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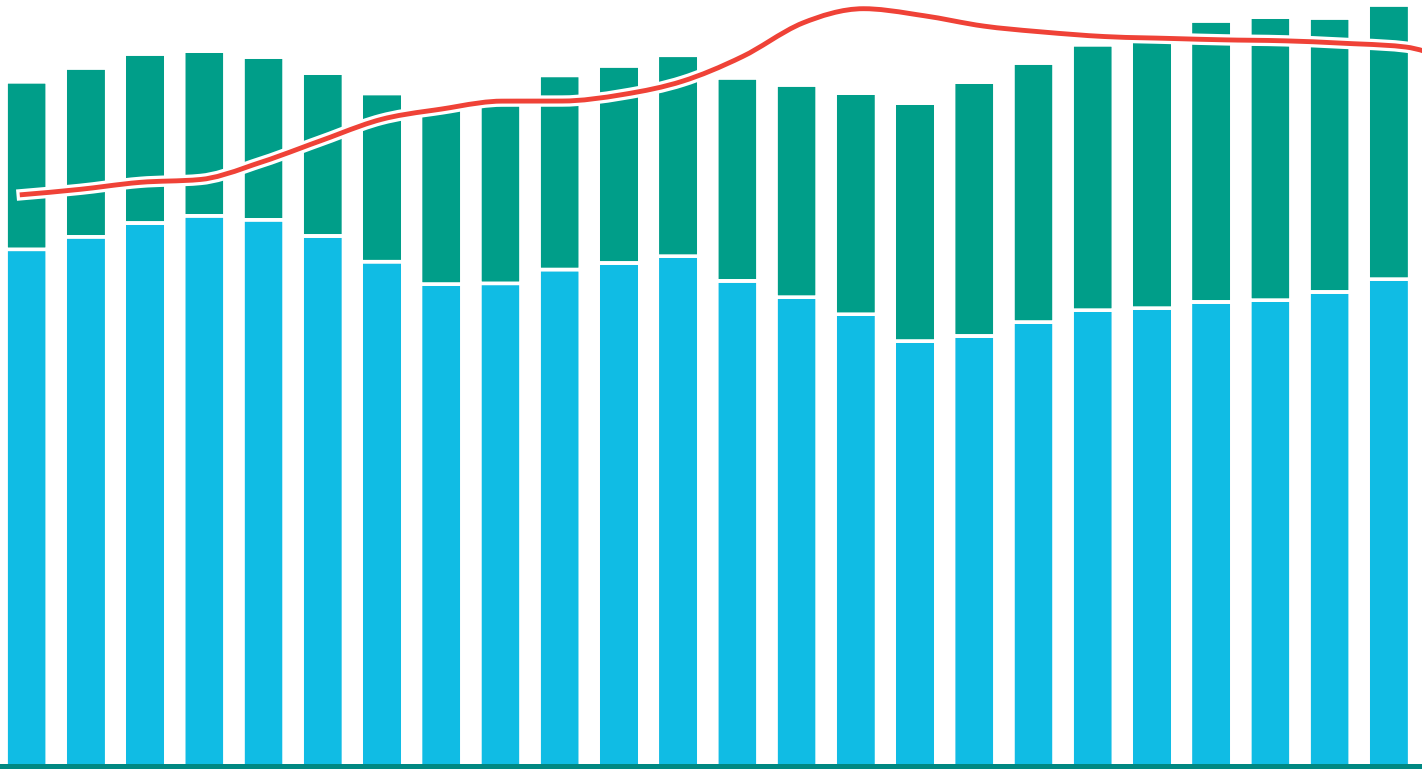
STATE HIGHER EDUCATION EXECUTIVE OFFICERS ASSOCIATION

SHEF

STATE HIGHER EDUCATION FINANCE

FY 2022



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 1980-2022 with detailed data on state and local funding, tuition revenue, and enrollment.

The 2022 SHEF report was authored by Kelsey Kunkle, policy analyst, and Sophia Laderman, associate vice president. The report would not have been possible without additional support, particularly from Gloria Auer, Rachel Burns, Jessica Duren, and Kelsey Heckert.

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. 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 is now separate from the main SHEF report, 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. (2023). State Higher Education Finance: FY 2022.

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EXECUTIVE SUMMARY

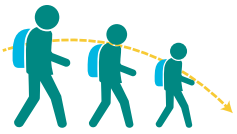
The State Higher Education Finance (SHEF) report is produced annually by the State Higher Education Executive Officers Association (SHEEO) to broaden understanding of the context and consequences of public policy decisions in each state that contribute to public higher education funding levels and funding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

The SHEF report supplies important context and trend analysis to help inform state postsecondary finance policy decisions. SHEF provides the earliest possible review of state and local support, tuition revenue, and enrollment trends for the most recently completed fiscal year. This year's report focuses on fiscal year 2022, which for most states ran from July 1, 2021, through June 30, 2022.

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 government funding for higher education totaled $120.7 billion in fiscal year 2022. All but 11 states used some portion of federal stimulus funding provided to state governments for higher education. Federal stimulus funding allocated by states to higher education totaled $2.5 billion in 2022, down 33.1% before inflation from last year and comprising 2.1% of total support. States contributed $108.1 billion (a 7.8% increase), and local governments in 32 states contributed $12.6 billion to higher education (a 5.3% increase).

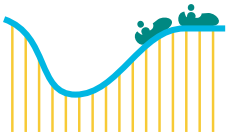


FULL-TIME EQUIVALENT (FTE) ENROLLMENT

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

- There were 10.3 million FTE enrolled students in 2022. Net FTE enrollment declined 2.5% in 2022, a loss of 266,338 FTE students, **the second largest FTE decline on record after last year.** 2022 marks the 11th straight year of enrollment declines following substantial enrollment increases during the Great Recession. Altogether, FTE enrollment has declined 11.6% from its peak in 2011, and remains just 0.4% above 2008 levels.
- Enrollment declined in 41 states between 2021 and 2022. The largest enrollment declines, all above 6%, were in Alaska, Delaware, Missouri, and New York.
- The recent enrollment decline is concentrated at two-year public institutions, which reported a net FTE enrollment decline of 9.8% from 2020 to 2022, reaching 3.88 million FTE, compared to only 2.9% at four-year institutions, reaching 6.43 million FTE. Two-year enrollment took a larger hit than four-year enrollment in 42 states.

From this point forward, all dollar figures are for public institutions and are adjusted for inflation and net FTE enrollment. The Higher Education Cost Adjustment (HECA), a measure of inflation in service industries, increased 5.1% from 2021 to 2022.



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. Following sharp declines during and after the Great Recession, education appropriations have increased for 10 consecutive years.

In 2022, education appropriations increased 4.9% beyond inflation ($475 per FTE) to $10,237. **For the first time since the Great Recession, inflation-adjusted education appropriations per FTE were greater than pre-recession funding levels in 2008**, by 3.1% or $304 per FTE. 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 education appropriations per FTE 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 by $136 per FTE in 2020, $360 per FTE in 2021, and $241 per FTE in 2022. Still, without federal stimulus funding directed by states to higher education and without the decline in FTE enrollment, inflation-adjusted education appropriations would have increased 3.6% from 2021 and 2.9% from 2020.

Education appropriations vary considerably by state. Education appropriations per FTE in 2022 ranged from $3,699 in New Hampshire to $22,970 in Illinois and $27,187 in Washington, D.C. Despite national-level increases, education appropriations per FTE declined in 21 states and Washington, D.C., from 2021 to 2022. Although national-level education appropriations have recovered to 2008 levels, the majority of states continue funding higher education at a lower level than prior to the Great Recession. Twenty-eight states have not yet recovered from the 2008 Great Recession (meaning their education appropriations per FTE in 2022 remain below 2008 levels). Arizona (40.9% below) and Louisiana (32.2% below) are furthest from recovery. Another eight states remain at least 20% below 2008 levels.

In the last year, inflation-adjusted state and local education appropriations increased 3.8% at two-year institutions, reaching $10,141 per FTE. At four-year institutions, education appropriations per FTE increased 4.0% from 2021 to 2022, reaching $9,596. There were important differences in the sources of two- and four-year public institution state and local funding, despite similar levels of education appropriations per FTE:

- Two-year public institutions received $6,297 per FTE in state general operating appropriations, 76.9% of the four-year general operating appropriation ($8,191).
- Local appropriations were 168.6 times higher at two-year institutions ($3,226) compared to four-year institutions ($19 per FTE). There were two-year local appropriations in 29 states, compared to only seven for four-year institutions.
- Total state and local support for public institutions (which includes $1,864 in state research and medical funding for four-year institutions) was $10,141, 88.5% of the amount at four-year institutions ($11,464).

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 80.0% of total state financial aid funding.

- State public financial aid per FTE increased 2.0% from 2021 to 2022 and reached an all-time high of $990 per FTE enrolled student. These funds made up 9.7% of all education appropriations.
- Financial aid per FTE increased in 29 states and Washington D.C., in the last year. In 2022, two states awarded less than $100 per FTE in state financial aid (Arizona and Montana); another four states awarded over $2,000 per FTE (Georgia, Louisiana, South Carolina, and Tennessee).
- State financial aid awards averaged $562 at two-year institutions, an increase of 10.6% over 2021. At four-year institutions, state financial aid decreased 0.9%, reaching $1,216 (still 2.2 times the per-FTE allocation in the two-year sector). The majority of states (33) 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.

Inflation-adjusted net tuition and fee revenue has increased substantially over time. Since 1980, tuition revenue per FTE at public institutions has increased 186.4%. 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, and tuition and fee revenue has declined for three of the last four years.** Public institutions received $7,244 in net tuition revenue in 2022, down 1.0% from 2021 and down 5.8% over the last five years. Decreases in net tuition revenue are largely due to increases in state financial aid and minimal tuition rate growth (lower than the rate of inflation).

Net tuition revenue per FTE ranges widely across the states due to variation 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.

- 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 was over $15,000 in Delaware, Michigan, and Vermont.
- Net tuition revenue per FTE declined in 27 states and Washington, D.C., between 2021 and 2022. 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.
- Net tuition revenue at two-year institutions averaged $2,577 per FTE in 2022, down 7.4% from 2021. At four-year institutions, tuition revenue averaged $10,090 per FTE, down 0.2% in the last year, but still 3.9 times the average tuition in the two-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 2.4% from 2021 to 2022, reaching an all-time high of $17,393 per FTE. 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 11 states. Many institutions 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. This is particularly true for those most reliant on state funding and those with a more limited ability to raise tuition rates and attract out-of-state and international students.

The increase in total education revenue since the start of the COVID-19 pandemic is explained by federal stimulus funding and the enrollment decline. **Excluding federal stimulus funding and if enrollment had held constant at 2020 levels, total education revenue per FTE would have declined 2.4% from 2020 to 2022.**

As with other measures, total revenue varied widely by state. Total education revenue per FTE ranged from less than $11,000 per FTE in Nevada to over $25,000 in Connecticut, Delaware, Illinois, Michigan, and Washington, D.C. Total education revenue per FTE decreased in half of all states (25) and Washington, D.C., in the last year, but has increased in 48 states since 1980, meaning that on average, public institutions in almost every state have higher total revenues with which to educate students than at the start of the SHEF dataset.

Two-year institutions had, on average, much less total revenue than four-year institutions. At two-year public institutions, total education revenue averaged $12,697 per FTE this year, up 1.3% from 2021. Total education revenue at four-year institutions averaged $19,556 in 2022, a 1.8% increase from 2021. Thanks to collecting much higher tuition revenues, four-year institutions had 1.54 times the amount of total revenue per FTE of two-year institutions.

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.

The student share has increased substantially 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 28.9%. In 2022, the U.S. average student share was 41.7%. This means that, **on average, 41.7% of revenues at public institutions came from student tuition and fees.** Excluding federal stimulus funding, the student share in 2022 was 42.2%.

There is wide variation in the student share across states. In 2022, 23 states had a student share above 50%. From 2021 to 2022, student share decreased in 32 states and Washington, D.C. 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 18 states—and it has increased in all but three states (Florida, Vermont, and Wyoming) since 2001.

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 2022 student share was less than a quarter (20.3%); it was over half (51.6%) at four-year institutions. The four-year student share is greater than the two-year student share in all but three states: Florida, Louisiana, and Wyoming. This means that in those three states, students at two-year institutions are responsible for a greater portion of public institutional revenue than students attending four-year institutions.

IMPLICATIONS

Fiscal year 2022 defied long-standing trends in higher education finance in the second year following an economic downturn. Instead of steep cuts in state funding and sharp growth in student enrollment and tuition revenue, as expected in the years following an economic recession, inflation-adjusted state and local education appropriations per FTE increased, and enrollment and tuition revenue per student decreased. This year marked the 10th straight year that state and local education appropriations increased, and the first year in which education appropriations per student exceeded 2008 (pre-Great Recession) levels—with and without federal stimulus funds. Although states allocated less federal stimulus funding directly to higher education than in 2021, the increase in education appropriations can still partially be attributed to continued federal stimulus and relief funding coupled with the enrollment decline. Federal stimulus and relief funds have been helpful over the past three years, supporting total state revenues, reducing budget strain, and providing more freedom for states to show commitment to higher education. However, these one-time funds are not a replacement for long-term state investments, as stimulus funds will run out in the coming years.

The COVID-19 pandemic altered the usual counter-cyclical enrollment trend where enrollment increases during and in the years immediately following economic recessions. Fiscal year 2022 marked the second largest single-year decline in public higher education enrollment on record (last year was the largest). Additionally, for three of the last four years, net tuition and fee revenue did not increase enough to keep up with inflation. The decline in net tuition revenue from 2021 to 2022 could be due to low growth in tuition rates, an increase in 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. However, state-specific context is incredibly important when discussing higher education finance trends. States vary in their relative allocations to general operating, financial aid, and research. They also vary in their reliance on local support to fund community colleges, federal stimulus funding during the COVID-19 pandemic, and 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. The student share decreased from 2021 to 2022, and for the first time since 2016, the student tuition and fees funding public higher education comprised less than 50% of total revenues in more than half of all states and Washington, D.C., even after excluding federal stimulus funding. As states are faced with fewer federal stimulus dollars amidst increasing concerns about student affordability and student loan debt, states must make conscious efforts to continue decreasing the portion of public higher education funded by students and families.

The trends detailed in the SHEF report reflect national and state averages, but there are almost always outliers in every trend. Even within states, there can be wide variation in the enrollment and revenue patterns at each institution. Since the start of the COVID-19 pandemic, largely due to declines in revenue from student tuition, 18 states and Washington, D.C., experienced a decrease in total education revenues; and all states face the inevitable end to COVID-19 federal stimulus funding in the near future. As states explore new or different ways to address college affordability, educational quality, and inequality in educational attainment, long-term, sustained investments are needed. With the end of federal stimulus funding near, states have hard decisions to make, and choosing to support higher education is crucial for the continued success of public institutions.

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 8.7% of total state spending and 9.2% of general fund expenditures in fiscal year 2022. Although state higher education expenditures as a share of general fund spending have remained constant since fiscal year 2019, spending on state higher education as a share of total state expenditures has declined by 1.3 percentage points since that time.[1,2] It is generally understood that state funding for higher education acts as a balance wheel during economic downturns, with funding reductions typically greater than those in other budget areas.[3] In part, states disproportionately reduce per-student funding to higher education due to the presumption that funding reductions can be partially offset with tuition revenue increases. During strong budget years, higher education typically sees increased appropriations in most states, both to make up for past cuts and to provide the funding necessary for public institutions to cover increasing costs due to inflation and changes in student enrollment.

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 (2007-2022). **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 $120.7 billion in fiscal year 2022, with more than $2.5 billion in federal stimulus funding. Federal stimulus funding in 2022 comprised 2.1% of total support, a decline of $1.2 billion, down 33.1% from fiscal year 2021.[4] States contributed $108.1 billion, and local governments in 32 states contributed $12.6 billion, representing increases of 7.8% and 5.3%, respectively. The largest

1. National Association of State Budget Officers. (2022). State expenditure report: Fiscal years 2020-2022. nasbo.org/reports-data/state-expenditure-report
2. 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.
3. Delaney, J., & Doyle, W. (2011). State spending on higher education: Testing the balance wheel over time. *Journal of Education Finance, 36(4).* jstor.org/stable/23018116
4. 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 used for capital projects and funds provided directly to institutions, such as the Higher Education Emergency Relief Fund (HEERF).

funding source was state tax appropriations, which accounted for $99.5 billion or 82.4% of total funding, as shown in *Figure 1.1*. Non-tax support (mostly from state lotteries) increased 5.8% and totaled just under $4.9 billion. Non-appropriated support, state-funded endowments, and other sources of state funding contributed nearly an additional $1.5 billion, a decline of 11.3% from 2021.[5]

TABLE 1.1

SOURCES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2007-2022 (UNADJUSTED DOLLARS, IN MILLIONS)

SOURCE	2007	2012	2017	2020	2021	2022	2022 % DISTRIBUTION
FEDERAL STIMULUS	$-	$117	$-	$1,457	$3,752	$2,509	2.1%
TAX APPROPRIATIONS	$72,350	$68,870	$81,754	$89,871	$90,862	$99,493	82.4%
NON-TAX SUPPORT	$2,321	$3,028	$3,460	$4,317	$4,586	$4,854	4.0%
NON-APPROPRIATED SUPPORT	$93	$99	$123	$166	$127	$130	0.1%
STATE-FUNDED ENDOWMENT EARNINGS	$318	$471	$562	$659	$1,157	$905	0.7%
OTHER	$206	$268	$268	$359	$350	$413	0.3%
FUNDS NOT AVAILABLE FOR USE	$38	$107	$158	$204	$551	$198	0.2%
TOTAL STATE SUPPORT	$75,251	$72,747	$86,009	$96,626	$100,282	$108,107	89.5%
LOCAL TAX APPROPRIATIONS	$7,413	$8,931	$10,286	$11,659	$11,998	$12,630	10.5%
TOTAL STATE AND LOCAL SUPPORT	**$82,664**	**$81,677**	**$96,295**	**$108,284**	**$112,280**	**$120,737**	**100.0%**
TOTAL STATE AND LOCAL SUPPORT (NO STIMULUS)	**$82,664**	**$81,560**	**$96,295**	**$106,828**	**$108,528**	**$118,228**	**97.9%**

NOTES:

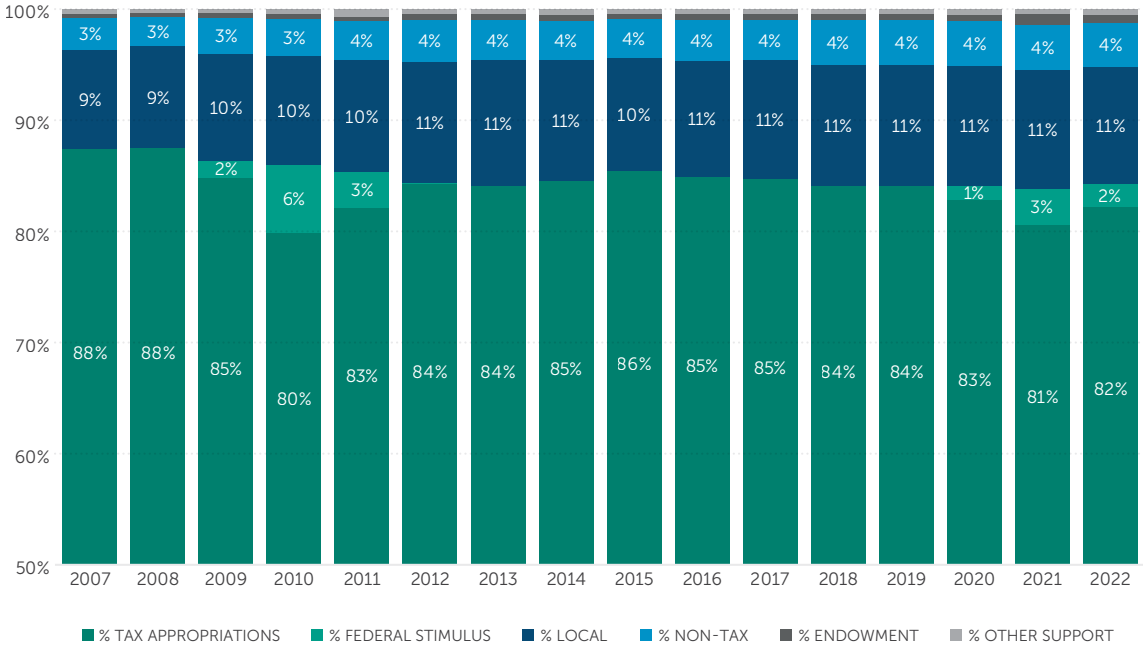
1. Federal stimulus funding is provided to state governments to stabilize state and local sources of revenue for higher education. It includes funds from the American Recovery and Reinvestment Act (ARRA) during the Great Recession, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act, 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) and funding used for capital projects.
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

5. This decrease was entirely due to a decline in endowment funds. In 2021, endowment funds increased by 75.4% over 2020, due entirely to a sizable increase in Texas. Despite a decrease in endowment returns since 2021, endowment funds remain 37.3% above 2020 levels.

FIGURE 1.1

DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING SOURCES, U.S., FY 2007-2022



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) and funding used for capital projects.
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 1% or less than 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

Almost all states are heavily reliant on state tax appropriations to fund higher education, although the distribution of state and local higher education funding sources varies across the nation.[6] In 2022, three states (Alabama, Massachusetts, and Washington) relied on tax appropriations as their only major source of state and local funding for higher education. Comparatively, no states relied solely on tax appropriations as their major source of state and local funding in fiscal year 2021 due in large part to federal stimulus funding allocated by states to higher education. Additionally, the number of states relying on state tax appropriations for at least 75% of their funding in 2022 increased by one from 2021, rising from 40 to 41.

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

All states had the majority of higher education funding come from state tax appropriations in 2022. Arizona, Kansas, Michigan, New Mexico, and Texas were the only other states that relied on local appropriations for at least 20% of higher education funding. Arizona is the only state in which nearly half (45.2%) of higher education funding came from local appropriations.[7] 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, Kentucky, South Carolina, and Tennessee relied on non-tax support for at least 20% of higher education funding. Meanwhile, 23 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 nine states and Washington, D.C. In Arizona, Oklahoma, Texas, Washington, D.C., and Wyoming, these revenue sources made up more than 5% of higher education support.

In 2022, federal stimulus funding provided to state governments was used for higher education in 39 states and Washington, D.C. Of these states, stimulus funds comprised less than 5% of total state and local support in 33 states and Washington, D.C. Vermont is the only state that relied on federal stimulus funding for more than 20% of higher education funding in 2022.[9]

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.[10]

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 24 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 2007.

2. Similarly, 17 states had increases in non-tax appropriations from 2007 to 2022. In four southern states (Arkansas, Florida, Kentucky, and South Carolina), 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.

7. This is the first year since 2015 that Arizona's local appropriations were not the top source for higher education funding. For more information, see the state spotlight on Arizona on page 15 of the FY 2020 SHEF report. State Higher Education Executive Officers Association. (2021). *State higher education finance: FY 2020.* shef.sheeo.org/wp-content/uploads/2021/05/SHEEO_SHEF_FY20_Report.pdf

8. In Washington D.C., district taxes are classified as state tax appropriations, not local support.

9. Five states (Colorado, Minnesota, New Hampshire, Vermont, and Wyoming) and Washington, D.C., relied on federal stimulus funds for more than 20% of education appropriations in fiscal year 2021.

10. shef.sheeo.org

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 (2007-2022). **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.

1. NATIONAL TRENDS

Table 1.3 shows that, nationally, funds allocated to support general public operations at public institutions increased 9.4% in 2022 to $92.8 billion, representing 78.5% 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.[11] In 2022, states provided $1.6 billion in agency funding (1.7% 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 increased 10.5% since 2021 to $12.0 billion—comprising 10.1% of total state and local support.
- State-funded student financial aid, which increased 4.2% to $12.8 billion—10.8% of total support—from 2021 to 2022. In 2022, 80.0% of total student aid was allocated to students attending public institutions.
- Operating support for independent (private) institutions, which increased 17.8% to $297.0 million, and support for non-credit and continuing education, which decreased 2.0% to $367.2 million. Together, these uses of state and local funding constituted 0.6% of higher education funding.

11. These funds have always been included in general public operations but were not available as a breakout until 2019.

TABLE 1.3

USES OF STATE AND LOCAL HIGHER EDUCATION FUNDING IN THE U.S., FY 2007-2022 (UNADJUSTED DOLLARS, IN MILLIONS)

USE	2007	2012	2017	2020	2021	2022	2022 % DISTRIBUTION
GENERAL PUBLIC OPERATIONS	$64,906	$62,502	$76,150	$83,600	$84,818	$92,824	78.5%
AGENCY FUNDING	N/A	N/A	N/A	$1,183	$1,219	$1,554	1.3%
RESEARCH - AGRICULTURE - MEDICAL (RAM)	$9,829	$9,589	$10,082	$11,114	$10,842	$11,984	10.1%
STATE PUBLIC FINANCIAL AID	$4,910	$6,584	$7,206	$9,122	$9,767	$10,205	8.6%
OUT-OF-STATE STUDENT AID	$38	$42	$37	$38	$39	$40	0.0%
INDEPENDENT STUDENT AID	$2,399	$2,341	$2,213	$2,329	$2,403	$2,486	2.1%
INDEPENDENT OPERATING SUPPORT	$291	$183	$217	$228	$252	$297	0.3%
NON-CREDIT AND CONTINUING EDUCATION	$290	$320	$383	$376	$375	$367	0.3%
TOTAL STUDENT FINANCIAL AID	$7,347	$8,966	$9,464	$11,509	$12,241	$12,756	10.8%
TOTAL INDEPENDENT SUPPORT	$2,690	$2,524	$2,430	$2,557	$2,655	$2,783	2.4%
TOTAL STATE AND LOCAL SUPPORT (NO STIMULUS)	**$82,664**	**$81,560**	**$96,295**	**$106,828**	**$108,528**	**$118,228**	**100.0%**

NOTES:

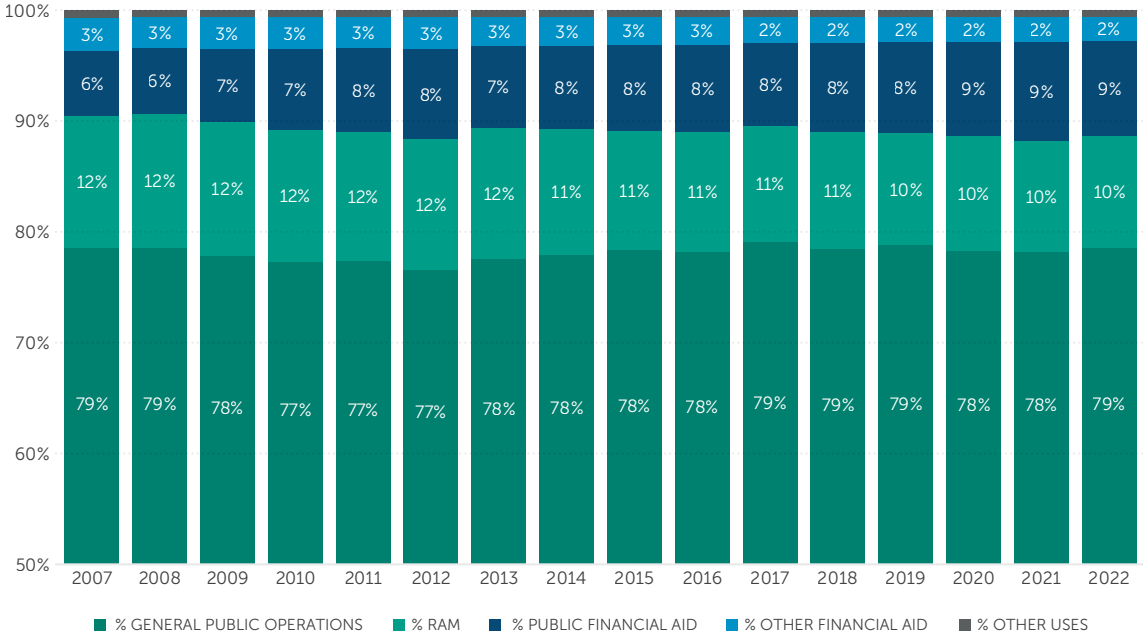
1. General public operations are any state and local support for public higher education institutions and agencies, excluding RAM, financial aid, and non-credit and continuing education. Federal stimulus funding is not included.
2. Agency funding is included in general public operations, and is the allocation 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, 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 biggest change in uses of higher education funding is the portion of funding allocated to public financial aid. Excluding stimulus funding, the proportion of state and local funding allocated to financial aid increased from 5.9% in 2007 to 8.6% in 2022 (2.7 percentage points), signifying a shift in the way states have chosen to invest in public higher education. Meanwhile, the portion allocated to general public operating decreased by 0.01 percentage point over the last 15 years. However, financial aid to students attending independent or out-of-state institutions declined by just under one percentage point (0.8) over that same time frame and now accounts for just 2.1% of state and local support.

FIGURE 1.3

DISTRIBUTION OF STATE AND LOCAL HIGHER EDUCATION FUNDING USES, U.S., FY 2007-2022



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. 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 both for tuition costs and living expenses.
4. Other financial aid includes any state appropriated student financial aid to students attending independent (private) or out-of-state institutions.
5. 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.
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

2. STATE COMPARISONS

Across the states, there is significant variation in the uses of state and local funding for higher education.[12] All states allocated at least half of all funding to general public operations in fiscal year 2022. Twenty-one states allocated at least 80% of funding to public institutions' general operations budgets, with Rhode Island (92.9%) and Michigan (91.9%) allocating at least 90%. On the low end, four states (Louisiana, South Carolina, Tennessee, and West Virginia) allocated less than 60%. Overall, the proportion of funding allocated to general public operations decreased in a total of 36 states since 2007.

