GENERAL

- **Adjusted data:** SHEF data are at times adjusted by several different metrics. Constant dollars refer to an inflation adjustment intended to make financial metrics more comparable over time. State-level data are generally adjusted by two comparison metrics (COLI and EMI); sector-level data are adjusted by COLI alone. To adjust SHEF data, simply divide dollars by each adjustment index or by the product of multiple adjustments. For example, the adjusted figure for state-level education appropriations is: \( \frac{Education\ Appropriations}{Net\ FTE} \times \frac{1}{HECA \times COLI \times EMI} \).

For more information about each adjustment, see the Data Adjustments section.

- **Fiscal year (FY):** In most states, the fiscal year runs from July 1 to June 30. For example, fiscal year 2022 refers to the period from July 1, 2021, to June 30, 2022. The corresponding academic year began in the fall of 2021. A few states have different fiscal years:
  - New York, April 1 to March 31
  - Texas, September 1 to August 31
  - Alabama and Michigan, October 1 to September 30

Nineteen states have a biennial budget, which means their appropriations are set every other year. The remaining 31 states set their budgets annually. SHEF tracks this information for every agency that provides data.

- **Determining sector:** SHEF follows the definitions of the Carnegie Basic Classification, regardless of the degree program in which individual students are enrolled. In many states, the classification of colleges within the two sectors is less clear than it has been in the past as some community colleges have begun to offer and award bachelor’s degrees. All data are reported by institution, regardless of the degree program in which individual students are enrolled.

For example, if a state has an Associate’s College (a two-year institution) that also offers four-year degrees, data providers classify all appropriations, tuition revenue, and FTE enrollment for that institution under the two-year sector. Institutions only offering graduate degrees are included in the four-year sector. Institutions classified as Baccalaureate/Associate’s Colleges, Technical Colleges, and degree-granting institutions that are considered “less-than-two-year” and are not assigned a Carnegie Classification are included in the two-year sector.

- **Determining residency:** Residency is determined according to state and/or institutional residency requirements for in-state tuition, regardless of citizenship. Nonresident enrollment is classified as out-of-state, regardless of the tuition rate the student pays. For example, out-of-state enrollment includes nonresident graduate students who receive a tuition waiver and any nonresident students participating in state exchange programs or reciprocity agreements in which tuition is partially or fully discounted to the in-state tuition rate. DACA and/or
undocumented students are classified based on state or institutional policy; if they receive in-state tuition rates, they are included as in-state residents.

- **Inclusion of federal stimulus funding**: Federal stimulus funding refers to federal funds allocated to states for higher education to stabilize state and local sources of funding for higher education after the Great Recession in 2009 through 2012 and provide additional resources during the COVID-19 pandemic in fiscal years 2020, 2021, and 2022. Federal stimulus in the SHEF report includes any state allocated CRF, ESF, GEERF, GSF, or State and Local Fiscal Recovery Funds, and excludes funds used for capital projects and funds provided directly to institutions (such as HEERF). Federal stimulus funds are 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.

- **Total education revenue (calculated)**: The sum of education appropriations and net tuition at public institutions, excluding net tuition revenue used or capital debt service. State-level total education revenue includes total federal stimulus funding. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.

Calculations:

- \[ \text{Total Education Revenue} = \text{Education Appropriations} + \text{Net Tuition and Fee Revenue} - \text{Tuition Used for Debt Service} \]
- \[ \text{Two-Year Total Education Revenue} = \text{Two-Year Education Appropriations} + \text{Two-Year Net Tuition and Fee Revenue} - \text{Two-Year Tuition Used for Debt Service} \]
- \[ \text{Four-Year Total Education Revenue} = \text{Four-Year Education Appropriations} + \text{Four-Year Net Tuition and Fee Revenue} - \text{Four-Year Tuition Used for Debt Service} \]

- **Sector-level total education revenue (calculated)**: The sum of education appropriations and net tuition at public two- and four-year institutions, reported separately. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.

