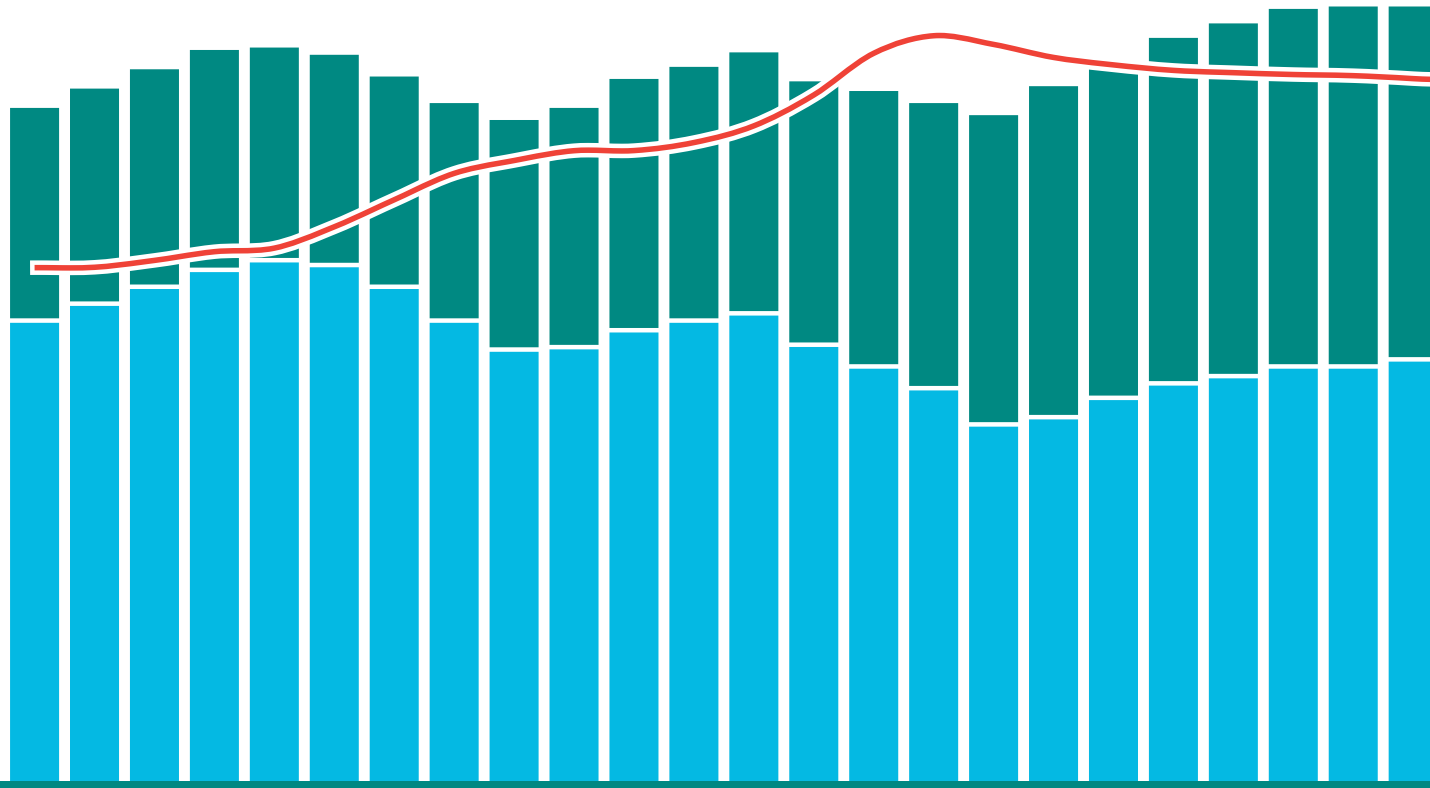
SHEEO

STATE HIGHER EDUCATION EXECUTIVE OFFICERS ASSOCIATION

SHEF

STATE HIGHER EDUCATION FINANCE

FY 2021



The State Higher Education Executive Officers Association (SHEEO) serves the 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 sheeo.org.

SHEF
STATE HIGHER EDUCATION FINANCE

Since 2003, the State Higher Education Executive Officers Association (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 1980-2021 with detailed data on state and local funding, tuition revenue, and enrollment.

The 2021 SHEF report was authored by Sophia Laderman, associate vice president, and Kelsey Kunkle, policy analyst. The report would not have been possible without additional support, particularly from Gloria Auer, Kelsey Heckert, Annahita Jimmerson, and David Tandberg.

We are deeply indebted to the staff of state higher education agencies who annually provide the state- and sector-level data essential for the preparation of this report and made the additional commitment to provide several new data elements this year. Without their diligent work, 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 State Effort and Capacity to Fund Higher Education report, which was separated from the main SHEF report last year, can be found online at shef.sheeo.org/state-effort.

The data in the SHEF report and accompanying website may be freely used with appropriate attribution and citation: State Higher Education Executive Officers Association. (2022). State Higher Education Finance: FY 2021.

TABLE OF CONTENTS

INDEX OF FIGURES

INDEX OF TABLES

EXECUTIVE SUMMARY

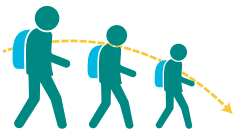
The State Higher Education Finance (SHEF) report is produced annually by the State Higher Education Executive Officers Association (SHEEO) to broaden understanding of the context and consequences of public policy decisions in each state that contribute to public higher education funding levels and funding 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 fiscal year 2021, which for most states ran from July 1, 2020, through June 30, 2021.

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 totaled $113.2 billion in fiscal year 2021, including $3.7 billion in federal stimulus funding (3.2%). All but five states (Alabama, Nevada, New York, Oklahoma, and West Virginia) used some portion of federal stimulus funding provided to state governments for higher education.[1] Five states (Colorado, Minnesota, New Hampshire, Vermont, and Wyoming) and Washington, D.C., relied on federal stimulus funding for more than 20% of higher education support. State tax and non-tax appropriations accounted for 85.2% of state and local funding, with local tax appropriations in 32 states contributing 10.7%. The vast majority of state and local support for higher education was used for general operations at public institutions (78.1%). Just over 10.1% of funding went to research, agricultural extension programs, and medical schools. Another 8.9% was allocated for student financial aid at public institutions. Less than 2.5% of all state and local funding supported independent (private) institutions, and most of those funds went to student financial aid (2.2%).



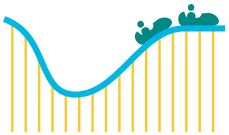
FULL-TIME EQUIVALENT (FTE) ENROLLMENT

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

- There were 10.6 million FTE enrolled students in 2021. Net FTE enrollment declined 3.0% this year, a loss of 323,952 FTE students, the largest FTE decline on record. 2021 marks the tenth straight year of enrollment declines following substantial enrollment increases during the Great Recession.
- Forty-seven states and Washington, D.C., saw FTE enrollment declines this year, more than in any previous year. Sixteen states and Washington, D.C., had enrollment declines greater than 5.0%, and only three states (Delaware, Illinois, and Utah) had an FTE enrollment increase from 2020 to 2021.

1. Federal stimulus funding is included in state-level education appropriations and total education revenue throughout this report.

- The recent enrollment decline is concentrated at two-year public institutions, which reported a net FTE enrollment decline of 6.1% from 2020 to 2021, compared to only 0.9% at four-year institutions. Two-year enrollment took a larger hit than four-year enrollment in 43 states.



EDUCATION APPROPRIATIONS PER FTE

Education appropriations measure state and local support for public higher education operating expenses and exclude research, hospitals, and medical education. State-level education appropriations include agency funding and federal stimulus funding; sector-level appropriations do not.

The U.S. entered a short recession in fiscal year 2020 due to the COVID-19 pandemic. In all previous recessions since 1980, education appropriations per FTE declined in the year following an economic recession. For the first time in 2021, this trend did not continue: Inflation-adjusted education appropriations per FTE increased 4.5% in the last year ($400 per FTE), reaching $9,327. This was the ninth straight year of increases and the largest single-year increase since 2014. Appropriations increased in 40 states and Washington, D.C., from 2020 to 2021. The increase in education appropriations per FTE can be attributed to three notable trends:

1. Increasing state commitments to higher education funding.
2. A sharp decline in FTE enrollment.
3. Generous federal stimulus funding.

Federal stimulus funding contributed to the increase in two ways. First, federal funds that protected state revenues and covered additional costs due to the COVID-19 pandemic and economic recession reduced the need to redirect funds from higher education to other budget areas during the pandemic. Second, federal funds given to states and used for higher education operations boosted operating education appropriations: In 2020, federal stimulus funding for public institutions accounted for 1.3% of total education appropriations ($113 per FTE). In 2021, this amount increased to 3.6% ($335 per FTE). Two-year institutions received $214 per FTE in federal stimulus for public operating in 2021, and four-year institutions received $288 per FTE.

Without federal stimulus funding directed by states to higher education, education appropriations per FTE would have increased just 2.0% from 2020 to 2021. Had FTE enrollment held constant and had states not directed federal stimulus funding toward higher education, education appropriations would have declined 1.0% this year.

In 2021, education appropriations per FTE ranged from $4,370 in New Hampshire to $34,466 in Washington, D.C. In 2021, three states and Washington, D.C., allocated more than $3,000 per FTE in federal stimulus funding to public higher education: Washington, D.C. ($10,853), Wyoming ($6,355), Minnesota ($3,140), and Vermont ($3,077). When excluding federal stimulus funding, 10 states had declines in inflation-adjusted education appropriations per FTE in the two-year sector and 27 states had declines in the four-year sector. Additionally, without federal stimulus, some states' increases or decreases in education appropriations per FTE reversed direction, or were overall less impactful. The largest differences were in Vermont (98.6% increase with stimulus vs. 44.6% without) and Colorado (7.8% increase vs. 37.6% decline).

The impacts of previous recessions on higher education funding can still be felt in most states. Education appropriations per FTE have increased for nine consecutive years, but these increases have not been large enough to reach pre-recession funding levels of 2001 and 2008. Notably, education appropriations per FTE in 2021 exceeded funding levels in the years between 2003 and 2007. Yet national-level education appropriations remain 1.2% ($112 per FTE) and 10.2% ($1,059) below 2008 and 2001 levels, respectively. Appropriations in 21 states have fully recovered to 2008 levels. Still, appropriations in nine states are at least 20% below 2008 levels, signifying a lack of recovery in education appropriations following the Great Recession. The largest declines from 2008 to 2021 are in Oklahoma (42.2%), Nevada (39.0%), Louisiana (38.0%), and Arizona (36.8%).

After two years of increases (3.3% in 2020 and 11.0% in 2021), two-year education appropriations per FTE exceeded those of four-year institutions this year ($9,347 and $8,859, respectively). Despite similar funding levels, there were important differences in the sources of two- and four-year public institution state and local funding:

- Two-year public institutions received $5,647 per FTE in state public operating appropriations, 76.2% of the four-year general operating appropriation ($7,414). State public operating increased 10.0% at two-year institutions and declined 2.7% at four-year institutions in the last year.
- Local appropriations were 151.8 times higher at two-year institutions ($2,976) compared to four-year institutions ($20 per FTE). Twenty-nine states had local appropriations for two-year institutions, compared to only eight for four-year institutions.
- Total state and local support for public institutions (which includes $1,690 in state research and medical funding for four-year institutions) was $9,347 at two-year institutions, 88.6% of the amount at four-year institutions ($10,555).

STATE PUBLIC FINANCIAL AID PER FTE

State public financial aid is any state appropriated student financial aid for public institutions, excluding loans. These funds are included in education appropriations but do not include federal stimulus funding. Public aid accounts for 79.8% of total state financial aid funding.

- State public financial aid per FTE increased 8.8% from 2020 to 2021 and reached an all-time high of $921 per FTE. These funds made up 9.9% of all education appropriations, the largest proportion since these data were first collected in 2001.
- Financial aid per FTE increased in 31 states in the last year. In 2021, four states awarded less than $100 per FTE in state financial aid (Arizona, Michigan, Montana, and New Hampshire); another four states awarded over $2,000 per FTE (Georgia, Louisiana, South Carolina, and Tennessee).
- State financial aid awards averaged $510 at two-year institutions, 44.8% of the $1,138 awarded to students attending four-year institutions. The majority of states (31) awarded more financial aid per FTE to students attending four-year institutions.

NET TUITION AND FEE REVENUE PER FTE

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

- Public institutions received, on average, $6,723 in net tuition revenue from in-state and out-of-state students in 2021, down 3.2% ($224) from last year. In dollars, this is the second largest decline in net tuition revenue per FTE since 1980. The decline in net tuition revenue is due to a combination of increases in state public financial aid, minimal tuition rate growth, and any changes in the proportion of students paying higher tuition rates.
- Notably, this is only the second time period with declines in net tuition revenue per FTE since the SHEF dataset began in 1980. Net tuition revenue per FTE has increased 180.5% ($4,326 per FTE) since 1980.
- Net tuition revenue per FTE declined in 72% of states between 2020 and 2021, and just over half of all states and Washington, D.C., have had declines in net tuition and fee revenue over the last five years. In 2021, Florida had the lowest net tuition revenue per FTE ($2,301) while Delaware had the highest ($16,517).
- In 2021, two-year institutions received $2,604 in net tuition revenue per FTE or 28.0% of the average net tuition revenue per FTE at four-year institutions ($9,295). Net tuition revenue per FTE declined 1.7% at two-year institutions over the last year, and 4.8% at four-year institutions. Only one state (Florida) had higher average net tuition revenue per FTE in the two-year sector; all other states received more tuition revenue per FTE from the four-year sector.

TOTAL EDUCATION REVENUE PER FTE

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

- Total education revenue increased 1.1% from 2020 to 2021, reaching an all-time high of $15,959 per FTE. However, total revenue is only at a record high in 18 states and Washington, D.C., and varies substantially by institution type. Without the influx of federal stimulus funding into states for higher education, total education revenue would have declined 0.3% in the last year. Finally, many institutions, particularly those that are the most reliant on state funding, have not been able to increase tuition revenue to offset declines in state funding and are not at an all-time high for total education revenue.
- Public institutions in nine states and Washington, D.C., have more than $20,000 per FTE in education revenue.

- In 2021, four-year institutions averaged $18,021 in total education revenue per FTE, 1.51 times the amount at two-year institutions ($11,928 per FTE). Four-year institutions had less total revenue with which to educate students than two-year institutions in only one state (Wisconsin).
- Nationally, total education revenue per FTE increased $880 (8.0%) at two-year institutions, and decreased $418 (2.3%) at four-year institutions in 2021.

STUDENT SHARE

The student share is a measure of the proportion of total education revenue at public institutions that comes from net tuition and fee revenue.

- There has been a substantial shift of responsibility for financing public higher education toward net tuition revenue, from 20.9% in 1980 to 42.1% in 2021. Historically, the student share tends to increase most rapidly during periods of economic recession, shifting more of higher education costs to students and families. Yet, the student share decreased by 1.9 percentage points in 2021 following the fiscal year 2020 recession, in large part because this recession was brief and all but five states allocated federal stimulus funding to higher education in 2021.
- Excluding federal stimulus funding, the student share in 2021 was 43.0%.
- In 2021, 20 states had a student share above 50%. From 2020-2021, the student share decreased in 40 states and Washington, D.C. However, over the last 10 years, the student share has increased in 23 states. Since 1980, the student share has increased in every state but Wyoming.
- At two-year institutions, the average student share was less than a quarter (21.8%). At four-year institutions, the average student share was over half (51.6%). In four states, the four-year student share was greater than 75%: Arizona, Delaware, New Hampshire, and Vermont.
- At only 2.7%, California's community colleges have, by far, the lowest student share of any sector or state in the country. Arizona's four-year institutions have the highest student share (79.0%).

IMPLICATIONS

Fiscal year 2021 defied several long-term trends in higher education finance. In the past, the year following an economic recession meant steep cuts in state funding, sharp growth in student enrollment, and growth in tuition revenue as public institutions increased tuition rates and worked to attract out-of-state and international students to make up for anticipated lost revenue from the state. Instead, state and local education appropriations per student increased for the ninth straight year in 2021 despite a short economic recession in fiscal year 2020, signifying states' continued commitment to prioritize higher education. Much of this increase can be attributed to generous federal stimulus and relief funding, which supported total state revenues, reducing budget strain while also directly supporting higher education during the COVID-19 pandemic. While these federal stimulus and relief funds are helpful, they cannot be a replacement for long-term state investments as stimulus funds are time-limited and often restricted in their use.

The COVID-19 pandemic counteracted the usual counter-cyclical enrollment trend where enrollment increases during and immediately following economic recessions. Instead, 2021 had the largest single-year decline in public higher education enrollment on record. Additionally, for the third straight year, net tuition and fee revenue did not increase enough to keep up with inflation. The decline in net tuition revenue from 2020 to 2021 is primarily due to low growth in tuition rates, increasing state financial aid, and a change in the proportion of students paying out-of-state and otherwise more expensive tuition rates. This continued decline in tuition revenue puts greater pressure on states not to cut funding to public higher education in the coming years. However, when federal stimulus funds run out, states will face difficult budgetary decisions, and higher education may face cuts in some states.

The SHEF report broadly addresses the wide variation in how states fund public higher education. States vary in their relative allocations to general operating, financial aid, and research; they vary in their reliance on local support to fund community colleges and federal stimulus funding during the COVID-19 pandemic; and they vary in the total funding allocated to higher education on a per-student level. Public institutions in some states remain primarily publicly funded, but a growing proportion have become primarily reliant on student tuition and fee revenue over the last two decades. State-specific context is incredibly important when discussing higher education finance—the trends described in this report reflect the national average, and there are almost always outliers to every trend. Additionally, even within states, there can be wide variation in the enrollment and revenue patterns at each institution.

On the whole, public institutions face uncertainty on where their future revenues will come from. With declining revenue from both states and students and after two years of increased costs due to the pandemic and the switch to online learning, state support for higher education is crucial for the continued success of public institutions. Thanks to the influx of federal stimulus funding, public systems of higher education are met with a unique opportunity to make progress toward state attainment goals. Now is a crucial time to make long-term, sustained investments to promote educational quality and student affordability and to reduce inequality in educational attainment.

SOURCES AND USES OF STATE FUNDING

Two core components of the SHEF report are the sources and uses of state and local investments in higher education. This section presents data on the distribution of state and local funds at the national level over time and across states. Later sections examine trends over time using inflation-adjusted and per student data.

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 this public revenue is provided, including general institutional operating expenses, student financial assistance, agency funding, and support for centrally funded research, medical education, and extension programs. Higher education is the third largest single budget area in state support, representing 8.5% of total state spending and 9.4% of general fund expenditures in fiscal year 2021. Although state higher education expenditures as a share of general fund spending has remained constant since fiscal year 2019, spending on state higher education as a share of total state expenditures has declined by 1.5%.[2,3] 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.[4] 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 (2006-2021). **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 $113.2 billion in fiscal year 2021, with more than $3.7 billion in federal stimulus funding. Federal stimulus funding in 2021 comprised just 3.2% of total support but increased 185.8% from fiscal year 2020.[5] States contributed $101.0 billion, and local governments in 32 states contributed $12.2 billion, representing increases of 3.6% and 4.2%, respectively. The largest funding source was state tax appropriations, which accounted for $92.0 billion or 81.3% of total funding as shown in *Figure 1.1*. Non-tax support (mostly from state lotteries) increased 6.0% and totaled more than $4.4 billion. Non-appropriated support, state-funded endowments, and other sources of state funding

2. National Association of State Budget Officers. (2021). *State expenditure report: Fiscal years 2019-2021.* www.nasbo.org/reports-data/state-expenditure-report
3. Unlike the SHEF data, NASBO expenditures exclude employer contributions to pensions and health benefits. NASBO defines state general funds as the majority fund for financing a state's operations with revenues received from broad-based state taxes, such as personal and corporate income tax and sales tax.
4. Delaney, J., & Doyle, W. (2011). State spending on higher education: Testing the balance wheel over time. *Journal of Education Finance, 36*(4). www.jstor.org/stable/23018116
5. Federal stimulus funding is provided to state governments to stabilize state and local sources of revenue for higher education. It includes funds from the American Recovery and Reinvestment Act (ARRA) during the Great Recession, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act, the 2020 Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, and the 2021 American Rescue Plan (ARP) during the COVID-19 pandemic. Federal stimulus must be state allocated and excludes aid provided directly to institutions such as the Higher Education Emergency Relief Fund (HEERF).

contributed an additional $1.5 billion, an increase of 34.1% from 2020. This increase was entirely due to a 63.6% increase in endowment funds, and 98.0% of the net increase in endowment was due to a $410.9 million increase in Texas.

TABLE 1.1

SOURCES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2006-2021 (UNADJUSTED DOLLARS, IN MILLIONS)

SOURCE	2006	2011	2016	2019	2020	2021	2021 % DISTRIBUTION
FEDERAL STIMULUS	$-	$2,840	$-	$-	$1,286	$3,677	3.2%
TAX APPROPRIATIONS	$67,409	$73,102	$79,643	$87,723	$91,129	$91,997	81.3%
NON-TAX SUPPORT	$2,324	$3,088	$3,375	$4,007	$4,187	$4,436	3.9%
NON-APPROPRIATED SUPPORT	$121	$79	$116	$142	$166	$130	0.1%
STATE-FUNDED ENDOWMENT EARNINGS	$303	$387	$603	$641	$659	$1,079	1.0%
OTHER	$218	$550	$189	$240	$282	$278	0.2%
FUNDS NOT AVAILABLE FOR USE	$43	$834	$54	$63	$204	$551	0.5%
TOTAL STATE SUPPORT	$70,331	$79,212	$83,872	$92,690	$97,506	$101,045	89.3%
LOCAL TAX APPROPRIATIONS	$7,072	$8,960	$9,777	$11,235	$11,660	$12,152	10.7%
TOTAL STATE AND LOCAL SUPPORT	**$77,404**	**$88,172**	**$93,649**	**$103,925**	**$109,166**	**$113,197**	**100.0%**
TOTAL STATE AND LOCAL SUPPORT (NO STIMULUS)	**$77,404**	**$85,332**	**$93,649**	**$103,925**	**$107,879**	**$109,520**	**96.8%**

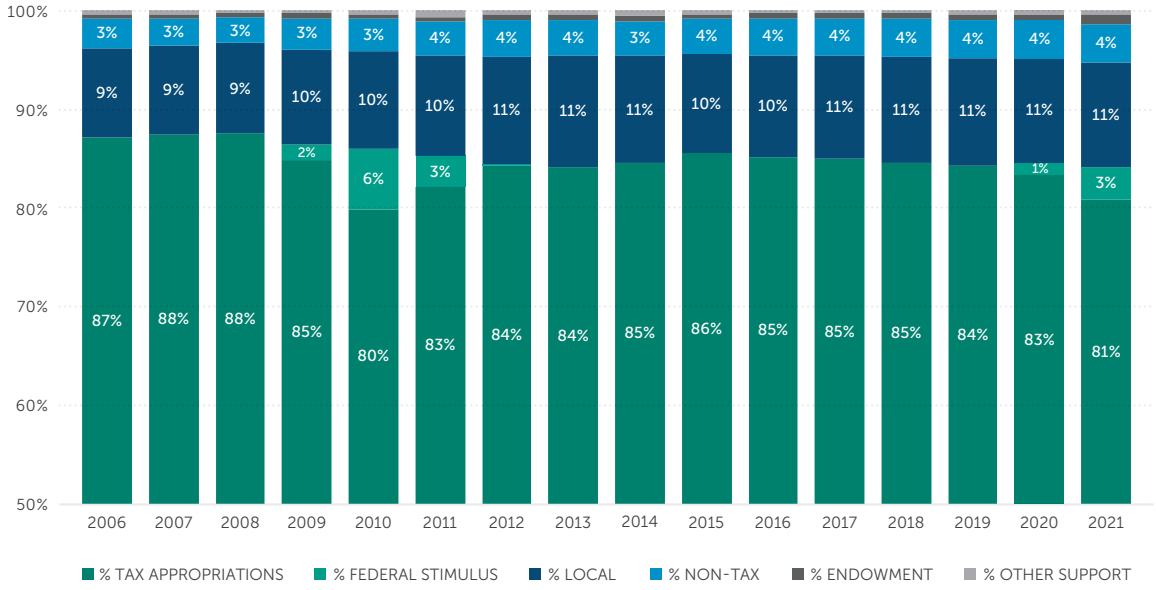
NOTES:

1. Federal stimulus funding is provided to state governments to stabilize state and local sources of revenue for higher education. It includes funds from the American Recovery and Reinvestment Act (ARRA) during the Great Recession, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act, the 2020 Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, and the 2021 American Rescue Plan (ARP) during the COVID-19 pandemic. Federal stimulus must be state allocated and excludes aid provided directly to institutions (such as HEERF).
2. Other includes multiyear appropriations from previous years and funds not classified in one of the other source categories.
3. Funds not available for use include appropriations that were returned to the state, and portions of multiyear appropriations to be spread over other years.
4. Total state and local support is the sum of federal stimulus funds, state and local 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

DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING SOURCES, U.S., FY 2006-2021



NOTES:

1. Tax appropriations are any appropriations from state government taxes to institutions for operations and other higher education activities.
2. Federal stimulus funding is provided to state governments to stabilize state and local sources of revenue for higher education. It includes funds from the American Recovery and Reinvestment Act (ARRA) during the Great Recession, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act, the 2020 Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, and the 2021 American Rescue Plan (ARP) during the COVID-19 pandemic. Federal stimulus must be state allocated and excludes aid provided directly to institutions (such as HEERF).
3. Local appropriations are the sum of tax appropriations from any government entity below the state level to public institutions for operating expenses. Local appropriations do not include grants from local nonprofit organizations such as chambers of commerce and charitable foundations.
4. Non-tax support includes any appropriated non-tax state support set aside by the state for higher education. This may include, but is not limited to, allocations from lotteries (including lottery scholarships), tobacco settlements, casinos, or other gaming sources.
5. In all years, state-funded endowment earnings and other sources accounted for less than 1% of total state and local funding for higher education. Other sources include non-appropriated funds, multiyear appropriations from previous years, and funds not classified in one of the other source categories.

SOURCE: State Higher Education Executive Officers Association

2. STATE COMPARISONS

While the distribution of state and local higher education funding sources varies across the nation, almost all states are heavily reliant on state tax appropriations to fund higher education.[6] In fiscal year 2020, four states (Massachusetts, North Dakota, Rhode Island, and Washington) relied on tax appropriations as their only major source of state and local funding for higher education. Due to federal stimulus funding allocated by states to higher education, no states relied solely on tax appropriations as their major source of state and local funding in fiscal year 2021. Additionally, the number of states relying on state tax appropriations for at least 75% of their funding decreased from 45 to 41.

6. See *Table 1.2* available online at shef.sheeo.org/report/?report_page=sources-and-uses-of-funding.

Colorado and Arizona are the only states where the majority of higher education funding did not come from state tax appropriations in 2021. In Colorado, 39.0% of higher education funding came from federal stimulus funding and only 49.4% came from tax appropriations. In years when federal stimulus funds have not been used, Colorado has relied on tax appropriations for 90.9% of their funding, on average.[7] Nearly half (46.0%) of higher education funding in Arizona came from local appropriations. Kansas and Michigan were the only other states that relied on local appropriations for at least 20% of higher education funding. Eighteen states and Washington, D.C., received no local tax appropriations for higher education.[8]

Several southern states with financial aid programs funded from lottery dollars were also less reliant on tax appropriations. Florida, Georgia, Kentucky, and South Carolina relied on non-tax support for at least 20% of higher education funding. Meanwhile, 24 states and Washington, D.C., had no non-tax support.

Endowments, non-appropriated support, and other sources of state revenue made up 1% or less of higher education funding in all but 12 states and Washington, D.C. In Arizona, Oklahoma, Texas, and Washington, D.C., these revenue sources made up more than 5% of higher education support.

Federal stimulus funding provided to state governments in 2021 was used for higher education in all but five states. These funds comprised less than 5% of total state and local support in 32 states. Five states (Colorado, Minnesota, New Hampshire, Vermont, and Wyoming) and Washington, D.C., relied on federal stimulus funding for more than 20% of higher education funding in 2021.

Two 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.[9]

1. Many states are increasingly reliant on local appropriations. Over the last 15 years, the proportion of total higher education funding from local appropriations has increased in 26 states. In five states (Arizona, Kansas, Nebraska, New Mexico, and Texas), the proportion of total higher education funding derived from local appropriations has increased by at least 5 percentage points since 2006.

2. Similarly, 18 states had increases in non-tax appropriations from 2006 to 2021. In five southern states (Arkansas, Florida, Kentucky, South Carolina, and Tennessee), all with sizable lottery-funded student financial aid programs, non-tax support as a proportion of total funding increased by more than 5 percentage points over the last 15 years.

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 (2006-2021). **As with the prior section, this section's funding amounts are not adjusted for inflation or enrollment.** However, unlike the prior section, federal stimulus funding is *not included* in the uses of state and local funding.

7. See the State Spotlight on Colorado for more information.
8. In Washington, D.C., district taxes are classified as state tax appropriations, not local support.
9. shef.sheeo.org

1. NATIONAL TRENDS

Table 1.3 shows that, nationally, funds allocated to support general public operations at public institutions increased 0.9% in 2021, representing 78.1% ($85.6 billion) of state and local higher education funding. General public operations include funding directly used to support instruction at two- and four-year public institutions as well as funding to state higher education agencies.

Agency funding is the allocation of operating funds to state-funded, state-level coordinating and governing bodies. These funds have always been included in general public operations but were not available as a breakout until 2019. In 2021, states provided $1.5 billion in agency funding (1.8% of all general public operations).

Other uses of funding include:

- Special purpose appropriations for research, agricultural extension programs, public health care services, and medical education (RAM). RAM funds have decreased 0.3% since 2020 to $11.1 billion—10.1% of total state and local support.
- Student financial aid increased 7.5% to $12.2 billion—11.2% of total support—from 2020 to 2021. Nearly 80% of total student aid was allocated to students attending public institutions.
- Operating support for independent (private) institutions increased 8.4% to $247.3 million, and support for non-credit and continuing education increased 0.7% to $387.8 million. Together, these uses of state and local funding constitute 0.6% of higher education funding.

TABLE 1.3

USES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2006-2021 (UNADJUSTED DOLLARS, IN MILLIONS)

USE	2006	2011	2016	2019	2020	2021	2021 % DISTRIBUTION
GENERAL PUBLIC OPERATIONS	$60,828	$66,075	$73,759	$82,221	$84,763	$85,559	78.1%
AGENCY FUNDING	N/A	N/A	N/A	$1,705	$1,897	$1,515	1.4%
RESEARCH - AGRICULTURE - MEDICAL (RAM)	$9,181	$9,874	$9,959	$10,401	$11,118	$11,089	10.1%
STATE PUBLIC FINANCIAL AID	$4,534	$6,487	$7,182	$8,407	$9,012	$9,766	8.9%
OUT-OF-STATE STUDENT AID	$36	$42	$38	$38	$38	$38	0.0%
INDEPENDENT STUDENT AID	$2,293	$2,336	$2,227	$2,230	$2,310	$2,398	2.2%
INDEPENDENT OPERATING SUPPORT	$263	$196	$196	$219	$228	$247	0.2%
NON-CREDIT AND CONTINUING EDUCATION	$266	$322	$287	$387	$385	$388	0.4%
TOTAL STUDENT FINANCIAL AID	$6,865	$8,865	$9,447	$10,697	$11,384	$12,237	11.2%
TOTAL INDEPENDENT SUPPORT	$2,556	$2,533	$2,423	$2,449	$2,538	$2,646	2.4%
TOTAL STATE AND LOCAL SUPPORT (NO STIMULUS)	**$77,404**	**$85,332**	**$93,649**	**$103,925**	**$107,879**	**$109,520**	**100.0%**

NOTES:

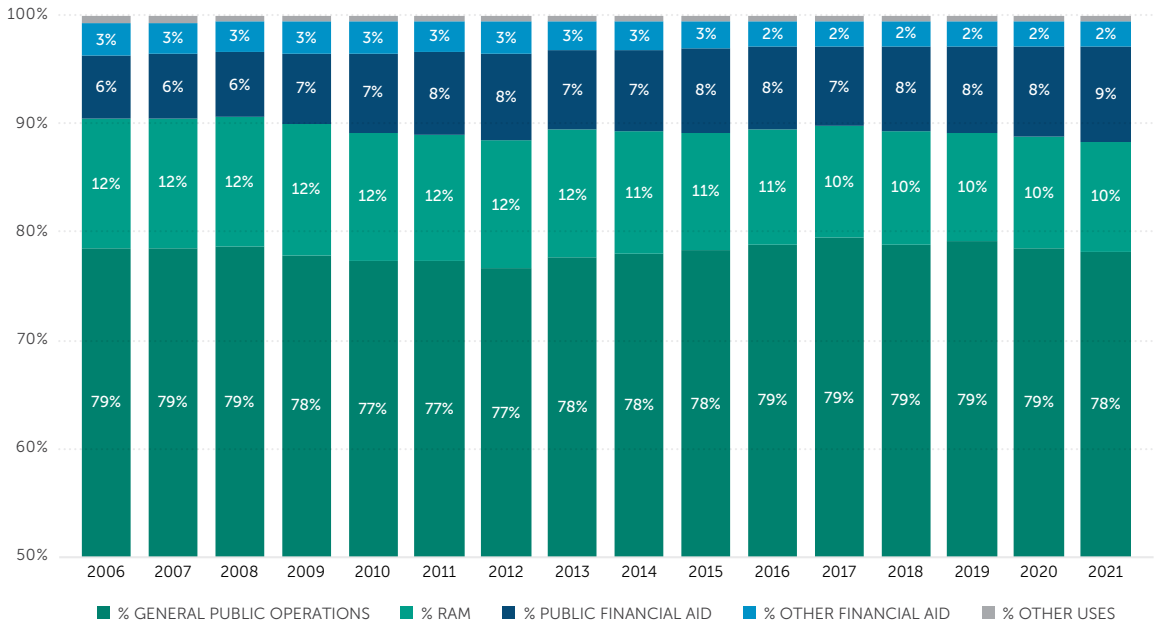
1. General public operations are any state and local support for public higher education institutions and agencies, excluding RAM, financial aid, and non-credit and continuing education. Federal stimulus funding is not included.
2. Agency funding is included in general public operations, and is the allocation of operating funds to state-funded, state-level coordinating and governing bodies.
3. RAM refers to the total appropriations intended for the direct operations of research, agriculture, public health care services, and medical schools.
4. Total student financial aid is the sum of any state appropriated student financial aid for public, independent, and out-of-state institutions, excluding loans. Financial aid for students attending medical institutions is included in total student financial aid but excluded from all other student aid categories.
5. Total independent support is the sum of state funds for private institutions (independent student aid and independent operating support).
6. Total state and local support is the sum of 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. Federal stimulus funding is not included.