Forty-six states reported agency funding in fiscal year 2022. Agency allocations ranged from 0.02% of all support in Montana to 14.3% in Idaho, and accounted for less than 1% of all support in 27 of those states. Four states (Alaska, Maine, Michigan, 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)[13] provided state and local support for direct operations of research, agriculture, public health care services, and medical schools (RAM). Thirty-one states and Washington, D.C., allocated at least 10% of funding to these areas in 2022, with Mississippi and West Virginia allocating more than 25% of total funding to RAM.

The proportion of state and local support allocated to student financial aid ranged from 0.6% in Montana to 32.7% in South Carolina. Arizona, Hawaii, and Montana were the only states that allocated less than 2% of funding to student financial aid. Of those states, Montana had the fourth lowest in-state, four-year tuition and fee rate while Arizona and Hawaii were above the national average in 2022.[14] Five states (Georgia, Kentucky, Louisiana, South Carolina, and Tennessee) allocated at least 20% of state and local funding to financial aid. From 2007 to 2022, the proportion of total state and local support appropriated to student financial aid increased in 40 states.

Support for independent (private) institutions is generally one of the smallest allocations of state and local funding. While 46 states provided funding to independent institutions, only five states (Iowa, Kentucky, New Jersey, Pennsylvania, and South Carolina) gave more than 5% of funding to these institutions in 2022. In most states, funding for independent institutions was predominantly allocated to student financial aid rather than institutional operating appropriations. Of the 46 states, 12 allocated some portion of funding to support independent (private) operating. Only two states, Alabama (66.8%) and Maryland (82.6%), allocated more than 50% of their support for independent institutions toward institutional operating.

12. See *Table 1.4*, available online at shef.sheeo.org/report/?report_page=sources-and-uses-of-funding
13. Rhode Island has not reported any RAM allocations since the start of the SHEF dataset.
14. Ma, Jennifer and Matea Pender. (2022). *Trends in college pricing and student aid 2022*. College Board. research.collegeboard.org/media/pdf/trends-in-college-pricing-student-aid-2022.pdf

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.[15] 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**:[16]

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 7.4% over 2021. Both subcomponents of education appropriations also increased, 4.5% for state public financial aid and 9.4% for general public operations. Net tuition revenue (tuition and fees net of state and institutional aid and medical tuition) increased 1.4%.

15. 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 state's individual per-FTE calculations.

16. 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 5.1% from 2021 to 2022. After applying HECA and therefore removing any increases due to inflation, state public financial aid decreased 0.6%, while general public operations increased 4.1%, and net tuition revenue decreased 3.5%.

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*. **From 2021 to 2022, enrollment declined 2.5%, or 266,338 FTE students. Following the decline from fiscal year 2020 to 2021 (3.2%, or 346,534 FTE students), this is the second largest enrollment decrease since the beginning of the SHEF dataset in 1980, in both percentage and total number.** After adjusting for both inflation and enrollment, we see that education appropriations increased 4.9% (financial aid increased 2.0%, general public operations increased 6.8%), while net tuition revenue decreased 1.0%, and total education revenue increased 2.4%.

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 (3.2%), 2021 (2.5%), and now (1.0%). The decline in 2022 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, 2021, and 2022. Excluding federal stimulus funding, inflation-adjusted education appropriations per FTE increased 6.3%, and total education revenue increased 3.1%.

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, 2021, and 2022. Federal stimulus included in the SHEF report includes any state allocated Governor's Emergency Education Relief Funds (GEERF), Coronavirus Relief Funds (CRF), or State and Local Fiscal Recovery Funds, and excludes aid provided directly to institutions (such as Higher Education Emergency Relief Funds). Federal stimulus funds used for public capital projects are also excluded. 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 1980-2022

	1980	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001	% CHANGE SINCE 1980
CURRENT UNADJUSTED DOLLARS (MILLIONS)											
STATE PUBLIC FINANCIAL AID	N/A	$2,834	$6,584	$7,206	$9,767	$10,205	4.5%	41.6%	55.0%	260.1%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$53,298	$62,502	$76,150	$84,818	$92,824	9.4%	21.9%	48.5%	74.2%	N/A
EDUCATION APPROPRIATIONS	$16,134	$56,118	$69,203	$83,363	$98,210	$105,515	7.4%	26.6%	52.5%	88.0%	554.0%
NET TUITION REVENUE	$4,264	$22,816	$59,234	$73,818	$73,644	$74,665	1.4%	1.1%	26.1%	227.2%	1651.1%
TOTAL EDUCATION REVENUE	**$20,398**	**$78,823**	**$127,737**	**$156,424**	**$170,911**	**$179,265**	**4.9%**	**14.6%**	**40.3%**	**127.4%**	**778.8%**
CONSTANT INFLATION ADJUSTED DOLLARS (MILLIONS)											
HECA	0.2460	0.5891	0.7893	0.8680	0.9515	1.0000	5.1%	15.2%	26.7%	69.8%	306.5%
STATE PUBLIC FINANCIAL AID	N/A	$4,811	$8,342	$8,302	$10,265	$10,205	-0.6%	22.9%	22.3%	112.1%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$90,477	$79,191	$87,729	$89,144	$92,824	4.1%	5.8%	17.2%	2.6%	N/A
EDUCATION APPROPRIATIONS	$65,590	$95,264	$87,682	$96,039	$103,219	$105,515	2.2%	9.9%	20.3%	10.8%	60.9%
NET TUITION REVENUE	$17,334	$38,732	$75,050	$85,041	$77,400	$74,665	-3.5%	-12.2%	-0.5%	92.8%	330.7%
TOTAL EDUCATION REVENUE	**$82,924**	**$133,807**	**$161,846**	**$180,208**	**$179,628**	**$179,265**	**-0.2%**	**-0.5%**	**10.8%**	**34.0%**	**116.2%**
CONSTANT INFLATION ADJUSTED DOLLARS (PER FTE)											
FTE ENROLLMENT	6,852,242	8,709,255	11,521,192	11,057,294	10,573,262	10,306,924	-2.5%	-6.8%	-10.5%	18.3%	50.4%
STATE PUBLIC FINANCIAL AID	N/A	$552	$724	$751	$971	$990	2.0%	31.9%	36.8%	79.3%	N/A
GENERAL PUBLIC OPERATIONS	N/A	$10,389	$6,874	$7,934	$8,431	$9,006	6.8%	13.5%	31.0%	-13.3%	N/A
EDUCATION APPROPRIATIONS	$9,572	$10,938	$7,610	$8,686	$9,762	$10,237	4.9%	17.9%	34.5%	-6.4%	6.9%
NET TUITION REVENUE	$2,530	$4,447	$6,514	$7,691	$7,320	$7,244	-1.0%	-5.8%	11.2%	62.9%	186.4%
TOTAL EDUCATION REVENUE	**$12,102**	**$15,364**	**$14,048**	**$16,298**	**$16,989**	**$17,393**	**2.4%**	**6.7%**	**23.8%**	**13.2%**	**43.7%**

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 2022 are available.

In unadjusted dollars, between 2021 and 2022, total education appropriations increased 3.1% at two-year institutions and 4.8% 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 increased 12.5% at two-year institutions but only 2.0% at four-year institutions. State public operating appropriations increased 8.2% at two-year institutions and 9.9% at four-year institutions. Local appropriations, which primarily support community colleges, increased 5.4% (or $638 million) at two-year institutions and decreased 4.4% (or $5.6 million) at four-year institutions. This decrease was largely driven by declines in Arkansas (100.0%) and South Carolina (68.0%). Four-year institutions also receive research, agriculture, and medical (RAM) appropriations, which increased 10.5% from 2021.

The sector-level data show that, in unadjusted dollars, net tuition and fee revenue decreased 5.8% at two-year institutions. Comparatively, unadjusted net tuition and fee revenue increased 2.7% 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 from 2021 to 2022, higher education inflation was 5.1%. After adjusting for inflation, all components of state support to two-year institutions increased, with the largest increase in state public financial aid (7.0%). At four-year institutions, state public financial aid and local appropriations decreased (by 2.9% and 9.0%, respectively), while state public operating (4.5%) and RAM (5.2%) increased after adjusting for inflation.

These differences are partially, but not entirely, explained by differing enrollment trends across the sectors. Net FTE enrollment declined 3.2% at two-year institutions compared to 2.1% 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 $54 (10.6%) at two-year institutions, and for the first time since the start of sector-level data collection (2019), state public financial aid decreased $11 (0.9%) per FTE at four-year institutions.
- State public operating per FTE increased $378 (6.4%) at two-year institutions and $519 (6.8%) at four-year institutions.
- Local appropriations per FTE increased $113 (3.6%) at two-year institutions and decreased just over $1 (or 7.1%) at four-year institutions.
- Research, agricultural extension, and medical appropriations only available to four-year institutions increased by $128 (7.4%) per FTE.
- Total state and local support per FTE increased by $374 (3.8%) at two-year institutions and $499 (4.5%) at four-year institutions.
- Net tuition revenue per FTE declined by $206 (7.4%) at two-year institutions and $25 (0.2%) at four-year institutions.
- Total education revenue per FTE increased $169 (1.3%) at two-year institutions and $354 (1.8%) 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 2019-2022

	TWO-YEAR					FOUR-YEAR				
CURRENT UNADJUSTED DOLLARS (MILLIONS)	**2019**	**2021**	**2022**	**% CHANGE SINCE 2021**	**% CHANGE SINCE 2019**	**2019**	**2021**	**2022**	**% CHANGE SINCE 2021**	**% CHANGE SINCE 2019**
STATE PUBLIC FINANCIAL AID	$1,881	$1,937	$2,179	12.5%	15.8%	$6,492	$7,665	$7,820	2.0%	20.5%
STATE PUBLIC OPERATING	$20,987	$22,567	$24,414	8.2%	16.3%	$46,582	$47,940	$52,672	9.9%	13.1%
LOCAL APPROPRIATIONS	$11,106	$11,869	$12,507	5.4%	12.6%	$126	$129	$123	-4.4%	-2.4%
RAM	$-	$-	$-	N/A	N/A	$10,393	$10,842	$11,984	10.5%	15.3%
STATE AND LOCAL SUPPORT	$33,974	$37,234	$39,315	5.6%	15.7%	$63,615	$68,511	$73,712	7.6%	15.9%
EDUCATION APPROPRIATIONS	$33,974	$37,234	$39,315	5.6%	15.7%	$53,200	$57,636	$61,703	7.1%	16.0%
NET TUITION REVENUE	$11,535	$10,610	$9,992	-5.8%	-13.4%	$63,525	$63,199	$64,879	2.7%	2.1%
TOTAL EDUCATION REVENUE	**$45,416**	**$47,758**	**$49,225**	**3.1%**	**8.4%**	**$115,915**	**$119,973**	**$125,745**	**4.8%**	**8.5%**
CONSTANT INFLATION ADJUSTED DOLLARS (MILLIONS)										
HECA	0.9093	0.9515	1.0000	5.1%	10.0%	0.9093	0.9515	1.0000	5.1%	10.0%
STATE PUBLIC FINANCIAL AID	$2,069	$2,036	$2,179	7.0%	5.3%	$7,139	$8,056	$7,820	-2.9%	9.5%
STATE PUBLIC OPERATING	$23,079	$23,718	$24,414	2.9%	5.8%	$51,226	$50,386	$52,672	4.5%	2.8%
LOCAL APPROPRIATIONS	$12,214	$12,475	$12,507	0.3%	2.4%	$139	$135	$123	-9.0%	-11.2%
RAM	$-	$-	$-	N/A	N/A	$11,430	$11,395	$11,984	5.2%	4.9%
STATE AND LOCAL SUPPORT	$37,362	$39,133	$39,315	0.5%	5.2%	$69,958	$72,005	$73,712	2.4%	5.4%
EDUCATION APPROPRIATIONS	$37,362	$39,133	$39,315	0.5%	5.2%	$58,504	$60,576	$61,703	1.9%	5.5%
NET TUITION REVENUE	$12,685	$11,151	$9,992	-10.4%	-21.2%	$69,858	$66,422	$64,879	-2.3%	-7.1%
TOTAL EDUCATION REVENUE	**$49,944**	**$50,194**	**$49,225**	**-1.9%**	**-1.4%**	**$127,472**	**$126,093**	**$125,745**	**-0.3%**	**-1.4%**
CONSTANT INFLATION ADJUSTED DOLLARS (PER FTE)										
FTE ENROLLMENT	4,388,978	4,006,438	3,876,804	-3.2%	-11.7%	6,598,714	6,566,825	6,430,119	-2.1%	-2.6%
STATE PUBLIC FINANCIAL AID	$471	$508	$562	10.6%	19.2%	$1,082	$1,227	$1,216	-0.9%	12.4%
STATE PUBLIC OPERATING	$5,258	$5,920	$6,297	6.4%	19.8%	$7,763	$7,673	$8,191	6.8%	5.5%
LOCAL APPROPRIATIONS	$2,783	$3,114	$3,226	3.6%	15.9%	$21	$21	$19	-7.1%	-8.9%
RAM	$-	$-	$-	N/A	N/A	$1,732	$1,735	$1,864	7.4%	7.6%
STATE AND LOCAL SUPPORT	$8,513	$9,767	$10,141	3.8%	19.1%	$10,602	$10,965	$11,464	4.5%	8.1%
EDUCATION APPROPRIATIONS	$8,513	$9,767	$10,141	3.8%	19.1%	$8,866	$9,225	$9,596	4.0%	8.2%
NET TUITION REVENUE	$2,890	$2,783	$2,577	-7.4%	-10.8%	$10,587	$10,115	$10,090	-0.2%	-4.7%
TOTAL EDUCATION REVENUE	**$11,379**	**$12,528**	**$12,697**	**1.3%**	**11.6%**	**$19,318**	**$19,201**	**$19,556**	**1.8%**	**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. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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 1997 to 2022. An interactive version of this figure with data back to 1980 is available online.[17] **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 10.3 million in 2022.[18] 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 year 2020 to 2021, enrollment dropped 3.2%, the largest decline on record. In 2022, enrollment continued to decline in public institutions, dropping by another 2.5% for a total of 10,306,924 FTE students. This means FTE enrollment in 2022 was down 11.6% from the peak in 2011, and only 0.4% 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, the start of the COVID-19 pandemic, federal stimulus funding for public institutions accounted for 1.5% of total education appropriations ($136 per FTE). In 2021, this proportion increased to 3.7% ($360 per FTE) but declined in 2022, making up 2.4% of total education appropriations ($241 per FTE).**

At the start of the SHEF dataset in 1980, states provided, on average, $9,572 per FTE in inflation-adjusted 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 a high of $11,046 per FTE. Since that peak, however, education appropriations have declined, down 7.3% ($809 per FTE) in the span of 22 years.

The downward trend in education appropriations has not been linear. Funding reached a record low of $7,610 per FTE in 2012 following declines during the Great Recession. Since that time, **appropriations have increased for 10 consecutive years**. In 2022, education appropriations increased 4.87% beyond inflation ($475 per FTE) to $10,237. This represents the second largest increase in state funding, with the largest having been in fiscal year 2021 (4.92%).

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

Overall, appropriations have increased 34.5%, or $2,627 per FTE, since the low point in 2012. **For the first time, inflation-adjusted education appropriations per FTE exceeded pre-recession 2008 levels in 2022. After 10 years of increases, 2022 education appropriations were above 2008 levels by 3.1%, or $304 per FTE.** This increase in education appropriations can be attributed to three notable trends:

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.

Despite increases in state support, inflation-adjusted general public operations per FTE have not yet recovered from the Great Recession.

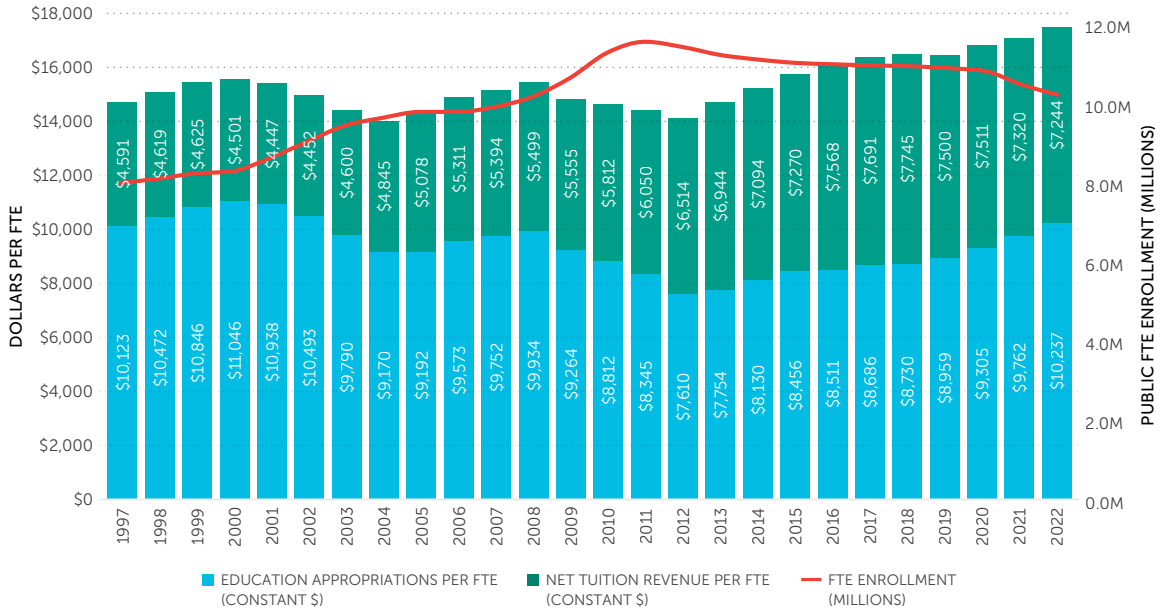
The **green bars** in *Figure 2.1* show net tuition revenue per FTE over time. Net tuition revenue measures tuition and fee revenue at public institutions, excluding state and institutional financial aid. Unlike education appropriations, until very recently, net tuition has increased steadily over time,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

However, after reaching an all-time high in 2018 ($7,745 per FTE), tuition revenue per FTE has decreased for three of the last four years: 3.2% in 2019, 2.5% in 2021, and 1.0% in 2022. Although tuition revenue did not decline in 2020, it increased by only $12 per FTE student. 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 2019, the only times net tuition revenue per FTE declined were fiscal years 2000 and 2001, two years immediately preceding an economic recession. In 2022, public institutions received, on average, $7,244 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 2022, total education revenue increased 2.4% to $17,393 per FTE, an all-time high.

FIGURE 2.1

PUBLIC FTE ENROLLMENT, EDUCATION APPROPRIATIONS PER FTE, AND NET TUITION REVENUE PER FTE, U.S, FY 1997-2022 (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 2022 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.[19] This trend changed following the brief economic downturn in 2020. *Figure 2.2* provides a more detailed look at the impact of economic recessions on state higher education appropriations.

In *Figure 2.2*, 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 reversed in 2021, after there was no decline following the COVID-19 pandemic-induced short economic recession in 2020.[20] Following a 4.9% year-over-year increase in 2021, education appropriations increased a total of 9.8% in the two years following the brief economic downturn (the short straight line in *Figure 2.2*). This was thanks in large part to federal stimulus funding that helped fill state budget shortfalls, reducing the

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

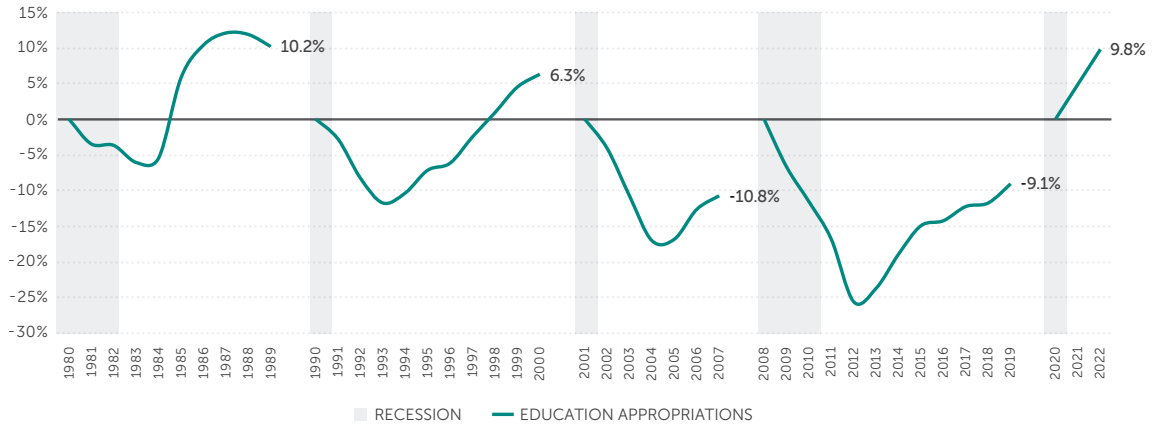
20. National Bureau of Economic Research. (2021). Business cycle dating committee announcement July 19, 2021. nber.org/news/business-cycle-dating-committee-announcement-july-19-2021

need to defer funding from higher education to other budget areas. The federal government also provided specific funds to states to use for education, which many states allocated, in part, to higher education. See Measurement Note: Federal Stimulus Funding for more information.

Without federal stimulus funding states allocated to higher education, funding would have increased 6.3% per FTE from 2021, and 9.0% from 2020. In addition to federal stimulus funds reducing the need for states to defer state dollars from higher education to other budget areas, these sizable increases are in part due to continued FTE enrollment declines which have not followed previous recessions. **Still, had FTE enrollment held constant and federal stimulus funding not come through for states, inflation-adjusted education appropriations would have increased 3.6% from 2021 and 2.9% from 2020.**

FIGURE 2.2

CUMULATIVE ANNUAL PERCENT CHANGE IN PUBLIC EDUCATION APPROPRIATIONS PER FTE FOLLOWING ECONOMIC RECESSIONS, U.S., FY 1980-2022 (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 2022 dollars adjusted by the Higher Education Cost Adjustment (HECA).

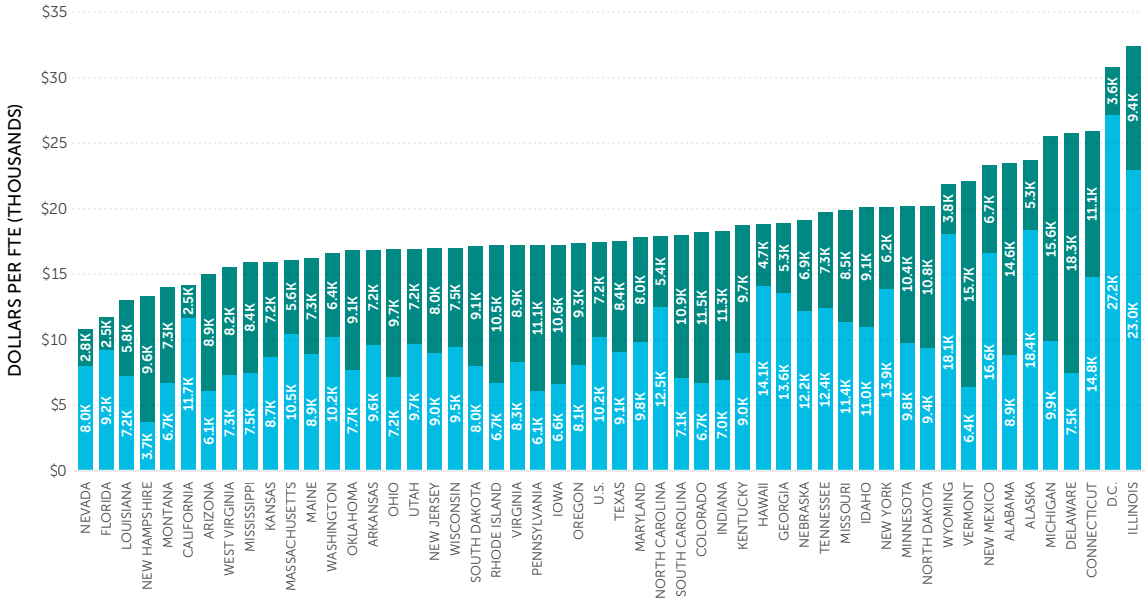
SOURCE: State Higher Education Executive Officers Association

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 2022. 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 74.2% of total revenue came from state funding. Louisiana had similar total revenue, and only 55.7% of funding came from education appropriations. At the other end of the spectrum, Connecticut, Delaware, Washington, D.C., and Illinois had the highest total revenues, yet they vary greatly in where they get those funds. The state provided 29.3% of total revenue in Delaware compared to 57.1% in Connecticut, 71.7% in Illinois, and 88.3% in Washington, D.C.

FIGURE 2.3

EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY STATE, FY 2022 (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. Fiscal year 2022 net tuition and fee revenue are estimates for Arkansas and Pennsylvania and include estimated two-year net tuition and fee revenue for Massachusetts and Texas. Education appropriations for Illinois and Texas include estimated local appropriations. Net FTE enrollment is estimated for Arkansas.
5. 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

EDUCATION APPROPRIATIONS STATE SPOTLIGHT: ILLINOIS

Education appropriations per FTE in Illinois continue to be an outlier at more than twice the U.S. average and 52.5% 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, and by a one-time payment of $250 million for the state's prepaid tuition program that will be disbursed over a span of years.

In 2017, 33.8% of all education appropriations in Illinois went to their state retirement pension system. This share grew to 37.0% in 2021 and dropped slightly to 35.8% in 2022. Of the $2.1 billion in pension payments in 2022, 77.7% were used for past unfunded liabilities, not current employees. This means that even after considering additional funding from local governments, over one quarter (27.8%) of all education appropriations in Illinois were spent on past pension obligations and were not available for use in 2022. This translates to $6,390 per FTE student, more than the entire per-FTE appropriation in New Hampshire, and within $1,000 of the per-FTE appropriation in nine other states.

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

3. SECTOR COMPARISONS

Public higher education revenues vary considerably across public two-year and 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 2022 are available.

As shown in *Figure 2.4*, 2022 education appropriations at two-year public institutions are slightly above the per-FTE levels at four-year institutions ($10,141 and $9,596, respectively).[21] 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 ($3,226 per FTE compared to $19 at four-year institutions), but do not include research, agricultural extension, and medical funding (RAM), of which an additional $1,864 per FTE was exclusively appropriated to four-year institutions in 2022. In addition, SHEF metrics use FTE enrollment rather than student headcount, and two-year institutions have a far greater proportion of part-time students.[22]

Education appropriations per FTE throughout the report include federal stimulus funding. Two-year institutions received $55 per FTE in federal stimulus for public operating in 2022, and four-year institutions received $169 per FTE in federal stimulus for public operating.

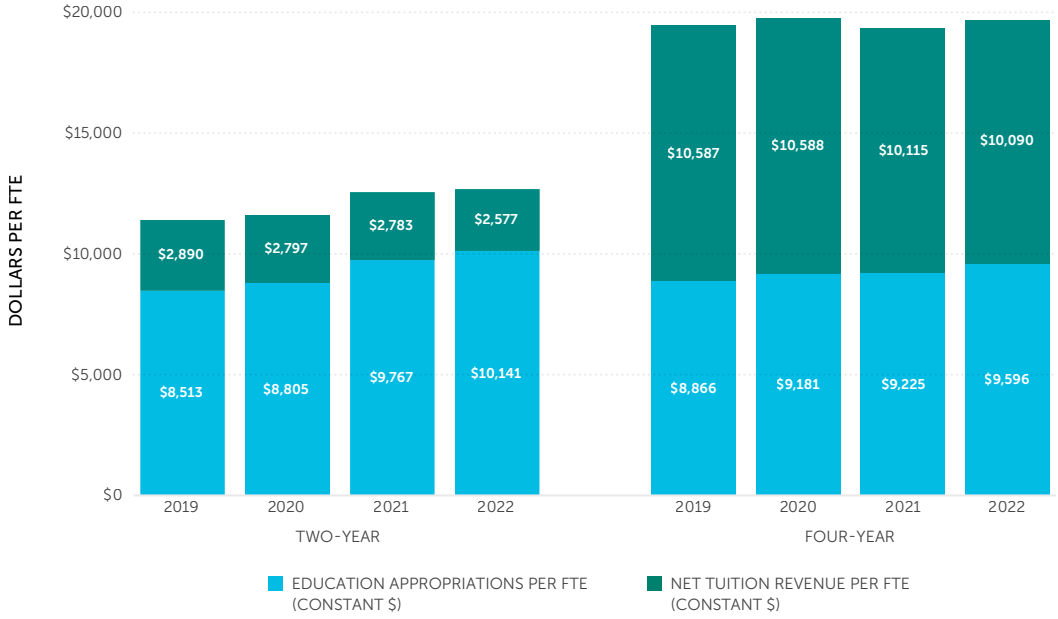
21. There are several differences in education appropriations between the state and sector levels. The state-level data include agency funding and all federal stimulus funding allocated to public institutions. The sector-level data exclude agency funding and include only the federal stimulus funding 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.

22. 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

Unlike education appropriations, net tuition revenue is very different at two- and four-year institutions. On average, two-year institutions received $2,577 in net tuition revenue per FTE, or 25.5% of the average net tuition revenue per FTE at four-year institutions ($10,090). As a result, public four-year institutions have, on average, much higher total revenues with which to educate students than two-year institutions.

FIGURE 2.4

PUBLIC EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY SECTOR, U.S, FY 2019-2022 (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. 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 2022 sector-level net tuition and fee revenue are estimates for Arkansas and Pennsylvania. Two-year net tuition and fee revenue is estimated for Massachusetts and Texas. Education appropriations for Illinois and Texas include estimated local appropriations. Sector-level net FTE enrollment is estimated for Arkansas.
6. Constant 2022 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 (80.0%) and private (19.5%) 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.[23] 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.

