



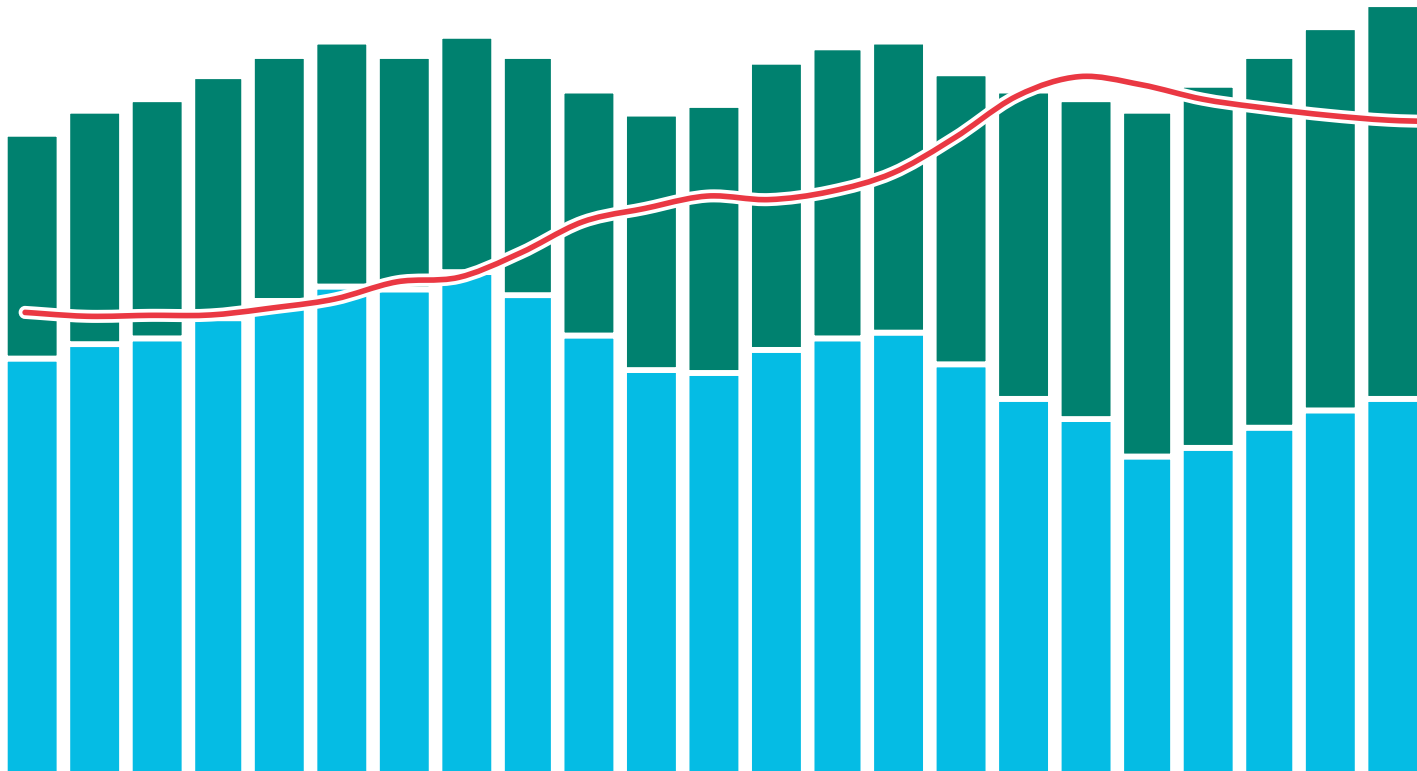
SHEEO

STATE HIGHER EDUCATION EXECUTIVE OFFICERS ASSOCIATION

SHEF

STATE HIGHER EDUCATION FINANCE

FY 2019



The State Higher Education Executive Officers Association (SHEEO) serves the chief executives of statewide governing, policy, and coordinating boards of postsecondary education and their staffs. Founded in 1954, SHEEO promotes an environment that values higher education and its role in ensuring the equitable education of all Americans, regardless of race/ethnicity, gender, or socioeconomic factors. Together with its members, SHEEO aims to achieve this vision by equipping state higher education executive officers and their staffs with the tools to effectively advance the value of higher education, promoting public policies and academic practices that enable all Americans to achieve success in the 21st century, and serving as an advocate for state higher education leadership. For more information, visit www.sheeo.org.

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 **SHEF**
STATE HIGHER EDUCATION FINANCE

Since 2003, SHEEO has produced the annual State Higher Education Finance (SHEF) report to broaden understanding and enable analysis of state-level and national funding and enrollment trends over time. The SHEF report provides the earliest possible review of state funding for higher education for the most recently completed fiscal year. SHEEO developed the SHEF report building directly on a 25-year effort by Kent Halstead, an analyst and scholar of state policy for higher education. As a result, SHEF includes a robust dataset for fiscal years 1980-2019 with detailed data on state and local funding, tuition revenue, and enrollment.

The 2019 SHEF report was coauthored by **Sophia Laderman** and **Dustin Weeden**, senior policy analysts at SHEEO. The report would not have been possible without additional support, particularly from Gloria Auer, Andy Carlson, Kelsey Heckert, and Annahita Jimmerson.

SHEEO is deeply indebted to the staff of state higher education agencies who annually provide the state-level data essential for the preparation of this report. Without their diligence and commitment, this project would not be possible.

A fully interactive version of this report, with adjustable visualizations and downloadable datasets for all figures and tables, is available at shef.sheeo.org.

The data in the SHEF report and accompanying website may be freely used with appropriate attribution and citation: State Higher Education Executive Officers Association. (2020). State Higher Education Finance: FY 2019. Boulder, CO.

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EXECUTIVE SUMMARY

The State Higher Education Finance (SHEF) report is produced annually by the State Higher Education Executive Officers Association (SHEEO) to broaden understanding of the context and consequences of public policy decisions in each state that contribute to public higher education funding levels and funding distributions across states and nationally.

The SHEF report supplies important context and trend analysis to help inform state postsecondary finance policy decisions. SHEF provides the earliest possible review of state and local support, tuition revenue, and enrollment trends for the most recently completed fiscal year. This year's report focuses on FY 2019, which for most states ran from July 1, 2018, through June 30, 2019.

A fully interactive version of this report is available on our website (shef.sheeo.org), including data downloads, visualization tools, and technical documentation.

REPORT HIGHLIGHTS

State and local funding for all higher education reached \$100 billion for the first time in fiscal 2019. State tax and non-tax appropriations accounted for 88 percent of those funds, with local tax appropriations contributing 11 percent. The vast majority of state and local support for higher education went to general operations at public institutions (78 percent). Roughly 10 percent of funding was used for research, agricultural extension programs, and medical schools. Another 8.5 percent was allocated for student financial aid at public institutions. Less than 3 percent of all state and local funding supported independent (private) institutions, and most of those funds went to student financial aid. In the 2019 SHEF report, we find that on a per-student (FTE) basis and after adjusting for inflation,

 **2.4%**

Education appropriations increased 2.4 percent or \$195 per FTE from 2018 to 2019, marking the seventh straight year of increases in state support (last year's increase was only \$15 per FTE);

 **2/3**

Nationally, education appropriations remained 8.7 percent below pre-recession levels in 2008, and states have only recovered about two-thirds (63.5 percent) of the total decline seen during the Great Recession;

 **4.0%**

State public financial aid (a part of education appropriations) increased 4.0 percent, reaching an all-time high of \$808 per FTE;

 **\$6**

For the first time since the Great Recession, the U.S. had a decline in net tuition revenue (due to the increase in state financial aid), although the decrease was only 0.1 percent or \$6 per FTE;

 **15k**

Total education revenues increased 1.3 percent per FTE, surpassing \$15,000 per FTE for the first time; and

Despite the recent increase in funding, in more than half of all states, the majority of total education revenues still came from student tuition dollars.

FULL-TIME EQUIVALENT (FTE) ENROLLMENT

- In recent years, enrollment has remained relatively stable both nationally and across states. There were just under **11 million FTE** enrolled students in 2019.
- FTE enrollment ranged from less than 17,000 in Alaska to 1.56 million in California.
- 2019 is the eighth straight year of FTE enrollment declines following substantial enrollment increases during the Great Recession. Annual enrollment declines have been less than 0.5 percent for the last three years.
- Twenty states had very stable enrollment from 2018 to 2019, with annual changes of less than 1 percent. In the past 10 years, almost half of all states have faced enrollment declines.

Full-time equivalent (FTE) enrollment converts student credit hours to full-time academic year students. FTE excludes medical students.

EDUCATION APPROPRIATIONS PER FTE

- Nationally, public institutions received an average of **\$8,196 in education appropriations per FTE**, a 2.4 percent increase above inflation in the last year.
- From 2018 to 2019, appropriations increased in 38 states and Washington, D.C. Across the states, per-FTE appropriations ranged from less than \$3,000 in New Hampshire and Vermont to almost \$19,000 in Wyoming.
- Although 2019 marks the seventh straight year of per-FTE increases in education appropriations, these funds remain 8.7 percent below pre-recession levels. Only seven states have fully recovered, and another seven remain 30 percent below funding before the Great Recession.

Education appropriations measure state and local support available for public higher education operating expenses and exclude research, hospitals, and medical education.

STATE PUBLIC FINANCIAL AID PER FTE

- State public financial aid per FTE increased 4.0 percent from 2018 to 2019 and reached an all-time high of **\$808 per FTE**. These funds made up 9.9 percent of all education appropriations, the largest proportion since SHEF began.
- Across the U.S., state financial aid for students attending public institutions has increased 34.1 percent per FTE since the start of the Great Recession.
- State public financial aid in 2019 ranged from under \$100 per FTE in five states (Arizona, Hawaii, Iowa, Michigan, and Montana) to over \$2,000 per FTE in Louisiana and Tennessee.

State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. These funds are included in education appropriations.

NET TUITION REVENUE PER FTE

- Public institutions averaged **\$6,902 in net tuition revenue** from in-state and out-of-state students in 2019.
- Following rapid increases in net tuition revenue in every state during the Great Recession, net tuition revenue declined for the first time this year since 2008. This decline was only 0.1 percent (\$6 per FTE) and is entirely explained by the large increase in student financial aid, which is deducted from net tuition revenue.
- Net tuition revenue per FTE varied by state, from below \$3,000 per FTE in California and Florida to nearly \$17,000 in Delaware.
- Net tuition is affected by changes in tuition rates as well as proportional differences in out-of-state, international, and graduate student enrollment.

Net tuition revenue is the total amount of tuition and fees, minus state and institutional financial aid and medical tuition and fees.

TOTAL EDUCATION REVENUES PER FTE

- Total education revenues increased for the seventh straight year, reaching an all-time high of **\$15,018 per FTE** (a 1.3 percent increase from 2018). This is the first time that nationally, public institutions have more than \$15,000 per FTE in total revenues.
- This trend does not hold for all institutions or states. Many institutions have been unable to increase tuition revenue to offset historical declines in state funding, and 16 states have not surpassed pre-recession levels of total education revenues.
- Total education revenues range from a low of \$10,262 in Florida to almost \$23,000 in Wyoming.
- Total revenues increased in 36 states and Washington, D.C., from 2018 to 2019. In the last five years, total revenues have declined in only five states (Indiana, Mississippi, Missouri, New Hampshire, and North Dakota).

Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service.

STUDENT SHARE

- Throughout the SHEF dataset, the student share has risen from 20.9 percent in 1980 to **46 percent in 2019**.
- Student share generally rises during economic recessions and levels off during economic recoveries. The sharpest increase in student share occurred during and immediately following the Great Recession.
- In over half of all states, tuition revenue comprises more than 50 percent of total revenues. Three states had a student share above 75 percent in 2019 (Delaware, New Hampshire, and Vermont). Conversely, three states still have a student share of less than 25 percent (California, New Mexico, and Wyoming).

The student share is a measure of the proportion of total education revenues at public institutions coming from net tuition revenue.

IMPLICATIONS

State and local funding for all higher education surpassed \$100 billion for the first time in 2019, and total education revenues at public institutions reached an all-time high, exceeding \$15,000 per FTE for the first time. Net tuition revenue per FTE declined this year, ending a decade-long trend of increases. On the surface, these trends suggest a healthy funding environment for public higher education institutions. The reality is much more complex. In more than half of all states, student tuition dollars now make up more than 50 percent of total education revenues at public institutions. Despite seven years of funding increases following the Great Recession, states have only recovered two-thirds of their lost state funding, and the average public institution still receives fewer education appropriations per FTE than in almost every pre-recession year in the SHEF dataset (which goes back to 1980).

The national numbers obscure very different funding situations across the United States. Seven states (Alaska, California, Hawaii, Nebraska, New York, Oregon, and Wyoming) have met or exceeded pre-recession education appropriation levels after declining during the Great Recession. However, another seven states (Alabama, Arizona, Delaware, Louisiana, Mississippi, Oklahoma, and Pennsylvania) remain more than 30 percent below their pre-recession education appropriations per FTE. In three Western states, student tuition dollars comprise less than 25 percent of total education revenues. On the other hand, student tuition accounts for over 75 percent of all revenues in three states in the Northeast.

Amidst these changes, many states have adopted ambitious attainment goals and committed to reducing inequality in educational attainment. These goals can only be met by addressing affordability concerns and ensuring that institutions have the resources to better serve students of color and other historically underserved groups. It is critical for states to continue to push for increased equity in attainment through the ups and downs of the economic cycle. Yet it is not clear what will happen to public institution revenues and student affordability if states continue to use higher education as a budgetary pressure release valve during the next recession.

SOURCES AND USES OF STATE FUNDING

In considering a state's investment in higher education, SHEF includes all state and local revenue sources, including those from taxes, lottery receipts, mineral and resource extraction revenue, and state-funded endowments. SHEF also identifies the primary purposes or uses for which these public revenues are provided, including general institutional operating expenses, student financial assistance, support for centrally funded research, medical education, and extension programs.

Higher education support is the third largest budget area of state spending. Still, the proportion of general funds allocated to higher education has steadily declined over time, from 12.9 percent in 1995 to 9.6 percent in 2019.^{1,2} It is generally understood that state funding for higher education acts as a balance wheel during economic downturns, with funding reductions typically greater than those in other budget areas.³ In part, states disproportionately reduce per-student funding to higher education due to the presumption that funding reductions can be partially offset with tuition revenue increases.

SOURCES OF STATE FUNDING

This section provides data and analysis of the sources of state and local government support for higher education over the last 15 years (2004-2019). **The funding amounts in this section are not adjusted for inflation or enrollment.**

1. NATIONAL TRENDS

Table 1.1 shows that state and local government funding for higher education totaled \$103 billion in fiscal year 2019. This was the first year in history with above \$100 billion in state and local support for higher education, following a nominal increase of 4.3 percent over 2018. States contributed \$92 billion, while local governments in 29 states contributed just over \$11 billion, representing increases of 4.4 percent and 3.6 percent, respectively. The largest source of funding was state tax appropriations, which accounted for \$87 billion or 84 percent of total funding. Non-tax support (mostly from state lotteries) increased 10.4 percent and totaled nearly \$4 billion. Non-appropriated support, state-funded endowments, and other sources of state funding altogether increased 8.1 percent and contributed an additional \$965 million.

-
1. National Association of State Budget Officers. (2019). *State expenditure report: Fiscal years 2017-2019*. Washington, DC: NASBO. <https://www.nasbo.org/reports-data/state-expenditure-report>
 2. Unlike the SHEF data, NASBO expenditures exclude employer contribution to pensions and health benefits.
 3. Delaney, J., & Doyle, W. (2011). State spending on higher education: Testing the balance wheel over time. *Journal of Education Finance*, 36(4). <http://www.jstor.org/stable/23018116>

TABLE 1.1

**SOURCES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2004-2019
(UNADJUSTED DOLLARS, IN MILLIONS)**

SOURCE	2004	2009	2014	2017	2018	2019	2019 % DISTRIBUTION
ARRA FUNDS	\$-	\$2,268	\$-	\$-	\$-	\$-	0.0%
TAX APPROPRIATIONS	\$60,352	\$74,459	\$73,547	\$82,462	\$83,892	\$87,322	84.4%
NON-TAX SUPPORT	\$1,641	\$2,709	\$3,031	\$3,345	\$3,538	\$3,905	3.8%
NON-APPROPRIATED SUPPORT	\$83	\$81	\$92	\$122	\$126	\$140	0.1%
STATE-FUNDED ENDOWMENT EARNINGS	\$276	\$398	\$530	\$541	\$547	\$600	0.6%
OTHER	\$92	\$207	\$323	\$199	\$220	\$225	0.2%
(-) FUNDS NOT AVAILABLE FOR USE	\$52	\$592	\$81	\$158	\$76	\$61	0.1%
TOTAL STATE SUPPORT	\$62,391	\$79,530	\$77,442	\$86,511	\$88,245	\$92,130	89.1%
LOCAL TAX APPROPRIATIONS	\$6,624	\$8,354	\$9,337	\$10,406	\$10,929	\$11,317	10.9%
TOTAL STATE AND LOCAL SUPPORT	\$69,015	\$87,884	\$86,779	\$96,917	\$99,174	\$103,447	100.0%

NOTES:

1. Other includes multiyear appropriations from previous years and funds not classified in one of the other source categories.
2. Funds not available for use include appropriations that were returned to the state, and portions of multiyear appropriations to be spread over other years.
3. Total state support is the sum of American Recovery and Reinvestment Act (ARRA) funds, tax appropriations, non-tax support, non-appropriated support, state-funded endowment earnings, and other state funds, net of any funds not available for use.

SOURCE: State Higher Education Executive Officers Association

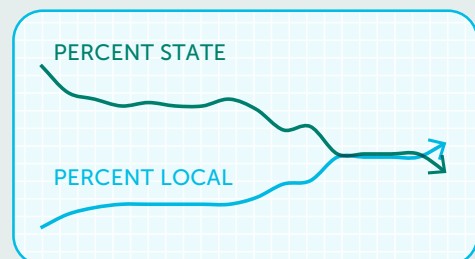
Figure 1.1 shows how the sources of state and local funding have become more diversified since the Great Recession. Before 2008, tax appropriations routinely accounted for 87 to 88 percent of higher education support. Since then, tax appropriations are closer to 84 to 85 percent, and the portion of revenue from local appropriations increased by 1.8 percentage points while non-tax sources increased 1.2 percentage points.

STATE SPOTLIGHT: ARIZONA



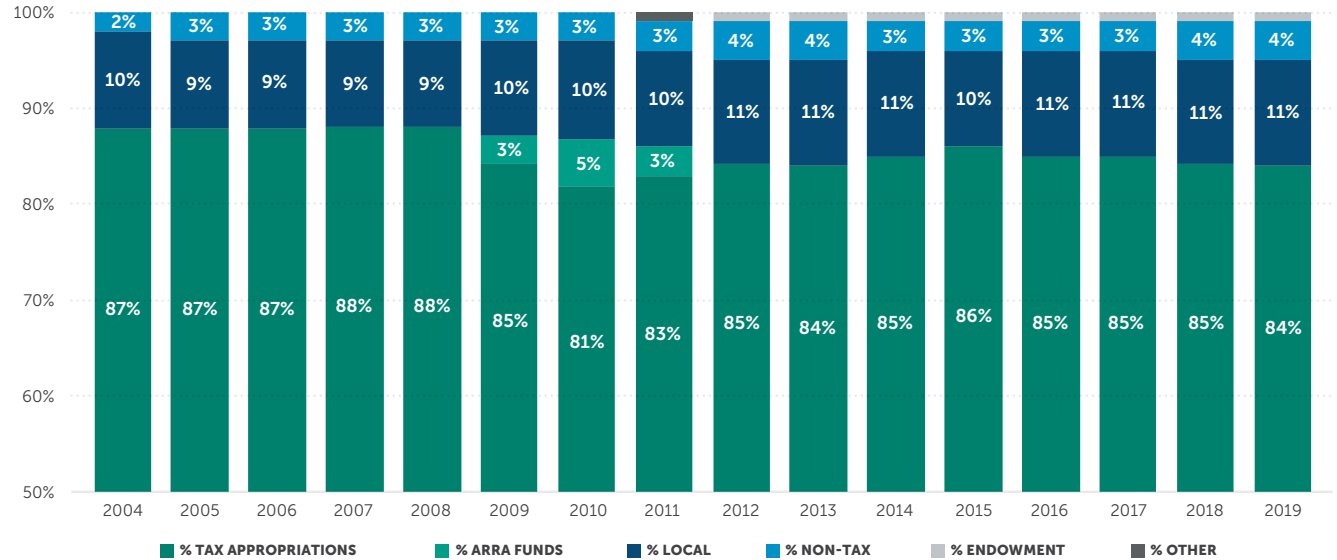
Between 2001 and 2015, state tax appropriations in Arizona declined from 73.9 percent to 47.6 percent of all higher education funding. During this time, the portion of funding from local appropriations increased from 25.6 percent to 46.8 percent. This growing reliance on local appropriations reflected a steady disinvestment by the state in public two-year institutions.

In fiscal year 2016, the state eliminated all state funding for the two largest community colleges.⁴ As a result, local appropriations reached 50 percent of all funding for the first time and have essentially remained at that level through 2019, **making Arizona the only state that has a higher portion of funding coming from local sources than state tax appropriations.**



4. Arizona Joint Budget Committee. (2018). *Arizona community colleges general fund appropriations: FY 2010 through FY 2019*. <https://www.azleg.gov/jlbc/accfapp.pdf>

FIGURE 1.1
DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING SOURCES,
U.S., FY 2004-2019



NOTES:

1. Other includes non-appropriated funds, multiyear appropriations from previous years, and funds not classified in one of the other source categories.
2. In all years, endowment and other sources accounted for less than 1 percent of U.S. state and local funding for higher education.

SOURCE: State Higher Education Executive Officers Association

2. STATE COMPARISONS

Table 1.2 shows the 40 states with funding sources other than state tax appropriations. The 10 states not listed in this table (and Washington, D.C.) rely on tax appropriations as the only major source of funding for higher education.

Arizona is the only state where the majority of higher education funding did not come from state tax appropriations. Nearly half of higher education funding in Arizona comes from local appropriations. Kansas, Michigan, and Oregon were the only other states that relied on local appropriations for at least 20 percent of higher education funding. Twenty-one states received no local tax appropriations.

Several Southern states that have financial aid programs funded with lottery dollars were also less reliant on tax appropriations. Florida, Georgia, Kentucky, and South Carolina all relied on non-tax support for at least 20 percent of higher education funding.

Endowments, non-appropriated, and other sources of revenue were less than 1 percent of higher education funding in all but 11 states. Arizona, Oklahoma, and Texas were the only states where these sources of revenue made up more than 5 percent of higher education support.

Several noteworthy trends have emerged as states have become less reliant on tax appropriations over time. These trends can be explored more closely using the interactive version of *Figure 1.1* on the [SHEF website](https://shef.sheeo.org/).⁵

- Many states are increasingly reliant on local appropriations. Since 2004, the proportion of total funding from local appropriations has increased in 24 states. In seven states (Arizona, Iowa, Kansas, Nebraska, New Mexico, Oregon, and Texas), this proportion has increased by at least 5 percentage points.
- In some states, such as Arizona and Nebraska, this trend began after the dot-com bubble led to a small recession during the early 2000s. In Nebraska, local appropriations increased from 3.9 percent of higher education support in 2001 to 11.6 percent in 2008, reaching 18.6 percent by 2019.
- Twenty states had increases in non-tax appropriations from 2004 to 2019. In five Southern states (Arkansas, Florida, Kentucky, South Carolina, and Tennessee), all with large lottery-funded student financial aid programs, non-tax support as a proportion of total funding increased by more than 5 percentage points. South Carolina exemplifies this trend, with non-tax support increasing from 17.1 percent of funding in 2008 to 33.3 percent in 2019.