SOURCE: State Higher Education Executive Officers Association

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. *Figure 1.3* shows that the most significant change in uses of higher education funding is the portion of funding allocated to public financial aid, which increased from 5.9% in 2006 to 8.9% of all state and local support in 2021. Additionally, financial aid to students attending independent or out-of-state institutions declined by nearly 1 percentage point (0.8) over that same time frame and now accounts for 2.2% of state and local support.

FIGURE 1.3

DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING USES, U.S., FY 2006-2021



NOTES:

1. General public operations are any state and local support for public higher education institutions and agencies, excluding RAM, financial aid, and non-credit and continuing education. Federal stimulus funding is not included.
2. RAM refers to the total appropriations intended for the direct operations of research, agriculture, public health care services, and medical schools.
3. Other financial aid includes any state appropriated student financial aid to students attending independent (private) or out-of-state institutions.
4. In all years, other uses accounted for less than 1% of total state and local funding for higher education. Other uses include funding for non-credit and independent operating.

SOURCE: State Higher Education Executive Officers Association

2. STATE COMPARISONS

Across the states, there is significant variation in the uses of state and local funding for higher education.[10] All but one state, Louisiana, allocated at least half of all funding to general public operations in fiscal year 2021 (Louisiana was one of a few states to allocate large proportions of state and local funding to both RAM and student financial aid). In 22 states and Washington, D.C., at least 80% of funding was allocated for public institutions' general operations. However, over the last 15 years, the proportion of funding allocated to general public operations decreased in 36 states.

10. See *Table 1.4*, available online at shef.sheeo.org/report/?report_page=sources-and-uses-of-funding

Forty-five states reported agency funding in fiscal year 2021. Agency allocations ranged from 0.02% of all support in Montana to 13.9% in Idaho, and accounted for less than 1% of all support in 27 states. Five states (Alaska, Maine, Michigan, Rhode Island, and Vermont) and Washington, D.C., reported no agency funding. States may not have agency funding if they do not have a statewide board for higher education (like in Michigan), or if systems of institutions allocate their own funding for system-level agency operations from their general budgets (as in Maine).

All but one state (Rhode Island) provided state and local support for direct operations of research, agriculture, public health care services, and medical schools (RAM). Thirty-two states and Washington, D.C., allocated at least 10% of funding to these areas in 2021, with Mississippi and West Virginia allocating more than 25% of total funding to RAM.

The proportion of state support for student financial aid ranged from 0.8% in Arizona to 34.5% in South Carolina. Only Arizona and Hawaii allocated less than 1% of funding to student financial aid. Seven states (Colorado, Georgia, Kentucky, Louisiana, South Carolina, Tennessee, and Washington) allocated at least 20% of funding to financial aid.[11] From 2006 to 2021, 39 states increased the proportion of total state and local support they appropriated to student financial aid.

Support for independent (private) institutions is generally one of the smallest allocations of state and local funding. While 45 states provided funding to independent institutions, only three states (Kentucky, Pennsylvania, and South Carolina) gave more than 6% of funding to these institutions in 2021. In most states, funding for independent institutions was predominantly allocated to student financial aid rather than institutional operating appropriations. Only two states, Maryland (75.6%) and Alabama (69.6%), allocated more than 50% of support for independent institutions to institutional operating.

11. Indiana allocated 19.997% of state and local support to funding student financial aid, which rounds to 20.0% in *Table 1.3*.

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 forward, the SHEF report highlights trends in higher education revenue and enrollment for **public institutions** only.

Several derived metrics are analyzed throughout the report, first at the U.S. level and then across states and sectors.[12] These metrics are net full-time equivalent (FTE) enrollment, general public operations, state public financial aid, education appropriations, net tuition and fee revenue, total education revenue, and student share. Each metric is defined in *Table 2.1* and explained in more detail in the 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 net FTE enrollment) and are **modified using three adjustments**:[13]

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

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

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).

OVERVIEW: TRENDS OVER TIME

1. NATIONAL TRENDS

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 and fee 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), education appropriations increased 4.1% over 2020. Both subcomponents of education appropriations also increased, 8.4% for state public financial aid and just 0.9% for general public operations. Net tuition revenue (tuition and fees net of state and institutional aid and medical tuition) decreased 3.6%.

12. 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 FTEs across the 50 states. It is not the average of each of the 50 states' individual per-FTE calculations.

13. These adjustments are described in more detail on the data definitions page of the SHEF website (shef.sheeo.org/data-definitions).

The middle section of *Table 2.1* shows that the Higher Education Cost Adjustment (HECA), a measure of inflation in service industries, increased 2.7% from 2020 to 2021. After applying HECA and therefore removing any increases due to inflation, state public financial aid increased 5.5%, while general public operations decreased 1.7%, and net tuition revenue decreased 6.1%.

The changes described above may be misleading if not contextualized with changes in net FTE enrollment, shown in the final section of *Table 2.1*. In the last year, enrollment declined 3.0%, or about 324,000 FTE students. This is the largest enrollment decline since the beginning of the SHEF dataset in 1980, both in percentage and total number. After adjusting for both inflation and enrollment, we see that education appropriations increased 4.5% (financial aid increased 8.8%, general public operations increased 1.3%), while net tuition revenue decreased 3.2%, and total education revenue increased 1.1%.

This year marks the second-largest ever decrease in inflation-adjusted net tuition revenue per FTE. Since the SHEF dataset began in 1980, net tuition revenue per FTE has only declined five times: in 2000 (2.7%), 2001 (1.2%), 2019 (3.6%), 2020 (0.2%), and now (3.2%). This year's decline is partially, but not entirely, explained by state public financial aid increases, which are removed from net tuition revenue.

Education appropriations and total education revenue described here and reported in *Table 2.1* include federal stimulus funding in fiscal years 2020 and 2021. Excluding federal stimulus funding, inflation-adjusted education appropriations per FTE increased 2.0%, and total education revenue declined 0.3%.

MEASUREMENT NOTE: FEDERAL STIMULUS FUNDING

The SHEF report includes federal stimulus funding allocated to states for higher education to stabilize state and local sources of funding for higher education and provide additional resources during the COVID-19 pandemic in fiscal years 2020 and 2021. Federal stimulus included in the SHEF report includes any state allocated GEERF, CRF, or State and Local Fiscal Recovery Funds, and excludes aid provided directly to institutions (such as HEERF). Federal stimulus funds were generally reported in the year(s) in which they were expended. State- and sector-level state and local support, education appropriations, and total education revenue include federal stimulus funding. Federal stimulus funding for private institution operations is excluded from education appropriations and total education revenue. Federal stimulus is not included in state public financial aid, general public operations, or state public operating.

TABLE 2.1

IMPACT OF INFLATION AND ENROLLMENT ON SHEF METRICS, U.S., FY 1980-2021

	1980	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001	% CHANGE SINCE 1980
CURRENT UNADJUSTED DOLLARS (MILLIONS)											
STATE PUBLIC FINANCIAL AID	N/A	$2,834	$6,487	$7,182	$9,012	$9,766	8.4%	36.0%	50.5%	244.6%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$53,298	$66,075	$73,759	$84,763	$85,559	0.9%	16.0%	29.5%	60.5%	N/A
EDUCATION APPROPRIATIONS	$16,134	$56,107	$75,401	$80,942	$94,981	$98,872	4.1%	22.2%	31.1%	76.2%	512.8%
NET TUITION REVENUE	$4,264	$22,816	$54,644	$69,879	$73,910	$71,264	-3.6%	2.0%	30.4%	212.3%	1571.4%
TOTAL EDUCATION REVENUE	**$20,398**	**$78,812**	**$129,492**	**$150,063**	**$167,939**	**$169,175**	**0.7%**	**12.7%**	**30.6%**	**114.7%**	**729.4%**
CONSTANT INFLATION ADJUSTED DOLLARS (MILLIONS)											
HECA	0.2597	0.6203	0.8158	0.8932	0.9740	1.0000	2.7%	12.0%	22.6%	61.2%	285.1%
STATE PUBLIC FINANCIAL AID	N/A	$4,568	$7,952	$8,041	$9,253	$9,766	5.5%	21.4%	22.8%	113.8%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$85,924	$80,993	$82,576	$87,029	$85,559	-1.7%	3.6%	5.6%	-0.4%	N/A
EDUCATION APPROPRIATIONS	$62,137	$90,452	$92,425	$90,617	$97,520	$98,872	1.4%	9.1%	7.0%	9.3%	59.1%
NET TUITION REVENUE	$16,421	$36,783	$66,981	$78,232	$75,886	$71,264	-6.1%	-8.9%	6.4%	93.7%	334.0%
TOTAL EDUCATION REVENUE	**$78,559**	**$127,055**	**$158,729**	**$168,001**	**$172,428**	**$169,175**	**-1.9%**	**0.7%**	**6.6%**	**33.2%**	**115.3%**
CONSTANT INFLATION ADJUSTED DOLLARS (PER FTE)											
FTE ENROLLMENT	6,852,242	8,709,255	11,654,967	11,085,435	10,924,333	10,600,381	-3.0%	-4.4%	-9.0%	21.7%	54.7%
STATE PUBLIC FINANCIAL AID	N/A	$525	$682	$725	$847	$921	8.8%	27.0%	35.0%	75.6%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$9,866	$6,949	$7,449	$7,967	$8,071	1.3%	8.4%	16.1%	-18.2%	N/A
EDUCATION APPROPRIATIONS	$9,068	$10,386	$7,930	$8,174	$8,927	$9,327	4.5%	14.1%	17.6%	-10.2%	2.9%
NET TUITION REVENUE	$2,396	$4,223	$5,747	$7,057	$6,946	$6,723	-3.2%	-4.7%	17.0%	59.2%	180.5%
TOTAL EDUCATION REVENUE	**$11,465**	**$14,588**	**$13,619**	**$15,155**	**$15,784**	**$15,959**	**1.1%**	**5.3%**	**17.2%**	**9.4%**	**39.2%**

NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. State public financial aid is the part of education appropriations used for student financial aid at public institutions, excluding loans and aid for students attending medical schools.
3. General public operations are any state and local support for public higher education institutions and agencies, excluding RAM, financial aid, and non-credit and continuing education. Federal stimulus funding is not included.
4. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
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. Total education revenue includes federal stimulus funding.
7. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.
8. The Higher Education Cost Adjustment (HECA) estimates inflation in the costs paid by colleges and universities. HECA adjusts for inflation from the state perspective.

SOURCE: State Higher Education Executive Officers Association

2. SECTOR TRENDS

Modeled after the previous section, *Table 2.1A* shows the impacts of inflation and enrollment on sector-level revenue at public institutions. Currently, only data for 2019 through 2021 are available. In future years, this table will expand to show longer trends over time.

Between 2020 and 2021, in unadjusted dollars, total education appropriations increased 7.0% at two-year institutions and 2.3% at four-year institutions. Sector-level education appropriations consist of state public financial aid, state public operating appropriations, and local appropriations. State public financial aid was largely flat at two-year institutions (a 0.8% increase) but increased 10.0% at four-year institutions. State public operating appropriations increased 6.0% at two-year institutions but declined 1.1% at four-year institutions. Local appropriations, which primarily support community colleges, increased 4.3% and 0.9% at two- and four-year institutions, respectively. Four-year institutions also receive research, agriculture, and medical (RAM) appropriations, which declined 0.3% from 2020.

The sector-level data show that the national decline in net tuition revenue is larger at two-year public institutions; unadjusted net tuition revenue declined 5.2% at two-year institutions compared to 3.2% at four-year institutions. Note that this difference is largely due to the greater enrollment decline in the two-year sector.

The second section of *Table 2.1A* shows that state public financial aid failed to keep up with inflation at two-year institutions (a 1.8% decline), while all other components of state support increased after adjusting for inflation. At four-year institutions, the opposite was true—state public financial aid was the only area to increase (7.1%) while all other components of state support declined after adjusting for inflation.

These differences are partially, but not entirely, explained by differing enrollment trends across the sectors. Net FTE enrollment declined 6.1% at two-year institutions compared to only 0.9% at four-year institutions. After considering changes in net FTE enrollment in the third section of the table, we see that in constant inflation-adjusted dollars per FTE enrollment:

- State public financial aid per FTE increased by $22 (4.6%) at two-year institutions and $86 (8.1%) at four-year institutions.
- State public operating per FTE increased $512 (10.0%) at two-year institutions and decreased $209 (2.7%) at four-year institutions.
- Local appropriations per FTE increased $225 (8.2%) at two-year institutions and were flat (less than $1 per FTE, or a 0.8% decline) at four-year institutions.
- Research, agricultural extension, and medical appropriations only available to four-year institutions decreased by $34 (2.0%) per FTE.
- Total state and local support per FTE increased by $925 (11.0%) at two-year institutions and only $21 (0.2%) at four-year institutions
- Net tuition revenue per FTE declined by $44 (1.7%) at two-year institutions and $472 (4.8%) at four-year institutions.
- Total education revenue per FTE increased $880 (8.0%) at two-year institutions and decreased $418 (2.3%) at four-year institutions.

Additional analysis of sector-level trends on these metrics can be found throughout the remainder of the SHEF report.

TABLE 2.1A

IMPACT OF INFLATION AND ENROLLMENT ON SHEF METRICS BY SECTOR, U.S., FY 2019-2021

	TWO-YEAR					FOUR-YEAR				
CURRENT UNADJUSTED DOLLARS (MILLIONS)	**2019**	**2020**	**2021**	**% CHANGE SINCE 2020**	**% CHANGE SINCE 2019**	**2019**	**2020**	**2021**	**% CHANGE SINCE 2020**	**% CHANGE SINCE 2019**
STATE PUBLIC FINANCIAL AID	$1,896	$2,043	$2,059	0.8%	8.6%	$6,352	$6,786	$7,465	10.0%	17.5%
STATE PUBLIC OPERATING	$21,276	$21,519	$22,810	6.0%	7.2%	$47,576	$49,163	$48,638	-1.1%	2.2%
LOCAL APPROPRIATIONS	$11,109	$11,532	$12,023	4.3%	8.2%	$126	$128	$129	0.9%	2.0%
RAM	$-	$-	$-	N/A	N/A	$10,401	$11,118	$11,089	-0.3%	6.6%
STATE AND LOCAL SUPPORT	$34,280	$35,294	$37,759	7.0%	10.1%	$64,477	$67,940	$69,246	1.9%	7.4%
EDUCATION APPROPRIATIONS	$34,280	$35,294	$37,759	7.0%	10.1%	$54,054	$56,798	$58,123	2.3%	7.5%
NET TUITION REVENUE	$11,566	$11,100	$10,521	-5.2%	-9.0%	$61,906	$62,993	$60,981	-3.2%	-1.5%
TOTAL EDUCATION REVENUE	**$45,752**	**$46,300**	**$48,185**	**4.1%**	**5.3%**	**$115,151**	**$118,930**	**$118,234**	**-0.6%**	**2.7%**
CONSTANT INFLATION ADJUSTED DOLLARS (MILLIONS)										
HECA	0.9566	0.9740	1.0000	2.7%	4.5%	0.9566	0.9740	1.0000	2.7%	4.5%
STATE PUBLIC FINANCIAL AID	$1,981	$2,097	$2,059	-1.8%	3.9%	$6,640	$6,967	$7,465	7.1%	12.4%
STATE PUBLIC OPERATING	$22,240	$22,095	$22,810	3.2%	2.6%	$49,732	$50,477	$48,638	-3.6%	-2.2%
LOCAL APPROPRIATIONS	$11,612	$11,840	$12,023	1.5%	3.5%	$132	$131	$129	-1.8%	-2.4%
RAM	$-	$-	$-	N/A	N/A	$10,873	$11,416	$11,089	-2.9%	2.0%
STATE AND LOCAL SUPPORT	$35,833	$36,237	$37,759	4.2%	5.4%	$67,399	$69,756	$69,246	-0.7%	2.7%
EDUCATION APPROPRIATIONS	$35,833	$36,237	$37,759	4.2%	5.4%	$56,504	$58,317	$58,123	-0.3%	2.9%
NET TUITION REVENUE	$12,090	$11,397	$10,521	-7.7%	-13.0%	$64,711	$64,677	$60,981	-5.7%	-5.8%
TOTAL EDUCATION REVENUE	**$47,825**	**$47,537**	**$48,185**	**1.4%**	**0.8%**	**$120,369**	**$122,109**	**$118,234**	**-3.2%**	**-1.8%**
CONSTANT INFLATION ADJUSTED DOLLARS (PER FTE)										
FTE ENROLLMENT	4,393,411	4,302,763	4,039,641	-6.1%	-8.1%	6,597,299	6,622,142	6,560,746	-0.9%	-0.6%
STATE PUBLIC FINANCIAL AID	$451	$487	$510	4.6%	13.0%	$1,006	$1,052	$1,138	8.1%	13.0%
STATE PUBLIC OPERATING	$5,062	$5,135	$5,647	10.0%	11.5%	$7,538	$7,623	$7,414	-2.7%	-1.7%
LOCAL APPROPRIATIONS	$2,643	$2,752	$2,976	8.2%	12.6%	$20	$20	$20	-0.8%	-1.8%
RAM	$-	$-	$-	N/A	N/A	$1,648	$1,724	$1,690	-2.0%	2.6%
STATE AND LOCAL SUPPORT	$8,156	$8,422	$9,347	11.0%	14.6%	$10,216	$10,534	$10,555	0.2%	3.3%
EDUCATION APPROPRIATIONS	$8,156	$8,422	$9,347	11.0%	14.6%	$8,565	$8,806	$8,859	0.6%	3.4%
NET TUITION REVENUE	$2,752	$2,649	$2,604	-1.7%	-5.4%	$9,809	$9,767	$9,295	-4.8%	-5.2%
TOTAL EDUCATION REVENUE	**$10,886**	**$11,048**	**$11,928**	**8.0%**	**9.6%**	**$18,245**	**$18,440**	**$18,021**	**-2.3%**	**-1.2%**

NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses.
2. State public operating appropriations are a measure of state support directly allocated to public two- and four-year institutions. State public operating excludes local appropriations, agency funding, RAM, and student financial aid.
3. Local appropriations are any local government taxes allocated directly to institutions for operating expenses.
4. RAM refers to the total appropriations intended for the direct operations of research, agriculture, public health care services, and medical schools.
5. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.
6. 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.
7. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.
8. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
9. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
10. The Higher Education Cost Adjustment (HECA) estimates inflation in the costs paid by colleges and universities. HECA adjusts for inflation from the state perspective.

SOURCE: State Higher Education Executive Officers Association

EDUCATION APPROPRIATIONS AND TUITION REVENUE

The historical data in *Figure 2.1* (the wave chart) demonstrate the economic cycle's impact on **public** higher education revenue from 1996 to 2021. An interactive version of this figure with data back to 1980 is available online.[14] **From this point forward, all dollar figures in the SHEF report are adjusted for inflation and net FTE enrollment.**

1. NATIONAL TRENDS

The **red line** in the wave chart shows FTE enrollment over the last 25 years, which has broadly increased over time from 6.85 million in 1980 to 10.6 million in 2021.[15] Historically, enrollment increased sharply during economic recessions and would level off or decline during economic recoveries. This pattern held during the Great Recession as enrollment increased sharply from 2008 through 2011, and then slowly declined for most of the next decade as state economies recovered. However, the COVID-19 pandemic and ensuing economic recession in 2020 altered the traditional counter-cyclical enrollment trend. Instead of an increase from fiscal years 2020 to 2021, enrollment dropped a full 3.0%, the largest decline on record. In 2021, public institutions enrolled 10,600,381 FTE students, down 9.0% from the peak in 2011, but still 3.3% above 2008 levels.

The **blue bars** show change over time in education appropriations per FTE enrolled student. State education appropriations are made up of general operating funds for public institutions, state public financial aid, and state agency funding. The bars make the shape of a wave over time because per-student education appropriations generally fluctuate with the economic cycle. Education appropriations also include federal stimulus funding during the last two economic recessions. **In 2020, federal stimulus funding for public institutions accounted for 1.3% of total education appropriations ($113 per FTE). In 2021, this amount increased to 3.6% ($335 per FTE).**

At the start of the SHEF dataset in 1980, states provided, on average, $9,068 per FTE in education appropriations to public institutions. From there, funding for higher education changed in response to the economic cycle, declining during economic recessions but overall growing (on a per-FTE basis) during the next two decades. In fiscal year 2000, education appropriations reached an inflation-adjusted high of $10,489 per FTE. Since that peak, however, education appropriations have declined, down 11.1% ($1,162 per student) over the last 21 years.

The downward trend in education appropriations has not been linear. Funding reached a record low of $7,232 per FTE in 2012 following declines during the Great Recession. Since that time, **appropriations have increased for nine consecutive years.** Over the last year, education appropriations increased 4.5% beyond inflation ($400 per FTE) to $9,327. This represents the largest increase in state funding since 2014, when state funding increased 4.8% in one year following the steep cuts of the Great Recession.

Overall, appropriations have increased 29.0%, or $2,095 per FTE, since the low point in 2012. Nine years after the all-time low in state funding, education appropriations in 2021 are now only 1.2% ($112 per FTE) below pre-recession funding levels in 2008. This year's increase in education appropriations can be attributed to three notable trends:

14. Visit the SHEF website (shef.sheeo.org) for a fully interactive version of *Figure 2.1*.
15. The funding levels and trends over time shown in the U.S. wave chart differ substantially by state.

1. Increasing state commitments to higher education funding.
2. A sharp decline in FTE enrollment.
3. Federal stimulus funding given to states to protect their revenues and support additional costs due to the COVID-19 pandemic and economic recession.

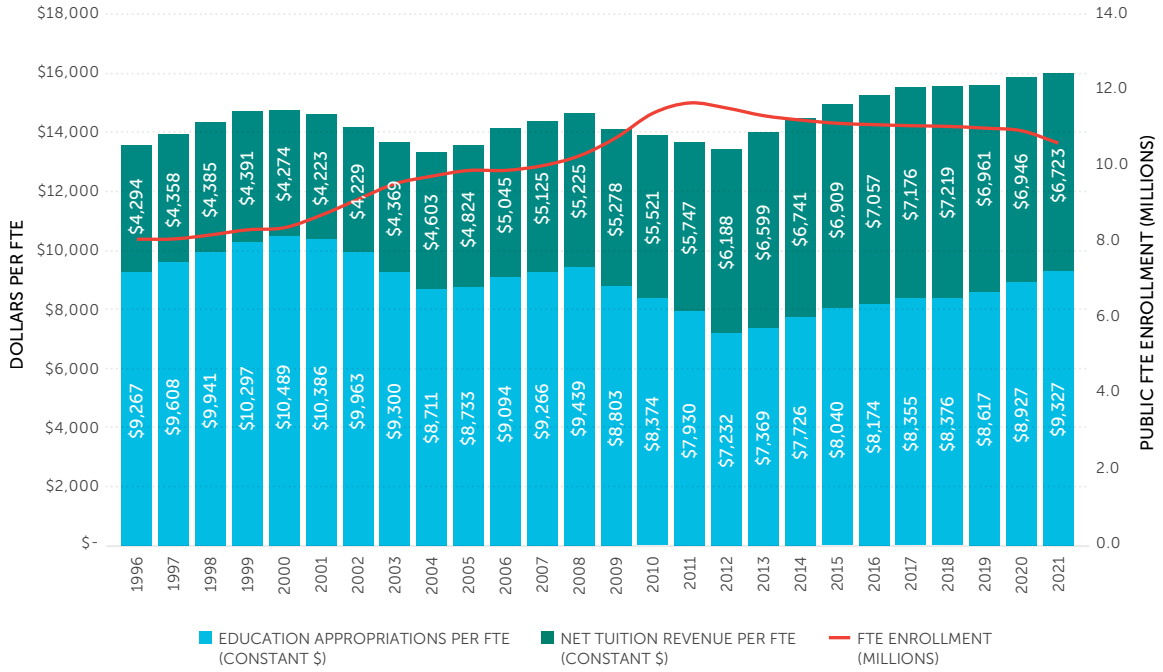
The **green bars** in *Figure 2.1* show net tuition revenue per FTE over time. Net tuition revenue measures tuition and fee revenue at public institutions, excluding state and institutional financial aid. Unlike education appropriations, net tuition has increased steadily over time, with an average annual net increase of 2.6% above inflation since 1980.

However, after reaching an all-time high in 2018, tuition revenue per FTE has decreased for three consecutive years: 3.6% in 2019, 0.2% in 2020, and 3.2% in 2021. Notably, this is only the second time period in which there have been declines in net tuition revenue per FTE since the SHEF dataset began in 1980. Prior to the last two years, the only times net tuition revenue per FTE declined were fiscal years 2000 and 2001, two years immediately preceding an economic recession. The fiscal year 2021 decline is partially, but not entirely, explained by increases in state public financial aid (which is excluded from net tuition revenue). In 2021, public institutions received, on average, $6,723 per FTE in net tuition revenue.

The **total of the bars** in the wave chart shows the approximate total education revenue available to public institutions on a per-student level. Total education revenue combines the two primary funding sources for public higher education—education appropriations and net tuition. In 2021, total education revenue increased 1.1% to $15,959 per FTE, an all-time high. On average, institutions have more than made up for prior recessionary declines in education appropriations by increasing net tuition revenue.

FIGURE 2.1

PUBLIC FTE ENROLLMENT, EDUCATION APPROPRIATIONS PER FTE, AND NET TUITION REVENUE PER FTE, U.S., FY 1996-2021 (CONSTANT DOLLARS)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
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. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
4. Constant 2021 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association

Economic recessions profoundly impact state funding for higher education. Higher education is viewed as a discretionary item in state budgets and, traditionally, has been disproportionately cut compared to other state budget areas.[16] During economic recessions prior to 2020, state funding declined as states either cut funding to higher education or failed to keep up with inflation and enrollment increases. Over time, funding declines due to economic recessions have chipped away at the base of state support for higher education.

Figure 2.2 provides a more detailed look at the impact of economic recessions on state higher education appropriations. In this figure, we begin each recessionary period at zero and track the cumulative percentage change over the course of the economic recession and recovery. With each recession until the most recent one in 2020, state support declines per FTE grew steeper and recoveries became slower and incomplete. However, the trend of education appropriations declining immediately following an economic recession has reversed this year, after there was no

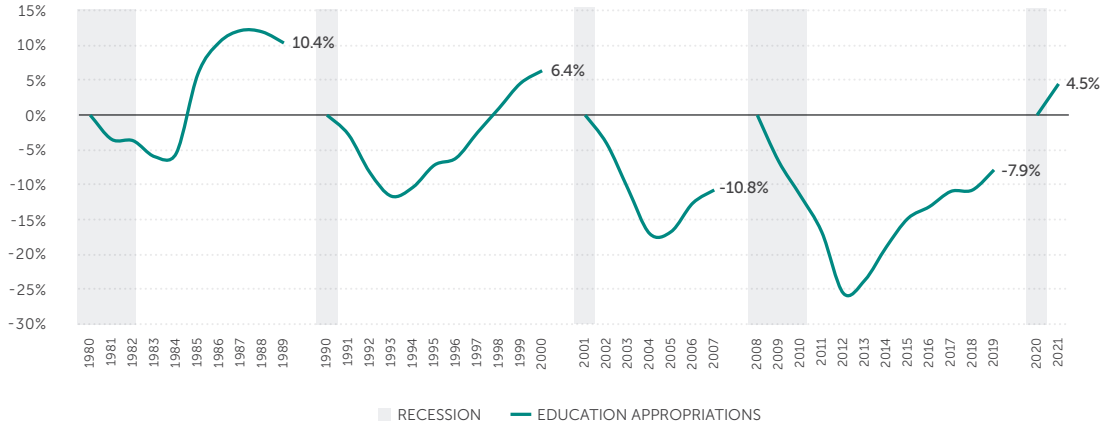
16. Delaney, J., & Doyle, W. (2011). State spending on higher education: Testing the balance wheel over time. *Journal of Education Finance, 36*(4). www.jstor.org/stable/23018116

decline following the COVID-19 pandemic-induced short economic recession in 2020.[17] From 2020 to 2021, education appropriations increased 4.5% (the short straight line in *Figure 2.2*), thanks in large part to federal stimulus funding that helped fill state budget shortfalls, reducing the need to defer funding from higher education to other budget areas. The federal government also provided specific funds to states to use on education, which many states allocated, in part, to higher education. See *Measurement Note: Federal Stimulus Funding* for more information.

Even without federal stimulus funding given to states and allocated to higher education, funding would have increased 2.0% per FTE from 2020 to 2021. This increase is because, unlike during past recessions, FTE enrollment declined this year. **Had FTE enrollment held constant and federal stimulus funding not come through for states, education appropriations would have declined 1.0% this year.**

FIGURE 2.2

CUMULATIVE ANNUAL PERCENT CHANGE IN PUBLIC EDUCATION APPROPRIATIONS PER FTE FOLLOWING ECONOMIC RECESSIONS, U.S., FY 1980-2021 (CONSTANT DOLLARS)



NOTES:

1. Cumulative annual percent change calculated since the start of each recession (1980, 1990, 2001, 2008, and 2020).
2. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
3. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
4. Constant 2021 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association

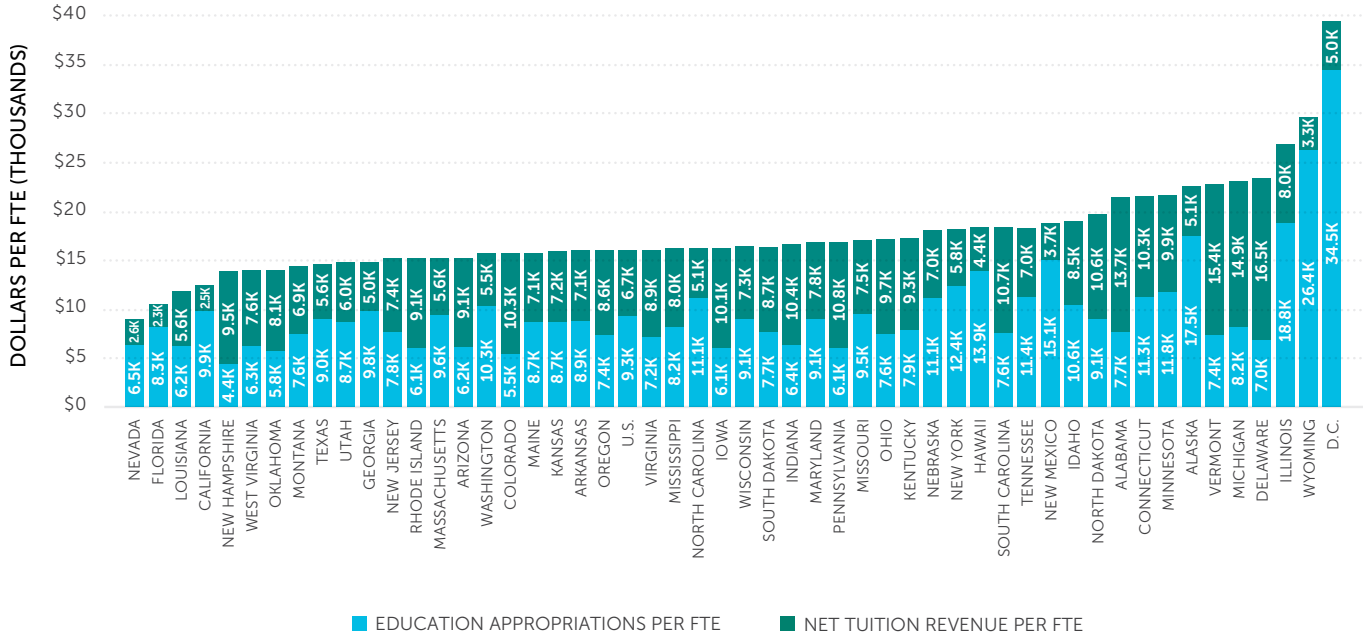
2. STATE COMPARISONS

Education appropriations and net tuition revenue per FTE vary considerably by state. *Figure 2.3* provides an expanded view of the *Figure 2.1* wave chart for all states in fiscal year 2021. States range widely in their total revenue (the sum of the **blue** and **green** bars) and the distribution of revenue that comprises that total. For example, Nevada had the lowest total revenue per FTE, but 71.8% of total revenue came from state funding. Louisiana had similar total revenue, and only 52.6% of funding came from education appropriations. At the other end of the spectrum, Delaware and Wyoming had some of the highest total revenues, yet they could not be more different in where they get those funds; the state provided 30.0% of total education revenue in Delaware compared to 89.0% in Wyoming.

17. National Bureau of Economic Research. (2021). Business cycle dating committee announcement July 19, 2021. www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021

FIGURE 2.3

EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY STATE, FY 2021 (ADJUSTED)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
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. The U.S. calculation does not include the District of Columbia.
4. 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.

