

# THE FINANCING OF PUBLIC HIGHER EDUCATION IN ARIZONA

**A Report from the Office of the University Economist**

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## SUMMARY

State and local government appropriations for public higher education — community colleges and universities combined — in Arizona as of fiscal year (FY) 2022 were considerably below the amount needed to equal the national average per full-time-equivalent (FTE) student. Adjusted for the cost of living, state and local government appropriations needed to be more than \$900 million higher for Arizona to rank in the middle of the 50 states per FTE student and more than \$1.2 billion higher for Arizona to equal the U.S. average per FTE student.

After adjustment for the cost of living, Arizona's state and local government support (appropriations) for public higher education per FTE student in FY 2022 was 39.1 percent less than the national average and ranked 49th among the 50 states, with only New Hampshire having a lower figure.

State government appropriations for public higher education per FTE student adjusted for the cost of living were 63.0 percent less than the national average in Arizona and the lowest among the states in FY 2022. In contrast, local government support was the third highest in the country in Arizona at 2.62 times higher than the national average. Local government support in Arizona is limited to community colleges.

Net tuition and fees is another significant source of higher education revenue. It is calculated as gross tuition and fees minus financial aid from state and institutional sources. Per FTE student adjusted for the cost of living, net tuition and fee revenue in Arizona in FY 2022 was 25.2 percent higher than the national average and ranked 20th nationally. In total, net tuition and fees was 45 percent higher than the funding from educational appropriations in Arizona in FY 2022.

Total educational revenue for higher education — appropriations and net tuition and fees combined — per FTE student was 14.5 percent less than the national average in Arizona in FY 2022. Arizona ranked 47th nationally, with only Nevada, Louisiana, and Florida lower.

A stark difference exists in public support for universities versus community colleges in Arizona. Arizona's FY 2022 state and local government appropriations for universities per FTE student were 62.5 percent below average, second lowest in the nation, while for community colleges, the figure was 24.1 percent above average, eighth highest in the nation. The dollar value of educational appropriations per FTE student was 3.5 times as much for community colleges as for universities in Arizona in FY 2022.

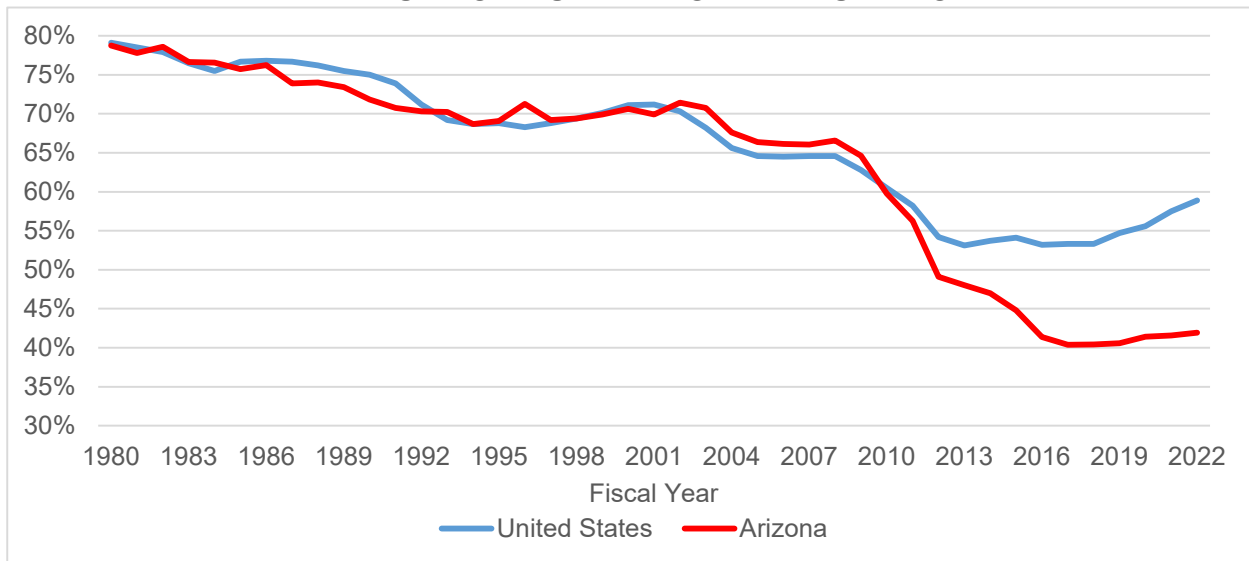
The situation is reversed for net tuition per FTE student in Arizona. In FY 2022, net tuition and fees in Arizona adjusted for the cost of living was 18.0 percent above average for university students, 17th highest in the nation, while the figure for community colleges was 13.7 percent below average, 43rd highest in the nation.

Despite the high university tuition, total educational revenue for universities in Arizona in FY 2022 was 23.9 percent below the national per FTE student average, ranking 46th. Total educational revenue for community colleges in Arizona in FY 2022 was 16.7 percent above the national per FTE student average, ranking 18th.

In FY 2022 nationally, appropriations by state and local governments accounted for 58.9 percent of the total revenue of community colleges and universities combined. The share contributed by state and local funding was considerably lower in Arizona at 41.9 percent. Arizona’s share ranked 39th nationally. Thus, relative to most states, Arizona places a higher share of the cost of higher education on students than on society as a whole.

Historically, the share of total higher educational revenue from appropriations of state and local governments was similar in Arizona to the national average; the share was more than 75 percent in the early 1980s. As seen in Chart S-1, the share of total higher educational revenue from state and local government appropriations has diverged sharply since FY 2009 in Arizona relative to the U.S. average. Between FY 2009 and FY 2022, the share fell 4 percentage points nationally compared to 23 percentage points in Arizona.

**CHART S-1  
EDUCATIONAL APPROPRIATIONS AS A SHARE OF TOTAL EDUCATIONAL REVENUE FOR PUBLIC HIGHER EDUCATION**



Source: Calculated from State Higher Education Executive Officers Association.

## **ANNUAL DATA FROM THE STATE HIGHER EDUCATION EXECUTIVE OFFICERS ASSOCIATION**

The State Higher Education Executive Officers Association (SHEEO) produces an annual report on “State Higher Education Finance” (<https://sheeo.org/project/state-higher-education-finance/>). The time series runs from fiscal year (FY) 1980 through FY 2022. By state, finance and enrollment data from all public universities and public community colleges are combined. Data for the District of Columbia are not available for the entire time period and have been excluded from this analysis. Thus, the national data are for the sum of the 50 states. In this paper, Arizona is compared to the nation and to a group of 10 states in the West: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington.

Data are separately reported for community colleges (also known as two-year institutions) and universities (four-year institutions) by the SHEEO, but only for fiscal years 2019 through 2022. In some states, the distinction between community colleges and universities is becoming blurred as community colleges are increasingly being allowed to offer some bachelor’s degrees.