5. <https://shef.sheeo.org/>

TABLE 1.2
SOURCES OF STATE AND LOCAL HIGHER EDUCATION FUNDING BY STATE, FY 2019
(UNADJUSTED DOLLARS)

	% TAX APPROPRIATIONS	% NON-TAX SUPPORT	% LOCAL APPROPRIATIONS	% ENDOWMENT, NON-APPROPRIATED, AND OTHER SOURCES	TOTAL STATE AND LOCAL SUPPORT (THOUSANDS)
ALABAMA	99.7%	0.0%	0.3%	0.0%	\$1,662,998
ALASKA	99.8%	0.0%	0.2%	0.0%	\$353,149
ARIZONA	43.7%	0.3%	49.5%	6.6%	\$1,792,832
ARKANSAS	86.8%	9.3%	3.6%	0.4%	\$1,033,281
CALIFORNIA	80.5%	1.8%	17.7%	0.0%	\$19,183,591
COLORADO	90.0%	2.3%	7.7%	0.0%	\$1,076,848
FLORIDA	77.3%	22.2%	0.0%	0.5%	\$5,347,532
GEORGIA	75.8%	23.0%	0.0%	1.2%	\$3,635,835
HAWAII	99.5%	1.2%	0.0%	0.0%	\$778,348
IDAHO	90.9%	0.0%	6.0%	3.1%	\$535,165
ILLINOIS	84.1%	0.0%	15.9%	0.0%	\$5,057,380
INDIANA	99.5%	0.5%	0.0%	0.0%	\$1,779,142
IOWA	88.8%	0.0%	11.2%	0.0%	\$918,526
KANSAS	74.9%	1.2%	24.0%	0.0%	\$1,059,915
KENTUCKY	77.0%	20.4%	2.3%	0.4%	\$1,171,685
LOUISIANA	98.2%	0.0%	0.0%	1.8%	\$1,177,144
MAINE	97.8%	2.2%	0.0%	0.0%	\$307,979
MARYLAND	82.3%	0.4%	17.3%	0.0%	\$2,501,580
MICHIGAN	77.9%	0.0%	22.1%	0.0%	\$2,509,053
MISSISSIPPI	93.3%	0.3%	6.3%	0.1%	\$965,751
MISSOURI	75.7%	11.0%	13.8%	2.1%	\$1,158,879
MONTANA	95.5%	0.0%	3.4%	1.1%	\$253,242
NEBRASKA	78.4%	3.1%	18.6%	0.0%	\$936,301
NEW JERSEY	91.3%	0.0%	8.7%	0.0%	\$2,361,103
NEW MEXICO	78.0%	4.2%	15.4%	2.4%	\$1,027,091
NEW YORK	85.3%	0.0%	14.7%	0.0%	\$7,204,864
NORTH CAROLINA	93.7%	0.2%	5.8%	0.4%	\$4,584,955
OHIO	92.0%	0.0%	8.0%	0.0%	\$2,500,499
OKLAHOMA	85.1%	3.2%	5.4%	6.3%	\$879,547
OREGON	77.6%	0.4%	22.1%	0.0%	\$1,134,144
PENNSYLVANIA	93.3%	0.0%	6.7%	0.0%	\$1,883,040
SOUTH CAROLINA	60.4%	33.3%	6.3%	0.0%	\$1,253,542
SOUTH DAKOTA	97.3%	2.1%	0.0%	0.6%	\$238,879
TENNESSEE	82.9%	17.6%	0.0%	0.6%	\$1,924,837
TEXAS	73.6%	0.7%	19.6%	6.1%	\$9,426,196
UTAH	99.3%	0.7%	0.0%	0.0%	\$1,113,971
VERMONT	95.8%	0.0%	0.0%	4.2%	\$96,188
VIRGINIA	98.9%	0.0%	1.1%	0.0%	\$2,143,403
WEST VIRGINIA	92.3%	7.7%	0.0%	0.0%	\$491,889
WYOMING	87.1%	0.0%	8.2%	4.6%	\$419,371
U.S.	84.4%	3.8%	10.9%	0.9%	\$103,447,156

NOTES:

1. Connecticut, Delaware, District of Columbia, Massachusetts, Minnesota, Nevada, New Hampshire, North Dakota, Rhode Island, Washington, and Wisconsin are excluded from this table because tax appropriations are the only major source of state and local higher education funding in those states.
2. In addition to non-appropriated support and state-funded endowment earnings, other sources include multiyear appropriations from previous years and funds not classified in one of the other source categories.
3. Total state and local support is the sum of American Recovery and Reinvestment Act (ARRA) funds, tax appropriations, non-tax support, local appropriations, non-appropriated support, state-funded endowment earnings, and other state funds, net of any funds not available for use.

SOURCE: State Higher Education Executive Officers Association

USES OF STATE FUNDING

This section provides data and analysis of the uses of state and local government support for higher education over the last 15 years (2004-2019). As with the prior section, **the funding amounts in this section are not adjusted for inflation or enrollment.**

1. NATIONAL TRENDS

Table 1.3 shows that nationally, \$80.8 billion or 78.1 percent of state and local higher education funding was allocated to support general operating expenses at public institutions. This represents an increase of 4.2 percent over fiscal 2018. Other uses of funding include:

- Special purpose appropriations for research, agricultural extension programs, and medical education (RAM). RAM funds increased 2.8 percent over 2018 to reach \$10.7 billion.
- Student financial aid, which increased 5.8 percent to \$11.4 billion. Nearly 78 percent of total student aid was allocated to students attending public institutions.
- Operating support for independent institutions, which increased 4.7 percent to \$225 million, and support for non-credit and continuing education, which increased 5.7 percent to \$315 million. Together, these uses of state and local funding constitute 0.5 percent of higher education funding.

TABLE 1.3

USES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2004-2019 (UNADJUSTED DOLLARS, IN MILLIONS)

USE	2004	2009	2014	2017	2018	2019	2019 % DISTRIBUTION
GENERAL PUBLIC OPERATIONS	\$53,781	\$68,785	\$67,208	\$76,270	\$77,460	\$80,784	78.1%
RESEARCH - AGRICULTURE - MEDICAL (RAM)	\$9,096	\$10,516	\$10,049	\$10,243	\$10,449	\$10,745	10.4%
STATE PUBLIC FINANCIAL AID	\$3,678	\$5,481	\$6,685	\$7,499	\$8,337	\$8,838	8.5%
OUT-OF-STATE STUDENT AID	\$33	\$39	\$37	\$34	\$33	\$34	0.0%
INDEPENDENT STUDENT AID	\$1,980	\$2,498	\$2,296	\$2,319	\$2,382	\$2,508	2.4%
INDEPENDENT OPERATING SUPPORT	\$259	\$253	\$188	\$215	\$215	\$225	0.2%
NON-CREDIT AND CONTINUING EDUCATION	\$188	\$313	\$314	\$337	\$298	\$315	0.3%
TOTAL STUDENT FINANCIAL AID	\$5,691	\$8,018	\$9,018	\$9,852	\$10,752	\$11,380	11.0%
TOTAL INDEPENDENT SUPPORT	\$2,238	\$2,751	\$2,485	\$2,533	\$2,597	\$2,733	2.6%
TOTAL STATE AND LOCAL SUPPORT	\$69,015	\$87,884	\$86,779	\$96,917	\$99,174	\$103,447	100.0%

NOTES:

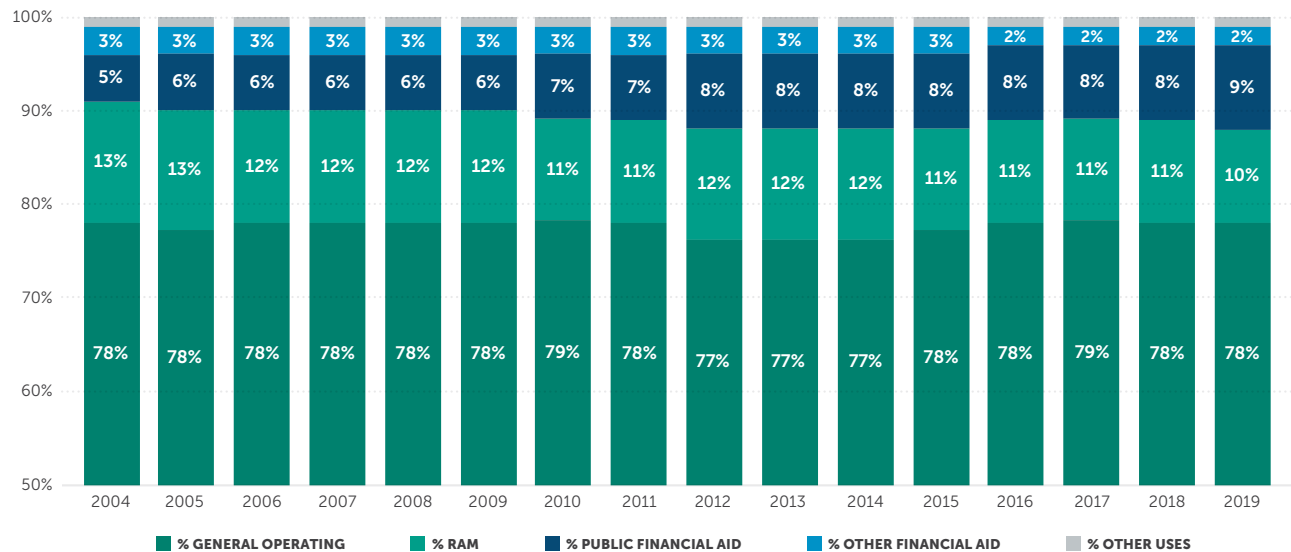
1. General public operations are any state and local support for higher education not allocated to one of the subsequent categories.
2. Total student financial aid is the sum of any state appropriated student financial aid for public, independent, and out-of-state institutions, excluding loans.
3. Total independent support is the sum of state funds for private institutions (independent student aid and independent operating support).

SOURCE: State Higher Education Executive Officers Association

Figure 1.3 shows that the most significant change in uses of higher education funding has been with the portion of funding allocated to public financial aid, which increased from 5 percent in 2004 to 9 percent of all state and local support in 2019. Financial aid to students attending independent or out-of-state institutions declined by 1 percentage point in 2016 and has remained at 2 percent of total funding since then.

Overall, except for a growing portion of funding allocated to financial aid, the uses of state and local higher education funding have remained relatively constant on a national level over time. While the percent of funding allocated to general operations at public institutions dipped to 77 percent following the Great Recession, it rebounded to at least 78 percent in each year since 2015.

FIGURE 1.3
DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING USES,
U.S., FY 2004-2019



NOTES:

1. General operating is the portion of state and local support appropriated directly to public institutions for the purposes of general operations.
2. Other financial aid includes any state appropriated student financial aid to students attending independent (private) or out-of-state institutions.
3. Other uses include funding for non-credit and independent operating.
4. In all years, other uses accounted for less than 1 percent of U.S. state and local funding for higher education.

SOURCE: State Higher Education Executive Officers Association

2. STATE COMPARISONS

Table 1.4 shows significant variation in the uses of state and local funding for higher education.

Twenty states allocated at least 80 percent of funding for general operations at public institutions. **Only Louisiana and Washington, D.C., allocated less than half of all funding to general operations.** Delaware, Michigan, New Hampshire, and Rhode Island each allocated at least 90 percent of funding to general operations at public institutions.

Support for research, agricultural extension programs, and medical education ranged from zero percent in Rhode Island to 29 percent in West Virginia. Thirty-six states allocated at least 10 percent of funding to these areas in 2019.

State support for student financial aid ranged from zero percent in New Hampshire to 45.8 percent in Washington, D.C.⁶ Five states (Arizona, Hawaii, Michigan, Montana, and New Hampshire) allocated less than 1 percent of funding to student financial aid. Seven states (Indiana, Kentucky, Louisiana, New Jersey, South Carolina, Tennessee, and Vermont) allocated more than 20 percent of funding to financial aid.

Support for independent institutions is generally one of the smallest allocations of state and local funding. Only seven states (Indiana, Iowa, Kentucky, New Jersey, New York, Pennsylvania, and South Carolina) gave more than 5 percent of funding to these institutions. In these states, funding for independent institutions was predominantly allocated to student financial aid.

Over the last 15 years, there were substantial shifts in the proportion of state funding allocated to general operating and financial aid:

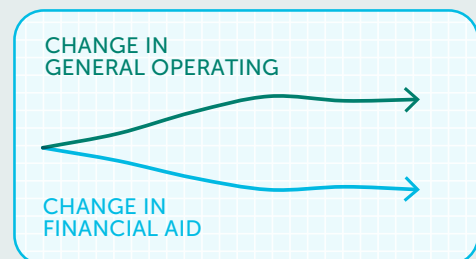
- From 2004 to 2019, 36 states increased the portion of total state and local support they appropriated to student financial aid. Twenty-three of those states had an increase of more than 3 percentage points, and three states had an increase above 10 percentage points (Louisiana, New Jersey, and Tennessee).
- More than half of all states (31) decreased their general operating appropriations as a proportion of total funding from 2004 to 2019. The largest decreases (all above 10 percentage points) were in Louisiana, New Jersey, and Tennessee—the same group of states with the largest shift toward student financial aid.

STATE SPOTLIGHT: WASHINGTON



Washington is one of the few states with a recent increase in general operating allocations as a percent of all support. This change is primarily due to a statewide tuition rate decrease in 2016 and 2017, during which tuition rates declined by 5 percent at Washington community colleges and between 15 and 20 percent at four-year institutions. To pay for the tuition reduction, the state appropriated a more than \$200 million increase in general operating support and reduced financial aid funding to public institutions.⁷ These funding shifts resulted in a 3.5 percentage point increase in the portion of funding going to general operations.

This change in the uses of state funding is expected to revert in the coming years, at least partially. In 2019, Washington enacted a significant overhaul of the state's need-based aid program to ensure all eligible students will receive grants. State financial aid appropriations are expected to increase significantly in the coming years.



6. Washington, D.C., was not able to provide data on financial aid for students attending in-district public institutions.

7. W.A. Legis. S.B. 5954. 3rd Special Session 2015. <http://lawfilesexternal.leg.wa.gov/biennium/2015-16/Pdf/Bills/Session%20Laws/Senate/5954-S.SL.pdf?q=20200225085531>

TABLE 1.4
**USES OF STATE AND LOCAL HIGHER EDUCATION FUNDING BY STATE, FY 2019
(UNADJUSTED DOLLARS)**

	% GENERAL PUBLIC OPERATIONS	% RESEARCH - AGRICULTURE - MEDICAL (RAM)	% TOTAL STUDENT FINANCIAL AID	% TOTAL INDEPENDENT SUPPORT	TOTAL STATE AND LOCAL SUPPORT (THOUSANDS)
ALABAMA	67.0%	24.5%	6.8%	1.2%	\$1,662,998
ALASKA	86.0%	8.7%	5.4%	0.4%	\$353,149
ARIZONA	88.1%	11.0%	0.9%	0.0%	\$1,792,832
ARKANSAS	66.0%	21.9%	12.1%	1.2%	\$1,033,281
CALIFORNIA	83.2%	5.3%	11.5%	1.5%	\$19,183,591
COLORADO	70.6%	13.7%	15.7%	0.9%	\$1,076,848
CONNECTICUT	74.6%	22.4%	3.0%	0.5%	\$1,131,758
DELAWARE	90.0%	3.7%	6.2%	0.1%	\$237,444
FLORIDA	72.1%	8.8%	18.6%	4.7%	\$5,347,532
GEORGIA	69.7%	10.1%	19.6%	1.7%	\$3,635,835
HAWAII	85.6%	13.8%	0.6%	0.0%	\$778,348
IDAHO	87.1%	10.1%	2.8%	0.4%	\$535,165
ILLINOIS	87.4%	3.8%	7.6%	3.1%	\$5,057,380
INDIANA	65.2%	14.2%	20.7%	5.7%	\$1,779,142
IOWA	79.7%	14.2%	6.2%	5.2%	\$918,526
KANSAS	78.6%	19.2%	2.1%	0.8%	\$1,059,915
KENTUCKY	66.6%	11.2%	20.8%	6.3%	\$1,171,685
LOUISIANA	48.8%	23.2%	28.0%	2.0%	\$1,177,144
MAINE	85.1%	10.0%	4.9%	1.0%	\$307,979
MARYLAND	82.3%	11.6%	3.9%	3.0%	\$2,501,580
MASSACHUSETTS	89.5%	3.6%	6.6%	2.6%	\$1,606,272
MICHIGAN	93.4%	6.1%	0.5%	0.3%	\$2,509,053
MINNESOTA	74.7%	12.6%	12.7%	4.6%	\$1,630,558
MISSISSIPPI	68.0%	27.7%	4.4%	0.4%	\$965,751
MISSOURI	87.7%	1.2%	11.1%	2.2%	\$1,158,879
MONTANA	84.6%	14.8%	0.6%	0.0%	\$253,242
NEBRASKA	75.9%	22.2%	1.9%	0.4%	\$936,301
NEVADA	70.6%	14.3%	15.1%	0.0%	\$655,333
NEW HAMPSHIRE	90.1%	9.9%	0.0%	0.0%	\$128,543
NEW JERSEY	67.0%	11.9%	21.1%	5.9%	\$2,361,103
NEW MEXICO	84.8%	12.4%	2.3%	0.0%	\$1,027,091
NEW YORK	77.7%	6.4%	15.3%	5.3%	\$7,204,864
NORTH CAROLINA	78.4%	11.7%	6.5%	3.7%	\$4,584,955
NORTH DAKOTA	73.3%	21.7%	5.0%	0.7%	\$358,491
OHIO	84.7%	8.8%	5.4%	2.1%	\$2,500,499
OKLAHOMA	70.7%	15.2%	14.0%	1.1%	\$879,547
OREGON	81.8%	10.0%	8.2%	0.5%	\$1,134,144
PENNSYLVANIA	75.5%	4.2%	18.6%	10.0%	\$1,883,040
RHODE ISLAND	91.9%	0.0%	7.5%	1.6%	\$208,435
SOUTH CAROLINA	56.7%	11.2%	31.0%	7.9%	\$1,253,542
SOUTH DAKOTA	76.2%	19.5%	4.4%	0.6%	\$238,879
TENNESSEE	59.0%	17.0%	24.0%	4.9%	\$1,924,837
TEXAS	79.9%	16.3%	3.8%	0.9%	\$9,426,196
UTAH	85.1%	12.0%	2.5%	0.0%	\$1,113,971
VERMONT	58.9%	20.1%	21.0%	4.8%	\$96,188
VIRGINIA	74.7%	10.2%	13.6%	4.6%	\$2,143,403
WASHINGTON	78.3%	5.1%	16.6%	2.4%	\$2,037,367
WEST VIRGINIA	52.9%	29.0%	18.0%	1.8%	\$491,889
WISCONSIN	79.4%	10.7%	9.5%	2.4%	\$1,573,280
WYOMING	81.9%	10.6%	6.8%	0.0%	\$419,371
U.S.	78.1%	10.4%	11.0%	2.6%	\$103,447,156
DISTRICT OF COLUMBIA	47.5%	6.8%	45.8%	1.6%	\$87,353

NOTES:

- Percentages do not add up to 100 because (a) this table does not include funds allocated to non-credit and continuing education, and (b) state financial aid to independent institutions is included in both total student financial aid and total independent support.
- General operating is the portion of state and local support appropriated directly to public institutions for the purposes of general operations.
- Total student financial aid is the sum of any state appropriated student financial aid for public, independent, and out-of-state institutions, excluding loans.
- Total independent support is the sum of state funds for private institutions (independent student aid and independent operating support).
- Total state and local support is the sum of American Recovery and Reinvestment Act (ARRA) funds, tax appropriations, non-tax support, local appropriations, non-appropriated support, state-funded endowment earnings, and other state funds, net of any funds not available for use.

SOURCE: State Higher Education Executive Officers Association

DISTRIBUTION OF REVENUE: WAVE CHARTS AND STUDENT SHARE

This section explores trends in the distribution and levels of the two primary revenue sources for public institutions of higher education: state and local funding and student tuition revenue. From this section on, the SHEF report highlights trends in higher education revenues and enrollment for **public institutions** only. Throughout the report, a key set of derived metrics is analyzed first at the U.S. level and then across states.⁸ These metrics are net FTE enrollment, education appropriations, state public financial aid, net tuition revenue, the student share, and total education revenues. Each metric is defined in *Table 2.1* and in the more detailed sections that follow.

SHEF's analytic methods are designed to make basic data about higher education finance as comparable as possible across states and over time. Finance metrics are provided on a per-student basis (using FTE enrollment) and are modified using three adjustments.⁹



Higher Education Cost Adjustment (HECA) adjusts for inflation over time;



Cost of Living Index (COLI) accounts for cost of living differences among the states; and



Enrollment Mix Index (EMI) adjusts for differences in the mix of enrollments across institutions resulting in different costs across the states (e.g., at community colleges or more expensive research institutions).

Table 2.1 shows the effects of FTE enrollment and inflation on the SHEF metrics. The progression shown in this table is a starting point for understanding the national story of public higher education funding from state and local sources, tuition revenue from students and families, and enrollment over time. Note that the state adjustments (COLI and EMI) do not impact the U.S. average.

The first section of *Table 2.1* shows that in unadjusted dollars (without adjusting for inflation or enrollment), all public higher education revenues increased from 2018 to 2019. Net tuition revenue had the smallest increase (1.9 percent), and state public financial aid, a component of education appropriations, increased the most (6 percent). Over the last 10 years, state aid increased 61.2 percent, and general public operating funds increased 17.4 percent, leading to an average 20.7 percent increase in education appropriations. Net tuition revenue increased 70.3 percent in the last 10 years, and total revenues increased 39.1 percent.

8. It is important to note that the U.S. totals are not averages of state averages. For example, "U.S. total education appropriations per FTE" is the sum of all education appropriations divided by the sum of all net FTE across the 50 states. It is not the average of each of the 50 states' individual per-FTE calculations.

9. These adjustments are described in more detail on the data definitions page of the [SHEF website \(https://shef.sheeo.org/\)](https://shef.sheeo.org/).

The middle section of *Table 2.1* shows that the Higher Education Cost Adjustment (HECA) increased 2.3 percent from 2018 to 2019 and 21.6 percent in the last 10 years. After applying HECA and therefore removing any increases due to inflation, we see more moderate increases in education appropriations and its components (2.0-3.6 percent), and net tuition revenue shows a 0.4 percent decrease over the last year. Looking back 10 years, there was a 32.6 percent increase in state aid, but a 3.4 percent decrease in general public operating funds. This trend shows the continued proportional increase in state aid as a percentage of all education appropriations. Net tuition revenue increased 40.1 percent over this time frame, and total education revenues increased 14.4 percent.

The one- and 10-year changes described above may be misleading if not contextualized with changes in FTE enrollment. In the last year, enrollment declined 0.3 percent—a very small amount, but enough to slightly increase the inflation-adjusted annual changes in the section above.