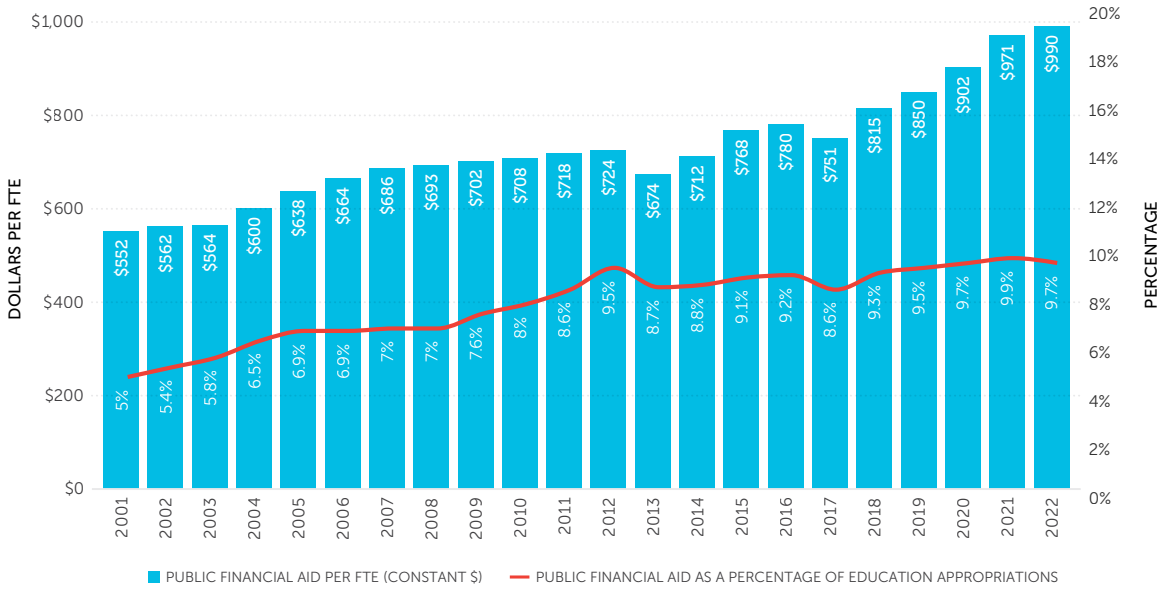
- On a per-FTE basis and after adjusting for inflation, state financial aid to public institutions has increased 79.3%, from $552 in 2001 (when these data were first collected) to $990 in 2022. State aid increased 2.0% from 2021.
- SHEF data show that states primarily protect financial aid during economic 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.
- Following the short recession in 2020, public aid grew from 9.7% to 9.9% of all education appropriations in 2021. In 2022, public aid as a portion of education appropriations returned to 9.7% in 2022, still up 5.0% from 2001.[24]

23. 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.

24. For more information about how states protected student affordability during the COVID-19 pandemic, see the SHEEO report, *Effects of the COVID-19 pandemic on state tuition, fees, and financial assistance policies*, at sheeo.org/project/tuition-and-fee-survey

FIGURE 2.5

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE AND AS A PERCENTAGE OF EDUCATION APPROPRIATIONS, U.S., FY 2001-2022 (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, it 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 2022 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, growth in education appropriations and occasional 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 for public institutions—also known as the student share. The student share shows the proportion of total education revenue that comes from net tuition and fees. 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 41.7%) 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

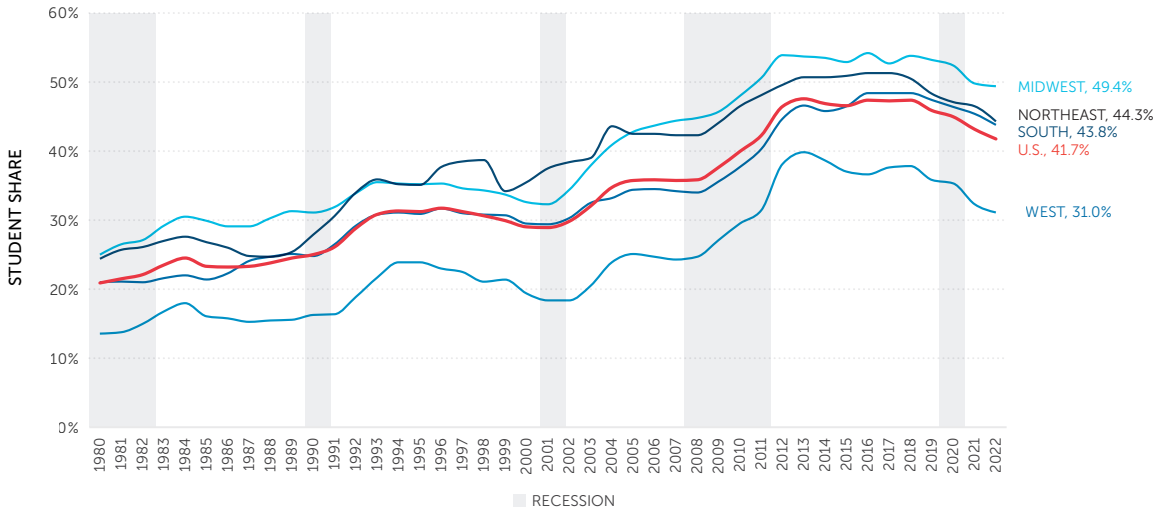
increased from 23.3% to 37.9%. Of greater concern, the percentage of students using federal loans increased from 23.8% to 30.1% during that time.[25]

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 5.9 percentage points to 41.7% in 2022. From 2021 to 2022, the student share declined 1.4 percentage points, the third largest decrease ever observed in the SHEF dataset. Decreases in student share occur when growth in education appropriations outpaces growth in net tuition revenue. In 2022, the decrease in student share was due to declines in FTE enrollment and net tuition revenue, as well as continued federal stimulus funding given to states, whether directly allocated to higher education or used to cushion state budgets, which reduced the need for states to defer funds to other budget areas. This downward trend in the student share may change in upcoming years as federal stimulus funding is depleted and FTE enrollment levels 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 2021 to 2022, the student share declined in each region: 2.2 percentage points in the Northeast, 1.5 in the South, 1.3 in the West, and 0.4 in the Midwest. 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*).

FIGURE 2.6

NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE, U.S., FY 1980-2022



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.

25. 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).

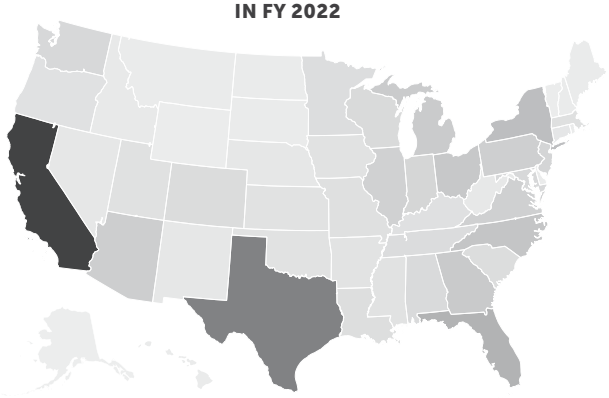
STATE FUNDING AND ENROLLMENT

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 third 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. After years of steady enrollment increases since the SHEF data collection began, the number of FTE students enrolled in public institutions slowly declined, both nationally and across states, over the last decade. However, with the onset of the COVID-19 pandemic in early 2020, FTE enrollment has most recently declined at unprecedented rates.[26]

NET FTE ENROLLMENT IN FY 2022



Historically, enrollment has increased in each decade. Starting in 2009, enrollment increased rapidly during and immediately following the Great Recession, having peaked at 11.65 million students in 2011.

Now, the most recent decade has seen a reverse in the trend:

- 6.85 million in 1980.
- 7.77 million in 1990.
- 8.38 million in 2000.
- 11.38 million in 2010.
- 10.91 million in 2020.
- 10.31 million in 2022.

Since 2011, FTE enrollment has declined for 11 straight years to 10.31 million in 2022. Between 2015 and 2020, these declines were less than 1.0% annually. In 2021, the COVID-19 pandemic led to a year-over-year decline of 3.2% in FTE enrollment, the largest decline since the start of the SHEF dataset in 1980. FTE enrollment continued to decline in 2022, marking the second largest drop in enrollment, with a decrease of 2.5%. As a result, public institutions enrolled 10,306,924 FTE students in 2022, down 11.6% from the peak in 2011, and only 0.4% above 2008 levels.

26. National Student Clearinghouse Research Center. (2022). Fall 2022 enrollment (as of September 2022). nscresearchcenter.org/stay-informed

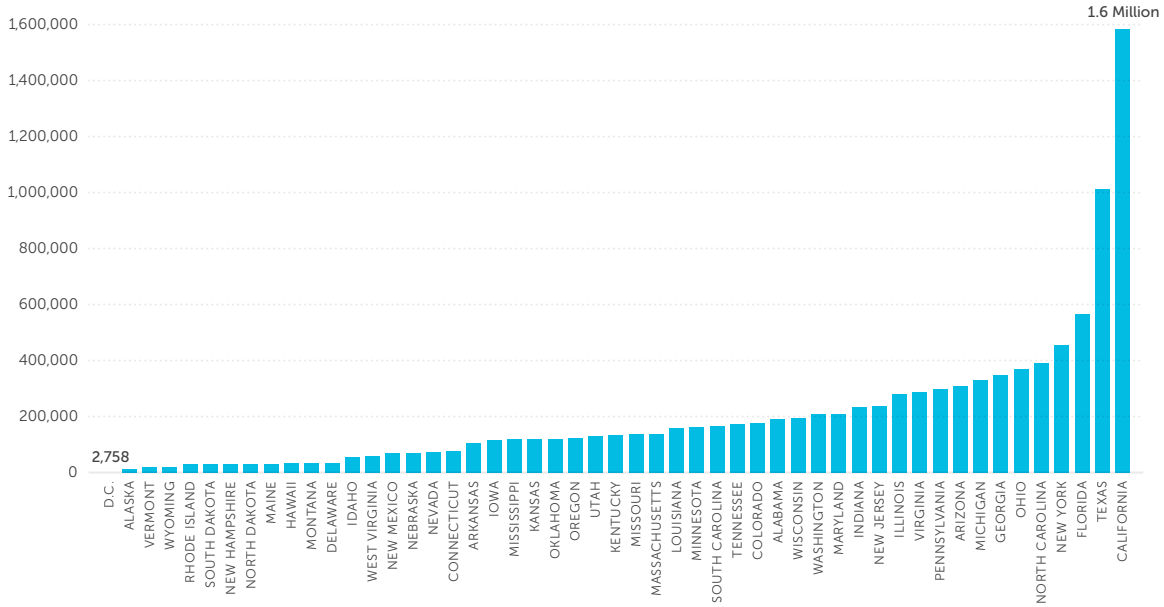
1. STATE COMPARISONS

Figure 3.1 shows net FTE enrollment for each state in fiscal year 2022. *Table 3.1* provides additional detail on how enrollment has changed over time in each state.

- Across the states, FTE enrollment ranged from roughly 2,758 students in Washington, D.C., and 12,440 in Alaska to 1.6 million students in California. Only California and Texas had more than one million FTE enrolled students in 2022, and 25.2% of all students attending a public institution in the U.S. attended an institution in either California or Texas.
- **Enrollment declined in 41 states between 2021 and 2022.** These declines ranged from 0.2% in North Dakota (representing only 78 FTE) to 12.5% in Missouri (19,540 FTE). Enrollment declined by more than 5% in nine states compared to 17 states and Washington, D.C., in 2021.
- Enrollment increased in nine states and Washington, D.C. Increases ranged from 0.2% (or 44 students) in Wyoming to 6.6% (or 4,334 students) in New Mexico.
- Enrollment has declined in 45 states and Washington, D.C., since 2012, but in only one state compared to the start of the SHEF dataset: FTE enrollment in Illinois has declined 18.0% since 1980.

FIGURE 3.1

PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY STATE, FY 2022



NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. Fiscal year 2022 net FTE enrollment is estimated for Arkansas.

SOURCE: State Higher Education Executive Officers Association

TABLE 3.1

PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT BY STATE, FY 1980-2022

	1980	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	138,620	165,833	206,364	198,619	194,930	191,445	-1.8%	-3.6%	-7.2%	15.4%	38.1%
ALASKA	10,530	16,079	21,674	18,492	13,739	12,440	-9.5%	-32.7%	-42.6%	-22.6%	18.1%
ARIZONA	120,148	194,629	275,238	286,335	292,192	309,160	5.8%	8.0%	12.3%	58.8%	157.3%
ARKANSAS	53,130	87,337	124,426	116,382	105,002	105,752	0.7%	-9.1%	-15.0%	21.1%	99.0%
CALIFORNIA	979,142	1,322,308	1,525,443	1,590,692	1,596,101	1,584,060	-0.8%	-0.4%	3.8%	19.8%	61.8%
COLORADO	113,281	141,492	192,541	182,212	179,676	175,533	-2.3%	-3.7%	-8.8%	24.1%	55.0%
CONNECTICUT	58,909	60,976	85,683	90,404	74,538	75,381	1.1%	-16.6%	-12.0%	23.6%	28.0%
DELAWARE	20,664	28,944	34,672	35,554	36,409	33,946	-6.8%	-4.5%	-2.1%	17.3%	64.3%
FLORIDA	287,388	420,957	641,446	597,293	595,409	567,049	-4.8%	-5.1%	-11.6%	34.7%	97.3%
GEORGIA	157,155	234,998	379,844	348,606	356,921	348,450	-2.4%	0.0%	-8.3%	48.3%	121.7%
HAWAII	30,465	31,810	40,883	36,827	34,151	32,620	-4.5%	-11.4%	-20.2%	2.5%	7.1%
IDAHO	26,647	39,495	58,980	53,116	53,699	53,976	0.5%	1.6%	-8.5%	36.7%	102.6%
ILLINOIS	342,097	323,876	384,615	327,545	282,476	280,511	-0.7%	-14.4%	-27.1%	-13.4%	-18.0%
INDIANA	142,061	193,130	262,545	248,664	237,621	235,412	-0.9%	-5.3%	-10.3%	21.9%	65.7%
IOWA	84,210	105,545	132,423	132,505	118,606	115,604	-2.5%	-12.8%	-12.7%	9.5%	37.3%
KANSAS	87,216	100,476	141,354	134,716	123,169	119,978	-2.6%	-10.9%	-15.1%	19.4%	37.6%
KENTUCKY	89,389	119,500	159,306	147,168	137,518	133,629	-2.8%	-9.2%	-16.1%	11.8%	49.5%
LOUISIANA	106,686	168,121	181,590	160,057	163,735	158,195	-3.4%	-1.2%	-12.9%	-5.9%	48.3%
MAINE	26,250	29,287	37,897	34,287	32,864	32,111	-2.3%	-6.3%	-15.3%	9.6%	22.3%
MARYLAND	133,228	175,085	242,955	232,963	217,333	208,380	-4.1%	-10.6%	-14.2%	19.0%	56.4%
MASSACHUSETTS	122,952	128,404	170,221	165,736	145,913	138,528	-5.1%	-16.4%	-18.6%	7.9%	12.7%
MICHIGAN	318,166	333,584	423,785	378,402	343,596	332,190	-3.3%	-12.2%	-21.6%	-0.4%	4.4%
MINNESOTA	149,418	167,238	214,653	189,951	171,312	162,546	-5.1%	-14.4%	-24.3%	-2.8%	8.8%
MISSISSIPPI	85,292	102,490	137,888	130,623	121,676	119,101	-2.1%	-8.8%	-13.6%	16.2%	39.6%
MISSOURI	120,468	156,588	196,360	195,255	156,493	136,953	-12.5%	-29.9%	-30.3%	-12.5%	13.7%
MONTANA	25,452	33,660	40,847	38,078	33,459	33,685	0.7%	-11.5%	-17.5%	0.1%	32.3%
NEBRASKA	56,360	65,725	83,861	76,899	72,564	71,335	-1.7%	-7.2%	-14.9%	8.5%	26.6%
NEVADA	19,367	48,107	65,238	74,913	75,873	74,078	-2.4%	-1.1%	13.6%	54.0%	282.5%
NEW HAMPSHIRE	19,415	26,506	39,099	38,156	32,348	30,874	-4.6%	-19.1%	-21.0%	16.5%	59.0%
NEW JERSEY	171,390	178,671	278,868	266,194	252,098	238,339	-5.5%	-10.5%	-14.5%	33.4%	39.1%
NEW MEXICO	48,268	66,847	97,719	89,020	65,855	70,189	6.6%	-21.2%	-28.2%	5.0%	45.4%
NEW YORK	418,679	449,959	576,389	549,948	494,691	455,844	-7.9%	-17.1%	-20.9%	1.3%	8.9%
NORTH CAROLINA	165,642	266,217	412,349	389,604	392,374	390,900	-0.4%	0.3%	-5.2%	46.8%	136.0%
NORTH DAKOTA	26,735	31,922	37,503	35,743	31,900	31,822	-0.2%	-11.0%	-15.1%	-0.3%	19.0%
OHIO	291,000	337,379	423,509	390,840	374,222	368,517	-1.5%	-5.7%	-13.0%	9.2%	26.6%
OKLAHOMA	96,476	121,111	146,518	133,682	123,954	120,966	-2.4%	-9.5%	-17.4%	-0.1%	25.4%
OREGON	96,946	111,006	165,094	150,305	129,767	124,310	-4.2%	-17.3%	-24.7%	12.0%	28.2%
PENNSYLVANIA	243,296	288,334	369,046	348,672	315,101	299,671	-4.9%	-14.1%	-18.8%	3.9%	23.2%
RHODE ISLAND	23,237	25,622	33,550	31,569	30,487	28,742	-5.7%	-9.0%	-14.3%	12.2%	23.7%
SOUTH CAROLINA	95,600	132,404	173,448	167,414	164,276	166,231	1.2%	-0.7%	-4.2%	25.5%	73.9%
SOUTH DAKOTA	18,623	22,064	33,540	32,295	31,957	30,645	-4.1%	-5.1%	-8.6%	38.9%	64.6%
TENNESSEE	124,022	159,838	190,710	182,223	178,576	173,240	-3.0%	-4.9%	-9.2%	8.4%	39.7%
TEXAS	466,900	667,534	1,013,647	1,034,453	1,044,747	1,014,462	-2.9%	-1.9%	0.1%	52.0%	117.3%
UTAH	47,061	91,953	126,594	123,075	129,312	128,774	-0.4%	4.6%	1.7%	40.0%	173.6%
VERMONT	13,656	15,914	21,807	20,638	19,509	19,633	0.6%	-4.9%	-10.0%	23.4%	43.8%
VIRGINIA	175,197	236,014	325,517	305,307	298,864	288,995	-3.3%	-5.3%	-11.2%	22.4%	65.0%
WASHINGTON	163,866	204,663	253,902	239,481	214,902	207,919	-3.2%	-13.2%	-18.1%	1.6%	26.9%
WEST VIRGINIA	53,331	62,902	80,193	69,938	62,038	58,865	-5.1%	-15.8%	-26.6%	-6.4%	10.4%
WISCONSIN	174,163	196,523	233,284	213,143	198,362	194,947	-1.7%	-8.5%	-16.4%	-0.8%	11.9%
WYOMING	14,048	20,198	26,174	23,300	20,947	20,991	0.2%	-9.9%	-19.8%	3.9%	49.4%
U.S.	**6,852,242**	**8,709,255**	**11,521,192**	**11,057,294**	**10,573,262**	**10,306,924**	**-2.5%**	**-6.8%**	**-10.5%**	**18.3%**	**50.4%**
D.C.	N/A	N/A	4,034	3,239	2,711	2,758	1.7%	-14.9%	-31.6%	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.
4. Fiscal year 2022 net FTE enrollment is estimated for Arkansas.

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 2022, there were 3.88 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 2,647 FTE in Vermont to 907,969 FTE in California. Twenty-three percent of students attending a U.S. public two-year institution in 2022 attended a California community college.

- In the last year, enrollment declined 3.2% at two-year institutions. Thirty-seven states had declines, six of which (Delaware, Hawaii, Missouri, New York, Pennsylvania, and Rhode Island) were greater than 10%. The largest two-year FTE enrollment decline was in Missouri (16.3%). These declines are fewer and comparatively less dramatic than those in 2021 when 14 states had declines of more than 10% in the two-year sector.
- Two-year enrollment declined by more than 10% in each year since the start of the COVID-19 pandemic in three states: New York (12.9% in 2021 and 11.3% in 2022), Pennsylvania (11.8% in 2021 and 10.1% in 2022), and Rhode Island (14.4% in 2021 and 12.2% in 2022).
- Two-year FTE enrollment increased in 12 states from 2021 to 2022. Enrollment increased by more than 5.0% in only one state: Vermont (6.6%). Of the 11 other states, increases ranged from 0.3% in Indiana to 4.6% in New Mexico.

There were 6.43 million FTE enrolled students at four-year institutions in 2022, about 1.7 times the number of two-year students. Enrollment at four-year institutions ranged from 2,758 in Washington, D.C., and 9,750 in Wyoming to 676,091 in California. Notably, California represented one-tenth (10.5%) of all four-year public enrollment in 2022.

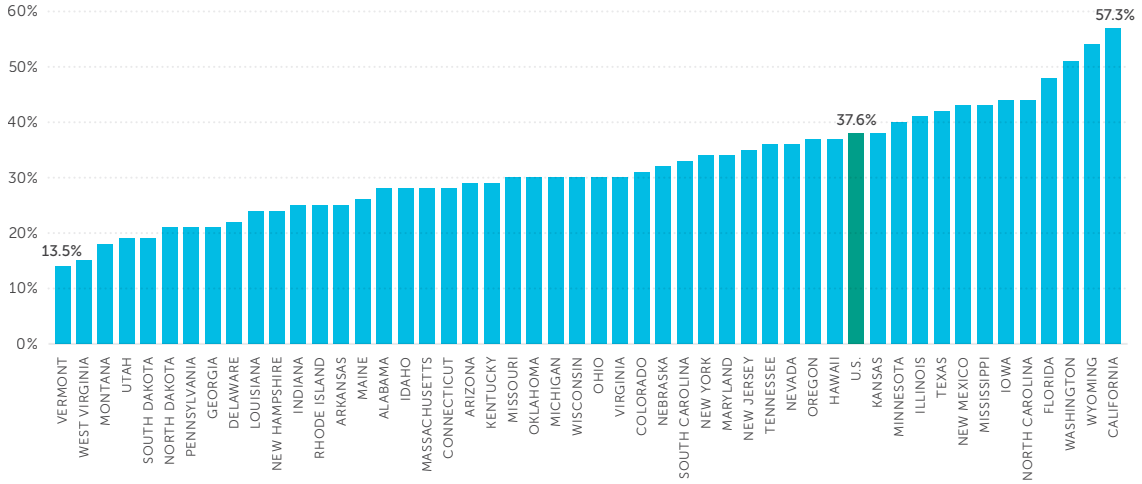
- From 2021 to 2022, FTE enrollment declined 2.1% at four-year institutions. Forty-two states had declines. This follows a 0.9% decline from 2020 to 2021. Only Missouri (10.8%) had an enrollment decline greater than 10% this year. The second and third largest declines were 9.5% in Alaska and 8.7% in Washington.
- Four-year FTE enrollment increased in only eight states and Washington, D.C., from 2021 to 2022. The largest enrollment increases were 9.4% in Arizona and 8.1% in New Mexico.

Thirty-two states had enrollment declines in both sectors over the last year, and only three states (Idaho, New Mexico, and South Carolina) had enrollment increases across both sectors in 2022. The two-year sector generally had larger enrollment declines across states—in 31 states, enrollment took a larger hit in the two-year sector than in the four-year sector from 2021 to 2022. This is a smaller difference compared to 2021, when the enrollment decline was greater in the two-year sector in 29 states. In nine states, enrollment declined from 2021 to 2022 in the four-year sector only.

Figure 3.1A shows that states enroll different proportions of students across sectors. Overall, 37.6% of public FTE students attended a two-year institution in the United States—a decline of 2.3 percentage points from 2019. The percentage of FTE at two-year institutions varied from only 13.5% in Vermont to 57.3% in California. **Only three states (California, Washington, and Wyoming) had more FTE students enrolled in the two-year sector than in the four-year sector.**

FIGURE 3.1A

PERCENTAGE OF PUBLIC HIGHER EDUCATION FULL-TIME EQUIVALENT (FTE) ENROLLMENT ATTENDING TWO-YEAR INSTITUTIONS BY STATE, FY 2022



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 2022 net FTE enrollment is estimated for Arkansas.

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 2019-2022

	TWO-YEAR FTE					FOUR-YEAR FTE				
	2019	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2019	2019	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2019
ALABAMA	59,288	51,745	52,783	2.0%	-11.0%	143,485	143,185	138,662	-3.2%	-3.4%
ALASKA	0	0	0	N/A	N/A	16,721	13,739	12,440	-9.5%	-25.6%
ARIZONA	110,557	92,151	90,402	-1.9%	-18.2%	182,299	200,041	218,758	9.4%	20.0%
ARKANSAS	30,934	27,633	26,722	-3.3%	-13.6%	82,311	77,369	79,030	2.1%	-4.0%
CALIFORNIA	934,456	910,429	907,969	-0.3%	-2.8%	672,687	685,672	676,091	-1.4%	0.5%
COLORADO	56,000	56,515	55,170	-2.4%	-1.5%	127,744	123,161	120,363	-2.3%	-5.8%
CONNECTICUT	26,419	20,295	21,142	4.2%	-20.0%	57,374	54,243	54,239	0.0%	-5.5%
DELAWARE	8,886	8,486	7,486	-11.8%	-15.8%	27,524	27,923	26,460	-5.2%	-3.9%
FLORIDA	315,763	291,691	269,699	-7.5%	-14.6%	293,197	303,718	297,350	-2.1%	1.4%
GEORGIA	86,540	77,837	74,285	-4.6%	-14.2%	269,808	279,084	274,165	-1.8%	1.6%
HAWAII	14,820	13,697	12,126	-11.5%	-18.2%	20,434	20,455	20,494	0.2%	0.3%
IDAHO	15,992	14,782	14,914	0.9%	-6.7%	38,429	38,917	39,063	0.4%	1.6%
ILLINOIS	140,713	116,619	115,921	-0.6%	-17.6%	166,254	165,857	164,590	-0.8%	-1.0%
INDIANA	63,913	58,773	58,967	0.3%	-7.7%	182,388	178,849	176,445	-1.3%	-3.3%
IOWA	57,239	51,791	50,859	-1.8%	-11.1%	72,148	66,815	64,745	-3.1%	-10.3%
KANSAS	52,895	47,174	46,029	-2.4%	-13.0%	79,358	75,995	73,949	-2.7%	-6.8%
KENTUCKY	43,446	40,579	39,127	-3.6%	-9.9%	98,556	96,940	94,502	-2.5%	-4.1%
LOUISIANA	43,091	39,608	37,533	-5.2%	-12.9%	120,841	124,127	120,662	-2.8%	-0.1%
MAINE	9,773	8,925	8,292	-7.1%	-15.2%	24,174	23,939	23,819	-0.5%	-1.5%
MARYLAND	89,990	76,482	71,365	-6.7%	-20.7%	139,253	140,851	137,015	-2.7%	-1.6%
MASSACHUSETTS	49,799	41,860	38,394	-8.3%	-22.9%	110,528	104,053	100,134	-3.8%	-9.4%
MICHIGAN	116,340	102,319	99,394	-2.9%	-14.6%	249,975	241,277	232,796	-3.5%	-6.9%
MINNESOTA	76,219	69,472	64,710	-6.9%	-15.1%	108,148	101,840	97,835	-3.9%	-9.5%
MISSISSIPPI	58,299	52,358	51,174	-2.3%	-12.2%	71,200	69,318	67,927	-2.0%	-4.6%
MISSOURI	59,765	48,416	40,516	-16.3%	-32.2%	122,734	108,077	96,436	-10.8%	-21.4%
MONTANA	6,678	5,964	5,936	-0.5%	-11.1%	29,697	27,495	27,749	0.9%	-6.6%
NEBRASKA	26,142	22,681	22,531	-0.7%	-13.8%	49,798	49,883	48,804	-2.2%	-2.0%
NEVADA	29,026	27,955	26,922	-3.7%	-7.2%	47,398	47,918	47,156	-1.6%	-0.5%
NEW HAMPSHIRE	9,853	8,066	7,515	-6.8%	-23.7%	26,500	24,282	23,359	-3.8%	-11.9%
NEW JERSEY	99,904	87,901	82,173	-6.5%	-17.7%	162,374	164,197	156,166	-4.9%	-3.8%
NEW MEXICO	37,798	28,678	29,992	4.6%	-20.7%	39,242	37,176	40,197	8.1%	2.4%
NEW YORK	210,891	174,908	155,063	-11.3%	-26.5%	327,088	319,783	300,781	-5.9%	-8.0%
NORTH CAROLINA	179,659	174,757	172,214	-1.5%	-4.1%	214,263	217,617	218,686	0.5%	2.1%
NORTH DAKOTA	7,028	6,493	6,524	0.5%	-7.2%	26,753	25,407	25,298	-0.4%	-5.4%
OHIO	99,164	110,206	111,675	1.3%	12.6%	287,287	264,015	256,842	-2.7%	-10.6%
OKLAHOMA	40,585	37,883	36,006	-5.0%	-11.3%	88,260	86,071	84,960	-1.3%	-3.7%
OREGON	60,770	50,320	46,129	-8.3%	-24.1%	83,519	79,447	78,181	-1.6%	-6.4%
PENNSYLVANIA	79,979	68,971	61,998	-10.1%	-22.5%	251,685	246,130	237,673	-3.4%	-5.6%
RHODE ISLAND	9,333	8,231	7,224	-12.2%	-22.6%	22,645	22,256	21,518	-3.3%	-5.0%
SOUTH CAROLINA	57,624	53,730	55,122	2.6%	-4.3%	109,116	110,545	111,109	0.5%	1.8%
SOUTH DAKOTA	5,810	5,848	5,829	-0.3%	0.3%	27,006	26,109	24,816	-5.0%	-8.1%
TENNESSEE	72,783	66,125	62,292	-5.8%	-14.4%	111,635	112,451	110,948	-1.3%	-0.6%
TEXAS	487,864	445,292	427,215	-4.1%	-12.4%	578,843	599,455	587,247	-2.0%	1.5%
UTAH	25,832	24,658	24,470	-0.8%	-5.3%	102,270	104,654	104,304	-0.3%	2.0%
VERMONT	2,652	2,482	2,647	6.6%	-0.2%	17,806	17,027	16,986	-0.2%	-4.6%
VIRGINIA	100,141	94,137	87,994	-6.5%	-12.1%	201,878	204,727	201,002	-1.8%	-0.4%
WASHINGTON	123,981	103,034	105,800	2.7%	-14.7%	112,000	111,868	102,119	-8.7%	-8.8%
WEST VIRGINIA	11,076	9,424	8,718	-7.5%	-21.3%	55,501	52,614	50,147	-4.7%	-9.6%
WISCONSIN	72,054	58,255	58,595	0.6%	-18.7%	137,600	140,108	136,351	-2.7%	-0.9%
WYOMING	11,214	10,802	11,241	4.1%	0.2%	10,980	10,145	9,750	-3.9%	-11.2%
U.S.	**4,388,978**	**4,006,438**	**3,876,804**	**-3.2%**	**-11.7%**	**6,598,714**	**6,566,825**	**6,430,119**	**-2.1%**	**-2.6%**
D.C.	0	0	0	N/A	N/A	3,518	2,711	2,758	1.7%	-21.6%

NOTES:

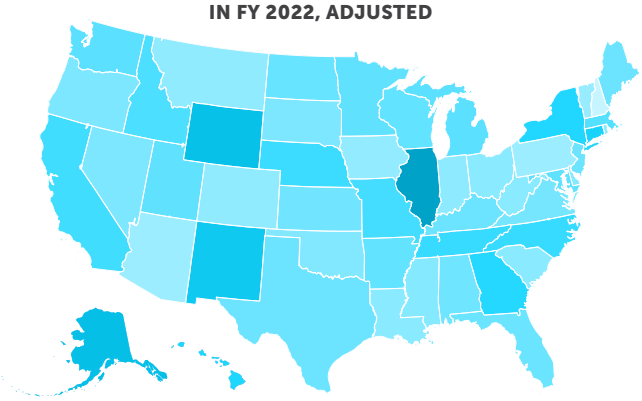
1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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 2022 net FTE enrollment is estimated for Arkansas.