Calculations:

- \[ \text{Two-Year Total Education Revenue} = \text{Two-Year Education Appropriations} + \text{Two-Year Net Tuition and Fee Revenue} - \text{Two-Year Tuition Used for Debt Service} \]
- \[ \text{Four-Year Total Education Revenue} = \text{Four-Year Education Appropriations} + \text{Four-Year Net Tuition and Fee Revenue} - \text{Four-Year Tuition Used for Debt Service} \]
FEDERAL STIMULUS FUNDING

This section provides information on federal stimulus and/or relief funding allocated to higher education during the Great Recession and COVID-19 pandemic. Allocations are reported within the specific legislation and fund from which they were provided, as well as the broad use category for which they were spent. Funds in this section only includes the portion of federal funds allocated to states (not institutions). *Data are published as an additional dataset.*

SOURCES OF FEDERAL STIMULUS FUNDING

- **Coronavirus Relief Fund (CRF):** Coronavirus Relief Fund (CRF) revenue allocated to states and used for higher education from the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act.

- **Coronavirus State and Local Fiscal Recovery Fund:** Coronavirus State and Local Fiscal Recovery Fund revenue allocated to states and used for higher education from the 2021 American Rescue Plan (ARP).

- **Governor’s Emergency Education Relief Fund (GEERF):** Governor’s Emergency Education Relief Fund (GEERF) revenue allocated to states and used for higher education from the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act.

- **Governor’s Emergency Education Relief Fund (GEERF II):** Governor’s Emergency Education Relief Fund (GEERF) revenue allocated to states and used for higher education from the 2020 Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act.

- **Education Stabilization Fund (ESF):** Education Stabilization Fund revenue provided through the Federal American Reinvestment and Recovery Act (ARRA) during the Great Recession to stabilize state and local sources of revenue for higher education.

- **Government Services Fund (GSF):** Government Services Fund revenue used for public higher education operations excluding modernization, renovation, or repair provided through the Federal American Reinvestment and Recovery Act (ARRA) during the Great Recession to stabilize state and local sources of revenue for higher education.

- **Public federal stimulus funding (calculated):** Federal stimulus funding allocated to states for public higher education to offset reductions in state appropriations and stabilize state and local sources of funding for higher education. Excludes any funds used for capital projects and those allocated directly by the federal government to institutions or students.

Calculation: \[ \text{Public Federal Stimulus Funding} = \text{Education Stabilization Fund} + \text{Government Services Fund} + \text{Governor’s Emergency Education Relief Fund I} + \text{Coronavirus Relief Fund} + \text{Governor’s Emergency Education Relief Fund II} + \text{Coronavirus State and Local Fiscal Recovery Fund} - \text{Independent Operating Stimulus} - \text{Public Capital Projects Stimulus} \]
• **Total federal stimulus funding (calculated):** Federal funds provided to state governments to stabilize state and local sources of revenue for higher education. Federal stimulus 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 funds used for public capital projects and aid provided directly to institutions (such as HEERF). Federal stimulus funding is included in high-level metrics like state and local support and education appropriations but is excluded from more detailed breakdowns such as general operating appropriations and state financial aid.

Calculation: Total Federal Stimulus Funding = Education Stabilization Fund + Government Services Fund + Governor’s Emergency Education Relief Fund I + Coronavirus Relief Fund + Governor’s Emergency Education Relief Fund II + Coronavirus State and Local Fiscal Recovery Fund – Public Capital Projects Stimulus

**USES OF FEDERAL STIMULUS FUNDING**

• **Four-year public operating stimulus:** The portion of federal stimulus funding allocated to states and used for operating at public four-year institutions (per Carnegie definitions), net of any agency funding, state financial aid, or research appropriations, agricultural extension appropriations, hospital appropriations, and medical school appropriations (RAM). Data not available prior to 2020.

• **Independent (private) institution operating stimulus:** The portion of federal stimulus funding allocated to states and used for operating at private institutions. Data not available prior to 2020.

• **Other uses of federal stimulus funding:** Federal stimulus funding not included in any of the categories, including but not limited to funds used for state agencies, non-credit and continuing education, RAM, or other purposes. Data not available prior to 2020.