Ten years ago (2009) was the first year of decreased funding for higher education during the Great Recession. Students had begun to enter college in higher numbers during the downturn. From 2009 to 2019, enrollment increased just 1.7 percent—but this figure hides a large increase and subsequent decrease in net FTE enrollment during the recession. On a per-student basis, education appropriations in 2019 remained 2.4 percent below 2009 levels, and net tuition revenue increased 37.7 percent since 2009.

Figures 2.1 and *2.2* explore the relationship between net tuition per FTE and education appropriations per FTE. They also illustrate year-over-year trends over time.

TABLE 2.1
IMPACT OF INFLATION AND ENROLLMENT ON SHEF METRICS, U.S., FY 1994-2019

	1994	2004	2009	2014	2018	2019	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE	15-YEAR % CHANGE	25-YEAR % CHANGE
UNADJUSTED DOLLARS (MILLIONS)											
STATE PUBLIC FINANCIAL AID	N/A	\$3,678	\$5,481	\$6,685	\$8,337	\$8,838	6.0%	32.2%	61.2%	140.3%	N/A
GENERAL PUBLIC OPERATIONS	N/A	\$53,781	\$68,785	\$67,208	\$77,460	\$80,784	4.3%	20.2%	17.4%	50.2%	N/A
EDUCATION APPROPRIATIONS	\$36,368	\$57,459	\$74,266	\$73,894	\$85,797	\$89,621	4.5%	21.3%	20.7%	56.0%	146.4%
NET TUITION REVENUE	\$16,569	\$30,437	\$44,311	\$64,778	\$74,083	\$75,476	1.9%	16.5%	70.3%	148.0%	355.5%
TOTAL EDUCATION REVENUE	\$52,937	\$87,638	\$118,100	\$137,917	\$159,044	\$164,225	3.3%	19.1%	39.1%	87.4%	210.2%
CONSTANT INFLATION ADJUSTED DOLLARS (MILLIONS)											
HIGHER EDUCATION COST ADJUSTMENT (HECA)	0.5270	0.7125	0.8226	0.9025	0.9776	1.0000	2.3%	10.8%	21.6%	40.3%	89.8%
STATE PUBLIC FINANCIAL AID	N/A	\$5,162	\$6,663	\$7,408	\$8,528	\$8,838	3.6%	19.3%	32.6%	71.2%	N/A
GENERAL PUBLIC OPERATIONS	N/A	\$75,479	\$83,622	\$74,471	\$79,237	\$80,784	2.0%	8.5%	-3.4%	7.0%	N/A
EDUCATION APPROPRIATIONS	\$69,014	\$80,640	\$90,285	\$81,879	\$87,765	\$89,621	2.1%	9.5%	-0.7%	11.1%	29.9%
NET TUITION REVENUE	\$31,442	\$42,717	\$53,869	\$71,779	\$75,783	\$75,476	-0.4%	5.2%	40.1%	76.7%	140.0%
TOTAL EDUCATION REVENUE	\$100,456	\$122,995	\$143,574	\$152,821	\$162,692	\$164,225	0.9%	7.5%	14.4%	33.5%	63.5%
CONSTANT INFLATION ADJUSTED DOLLARS (PER FTE)											
FULL-TIME EQUIVALENT (FTE) ENROLLMENT	8,123,619	9,685,811	10,749,886	11,194,139	10,969,226	10,934,890	-0.3%	-2.3%	1.7%	12.9%	34.6%
STATE PUBLIC FINANCIAL AID	N/A	\$533	\$620	\$662	\$777	\$808	4.0%	22.1%	30.4%	51.7%	N/A
GENERAL PUBLIC OPERATIONS	N/A	\$7,793	\$7,779	\$6,653	\$7,224	\$7,388	2.3%	11.0%	-5.0%	-5.2%	N/A
EDUCATION APPROPRIATIONS	\$8,495	\$8,326	\$8,399	\$7,314	\$8,001	\$8,196	2.4%	12.1%	-2.4%	-1.6%	-3.5%
NET TUITION REVENUE	\$3,870	\$4,410	\$5,011	\$6,412	\$6,909	\$6,902	-0.1%	7.6%	37.7%	56.5%	78.3%
TOTAL EDUCATION REVENUE	\$12,366	\$12,698	\$13,356	\$13,652	\$14,832	\$15,018	1.3%	10.0%	12.4%	18.3%	21.5%

NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
3. State public financial aid is the part of education appropriations used for student financial aid at public institutions, excluding loans.
4. General public operations are the portion of state and local support appropriated directly to public institutions for the purposes of general operations.
5. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.
6. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service.
7. The Higher Education Cost Adjustment (HECA) measures cost inflation experienced by colleges and universities.

SOURCE: State Higher Education Executive Officers Association

EDUCATION REVENUES

The historical data in *Figure 2.1* (the wave chart) demonstrate the impact of the economic cycle on public higher education revenues from 1994 to 2019.

1. NATIONAL TRENDS

The **red line** in the wave chart shows FTE enrollment, which has broadly increased over time from 6.85 million in 1980 to 10.93 million in 2019. Enrollment increases sharply during recessions and levels off or declines during economic recoveries—**2019 is the eighth straight year of enrollment declines, although annual declines have been less than 1 percent since 2015.**

The **blue bars** show change over time in education appropriations per FTE enrolled student. Education appropriations are made up of general operating funds for public institutions and state public financial aid. The bars make the shape of a wave over time because per-student education appropriations generally fluctuate with the economic cycle. During economic recessions, state funding declines as states either cut funding to higher education or fail to keep up with changes in inflation and enrollment.

- Historically, states would reinvest in public higher education as the economy recovered. Beginning with the tech bust in 2001, however, education appropriations declined and have never fully recovered.
- Fiscal 2019 marks the seventh consecutive year of growth in education appropriations since 2012, the height of the Great Recession and the record low for state funding. Education appropriations in 2019 increased 2.4 percent beyond inflation, from \$8,001 to \$8,196.
- States have only recovered about two-thirds (63.5 percent) of the total decline seen during the Great Recession.

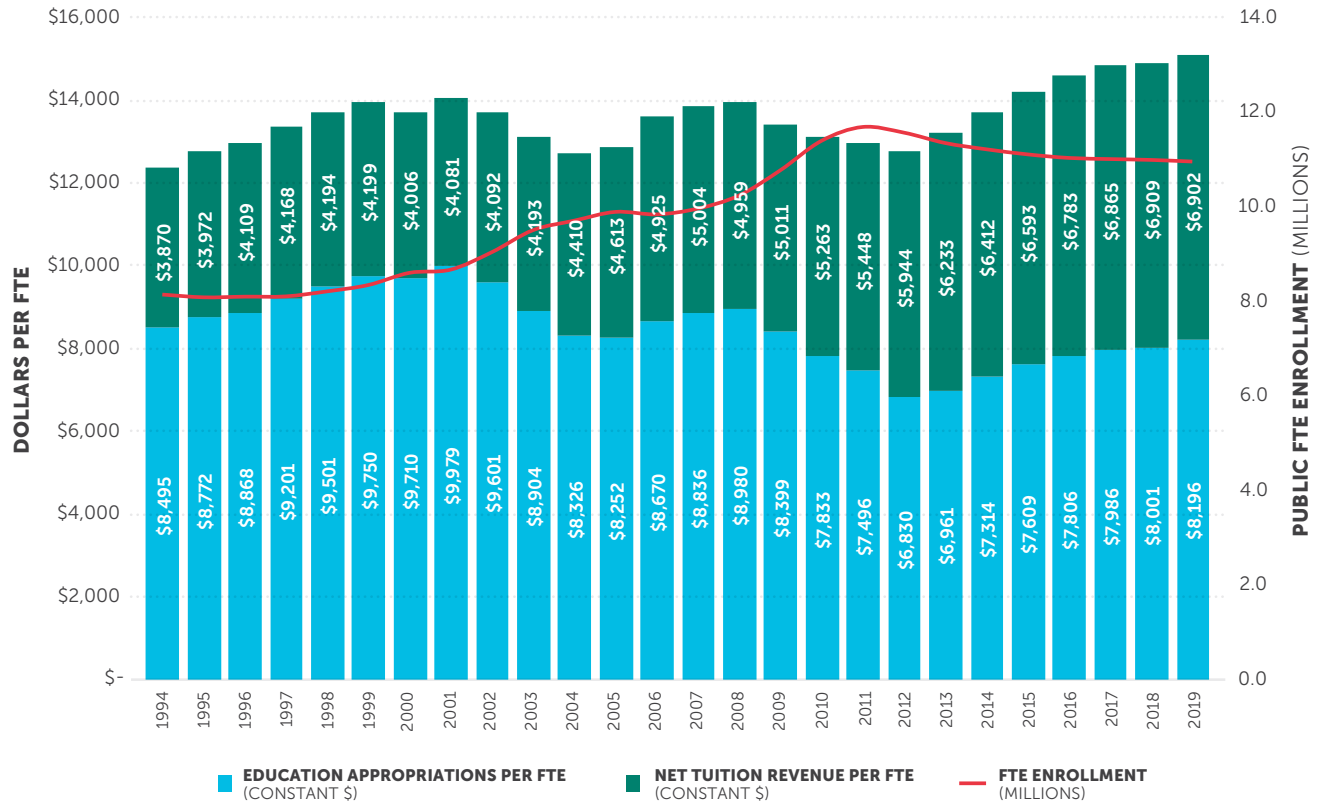
After seven years of funding increases, states have only recovered about two-thirds of the total decline seen during the Great Recession.

The **green bars** in *Figure 2.1* show net tuition revenue per FTE over time. Net tuition revenue measures tuition and fee revenue at public institutions, excluding state and institutional financial aid. Unlike education appropriations, net tuition has increased steadily over time, with an average annual increase 2.9 percent above inflation since the start of the SHEF dataset in 1980. However, after reaching an all-time high in 2018, tuition revenue per FTE decreased by 0.09 percent from \$6,908 to \$6,902 in 2019. Notably, **this is only the third time there has been a decline in net tuition revenue per FTE since the SHEF dataset began in 1980.** The two prior decreases were in 2000 and 2008, both years which immediately preceded economic recessions.

The **total of the bars** in the wave chart shows the approximate total education revenues available to public institutions on a per-student level. Total education revenues combine the two primary sources of funding for public higher education—education appropriations and net tuition. In 2019, total revenues increased 1.3 percent to \$15,018 per FTE, surpassing \$15,000 for the first time in the SHEF dataset. On average, institutions have more than made up for declines in education appropriations by increasing net tuition revenues.

FIGURE 2.1

PUBLIC FTE ENROLLMENT, EDUCATION APPROPRIATIONS PER FTE, AND NET TUITION REVENUE PER FTE, U.S., FY 1994-2019 (CONSTANT DOLLARS)



NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
3. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.
4. Constant 2019 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association

The funding levels and trends over time shown in the U.S. wave chart differ substantially by state. Visit the [SHEF website](https://shef.sheeo.org/)¹⁰ for a fully interactive version of Figure 2.1 and additional data tables exploring FTE enrollment, education appropriations, net tuition revenue, and total education revenues.

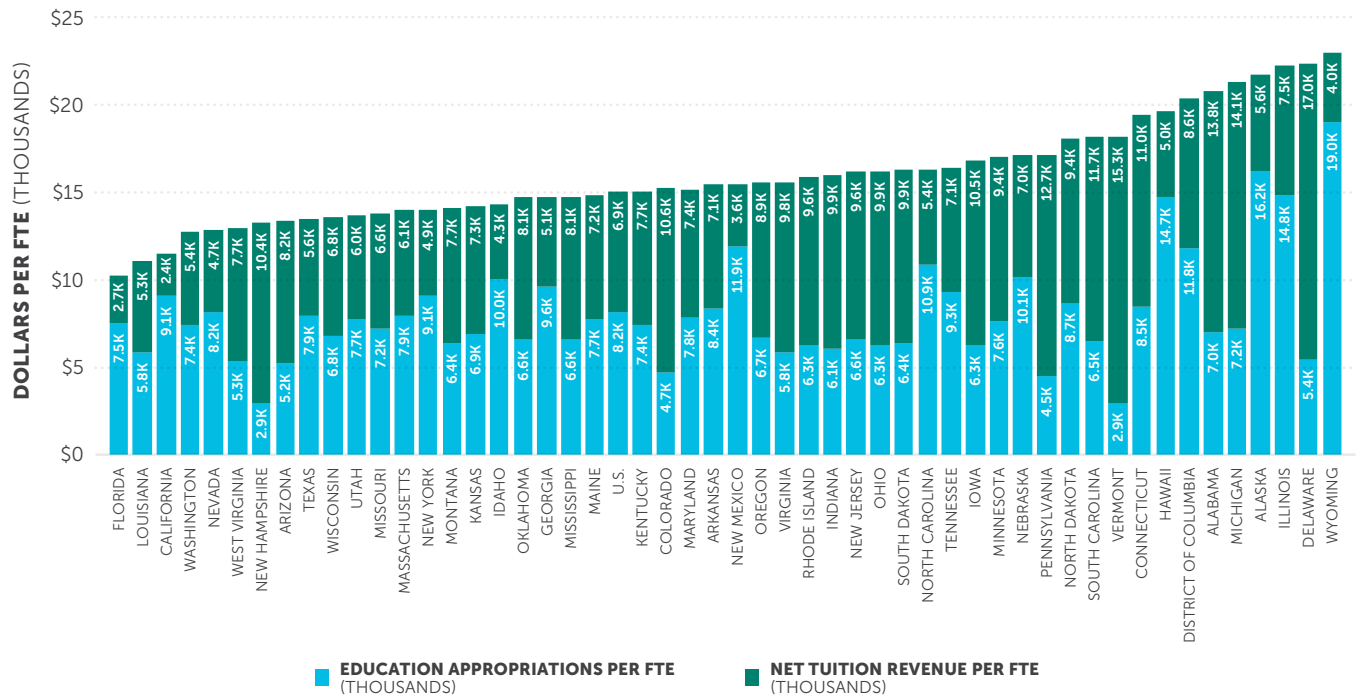
10. <https://shef.sheeo.org/>

2. STATE COMPARISONS

Revenues in the SHEF wave chart vary considerably by state. *Figure 2.2* provides an expanded view of the 2.1 wave chart for all states in fiscal 2019. States range in their total revenues (the sum of the blue and green bars) and in the distribution of revenues that comprise that total. For example, Florida has the lowest total revenues per FTE, but 73.5 percent of total revenues come from state funding. Louisiana has similar total revenues, but only 52 percent of funding comes from education appropriations. At the other end of the spectrum, Delaware and Wyoming have the two highest total revenues. Yet they could not be more different in where they get those funds: the state provides 24 percent of revenue in Delaware compared to 83 percent in Wyoming.

FIGURE 2.2

EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY STATE, FY 2019 (ADJUSTED)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
2. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.
3. Adjustment factors to account for interstate differences include the Cost of Living Index (COLI) and Enrollment Mix Index (EMI). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

FINANCIAL AID

States allocate financial aid to students attending both public and independent (private) institutions. A small portion of financial aid (less than 1 percent) is allocated to students attending out-of-state institutions. SHEF focuses specifically on state funding for public institutions. For this reason, financial aid to independent and out-of-state institutions is excluded from education appropriations. This section examines allocations to state financial aid for students attending public in-state institutions.

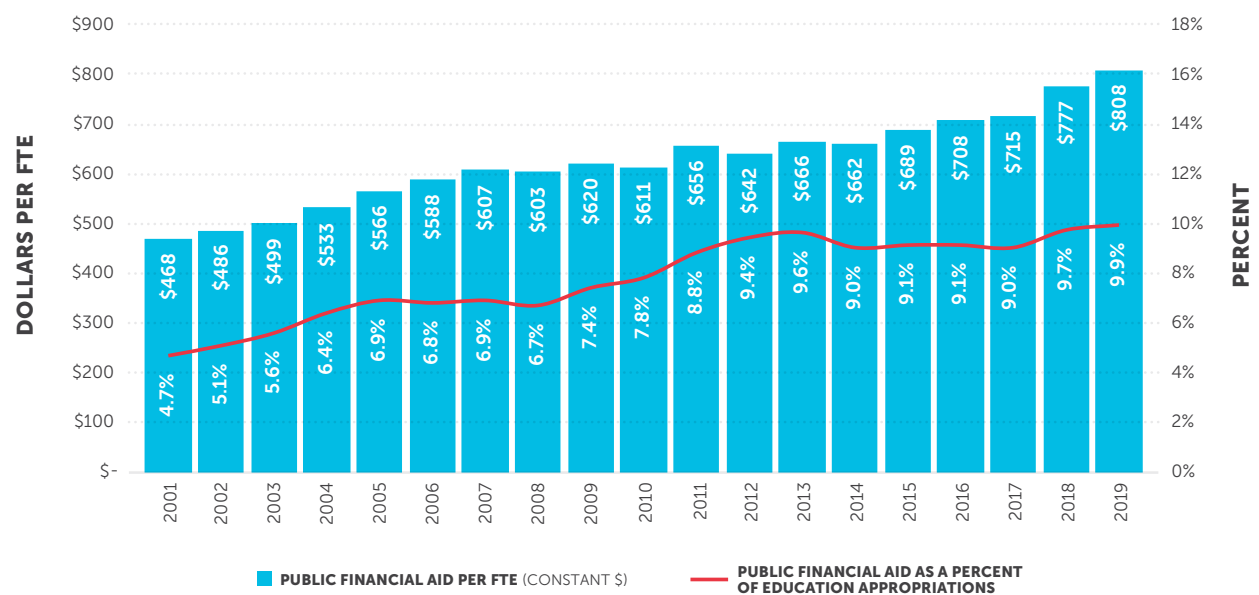
1. NATIONAL TRENDS

Figure 2.3 shows the change in state financial aid for students at public institutions over time. Unlike the rest of education appropriations, state public financial aid has increased consistently over time.

- On a per-FTE basis and after adjusting for inflation, state financial aid to public institutions has increased 72.7 percent, from \$468 in 2001 to \$808 in 2019. State aid increased 4 percent in the last year and 8.7 percent from 2017-2018.
- SHEF data show that states primarily protect financial aid during economic downturns. During the worst years of the Great Recession, from 2008 to 2012, aid increased 6.5 percent while appropriations dropped 23.9 percent. As a result, state public financial aid as a percent of appropriations increased from 6.7 to 9.4 percent.

FIGURE 2.3

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE AND AS A PERCENT OF EDUCATION APPROPRIATIONS, U.S., FY 2001-2019 (CONSTANT DOLLARS)



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. Some respondents could not separate tuition aid from aid for living expenses.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
3. Constant 2019 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association



SHEF ISSUE BRIEF: CHANGING TRENDS IN STATE FINANCIAL AID

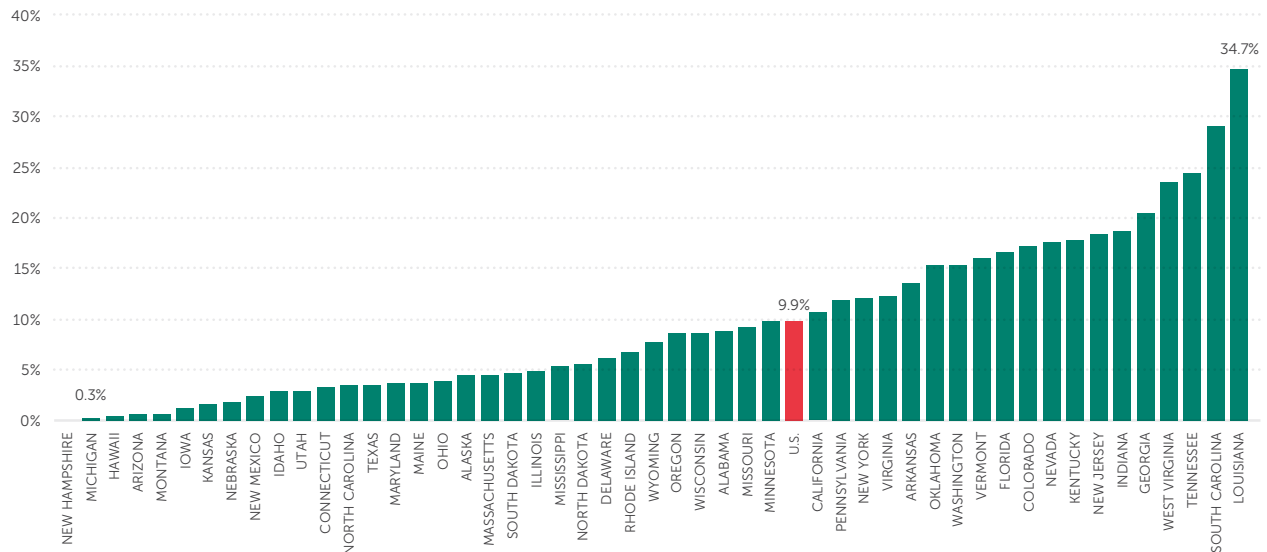
Trends in state-funded student financial aid for students attending public institutions differ substantially from trends in aid for students attending independent institutions. The composition of state financial aid has also changed over time. The [SHEF Issue Brief](#) on state financial aid explores trends over time in state financial aid to public and private institutions, by state. Key findings include:

- Despite similar enrollment increases across institutions, states have redirected their financial aid dollars to public institutions. From 2001 to 2019, state public financial aid increased by 118.3 percent while independent aid declined 7.5 percent.
- Accordingly, the proportion of all state financial aid allocated to independent institutions decreased from 40 percent to only 22 percent since 2001.
- In 2019, almost two-thirds of states allocated 75 percent or more of their financial aid to students attending public institutions. States in the Midwest and Northeast were the most likely to allocate a high proportion of financial aid to students attending independent institutions.

2. STATE COMPARISONS

States vary considerably in how much of their total funding is allocated to student financial aid. On the low end, New Hampshire does not have an aid program, and Michigan has a very small aid program that comprises only 0.3 percent of its total education appropriations. On the high end, in two Southern states (Louisiana and South Carolina), financial aid comprises more than one-quarter of their total funding for public higher education (*Figure 2.4*).

FIGURE 2.4
PUBLIC HIGHER EDUCATION STATE FINANCIAL AID AS A PERCENT OF EDUCATION APPROPRIATIONS BY STATE, FY 2019



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. Some respondents could not separate tuition aid from aid for living expenses.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
3. The District of Columbia did not provide data on public financial aid.
4. New Hampshire ended its public financial aid program in 2011.

SOURCE: State Higher Education Executive Officers Association

STUDENT SHARE

Figure 2.5 provides a 25-year look at the growing reliance on net tuition as a revenue source—the student share. The measure of student share shows the proportion of total education revenues that comes from net tuition. Net tuition excludes state and institutional financial aid but does not exclude federal financial aid or loans.