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 only 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.[27] This map shows education appropriations per FTE across the nation and over time.

EDUCATION APPROPRIATIONS PER FTE IN FY 2022, 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. Education appropriations reached an all-time low in 2012 following the cumulative effects of the 2001 and 2008 recessions. However, during and following 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.[28]

Fiscal year 2022 marks the 10th straight year of per-FTE increases in education appropriations. Inflation-adjusted education appropriations per FTE increased 4.9% from 2021 to 2022, reaching $10,237 (*Table 3.2*). **For the first time since the Great Recession, education appropriations per FTE exceeded 2008 levels, both including and excluding federal stimulus (3.1% and 0.6% higher, respectively).** However, 2022 education appropriations per FTE remained below 2001 levels, another pre-recession high point, both when including (6.4%) and excluding (8.6%) federal stimulus.

27. shef.sheeo.org/data-visualizations/map-3-2

28. 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 2022 ranged from $3,699 in New Hampshire to $22,970 in Illinois[29] and $27,187 in Washington, D.C. (*Figure 3.2*).

- Despite national-level increases, education appropriations per FTE declined in 21 states and Washington, D.C., from 2021 to 2022. Three states, Minnesota (21.8%, or $2,729 per FTE), New Hampshire (20.1%, or $931 per FTE), and Wyoming (35.1%, or $9,801 per FTE), and Washington, D.C. (28.0%, or $10,572 per FTE), had a decline greater than 20%. These declines were entirely due to states decreasing the amount of stimulus funds allocated to higher education in 2022.
- Education appropriations per FTE increased in 29 states in the last year. In six states, increases were greater than 10%. The largest increases were in Georgia (30.3%, or $3,174), New Jersey (25.0%, or $1,790), and Connecticut (23.9%, or $2,859). The increase in Georgia was largely, but not entirely, due to federal stimulus funds. The increase in New Jersey was primarily due to state investment in public operating. In Connecticut, the increase was due to a combination of federal stimulus funds and state investment in public operating.

Although nationally, education appropriations have recovered to 2008 levels, the majority of states continue funding higher education at a lower level than prior to the Great Recession. Twenty-eight states have not yet recovered from the 2008 Great Recession (meaning their education appropriations per FTE in 2022 remain below 2008 levels). Arizona (40.9% below) and Louisiana (32.2% below), are furthest from recovery. Another eight states remain at least 20% below 2008 levels. Additionally, in 36 states, education appropriations per FTE remain below the level seen in 2001 prior to the tech bust.

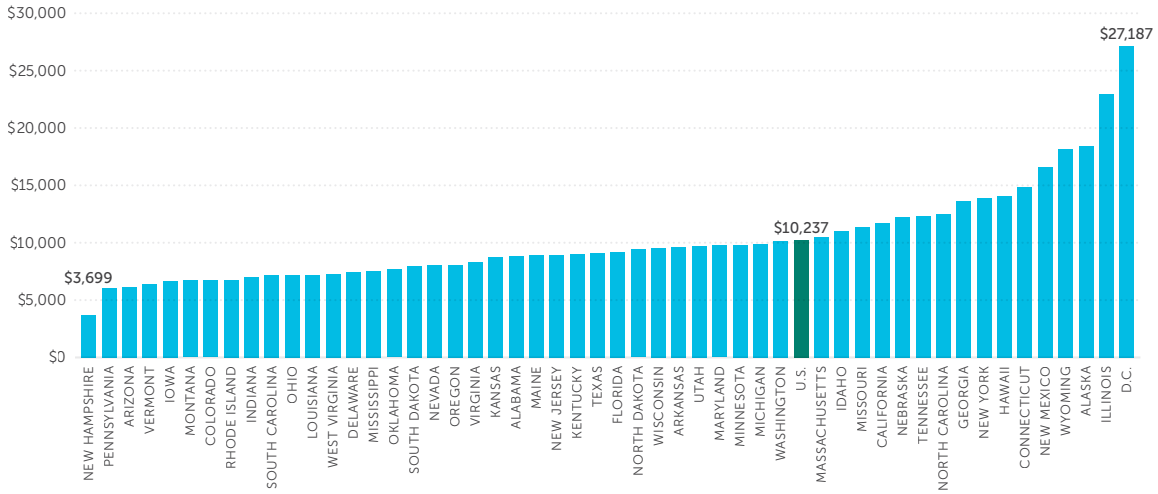
Federal stimulus funding has a heavy impact on the above figures. On average, states allocated $241 per FTE in federal stimulus funding to public higher education. In 2022, three states and Washington, D.C., allocated more than $1,000 per FTE in federal stimulus funding to public higher education: Vermont ($2,707), Georgia ($2,340), and Connecticut ($1,425). After excluding federal stimulus funding from all years in which it was allocated (2009-2012 and 2020-2022):

- Education appropriations per FTE declined in 10 states and Washington, D.C., from 2021 to 2022. The largest declines were in Vermont (19.9%) and Wyoming (15.1%). These were the only two states with declines greater than 10.0%.
- Education appropriations per student increased in 40 states in the last year. The largest increase was in Colorado (83.7%), due entirely to Colorado relying on federal stimulus funding for 46.5% of education appropriations per FTE in 2021.
- Excluding stimulus funding, the only other states with increases in education appropriations per FTE exceeding 20% in the last year were New Jersey (26.5%) and Louisiana (20.7%).
- Although U.S. average education appropriations per FTE are higher than prior to the 2008 recession, even when excluding stimulus, 30 states have not yet recovered. Additionally, 37 have not yet recovered from the 2001 recession.

29. In 2022, Illinois allocated a one-time payment of $250 million to the state's prepaid tuition program. These funds will be disbursed over a span of years, rather than in 2022 alone.

FIGURE 3.2

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2022 (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. Fiscal year 2022 net FTE enrollment is estimated for Arkansas and education appropriations for Illinois and Texas include estimated local appropriations.
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 3.2

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 1980-2022 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$7,653	$8,987	$7,183	$7,248	$8,005	$8,867	10.8%	22.3%	23.4%	-1.3%	15.9%
ALASKA	$24,506	$15,104	$16,029	$16,339	$18,520	$18,436	-0.5%	12.8%	15.0%	22.1%	-24.8%
ARIZONA	$8,492	$9,597	$6,470	$6,201	$6,552	$6,127	-6.5%	-1.2%	-5.3%	-36.2%	-27.9%
ARKANSAS	$10,096	$10,769	$9,706	$8,892	$9,432	$9,596	1.7%	7.9%	-1.1%	-10.9%	-5.0%
CALIFORNIA	$9,156	$10,029	$7,196	$9,244	$10,643	$11,694	9.9%	26.5%	62.5%	16.6%	27.7%
COLORADO	$5,808	$7,018	$3,558	$4,667	$6,279	$6,711	6.9%	43.8%	88.6%	-4.4%	15.5%
CONNECTICUT	$8,595	$16,820	$12,059	$10,148	$11,967	$14,827	23.9%	46.1%	23.0%	-11.8%	72.5%
DELAWARE	$8,135	$9,391	$6,385	$6,319	$7,414	$7,473	0.8%	18.3%	17.0%	-20.4%	-8.1%
FLORIDA	$7,202	$10,893	$6,141	$7,632	$8,865	$9,178	3.5%	20.3%	49.5%	-15.7%	27.4%
GEORGIA	$10,018	$15,461	$8,578	$10,306	$10,466	$13,640	30.3%	32.4%	59.0%	-11.8%	36.2%
HAWAII	$9,787	$9,778	$9,133	$12,112	$14,787	$14,097	-4.7%	16.4%	54.4%	44.2%	44.0%
IDAHO	$13,455	$14,294	$7,670	$10,582	$11,227	$11,009	-1.9%	4.0%	43.5%	-23.0%	-18.2%
ILLINOIS	$10,150	$15,347	$14,975	$19,113	$22,040	$22,970	4.2%	20.2%	53.4%	49.7%	126.3%
INDIANA	$10,040	$9,940	$6,515	$7,031	$6,746	$7,004	3.8%	-0.4%	7.5%	-29.5%	-30.2%
IOWA	$10,804	$11,804	$6,295	$6,132	$6,655	$6,641	-0.2%	8.3%	5.5%	-43.7%	-38.5%
KANSAS	$10,229	$11,641	$7,194	$7,166	$9,237	$8,749	-5.3%	22.1%	21.6%	-24.8%	-14.5%
KENTUCKY	$11,125	$13,494	$8,729	$8,275	$8,594	$9,022	5.0%	9.0%	3.4%	-33.1%	-18.9%
LOUISIANA	$9,958	$8,783	$7,203	$6,195	$6,596	$7,224	9.5%	16.6%	0.3%	-17.8%	-27.5%
MAINE	$7,452	$10,982	$7,593	$8,405	$8,798	$8,938	1.6%	6.3%	17.7%	-18.6%	19.9%
MARYLAND	$7,749	$10,382	$7,201	$8,458	$9,642	$9,759	1.2%	15.4%	35.5%	-6.0%	25.9%
MASSACHUSETTS	$8,568	$11,534	$6,807	$8,211	$10,164	$10,513	3.4%	28.0%	54.4%	-8.9%	22.7%
MICHIGAN	$10,716	$13,110	$6,411	$7,775	$8,766	$9,909	13.0%	27.4%	54.6%	-24.4%	-7.5%
MINNESOTA	$11,337	$11,462	$6,500	$8,208	$12,532	$9,802	-21.8%	19.4%	50.8%	-14.5%	-13.5%
MISSISSIPPI	$9,307	$11,309	$7,471	$8,019	$8,685	$7,507	-13.6%	-6.4%	0.5%	-33.6%	-19.3%
MISSOURI	$11,446	$13,675	$7,963	$7,858	$10,753	$11,376	5.8%	44.8%	42.9%	-16.8%	-0.6%
MONTANA	$8,099	$6,232	$5,385	$6,318	$8,146	$6,709	-17.6%	6.2%	24.6%	7.7%	-17.2%
NEBRASKA	$9,290	$9,228	$9,030	$11,050	$11,853	$12,207	3.0%	10.5%	35.2%	32.3%	31.4%
NEVADA	$9,333	$9,764	$8,168	$7,734	$6,904	$8,022	16.2%	3.7%	-1.8%	-17.8%	-14.0%
NEW HAMPSHIRE	$4,868	$5,376	$1,903	$2,829	$4,630	$3,699	-20.1%	30.7%	94.4%	-31.2%	-24.0%
NEW JERSEY	$8,561	$11,539	$7,831	$8,005	$7,175	$8,965	25.0%	12.0%	14.5%	-22.3%	4.7%
NEW MEXICO	$11,615	$11,760	$10,140	$11,938	$16,330	$16,600	1.7%	39.0%	63.7%	41.2%	42.9%
NEW YORK	$11,985	$11,294	$10,245	$12,278	$12,697	$13,897	9.5%	13.2%	35.7%	23.0%	16.0%
NORTH CAROLINA	$11,173	$14,419	$10,836	$11,629	$11,828	$12,513	5.8%	7.6%	15.5%	-13.2%	12.0%
NORTH DAKOTA	$9,348	$7,925	$9,261	$10,533	$9,721	$9,409	-3.2%	-10.7%	1.6%	18.7%	0.6%
OHIO	$8,927	$10,697	$6,140	$7,320	$8,002	$7,214	-9.8%	-1.5%	17.5%	-32.6%	-19.2%
OKLAHOMA	$9,028	$11,009	$8,587	$7,832	$7,480	$7,670	2.5%	-2.1%	-10.7%	-30.3%	-15.0%
OREGON	$7,729	$8,348	$4,484	$5,579	$7,522	$8,068	7.3%	44.6%	79.9%	-3.4%	4.4%
PENNSYLVANIA	$10,478	$10,462	$4,971	$5,040	$6,366	$6,090	-4.3%	20.8%	22.5%	-41.8%	-41.9%
RHODE ISLAND	$11,141	$9,630	$5,812	$5,970	$6,872	$6,729	-2.1%	12.7%	15.8%	-30.1%	-39.6%
SOUTH CAROLINA	$10,267	$8,788	$5,483	$6,696	$8,088	$7,150	-11.6%	6.8%	30.4%	-18.6%	-30.4%
SOUTH DAKOTA	$10,078	$8,321	$6,126	$7,616	$8,163	$8,003	-2.0%	5.1%	30.6%	-3.8%	-20.6%
TENNESSEE	$9,835	$10,284	$8,409	$10,582	$12,874	$12,354	-4.0%	16.7%	46.9%	20.1%	25.6%
TEXAS	$8,987	$10,416	$8,684	$8,270	$8,738	$9,084	4.0%	9.9%	4.6%	-12.8%	1.1%
UTAH	$10,759	$9,313	$6,607	$8,492	$9,269	$9,750	5.2%	14.8%	47.6%	4.7%	-9.4%
VERMONT	$4,832	$4,400	$3,317	$3,025	$7,836	$6,363	-18.8%	110.3%	91.8%	44.6%	31.7%
VIRGINIA	$8,176	$10,154	$5,416	$6,689	$7,651	$8,283	8.3%	23.8%	52.9%	-18.4%	1.3%
WASHINGTON	$9,524	$9,142	$5,847	$7,956	$10,961	$10,154	-7.4%	27.6%	73.7%	11.1%	6.6%
WEST VIRGINIA	$8,356	$7,981	$6,506	$5,588	$6,676	$7,299	9.3%	30.6%	12.2%	-8.5%	-12.7%
WISCONSIN	$11,010	$12,287	$8,470	$8,435	$9,673	$9,510	-1.7%	12.7%	12.3%	-22.6%	-13.6%
WYOMING	$17,044	$13,890	$17,240	$20,010	$27,942	$18,140	-35.1%	-9.3%	5.2%	30.6%	6.4%
U.S.	**$9,572**	**$10,938**	**$7,610**	**$8,686**	**$9,762**	**$10,237**	**4.9%**	**17.9%**	**34.5%**	**-6.4%**	**6.9%**
D.C.	N/A	N/A	$16,762	$20,119	$37,760	$27,187	-28.0%	35.1%	62.2%	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 and allocation models in many states and vary in the amount of funding they receive from state and local sources.[30]

In the last year, inflation-adjusted state and local education appropriations increased 3.8% at two-year institutions, reaching $10,141 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 less per FTE ($8,953 per FTE).

Two-year public education appropriations per FTE ranged widely across states, from $4,791 in Louisiana to $17,243 per FTE in Illinois.[31] In the last year, two-year education appropriations per FTE declined in 15 states. The largest decline was in Wyoming (28.6%). Three other states, Minnesota (24.8%), Mississippi (22.2%), and South Dakota (21.2%) had declines greater than 20%. The declines in Minnesota, Mississippi, and Wyoming were due to federal stimulus, whereas the decline in South Dakota was due to public operating. Thirty-five states had increases in two-year education appropriations per FTE, and 12 states had single-year increases greater than 10%. The largest increases were in Georgia (20.2%), New Jersey (25.1%), and Nevada (26.9%). In Georgia, this increase was primarily due to federal stimulus, whereas the increases in New Jersey and Nevada were largely due to increases in public operating.

At four-year institutions, education appropriations per FTE increased 4.0% from 2021 to 2022, reaching $9,596. 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 and Washington, D.C.[32] From 2021 to 2022, four-year education appropriations per FTE declined in 23 states and Washington, D.C.

The largest declines in four-year education appropriations per FTE were in Wyoming (37.0%), New Hampshire (26.7%), and Vermont (20.5%). Notably, these three states had the largest increases in four-year education appropriations per FTE in 2021.[33] All three fluctuations were, in large part, due to states allocating additional funds to aid institutions during the COVID-19 pandemic in 2021 (federal stimulus funds in New Hampshire and Wyoming, and a mix of federal stimulus funds and a one-time bridge appropriation in Vermont). The largest increases this year were in Georgia (34.6%), New Jersey (25.8%), and Michigan (22.0%). The increase in Georgia came primarily from federal stimulus, while the increases in Michigan and New Jersey were the results of states investing in public operations at four-year institutions. Four other states (Alabama, California, Connecticut, and Nevada) increased education appropriations per FTE for four-year institutions by more than 10%.

30. 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.
31. A large portion of education appropriations in Illinois are not available for operations at public institutions. Additionally, Illinois received a one-time payment of $250 million for the state's prepaid tuition program that will be disbursed over a span of years. See the Illinois state spotlight to learn more.
32. Ibid.
33. The top four-year sector year-over-year increases in 2021 were Vermont (70.9%), Wyoming (46.4%), and New Hampshire (42.1%).

Sector-level education appropriations in 2022 included $55 per FTE in federal stimulus for two-year institutions and $169 per FTE in federal stimulus for four-year institutions. Excluding federal stimulus funding, education appropriations at both two- and four-year institutions increased 5.7% from 2021 to 2022.

- Without federal stimulus funding, two-year education appropriations declined in 13 states. The largest declines were in Vermont (26.9%), South Dakota (14.8%), Tennessee (13.7%), and Wyoming (13.2%).
- Twelve states and Washington, D.C., had declines in four-year education appropriations when excluding federal stimulus funding. The largest declines were in Vermont (17.3%), Hawaii (16.7%), Wyoming (15.8%), and Montana (5.6%). No other states had declines greater than 5%.

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.

- In 2019 and 2020, four-year institutions received more in education appropriations per student than two-year institutions, but in 2021 and 2022, they received approximately $540 less per FTE in both years. This means that in 2022, two-year education appropriations per FTE were 5.7% higher than four-year education appropriations, with 28 states reporting higher funding in the two-year sector. If research, agriculture, and medical (RAM) appropriations were included in the education appropriations total, four-year institutions would receive $1,319 more than two-year institutions per FTE, or 13.0% higher.
- Arizona had the largest education appropriation disparity favoring the two-year sector (111.0% 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 73.1% 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.

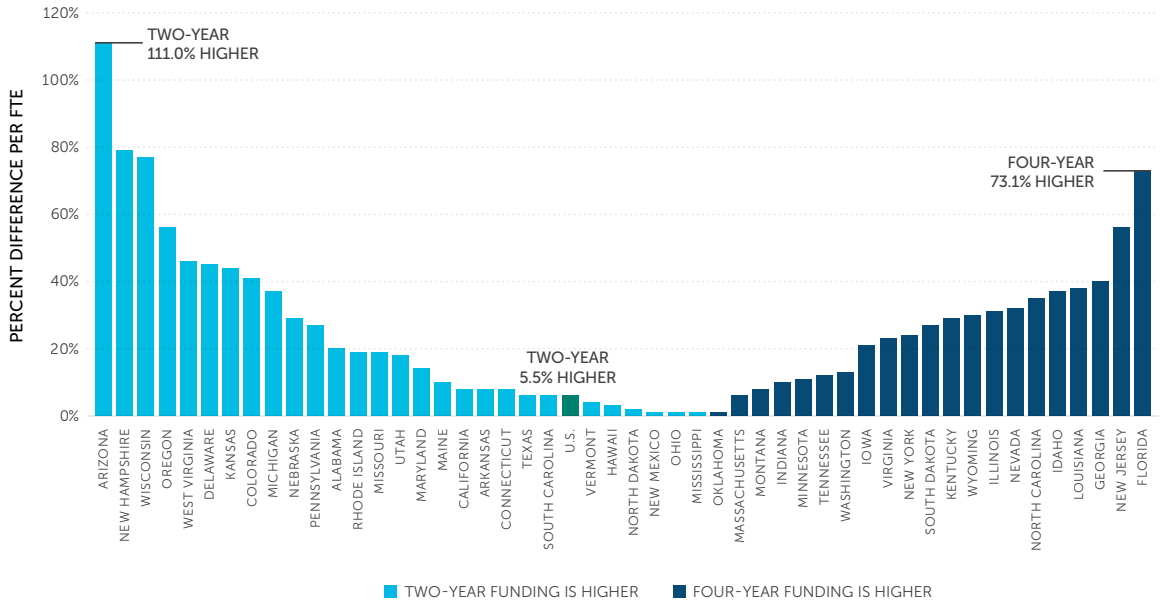
To help explain the components of sector-level education appropriations, *Table 3.2B* breaks out the different sources of state and local support per FTE for two- and four-year public institutions in fiscal year 2022.

- Two-year public institutions received $6,297 per FTE in state general operating appropriations, 76.9% of the four-year general operating appropriation ($8,191).
- State financial aid awards averaged $562 at two-year institutions, 46.2% of the $1,216 awarded to students attending four-year institutions.
- Local appropriations were 168.6 times higher at two-year institutions ($3,226) compared to four-year institutions ($19 per FTE). There were two-year local appropriations in 29 states, compared to only seven for four-year institutions.

- RAM averaged $1,864 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 $10,141, 88.5% of the amount at four-year institutions ($11,464).

FIGURE 3.2A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2022



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.
4. Fiscal year 2022 two-year education appropriations for Illinois and Texas include estimated local appropriations.

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 to learn more.

TABLE 3.2A

PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY SECTOR AND STATE, FY 2019-2022 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR EDUCATION APPROPRIATIONS						FOUR-YEAR EDUCATION APPROPRIATIONS					
	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019
ALABAMA	$7,929	$9,465	$10,446	1.03	10.4%	31.7%	$7,626	$7,743	$8,587	0.89	10.9%	12.6%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$16,862	$17,976	$17,894	1.86	-0.5%	6.1%
ARIZONA	$10,450	$12,216	$12,650	1.25	3.6%	21.1%	$3,896	$4,120	$3,619	0.38	-12.2%	-7.1%
ARKANSAS	$8,789	$9,697	$9,851	0.97	1.6%	12.1%	$8,609	$9,025	$9,132	0.95	1.2%	6.1%
CALIFORNIA	$9,445	$10,594	$11,033	1.09	4.1%	16.8%	$9,233	$9,242	$10,187	1.06	10.2%	10.3%
COLORADO	$6,544	$6,956	$8,029	0.79	15.4%	22.7%	$4,496	$5,337	$5,293	0.55	-0.8%	17.7%
CONNECTICUT	$9,565	$12,670	$14,367	1.42	13.4%	50.2%	$10,542	$11,595	$13,322	1.39	14.9%	26.4%
DELAWARE	$9,716	$10,907	$11,674	1.15	7.0%	20.2%	$6,015	$7,131	$7,352	0.77	3.1%	22.2%
FLORIDA	$5,182	$5,552	$5,913	0.58	6.5%	14.1%	$12,855	$12,610	$12,725	1.33	0.9%	-1.0%
GEORGIA	$7,549	$7,844	$9,428	0.93	20.2%	24.9%	$11,134	$10,526	$14,165	1.48	34.6%	27.2%
HAWAII	$11,364	$12,333	$13,072	1.29	6.0%	15.0%	$14,281	$14,100	$12,643	1.32	-10.3%	-11.5%
IDAHO	$5,975	$6,594	$6,528	0.64	-1.0%	9.2%	$9,956	$9,933	$9,508	0.99	-4.3%	-4.5%
ILLINOIS	$13,353	$17,345	$17,243	1.70	-0.6%	29.1%	$21,224	$23,503	$23,496	2.45	0.0%	10.7%
INDIANA	$6,287	$6,335	$6,441	0.64	1.7%	2.4%	$7,582	$6,862	$7,084	0.74	3.2%	-6.6%
IOWA	$5,081	$5,981	$6,126	0.60	2.4%	20.6%	$7,318	$7,727	$7,549	0.79	-2.3%	3.2%
KANSAS	$9,521	$11,194	$11,361	1.12	1.5%	19.3%	$6,599	$8,035	$7,299	0.76	-9.2%	10.6%
KENTUCKY	$6,681	$7,143	$7,229	0.71	1.2%	8.2%	$8,711	$9,099	$9,678	1.01	6.4%	11.1%
LOUISIANA	$3,992	$4,208	$4,791	0.47	13.8%	20.0%	$6,913	$6,439	$7,071	0.74	9.8%	2.3%
MAINE	$7,981	$8,907	$9,206	0.91	3.4%	15.3%	$7,866	$8,208	$8,296	0.86	1.1%	5.5%
MARYLAND	$8,247	$9,726	$10,455	1.03	7.5%	26.8%	$8,689	$9,318	$9,114	0.95	-2.2%	4.9%
MASSACHUSETTS	$7,193	$8,843	$9,770	0.96	10.5%	35.8%	$8,991	$10,290	$10,415	1.09	1.2%	15.8%
MICHIGAN	$10,599	$12,624	$12,983	1.28	2.8%	22.5%	$7,051	$7,331	$8,943	0.93	22.0%	26.8%
MINNESOTA	$7,190	$11,205	$8,431	0.83	-24.8%	17.3%	$8,648	$10,153	$9,362	0.98	-7.8%	8.3%
MISSISSIPPI	$6,769	$9,719	$7,561	0.75	-22.2%	11.7%	$7,216	$8,073	$7,523	0.78	-6.8%	4.2%
MISSOURI	$7,326	$10,636	$12,482	1.23	17.4%	70.4%	$8,045	$10,462	$10,373	1.08	-0.9%	28.9%
MONTANA	$5,944	$7,697	$6,641	0.65	-13.7%	11.7%	$6,742	$8,815	$7,183	0.75	-18.5%	6.5%
NEBRASKA	$12,314	$14,602	$14,899	1.47	2.0%	21.0%	$10,386	$10,748	$11,108	1.16	3.4%	7.0%
NEVADA	$6,559	$5,307	$6,737	0.66	26.9%	2.7%	$9,658	$8,293	$9,297	0.97	12.1%	-3.7%
NEW HAMPSHIRE	$4,956	$7,196	$6,924	0.68	-3.8%	39.7%	$2,495	$4,103	$3,009	0.31	-26.7%	20.6%
NEW JERSEY	$4,453	$4,245	$5,311	0.52	25.1%	19.3%	$8,357	$7,515	$9,454	0.99	25.8%	13.1%
NEW MEXICO	$11,116	$15,094	$16,352	1.61	8.3%	47.1%	$15,607	$16,695	$16,187	1.69	-3.0%	3.7%
NEW YORK	$9,583	$9,530	$11,347	1.12	19.1%	18.4%	$14,487	$13,646	$14,409	1.50	5.6%	-0.5%
NORTH CAROLINA	$8,824	$9,268	$9,597	0.95	3.6%	8.8%	$13,573	$12,900	$13,711	1.43	6.3%	1.0%
NORTH DAKOTA	$7,778	$8,691	$8,402	0.83	-3.3%	8.0%	$8,018	$8,305	$8,236	0.86	-0.8%	2.7%
OHIO	$8,409	$7,800	$7,179	0.71	-8.0%	-14.6%	$6,633	$8,067	$7,111	0.74	-11.9%	7.2%
OKLAHOMA	$6,468	$6,693	$7,238	0.71	8.2%	11.9%	$7,447	$7,150	$7,298	0.76	2.1%	-2.0%
OREGON	$7,696	$9,910	$11,025	1.09	11.3%	43.3%	$4,952	$5,938	$6,225	0.65	4.8%	25.7%
PENNSYLVANIA	$5,894	$7,142	$7,358	0.73	3.0%	24.8%	$5,411	$5,507	$5,622	0.59	2.1%	3.9%
RHODE ISLAND	$5,790	$7,149	$7,241	0.71	1.3%	25.1%	$5,356	$5,981	$5,984	0.62	0.0%	11.7%
SOUTH CAROLINA	$7,483	$8,210	$7,307	0.72	-11.0%	-2.3%	$6,149	$8,134	$6,914	0.72	-15.0%	12.4%
SOUTH DAKOTA	$5,431	$6,926	$5,456	0.54	-21.2%	0.5%	$6,628	$7,177	$7,159	0.75	-0.2%	8.0%
TENNESSEE	$9,716	$12,024	$10,376	1.02	-13.7%	6.8%	$11,166	$12,055	$11,752	1.22	-2.5%	5.2%
TEXAS	$7,101	$8,264	$8,549	0.84	3.4%	20.4%	$7,684	$7,943	$8,050	0.84	1.3%	4.8%
UTAH	$10,060	$10,474	$11,015	1.09	5.2%	9.5%	$8,664	$8,917	$9,234	0.96	3.6%	6.6%
VERMONT	$2,891	$5,475	$5,384	0.53	-1.7%	86.2%	$2,989	$6,520	$5,184	0.54	-20.5%	73.4%
VIRGINIA	$5,286	$5,937	$6,579	0.65	10.8%	24.5%	$7,013	$8,052	$8,245	0.86	2.4%	17.6%
WASHINGTON	$7,126	$10,421	$9,161	0.90	-12.1%	28.6%	$8,905	$10,261	$10,440	1.09	1.7%	17.2%
WEST VIRGINIA	$7,549	$9,539	$10,288	1.01	7.9%	36.3%	$5,626	$6,421	$6,437	0.67	0.3%	14.4%
WISCONSIN	$12,864	$15,349	$14,788	1.46	-3.7%	15.0%	$5,993	$6,604	$6,599	0.69	-0.1%	10.1%
WYOMING	$18,075	$19,816	$14,155	1.40	-28.6%	-21.7%	$20,236	$30,289	$19,088	1.99	-37.0%	-5.7%
U.S.	**$8,513**	**$9,767**	**$10,141**	**1.00**	**3.8%**	**19.1%**	**$8,866**	**$9,225**	**$9,596**	**1.00**	**4.0%**	**8.2%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$19,352	$31,050	$25,835	2.69	-16.8%	33.5%