The SHEEO report focuses on the sources of funding for higher education; it does not provide information on how those funds are used (expended). SHEEO does not include revenue from all sources. Five categories of revenue are examined in this paper:

- State Support for Public Higher Education: State government appropriations.
- Local Support for Public Higher Education: Local government funding; in Arizona, only community colleges receive local funding.
- Educational Appropriations for Public Higher Education: The sum of state support and local support, minus appropriations for special purposes, research, and medical programs.
- Net Tuition for Public Higher Education: Tuition and fees paid by students, minus financial aid from state and institutional sources, student waivers and discounts, and medical student tuition and fees.
- Total Educational Revenue for Public Higher Education: The sum of the educational appropriations category and the net tuition category, minus tuition revenue used for capital outlays or debt service.

### **Standardization of Data**

In order to compare states, the data must be standardized to account for differences in size. For education finance, the adjustment for size and changes in size over time is accomplished by expressing the data on a per student basis. SHEEO reports a measure of full-time-equivalent (FTE) enrollment by state that does not include medical students.

Analyses over time of dollar measures must account for inflation, which is measured by the gross domestic product implicit price deflator (GDP deflator) produced by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA).<sup>1</sup>

In addition to the adjustments for size and inflation, dollar figures used to compare states generally should be adjusted for geographic cost-of-living differences. The regional price parity (RPP) estimates produced by the BEA — which are expressed as percentages of the national

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<sup>1</sup> See Table 1.1.9 at <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey> .

average — are used to measure the cost of living.<sup>2</sup> The regional price parity estimates are available only for calendar years 2008 through 2021. For this paper, fiscal year RPPs were estimated as the average of two calendar years. Since the RPPs are not yet available for 2022, the FY 2022 SHEEO revenue data are adjusted by the calendar year 2021 RPPs. The RPPs change only slowly over time, so these estimated values have little practical effect.

The adjustment for the cost of living does not make a significant difference in Arizona’s dollar figures relative to the nation since the state’s RPP has been close to the national average. Arizona’s RPP in fiscal year 2009 was 103.2 (3.2 percent higher than the national average). The state’s RPP declined over the following few years; it was between 97.6 and 98.9 from fiscal years 2012 through 2021. The calendar year 2022 figure was 96.7 — 3.3 percent less than the U.S. average. In contrast, adjusting for the cost of living has a large impact in some states and can cause a noticeable difference in Arizona’s rank among the states.

An alternative adjustment is sometimes made to public revenue data to reflect the “ability to pay.” Typically, personal income is used to make this adjustment; in the case of education data that are expressed per student, per capita personal income is used for the adjustment.<sup>3</sup> This adjustment causes a larger difference in Arizona’s higher education revenue figures relative to the nation since the state’s per capita personal income is well below the national average, with the differential increasing over time. Arizona’s per capita personal income dropped from 4.9 percent below average in FY 1980 to 13.4 percent below average in FY 2022 (not adjusted for the cost of living). Arizona ranked 40th among the 50 states and the District of Columbia in FY 2022. Adjusted for the cost of living, per capita personal income in Arizona was 11.0 percent below average in FY 2022. Though Arizona’s adjusted figure was not as far below the U.S. average as its unadjusted figure, its adjusted rank was lower at 44th.

The problem with adjusting appropriations by the ability to pay is that the cost of providing an equal quality of education is essentially the same across the country after adjusting for the cost of living. Thus, a lower-income state that expends less than the national average on an adjusted per student basis generally provides a lesser quality of education, a factor that works against that state in improving the standard of living of its residents. The adjustment by per capita personal income makes more sense when applied to the net tuition category.

### **Higher Education Revenue in Fiscal Year 2022**

Public support for higher education is measured by educational appropriations for public universities and community colleges by state and local governments, less funding targeted for special purposes, research, and medical programs. In Arizona in FY 2022, this amounted to \$1.86 billion. The amount per full-time-equivalent student was \$6,237 after adjustment for the cost of living. This adjusted figure was 39.1 percent less than the national average and ranked 49th among the 50 states, with only New Hampshire having a lower figure.

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<sup>2</sup> The RPPs are available from <http://www.bea.gov/regional/index.htm>.

<sup>3</sup> Quarterly estimates of per capita personal income were used in this analysis to calculate fiscal year averages. Gross product sometimes is used instead of personal income in the ability-to-pay analysis. The BEA produces estimates of both indicators, available from <http://www.bea.gov/regional/index.htm>.

Since the relative responsibility for financing public higher education varies by state between state government and local governments, comparisons across states of state support need to be made cautiously, as do comparisons of local support. While all state governments provide funding for higher education, local governments provided funding for higher education in only 32 states in FY 2022.

State government appropriations for public higher education — without subtracting monies intended for special purposes, research, and medical programs — totaled \$1.16 billion in Arizona in FY 2022. Expenditures per FTE student were \$3,884 after adjusting for the cost of living — 63.0 percent less than the national average and the lowest among the states. In contrast, local support adjusted for the cost of living was the third highest in the country in Arizona at \$3,210 per FTE student, which was 2.62 times higher than the national average. Local support in Arizona, which is limited to community colleges, totaled \$960 million in FY 2022 (without subtracting monies intended for special purposes, research, and medical programs).

Student tuition and fees is another significant source of higher education revenue. In Arizona in FY 2022, net tuition and fees — tuition and fees paid by students, minus financial aid from state and institutional sources, student waivers and discounts, and medical student tuition and fees — provided \$2.71 billion. The calculation of net tuition and fees is shown in Table 1.

The amount of funding from net tuition and fees was 45 percent higher than the funding from educational appropriations in Arizona in FY 2022. Per FTE student adjusted for the cost of living, net tuition and fees in Arizona amounted to \$9,073, which was 25.2 percent higher than the national average and ranked 20th nationally. Adjusted per FTE student net tuition and fees in Arizona was third highest among the 10 states in the West, less than in Colorado and Oregon. In contrast, Nevada ranked 48th and California ranked 49th nationally.

Total educational revenue for higher education is the sum of (1) state and local government educational appropriations (total appropriations less those for special purposes, research, and medical programs), and (2) net tuition less any tuition used for capital outlays or debt service. Total educational revenue in Arizona in FY 2022 was \$4.45 billion. Per FTE student adjusted for the cost of living, the figure was \$14,877 — 14.5 percent less than the national average. Arizona ranked 47th nationally, with only Nevada, Louisiana, and Florida lower. The data for FY 2022 are summarized in Table 2 for each of the categories of higher education revenue.

**TABLE 1  
TUITION AND FEES, ARIZONA, FISCAL YEAR 2022**

	<b>Total Higher Education</b>	<b>Universities</b>	<b>Community Colleges</b>
Gross Tuition and Fee Revenue	\$3,964,271,700	\$3,651,349,100	\$312,922,600
State Public Financial Aid	18,628,900	18,018,500	610,400
Institutional Discounts and Waivers	1,200,780,600	1,083,033,700	117,746,900
Medical Tuition and Fees	31,750,400	31,750,400	0
Net Tuition and Fee Revenue	2,713,111,800	2,518,546,500	194,565,300

Source: Calculated from State Higher Education Executive Officers Association.

In fiscal year 2022, educational appropriations by state and local governments accounted for 58.9 percent of total higher educational revenue nationally. The share contributed by state and local funding was considerably lower in Arizona at 41.9 percent. Arizona's share ranked 39th nationally and ninth of 10 states in the West (only Colorado was lower). Thus, relative to most states, Arizona places a higher share of the cost of higher education on students than on society as a whole.