There has been a substantial shift of responsibility for financing public higher education toward net tuition revenue (from 21 percent to 46 percent) since the start of the SHEF dataset in 1980. The student share increases most rapidly during periods of economic recession, shifting more of the cost of higher education to students and families. When the economy stabilizes, a new level is established. Because of this trend, **the student share will likely pass 50 percent during the next recession.**

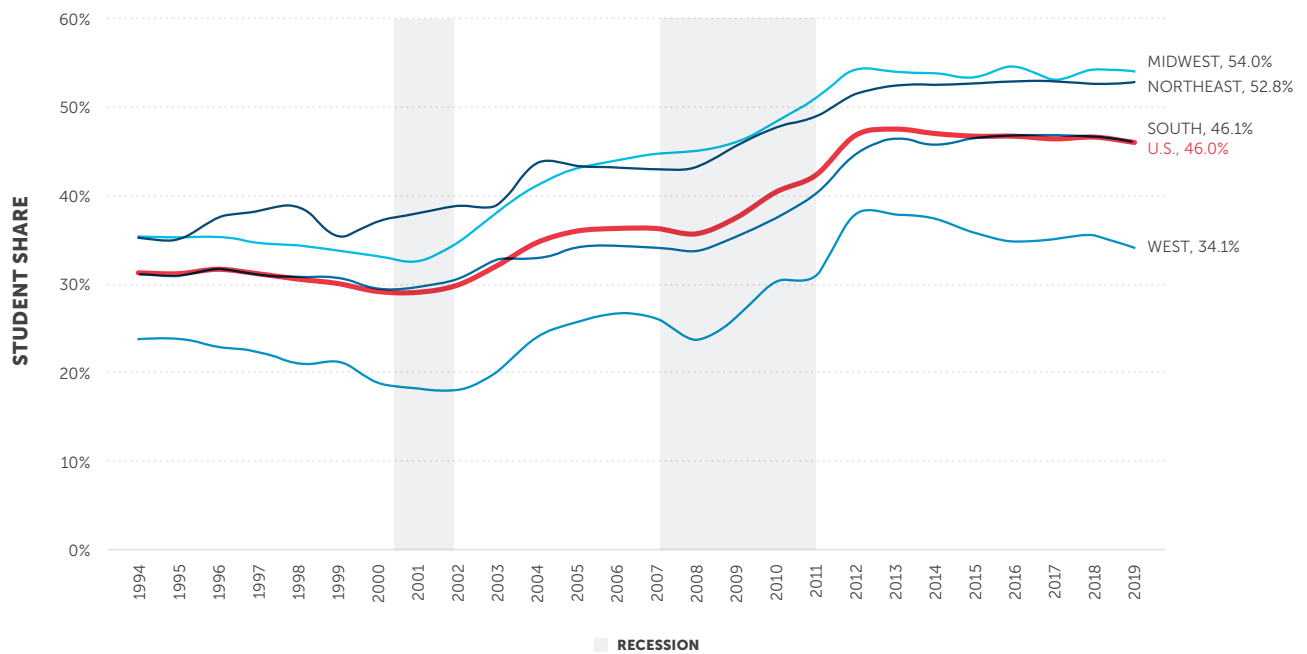
1. NATIONAL TRENDS

Over the last 25 years, the U.S. average student share increased 14.7 percentage points from 31.3 percent in 1994 to 46 percent in 2019. Student share grew rapidly during the Great Recession, increasing from 35.7 percent in 2008 to an all-time high of 47.5 percent in 2013. Since that high point, the share from net tuition declined slightly, returning to 46 percent in 2019. Decreases in student share occur when growth in education appropriations outpaces growth in net tuition revenue.

There are regional differences in the student share, but the overall trend of sharp increases during economic recessions holds across each region. Student share is highest in the Midwest and Northeast; the South tracks closely to the U.S. average; and the West has the lowest student share of any region (*Figure 2.5*).

FIGURE 2.5

NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE, U.S., FY 1994-2019



NOTES:

1. Net tuition revenue used for capital debt service is included in net tuition revenue, but excluded from total education revenue in calculating the above figures.
2. Regional averages are based on the U.S. Census designation.

SOURCE: State Higher Education Executive Officers Association



SHEF ISSUE BRIEF:
REGIONAL DIFFERENCES IN HIGHER EDUCATION FINANCE

The **SHEF Issue Brief** on regional differences in higher education finance explores regional differences across each of the primary SHEF metrics. Key findings include:

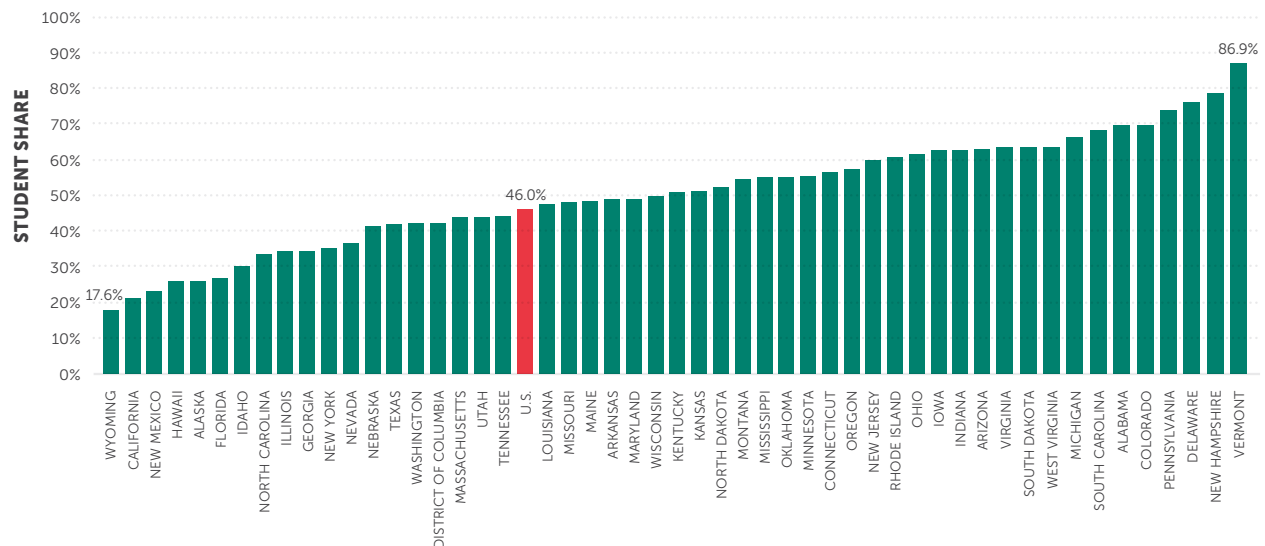
- The Midwest is the only region with lower FTE enrollment and state public financial aid than prior to the Great Recession.
- Only the West has fully recovered in education appropriations per FTE.
- In the Midwest and Northeast, student tuition dollars provide a larger share of total revenue at public institutions than state and local sources combined.

2. STATE COMPARISONS

In 2019, over half of all states (26) had a student share above 50 percent (*Figure 2.6*). Three states had a student share above 75 percent: Delaware (76.1 percent), New Hampshire (78.3 percent), and Vermont (86.9 percent). Conversely, three states had a student share below 25 percent: California (21.1 percent), New Mexico (23.1 percent), and Wyoming (17.6 percent).

From 2018-2019, student share decreased in 35 states and Washington, D.C. Over the last 10 years, the student share increased in all but three states (Maine, Massachusetts, and North Dakota).

FIGURE 2.6
NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE BY STATE, FY 2019



NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions that comes from net tuition revenue. Net tuition revenue used for capital debt service is included in net tuition revenue, but excluded from total education revenue in calculating the above figures.

SOURCE: State Higher Education Executive Officers Association

STATE AND NATIONAL TRENDS BY METRIC

This section more deeply examines trends and interstate differences for each of the primary SHEF metrics (FTE enrollment, education appropriations, financial aid, net tuition, and total revenues).

STUDENT ENROLLMENT

1. NATIONAL TRENDS

Full-time equivalent (FTE) enrollment converts student credit hours to full-time, academic year students, but excludes medical students. In recent years, enrollment has remained relatively stable both nationally and across states. SHEF includes enrollment for undergraduate and graduate students at public institutions.

Enrollment increases during economic downturns and levels off as the economy recovers, but net enrollment has increased substantially over time. Prior to the most recent decade, only six years had enrollment declines since 1980 (the start of the SHEF dataset). In 1980, U.S. public institutions enrolled 6.85 million FTE students. Enrollment increased in each decade, reaching:

- 7.77 million in 1990;
- 8.58 million in 2000; and
- 11.37 million in 2010.

Enrollment peaked at 11.67 million students in 2011 and has since declined year after year. 2019 is the eighth straight year of FTE enrollment declines following rapid enrollment increases during the Great Recession. While FTE is currently at its lowest point since 2009, annual declines have been less than 0.5 percent for the last three years. These declines represent a small percentage of total enrollment, yet they account for a large number of students. The 0.3 percent decline from 2018 to 2019 represented almost 35,000 students. On a national level, enrollment remains above pre-recession levels—**there were just under 11 million FTE enrolled students in 2019.**

MEASUREMENT NOTE: IMPACT OF FTE ENROLLMENT IN LARGE STATES

*With 1.55 million FTE enrolled students, California makes up almost 15 percent of U.S. FTE enrollment. Such disproportionately high enrollment means that changes in California can drive the U.S. total. **For this reason, SHEF calculates all per-FTE metrics using a weighted total.***

Every year, the major changes in SHEF data are analyzed with the largest four states (California, Texas, Florida, and New York) removed to ensure that changes in these states broadly match trends over time in the majority of states. Still, it is important to keep in mind that the U.S. averages are most representative of the largest states.

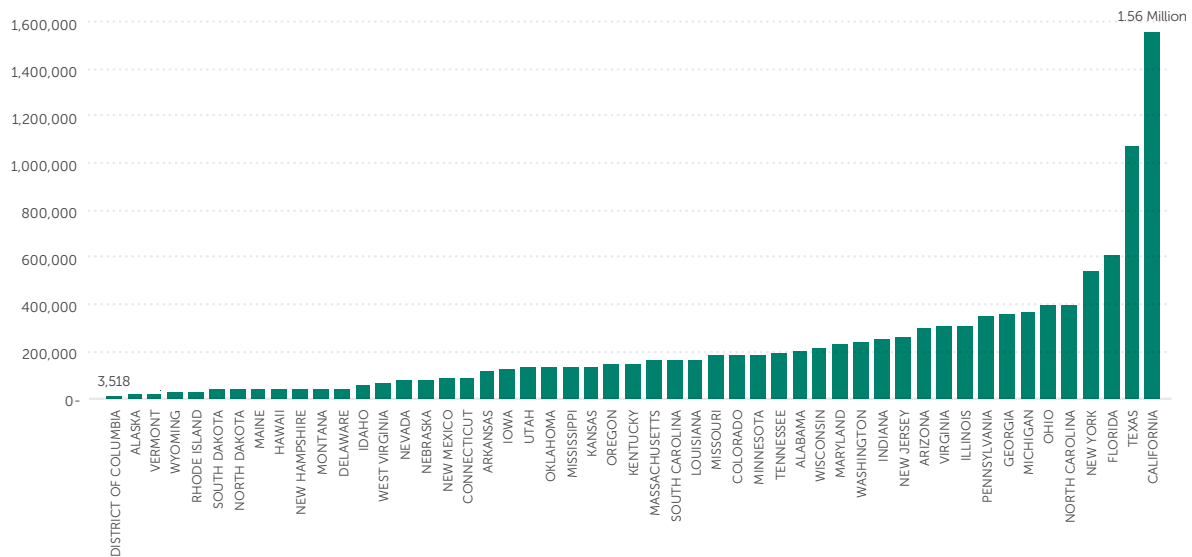


2. STATE COMPARISONS

Figure 3.1 shows net FTE enrollment for each state in 2019. The data in Table 3.1 provide additional detail on how enrollment has changed over time in each state.

- Twenty states had very stable enrollment from 2018 to 2019, with annual changes of less than 1 percent. Across the states, FTE enrollment ranged from roughly 3,500 students in Washington, D.C., and less than 17,000 in Alaska to 1.55 million in California.
- **Enrollment declined in 33 states and Washington, D.C., between 2018 and 2019.** These declines ranged from 0.1 percent in Colorado to 4.8 percent in Alaska. Seventeen states had increases in FTE enrollment, from .01 percent in Maine to 2.1 percent in Utah.
- In the last 10 years, almost half of all states have faced enrollment declines. FTE declines were greater than 10 percent in Alaska, Illinois, Michigan, New Mexico, and West Virginia.

FIGURE 3.1
PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY STATE, FY 2019



NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.1
PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY STATE

	2009	2014	2018	2019	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	199,153	194,439	202,506	203,627	0.6%	4.7%	2.2%
ALASKA	19,030	20,484	17,555	16,721	-4.8%	-18.4%	-12.1%
ARIZONA	245,680	270,127	290,816	292,856	0.7%	8.4%	19.2%
ARKANSAS	108,474	121,365	114,664	112,722	-1.7%	-7.1%	3.9%
CALIFORNIA	1,639,923	1,517,902	1,553,164	1,555,997	0.2%	2.5%	-5.1%
COLORADO	171,564	184,836	183,875	183,745	-0.1%	-0.6%	7.1%
CONNECTICUT	80,433	88,681	86,008	83,793	-2.6%	-5.5%	4.2%
DELAWARE	32,417	35,657	36,073	36,410	0.9%	2.1%	12.3%
FLORIDA	564,963	608,226	602,675	603,916	0.2%	-0.7%	6.9%
GEORGIA	330,866	347,733	350,448	355,223	1.4%	2.2%	7.4%
HAWAII	37,070	40,436	36,030	35,254	-2.2%	-12.8%	-4.9%
IDAHO	44,705	56,177	53,570	54,421	1.6%	-3.1%	21.7%
ILLINOIS	368,019	362,508	319,582	310,561	-2.8%	-14.3%	-15.6%
INDIANA	239,873	253,337	247,678	246,301	-0.6%	-2.8%	2.7%
IOWA	117,254	127,407	125,333	123,666	-1.3%	-2.9%	5.5%
KANSAS	130,930	138,310	133,815	132,253	-1.2%	-4.4%	1.0%
KENTUCKY	144,641	154,782	144,747	142,002	-1.9%	-8.3%	-1.8%
LOUISIANA	169,602	168,001	161,670	163,932	1.4%	-2.4%	-3.3%
MAINE	35,968	36,577	33,945	33,947	0.0%	-7.2%	-5.6%
MARYLAND	231,079	232,935	231,761	229,239	-1.1%	-1.6%	-0.8%
MASSACHUSETTS	155,387	172,574	163,673	160,327	-2.0%	-7.1%	3.2%
MICHIGAN	409,270	400,859	372,073	366,298	-1.6%	-8.6%	-10.5%
MINNESOTA	200,732	203,523	187,705	184,359	-1.8%	-9.4%	-8.2%
MISSISSIPPI	120,873	130,436	130,279	129,499	-0.6%	-0.7%	7.1%
MISSOURI	177,751	196,831	186,862	182,499	-2.3%	-7.3%	2.7%
MONTANA	36,388	39,484	37,371	36,371	-2.7%	-7.9%	0.0%
NEBRASKA	77,825	79,704	76,792	75,941	-1.1%	-4.7%	-2.4%
NEVADA	65,665	64,497	70,437	71,016	0.8%	10.1%	8.1%
NEW HAMPSHIRE	34,311	36,988	37,643	36,353	-3.4%	-1.7%	6.0%
NEW JERSEY	246,215	274,341	264,441	262,246	-0.8%	-4.4%	6.5%
NEW MEXICO	89,450	98,630	83,747	79,980	-4.5%	-18.9%	-10.6%
NEW YORK	547,845	565,719	546,831	537,113	-1.8%	-5.1%	-2.0%
NORTH CAROLINA	385,792	402,199	392,138	393,922	0.5%	-2.1%	2.1%
NORTH DAKOTA	36,408	36,927	34,969	33,683	-3.7%	-8.8%	-7.5%
OHIO	391,546	401,856	387,109	390,905	1.0%	-2.7%	-0.2%
OKLAHOMA	127,058	145,401	131,083	128,845	-1.7%	-11.4%	1.4%
OREGON	141,532	155,418	140,410	137,942	-1.8%	-11.2%	-2.5%
PENNSYLVANIA	353,494	358,693	344,494	346,265	0.5%	-3.5%	-2.0%
RHODE ISLAND	30,120	31,506	30,316	30,204	-0.4%	-4.1%	0.3%
SOUTH CAROLINA	157,467	174,816	164,402	162,050	-1.4%	-7.3%	2.9%
SOUTH DAKOTA	31,027	33,659	32,899	32,816	-0.3%	-2.5%	5.8%
TENNESSEE	178,100	190,485	184,976	185,912	0.5%	-2.4%	4.4%
TEXAS	861,900	1,010,936	1,052,885	1,066,707	1.3%	5.5%	23.8%
UTAH	107,649	119,692	125,550	128,130	2.1%	7.0%	19.0%
VERMONT	20,654	20,903	20,583	20,458	-0.6%	-2.1%	-0.9%
VIRGINIA	294,436	318,166	303,300	304,997	0.6%	-4.1%	3.6%
WASHINGTON	236,742	245,011	237,289	235,292	-0.8%	-4.0%	-0.6%
WEST VIRGINIA	74,864	76,202	68,746	66,577	-3.2%	-12.6%	-11.1%
WISCONSIN	224,113	223,777	211,610	209,403	-1.0%	-6.4%	-6.6%
WYOMING	23,628	24,986	22,699	22,194	-2.2%	-11.2%	-6.1%
U.S.	10,749,886	11,194,139	10,969,226	10,934,890	-0.3%	-2.3%	1.7%
DISTRICT OF COLUMBIA	N/A	3,895	3,568	3,518	-1.4%	-9.7%	N/A

NOTES:

1. Full-time equivalent enrollment equates student credit hours to full-time, academic year students, but excludes medical students.
2. The U.S. calculation does not include the District of Columbia.

SOURCE: State Higher Education Executive Officers Association

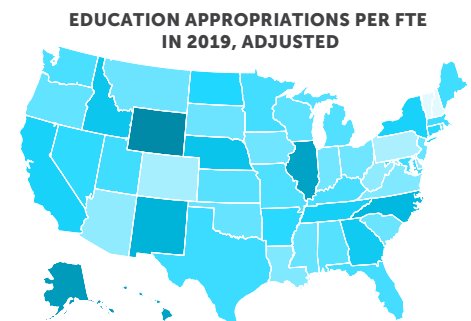
EDUCATION APPROPRIATIONS

1. NATIONAL TRENDS

Education appropriations are a measure of state and local support available for public higher education operating expenses and exclude appropriations for independent institutions, financial aid for students attending independent or out-of-state institutions, research, hospitals, and medical education. Visit the SHEF website to view the [interactive education appropriations map](#).¹¹ This map shows education appropriations per FTE across the nation.

- Historically, public higher education was primarily funded by the states. For the last four decades, funding has decreased during poor economic times and increased as the economy improved. Following the previous two recessions, annual increases in education appropriations per FTE have generally been smaller than the declines during each recession.
- As a net result, per-student funding has declined over time, and other revenues have increased to make up the difference. Altogether, education appropriations per FTE have declined in 18 out of the almost 40 years in the SHEF dataset.
Education appropriations per FTE in 2019 remain at a lower level than all but one year prior to the steep declines of the Great Recession (1983).

- Nationally, education appropriations increased 2.4 percent above inflation in the last year, reaching \$8,196 per FTE. This increase was driven by both general public operating appropriations (up 2.3 percent from 2018) and public student financial aid (up 4.0 percent).
- Although 2019 marks the seventh straight year of per-FTE increases in education appropriations, these funds remain 8.7 percent below the pre-recession high point in 2008 and 2.4 percent below 2009 (which was the first year with decreased funding during the Great Recession).



11. http://shf.sheeo.org/report/?report_page=state-and-national-trends&modal=Map_3_2



SHEF ISSUE BRIEF:

POST-RECESSION TRENDS IN HIGHER EDUCATION REVENUES

The Great Recession led to dramatic changes in the way public institutions finance higher education. The [SHEF Issue Brief](#) on post-recession trends provides an analysis of how well states have recovered from the Great Recession. We consider the depth of cuts in state funding, recovery of total education revenues and the sources of that recovery, and changes in state financial aid. Highlights include:

- More than a decade after the Great Recession, 41 states have yet to recover from reductions in education appropriations per student.
- In 2019, the average public institution received nearly \$800 less in education appropriations per student than in 2008.
- Inflation-adjusted net tuition revenue per FTE increased in every state since before the recession.
- Total education revenue remains below pre-recession levels in 16 states.

STATE COMPARISONS

Education appropriations per FTE ranged from just under \$3,000 in New Hampshire and Vermont to almost \$19,000 per FTE in Wyoming (*Figure 3.2*). **Appropriations increased in 38 states and Washington, D.C., from 2018 to 2019.** Washington, D.C., had the largest increase at 26.3 percent or \$2,456 per FTE. This increase was entirely in the four-year sector.¹² The five states with the largest increases were Hawaii (9.6 percent), Colorado (8.2 percent), New Mexico (7.8 percent), South Carolina (6.6 percent), and West Virginia (6.0 percent).

Of the 12 states with appropriations decreases in the last year, none were above 5 percent (*Table 3.2*). The most sizeable year-over-year declines in education appropriations were 3.6 and 3.3 percent in Kentucky and Ohio, respectively.

Fifteen states had lower education appropriations per FTE in 2019 than in 2014. In four states (Arizona, Mississippi, North Dakota, and Oklahoma), those five-year declines were greater than 10 percent. In the last 10 years, funding declined in 35 states. Declines ranged from 1.2 percent in Georgia to 38.6 percent in Arizona.

12. With only 3,518 FTE enrolled students in Washington, D.C., per-student funding fluctuates more dramatically with any increases or decreases in state support. The 26.3 percent per-FTE increase corresponds to an additional \$9.2 million in tax appropriations in fiscal 2019.

STATE SPOTLIGHT: ILLINOIS



Education appropriations per FTE in Illinois continue to be an outlier at 1.81 times the U.S. average and 30 percent above pre-recession levels. The significant increase in appropriations over the last decade is driven entirely by the state's efforts to address its historically underfunded state retirement pension system.

In 2019, 75 percent of the \$1.66 billion in pension payments were used for unfunded past liabilities, not current employees. This means that even after considering additional funding from local governments, **over one quarter (27 percent) of all education appropriations in Illinois are now spent on past pension obligations** and are not available for use in 2019. This translates to roughly \$4,000 per FTE student, more than the entire per-FTE appropriation in either New Hampshire or Vermont.

A [SHEF Issue Brief on Illinois](#) from the 2018 SHEF report provides more detail on the funding situation in Illinois over time.