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. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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 2022 education appropriations include estimated two-year local appropriations for Illinois and Texas.
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

TABLE 3.2B

COMPONENTS OF PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY SECTOR AND STATE, FY 2022 (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	$10,302	$124	$20	$10,446	$10,446	$8,253	$335	$-	$8,587	$3,220	$11,835
ALASKA	$-	$-	$-	$-	$-	$16,864	$834	$60	$17,894	$1,303	$19,197
ARIZONA	$1,611	$7	$11,032	$12,650	$12,650	$3,533	$86	$-	$3,619	$1,198	$4,816
ARKANSAS	$7,911	$404	$1,536	$9,851	$9,851	$7,685	$1,447	$-	$9,132	$3,377	$12,519
CALIFORNIA	$7,630	$401	$3,002	$11,033	$11,033	$8,259	$1,928	$-	$10,187	$1,410	$11,598
COLORADO	$4,522	$1,117	$2,390	$8,029	$8,029	$4,275	$1,018	$-	$5,293	$1,275	$6,568
CONNECTICUT	$13,712	$337	$-	$14,367	$14,367	$12,588	$295	$-	$13,322	$5,111	$18,433
DELAWARE	$11,360	$114	$-	$11,674	$11,674	$5,474	$566	$-	$7,352	$361	$7,713
FLORIDA	$5,191	$552	$166	$5,913	$5,913	$10,222	$2,503	$-	$12,725	$1,754	$14,479
GEORGIA	$7,439	$887	$-	$9,428	$9,428	$8,546	$2,919	$-	$14,165	$1,727	$15,892
HAWAII	$12,468	$358	$-	$13,072	$13,072	$11,506	$94	$-	$12,643	$4,402	$17,045
IDAHO	$3,710	$130	$2,688	$6,528	$6,528	$9,098	$410	$-	$9,508	$1,662	$11,170
ILLINOIS	$8,134	$479	$8,448	$17,243	$17,243	$21,986	$1,444	$-	$23,496	$1,241	$24,771
INDIANA	$5,655	$744	$-	$6,441	$6,441	$5,775	$1,279	$-	$7,084	$1,712	$8,796
IOWA	$4,603	$584	$856	$6,126	$6,126	$7,436	$113	$-	$7,549	$2,019	$9,583
KANSAS	$4,445	$252	$6,664	$11,361	$11,361	$6,471	$434	$394	$7,299	$3,177	$10,562
KENTUCKY	$5,348	$1,855	$-	$7,229	$7,229	$7,642	$1,660	$350	$9,678	$1,550	$11,229
LOUISIANA	$4,159	$632	$-	$4,791	$4,791	$4,199	$2,872	$-	$7,071	$2,826	$9,922
MAINE	$8,287	$883	$-	$9,206	$9,206	$7,476	$498	$-	$8,296	$1,456	$9,752
MARYLAND	$4,838	$148	$5,469	$10,455	$10,455	$8,623	$492	$-	$9,114	$1,975	$11,090
MASSACHUSETTS	$9,102	$653	$-	$9,770	$9,770	$9,841	$574	$-	$10,415	$482	$10,898
MICHIGAN	$5,057	$670	$7,256	$12,983	$12,983	$8,931	$13	$-	$8,943	$855	$9,798
MINNESOTA	$7,875	$555	$-	$8,431	$8,431	$8,354	$1,008	$-	$9,362	$2,165	$11,527
MISSISSIPPI	$5,865	$155	$1,540	$7,561	$7,561	$6,858	$615	$-	$7,523	$5,086	$12,609
MISSOURI	$4,869	$1,730	$5,684	$12,482	$12,482	$9,542	$768	$-	$10,373	$70	$10,443
MONTANA	$4,905	$37	$1,698	$6,641	$6,641	$7,133	$49	$-	$7,183	$1,513	$8,695
NEBRASKA	$4,994	$265	$9,171	$14,899	$14,899	$10,760	$347	$-	$11,108	$4,529	$15,637
NEVADA	$5,930	$563	$-	$6,737	$6,737	$6,965	$1,781	$13	$9,297	$1,911	$11,208
NEW HAMPSHIRE	$6,554	$370	$-	$6,924	$6,924	$2,789	$44	$-	$3,009	$500	$3,509
NEW JERSEY	$2,117	$798	$2,397	$5,311	$5,311	$7,765	$1,689	$-	$9,454	$1,726	$11,180
NEW MEXICO	$7,366	$220	$8,766	$16,352	$16,352	$15,780	$407	$-	$16,187	$3,759	$19,995
NEW YORK	$4,245	$768	$6,334	$11,347	$11,347	$12,706	$1,535	$168	$14,409	$949	$15,358
NORTH CAROLINA	$7,298	$106	$1,928	$9,597	$9,597	$13,036	$675	$-	$13,711	$2,838	$16,550
NORTH DAKOTA	$7,775	$627	$-	$8,402	$8,402	$7,676	$561	$-	$8,236	$3,581	$11,817
OHIO	$4,866	$30	$2,224	$7,179	$7,179	$6,669	$421	$-	$7,111	$1,079	$8,190
OKLAHOMA	$4,918	$563	$1,757	$7,238	$7,238	$6,281	$1,017	$-	$7,298	$1,832	$9,131
OREGON	$5,973	$896	$4,065	$11,025	$11,025	$5,591	$601	$-	$6,225	$1,488	$7,712
PENNSYLVANIA	$4,578	$385	$2,395	$7,358	$7,358	$4,699	$705	$-	$5,622	$376	$5,998
RHODE ISLAND	$6,165	$1,077	$-	$7,241	$7,241	$5,779	$184	$-	$5,984	$-	$5,984
SOUTH CAROLINA	$3,461	$2,046	$1,723	$7,307	$7,307	$4,481	$2,428	$5	$6,914	$1,779	$8,696
SOUTH DAKOTA	$5,217	$239	$-	$5,456	$5,456	$6,790	$368	$-	$7,159	$2,014	$9,174
TENNESSEE	$6,184	$4,192	$-	$10,376	$10,376	$9,168	$2,584	$-	$11,752	$3,878	$15,629
TEXAS	$2,676	$124	$5,710	$8,549	$8,549	$6,961	$813	$-	$8,050	$3,978	$12,027
UTAH	$10,878	$137	$-	$11,015	$11,015	$8,894	$340	$-	$9,234	$1,085	$10,319
VERMONT	$3,053	$729	$-	$5,384	$5,384	$3,174	$391	$-	$5,184	$1,018	$6,243
VIRGINIA	$5,368	$1,151	$60	$6,579	$6,579	$6,913	$1,269	$63	$8,245	$1,337	$9,595
WASHINGTON	$8,121	$1,040	$-	$9,161	$9,161	$8,027	$2,413	$-	$10,440	$1,031	$11,471
WEST VIRGINIA	$8,546	$1,743	$-	$10,288	$10,288	$4,948	$1,489	$-	$6,437	$2,994	$9,431
WISCONSIN	$9,843	$390	$4,556	$14,788	$14,788	$5,616	$677	$-	$6,599	$1,525	$8,123
WYOMING	$9,835	$480	$3,787	$14,155	$14,155	$15,992	$2,919	$-	$19,088	$4,389	$23,476
U.S.	**$6,297**	**$562**	**$3,226**	**$10,141**	**$10,141**	**$8,191**	**$1,216**	**$19**	**$9,596**	**$1,864**	**$11,464**
D.C.	$-	$-	$-	$-	$-	$24,078	$989	$-	$25,835	$6,688	$32,523

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 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. Fiscal year 2022 sector-level state financial aid is estimated for Vermont.
10. Fiscal year 2022 local appropriations are estimated for Illinois and Texas.
11. 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

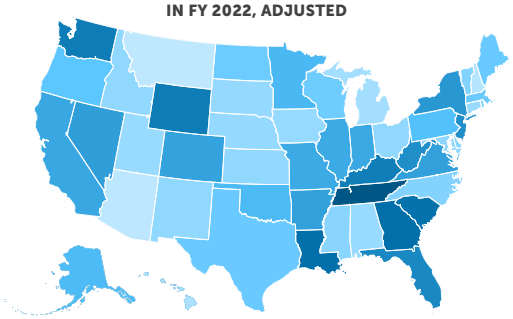
STATE PUBLIC FINANCIAL AID

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 two years. Visit the SHEF website to view the interactive financial aid map.[34] This map shows state public financial aid per FTE across the nation.

State public financial aid per FTE increased 2.0% from 2021 to 2022 and reached an all-time high of $990 per FTE enrolled student. Nationally, state public financial aid has increased 42.8% since 2008 and 79.3% 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 2.0% increase in the last year corresponded to an additional $19 per FTE in financial aid.

STATE PUBLIC FINANCIAL AID PER FTE IN FY 2022, ADJUSTED



1. STATE COMPARISONS

States vary considerably in the size and extent of their financial aid programs (*Figure 3.3*). In 2022, 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 two states ($44 per FTE in Montana and $61 per FTE in Arizona) to over $2,000 per FTE in four states (Georgia, Louisiana, South Carolina, and Tennessee). Tennessee, with $3,234 in state financial aid per FTE, was the only state to exceed $3,000 per student.

Since 2001, per-student aid has increased in 38 states. Despite the longstanding increases in financial aid nationally, per-student aid has decreased in 21 states in the last year (*Table 3.3*). The largest percentage decrease was in Montana (45.1%), with a decrease of $36 per FTE. Outside of Montana, the largest decreases in financial aid were in Washington (13.5% or $274 per FTE) and Alabama (13.1% or $45 per FTE).

Financial aid per FTE increased in 29 states and Washington, D.C., from 2021 to 2022. Of these states, 15 and Washington, D.C., saw increases greater than 10%. There were notable increases in both per FTE dollar amounts and percentage changes. In three states (Kansas, Missouri, Virginia) and Washington, D.C., financial aid increased more than $200 per FTE. Michigan (211.4%, or $158 per FTE) and Kansas (166.5%, or $223 per FTE) had the highest percentage increases. Both increases were largely due to these states recently implementing financial aid programs that support students in the two-year sector.[35,36]

34. shef.sheeo.org/data-visualizations/map-3-3

35. Some states, like California and Michigan, also use federal Temporary Assistance for Needy Families (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.

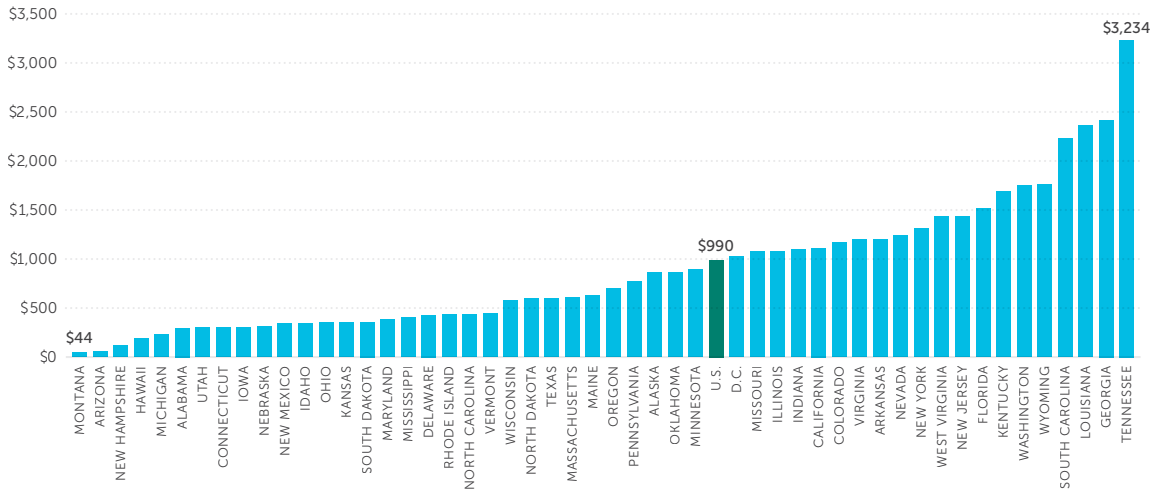
36. See State Spotlight: Michigan for more information.

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 2022 (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. Fiscal year 2022 state public financial aid includes estimates for Vermont.
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 2001-2022 (CONSTANT ADJUSTED DOLLARS)

	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001
ALABAMA	$162	$331	$522	$340	$296	-13.1%	-43.4%	-10.5%	82.3%
ALASKA	$-	$270	$795	$842	$859	2.0%	8.1%	217.8%	N/A
ARIZONA	$31	$53	$45	$41	$61	50.5%	34.7%	15.7%	95.7%
ARKANSAS	$682	$1,674	$1,147	$1,246	$1,202	-3.5%	4.9%	-28.2%	76.2%
CALIFORNIA	$389	$891	$633	$1,075	$1,113	3.5%	75.9%	24.9%	185.9%
COLORADO	$723	$600	$820	$1,091	$1,173	7.5%	43.0%	95.4%	62.2%
CONNECTICUT	$516	$403	$315	$324	$304	-6.3%	-3.7%	-24.7%	-41.1%
DELAWARE	$481	$439	$396	$393	$429	9.3%	8.4%	-2.2%	-10.7%
FLORIDA	$884	$889	$655	$1,570	$1,515	-3.5%	131.4%	70.3%	71.4%
GEORGIA	$1,949	$1,794	$2,158	$2,480	$2,418	-2.5%	12.0%	34.8%	24.1%
HAWAII	$10	$80	$70	$125	$186	48.6%	164.0%	132.0%	1677.8%
IDAHO	$110	$153	$261	$390	$346	-11.2%	32.6%	126.1%	215.2%
ILLINOIS	$1,135	$803	$733	$1,064	$1,077	1.3%	46.9%	34.1%	-5.1%
INDIANA	$633	$1,043	$1,190	$1,233	$1,096	-11.1%	-7.9%	5.1%	73.1%
IOWA	$56	$104	$69	$227	$306	34.7%	343.1%	192.9%	449.8%
KANSAS	$123	$112	$100	$134	$357	166.5%	257.6%	219.7%	190.3%
KENTUCKY	$332	$1,170	$1,410	$1,643	$1,690	2.8%	19.8%	44.4%	408.4%
LOUISIANA	$902	$1,355	$1,748	$2,290	$2,358	2.9%	34.9%	74.0%	161.4%
MAINE	$457	$286	$619	$560	$626	11.6%	1.0%	118.7%	36.9%
MARYLAND	$386	$329	$370	$336	$380	13.2%	2.6%	15.6%	-1.6%
MASSACHUSETTS	$629	$344	$345	$512	$608	18.7%	76.2%	76.5%	-3.4%
MICHIGAN	$753	$3	$18	$75	$232	211.4%	1165.5%	8303.8%	-69.2%
MINNESOTA	$762	$540	$766	$821	$893	8.8%	16.5%	65.4%	17.1%
MISSISSIPPI	$569	$269	$353	$410	$407	-0.8%	15.2%	51.1%	-28.5%
MISSOURI	$318	$500	$724	$867	$1,073	23.7%	48.2%	114.4%	237.7%
MONTANA	$145	$111	$67	$80	$44	-45.1%	-34.3%	-60.7%	-69.7%
NEBRASKA	$56	$167	$231	$280	$315	12.7%	36.3%	88.6%	463.0%
NEVADA	$959	$1,101	$1,180	$1,271	$1,238	-2.5%	4.9%	12.4%	29.1%
NEW HAMPSHIRE	$38	$-	$39	$99	$115	16.4%	195.1%	N/A	198.8%
NEW JERSEY	$945	$924	$1,139	$1,305	$1,436	10.0%	26.1%	55.4%	52.0%
NEW MEXICO	$1,172	$306	$320	$378	$342	-9.5%	6.9%	11.7%	-70.8%
NEW YORK	$1,084	$1,257	$1,365	$1,307	$1,313	0.5%	-3.8%	4.5%	21.1%
NORTH CAROLINA	$325	$505	$482	$436	$435	-0.3%	-9.7%	-13.9%	34.0%
NORTH DAKOTA	$54	$387	$517	$578	$594	2.8%	14.8%	53.4%	990.8%
OHIO	$333	$194	$263	$329	$350	6.5%	33.3%	80.0%	5.0%
OKLAHOMA	$369	$940	$943	$849	$863	1.7%	-8.5%	-8.2%	133.6%
OREGON	$207	$265	$528	$611	$699	14.4%	32.4%	164.1%	237.6%
PENNSYLVANIA	$902	$847	$692	$781	$775	-0.8%	11.9%	-8.5%	-14.1%
RHODE ISLAND	$180	$275	$247	$460	$433	-5.8%	75.4%	57.5%	140.5%
SOUTH CAROLINA	$540	$1,912	$1,936	$2,329	$2,231	-4.2%	15.2%	16.6%	313.4%
SOUTH DAKOTA	$8	$153	$297	$361	$358	-0.7%	20.3%	134.1%	4592.6%
TENNESSEE	$319	$2,161	$2,859	$3,309	$3,234	-2.3%	13.1%	49.6%	913.4%
TEXAS	$22	$317	$524	$549	$597	8.8%	14.0%	88.3%	2647.4%
UTAH	$95	$116	$208	$248	$298	20.3%	43.4%	156.7%	215.0%
VERMONT	$515	$467	$495	$438	$446	1.8%	-9.8%	-4.4%	-13.3%
VIRGINIA	$537	$622	$833	$990	$1,202	21.4%	44.4%	93.4%	124.0%
WASHINGTON	$729	$1,161	$1,220	$2,027	$1,753	-13.5%	43.8%	51.0%	140.6%
WEST VIRGINIA	$429	$1,354	$1,428	$1,436	$1,431	-0.4%	0.2%	5.7%	233.8%
WISCONSIN	$440	$625	$658	$628	$580	-7.6%	-11.9%	-7.3%	31.9%
WYOMING	$1,100	$1,396	$1,543	$1,887	$1,763	-6.6%	14.3%	26.3%	60.3%
U.S.	**$552**	**$724**	**$751**	**$971**	**$990**	**2.0%**	**31.9%**	**36.8%**	**79.3%**
D.C.	N/A	$2,107	$1,228	$779	$1,030	32.2%	-16.1%	-51.1%	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. Fiscal year 2022 state public financial aid includes estimates for Vermont.
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.[37]

At two-year institutions, state public financial aid increased 10.6% from 2021 to 2022 (a $54 increase per student), reaching $562 per FTE. Aid ranged from $7 in Arizona to $4,192 in Tennessee. Only one other state, South Carolina, exceeded $2,000 per FTE in financial aid for students attending public two-year institutions. Overall, in 2022, three states (Arizona, Montana, and Ohio) awarded less than $100 in financial aid per FTE at two-year institutions, and nine (Colorado, Kentucky, Missouri, Rhode Island, South Carolina, Tennessee, Virginia, Washington, and West Virginia) awarded more than $1,000 per FTE.

Over the last year, aid to two-year institutions increased in 26 states. The largest increase was in Kansas (876.2%, or $226 per FTE) due to the implementation of a large financial aid program, the Kansas Promise Scholarship. Of the 23 states with declines, the largest were in Montana (41.8%) and Idaho (37.7%).

STATE PUBLIC FINANCIAL AID STATE SPOTLIGHT: MICHIGAN

Historically, most of Michigan's state public financial aid funding has been concentrated in the four-year sector. In 2019 and 2020, 65.3% and 70.0% of all state public financial aid dollars went to the four-year sector, while only 8.5% (2019) and 9.2% (2020) flowed to students attending two-year colleges. In 2021, there was a dramatic shift in sector-level financial aid allocation that led to a 3,011.9% increase in Michigan's two-year state public financial aid per FTE: 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. This trend continued in 2022 with an increase of 286.1% in the two-year sector. As a result, two-year public aid in Michigan increased from $173 per FTE in 2021 to $670 per FTE in 2022, making up 84.0% of Michigan's state public financial aid.

The first program, Futures for Frontliners, was initially funded with $18 million in federal GEER funds (not included in state public financial aid reported in SHEF) in 2021 and $25 million in state appropriations for 2022. The second program, Michigan Reconnect, received $30 million in state funds in 2021 and $55 million in state funds in fiscal year 2022. Michigan Reconnect is also projected to receive $55 million in fiscal year 2023. Both of these financial aid programs are funded through Michigan's Department of Labor and Economic Opportunity budget.

37. Overall, 2.0% of state public financial aid was uncategorizable. Thirty-seven 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: Minnesota (5.9%), Alabama (10.6%), Michigan (12.3%), Texas (12.5%), Ohio (14.4%), Colorado (14.6%), and Pennsylvania (20.9%).

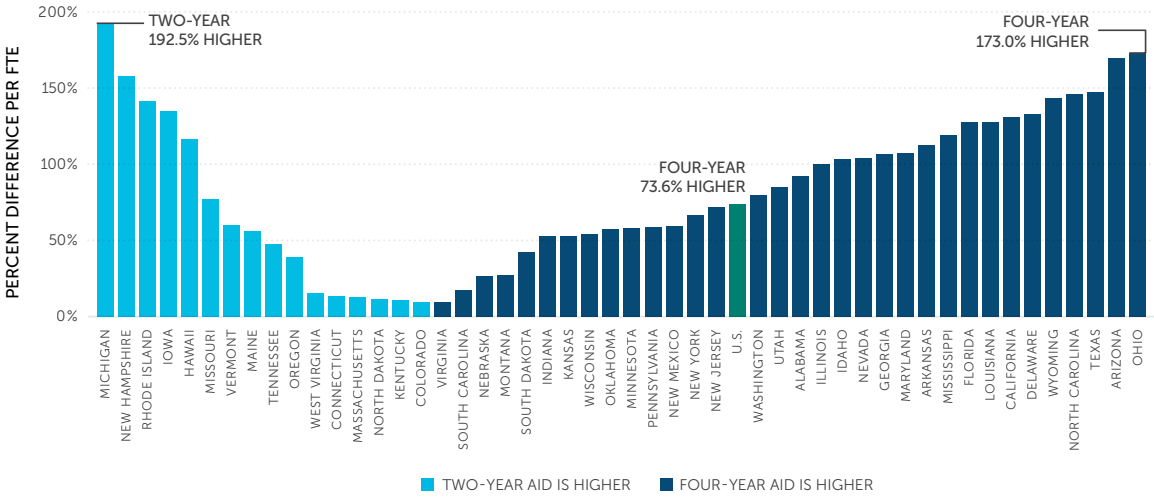
At four-year institutions, state public financial aid declined 0.9% in the last year, or $11 per FTE, totaling $1,216 per FTE nationally. Aid ranged from $13 per FTE in Michigan to $2,919 in Wyoming. Five states (Arizona, Hawaii, Michigan, Montana, and New Hampshire) awarded less than $100 per FTE in financial aid to students attending four-year institutions, while 20 states awarded more than $1,000 per FTE.

From 2021 to 2022, four-year aid allocations increased in 26 states and Washington, D.C, the largest of which was 111.2% ($228 per FTE) in Kansas. Twenty-four states had decreases in per-FTE financial aid. Montana had the largest percentage decrease (45.6%, representing $41 per FTE). However, Tennessee had the largest real dollar decline (19.3% or $617 per FTE), partially due to a shift in the portion of state public financial aid funds allocated to students attending two-year institutions. The portion of state public financial aid allocated to students attending four-year institutions in Tennessee decreased 10.0 percentage points (62.3% in 2021 to 52.3% in 2022), while the portion allocated to the two-year sector increased from 37.7% in 2021 to 47.7% in 2022.

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 (73.6% higher, on national average), the four-year sector also has much higher tuition rates. Michigan had the largest disparity in financial aid, favoring its two-year sector (192.5% higher), while Ohio had the largest disparity, favoring its four-year sector (173.0% higher).

FIGURE 3.3A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY STATE, FY 2022



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. Fiscal year 2022 sector-level state financial aid is estimated for Vermont.
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

TABLE 3.3A

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID PER FTE BY SECTOR AND STATE, FY 2019-2022 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR FINANCIAL AID						FOUR-YEAR FINANCIAL AID					
	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019
ALABAMA	$176	$141	$124	0.22	-12.3%	-29.8%	$553	$390	$335	0.28	-14.1%	-39.5%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$760	$817	$834	0.69	2.0%	9.7%
ARIZONA	$6	$7	$7	0.01	-3.0%	9.0%	$66	$57	$86	0.07	49.0%	30.1%
ARKANSAS	$308	$455	$404	0.72	-11.2%	31.4%	$1,427	$1,495	$1,447	1.19	-3.2%	1.4%
CALIFORNIA	$261	$317	$401	0.71	26.6%	53.6%	$1,193	$1,947	$1,928	1.59	-0.9%	61.7%
COLORADO	$996	$1,034	$1,117	1.99	8.0%	12.2%	$879	$957	$1,018	0.84	6.5%	15.9%
CONNECTICUT	$338	$384	$337	0.60	-12.1%	-0.3%	$297	$306	$295	0.24	-3.7%	-0.9%
DELAWARE	$106	$106	$114	0.20	7.9%	7.9%	$555	$523	$566	0.47	8.3%	2.0%
FLORIDA	$518	$535	$552	0.98	3.1%	6.5%	$2,485	$2,687	$2,503	2.06	-6.8%	0.7%
GEORGIA	$882	$921	$887	1.58	-3.7%	0.6%	$2,836	$3,005	$2,919	2.40	-2.9%	2.9%
HAWAII	$151	$174	$358	0.64	105.2%	136.7%	$101	$99	$94	0.08	-5.0%	-6.9%
IDAHO	$222	$209	$130	0.23	-37.7%	-41.3%	$413	$438	$410	0.34	-6.3%	-0.7%
ILLINOIS	$351	$477	$479	0.85	0.5%	36.4%	$1,320	$1,423	$1,444	1.19	1.5%	9.4%
INDIANA	$701	$855	$744	1.32	-13.0%	6.1%	$1,544	$1,430	$1,279	1.05	-10.6%	-17.2%
IOWA	$130	$404	$584	1.04	44.8%	349.7%	$70	$110	$113	0.09	3.5%	62.2%
KANSAS	$23	$26	$252	0.45	876.2%	1007.5%	$208	$205	$434	0.36	111.2%	108.6%
KENTUCKY	$1,668	$1,832	$1,855	3.30	1.3%	11.2%	$1,519	$1,602	$1,660	1.37	3.6%	9.3%
LOUISIANA	$472	$540	$632	1.12	16.9%	33.7%	$2,843	$2,826	$2,872	2.36	1.6%	1.0%
MAINE	$773	$744	$883	1.57	18.8%	14.3%	$468	$457	$498	0.41	8.8%	6.4%
MARYLAND	$83	$154	$148	0.26	-4.0%	78.2%	$452	$426	$492	0.40	15.5%	8.6%
MASSACHUSETTS	$406	$532	$653	1.16	22.8%	60.7%	$383	$491	$574	0.47	17.1%	50.1%
MICHIGAN	$7	$173	$670	1.19	286.1%	9796.4%	$24	$15	$13	0.01	-13.9%	-47.1%
MINNESOTA	$561	$567	$555	0.99	-2.0%	-0.9%	$1,016	$973	$1,008	0.83	3.5%	-0.8%
MISSISSIPPI	$141	$163	$155	0.28	-4.8%	10.2%	$582	$616	$615	0.51	0.0%	5.8%
MISSOURI	$926	$1,414	$1,730	3.08	22.4%	86.8%	$610	$598	$768	0.63	28.3%	25.9%
MONTANA	$26	$64	$37	0.07	-41.8%	44.7%	$53	$91	$49	0.04	-45.6%	-7.2%
NEBRASKA	$225	$250	$265	0.47	6.2%	17.7%	$256	$301	$347	0.29	15.3%	35.6%
NEVADA	$580	$570	$563	1.00	-1.2%	-3.0%	$1,906	$1,843	$1,781	1.46	-3.3%	-6.5%
NEW HAMPSHIRE	$336	$324	$370	0.66	14.3%	10.3%	$4	$33	$44	0.04	31.1%	882.5%
NEW JERSEY	$678	$756	$798	1.42	5.5%	17.6%	$1,564	$1,552	$1,689	1.39	8.8%	8.0%
NEW MEXICO	$289	$252	$220	0.39	-12.7%	-23.8%	$297	$446	$407	0.33	-8.7%	37.2%
NEW YORK	$1,177	$827	$768	1.37	-7.0%	-34.7%	$1,655	$1,510	$1,535	1.26	1.7%	-7.2%
NORTH CAROLINA	$112	$110	$106	0.19	-3.4%	-5.1%	$722	$679	$675	0.56	-0.6%	-6.5%
NORTH DAKOTA	$464	$587	$627	1.12	6.8%	35.2%	$502	$552	$561	0.46	1.7%	11.8%
OHIO	$38	$34	$30	0.05	-10.0%	-19.9%	$359	$425	$421	0.35	-0.9%	17.5%
OKLAHOMA	$696	$535	$563	1.00	5.4%	-19.0%	$1,136	$1,016	$1,017	0.84	0.1%	-10.4%
OREGON	$757	$803	$896	1.59	11.6%	18.2%	$469	$506	$601	0.49	18.9%	28.2%
PENNSYLVANIA	$356	$383	$385	0.68	0.4%	8.0%	$645	$716	$705	0.58	-1.6%	9.3%
RHODE ISLAND	$865	$1,101	$1,077	1.92	-2.2%	24.5%	$191	$187	$184	0.15	-1.6%	-3.6%
SOUTH CAROLINA	$2,421	$2,399	$2,046	3.64	-14.7%	-15.5%	$2,364	$2,400	$2,428	2.00	1.1%	2.7%
SOUTH DAKOTA	$205	$230	$239	0.43	4.0%	16.8%	$361	$372	$368	0.30	-1.1%	2.1%
TENNESSEE	$3,165	$3,294	$4,192	7.46	27.3%	32.5%	$2,633	$3,201	$2,584	2.12	-19.3%	-1.9%
TEXAS	$119	$125	$124	0.22	-0.8%	3.8%	$824	$837	$813	0.67	-2.9%	-1.2%
UTAH	$86	$136	$137	0.24	0.8%	58.6%	$282	$278	$340	0.28	22.5%	20.8%
VERMONT	$903	$758	$729	1.30	-3.9%	-19.3%	$403	$381	$391	0.32	2.7%	-2.9%
VIRGINIA	$630	$720	$1,151	2.05	59.8%	82.6%	$1,050	$1,148	$1,269	1.04	10.6%	20.8%
WASHINGTON	$809	$1,197	$1,040	1.85	-13.1%	28.5%	$1,827	$2,318	$2,413	1.98	4.1%	32.0%
WEST VIRGINIA	$1,071	$1,540	$1,743	3.10	13.2%	62.7%	$1,584	$1,531	$1,489	1.22	-2.7%	-6.0%
WISCONSIN	$529	$440	$390	0.69	-11.5%	-26.3%	$722	$722	$677	0.56	-6.2%	-6.2%
WYOMING	$684	$596	$480	0.85	-19.3%	-29.7%	$2,187	$2,932	$2,919	2.40	-0.4%	33.5%
U.S.	**$471**	**$508**	**$562**	**1.00**	**10.6%**	**19.2%**	**$1,082**	**$1,227**	**$1,216**	**1.00**	**-0.9%**	**12.4%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$1,207	$748	$989	0.81	32.2%	-18.1%

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. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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 2022 sector-level state financial aid is estimated for Vermont.
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

FINANCIAL AID PERCENTAGE OF EDUCATION APPROPRIATIONS

Financial aid is one component of education appropriations. 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, 5.0% of education appropriations were directed toward student financial aid; by 2022, this proportion had increased to 9.7% (an increase of 4.6 percentage points).