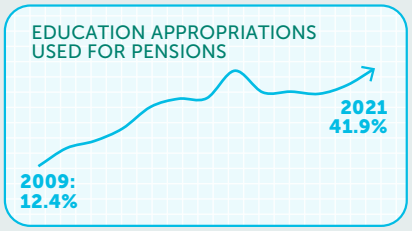
SOURCE: State Higher Education Executive Officers Association

STATE SPOTLIGHT: ILLINOIS

Education appropriations per FTE in Illinois continue to be an outlier at twice the U.S. average and 32.6% above 2000 levels (the U.S. high point). The significant increase in appropriations over the last decade is driven largely by the state's efforts to address its historically underfunded state retirement pension system.

In 2021, 41.9% of all education appropriations in Illinois went to their state retirement pension system. Of the $2.0 billion in pension payments, 77.7% was used for past unfunded liabilities, not current employees. This means that even after considering additional funding from local governments, over one quarter (29.4%) of all education appropriations in Illinois are now spent on past pension obligations and are not available for use in 2021. This translates to roughly $5,500 per FTE student, more than the entire per-FTE appropriation in either Colorado or New Hampshire.

A SHEF Issue Brief[18] on Illinois from the 2018 SHEF report provides more detail on the funding situation in Illinois over time.



18. shef.sheeo.org/wp-content/uploads/2020/04/SHEEO_SHEF_FY18_IB_Illinois.pdf

3. SECTOR COMPARISONS

Public higher education revenue also varies across public two-year and public four-year institutions. *Figure 2.4* shows higher education revenues for public two-year and four-year institutions separately. Currently, only data from 2019 through 2021 are available. In future years, this figure will expand to show longer trends over time.

As shown in *Figure 2.4*, 2021 education appropriations at two-year public institutions are slightly above the per-FTE levels at four-year institutions ($9,347 and $8,859, respectively).[19] In large part, the difference in education appropriations per FTE between two- and four-year public institutions is because SHEF data reported here include local appropriations, which primarily support two-year institutions, but do not include research, agricultural extension, and medical funding (RAM), of which an additional $1,690 per FTE was exclusively appropriated to four-year institutions in 2021. In addition, SHEF metrics use FTE enrollment rather than student headcount, and two-year institutions have a far greater proportion of part-time students.[20]

Education appropriations per FTE throughout the report include federal stimulus funding. Two-year institutions received $214 per FTE in federal stimulus for public operating in 2021, and four-year institutions received $288 per FTE in federal stimulus for public operating.

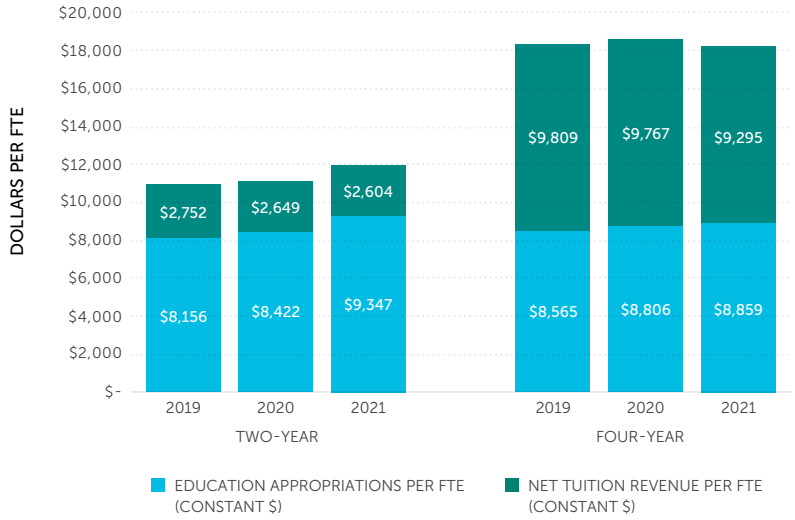
Unlike education appropriations, net tuition revenue is very different at two- and four-year institutions. On average, two-year institutions received $2,604 in net tuition revenue per FTE, or 28.0% of the average net tuition revenue per FTE at four-year institutions ($9,295). As a result, four-year institutions have, on average, much higher total revenues with which to educate students than two-year institutions.

19. There are several differences in education appropriations between the state and sector levels. The state-level data include agency funding and all federal stimulus funding allocated to public institutions. The sector-level data exclude agency funding, and include only the federal stimulus funding allocated to two-year or four-year public operating. In a few states, some uncategorizable state support and uncategorizable financial aid could not be allocated to either sector.

20. According to the National Center for Education Statistics, in fall 2021, an estimated 37% of two-year students (at both public and private institutions) attended full time, compared to 74% at four-year institutions. Source: Table 303.70, nces.ed.gov/programs/digest/d21/tables/dt21_303.70.asp?current=yes.

FIGURE 2.4

PUBLIC EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY SECTOR, U.S., FY 2019-2021 (CONSTANT DOLLARS)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.
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. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
4. Constant 2021 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association

Education appropriations shown in the above sections include funding for institutions (general public operations) as well as funding for student financial aid. The following section explores the proportion of education appropriations allocated to student financial aid.

FINANCIAL AID PERCENTAGE OF EDUCATION APPROPRIATIONS

States allocate financial aid to students attending both public (79.8%) and private (19.6%) institutions. A small portion of financial aid (0.3%) is allocated to students attending out-of-state institutions. SHEF focuses specifically on state funding for public institutions, and financial aid to independent and out-of-state institutions is excluded from education appropriations.[21] This section examines state financial aid for students attending **public in-state institutions**.

Figure 2.5 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.

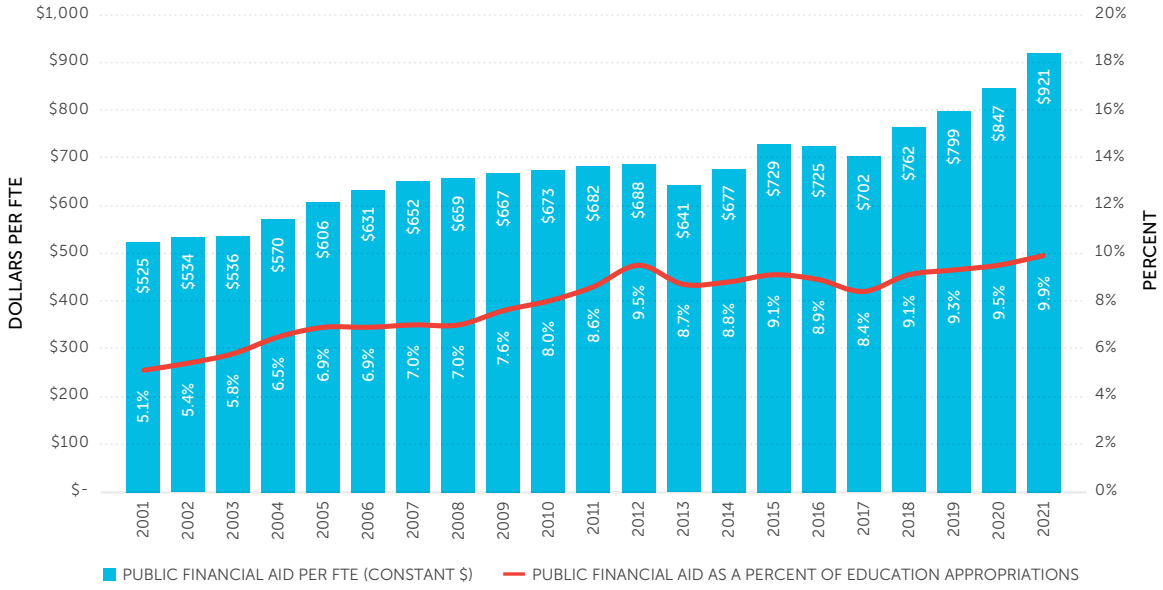
- On a per-FTE basis and after adjusting for inflation, state financial aid to public institutions has increased 75.6%, from $525 in 2001 (when these data were first collected) to $921 in 2021. State aid increased 8.8% in the last year alone.

21. 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. For more information, the 2019 SHEF Issue Brief (shef.sheeo.org/wp-content/uploads/2020/04/SHEEO_SHEF_FY19_IB_Financial_Aid.pdf) on state financial aid explores trends over time in state financial aid to public and private institutions by state.

- 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 per FTE increased 4.4% despite rapidly increasing enrollment, while the rest of education appropriations declined. As a result, the financial aid allocation increased from 7.0% to 9.5% of all education appropriations. Similarly, following the short recession in 2020, public aid grew from 9.5% to 9.9% of all education appropriations.
- In 2021, aid to public institutions comprised 9.9% of all education appropriations, up from 5.1% in 2001.

FIGURE 2.5

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE AND AS A PERCENT OF EDUCATION APPROPRIATIONS, U.S., FY 2001-2021 (CONSTANT DOLLARS)



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, includes aid both for tuition costs and living expenses.
2. Financial aid data are not available prior to 2001. Over time, states have shifted from reporting appropriated student financial aid to reporting actual/awarded student financial aid (see measurement note). Any such updates are made to all historical data for each state.
3. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
4. Constant 2021 dollars adjusted by the Higher Education Cost Adjustment (HECA).

SOURCE: State Higher Education Executive Officers Association

Despite increasing state allocations to student financial aid over the last several decades, student contributions to higher education revenues have increased over time. However, in recent years, simultaneous growth in education appropriations and declines in net tuition revenues have resulted in small decreases in institutional reliance on student tuition dollars. In the next section, we examine the student contribution to higher education, or the student share.

STUDENT SHARE

Figure 2.6 provides a comprehensive look at the reliance on net tuition as a revenue source—the student share. The measure of student share shows the proportion of total education revenue from net tuition. Net tuition and fee revenue 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 20.9% to 42.1%) since 1980. Historically, student share has increased most rapidly during periods of economic recession, shifting more of higher education costs to students and families. The student share grew rapidly during the Great Recession, increasing from 35.8% in 2008 to an all-time high of 47.5% in 2013. During this time, students and their families turned to federal aid to cushion their growing share of higher education costs. From 2008 to 2012, the proportion of students attending public institutions using federal Pell Grant aid increased from 23.2% to 37.8%. Of greater concern, the percentage of students using federal loans increased from 23.7% to 30.1% during that time.[22]

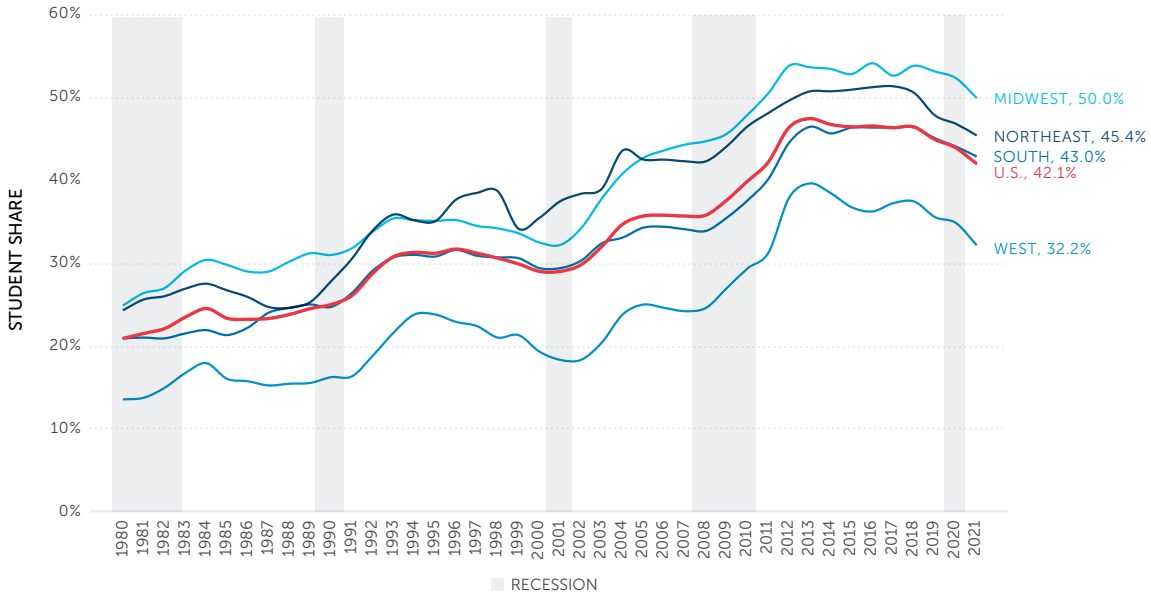
When the economy stabilizes, the student share also stabilizes and, as in recent years, decreases. Since the 2013 high point, the student share has declined 5.4 percentage points to 42.1% in 2021. In the last year, the student share declined 1.9 percentage points, the largest decrease ever observed in the SHEF dataset. Decreases in student share occur when growth in education appropriations outpaces growth in net tuition revenue. This year's decrease in student share is due to declines in FTE enrollment and net tuition revenue as well as the increase in federal stimulus funding allocated to higher education. This downward trend may change in upcoming years as federal stimulus funding is depleted and FTE enrollment declines level out.

There are regional differences in the student share, but the overall trend of sharp increases during past economic recessions holds across each region. Additionally, from 2020 to 2021, the student share declined in each region: 2.7 percentage points in the West, 2.4 in the Midwest, 1.5 in the Northeast, and 1.2 in the South. Historically and today, the student share is highest in the Midwest and Northeast, while the South tracks closely to the U.S. average, and the West has the lowest regional student share (*Figure 2.6*).

22. These data were compiled from the U.S. Department of Education, National Center for Education Statistics, 2007-08 National Postsecondary Student Aid Study (NPSAS:08) and the U.S. Department of Education, National Center for Education Statistics, 2011-12 National Postsecondary Student Aid Study (NPSAS:12).

FIGURE 2.6

NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE, U.S., FY 1980-2021



NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions coming 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. Total education revenue includes federal stimulus funding.
2. Regional averages are based on the U.S. Census designation.

SOURCE: State Higher Education Executive Officers Association

Throughout the rest of the SHEF report, we more closely examine current and long-term U.S., state, and sector-level trends in each individual component of state funding, enrollment, net tuition, and total revenue.

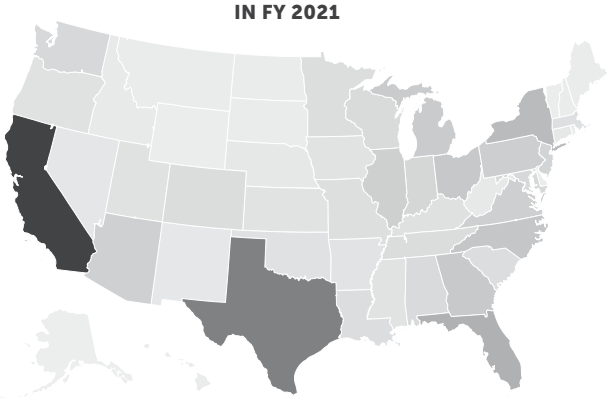
STATE FUNDING AND ENROLLMENT

There is wide variation in higher education finance across states. This section more deeply examines trends and interstate differences for measures of enrollment and state funding (education appropriations and student financial aid). For the second year, we also present sector-level breakouts for each of these metrics.

STUDENT ENROLLMENT

Full-time equivalent (FTE) enrollment converts student credit hours to full-time, academic year students, but excludes medical students. SHEF includes enrollment for all degree-seeking undergraduate and graduate students at public institutions. For many years, enrollment remained relatively stable both nationally and across states. However, with the onset of the COVID-19 pandemic in early 2020, enrollment declined across sectors.[23] Visit the SHEF website to view the interactive FTE enrollment map.[24] This map shows net FTE enrollment across the nation and over time.

NET FTE ENROLLMENT IN FY 2021



FTE enrollment has broadly increased since the start of the SHEF dataset in 1980. In 1980, U.S. public institutions enrolled 6.85 million FTE students. Historically, enrollment has increased in each decade, reaching:

- 7.77 million in 1990.
- 8.38 million in 2000.
- 11.38 million in 2010.

However, the last decade has reversed this trend. Enrollment increased rapidly during and immediately following the Great Recession and peaked at 11.65 million students in 2011. Since 2011, FTE enrollment has declined for ten straight years to 10.60 million in 2021. In recent years (since 2015), these declines have been less than 1.0% annually. However, in the last year, the COVID-19 pandemic led to a 3.0% decline in FTE enrollment from 2020 to 2021. This corresponds

23. National Student Clearinghouse Research Center. (2021). Fall 2021 enrollment (as of October 21). nscresearchcenter.org/stay-informed

24. shef.sheeo.org/data-visualizations/map-3-1/?report_page=state-funding-and-enrollment&modal=map-3_1

to a loss of 323,952 students, the largest decline since the start of the SHEF dataset in 1980. As a result, in 2021, public institutions enrolled 10,600,381 FTE students, down 9.0% from the peak in 2011, but still 3.3% above 2008 levels.

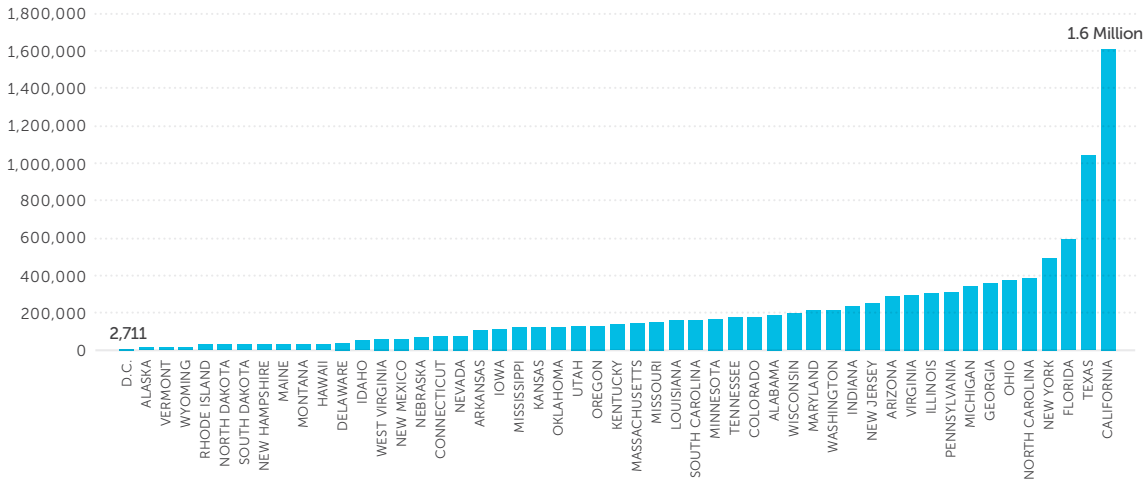
1. STATE COMPARISONS

Figure 3.1 shows net FTE enrollment for each state in fiscal year 2021. *Table 3.1* provides additional detail on how enrollment has changed over time in each state.

- Across the states, FTE enrollment ranged from roughly 2,700 students in Washington, D.C., and 13,700 in Alaska to 1.6 million in California. Only California and Texas had more than 1 million FTE enrolled students in 2021, and 25% of all students attending a public institution in the U.S. attended an institution in either California or Texas.
- **Enrollment declined in 47 states and Washington, D.C., between 2020 and 2021, more than in any other year.** These declines ranged from 0.02% in South Dakota (representing only 5 FTE) to 8.7% in Alaska (1,312 FTE) and 14.6% in Washington, D.C. (465 FTE). Enrollment declines were greater than 5.0% in 16 states and Washington, D.C.
- Enrollment increased in only three states: Illinois (0.9%), Utah (1.2%), and Delaware (2.4%).
- Enrollment has declined in 43 states and Washington D.C., since 2011, but in only one state compared to the start of the SHEF dataset: FTE enrollment in Illinois has declined 10.7% since 1980.

FIGURE 3.1

PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY STATE, FY 2021



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, FY 1980-2021

	1980	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	138,620	165,833	212,758	195,536	200,991	194,930	-3.0%	-0.3%	-8.4%	17.5%	40.6%
ALASKA	10,530	16,079	21,090	19,269	15,051	13,739	-8.7%	-28.7%	-34.9%	-14.6%	30.5%
ARIZONA	120,148	194,629	275,071	279,239	314,892	292,192	-7.2%	4.6%	6.2%	50.1%	143.2%
ARKANSAS	53,130	87,337	124,085	117,112	110,945	105,044	-5.3%	-10.3%	-15.3%	20.3%	97.7%
CALIFORNIA	979,142	1,322,308	1,580,877	1,584,280	1,611,971	1,608,718	-0.2%	1.5%	1.8%	21.7%	64.3%
COLORADO	113,281	141,492	195,621	180,264	188,864	179,676	-4.9%	-0.3%	-8.2%	27.0%	58.6%
CONNECTICUT	58,909	60,976	86,281	85,705	81,422	74,538	-8.5%	-13.0%	-13.6%	22.2%	26.5%
DELAWARE	20,664	28,944	34,648	36,472	35,571	36,409	2.4%	-0.2%	5.1%	25.8%	76.2%
FLORIDA	287,388	420,957	636,320	598,660	609,456	595,444	-2.3%	-0.5%	-6.4%	41.5%	107.2%
GEORGIA	157,155	234,998	386,534	346,741	360,193	356,921	-0.9%	2.9%	-7.7%	51.9%	127.1%
HAWAII	30,465	31,810	40,743	38,414	34,736	34,151	-1.7%	-11.1%	-16.2%	7.4%	12.1%
IDAHO	26,647	39,495	53,201	52,744	55,155	53,699	-2.6%	1.8%	0.9%	36.0%	101.5%
ILLINOIS	342,097	323,876	393,313	342,422	302,722	305,508	0.9%	-10.8%	-22.3%	-5.7%	-10.7%
INDIANA	142,061	193,130	273,322	249,925	245,224	237,621	-3.1%	-4.9%	-13.1%	23.0%	67.3%
IOWA	84,210	105,545	132,744	132,748	125,433	118,991	-5.1%	-10.4%	-10.4%	12.7%	41.3%
KANSAS	87,216	100,476	141,031	135,366	129,622	123,169	-5.0%	-9.0%	-12.7%	22.6%	41.2%
KENTUCKY	89,389	119,500	159,806	149,314	140,429	137,574	-2.0%	-7.9%	-13.9%	15.1%	53.9%
LOUISIANA	106,686	168,121	183,633	167,897	165,145	163,735	-0.9%	-2.5%	-10.8%	-2.6%	53.5%
MAINE	26,250	29,287	38,284	34,604	34,005	32,862	-3.4%	-5.0%	-14.2%	12.2%	25.2%
MARYLAND	133,228	175,085	238,742	234,124	221,418	213,324	-3.7%	-8.9%	-10.6%	21.8%	60.1%
MASSACHUSETTS	122,952	128,404	168,671	169,189	156,878	145,913	-7.0%	-13.8%	-13.5%	13.6%	18.7%
MICHIGAN	318,166	333,584	435,592	380,128	357,275	343,596	-3.8%	-9.6%	-21.1%	3.0%	8.0%
MINNESOTA	149,418	167,238	214,342	193,197	180,442	171,312	-5.1%	-11.3%	-20.1%	2.4%	14.7%
MISSISSIPPI	85,292	102,490	138,859	128,728	127,142	121,550	-4.4%	-5.6%	-12.5%	18.6%	42.5%
MISSOURI	120,468	156,588	197,890	192,781	163,408	156,493	-4.2%	-18.8%	-20.9%	-0.1%	29.9%
MONTANA	25,452	33,660	40,961	37,952	35,252	33,459	-5.1%	-11.8%	-18.3%	-0.6%	31.5%
NEBRASKA	56,360	65,725	84,384	76,442	73,833	72,564	-1.7%	-5.1%	-14.0%	10.4%	28.8%
NEVADA	19,367	48,107	69,169	74,451	78,164	75,873	-2.9%	1.9%	9.7%	57.7%	291.8%
NEW HAMPSHIRE	19,415	26,506	39,036	36,640	34,695	32,348	-6.8%	-11.7%	-17.1%	22.0%	66.6%
NEW JERSEY	171,390	178,671	277,147	268,296	261,616	252,098	-3.6%	-6.0%	-9.0%	41.1%	47.1%
NEW MEXICO	48,268	66,847	92,078	93,379	70,090	65,855	-6.0%	-29.5%	-28.5%	-1.5%	36.4%
NEW YORK	418,679	449,959	578,830	556,312	524,708	494,065	-5.8%	-11.2%	-14.6%	9.8%	18.0%
NORTH CAROLINA	165,642	266,217	425,779	388,322	403,093	392,374	-2.7%	1.0%	-7.8%	47.4%	136.9%
NORTH DAKOTA	26,735	31,922	37,915	36,165	32,660	31,900	-2.3%	-11.8%	-15.9%	-0.1%	19.3%
OHIO	291,000	337,379	460,747	388,777	385,027	374,222	-2.8%	-3.7%	-18.8%	10.9%	28.6%
OKLAHOMA	96,476	121,111	150,171	134,960	126,370	123,954	-1.9%	-8.2%	-17.5%	2.3%	28.5%
OREGON	96,946	111,006	168,374	151,544	137,801	129,767	-5.8%	-14.4%	-22.9%	16.9%	33.9%
PENNSYLVANIA	243,296	288,334	374,997	350,435	331,077	309,837	-6.4%	-11.6%	-17.4%	7.5%	27.3%
RHODE ISLAND	23,237	25,622	33,062	32,063	32,088	31,426	-2.1%	-2.0%	-4.9%	22.7%	35.2%
SOUTH CAROLINA	95,600	132,404	172,375	171,202	168,719	164,276	-2.6%	-4.0%	-4.7%	24.1%	71.8%
SOUTH DAKOTA	18,623	22,064	33,313	33,674	31,962	31,957	0.0%	-5.1%	-4.1%	44.8%	71.6%
TENNESSEE	124,022	159,838	193,994	183,251	184,992	178,618	-3.4%	-2.5%	-7.9%	11.7%	44.0%
TEXAS	466,900	667,534	979,943	1,020,366	1,071,308	1,044,747	-2.5%	2.4%	6.6%	56.5%	123.8%
UTAH	47,061	91,953	125,073	122,066	127,833	129,310	1.2%	5.9%	3.4%	40.6%	174.8%
VERMONT	13,656	15,914	22,578	20,429	20,562	19,509	-5.1%	-4.5%	-13.6%	22.6%	42.9%
VIRGINIA	175,197	236,014	321,965	310,368	301,730	298,864	-0.9%	-3.7%	-7.2%	26.6%	70.6%
WASHINGTON	163,866	204,663	261,485	240,788	228,720	214,902	-6.0%	-10.8%	-17.8%	5.0%	31.1%
WEST VIRGINIA	53,331	62,902	81,116	71,026	65,445	62,038	-5.2%	-12.7%	-23.5%	-1.4%	16.3%
WISCONSIN	174,163	196,523	240,625	217,856	206,545	198,362	-4.0%	-8.9%	-17.6%	0.9%	13.9%
WYOMING	14,048	20,198	26,392	23,812	21,653	20,947	-3.3%	-12.0%	-20.6%	3.7%	49.1%
U.S.	**6,852,242**	**8,709,255**	**11,654,967**	**11,085,435**	**10,924,333**	**10,600,381**	**-3.0%**	**-4.4%**	**-9.0%**	**21.7%**	**54.7%**
D.C.	N/A	N/A	3,659	4,041	3,176	2,711	-14.6%	-32.9%	-25.9%	N/A	N/A

NOTES:

1. Full-time equivalent enrollment converts 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. Data for the District of Columbia are not available prior to 2011.
3. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.

SOURCE: State Higher Education Executive Officers Association

2. SECTOR COMPARISONS

Table 3.1A presents data on net FTE enrollment for the public two-year and four-year sectors separately. In 2021, there were 4.04 million FTE enrolled students at two-year institutions. Alaska and Washington, D.C., have no public two-year institutions. Two-year enrollment across all other states ranged from 2,482 FTE in Vermont to 917,528 FTE in California. Twenty-three percent of students attending a U.S. public two-year institution in 2021 attended an institution in California.

- In the last year, enrollment declined 6.1% at two-year institutions. Forty-four states had declines, 11 of which were greater than 10%. The largest two-year FTE enrollment declines were in Connecticut (18.1%), Arizona (15.7%), West Virginia (14.6%), and New Mexico (14.5%).
- Two-year FTE enrollment increased in only five states from 2020 to 2021: South Dakota (0.2%), Delaware (0.9%), Illinois (2.3%), Oklahoma (2.6%), and Ohio (6.1%).

There were 6.56 million FTE enrolled students at four-year institutions in 2021, about 1.6 times the number of two-year students. Enrollment at four-year institutions ranged from 2,711 in Washington D.C., and 10,145 in Wyoming to 691,191 in California. Notably, Texas had the second highest FTE enrollment of students attending four-year institutions (599,455), but less than half as many two-year students as California. California represents about one-tenth of all four-year public enrollment.

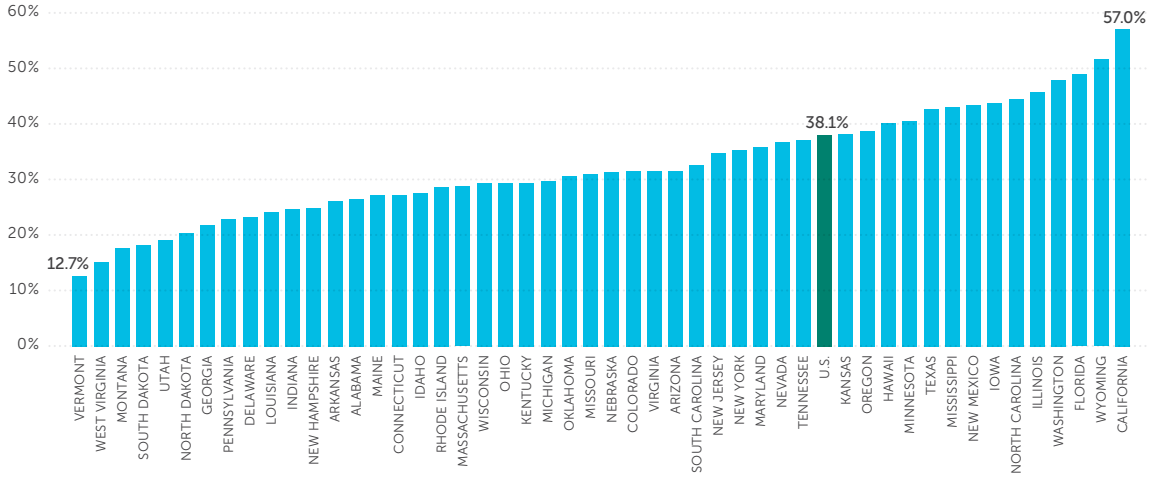
- From 2020 to 2021, FTE enrollment declined 0.9% at four-year institutions. Thirty-five states and Washington, D.C., had declines. Only Washington, D.C. (14.6%) was greater than 10%. The second and third largest declines were 8.7% in Alaska and 6.1% in Ohio.
- Four-year FTE enrollment increased in 15 states from 2020 to 2021. The largest increase was 2.8% in Delaware.

Thirty states had enrollment declines in both sectors, and the only state with increases in enrollment across both sectors was Delaware. The two-year sector generally had larger enrollment declines across states—in 43 states, enrollment took a larger hit in the two-year sector than in the four-year sector from 2020 to 2021. However, in four states, enrollment declined in the four-year sector only: Illinois, Ohio, Oklahoma, and South Dakota.

Figure 3.1A shows that states enroll different proportions of students across sectors. Overall, 38.1% of FTE students attended a two-year institution in the United States. The percentage of FTE at two-year institutions varied from only 12.7% in Vermont to 57.0% in California. **Only two states (California and Wyoming) had more FTE students enrolled in the two-year sector than in the four-year sector.**

FIGURE 3.1A

PERCENT OF PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT ATTENDING TWO-YEAR INSTITUTIONS BY STATE, FY 2021



NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
3. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
4. Fiscal year 2021 two-year FTE is a projected amount for Illinois.

SOURCE: State Higher Education Executive Officers Association

MEASUREMENT NOTE: SECTOR ENROLLMENT MIX

States vary in the proportion of enrollment attending two-year and four-year public institutions. In addition, as the following sections will show, the two-year and four-year public sectors have very different revenue structures and total revenues. These varying enrollment proportions and different revenue structures make state-level data more difficult to compare. The Enrollment Mix Index (EMI) adjustment used throughout the state-level metrics in this report attempts to correct for this variation in FTE enrollment. Sector-level data are not adjusted for EMI (and do not need to be). See the SHEF website (shef.sheeo.org/data-definitions) to learn more about how the EMI adjustment is calculated.