Revenue from Arizona's educational appropriations (state and local government) for higher education as of FY 2022 was considerably below the amount needed to equal the nation's per FTE student average. Adjusted for the cost of living, state and local government appropriations needed to be more than \$900 million higher for Arizona to rank in the middle of the 50 states per FTE student and more than \$1.2 billion higher for Arizona to equal the U.S. per FTE student average.

**TABLE 2**  
**PUBLIC HIGHER EDUCATION REVENUE PER FULL-TIME-EQUIVALENT**  
**STUDENT, ARIZONA, FISCAL YEAR 2022,**  
**UNIVERSITIES AND COMMUNITY COLLEGES COMBINED**

	Dollars	Percentage of Nation^^	Rank: Nation^^	Rank: West^^^
<b>Total Educational Revenue*</b>	\$14,389	82.7%	44	9
Adjusted by Cost of Living	14,877	85.5	47	9
Adjusted by Per Capita Personal Income^	260	95.5	39	7
<b>Net Tuition and Fees</b>	8,776	121.1	19	3
Adjusted by Cost of Living	9,073	125.2	20	3
Adjusted by Per Capita Personal Income^	158	139.8	18	3
<b>State and Local Government Support**</b>	6,032	58.9	49	10
Adjusted by Cost of Living	6,237	60.9	49	10
Adjusted by Per Capita Personal Income^	109	68.0	47	9
State Government Support	3,757	35.8	50	10
Adjusted by Cost of Living	3,884	37.0	50	10
Adjusted by Per Capita Personal Income^	68	41.3	50	10
Local Government Support	3,105	253.4	3	2
Adjusted by Cost of Living	3,210	261.9	3	2
Adjusted by Per Capita Personal Income^	56	292.5	2	2

Note: Alaska (and the District of Columbia) does not have any two-year public institutions. In 20 other states, including three in the West, there is no local government support for two-year institutions.

\* State and local government support plus net tuition, less tuition revenue used for capital outlays or debt service.

\*\* Less appropriations for special purposes, research, and medical programs.

^ The dollar value is expressed as revenue per FTE student per \$1,000 of per capita personal income.

^^ The nation consists of the 50 states. A rank of 1 represents the highest revenue.

^^^ The West includes 10 states: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington. A rank of 1 represents the highest revenue.

Source: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (regional price parity and per capita personal income).



## **Universities**

In only seven states, including Nevada, do local government appropriations support four-year institutions. In Arizona in FY 2022, state government appropriations for universities amounted to \$1.01 billion. Less funding targeted for special purposes, research, and medical programs, the amount was \$762 million. Compared to the national average, which includes local government appropriations, appropriations for four-year institutions in Arizona in FY 2022 was \$3,601 per full-time-equivalent student after adjustment for the cost of living. This adjusted figure was 62.5 percent less than the national average for educational appropriations and ranked 49th among the 50 states, with only New Hampshire having a lower figure.

In Arizona in FY 2022, university net tuition — tuition and fees paid by students, minus financial aid from state and institutional sources, student waivers and discounts, and medical student tuition and fees — provided \$2.52 billion. Per FTE student adjusted for the cost of living, net tuition in Arizona amounted to \$11,903, which was 18.0 percent higher than the national average and ranked 17th nationally. Adjusted per FTE student net tuition in Arizona was third highest among the 10 states in the West, less than in Colorado and Oregon. Adjusted instead by per capita personal income, net tuition per FTE university student in Arizona in 2022 was 3.7 percent above the U.S. average, 12th highest in the nation.

Total university educational revenue in Arizona in FY 2022 was \$3.15 billion. Per FTE student adjusted for the cost of living, the figure was \$14,891 — 23.9 percent less than the national average. Arizona ranked 46th nationally, with only West Virginia, Nevada, Louisiana, and Florida lower. The university data for FY 2022 are summarized in Table 3 for each of the categories of higher education revenue.

In fiscal year 2022, educational appropriations for universities by state and local governments accounted for 49.1 percent of total educational revenue nationally. The share contributed by state and local funding was considerably lower in Arizona at 24.2 percent. Arizona's share ranked 47th nationally and lowest of 10 states in the West. Thus, relative to most states, Arizona places a higher share of the cost of university education on students than on society as a whole.

State and local government appropriations for universities in FY 2022 needed to be more than \$1.1 billion higher for Arizona to rank in the middle of the 50 states, and more than \$1.6 billion higher for Arizona to equal the U.S. average, on a per FTE student basis adjusted for the cost of living. Even on a per FTE student basis adjusted for per capita personal income, the appropriations needed to be nearly \$900 million higher for Arizona to rank in the middle of the 50 states, and nearly \$1.3 billion higher for Arizona to equal the U.S. average.

## **Community Colleges**

Of the 49 states that have public two-year institutions, 20 provide all of the appropriations through state government, including Nevada, Utah, and Washington. Every state government supports two-year schools.

In Arizona in FY 2022, state and local government support for community colleges amounted to \$1.10 billion. The amount per full-time-equivalent student was \$12,588 after adjustment for the

**TABLE 3  
PUBLIC UNIVERSITY REVENUE PER FULL-TIME-EQUIVALENT STUDENT,  
ARIZONA, FISCAL YEAR 2022**

	Dollars	Percentage of Nation^^	Rank: Nation^^	Rank: West^^^
<b>Total Educational Revenue*</b>	\$14,403	73.7%	46	9
Adjusted by Cost of Living	14,891	76.1	46	9
Adjusted by Per Capita Personal Income^	260	85.0	43	9
<b>Net Tuition and Fees</b>	11,513	114.1	19	4
Adjusted by Cost of Living	11,903	118.0	17	3
Adjusted by Per Capita Personal Income^	208	131.7	12	3
<b>State and Local Government Support**</b>	3,483	36.3	49	10
Adjusted by Cost of Living	3,601	37.5	49	10
Adjusted by Per Capita Personal Income^	63	41.9	49	10
State Government Support	4,635	40.5	49	10
Adjusted by Cost of Living	4,793	41.9	49	10
Adjusted by Per Capita Personal Income^	84	46.8	49	10

Note: In only seven states (one in the West) is there local government support for four-year institutions.

\* State and local government support plus net tuition, less tuition revenue used for capital outlays or debt service.

\*\* Less appropriations for special purposes, research, and medical programs.

^ The dollar value is expressed as revenue per FTE student per \$1,000 of per capita personal income.

^^ The nation consists of the 50 states. A rank of 1 represents the highest revenue.

^^^ The West includes 10 states: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington. A rank of 1 represents the highest revenue.

Source: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (regional price parity and per capita personal income).

cost of living. This adjusted figure was 24.1 percent more than the national average and ranked eighth among the 50 states and second among 10 states in the West.

State government appropriations for community colleges totaled only \$141 million in Arizona in FY 2022. Expenditures per FTE student were \$1,610 after adjusting for the cost of living — 76.7 percent less than the national average and the second lowest among the states. In contrast, local support for community colleges totaled \$960 million. The amount per FTE student adjusted for the cost of living was the highest in the country at \$10,978, which was 3.40 times higher than the national average.