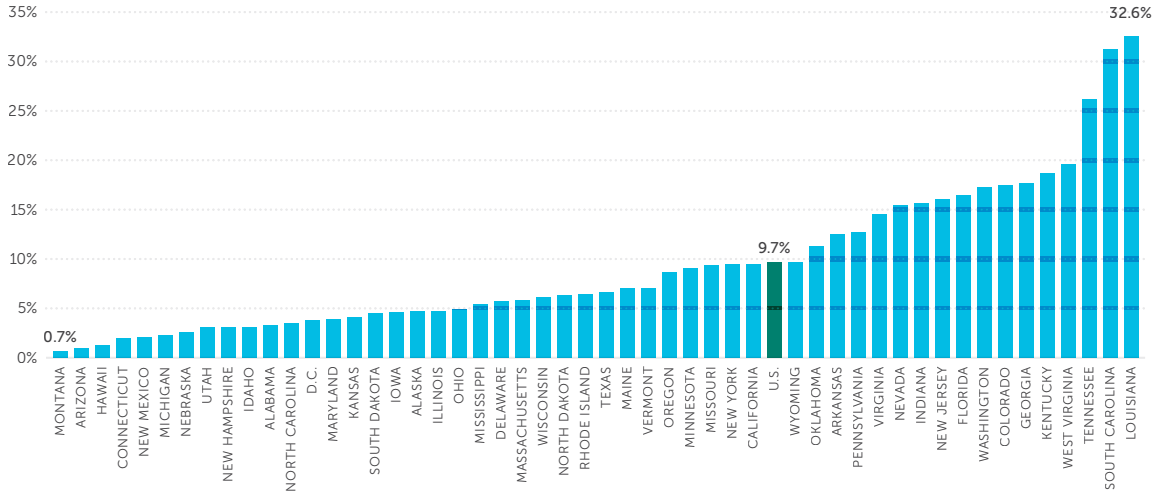
1. STATE COMPARISONS

States vary considerably in how much of their total funding is allocated to student financial aid. On the low end, Montana has a very small aid program that comprises only 0.7% of its total education appropriations. On the high end, the financial aid allocation accounts for 32.6% of Louisiana's total funding for public higher education (*Figure 3.4*).[38]

Financial aid as a percentage of education appropriations has increased in 43 states since 2001, when SHEEO first collected financial aid data. The proportion increased by more than 10 percentage points in five states (Kentucky, Louisiana, South Carolina, Tennessee, and West Virginia). The largest increase in financial aid as a percentage of education appropriations was in South Carolina (25.1 percentage points). Of the seven states with declines in the proportion of education appropriations allocated to financial aid, only one state, New Mexico (7.9), had a decline greater than 5 percentage points.

FIGURE 3.4

PUBLIC HIGHER EDUCATION STATE FINANCIAL AID AS A PERCENTAGE OF EDUCATION APPROPRIATIONS BY STATE, FY 2022



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. Fiscal year 2022 state public financial aid is estimated for Vermont and two-year education appropriations for Illinois and Texas include estimated local appropriations.

SOURCE: State Higher Education Executive Officers Association

38. 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

2. SECTOR COMPARISONS

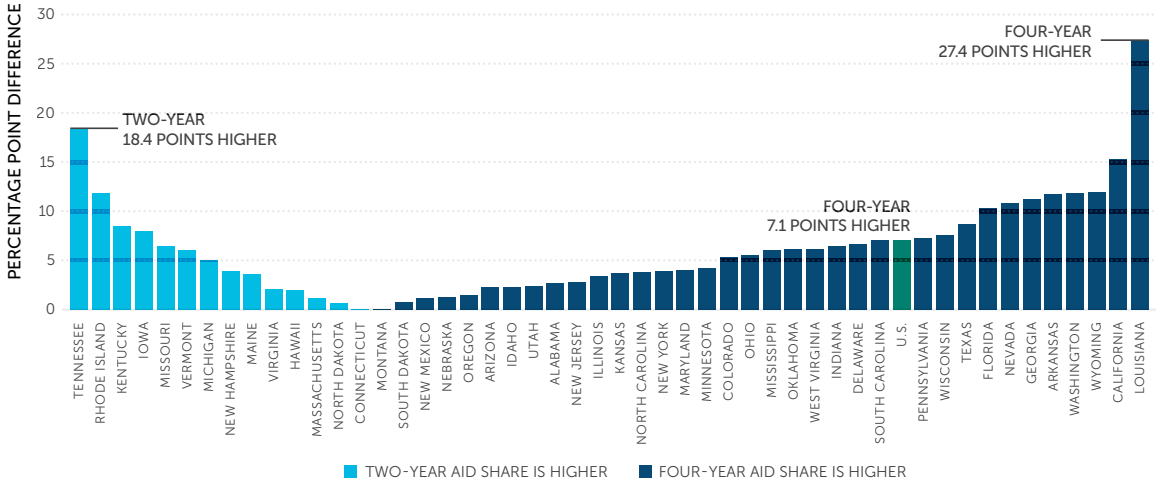
The percentage of education appropriations allocated to financial aid differs for two- and four-year institutions. In fiscal year 2022, 5.5% of funding at two-year institutions went to financial aid, compared to 12.7% of funding at four-year institutions.

- The financial aid allocation at two-year institutions ranged from 0.1% in Arizona to 40.4% in Tennessee. Four states (Arizona, Delaware, 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 (0.1%), and Louisiana had the highest (40.6%). Three states (Hawaii, Michigan, and Montana) 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 PERCENTAGE OF EDUCATION APPROPRIATIONS BY STATE, FY 2022



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. 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 year 2022 sector-level state public financial aid is estimated for Vermont and two-year education appropriations for Illinois and Texas include estimated local appropriations.

SOURCE: State Higher Education Executive Officers Association

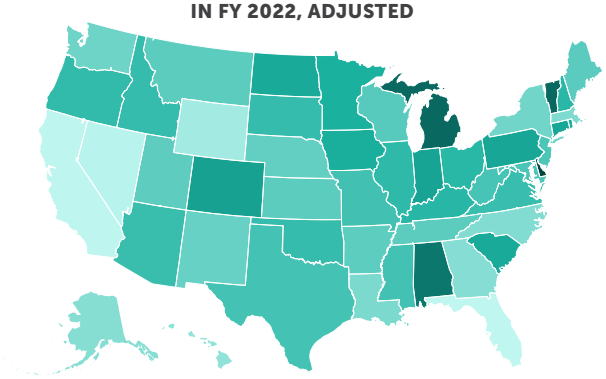
NET TUITION AND TOTAL EDUCATION REVENUE

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 AND FEE 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.[39] This map shows net tuition revenue per FTE across the nation.

NET TUITION REVENUE PER FTE IN FY 2022, ADJUSTED



Inflation-adjusted net tuition and fee revenue has increased substantially over time. In 1980 (the start of the SHEF dataset), public institutions averaged $2,530 in net tuition revenue per FTE. Since that time, tuition revenue per FTE has increased 186.4%, and there have been only five years with a decline in net tuition revenue (2000, 2001, 2019, 2021, 2022). 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 three of the last four years. **Public institutions received $7,244 in net tuition revenue from in-state and out-of-state students in 2022, down 1.0% from 2021 and down 5.8% over the last five years.** Decreases in net tuition revenue are largely due to increases in state financial aid and minimal tuition rate growth (lower than the rate of inflation).

39. shef.sheeo.org/data-visualizations/map-4-1

1. STATE COMPARISONS

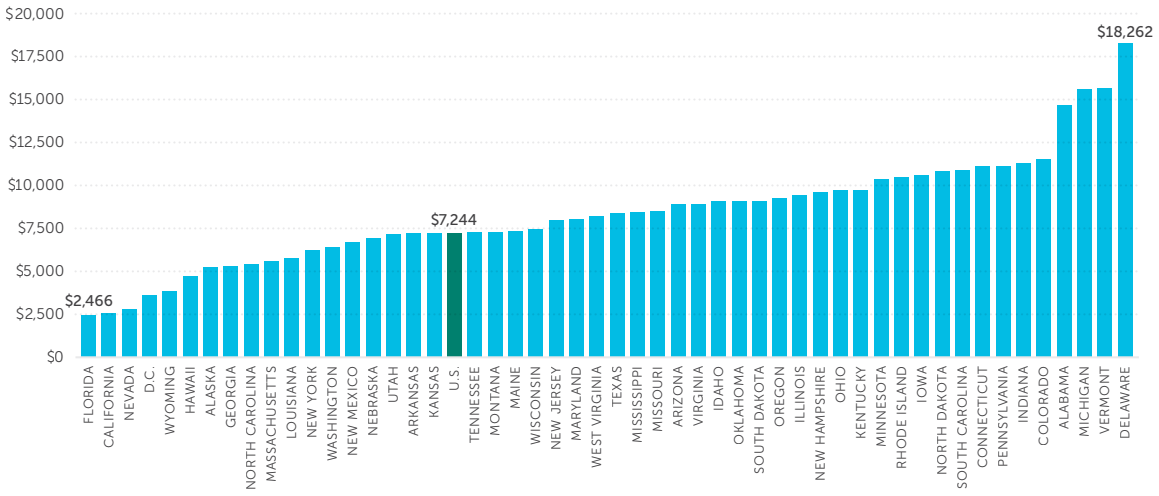
Net tuition revenue per FTE ranged widely across the states due to variation in the mix of students paying different tuition rates, the level of state support and availability of state public financial aid, and whether institutions can freely raise their tuition rates (*Figure 4.1*). On the low end, net tuition revenue was less than $3,000 per FTE in California, Florida, and Nevada. On the high end, net tuition revenue was over $15,000 in Delaware, Michigan, and Vermont. Five states and Washington, D.C., had net tuition revenue averages below $5,000 per FTE, and 13 states were above $10,000 per FTE.

- *Table 4.1* shows that net tuition revenue per FTE declined in 27 states and Washington, D.C., between 2021 and 2022. Washington, D.C., saw a decline of 31.8%, which was the only decrease greater than 10%. A large increase in financial aid accounts for most of the decline seen in Washington, D.C. Six other states saw year-over-year declines greater than 5% (Arizona, California, Kansas, Massachusetts, Nebraska, and Ohio).
- Of the 23 states with net tuition revenue increases in the last year, only four had increases higher than 5% (Colorado, Utah, Washington, and Wyoming).

In the last five years (since 2017), net tuition and fee revenue has declined in 28 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 between 1980 and 2022 was 27.8% 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 2022 (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 2022 net tuition and fee revenue includes estimated tuition and fee revenue for Arkansas, Massachusetts, Pennsylvania, and Texas.
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 1980-2022 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$2,782	$6,623	$11,558	$14,677	$15,063	$14,642	-2.8%	-0.2%	26.7%	121.1%	426.30%
ALASKA	$2,534	$3,364	$4,904	$5,064	$5,428	$5,252	-3.2%	3.7%	7.1%	56.1%	107.3%
ARIZONA	$2,292	$4,504	$7,099	$9,517	$9,627	$8,913	-7.4%	-6.3%	25.6%	97.9%	288.8%
ARKANSAS	$3,104	$3,659	$5,443	$7,419	$7,567	$7,203	-4.8%	-2.9%	32.3%	96.9%	132.0%
CALIFORNIA	$746	$1,138	$2,589	$3,338	$2,688	$2,539	-5.5%	-23.9%	-1.9%	123.1%	240.2%
COLORADO	$3,358	$4,994	$8,589	$10,740	$10,963	$11,512	5.0%	7.2%	34.0%	130.5%	242.8%
CONNECTICUT	$2,342	$5,718	$8,587	$11,130	$10,893	$11,145	2.3%	0.1%	29.8%	94.9%	375.9%
DELAWARE	$4,963	$10,979	$16,885	$17,756	$17,535	$18,262	4.1%	2.9%	8.2%	66.3%	268.0%
FLORIDA	$1,813	$3,330	$3,534	$3,805	$2,443	$2,466	0.9%	-35.2%	-30.2%	-25.9%	36.0%
GEORGIA	$2,235	$2,739	$4,853	$6,064	$5,298	$5,308	0.2%	-12.5%	9.4%	93.8%	137.5%
HAWAII	$913	$2,376	$4,577	$5,071	$4,663	$4,699	0.8%	-7.3%	2.7%	97.8%	414.7%
IDAHO	$2,271	$4,383	$6,076	$9,007	$8,947	$9,065	1.3%	0.6%	49.2%	106.8%	299.2%
ILLINOIS	$1,991	$3,514	$7,320	$9,259	$9,361	$9,433	0.8%	1.9%	28.9%	168.5%	373.8%
INDIANA	$3,828	$7,032	$10,497	$11,034	$10,999	$11,299	2.7%	2.4%	7.6%	60.7%	195.1%
IOWA	$3,504	$6,408	$9,881	$10,713	$10,814	$10,607	-1.9%	-1.0%	7.4%	65.5%	202.7%
KANSAS	$3,084	$4,619	$7,094	$7,900	$7,699	$7,236	-6.0%	-8.4%	2.0%	56.7%	134.6%
KENTUCKY	$2,895	$5,722	$9,612	$10,511	$9,920	$9,725	-2.0%	-7.5%	1.2%	70.0%	236.0%
LOUISIANA	$2,264	$3,138	$4,732	$6,474	$5,936	$5,756	-3.0%	-11.1%	21.6%	83.5%	154.3%
MAINE	$3,527	$6,498	$8,352	$7,560	$7,537	$7,341	-2.6%	-2.9%	-12.1%	13.0%	108.2%
MARYLAND	$2,775	$6,138	$7,759	$8,045	$8,170	$8,047	-1.5%	0.0%	3.7%	31.1%	190.0%
MASSACHUSETTS	$2,534	$4,710	$5,751	$6,306	$5,971	$5,589	-6.4%	-11.4%	-2.8%	18.7%	120.5%
MICHIGAN	$4,523	$7,948	$13,230	$15,393	$15,934	$15,596	-2.1%	1.3%	17.9%	96.2%	244.8%
MINNESOTA	$2,564	$4,844	$10,415	$10,450	$10,585	$10,370	-2.0%	-0.8%	-0.4%	114.1%	304.5%
MISSISSIPPI	$3,233	$4,425	$6,862	$8,109	$8,507	$8,438	-0.8%	4.1%	23.0%	90.7%	161.0%
MISSOURI	$3,228	$5,186	$7,806	$7,144	$8,093	$8,497	5.0%	18.9%	8.8%	63.8%	163.3%
MONTANA	$2,127	$4,691	$6,496	$7,269	$7,403	$7,298	-1.4%	0.4%	12.4%	55.6%	243.1%
NEBRASKA	$2,664	$4,506	$6,449	$7,240	$7,495	$6,929	-7.6%	-4.3%	7.4%	53.8%	160.1%
NEVADA	$2,186	$2,811	$3,973	$4,036	$2,731	$2,793	2.3%	-30.8%	-29.7%	-0.6%	27.8%
NEW HAMPSHIRE	$5,794	$10,145	$10,342	$10,352	$10,031	$9,629	-4.0%	-7.0%	-6.9%	-5.1%	66.2%
NEW JERSEY	$2,124	$7,263	$9,172	$10,885	$7,820	$7,969	1.9%	-26.8%	-13.1%	9.7%	275.2%
NEW MEXICO	$2,236	$1,470	$3,971	$4,033	$6,641	$6,707	1.0%	66.3%	68.9%	356.2%	200.0%
NEW YORK	$2,923	$4,762	$5,649	$6,822	$6,058	$6,224	2.7%	-8.8%	10.2%	30.7%	112.9%
NORTH CAROLINA	$2,201	$3,369	$4,801	$6,116	$5,435	$5,412	-0.4%	-11.5%	12.7%	60.6%	145.9%
NORTH DAKOTA	$2,729	$5,371	$8,831	$9,747	$11,250	$10,847	-3.6%	11.3%	22.8%	101.9%	297.5%
OHIO	$4,366	$7,407	$10,129	$10,418	$10,236	$9,708	-5.2%	-6.8%	-4.2%	31.1%	122.4%
OKLAHOMA	$2,228	$2,985	$5,650	$7,723	$8,783	$9,072	3.3%	17.5%	60.6%	203.9%	307.2%
OREGON	$2,549	$4,668	$7,083	$8,472	$9,190	$9,261	0.8%	9.3%	30.8%	98.4%	263.3%
PENNSYLVANIA	$4,939	$9,941	$9,779	$12,161	$11,631	$11,149	-4.1%	-8.3%	14.0%	12.2%	125.8%
RHODE ISLAND	$3,402	$7,578	$8,561	$9,010	$10,339	$10,458	1.1%	16.1%	22.2%	38.0%	207.4%
SOUTH CAROLINA	$2,467	$5,169	$9,392	$11,229	$11,349	$10,889	-4.1%	-3.0%	15.9%	110.7%	341.4%
SOUTH DAKOTA	$3,813	$7,096	$8,826	$9,827	$9,275	$9,103	-1.9%	-7.4%	3.1%	28.3%	138.8%
TENNESSEE	$2,861	$5,197	$7,351	$8,054	$7,156	$7,255	1.4%	-9.9%	-1.3%	39.6%	153.5%
TEXAS	$2,052	$5,364	$5,226	$8,005	$8,252	$8,401	1.8%	4.9%	60.7%	56.6%	309.3%
UTAH	$2,677	$3,377	$6,107	$7,079	$6,457	$7,175	11.1%	1.3%	17.5%	112.4%	168.1%
VERMONT	$7,982	$14,164	$16,229	$17,649	$16,410	$15,674	-4.5%	-11.2%	-3.4%	10.7%	96.4%
VIRGINIA	$2,590	$4,835	$8,309	$9,127	$9,345	$8,936	-4.4%	-2.1%	7.5%	84.8%	245.0%
WASHINGTON	$2,431	$2,817	$5,352	$6,001	$5,813	$6,386	9.9%	6.4%	19.3%	126.7%	162.7%
WEST VIRGINIA	$1,964	$4,574	$6,981	$8,530	$8,051	$8,235	2.3%	-3.5%	18.0%	80.0%	319.3%
WISCONSIN	$3,928	$4,283	$6,536	$7,413	$7,703	$7,469	-3.0%	0.8%	14.3%	74.4%	90.2%
WYOMING	$2,777	$3,836	$2,901	$3,455	$3,480	$3,832	10.1%	10.9%	32.1%	-0.1%	38.0%
U.S.	**$2,530**	**$4,447**	**$6,514**	**$7,691**	**$7,320**	**$7,244**	**-1.0%**	**-5.8%**	**11.2%**	**62.9%**	**186.4%**
D.C.	N/A	N/A	$5,536	$8,037	$5,305	$3,617	-31.8%	-55.0%	-34.7%	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 year 2017 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas, Massachusetts, Pennsylvania, and Texas.
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 $2,577 per FTE in 2022, down 7.4% ($206 per FTE) from 2021, 7.9% ($220 per FTE) from 2020, and 10.8% ($313 per FTE) from 2019. In 2022, two-year net tuition ranged from a low of $124 per FTE in California (one of only two states with less than $1,000 per FTE in net tuition revenue) to over $6,000 per FTE in Illinois and Michigan.

In the last year, per-FTE tuition revenue decreased at two-year institutions in 42 states. Tennessee had the largest two-year tuition decline (62.0%). California was the only other state with a decline greater than 50%. Both were largely due to increases in state-funded financial aid. Of the seven states with increases, the largest was 11.4% in Utah. No other states had increases above 10%.

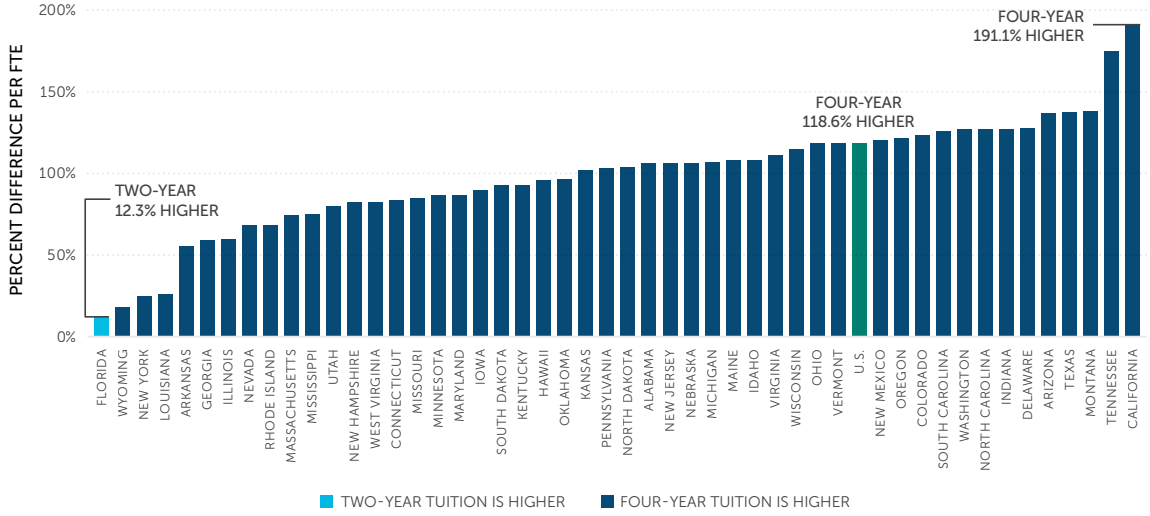
At four-year institutions, tuition revenue remained largely flat (0.2% decline), averaging $10,090 per FTE. This is 3.9 times the average tuition in the two-year sector. Only three states and Washington, D.C., averaged less than $5,000 in four-year net tuition revenue per FTE: Florida, Nevada, and Wyoming. Florida had the lowest four-year tuition ($2,414 per FTE). On the other hand, seven states had net tuition revenue greater than $15,000 per FTE: Alabama, Colorado, Delaware, Iowa, Michigan, South Carolina, and Vermont. Delaware had the highest four-year net tuition revenue ($24,592 per FTE).

From 2021 to 2022, four-year net tuition revenue decreased in 28 states and Washington, D.C. Five states and Washington, D.C., had declines greater than 5% in the last year (Arkansas, Arizona, Kansas, Massachusetts, and Nebraska). The largest percentage decline was 31.8% (or $1,619 per FTE) in Washington, D.C., followed closely by Arizona ($1,194). Declines in both Arizona and Washington, D.C., were due almost entirely to increases in financial 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 118.6% more tuition and fee revenue than two-year institutions. Only Florida is on the figure's left side (the **light blue** bar), with 12.3% 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 191.1% 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 2022



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 2022 sector-level net tuition and fee revenue includes estimated tuition and fee revenue for Arkansas and Pennsylvania, and two-year net tuition and fee revenue for Massachusetts and Texas.
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 4.1A

PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY SECTOR AND STATE, FY 2019-2022 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR TUITION REVENUE						FOUR-YEAR TUITION REVENUE					
	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019
ALABAMA	$5,966	$6,084	$5,815	2.26	-4.4%	-2.5%	$19,294	$19,296	$18,978	1.88	-1.6%	-1.6%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$5,085	$5,269	$5,098	0.51	-3.2%	0.3%
ARIZONA	$2,265	$2,667	$2,236	0.87	-16.2%	-1.3%	$14,290	$13,156	$11,962	1.19	-9.1%	-16.3%
ARKANSAS	$4,857	$4,825	$4,642	1.80	-3.8%	-4.4%	$8,758	$8,694	$8,202	0.81	-5.7%	-6.3%
CALIFORNIA	$392	$271	$124	0.05	-54.4%	-68.5%	$6,749	$5,556	$5,459	0.54	-1.7%	-19.1%
COLORADO	$4,677	$4,184	$3,820	1.48	-8.7%	-18.3%	$15,151	$15,090	$16,117	1.60	6.8%	6.4%
CONNECTICUT	$6,044	$6,507	$5,523	2.14	-15.1%	-8.6%	$14,801	$12,671	$13,478	1.34	6.4%	-8.9%
DELAWARE	$6,211	$5,489	$5,412	2.10	-1.4%	-12.9%	$25,538	$23,826	$24,592	2.44	3.2%	-3.7%
FLORIDA	$2,982	$2,810	$2,730	1.06	-2.9%	-8.5%	$2,885	$2,281	$2,414	0.24	5.8%	-16.3%
GEORGIA	$3,379	$3,560	$3,296	1.28	-7.4%	-2.5%	$6,485	$5,973	$6,043	0.60	1.2%	-6.8%
HAWAII	$2,668	$2,458	$2,252	0.87	-8.4%	-15.6%	$6,698	$6,408	$6,406	0.63	0.0%	-4.4%
IDAHO	$3,289	$3,359	$3,220	1.25	-4.1%	-2.1%	$9,573	$10,596	$10,816	1.07	2.1%	13.0%
ILLINOIS	$5,826	$6,520	$6,098	2.37	-6.5%	4.7%	$11,582	$10,886	$11,306	1.12	3.9%	-2.4%
INDIANA	$3,828	$3,619	$3,265	1.27	-9.8%	-14.7%	$14,027	$14,075	$14,656	1.45	4.1%	4.5%
IOWA	$6,178	$5,881	$5,820	2.26	-1.0%	-5.8%	$15,602	$15,552	$15,269	1.51	-1.8%	-2.1%
KANSAS	$3,232	$3,536	$3,237	1.26	-8.5%	0.2%	$11,239	$10,519	$9,948	0.99	-5.4%	-11.5%
KENTUCKY	$4,938	$4,771	$4,438	1.72	-7.0%	-10.1%	$12,831	$12,303	$12,138	1.20	-1.3%	-5.4%
LOUISIANA	$4,350	$4,575	$4,645	1.80	1.5%	6.8%	$6,639	$6,312	$6,045	0.60	-4.2%	-8.9%
MAINE	$3,169	$2,924	$2,554	0.99	-12.7%	-19.4%	$8,968	$8,785	$8,557	0.85	-2.6%	-4.6%
MARYLAND	$4,158	$4,254	$3,940	1.53	-7.4%	-5.2%	$10,720	$10,093	$9,988	0.99	-1.0%	-6.8%
MASSACHUSETTS	$3,413	$3,375	$2,962	1.15	-12.2%	-13.2%	$7,035	$6,853	$6,447	0.64	-5.9%	-8.4%
MICHIGAN	$6,897	$6,757	$6,144	2.38	-9.1%	-10.9%	$20,457	$20,469	$20,285	2.01	-0.9%	-0.8%
MINNESOTA	$5,510	$5,581	$5,347	2.07	-4.2%	-3.0%	$13,602	$13,738	$13,528	1.34	-1.5%	-0.5%
MISSISSIPPI	$5,055	$5,493	$5,155	2.00	-6.2%	2.0%	$11,531	$11,184	$11,309	1.12	1.1%	-1.9%
MISSOURI	$3,194	$3,766	$4,078	1.58	8.3%	27.7%	$10,024	$9,806	$10,122	1.00	3.2%	1.0%
MONTANA	$1,876	$1,810	$1,681	0.65	-7.1%	-10.4%	$9,481	$9,303	$9,175	0.91	-1.4%	-3.2%
NEBRASKA	$3,087	$2,967	$2,768	1.07	-6.7%	-10.3%	$9,891	$9,773	$9,053	0.90	-7.4%	-8.5%
NEVADA	$1,922	$1,902	$1,822	0.71	-4.2%	-5.2%	$3,357	$3,566	$3,703	0.37	3.9%	10.3%
NEW HAMPSHIRE	$5,537	$5,206	$5,029	1.95	-3.4%	-9.2%	$13,074	$12,627	$12,056	1.19	-4.5%	-7.8%
NEW JERSEY	$3,125	$3,161	$3,172	1.23	0.3%	1.5%	$10,871	$10,158	$10,368	1.03	2.1%	-4.6%
NEW MEXICO	$2,079	$2,645	$2,420	0.94	-8.5%	16.4%	$6,072	$9,540	$9,723	0.96	1.9%	60.1%
NEW YORK	$4,520	$4,722	$5,085	1.97	7.7%	12.5%	$7,362	$6,510	$6,530	0.65	0.3%	-11.3%
NORTH CAROLINA	$2,038	$1,872	$1,793	0.70	-4.3%	-12.0%	$8,862	$8,049	$8,019	0.79	-0.4%	-9.5%
NORTH DAKOTA	$4,040	$4,267	$3,867	1.50	-9.4%	-4.3%	$11,157	$12,573	$12,201	1.21	-3.0%	9.4%
OHIO	$4,239	$3,448	$3,260	1.26	-5.5%	-23.1%	$12,533	$13,256	$12,733	1.26	-3.9%	1.6%
OKLAHOMA	$4,426	$3,986	$4,059	1.57	1.8%	-8.3%	$10,854	$11,321	$11,634	1.15	2.8%	7.2%
OREGON	$3,373	$3,223	$3,193	1.24	-0.9%	-5.3%	$12,577	$13,217	$13,084	1.30	-1.0%	4.0%
PENNSYLVANIA	$4,886	$4,627	$4,383	1.70	-5.3%	-10.3%	$15,194	$14,426	$13,706	1.36	-5.0%	-9.8%
RHODE ISLAND	$5,263	$5,680	$5,554	2.15	-2.2%	5.5%	$9,655	$11,274	$11,327	1.12	0.5%	17.3%
SOUTH CAROLINA	$3,697	$3,723	$3,439	1.33	-7.6%	-7.0%	$16,443	$15,592	$15,100	1.50	-3.2%	-8.2%
SOUTH DAKOTA	$3,708	$3,788	$3,643	1.41	-3.8%	-1.8%	$10,760	$10,059	$9,944	0.99	-1.1%	-7.6%
TENNESSEE	$2,037	$1,885	$717	0.28	-62.0%	-64.8%	$11,238	$10,003	$10,674	1.06	6.7%	-5.0%
TEXAS	$2,336	$2,398	$2,385	0.93	-0.5%	2.1%	$12,686	$12,639	$12,920	1.28	2.2%	1.8%
UTAH	$3,213	$3,127	$3,483	1.35	11.4%	8.4%	$8,022	$7,330	$8,138	0.81	11.0%	1.4%
VERMONT	$6,549	$6,003	$4,361	1.69	-27.4%	-33.4%	$18,821	$17,522	$17,046	1.69	-2.7%	-9.4%
VIRGINIA	$4,313	$4,210	$3,379	1.31	-19.7%	-21.7%	$12,565	$12,233	$11,867	1.18	-3.0%	-5.6%
WASHINGTON	$2,651	$2,329	$2,309	0.90	-0.9%	-12.9%	$9,424	$9,159	$10,321	1.02	12.7%	9.5%
WEST VIRGINIA	$4,378	$4,085	$4,001	1.55	-2.1%	-8.6%	$9,827	$9,399	$9,620	0.95	2.4%	-2.1%
WISCONSIN	$3,167	$2,878	$2,631	1.02	-8.6%	-16.9%	$9,833	$9,909	$9,743	0.97	-1.7%	-0.9%
WYOMING	$2,855	$3,053	$3,212	1.25	5.2%	12.5%	$5,115	$3,325	$3,848	0.38	15.7%	-24.8%
U.S.	**$2,890**	**$2,783**	**$2,577**	**1.00**	**-7.4%**	**-10.8%**	**$10,587**	**$10,115**	**$10,090**	**1.00**	**-0.2%**	**-4.7%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$6,300	$5,089	$3,470	0.34	-31.8%	-44.9%