TABLE 3.1A

PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY SECTOR AND STATE, FY 2019-2021

	TWO-YEAR FTE					FOUR-YEAR FTE				
	2019	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2019	2019	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2019
ALABAMA	59,288	54,331	51,745	-4.8%	-12.7%	143,485	146,660	143,185	-2.4%	-0.2%
ALASKA	0	0	0	N/A	N/A	16,721	15,051	13,739	-8.7%	-17.8%
ARIZONA	110,557	109,319	92,151	-15.7%	-16.6%	182,299	205,573	200,041	-2.7%	9.7%
ARKANSAS	31,641	30,830	27,633	-10.4%	-12.7%	81,697	80,115	77,412	-3.4%	-5.2%
CALIFORNIA	938,182	930,195	917,528	-1.4%	-2.2%	672,687	681,776	691,191	1.4%	2.8%
COLORADO	56,000	61,550	56,515	-8.2%	0.9%	127,744	127,314	123,161	-3.3%	-3.6%
CONNECTICUT	26,419	24,779	20,295	-18.1%	-23.2%	57,374	56,643	54,243	-4.2%	-5.5%
DELAWARE	8,886	8,412	8,486	0.9%	-4.5%	27,524	27,159	27,923	2.8%	1.4%
FLORIDA	315,763	312,291	291,691	-6.6%	-7.6%	293,197	297,165	303,753	2.2%	3.6%
GEORGIA	86,540	86,454	77,837	-10.0%	-10.1%	269,808	273,739	279,084	2.0%	3.4%
HAWAII	14,820	14,411	13,697	-5.0%	-7.6%	20,434	20,326	20,455	0.6%	0.1%
IDAHO	15,992	15,235	14,782	-3.0%	-7.6%	38,429	39,920	38,917	-2.5%	1.3%
ILLINOIS	140,713	136,458	139,651	2.3%	-0.8%	166,254	166,264	165,857	-0.2%	-0.2%
INDIANA	63,913	62,784	58,773	-6.4%	-8.0%	182,388	182,441	178,849	-2.0%	-1.9%
IOWA	57,239	55,791	52,176	-6.5%	-8.8%	72,148	69,642	66,815	-4.1%	-7.4%
KANSAS	52,895	51,124	47,174	-7.7%	-10.8%	79,358	78,498	75,995	-3.2%	-4.2%
KENTUCKY	43,446	43,531	40,579	-6.8%	-6.6%	98,556	96,897	96,996	0.1%	-1.6%
LOUISIANA	43,091	43,802	39,608	-9.6%	-8.1%	120,841	121,344	124,127	2.3%	2.7%
MAINE	9,773	9,972	8,925	-10.5%	-8.7%	24,174	24,033	23,937	-0.4%	-1.0%
MARYLAND	89,990	84,662	76,480	-9.7%	-15.0%	139,253	136,756	136,844	0.1%	-1.7%
MASSACHUSETTS	49,799	46,920	41,860	-10.8%	-15.9%	110,528	110,527	104,053	-5.9%	-5.9%
MICHIGAN	116,340	108,318	102,319	-5.5%	-12.1%	249,975	248,957	241,277	-3.1%	-3.5%
MINNESOTA	76,219	74,260	69,472	-6.4%	-8.9%	108,148	106,182	101,840	-4.1%	-5.8%
MISSISSIPPI	58,299	56,938	52,232	-8.3%	-10.4%	71,200	70,204	69,318	-1.3%	-2.6%
MISSOURI	59,765	51,524	48,416	-6.0%	-19.0%	122,734	111,884	108,077	-3.4%	-11.9%
MONTANA	6,678	6,386	5,964	-6.6%	-10.7%	29,697	28,866	27,495	-4.7%	-7.4%
NEBRASKA	26,142	24,096	22,681	-5.9%	-13.2%	49,798	49,737	49,883	0.3%	0.2%
NEVADA	29,026	29,890	27,955	-6.5%	-3.7%	47,398	48,273	47,918	-0.7%	1.1%
NEW HAMPSHIRE	9,853	9,059	8,066	-11.0%	-18.1%	26,500	25,636	24,282	-5.3%	-8.4%
NEW JERSEY	99,904	97,367	87,901	-9.7%	-12.0%	162,374	164,249	164,197	0.0%	1.1%
NEW MEXICO	37,798	33,544	28,678	-14.5%	-24.1%	39,242	36,546	37,176	1.7%	-5.3%
NEW YORK	210,891	200,823	174,908	-12.9%	-17.1%	326,233	323,886	319,158	-1.5%	-2.2%
NORTH CAROLINA	179,659	186,828	174,757	-6.5%	-2.7%	214,263	216,265	217,617	0.6%	1.6%
NORTH DAKOTA	7,028	6,701	6,493	-3.1%	-7.6%	26,753	25,959	25,407	-2.1%	-5.0%
OHIO	99,164	103,898	110,206	6.1%	11.1%	287,287	281,129	264,015	-6.1%	-8.1%
OKLAHOMA	40,585	36,927	37,883	2.6%	-6.7%	88,260	89,443	86,071	-3.8%	-2.5%
OREGON	60,770	56,052	50,320	-10.2%	-17.2%	83,519	81,749	79,447	-2.8%	-4.9%
PENNSYLVANIA	79,979	78,240	71,023	-9.2%	-11.2%	251,685	252,837	238,814	-5.5%	-5.1%
RHODE ISLAND	9,333	9,612	8,994	-6.4%	-3.6%	22,645	22,476	22,432	-0.2%	-0.9%
SOUTH CAROLINA	57,624	57,648	53,730	-6.8%	-6.8%	109,116	111,071	110,545	-0.5%	1.3%
SOUTH DAKOTA	5,810	5,839	5,848	0.2%	0.7%	27,006	26,123	26,109	-0.1%	-3.3%
TENNESSEE	72,783	72,808	66,125	-9.2%	-9.1%	111,689	112,184	112,493	0.3%	0.7%
TEXAS	487,864	485,422	445,292	-8.3%	-8.7%	578,843	585,886	599,455	2.3%	3.6%
UTAH	25,832	24,933	24,658	-1.1%	-4.5%	102,270	102,901	104,654	1.7%	2.3%
VERMONT	2,652	2,569	2,482	-3.4%	-6.4%	17,806	17,993	17,027	-5.4%	-4.4%
VIRGINIA	100,141	96,823	94,137	-2.8%	-6.0%	201,878	204,907	204,727	-0.1%	1.4%
WASHINGTON	123,981	117,118	103,034	-12.0%	-16.9%	112,000	111,602	111,868	0.2%	-0.1%
WEST VIRGINIA	11,076	11,035	9,424	-14.6%	-14.9%	55,501	54,410	52,614	-3.3%	-5.2%
WISCONSIN	72,054	64,314	58,255	-9.4%	-19.2%	137,600	142,231	140,108	-1.5%	1.8%
WYOMING	11,214	10,940	10,802	-1.3%	-3.7%	10,980	10,713	10,145	-5.3%	-7.6%
U.S.	**4,393,411**	**4,302,763**	**4,039,641**	**-6.1%**	**-8.1%**	**6,597,299**	**6,622,142**	**6,560,746**	**-0.9%**	**-0.6%**
D.C.	0	0	0	N/A	N/A	3,518	3,176	2,711	-14.6%	-22.9%

NOTES:

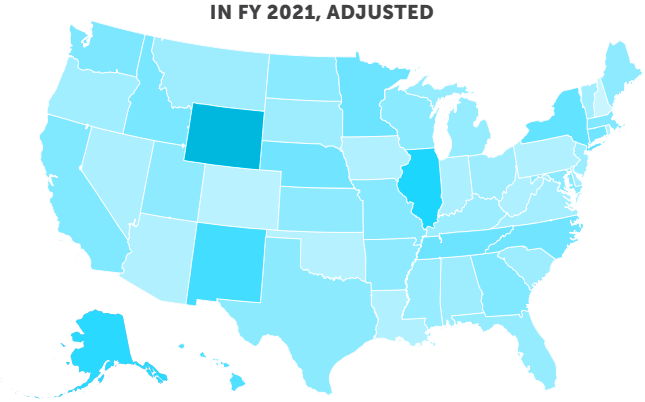
1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
5. Fiscal year 2021 two-year FTE is a projected amount for Illinois.

SOURCE: State Higher Education Executive Officers Association

EDUCATION APPROPRIATIONS

Education appropriations measure 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. State-level education appropriations include state higher education agency allocations and all federal stimulus funding allocated to public institutions, while sector-level education appropriations exclude agency funding and include the federal stimulus funding allocated to two-year or four-year public operating. In a handful of states, some uncategorizable state support and uncategorizable financial aid are not allocated to either sector. Visit the SHEF website to view the interactive education appropriations map.[25] This map shows education appropriations per FTE across the nation and over time.

EDUCATION APPROPRIATIONS PER FTE IN FY 2021, ADJUSTED



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. Beginning with the tech bust in 2001 and continuing after the Great Recession in 2008, however, annual increases in education appropriations per FTE have been smaller than the declines during each recession. After a historic low in 2012 following the Great Recession, states entered the 2020 recession with the lowest amount of education appropriations per FTE compared to the beginning of any other recession period since 1980. During the 2020 recession, federal stimulus funding protected education appropriation levels in many states, reversing the trend of large cuts to education appropriations in years following economic recessions.[26]

Fiscal year 2021 marks the ninth straight year of per-FTE increases in education appropriations. Inflation-adjusted education appropriations per FTE increased 4.5% from 2020 to 2021, reaching $9,327 (*Table 3.2*). Despite recent increases, education appropriations remain 1.2% below 2008 levels and 10.2% below 2001 levels (two pre-recession high points). **Excluding federal stimulus funding, education appropriations per FTE increased 2.0% in the last year, yet remain 4.7% below 2008 levels and 13.4% below 2001 levels.**

25. shef.sheeo.org/data-visualizations/map-3-2/?report_page=state-funding-and-enrollment&modal=map-3_2

26. Federal stimulus funds protected education appropriations in two ways: States received federal stimulus funding for other priority budget areas, reducing the need to redirect higher education funds toward those areas, and states received targeted federal stimulus funding directly to higher education.

1. STATE COMPARISONS

States vary widely in their per-student funding for higher education. Education appropriations per FTE in 2021 ranged from $4,370 in New Hampshire to $26,393 in Wyoming and $34,466 in Washington, D.C. (*Figure 3.2*).

- From 2020 to 2021, education appropriations per FTE declined in 10 states. Only Nevada had a decline greater than 15% (18.7%). Nevada's declines were due to a special reduction in general fund appropriations following shortfalls in state revenue during the COVID-19 pandemic.
- Education appropriations per FTE increased in 40 states and Washington, D.C., in the last year. In 14 states and Washington, D.C., the increases were greater than 10%. The largest increases were in Vermont (98.6%), Washington, D.C. (46.3%), Wyoming (33.3%), Minnesota (31.8%), and New Hampshire (30.7%). These increases were primarily but not entirely due to federal stimulus funds. In Vermont, education appropriations increased 44.6% over the last year, even after excluding federal stimulus funds. This increase is due to the state's low base of per-student funding coupled with a one-time bridge appropriation in 2021.

The majority of states continue funding higher education at a lower level than prior to the Great Recession. Twenty-nine states have not yet recovered from the 2008 Great Recession (meaning their education appropriations per FTE in 2021 remain below 2008 levels). In 36 states, education appropriations per FTE remain below the level seen in 2001 prior to the tech bust.

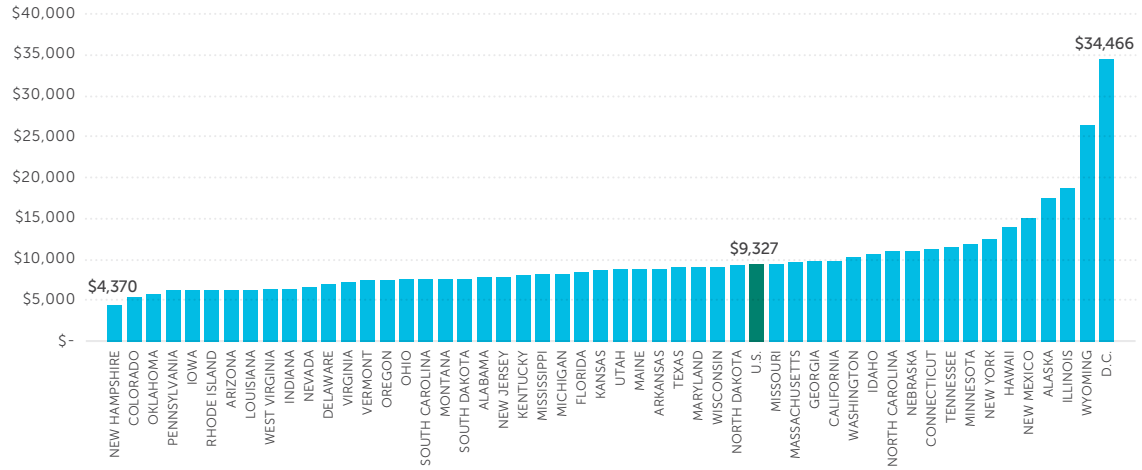
Federal stimulus funding has a heavy impact on the above figures. On average, states allocated $335 per FTE of stimulus to higher education. In 2021, three states and Washington, D.C., allocated more than $3,000 per FTE in federal stimulus funding to public higher education: Washington, D.C. ($10,853), Wyoming ($6,355), Minnesota ($3,140), and Vermont ($3,077). After excluding federal stimulus funding from all years in which it was allocated (2009-2012 and 2020-2021):

- Education appropriations per FTE declined in 18 states from 2020 to 2021. The largest declines were in Colorado (37.6%), Nevada (15.1%), and Louisiana (10.0%).[27]
- Education appropriations increased in 32 states and Washington, D.C., in the last year. The largest increases were in Vermont (44.6%), Washington (15.7%), and Michigan (15.5%).
- Thirty-three states have not yet recovered from the 2008 recession, and 37 have not yet recovered from the 2001 recession.

27. Louisiana higher education institutions were appropriated $96.7 million of Coronavirus Relief Funds (CRF) from the CARES Act in fiscal year 2020. These funds were utilized by higher education in fiscal year 2021 to alleviate a $121 million dollar state general fund reduction. Along with $3.3 million of additional CRF funds for use in fiscal year 2021, higher education received a true operating reduction of $21 million. In fiscal year 2022, the full state general fund reduction was restored.

FIGURE 3.2

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2021 (ADJUSTED)



NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
2. The U.S. calculation does not include the District of Columbia.
3. Adjustment factors to arrive at constant dollar figures include 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

STATE SPOTLIGHT: COLORADO

CO

In 2021, Colorado state and local education appropriations per FTE (excluding federal stimulus funding) declined by 37.6%. However, after including federal stimulus funding, the state saw a 7.8% increase in education appropriations per FTE. This wide difference is due to an unadjusted $404 million (39.1%) decline in Colorado's state and local education appropriations and an influx of $458 million in federal CARES Act funding allocated to higher education to stimulate the economy by supporting Colorado's workforce through increasing student retention and completion at state institutions of public higher education. In 2021, 42.1% of Colorado's education appropriations came from federal stimulus funding.

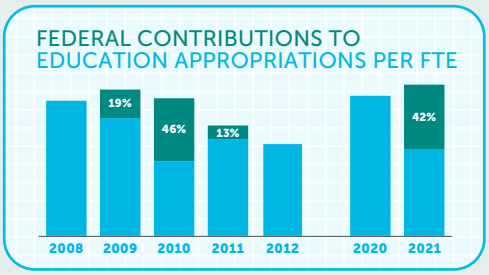


TABLE 3.2

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 1980-2021 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$7,160	$8,428	$7,066	$6,524	$8,073	$7,733	-4.2%	18.5%	9.4%	-8.2%	8.0%
ALASKA	$23,052	$14,242	$15,089	$16,000	$16,598	$17,497	5.4%	9.4%	16.0%	22.8%	-24.1%
ARIZONA	$7,995	$9,057	$7,370	$5,920	$5,812	$6,194	6.6%	4.6%	-16.0%	-31.6%	-22.5%
ARKANSAS	$9,475	$9,596	$9,364	$8,680	$8,619	$8,886	3.1%	2.4%	-5.1%	-7.4%	-6.2%
CALIFORNIA	$8,574	$9,415	$7,629	$8,670	$9,578	$9,859	2.9%	13.7%	29.2%	4.7%	15.0%
COLORADO	$5,439	$6,587	$4,006	$4,493	$5,066	$5,462	7.8%	21.6%	36.4%	-17.1%	0.4%
CONNECTICUT	$8,071	$15,833	$13,007	$10,695	$9,917	$11,287	13.8%	5.5%	-13.2%	-28.7%	39.8%
DELAWARE	$7,630	$8,829	$6,041	$5,774	$6,544	$6,984	6.7%	20.9%	15.6%	-20.9%	-8.5%
FLORIDA	$6,755	$10,242	$6,845	$6,974	$8,118	$8,323	2.5%	19.3%	21.6%	-18.7%	23.2%
GEORGIA	$9,382	$14,515	$9,105	$9,436	$10,468	$9,844	-6.0%	4.3%	8.1%	-32.2%	4.9%
HAWAII	$9,156	$9,170	$8,847	$10,017	$13,366	$13,881	3.8%	38.6%	56.9%	51.4%	51.6%
IDAHO	$12,663	$13,486	$8,480	$9,388	$10,264	$10,612	3.4%	13.0%	25.1%	-21.3%	-16.2%
ILLINOIS	$9,505	$14,407	$13,203	$13,822	$18,353	$18,752	2.2%	35.7%	42.0%	30.2%	97.3%
INDIANA	$9,444	$9,373	$6,101	$6,784	$6,569	$6,408	-2.4%	-5.5%	5.0%	-31.6%	-32.1%
IOWA	$10,109	$11,071	$6,140	$6,040	$5,925	$6,115	3.2%	1.3%	-0.4%	-44.8%	-39.5%
KANSAS	$9,571	$10,918	$7,161	$6,757	$7,520	$8,680	15.4%	28.5%	21.2%	-20.5%	-9.3%
KENTUCKY	$10,403	$12,649	$8,686	$8,061	$7,783	$7,931	1.9%	-1.6%	-8.7%	-37.3%	-23.8%
LOUISIANA	$9,333	$8,253	$9,229	$6,177	$6,263	$6,209	-0.9%	0.5%	-32.7%	-24.8%	-33.5%
MAINE	$6,990	$10,327	$7,374	$7,726	$8,150	$8,724	7.0%	12.9%	18.3%	-15.5%	24.8%
MARYLAND	$7,254	$9,743	$6,983	$7,670	$9,012	$9,050	0.4%	18.0%	29.6%	-7.1%	24.8%
MASSACHUSETTS	$8,067	$10,886	$6,697	$7,556	$8,707	$9,611	10.4%	27.2%	43.5%	-11.7%	19.1%
MICHIGAN	$10,008	$12,274	$6,878	$7,265	$7,669	$8,197	6.9%	12.8%	19.2%	-33.2%	-18.1%
MINNESOTA	$10,591	$10,734	$6,766	$7,669	$8,921	$11,759	31.8%	53.3%	73.8%	9.5%	11.0%
MISSISSIPPI	$8,699	$10,595	$7,702	$7,905	$6,837	$8,161	19.4%	3.2%	6.0%	-23.0%	-6.2%
MISSOURI	$10,737	$12,859	$7,990	$7,883	$8,907	$9,504	6.7%	20.6%	18.9%	-26.1%	-11.5%
MONTANA	$7,568	$5,838	$5,359	$5,984	$6,272	$7,646	21.9%	27.8%	42.7%	31.0%	1.0%
NEBRASKA	$8,671	$8,635	$9,175	$10,519	$10,677	$11,113	4.1%	5.6%	21.1%	28.7%	28.2%
NEVADA	$8,724	$9,150	$8,486	$7,223	$7,986	$6,490	-18.7%	-10.1%	-23.5%	-29.1%	-25.6%
NEW HAMPSHIRE	$4,575	$5,064	$3,089	$2,823	$3,345	$4,370	30.7%	54.8%	41.5%	-13.7%	-4.5%
NEW JERSEY	$8,002	$10,812	$8,023	$7,753	$8,705	$7,753	-10.9%	0.0%	-3.4%	-28.3%	-3.1%
NEW MEXICO	$10,857	$11,019	$9,668	$11,488	$14,792	$15,134	2.3%	31.7%	56.5%	37.3%	39.4%
NEW YORK	$11,223	$10,602	$10,516	$11,184	$12,396	$12,428	0.3%	11.1%	18.2%	17.2%	10.7%
NORTH CAROLINA	$10,431	$13,494	$10,383	$10,846	$10,845	$11,090	2.3%	2.3%	6.8%	-17.8%	6.3%
NORTH DAKOTA	$8,739	$7,426	$7,972	$9,575	$9,041	$9,133	1.0%	-4.6%	14.6%	23.0%	4.5%
OHIO	$8,381	$10,068	$6,184	$6,882	$6,569	$7,567	15.2%	10.0%	22.4%	-24.8%	-9.7%
OKLAHOMA	$8,463	$10,346	$8,819	$7,315	$6,267	$5,838	-6.8%	-20.2%	-33.8%	-43.6%	-31.0%
OREGON	$7,231	$7,830	$4,699	$5,307	$6,717	$7,395	10.1%	39.4%	57.4%	-5.6%	2.3%
PENNSYLVANIA	$9,825	$9,834	$5,753	$4,642	$5,704	$6,097	6.9%	31.3%	6.0%	-38.0%	-37.9%
RHODE ISLAND	$10,420	$9,029	$5,080	$5,424	$5,190	$6,137	18.3%	13.2%	20.8%	-32.0%	-41.1%
SOUTH CAROLINA	$9,635	$8,267	$5,647	$5,906	$6,687	$7,624	14.0%	29.1%	35.0%	-7.8%	-20.9%
SOUTH DAKOTA	$9,422	$8,910	$6,484	$6,324	$7,952	$7,665	-3.6%	21.2%	18.2%	-14.0%	-18.7%
TENNESSEE	$9,222	$9,665	$9,518	$9,336	$11,306	$11,412	0.9%	22.2%	19.9%	18.1%	23.8%
TEXAS	$8,407	$9,768	$8,629	$8,734	$8,293	$9,039	9.0%	3.5%	4.7%	-7.5%	7.5%
UTAH	$10,051	$8,722	$6,576	$7,845	$8,984	$8,717	-3.0%	11.1%	32.6%	-0.1%	-13.3%
VERMONT	$4,525	$4,131	$3,283	$2,942	$3,711	$7,370	98.6%	150.5%	124.5%	78.4%	62.9%
VIRGINIA	$7,660	$9,537	$6,342	$5,697	$7,312	$7,215	-1.3%	26.6%	13.8%	-24.3%	-5.8%
WASHINGTON	$8,908	$8,572	$6,390	$7,101	$8,670	$10,296	18.8%	45.0%	61.1%	20.1%	15.6%
WEST VIRGINIA	$7,868	$7,533	$6,138	$5,330	$6,137	$6,309	2.8%	18.4%	2.8%	-16.3%	-19.8%
WISCONSIN	$10,322	$11,546	$8,993	$7,823	$8,394	$9,107	8.5%	16.4%	1.3%	-21.1%	-11.8%
WYOMING	$16,030	$13,095	$18,715	$20,944	$19,793	$26,393	33.3%	26.0%	41.0%	101.5%	64.7%
U.S.	**$9,068**	**$10,386**	**$7,930**	**$8,174**	**$8,927**	**$9,327**	**4.5%**	**14.1%**	**17.6%**	**-10.2%**	**2.9%**
D.C.	N/A	N/A	$17,208	$14,894	$23,563	$34,466	46.3%	131.4%	100.3%	N/A	N/A

NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
2. The U.S. calculation does not include the District of Columbia. Data for the District of Columbia are not available prior to 2011.
3. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.
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

2. SECTOR COMPARISONS

Table 3.2A presents data on education appropriations per FTE for the public two-year and four-year sectors separately. Two- and four-year institutions have different funding structures in many states and vary in the amount of funding they receive from state and local sources.[28]

In the last year, inflation-adjusted state and local education appropriations increased 11.0% at two-year institutions, reaching $9,347 per FTE. Because one in five FTE students at two-year institutions are located in California, the U.S. weighted average is heavily affected by California's relatively high education appropriations. When excluding California, the U.S. average state and local education appropriations at two-year institutions is nearly $1,000 per FTE lower ($8,399 per FTE). Two-year public education appropriations per FTE ranged widely across states, from $3,962 in Louisiana to $18,718 per FTE in Wyoming. In the last year, two-year education appropriations per FTE declined in seven states. The largest declines were in Nevada (14.5%) and Oklahoma (12.6%). Forty-two states had increases, and 22 states had single-year increases greater than 10%. The largest increases were in Mississippi (37.5%), Minnesota (38.8%), and Vermont (74.5%).

At four-year institutions, education appropriations per FTE were largely flat from 2020 to 2021 (a 0.6% increase above inflation), reaching $8,859. Appropriations ranged even more widely in the four-year sector, from less than $5,000 per student in Arizona and New Hampshire to over $20,000 per student in Illinois, Wyoming, and Washington, D.C.[29] From 2020 to 2021, four-year education appropriations per FTE declined in 16 states. The largest declines were in Nevada (16.0%) and New Jersey (15.2%). Of the 34 states and Washington D.C., with increases, 14 were above 10%. The largest increases were 71.0% in Vermont (due to increases in federal stimulus funding and a one-time bridge appropriation from the state), 46.5% in Wyoming, and 42.2% in New Hampshire.

Sector-level education appropriations in 2021 included $214 per FTE in federal stimulus for two-year institutions, and $288 per FTE in federal stimulus for four-year institutions. Excluding federal stimulus funding, education appropriations at two-year institutions increased 9.1% from 2020 to 2021, while appropriations at four-year institutions *decreased* 1.4%.

- Without federal stimulus funding, two-year education appropriations declined in 10 states. The largest declines were in Colorado (26.2%), Nevada (14.5%), Oklahoma (11.7%), and Louisiana (9.1%).
- Twenty-seven states had declines in four-year education appropriations when excluding federal stimulus funding. In 11 states, declines were greater than 5% per FTE. The largest declines were in Colorado (46.6%), Nevada (16.0%), Louisiana (12.2%), and Missouri (10.2%).

Figure 3.2A displays the disparity in funding between the two- and four-year public sectors within each state. States on the left side of the figure (the **light blue** bars) have relatively higher per-FTE appropriations in the two-year sector, while states on the right side of the figure (the **dark blue** bars) have higher per-FTE appropriations in the four-year sector.

28. Unlike state-level education appropriations, sector-level education appropriations exclude agency funding, and include only the portion of federal stimulus funding known to be allocated for two-year or four-year public operating purposes. In a handful of states, some uncategorizable state support and uncategorizable financial aid are not allocated to either sector and are excluded from the sector-level data.

29. A large portion of education appropriations in Illinois are not available for operations at public institutions. See the Illinois state spotlight to learn more.

- In 2019 and 2020, four-year institutions received more in education appropriations per student than two-year institutions, but in 2021 they received $488 less per FTE. This means that in 2021, two-year education appropriations per FTE were 5.4% higher than four-year education appropriations, with 25 states reporting higher funding in the two-year sector.
- Arizona had the largest disparity favoring the two-year sector (99.2% higher), although this is entirely due to local appropriations that exclusively support community colleges. Florida has the highest disparity favoring the four-year sector, with 77.3% greater education appropriations per FTE at four-year institutions.

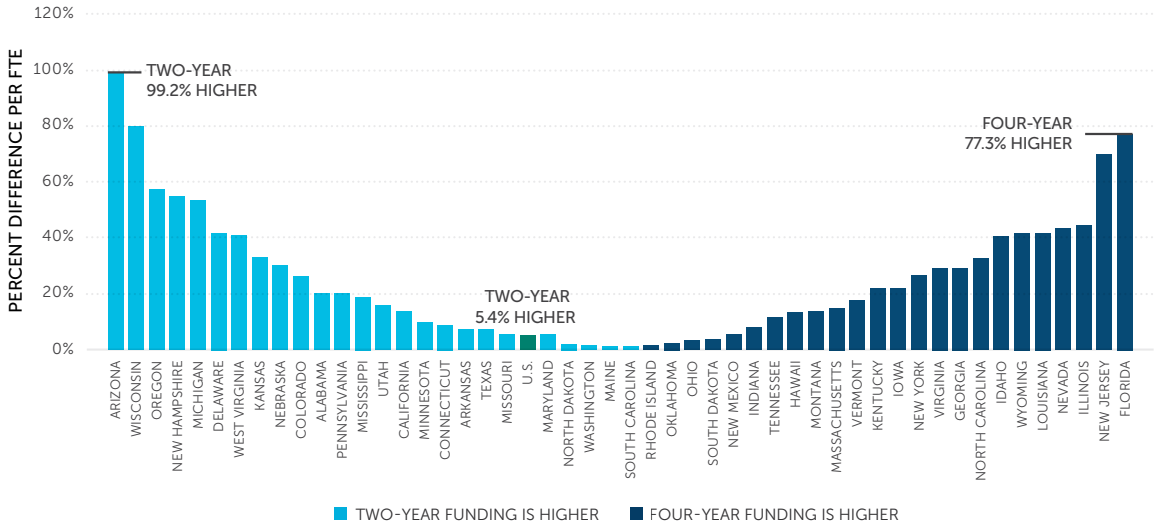
These high-level data on education appropriations should be interpreted cautiously and with consideration of each state's broader context. This is because education appropriations attempt to make higher education funding more comparable across states by including local appropriations (which primarily support two-year institutions) but excluding research, agriculture, and medical appropriations, which only support four-year institutions.

To help explain the components of sector-level education appropriations, *Table 3.2B* breaks out the different sources of state and local support per FTE for two- and four-year public institutions in fiscal year 2021.

- Two-year public institutions received $5,647 per FTE in state general operating appropriations, 76.2% of the four-year general operating appropriation ($7,414).
- State financial aid awards averaged $510 at two-year institutions, 44.8% of the $1,138 awarded to students attending four-year institutions.
- Local appropriations were 151.8 times higher at two-year institutions ($2,976) compared to four-year institutions ($20 per FTE). There were two-year local appropriations in 29 states, compared to only eight for four-year institutions.
- RAM averaged $1,690 at four-year institutions. These funds, which are only allocated to four-year institutions, are excluded from education appropriations but included in total state support.
- Total state and local support at two-year institutions was $9,347, 88.6% of the amount at four-year institutions ($10,555).

FIGURE 3.2A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2021



NOTES:

1 Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.

2. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.

3. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.

SOURCE: State Higher Education Executive Officers Association

The SHEF website includes interactive profiles highlighting trends in higher education revenues for each state. Visit **shef.sheeo.org/state-profile** and select your state for to learn more.