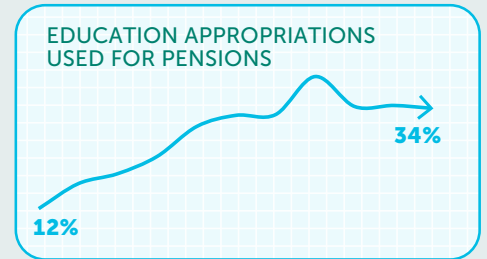
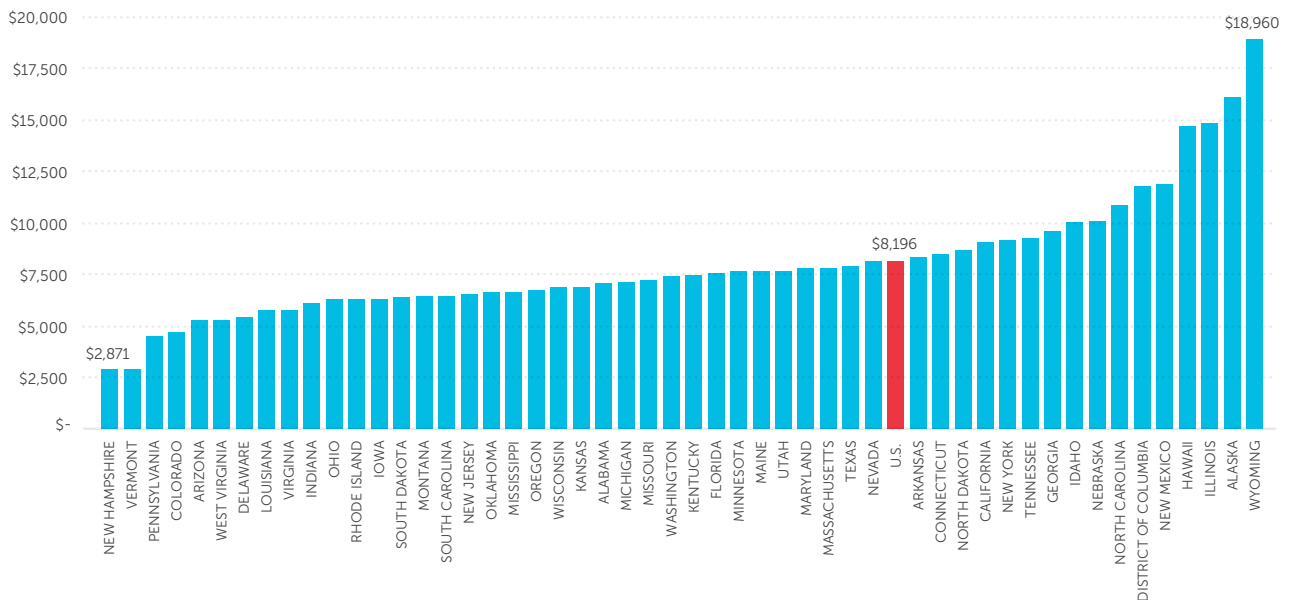


FIGURE 3.2
PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2019 (ADJUSTED)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses, and exclude appropriations for independent institutions, financial aid for students attending independent or out-of-state institutions, research, hospitals, and medical education.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to account for interstate differences include the Cost of Living Index (COLI) and Enrollment Mix Index (EMI). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.2
PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE
(CONSTANT ADJUSTED DOLLARS)

	2009	2014	2018	2019	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$8,131	\$6,744	\$7,079	\$7,031	0.86	-0.7%	4.3%	-13.5%
ALASKA	\$15,960	\$16,632	\$15,362	\$16,164	1.97	5.2%	-2.8%	1.3%
ARIZONA	\$8,550	\$5,834	\$5,313	\$5,247	0.64	-1.2%	-10.1%	-38.6%
ARKANSAS	\$9,410	\$8,753	\$8,230	\$8,368	1.02	1.7%	-4.4%	-11.1%
CALIFORNIA	\$7,100	\$6,912	\$8,579	\$9,078	1.11	5.8%	31.3%	27.9%
COLORADO	\$5,186	\$3,466	\$4,300	\$4,653	0.57	8.2%	34.3%	-10.3%
CONNECTICUT	\$10,162	\$8,089	\$8,446	\$8,458	1.03	0.1%	4.6%	-16.8%
DELAWARE	\$7,506	\$5,845	\$5,592	\$5,431	0.66	-2.9%	-7.1%	-27.6%
FLORIDA	\$7,533	\$5,956	\$7,263	\$7,542	0.92	3.8%	26.6%	0.1%
GEORGIA	\$9,751	\$8,359	\$9,415	\$9,638	1.18	2.4%	15.3%	-1.2%
HAWAII	\$12,728	\$9,434	\$13,411	\$14,698	1.79	9.6%	55.8%	15.5%
IDAHO	\$11,869	\$8,083	\$9,872	\$9,983	1.22	1.1%	23.5%	-15.9%
ILLINOIS	\$11,284	\$14,036	\$14,504	\$14,846	1.81	2.4%	5.8%	31.6%
INDIANA	\$7,147	\$6,364	\$6,218	\$6,139	0.75	-1.3%	-3.5%	-14.1%
IOWA	\$8,390	\$6,561	\$6,223	\$6,320	0.77	1.6%	-3.7%	-24.7%
KANSAS	\$8,004	\$6,804	\$6,703	\$6,929	0.85	3.4%	1.8%	-13.4%
KENTUCKY	\$9,657	\$7,802	\$7,725	\$7,444	0.91	-3.6%	-4.6%	-22.9%
LOUISIANA	\$8,875	\$6,020	\$5,899	\$5,795	0.71	-1.8%	-3.7%	-34.7%
MAINE	\$7,637	\$6,887	\$7,731	\$7,684	0.94	-0.6%	11.6%	0.6%
MARYLAND	\$7,250	\$6,889	\$7,596	\$7,824	0.95	3.0%	13.6%	7.9%
MASSACHUSETTS	\$7,587	\$6,758	\$7,669	\$7,859	0.96	2.5%	16.3%	3.6%
MICHIGAN	\$7,824	\$6,325	\$7,017	\$7,152	0.87	1.9%	13.1%	-8.6%
MINNESOTA	\$8,141	\$6,433	\$7,851	\$7,638	0.93	-2.7%	18.7%	-6.2%
MISSISSIPPI	\$8,934	\$7,653	\$6,715	\$6,637	0.81	-1.2%	-13.3%	-25.7%
MISSOURI	\$9,396	\$6,926	\$7,138	\$7,238	0.88	1.4%	4.5%	-23.0%
MONTANA	\$6,698	\$6,110	\$6,307	\$6,427	0.78	1.9%	5.2%	-4.0%
NEBRASKA	\$9,916	\$9,340	\$10,033	\$10,116	1.23	0.8%	8.3%	2.0%
NEVADA	\$10,601	\$7,643	\$8,042	\$8,179	1.00	1.7%	7.0%	-22.8%
NEW HAMPSHIRE	\$3,888	\$2,629	\$2,826	\$2,871	0.35	1.6%	9.2%	-26.2%
NEW JERSEY	\$8,147	\$6,515	\$6,355	\$6,550	0.80	3.1%	0.5%	-19.6%
NEW MEXICO	\$10,247	\$9,244	\$11,063	\$11,922	1.45	7.8%	29.0%	16.4%
NEW YORK	\$8,183	\$7,942	\$8,835	\$9,139	1.12	3.4%	15.1%	11.7%
NORTH CAROLINA	\$11,217	\$9,966	\$10,640	\$10,896	1.33	2.4%	9.3%	-2.9%
NORTH DAKOTA	\$7,002	\$10,126	\$8,537	\$8,679	1.06	1.7%	-14.3%	23.9%
OHIO	\$7,327	\$5,462	\$6,479	\$6,262	0.76	-3.3%	14.6%	-14.5%
OKLAHOMA	\$10,203	\$8,056	\$6,571	\$6,617	0.81	0.7%	-17.9%	-35.1%
OREGON	\$5,933	\$4,776	\$6,452	\$6,703	0.82	3.9%	40.4%	13.0%
PENNSYLVANIA	\$6,676	\$4,315	\$4,475	\$4,477	0.55	0.0%	3.8%	-32.9%
RHODE ISLAND	\$6,850	\$5,243	\$6,132	\$6,286	0.77	2.5%	19.9%	-8.2%
SOUTH CAROLINA	\$6,455	\$5,068	\$6,067	\$6,465	0.79	6.6%	27.6%	0.2%
SOUTH DAKOTA	\$6,849	\$5,958	\$6,411	\$6,397	0.78	-0.2%	7.4%	-6.6%
TENNESSEE	\$10,382	\$8,125	\$9,073	\$9,291	1.13	2.4%	14.4%	-10.5%
TEXAS	\$8,752	\$8,163	\$7,972	\$7,888	0.96	-1.1%	-3.4%	-9.9%
UTAH	\$7,977	\$6,594	\$7,480	\$7,688	0.94	2.8%	16.6%	-3.6%
VERMONT	\$3,182	\$3,138	\$2,905	\$2,914	0.36	0.3%	-7.1%	-8.4%
VIRGINIA	\$6,676	\$5,124	\$5,646	\$5,805	0.71	2.8%	13.3%	-13.0%
WASHINGTON	\$7,645	\$6,060	\$7,063	\$7,424	0.91	5.1%	22.5%	-2.9%
WEST VIRGINIA	\$6,262	\$5,480	\$4,962	\$5,261	0.64	6.0%	-4.0%	-16.0%
WISCONSIN	\$8,570	\$7,010	\$6,640	\$6,846	0.84	3.1%	-2.3%	-20.1%
WYOMING	\$18,804	\$16,962	\$18,188	\$18,960	2.31	4.2%	11.8%	0.8%
U.S.	\$8,399	\$7,314	\$8,001	\$8,196	1.00	2.4%	12.1%	-2.4%
DISTRICT OF COLUMBIA	N/A	\$10,208	\$9,327	\$11,783	1.44	26.3%	15.4%	N/A

NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses, and exclude appropriations for independent institutions, financial aid for students attending independent or out-of-state institutions, research, hospitals, and medical education.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI), Enrollment Mix Index (EMI), and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

STATE PUBLIC FINANCIAL AID

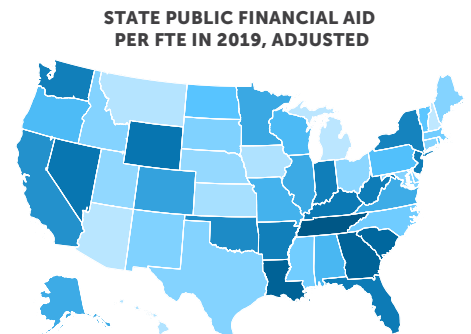
1. NATIONAL TRENDS

State public financial aid is any state appropriated student financial aid for public institutions, excluding loans.

The SHEF data collection on financial aid goes back to 2001. From that year on, financial aid per FTE has increased in all but four years. Visit the SHEF website to view the [interactive financial aid map](#).¹³ This map shows state public financial aid per FTE across the nation.

Following a large increase from 2017 to 2018, state public financial aid per FTE increased 4 percent from 2018 to 2019 and reached an all-time high of \$808 per-FTE enrolled student. Because financial aid per FTE has a low base, percent increases represent smaller dollar-amount increases than similar figures in the other revenue metrics. The 4 percent increase in the last year corresponded to an additional \$31 per FTE in financial aid.

Nationally, state public financial aid has increased 22.1 percent since 2014 and 30.4 percent since 2009.



STATE SPOTLIGHT: MICHIGAN

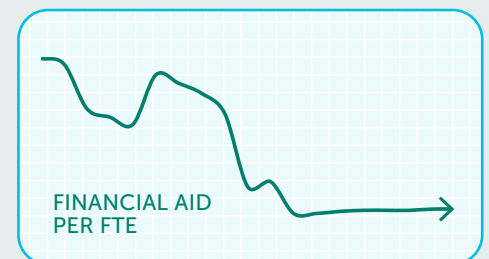


Not all states saw an increase in financial aid in recent years. In Michigan, financial aid to public institutions decreased by 96.8 percent from \$675 per FTE in 2001 to only \$22 per FTE in 2019. Aid as a percent of all appropriations declined from 5.7 percent in 2001 to 0.3 percent in 2019.

This decline reflects legislative efforts to rebalance the state budget following the Great Recession, which severely impacted Michigan's economy. In 2010, the Michigan Legislature eliminated several financial aid programs, totaling an estimated \$150.4 million in financial aid cuts. For the remaining financial aid programs, most of the state general fund support was replaced with federal funds from the Temporary Assistance for Needy Families (TANF) program in FY 2012.¹⁴

In fiscal 2019, gross funding for student financial aid in Michigan was \$139,583,200. Of that total, only \$13.7 million came from state general funds (52.6 percent of which went to public institutions), and the rest was federally funded.

In recent years, the governor has proposed that the state reinvest in student financial aid programs, including a new state grant that would provide tuition-free opportunities for adult students at two-year institutions.¹⁵ Unfortunately, Michigan's general fund revenue levels have mainly remained flat for over 20 years. This is due to a combination of economic factors, tax policy decisions, and diversions of the general fund for road repair and infrastructure investment.



13. https://shef.sheeo.org/report/?report_page=state-and-national-trends&modal=Map_3_3

14. <https://www.legislature.mi.gov/documents/2011-2012/publicact/pdf/2011-PA-0062.pdf>, see Sec. 256. (5)

15. https://www.michigan.gov/budget/0,9357,7-379-88613_88626---,00.html

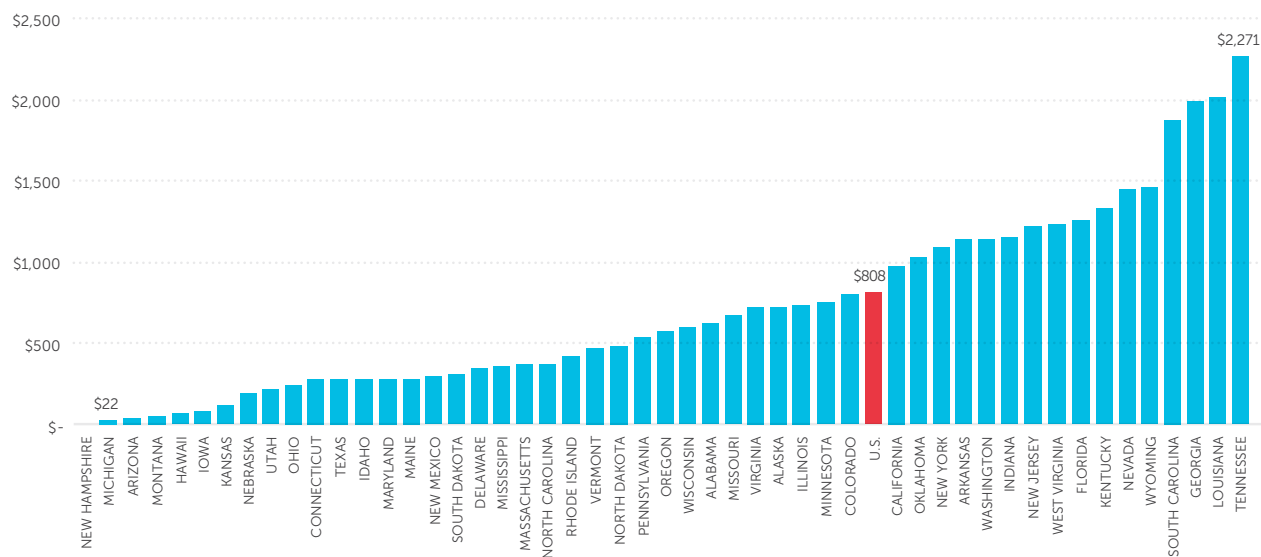
2. STATE COMPARISONS

States vary considerably in the size and extent of their financial aid programs. Only one state (New Hampshire) does not currently provide financial aid to students attending public institutions. Of the remaining 49 states, public state financial aid ranged from under \$100 per FTE in five states (Arizona, Hawaii, Iowa, Michigan, and Montana) to over \$2,000 per FTE in Louisiana and Tennessee (*Figure 3.3*).

Despite the longstanding increases in financial aid nationally, per-student aid has decreased in 18 states since 2018. Those per-FTE decreases ranged from 0.1 percent in Hawaii to 6.6 percent in Connecticut. Of the 31 states with increases, financial aid per FTE increased more than 10 percent in nine states. The largest increases were in Rhode Island (26.1 percent), Utah (24.6 percent), and Idaho (23.8 percent).

Five-year changes in financial aid range from a 74.9 percent reduction in Montana (\$138) to a 118.7 percent increase in Idaho (\$150).

FIGURE 3.3
PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY STATE, FY 2019 (ADJUSTED)



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. Some respondents could not separate tuition aid from aid for living expenses.
2. The District of Columbia did not provide data on public financial aid.
3. New Hampshire ended its public financial aid program in 2011.
4. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI) and Enrollment Mix Index (EMI). The COLI is not a measure of inflation over time.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.3
PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY STATE
(CONSTANT ADJUSTED DOLLARS)

	2009	2014	2018	2019	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$239	\$387	\$664	\$621	0.77	-6.5%	60.5%	160.5%
ALASKA	\$100	\$515	\$755	\$728	0.90	-3.5%	41.4%	625.1%
ARIZONA	\$54	\$45	\$38	\$37	0.05	-2.9%	-16.8%	-31.0%
ARKANSAS	\$451	\$1,368	\$1,082	\$1,136	1.41	5.1%	-16.9%	151.7%
CALIFORNIA	\$311	\$711	\$930	\$971	1.20	4.5%	36.7%	212.4%
COLORADO	\$673	\$590	\$753	\$804	0.99	6.8%	36.1%	19.5%
CONNECTICUT	\$445	\$245	\$293	\$274	0.34	-6.6%	11.8%	-38.6%
DELAWARE	\$447	\$380	\$347	\$336	0.42	-3.1%	-11.6%	-24.9%
FLORIDA	\$1,093	\$702	\$1,030	\$1,249	1.55	21.2%	77.9%	14.3%
GEORGIA	\$2,180	\$1,661	\$1,919	\$1,985	2.46	3.5%	19.5%	-8.9%
HAWAII	\$45	\$80	\$66	\$66	0.08	-0.1%	-18.0%	45.3%
IDAHO	\$255	\$127	\$224	\$277	0.34	23.8%	118.7%	8.6%
ILLINOIS	\$679	\$612	\$736	\$735	0.91	-0.2%	20.0%	8.1%
INDIANA	\$865	\$1,053	\$1,191	\$1,149	1.42	-3.6%	9.1%	32.8%
IOWA	\$135	\$120	\$66	\$79	0.10	19.7%	-34.1%	-41.1%
KANSAS	\$122	\$106	\$95	\$114	0.14	20.3%	7.2%	-7.1%
KENTUCKY	\$1,190	\$1,117	\$1,352	\$1,324	1.64	-2.0%	18.6%	11.3%
LOUISIANA	\$1,095	\$1,635	\$2,019	\$2,009	2.49	-0.5%	22.9%	83.5%
MAINE	\$251	\$194	\$287	\$281	0.35	-2.2%	45.0%	12.0%
MARYLAND	\$348	\$348	\$294	\$280	0.35	-5.0%	-19.6%	-19.7%
MASSACHUSETTS	\$348	\$325	\$327	\$365	0.45	11.4%	12.1%	4.8%
MICHIGAN	\$436	\$12	\$22	\$22	0.03	1.6%	89.0%	-95.0%
MINNESOTA	\$584	\$626	\$710	\$753	0.93	6.0%	20.3%	28.9%
MISSISSIPPI	\$298	\$324	\$325	\$359	0.44	10.2%	10.8%	20.6%
MISSOURI	\$455	\$490	\$639	\$666	0.82	4.3%	36.0%	46.4%
MONTANA	\$228	\$184	\$46	\$46	0.06	0.6%	-74.9%	-79.7%
NEBRASKA	\$131	\$167	\$182	\$194	0.24	6.5%	16.4%	47.9%
NEVADA	\$1,254	\$1,325	\$1,446	\$1,443	1.79	-0.2%	8.9%	15.0%
NEW HAMPSHIRE	\$67	\$-	\$-	\$-	-	N/A	N/A	-100%
NEW JERSEY	\$903	\$910	\$1,102	\$1,212	1.50	9.9%	33.1%	34.2%
NEW MEXICO	\$388	\$264	\$289	\$296	0.37	2.4%	12.4%	-23.7%
NEW YORK	\$824	\$925	\$1,085	\$1,095	1.35	0.9%	18.3%	32.9%
NORTH CAROLINA	\$462	\$397	\$379	\$369	0.46	-2.7%	-7.1%	-20.1%
NORTH DAKOTA	\$111	\$429	\$478	\$480	0.59	0.4%	11.7%	331.2%
OHIO	\$501	\$204	\$256	\$241	0.30	-5.8%	18.0%	-51.9%
OKLAHOMA	\$1,009	\$828	\$935	\$1,020	1.26	9.1%	23.1%	1.1%
OREGON	\$604	\$369	\$518	\$575	0.71	11.1%	55.6%	-4.9%
PENNSYLVANIA	\$629	\$696	\$561	\$533	0.66	-5.0%	-23.5%	-15.3%
RHODE ISLAND	\$314	\$244	\$333	\$421	0.52	26.1%	72.4%	33.7%
SOUTH CAROLINA	\$1,889	\$1,819	\$1,831	\$1,879	2.32	2.6%	3.3%	-0.5%
SOUTH DAKOTA	\$132	\$145	\$308	\$300	0.37	-2.5%	106.8%	127.5%
TENNESSEE	\$1,915	\$1,797	\$2,193	\$2,271	2.81	3.6%	26.4%	18.6%
TEXAS	\$129	\$213	\$274	\$277	0.34	1.0%	30.1%	114.3%
UTAH	\$158	\$125	\$175	\$218	0.27	24.6%	74.5%	37.8%
VERMONT	\$424	\$418	\$423	\$465	0.58	9.9%	11.3%	9.7%
VIRGINIA	\$542	\$599	\$702	\$716	0.89	1.9%	19.5%	32.2%
WASHINGTON	\$888	\$1,218	\$1,120	\$1,145	1.42	2.2%	-6.0%	29.0%
WEST VIRGINIA	\$1,072	\$1,199	\$1,234	\$1,234	1.53	0.0%	3.0%	15.1%
WISCONSIN	\$556	\$608	\$585	\$591	0.73	1.0%	-2.8%	6.2%
WYOMING	\$1,321	\$1,308	\$1,463	\$1,454	1.80	-0.6%	11.1%	10.1%
U.S.	\$620	\$662	\$777	\$808	1.00	4.0%	22.1%	30.4%

NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. Some respondents could not separate tuition aid from aid for living expenses.
2. The District of Columbia did not provide data on public financial aid.
3. New Hampshire ended its public financial aid program in 2011.
4. Adjustment factors to arrive at constant dollar figures include Cost of Living Index (COLI), Enrollment Mix Index (EMI), and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time.

SOURCE: State Higher Education Executive Officers Association

NET TUITION REVENUE

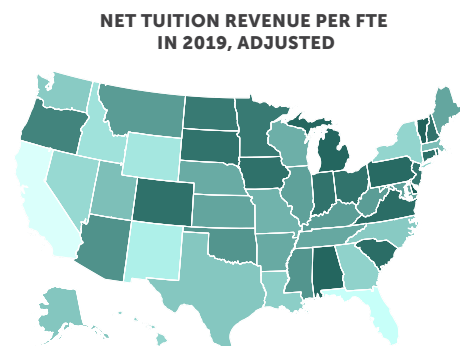
1. NATIONAL TRENDS

Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.

Since 1980, net tuition revenue per FTE has increased in all but three years (2000, 2008, and 2019). Overall, tuition revenue increases an average of 2.9 percent above inflation annually. Visit the SHEF website to view the [interactive tuition revenue map](#).¹⁶ This map shows net tuition revenue per FTE across the nation.

Public institutions received, on average, \$6,902 in net tuition revenue from in-state and out-of-state students in 2019, down 0.1 percent from last year. **The decline in net tuition revenue is due to increases in state public financial aid, which more than offset what would have been a small increase in inflation-adjusted net tuition revenues.**

Nationally, net tuition revenue is up 7.6 percent in the last five years, and 37.7 percent since 2009. These increases are due to changes in tuition rates but also to increasing out-of-state, international, and graduate student enrollment over the last decade.



