A FISCAL COMPARISON OF ARIZONA AND UTAH

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P3 | PRODUCTIVITY AND PROSPERITY PROJECT

ASU W. P. CAREY SCHOOL of BUSINESS
ARIZONA STATE UNIVERSITY

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SUMMARY

In a comprehensive study of state government performance published by Pew Charitable Trusts in 2008, Utah was ranked as one of the top three states while Arizona was graded as average. Utah scored higher than Arizona in each of four categories, with the largest differential in the fiscal category. In each of five fiscal measures, Utah's performance was rated as strong, while Arizona was at best average and was below average in the structural balance measure.

Several less comprehensive but recent studies reach similar conclusions. The Mercatus Center ranks Utah seventh on fiscal solvency compared to Arizona's rank of 31st. Utah is rated more highly in four of five categories, especially cash solvency and budget solvency. Arizona ranks a bit above Utah on trust fund solvency. In a separate report, Mercatus found that Utah is well prepared for the next economic downturn, while Arizona is somewhat prepared.

A group called United States Common Sense evaluated fiscal health among state and local governments. Utah scored in the 78th percentile while Arizona was in the 55th percentile. Utah scored well above Arizona in the budget balance and asset flexibility categories, but Arizona scored better on the third category of pension funding.

WalletHub ranked the states on return on investment, comparing per capita taxes to the quality of government service provision. Utah ranks sixth and Arizona 19th. Arizona has one of the lowest tax burdens but ranks among the lowest states on the quality of service provision. The tax burden in Utah is somewhat higher than in Arizona, but Utah ranks among the top 10 on service provision.

Finally, Utah receives the highest credit rating from Standard and Poor's. Only three states have a lower rating than Arizona.

The high ratings for fiscal management in Utah, and more broadly for government performance in general, result from a multitude of factors. Among those cited in the literature is a focus on the long term and on the return on investment. Utah builds coalitions based on common values. It has good information systems and bases decisions on unbiased data. *Economist* magazine cited Utah for its "practical conservatism" and its "constructive Republicanism."

Government Revenues and Expenditures

Over the last 25 years, Arizona state government has made numerous changes to its revenue system, greatly reducing revenues. Utah has made many fewer changes and has not focused on lowering taxes.

Relative to personal income, state and local government revenues are lower than the national average in Arizona but higher than average in Utah. Arizona's revenues relative to personal income are lower than in Utah in most categories, including total taxes, but particularly in the individual income tax, the motor vehicle license tax, and several categories of current charges (user fees). However, sales tax revenues are considerably higher in Arizona than Utah.

As a share of total revenue, Arizona is more reliant on the federal government and on taxes and less reliant on user charges than Utah. The sales tax makes up a greater share of the total in Arizona, while the income tax share is lower.

Relative to personal income, state and local government expenditures in Arizona are below the national average and Utah is above average — overall, for current operations, and for capital outlays. Arizona's spending is higher in some categories and lower in others compared to Utah. Arizona's spending is lower in the largest category of education, particularly for higher education.

As a share of total expenditures, Arizona spends more than Utah on public safety and public welfare. Arizona spends relatively less on education, especially higher education.

Representative Revenues and Expenditures

A more telling measure of revenues and expenditures takes into account revenue capacity and expenditure need. Arizona and Utah are considerably below the national average on revenue capacity, but Utah collects more revenue than Arizona on a per capita basis, putting its revenue effort close to the national average. In contrast, the revenue effort in Arizona is below average. Arizona's effort is higher on the sales tax but particularly lower on the income tax than in Utah. Arizona's effort also is higher on the property tax but lower on current charges than in Utah.

The expenditure need in Arizona is above the national average but below average in Utah. However, actual expenditures are lower in Arizona than in Utah. Thus, the expenditure effort is much lower in Arizona than Utah; Utah's effort is below the national average.

Education Revenues and Expenditures

Education is a major function of state and local governments. Arizona and Utah each raise and spend very little per student on elementary and secondary education. Per student, Arizona spends a bit more than Utah on current operations, with similar expenditures on instruction and greater expenditures on support services (but lower spending on school administration). Utah spends more per student than Arizona on capital outlays.

Since the early 1990s, Arizona's K-12 revenues and expenditures per student have fallen considerably relative to the national average, going from not that far below average to considerably below average. In contrast, Utah has consistently been well below average. Revenue has declined in Arizona particularly from the state government since 2008. Expenditure decreases in Arizona have occurred in current operations (instruction and support services) and capital outlays.

In higher education — community colleges and universities — per student appropriations are near the U.S. average in Utah, while Arizona is considerably below average. In contrast, tuition is below average in Utah but much above average in Arizona. Relative to the nation since 2008, the decline in appropriations has been significant in Arizona but slight in Utah, while tuition has increased substantially in Arizona but has climbed in Utah at the national average pace.

Tax Burden

In the late 1970s, the overall tax burden — taxes paid by individuals and businesses combined — in Arizona and Utah was equal to the national average. Since then, the tax burden in Arizona has been lower than in Utah, with the latest data showing the tax burden to be well below the national average in Arizona and slightly below average in Utah.

Measured in the largest city in each state, the individual tax burden in Phoenix is less than in Salt Lake City except at low incomes. The individual tax burden in both cities is below the national average, except in Phoenix at low incomes.

In contrast, the business tax burden in Arizona is much higher than in Utah. The business burden is a little above the national average in Arizona and well below average in Utah.

With higher sales tax rates in Arizona, the sales tax burden in Arizona is higher than in Utah. For both individuals and businesses, the sales tax burden is considerably above the national average in Arizona and is near average in Utah.

In contrast, the individual income tax rate in Arizona is less than in Utah, with the tax burden lower in Arizona at all income levels. The individual income tax burden is considerably below the U.S. average in Arizona, except for being near average at incomes of $35,000 or less. In Utah, the individual income tax burden is slightly greater than the U.S. average except at very high incomes, where it is lower. The corporate income tax burden in each state is well below the national average, with Arizona lower than Utah.

The residential property tax in Salt Lake City is less than in Phoenix, with the tax burden in Salt Lake City considerably below the U.S. average; the burden in Phoenix varies by study from a little above to below the national average. In contrast, the commercial and industrial property tax burdens are higher than average in Phoenix except at very low appraised values, while the nonresidential burden in Salt Lake City is considerably below average.

The overall tax burden in each state is regressive, with lower-income households paying a higher share of their income in taxes than higher-income households. Arizona has the eighth-most regressive tax structure in the nation; Utah ranks 34th.

INTRODUCTION

This is the third paper produced by the Office of the University Economist that compares Arizona and Utah. The first paper, "Higher Education Funding in Arizona and Utah" (https://wpcarey.asu.edu/sites/default/files/fundingazut05-15.pdf), was completed in June 2015. That paper documented the sharp divergence in public support for higher education between the two states since fiscal year 2011. Relative to the nation, appropriations per student for higher education have increased in Utah, while tuition has fallen slightly. In Arizona in contrast, appropriations have fallen considerably, while tuition has increased substantially, relative to the nation.

The second paper, "An Economic Comparison of Arizona and Utah" (https://wpcarey.asu.edu/sites/default/files/economyazut9-15.pdf), was from September 2015. It noted that the business climate in Utah is evaluated as one of the best in the nation, while Arizona ranks in the middle of the states. Utah is rated higher in the two most important factors, the quality and availability of the labor force and the quality and availability of the physical infrastructure. Economic performance also has been stronger in Utah than in Arizona on various measures of productivity and prosperity. Even aggregate growth rates have been higher in Utah than Arizona since 2007.

This third paper focuses on a fiscal comparison of Arizona and Utah, primarily presenting topics that were not discussed in the first two papers. Utah's public finance system is considered to be one of the best in the nation. For example, the Pew Charitable Trusts states that "Utah is a national leader on long-term fiscal management."[1]

[1] The Pew Charitable Trusts, "In Utah, Evidence-based Policies for Rainy Day Funds," April 2014, http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2014/04/28/in-utah-evidencebased-policies-for-rainy-day-funds.

EVALUATIONS OF STATE GOVERNMENT PERFORMANCE

A number of studies are available that evaluate one or more aspect of state government performance across the states. Those studies that incorporate fiscal issues are discussed in this section.

Pew Charitable Trusts

The premier report evaluating state government performance was produced in 2008 by the Pew Charitable Trusts in conjunction with Governing magazine, part of Pew's "Government Finance Project" that ended in 2010.[2] Four categories of state government performance were examined: "money," "people," "infrastructure," and "information." The study assigned letter grades to the states, with most states earning Bs and Cs, both overall and in each of the categories. The median state earned a B- overall and in three of the categories; in the people category, the median was C+.

Overall, Arizona was assigned a grade of B-, equal to the median state. Utah ranked at the top, as one of three states earning an A-. Arizona's grade was a B- in each category except money (C+). Utah earned an A in each category except people (B+).

Five characteristics were listed in each category. In the money category, the characteristics were long-term outlook, budget process, structural balance, contracting and purchasing, and financial controls. Utah was rated as strong in each of the characteristics, while Arizona was assessed as weak on the structural balance and average on the others. Thus, Utah outperformed Arizona on each characteristic in the fiscal category.

The five characteristics in the people category were strategic workforce planning, hiring, retaining employees, training and development, and managing employee performance. Utah was rated as strong on each the last three characteristics and average on the other two, while Arizona was assessed as strong on training and development, weak on retaining employees, and average on the others.

In the infrastructure category, the five characteristics were capital planning, project monitoring, maintenance, internal coordination, and intergovernmental coordination. Utah was rated as strong in each of the characteristics, while Arizona was assessed as strong on intergovernmental coordination and average on the others.

The five characteristics in the information category were strategic direction, budgeting for performance, managing for performance, performance auditing and evaluation, and online services and information. Utah was rated as strong on the first two and last two of the characteristics and average on the other. Arizona was average on all characteristics.

In addition to the 2008 report, Pew provides more up-to-date data by state on several fiscal-related indicators.[3] A few are discussed below:

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[2] The Pew Charitable Trusts, *Grading the States*, 2008 http://www.pewtrusts.org/en/research-and-analysis/reports/2008/03/03/grading-the-states-2008-report.

[3] See http://www.pewtrusts.org/en/research-and-analysis/collections/2014/05/19/fiscal-50-state-trends-and-analysis.

- Change in tax revenue from peak quarter (through the end of 2015). During the last recession, tax revenue fell similarly in Arizona and Utah, with a deeper drop than the U.S. average. Arizona began to recover faster than Utah in 2010, but in 2013 Utah's decline from the prerecessionary peak became smaller than in Arizona. As of the latest data, revenue nationally was 6.5 percent higher than the prerecession peak, compared to 1.8 percent lower in Utah and 5.0 percent lower in Arizona.
- Tax revenue volatility from 1995 through 2014. Overall, Arizona was ranked as having the seventh-highest revenue volatility among the states; Utah ranked 11th highest. The volatility was higher in Arizona than Utah on the personal income tax, the sales tax, and the motor fuels tax.
- Debt and unfunded retirement costs as a share of personal income in 2013. According to this measure, Arizona and Utah were tied for 14th best, with debt lower in Arizona but unfunded pensions lower in Utah.
- Reserves and balances. On the number of days that state government could run on its reserves, Arizona compared quite unfavorably to Utah and the nation during the last recession. In recent years, however, Arizona and Utah have been similar and close to the national average.

Mercatus Center

The Mercatus Center at George Mason University annually rates the financial condition of the states.[4] The ranking is based on short- and long-term debt and other key fiscal obligations, such as unfunded pensions and healthcare benefits, using each state's audited financial report. The 2016 edition uses fiscal year 2014 data.

On overall fiscal solvency, Utah was ranked seventh best while Arizona ranked 31st. Five categories of fiscal solvency were assessed:

- Cash solvency. Does a state have enough cash on hand to cover its short-term bills? Utah ranked sixth best and Arizona 45th.
- Budget solvency. Can a state cover its fiscal year spending with current revenues, or does it have a budget shortfall? Utah was fifth best and Arizona 21st.
- Long-run solvency. Can a state meet its long-term spending commitments? Will there be enough money to cushion it from economic shocks or other long-term fiscal risks? Utah ranked 16th best and Arizona 22nd.
- Service-level solvency. How much "fiscal slack" does a state have to increase spending if citizens demand more services? Utah was 12th best and Arizona 19th.
- Trust fund solvency. How much debt does a state have? How large are its unfunded pension and healthcare liabilities? Utah ranked 26th best and Arizona 17th.

Thus, Utah was rated more favorably than Arizona in four of the categories, with a very large differential in the cash solvency category. Arizona ranked higher than Utah on trust fund solvency.

[4] Mercatus Center, George Mason University, *Ranking the States by Fiscal Condition*, June 2016, https://www.mercatus.org/statefiscalrankings.

Another 2016 report from the Mercatus Center assessed the preparedness of each state to respond to the next economic downturn without needing to cut spending or increase taxes.[5] Based on a sophisticated methodology that took into account rainy-day fund balances and cyclicality by state, Utah was ranked 10th best among the states, described as "well prepared." Arizona ranked in the middle of the states as being "somewhat prepared."

Other Studies

United States Common Sense is a nonpartisan, nonprofit policy group founded at Stanford University in 2010. They have collected financial data on a large number of state and local governments based on official financial documents.[6] Using 2014 data, they have evaluated fiscal health in three categories: budget balance, asset flexibility, and pension funding. Rather than a ranking, each state is given a percentile score in each category and overall. The higher the percentile, the better the financial health. Overall, Arizona scores in the 55th percentile while Utah is in the 78th percentile. Utah (90th percentile) is assessed more favorably than Arizona (64th percentile) on the budget balance: total revenue divided by total expenditures. On asset flexibility — unrestricted net assets divided by total liabilities — Utah is in the 80th percentile while Arizona is only in the 36th percentile. Arizona (72nd percentile) scores better than Utah (38th percentile) on pension funding: unfunded pension liability divided by population.