TABLE 3.2A

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY SECTOR AND STATE, FY 2019-2021 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR EDUCATION APPROPRIATIONS						FOUR-YEAR EDUCATION APPROPRIATIONS					
	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019
ALABAMA	$7,443	$9,270	$8,894	0.95	-4.1%	19.5%	$7,158	$7,388	$7,276	0.82	-1.5%	1.6%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$15,915	$16,111	$16,983	1.92	5.4%	6.7%
ARIZONA	$9,871	$10,308	$11,550	1.24	12.1%	17.0%	$3,680	$3,614	$3,894	0.44	7.8%	5.8%
ARKANSAS	$8,091	$8,412	$9,139	0.98	8.6%	13.0%	$8,167	$8,259	$8,501	0.96	2.9%	4.1%
CALIFORNIA	$8,850	$8,653	$9,776	1.05	13.0%	10.5%	$8,789	$9,393	$8,540	0.96	-9.1%	-2.8%
COLORADO	$6,148	$6,182	$6,541	0.70	5.8%	6.4%	$4,224	$4,629	$5,019	0.57	8.4%	18.8%
CONNECTICUT	$9,012	$9,408	$11,949	1.28	27.0%	32.6%	$9,932	$10,170	$10,936	1.23	7.5%	10.1%
DELAWARE	$9,143	$9,989	$10,274	1.10	2.9%	12.4%	$5,661	$6,329	$6,717	0.76	6.1%	18.7%
FLORIDA	$4,877	$4,945	$5,230	0.56	5.8%	7.2%	$12,039	$12,077	$11,822	1.33	-2.1%	-1.8%
GEORGIA	$7,093	$7,156	$7,377	0.79	3.1%	4.0%	$10,463	$10,757	$9,901	1.12	-8.0%	-5.4%
HAWAII	$10,668	$10,948	$11,551	1.24	5.5%	8.3%	$13,406	$12,984	$13,199	1.49	1.7%	-1.5%
IDAHO	$5,643	$5,974	$6,233	0.67	4.3%	10.5%	$9,401	$9,256	$9,389	1.06	1.4%	-0.1%
ILLINOIS	$12,547	$13,702	$13,631	1.46	-0.5%	8.6%	$19,942	$20,689	$21,357	2.41	3.2%	7.1%
INDIANA	$5,934	$5,951	$5,985	0.64	0.6%	0.9%	$7,156	$6,928	$6,483	0.73	-6.4%	-9.4%
IOWA	$4,759	$5,213	$5,610	0.60	7.6%	17.9%	$6,639	$6,973	$6,999	0.79	0.4%	5.4%
KANSAS	$8,939	$9,348	$10,518	1.13	12.5%	17.7%	$6,195	$6,476	$7,550	0.85	16.6%	21.9%
KENTUCKY	$6,268	$6,393	$6,708	0.72	4.9%	7.0%	$8,183	$8,330	$8,338	0.94	0.1%	1.9%
LOUISIANA	$3,755	$3,770	$3,962	0.42	5.1%	5.5%	$6,501	$6,320	$6,062	0.68	-4.1%	-6.8%
MAINE	$7,512	$7,416	$8,392	0.90	13.2%	11.7%	$7,655	$7,907	$8,280	0.93	4.7%	8.2%
MARYLAND	$7,746	$8,467	$9,177	0.98	8.4%	18.5%	$8,162	$8,964	$8,702	0.98	-2.9%	6.6%
MASSACHUSETTS	$6,795	$7,406	$8,362	0.89	12.9%	23.1%	$8,494	$8,751	$9,731	1.10	11.2%	14.6%
MICHIGAN	$9,933	$10,801	$11,873	1.27	9.9%	19.5%	$6,607	$6,602	$6,877	0.78	4.2%	4.1%
MINNESOTA	$6,740	$7,572	$10,513	1.12	38.8%	56.0%	$8,106	$8,572	$9,527	1.08	11.1%	17.5%
MISSISSIPPI	$6,348	$6,651	$9,145	0.98	37.5%	44.1%	$6,767	$7,085	$7,578	0.86	7.0%	12.0%
MISSOURI	$6,895	$8,618	$9,623	1.03	11.7%	39.6%	$7,573	$8,671	$9,103	1.03	5.0%	20.2%
MONTANA	$5,573	$6,048	$7,224	0.77	19.4%	29.6%	$6,321	$6,805	$8,273	0.93	21.6%	30.9%
NEBRASKA	$11,533	$12,796	$13,650	1.46	6.7%	18.4%	$9,727	$9,939	$10,094	1.14	1.6%	3.8%
NEVADA	$6,153	$5,862	$5,011	0.54	-14.5%	-18.6%	$9,059	$9,269	$7,784	0.88	-16.0%	-14.1%
NEW HAMPSHIRE	$4,673	$6,010	$6,792	0.73	13.0%	45.3%	$2,353	$2,724	$3,873	0.44	42.2%	64.6%
NEW JERSEY	$4,077	$4,606	$4,476	0.48	-2.8%	9.8%	$10,312	$10,921	$9,258	1.04	-15.2%	-10.2%
NEW MEXICO	$10,425	$12,244	$14,389	1.54	17.5%	38.0%	$14,638	$16,555	$15,163	1.71	-8.4%	3.6%
NEW YORK	$9,004	$9,058	$9,978	1.07	10.2%	10.8%	$13,619	$13,662	$13,007	1.47	-4.8%	-4.5%
NORTH CAROLINA	$8,266	$8,051	$8,690	0.93	7.9%	5.1%	$12,714	$12,414	$12,096	1.37	-2.6%	-4.9%
NORTH DAKOTA	$7,296	$7,878	$7,998	0.86	1.5%	9.6%	$7,521	$7,812	$7,846	0.89	0.4%	4.3%
OHIO	$7,922	$7,369	$7,346	0.79	-0.3%	-7.3%	$6,248	$6,258	$7,591	0.86	21.3%	21.5%
OKLAHOMA	$5,846	$6,700	$5,858	0.63	-12.6%	0.2%	$6,283	$6,249	$5,994	0.68	-4.1%	-4.6%
OREGON	$7,933	$9,092	$10,050	1.08	10.5%	26.7%	$4,649	$5,055	$5,580	0.63	10.4%	20.0%
PENNSYLVANIA	$5,546	$5,867	$6,532	0.70	11.3%	17.8%	$5,091	$5,172	$5,345	0.60	3.4%	5.0%
RHODE ISLAND	$4,923	$4,351	$5,499	0.59	26.4%	11.7%	$5,004	$4,983	$5,574	0.63	11.9%	11.4%
SOUTH CAROLINA	$7,046	$7,563	$7,738	0.83	2.3%	9.8%	$5,790	$6,257	$7,667	0.87	22.5%	32.4%
SOUTH DAKOTA	$5,095	$5,900	$6,504	0.70	10.2%	27.7%	$6,218	$7,125	$6,739	0.76	-5.4%	8.4%
TENNESSEE	$9,140	$9,268	$9,915	1.06	7.0%	8.5%	$10,499	$11,082	$11,120	1.26	0.3%	5.9%
TEXAS	$7,299	$7,655	$8,934	0.96	16.7%	22.4%	$8,003	$7,424	$8,319	0.94	12.1%	4.0%
UTAH	$9,430	$10,227	$9,820	1.05	-4.0%	4.1%	$8,122	$8,735	$8,393	0.95	-3.9%	3.3%
VERMONT	$2,717	$2,951	$5,150	0.55	74.5%	89.6%	$2,809	$3,587	$6,133	0.69	71.0%	118.4%
VIRGINIA	$4,969	$5,494	$5,633	0.60	2.5%	13.4%	$6,593	$7,942	$7,542	0.85	-5.0%	14.4%
WASHINGTON	$6,687	$7,711	$9,788	1.05	26.9%	46.4%	$8,357	$9,052	$9,639	1.09	6.5%	15.3%
WEST VIRGINIA	$7,132	$7,991	$9,148	0.98	14.5%	28.3%	$5,308	$5,934	$6,038	0.68	1.7%	13.8%
WISCONSIN	$12,100	$13,389	$14,452	1.55	7.9%	19.4%	$5,637	$5,521	$6,217	0.70	12.6%	10.3%
WYOMING	$17,057	$16,396	$18,718	2.00	14.2%	9.7%	$19,096	$19,535	$28,610	3.23	46.5%	49.8%
U.S.	**$8,156**	**$8,422**	**$9,347**	**1.00**	**11.0%**	**14.6%**	**$8,565**	**$8,806**	**$8,859**	**1.00**	**0.6%**	**3.4%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$18,241	$22,221	$28,183	3.18	26.8%	54.5%

NOTES:

1. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
5. Adjustment factors to arrive at constant dollar figures include Cost of Living Index (COLI) and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The Enrollment Mix Index (EMI) is not applied to sector-level data.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.2B

COMPONENTS OF PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY SECTOR AND STATE, FY 2021 (ADJUSTED)

	TWO-YEAR PUBLIC INSTITUTIONS					FOUR-YEAR PUBLIC INSTITUTIONS					
	STATE OPERATING	STATE FINANCIAL AID	LOCAL	EDUC. APPROPS.	STATE AND LOCAL	STATE OPERATING	STATE FINANCIAL AID	LOCAL	EDUC. APPROPS.	RAM	STATE AND LOCAL
ALABAMA	$8,744	$133	$17	$8,894	$8,894	$6,910	$366	$-	$7,276	$2,961	$10,255
ALASKA	$-	$-	$-	$-	$-	$15,179	$772	$51	$16,983	$1,394	$18,377
ARIZONA	$1,069	$7	$10,475	$11,550	$11,550	$3,200	$54	$-	$3,894	$1,205	$5,099
ARKANSAS	$7,157	$429	$1,397	$9,139	$9,139	$6,846	$1,408	$109	$8,501	$3,446	$11,961
CALIFORNIA	$6,592	$318	$2,819	$9,776	$9,776	$6,634	$1,906	$-	$8,540	$1,127	$9,667
COLORADO	$1,801	$972	$1,788	$6,541	$6,541	$1,570	$900	$-	$5,019	$596	$5,615
CONNECTICUT	$11,588	$362	$-	$11,949	$11,949	$10,647	$289	$-	$10,936	$5,170	$16,106
DELAWARE	$9,670	$100	$-	$10,274	$10,274	$5,109	$493	$-	$6,717	$335	$7,052
FLORIDA	$4,555	$504	$172	$5,230	$5,230	$9,291	$2,531	$-	$11,822	$1,672	$13,494
GEORGIA	$6,356	$867	$-	$7,377	$7,377	$7,055	$2,826	$-	$9,901	$1,476	$11,377
HAWAII	$11,161	$164	$-	$11,551	$11,551	$12,990	$93	$-	$13,199	$3,631	$16,831
IDAHO	$3,458	$197	$2,519	$6,233	$6,233	$8,882	$414	$-	$9,389	$1,604	$10,993
ILLINOIS	$6,395	$374	$6,701	$13,631	$13,631	$19,807	$1,338	$-	$21,357	$1,204	$22,592
INDIANA	$5,177	$808	$-	$5,985	$5,985	$5,133	$1,351	$-	$6,483	$1,639	$8,123
IOWA	$4,298	$407	$782	$5,610	$5,610	$6,915	$62	$-	$6,999	$2,091	$9,102
KANSAS	$3,930	$24	$6,304	$10,518	$10,518	$5,831	$193	$368	$7,550	$3,008	$10,641
KENTUCKY	$4,704	$1,720	$-	$6,708	$6,708	$6,068	$1,504	$320	$8,338	$1,895	$10,233
LOUISIANA	$2,917	$509	$-	$3,962	$3,962	$2,886	$2,661	$-	$6,062	$2,441	$8,526
MAINE	$7,568	$701	$-	$8,392	$8,392	$7,259	$431	$-	$8,280	$1,149	$9,429
MARYLAND	$4,021	$145	$4,930	$9,177	$9,177	$8,108	$412	$-	$8,702	$1,893	$10,595
MASSACHUSETTS	$7,724	$503	$-	$8,362	$8,362	$9,222	$464	$-	$9,731	$438	$10,169
MICHIGAN	$4,916	$195	$6,763	$11,873	$11,873	$6,863	$14	$-	$6,877	$803	$7,679
MINNESOTA	$6,993	$532	$-	$10,513	$10,513	$7,624	$913	$-	$9,527	$2,046	$11,573
MISSISSIPPI	$5,241	$153	$1,451	$9,145	$9,145	$6,006	$578	$-	$7,578	$4,719	$12,297
MISSOURI	$3,453	$1,355	$4,147	$9,623	$9,623	$7,217	$574	$-	$9,103	$40	$9,143
MONTANA	$4,716	$60	$1,562	$7,224	$7,224	$7,056	$85	$-	$8,273	$1,475	$9,748
NEBRASKA	$4,747	$195	$8,708	$13,650	$13,650	$9,793	$300	$-	$10,094	$4,560	$14,654
NEVADA	$4,448	$563	$-	$5,011	$5,011	$6,045	$1,727	$12	$7,784	$1,684	$9,468
NEW HAMPSHIRE	$5,988	$306	$-	$6,792	$6,792	$2,674	$32	$-	$3,873	$474	$4,347
NEW JERSEY	$1,677	$730	$1,971	$4,476	$4,476	$7,772	$1,417	$-	$9,258	$1,478	$10,735
NEW MEXICO	$7,130	$455	$6,789	$14,389	$14,389	$14,898	$169	$-	$15,163	$3,863	$19,180
NEW YORK	$3,598	$777	$5,603	$9,978	$9,978	$11,428	$1,423	$156	$13,007	$836	$13,843
NORTH CAROLINA	$6,305	$103	$1,782	$8,690	$8,690	$11,459	$637	$-	$12,096	$2,686	$14,782
NORTH DAKOTA	$7,371	$551	$-	$7,998	$7,998	$7,251	$518	$-	$7,846	$3,382	$11,228
OHIO	$4,845	$32	$2,189	$7,346	$7,346	$6,355	$401	$-	$7,591	$992	$8,583
OKLAHOMA	$3,905	$464	$1,489	$5,858	$5,858	$5,059	$934	$-	$5,994	$1,759	$7,753
OREGON	$5,680	$754	$3,537	$10,050	$10,050	$5,088	$475	$-	$5,580	$1,350	$6,930
PENNSYLVANIA	$3,935	$351	$2,043	$6,532	$6,532	$4,629	$695	$-	$5,345	$371	$5,716
RHODE ISLAND	$4,745	$299	$-	$5,499	$5,499	$4,745	$174	$-	$5,574	$-	$5,574
SOUTH CAROLINA	$3,596	$2,261	$1,678	$7,738	$7,738	$3,883	$2,262	$15	$7,667	$1,577	$9,346
SOUTH DAKOTA	$5,795	$216	$-	$6,504	$6,504	$6,216	$350	$-	$6,739	$1,881	$8,620
TENNESSEE	$6,919	$2,853	$-	$9,915	$9,915	$8,312	$2,718	$-	$11,120	$3,529	$14,649
TEXAS	$3,411	$372	$5,152	$8,934	$8,934	$7,668	$361	$-	$8,319	$3,363	$11,682
UTAH	$9,700	$120	$-	$9,820	$9,820	$8,106	$287	$-	$8,393	$930	$9,323
VERMONT	$4,153	$713	$-	$5,150	$5,150	$3,695	$358	$-	$6,133	$985	$7,155
VIRGINIA	$4,852	$678	$104	$5,633	$5,633	$6,403	$1,080	$59	$7,542	$1,155	$8,700
WASHINGTON	$8,274	$1,124	$-	$9,788	$9,788	$7,357	$2,178	$-	$9,639	$834	$10,473
WEST VIRGINIA	$7,565	$1,584	$-	$9,148	$9,148	$4,594	$1,444	$-	$6,038	$2,891	$8,934
WISCONSIN	$9,166	$415	$4,871	$14,452	$14,452	$5,070	$679	$-	$6,217	$1,461	$7,678
WYOMING	$10,699	$563	$4,086	$18,718	$18,718	$18,434	$2,770	$-	$28,610	$4,259	$32,869
U.S.	**$5,647**	**$510**	**$2,976**	**$9,347**	**$9,347**	**$7,414**	**$1,138**	**$20**	**$8,859**	**$1,690**	**$10,555**
D.C.	$-	$-	$-	$-	$-	$21,949	$705	$-	$28,183	$4,409	$32,592

NOTES:

1. State public operating appropriations are a measure of state support directly allocated to public two- and four-year institutions. State public operating excludes local appropriations, agency funding, RAM, and student financial aid.
2. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses.
3. Local appropriations are any local government taxes allocated directly to institutions for operating expenses.
4. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.
5. RAM refers to the total appropriations intended for the direct operations of research, agriculture, public health care services, and medical schools.
6. Total state and local support is the sum of federal stimulus funds, state and local tax appropriations, non-tax support, non-appropriated support, state-funded endowment earnings, and other state funds, net of any funds not available for use. RAM is included in four-year state and local support. Sector-level state and local support includes any portion of federal stimulus funding allocated specifically to each sector.
7. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
8. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
9. Alabama was unable to provide sector-level breakouts for all financial programs. As a result, 49% of Alabama's 2021 state public financial aid is excluded from this table. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal years 2020 and 2021 are missing non-reverting and lottery funds. Additionally, four-year public operating funds for New Mexico are estimated.
10. Adjusted by the Cost of Living Index (COLI). The COLI is not a measure of inflation over time. The Enrollment Mix Index (EMI) is not applied to sector-level data.

SOURCE: State Higher Education Executive Officers Association

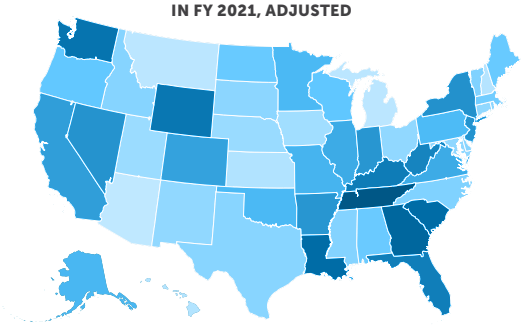
STATE PUBLIC FINANCIAL AID

State public financial aid is the part of education appropriations allocated to financial aid for students attending public institutions, excluding loans. While we present financial aid on a per-FTE basis along with all other metrics in the SHEF report, it is important to note that financial aid is not awarded to all students, and increases in aid per FTE could be due to rising award amounts or an increase in the number of students receiving an award.

Financial aid has increased steadily despite economic recessions that negatively impacted the rest of education appropriations. The SHEF data collection on financial aid goes back to 2001. From that year forward, financial aid per FTE has increased in all but three years. Visit the SHEF website to view the interactive financial aid map.[30] This map shows state public financial aid per FTE across the nation.

State public financial aid per FTE increased 8.8% from 2020 to 2021 and reached an all-time high of $921 per FTE enrolled student. Nationally, state public financial aid has increased 39.8% since 2008 and 75.6% since 2001. Because financial aid per FTE has a low base, percentage increases represent smaller dollar-amount increases than similar figures in the other revenue metrics. The 8.8% increase in the last year corresponded to an additional $74 per FTE in financial aid.

STATE PUBLIC FINANCIAL AID PER FTE IN FY 2021, ADJUSTED



1. STATE COMPARISONS

States vary considerably in the size and extent of their financial aid programs (*Figure 3.3*). In 2021, all states and Washington, D.C., had at least one public financial aid program. Public state financial aid ranged from under $100 per FTE in four states (Arizona, Michigan, Montana, and New Hampshire) to over $2,000 per FTE in another four states (Georgia, Louisiana, South Carolina, and Tennessee).

Since 2001, per-student aid has increased in 38 states. Despite the longstanding increases in financial aid nationally, per-student aid has decreased in 19 states and Washington, D.C., in the last year (*Table 3.3*). The largest percentage decrease was in Washington, D.C. (26.0%), with a decrease of $259 per FTE. Outside of Washington, D.C., the largest declines in financial aid were in Oklahoma (15.0% or $136 per FTE) and New York (11.8% or $165 per FTE).

Of the 31 states with increases from 2020 to 2021, financial aid per FTE increased more than 10% in nine states, and there were notable increases in Washington (32.2% or $464 per FTE) and California (41.8% or $319 per FTE). In California, the increase is due to growth in financial aid awards to student parents and a reallocation in the sources of state financial aid from federal to state funds. Michigan had the highest percentage increase (393.3%), however, this percentage only represents an increase of $57 per FTE, and was largely due to declines in enrollment and the implementation of two new financial aid programs in the two-year sector.[31]

30. shef.sheeo.org/data-visualizations/map-3-3/?report_page=state-funding-and-enrollment&modal=map-3_3

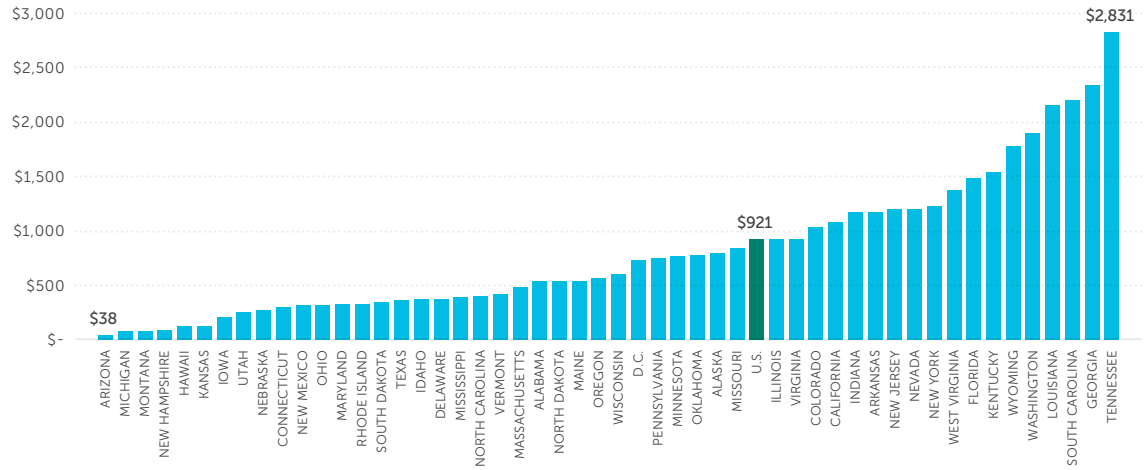
31. Some states, like California and Michigan, also use federal TANF allocations for state financial aid programs; these funds are not included in SHEF education appropriations. Michigan's TANF allocations for state financial aid represent a large portion of the state's total financial aid allocations. See State Spotlight: Michigan for more information.

MEASUREMENT NOTE: FINANCIAL AID REPORTING

Starting in 2020, the SHEF data collection asked states to provide state financial aid by sector. For many statewide programs, there is not a separate financial aid appropriation for two-year and four-year public institutions, and actual allocations must be reported to obtain accurate sector-level data. As a result, many states switched from reporting financial aid appropriations to reporting actual allocations by sector. A handful of states, including those with multiple sector-level data providers, have always provided financial aid allocations. This reporting change is noteworthy because financial aid awards depend on the number of students who qualify and apply for each aid program, and appropriations rarely match allocations. In all cases, prior year data were corrected to match the new reporting methodology, or unallocated funds were listed as "uncategorizable public aid" to ensure continuity in state support definitions over time. Nevertheless, this reporting change marks a departure from the historical practice of SHEF reporting state appropriations for financial aid.

FIGURE 3.3

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY STATE, FY 2021 (ADJUSTED)



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. In several states, financial aid may include unawarded funds that were reverted back to the state.
2. The U.S. calculation does not include the District of Columbia.
3. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal year 2021 is missing non-reverting and lottery funds.
4. Adjustment factors to arrive at constant dollar figures include 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, FY 2001-2021 (CONSTANT ADJUSTED DOLLARS)

	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001
ALABAMA	$152	$277	$390	$517	$531	2.8%	36.2%	92.1%	249.3%
ALASKA	$-	$68	$716	$728	$796	9.3%	11.1%	1074.4%	N/A
ARIZONA	$30	$51	$45	$37	$38	5.0%	-14.6%	-24.5%	30.1%
ARKANSAS	$642	$1,562	$1,187	$1,108	$1,174	6.0%	-1.1%	-24.8%	82.9%
CALIFORNIA	$366	$708	$772	$765	$1,084	41.8%	40.3%	53.1%	196.5%
COLORADO	$679	$552	$795	$1,027	$1,026	-0.2%	29.1%	85.9%	51.1%
CONNECTICUT	$485	$432	$342	$296	$306	3.4%	-10.6%	-29.3%	-37.0%
DELAWARE	$452	$420	$371	$388	$370	-4.8%	-0.4%	-12.0%	-18.2%
FLORIDA	$831	$966	$651	$1,427	$1,479	3.7%	127.3%	53.2%	78.0%
GEORGIA	$1,830	$2,406	$2,012	$2,257	$2,333	3.4%	16.0%	-3.0%	27.5%
HAWAII	$10	$66	$64	$110	$117	6.3%	82.6%	76.9%	1098.5%
IDAHO	$104	$123	$139	$396	$368	-7.1%	164.2%	200.1%	255.7%
ILLINOIS	$1,066	$676	$601	$958	$925	-3.4%	54.0%	36.8%	-13.2%
INDIANA	$597	$870	$1,113	$1,152	$1,165	1.1%	4.6%	33.9%	95.1%
IOWA	$52	$91	$92	$207	$213	2.7%	131.0%	132.8%	307.5%
KANSAS	$115	$99	$97	$124	$126	1.7%	29.7%	26.9%	9.1%
KENTUCKY	$312	$1,088	$1,300	$1,572	$1,543	-1.9%	18.6%	41.8%	395.1%
LOUISIANA	$847	$1,140	$2,114	$2,090	$2,156	3.2%	2.0%	89.2%	154.4%
MAINE	$430	$269	$556	$517	$545	5.4%	-1.9%	102.9%	26.9%
MARYLAND	$362	$322	$340	$342	$322	-5.9%	-5.4%	-0.1%	-11.3%
MASSACHUSETTS	$594	$325	$331	$386	$484	25.6%	46.2%	49.1%	-18.4%
MICHIGAN	$705	$147	$18	$15	$72	393.9%	310.2%	-51.0%	-89.8%
MINNESOTA	$714	$411	$656	$782	$770	-1.5%	17.4%	87.2%	7.9%
MISSISSIPPI	$533	$234	$382	$380	$385	1.5%	0.8%	64.9%	-27.8%
MISSOURI	$299	$436	$659	$770	$831	8.0%	26.2%	90.7%	178.2%
MONTANA	$135	$104	$71	$65	$75	15.0%	4.9%	-27.7%	-44.7%
NEBRASKA	$52	$166	$188	$245	$262	7.1%	39.1%	58.3%	400.4%
NEVADA	$898	$990	$1,113	$1,197	$1,201	0.3%	7.9%	21.2%	33.7%
NEW HAMPSHIRE	$36	$71	$42	$84	$93	10.2%	122.9%	30.2%	157.2%
NEW JERSEY	$885	$927	$1,042	$1,325	$1,199	-9.5%	15.0%	29.3%	35.4%
NEW MEXICO	$1,098	$324	$309	$265	$308	16.2%	-0.2%	-4.9%	-71.9%
NEW YORK	$1,018	$1,073	$1,285	$1,396	$1,231	-11.8%	-4.2%	14.7%	20.9%
NORTH CAROLINA	$304	$570	$466	$409	$409	0.1%	-12.2%	-28.2%	34.6%
NORTH DAKOTA	$51	$322	$487	$547	$542	-0.8%	11.4%	68.6%	963.5%
OHIO	$314	$206	$259	$316	$310	-1.7%	19.5%	50.8%	-1.2%
OKLAHOMA	$347	$832	$883	$908	$772	-15.0%	-12.6%	-7.2%	122.3%
OREGON	$194	$104	$381	$586	$574	-2.0%	50.8%	454.2%	195.6%
PENNSYLVANIA	$848	$610	$727	$718	$748	4.2%	2.9%	22.7%	-11.8%
RHODE ISLAND	$169	$239	$247	$337	$335	-0.6%	36.0%	40.1%	98.8%
SOUTH CAROLINA	$508	$1,794	$1,757	$2,292	$2,195	-4.2%	25.0%	22.4%	332.5%
SOUTH DAKOTA	$7	$171	$258	$342	$339	-1.1%	31.4%	97.9%	4636.3%
TENNESSEE	$300	$2,012	$2,434	$2,814	$2,831	0.6%	16.3%	40.7%	843.7%
TEXAS	$20	$364	$264	$307	$365	19.0%	38.3%	0.4%	1691.4%
UTAH	$89	$143	$143	$241	$253	4.9%	76.2%	76.2%	184.9%
VERMONT	$484	$388	$470	$425	$412	-2.9%	-12.2%	6.2%	-14.8%
VIRGINIA	$504	$552	$666	$919	$932	1.4%	40.0%	68.7%	84.9%
WASHINGTON	$683	$911	$1,234	$1,440	$1,904	32.2%	54.3%	108.9%	178.7%
WEST VIRGINIA	$404	$1,222	$1,317	$1,378	$1,377	-0.1%	4.6%	12.7%	240.4%
WISCONSIN	$413	$564	$605	$595	$591	-0.7%	-2.3%	4.8%	43.0%
WYOMING	$1,037	$1,296	$1,477	$1,417	$1,783	25.8%	20.7%	37.6%	71.9%
U.S.	**$525**	**$682**	**$725**	**$847**	**$921**	**8.8%**	**27.0%**	**35.0%**	**75.6%**
D.C.	N/A	$1,925	$1,204	$994	$735	-26.0%	-38.9%	-61.8%	N/A

NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. In several states, financial aid may include unawarded funds that were reverted back to the state.
2. Financial aid data are not available prior to 2001. Over time, states have shifted from reporting appropriated student financial aid to reporting actual/awarded student financial aid. Any such updates are made to all historical data for each state.
3. The U.S. calculation does not include the District of Columbia. Data for the District of Columbia are not available prior to 2011.
4. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal years 2020 and 2021 are missing non-reverting and lottery funds.
5. 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

2. SECTOR COMPARISONS

Table 3.3A presents state financial aid allocated to FTE students attending the public two-year and four-year sectors, separately. In some cases, states were not able to identify the sector for some of their financial aid dollars. In those cases, the funds were listed as "uncategorizable" and are excluded from this section.[32]

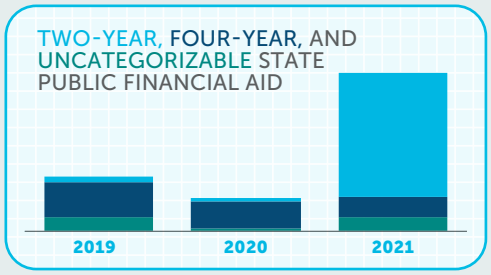
At two-year institutions, state public financial aid increased 4.6% from 2020 to 2021 (a $22 increase per FTE), reaching $510 per FTE. Aid ranged from $7 in Arizona to $2,853 in Tennessee. Overall, in 2021, five states (Arizona, Delaware, Kansas, Montana, and Ohio) awarded less than $100 in financial aid per FTE at two-year institutions, and six (Kentucky, Missouri, South Carolina, Tennessee, Washington, and West Virginia) awarded more than $1,000 per FTE.

Over the last year, aid to two-year institutions increased in 29 states. The largest increase was 3,623.3% in Michigan ($189 per FTE) due to two new financial aid programs, which received $30 million in state funds in fiscal year 2021. Of the 20 states with declines, the largest was 39.7% in Oklahoma ($306 per FTE). This decline was due to several factors, including a reduction in state-funded financial aid, an enrollment decline at two-year institutions, and a decline in enrollment under Oklahoma's largest scholarship program (OK Promise).

STATE SPOTLIGHT: MICHIGAN

Historically, the largest proportion of Michigan's state public financial aid funding has been concentrated in the four-year sector. In 2019 and 2020, 65.3% and 80.8% of all state public financial aid dollars went to the four-year sector, while only 8.5% (2019) and 10.6% (2020) flowed to two-year colleges.[33] In 2021, there was a dramatic shift in sector-level financial aid allocation that led to a 3,623.3% increase in Michigan's two-year sector state public financial aid: Michigan's governor introduced two new financial aid programs (Futures for Frontliners and Michigan Reconnect), both of which provide free tuition and fees for eligible students enrolled in Michigan's community colleges. As a result, two-year public aid in Michigan increased from $5 per FTE in 2020 to $195 per FTE in 2021.

The first program, Futures for Frontliners, was initially funded with $24 million in federal GEER funds (not included in state public financial aid reported in SHEF) but will be funded with state appropriations in fiscal year 2022. In 2021, a second program, called Michigan Reconnect, received $30 million in state funds and is projected to receive $55 million in state funds in fiscal year 2022. Both of these financial aid programs are funded through Michigan's Department of Labor and Economic Opportunity budget.



32. Overall, 2.5% of state public financial aid was uncategorizable. Twenty-nine states and Washington, D.C., were able to classify all state public financial aid by sector and listed no uncategorizable aid. In seven states, more than 5% of aid could not be classified by sector: Ohio (6.7%), Michigan (8.6%), Washington (10.2%), Colorado (14.2%), Pennsylvania (20.9%), Rhode Island (33.6%), and Alabama (45.3%).

33. These percentages were calculated using the sum of two-year, four-year, and uncategorizable public financial aid.

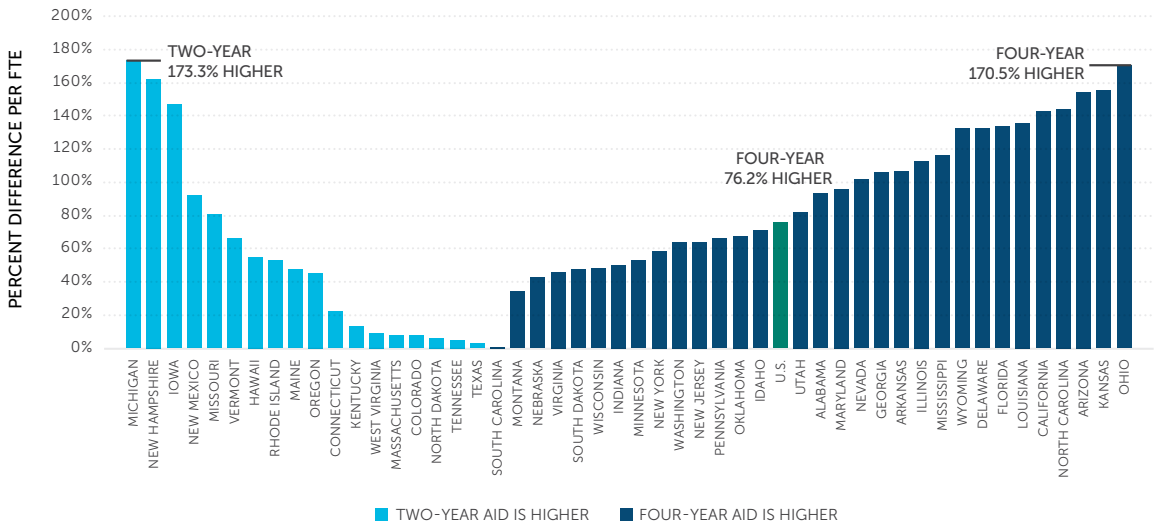
At four-year institutions, state public financial aid increased 8.1% in the last year, or $86 per FTE, reaching $1,138 per FTE nationally. Aid ranged from $14 per FTE in Michigan to $2,826 in Georgia. Six states (Arizona, Hawaii, Iowa, Michigan, Montana, and New Hampshire) awarded less than $100 per FTE in financial aid to students attending four-year institutions, while 17 states awarded more than $1,000 per FTE.

From 2020 to 2021, four-year aid allocations increased in 21 states. The largest increase was 172.3% ($20 per FTE) in New Hampshire, which has a relatively small financial aid program. Twenty-nine states and Washington, D.C., had decreases in per-FTE financial aid this year. While New Mexico had the largest percentage decrease (32.1%, representing $80 per FTE), New Jersey had the largest real decline (18.9% or $330 per FTE).

Figure 3.3A displays the disparity in state financial aid between the two- and four-year public sectors within each state. States on the left side of the figure (the **light blue** bars) have higher per-FTE financial aid in the two-year sector, while states on the right side of the figure (the **dark blue** bars) have relatively higher per-FTE financial aid in the four-year sector. While most states have greater financial aid in the four-year sector (76.2% higher, on national average), the four-year sector also has much higher tuition rates. Michigan had the largest disparity favoring its two-year sector (173.3% higher), while Ohio had the largest disparity favoring its four-year sector (170.5% higher).