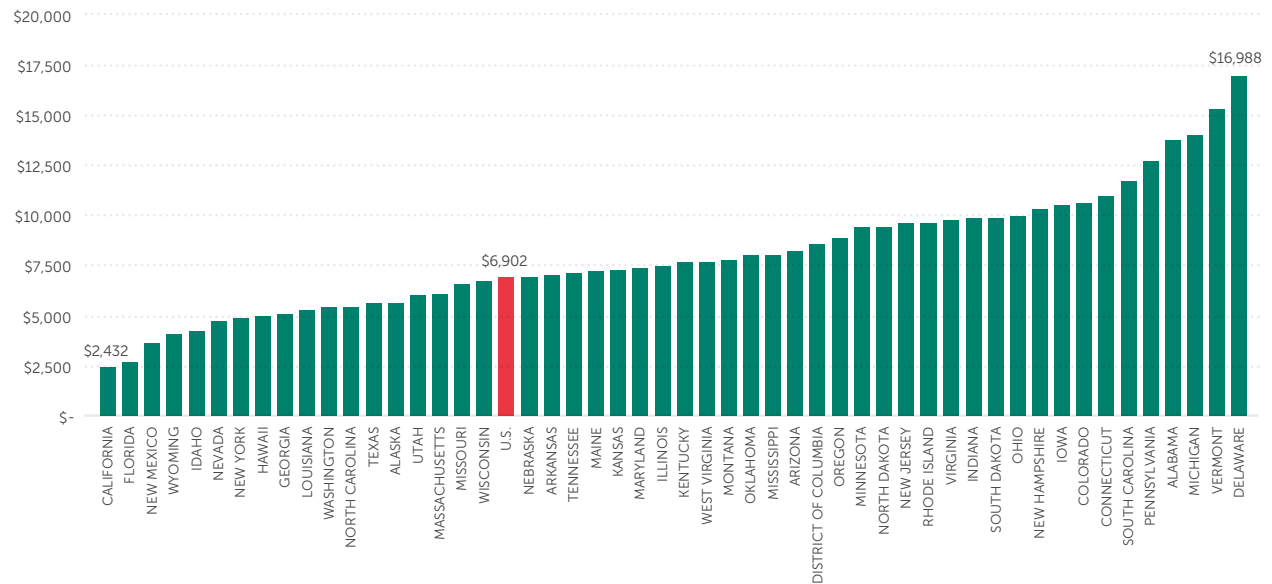
2. STATE COMPARISONS

Net tuition revenue per FTE ranges from less than \$3,000 per FTE in California and Florida to almost \$17,000 in Delaware. Ten states have net tuition revenue averages above \$10,000 per FTE, and seven are below \$5,000.

- Net tuition revenue per FTE declined in half of all states and Washington, D.C., between 2018 and 2019.
- Net tuition revenue can decrease due to multiple factors, such as increases in financial aid and changes in a state's enrollment mix (i.e., a higher proportion of community college students). The greatest decrease was \$378 per FTE in New Mexico (9.5 percent).
- Of the 25 states with net tuition revenue increases, only four had increases higher than 3 percent (Connecticut, Oklahoma, Pennsylvania, and Wyoming). The largest per-student increase in net tuition revenue was \$776 in Pennsylvania (6.5 percent).

16. https://shef.sheeo.org/report/?report_page=state-and-national-trends&modal=Map_3_4

FIGURE 3.4
PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE, FY 2019
(ADJUSTED)



NOTES:

1. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees. Net tuition revenue used for capital debt service is included in the net tuition revenue figures above.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI) and Enrollment Mix Index (EMI). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.4
PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE
(CONSTANT ADJUSTED DOLLARS)

	2009	2014	2018	2019	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$7,810	\$12,288	\$14,054	\$13,775	2.00	-2.0%	12.1%	76.4%
ALASKA	\$4,895	\$4,911	\$5,599	\$5,639	0.82	0.7%	14.8%	15.2%
ARIZONA	\$5,168	\$6,972	\$8,141	\$8,228	1.19	1.1%	18.0%	59.2%
ARKANSAS	\$5,476	\$5,862	\$7,083	\$7,067	1.02	-0.2%	20.5%	29.1%
CALIFORNIA	\$1,458	\$2,136	\$2,471	\$2,432	0.35	-1.6%	13.9%	66.8%
COLORADO	\$6,733	\$9,305	\$10,374	\$10,572	1.53	1.9%	13.6%	57.0%
CONNECTICUT	\$6,701	\$8,551	\$10,504	\$10,997	1.59	4.7%	28.6%	64.1%
DELAWARE	\$12,359	\$16,005	\$16,813	\$16,988	2.46	1.0%	6.1%	37.5%
FLORIDA	\$1,876	\$3,435	\$2,852	\$2,720	0.39	-4.6%	-20.8%	45.0%
GEORGIA	\$2,552	\$5,118	\$5,310	\$5,062	0.73	-4.7%	-1.1%	98.4%
HAWAII	\$3,976	\$4,859	\$5,074	\$5,032	0.73	-0.8%	3.6%	26.5%
IDAHO	\$3,127	\$4,869	\$4,470	\$4,286	0.62	-4.1%	-12.0%	37.1%
ILLINOIS	\$5,202	\$6,831	\$7,563	\$7,498	1.09	-0.9%	9.8%	44.2%
INDIANA	\$7,921	\$9,702	\$9,846	\$9,861	1.43	0.1%	1.6%	24.5%
IOWA	\$8,057	\$9,797	\$10,607	\$10,499	1.52	-1.0%	7.2%	30.3%
KANSAS	\$5,849	\$6,895	\$7,162	\$7,304	1.06	2.0%	5.9%	24.9%
KENTUCKY	\$6,352	\$7,237	\$7,692	\$7,655	1.11	-0.5%	5.8%	20.5%
LOUISIANA	\$3,111	\$4,999	\$5,362	\$5,250	0.76	-2.1%	5.0%	68.7%
MAINE	\$7,636	\$7,628	\$7,217	\$7,250	1.05	0.5%	-5.0%	-5.1%
MARYLAND	\$6,365	\$6,964	\$7,381	\$7,404	1.07	0.3%	6.3%	16.3%
MASSACHUSETTS	\$5,976	\$5,485	\$6,265	\$6,101	0.88	-2.6%	11.2%	2.1%
MICHIGAN	\$10,198	\$12,711	\$14,044	\$14,052	2.04	0.1%	10.5%	37.8%
MINNESOTA	\$6,784	\$9,317	\$9,461	\$9,403	1.36	-0.6%	0.9%	38.6%
MISSISSIPPI	\$6,070	\$7,227	\$7,961	\$8,066	1.17	1.3%	11.6%	32.9%
MISSOURI	\$6,628	\$7,269	\$6,691	\$6,598	0.96	-1.4%	-9.2%	-0.5%
MONTANA	\$6,580	\$7,185	\$7,648	\$7,732	1.12	1.1%	7.6%	17.5%
NEBRASKA	\$5,096	\$6,524	\$7,011	\$6,975	1.01	-0.5%	6.9%	36.9%
NEVADA	\$3,421	\$4,491	\$4,615	\$4,741	0.69	2.7%	5.6%	38.6%
NEW HAMPSHIRE	\$9,461	\$10,982	\$10,342	\$10,368	1.50	0.3%	-5.6%	9.6%
NEW JERSEY	\$7,954	\$9,082	\$9,495	\$9,584	1.39	0.9%	5.5%	20.5%
NEW MEXICO	\$2,788	\$3,756	\$3,961	\$3,583	0.52	-9.5%	-4.6%	28.5%
NEW YORK	\$3,692	\$4,492	\$4,810	\$4,935	0.72	2.6%	9.9%	33.7%
NORTH CAROLINA	\$3,601	\$5,024	\$5,627	\$5,449	0.79	-3.2%	8.5%	51.3%
NORTH DAKOTA	\$8,100	\$8,573	\$9,285	\$9,404	1.36	1.3%	9.7%	16.1%
OHIO	\$8,073	\$9,298	\$10,040	\$9,950	1.44	-0.9%	7.0%	23.3%
OKLAHOMA	\$5,405	\$6,090	\$7,724	\$8,065	1.17	4.4%	32.4%	49.2%
OREGON	\$5,176	\$8,383	\$8,664	\$8,883	1.29	2.5%	6.0%	71.6%
PENNSYLVANIA	\$9,810	\$10,907	\$11,909	\$12,685	1.84	6.5%	16.3%	29.3%
RHODE ISLAND	\$7,546	\$8,796	\$9,671	\$9,587	1.39	-0.9%	9.0%	27.0%
SOUTH CAROLINA	\$6,750	\$8,733	\$11,520	\$11,696	1.69	1.5%	33.9%	73.3%
SOUTH DAKOTA	\$7,057	\$9,949	\$10,167	\$9,918	1.44	-2.4%	-0.3%	40.5%
TENNESSEE	\$5,082	\$7,125	\$7,376	\$7,127	1.03	-3.4%	0.0%	40.2%
TEXAS	\$4,451	\$5,193	\$5,669	\$5,632	0.82	-0.6%	8.5%	26.5%
UTAH	\$4,246	\$6,007	\$6,406	\$5,996	0.87	-6.4%	-0.2%	41.2%
VERMONT	\$14,355	\$14,273	\$15,216	\$15,315	2.22	0.7%	7.3%	6.7%
VIRGINIA	\$6,634	\$7,995	\$9,635	\$9,786	1.42	1.6%	22.4%	47.5%
WASHINGTON	\$3,425	\$5,588	\$5,489	\$5,430	0.79	-1.1%	-2.8%	58.6%
WEST VIRGINIA	\$5,919	\$7,139	\$7,847	\$7,704	1.12	-1.8%	7.9%	30.2%
WISCONSIN	\$5,033	\$6,530	\$6,770	\$6,794	0.98	0.4%	4.0%	35.0%
WYOMING	\$2,532	\$3,026	\$3,841	\$4,047	0.59	5.4%	33.7%	59.8%
U.S.	\$5,011	\$6,412	\$6,909	\$6,902	1.00	-0.1%	7.6%	37.7%
DISTRICT OF COLUMBIA	N/A	\$8,189	\$9,247	\$8,621	1.25	-6.8%	5.3%	N/A

NOTES:

1. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees. Net tuition revenue used for capital debt service is included in the net tuition revenue figures above.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI), Enrollment Mix Index (EMI), and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

TOTAL EDUCATION REVENUE

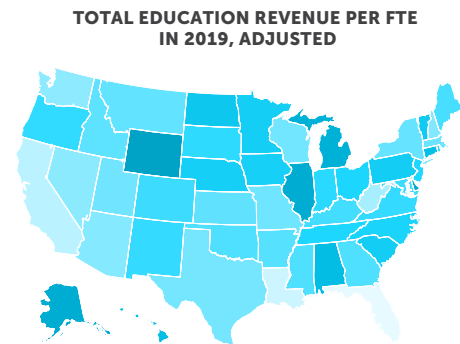
1. NATIONAL TRENDS

Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Visit the SHEF website to view the [interactive education revenue map](#).¹⁷ This map shows total education revenues per FTE across the nation.

Total education revenues increased for the seventh year, reaching an all-time high of \$15,018 per FTE. This is the first time that nationally, public institutions have above \$15,000 per-FTE enrolled student on average.

Of course, these figures do not indicate that all public institutions have more revenue than ever before. Following declines in state funding after the last two recessions, institutions varied in their ability to increase tuition revenue (either by increasing rates or out-of-state enrollment).

Many institutions, particularly those that are the most reliant on state funding, have not been able to increase tuition revenues to offset declines in state funding and are not at an all-time high for total education revenues.



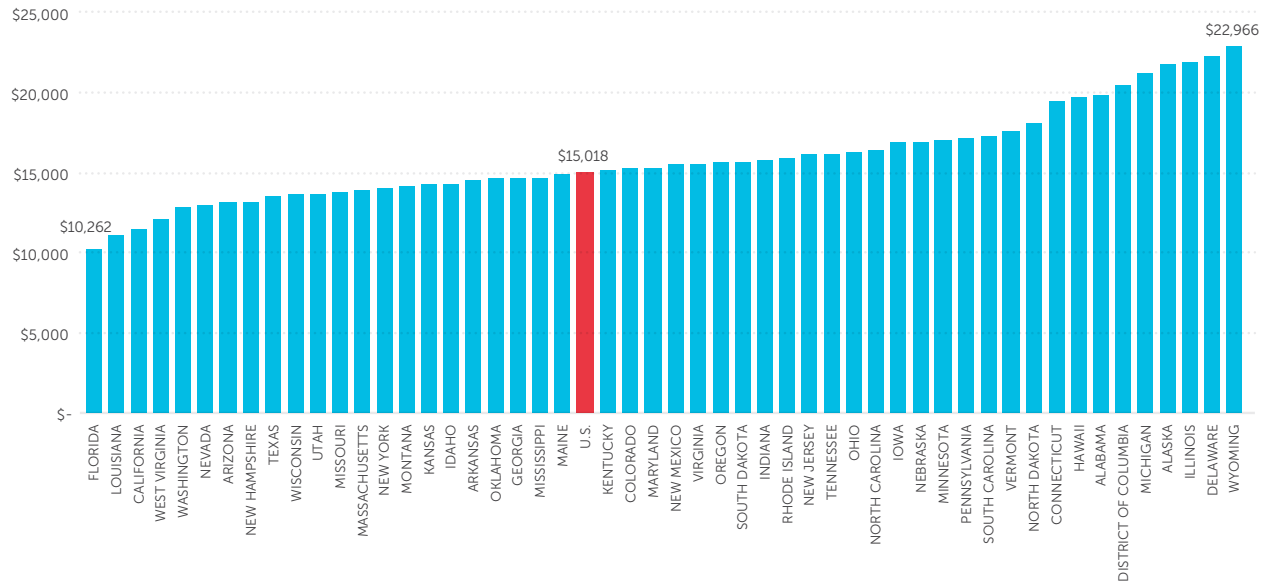
2. STATE COMPARISONS

Total education revenues range from \$10,262 in Florida to \$22,966 in Wyoming.

- Public institutions in five states (Alaska, Delaware, Illinois, Michigan, and Wyoming) have more than \$20,000 per FTE in education revenues. These funds are primarily sourced from education appropriations in Alaska, Illinois, and Wyoming, and come mainly from tuition revenues in Delaware and Michigan.
- Total revenues increased in 36 states and Washington, D.C., from 2018 to 2019, but those increases were less than 1 percent in 11 of those states. The largest increase was 6.7 percent in Hawaii, thanks entirely to the rise in education appropriations per FTE. In the last five years, total revenues have only declined in five states (Indiana, Mississippi, Missouri, New Hampshire, and North Dakota).

17. https://shef.sheeo.org/report/?report_page=state-and-national-trends&modal=Map_3_5

FIGURE 3.5
TOTAL PUBLIC HIGHER EDUCATION REVENUE PER FTE BY STATE, FY 2019 (ADJUSTED)



NOTES:

1. Total education revenue is the sum of education appropriations and net tuition excluding net tuition revenue used for capital debt service.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI) and Enrollment Mix Index (EMI). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.5
**PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE
(CONSTANT ADJUSTED DOLLARS)**

	2009	2014	2018	2019	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$15,311	\$18,252	\$20,261	\$19,844	1.32	-2.1%	8.7%	29.6%
ALASKA	\$20,855	\$21,544	\$20,961	\$21,803	1.45	4.0%	1.2%	4.5%
ARIZONA	\$13,345	\$12,420	\$13,152	\$13,133	0.87	-0.1%	5.7%	-1.6%
ARKANSAS	\$14,235	\$13,603	\$14,305	\$14,544	0.97	1.7%	6.9%	2.2%
CALIFORNIA	\$8,558	\$9,048	\$11,050	\$11,511	0.77	4.2%	27.2%	34.5%
COLORADO	\$11,918	\$12,771	\$14,674	\$15,225	1.01	3.8%	19.2%	27.7%
CONNECTICUT	\$16,863	\$16,640	\$18,949	\$19,456	1.30	2.7%	16.9%	15.4%
DELAWARE	\$19,755	\$21,809	\$22,264	\$22,325	1.49	0.3%	2.4%	13.0%
FLORIDA	\$9,409	\$9,391	\$10,115	\$10,262	0.68	1.5%	9.3%	9.1%
GEORGIA	\$12,280	\$13,467	\$14,723	\$14,698	0.98	-0.2%	9.1%	19.7%
HAWAII	\$16,704	\$14,292	\$18,486	\$19,730	1.31	6.7%	38.0%	18.1%
IDAHO	\$14,996	\$12,952	\$14,342	\$14,269	0.95	-0.5%	10.2%	-4.8%
ILLINOIS	\$16,295	\$20,462	\$21,669	\$21,889	1.46	1.0%	7.0%	34.3%
INDIANA	\$15,025	\$15,873	\$15,879	\$15,795	1.05	-0.5%	-0.5%	5.1%
IOWA	\$16,447	\$16,358	\$16,830	\$16,819	1.12	-0.1%	2.8%	2.3%
KANSAS	\$13,853	\$13,700	\$13,865	\$14,233	0.95	2.7%	3.9%	2.7%
KENTUCKY	\$16,010	\$15,039	\$15,417	\$15,099	1.01	-2.1%	0.4%	-5.7%
LOUISIANA	\$11,986	\$11,020	\$11,260	\$11,045	0.74	-1.9%	0.2%	-7.9%
MAINE	\$15,273	\$14,515	\$14,947	\$14,934	0.99	-0.1%	2.9%	-2.2%
MARYLAND	\$13,615	\$13,853	\$14,977	\$15,228	1.01	1.7%	9.9%	11.8%
MASSACHUSETTS	\$13,563	\$12,243	\$13,935	\$13,960	0.93	0.2%	14.0%	2.9%
MICHIGAN	\$18,022	\$19,036	\$21,061	\$21,204	1.41	0.7%	11.4%	17.7%
MINNESOTA	\$14,925	\$15,749	\$17,312	\$17,042	1.13	-1.6%	8.2%	14.2%
MISSISSIPPI	\$15,003	\$14,881	\$14,676	\$14,704	0.98	0.2%	-1.2%	-2.0%
MISSOURI	\$16,024	\$14,194	\$13,829	\$13,836	0.92	0.1%	-2.5%	-13.7%
MONTANA	\$13,278	\$13,294	\$13,955	\$14,160	0.94	1.5%	6.5%	6.6%
NEBRASKA	\$15,012	\$15,606	\$16,801	\$16,850	1.12	0.3%	8.0%	12.2%
NEVADA	\$14,022	\$12,134	\$12,657	\$12,920	0.86	2.1%	6.5%	-7.9%
NEW HAMPSHIRE	\$13,349	\$13,610	\$13,168	\$13,239	0.88	0.5%	-2.7%	-0.8%
NEW JERSEY	\$16,101	\$15,597	\$15,850	\$16,135	1.07	1.8%	3.4%	0.2%
NEW MEXICO	\$13,035	\$13,000	\$15,024	\$15,505	1.03	3.2%	19.3%	19.0%
NEW YORK	\$11,875	\$12,434	\$13,645	\$14,075	0.94	3.1%	13.2%	18.5%
NORTH CAROLINA	\$14,818	\$14,990	\$16,266	\$16,346	1.09	0.5%	9.0%	10.3%
NORTH DAKOTA	\$15,103	\$18,699	\$17,821	\$18,084	1.20	1.5%	-3.3%	19.7%
OHIO	\$15,399	\$14,760	\$16,519	\$16,212	1.08	-1.9%	9.8%	5.3%
OKLAHOMA	\$15,608	\$14,145	\$14,295	\$14,683	0.98	2.7%	3.8%	-5.9%
OREGON	\$11,109	\$13,159	\$15,116	\$15,587	1.04	3.1%	18.5%	40.3%
PENNSYLVANIA	\$16,486	\$15,222	\$16,383	\$17,162	1.14	4.7%	12.7%	4.1%
RHODE ISLAND	\$14,396	\$14,039	\$15,802	\$15,873	1.06	0.4%	13.1%	10.3%
SOUTH CAROLINA	\$12,530	\$13,090	\$16,656	\$17,213	1.15	3.3%	31.5%	37.4%
SOUTH DAKOTA	\$13,172	\$14,932	\$15,439	\$15,643	1.04	1.3%	4.8%	18.8%
TENNESSEE	\$15,264	\$15,073	\$16,169	\$16,148	1.08	-0.1%	7.1%	5.8%
TEXAS	\$13,202	\$13,356	\$13,640	\$13,520	0.90	-0.9%	1.2%	2.4%
UTAH	\$12,224	\$12,601	\$13,886	\$13,684	0.91	-1.5%	8.6%	11.9%
VERMONT	\$17,075	\$16,917	\$17,498	\$17,617	1.17	0.7%	4.1%	3.2%
VIRGINIA	\$13,294	\$13,035	\$15,199	\$15,506	1.03	2.0%	19.0%	16.6%
WASHINGTON	\$11,070	\$11,648	\$12,552	\$12,854	0.86	2.4%	10.3%	16.1%
WEST VIRGINIA	\$11,390	\$11,811	\$11,997	\$12,139	0.81	1.2%	2.8%	6.6%
WISCONSIN	\$13,603	\$13,540	\$13,410	\$13,640	0.91	1.7%	0.7%	0.3%
WYOMING	\$21,336	\$19,948	\$21,988	\$22,966	1.53	4.5%	15.1%	7.6%
U.S.	\$13,356	\$13,652	\$14,832	\$15,018	1.00	1.3%	10.0%	12.4%
DISTRICT OF COLUMBIA	N/A	\$18,398	\$18,574	\$20,404	1.36	9.9%	10.9%	N/A

NOTES:

1. Total education revenue is the sum of education appropriations and net tuition excluding net tuition revenue used for capital debt service.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include the Cost of Living Index (COLI), Enrollment Mix Index (EMI), and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The District of Columbia is not adjusted for COLI or EMI.

SOURCE: State Higher Education Executive Officers Association

STATE EFFORT AND CAPACITY TO FUND HIGHER EDUCATION

Within each state, policies and decisions about the financing of higher education are made in the context of multiple factors, including current and projected economic conditions, state tax structures, competing budgetary priorities across the state, cultural and ideological shifts in the state population, and political and higher education characteristics of the state.

Within these contexts, state policymakers must make decisions about necessary taxation levels and spending priorities for different public services and investments. This section uses publicly available data to estimate state tax capacity and tax effort. It compares three indicators of state effort to fund higher education: funding for higher education as a percentage of total state and local tax revenues, funding per capita, and funding per \$1,000 of personal income. The information presented here is intended to provide contextual and comparative information for policymakers and researchers as they evaluate public policy decisions for higher education.

The data presented in this section are adjusted for inflation using the Consumer Price Index (CPI). In all cases, the most recent available data are presented. In some cases, such as tax revenue, the most recent year is 2017.

TAX CAPACITY AND REVENUE

State revenues are determined by two factors: the total resources available in a state that can potentially be taxed (i.e., tax capacity) and the rate at which state revenue policies tax these resources in support of public services. For this section, the U.S. Treasury Department's total taxable resources (TTR) is used to estimate tax capacity.¹⁸ Actual tax revenue (ATR) data are collected from the U.S. Census Bureau and represent the total amount collected from all state and local taxes. The effective tax rate is calculated by dividing actual tax revenues by total taxable resources.