A simple means of comparing states is to use credit ratings. In 2014, Pew collected the ratings for each state from Standard and Poor's.[7] Utah was one of 15 states that had the highest credit rating of AAA; it had maintained this rating for at least a decade. Arizona's rating was AA- following a downgrade in 2009. Only three states had a lower rating; two others also received an AA-.

WalletHub contrasted state and local government tax rates with the quality of the services provided within five categories: education, health, safety, economy, and infrastructure and pollution.[8] Between two and five measures were used in each category. Per capita taxes (based on the population 18 and older) were ninth lowest in Arizona but the quality of government services was ranked 43rd best. The return on investment (ROI) ranked 19th best. In contrast, per capita taxes were higher in Utah (19th lowest) but the quality of public services (eighth best) was considerably higher than in Arizona. Thus, the ROI in Utah ranked sixth best. Services in Utah were ranked considerably higher than in Arizona in four of the five categories: education (Utah's rank was 14th and Arizona's rank was 45th), health (11th versus 28th), safety (13th versus 42nd), and economy (first versus 40th). On the infrastructure and pollution category, Arizona ranked 16th and Utah 20th.

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[5] Mercatus Center, George Mason University, *Weathering the Next Recession: How Prepared Are the 50 States?*, January 2016, https://www.mercatus.org/publication/weathering-next-recession-how-prepared-are-50-states.

[6] See http://govrank.org/.

[7] See http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2014/06/09/sp-ratings-2014.

[8] WalletHub, *2016's States with the Best & Worst Taxpayer ROI*, April 2016, https://wallethub.com/edu/state-taxpayer-roi-report/3283/.

A report by 24/7 Wall St. took a broad look at each state.[9] While supposedly assessing the states on how well they are run, a wide range of economic and socioeconomic indicators were examined as well as indicators of state government finance. Only an overall ranking is available. Utah ranked sixth best; Arizona ranked 36th.

Why Utah Compares More Favorably Than Arizona

Regardless of the measure of state government performance, Utah generally compares more favorably — often much more so — than Arizona. The primary exception is the comparison of funding for pensions and other trusts, the results of which are mixed across the two states.

Pew's 2008 report "Grading the States" cited several factors contributing to Utah's success:

- Financial decisions are made with a focus on return on investment and long-term performance.
- High coordination exists between the Governor's office and the Legislature, including the use of the same financial system.
- The state uses an integrated management system.
- Budgets are designed to maintain infrastructure. More generally, there is a willingness to fund needs.

In contrast, Arizona was cited as using old technology and an outdated financial information system. The state was cited as failing to recognize the inevitability of economic expansions turning into recessions, lacking money management, and not allocating adequate funding to infrastructure maintenance.

In April 2014, Pew discussed Utah's recent efforts at fiscal management.[10] In 2008, Utah passed a law requiring regular analyses of revenue volatility — the only state with such a statutory requirement. The mitigation of revenue volatility is described by Pew as "a key element in the prudent stewardship of finances." Utah's analyses of revenue volatility have been used to inform policies regarding the rainy-day fund, with the limit increased in 2009 and again in 2012. Further legislation was passed in 2014 that sets the stage for an automatic deposit mechanism.

The Governor's Office of Management and Budget in Utah has identified six key drivers of the state's budget and currently is developing a planning strategy for each.[11] The office notes that "reacting to new demands and changes within the economy without a proactive approach to budget design and strategy could potentially leave Utah vulnerable to a diminished future prosperity."

As an example, corrections is one of the six budget drivers. Utah's goal is to reduce recidivism. It has sought technical assistance from Pew's Public Safety Performance Project and the U.S. Department of Justice. As a result, 18 policy recommendations in five categories have been created. The categories are (1) focus prison beds on serious and violent offenders, (2) strengthen

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[9] 24/7 Wall St, *The Best and Worst Run States in America*, December 2015, http://247wallst.com/special-report/2015/12/03/the-best-and-worst-run-states-in-america-a-survey-of-all-50-4/.

[10] The Pew Charitable Trusts, "In Utah, Evidence-based Policies for Rainy Day Funds," April 2014, http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2014/04/28/in-utah-evidencebased-policies-for-rainy-day-funds.

[11] See http://gomb.utah.gov/budget-policy/budget-drivers/.

probation and parole supervision, (3) improve and expand re-entry and treatment services, (4) support local corrections, and (5) ensure oversight and accountability. If passed, the recommendations are expected to divert 98 percent of the projected growth in the prison population and avert $542 million in corrections spending.

Governing magazine discussed the mechanisms that Utah has used to provide and maintain the transportation infrastructure.[12] They include increasing the gasoline tax, issuing bonds, and allowing the public to decide whether to increase the local sales tax rate. In 2015, the Legislature increased the existing gasoline tax rate of 24.5 cents by about 5 cents and converted the tax to a percentage so that revenues would keep pace with inflation. In November 2015, 17 of 29 counties voted on whether to increase the sales tax by 0.25 to support local transportation; the measure passed in 10 counties. The success of these efforts depended on the building of a coalition of broad interests focused on one goal: moving people around the state.

Coalition building based on common values seems to be a consistent theme in Utah. For example, in 2010 the Utah Compact was issued, which expresses the values of the community toward immigration. It had the support of community leaders, business associations, the law enforcement community, and the religious community.

A prime example of this approach is Envision Utah, the organization driving regional planning in the state. While an organization exists, Governing magazine describes this as a "process" rather than a program.[13] It is described as a grassroots, nonideological, research-based approach that include all stakeholders in a loosely defined public-private-nonprofit partnership. It has had success on several issues, including air quality, water use, land use, and transportation.

The Envision Utah process was described in more detail in a Brookings publication.[14] Envision Utah maintains neutrality, promotes inclusiveness, and operates as a nongovernmental voluntary partnership that focuses on collaborative planning. It rejects regional governance and does not depend on interlocal agreements. Instead, using public education and political savvy, it has shifted attitudes on sprawl. This has resulted in public entities voluntarily adopting new zoning and regulations. The process has been supported by many developers.

The Envision Utah effort has had considerable success despite challenging conditions, including the community's strong belief in property rights and local control, broadly set in a politically conservative environment. Several factors are cited as contributing to the success:

- Tapping into shared values and aspirations.
- Employing significant public engagement.
- Using convincing, unbiased data.
- Getting broad buy in.

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[12] *Governing*, "A Model for Raising Taxes in Republican States," October 2015, http://www.governing.com/topics/transportation-infrastructure/is-this-the-way-states-can-sell-tax-hikes-for-transportation.html.
[13] *Governing*, "Utah's Secret Weapon for Long-Term Planning," March 2015, http://www.governing.com/topics/transportation-infrastructure/gov-utah-secret-weapon-growth-planning.html.
[14] Brookings Mountain West, "The Utah Model: Lessons for Regional Planning," December 2012, https://www.unlv.edu/sites/default/files/TheUtahModel_0.pdf.

Perhaps the best summary of Utah was in the May 2015 issue of the Economist magazine. It labeled Utah as being a model of "practical conservatism" and "constructive Republicanism."[15]

[15] Economist, "Young, Tolerant and Surprising," May 2015, http://www.economist.com/news/united-states/21650153-some-lessons-practical-conservatism-desert-west-young-tolerant-and-surprising?fsrc=scn/tw/te/pe/st/youngtolerantandsurprising.

RECENT CHANGES IN THE FISCAL SYSTEMS OF ARIZONA AND UTAH

Since the early 1990s, the Arizona Legislature has made numerous changes to the revenue system, lowering tax rates, passing exemptions and credits that narrow the tax base, and eliminating some taxes, as least in terms of contributing revenue to the general fund. A recent Office of the University Economist paper discussed these changes and the effects on economic growth and government revenue.[16] In addition, the next section examines changes over time in state and local government revenues and expenditures by category.

In contrast to the numerous fiscal modifications implemented in Arizona, Utah has made many fewer changes. It has not pursued a policy of reducing taxes and public spending.

As noted in the prior section, Utah altered its gasoline tax effective at the beginning of 2016. The big change was to go from a fixed number of cents per gallon sold at the pump to a percentage of the statewide average rack price per gallon.[17] This provides a mechanism for future revenues to keep pace with inflation. As part of the change, the effective tax rate was increased in order to provide more funding for highway construction and related programs. In 2007, registration fees were increased for the same purposes.

A substantial change to Utah's personal income tax was implemented in two steps in 2007 and 2008. The main feature was to go to a single tax rate of 5 percent. It is not a "flat tax" since exemptions and deductions are still allowed. Thus, the progressivity of Utah's personal income tax was preserved — it currently is as progressive as Arizona's graduated-rate individual income tax.

Examining actual income tax return data from 2006, 2007, and 2008 reveals that Utah's change to a single-rate individual income tax lowered the effective tax rate overall, though not by a substantial amount.[18] The average tax and effective tax rate in each income bracket was lowered, though by an insignificant amount except among those in very high income brackets. Thus, the change resulted in a relative shift in tax liability. As a proportion of the total tax paid, those with an adjusted gross income of more than $250,000 paid substantially less, while those with adjusted gross incomes of between $20,000 and $250,000 paid more.

The Utah Legislature substantially increased the tax on tobacco products, effective on July 1, 2010. The tax rate per pack of cigarettes rose from 69.5 cents to $1.70.

In the sales and use tax category, some expansion in optional taxes levied by counties and municipalities has occurred in Utah. The changes over the last decade have increased revenue for transportation purposes.

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[16] See "Tax Reductions in Arizona: Effects on Economic Growth and Government Revenue," October 2016, available at https://economist.asu.edu/public-finance.

[17] Generally set daily, the rack price is the price charged to retailers. It includes the wholesale price of the gas, the cost of transportation from the wholesale terminal to the retailer, profit for the wholesaler, etc.

[18] Aggregate statistics from income tax returns are available from the Utah State Tax Commission at http://tax.utah.gov/econstats.

On the expenditure side, moderate increases in funding for higher education have been implemented in recent years in Utah, compared to reductions in Arizona. In addition, state government employees in Utah have received salary increases in recent years; in contrast, state government employees in Arizona have received hardly any increase in wages since fiscal year 2008.

FISCAL DATA FOR ARIZONA AND UTAH

The primary source of fiscal data by state is the U.S. Census Bureau in its State and Local Government Finance series.[19] The latest data are for fiscal year (FY) 2014, which ran from July 1, 2013 through June 30, 2014 in Arizona and Utah. While data by state are available separately for state government and for the sum of all local governments, the emphasis is on combined state and local government data due to variations by state in taxing authority and program responsibilities between state and local governments.

In addition to the comparison of the states in FY 2014, comparisons are made of the change over three time periods: FYs 1993 through 2001, 2001 through 2008, and 2008 through 2014. Fiscal year 1993 was selected since the Census Bureau expanded the amount of categorical detail on revenues and expenditures in that year. FY 2008 is used since it was a transitionary year from an economic expansion to recession. FY 2001 also was a transitional year, but local government data were not collected by the Census Bureau in that year; FY 2000 is used instead.

To compare areas, the Census Bureau's data can be expressed either per capita or per $1,000 of personal income. Since per capita income varies widely across the states, even after adjusting for living costs, comparisons of states can vary widely based on the standardization measure selected. In the case of Arizona and Utah, the choice of measure is not very important since per capita personal income in FY 2014 was nearly identical in the two states; per capita personal income in Arizona rose a little less than in Utah in each of the three time periods analyzed in this section. Revenue and expenditure data are expressed per $1,000 of personal income in this section.

The cost of living also is similar in the two states. According to the U.S. Bureau of Economic Analysis, the cost of living relative to the national average was 3.6 percent lower in Arizona and 3.0 percent lower in Utah in 2014.[20]

The Census Bureau provides more detail on elementary and secondary education funding in a separate report. Detail on higher education is available from the State Higher Education Executive Officers Association. These sources also are reviewed in this section.

In this section, Arizona and Utah are compared to the national average and are ranked relative to all states and to a group of 10 western states.[21]

Revenues

State and local government revenues in fiscal year 2014 in Arizona and Utah are compared in Table 1. The sources of revenue as a share of total revenue are displayed in the left portion of the table. The other data in the table should be interpreted relative to the size of each revenue source.

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[19] U.S. Department of Commerce, Census Bureau, State and Local Government Finance, http://www.census.gov/govs/local/.

[20] U.S. Department of Commerce, Bureau of Economic Analysis, Regional Price Parities, http://www.bea.gov/regional/index.htm.

[21] The 10 western states are Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington.