FIGURE 3.3A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY STATE, FY 2021



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. Sector-level state public financial aid excludes any financial aid that could not be categorized by sector. Differences in aid amounts across sector capture variation in the proportion of students receiving an award as well as differences in average award size.
2. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
3. Alabama was unable to provide sector-level breakouts for all financial aid programs. As a result, 49% of Alabama's 2021 state public financial aid is excluded from this table.
4. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal year 2021 is missing non-reverting and lottery funds.
5. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.3A

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY SECTOR AND STATE, FY 2019-2021 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR FINANCIAL AID						FOUR-YEAR FINANCIAL AID					
	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019
ALABAMA	$166	$161	$133	0.26	-17.7%	-19.9%	$519	$450	$366	0.32	-18.7%	-29.5%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$717	$706	$772	0.68	9.3%	7.7%
ARIZONA	$6	$6	$7	0.01	15.5%	14.8%	$62	$54	$54	0.05	0.1%	-12.8%
ARKANSAS	$283	$313	$429	0.84	37.0%	51.5%	$1,354	$1,373	$1,408	1.24	2.6%	4.0%
CALIFORNIA	$244	$302	$318	0.62	5.5%	30.4%	$1,150	$1,232	$1,906	1.68	54.7%	65.7%
COLORADO	$935	$960	$972	1.91	1.3%	4.0%	$826	$915	$900	0.79	-1.7%	9.0%
CONNECTICUT	$319	$309	$362	0.71	17.0%	13.6%	$280	$294	$289	0.25	-1.7%	3.0%
DELAWARE	$100	$104	$100	0.20	-3.5%	0.2%	$523	$520	$493	0.43	-5.3%	-5.7%
FLORIDA	$487	$494	$504	0.99	2.0%	3.4%	$2,339	$2,523	$2,531	2.22	0.3%	8.2%
GEORGIA	$829	$898	$867	1.70	-3.5%	4.5%	$2,665	$2,770	$2,826	2.48	2.0%	6.0%
HAWAII	$142	$143	$164	0.32	14.6%	15.5%	$95	$94	$93	0.08	-0.8%	-1.8%
IDAHO	$209	$246	$197	0.39	-19.8%	-5.7%	$390	$433	$414	0.36	-4.4%	6.1%
ILLINOIS	$330	$400	$374	0.73	-6.3%	13.4%	$1,240	$1,364	$1,338	1.18	-1.9%	7.9%
INDIANA	$662	$666	$808	1.58	21.4%	22.1%	$1,458	$1,388	$1,351	1.19	-2.7%	-7.3%
IOWA	$111	$391	$407	0.80	4.1%	267.2%	$57	$59	$62	0.05	5.4%	8.9%
KANSAS	$21	$22	$24	0.05	11.4%	13.6%	$195	$194	$193	0.17	-0.7%	-1.1%
KENTUCKY	$1,565	$1,782	$1,720	3.37	-3.5%	9.9%	$1,425	$1,514	$1,504	1.32	-0.7%	5.5%
LOUISIANA	$444	$463	$509	1.00	9.8%	14.5%	$2,674	$2,656	$2,661	2.34	0.2%	-0.5%
MAINE	$727	$631	$701	1.37	11.0%	-3.7%	$440	$414	$431	0.38	4.1%	-2.1%
MARYLAND	$78	$119	$145	0.28	21.7%	85.7%	$425	$471	$412	0.36	-12.5%	-3.1%
MASSACHUSETTS	$384	$340	$503	0.99	47.7%	30.9%	$361	$392	$464	0.41	18.3%	28.4%
MICHIGAN	$6	$5	$195	0.38	3623.3%	2967.8%	$23	$17	$14	0.01	-20.1%	-38.5%
MINNESOTA	$525	$527	$532	1.04	0.9%	1.2%	$952	$941	$913	0.80	-2.9%	-4.1%
MISSISSIPPI	$132	$157	$153	0.30	-2.5%	16.1%	$545	$578	$578	0.51	-0.1%	6.0%
MISSOURI	$872	$1,081	$1,355	2.66	25.4%	55.5%	$574	$605	$574	0.50	-5.2%	-0.1%
MONTANA	$24	$49	$60	0.12	23.1%	148.8%	$50	$75	$85	0.07	13.7%	70.8%
NEBRASKA	$211	$222	$195	0.38	-12.2%	-7.7%	$240	$263	$300	0.26	14.2%	25.2%
NEVADA	$544	$541	$563	1.10	4.1%	3.5%	$1,787	$1,760	$1,727	1.52	-1.9%	-3.4%
NEW HAMPSHIRE	$316	$314	$306	0.60	-2.8%	-3.4%	$4	$12	$32	0.03	172.3%	650.2%
NEW JERSEY	$518	$561	$730	1.43	30.0%	40.8%	$1,673	$1,747	$1,417	1.25	-18.9%	-15.3%
NEW MEXICO	$271	$254	$455	0.89	79.0%	67.9%	$278	$249	$169	0.15	-32.1%	-39.3%
NEW YORK	$1,106	$1,003	$777	1.53	-22.5%	-29.7%	$1,559	$1,573	$1,423	1.25	-9.5%	-8.7%
NORTH CAROLINA	$105	$99	$103	0.20	4.1%	-1.7%	$676	$658	$637	0.56	-3.2%	-5.8%
NORTH DAKOTA	$435	$544	$551	1.08	1.3%	26.7%	$470	$525	$518	0.46	-1.4%	10.1%
OHIO	$36	$37	$32	0.06	-13.2%	-10.9%	$338	$404	$401	0.35	-0.6%	18.7%
OKLAHOMA	$654	$770	$464	0.91	-39.7%	-29.1%	$1,068	$997	$934	0.82	-6.3%	-12.5%
OREGON	$711	$804	$754	1.48	-6.2%	6.1%	$440	$452	$475	0.42	5.1%	8.0%
PENNSYLVANIA	$335	$353	$351	0.69	-0.7%	4.6%	$607	$677	$695	0.61	2.6%	14.5%
RHODE ISLAND	$302	$288	$299	0.59	4.1%	-0.7%	$180	$179	$174	0.15	-2.5%	-2.8%
SOUTH CAROLINA	$2,280	$2,530	$2,261	4.44	-10.6%	-0.8%	$2,226	$2,249	$2,262	1.99	0.6%	1.6%
SOUTH DAKOTA	$192	$221	$216	0.42	-2.5%	12.4%	$339	$353	$350	0.31	-0.9%	3.3%
TENNESSEE	$2,977	$2,963	$2,853	5.60	-3.7%	-4.2%	$2,475	$2,614	$2,718	2.39	4.0%	9.8%
TEXAS	$190	$203	$372	0.73	83.4%	95.4%	$378	$393	$361	0.32	-8.3%	-4.7%
UTAH	$81	$95	$120	0.24	27.1%	48.7%	$264	$279	$287	0.25	2.8%	8.8%
VERMONT	$848	$743	$713	1.40	-4.0%	-15.9%	$379	$369	$358	0.31	-2.9%	-5.4%
VIRGINIA	$593	$698	$678	1.33	-2.8%	14.4%	$987	$1,054	$1,080	0.95	2.5%	9.4%
WASHINGTON	$760	$896	$1,124	2.20	25.5%	48.0%	$1,715	$1,946	$2,178	1.91	11.9%	27.0%
WEST VIRGINIA	$1,012	$1,358	$1,584	3.11	16.6%	56.5%	$1,497	$1,487	$1,444	1.27	-2.9%	-3.6%
WISCONSIN	$498	$408	$415	0.81	1.5%	-16.7%	$679	$695	$679	0.60	-2.3%	0.1%
WYOMING	$645	$644	$563	1.10	-12.7%	-12.8%	$2,064	$1,964	$2,770	2.43	41.0%	34.2%
U.S.	**$451**	**$487**	**$510**	**1.00**	**4.6%**	**13.0%**	**$1,006**	**$1,052**	**$1,138**	**1.00**	**8.1%**	**13.0%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$1,138	$954	$705	0.62	-26.0%	-38.0%

NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. Sector-level state public financial aid excludes any financial aid that could not be categorized by sector.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
5. Alabama was unable to provide sector-level breakouts for all programs. As a result, 49% of Alabama's 2021 state public financial aid is excluded from this table.
6. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal years 2020 and 2021 are missing non-reverting and lottery funds.
7. Adjustment factors to arrive at constant dollar figures include Cost of Living Index (COLI) and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The Enrollment Mix Index (EMI) is not applied to sector-level data.

SOURCE: State Higher Education Executive Officers Association

FINANCIAL AID PERCENTAGE OF EDUCATION APPROPRIATIONS

Financial aid is one component of education appropriations, and its share of education appropriations has increased over time. This section provides data on state public financial aid as a percentage of education appropriations (the financial aid allocation) by state and sector.

The percentage of education appropriations allocated to state financial aid has increased over time. In 2001, 5.1% of education appropriations were directed toward student financial aid; by 2021, this proportion had increased to 9.9% (a growth of 4.8 percentage points).

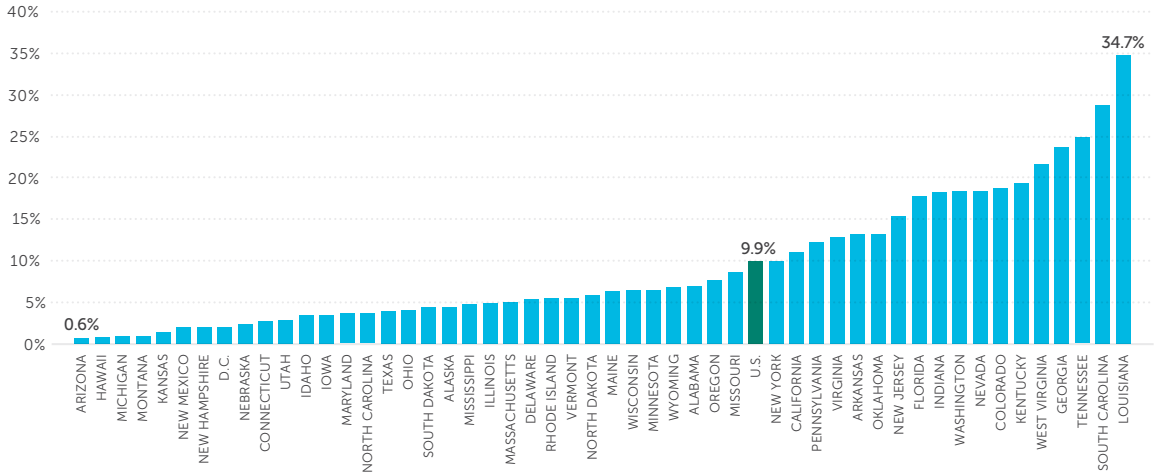
1. STATE COMPARISONS

States vary considerably in how much of their total funding is allocated to student financial aid. On the low end, Arizona has a very small aid program that comprises only 0.6% of its total education appropriations. On the high end, the financial aid allocation accounts for 34.7% of Louisiana's total funding for public higher education (*Figure 3.4*).

Financial aid as a percentage of education appropriations has increased in 39 states since 2001, when financial aid data were first collected. This proportion increased by more than 10 percentage points in eight states. The largest increases were in Louisiana (24.5 percentage points), South Carolina (22.7), and Tennessee (21.7). Of the 11 states with declines in the proportion of education appropriations allocated to financial aid, only two states had declines greater than 5 percentage points: Vermont (6.1 percentage points) and New Mexico (7.9).

FIGURE 3.4

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID AS A PERCENT OF EDUCATION APPROPRIATIONS BY STATE, FY 2021



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. In several states, financial aid may include unawarded funds that were reverted back to the state.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Education appropriations include federal stimulus funding.
3. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal year 2021 is missing non-reverting and lottery funds.

SOURCE: State Higher Education Executive Officers Association

2. SECTOR COMPARISONS

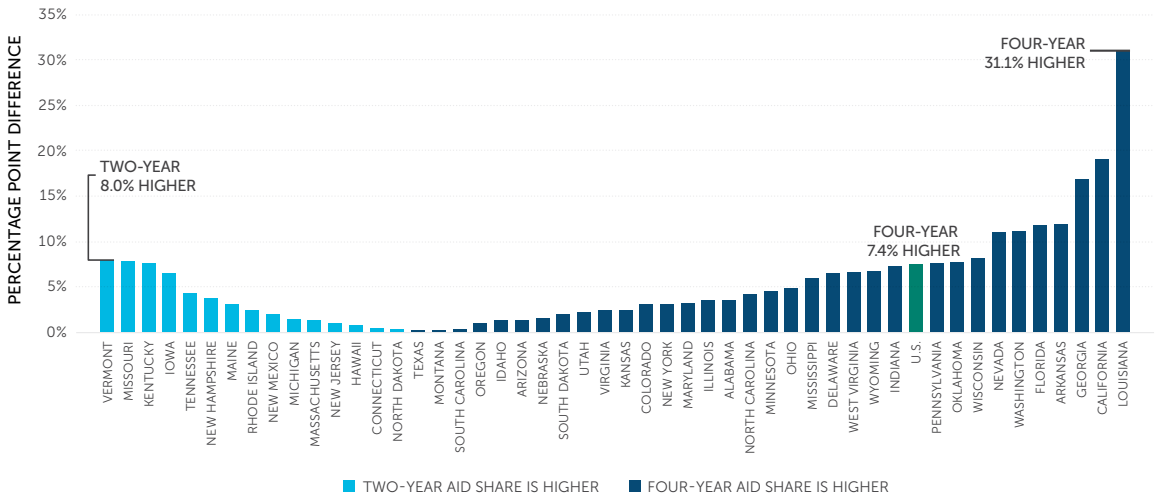
The percentage of education appropriations allocated to financial aid differs for two- and four-year institutions. In fiscal year 2021, 5.5% of funding at two-year institutions went to financial aid, compared to 12.8% at four-year institutions.[34]

- The financial aid allocation at two-year institutions ranged from 0.1% in Arizona to 29.2% in South Carolina. Five states (Arizona, Delaware, Kansas, Montana, and Ohio) had a two-year financial aid allocation of less than 1%.
- At four-year institutions, Michigan had the lowest financial aid allocation (0.2%), and Louisiana had the highest (43.9%). Four states (Hawaii, Iowa, Michigan, and New Hampshire) had a four-year financial aid allocation of less than 1%.

Figure 3.4A shows the difference in the financial aid allocation as a percentage of sector-level education appropriations between two- and four-year institutions. In states on the figure's left side (the **light blue** bars), the financial aid allocation as a percentage of two-year education appropriations is highest in the two-year sector. Most states are on the right side of *Figure 3.4A* (the **dark blue** bars), indicating that in a majority of states, the mix of funding for four-year institutions leans more toward student aid than at two-year institutions.

FIGURE 3.4A

DIFFERENCE IN TWO-YEAR AND FOUR-YEAR STATE FINANCIAL AID AS A PERCENT OF EDUCATION APPROPRIATIONS BY STATE, FY 2021



NOTES:

1. State public financial aid is any state appropriated student financial aid for public institutions, excluding loans and aid for students attending medical schools. For many states, it includes aid for both tuition costs and living expenses. Sector-level state public financial aid excludes any financial aid that could not be categorized by sector. Differences in aid amounts across sector capture variation in the proportion of students receiving an award as well as differences in average award size.
2. Education appropriations are a measure of state and local support available for public higher education operating expenses and student financial aid, excluding appropriations for research, hospitals, and medical education. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector, but exclude state agency funding.
3. Percentage point differences show the number of percentage points by which the student share is higher at either two- or four-year institutions, not the percent difference between the two.
4. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
5. Alabama was unable to provide sector-level breakouts for all financial aid programs. As a result, 49% of Alabama's 2021 state public financial aid is excluded from this table.
6. New Mexico was unable to provide complete financial aid data. Financial aid for fiscal year 2021 is missing non-reverting and lottery funds.

SOURCE: State Higher Education Executive Officers Association

34. For a breakdown of state aid as a percentage of education appropriations over time for each state and by sector, visit the web-only *Tables 3.4* and *3.4A* on the SHEF website at shef.sheeo.org/report/?report_page=state-funding-and-enrollment#financial-aid-share.

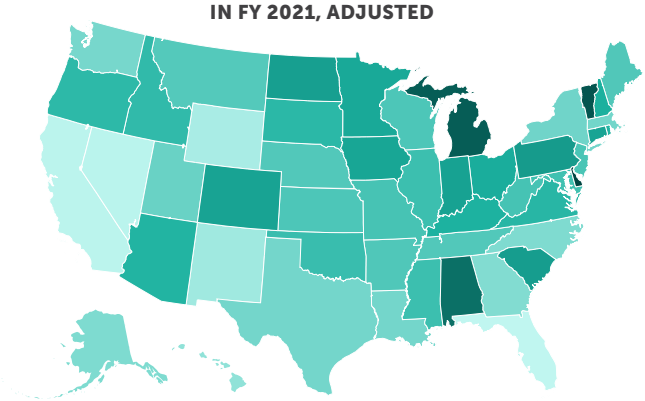
NET TUITION AND TOTAL EDUCATION REVENUE

This section thoroughly examines the trends and interstate differences in net tuition revenue and total education revenue, including the student share. We also present sector-level breakouts for each of these metrics.

NET TUITION REVENUE

Net tuition revenue is calculated by taking the gross amount of tuition and fees net of state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees. Federal financial aid and student loans are included in net tuition revenue. Visit the SHEF website to view the interactive tuition revenue map.[35] This map shows net tuition revenue per FTE across the nation.

NET TUITION REVENUE PER FTE IN FY 2021, ADJUSTED



Inflation-adjusted net tuition and fee revenue has increased substantially over time. In 1980 (the start of the SHEF dataset), public institutions averaged $2,396 in net tuition revenue per FTE. Since that time, tuition revenue per FTE has increased 180.5%, and there have been only five years with a decline in net tuition revenue (2000, 2001, 2019, 2020, 2021). Overall, the average annual change in tuition and fee revenue is a 2.6% increase above inflation. These increases are primarily due to increases in tuition and fee rates and an increasing proportion of out-of-state, international, and graduate student enrollment.

Recently, this trend has shifted; tuition and fee revenue has declined for the last three years. **Public institutions received $6,723 in net tuition revenue from in-state and out-of-state students in 2021, down 3.2% from 2020 and 4.7% over the last five years.** Declines in net tuition revenue are largely due to increases in state financial aid and minimal tuition rate growth.

35. shef.sheeo.org/data-visualizations/map-4-1/?report_page=net-tuition-and-total-education-revenue&modal=map-4_1

1. STATE COMPARISONS

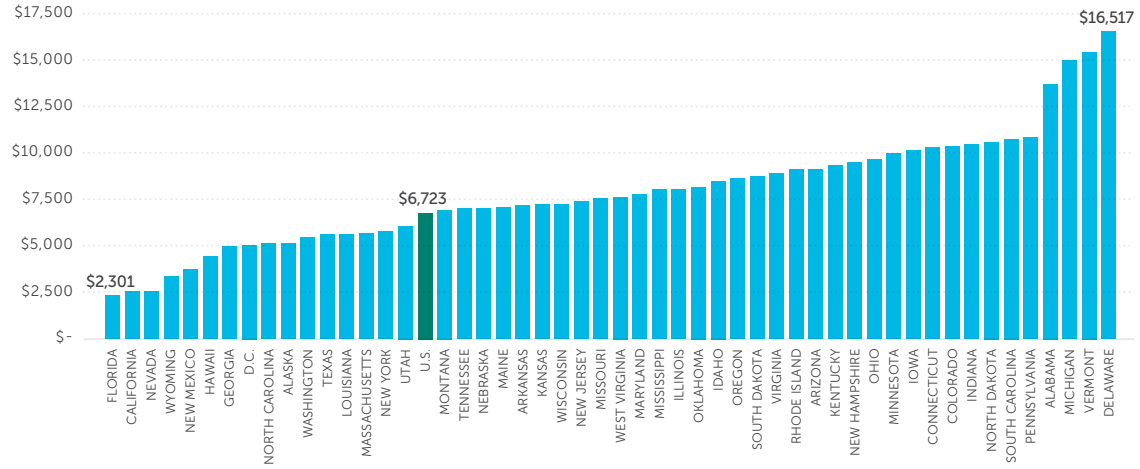
Net tuition revenue per FTE ranged widely across the states due to differences in the mix of students paying different tuition rates, the level of state support and availability of state public financial aid, and whether institutions can freely raise their tuition rates (*Figure 4.1*). On the low end, net tuition revenue was less than $3,000 per FTE in California, Florida, and Nevada. On the high end, net tuition revenue is over $15,000 in Delaware and Vermont. Seven states had net tuition revenue averages below $5,000 per FTE, and 11 states were above $10,000 per FTE.

- *Table 4.1* shows that net tuition revenue per FTE declined in 36 states between 2020 and 2021. Five states saw declines greater than 10% (California, Connecticut, Delaware, New Mexico, and Wyoming). Increases in financial aid account for most of the declines seen in California and Wyoming.
- Of the 14 states and Washington, D.C., with net tuition revenue increases in the last year, only three had increases higher than 5% (Arizona, North Dakota, and Rhode Island).

In the last five years (since 2016), net tuition and fee revenue has declined in 26 states and Washington, D.C. Despite these recent declines, since 1980 net tuition revenue per FTE has increased in every state and has increased by more than 100% in 44 states. The smallest increase was 25.0% in Nevada; the largest increases, both more than 400%, were in Alabama and Hawaii.

FIGURE 4.1

PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE, FY 2021 (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.
2. The U.S. calculation does not include the District of Columbia.
3. Fiscal year 2021 includes estimated net tuition revenue for Illinois, New Jersey, and Pennsylvania.
4. Adjustment factors to arrive at constant dollar figures include 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 4.1

PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE, FY 1980-2021 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$2,602	$6,211	$9,797	$13,624	$13,633	$13,685	0.4%	0.4%	39.7%	120.3%	425.80%
ALASKA	$2,384	$3,172	$4,635	$4,776	$5,091	$5,128	0.7%	7.4%	10.7%	61.7%	115.2%
ARIZONA	$2,158	$4,250	$6,092	$8,784	$8,580	$9,102	6.1%	3.6%	49.4%	114.2%	321.8%
ARKANSAS	$2,913	$3,442	$4,702	$6,650	$7,208	$7,129	-1.1%	7.2%	51.6%	107.1%	144.7%
CALIFORNIA	$699	$1,068	$1,683	$2,729	$2,963	$2,533	-14.5%	-7.2%	50.5%	137.1%	262.4%
COLORADO	$3,144	$4,688	$7,764	$9,807	$10,396	$10,310	-0.8%	5.1%	32.8%	119.9%	227.9%
CONNECTICUT	$2,199	$5,382	$6,579	$10,712	$11,826	$10,273	-13.1%	-4.1%	56.2%	90.9%	367.1%
DELAWARE	$4,655	$10,323	$14,212	$16,783	$18,663	$16,517	-11.5%	-1.6%	16.2%	60.0%	254.8%
FLORIDA	$1,701	$3,131	$2,998	$3,658	$2,428	$2,301	-5.2%	-37.1%	-23.2%	-26.5%	35.3%
GEORGIA	$2,093	$2,572	$3,244	$5,740	$5,257	$4,983	-5.2%	-13.2%	53.6%	93.8%	138.0%
HAWAII	$854	$2,229	$4,064	$4,691	$4,447	$4,381	-1.5%	-6.6%	7.8%	96.6%	412.9%
IDAHO	$2,137	$4,135	$5,277	$8,476	$8,193	$8,457	3.2%	-0.2%	60.3%	104.5%	295.7%
ILLINOIS	$1,865	$3,299	$6,575	$8,566	$8,397	$8,002	-4.7%	-6.6%	21.7%	142.6%	329.2%
INDIANA	$3,601	$6,631	$8,433	$10,450	$10,346	$10,391	0.4%	-0.6%	23.2%	56.7%	188.5%
IOWA	$3,279	$6,011	$8,888	$9,777	$10,150	$10,129	-0.2%	3.6%	14.0%	68.5%	208.9%
KANSAS	$2,886	$4,332	$6,379	$7,345	$7,358	$7,234	-1.7%	-1.5%	13.4%	67.0%	150.7%
KENTUCKY	$2,707	$5,363	$8,985	$9,729	$9,649	$9,312	-3.5%	-4.3%	3.6%	73.6%	244.0%
LOUISIANA	$2,122	$2,948	$3,387	$5,020	$5,450	$5,588	2.5%	11.3%	65.0%	89.6%	163.4%
MAINE	$3,308	$6,111	$7,804	$7,056	$7,142	$7,098	-0.6%	0.6%	-9.0%	16.2%	114.6%
MARYLAND	$2,598	$5,761	$7,133	$7,528	$7,857	$7,801	-0.7%	3.6%	9.4%	35.4%	200.3%
MASSACHUSETTS	$2,386	$4,445	$6,280	$5,748	$5,856	$5,646	-3.6%	-1.8%	-10.1%	27.0%	136.6%
MICHIGAN	$4,224	$7,441	$11,472	$14,251	$15,287	$14,922	-2.4%	4.7%	30.1%	100.5%	253.3%
MINNESOTA	$2,395	$4,536	$9,332	$9,816	$9,969	$9,931	-0.4%	1.2%	6.4%	119.0%	314.7%
MISSISSIPPI	$3,021	$4,146	$5,764	$7,494	$7,901	$7,994	1.2%	6.7%	38.7%	92.8%	164.6%
MISSOURI	$3,028	$4,877	$6,888	$7,537	$7,704	$7,528	-2.3%	-0.1%	9.3%	54.4%	148.6%
MONTANA	$1,988	$4,395	$5,953	$6,706	$6,959	$6,948	-0.2%	3.6%	16.7%	58.1%	249.5%
NEBRASKA	$2,487	$4,216	$5,704	$6,766	$7,082	$7,027	-0.8%	3.9%	23.2%	66.7%	182.6%
NEVADA	$2,044	$2,634	$3,292	$3,703	$2,436	$2,554	4.8%	-31.0%	-22.4%	-3.0%	25.0%
NEW HAMPSHIRE	$5,444	$9,557	$9,103	$10,300	$9,628	$9,467	-1.7%	-8.1%	4.0%	-0.9%	73.9%
NEW JERSEY	$1,985	$6,806	$8,393	$10,051	$7,312	$7,369	0.8%	-26.7%	-12.2%	8.3%	271.2%
NEW MEXICO	$2,090	$1,378	$3,606	$3,563	$4,156	$3,685	-11.3%	3.4%	2.2%	167.5%	76.3%
NEW YORK	$2,737	$4,470	$5,064	$6,448	$6,091	$5,763	-5.4%	-10.6%	13.8%	28.9%	110.6%
NORTH CAROLINA	$2,055	$3,153	$3,678	$5,653	$5,195	$5,096	-1.9%	-9.9%	38.6%	61.6%	148.0%
NORTH DAKOTA	$2,551	$5,033	$7,840	$8,894	$9,614	$10,562	9.9%	18.8%	34.7%	109.8%	314.1%
OHIO	$4,099	$6,971	$8,223	$10,024	$9,954	$9,652	-3.0%	-3.7%	17.4%	38.5%	135.5%
OKLAHOMA	$2,088	$2,805	$4,855	$6,819	$8,443	$8,129	-3.7%	19.2%	67.5%	189.8%	289.2%
OREGON	$2,385	$4,378	$6,102	$7,963	$8,538	$8,636	1.2%	8.5%	41.5%	97.3%	262.1%
PENNSYLVANIA	$4,631	$9,345	$11,454	$11,260	$11,116	$10,850	-2.4%	-3.6%	-5.3%	16.1%	134.3%
RHODE ISLAND	$3,182	$7,106	$8,110	$8,611	$8,495	$9,087	7.0%	5.5%	12.0%	27.9%	185.6%
SOUTH CAROLINA	$2,315	$4,863	$8,250	$10,137	$10,754	$10,697	-0.5%	5.5%	29.6%	120.0%	362.0%
SOUTH DAKOTA	$3,565	$6,650	$7,934	$8,672	$9,151	$8,710	-4.8%	0.4%	9.8%	31.0%	144.3%
TENNESSEE	$2,683	$4,884	$6,080	$7,811	$7,178	$7,021	-2.2%	-10.1%	15.5%	43.8%	161.7%
TEXAS	$1,920	$5,030	$5,188	$5,871	$5,620	$5,567	-0.9%	-5.2%	7.3%	10.7%	190.0%
UTAH	$2,501	$3,163	$5,336	$6,602	$6,698	$6,039	-9.8%	-8.5%	13.2%	90.9%	141.5%
VERMONT	$7,476	$13,297	$14,204	$16,468	$16,071	$15,436	-4.0%	-6.3%	8.7%	16.1%	106.5%
VIRGINIA	$2,427	$4,541	$7,155	$8,483	$8,844	$8,866	0.2%	4.5%	23.9%	95.2%	265.3%
WASHINGTON	$2,274	$2,641	$4,358	$5,963	$5,936	$5,460	-8.0%	-8.4%	25.3%	106.7%	140.1%
WEST VIRGINIA	$1,849	$4,317	$6,243	$8,094	$7,692	$7,577	-1.5%	-6.4%	21.4%	75.5%	309.8%
WISCONSIN	$3,682	$4,025	$5,533	$6,821	$7,033	$7,250	3.1%	6.3%	31.0%	80.1%	96.9%
WYOMING	$2,612	$3,616	$2,432	$3,060	$3,852	$3,287	-14.7%	7.4%	35.2%	-9.1%	25.9%
U.S.	**$2,396**	**$4,223**	**$5,747**	**$7,057**	**$6,946**	**$6,723**	**-3.2%**	**-4.7%**	**17.0%**	**59.2%**	**180.5%**
D.C.	N/A	N/A	$6,479	$6,099	$4,927	$5,005	1.6%	-17.9%	-22.8%	N/A	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.
2. The U.S. calculation does not include the District of Columbia. Data for the District of Columbia are not available prior to 2011.
3. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.
4. Fiscal years 2020 and 2021 include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated net tuition revenue for Illinois.
5. 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

2. SECTOR COMPARISONS

Table 4.1A presents new data on net tuition revenue per FTE for the two- and four-year public sectors separately.

Net tuition revenue at two-year institutions averaged $2,604 per FTE in 2021, down 1.7% ($44 per FTE) from 2020 and 5.4% ($147 per FTE) from 2019. This year, two-year net tuition ranged from a low of $266 per FTE in California (the only state with less than $1,000 per FTE in net tuition revenue in either sector) to over $6,000 per FTE in Connecticut and Michigan.

In the last year, per-FTE tuition revenue declined at two-year institutions in 31 states. Delaware had the largest two-year tuition decline (11.6%). Of the 18 states with increases, the largest was 19.4% in Arizona. The only other increase above 10% was South Carolina (13.1%).

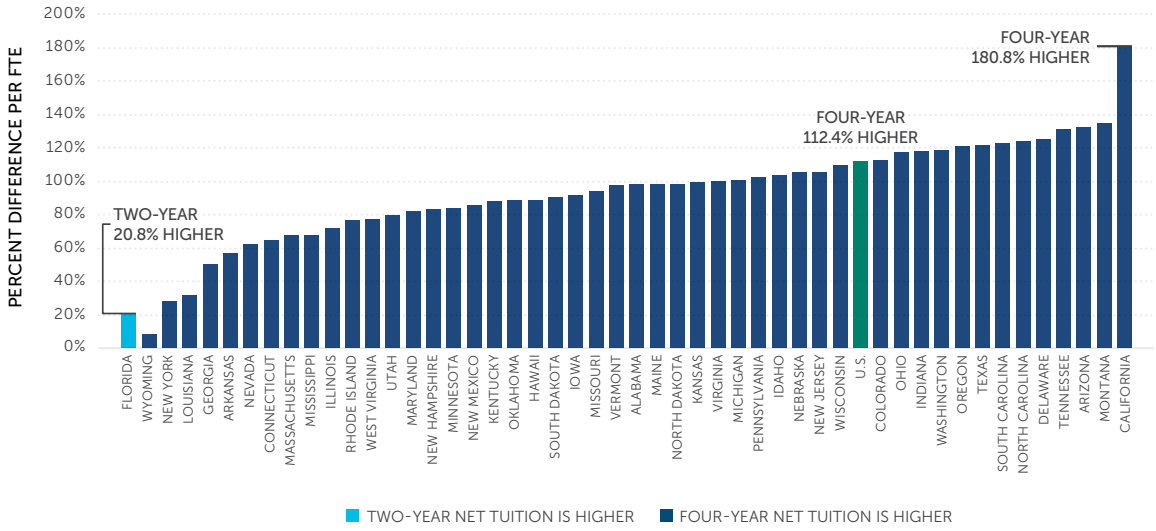
At four-year institutions, tuition revenue averaged $9,295 per FTE, 3.6 times the average tuition in the two-year sector. Only five states and Washington, D.C., averaged less than $5,000 in four-year net tuition revenue per FTE: Alaska, Florida, Nevada, New Mexico, and Wyoming. Florida had the lowest four-year tuition ($2,148 per FTE). On the other hand, four states had net tuition revenue greater than $15,000 per FTE: Alabama, Delaware, Michigan, and Vermont. Delaware had the highest four-year net tuition revenue ($22,443 per FTE).

From 2020 to 2021, four-year net tuition revenue decreased in 40 states. Seven states had declines greater than 10% (California, Connecticut, Delaware, New Mexico, New York, Utah, and Wyoming). The largest percentage decline was 24.0% in Wyoming, but the largest per-FTE declines were in Connecticut ($2,666) and Delaware ($2,998). In Wyoming, the decline was almost entirely explained by increases in financial aid. In Utah, the decline was due to an increase in institutional aid during the COVID-19 pandemic. However, in both Connecticut and Delaware, the declines were due to decreases in gross tuition and fee revenue (rather than increases in state or institutional aid).

Figure 4.1A displays the disparity in net tuition revenue per FTE between each state's two- and four-year public sectors. On average, four-year institutions receive 112.4% more tuition and fee revenue than two-year institutions. Only Florida is on the figure's left side (the **light blue** bar), with 20.8% higher per-FTE net tuition revenue in the two-year sector. All other states are on the figure's right side (the **dark blue** bars), with relatively higher net tuition revenue per FTE in the four-year sector. California has the largest disparity in net tuition revenue across sectors, with 180.8% higher net tuition and fee revenue in the four-year sector.

FIGURE 4.1A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE, FY 2021



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.
2. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
3. Fiscal year 2021 includes estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated two-year net tuition revenue for Illinois, Massachusetts, and Michigan.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/ Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.

SOURCE: State Higher Education Executive Officers Association

Explore the full context of higher education enrollment and revenues in any state using the SHEF State Profiles on our website. Select your state and choose a comparison group at shef.sheeo.org/state-profile.