In Arizona in FY 2022, community college net tuition provided \$195 million. Per FTE student adjusted for the cost of living, net tuition in Arizona amounted to \$2,225, which was 13.7 percent less than the national average and ranked 43rd nationally. Adjusted net tuition per FTE community college student in Arizona was seventh highest among the 10 states in the West. Adjusted instead by per capita personal income, net tuition per FTE student in Arizona in FY 2022 was 3.6 percent less than the U.S. average for two-year institutions, ranking 42nd in the nation.

Total community college educational revenue in Arizona in FY 2022 was \$1.30 billion. Per FTE student adjusted for the cost of living, the figure was \$14,813 — 16.7 percent more than the national average. Arizona ranked 18th nationally and fourth among 10 states in the West. The community college data for FY 2022 are summarized in Table 4 for each of the categories of higher education revenue.

In fiscal year 2022, educational appropriations by state and local governments for community colleges accounted for 79.9 percent of total educational revenue nationally. The share contributed by state and local funding was higher in Arizona at 85.0 percent. Arizona’s share ranked sixth nationally and third of 10 states in the West.

### Support for Universities Versus Community Colleges in Arizona

The preceding discussion illustrates the stark difference in public support for universities versus community colleges in Arizona. While state government appropriations in Arizona in FY 2022

**TABLE 4  
PUBLIC COMMUNITY COLLEGE REVENUE PER FULL-TIME-EQUIVALENT  
STUDENT, ARIZONA, FISCAL YEAR 2022**

	Dollars	Percentage of Nation^^	Rank: Nation^^	Rank: West^^^
<b>Total Educational Revenue*</b>	\$14,327	112.8%	15	3
Adjusted by Cost of Living	14,813	116.7	18	4
Adjusted by Per Capita Personal Income^	259	130.3	12	3
<b>Net Tuition and Fees</b>	2,152	83.5	44	8
Adjusted by Cost of Living	2,225	86.3	43	7
Adjusted by Per Capita Personal Income^	39	96.4	42	6
<b>State and Local Government Support**</b>	12,175	120.1	12	4
Adjusted by Cost of Living	12,588	124.1	8	2
Adjusted by Per Capita Personal Income^	220	138.6	6	2
State Government Support	1,558	22.5	49	10
Adjusted by Cost of Living	1,610	23.3	49	10
Adjusted by Per Capita Personal Income^	28	26.0	49	10
Local Government Support	10,618	329.1	1	1
Adjusted by Cost of Living	10,978	340.3	1	1
Adjusted by Per Capita Personal Income^	192	379.9	1	1

Note: Alaska and the District of Columbia do not have any two-year public institutions. In 20 other states, including three in the West, there is no local government support for two-year institutions.

\* State and local government support plus net tuition, less tuition revenue used for capital outlays or debt service.

\*\* Less appropriations for special purposes, research, and medical programs.

^ The dollar value is expressed as revenue per FTE student per \$1,000 of per capita personal income.

^^ The nation consists of the 50 states. A rank of 1 represents the highest revenue.

^^^ The West includes 10 states: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington. A rank of 1 represents the highest revenue.

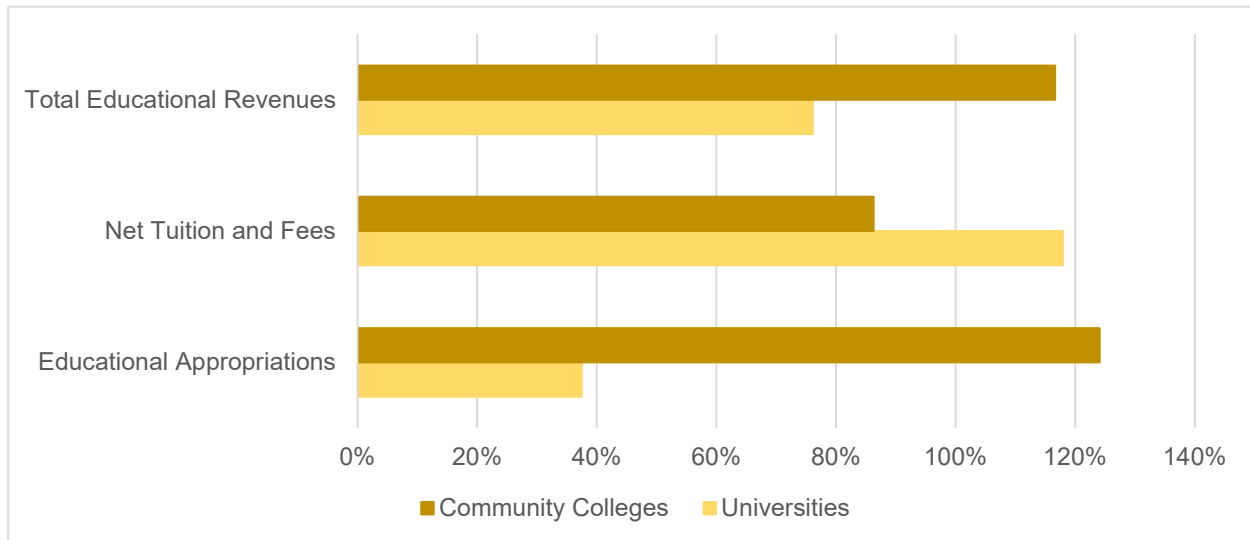
Sources: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (regional price parity and per capita personal income).

were far below average for both universities and community colleges, local government funding for community colleges — the highest in the nation per FTE student — more than offset the low state funding for community colleges in Arizona. Local funding is not available for Arizona’s universities. Thus, per FTE student adjusted for the cost of living, Arizona’s FY 2022 combined state and local government educational appropriations for universities were 62.5 percent below average, second lowest in the nation, while for community colleges, the figure was 24.1 percent above average, eighth highest in the nation (see Chart 1). The dollar value of educational appropriations per FTE student was 3.5 times as much for community colleges than for universities in Arizona in FY 2022.

The situation is reversed for net tuition per FTE student adjusted for the cost of living in Arizona. In FY 2022, university net tuition was 18.0 percent above average for university students, 17th highest in the nation, while community college net tuition was 13.7 percent below average, 43rd highest in the nation.

Despite the high university tuition, total educational revenue for universities in Arizona in FY 2022 was 23.9 percent below the national per FTE student average, ranking 46th. Total educational revenue for community colleges in Arizona in FY 2022 was 16.7 percent above the national per FTE student average, ranking 18th.

**CHART 1  
HIGHER EDUCATION REVENUE PER FULL-TIME-EQUIVALENT STUDENT  
ADJUSTED FOR THE COST OF LIVING, PUBLIC UNIVERSITIES VERSUS  
COMMUNITY COLLEGES, ARIZONA AS A PERCENTAGE OF THE U.S. AVERAGE,  
FISCAL YEAR 2022**



Source: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (regional price parity).