• **[NEW] Public capital projects stimulus:** The portion of federal stimulus funding allocated to state agencies and used for capital projects at public institutions in 2020, 2021, and 2022. These funds are used for new construction, renovations and improvements, equipment, and other capital projects. Stimulus funds used for capital projects are excluded from total federal stimulus. Data not available prior to 2020.

• **Student financial aid stimulus:** The portion of federal stimulus funding allocated to states and used for student financial aid at public and private institutions. Data not available prior to 2020.

• **Two-year public operating stimulus:** The portion of federal stimulus funding allocated to states and used for operating at public Carnegie Associate’s Colleges, Mixed Baccalaureate/Associate’s Colleges, Special Focus Two-Year Institutions, Technical Colleges, and those that are considered “less-than-two-year” but are not in the Carnegie Classification, net of any agency funding or state financial aid. Data not available prior to 2020.
STATE FUNDING

This section includes information about how much money the state provides to support higher education (excluding capital and debt service). All state funding for higher education (even those sums that are appropriated to other state agencies) is included here.

- **Education appropriations (calculated)**: State and local support available for public higher education operating expenses and student financial aid excluding research, hospitals, and medical education (RAM). State-level education appropriations include total federal stimulus funding. Sector-level education appropriations include any portion of federal stimulus funding allocated specifically to each sector. State-level education appropriations include agency funding; sector-level education appropriations do not.

  Calculations:

  - **Education Appropriations = State Support for Public Institutions + Local Appropriations - Research Appropriations - Agricultural Extension Appropriations - Hospital Appropriations - Medical School Appropriations - Medical Public Aid**
  - **Two-Year Education Appropriations = Two-Year State General Operating + Two-Year Public Financial Aid + Two-Year Local Appropriations + Two-Year Public Operating Stimulus**
  - **Four-Year Education Appropriations = Four-Year State General Operating + Four-Year Public Financial Aid + Four-Year Local Appropriations + Four-Year Public Operating Stimulus**

- **Education appropriations net of federal stimulus (calculated)**: State and local support available for public higher education operating expenses excluding research, hospitals, and medical education net of federal stimulus funding.

  Calculation: **Education Appropriations Net of Federal Stimulus = Education Appropriations - Public Federal Stimulus**

- **Endowment income**: Interest or earnings received from state-funded endowments set aside and pledged to public sector institutions.

- **General public operations (calculated)**: 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.

  Calculation: **Education Appropriations - Public Federal Stimulus - State Public Financial Aid**

- **Non-appropriated support**: Funding under state auspices for non-appropriated state support. These may include, but are not limited to, monies from receipt of lease income, cattle-grazing rights fees, and oil/mineral extraction fees on land set aside by the state for higher education.

- **Non-tax support (including lottery)**: Funding under state auspices for appropriated non-tax state support set aside by the state for higher education. These may include, but are not limited to, monies from lotteries (including lottery scholarships), tobacco settlements, casinos, or other gaming sources.

- **Other support**: Other support includes any other state funds not included in the other state support categories.
• **Previous, return, and multiyear appropriations:**
  • Previous appropriations are portions of multiyear appropriations from previous years.
  • Return appropriations are appropriations returned to the state.
  • Multiyear appropriations are portions of multiyear appropriations in the current year which are to be spread over other years.

• **Sector-level education appropriations (calculated):** Sector-level 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 and do not include agency funding. *Data not available prior to 2019.*

  Calculations:
  • Two-Year Education Appropriations = Two-Year State General Operating + Two-Year Public Financial Aid + Two-Year Local Appropriations + Two-Year Public Operating Stimulus
  • Four-Year Education Appropriations = Four-Year State General Operating + Four-Year Public Financial Aid + Four-Year Local Appropriations + Four-Year Public Operating Stimulus

• **Sector-level state and local support (calculated):** Sector-level state and local support is a broad measure of the money state and local governments provide to public higher education institutions. Sector-level state and local support is the sum of state and local operating appropriations and state financial aid at public two- and four-year institutions. Four-year state and local support also includes state research, agricultural, and medical appropriations and state financial aid for students attending medical institutions. Sector-level state and local support includes any portion of federal stimulus funding allocated specifically to each sector and does not include agency funding. *Data not available prior to 2019.*