TABLE 1
REVENUE BY SOURCE, STATE AND LOCAL GOVERNMENTS, FISCAL YEAR 2014

	Share of Total		Per $1,000 of Personal Income					
			Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
TOTAL REVENUE	100.0%	100.0%	94.0%	105.3%	37	22	8	3
From Federal Government	25.9	21.9	111.4	105.4	22	28	3	5
Total Own Source	74.1	78.1	89.1	105.3	42	16	10	3
Taxes	50.3	47.6	89.5	92.7	40	31	9	5
Property	14.8	13.2	82.4	81.9	34	35	6	7
General Sales	19.9	11.6	148.8	96.7	8	26	4	8
Selective Sales:	4.5	5.5	69.0	93.1	46	31	9	5
Motor Fuel	1.7	1.7	105.7	116.9	29	19	8	3
Alcoholic Beverage	0.2	0.2	61.3	96.4	33	22	6	4
Tobacco	0.7	0.5	103.7	87.1	30	33	3	6
Public Utilities	0.4	0.6	40.2	57.3	40	33	8	6
Other	1.5	2.4	51.5	94.1	47	24	9	3
Individual Income	7.7	13.3	58.8	113.4	41	16	7	3
Corporate Income	1.3	1.4	61.1	75.6	40	29	7	4
Motor Vehicle License	0.5	0.8	45.2	91.7	49	29	10	8
Other	1.6	1.8	46.8	62.4	49	39	10	8
Nontax Revenue	23.8	30.6	92.9	133.6	36	9	8	3
Current Charges	16.6	22.4	94.8	143.0	30	6	8	1
Education	5.6	7.4	119.8	178.7	23	3	4	1
Higher Education	5.0	7.0	124.2	193.7	20	3	4	1
School Lunch Sales	0.2	0.3	88.4	122.4	36	19	4	2
Other	0.4	0.2	92.8	54.4	23	34	4	7
Hospitals	4.3	7.5	84.2	163.4	31	9	9	1
Highways	0.0	0.2	5.7	32.4	42	31	10	8
Airports	1.1	0.7	129.3	88.9	10	17	3	8
Parking Facilities	0.0	0.0	8.0	27.9	47	36	9	6
Natural Resources	0.3	0.1	134.6	71.2	11	25	5	8

(continued)

TABLE 1 (continued)
REVENUE BY SOURCE, STATE AND LOCAL GOVERNMENTS, FISCAL YEAR 2014

	Share of Total		Per $1,000 of Personal Income					
			Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Current Charges (continued)								
Parks and Recreation	0.3%	0.5%	86.4%	130.9%	31	11	8	4
Housing & Development	0.1	0.1	33.3	45.7	50	45	10	9
Sewerage	2.0	1.9	98.0	105.3	25	17	7	4
Solid Waste Management	1.0	0.9	157.0	153.7	9	11	4	5
Other	2.0	3.1	77.8	140.0	30	11	8	4
Miscellaneous Revenue	7.2	8.2	88.8	113.2	32	15	6	3
Interest Earned	1.9	2.1	98.9	120.3	29	15	5	4
Special Assessments	0.2	0.2	57.5	86.2	24	16	8	6
Sale of Property	0.4	0.3	219.8	167.3	4	8	2	4
Other	4.8	5.7	83.3	110.7	42	16	7	3

* Among the 50 states and the District of Columbia; a rank of 1 indicates the highest revenues or expenditures.
** Among 10 western states; a rank of 1 indicates the highest revenues or expenditures.

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

Relative to Utah, Arizona's revenues disproportionately come from the federal government and taxes, with a lesser share coming from current charges. Among the various categories of current charges, the share of total revenue is lower in Arizona than in Utah in most, particularly in hospitals and higher education. Among the tax sources, Arizona is much more reliant on the general sales tax, with a much lesser share from the individual income tax, than Utah.

Expressed relative to personal income, overall revenues in Arizona in fiscal year 2014 were below the national average, while Utah's figure was above average. Arizona's revenue per $1,000 of personal income was less than in Utah in most categories, with very large differentials in the individual income tax, motor vehicle license tax, and several of the current charge categories. In contrast, Arizona's figure was much higher than in Utah on the general sales tax.

The change in revenue, expressed as the change in the ratio to the national average of revenue per $1,000 of personal income, is shown for the larger revenue sources in Table 2. Between fiscal years 1993 and 2000, Utah experienced a greater gain in revenue than Arizona. Utah's gain was greater in each of the major categories: federal government, own source, taxes, and nontax revenue. The situation was reversed between fiscal years 2000 and 2008, when Arizona had a larger increase than Utah in each of these major categories. In the period since fiscal year 2008, the overall change in revenue and the change in own-source revenue has been similar in the two states.

TABLE 2
CHANGE IN REVENUE, SELECTED SOURCES, STATE AND LOCAL GOVERNMENTS

	Change in Percent of U.S. Average, Per $1,000 of Personal Income					
	1993 to 2000		2000 to 2008		2008 to 2014	
	Arizona	Utah	Arizona	Utah	Arizona	Utah
TOTAL REVENUE	-5	6	1	-7	-2	-3
From Federal Government	2	-0	14	-6	-0	-6
Total Own Source	-7	7	-2	-7	-3	-2
Taxes	-8	6	-5	-9	-5	-5
Property	-8	2	-10	-8	-8	7
General Sales	-4	-5	8	-17	-3	-22
Selective Sales	-7	14	-1	-6	-12	0
Individual Income	-15	2	-8	-6	-3	-5
Corporate Income	23	20	-17	19	-14	-20
Nontax Revenue	-3	9	5	-4	2	4
Current Charges	-6	6	3	5	17	4
Miscellaneous Revenue	2	13	10	-17	-22	-1

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

Expenditures

Significant differences exist between Utah and Arizona on the shares by expenditure category (see Table 3). Arizona spends relatively less on education, particularly higher education, and more on public welfare and public safety — police protection, fire protection, corrections, and judicial and legal administration.

Expressed relative to personal income, overall expenditures in Arizona in fiscal year 2014 were below the national average, while Utah's figure was above average. This conclusion holds for both current operations and capital outlays, though the differential between the two states was larger for capital outlays.

Arizona's expenditure per $1,000 of personal income varied from higher to lower than in Utah by category. However, Arizona was far lower than Utah on the largest category of education, again more so for higher education than for K-12 education. In contrast, Arizona's figures were higher than in Utah in the public safety categories.

The change in expenditures, expressed as the change in the ratio to the national average of expenditures per $1,000 of personal income, is shown for the larger expenditure categories in Table 4. Between fiscal years 1993 and 2000, Utah experienced a greater increase in expenditures than Arizona. Utah's gain was greater in each of the major categories. The situation was reversed between fiscal years 2000 and 2008, when Arizona had a larger increase than Utah overall and in most of these major categories. However, the change in education expenditures was similar in the two states. In the period since fiscal year 2008, the change in expenditures has been slightly greater in Utah overall.

Representative Revenues and Expenditures

Another way of comparing the fiscal systems of states is through the "representative revenue system" and "representative expenditure system" approaches. In the representative revenue system, "revenue capacity" (revenue-raising potential) is estimated by establishing a revenue base in each state and then applying a national average tax rate to that base, measured on a per capita basis. Revenue effort is calculated as actual revenue as a percentage of the revenue capacity.

In the representative expenditure system, "fiscal need" is estimated by applying a national average rate of per capita spending to the population of each state. The result is then adjusted for workload factors and other factors, such as input prices, that contribute to cost variations by state, measuring fiscal need on a per capita basis. Spending effort is calculated as actual expenditures as a percentage of the fiscal need.

Using FY 2012 data, the Urban Institute recently calculated revenue capacity and fiscal need by category for all states.[22] The results for Arizona and Utah are shown in Tables 5 and 6.

The overall revenue capacity per capita in FY 2012 was considerably below the national average in both Arizona and Utah, each ranking among the bottom 10 states in the country, but with

[22] Urban Institute, March 2016, *Assessing Fiscal Capacities of States: A Representative Revenue System-Representative Expenditure System Approach, Fiscal Year 2012*, www.urban.org.

TABLE 3
EXPENDITURES BY CATEGORY, STATE AND LOCAL GOVERNMENTS, FISCAL YEAR 2014

	Share of Total		Per $1,000 of Personal Income					
			Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
TOTAL EXPENDITURES	100.0%	100.0%	91.7%	103.7%	40	25	7	3
Education	35.2	40.0	96.6	124.0	35	7	5	2
Higher Education***	11.8	17.7	109.0	184.5	25	1	5	1
Elementary & Secondary Educ	18.6	20.4	78.7	97.6	50	31	10	3
Other Education	4.8	1.9	241.2	107.9	3	22	1	4
Libraries	0.3	0.5	68.4	119.8	45	16	9	5
Public Welfare	20.8	15.6	95.0	80.6	30	39	5	6
Hospitals	4.0	6.6	59.9	112.4	35	16	10	5
Health	5.0	2.2	138.6	69.5	10	35	2	7
Employment Security	0.2	0.1	127.3	40.8	25	48	4	9
Veterans' Services	0.0	0.0	47.0	23.7	18	31	5	7
Highways	4.5	5.1	69.4	88.5	49	38	10	8
Air Transportation	1.1	0.8	128.5	107.8	8	13	3	5
Parking Facilities	0.0	0.0	7.9	2.5	49	51	8	10
Police Protection	4.6	3.2	110.9	88.6	14	32	4	8
Fire Protection	2.4	1.3	137.1	83.7	7	33	3	9
Corrections	3.8	2.6	127.0	96.7	7	21	4	7
Protective Inspection & Regulation	0.5	0.4	86.2	79.6	21	28	7	8
Natural Resources	1.2	1.2	111.2	117.4	27	23	8	7
Parks & Recreation	1.4	2.1	94.5	161.0	26	10	8	4
Housing & Community Developmt	1.2	1.5	61.2	83.6	41	26	8	5
Sewerage	1.5	1.8	74.5	97.5	42	22	9	6
Solid Waste Management	0.9	0.8	91.4	95.2	29	26	5	4
Financial Administration	1.3	2.3	76.9	154.0	46	10	8	3
Judicial and Legal	2.2	1.8	121.0	112.3	11	16	5	7
General Public Buildings	0.4	0.8	70.3	151.5	40	15	8	3
Other Administration	1.1	1.5	89.3	140.2	38	9	7	4

(continued)

TABLE 3 (continued)
EXPENDITURES BY CATEGORY, STATE AND LOCAL GOVERNMENTS, FISCAL YEAR 2014

	Share of Total		Per $1,000 of Personal Income					
			Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Interest on Debt	3.6%	2.5%	82.4%	64.8%	32	39	8	9
Misc. Commercial Activities	0.0	0.2	13.9	122.8	41	11	9	2
Other	2.8	5.3	52.1	113.6	49	15	10	1
Total Capital Outlays	8.9	10.4	81.6	108.4	42	23	9	4
Total Noncapital	91.1	89.6	92.8	103.2	38	26	7	4

* Among the 50 states and the District of Columbia; a rank of 1 indicates the highest expenditures.
** Among 10 western states; a rank of 1 indicates the highest expenditures.
*** Higher education includes community colleges and universities.

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

TABLE 4
CHANGE IN EXPENDITURES, SELECTED CATEGORIES, STATE AND LOCAL GOVERNMENTS

	Change in Percent of U.S. Average, Per $1,000 of Personal Income					
	1993 to 2000		2000 to 2008		2008 to 2014	
	Arizona	Utah	Arizona	Utah	Arizona	Utah
TOTAL EXPENDITURES	-5	7	0	-8	-7	-4
Education	-16	-9	-3	-3	3	-1
Higher Education*	-11	4	-13	-9	4	1
Elementary & Secondary Educ	-19	-15	-0	-1	-11	-6
Public Welfare	-20	19	18	-22	-3	3
Highways	15	41	-16	-33	-38	-40
Total Capital Outlays	-9	2	4	1	-46	-33
Total Noncapital	-5	7	-1	-9	-2	0

* Higher education includes community colleges and universities.

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

Arizona's capacity less than that of Utah. The low capacity is due to a number of factors, but the low per capita income in each state is a primary cause. The capacity was less than average in each state on each of the major revenue sources and on most of the other sources.

In Arizona, actual revenue per capita in FY 2012 — third lowest in the nation — was further below the national average than revenue capacity. Thus, the revenue effort was below the national average and ranked 40th. In other words, despite the low capacity, the state could have raised additional revenue without its revenue effort reaching the national average. In contrast, actual per capita revenue in Utah was quite close to its capacity, putting its revenue effort nearly equal to the U.S. average and in the middle of the states.

Revenue effort varied widely by revenue source in Arizona, though for most sources the effort was below the national average. Among the major sources, actual revenue as a percentage of capacity was 143 percent for the general sales tax but only 61 percent for the individual income tax. In Utah, revenue effort varied from above to below average. Among the larger revenue sources, effort was high for user fees.

In contrast to the low overall revenue capacity per capita, Arizona's overall fiscal need per capita in FY 2012 was greater than the national average, 11th highest in the nation. This too is due to a number of factors, including the state's high poverty rate. Actual spending per capita in FY 2012 — second lowest in the nation — was far below the need. Thus, the spending effort also was far below average, with only one state having a lower figure.

TABLE 5
REPRESENTATIVE REVENUES, FISCAL YEAR 2012

	Per Capita Revenue			Per Capita Capacity			Percentage of the National Average Per Capita Revenue		Per Capita Capacity		Effort: Revenue as a Percentage of Capacity	
	U.S.	Arizona	Utah	U.S.	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total Revenue	$6,483	$4,920	$5,460	$6,483	$5,344	$5,506	75.9%	84.2%	82.4%	84.9%	92.1%	99.2%
General Sales Tax	1,000	1,309	875	1,000	917	861	130.9	87.5	91.7	86.1	142.7	101.6
Property Tax	1,423	1,044	938	1,423	1,091	1,205	73.4	65.9	76.7	84.7	95.7	77.8
Individual Income Tax	978	472	864	978	779	865	48.3	88.3	79.7	88.4	60.6	99.9
Corporate Income Tax	156	99	91	156	118	126	63.5	58.3	75.6	80.8	83.9	72.2
Charges (User Fees)	1,358	1,065	1,559	1,358	1,128	1,104	78.4	114.8	83.1	81.3	94.4	141.2
Motor Fuel Tax	132	137	130	132	124	126	103.8	98.5	93.9	95.5	110.5	103.2
Tobacco Tax	59	49	43	59	33	30	83.1	72.9	55.9	50.8	148.5	143.3
Alcoholic Bev Tax	47	10	110	47	48	26	21.3	234.0	102.1	55.3	20.8	423.1
Insurance Tax	56	65	37	56	42	40	116.1	66.1	75.0	71.4	154.8	92.5
Severance Tax	55	6	38	55	61	136	10.9	69.1	110.9	247.3	9.8	27.9
Estate, Inherit, Gift Tax	16	0	0	16	11	6	0.0	0.0	68.8	37.5	0.0	0.0
Lottery	71	31	0	71	35	30	43.7	0.0	49.3	42.3	88.6	0.0
Corporate Licenses	36	2	0	36	33	53	5.6	0.0	91.7	147.2	6.1	0.0
Hunt & Fish Licenses	5	4	10	5	3	8	80.0	200.0	60.0	160.0	133.3	125.0
Motor Vehicle Register	78	26	55	78	76	67	33.3	70.5	97.4	85.9	34.2	82.1
Motor Veh Op Licenses	8	5	5	8	9	8	62.5	62.5	112.5	100.0	55.6	62.5
All Other Taxes	370	149	150	370	308	301	40.3	40.5	83.2	81.4	48.4	49.8
Other Revenue	635	447	554	635	528	516	70.4	87.2	83.1	81.3	84.7	107.4