### Change in Higher Education Revenue Over Time

The change over time in higher education revenue is examined in two ways in this section:

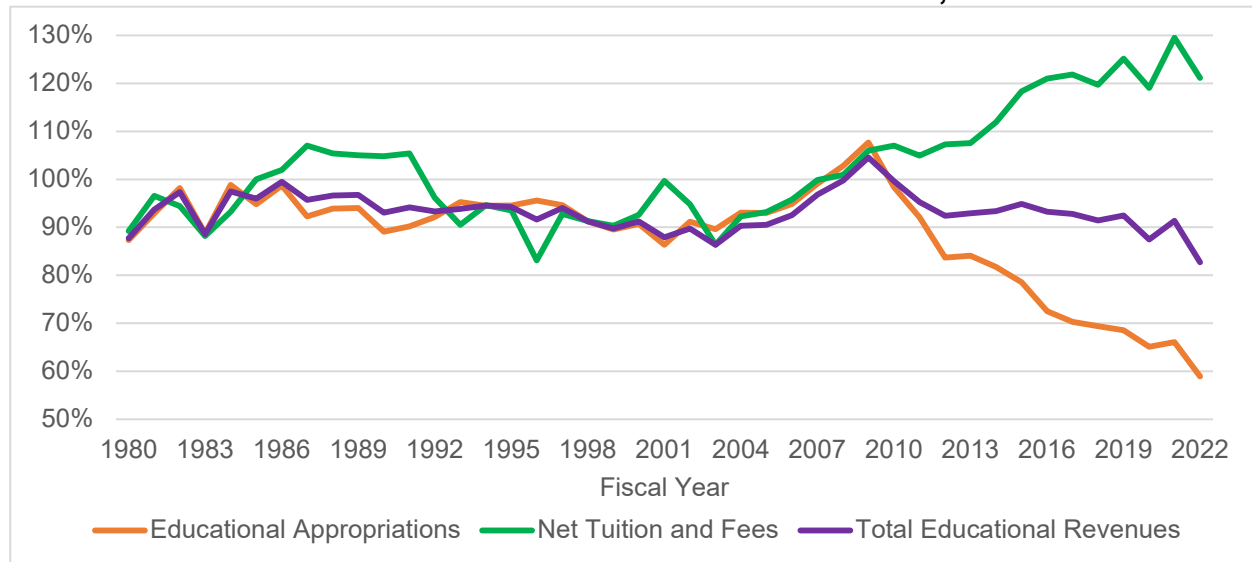
- Per FTE student adjusted for inflation but not for the cost of living, for the time period from FY 1980 through FY 2022. The dollar figures are expressed in inflation-adjusted FY 2022 dollars.
- Per FTE student adjusted for inflation and for the cost of living, for FYs 2009 through 2022. The dollar figures are expressed in inflation-adjusted FY 2022 dollars.

#### Adjusted for Inflation But Not for Living Costs

Inflation-adjusted (real) educational appropriations by state and local governments for public higher education per FTE student peaked in Arizona in FY 2008 at \$9,900; by FY 2022, the figure was down to \$6,032, a decrease of 39 percent. The percentage of the national average reached 107.6 in FY 2009, but was down to 58.9 in FY 2022. Before FY 2008, Arizona’s figure ranged from 1-to-14 percent less than the national average (see Chart 2). In FYs 2008 and 2009, Arizona’s figure exceeded the national average. After FY 2009, the state’s figure relative to the U.S. average dropped precipitously. Arizona ranked between 21st and 37th between FYs 1980 and 2007. The rank improved to 16th in FY 2009 but then dropped, reaching 49th in FY 2022.

Net tuition per FTE student has increased in Arizona in most years on an inflation-adjusted basis. In FY 2003, the figure was 2.2 times higher than in FY 1980. This was followed by a period of more rapid increases; in FY 2017, the figure was 2.5 times higher than in FY 2003. However, the figure was lower in FY 2022 than in FY 2017. As a percentage of the U.S. average, net tuition per FTE student in Arizona was less than the U.S. average from FYs 1980 through 1984, more than the U.S. average from FYs 1986 through 1991, and generally from 4-to-10 percent below

**CHART 2  
PUBLIC HIGHER EDUCATION REVENUE PER FULL-TIME-EQUIVALENT STUDENT  
AS A PERCENTAGE OF THE NATIONAL AVERAGE, ARIZONA**



Source: Calculated from State Higher Education Executive Officers Association.

average during the next 15 years. Arizona's figure increased from 4 percent below average in FY 2006 to 30 percent above the U.S. average in FY 2021. As seen in Chart 2, per FTE student educational appropriations and net tuition generally were similar as a percentage of the national average through FY 2009. They have dispersed widely since then. In FY 2022, per FTE student educational appropriations were 41 percent below average while per FTE student net tuition was 21 percent above average.

Total educational revenue for higher education on an inflation-adjusted per FTE student basis increased in Arizona by 88 percent between FYs 1980 and 2009. After dropping through FY 2012, the figure rose to more than in FY 2009, but in FY 2022 it was 4 percent below the FY 2009 amount. From FY 1980 through FY 2007, total educational revenue for higher education per FTE student in Arizona ranged from 1-to-14 percent below the U.S. average. After exceeding the national average in FY 2009, Arizona's figure returned to the historical range before dropping to 17 percent below average in FY 2022. Arizona's rank historically ranged from 26th to 44th. After reaching 25th in FY 2009, the rank returned to the historical range. It was 44th in FY 2022.

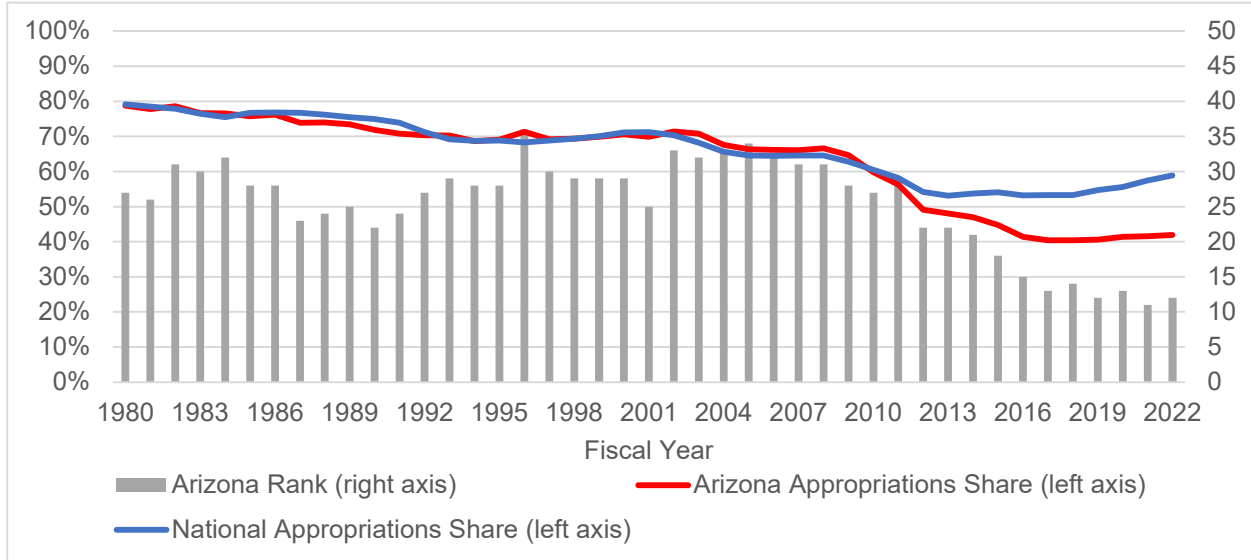
The share of total higher educational revenue coming from educational appropriations made by state and local governments has declined over time nationally, from close to 80 percent in the early 1980s to 53 percent in various years between 2012 and 2018. It has since rebounded to 59 percent in FY 2022. The appropriations share in Arizona was quite close to the national average through FY 2010, but has diverged since then, with Arizona's share barely above 40 percent since FY 2016 (see Chart 3). Similarly, Arizona's rank on the appropriations share has declined from the middle of the states to the 12th-lowest share in FY 2022.