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. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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 2019 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas and Pennsylvania, and two-year net tuition and fee revenue for Massachusetts and Texas.
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

TOTAL EDUCATION REVENUE

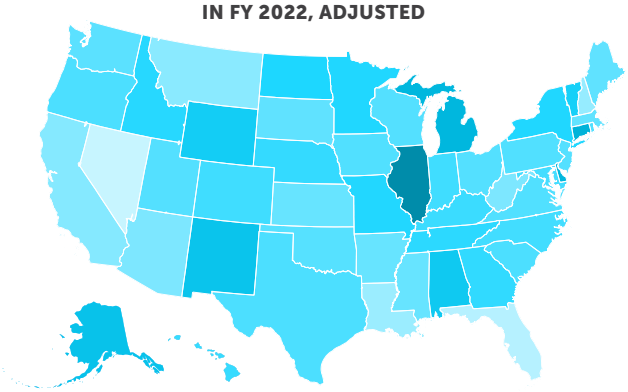
Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Visit the SHEF website to view the interactive education revenue map.[40] This map shows total education revenue per FTE across the nation.

Total education revenue increased 2.4% from 2021 to 2022, reaching an all-time high of $17,393 per FTE. Total education revenue has increased nine out of the last 10 years (except 2019) following declines during the Great Recession and has increased 13.2% since 2001 and 43.7% since the start of the SHEF dataset in 1980.

Record high total revenue does not mean 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 11 states.** Many institutions, particularly those most reliant on state funding and those with a more limited ability to raise tuition rates and attract out-of-state and international students, 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.[41]

Excluding federal stimulus funding that states allocated directly to public higher education, total education revenue increased 3.1% from 2021 to 2022. Had enrollment held constant and states not allocated federal stimulus funding to higher education, total education revenue per FTE would have increased only 0.5% from 2021, but decreased 2.4% from 2020.

TOTAL EDUCATION REVENUE PER FTE IN FY 2022, ADJUSTED



1. STATE COMPARISONS

Total education revenue per FTE ranges from a low of $10,815 in Nevada to over $25,000 in Connecticut, Delaware, and Michigan. In fact, total education revenue exceeded $30,000 in Washington, D.C. ($30,804), and Illinois ($32,022) (*Figure 4.2*).[42]

40. shef.sheeo.org/data-visualizations/map-4-2

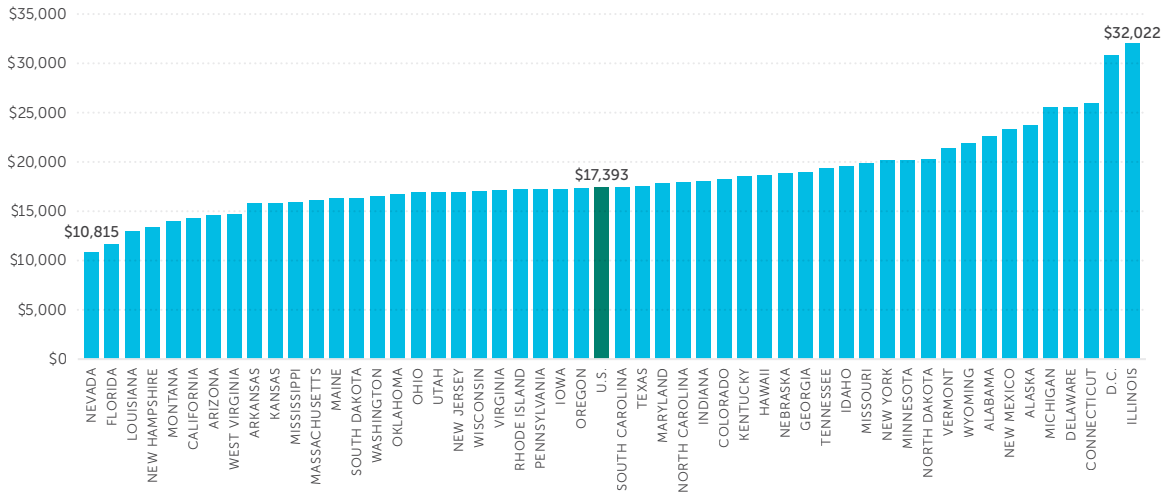
41. State Higher Education Executive Officers Association. (2021). *Investigating the impacts of state higher education appropriations and financial aid.* sheeo.org/wp-content/uploads/2021/05/SHEEO_ImpactAppropationsFinancialAid.pdf

42. A large portion of education appropriations in Illinois are not available for operations at public institutions. Additionally, Illinois received a one-time payment of $250 million for the state's prepaid tuition program that will be disbursed over a span of years. See the Illinois state spotlight to learn more.

- Public institutions in 12 states and Washington, D.C., have more than $20,000 per FTE in education revenue. These funds are primarily sourced from education appropriations in Alaska, Connecticut, Illinois, New Mexico, New York, Washington, D.C., and Wyoming. On the other hand, education revenues come mainly from tuition revenue in Alabama, Delaware, Michigan, and Vermont, and come from an even mix of sources in Minnesota and North Dakota.
- Total education revenue per FTE decreased in half of all states (25) and Washington, D.C., from 2021 to 2022 (*Table 4.2*). In two states and Washington, D.C., the decline was greater than 10%. The largest decrease was in Wyoming (30.2%), due to a sharp decrease in federal stimulus funding.
- Total education revenue increased in the other half of all states in 2022. In four states, increases were greater than 10%. The largest increases were in Georgia (20.2%) and Connecticut (13.6%), both entirely due to federal stimulus funding.
- Total revenue has increased in 38 states since 2001 and 48 states since 1980. The two states with inflation-adjusted declines in total education revenue per FTE since 1980 are Alaska (12.4%) and Nevada (6.1%). 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 2022 (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. Fiscal year 2022 total education revenue includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.
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 1980-2022 (CONSTANT ADJUSTED DOLLARS)

	1980	2001	2012	2017	2021	2022	% CHANGE SINCE 2021	% CHANGE SINCE 2017	% CHANGE SINCE 2012	% CHANGE SINCE 2001	% CHANGE SINCE 1980
ALABAMA	$10,435	$15,609	$17,949	$20,927	$22,134	$22,546	1.9%	7.7%	25.6%	44.4%	116.1%
ALASKA	$27,040	$18,468	$20,933	$21,403	$23,948	$23,688	-1.1%	10.7%	13.2%	28.3%	-12.4%
ARIZONA	$10,784	$13,724	$13,183	$15,358	$15,766	$14,615	-7.3%	-4.8%	10.9%	6.5%	35.5%
ARKANSAS	$13,201	$14,428	$14,116	$15,344	$15,405	$15,785	2.5%	2.9%	11.8%	9.4%	19.6%
CALIFORNIA	$9,902	$11,167	$9,784	$12,582	$13,330	$14,233	6.8%	13.1%	45.5%	27.5%	43.7%
COLORADO	$9,166	$12,012	$12,147	$15,407	$17,242	$18,223	5.7%	18.3%	50.0%	51.7%	98.8%
CONNECTICUT	$10,937	$22,537	$20,647	$21,277	$22,860	$25,971	13.6%	22.1%	25.8%	15.2%	137.5%
DELAWARE	$13,099	$20,370	$23,161	$23,833	$24,749	$25,533	3.2%	7.1%	10.2%	25.3%	94.9%
FLORIDA	$9,015	$14,223	$9,674	$11,437	$11,308	$11,644	3.0%	1.8%	20.4%	-18.1%	29.2%
GEORGIA	$12,254	$18,150	$13,410	$16,361	$15,763	$18,948	20.2%	15.8%	41.3%	4.4%	54.6%
HAWAII	$10,700	$12,154	$13,710	$17,183	$19,311	$18,667	-3.3%	8.6%	36.2%	53.6%	74.5%
IDAHO	$15,725	$18,677	$13,746	$19,588	$19,646	$19,552	-0.5%	-0.2%	42.2%	4.7%	24.3%
ILLINOIS	$12,141	$18,861	$21,844	$28,026	$30,900	$32,022	3.6%	14.3%	46.6%	69.8%	163.8%
INDIANA	$13,868	$16,972	$16,806	$17,870	$17,465	$18,040	3.3%	0.9%	7.3%	6.3%	30.1%
IOWA	$14,309	$18,212	$16,175	$16,846	$17,469	$17,248	-1.3%	2.4%	6.6%	-5.3%	20.5%
KANSAS	$13,314	$16,260	$14,288	$15,067	$16,760	$15,820	-5.6%	5.0%	10.7%	-2.7%	18.8%
KENTUCKY	$14,020	$19,216	$18,342	$18,495	$18,264	$18,502	1.3%	0.0%	0.9%	-3.7%	32.0%
LOUISIANA	$12,221	$11,921	$11,935	$12,669	$12,532	$12,980	3.6%	2.4%	8.8%	8.9%	6.2%
MAINE	$10,978	$17,480	$15,945	$15,965	$16,335	$16,279	-0.3%	2.0%	2.1%	-6.9%	48.3%
MARYLAND	$10,524	$16,520	$14,961	$16,503	$17,812	$17,806	0.0%	7.9%	19.0%	7.8%	69.2%
MASSACHUSETTS	$11,102	$16,244	$12,558	$14,516	$16,135	$16,102	-0.2%	10.9%	28.2%	-0.9%	45.0%
MICHIGAN	$15,239	$21,057	$19,641	$23,168	$24,700	$25,505	3.3%	10.1%	29.9%	21.1%	67.4%
MINNESOTA	$13,901	$16,305	$16,916	$18,658	$23,117	$20,144	-12.9%	8.0%	19.1%	23.5%	44.9%
MISSISSIPPI	$12,540	$15,734	$14,333	$16,128	$17,191	$15,945	-7.2%	-1.1%	11.2%	1.3%	27.2%
MISSOURI	$14,674	$18,861	$15,769	$15,003	$18,845	$19,873	5.5%	32.5%	26.0%	5.4%	35.4%
MONTANA	$10,226	$10,923	$11,881	$13,587	$15,550	$14,008	-9.9%	3.1%	17.9%	28.2%	37.0%
NEBRASKA	$11,954	$13,734	$15,199	$18,023	$19,080	$18,834	-1.3%	4.5%	23.9%	37.1%	57.6%
NEVADA	$11,519	$12,575	$12,141	$11,770	$9,635	$10,815	12.2%	-8.1%	-10.9%	-14.0%	-6.1%
NEW HAMPSHIRE	$10,662	$15,521	$12,245	$13,181	$14,661	$13,328	-9.1%	1.1%	8.8%	-14.1%	25.0%
NEW JERSEY	$10,685	$18,801	$17,003	$18,890	$14,995	$16,934	12.9%	-10.4%	-0.4%	-9.9%	58.5%
NEW MEXICO	$13,851	$13,230	$14,111	$15,972	$22,971	$23,307	1.5%	45.9%	65.2%	76.2%	68.3%
NEW YORK	$14,908	$16,056	$15,894	$19,100	$18,755	$20,121	7.3%	5.3%	26.6%	25.3%	35.0%
NORTH CAROLINA	$13,374	$17,789	$15,637	$17,744	$17,263	$17,925	3.8%	1.0%	14.6%	0.8%	34.0%
NORTH DAKOTA	$12,077	$13,296	$18,092	$20,279	$20,971	$20,256	-3.4%	-0.1%	12.0%	52.3%	67.7%
OHIO	$13,293	$18,104	$16,269	$17,738	$18,238	$16,921	-7.2%	-4.6%	4.0%	-6.5%	27.3%
OKLAHOMA	$11,256	$13,994	$14,237	$15,555	$16,263	$16,743	2.9%	7.6%	17.6%	19.6%	48.7%
OREGON	$10,278	$13,016	$11,567	$14,051	$16,713	$17,329	3.7%	23.3%	49.8%	33.1%	68.6%
PENNSYLVANIA	$15,416	$20,403	$14,750	$17,201	$17,997	$17,239	-4.2%	0.2%	16.9%	-15.5%	11.8%
RHODE ISLAND	$14,543	$17,209	$14,372	$14,980	$17,211	$17,186	-0.1%	14.7%	19.6%	-0.1%	18.2%
SOUTH CAROLINA	$12,734	$13,555	$14,127	$17,213	$18,783	$17,421	-7.3%	1.2%	23.3%	28.5%	36.8%
SOUTH DAKOTA	$13,890	$15,417	$14,412	$16,881	$16,697	$16,313	-2.3%	-3.4%	13.2%	5.8%	17.4%
TENNESSEE	$12,697	$15,480	$15,542	$18,382	$19,715	$19,313	-2.0%	5.1%	24.3%	24.8%	52.1%
TEXAS	$11,039	$15,781	$13,910	$16,275	$16,990	$17,486	2.9%	7.4%	25.7%	10.8%	58.4%
UTAH	$13,436	$12,691	$12,715	$15,572	$15,726	$16,924	7.6%	8.7%	33.1%	33.4%	26.0%
VERMONT	$12,814	$18,442	$18,980	$19,942	$23,540	$21,358	-9.3%	7.1%	12.5%	15.8%	66.7%
VIRGINIA	$10,766	$14,989	$13,640	$15,721	$16,902	$17,127	1.3%	8.9%	25.6%	14.3%	59.1%
WASHINGTON	$11,955	$11,959	$11,199	$13,957	$16,774	$16,540	-1.4%	18.5%	47.7%	38.3%	38.4%
WEST VIRGINIA	$10,320	$11,660	$12,702	$13,265	$13,981	$14,648	4.8%	10.4%	15.3%	25.6%	41.9%
WISCONSIN	$14,938	$16,570	$15,005	$15,848	$17,376	$16,978	-2.3%	7.1%	13.1%	2.5%	13.7%
WYOMING	$19,821	$17,726	$20,141	$23,421	$31,388	$21,919	-30.2%	-6.4%	8.8%	23.7%	10.6%
U.S.	**$12,102**	**$15,364**	**$14,048**	**$16,298**	**$16,989**	**$17,393**	**2.4%**	**6.7%**	**23.8%**	**13.2%**	**43.7%**
D.C.	N/A	N/A	$22,298	$28,156	$43,064	$30,804	-28.5%	9.4%	38.1%	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 year 2017 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.
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 $12,697 per FTE, up 1.3% from 2021. Total revenue ranged from $7,981 in South Dakota to $23,341 in Illinois. Ten states had an average two-year total revenue of less than $10,000 per FTE. On the other hand, in 12 states, two-year total revenue was greater than $15,000 per FTE; only Illinois exceeded $20,000 per FTE.[43]

Two-year total education revenue declined in 23 states from 2021 to 2022. The largest declines were in Wyoming (24.1%) and Tennessee (20.3%). The decrease in Wyoming was due to federal stimulus funding, whereas the decrease in Tennessee was due to a decline in two-year public operating. Of the 26 states with increases, two were above 15%: New York (15.3%) and Nevada (18.7%). In both states, these changes were due to increases in education appropriations. In Nevada, this change came almost entirely from an increase in funds for general operating budgets at public two-year institutions. In New York, this change was partially due to a decrease in two-year state financial aid.

Total education revenue at four-year institutions averaged $19,556 in 2022, a 1.8% increase from 2021, but a 0.4% decline from 2020. **Four-year institutions had, on average, 1.54 times the amount of total revenue per FTE of two-year institutions.** Nevada and Louisiana had the lowest revenue per FTE ($13,000 and $13,116, respectively). Twenty-three states and Washington, D.C., had total revenue greater than $20,000—including Delaware and Illinois, both of which had total revenue greater than $30,000 per FTE.[44]

In the last year, four-year total education revenue declined in 24 states and Washington, D.C. Two states, Arizona (10.2%) and Wyoming (32.0%), and Washington, D.C. (18.9%), had declines greater than 10%. In both states and Washington, D.C., the declines were due largely to decreases in federal stimulus funding.

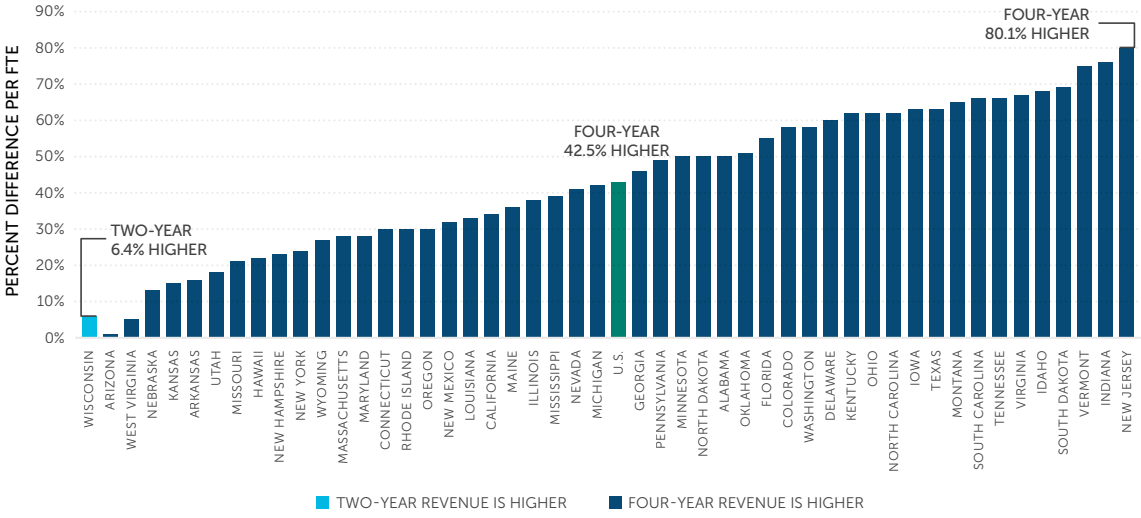
Figure 4.2A displays the disparity in total education revenue per FTE between each state's two-year and four-year public sectors. Only Wisconsin is on the figure's left side (the **light blue** bar), with 6.4% higher total education revenue in the two-year sector. All other states are on the figure's 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 2.3 times the total revenue of two-year institutions.

43. A large portion of education appropriations in Illinois are not available for operations at public institutions. Additionally, Illinois received a one-time payment of $250 million for the state's prepaid tuition program that will be disbursed over a span of years. See the Illinois state spotlight to learn more.

44. Ibid.

FIGURE 4.2A

PERCENT DIFFERENCE IN TWO-YEAR AND FOUR-YEAR PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE, FY 2022



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. Fiscal year 2022 total education revenue includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.
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 **Insights & Briefs** page to download Capital Appropriations, Performance-Based Funding, and Student Residency data tables and figures.

TABLE 4.2A

PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY SECTOR AND STATE, FY 2019-2022 (CONSTANT ADJUSTED DOLLARS)

	TWO-YEAR TOTAL REVENUE						FOUR-YEAR TOTAL REVENUE					
	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019	2019	2021	2022	INDEX TO U.S.	% CHANGE SINCE 2021	% CHANGE SINCE 2019
ALABAMA	$13,277	$15,135	$15,754	1.24	4.1%	18.7%	$25,742	$25,859	$26,367	1.35	2.0%	2.4%
ALASKA	$-	$-	$-	N/A	N/A	N/A	$21,947	$23,245	$22,992	1.18	-1.1%	4.8%
ARIZONA	$12,715	$14,883	$14,886	1.17	0.0%	17.1%	$17,536	$16,659	$14,965	0.77	-10.2%	-14.7%
ARKANSAS	$12,951	$13,422	$13,767	1.08	2.6%	6.3%	$16,310	$15,928	$16,209	0.83	1.8%	-0.6%
CALIFORNIA	$9,836	$10,865	$11,156	0.88	2.7%	13.4%	$15,982	$14,797	$15,646	0.80	5.7%	-2.1%
COLORADO	$11,221	$11,139	$11,849	0.93	6.4%	5.6%	$19,647	$20,426	$21,410	1.09	4.8%	9.0%
CONNECTICUT	$15,608	$19,178	$19,890	1.57	3.7%	27.4%	$25,343	$24,267	$26,800	1.37	10.4%	5.8%
DELAWARE	$15,927	$16,396	$17,086	1.35	4.2%	7.3%	$31,249	$30,667	$31,656	1.62	3.2%	1.3%
FLORIDA	$8,164	$8,362	$8,643	0.68	3.4%	5.9%	$15,740	$14,891	$15,139	0.77	1.7%	-3.8%
GEORGIA	$10,928	$11,345	$12,669	1.00	11.7%	15.9%	$17,616	$16,499	$20,207	1.03	22.5%	14.7%
HAWAII	$13,906	$14,660	$15,198	1.20	3.7%	9.3%	$20,802	$20,355	$18,910	0.97	-7.1%	-9.1%
IDAHO	$9,264	$9,896	$9,700	0.76	-2.0%	4.7%	$19,529	$19,850	$19,649	1.00	-1.0%	0.6%
ILLINOIS	$19,179	$23,865	$23,341	1.84	-2.2%	21.7%	$31,803	$33,560	$34,170	1.75	1.8%	7.4%
INDIANA	$9,996	$9,830	$9,589	0.76	-2.5%	-4.1%	$21,332	$20,589	$21,413	1.09	4.0%	0.4%
IOWA	$11,260	$11,862	$11,945	0.94	0.7%	6.1%	$22,920	$23,279	$22,819	1.17	-2.0%	-0.4%
KANSAS	$12,753	$14,730	$14,598	1.15	-0.9%	14.5%	$17,838	$18,264	$16,975	0.87	-7.1%	-4.8%
KENTUCKY	$11,315	$11,632	$11,394	0.90	-2.0%	0.7%	$21,236	$21,161	$21,576	1.10	2.0%	1.6%
LOUISIANA	$8,342	$8,783	$9,436	0.74	7.4%	13.1%	$13,551	$12,752	$13,116	0.67	2.9%	-3.2%
MAINE	$11,150	$11,831	$11,760	0.93	-0.6%	5.5%	$16,834	$16,993	$16,853	0.86	-0.8%	0.1%
MARYLAND	$12,405	$13,980	$14,395	1.13	3.0%	16.0%	$19,410	$19,412	$19,103	0.98	-1.6%	-1.6%
MASSACHUSETTS	$10,606	$12,217	$12,732	1.00	4.2%	20.0%	$16,026	$17,144	$16,863	0.86	-1.6%	5.2%
MICHIGAN	$17,496	$19,380	$19,127	1.51	-1.3%	9.3%	$27,507	$27,800	$29,228	1.49	5.1%	6.3%
MINNESOTA	$12,701	$16,786	$13,777	1.09	-17.9%	8.5%	$22,250	$23,892	$22,843	1.17	-4.4%	2.7%
MISSISSIPPI	$11,824	$15,212	$12,715	1.00	-16.4%	7.5%	$18,747	$19,257	$18,831	0.96	-2.2%	0.5%
MISSOURI	$10,519	$14,402	$16,560	1.30	15.0%	57.4%	$18,070	$20,269	$20,495	1.05	1.1%	13.4%
MONTANA	$7,820	$9,507	$8,322	0.66	-12.5%	6.4%	$16,223	$18,118	$16,358	0.84	-9.7%	0.8%
NEBRASKA	$15,219	$17,346	$17,438	1.37	0.5%	14.6%	$19,970	$20,222	$19,817	1.01	-2.0%	-0.8%
NEVADA	$8,481	$7,209	$8,559	0.67	18.7%	0.9%	$13,015	$11,859	$13,000	0.66	9.6%	-0.1%
NEW HAMPSHIRE	$10,494	$12,402	$11,952	0.94	-3.6%	13.9%	$15,569	$16,731	$15,065	0.77	-10.0%	-3.2%
NEW JERSEY	$7,578	$7,407	$8,483	0.67	14.5%	11.9%	$19,228	$17,673	$19,822	1.01	12.2%	3.1%
NEW MEXICO	$13,195	$17,740	$18,772	1.48	5.8%	42.3%	$21,680	$26,235	$25,910	1.32	-1.2%	19.5%
NEW YORK	$14,103	$14,253	$16,432	1.29	15.3%	16.5%	$21,849	$20,156	$20,939	1.07	3.9%	-4.2%
NORTH CAROLINA	$10,863	$11,140	$11,390	0.90	2.2%	4.9%	$22,435	$20,950	$21,730	1.11	3.7%	-3.1%
NORTH DAKOTA	$11,819	$12,958	$12,269	0.97	-5.3%	3.8%	$19,175	$20,878	$20,437	1.05	-2.1%	6.6%
OHIO	$12,648	$11,249	$10,439	0.82	-7.2%	-17.5%	$19,165	$21,323	$19,844	1.01	-6.9%	3.5%
OKLAHOMA	$10,894	$10,678	$11,298	0.89	5.8%	3.7%	$18,300	$18,470	$18,933	0.97	2.5%	3.5%
OREGON	$11,068	$13,133	$14,218	1.12	8.3%	28.5%	$17,530	$19,155	$19,309	0.99	0.8%	10.2%
PENNSYLVANIA	$10,781	$11,769	$11,741	0.92	-0.2%	8.9%	$20,605	$19,932	$19,328	0.99	-3.0%	-6.2%
RHODE ISLAND	$11,053	$12,829	$12,795	1.01	-0.3%	15.8%	$15,010	$17,255	$17,310	0.89	0.3%	15.3%
SOUTH CAROLINA	$10,776	$11,826	$10,653	0.84	-9.9%	-1.1%	$21,209	$22,776	$21,106	1.08	-7.3%	-0.5%
SOUTH DAKOTA	$9,139	$9,563	$7,981	0.63	-16.5%	-12.7%	$16,761	$16,622	$16,425	0.84	-1.2%	-2.0%
TENNESSEE	$11,744	$13,903	$11,085	0.87	-20.3%	-5.6%	$21,914	$21,574	$21,979	1.12	1.9%	0.3%
TEXAS	$9,437	$10,662	$10,934	0.86	2.5%	15.9%	$20,370	$20,582	$20,969	1.07	1.9%	2.9%
UTAH	$13,274	$13,601	$14,499	1.14	6.6%	9.2%	$16,687	$16,247	$17,373	0.89	6.9%	4.1%
VERMONT	$9,439	$11,478	$9,745	0.77	-15.1%	3.2%	$21,042	$23,251	$21,461	1.10	-7.7%	2.0%
VIRGINIA	$9,562	$10,108	$9,919	0.78	-1.9%	3.7%	$19,454	$20,161	$19,991	1.02	-0.8%	2.8%
WASHINGTON	$9,777	$12,749	$11,470	0.90	-10.0%	17.3%	$18,330	$19,421	$20,761	1.06	6.9%	13.3%
WEST VIRGINIA	$11,732	$13,485	$14,206	1.12	5.3%	21.1%	$14,408	$14,906	$14,963	0.77	0.4%	3.9%
WISCONSIN	$16,031	$18,228	$17,419	1.37	-4.4%	8.7%	$15,826	$16,513	$16,342	0.84	-1.0%	3.3%
WYOMING	$20,930	$22,869	$17,367	1.37	-24.1%	-17.0%	$25,270	$33,552	$22,830	1.17	-32.0%	-9.7%
U.S.	**$11,379**	**$12,528**	**$12,697**	**1.00**	**1.3%**	**11.6%**	**$19,318**	**$19,201**	**$19,556**	**1.00**	**1.8%**	**1.2%**
D.C.	$-	$-	$-	N/A	N/A	N/A	$25,652	$36,139	$29,305	1.50	-18.9%	14.2%

NOTES:

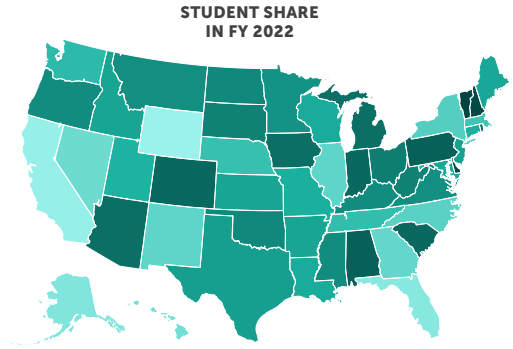
1. Total education revenue is the sum of education appropriations and net tuition, excluding net tuition revenue used for capital debt service. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.
2. The U.S. calculation does not include the District of Columbia. There are no two-year public institutions in Alaska or the District of Columbia.
3. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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. Total education revenue for fiscal year 2019 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.
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.[45] This map shows the student share for students attending two- and four-year institutions across the nation.