(continued)

TABLE 5 (continued)
REPRESENTATIVE REVENUES, FISCAL YEAR 2012

	Per Capita Revenue				Per Capita Capacity				Effort			
	Rank, All States*		Rank, West**		Rank, All States*		Rank, West**		Rank, All States*		Rank, West**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total Revenue	49	39	9	7	46	42	9	8	40	25	8	4
General Sales Tax	10	29	4	8	37	47	7	10	9	25	4	7
Property Tax	33	39	6	8	39	33	9	6	23	33	3	6
Individual Income Tax	42	30	7	4	45	33	9	7	40	31	7	4
Corporate Income Tax	36	38	5	7	40	34	7	5	31	35	5	6
Charges (User Fees)	43	16	10	5	42	45	7	8	31	6	8	1
Motor Fuel Tax	23	26	5	7	37	35	5	4	17	22	5	7
Tobacco Tax	33	35	4	5	46	48	7	9	16	18	2	3
Alcoholic Bev Tax	45	8	8	3	28	51	6	10	44	2	8	1
Insurance Tax	19	43	2	9	42	45	4	6	10	31	3	8
Severance Tax	22	14	7	4	16	11	6	4	29	23	9	7
Estate, Inherit, Gift Tax	25	25	3	3	25	46	5	9	25	25	3	3
Lottery	37	45	5	9	40	45	6	8	32	45	6	9
Corporate Licenses	41	49	7	10	27	4	7	1	40	49	6	10
Hunt & Fish Licenses	30	12	7	5	37	14	7	2	15	18	8	10
Motor Vehicle Register	50	41	10	9	37	47	6	10	50	31	10	8
Motor Veh Op Licenses	32	32	7	7	6	32	1	5	35	32	9	8
All Other Taxes	45	44	9	8	42	44	7	8	44	41	9	8
Other Revenue	45	35	9	6	42	45	7	8	40	18	8	3

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

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

TABLE 6
REPRESENTATIVE EXPENDITURES, FISCAL YEAR 2012

	Per Capita Expenditures			Per Capita Need			Percentage of the National Average Per Capita Spending		Per Capita Need		Effort: Revenue as a Percentage of Capacity	
	U.S.	Arizona	Utah	U.S.	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total General Exp	$8,443	$6,442	$7,663	$8,443	$8,759	$8,223	76.3%	90.8%	103.7%	97.4%	73.5%	93.2%
K-12 Education	1,801	1,205	1,476	1,801	1,999	2,195	66.9	82.0	111.0	121.9	60.3	67.2
Higher Education	826	727	1,273	826	816	918	88.0	154.1	98.8	111.1	89.1	138.7
Highways	510	356	687	510	477	517	69.8	134.7	93.5	101.4	74.6	132.9
Police & Corrections	540	550	414	540	560	430	101.9	76.7	103.7	79.6	98.2	96.3
Health and Hospitals	767	562	567	767	775	635	73.3	73.9	101.0	82.8	72.5	89.3
Public Welfare	1,546	1,241	1,059	1,546	1,693	1,127	80.3	68.5	109.5	72.9	73.3	94.0
Environ & Housing	625	453	591	625	622	615	72.5	94.6	99.5	98.4	72.8	96.1
Govt Administration	349	307	373	349	345	333	88.0	106.9	98.9	95.4	89.0	112.0
Other	1,133	788	1,019	1,133	1,125	1,107	69.5	89.9	99.3	97.7	70.0	92.1

	Per Capita Expenditures				Per Capita Need				Effort			
	Rank, All States*		Rank, West**		Rank, All States*		Rank, West**		Rank, All States*		Rank, West**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total General Exp	50	33	9	6	11	36	4	7	50	33	10	6
K-12 Education	50	42	9	7	5	2	4	2	51	49	10	8
Higher Education	35	2	8	1	25	8	6	2	34	7	8	2
Highways	48	12	10	1	38	29	7	4	42	9	9	1
Police & Corrections	15	39	5	10	18	44	2	8	18	21	7	8
Health and Hospitals	35	33	8	7	23	51	3	10	34	23	8	7
Public Welfare	41	49	5	9	11	46	2	10	44	29	8	5
Environ & Housing	45	26	9	6	23	34	6	7	46	25	9	6
Govt Administration	36	18	9	5	23	34	6	7	33	15	8	5
Other	36	24	8	6	24	34	6	7	37	23	8	6

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

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

In Utah, in contrast, fiscal need was a little below the national average. Per capita spending was further below average, though not nearly as far below average as in Arizona. Thus, the spending effort in Utah was below average, but considerably higher than in Arizona.

The fiscal need by category of spending ranged from somewhat above the national average to somewhat below in Arizona. Actual spending was below the need in every category, but the spending effort was close to average in the police and corrections category. In contrast, the effort was very low — the lowest in the nation — for K-12 education. The fiscal need for K-12 education was high, fifth in the nation, while actual spending was very low, second lowest in the nation. Arizona also ranked very low on both actual spending and spending relative to the need in the highways, public welfare, and environment and housing categories.

In Utah, the per capita need ranged from considerably below average in the police and corrections, health and hospitals, and public welfare categories to much above average for education. Spending effort was considerably below average for K-12 education but well above average for higher education. The effort also was high in the highways category.

Elementary and Secondary Education

The Census Bureau annually produces a report on K-12 public education finance by state, examining both revenues and expenditures.[23] Private schools, including charter schools operated by nongovernmental organizations, are not included in the report. Data for fiscal years 1992 through 2014 are available online. The following summary is based on per student revenues and expenditures. Data for FY 2014 are adjusted by the cost of living, but the change over time does not reflect changes in living costs — the earliest year of cost-of-living data is 2008.

Revenues raised to support K-12 education are divided by the Census Bureau into three government sources: federal, state, and local. In FY 2014 nationally, less than 9 percent of the revenue came from the federal government, with the balance nearly equally split between state (47 percent) and local (45 percent) governments. In Arizona, federal funding made up a larger share (13 percent) and local funding was disproportionately used (48 percent versus 38 percent from state government). In Utah, state funding was disproportionately used (54 percent versus 38 percent from local governments); federal funding accounted for 9 percent. Since the local/state government responsibilities for funding K-12 education vary across the states, combined state and local government figures need to be used to compare states.

The Census Bureau separates capital outlays for K-12 education from other expenditures, splitting the latter into current operations and other expenditures (the latter consisting largely of interest payments for debt). Capital outlays are subdivided into construction, land and existing structures, instructional equipment, and other equipment. In FY 2014 nationally, 89 percent of the expenditures were for current operations, 8 percent were for capital outlays, and 3 percent were for other purposes. The shares in Arizona were similar to the national average. In Utah, a somewhat higher proportion of the total went to capital outlays (11 percent) and less to current operations (86 percent).

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[23] U.S. Department of Commerce, Census Bureau, Public Elementary-Secondary Education Finance, http://www.census.gov/govs/school/.

Expenditures for current operations are split into three subcategories. The instruction subcategory is the largest, accounting for 60 percent of current operations nationally in FY 2014; the share was 62 percent in Utah and 54 percent in Arizona. The instruction category includes wages and salaries, employee benefits, and purchases of supplies directly related to instruction. The second subcategory of support services accounted for 34 percent of current operations nationally, with a higher share in Arizona (40 percent) and a smaller share in Utah (30 percent). Support services consist of 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 includes such functions as food services and adult education. It accounted for 5 percent of the total nationally, 6 percent in Arizona, and 8 percent in Utah.

The following analysis focuses on the per student measure, reporting the Arizona and Utah figures as a percentage of the national average and as a rank among the states (with the District of Columbia included). The FY 2014 figures are adjusted for the cost of living. Since the cost of living is a little less than the U.S. average in both Arizona and Utah, this adjustment slightly raises the percentages of the national average for each state. Since the difference in the cost of living between Arizona and Utah is less than 1 percent, the adjustment has little effect on the comparison between Arizona and Utah.

Instead of using the cost-of-living adjustment, it is possible to adjust the per student figures for per capita personal income. Each state's per capita personal income in FY 2014 was a little more than 17 percent below the national figure. Thus, the percentages of the U.S. average are considerably higher on the per student per $1,000 of per capita personal income measure than on the per student measure, but this adjustment hardly affects the comparison of Arizona and Utah.

Fiscal Year 2014

Elementary and secondary education finance in Arizona and Utah in FY 2014 is compared in Table 7. Total revenues exceeded total expenditures in Arizona, while expenditures and revenues were nearly equal in Utah. Thus, comparisons of the two states vary a little depending on whether the revenue or expenditure figures are examined. Total dollar values are presented in the table to provide the relative size of the various categories. Otherwise, the table presents revenues and expenditures per student in FY 2014, adjusted for the cost of living. The following discussion is based on the per student measures in FY 2014, adjusted for living costs.

Revenues for K-12 education were far below the national average in both Arizona and Utah, by 29 percent in Arizona and 38 percent in Utah. Each ranked among the bottom three states. Arizona received above-average amounts of federal funding, while Utah's federal funding was far below average. Looking only at state and local government revenue, Arizona was 32 percent, and Utah was 38 percent, below the national average.

Expenditures for K-12 education in Arizona and Utah also were far below the national average, by 30 percent in Arizona and 38 percent in Utah. Each ranked near the bottom of the states. In each of the three broad categories of expenditures — current operations, capital outlays, and other expenditures, spending was considerably below the national average in each state.

TABLE 7
ELEMENTARY AND SECONDARY EDUCATION FINANCE, FISCAL YEAR 2014

	Dollars in Millions		Per Student, Adjusted for Cost of Living							
			Dollars		Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total Revenues	$8,294	$4,400	$9,105	$7,940	71.3%	62.2%	49	51	8	10
Federal Government	1,103	385	1,211	695	110.7	63.6	19	51	2	10
State and Local Government	7,191	4,015	7,894	7,245	67.6	62.0	49	50	8	9
State Government	3,182	2,363	3,494	4,264	58.5	71.4	50	47	10	9
Local Government	4,008	1,652	4,400	2,981	77.0	52.2	33	45	4	7
Property Tax	2,981	1,461	3,273	2,637	87.9	70.8	25	32	4	6
Other	1,027	191	1,127	345	56.7	17.3	27	47	1	8
Total Expenditures	8,101	4,382	8,893	7,907	70.1	62.3	49	50	8	9
Current Operations	7,222	3,779	7,928	6,820	70.1	60.3	49	51	8	10
Instruction	3,903	2,337	4,284	4,216	62.7	61.7	49	51	8	10
Support Services	2,858	1,140	3,138	2,057	80.7	52.9	44	51	6	10
Pupil Support	546	133	599	240	96.8	38.7	26	51	4	10
Instructional Staff Support	409	149	449	269	88.2	52.9	35	49	6	9
General Administration	96	36	105	64	50.1	30.7	46	50	7	10
School Administration	329	228	361	412	59.5	67.8	51	49	10	8
Plant Operations & Maintain	854	363	937	655	88.9	62.1	39	51	3	10
Pupil Transportation	346	126	380	228	76.9	46.2	41	50	5	9
Other Support Services	279	105	306	189	78.0	48.2	32	45	7	9
Other Current Operations	461	303	506	546	86.3	93.1	39	37	4	2
Capital Outlays	678	491	745	886	75.7	90.1	38	33	7	5
Construction	424	280	465	505	62.6	67.9	36	35	7	6
Land and Structures	44	118	48	213	78.8	347.2	23	6	6	1
Equipment: Instructional	50	41	54	74	125.6	171.4	24	18	3	1
Equipment: Other	161	52	176	94	130.3	69.3	18	41	3	8
Other Expenditures	201	112	220	202	54.9	50.2	34	38	7	10
Interest on Debt	198	111	218	201	60.4	55.6	33	37	7	10
Payments to Other Governmts	3	1	3	1	6.8	2.4	15	17	3	4

* Among the 50 states and the District of Columbia; a rank of 1 indicates the highest revenues or expenditures.
** Among 10 western states; a rank of 1 indicates the highest revenues or expenditures.

Source: U.S. Department of Commerce, Census Bureau, Public Elementary-Secondary Education Finance, http://www.census.gov/govs/school/ (education finance and number of students) and U.S. Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov/regional/index.htm (cost of living).

Capital outlays were higher in Utah than Arizona: 10 percent below average versus 24 percent below average. The amount spent on capital projects can vary significantly from year to year, especially by category of capital outlays. Spending for purposes other than current operations and capital outlays consists almost entirely of interest payments on debt. The amount was similar in the two states, far below the national average.

The current operations category is the key to evaluating how well a state supports public education. Current operations spending was 30 percent below the national average in Arizona (third lowest of the states) and 40 percent below average in Utah (the lowest of all states). Expenditures were below average in each of the current operations categories in both Arizona and Utah. Spending was higher in Utah than in Arizona only in the school administration category. Arizona was particularly below average on the two administrative categories; Utah was far below average on pupil support and general administration.

Change Over Time

A summary of the change in education finance in Arizona and Utah relative to the nation between FYs 1992 and 2014 is presented in Table 8. Fiscal year 1992 was selected as the starting year both for the sake of convenience (it is the first year of data available online) and because after FY 1992, Arizona began a series of tax reductions that have limited the amount of funding available to K-12 education. The 22-year period is split into three parts: the period since the high point of the previous economic cycle in FY 2008 and the prior 16 years divided evenly into eight-year periods.

The table and the following discussion presents the per student change in the percentage of the national average in each state. For example, total revenue per student in Arizona was 88 percent of the national average in FY 1992 and 80 percent of the average in FY 2000; the decrease of 8 percentage points is reported in the upper-left corner of the table. The figures are not adjusted for changes in the relative cost of living.