Thus, students nationally are being asked to pay a higher share of the cost of higher education, especially since 2010. This trend is stronger in Arizona.

The trend in state funding for public higher education in Arizona has been considerably different from that of local funding, as seen in Chart 4. State support per FTE student in real terms peaked at \$7,730 in FY 1986, but the FY 2008 figure was only 2 percent less than this peak. Between FY 2008 and FY 2018, the figure decreased 55 percent, but the FY 2022 figure was 11 percent higher than the FY 2018 figure. As a percentage of the national average, Arizona's state support per FTE student ranged from 72-to-83 percent from FY 1980 through FY 1997. It was below the historical range from FYs 1998 through 2007, dropping as low as 65 percent of the U.S. average. The percentage returned to the historical range in FYs 2008 and 2009, but then plunged; it was only 35.8 percent of the national average in FY 2022. Historically, the state's rank ranged from 42nd to 49th. From FYs 2015 through 2022, Arizona's state support per FTE student was the lowest in the nation.

In contrast, local support for higher education (only community colleges in Arizona) per FTE student increased from the early 1980s through FY 2009. The decline from FY 2009 through FY 2022 of 16 percent was much less than the decrease in state support.

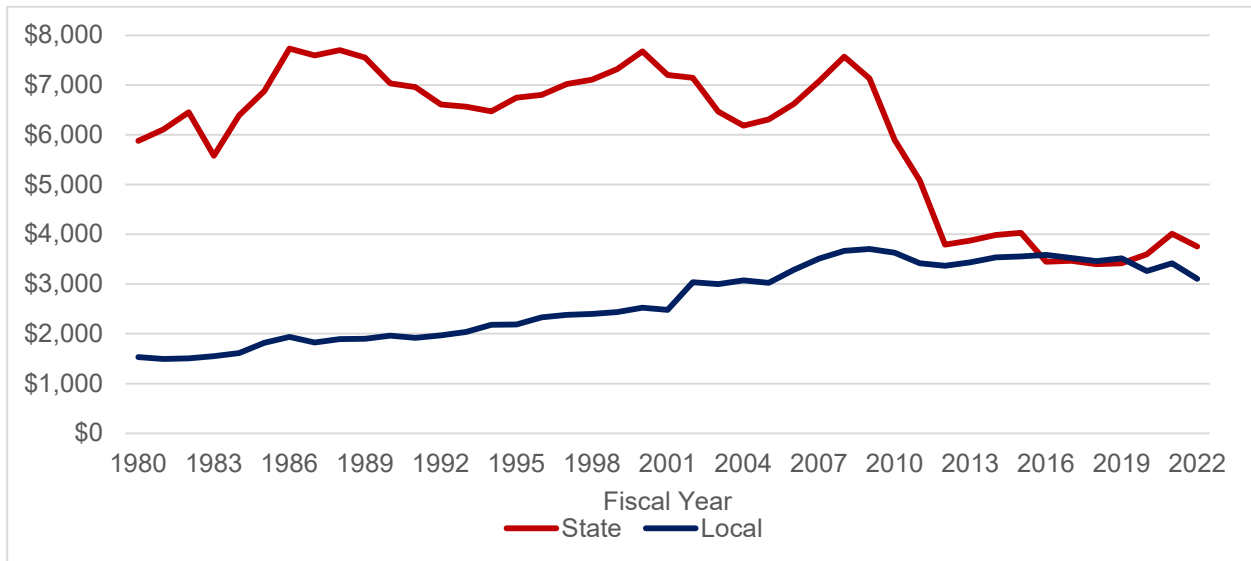
**CHART 3  
EDUCATIONAL APPROPRIATIONS AS A SHARE OF TOTAL EDUCATIONAL REVENUE FOR PUBLIC HIGHER EDUCATION AND ARIZONA RANK**



Note: A rank of 50th represents the highest share among the states.

Source: Calculated from State Higher Education Executive Officers Association.

**CHART 4  
INFLATION-ADJUSTED PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FULL-TIME-EQUIVALENT STUDENT BY STATE AND LOCAL GOVERNMENTS, ARIZONA**



Source: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (GDP implicit price deflator).

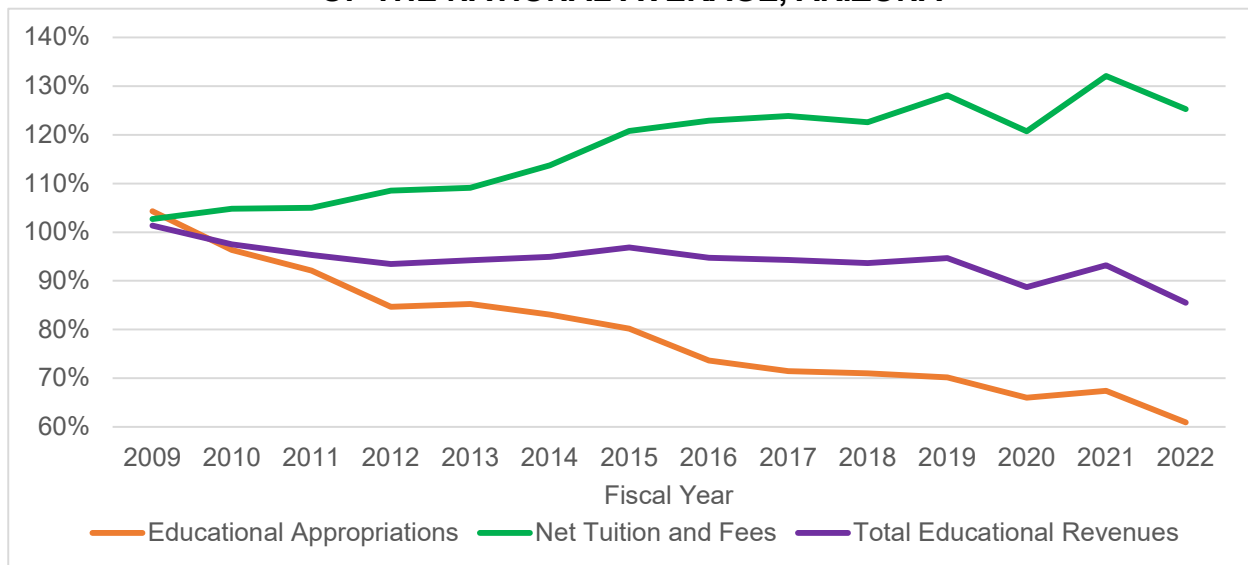
### Adjusted for Inflation and the Cost of Living

The earliest cost-of-living data are for FY 2009. Per FTE student and adjusted for the cost of living, higher education appropriations, net tuition, and total educational revenues in Arizona were just above the U.S. average in FY 2009. The three measures diverged after that relative to the national average, with a sharp decline in educational appropriations, an increase in net tuition, and a decrease in total educational revenues (see Chart 5).