The student share has increased substantially 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 28.9%. In 2022, the U.S. average student share was 41.7%. This means that, on average, 41.7% of revenues at public institutions came from student tuition and fees. Excluding federal stimulus funding, the student share in 2022 was 42.2%.



1. STATE COMPARISONS

There is wide variation in the student share across states. From fiscal years 2017-2020, the student share was above 50% in at least half of all states (25 states in 2017 and 2020; 26 states in 2018 and 2019). This trend changed in 2021 when the number of states with a student share greater than 50% decreased to 21. In 2022, the number of states increased to 23. Three states, Delaware (71.5%), New Hampshire (72.2%), and Vermont (73.4%) had a student share above 70%. After excluding federal stimulus, the fiscal year 2022 student share in Vermont increased 10.7 percentage points to 84.0% and was the only state to exceed a share of 75%. Conversely, four states (Alaska, California, Florida, and Wyoming) and Washington, D.C., had a student share below 25%, both including and excluding federal stimulus (*Figure 4.3*).

From 2021 to 2022, student share decreased in 32 states and Washington, D.C. Over the last five years, four states (Connecticut, Kansas, Louisiana, and New Jersey) reduced the student share in their state 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 18 states—and it has increased in all but three states (Florida, Vermont, and Wyoming) since 2001 (*Table 4.3*).

After excluding federal stimulus funding, the number of states that had a student share above 50% in 2021 increased from 21 to 25. However, the total number of states with a student share above 50% in 2022 remained at 23, meaning there was no change after excluding federal stimulus. **Excluding federal stimulus, fiscal year 2022 had the fewest number of states with a student share greater than 50% since 2016.**

45. shef.sheeo.org/report/?modal=map-4_3

TABLE 4.3

NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE BY STATE, FY 1980-2022

	1980	2001	2012	2017	2021	2022	CHANGE SINCE 2021	CHANGE SINCE 2017	CHANGE SINCE 2012	CHANGE SINCE 2001	CHANGE SINCE 1980
ALABAMA	26.7%	42.4%	64.4%	70.1%	68.1%	64.9%	-3.1	-5.2	0.6	22.5	38.3
ALASKA	9.4%	18.2%	23.4%	23.7%	22.7%	22.2%	-0.5	-1.5	-1.3	4.0	12.8
ARIZONA	21.3%	32.8%	53.9%	62.0%	61.1%	61.0%	-0.1	-1.0	7.1	28.2	39.7
ARKANSAS	23.5%	25.4%	38.6%	48.3%	49.1%	45.6%	-3.5	-2.7	7.1	20.3	22.1
CALIFORNIA	7.5%	10.2%	26.5%	26.5%	20.2%	17.8%	-2.3	-8.7	-8.6	7.6	10.3
COLORADO	36.6%	41.6%	70.7%	69.7%	63.6%	63.2%	-0.4	-6.5	-7.5	21.6	26.5
CONNECTICUT	21.4%	25.4%	41.6%	52.3%	47.6%	42.9%	-4.7	-9.4	1.3	17.5	21.5
DELAWARE	37.9%	53.9%	72.9%	74.5%	70.8%	71.5%	0.7	-3.0	-1.4	17.6	33.6
FLORIDA	20.1%	23.4%	36.5%	33.3%	21.6%	21.2%	-0.4	-12.1	-15.3	-2.2	1.1
GEORGIA	18.2%	15.1%	36.2%	37.1%	33.6%	28.0%	-5.6	-9.1	-8.2	12.9	9.8
HAWAII	8.5%	19.6%	33.4%	29.5%	24.1%	25.2%	1.0	-4.3	-8.2	5.6	16.6
IDAHO	14.4%	23.5%	44.2%	46.0%	45.5%	46.4%	0.8	0.4	2.2	22.9	31.9
ILLINOIS	16.4%	18.6%	33.5%	33.0%	30.3%	29.5%	-0.8	-3.6	-4.1	10.8	13.1
INDIANA	27.6%	41.4%	62.5%	61.7%	63.0%	62.6%	-0.3	0.9	0.2	21.2	35.0
IOWA	24.5%	35.2%	61.1%	63.6%	61.9%	61.5%	-0.4	-2.1	0.4	26.3	37.0
KANSAS	23.2%	28.4%	49.6%	52.4%	45.9%	45.7%	-0.2	-6.7	-3.9	17.3	22.6
KENTUCKY	20.6%	29.8%	52.4%	56.8%	54.3%	52.6%	-1.8	-4.3	0.2	22.8	31.9
LOUISIANA	18.5%	26.3%	39.6%	51.1%	47.4%	44.3%	-3.0	-6.8	4.7	18.0	25.8
MAINE	32.1%	37.2%	52.4%	47.4%	46.1%	45.1%	-1.0	-2.3	-7.3	7.9	13.0
MARYLAND	26.4%	37.2%	51.9%	48.7%	45.9%	45.2%	-0.7	-3.6	-6.7	8.0	18.8
MASSACHUSETTS	22.8%	29.0%	45.8%	43.4%	37.0%	34.7%	-2.3	-8.7	-11.1	5.7	11.9
MICHIGAN	29.7%	37.7%	67.4%	66.4%	64.5%	61.1%	-3.4	-5.3	-6.2	23.4	31.5
MINNESOTA	18.4%	29.7%	61.6%	56.0%	45.8%	51.5%	5.7	-4.5	-10.1	21.8	33.0
MISSISSIPPI	25.8%	28.1%	47.9%	50.3%	49.5%	52.9%	3.4	2.6	5.0	24.8	27.1
MISSOURI	22.0%	27.5%	49.5%	47.6%	42.9%	42.8%	-0.2	-4.9	-6.7	15.3	20.8
MONTANA	20.8%	42.9%	54.7%	53.5%	47.6%	52.1%	4.5	-1.4	-2.6	9.2	31.3
NEBRASKA	22.3%	32.8%	42.4%	40.2%	39.3%	36.8%	-2.5	-3.4	-5.6	4.0	14.5
NEVADA	19.0%	22.4%	32.7%	34.3%	28.3%	25.8%	-2.5	-8.5	-6.9	3.5	6.8
NEW HAMPSHIRE	54.3%	65.4%	84.5%	78.5%	68.4%	72.2%	3.8	-6.3	-12.2	6.9	17.9
NEW JERSEY	19.9%	38.6%	53.9%	57.6%	52.2%	47.1%	-5.1	-10.6	-6.9	8.4	27.2
NEW MEXICO	16.1%	11.1%	28.1%	25.3%	28.9%	28.8%	-0.1	3.5	0.6	17.7	12.6
NEW YORK	19.6%	29.7%	35.5%	35.7%	32.3%	30.9%	-1.4	-4.8	-4.6	1.3	11.3
NORTH CAROLINA	16.5%	18.9%	30.7%	34.5%	31.5%	30.2%	-1.3	-4.3	-0.5	11.3	13.7
NORTH DAKOTA	22.6%	40.4%	48.8%	48.1%	53.6%	53.5%	-0.1	5.5	4.7	13.2	31.0
OHIO	32.8%	40.9%	62.3%	58.7%	56.1%	57.4%	1.2	-1.4	-4.9	16.5	24.5
OKLAHOMA	19.8%	21.3%	39.7%	49.6%	54.0%	54.2%	0.2	4.5	14.5	32.9	34.4
OREGON	24.8%	35.9%	61.2%	60.3%	55.0%	53.4%	-1.5	-6.9	-7.8	17.6	28.6
PENNSYLVANIA	32.0%	48.7%	66.3%	70.7%	64.6%	64.7%	0.0	-6.0	-1.6	16.0	32.6
RHODE ISLAND	23.4%	44.0%	59.6%	60.1%	60.1%	60.8%	0.8	0.7	1.3	16.8	37.5
SOUTH CAROLINA	19.4%	38.1%	66.5%	65.2%	60.4%	62.5%	2.1	-2.7	-4.0	24.4	43.1
SOUTH DAKOTA	27.4%	46.0%	61.2%	58.2%	55.6%	55.8%	0.3	-2.4	-5.4	9.8	28.4
TENNESSEE	22.5%	33.6%	47.3%	43.8%	36.3%	37.6%	1.3	-6.2	-9.7	4.0	15.0
TEXAS	18.6%	34.0%	37.6%	49.2%	48.6%	48.0%	-0.5	-1.1	10.5	14.1	29.5
UTAH	19.9%	26.6%	48.0%	45.5%	41.1%	42.4%	1.3	-3.1	-5.6	15.8	22.5
VERMONT	62.3%	76.8%	85.5%	88.5%	69.7%	73.4%	3.7	-15.1	-12.1	-3.4	11.1
VIRGINIA	24.1%	32.3%	60.9%	58.1%	55.3%	52.2%	-3.1	-5.9	-8.7	19.9	28.1
WASHINGTON	20.3%	23.6%	47.8%	43.0%	34.7%	38.6%	4.0	-4.4	-9.2	15.1	18.3
WEST VIRGINIA	19.0%	39.2%	55.0%	64.3%	57.6%	56.2%	-1.4	-8.1	1.3	17.0	37.2
WISCONSIN	26.3%	25.8%	43.6%	46.8%	44.3%	44.0%	-0.3	-2.8	0.4	18.1	17.7
WYOMING	14.0%	21.6%	14.4%	14.8%	11.1%	17.5%	6.4	2.7	3.1	-4.2	3.5
U.S.	**20.9%**	**28.9%**	**46.4%**	**47.2%**	**43.1%**	**41.7%**	**-1.4**	**-5.5**	**-4.7**	**12.7**	**20.7**
D.C.	N/A	N/A	24.8%	28.5%	12.3%	11.7%	-0.6	-16.8	-13.1	N/A	N/A

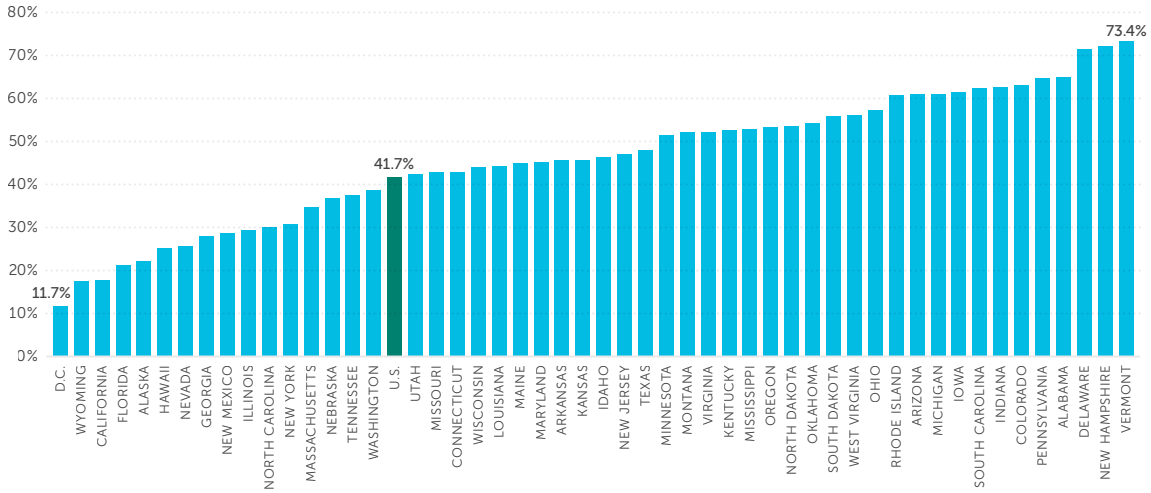
NOTES:

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. Total education revenue for fiscal year 2017 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.

SOURCE: State Higher Education Executive Officers Association

FIGURE 4.3

NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE BY STATE, FY 2022



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 2022 total education revenue includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.

SOURCE: State Higher Education Executive Officers Association

2. SECTOR COMPARISONS

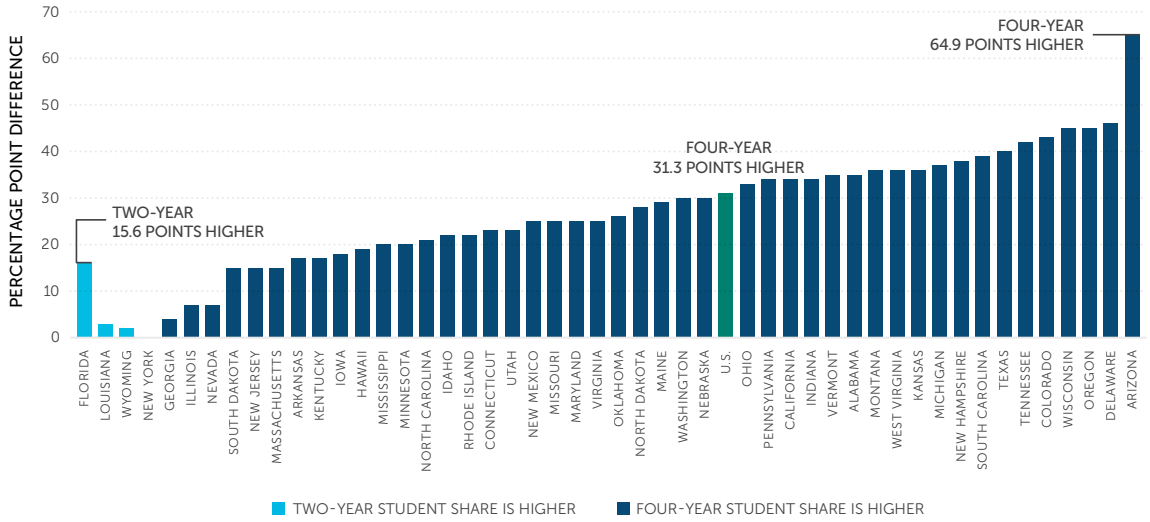
The student share is perhaps the most dramatically different SHEF metric when comparing two- and four-year public institutions. At two-year institutions, the fiscal year 2022 student share was less than a quarter (20.3%); it was over half (51.6%) at four-year institutions (*Table 4.3A*).

- The student share at two-year institutions is generally between 15% and 50%. Only California (1.1%) and Tennessee (6.5%) have a student share of less than 10%. New Mexico (12.9%) and Hawaii (14.9%) each reported student shares less than 15%. In 2022, no states had a two-year student share greater than 50%. South Dakota (45.6%), Iowa (48.7%), and Louisiana (49.2%) were the only states that had a two-year student share greater than 45%.
- At four-year institutions, student share ranged from 11.8% in Washington, D.C., and 15.9% in Florida to 80.0% in New Hampshire. In 32 states, the four-year student share is greater than 50%. In five states, the four-year student share is greater than 75%: Colorado (75.3%), Delaware (77.7%), Vermont (79.4%), Arizona (79.9%), and New Hampshire (80.0%).

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 31.3 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. This means that in those three states, students at two-year institutions are responsible for a greater portion of public institutional revenue than students attending four-year institutions. Arizona has the greatest difference in student share across institution types, where the four-year student share of 79.9% is 64.9 percentage points higher than the two-year student share of 15.0%.

FIGURE 4.3A

DIFFERENCE IN TWO-YEAR AND FOUR-YEAR NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE BY STATE, FY 2022



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 2022 total education revenue includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.
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

STUDENT SHARE 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 1.1% 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 20.3% to 27.1%.

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 3.4 percentage points since 2001. The decline in California's student share is due to a decline in gross tuition revenue (in constant 2022 dollars) and recent increases in state-funded financial aid for community college students. These financial aid awards were directed to resident students, resulting in a negative net in-state tuition and fee revenue (-$58,035,384) for California's two-year sector in fiscal year 2022.

TABLE 4.3A

NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE BY SECTOR AND STATE, FY 2019-2022

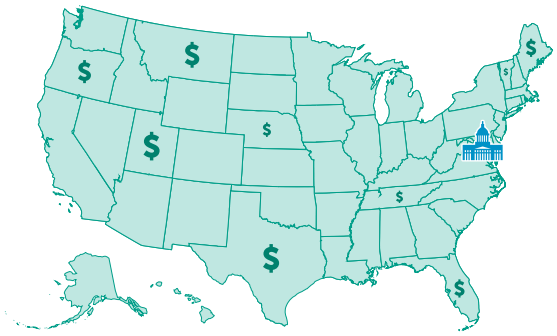
	TWO-YEAR STUDENT SHARE						FOUR-YEAR STUDENT SHARE					
	2019	2021	2022	INDEX TO U.S.	CHANGE SINCE 2021	CHANGE SINCE 2019	2019	2021	2022	INDEX TO U.S.	CHANGE SINCE 2021	CHANGE SINCE 2019
ALABAMA	44.9%	40.2%	36.9%	1.82	-3.3	-8.0	75.0%	74.6%	72.0%	1.39	-2.6	-3.0
ALASKA	N/A	N/A	N/A	N/A	N/A	N/A	23.2%	22.7%	22.2%	0.43	-0.5	-1.0
ARIZONA	17.8%	17.9%	15.0%	0.74	-2.9	-2.8	81.5%	79.0%	79.9%	1.55	1.0	-1.6
ARKANSAS	37.5%	35.9%	33.7%	1.66	-2.2	-3.8	53.7%	54.6%	50.6%	0.98	-4.0	-3.1
CALIFORNIA	4.0%	2.5%	1.1%	0.05	-1.4	-2.9	42.2%	37.5%	34.9%	0.68	-2.7	-7.3
COLORADO	41.7%	37.6%	32.2%	1.59	-5.3	-9.4	77.1%	73.9%	75.3%	1.46	1.4	-1.8
CONNECTICUT	38.7%	33.9%	27.8%	1.37	-6.2	-11.0	58.4%	52.2%	50.3%	0.97	-1.9	-8.1
DELAWARE	39.0%	33.5%	31.7%	1.56	-1.8	-7.3	81.7%	77.7%	77.7%	1.51	0.0	-4.0
FLORIDA	36.5%	33.6%	31.6%	1.56	-2.0	-4.9	18.3%	15.3%	15.9%	0.31	0.6	-2.4
GEORGIA	30.9%	31.4%	26.0%	1.28	-5.4	-4.9	36.8%	36.2%	29.9%	0.58	-6.3	-6.9
HAWAII	19.2%	16.8%	14.8%	0.73	-1.9	-4.4	32.2%	31.5%	33.9%	0.66	2.4	1.7
IDAHO	35.5%	33.9%	33.2%	1.64	-0.7	-2.3	49.0%	53.4%	55.0%	1.07	1.7	6.0
ILLINOIS	30.4%	27.3%	26.1%	1.29	-1.2	-4.3	36.4%	32.4%	33.1%	0.64	0.6	-3.3
INDIANA	38.3%	36.8%	34.1%	1.68	-2.8	-4.2	65.8%	68.4%	68.4%	1.33	0.1	2.7
IOWA	54.9%	49.6%	48.7%	2.40	-0.9	-6.2	68.1%	66.8%	66.9%	1.30	0.1	-1.2
KANSAS	25.3%	24.0%	22.2%	1.09	-1.8	-3.2	63.0%	57.6%	58.6%	1.14	1.0	-4.4
KENTUCKY	43.6%	41.0%	38.9%	1.92	-2.1	-4.7	60.4%	58.1%	56.3%	1.09	-1.9	-4.2
LOUISIANA	52.1%	52.1%	49.2%	2.43	-2.9	-2.9	49.0%	49.5%	46.1%	0.89	-3.4	-2.9
MAINE	28.4%	24.7%	21.7%	1.07	-3.0	-6.7	53.3%	51.7%	50.8%	0.98	-0.9	-2.5
MARYLAND	33.5%	30.4%	27.4%	1.35	-3.1	-6.1	55.2%	52.0%	52.3%	1.01	0.3	-2.9
MASSACHUSETTS	32.2%	27.6%	23.3%	1.15	-4.4	-8.9	43.9%	40.0%	38.2%	0.74	-1.7	-5.7
MICHIGAN	39.4%	34.9%	32.1%	1.58	-2.7	-7.3	74.4%	73.6%	69.4%	1.35	-4.2	-5.0
MINNESOTA	43.4%	33.2%	38.8%	1.91	5.6	-4.6	61.1%	57.5%	59.2%	1.15	1.7	-1.9
MISSISSIPPI	42.8%	36.1%	40.5%	2.00	4.4	-2.2	61.5%	58.1%	60.1%	1.16	2.0	-1.5
MISSOURI	30.4%	26.1%	24.6%	1.21	-1.5	-5.7	55.5%	48.4%	49.4%	0.96	1.0	-6.1
MONTANA	24.0%	19.0%	20.2%	1.00	1.2	-3.8	58.4%	51.3%	56.1%	1.09	4.7	-2.4
NEBRASKA	20.3%	17.1%	15.9%	0.78	-1.2	-4.4	49.5%	48.3%	45.7%	0.89	-2.6	-3.8
NEVADA	22.7%	26.4%	21.3%	1.05	-5.1	-1.4	25.8%	30.1%	28.5%	0.55	-1.6	2.7
NEW HAMPSHIRE	52.8%	42.0%	42.1%	2.07	0.1	-10.7	84.0%	75.5%	80.0%	1.55	4.6	-3.9
NEW JERSEY	41.2%	42.7%	37.4%	1.84	-5.3	-3.8	56.5%	57.5%	52.3%	1.01	-5.2	-4.2
NEW MEXICO	15.8%	14.9%	12.9%	0.64	-2.0	-2.9	28.0%	36.4%	37.5%	0.73	1.2	9.5
NEW YORK	32.0%	33.1%	30.9%	1.52	-2.2	-1.1	33.7%	32.3%	31.2%	0.60	-1.1	-2.5
NORTH CAROLINA	18.8%	16.8%	15.7%	0.78	-1.1	-3.0	39.5%	38.4%	36.9%	0.72	-1.5	-2.6
NORTH DAKOTA	34.2%	32.9%	31.5%	1.55	-1.4	-2.7	58.2%	60.2%	59.7%	1.16	-0.5	1.5
OHIO	33.5%	30.7%	31.2%	1.54	0.6	-2.3	65.4%	62.2%	64.2%	1.24	2.0	-1.2
OKLAHOMA	40.6%	37.3%	35.9%	1.77	-1.4	-4.7	59.3%	61.3%	61.5%	1.19	0.2	2.1
OREGON	30.5%	24.5%	22.5%	1.11	-2.1	-8.0	71.7%	69.0%	67.8%	1.31	-1.2	-4.0
PENNSYLVANIA	45.3%	39.3%	37.3%	1.84	-2.0	-8.0	73.7%	72.4%	70.9%	1.37	-1.5	-2.8
RHODE ISLAND	47.6%	44.3%	43.4%	2.14	-0.9	-4.2	64.3%	65.3%	65.4%	1.27	0.1	1.1
SOUTH CAROLINA	34.3%	31.5%	32.3%	1.59	0.8	-2.0	77.5%	68.5%	71.5%	1.39	3.1	-6.0
SOUTH DAKOTA	40.6%	39.6%	45.6%	2.25	6.0	5.1	64.2%	60.5%	60.5%	1.17	0.0	-3.7
TENNESSEE	17.3%	13.6%	6.5%	0.32	-7.1	-10.9	51.3%	46.4%	48.6%	0.94	2.2	-2.7
TEXAS	24.8%	22.5%	21.8%	1.07	-0.7	-2.9	62.3%	61.4%	61.6%	1.19	0.2	-0.7
UTAH	24.2%	23.0%	24.0%	1.18	1.0	-0.2	48.1%	45.1%	46.8%	0.91	1.7	-1.2
VERMONT	69.4%	52.3%	44.8%	2.20	-7.6	-24.6	89.4%	75.4%	79.4%	1.54	4.1	-10.0
VIRGINIA	45.1%	41.6%	34.1%	1.68	-7.6	-11.0	64.6%	60.7%	59.4%	1.15	-1.3	-5.2
WASHINGTON	27.1%	18.3%	20.1%	0.99	1.9	-7.0	51.4%	47.2%	49.7%	0.96	2.6	-1.7
WEST VIRGINIA	37.3%	30.3%	28.2%	1.39	-2.1	-9.2	68.2%	63.1%	64.3%	1.25	1.2	-3.9
WISCONSIN	19.8%	15.8%	15.1%	0.74	-0.7	-4.7	62.1%	60.0%	59.6%	1.16	-0.4	-2.5
WYOMING	13.6%	13.3%	18.5%	0.91	5.1	4.9	20.2%	9.9%	16.9%	0.33	6.9	-3.4
U.S.	**25.4%**	**22.2%**	**20.3%**	**1.00**	**-1.9**	**-5.1**	**54.8%**	**52.7%**	**51.6%**	**1.00**	**-1.1**	**-3.2**
D.C.	N/A	N/A	N/A	N/A	N/A	N/A	24.6%	14.1%	11.8%	0.23	-2.2	-12.7

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. The year 2019 is included in this table because it is the starting point of the sector-level SHEF dataset.
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. Total education revenue for fiscal year 2019 includes estimated two-year net tuition and fee revenue for Texas. Fiscal year 2021 includes estimated tuition and fee revenue for Pennsylvania. Fiscal year 2022 includes estimated tuition and fee revenue for Arkansas and Pennsylvania; two-year net tuition and fee revenue for Massachusetts and Texas; and local appropriations for Illinois and Texas.

SOURCE: State Higher Education Executive Officers Association

IMPLICATIONS



Fiscal year 2022 defied long-standing trends in higher education finance in the second year following an economic downturn. Instead of steep cuts in state funding and sharp growth in student enrollment and tuition revenue, as expected in the years following an economic recession, inflation-adjusted state and local education appropriations per FTE increased, and enrollment and tuition revenue per student decreased. This year marked the 10th straight year that state and local education appropriations increased, and the first year in which education appropriations per student exceeded 2008 (pre-Great Recession) levels—with and without federal stimulus funds. Although states allocated less federal stimulus funding directly to higher education than in 2021, the increase in education appropriations can still partially be attributed to continued federal stimulus and relief funding coupled with the enrollment decline. Federal stimulus and relief funds have been helpful over the past three years, supporting total state revenues, reducing budget strain, and providing more freedom for states to show commitment to higher education. However, these one-time funds are not a replacement for long-term state investments, as stimulus funds will run out in the coming years.

The COVID-19 pandemic altered the usual counter-cyclical enrollment trend where enrollment increases during and in the years immediately following economic recessions. Fiscal year 2022 marked the second largest single-year decline in public higher education enrollment on record (last year was the largest). Additionally, for three of the last four years, net tuition and fee revenue did not increase enough to keep up with inflation. The decline in net tuition revenue from 2021 to 2022 could be due to low growth in tuition rates, an increase in 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. However, state-specific context is incredibly important when discussing higher education finance trends. States vary in their relative allocations to general operating, financial aid, and research. They also vary in their reliance on local support to fund community colleges, federal stimulus funding during the COVID-19 pandemic, and 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. The student share decreased from 2021 to 2022, and for the first time since 2016, the student share was below 50% in more than half of all states and Washington, D.C., even after excluding federal stimulus funding. As states are faced with fewer federal stimulus dollars amidst increasing concerns about student affordability and student loan debt, states must make conscious efforts to continue decreasing the portion of public higher education funded by students and families.

The trends detailed in the SHEF report reflect national and state averages, but there are almost always outliers in every trend. Even within states, there can be wide variation in the enrollment and revenue patterns at each institution. Since the start of the COVID-19 pandemic, largely due to declines in revenue from student tuition, 18 states and Washington, D.C., experienced a decrease in total education revenues; and all states face the inevitable end to COVID-19 federal stimulus funding in the near future. As states explore new or different ways to address college affordability, educational quality, and inequality in educational attainment, long-term, sustained investments are needed. With the end of federal stimulus funding near, states have hard decisions to make, and choosing to support higher education is crucial for the continued success of public institutions.

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