Total revenue fell in each of the three time periods in Arizona. A large decline in state funding occurred between FYs 2008 and 2014. In Utah, revenue rose between FYs 1992 and 2000, then fell back to near the FY 1992 value after FY 2000.

Spending fell considerably in Arizona between FYs 1992 and 2000 and again between FYs 2008 and 2014, with declines in current operations and very large decreases in capital outlays. Capital outlays vary widely by year as projects begin and end. Thus, the changes between specific years shown in Table 8 should be interpreted with caution. In contrast to Arizona, expenditures in Utah hardly changed between FYs 1992 and 2014, in total and for current operations.

The annual record of current operations spending is shown in Chart 1. While per pupil expenditures in Utah relative to the U.S. average were relatively steady at far below average throughout the 22-year period, spending in Arizona fell more than 20 percentage points versus the national average.

In Arizona, spending on instruction and on support services fell between FYs 1992 and 2014. In both categories, spending in Utah fluctuated over time, with little net change over the 22 years.

TABLE 8
CHANGE IN ELEMENTARY AND SECONDARY EDUCATION FINANCE

	Change in Percentage of U.S. Average, Per Student					
	1992 to 2000		2000 to 2008		2008 to 2014	
	Arizona	Utah	Arizona	Utah	Arizona	Utah
Total Revenues	-8	6	-3	-4	-9	-2
Federal Government	-15	5	-7	1	4	-9
State and Local Government	-7	6	-3	-4	-10	-2
State Government	-5	7	5	-6	-21	-4
Local Government	-9	3	-11	-2	2	1
Property Tax	-8	8	-8	0	-7	4
Other	-5	-4	-16	-6	18	-7
Total Expenditures	-13	4	1	0	-12	-3
Current Operations	-5	6	0	-7	-6	2
Instruction	-8	6	-1	-8	-8	1
Support Services	-4	3	1	-6	-2	5
Pupil Support	10	11	13	-8	-3	1
Instructional Staff Support	-23	0	1	-7	38	2
General Administration	-56	9	-9	0	-6	-2
School Administration	-7	6	-6	-6	-10	6
Plant Operations & Maintenance	7	5	-7	-8	-5	8
Pupil Transportation	-8	9	16	-4	-4	1
Other Support Services	23	-33	4	-4	-32	12
Other Current Operations	11	21	1	-8	0	-6
Capital Outlays	-94	-10	18	59	-39	-30
Other Expenditures	-64	-7	-41	-13	-67	0

Source: U.S. Department of Commerce, Census Bureau, Public Elementary-Secondary Education Finance, http://www.census.gov/govs/school/.

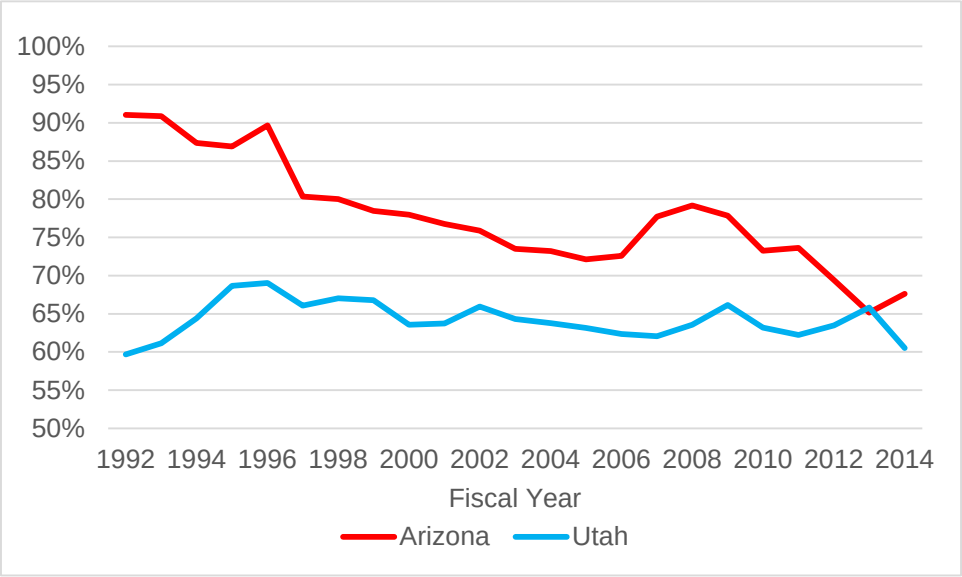
Within the support services category, spending fell sharply in Arizona in the general administration category, which includes school district offices. Significant decreases also occurred in the school administration category. In contrast, gains occurred in the pupil support category between FYs 1992 and 2008. In Utah, gains and losses were fairly small in each of the support services subcategories in each time period, except for the other support services category.

Higher Education

The State Higher Education Executive Officers Association (SHEEO) produces an annual report on higher education revenue.[24] The time series runs from fiscal year 2000 through FY 2015. The revenue and enrollment of all public higher education institutions in a state are combined; data are not available specific to community colleges or to universities.

[24] State Higher Education Executive Officers Association, "State Higher Education Finance," http://sheeo.org/projects/shef-%E2%80%94-state-higher-education-finance.

CHART 1
ELEMENTARY AND SECONDARY EDUCATION EXPENDITURES PER STUDENT, PERCENT OF THE NATIONAL AVERAGE



Source: U.S. Department of Commerce, Census Bureau, Public Elementary-Secondary Education Finance, http://www.census.gov/govs/school/.

SHEEO reports higher education revenue in each of five primary categories:

- State support
- Local support
- Educational appropriations
- Net tuition revenue
- Total educational revenue

According to SHEEO, "State and Local Support consists of state tax appropriations and local tax support plus additional nontax funds (e.g., lottery revenue) that support or benefit higher education, and funds appropriated to other state entities for specific higher education expenditures or benefits (e.g., employee fringe benefits disbursed by the state treasurer). State and local support for 2009–2012 also includes federal American Reinvestment and Recovery Act (ARRA) revenue provided to stabilize these sources of revenue for higher education."

In Table 9, state support and local support are shown separately. Since the relative responsibility for financing public higher education varies between state government and local government by state, comparisons across states of either state support or of local support need to be made cautiously. Local governments provide funding for higher education in only 29 states, including Arizona but not Utah.

According to SHEEO, "Educational Appropriations are that part of state and local support available for public higher education operating expenses. They are defined to exclude spending for research, agricultural, and medical education, as well as support for independent institutions

TABLE 9
HIGHER EDUCATION REVENUE, FISCAL YEAR 2015

	Dollars in Millions		Per Student, Adjusted for Cost of Living							
			Dollars		Percent of U.S.		U.S. Rank*		West Rank**	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
State Support	$916	$884	$3,464	$7,572	48.9%	106.8%	49	22	10	2
Local Support	808	0	3,057	0	375.2	0.0	1	30t	1	8t
Educational Appropriations	1,487	787	5,626	6,740	80.8	96.8	41	24	8	5
Net Tuition	2,038	652	7,709	5,582	128.3	92.9	21	35	3	4
Total Educational Revenue	3,431	1,439	12,978	12,322	100.6	95.5	33	41	2	5

* Among the 50 states; a rank of 1 indicates the highest revenues or expenditures.
** Among 10 western states; a rank of 1 indicates the highest revenues or expenditures.
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Sources: State Higher Education Executive Officers Association, *State Higher Education Finance*, http://www.sheeo.org/projects/shef-%E2%80%94-state-higher-education-finance (finance data); and U.S. Department of Commerce, Bureau of Economic Analysis, http://bea.gov/regional/index.htm (cost of living).

TABLE 10
CHANGE IN HIGHER EDUCATION REVENUE

	Change in Percentage of U.S. Average, Per Student			
	2000 to 2008		2008 to 2015	
	Arizona	Utah	Arizona	Utah
State Support	1	12	-28	0
Local Support	87	-	6	-
Educational Appropriations	9	9	-25	-4
Net Tuition	7	15	22	1
Total Educational Revenue	5	11	-3	8

Source: State Higher Education Executive Officers Association, *State Higher Education Finance*, http://www.sheeo.org/projects/shef-%E2%80%94-state-higher-education-finance (finance data).

or students attending them. Since funding for medical education and other major non-instructional purposes varies substantially across states, excluding these funding components helps to improve the comparability of state-level data on a per student basis."

Thus, the educational appropriations category is not equal to the sum of state support and local support. Per student educational appropriations after adjusting for the cost of living in FY 2015 were 19 percent less than the national average in Arizona but only 3 percent below average in Utah. Arizona's figure was 10th lowest among the 50 states; Utah ranked in the middle of the states.

Student tuition and fees is another significant source of higher education revenue. According to SHEEO, "Net Tuition Revenue is the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees. This is a measure of the resources available from tuition and fees to support instruction and related operations at public higher education institutions and includes revenue from in-state and out-of-state students as well as undergraduates and graduate students. Net tuition revenue generally reflects the share of instructional support received from students and their families."

In FY 2015, net tuition was 28 percent higher than the national average in Arizona but 7 percent below average in Utah after adjusting for the cost of living. Relative to the funding from educational appropriations, net tuition in Arizona was 37 percent higher and in Utah was 17 percent lower.

Total educational revenue for higher education is not exactly equal to the sum of educational appropriations and net tuition. According to SHEEO, "Total Educational Revenue is the sum of educational appropriations and net tuition revenue excluding any tuition revenue used for capital and debt service. It measures the amount of revenue available to public institutions to support instruction (excluding medical students). Very few public institutions have significant non-restricted revenue from gifts and endowments to support instruction. In some states, a portion of the net tuition revenue is used to fund capital debt service and similar non-operational activities. These sums are excluded from calculations used to determine total educational revenue."

Total educational revenue per student adjusted for living costs was less than 1 percent above the national average in Arizona in FY 2015 and ranked 33rd nationally. Utah's figure was 10th lowest among the states at 4.5 percent below average.

A summary of the change in higher education finance in Arizona and Utah relative to the nation between FYs 2000 and 2015 is presented in Table 10 for each of the five categories of revenue. The 15-year period is split into two parts: the period since the high point of the previous economic cycle in FY 2008 and the prior eight years. The table and the following discussion presents the per student change in the percentage of the national average in each state. In addition, the annual per student change in each of the five categories of revenue over the FY 2000-to-2015 period relative to the nation and to other states is shown in Chart 2. Table 10 and Chart 2 do not reflect changes in the relative cost of living.

From FY 2000 through FY 2008, state support for higher education relative to the national average was generally steady in Arizona but rose in Utah. Due to the decline in government revenue during the recession, state support fell in each state relative to the nation for a few years. Since then, state support in Utah has returned to its peak level relative to the nation, but no rebound has occurred in Arizona, leaving Arizona's FY 2015 figure 28 percentage points below the FY 2008 figure.

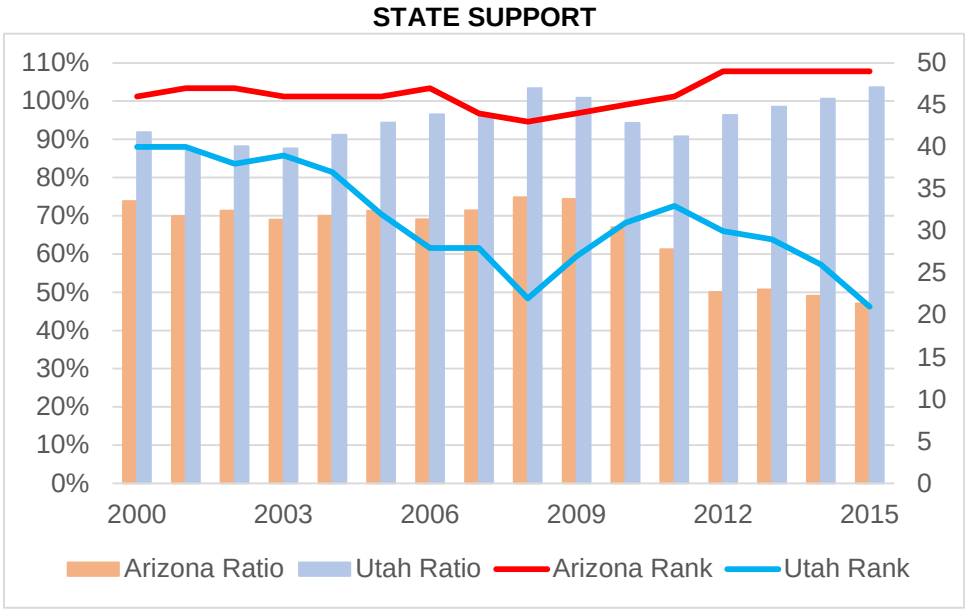
In Arizona, local support for higher education (for community colleges) rose relative to the nation between FYs 2000 and 2008 and has since held mostly steady. Utah does not fund higher education with local sources of revenue.

Educational appropriations per student in Arizona and Utah rose by equal amounts between FYs 2000 and 2008 relative to the national average. Arizona's level in each year was higher than in Utah. Since FY 2008, Arizona's level has declined 25 percentage points relative to the nation. Utah experienced a relative decline through FY 2011, but appropriations since then have increased almost to the FY 2008 level. Educational appropriations per student in Utah have been increasingly higher than in Arizona since FY 2012.

Net tuition has followed a different temporal pattern. While net tuition per student has been higher in Arizona than Utah in each year, the differential narrowed between FYs 2000 and 2008. Since then, Arizona has experienced a substantial increase of 22 percentage points relative to the nation. Utah had a relative increase only in FYs 2010 and 2011, with the change over the FY 2008-through-2015 period barely greater than the U.S. average.

Total educational revenues per student have been higher in Arizona than in Utah, but the increase in Arizona was less than in Utah in each of the two time periods.