Educational appropriations per FTE student adjusted for inflation and living costs totaled \$9,371 in Arizona in FY 2009. The amount dropped for three consecutive years to \$6,320, and has since fluctuated between \$6,200 and \$6,694. In FY 2022, the amount was only \$6,237 — 33 percent lower than the figure in FY 2009. Arizona’s figure tumbled from above the national average in FY 2009 to 39 percent below average in FY 2022. The state’s rank lowered from 22nd in FY 2009 to 49th in FY 2020.

State support for higher education per FTE student adjusted for inflation and living costs accounted for most of the decrease. The figure was \$6,911 in Arizona in FY 2009. The amount dropped as low as \$3,480 in FY 2018. In FY 2022, the amount was \$3,884 — 44 percent lower than the figure in FY 2009. Arizona’s figure tumbled from 28 percent below the national average in FY 2009 to 63 percent below average in FY 2022. The state’s rank lowered from 45th in FY 2009 to last in FYs 2015 through 2022.

**CHART 5**  
**PUBLIC HIGHER EDUCATION REVENUE PER FULL-TIME-EQUIVALENT STUDENT**  
**ADJUSTED FOR THE COST OF LIVING AS A PERCENTAGE**  
**OF THE NATIONAL AVERAGE, ARIZONA**



Source: Calculated from State Higher Education Executive Officers Association (revenues and enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (regional price parity).



Local support for higher education per FTE student adjusted for inflation and living costs fluctuated in Arizona from FYs 2009 through 2019 between \$3,408 and \$3,643. The amount in FY 2022 of \$3,210 was 11 percent lower than the figure in FY 2009. Arizona's figure was approximately 3.5 times the national average from FYs 2009 through 2016, but dropped to 2.6 times higher in FY 2022. The state ranked first or second in each year except for third in FY 2022.

Deflated and RPP-adjusted, net tuition per FTE student in Arizona rose from \$5,531 in FY 2009 to \$9,835 in FY 2021 before dropping to \$9,073 in FY 2022. The figure in FY 2022 was 64 percent higher than in FY 2009. Relative to the national average, Arizona went from 2.7 percent higher in FY 2009 to 32.1 percent higher in FY 2021; the FY 2022 figure was 25.2 percent above average. The state's rank went from 32nd in FY 2009 to 18th in FY 2021; the FY 2022 rank was 20th.

Total higher educational revenues adjusted for inflation and the cost of living in Arizona dropped from \$14,503 in FY 2009 to \$12,877 in FY 2012, but then recovered; the figure was \$14,877 in FY 2022. However, the figure went from 1 percent above average in FY 2009 to 14.5 percent below average in FY 2022. The rank fell from 35th in FY 2009 to 47th in FY 2022.

### **Two-Year Versus Four-Year Institutions**

The earliest SHEEO data splitting higher education revenues into two-year and four-year institutions is FY 2019. In the three years from FY 2019 through FY 2022, revenues per FTE student in Arizona as a percentage of the national average after adjusting for the cost of living moved in opposite directions for educational appropriations and total educational revenues. For educational appropriations, the university figure dropped from 43.3 percent of the U.S. average to 37.5 percent while the community college figure rose from 121.0 percent to 124.1 percent. Similarly for total educational revenues, the university figure dropped from 89.4 percent of the U.S. average to 76.1 percent while the community college figure rose from 110.1 percent to 116.7 percent. The university net tuition figure fell from 133.0 percent to 118.0 percent while the community college figure rose from 77.2 percent to 86.3 percent.

## **ANNUAL DATA FROM THE ARIZONA JOINT LEGISLATIVE BUDGET COMMITTEE**

The Arizona Joint Legislative Budget Committee (JLBC) reports state government funding for community colleges and for universities, but state funding represents only a small share of the community college total. JLBC's data cannot be directly compared to data from other states due to differing accounting systems.

General fund appropriations for the universities, including funding for the Board of Regents, are available back to FY 1979. As seen in Chart 6, university appropriations per \$1,000 of personal income have fallen significantly since the early 1990s; the drop between FY 1990 and FY 2024 was 72 percent. Chart 6 also displays the decline in the universities' share of general fund appropriations. The share has declined since the first year of data, dropping from 19.1 percent in FY 1979 to 6.1 percent in FY 2024 — more than a two-thirds drop in share.

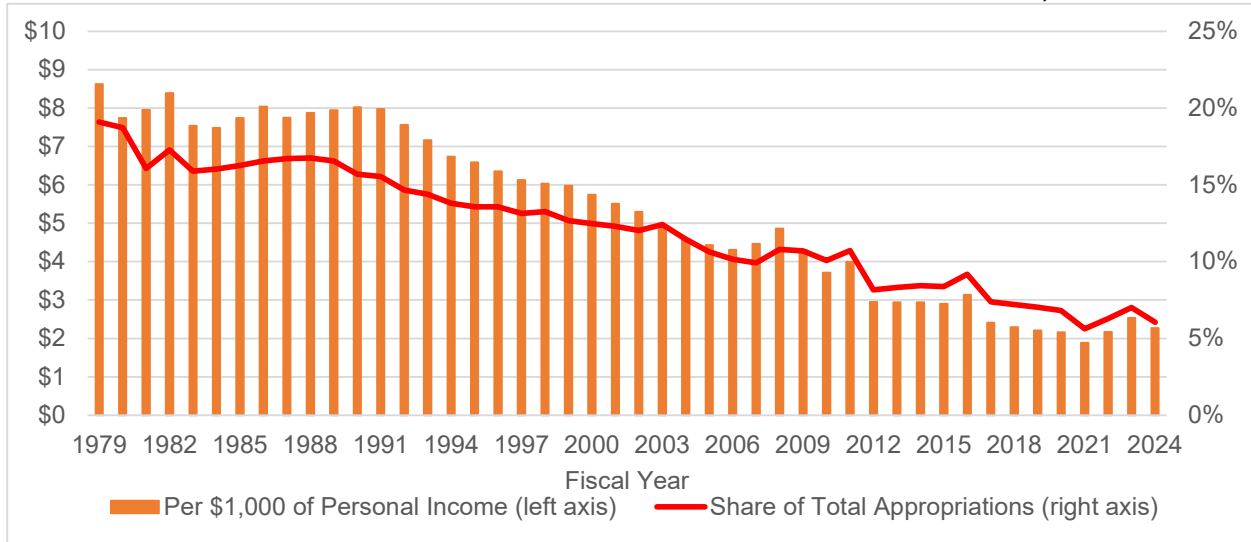
Chart 7 displays general fund appropriations per student adjusted for inflation. The enrollment figures, which come from the National Center for Education Statistics, are available for fiscal years 1983 through 2021 for the overall student count and for fiscal years 1985 through 2021 for the full-time-equivalent number. Real appropriations per student — measured both ways — fluctuated from the mid-1980s through FY 2008, but fell sharply thereafter. Between FY 2008 and FY 2021, both per-student amounts dropped 64 percent.