TABLE 4.1A

PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY SECTOR AND STATE, FY 2019-2021 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR TUITION REVENUE						FOUR-YEAR TUITION REVENUE					
	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019
ALABAMA	$5,600	$6,000	$5,997	2.30	-0.1%	7.1%	$18,111	$17,551	$17,663	1.90	0.6%	-2.5%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$4,799	$4,942	$4,978	0.54	0.7%	3.7%
ARIZONA	$2,140	$2,112	$2,522	0.97	19.4%	17.9%	$13,498	$12,321	$12,439	1.34	1.0%	-7.8%
ARKANSAS	$4,471	$4,582	$4,547	1.75	-0.8%	1.7%	$8,309	$8,368	$8,190	0.88	-2.1%	-1.4%
CALIFORNIA	$366	$279	$266	0.10	-4.4%	-27.3%	$6,323	$6,309	$5,278	0.57	-16.4%	-16.5%
COLORADO	$4,394	$3,889	$3,934	1.51	1.2%	-10.5%	$14,234	$14,511	$14,191	1.53	-2.2%	-0.3%
CONNECTICUT	$5,694	$5,807	$6,137	2.36	5.7%	7.8%	$13,946	$14,616	$11,950	1.29	-18.2%	-14.3%
DELAWARE	$5,845	$5,851	$5,170	1.99	-11.6%	-11.5%	$24,032	$25,441	$22,443	2.41	-11.8%	-6.6%
FLORIDA	$2,806	$2,702	$2,647	1.02	-2.0%	-5.7%	$2,715	$2,338	$2,148	0.23	-8.1%	-20.9%
GEORGIA	$3,175	$3,257	$3,349	1.29	2.8%	5.5%	$6,094	$6,083	$5,618	0.60	-7.6%	-7.8%
HAWAII	$2,505	$2,462	$2,310	0.89	-6.2%	-7.8%	$6,287	$6,116	$6,021	0.65	-1.5%	-4.2%
IDAHO	$3,591	$3,358	$3,175	1.22	-5.4%	-11.6%	$11,937	$9,604	$10,015	1.08	4.3%	-16.1%
ILLINOIS	$5,474	$4,885	$4,827	1.85	-1.2%	-11.8%	$10,883	$10,826	$10,239	1.10	-5.4%	-5.9%
INDIANA	$3,613	$3,536	$3,419	1.31	-3.3%	-5.4%	$13,240	$13,310	$13,298	1.43	-0.1%	0.4%
IOWA	$5,811	$5,400	$5,456	2.09	1.0%	-6.1%	$14,656	$14,845	$14,656	1.58	-1.3%	0.0%
KANSAS	$3,034	$3,173	$3,323	1.28	4.7%	9.5%	$10,551	$10,315	$9,885	1.06	-4.2%	-6.3%
KENTUCKY	$4,633	$4,365	$4,481	1.72	2.6%	-3.3%	$12,038	$12,249	$11,547	1.24	-5.7%	-4.1%
LOUISIANA	$4,091	$3,970	$4,307	1.65	8.5%	5.3%	$6,244	$5,929	$5,942	0.64	0.2%	-4.8%
MAINE	$2,983	$2,907	$2,810	1.08	-3.3%	-5.8%	$8,441	$8,463	$8,276	0.89	-2.2%	-1.9%
MARYLAND	$3,928	$3,924	$4,066	1.56	3.6%	3.5%	$10,040	$10,087	$9,692	1.04	-3.9%	-3.5%
MASSACHUSETTS	$3,225	$3,490	$3,191	1.23	-8.6%	-1.0%	$6,646	$6,671	$6,481	0.70	-2.8%	-2.5%
MICHIGAN	$6,463	$6,685	$6,306	2.42	-5.7%	-2.4%	$19,170	$19,635	$19,169	2.06	-2.4%	0.0%
MINNESOTA	$5,165	$5,269	$5,237	2.01	-0.6%	1.4%	$12,750	$13,009	$12,890	1.39	-0.9%	1.1%
MISSISSIPPI	$4,741	$4,829	$5,169	1.98	7.0%	9.0%	$10,813	$10,776	$10,498	1.13	-2.6%	-2.9%
MISSOURI	$3,006	$3,391	$3,327	1.28	-1.9%	10.7%	$9,435	$9,475	$9,201	0.99	-2.9%	-2.5%
MONTANA	$1,759	$1,736	$1,699	0.65	-2.1%	-3.4%	$8,890	$8,762	$8,731	0.94	-0.4%	-1.8%
NEBRASKA	$2,891	$2,871	$2,821	1.08	-1.7%	-2.4%	$9,264	$9,333	$9,144	0.98	-2.0%	-1.3%
NEVADA	$1,803	$1,755	$1,757	0.67	0.1%	-2.5%	$3,149	$3,178	$3,348	0.36	5.3%	6.3%
NEW HAMPSHIRE	$5,221	$5,183	$4,913	1.89	-5.2%	-5.9%	$12,328	$12,168	$11,918	1.28	-2.1%	-3.3%
NEW JERSEY	$3,049	$2,977	$2,948	1.13	-1.0%	-3.3%	$9,990	$9,712	$9,577	1.03	-1.4%	-4.1%
NEW MEXICO	$1,950	$2,112	$1,962	0.75	-7.1%	0.6%	$5,695	$5,926	$4,930	0.53	-16.8%	-13.4%
NEW YORK	$4,247	$4,372	$4,601	1.77	5.2%	8.3%	$6,935	$6,864	$6,135	0.66	-10.6%	-11.5%
NORTH CAROLINA	$1,909	$1,806	$1,756	0.67	-2.8%	-8.1%	$8,302	$7,880	$7,547	0.81	-4.2%	-9.1%
NORTH DAKOTA	$3,790	$3,865	$4,006	1.54	3.7%	5.7%	$10,465	$10,703	$11,804	1.27	10.3%	12.8%
OHIO	$3,993	$3,562	$3,252	1.25	-8.7%	-18.6%	$11,807	$12,482	$12,500	1.34	0.1%	5.9%
OKLAHOMA	$4,163	$4,262	$3,973	1.53	-6.8%	-4.6%	$10,208	$10,571	$10,300	1.11	-2.6%	0.9%
OREGON	$3,843	$2,888	$3,029	1.16	4.9%	-21.2%	$11,808	$12,649	$12,420	1.34	-1.8%	5.2%
PENNSYLVANIA	$4,598	$4,492	$4,369	1.68	-2.7%	-5.0%	$14,296	$13,958	$13,569	1.46	-2.8%	-5.1%
RHODE ISLAND	$4,638	$4,646	$4,583	1.76	-1.3%	-1.2%	$9,061	$9,620	$10,333	1.11	7.4%	14.0%
SOUTH CAROLINA	$3,481	$3,103	$3,509	1.35	13.1%	0.8%	$15,483	$15,272	$14,696	1.58	-3.8%	-5.1%
SOUTH DAKOTA	$3,479	$3,710	$3,557	1.37	-4.1%	2.2%	$10,094	$9,928	$9,446	1.02	-4.9%	-6.4%
TENNESSEE	$1,916	$1,983	$2,025	0.78	2.1%	5.7%	$10,567	$10,286	$9,711	1.04	-5.6%	-8.1%
TEXAS	$2,115	$2,134	$1,999	0.77	-6.3%	-5.5%	$8,640	$8,518	$8,227	0.89	-3.4%	-4.8%
UTAH	$3,012	$2,999	$2,941	1.13	-2.0%	-2.4%	$7,520	$7,686	$6,850	0.74	-10.9%	-8.9%
VERMONT	$6,154	$6,248	$5,647	2.17	-9.6%	-8.2%	$17,686	$17,077	$16,481	1.77	-3.5%	-6.8%
VIRGINIA	$4,054	$3,813	$3,866	1.48	1.4%	-4.7%	$11,812	$11,724	$11,665	1.26	-0.5%	-1.2%
WASHINGTON	$2,488	$2,335	$2,188	0.84	-6.3%	-12.1%	$8,844	$9,444	$8,603	0.93	-8.9%	-2.7%
WEST VIRGINIA	$4,136	$3,856	$3,889	1.49	0.9%	-6.0%	$9,283	$9,099	$8,843	0.95	-2.8%	-4.7%
WISCONSIN	$2,979	$2,709	$2,702	1.04	-0.3%	-9.3%	$9,249	$9,175	$9,330	1.00	1.7%	0.9%
WYOMING	$2,694	$2,930	$2,884	1.11	-1.6%	7.0%	$4,827	$4,134	$3,141	0.34	-24.0%	-34.9%
U.S.	**$2,752**	**$2,649**	**$2,604**	**1.00**	**-1.7%**	**-5.4%**	**$9,809**	**$9,767**	**$9,295**	**1.00**	**-4.8%**	**-5.2%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$5,938	$4,727	$4,801	0.52	1.6%	-19.1%

NOTES:

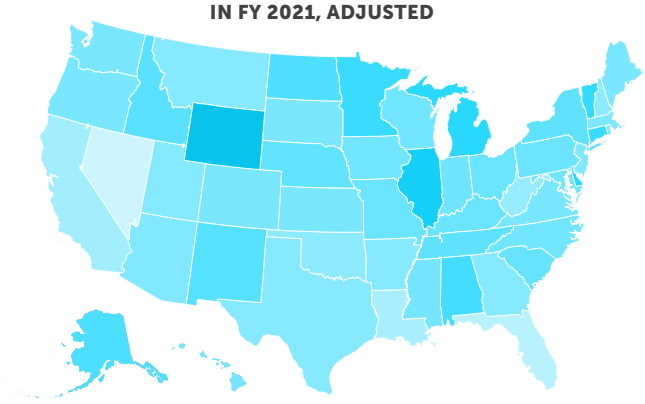
1. Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. Sector-level data are a recently required component of the SHEF report and are not currently available for years prior to 2019. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
4. Fiscal years 2020 and 2021 include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated two-year net tuition revenue for Illinois, Massachusetts, and Michigan.
5. Adjustment factors to arrive at constant dollar figures include Cost of Living Index (COLI) and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The Enrollment Mix Index (EMI) is not applied to sector-level data.

SOURCE: State Higher Education Executive Officers Association

TOTAL EDUCATION REVENUE

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.[36] This map shows total education revenue per FTE across the nation.

TOTAL EDUCATION REVENUE PER FTE IN FY 2021, ADJUSTED



Total education revenue increased 1.1% from 2020 to 2021, reaching an all-time high of $15,959 per FTE. Total education revenue has increased eight out of the last nine years following declines during the Great Recession and has increased 9.4% since 2001 and 39.2% since the start of the SHEF dataset in 1980.

Record high total revenue does not indicate that all public institutions have more revenue than ever before. Following declines in state funding after the last two recessions, institutions varied widely in their ability to increase tuition revenue (either by increasing rates or out-of-state enrollment). Total education revenue is at an all-time high in only 18 states and Washington D.C.[37] Many institutions, particularly those most reliant on state funding, have not been able to increase tuition revenue to offset declines in state funding and are not at an all-time high for total education revenue.[38]

Additionally, the slight increase in inflation-adjusted total education revenue per FTE in the last year is due to federal stimulus funding. **Excluding federal stimulus funding, total education revenue declined 0.3% from 2020 to 2021.**

1. STATE COMPARISONS

Total education revenue per FTE ranges from a low of $9,044 in Nevada to over $25,000 in Illinois and Wyoming, and $39,471 in Washington, D.C. (*Figure 4.2*).[39,40]

- Public institutions in nine states and Washington, D.C., have more than $20,000 per FTE in education revenue. These funds are primarily sourced

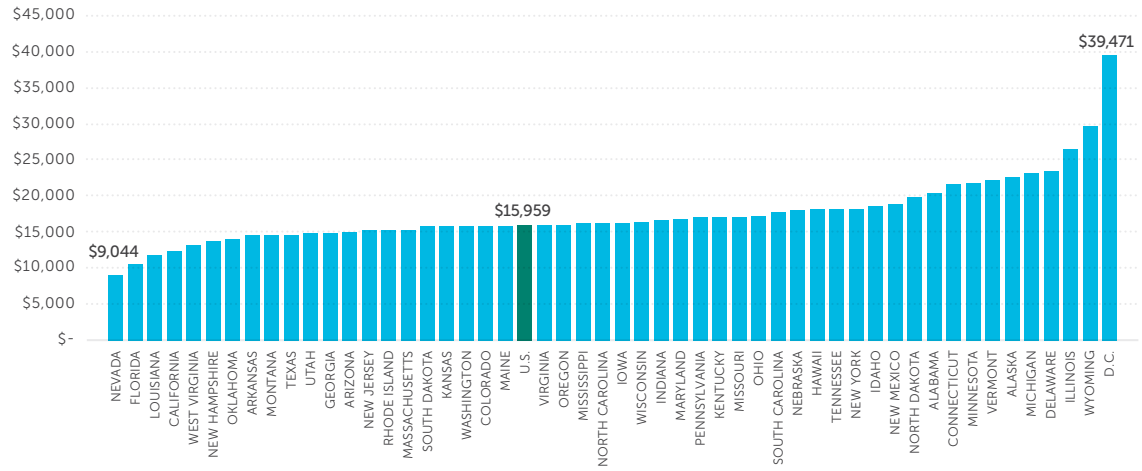
36. shef.sheeo.org/data-visualizations/map-4-1/?report_page=net-tuition-and-total-education-revenue&modal=map-4_2
37. Data for Washington, D.C., are not available prior to 2011.
38. State Higher Education Executive Officers Association. (2021). Investigating the impacts of state higher education appropriations and financial aid. sheeo.org/wp-content/uploads/2021/05/SHEEO_ImpactAppropationsFinancialAid.pdf
39. In Illinois, a large portion of education appropriations (which constitute most of the state's total education revenue) are not available for operations at public institutions. See the Illinois state spotlight to learn more.
40. Washington, D.C., had high total education revenue in 2021 due to $15,801 per FTE in federal stimulus funding.

from education appropriations in Alaska, Illinois, Washington, D.C., and Wyoming, come mainly from tuition revenue in Alabama, Delaware, Michigan, and Vermont, and are an even mix of the two sources in Connecticut and Minnesota.

- Total education revenue per FTE decreased in 18 states from 2020 to 2021 (*Table 4.2*). The largest decrease was in Nevada (13.2%). Nevada's total education revenue declines were due to sharp decreases in education appropriations.
- Total education revenue increased in 32 states and Washington, D.C., this year. In five states and Washington, D.C., increases were greater than 10%. The largest increases were in Wyoming (25.6%) and Washington, D.C. (38.5%), both due entirely to federal stimulus funding.
- Total revenue has increased in 36 states since 2001 and 48 states since 1980. The two states with inflation-adjusted declines in total education revenue per FTE since 1980 are Nevada (16.0%) and Alaska (11.0%). In Alabama, Connecticut, and Illinois, total education revenue per FTE has increased by more than 100% since 1980.

FIGURE 4.2

PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE, FY 2021 (ADJUSTED)



NOTES:

1. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Total education revenue includes federal stimulus funding.
2. The U.S. calculation does not include the District of Columbia.
3. Total education revenue for fiscal year 2021 includes estimated net tuition revenue for Illinois, New Jersey, and Pennsylvania.
4. Adjustment factors to arrive at constant dollar figures include 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 4.2

PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE, FY 1980-2021 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2011	2016	2020	2021	% CHANGE SINCE 2020	% CHANGE SINCE 2016	% CHANGE SINCE 2011	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$9,762	$14,639	$16,230	$19,248	$20,823	$20,446	-1.8%	6.2%	26.0%	39.7%	109.4%
ALASKA	$25,435	$17,414	$19,724	$20,776	$21,690	$22,625	4.3%	8.9%	14.7%	29.9%	-11.0%
ARIZONA	$10,153	$12,952	$13,098	$14,308	$14,038	$14,906	6.2%	4.2%	13.8%	15.1%	46.8%
ARKANSAS	$12,388	$13,038	$13,128	$14,433	$13,547	$14,514	7.1%	0.6%	10.6%	11.3%	17.2%
CALIFORNIA	$9,273	$10,483	$9,312	$11,400	$12,541	$12,392	-1.2%	8.7%	33.1%	18.2%	33.6%
COLORADO	$8,583	$11,275	$11,770	$14,300	$15,463	$15,772	2.0%	10.3%	34.0%	39.9%	83.8%
CONNECTICUT	$10,270	$21,215	$19,585	$21,407	$21,744	$21,559	-0.8%	0.7%	10.1%	1.6%	109.9%
DELAWARE	$12,285	$19,152	$20,151	$22,363	$25,011	$23,313	-6.8%	4.2%	15.7%	21.7%	89.8%
FLORIDA	$8,456	$13,374	$9,844	$10,633	$10,546	$10,625	0.7%	-0.1%	7.9%	-20.6%	25.7%
GEORGIA	$11,476	$17,040	$12,330	$15,167	$15,722	$14,827	-5.7%	-2.2%	20.2%	-13.0%	29.2%
HAWAII	$10,011	$11,399	$12,911	$14,708	$17,672	$18,131	2.6%	23.3%	40.4%	59.1%	81.1%
IDAHO	$14,800	$17,621	$13,757	$17,865	$17,970	$18,571	3.3%	4.0%	35.0%	5.4%	25.5%
ILLINOIS	$11,370	$17,706	$19,566	$22,047	$26,428	$26,318	-0.4%	19.4%	34.5%	48.6%	131.5%
INDIANA	$13,046	$16,004	$14,534	$17,050	$16,678	$16,535	-0.9%	-3.0%	13.8%	3.3%	26.7%
IOWA	$13,388	$17,082	$15,027	$15,817	$16,076	$16,245	1.1%	2.7%	8.1%	-4.9%	21.3%
KANSAS	$12,457	$15,250	$13,540	$14,102	$14,878	$15,749	5.9%	11.7%	16.3%	3.3%	26.4%
KENTUCKY	$13,110	$18,012	$17,670	$17,513	$17,152	$17,009	-0.8%	-2.9%	-3.7%	-5.6%	29.7%
LOUISIANA	$11,455	$11,201	$12,616	$11,197	$11,714	$11,797	0.7%	5.4%	-6.5%	5.3%	3.0%
MAINE	$10,298	$16,438	$15,178	$14,782	$15,293	$15,822	3.5%	7.0%	4.2%	-3.7%	53.6%
MARYLAND	$9,852	$15,503	$14,116	$15,198	$16,869	$16,851	-0.1%	10.9%	19.4%	8.7%	71.0%
MASSACHUSETTS	$10,453	$15,331	$12,977	$13,304	$14,563	$15,257	4.8%	14.7%	17.6%	-0.5%	46.0%
MICHIGAN	$14,233	$19,715	$18,350	$21,516	$22,956	$23,119	0.7%	7.4%	26.0%	17.3%	62.4%
MINNESOTA	$12,986	$15,270	$16,098	$17,485	$18,890	$21,690	14.8%	24.0%	34.7%	42.0%	67.0%
MISSISSIPPI	$11,720	$14,742	$13,466	$15,398	$14,738	$16,154	9.6%	4.9%	20.0%	9.6%	37.8%
MISSOURI	$13,765	$17,736	$14,878	$15,420	$16,611	$17,032	2.5%	10.5%	14.5%	-4.0%	23.7%
MONTANA	$9,556	$10,232	$11,312	$12,690	$13,231	$14,594	10.3%	15.0%	29.0%	42.6%	52.7%
NEBRASKA	$11,158	$12,852	$14,879	$17,027	$17,504	$17,887	2.2%	5.1%	20.2%	39.2%	60.3%
NEVADA	$10,768	$11,784	$11,778	$10,925	$10,423	$9,044	-13.2%	-17.2%	-23.2%	-23.2%	-16.0%
NEW HAMPSHIRE	$10,019	$14,621	$12,192	$13,123	$12,973	$13,837	6.7%	5.4%	13.5%	-5.4%	38.1%
NEW JERSEY	$9,988	$17,618	$16,416	$17,804	$16,016	$15,122	-5.6%	-15.1%	-7.9%	-14.2%	51.4%
NEW MEXICO	$12,947	$12,397	$13,274	$15,051	$18,948	$18,819	-0.7%	25.0%	41.8%	51.8%	45.4%
NEW YORK	$13,960	$15,072	$15,580	$17,632	$18,487	$18,191	-1.6%	3.2%	16.8%	20.7%	30.3%
NORTH CAROLINA	$12,486	$16,647	$14,061	$16,499	$16,040	$16,186	0.9%	-1.9%	15.1%	-2.8%	29.6%
NORTH DAKOTA	$11,290	$12,460	$15,812	$18,470	$18,655	$19,695	5.6%	6.6%	24.6%	58.1%	74.4%
OHIO	$12,480	$17,039	$14,407	$16,906	$16,523	$17,220	4.2%	1.9%	19.5%	1.1%	38.0%
OKLAHOMA	$10,551	$13,151	$13,673	$14,134	$14,710	$13,967	-5.0%	-1.2%	2.2%	6.2%	32.4%
OREGON	$9,617	$12,208	$10,801	$13,270	$15,256	$16,031	5.1%	20.8%	48.4%	31.3%	66.7%
PENNSYLVANIA	$14,456	$19,179	$17,207	$15,903	$16,819	$16,947	0.8%	6.6%	-1.5%	-11.6%	17.2%
RHODE ISLAND	$13,602	$16,135	$13,190	$14,034	$13,685	$15,224	11.2%	8.5%	15.4%	-5.6%	11.9%
SOUTH CAROLINA	$11,950	$12,752	$13,192	$15,374	$16,885	$17,704	4.9%	15.2%	34.2%	38.8%	48.1%
SOUTH DAKOTA	$12,987	$15,560	$13,922	$14,492	$16,595	$15,679	-5.5%	8.2%	12.6%	0.8%	20.7%
TENNESSEE	$11,904	$14,550	$15,402	$16,912	$18,194	$18,138	-0.3%	7.2%	17.8%	24.7%	52.4%
TEXAS	$10,327	$14,799	$13,818	$14,605	$13,913	$14,606	5.0%	0.0%	5.7%	-1.3%	41.4%
UTAH	$12,552	$11,885	$11,912	$14,447	$15,682	$14,755	-5.9%	2.1%	23.9%	24.2%	17.6%
VERMONT	$12,001	$17,313	$16,967	$18,735	$19,171	$22,142	15.5%	18.2%	30.5%	27.9%	84.5%
VIRGINIA	$10,087	$14,078	$13,418	$14,090	$16,065	$15,992	-0.5%	13.5%	19.2%	13.6%	58.5%
WASHINGTON	$11,181	$11,212	$10,748	$13,065	$14,607	$15,756	7.9%	20.6%	46.6%	40.5%	40.9%
WEST VIRGINIA	$9,717	$11,005	$11,620	$12,577	$13,038	$13,179	1.1%	4.8%	13.4%	19.8%	35.6%
WISCONSIN	$14,003	$15,572	$14,526	$14,644	$15,427	$16,358	6.0%	11.7%	12.6%	5.0%	16.8%
WYOMING	$18,641	$16,712	$21,147	$23,962	$23,605	$29,649	25.6%	23.7%	40.2%	77.4%	59.1%
U.S.	**$11,465**	**$14,588**	**$13,619**	**$15,155**	**$15,784**	**$15,959**	**1.1%**	**5.3%**	**17.2%**	**9.4%**	**39.2%**
D.C.	N/A	N/A	$23,687	$20,993	$28,491	$39,471	38.5%	88.0%	66.6%	N/A	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. Total education revenue includes federal stimulus funding.
2. The U.S. calculation does not include the District of Columbia. Data for the District of Columbia are not available prior to 2011.
3. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.
4. Total education revenue for fiscal years 2020 and 2021 includes estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated net tuition revenue for Illinois.
5. 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

2. SECTOR COMPARISONS

Table 4.2A presents new data on total education revenue per FTE for the two- and four-year public sectors separately.

At two-year public institutions, total education revenue averaged $11,928 per FTE, up 8.0% from 2020. Total revenue ranged from $6,768 in Nevada to $21,601 in Wyoming. Ten states had an average total revenue of less than $10,000 per FTE at two-year institutions. In nine states, two-year total revenue was greater than $15,000 per FTE; only Wyoming was greater than $20,000 per FTE.

Two-year total education revenue declined in 10 states from 2020 to 2021. The largest declines, both above 10%, were in Nevada (11.1%) and Oklahoma (10.3%). Of the 39 states with increases, two were above 20%: Minnesota (22.7%) and Mississippi (24.7%). In both states, these increases were primarily due to federal stimulus funds, which supplemented additional state support.

Total education revenue at four-year institutions averaged $18,021 in 2021, a 2.3% decline from 2020 and 1.2% decline from 2019. **Four-year institutions had, on average, 1.51 times the amount of total revenue per FTE of two-year institutions.** Nevada and Louisiana had the lowest revenue per FTE ($11,131 and $12,004, respectively). Fourteen states and Washington, D.C., had total revenue greater than $20,000—and Illinois, Washington, D.C., and Wyoming had more than $30,000 per FTE.[41]

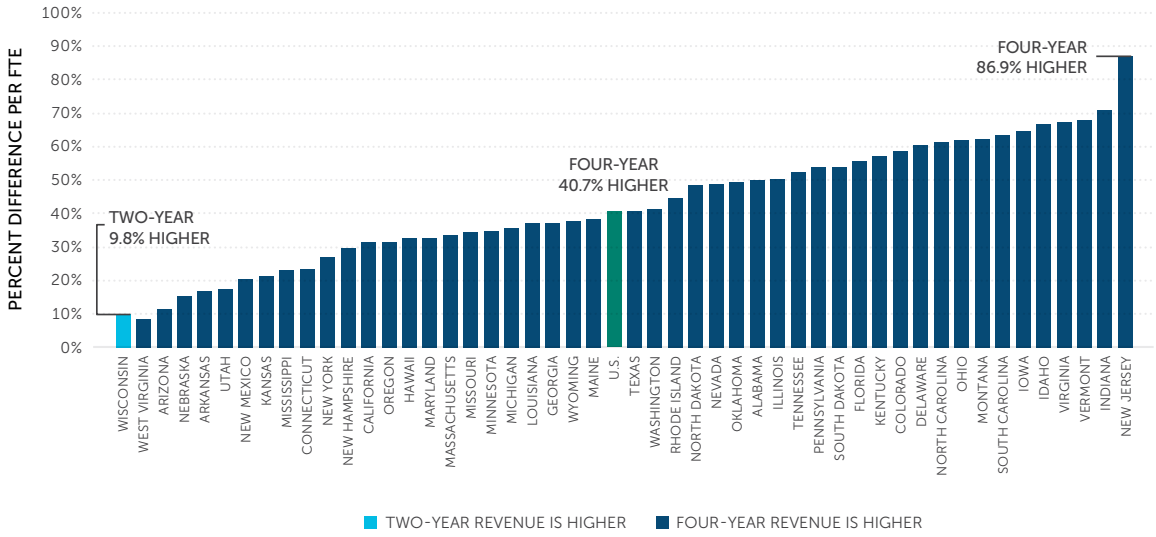
In the last year, four-year total education revenue declined in 27 states. Three states had declines greater than 10%: California (12.0%), Nevada (10.6%), and New Mexico (10.6%). In California and New Mexico, the decline was due to decreases in both tuition revenue and education appropriations. In Nevada, the decline was due to decreases in education appropriations alone.

Figure 4.2A displays the disparity in total education revenue per FTE between each state's two-year and four-year public sectors. Only Wisconsin is on the figure's left side (the **light blue** bar), with 9.8% higher total education revenue in the two-year sector. All other states are on the figure's right side (the **dark blue** bars), with relatively higher total education revenue per FTE in the four-year sector. New Jersey had the largest disparity in total education revenue across sectors, where four-year institutions had 2.5 times the total revenue of two-year institutions.

41. A large portion of education appropriations in Illinois are not available for operations at public institutions. See the Illinois state spotlight to learn more.

FIGURE 4.2A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE, FY 2021



NOTES:

1. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.
2. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
3. Total education revenue for fiscal year 2021 includes estimated net tuition revenue for New Jersey, and Pennsylvania. Fiscal year 2021 total education revenue includes estimated two-year net tuition revenue for Illinois, Massachusetts, and Michigan.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/ Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.

SOURCE: State Higher Education Executive Officers Association

Visit the SHEF website (**shef.sheeo.org**) to download all state- and sector-level data used in this report.

TABLE 4.2A

PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY SECTOR AND STATE, FY 2019-2021 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR TOTAL REVENUE						FOUR-YEAR TOTAL REVENUE					
	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019	2019	2020	2021	INDEX TO U.S.	% CHANGE SINCE 2020	% CHANGE SINCE 2019
ALABAMA	$12,463	$14,674	$14,286	1.20	-2.6%	14.6%	$24,163	$23,894	$23,774	1.32	-0.5%	-1.6%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$20,714	$21,053	$21,960	1.22	4.3%	6.0%
ARIZONA	$12,010	$12,420	$14,072	1.18	13.3%	17.2%	$16,564	$15,379	$15,750	0.87	2.4%	-4.9%
ARKANSAS	$11,922	$11,894	$12,650	1.06	6.4%	6.1%	$15,473	$13,864	$15,004	0.83	8.2%	-3.0%
CALIFORNIA	$9,216	$8,931	$10,042	0.84	12.4%	9.0%	$15,112	$15,703	$13,818	0.77	-12.0%	-8.6%
COLORADO	$10,542	$10,071	$10,476	0.88	4.0%	-0.6%	$18,458	$19,141	$19,209	1.07	0.4%	4.1%
CONNECTICUT	$14,706	$15,215	$18,086	1.52	18.9%	23.0%	$23,878	$24,785	$22,886	1.27	-7.7%	-4.2%
DELAWARE	$14,988	$15,840	$15,444	1.29	-2.5%	3.0%	$29,407	$31,484	$28,887	1.60	-8.2%	-1.8%
FLORIDA	$7,683	$7,647	$7,877	0.66	3.0%	2.5%	$14,754	$14,415	$13,970	0.78	-3.1%	-5.3%
GEORGIA	$10,269	$10,358	$10,671	0.89	3.0%	3.9%	$16,553	$16,836	$15,518	0.86	-7.8%	-6.2%
HAWAII	$13,054	$13,291	$13,737	1.15	3.4%	5.2%	$19,528	$18,936	$19,077	1.06	0.7%	-2.3%
IDAHO	$9,234	$9,274	$9,354	0.78	0.9%	1.3%	$21,338	$18,235	$18,764	1.04	2.9%	-12.1%
ILLINOIS	$18,021	$18,587	$18,458	1.55	-0.7%	2.4%	$29,884	$30,945	$30,817	1.71	-0.4%	3.1%
INDIANA	$9,435	$9,374	$9,287	0.78	-0.9%	-1.6%	$20,134	$19,944	$19,452	1.08	-2.5%	-3.4%
IOWA	$10,570	$10,613	$11,065	0.93	4.3%	4.7%	$21,295	$21,818	$21,655	1.20	-0.7%	1.7%
KANSAS	$11,973	$12,520	$13,842	1.16	10.6%	15.6%	$16,746	$16,791	$17,163	0.95	2.2%	2.5%
KENTUCKY	$10,616	$10,480	$10,923	0.92	4.2%	2.9%	$19,934	$20,292	$19,658	1.09	-3.1%	-1.4%
LOUISIANA	$7,846	$7,740	$8,268	0.69	6.8%	5.4%	$12,745	$12,249	$12,004	0.67	-2.0%	-5.8%
MAINE	$10,495	$10,323	$11,201	0.94	8.5%	6.7%	$16,096	$16,370	$16,556	0.92	1.1%	2.9%
MARYLAND	$11,674	$12,390	$13,243	1.11	6.9%	13.4%	$18,202	$19,051	$18,393	1.02	-3.5%	1.1%
MASSACHUSETTS	$10,019	$10,895	$11,553	0.97	6.0%	15.3%	$15,139	$15,422	$16,211	0.90	5.1%	7.1%
MICHIGAN	$16,396	$17,486	$18,179	1.52	4.0%	10.9%	$25,777	$26,236	$26,046	1.45	-0.7%	1.0%
MINNESOTA	$11,905	$12,841	$15,749	1.32	22.7%	32.3%	$20,856	$21,580	$22,417	1.24	3.9%	7.5%
MISSISSIPPI	$11,088	$11,480	$14,314	1.20	24.7%	29.1%	$17,581	$17,861	$18,076	1.00	1.2%	2.8%
MISSOURI	$9,901	$12,009	$12,950	1.09	7.8%	30.8%	$17,008	$18,146	$18,303	1.02	0.9%	7.6%
MONTANA	$7,332	$7,784	$8,923	0.75	14.6%	21.7%	$15,211	$15,568	$17,004	0.94	9.2%	11.8%
NEBRASKA	$14,254	$15,459	$16,262	1.36	5.2%	14.1%	$18,703	$18,986	$18,958	1.05	-0.1%	1.4%
NEVADA	$7,955	$7,618	$6,768	0.57	-11.1%	-14.9%	$12,208	$12,448	$11,131	0.62	-10.6%	-8.8%
NEW HAMPSHIRE	$9,895	$11,193	$11,705	0.98	4.6%	18.3%	$14,680	$14,893	$15,791	0.88	6.0%	7.6%
NEW JERSEY	$7,126	$7,584	$7,425	0.62	-2.1%	4.2%	$20,302	$20,633	$18,835	1.05	-8.7%	-7.2%
NEW MEXICO	$12,375	$14,356	$16,351	1.37	13.9%	32.1%	$20,333	$22,481	$20,092	1.11	-10.6%	-1.2%
NEW YORK	$13,251	$13,430	$14,579	1.22	8.6%	10.0%	$20,554	$20,525	$19,142	1.06	-6.7%	-6.9%
NORTH CAROLINA	$10,175	$9,858	$10,445	0.88	6.0%	2.7%	$21,015	$20,294	$19,643	1.09	-3.2%	-6.5%
NORTH DAKOTA	$11,085	$11,743	$12,004	1.01	2.2%	8.3%	$17,985	$18,515	$19,650	1.09	6.1%	9.3%
OHIO	$11,915	$10,931	$10,598	0.89	-3.0%	-11.1%	$18,055	$18,740	$20,091	1.11	7.2%	11.3%
OKLAHOMA	$10,009	$10,962	$9,831	0.82	-10.3%	-1.8%	$16,492	$16,820	$16,294	0.90	-3.1%	-1.2%
OREGON	$11,776	$11,980	$13,079	1.10	9.2%	11.1%	$16,457	$17,704	$18,001	1.00	1.7%	9.4%
PENNSYLVANIA	$10,143	$10,359	$10,901	0.91	5.2%	7.5%	$19,387	$19,130	$18,915	1.05	-1.1%	-2.4%
RHODE ISLAND	$9,561	$8,997	$10,082	0.85	12.1%	5.5%	$14,065	$14,603	$15,907	0.88	8.9%	13.1%
SOUTH CAROLINA	$10,147	$10,580	$11,147	0.93	5.4%	9.9%	$19,971	$20,701	$21,467	1.19	3.7%	7.5%
SOUTH DAKOTA	$8,574	$9,611	$8,980	0.75	-6.6%	4.7%	$15,723	$16,456	$15,608	0.87	-5.2%	-0.7%
TENNESSEE	$11,048	$11,245	$11,934	1.00	6.1%	8.0%	$20,606	$20,905	$20,375	1.13	-2.5%	-1.1%
TEXAS	$9,414	$9,789	$10,933	0.92	11.7%	16.1%	$16,643	$15,941	$16,546	0.92	3.8%	-0.6%
UTAH	$12,442	$13,226	$12,761	1.07	-3.5%	2.6%	$15,641	$16,421	$15,243	0.85	-7.2%	-2.5%
VERMONT	$8,870	$9,199	$10,796	0.91	17.4%	21.7%	$19,773	$19,980	$21,869	1.21	9.5%	10.6%
VIRGINIA	$8,989	$9,271	$9,463	0.79	2.1%	5.3%	$18,288	$19,546	$19,090	1.06	-2.3%	4.4%
WASHINGTON	$9,175	$10,046	$11,976	1.00	19.2%	30.5%	$17,201	$18,497	$18,242	1.01	-1.4%	6.1%
WEST VIRGINIA	$11,084	$11,706	$12,905	1.08	10.2%	16.4%	$13,605	$14,047	$14,016	0.78	-0.2%	3.0%
WISCONSIN	$15,078	$16,099	$17,153	1.44	6.5%	13.8%	$14,886	$14,696	$15,547	0.86	5.8%	4.4%
WYOMING	$19,751	$19,326	$21,601	1.81	11.8%	9.4%	$23,846	$23,596	$31,692	1.76	34.3%	32.9%
U.S.	**$10,886**	**$11,048**	**$11,928**	**1.00**	**8.0%**	**9.6%**	**$18,245**	**$18,440**	**$18,021**	**1.00**	**-2.3%**	**-1.2%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$24,179	$26,948	$32,985	1.83	22.4%	36.4%

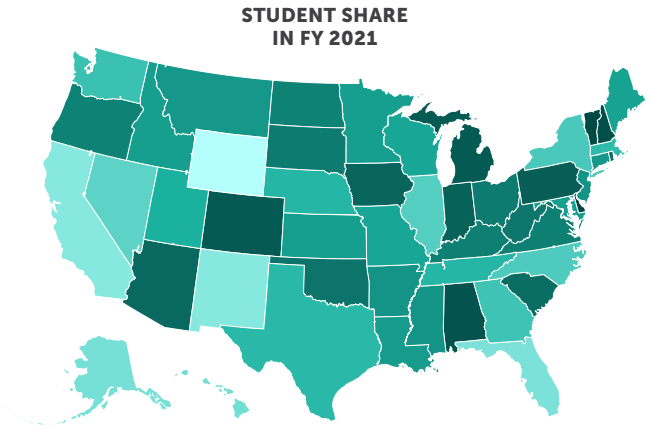
NOTES:

1. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
4. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
5. Fiscal years 2020 and 2021 total education revenue include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated net tuition revenue for Illinois.
6. Adjustment factors to arrive at constant dollar figures include Cost of Living Index (COLI) and Higher Education Cost Adjustment (HECA). The COLI is not a measure of inflation over time. The Enrollment Mix Index (EMI) is not applied to sector-level data.