  Calculations:
  • Two-Year State and Local Support = Two-Year State General Operating + Two-Year Public Financial Aid + Two-Year Local Appropriations + Two-Year Public Operating Stimulus
  • Four-Year State and Local Support = Four-Year State General Operating + Four-Year Public Financial Aid + Four-Year Local Appropriations + Research Appropriations + Agricultural Extension Appropriations + Hospital Appropriations + Medical School Appropriations + Medical Aid + Four-Year Public Operating Stimulus

• **Sector-level state public operating:** State operating appropriations are a measure of state support directly allocated to public two- and four-year institutions. State operating excludes federal stimulus, local appropriations, agency funding, research, hospitals, and medical education, and student financial aid. Federal stimulus funding is not included. *Data not available prior to 2019.*

• **Sector-level state support (calculated):** State support available for public higher education operating expenses and student financial aid allocated to public two-year or four-year institutions (per Carnegie definitions). Federal stimulus funds allocated by states for higher
education general operating appropriations at two- and four-year institutions are included. Sector-level state support excludes agency funding and state support that could not be categorized by sector. *Data not available prior to 2019.*

Calculations:

- **Two-Year State Support** = Two-Year State General Operating + Two-Year Public Financial Aid + Two-Year Public Operating Stimulus

- **Four-Year State Support** = Four-Year State General Operating + Four-Year Public Financial Aid + Four-Year Public Operating Stimulus + Research Appropriations + Agricultural Extension Appropriations + Hospital Appropriations + Medical School Appropriations + Medical Public Aid

- **State and local support (calculated)**: State and local support is a broad measure of how much money the state provides to support all higher education. This measure does not include any sums for capital outlays and debt service or sums derived from federal sources (unless otherwise noted), student tuition and fees, or auxiliary enterprises.

  State and local support consists of state tax appropriations and local tax support plus additional non-tax funds (e.g., lottery revenue) that support or benefit higher education, and funds appropriated to other state entities for specific higher education expenditures or benefits (e.g., employee fringe benefits disbursed by the state treasurer). State and local support for 2009-2012 and 2020-2022 also includes federal stimulus funding provided to stabilize these sources of revenue for higher education.


- **State support for public institutions (calculated)**: State support available for public higher education operating expenses, agency funding, student financial aid, research, hospitals, and medical education. State-level support for public institutions includes total federal stimulus funding and agency funding. Sector-level support for public institutions includes any portion of federal stimulus funding allocated specifically to each sector and does not include agency funding.

  Calculations:


  - **Two-Year State Support for Public Institutions** = Two-Year State General Operating + Two-Year Public Financial Aid + Two-Year Public Operating Stimulus

  - **Four-Year State Support for Public Institutions** = Four-Year State General Operating + Four-Year Public Financial Aid + Four-Year Public Operating Stimulus + Research Appropriations + Agricultural Extension Appropriations + Hospital Appropriations + Medical School Appropriations + Medical Public Aid
• **Tax appropriations:** Appropriations from state government taxes for public and private higher education institution and agency annual operating expenses, excluding capital outlay (for new construction or debt retirement) and revenue from auxiliary enterprises.

• **Total state support (calculated):** Total state support for all higher education is calculated by adding the primary sources of state funding and subtracting from that sum appropriations expected to be returned to the state and appropriations in the current year intended for use in other years (in other words, any appropriated funds that are not usable in the fiscal year for which they are appropriated).

State support includes:

- Sums appropriated for state aid to local public community colleges and operation of state-supported community colleges, and for vocational-technical two-year colleges or institutions that are predominantly for high school graduates and adult students;
- Sums appropriated to statewide coordinating boards or governing boards, either for board expenses or for allocation by the board to other institutions or both;
- Sums appropriated for state scholarships or other state-level student financial aid programs;
- Sums destined for higher education but designated to some other state agency (as in the case of funds intended for faculty fringe benefits that are appropriated to the state treasurer);
- Appropriations directed to private institutions of higher education at all levels; and
- Sums for students enrolled in dual credit or dual enrollment.

State support does not include sums for capital outlays and debt service or sums derived from federal sources, student fees, and auxiliary enterprises. In the Grapevine and SHEF reports, Total State Support also includes the sum of federal stimulus funding.