Chart 8 displays a broader accounting of expenditures for universities reported by the JLBC. The "other funds" category consists of the "university collections fund" to which a portion of university tuition and fees are deposited. The remainder of the university tuition and fees is placed in the "not appropriated" category, which also includes federal funding and monies from a variety of other sources other than the state government. As with the SHEEO data, the JLBC subtracts state financial aid and institutional discount and waivers from gross tuition.

While general fund appropriations per FTE student have fallen, funding per FTE student from other sources has increased significantly, resulting in increases in total authorized spending per FTE student after adjustment for inflation. However, much of the not-appropriated funding is greatly restricted in how it can be used and thus cannot be viewed as an offset to the loss in general fund appropriations.

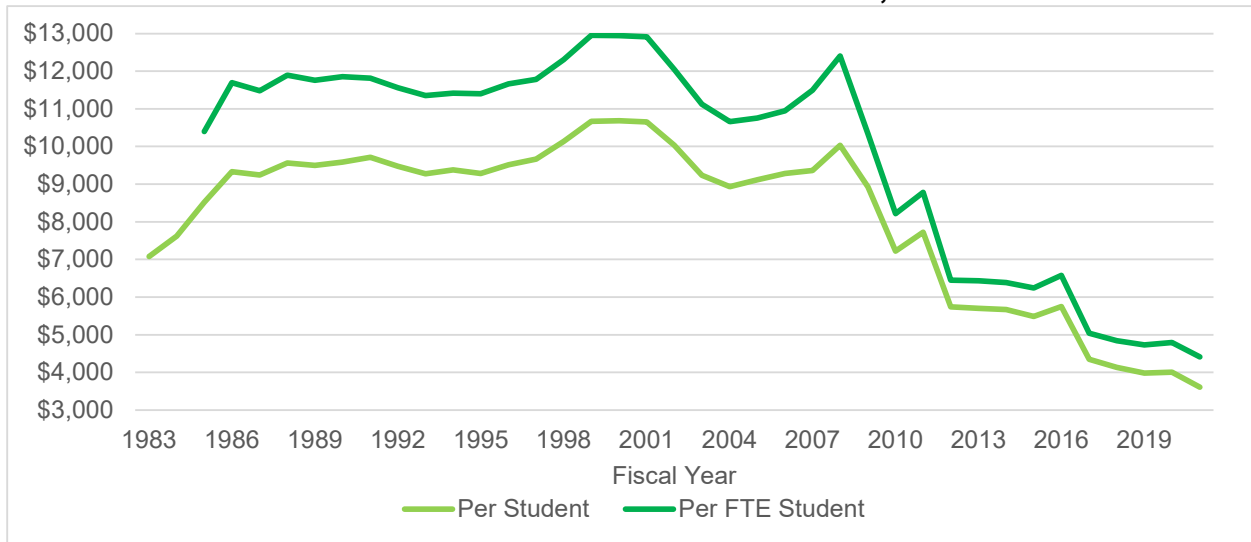
The significant shift over time seen in Charts 2 and 5 between appropriations and tuition as a percentage of the national average is also apparent in Chart 8 expressed per FTE student. Between FY 1989, the first year of data for the not-appropriated category, and FY 2021, the last year of enrollment figures, real funding per FTE student dropped 62 percent from the general fund, but rose 123 percent from other funds and 138 percent from the not-appropriated category. Overall, the increase was 49 percent over the 32 years.

**CHART 6  
GENERAL FUND APPROPRIATIONS FOR PUBLIC UNIVERSITIES, ARIZONA**



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

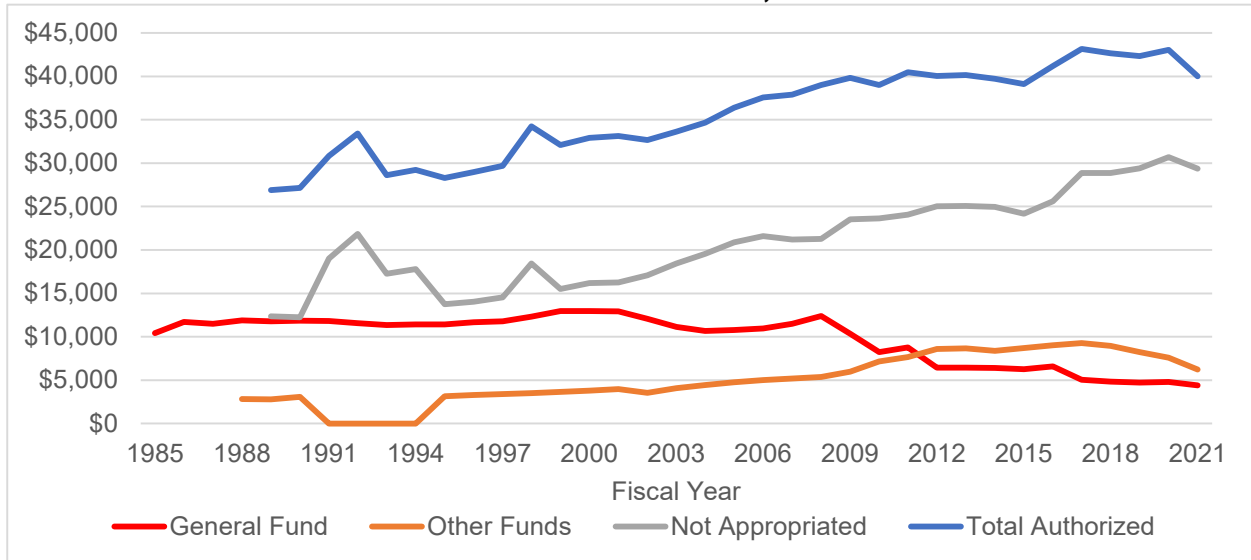
**CHART 7  
GENERAL FUND APPROPRIATIONS FOR PUBLIC UNIVERSITIES  
PER STUDENT ADJUSTED FOR INFLATION, ARIZONA**



Note: In fiscal year 2021 dollars.

Sources: Calculated from Arizona Joint Legislative Budget Committee (appropriations), U.S. Department of Education, National Center for Education Statistics (enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (GDP deflator).

**CHART 8  
FUNDING FOR PUBLIC UNIVERSITIES PER FULL-TIME-EQUIVALENT STUDENT  
ADJUSTED FOR INFLATION, ARIZONA**



Note: In fiscal year 2021 dollars.

Sources: Calculated from Arizona Joint Legislative Budget Committee (expenditures), U.S. Department of Education, National Center for Education Statistics (enrollment), and U.S. Department of Commerce, Bureau of Economic Analysis (GDP deflator).