Presented in dollars per capita, total taxable resources varied from \$41,911 in Mississippi to \$92,812 in Connecticut (*Table 4.1*). States with greater TTR should have a greater capacity to invest in higher education and other public services.

- For 2017, eight states (Arkansas, Georgia, Hawaii, Idaho, New Mexico, North Carolina, Tennessee, and Texas) had below average total taxable resources but above average education appropriations per FTE.¹⁹
- Eleven states had above average total taxable resources but below average education appropriations per FTE. Of those 11, Colorado, New Hampshire, and Pennsylvania each lagged the national average for education appropriations by more than \$3,000 per FTE.

18. TTR is defined as the unduplicated sum of the income flows produced within a state (gross state product), and the income flows received by its residents (state personal income), which a state can potentially tax. For more information, please see the U.S. Department of the Treasury. (2002). *Treasury methodology for estimating total taxable resources (TTR)*. <https://www.treasury.gov/resource-center/economic-policy/Documents/nmpubsum.pdf>

19. Education appropriations per FTE are adjusted for enrollment mix and cost of living differences across states.

- Alabama collected the lowest actual tax revenue per capita (\$3,370), while New York collected the highest tax revenue per capita (\$9,073) in 2017.
- Five states collected actual tax revenues per capita that were more than one standard deviation below the national average.²⁰ Among these states, only Tennessee also had above average education appropriations per FTE. Conversely, six states collected tax revenues per capita that were more than one standard deviation above the national average. Among these states, only Massachusetts and New Jersey lagged the national average in education appropriations per FTE.

The effective tax rate for fiscal year 2017 varied from 5.6 percent in Alaska to 10 percent in Hawaii and Maine. The average effective tax rate was 7.6 percent, down from 7.8 in 2007. Of the 23 states with an above average effective tax rate in 2017, only eight (Arkansas, California, Connecticut, Hawaii, Illinois, New Mexico, New York, and North Dakota) had above average education appropriations per FTE.

20. SHEEO calculates all U.S. level metrics using a weighted average and standard deviation.

TABLE 4.1
TAX CAPACITY, TAX REVENUES, AND EFFECTIVE TAX RATES BY STATE, FY 2017

	ACTUAL TAX REVENUES (ATR)		TOTAL TAXABLE RESOURCES (TTR)		EFFECTIVE TAX RATE (ATR/TTR)	
	DOLLARS PER CAPITA	INDEX TO U.S. AVERAGE	DOLLARS PER CAPITA	INDEX TO U.S. AVERAGE	TAX RATE	INDEX TO U.S. AVERAGE
ALABAMA	\$3,370	0.67	\$48,737	0.73	6.9%	0.92
ALASKA	\$4,096	0.81	\$72,589	1.08	5.6%	0.75
ARIZONA	\$3,472	0.69	\$52,051	0.78	6.7%	0.88
ARKANSAS	\$4,002	0.79	\$49,684	0.74	8.1%	1.07
CALIFORNIA	\$6,170	1.22	\$78,544	1.17	7.9%	1.04
COLORADO	\$4,881	0.96	\$69,179	1.03	7.1%	0.93
CONNECTICUT	\$7,638	1.51	\$92,812	1.39	8.2%	1.09
DELAWARE	\$4,886	0.97	\$85,573	1.28	5.7%	0.76
FLORIDA	\$3,653	0.72	\$58,665	0.88	6.2%	0.82
GEORGIA	\$3,739	0.74	\$58,993	0.88	6.3%	0.84
HAWAII	\$6,640	1.31	\$66,493	0.99	10.0%	1.32
IDAHO	\$3,712	0.73	\$49,450	0.74	7.5%	0.99
ILLINOIS	\$5,764	1.14	\$72,430	1.08	8.0%	1.05
INDIANA	\$3,893	0.77	\$58,858	0.88	6.6%	0.88
IOWA	\$4,992	0.99	\$64,925	0.97	7.7%	1.02
KANSAS	\$4,643	0.92	\$63,696	0.95	7.3%	0.97
KENTUCKY	\$3,894	0.77	\$50,428	0.75	7.7%	1.02
LOUISIANA	\$4,328	0.86	\$54,873	0.82	7.9%	1.04
MAINE	\$5,302	1.05	\$52,956	0.79	10.0%	1.33
MARYLAND	\$6,301	1.25	\$78,591	1.17	8.0%	1.06
MASSACHUSETTS	\$6,564	1.30	\$90,293	1.35	7.3%	0.96
MICHIGAN	\$4,189	0.83	\$56,964	0.85	7.4%	0.97
MINNESOTA	\$6,176	1.22	\$69,951	1.04	8.8%	1.17
MISSISSIPPI	\$3,678	0.73	\$41,911	0.63	8.8%	1.16
MISSOURI	\$3,821	0.75	\$56,920	0.85	6.7%	0.89
MONTANA	\$3,878	0.77	\$52,227	0.78	7.4%	0.98
NEBRASKA	\$5,118	1.01	\$67,950	1.01	7.5%	1.00
NEVADA	\$4,495	0.89	\$61,869	0.92	7.3%	0.96
NEW HAMPSHIRE	\$4,895	0.97	\$75,198	1.12	6.5%	0.86
NEW JERSEY	\$6,978	1.38	\$83,309	1.24	8.4%	1.11
NEW MEXICO	\$4,117	0.81	\$49,632	0.74	8.3%	1.10
NEW YORK	\$9,073	1.79	\$91,742	1.37	9.9%	1.31
NORTH CAROLINA	\$3,960	0.78	\$57,084	0.85	6.9%	0.92
NORTH DAKOTA	\$6,665	1.32	\$73,360	1.09	9.1%	1.20
OHIO	\$4,682	0.93	\$60,442	0.90	7.7%	1.03
OKLAHOMA	\$3,544	0.70	\$52,840	0.79	6.7%	0.89
OREGON	\$4,731	0.93	\$60,700	0.91	7.8%	1.03
PENNSYLVANIA	\$5,166	1.02	\$67,034	1.00	7.7%	1.02
RHODE ISLAND	\$5,562	1.10	\$68,245	1.02	8.2%	1.08
SOUTH CAROLINA	\$3,522	0.70	\$50,526	0.75	7.0%	0.92
SOUTH DAKOTA	\$4,260	0.84	\$64,813	0.97	6.6%	0.87
TENNESSEE	\$3,405	0.67	\$56,195	0.84	6.1%	0.80
TEXAS	\$4,161	0.82	\$63,525	0.95	6.6%	0.87
UTAH	\$4,063	0.80	\$58,296	0.87	7.0%	0.92
VERMONT	\$6,044	1.19	\$61,647	0.92	9.8%	1.30
VIRGINIA	\$4,797	0.95	\$69,898	1.04	6.9%	0.91
WASHINGTON	\$5,342	1.06	\$79,699	1.19	6.7%	0.89
WEST VIRGINIA	\$3,954	0.78	\$46,724	0.70	8.5%	1.12
WISCONSIN	\$4,891	0.97	\$62,551	0.93	7.8%	1.04
WYOMING	\$4,698	0.93	\$78,247	1.17	6.0%	0.80
U.S.	\$5,061	1.00	\$67,011	1.00	7.6%	1.00

NOTES:

1. Effective tax rates are calculated from actual tax revenues divided by total taxable resources.
2. Actual tax revenue (ATR) data are the per-capita general revenues derived from taxation by state and local governments.
3. Total taxable resources equals the taxable gross state product (GDP) per capita.

SOURCES: State Higher Education Executive Officers Association

Actual tax revenues are from the U.S. Census Bureau 2017 Annual Surveys of State and Local Government Finances.

Total taxable resources are from the U.S. Treasury Department. Population data are from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

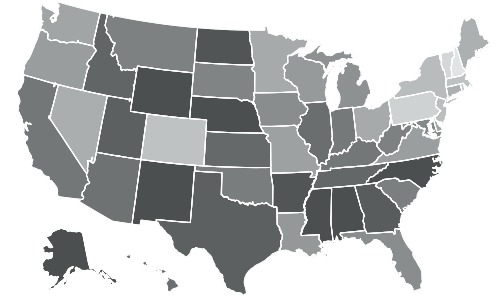
PERCENT OF REVENUE ALLOCATED TO HIGHER EDUCATION

The percent of revenue allocated to higher education compares available state and local funds from tax revenue and lottery profits relative to the amount of these funds appropriated to higher education. It provides a direct assessment of a state’s willingness to allocate tax revenues to higher education.

1. NATIONAL TRENDS

Table 4.2 shows that 5.8 percent of state and local tax revenue was allocated to higher education in 2017. Over the last five years, the portion of revenue allocated to higher education was essentially unchanged. However, the percent of tax revenue dedicated to higher education since 2007 is down half of a percentage point. The reduction nationally on this measure reflects the increased competition for scarce public funds. Other budget categories, such as Medicaid, K-12 education, and pensions, often take priority over higher education.

ALLOCATION TO HIGHER EDUCATION IN FY 2017



Visit the SHEF website to view the [interactive allocation to higher education map](#).²¹ For more information about the increasing scarcity of state funds, see the [SHEF Issue Brief](#) on state budget drivers from the fiscal 2018 SHEF report.²²

2. STATE COMPARISONS

The portion of state and local tax revenue allocated to higher education in 2017 ranged from 1.9 percent in New Hampshire to 15.2 percent in Wyoming. Only Connecticut and New York—which had the highest actual tax revenue per capita—had above average education appropriations per FTE and a below average portion of state and local support allocated to higher education in 2017. Thirteen states had an above average portion of tax revenue allocated to higher education but below average education appropriations per FTE. In West Virginia, 6.3 percent of state and local tax revenue was allocated to higher education (half a percentage point above the U.S. average). Still, education appropriations per FTE lagged the national average by more than \$2,700.

Twenty-three states allocated a smaller percentage of state and local tax revenue in fiscal year 2017 than in fiscal year 2016. These reductions ranged from 1.7 percentage points in Alaska to a tenth of a percentage point in nine states.

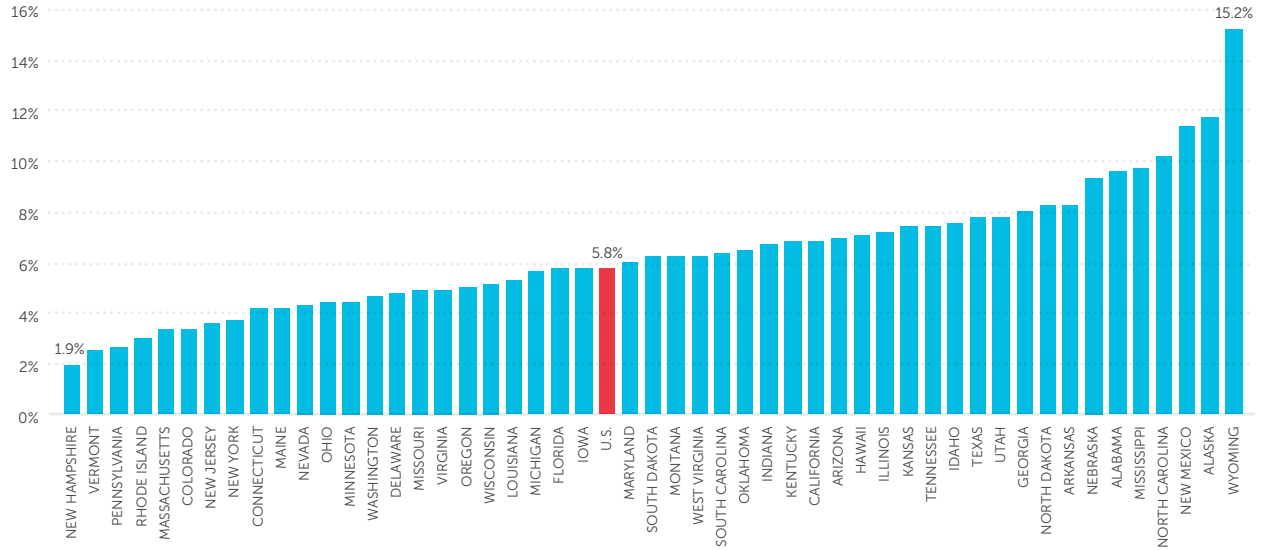
Between 2007 and 2017, only six states increased the percentage of state and local tax revenue allocated to higher education. The greatest increase was in Alaska (5.8 percentage points). The 10-year change for the remaining 44 states was negative, with the greatest reductions in Alabama and Louisiana (2.9 percentage points).

21. https://shef.sheeo.org/report/?report_page=state-effort-and-capacity&modal=Map_4_2

22. Weeden, D.D. (2019). *State higher education finance case study: State budget drivers: Slow revenue growth and increased expenditure completion*. Boulder, CO: State Higher Education Executive Officers Association. https://shef.sheeo.org/wp-content/uploads/2020/04/SHEEO_SHEF_FY18_IB_Budget_Drivers.pdf

FIGURE 4.2

PERCENT OF TAX AND LOTTERY REVENUES ALLOCATED TO HIGHER EDUCATION BY STATE, FY 2017



NOTES:

1. Allocation to higher education is higher education support as a proportion of actual tax and lottery revenues.
2. Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.
3. Actual tax revenue (ATR) data are the total general revenues derived from taxation by state and local governments.
4. Lottery profits are the revenues from all lotto games and gaming operations, where applicable, that are transferred to beneficiaries.

SOURCES: State Higher Education Executive Officers Association

Actual tax revenues are from the U.S. Census Bureau 2017 Annual Surveys of State and Local Government Finances.

Lottery profits are from the North American Association of State and Provincial Lotteries.

TABLE 4.2
PERCENT OF TAX AND LOTTERY REVENUES ALLOCATED TO HIGHER EDUCATION BY STATE

	2007	2012	2016	2017	INDEX TO U.S. AVERAGE	1-YEAR CHANGE	5-YEAR CHANGE	10-YEAR CHANGE
ALABAMA	12.5%	10.5%	9.6%	9.6%	1.64	-0.1	-1.0	-2.9
ALASKA	5.8%	4.2%	13.4%	11.7%	2.00	-1.7	7.4	5.8
ARIZONA	7.7%	7.1%	6.7%	7.0%	1.21	0.3	-0.1	-0.6
ARKANSAS	8.9%	10.0%	8.6%	8.3%	1.43	-0.2	-1.7	-0.5
CALIFORNIA	7.1%	6.0%	6.6%	6.8%	1.17	0.2	0.8	-0.3
COLORADO	3.9%	3.3%	3.6%	3.4%	0.59	-0.2	0.1	-0.5
CONNECTICUT	4.2%	3.8%	4.6%	4.2%	0.72	-0.5	0.4	-0.1
DELAWARE	6.0%	4.8%	4.8%	4.8%	0.83	0.0	0.0	-1.1
FLORIDA	5.3%	5.5%	5.9%	5.8%	1.00	-0.1	0.3	0.4
GEORGIA	8.2%	8.2%	7.8%	8.0%	1.38	0.2	-0.1	-0.2
HAWAII	7.7%	7.0%	6.5%	7.1%	1.21	0.5	0.0	-0.6
IDAHO	8.1%	7.3%	7.5%	7.6%	1.30	0.1	0.3	-0.5
ILLINOIS	6.4%	6.9%	5.7%	7.2%	1.23	1.5	0.3	0.8
INDIANA	6.8%	6.3%	6.7%	6.7%	1.14	0.0	0.4	-0.1
IOWA	7.8%	5.9%	6.0%	5.8%	1.00	-0.2	0.0	-1.9
KANSAS	8.4%	7.5%	7.5%	7.4%	1.26	-0.1	-0.1	-1.1
KENTUCKY	9.1%	8.2%	7.0%	6.8%	1.17	-0.2	-1.4	-2.3
LOUISIANA	8.2%	7.2%	6.4%	5.3%	0.91	-1.1	-1.9	-2.9
MAINE	4.4%	4.4%	4.1%	4.2%	0.73	0.1	-0.1	-0.2
MARYLAND	6.3%	6.2%	6.0%	6.0%	1.04	0.0	-0.2	-0.2
MASSACHUSETTS	3.8%	3.2%	3.3%	3.4%	0.58	0.0	0.2	-0.5
MICHIGAN	6.8%	5.5%	5.7%	5.6%	0.97	0.0	0.2	-1.1
MINNESOTA	5.9%	4.6%	4.5%	4.5%	0.77	-0.1	-0.1	-1.4
MISSISSIPPI	10.5%	10.4%	10.1%	9.7%	1.67	-0.4	-0.6	-0.8
MISSOURI	5.7%	5.2%	5.2%	4.9%	0.84	-0.3	-0.3	-0.8
MONTANA	5.3%	5.7%	6.7%	6.3%	1.08	-0.4	0.6	1.0
NEBRASKA	9.5%	9.5%	9.3%	9.3%	1.60	0.0	-0.2	-0.2
NEVADA	5.7%	4.5%	4.3%	4.3%	0.73	0.0	-0.2	-1.4
NEW HAMPSHIRE	2.6%	1.5%	1.9%	1.9%	0.32	0.0	0.3	-0.7
NEW JERSEY	4.2%	4.0%	3.7%	3.6%	0.62	-0.1	-0.4	-0.5
NEW MEXICO	13.7%	12.1%	12.7%	11.4%	1.95	-1.3	-0.7	-2.3
NEW YORK	3.8%	3.6%	3.5%	3.7%	0.63	0.1	0.1	-0.1
NORTH CAROLINA	11.1%	10.8%	10.1%	10.2%	1.76	0.2	-0.6	-0.9
NORTH DAKOTA	8.3%	5.2%	8.1%	8.3%	1.43	0.2	3.1	0.0
OHIO	5.1%	4.6%	4.6%	4.5%	0.77	-0.1	-0.1	-0.6
OKLAHOMA	9.0%	8.1%	7.1%	6.5%	1.11	-0.6	-1.6	-2.5
OREGON	5.7%	5.0%	5.3%	5.1%	0.88	-0.2	0.1	-0.5
PENNSYLVANIA	4.3%	3.0%	2.7%	2.7%	0.46	0.0	-0.3	-1.6
RHODE ISLAND	3.8%	3.2%	2.9%	3.0%	0.52	0.1	-0.2	-0.8
SOUTH CAROLINA	8.4%	6.3%	6.3%	6.4%	1.11	0.2	0.1	-1.9
SOUTH DAKOTA	7.1%	6.0%	6.2%	6.2%	1.07	0.0	0.2	-0.9
TENNESSEE	7.9%	7.0%	7.3%	7.5%	1.28	0.2	0.5	-0.4
TEXAS	7.8%	7.9%	7.9%	7.8%	1.33	-0.1	-0.2	0.0
UTAH	7.9%	7.6%	8.2%	7.8%	1.33	-0.4	0.1	-0.1
VERMONT	2.9%	2.8%	2.5%	2.5%	0.42	0.0	-0.3	-0.5
VIRGINIA	5.7%	4.9%	4.8%	5.0%	0.87	0.2	0.1	-0.7
WASHINGTON	5.9%	4.6%	4.8%	4.7%	0.81	-0.1	0.1	-1.2
WEST VIRGINIA	6.8%	7.1%	6.3%	6.3%	1.08	0.0	-0.7	-0.4
WISCONSIN	6.6%	5.8%	5.3%	5.2%	0.89	-0.1	-0.7	-1.4
WYOMING	9.7%	9.6%	14.0%	15.2%	2.61	1.1	5.6	5.5
U.S.	6.3%	5.8%	5.8%	5.8%	1.00	0.1	0.1	-0.5

NOTES:

1. Allocation to higher education is higher education support as a proportion of actual tax and lottery revenues.
2. Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.
3. Actual tax revenue (ATR) data are the total general revenues derived from taxation by state and local governments.
4. Lottery profits are the revenues from all lotto games and gaming operations, where applicable, that are transferred to beneficiaries.
5. One-, five-, and 10-year change columns show percentage point increases or decreases, not percent change.

SOURCES: State Higher Education Executive Officers Association

Actual tax revenues are from the U.S. Census Bureau 2017 Annual Surveys of State and Local Government Finances.

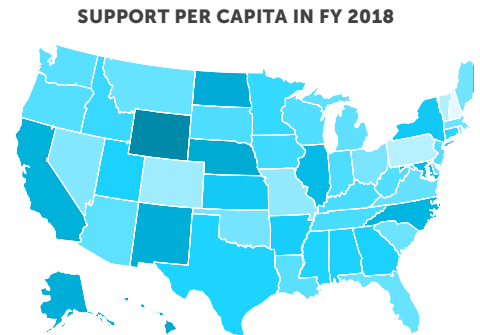
Lottery profits are from the North American Association of State and Provincial Lotteries.

SUPPORT PER CAPITA

Higher education support per capita standardizes state funding for a state’s population. It assesses effort because states with larger populations generally should have a broader tax base and, therefore, may be able to direct greater resources toward higher education. To calculate this measure, the total population is divided by the amount of state and local education appropriations.

1. NATIONAL TRENDS

Table 4.3 shows that state and local support for higher education per capita was \$304 in 2018. This amount was about \$2 per capita lower than in 2017. The 10-year period between 2008 and 2018 illustrates the effect of the Great Recession on state effort to fund higher education. In 2008, which was the high year of funding in many states, higher education support per capita was \$339 nationally. In 2013—the lowest year of funding following the Great Recession for many states—support per capita was \$281, a reduction of 17 percent or \$58 per capita. Since 2013, higher education funding per capita has increased 8 percent but remains \$35 below the 2008 level of support.



During this same 10-year time period, the U.S. population increased every year. However, the rate of population increase has slowed in recent years. For example, in 2008, the national population grew by 1 percent, while in 2018, the population grew by 0.6 percent.

Visit the SHEF website to view the [interactive support per capita map](#).²³

2. STATE COMPARISONS

State and local support for higher education per capita ranged from \$94 in New Hampshire to \$704 in Wyoming. Thirty-one states provided support for public higher education per capita below the national average in fiscal year 2018.

Thirty states have increased higher education support per capita since 2013. California and New Hampshire provided the largest increases, each more than 35 percent. Conversely, Oklahoma and West Virginia had the largest decreases (27.4 percent and 18.5 percent, respectively).

Between 2008 and 2018, only eight states increased higher education funding per capita. These increases ranged from 0.6 percent in Wyoming to 10.1 percent in Illinois. Of the 42 states with decreases in per capita support, 26 states had larger reductions than the national average (a 10.5 percent decline).

23. https://shef.sheeo.org/report/?report_page=state-effort-and-capacity&modal=Map_4_3

STATE SPOTLIGHT: NEW HAMPSHIRE



Between 2008 and 2013, New Hampshire reduced higher education appropriations per FTE by **51 percent**. This reduction included the elimination of student financial aid in 2011. Even before the recession, New Hampshire's education appropriations and state effort metrics were among the lowest in the nation. Higher education support in New Hampshire was only:

- 1.5 percent of state tax revenue in 2012,
- \$70 per capita in 2013, and
- 1.30 per \$1,000 of personal income in 2013.

Since this low point, New Hampshire has had some of the largest five-year increases on each of the state effort metrics. The state's 0.3 percent increase in the portion of tax revenue allocated to higher education is among the top ten largest increases over the last five years; the 35.5 percent increase in support per capita is the second largest increase, following California; and the 21 percent increase in support per \$1,000 of personal income is the largest increase in the nation by more than 6 percentage points.