Calculation: \( \text{Total State Support} = \text{Tax Appropriations} + \text{Non-Tax Support} + \text{Non-Appropriated Support} + \text{Endowment} + \text{Previous Appropriations} + \text{Other Support} - \text{Return Appropriations} - \text{Multiyear Appropriations} + \text{Total Federal Stimulus} \)

**SPECIFIC USES OF STATE SUPPORT**

This section provides details on the allocation of total state support across different areas. Figures included here do not include any federal stimulus or relief funds.

• **Agency funding:** Allocation of operating funds to state-funded, state-level coordinating and governing bodies. Does not include any pass-through funding to campuses or other entities. Includes all benefit appropriations for agency staff and funding allocated to cover the costs of operating and managing all agency programs and initiatives. *Data not available prior to 2019.*
• **Dual enrollment appropriations:** Any state or local funding to postsecondary institutions that supports dual enrollment programs. Dual enrollment refers to students who enroll in college courses offered by an institution of higher education while enrolled in high school, as part of a state, local, or postsecondary system program. May include dual credit, concurrent enrollment, and joint enrollment programs. *Data not available for all states or years.*

• **Four-year public operating:** Total state support, net of any funds included in agency funding, state financial aid, or RAM, allocated to public four-year institutions (per Carnegie definitions). *Data not available prior to 2019.*

• **Independent (private) operating:** Funds to independent institutions for operating expenses.

• **Non-credit:** State funding for students in non-credit continuing or adult education courses and non-credit extension courses which are not part of a regular program leading to a degree or certificate.

• **Two-year public operating:** Total state support, net of any funds included in agency funding or state financial aid, allocated to public Carnegie Associate's Colleges, Mixed Baccalaureate/Associate’s Colleges, Special Focus Two-Year Institutions, Technical Colleges, and those that are considered "less-than-two-year" but are not in the Carnegie Classification. *Data not available prior to 2019.*

**FINANCIAL AID**

State financial aid refers to allocations to state scholarships or other state financial aid for students attending all institution types (public and independent). Includes all aid that is not expected to be repaid, such as conditional and non-conditional grant and scholarship programs, work-study, and state-funded tuition waivers. Excludes any allocation to state loan programs. In several states, financial aid may include unawarded funds that were reverted back to the state. Federal stimulus funds used for financial aid are not included.

• **Four-year public financial aid:** Allocations to state scholarships or other state financial aid for students attending four-year public institutions (per Carnegie definitions). *Data not available prior to 2019.*

• **Independent aid:** Allocations to state scholarships or other state financial aid for students attending in-state independent (private) institutions. Includes all aid that is not expected to be repaid, such as conditional and non-conditional grant and scholarship programs, work-study, and state-funded tuition waivers. Excludes any allocation to state loan programs.

• **Medical public aid:** Allocations to state scholarships or other state financial aid for students attending the four major types of public medical schools (medicine, dentistry, veterinary medicine, and osteopathic medicine). Medical aid is excluded from state public financial aid and education appropriations, but is included in total state and local support. *Data not available prior to 2019.*

• **Out-of-state aid:** Allocations to state scholarships or other state financial aid for students attending public and independent (private) out-of-state institutions. Includes all aid that is not expected to be repaid, such as conditional and non-conditional grant and scholarship programs, work-study, and state-funded tuition waivers. Excludes any allocation to state loan programs.
• **Sector-level state public financial aid:** Allocations to state scholarships or other state financial aid for students attending two- and four-year public institutions, reported separately. State public financial aid that cannot be allocated by sector is reported as “uncategorizable.”

• **State public financial aid (calculated):** 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.

  Calculation:  
  \[
  \text{State Public Financial Aid} = \text{Two-Year State Public Financial Aid} + \text{Four-Year State Public Financial Aid} + \text{Uncategorizable Public Aid}
  \]

• **State public financial aid as a percentage of education appropriations (calculated):** Allocations to state scholarships or other state financial aid for students attending public in-state institutions, as a proportion of total state and local support available for public higher education operating expenses (which excludes spending for research, agricultural, and medical education).