CHART 2
HIGHER EDUCATION REVENUE PER STUDENT, PERCENT OF THE NATIONAL AVERAGE AND RANK AMONG THE 50 STATES



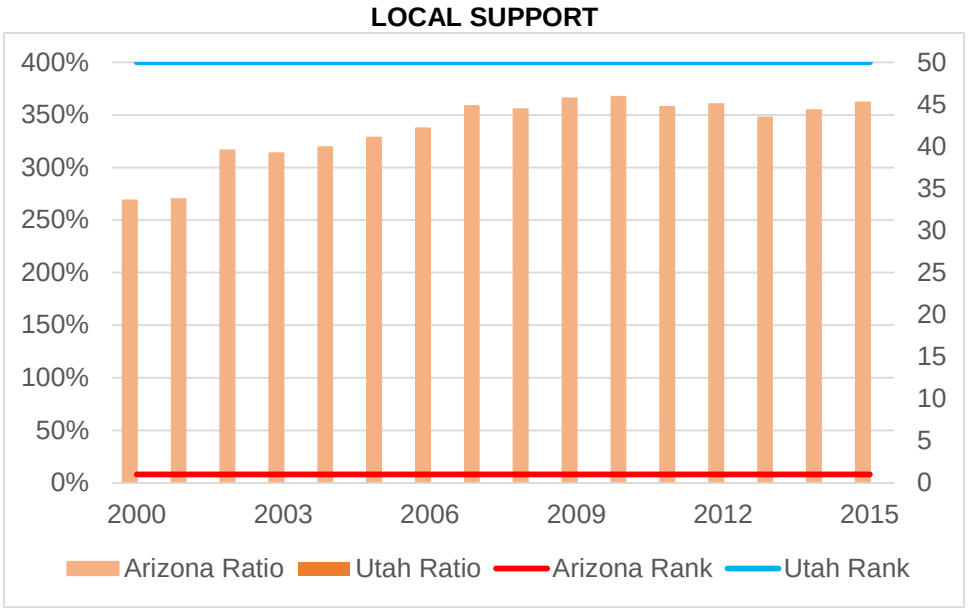


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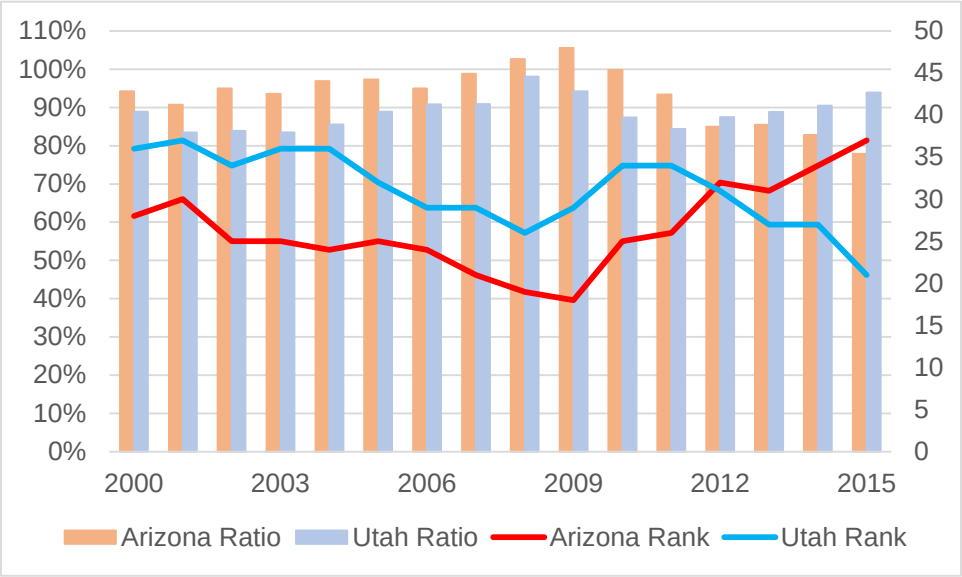
CHART 2 (continued)
HIGHER EDUCATION REVENUE PER STUDENT, PERCENT OF THE NATIONAL AVERAGE AND RANK AMONG THE 50 STATES

EDUCATIONAL APPROPRIATIONS



NET TUITION

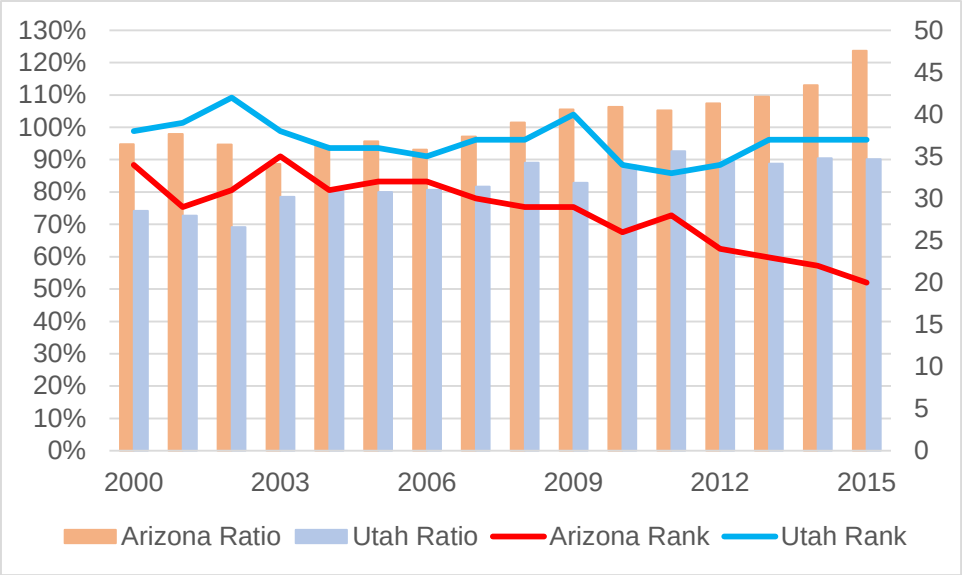


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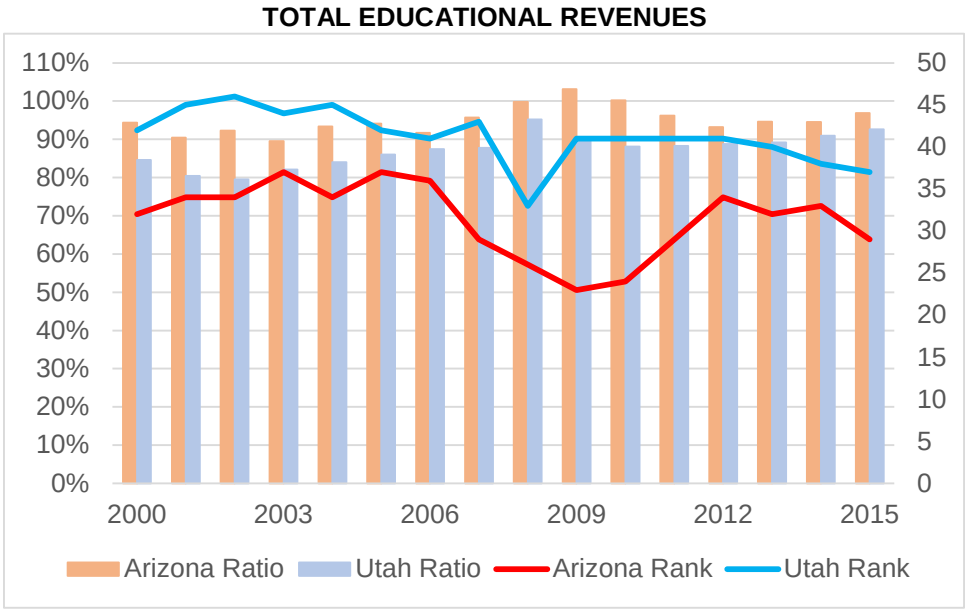
CHART 2 (continued)
HIGHER EDUCATION REVENUE PER STUDENT, PERCENT OF THE NATIONAL AVERAGE AND RANK AMONG THE 50 STATES



Notes:
The bars represent the percent of the national average; use the left scale.
The lines represent the ranks, where a rank of 1 indicates the highest revenue; use the right scale.

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

TAX RATES AND TAX BASES IN ARIZONA AND UTAH

In this section, the characteristics of each of several revenue sources in Arizona and Utah are compared. Because of the myriad of differences in the design of a tax from one state to another, only a general discussion is undertaken. The property tax is not discussed due to its complexity.

Individual Income Tax

Utah applies a single tax rate for individual income taxes of 5.0 percent. However, Utah's personal income tax does not qualify as a true "flat tax" since various deductions and exemptions are allowed. The standard deduction is 6 percent of the federal standard or itemized deduction; this averaged nearly $3,000 in 2014. The personal exemption is $3,000 per person.

Utah has an education fund separate from its general fund. Income tax revenue (personal and corporate) is deposited to the education fund.

Arizona's individual income tax has a graduated rate structure over five categories of income. The rate ranges from 2.59 percent for those whose taxable income is $20,000 or less to 4.54 percent for those with a taxable income of more than $300,000. The standard deduction is $5,086 for a single filer and $10,173 for a couple filing jointly; the personal exemption is $2,100 per person.

Corporate Income Tax

Each state applies a single rate with a small minimum payment. The rate has been declining in Arizona. For tax year 2017, the rate will be 4.9 percent; the rate in Utah is 5.0 percent. For corporations operating in more than one state, the apportionment of income is based on sales in Utah. In Arizona, corporations can use either the standard apportionment formula — 50 percent sales, 25 percent property, and 25 percent payroll — or an "enhanced" formula. In tax year 2017, the enhanced formula will be based entirely on sales.

General Sales Tax

The sales tax rate in Utah is 4.7 percent for state government. A 1.0 percent tax rate is levied across the state for municipalities and a 0.25 percent tax rate is applied for counties. Thus, the base tax rate is 5.95 percent. In addition, counties and municipalities have the option of levying additional sales tax rates for specific purposes. These additional rates range from zero to 2.4 percent. Thus, by jurisdiction, the overall sales tax rate ranges from 5.95-to-8.35 percent.

This tax rate is applied to most retail goods. However, the total tax rate on grocery food items is 3.0 percent (1.75 percent for state government, 1.0 percent for municipalities, and 0.25 percent for counties). The tax rate for restaurant food ranges by jurisdiction from 5.95-to-9.1 percent, the rate for transient lodging spans from 8.95-to-13.85 percent, and the rate for short-term leases varies from 8.45-to-17.85 percent.

The general sales tax in Arizona technically is called a transaction privilege tax (TPT). There are 15 categories within the TPT, including retail and restaurants, but most have a 5.6 percent tax rate levied by the state — slightly lower than Utah's base rate of 5.95 percent. However, the optional tax rates levied by municipalities and counties are higher in Arizona than in Utah,

ranging from 2.0-to-5.3 percent. Thus, the total sales tax rate in Arizona ranges by jurisdiction from 7.6-to-10.9 percent — roughly 2 percentage points higher than in Utah.

Numerous tax exemptions are allowed in Arizona. For example, food to be consumed at home is not taxed by the state, though municipalities may levy a tax.

Generally, services are not subject to the sales tax in either state. However, each state taxes some services. The list of services taxed differs between the two states, but the total number of services taxed is similar in the two states.

Motor Fuel Tax

Until 2016, each state applied a tax per gallon of motor fuel sold. For each type of fuel, the tax was 24.5 cents in Utah and 18 cents in Arizona, except that diesel fuel is taxed at 26 cents in Arizona for vehicles weighing more than 26,000 pounds. Arizona also levies a 1 cent per gallon tax on gasoline and other petroleum products placed in underground storage tanks.

In 2016, Utah shifted to a 12 percent tax on the statewide average rack price per gallon. The minimum tax rate per gallon is 29.4 cents.

Tobacco Taxes

For cigarettes, the tax is $2 per pack of 20 in Arizona and $1.70 per pack in Utah. Tobacco per ounce is taxed at 22.25 cents in Arizona and $1.83 in Utah. The tax on cigars in Arizona is 21.8 cents for a large cigar and 44.05 cents per 20 small cigars. In Utah, the tax on cigars is 86 percent of the manufacturer’s price.

Taxes on Alcoholic Beverages

In both states, the general sales tax applies to alcoholic beverages. In addition, a tax of 41 cents per gallon is assessed in Utah for beer of 3.2 percent alcohol or less; the tax on beer in Arizona is 16 cents per gallon. In Utah, all other alcoholic beverages must be purchased at a state-operated store; it is not possible to determine a tax rate. In Arizona, distilled spirits are taxed at $3 per gallon and wine is taxed at 84 cents per gallon.

Insurance Premium Tax

This tax is imposed on net insurance premiums received by insurance companies for risks that exist within the state. For most types of property, casualty, and life insurance, the tax rate is 2.25 percent in Utah. In Arizona, the tax rate is gradually being lowered, from 2.0 percent in FY 2015 to 1.7 percent in FY 2021.

TAX BURDEN IN ARIZONA AND UTAH

Numerous comparisons of the tax burden by state are available, but many of the studies are incomplete or otherwise unreliable. Most studies look at the total tax burden paid by individuals and businesses combined, but a few studies focus on either individual tax burdens or business tax burdens. In this section, Arizona and Utah are compared to the national average and are ranked relative to all states and to the 10 western states.

Total Tax Burden

A measure of the overall tax burden — including taxes paid by individuals and by businesses — can be calculated from the data reported annually by the Census Bureau. State and local government taxes per $1,000 of personal income in FY 2014 were 11 percent less than the U.S. average in Arizona, ranking 42nd highest among the 50 states and the District of Columbia and last among 10 western states. The figure in Utah was 5 percent above the U.S. average, ranking 16th highest nationally and third highest among the 10 western states. On a per capita basis, Arizona was 46th highest nationally and ninth highest among the 10 western states at 28 percent below average. Utah was 25 percent below average, ranking 42nd nationally and eighth in the West.