The increased state effort to fund higher education in New Hampshire was the result of increased education appropriations relative to tax revenue, population, and personal income; however, the state remains below its pre-recession levels in education appropriations and each of the state effort metrics.

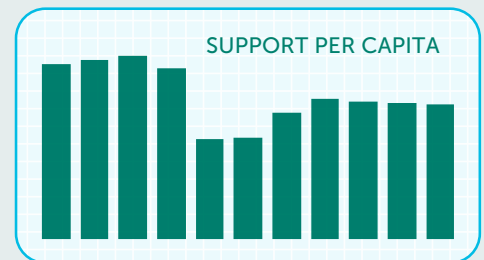
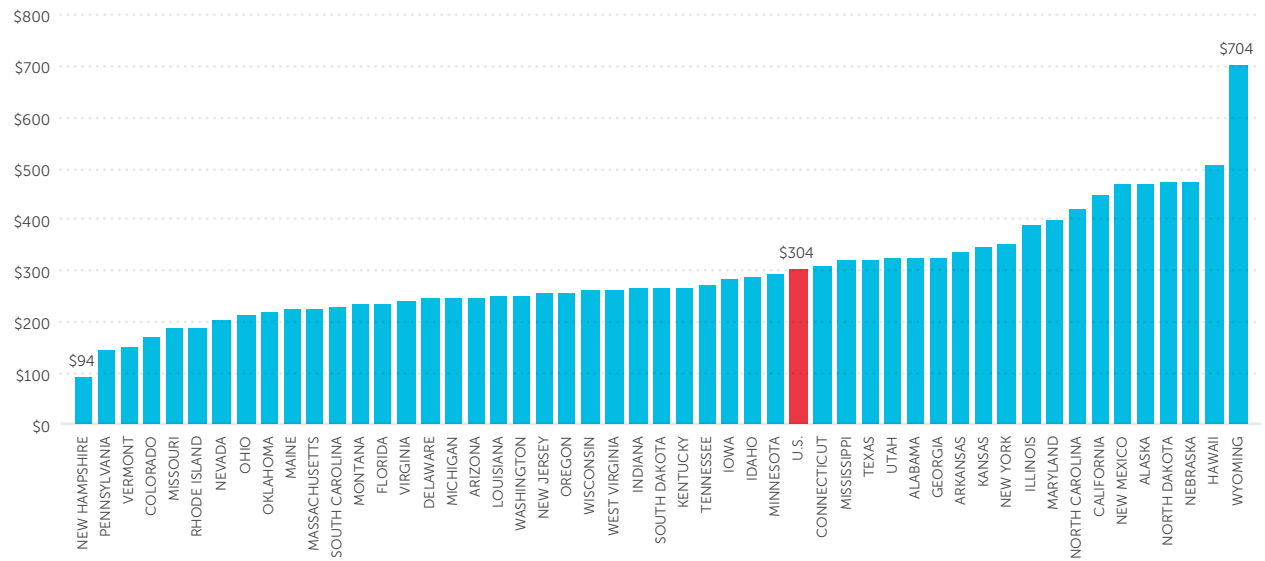


FIGURE 4.3
PUBLIC HIGHER EDUCATION SUPPORT PER CAPITA BY STATE, FY 2018



NOTES:

1. Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.

SOURCES: State Higher Education Executive Officers Association

Population data are from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

TABLE 4.3
PUBLIC HIGHER EDUCATION SUPPORT PER CAPITA BY STATE
(CONSTANT DOLLARS)

	2008	2013	2017	2018	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$486	\$314	\$330	\$327	1.08	-0.8%	4.1%	-32.6%
ALASKA	\$512	\$560	\$489	\$467	1.54	-4.4%	-16.5%	-8.6%
ARIZONA	\$367	\$262	\$252	\$246	0.81	-2.4%	-6.1%	-32.9%
ARKANSAS	\$365	\$381	\$344	\$338	1.11	-1.9%	-11.4%	-7.5%
CALIFORNIA	\$436	\$328	\$434	\$448	1.47	3.2%	36.6%	2.8%
COLORADO	\$190	\$142	\$172	\$171	0.56	-0.5%	21.0%	-9.6%
CONNECTICUT	\$340	\$266	\$330	\$307	1.01	-7.0%	15.5%	-9.7%
DELAWARE	\$319	\$253	\$251	\$245	0.81	-2.4%	-3.0%	-23.1%
FLORIDA	\$251	\$184	\$222	\$237	0.78	6.7%	28.6%	-5.8%
GEORGIA	\$363	\$284	\$316	\$327	1.08	3.6%	15.4%	-9.9%
HAWAII	\$485	\$403	\$480	\$505	1.66	5.1%	25.3%	4.0%
IDAHO	\$322	\$257	\$291	\$290	0.95	-0.4%	12.6%	-9.9%
ILLINOIS	\$355	\$428	\$429	\$391	1.29	-8.8%	-8.8%	10.1%
INDIANA	\$277	\$256	\$268	\$265	0.87	-1.3%	3.7%	-4.3%
IOWA	\$356	\$297	\$299	\$285	0.94	-4.9%	-4.1%	-20.1%
KANSAS	\$420	\$369	\$352	\$348	1.15	-1.0%	-5.5%	-17.0%
KENTUCKY	\$363	\$295	\$275	\$269	0.88	-2.3%	-9.0%	-26.0%
LOUISIANA	\$420	\$274	\$238	\$249	0.82	4.7%	-9.1%	-40.8%
MAINE	\$238	\$216	\$232	\$226	0.75	-2.2%	4.9%	-4.7%
MARYLAND	\$383	\$352	\$401	\$399	1.31	-0.6%	13.2%	4.0%
MASSACHUSETTS	\$243	\$202	\$231	\$227	0.75	-1.7%	12.5%	-6.7%
MICHIGAN	\$305	\$230	\$248	\$245	0.81	-1.0%	6.8%	-19.6%
MINNESOTA	\$347	\$256	\$284	\$295	0.97	3.8%	15.1%	-15.1%
MISSISSIPPI	\$433	\$353	\$367	\$321	1.06	-12.5%	-9.0%	-25.9%
MISSOURI	\$227	\$191	\$194	\$186	0.61	-4.1%	-2.5%	-18.0%
MONTANA	\$240	\$222	\$250	\$235	0.77	-6.2%	6.0%	-2.0%
NEBRASKA	\$466	\$458	\$490	\$476	1.57	-2.9%	4.1%	2.2%
NEVADA	\$273	\$183	\$197	\$205	0.67	4.2%	11.8%	-24.8%
NEW HAMPSHIRE	\$118	\$70	\$95	\$94	0.31	-0.7%	35.5%	-20.0%
NEW JERSEY	\$302	\$253	\$263	\$254	0.84	-3.4%	0.4%	-15.8%
NEW MEXICO	\$645	\$490	\$482	\$466	1.54	-3.3%	-4.8%	-27.7%
NEW YORK	\$332	\$321	\$347	\$353	1.16	1.7%	9.9%	6.2%
NORTH CAROLINA	\$504	\$434	\$422	\$418	1.38	-0.9%	-3.6%	-17.0%
NORTH DAKOTA	\$450	\$513	\$569	\$472	1.55	-17.1%	-8.1%	4.7%
OHIO	\$246	\$205	\$218	\$214	0.71	-1.7%	4.5%	-12.8%
OKLAHOMA	\$361	\$304	\$236	\$221	0.73	-6.6%	-27.4%	-38.8%
OREGON	\$263	\$212	\$258	\$259	0.85	0.5%	22.2%	-1.5%
PENNSYLVANIA	\$213	\$147	\$145	\$144	0.47	-1.3%	-2.3%	-32.7%
RHODE ISLAND	\$212	\$168	\$183	\$189	0.62	3.1%	12.3%	-10.8%
SOUTH CAROLINA	\$326	\$220	\$238	\$231	0.76	-3.0%	4.9%	-29.2%
SOUTH DAKOTA	\$290	\$251	\$280	\$265	0.87	-5.2%	5.6%	-8.6%
TENNESSEE	\$306	\$242	\$265	\$273	0.90	3.0%	12.8%	-11.0%
TEXAS	\$356	\$319	\$335	\$322	1.06	-3.8%	1.1%	-9.4%
UTAH	\$356	\$279	\$323	\$326	1.07	0.8%	17.0%	-8.4%
VERMONT	\$170	\$154	\$153	\$153	0.50	-0.2%	-0.8%	-10.1%
VIRGINIA	\$283	\$227	\$251	\$239	0.79	-4.7%	5.5%	-15.6%
WASHINGTON	\$314	\$218	\$259	\$253	0.83	-2.3%	16.2%	-19.5%
WEST VIRGINIA	\$359	\$320	\$273	\$261	0.86	-4.5%	-18.5%	-27.4%
WISCONSIN	\$343	\$305	\$261	\$260	0.85	-0.4%	-14.8%	-24.4%
WYOMING	\$699	\$773	\$732	\$704	2.32	-3.8%	-9.0%	0.6%
U.S.	\$339	\$281	\$306	\$304	1.00	-0.7%	8.0%	-10.5%

NOTES:

- Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.
- Constant 2018 dollars adjusted by the Consumer Price Index (CPI).

SOURCES: State Higher Education Executive Officers Association

Population data are from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

SUPPORT PER \$1,000 OF PERSONAL INCOME

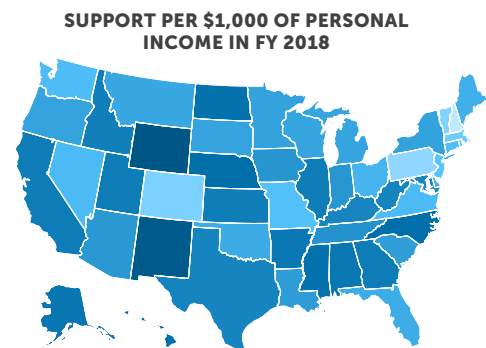
Higher education support per \$1,000 of personal income measures the amount a state pays for higher education relative to its capacity to pay. It helps us understand the scale of support for higher education in relation to a state's available tax base since most state revenue comes from income and sales or consumption taxes.²⁴

1. NATIONAL TRENDS

Table 4.4 shows that the national average of state and local support for higher education per \$1,000 of personal income was \$5.60 in 2018, a 3.1 percent decline when compared to 2017. Historically, this measure has followed the same general trend as education appropriations. Support per \$1,000 of personal income declines during economic downturns and increases during periods of economic expansion. However, **support for higher education per \$1,000 of personal income has declined 21.6 percent since 2008.**

Nationally, state and local support per \$1,000 of personal income is 4.1 percent lower than in 2013 and nearly 22 percent lower than in 2008. This means that state and local governments spent \$1.50 less per \$1,000 of personal income in 2018 than they did in 2008 to fund higher education. Over this same period, personal income grew by 23 percent nationally.

Visit the SHEF website to view the [interactive support per \\$1,000 of personal income map](#).²⁵



24. Trostel, P.A., & Ronca, J.M. (2009). A simple unifying measure of state support for postsecondary education. *Research in Higher Education*, 50 (3), 215-247.

25. https://shef.sheeo.org/report/?report_page=state-effort-and-capacity&modal=Map_4_4

2. STATE COMPARISONS

In 2018, state support per \$1,000 of personal income ranged from \$1.50 in New Hampshire to \$11.70 in Wyoming. States with support above the national average on this measure tend to be less reliant on net tuition revenue. In states with above average support per \$1,000 of personal income, students provided the majority of total education revenue in only 30 percent of states. In states with below average support per \$1,000, students provided the majority of revenue in 70 percent of states.

Between 2013 and 2018, thirteen states increased the share of higher education support relative to personal income growth. In California, Florida, and New Hampshire, higher education support increased more than 10 percent, while 18 states reduced higher education support by at least 10 percent.

Between 2008 and 2018, no state increased the amount of public higher education funding per \$1,000 of personal income. Illinois had the smallest decline (2.3 percent). Hawaii, Maryland, Nebraska, and Wyoming were the only other states with declines of 10 percent or less on this measure.

Seven states (Alabama, Arizona, Louisiana, Oklahoma, Pennsylvania, South Carolina, and West Virginia) had 10-year reductions of 35 percent or more. Excluding Pennsylvania, these were also the only states in which student share increased by at least 20 percentage points over the last 10 years.

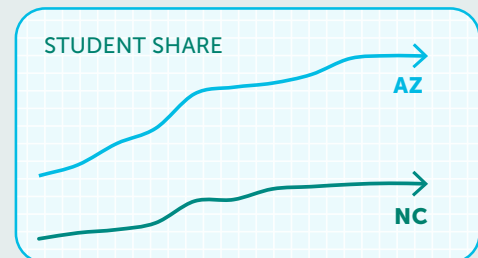
STATE SPOTLIGHT: ARIZONA AND NORTH CAROLINA



Arizona²⁶ and North Carolina²⁷ each have constitutional provisions stating that higher education should be as close to free as possible. Following the Great Recession, both states have become more reliant on tuition revenue, but the shift in Arizona far outpaced North Carolina. Between 2008 and 2018, the share of education revenue paid by students increased 25.5 percentage points in Arizona, reaching 61.9 percent. During that same time frame, the student share increased only 11.5 percentage points in North Carolina, reaching 34.6 percent in 2018.

Two state effort metrics mirror these contrasting changes over time in Arizona and North Carolina. Higher education support per capita fell 33 percent in Arizona and only 17 percent in North Carolina between 2008 and 2018. Similarly, support relative to personal income fell 37.2 percent in Arizona and 20.9 percent in North Carolina during this period. While both states were above the national average on these metrics in 2008, only North Carolina remained above the U.S. average in 2018.

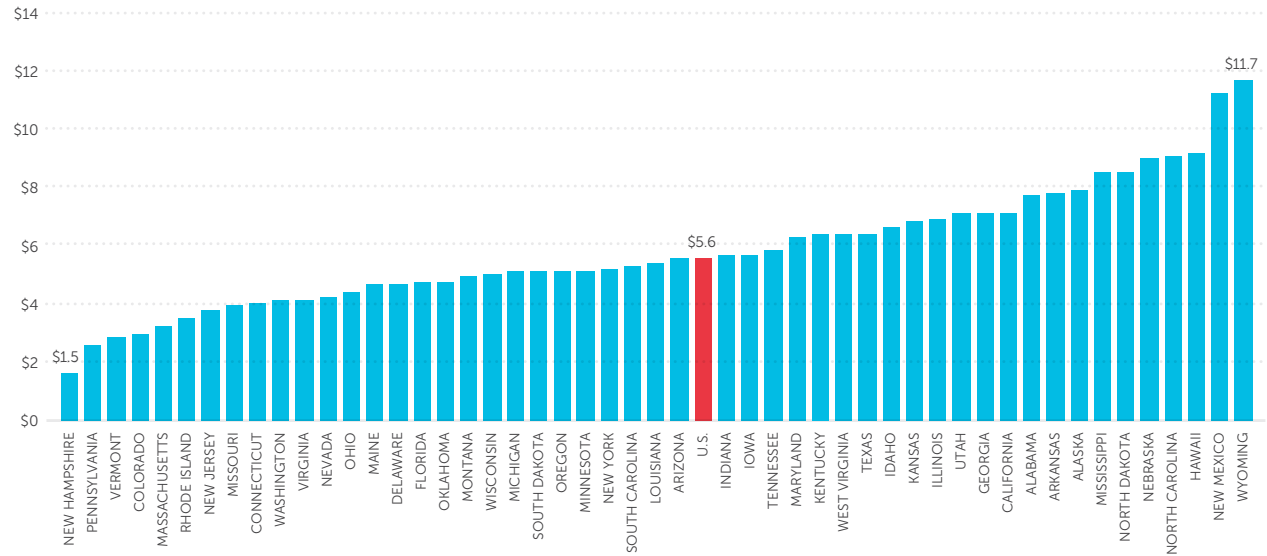
Between 2007 and 2017, the portion of state and local tax revenue allocated to higher education declined from 7.7 percent to 7 percent in Arizona and from 11.1 percent to 10.2 percent in North Carolina. Both states remain above the national average on this metric.



26. A.Z. Const. art. XI § 6

27. N.C. Const. art. IX § 9

FIGURE 4.4
PUBLIC HIGHER EDUCATION SUPPORT PER \$1,000 OF PERSONAL INCOME BY STATE,
FY 2018



NOTES:

- Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.

SOURCES: State Higher Education Executive Officers Association

Personal income data are from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

TABLE 4.4
PUBLIC HIGHER EDUCATION SUPPORT PER \$1,000 OF PERSONAL INCOME BY STATE

	2008	2013	2017	2018	INDEX TO U.S. AVERAGE	1-YEAR % CHANGE	5-YEAR % CHANGE	10-YEAR % CHANGE
ALABAMA	\$12.5	\$8.1	\$8.0	\$7.7	1.39	-2.7%	-4.1%	-37.9%
ALASKA	\$9.2	\$9.9	\$8.4	\$7.9	1.41	-6.4%	-20.2%	-14.4%
ARIZONA	\$8.8	\$6.6	\$5.8	\$5.6	0.99	-4.1%	-16.4%	-37.2%
ARKANSAS	\$9.8	\$9.8	\$8.1	\$7.8	1.40	-3.5%	-19.9%	-20.3%
CALIFORNIA	\$8.5	\$6.2	\$7.0	\$7.0	1.26	0.1%	14.2%	-17.2%
COLORADO	\$3.8	\$2.8	\$3.0	\$2.9	0.53	-3.5%	5.6%	-23.0%
CONNECTICUT	\$4.8	\$3.9	\$4.5	\$4.0	0.72	-10.0%	3.5%	-15.8%
DELAWARE	\$6.7	\$5.3	\$4.9	\$4.7	0.84	-4.2%	-11.7%	-30.5%
FLORIDA	\$5.5	\$4.2	\$4.5	\$4.7	0.85	4.5%	12.5%	-13.9%
GEORGIA	\$8.9	\$7.0	\$6.9	\$7.0	1.26	1.7%	0.5%	-20.4%
HAWAII	\$9.9	\$8.3	\$8.8	\$9.1	1.63	3.2%	9.6%	-7.9%
IDAHO	\$8.4	\$6.6	\$6.7	\$6.6	1.18	-2.1%	0.1%	-21.7%
ILLINOIS	\$7.0	\$8.4	\$7.8	\$6.9	1.23	-11.4%	-18.5%	-2.3%
INDIANA	\$6.7	\$6.0	\$5.8	\$5.6	1.01	-3.0%	-6.0%	-16.6%
IOWA	\$7.9	\$6.3	\$6.2	\$5.7	1.02	-7.7%	-10.3%	-28.4%
KANSAS	\$8.8	\$7.4	\$7.0	\$6.8	1.21	-3.7%	-9.0%	-23.3%
KENTUCKY	\$9.5	\$7.6	\$6.5	\$6.3	1.13	-3.3%	-17.0%	-33.4%
LOUISIANA	\$9.5	\$6.2	\$5.3	\$5.4	0.96	1.9%	-13.3%	-43.4%
MAINE	\$5.5	\$5.0	\$4.9	\$4.6	0.83	-4.6%	-7.1%	-15.8%
MARYLAND	\$6.6	\$6.2	\$6.5	\$6.3	1.13	-2.8%	2.2%	-5.3%
MASSACHUSETTS	\$4.0	\$3.3	\$3.3	\$3.2	0.57	-4.1%	-3.0%	-21.2%
MICHIGAN	\$7.3	\$5.4	\$5.2	\$5.1	0.91	-3.1%	-6.5%	-30.8%
MINNESOTA	\$6.9	\$5.0	\$5.0	\$5.1	0.92	1.5%	3.4%	-25.8%
MISSISSIPPI	\$12.2	\$9.7	\$9.8	\$8.5	1.52	-13.8%	-12.2%	-30.4%
MISSOURI	\$5.3	\$4.4	\$4.2	\$3.9	0.70	-5.9%	-11.2%	-25.8%
MONTANA	\$5.8	\$5.1	\$5.4	\$4.9	0.88	-8.4%	-3.4%	-15.3%
NEBRASKA	\$9.9	\$9.1	\$9.4	\$8.9	1.60	-5.4%	-1.9%	-10.0%
NEVADA	\$6.0	\$4.3	\$4.1	\$4.2	0.75	1.8%	-3.8%	-30.9%
NEW HAMPSHIRE	\$2.2	\$1.3	\$1.6	\$1.5	0.28	-3.1%	21.0%	-30.5%
NEW JERSEY	\$5.0	\$4.2	\$4.0	\$3.7	0.67	-5.9%	-11.1%	-25.1%
NEW MEXICO	\$16.5	\$12.9	\$11.9	\$11.2	2.01	-5.9%	-13.4%	-32.2%
NEW YORK	\$5.9	\$5.5	\$5.2	\$5.1	0.92	-0.4%	-6.0%	-12.9%
NORTH CAROLINA	\$11.5	\$10.5	\$9.3	\$9.1	1.62	-2.7%	-13.9%	-20.9%
NORTH DAKOTA	\$9.6	\$8.8	\$10.6	\$8.5	1.52	-19.4%	-3.9%	-11.0%
OHIO	\$5.8	\$4.6	\$4.6	\$4.4	0.79	-3.6%	-5.0%	-23.6%
OKLAHOMA	\$8.0	\$6.5	\$5.3	\$4.8	0.86	-9.7%	-27.0%	-40.5%
OREGON	\$6.1	\$4.9	\$5.2	\$5.1	0.91	-2.1%	3.7%	-16.3%
PENNSYLVANIA	\$4.4	\$2.9	\$2.7	\$2.6	0.46	-4.4%	-13.1%	-42.0%
RHODE ISLAND	\$4.3	\$3.4	\$3.4	\$3.4	0.62	0.9%	2.0%	-20.8%
SOUTH CAROLINA	\$8.5	\$5.7	\$5.5	\$5.3	0.95	-4.3%	-7.5%	-37.8%
SOUTH DAKOTA	\$6.1	\$5.1	\$5.5	\$5.1	0.91	-7.9%	-1.3%	-16.5%
TENNESSEE	\$7.5	\$5.7	\$5.7	\$5.8	1.04	1.1%	2.2%	-22.9%
TEXAS	\$7.8	\$6.7	\$6.8	\$6.4	1.14	-6.2%	-5.3%	-17.6%
UTAH	\$9.0	\$7.0	\$7.2	\$7.0	1.26	-1.9%	0.0%	-21.9%
VERMONT	\$3.6	\$3.1	\$2.9	\$2.8	0.50	-1.9%	-9.3%	-20.8%
VIRGINIA	\$5.3	\$4.3	\$4.4	\$4.1	0.74	-6.6%	-3.8%	-22.6%
WASHINGTON	\$6.0	\$4.2	\$4.3	\$4.1	0.73	-5.6%	-2.5%	-32.5%
WEST VIRGINIA	\$9.8	\$8.5	\$6.9	\$6.4	1.14	-7.5%	-24.9%	-35.2%
WISCONSIN	\$7.6	\$6.5	\$5.2	\$5.0	0.90	-2.5%	-23.2%	-33.5%
WYOMING	\$12.3	\$13.6	\$12.7	\$11.7	2.09	-7.9%	-14.0%	-5.5%
U.S.	\$7.1	\$5.8	\$5.8	\$5.6	1.00	-3.1%	-4.1%	-21.6%

NOTES:

1. Higher education support is state and local tax and non-tax support for public and independent higher education, including special purpose appropriations for research-agriculture-medical.

SOURCES: State Higher Education Executive Officers Association

Personal income data are from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

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