  Calculations:
  \[
  \text{State Public Financial Aid as a Percentage of Education Appropriations} = \frac{\text{State Public Financial Aid}}{\text{Education Appropriations}}
  \]

  \[
  \text{Two-Year State Public Financial Aid as a Percentage of Education Appropriations} = \frac{\text{Two-Year State Public Financial Aid}}{\text{Two-Year Education Appropriations}}
  \]

  \[
  \text{Four-Year State Public Financial Aid as a Percentage of Education Appropriations} = \frac{\text{Four-Year State Public Financial Aid}}{\text{Four-Year Education Appropriations}}
  \]

• **Total state financial aid:** State appropriated student aid for tuition and mandatory fees for students attending public and private institutions. Includes all aid that is not expected to be repaid. Federal stimulus funds used for financial aid are not included.

  Calculation:  
  \[
  \text{Total State Financial Aid} = \text{Two-Year Public Financial Aid} + \text{Four-Year Public Financial Aid} + \text{Medical Public Aid} + \text{Independent Aid} + \text{Out-Of-State Aid} + \text{Uncategorizable Public Financial Aid}
  \]

• **Two-year public financial aid:** Allocations to state scholarships or other state financial aid for students attending public Carnegie Associate’s Colleges, Mixed Baccalaureate/Associate’s Colleges, Special Focus Two-Year Institutions, Technical Colleges, and those that are considered “less-than-two-year” but are not in the Carnegie Classification. *Data not available prior to 2019.*

• **Uncategorizable public aid:** State public financial aid that could not be allocated by sector.

**RESEARCH/AGRICULTURAL/MEDICAL (RAM)**

Total state support for research, agriculture, medical, and hospital appropriations. For analytical purposes, RAM appropriations are assumed to exclusively support four-year institutions.

• **Agriculture and extension appropriations:** Appropriated sums for agricultural experiment stations and cooperative extension services.
- **Hospital appropriations**: Appropriated sums for teaching or affiliated hospital operations and public service patient care. Includes all medical, dental, veterinary, optometry, pharmacy, mental health, nursing, and other health science institutes, clinics, laboratories, dispensaries, etc., primarily serving the public.

- **Medical school appropriations**: Appropriated sums for the direct operation and administrative support of the four major types of medical schools (medicine, dentistry, veterinary medicine, and osteopathic medicine) and centers corresponding to medical enrollments.

- **Research appropriations**: Appropriated sums for research centers, laboratories, and institutes and appropriated sums separately budgeted by institutions for organized research. Generally, these are ongoing programs. Includes all health and science research.

- **Total RAM (calculated)**: The portion of total state and local appropriations targeted by legislative budget line-item identification or institutional designation for the direct operations of research, agriculture, public health care services, and medical schools. Does not include discretionary use by faculty of unrestricted appropriations supplemented by other revenues for short-term research primarily performed as an adjunct component of instruction (departmental research of an unsponsored nature). Does not include any tuition revenues used for research.

  Calculation: \[ RAM = \text{Research Appropriations} + \text{Agriculture and Extension Appropriations} + \text{Hospital Appropriations} + \text{Medical School Appropriations} \]

**OTHER PUBLIC FUNDING SOURCES**

This section includes information on additional sources of state support for higher education. These funds are not included in any calculated measures of state support.

- **Appropriations derived from federal sources**: State appropriated funds derived from federal sources, excluding federal stimulus funds. Appropriations derived from federal sources are not included in any calculated variables.

- **Independent capital appropriations**: Sums to independent (private) institutions for capital outlay (new construction and debt service/retirement). Independent capital appropriations are not included in any calculated variables.

- **Tuition offsets**: Tuition charges collected by the institutions and remitted to the state as an offset to the state appropriations. Tuition offsets are not included in any calculated variables.

**PUBLIC CAPITAL APPROPRIATIONS**

The information on capital appropriations in this section are reported separately from state support for operations. Capital projects often include new construction, significant renovations and improvements of existing buildings, major maintenance, land purchases, acquisitions of existing structures, equipment, and information technology systems. States with biennial budgets for capital appropriations split each appropriated amount evenly across both years.