SOURCE: State Higher Education Executive Officers Association

STUDENT SHARE

Net tuition as a percentage of total education revenue (the student share) shows the overall reliance of public institutions on tuition as a revenue source. Net tuition excludes state and institutional financial aid but does not exclude federal financial aid or loans. Visit the SHEF website to view the interactive student share map.[42] This map shows the student share for students attending two- and four-year institutions across the nation.



The student share has consistently increased over time due to declines in education appropriations and net tuition revenue increases. In 1980 (the earliest available data), the student share was 20.9%. By 2001 (the start of the modern SHEF data collection and a pre-recession high point in education appropriations), the student share had already increased to 29.0%. In 2021, the U.S. average student share was 42.1%. This means that, on average, 42.1% of revenues at public institutions came from student tuition and fees. Excluding federal stimulus funding, the student share in 2021 was 43.0%.

1. STATE COMPARISONS

There is wide variation in the student share across states. In 2021, 20 states had a student share above 50%. This is a notable decrease after a four-year trend (fiscal years 2017-2020) in which at least half of all states had a student share above 50%. However, excluding federal stimulus funds from total education revenue would result in four additional states (Louisiana, Minnesota, Mississippi, and Montana) having a student share above 50% in 2021. Only one state, Delaware (70.8%), had a student share above 70%. Conversely, six states and Washington, D.C., had a student share below 25% (*Figure 4.3*).

From 2020 to 2021, student share decreased in 40 states and Washington, D.C. Over the last five years, seven states (Arkansas, Connecticut, Kansas, Minnesota, Mississippi, Montana, and New Jersey) reduced the student share in their state from more to less than 50%. This was in part due to federal stimulus funding. It is not yet clear how these trends will continue following the depletion of federal stimulus dollars, but these decreases in student share indicate that states are making efforts to address college affordability. Still, over the last 10 years, the student share has increased in 23 states—and it has increased in all but three states (Florida, Vermont, and Wyoming) since 2001 (*Table 4.3*).

42. shef.sheeo.org/report/?report_page=net-tuition-and-total-education-revenue#student-share

TABLE 4.3

NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE BY STATE, FY 1980-2021

	1980	2001	2011	2016	2020	2021	CHANGE SINCE 2020	CHANGE SINCE 2016	CHANGE SINCE 2011	CHANGE SINCE 2001	CHANGE SINCE 1980
ALABAMA	26.7%	42.4%	60.4%	70.8%	65.5%	66.9%	1.5	-3.8	6.6	24.5	40.3
ALASKA	9.4%	18.2%	23.5%	23.0%	23.5%	22.7%	-0.8	-0.3	-0.8	4.5	13.3
ARIZONA	21.3%	32.8%	46.5%	61.4%	61.1%	61.1%	-0.1	-0.3	14.6	28.2	39.8
ARKANSAS	23.5%	26.4%	35.8%	46.1%	53.2%	49.1%	-4.1	3.0	13.3	22.7	25.6
CALIFORNIA	7.5%	10.2%	18.1%	23.9%	23.6%	20.4%	-3.2	-3.5	2.4	10.3	12.9
COLORADO	36.6%	41.6%	66.0%	68.6%	67.2%	65.4%	-1.9	-3.2	-0.6	23.8	28.7
CONNECTICUT	21.4%	25.4%	33.6%	50.0%	54.4%	47.6%	-6.7	-2.4	14.1	22.3	26.2
DELAWARE	37.9%	53.9%	70.5%	75.0%	74.6%	70.8%	-3.8	-4.2	0.3	17.0	33.0
FLORIDA	20.1%	23.4%	30.5%	34.4%	23.0%	21.7%	-1.4	-12.7	-8.8	-1.8	1.6
GEORGIA	18.2%	15.1%	26.3%	37.8%	33.4%	33.6%	0.2	-4.2	7.3	18.5	15.4
HAWAII	8.5%	19.6%	31.5%	31.9%	25.2%	24.2%	-1.0	-7.7	-7.3	4.6	15.6
IDAHO	14.4%	23.5%	38.4%	47.4%	45.6%	45.5%	-0.1	-1.9	7.2	22.1	31.1
ILLINOIS	16.4%	18.6%	33.6%	38.9%	31.8%	30.4%	-1.4	-8.4	-3.2	11.8	14.0
INDIANA	27.6%	41.4%	58.0%	61.3%	62.0%	62.8%	0.8	1.6	4.8	21.4	35.2
IOWA	24.5%	35.2%	59.1%	61.8%	63.1%	62.4%	-0.8	0.5	3.2	27.2	37.9
KANSAS	23.2%	28.4%	47.1%	52.1%	49.5%	45.9%	-3.5	-6.2	-1.2	17.5	22.8
KENTUCKY	20.6%	29.8%	50.8%	55.6%	56.3%	54.7%	-1.5	-0.8	3.9	25.0	34.1
LOUISIANA	18.5%	26.3%	26.8%	44.8%	46.5%	47.4%	0.8	2.5	20.5	21.0	28.8
MAINE	32.1%	37.2%	51.4%	47.7%	46.7%	44.9%	-1.8	-2.9	-6.6	7.7	12.7
MARYLAND	26.4%	37.2%	50.5%	49.5%	46.6%	46.3%	-0.3	-3.2	-4.2	9.1	19.9
MASSACHUSETTS	22.8%	29.0%	48.4%	43.2%	40.2%	37.0%	-3.2	-6.2	-11.4	8.0	14.2
MICHIGAN	29.7%	37.7%	62.5%	66.2%	66.6%	64.5%	-2.0	-1.7	2.0	26.8	34.9
MINNESOTA	18.4%	29.7%	58.0%	56.1%	52.8%	45.8%	-7.0	-10.4	-12.2	16.1	27.3
MISSISSIPPI	25.8%	28.1%	42.8%	48.7%	53.6%	49.5%	-4.1	0.8	6.7	21.4	23.7
MISSOURI	22.0%	27.5%	46.3%	48.9%	46.4%	44.2%	-2.2	-4.7	-2.1	16.7	22.2
MONTANA	20.8%	42.9%	52.6%	52.8%	52.6%	47.6%	-5.0	-5.2	-5.0	4.7	26.8
NEBRASKA	22.3%	32.8%	38.3%	39.7%	40.5%	39.3%	-1.2	-0.5	0.9	6.5	17.0
NEVADA	19.0%	22.4%	27.9%	33.9%	23.4%	28.2%	4.9	-5.6	0.3	5.9	9.3
NEW HAMPSHIRE	54.3%	65.4%	74.7%	78.5%	74.2%	68.4%	-5.8	-10.1	-6.2	3.1	14.1
NEW JERSEY	19.9%	38.6%	51.1%	56.5%	45.7%	48.7%	3.1	-7.7	-2.4	10.1	28.9
NEW MEXICO	16.1%	11.1%	27.2%	23.7%	21.9%	19.6%	-2.4	-4.1	-7.6	8.5	3.4
NEW YORK	19.6%	29.7%	32.5%	36.6%	32.9%	31.7%	-1.3	-4.9	-0.8	2.0	12.1
NORTH CAROLINA	16.5%	18.9%	26.2%	34.3%	32.4%	31.5%	-0.9	-2.8	5.3	12.5	15.0
NORTH DAKOTA	22.6%	40.4%	49.6%	48.2%	51.5%	53.6%	2.1	5.5	4.0	13.2	31.0
OHIO	32.8%	40.9%	57.1%	59.3%	60.2%	56.1%	-4.2	-3.2	-1.0	15.1	23.2
OKLAHOMA	19.8%	21.3%	35.5%	48.2%	57.4%	58.2%	0.8	10.0	22.7	36.9	38.4
OREGON	24.8%	35.9%	56.5%	60.0%	56.0%	53.9%	-2.1	-6.1	-2.6	18.0	29.1
PENNSYLVANIA	32.0%	48.7%	66.6%	70.8%	66.1%	64.0%	-2.1	-6.8	-2.5	15.3	32.0
RHODE ISLAND	23.4%	44.0%	61.5%	61.4%	62.1%	59.7%	-2.4	-1.7	-1.8	15.6	36.3
SOUTH CAROLINA	19.4%	38.1%	62.5%	65.9%	63.7%	60.4%	-3.3	-5.5	-2.1	22.3	41.0
SOUTH DAKOTA	27.4%	42.7%	57.0%	59.8%	55.1%	55.6%	0.4	-4.3	-1.4	12.8	28.1
TENNESSEE	22.5%	33.6%	39.5%	46.2%	39.5%	38.7%	-0.7	-7.5	-0.8	5.1	16.2
TEXAS	18.6%	34.0%	37.5%	40.2%	40.4%	38.1%	-2.3	-2.1	0.6	4.1	19.5
UTAH	19.9%	26.6%	44.8%	45.7%	42.7%	40.9%	-1.8	-4.8	-3.9	14.3	21.0
VERMONT	62.3%	76.8%	83.7%	87.9%	83.8%	69.7%	-14.1	-18.2	-14.0	-7.1	7.4
VIRGINIA	24.1%	32.3%	53.3%	60.2%	55.0%	55.4%	0.4	-4.8	2.1	23.2	31.4
WASHINGTON	20.3%	23.6%	40.5%	45.6%	40.6%	34.7%	-6.0	-11.0	-5.9	11.1	14.3
WEST VIRGINIA	19.0%	39.2%	53.7%	64.4%	59.0%	57.5%	-1.5	-6.9	3.8	18.3	38.5
WISCONSIN	26.3%	25.8%	38.1%	46.6%	45.6%	44.3%	-1.3	-2.3	6.2	18.5	18.0
WYOMING	14.0%	21.6%	11.5%	12.8%	16.3%	11.1%	-5.2	-1.7	-0.4	-10.6	-2.9
U.S.	**20.9%**	**29.0%**	**42.2%**	**46.6%**	**44.0%**	**42.1%**	**-1.9**	**-4.4**	**-0.1**	**13.2**	**21.2**
D.C.	N/A	N/A	27.4%	29.1%	17.3%	12.7%	-4.6	-16.4	-14.7	N/A	N/A

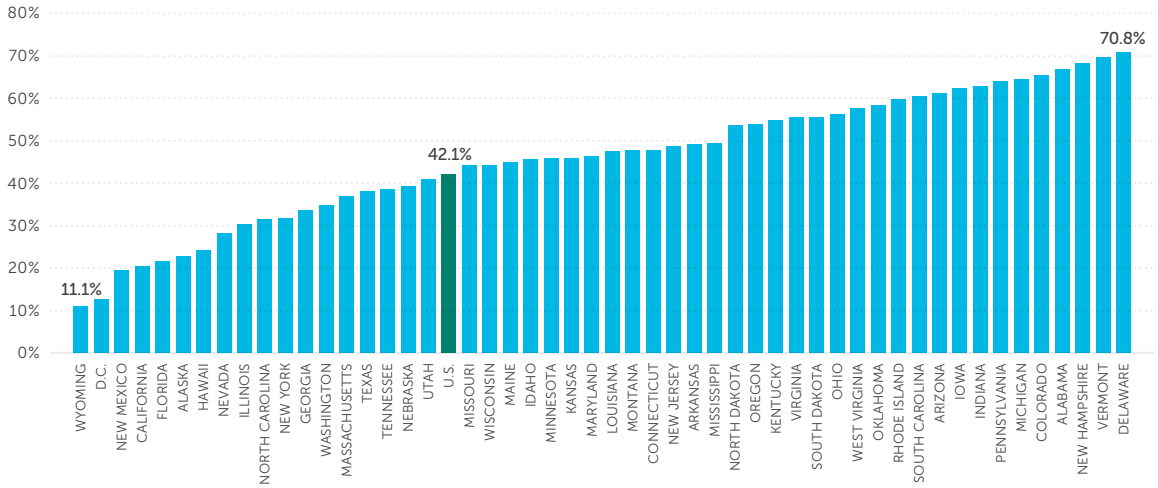
NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions coming 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. Total education revenue includes federal stimulus funding.
2. Year change columns show percentage point increases or decreases, not percent change.
3. The U.S. calculation does not include the District of Columbia. Data for the District of Columbia are not available prior to 2011.
4. The years 1980 and 2001 are included in this table because they are the starting points of the historical SHEF dataset and modern SHEF data collection, respectively.
5. Fiscal years 2020 and 2021 include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated net tuition revenue for Illinois.

SOURCE: State Higher Education Executive Officers Association

FIGURE 4.3

NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE BY STATE, FY 2021



NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions coming 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. Total education revenue includes federal stimulus funding.
2. Fiscal year 2021 includes estimated net tuition revenue for Illinois, New Jersey, and Pennsylvania.

SOURCE: State Higher Education Executive Officers Association

2. SECTOR COMPARISONS

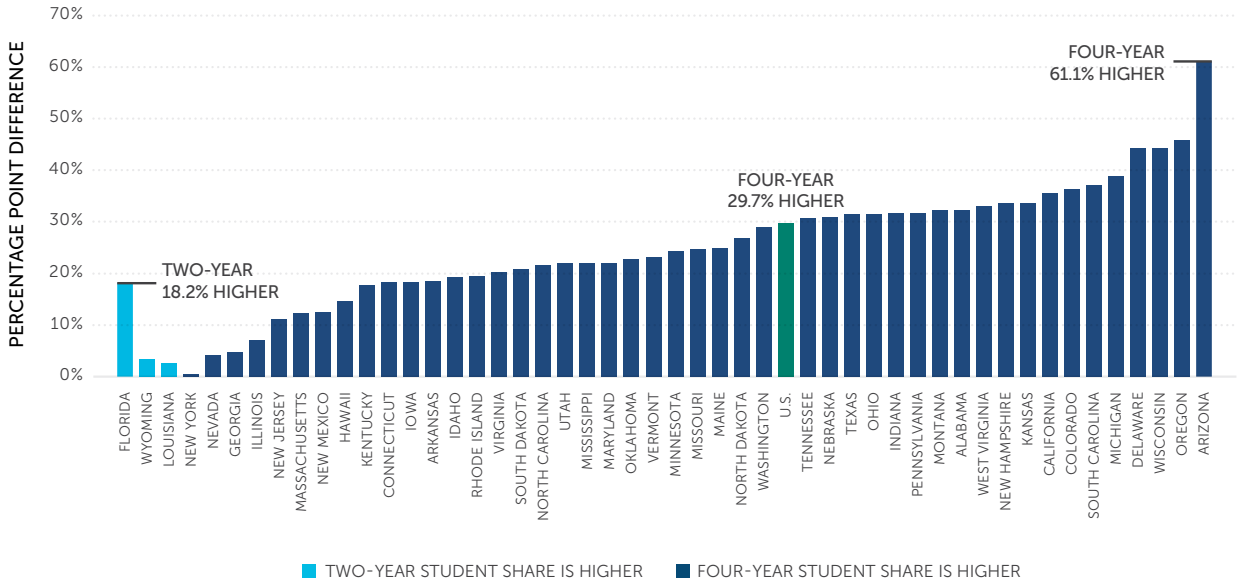
The student share is perhaps the most dramatically different SHEF metric when comparing two- and four-year public institutions. At two-year institutions, the fiscal year 2021 student share was less than a quarter (21.8%); it was over half (51.6%) at four-year institutions (*Table 4.3A*).

- The student share at two-year institutions is generally between 15% and 50%. Only California (2.7%) has a student share of less than 10%. New Mexico (12.0%) and Wyoming (13.3%) each reported student shares less than 15%. On the other hand, two states have a two-year student share greater than 50%: Louisiana (52.1%) and Vermont (52.3%).
- At four-year institutions, student share ranged from 9.9% in Wyoming to 79.0% in Arizona. In 31 states, the four-year student share is greater than 50%. In four states, the four-year student share is greater than 75%: Vermont (75.4%), New Hampshire (75.5%), Delaware (77.7%), and Arizona (79.0%).

Figure 4.3A shows the difference between the student share at each state's two- and four-year public institutions. On the figure's left side, the **light blue** bars show states with a higher two-year student share. Most states have a higher four-year student share (the **dark blue** bars). **On average, the four-year student share is 29.7 percentage points above the two-year student share.** The four-year student share is greater than the two-year student share in all but three states: Florida, Louisiana, and Wyoming. Arizona has the greatest difference in student share across institution types, where the four-year student share of 79.0% is 61.1 percentage points higher than the two-year student share of 17.9%.

FIGURE 4.3A

DIFFERENCE IN TWO-YEAR AND FOUR-YEAR NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE BY STATE, FY 2021



NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions coming 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. Total education revenue includes federal stimulus funding.
2. Percentage point differences show the number of percentage points by which the student share is higher at either two- or four-year institutions, not the percent difference between the two.
3. Alaska and the District of Columbia are excluded from this figure because they do not have any public two-year institutions.
4. Fiscal year 2021 include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated two-year net tuition revenue for Illinois, Massachusetts, and Michigan.
5. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.

SOURCE: State Higher Education Executive Officers Association

STATE SPOTLIGHT: CALIFORNIA

National trends in the two-year student share (net tuition as a percentage of total education revenue) are greatly impacted by California, which enrolls more than 20% of the nation's two-year enrollment. California dampens national two-year trends in two ways.

First, California has the lowest two-year student share by far, with student tuition revenue comprising only 2.7% of total education revenue. California's low student share is due primarily to the state having among the lowest community college tuition charges in the nation and its practice of waiving tuition for low-income students. Excluding California from the data increases the national two-year student share from 21.8% to 28.1%.

Second, in stark contrast to most other states facing long-term increases in student share, California's student share at two-year public institutions has declined 1.9 percentage points since 2001. The decline in California's student share is due to a decline in gross tuition revenue (in constant 2021 dollars) and recent increases in state-funded financial aid for community college students.

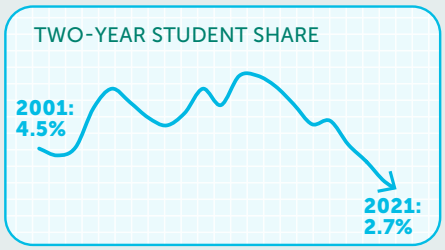


TABLE 4.3A

NET TUITION AS A PERCENT OF TOTAL EDUCATION REVENUE BY SECTOR AND STATE, FY 2019-2021

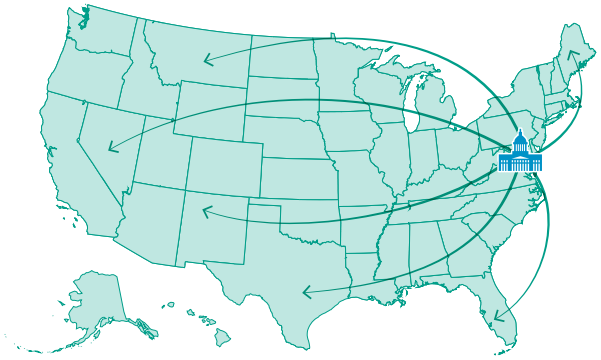
	TWO-YEAR STUDENT SHARE						FOUR-YEAR STUDENT SHARE					
	2019	2020	2021	INDEX TO U.S.	CHANGE SINCE 2020	CHANGE SINCE 2019	2019	2020	2021	INDEX TO U.S.	CHANGE SINCE 2020	CHANGE SINCE 2019
ALABAMA	44.9%	40.9%	42.0%	1.92	1.1	-3.0	75.0%	73.5%	74.3%	1.44	0.8	-0.7
ALASKA	N/A	N/A	N/A	N/A	N/A	N/A	23.2%	23.5%	22.7%	0.44	-0.8	-0.5
ARIZONA	17.8%	17.0%	17.9%	0.82	0.9	0.1	81.5%	80.1%	79.0%	1.53	-1.1	-2.5
ARKANSAS	37.5%	38.5%	35.9%	1.65	-2.6	-1.6	53.7%	60.4%	54.6%	1.06	-5.8	0.9
CALIFORNIA	4.0%	3.1%	2.7%	0.12	-0.5	-1.3	41.8%	40.2%	38.2%	0.74	-2.0	-3.6
COLORADO	41.7%	38.6%	37.6%	1.72	-1.1	-4.1	77.1%	75.8%	73.9%	1.43	-1.9	-3.2
CONNECTICUT	38.7%	38.2%	33.9%	1.55	-4.2	-4.8	58.4%	59.0%	52.2%	1.01	-6.8	-6.2
DELAWARE	39.0%	36.9%	33.5%	1.53	-3.5	-5.5	81.7%	80.8%	77.7%	1.51	-3.1	-4.0
FLORIDA	36.5%	35.3%	33.6%	1.54	-1.7	-2.9	18.4%	16.2%	15.4%	0.30	-0.8	-3.0
GEORGIA	30.9%	31.4%	31.4%	1.44	-0.1	0.5	36.8%	36.1%	36.2%	0.70	0.1	-0.6
HAWAII	19.2%	18.5%	16.8%	0.77	-1.7	-2.4	32.2%	32.3%	31.6%	0.61	-0.7	-0.6
IDAHO	38.9%	36.2%	33.9%	1.55	-2.3	-4.9	55.9%	52.7%	53.4%	1.03	0.7	-2.6
ILLINOIS	30.4%	26.3%	26.1%	1.20	-0.1	-4.2	36.4%	35.0%	33.2%	0.64	-1.8	-3.2
INDIANA	38.3%	37.7%	36.8%	1.69	-0.9	-1.5	65.8%	66.7%	68.4%	1.33	1.6	2.6
IOWA	55.0%	50.9%	49.3%	2.26	-1.6	-5.7	68.8%	68.0%	67.7%	1.31	-0.4	-1.1
KANSAS	25.3%	25.3%	24.0%	1.10	-1.3	-1.3	63.0%	61.4%	57.6%	1.12	-3.8	-5.4
KENTUCKY	43.6%	41.7%	41.0%	1.88	-0.6	-2.6	60.4%	60.4%	58.7%	1.14	-1.6	-1.6
LOUISIANA	52.1%	51.3%	52.1%	2.39	0.8	-0.1	49.0%	48.4%	49.5%	0.96	1.1	0.5
MAINE	28.4%	28.2%	25.1%	1.15	-3.1	-3.3	52.4%	51.7%	50.0%	0.97	-1.7	-2.5
MARYLAND	33.6%	31.7%	30.7%	1.41	-1.0	-2.9	55.2%	52.9%	52.7%	1.02	-0.3	-2.5
MASSACHUSETTS	32.2%	32.0%	27.6%	1.27	-4.4	-4.6	43.9%	43.3%	40.0%	0.78	-3.3	-3.9
MICHIGAN	39.4%	38.2%	34.7%	1.59	-3.5	-4.7	74.4%	74.8%	73.6%	1.43	-1.2	-0.8
MINNESOTA	43.4%	41.0%	33.2%	1.52	-7.8	-10.1	61.1%	60.3%	57.5%	1.11	-2.8	-3.6
MISSISSIPPI	42.8%	42.1%	36.1%	1.65	-6.0	-6.6	61.5%	60.3%	58.1%	1.13	-2.3	-3.4
MISSOURI	30.4%	28.2%	25.7%	1.18	-2.5	-4.7	55.5%	52.2%	50.3%	0.97	-1.9	-5.2
MONTANA	24.0%	22.3%	19.0%	0.87	-3.3	-4.9	58.4%	56.3%	51.3%	1.00	-4.9	-7.1
NEBRASKA	20.3%	18.6%	17.3%	0.79	-1.2	-2.9	49.5%	49.2%	48.2%	0.94	-0.9	-1.3
NEVADA	22.7%	23.0%	26.0%	1.19	2.9	3.3	25.8%	25.5%	30.1%	0.58	4.5	4.3
NEW HAMPSHIRE	52.8%	46.3%	42.0%	1.92	-4.3	-10.8	84.0%	81.7%	75.5%	1.46	-6.2	-8.5
NEW JERSEY	42.8%	39.3%	39.7%	1.82	0.4	-3.1	49.2%	47.1%	50.8%	0.99	3.8	1.6
NEW MEXICO	15.8%	14.7%	12.0%	0.55	-2.7	-3.8	28.0%	26.4%	24.5%	0.48	-1.8	-3.5
NEW YORK	32.0%	32.6%	31.6%	1.45	-1.0	-0.5	33.7%	33.4%	32.0%	0.62	-1.4	-1.7
NORTH CAROLINA	18.8%	18.3%	16.8%	0.77	-1.5	-2.0	39.5%	38.8%	38.4%	0.74	-0.4	-1.1
NORTH DAKOTA	34.2%	32.9%	33.4%	1.53	0.5	-0.8	58.2%	57.8%	60.1%	1.16	2.3	1.9
OHIO	33.5%	32.6%	30.7%	1.41	-1.9	-2.8	65.4%	66.6%	62.2%	1.21	-4.4	-3.2
OKLAHOMA	41.6%	38.9%	40.4%	1.85	1.5	-1.2	61.9%	62.8%	63.2%	1.23	0.4	1.3
OREGON	32.6%	24.1%	23.2%	1.06	-0.9	-9.5	71.7%	71.4%	69.0%	1.34	-2.4	-2.7
PENNSYLVANIA	45.3%	43.4%	40.1%	1.84	-3.3	-5.2	73.7%	73.0%	71.7%	1.39	-1.2	-2.0
RHODE ISLAND	48.5%	51.6%	45.5%	2.08	-6.2	-3.0	64.4%	65.9%	65.0%	1.26	-0.9	0.5
SOUTH CAROLINA	34.3%	29.3%	31.5%	1.44	2.1	-2.8	77.5%	73.8%	68.5%	1.33	-5.3	-9.1
SOUTH DAKOTA	40.6%	38.6%	39.6%	1.81	1.0	-1.0	64.2%	60.3%	60.5%	1.17	0.2	-3.7
TENNESSEE	17.3%	17.6%	17.0%	0.78	-0.7	-0.4	51.3%	49.2%	47.7%	0.92	-1.5	-3.6
TEXAS	22.5%	21.8%	18.3%	0.84	-3.5	-4.2	51.9%	53.4%	49.7%	0.96	-3.7	-2.2
UTAH	24.2%	22.7%	23.0%	1.06	0.4	-1.2	48.1%	46.8%	44.9%	0.87	-1.9	-3.1
VERMONT	69.4%	67.9%	52.3%	2.40	-15.6	-17.1	89.4%	85.5%	75.4%	1.46	-10.1	-14.1
VIRGINIA	45.1%	41.1%	40.9%	1.87	-0.3	-4.3	64.6%	60.0%	61.1%	1.18	1.1	-3.5
WASHINGTON	27.1%	23.2%	18.3%	0.84	-5.0	-8.9	51.4%	51.1%	47.2%	0.91	-3.9	-4.3
WEST VIRGINIA	37.3%	32.9%	30.1%	1.38	-2.8	-7.2	68.2%	64.8%	63.1%	1.22	-1.7	-5.1
WISCONSIN	19.8%	16.8%	15.8%	0.72	-1.1	-4.0	62.1%	62.4%	60.0%	1.16	-2.4	-2.1
WYOMING	13.6%	15.2%	13.3%	0.61	-1.8	-0.3	20.2%	17.5%	9.9%	0.19	-7.6	-10.3
U.S.	**25.3%**	**24.0%**	**21.8%**	**1.00**	**-2.1**	**-3.4**	**53.8%**	**53.0%**	**51.6%**	**1.00**	**-1.4**	**-2.2**
D.C.	N/A	N/A	N/A	N/A	N/A	N/A	24.6%	17.5%	14.6%	0.28	-3.0	-10.0

NOTES:

1. The student share is a measure of the proportion of total education revenue at public institutions coming 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. Total education revenue includes federal stimulus funding.
2. Year change columns show percentage point increases or decreases, not percent change.
3. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
4. Sector-level data are recently required components of the SHEF data collection and are not currently available for years prior to 2019.
5. Sector is determined at the institution level using the Carnegie Basic Classification (carnegieclassifications.acenet.edu). Baccalaureate/Associate's Colleges and "less-than-two-year" degree-granting institutions not assigned a Carnegie classification are considered two-year institutions.
6. Fiscal years 2020 and 2021 include estimated net tuition revenue for New Jersey and Pennsylvania. Fiscal year 2021 includes estimated two-year net tuition revenue for Illinois, Massachusetts, and Michigan.

SOURCE: State Higher Education Executive Officers Association

IMPLICATIONS



Fiscal year 2021 defied several long-term trends in higher education finance. In the past, the year following an economic recession meant steep cuts in state funding, sharp growth in student enrollment, and growth in tuition revenue as public institutions increased tuition rates and worked to attract out-of-state and international students to make up for anticipated lost revenue from the state. Instead, state and local education appropriations per student increased for the ninth straight year in 2021 despite a short economic recession in fiscal year 2020, signifying states' continued commitment to prioritize higher education. Much of this increase can be attributed to generous federal stimulus and relief funding, which supported total state revenues, reducing budget strain while also directly supporting higher education during the COVID-19 pandemic. While these federal stimulus and relief funds are helpful, they cannot be a replacement for long-term state investments as stimulus funds are time limited and often restricted in their use.

The COVID-19 pandemic counteracted the usual counter-cyclical enrollment trend where enrollment increases during and immediately following economic recessions. Instead, 2021 had the largest single-year decline in public higher education enrollment on record. Additionally, for the third straight year, net tuition and fee revenue did not increase enough to keep up with inflation. The decline in net tuition revenue from 2020 to 2021 is primarily due to low growth in tuition rates, increasing state financial aid, and a change in the proportion of students paying out-of-state and otherwise more expensive tuition rates. This continued decline in tuition revenue puts greater pressure on states to not cut funding to public higher education in the coming years. However, when federal stimulus funds run out, states will face difficult budgetary decisions, and higher education may face cuts in some states.

The SHEF report broadly addresses the wide variation in how states fund public higher education. States vary in their relative allocations to general operating, financial aid, and research; they vary in their reliance on local support to fund community colleges and federal stimulus funding during the COVID-19 pandemic; and they vary in the total funding allocated to higher education on a per-student level. Public institutions in some states remain primarily publicly funded, but a growing proportion have become primarily reliant on student tuition and fee revenue over the last two decades. State-specific context is incredibly important when discussing higher education finance—the trends described in this report reflect the national average, and there are almost always outliers to every trend. Additionally, even within states, there can be wide variation in the enrollment and revenue patterns at each institution.

On the whole, public institutions face uncertainty on where their future revenues will come from. With declining revenue from both states and students and after two years of increased costs due to the pandemic and the switch to online learning, state support for higher education is crucial for the continued success of public institutions. Thanks to the influx of federal stimulus funding, public systems of higher education are met with a unique opportunity to make progress toward state attainment goals. Now is a crucial time to make long-term, sustained investments to promote educational quality and student affordability and to reduce inequality in educational attainment.

STATE HIGHER EDUCATION EXECUTIVE OFFICERS

3035 CENTER GREEN DRIVE, SUITE 100, BOULDER, COLORADO, 80301
303.541.1600 • **SHEEO.org**