The Tax Foundation provides a comparison of total state and local government taxes by state from 1977 through 2012 using methodology and data different from that of the Census Bureau.[25] The tax burden is expressed relative to a measure of per capita income. In 2012, the total amount of taxes collected in Arizona was 8.8 percent of per capita income, 11 percent less than the national average of 9.9 percent. This includes the temporary increase in the sales tax rate that was in effect from June 2010 through May 2013. Utah's figure was 9.6 percent. Arizona's tax burden was 36th highest among the 50 states; Utah ranked 21st.

The historical comparison of the tax burden in Arizona, Utah, and the nation based on the Tax Foundation's data is shown in Chart 3. Since 1978, the tax burden in Arizona has been lower than in Utah. The burden has fallen in each state relative to the national average. Most of the decrease in Arizona occurred during the 1990s, while Utah had a lesser decline during the 1990s but another period of decreases after 2008. If current data were available, Arizona's tax burden likely would be lower than in 2012 relative to Utah and the nation due to the expiration of the temporary sales tax increase and the phased implementation of tax cuts passed in 2011 and 2012.

Individual Tax Burden

An annual study of state and local government taxes paid by individuals is produced by the government of the District of Columbia.[26] For a hypothetical family of three living in the largest city in each state and the District of Columbia, the amount of state and local government taxes paid are calculated based on the applicable tax laws for four types of taxes at each of five income levels, ranging from $25,000 to $150,000. The latest data are for 2014.

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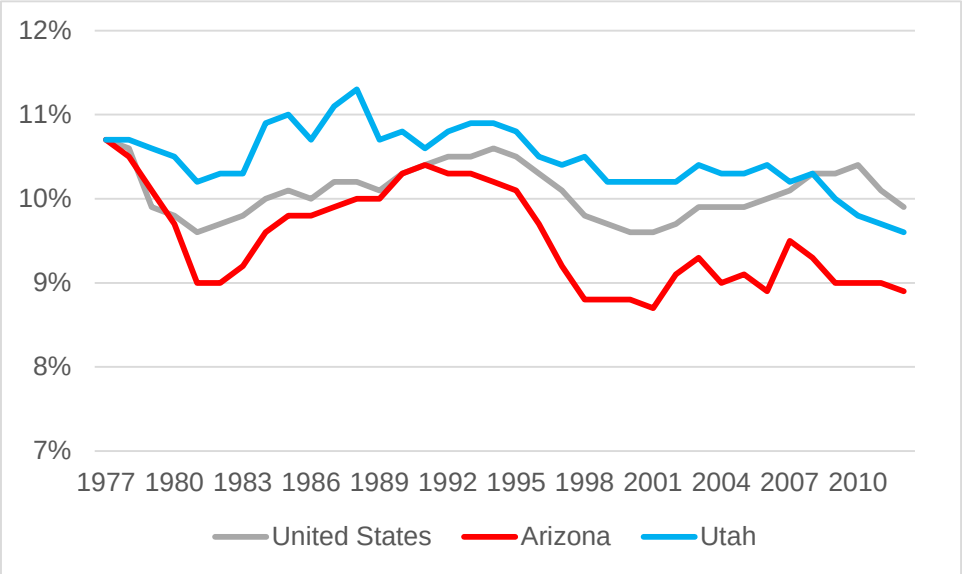
[25] Tax Foundation, *State-Local Tax Burden Rankings*, January 2016, http://taxfoundation.org/article/state-local-tax-burden-rankings-fy-2012.

[26] Government of the District of Columbia, *Tax Rates and Tax Burdens in the District of Columbia — A Nationwide Comparison*, *2014*, December 2015, http://cfo.dc.gov/node/215912.

CHART 3
TAX BURDEN AS A PERCENTAGE OF INCOME, STATE AND LOCAL GOVERNMENTS



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

Relative to the median of the 51 cities, total tax payments in Phoenix ranged from slightly above the median at the $25,000 income level to more than 13 percent below the median at household income levels of at least $100,000 (see Table 11). Salt Lake City's tax burden was less than or equal to the median city at each income level. Relative to Phoenix, the tax burden in Salt Lake City was 7 percent lower for those with an income of $25,000 but from 6-to-11 percent higher for those with higher incomes. Thus, the tax structure was less regressive in Salt Lake City than in Phoenix.

Among the four categories of taxes, the property tax had the highest burden at each income level in Phoenix. The income tax burden ranged from lowest at $25,000 to second highest at incomes of at least $100,000. In Salt Lake City in contrast, the income tax payment was the highest followed by the property tax at income levels of at least $50,000.

Individual income tax payments in Phoenix were less than half of the median of the cities at incomes of $50,000 or more. The income tax burden in Salt Lake City varied with income but generally was close to the median city. The individual income tax burden in Salt Lake City was at least twice as high as in Phoenix at income levels of at least $50,000. It is because of the low income taxes in Phoenix at incomes of $50,000 and higher that the overall tax burden in Phoenix was less than in Salt Lake City.

Property tax payments were above the median in Phoenix except at the lowest income level. In Salt Lake City, property taxes were considerably below the median except at the lowest income level. The property tax in Salt Lake City was about the same as in Phoenix at an income of $25,000. Households at this income level are assumed to rent. At higher incomes, households are

TABLE 11
TAXES PAID BY HOUSEHOLDS IN PHOENIX AND SALT LAKE CITY IN 2014

Household Income	Tax Payment: Income Tax		Property Tax		Sales Tax		Automotive Taxes		Total	
	Phx	SLC	Phx	SLC	Phx	SLC	Phx	SLC	Phx	SLC
$25,000	$54	$0	$1,474	$1,490	$1,040	$850	$279	$307	$2,847	$2,648
$50,000	619	1,499	1,718	1,271	1,269	1,031	288	307	3,894	4,109
$75,000	1,093	2,589	2,577	1,907	1,479	1,159	634	497	5,782	6,152
$100,000	1,876	4,108	3,436	2,543	1,690	1,361	721	587	7,722	8,599
$150,000	3,267	6,597	5,153	3,814	2,120	1,646	1,248	660	11,788	12,717

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

Household Income	Income Tax		Property Tax		Sales Tax		Automotive Taxes		Total	
Phoenix										
$25,000	-%^	18/3	94.8%	31/8	131.6%	12/2	101.8%	25/5	103.0%	24/4
$50,000	45.5	38/6	111.1	21/4	132.6	12/2	105.1	21/4	94.8	30/4
$75,000	44.0	39/6	110.9	22/4	133.5	11/2	130.2	14/2	90.9	34/5
$100,000	46.1	39/6	108.6	22/4	131.8	12/2	113.7	16/3	85.2	37/6
$150,000	48.4	39/7	100.6	25/6	135.8	10/1	185.4	12/2	86.6	37/6
Salt Lake City										
$25,000	-%^	19t/4t	95.8%	29/7	107.6%	20/8	112.0%	25/5	95.8%	32/7
$50,000	110.1	18/2	82.2	37/8	107.7	21/8	112.0	21/4	100.0	26/3
$75,000	104.4	18/3	82.1	37/8	104.6	20t/7t	102.1	14/2	96.7	29/4
$100,000	101.0	20/3	80.3	40/9	106.2	21/8	92.6	29/6	94.8	29/4
$150,000	97.7	25/3	74.4	41/9	105.4	22/8	98.1	27/4	93.4	32/4

* A rank of 1 indicates the highest tax payments.
^ The median is zero.
t tie

Source: Government of the District of Columbia, *Tax Rates and Tax Burdens in the District of Columbia — A Nationwide Comparison*, *2014*, December 2015, http://cfo.dc.gov/node/215912.

assumed to own their homes; property taxes in Salt Lake City were 26 percent lower than in Phoenix.

The amount of sales tax paid in Phoenix was very high at each income level. Sales tax payments in Salt Lake City also were above the median, but not by as much as in Phoenix. The sales tax in Salt Lake City ranged by income from 18-to-22 percent less than in Phoenix.

Automotive-related taxes were above the median at each income level in Phoenix and above the median in Salt Lake City at incomes up to $75,000. The automotive taxes in Phoenix were lower than those in Salt Lake City at income levels of $50,000 and less but considerably higher at the highest income level.

Individual income taxes are examined in more detail in a study done by the Minnesota Center for Fiscal Excellence.[27] Forty-one states and the District of Columbia, including seven of 10 western states, levy an individual income tax. The Arizona and Utah figures for a married couple filing jointly are shown in Table 12; the relative results are similar for a senior married couple filing jointly, a head of household, a single person, and a senior single filer. The results from this study generally are in line with those from the District of Columbia study, showing that individual income taxes in Arizona were very low from a national perspective at incomes of $50,000 and more and that income tax payments were substantially higher in Utah than in Arizona, though the differential was not quite as large as indicated in the District of Columbia study. The individual income tax burden in Utah generally was above the national average except at very high income levels.

The Minnesota Center for Fiscal Excellence also provides information on property taxes for the largest city in each state and the District of Columbia and for two additional cities.[28] This study indicates that residential property taxes of homeowners in both Phoenix and Salt Lake City are lower relative to the national average than in the District of Columbia study, with tax burdens considerably below average (as seen at the bottom of Table 13). The tax burden in Salt Lake City was 30 percent less than in Phoenix at values of $150,000 and $300,000. However, the differential was only 7 percent at the median value. If assessment limitations and property tax relief programs that are broadly applicable are considered, the tax was 4 percent higher in Salt Lake City than in Phoenix at the median value.

The individual income tax in both states is progressive — even though a single tax rate is applied in Utah — with the amount due as a percentage of income rising with income. This partially offsets the regressive nature of most other taxes. The other primary taxes — the sales tax and the property tax — are regressive in structure, with lower income earners paying a higher share of their income in taxes than higher income earners, as seen in Chart 4. These data for 2015 come from a study by the Institute on Taxation & Economic Policy (ITEP), which expresses state and local government taxes as a share of income for nonelderly taxpayers.[29] Shares are calculated by income quintile, with the highest quintile split into three parts.

According to the ITEP study, the overall tax structure in Arizona was more regressive than the national average, with the tax burden higher than in Utah and the nation at low incomes but lower at high incomes, as seen in Chart 5. Regressivity in Utah was lower than the U.S. average. The tax system in Arizona was the eighth-most regressive among the states (third most among the 10 western states), while Utah ranked 34th nationally and seventh among the western states.

Arizona's relatively more regressive overall tax structure results largely from its limited use of the individual income tax and its heavy dependence on the sales tax. Its property and sales taxes

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[27] Minnesota Center for Fiscal Excellence, *Comparison of Individual Income Tax Burdens by State, 2015 Edition*, October 2015, https://www.fiscalexcellence.org/our-studies/income-tax-burden-study-2015edition-final.pdf.

[28] Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy, *50-State Property Tax Comparison Study*, June 2016, https://www.lincolninst.edu/publications/other/50-state-property-tax-comparison-study-0.

[29] Institute on Taxation & Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2015, http://www.itep.org/whopays/.

TABLE 12
INDIVIDUAL INCOME TAXES PAYABLE IN 2013, MARRIED COUPLE FILING JOINTLY

	Tax Due		Tax as Percent of U.S. Average		National Rank*		West Rank**		Tax as Percent of Income	
	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah	Arizona	Utah
$20,000	$-100	$0	***	***	23	7t	4	1t	-0.50%	0.00%
$35,000	357	396	101.1%	112.1%	21	20	3	2	1.02	1.13
$50,000	762	1,321	56.1	97.3	36	21	5	2	1.52	2.64
$75,000	1,329	2,784	55.0	115.3	39	14	6	2	1.77	3.71
$100,000	2,055	4,184	55.6	113.3	40	12	7	2	2.06	4.18
$150,000	3,400	6,633	54.7	106.7	41	18	7	3	2.27	4.42
$250,000	6,836	11,485	59.1	99.3	41	23	7	4	2.73	4.59
$500,000	17,888	23,028	69.6	89.5	39	28	7	4	3.58	4.61
$1,000,000	35,358	46,634	63.3	83.5	39	29	7	4	3.54	4.66

* Among 42 states that levy the tax, where a rank of 1 indicates the highest tax payments.
** Among seven western states that levy the tax, where a rank of 1 indicates the highest tax payments.
*** The U.S. average is negative.
t tie

Source: Minnesota Center for Fiscal Excellence, *Comparison of Individual Income Tax Burdens by State, 2015 Edition*, October 2015, https://www.fiscalexcellence.org/our-studies/income-tax-burden-study-2015edition-final.pdf.

TABLE 13
PROPERTY TAXES PAYABLE IN PHOENIX AND SALT LAKE CITY IN 2015

Category and Value	Ratio to National Average		National Rank*		West Rank**	
	Phx	SLC	Phx	SLC	Phx	SLC
Commercial:						
$100,000	103.0%	75.2%	24	33	4	5
$1 Million	106.8	73.0	23	36	4	6
$25 Million	122.9	71.9	17	37	1	6
Industrial, 50% Personal Property:						
$100,000	85.6	83.8	31	32	4	5
$1 Million	127.6	79.2	13	35	2	6
$25 Million	139.8	77.9	8	35	2	6
Industrial, 60% Personal Property:						
$100,000	76.2	88.9	35	28	6	4
$1 Million	139.5	82.9	9	33	2	6
$25 Million	149.8	81.6	6	34	2	6
Apartment:						
$600,000	68.7	46.1	36	46	5	8
Residence:						
$150,000	83.0	57.7	30	43	4	8
$300,000	79.7	55.4	32	45	4	9
Median Value	78.4	72.7	27	30	6	8
Residence, With Assessment Limits:						
Median Value	73.0	75.9	33	29	8	7

* Among 53 large cities nationwide, where a rank of 1 indicates the highest tax payments.
** Among 10 large cities in western states, where a rank of 1 indicates the highest tax payments.

Source: Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy, *50-State Property Tax Comparison Study*, June 2016, https://www.lincolninst.edu/publications/other/50-state-property-tax-comparison-study-0.

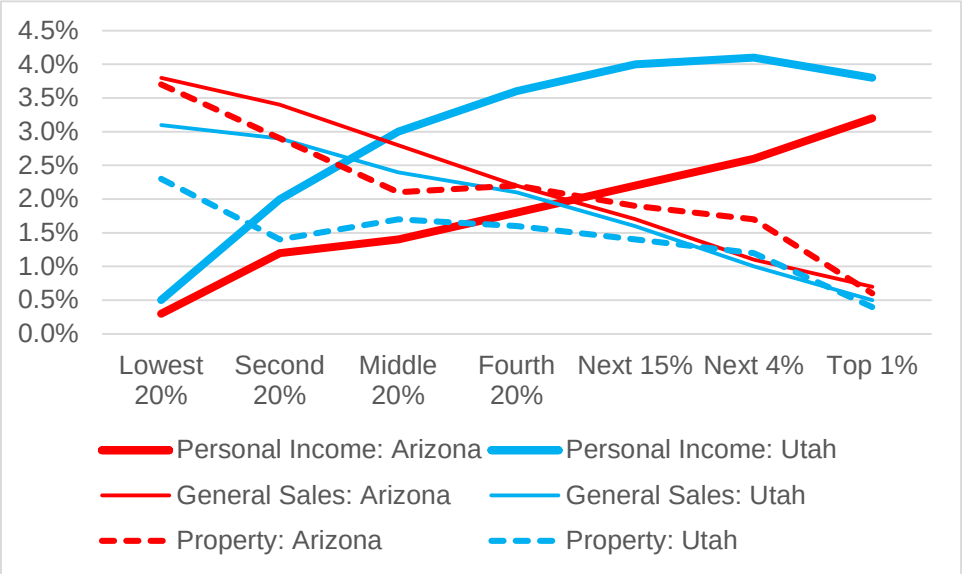
are not more regressive than the U.S. average. The relatively less regressive overall tax structure in Utah largely results from its relatively heavy use of the individual income tax.

Business Tax Burden

For most companies — those who serve local residents — taxes are not much of an issue. Such companies are subject to the same taxes as their competitors and taxes generally are passed on to the consumer, as are other costs, as part of the price of a good or service.

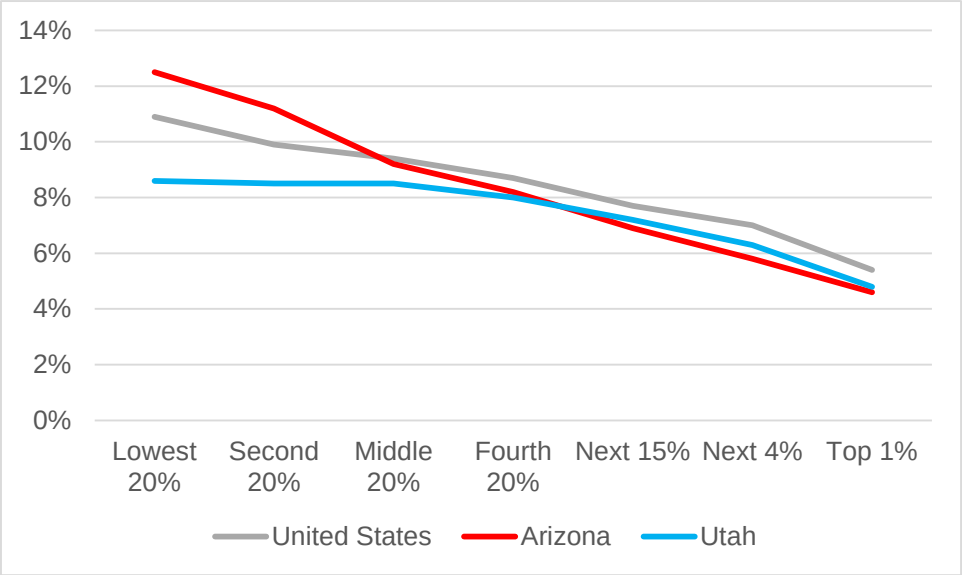
In contrast, business taxes are an issue for companies in the traded sector of the economy. Such companies sell their products primarily to customers outside the local area; their market area may be national or international. Communities nationally or internationally compete to be the home of such operations, based on economic development location factors, including the local tax burden. However, the business tax burden is not one of the most important factors. In particular, the quality and availability of the labor force, the quality and availability of the physical infrastructure, and other costs — particularly labor costs — are more important than taxes.

CHART 4
MAJOR STATE AND LOCAL GOVERNMENT TAXES AS A SHARE OF FAMILY INCOME FOR NONELDERLY TAXPAYERS BY INCOME QUINTILE IN 2015



Source: Institute on Taxation & Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2015, http://www.itep.org/whopays/.

CHART 5
TOTAL STATE AND LOCAL GOVERNMENT TAXES AS A SHARE OF FAMILY INCOME FOR NONELDERLY TAXPAYERS BY INCOME QUINTILE IN 2015



Source: Institute on Taxation & Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2015, http://www.itep.org/whopays/.

All taxes paid by businesses are included in an annual study produced by Ernst & Young for the Council on State Taxation.[30] The study identifies six categories of business taxes: property, sales, excise (such as the motor fuel tax), income (corporate income tax plus the individual income tax when used for pass-through income by S corps), unemployment insurance, and license and other taxes (such as severance taxes). The amount of taxes paid by businesses during fiscal year 2014 was determined through a combination of detailed data collection and modeling. To compare states, the total amount of business taxes paid is divided by private-sector gross domestic product.

As seen in Table 14, the business tax structure in Utah is similar to the national average, while the composition of business taxes in Arizona is relatively more dependent on the property and sales taxes and less dependent on each of the other four categories.

The business tax burden is expressed as a percentage of private-sector gross domestic product. The overall business tax burden in Arizona in FY 2014 was a little higher than the national average, in contrast to the lower-than-average individual tax burden (at income levels of $50,000 and higher). The business tax burden in Utah was 19 percent less than the national average and 24 percent less than in Arizona. As already-passed business tax cuts (mostly to the corporate income tax) continue to phase in over the next few years, Arizona's position relative to the rest of the country should improve somewhat.

TABLE 14
TAXES PAID BY BUSINESSES IN FISCAL YEAR 2014

	Share of Business Taxes			Business Taxes as a Share of Private-Sector Gross Domestic Product					
				Ratio To U.S. Average		National Rank*		West Rank**	
Tax	**U.S.**	**AZ**	**Utah**	**AZ**	**Utah**	**AZ**	**Utah**	**AZ**	**Utah**
TOTAL	100%	100%	100%	106%	81%	19	45	5	9
Property	36	43	37	124	84	13	33	1	6
Sales	21	32	22	165	86	7	32	4	9
Income	14	8	13	57	75	45	33	8	5
Excise	12	9	13	81	88	38	28	8	6
License/Other	9	4	6	48	58	47	42	10	9
Unemployment Insurance	7	3	9	51	101	48	21	10	5

* Rank among 51 states, where a rank of 1 indicates the highest tax payments.
** Rank among 10 western states, where a rank of 1 indicates the highest tax payments.

Source: Ernst & Young, *Total State and Local Business Taxes: State-by-State Estimates for Fiscal Year 2014*, October 2015, http://www.cost.org/WorkArea/DownloadAsset.aspx?id=91531 (taxes paid) and U.S. Department of Commerce, Bureau of Economic Analysis (private-sector GDP).

[30] Ernst & Young, *Total State and Local Business Taxes: State-by-State Estimates for Fiscal Year 2014*, October 2015, http://www.cost.org/WorkArea/DownloadAsset.aspx?id=91531.

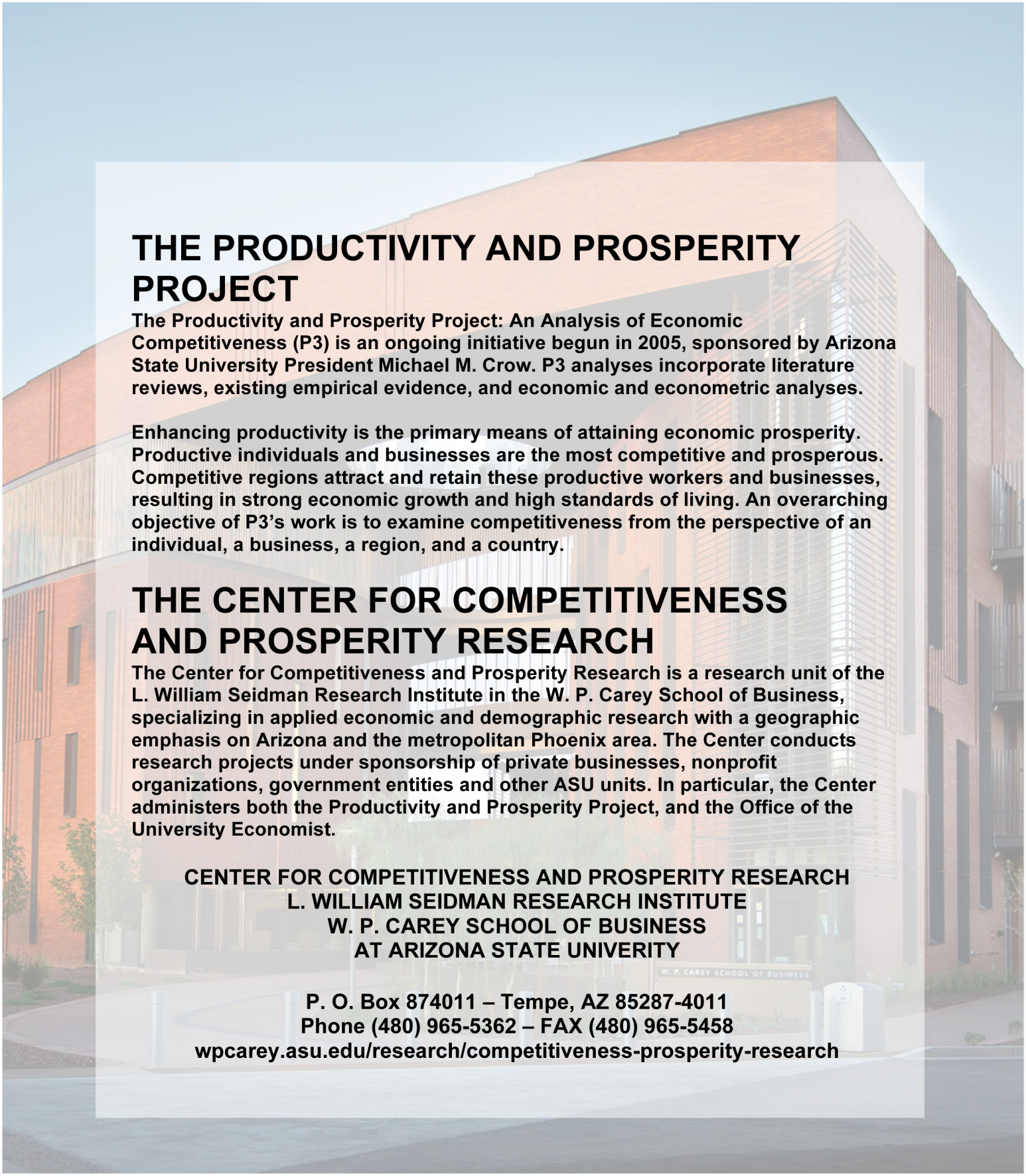
Property and sales taxes paid by businesses in Arizona were far higher than the national average, while the tax burden for each of the other business tax categories was substantially below average. Other than the unemployment insurance tax, each of Utah's business taxes were below the national average. The business tax burden in Utah was much less than in Arizona for the property and sales taxes, but higher for each of the other taxes.

Business property taxes are examined in more detail in the study done by the Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy. This study agrees with the Ernst & Young study in indicating that business property taxes in Utah are much less than in Arizona.

This study indicates that commercial and industrial property taxes in Phoenix relative to other large cities (including Salt Lake City) vary with the value of the property (see Table 13). Commercial property taxes in Phoenix in 2015 were only slightly above average at low values but were further above average at high property values. Industrial property taxes ranged from below average at low values to substantially above average at high property values. In contrast, residential property taxes in Phoenix were considerably below average at all values. Business property taxes in Salt Lake City were similar to those in Phoenix for industrial properties at low values but otherwise were substantially lower than in Phoenix.

The Ernst & Young study indicates that the business share of state and local government taxes in Arizona was above the national average in FY 2014. This results more from the low tax burden on individuals than the slightly high burden on businesses. The business share of local taxes was considerably above the national average but the share of state taxes was only a little above average. In contrast, the business share of state and local government taxes in Utah was less than the national average. The business share of local taxes was above the national average but the share of state taxes was below average.

In addition, the Ernst & Young study looks at the issue of the amount of business taxes paid versus the benefits businesses receive from state and local government services. A number of assumptions must be made in pursuing such an analysis. Ernst & Young conclude that business taxes nationally are high relative to the services received, with Arizona similar to the national average in the extent to which the tax burden exceeds the value of the public services. In Utah, business taxes are not as high relative to the services received as the national average.



THE PRODUCTIVITY AND PROSPERITY PROJECT

The Productivity and Prosperity Project: An Analysis of Economic Competitiveness (P3) is an ongoing initiative begun in 2005, sponsored by Arizona State University President Michael M. Crow. P3 analyses incorporate literature reviews, existing empirical evidence, and economic and econometric analyses.

Enhancing productivity is the primary means of attaining economic prosperity. Productive individuals and businesses are the most competitive and prosperous. Competitive regions attract and retain these productive workers and businesses, resulting in strong economic growth and high standards of living. An overarching objective of P3's work is to examine competitiveness from the perspective of an individual, a business, a region, and a country.

THE CENTER FOR COMPETITIVENESS AND PROSPERITY RESEARCH

The Center for Competitiveness and Prosperity Research is a research unit of the L. William Seidman Research Institute in the W. P. Carey School of Business, specializing in applied economic and demographic research with a geographic emphasis on Arizona and the metropolitan Phoenix area. The Center conducts research projects under sponsorship of private businesses, nonprofit organizations, government entities and other ASU units. In particular, the Center administers both the Productivity and Prosperity Project, and the Office of the University Economist.

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