While institutional funding is often used to match state funding and often an important consideration in state funding decisions, these funds are excluded from the SHEF collection. *Data are published as an additional dataset.*
- **Capital appropriations for equipment**: The allocation of total state postsecondary capital appropriations used for capital equipment purchases at public institutions. *Data not available prior to 2020.*

- **Capital appropriations for new construction**: The allocation of total state postsecondary capital appropriations used for the construction of new buildings and structures. Please use your state’s legal definition for new construction at public institutions. *Data not available prior to 2020.*

- **Capital appropriations for renovations and improvements to existing facilities**: The allocation of total state postsecondary capital appropriations used for significant renovations or improvements to existing facilities or structures at public institutions. *Data not available prior to 2020.*

- **Cash-financed capital appropriations**: The allocation of total state postsecondary capital appropriations paid for with state cash funds at public institutions. *Data not available prior to 2020.*

- **Debt-financed capital appropriations**: The allocation of total state postsecondary capital appropriations paid for through debt financing instruments at public institutions. Includes any origination fees associated with the debt financing. *Data not available prior to 2020.*

- **Other capital projects**: Any capital appropriations that could not be attributed to capital appropriations for new construction, renovations and improvements, or equipment at public institutions. *Data not available prior to 2020.*

- **Total public capital appropriations**: Total state support allocated for higher education capital projects at public institutions. Includes any origination fees associated with debt financing. *Data not available prior to 2020.*

**LOCAL SUPPORT**

Local support refers to the sum of all tax appropriations from any government entity below the state level to public institutions for operating expenses. Excludes any grants from local nonprofit organizations such as chambers of commerce, charitable foundations, and other entities.

- **Four-year local appropriations**: Local appropriations from local government taxes to institutions for operating expenses at public four-year institutions (per Carnegie definitions). *Data not available prior to 2019.*

- **Local support (calculated)**: The sum of all tax appropriations from any government entity below the state level to public institutions for operating expenses. Excludes any grants from local nonprofit organizations such as chambers of commerce, charitable foundations, and other entities.

  Calculation: \[ \text{Local Support} = \text{Two-Year Local Appropriations} + \text{Four-Year Local Appropriations} + \text{Uncategorizable Local Appropriations} \]

- **Sector-level local appropriations**: Appropriations from local government taxes to public two- and four-year institutions for operating expenses.

- **Two-year local appropriations**: Local appropriations from local government taxes to institutions for operating expenses at public Carnegie Associate’s Colleges, Mixed
Baccalaureate/Associate’s Colleges, Special Focus Two-Year Institutions, Technical Colleges, and those that are considered “less-than-two-year” but are not in the Carnegie Classification. Data not available prior to 2019.

- **Uncategorizable local appropriations:** Local appropriations to public institutions that could not be allocated to the two-year or four-year sectors. Funds to institutions that are considered “less-than-two-year” are included in the two-year sector.

### STATE FUNDING ALLOCATION METHODS

#### PERFORMANCE-BASED FUNDING

Performance-based funding refers to the total state dollars awarded based on performance to institutions in each sector, including funds distributed through both system- and state-level PBF policies. A system-level policy refers to situations in which a system of institutions develops performance measures and allocates state funding based on institutional outcomes, whereas a state-level policy refers to when the state determines performance measures and distributes funding to institutions based on institutional outcomes. Data are published as an additional dataset.

- **Four-year performance-based funding:** Performance- or outcomes-based funding at public Carnegie Baccalaureate, Master’s, and Doctoral Colleges, and Special Focus Four-Year Institutions. Performance- or outcomes-based appropriations are any state tax dollars allocated on the basis of how well institutions accomplish goals or outcomes as defined by state or system programs. Data not available prior to 2020.

- **Total performance-based funding (calculated):** The sum of state tax dollars allocated to two- and four-year public institutions on the basis of how well institutions accomplish goals or outcomes as defined by state or system programs. Data not available prior to 2020.

  Calculation: \( \text{Total Performance-Based Funding} = \text{Two-Year Performance-Based Funding} + \text{Four-Year Performance-Based Funding} \)

- **Two-year performance-based funding:** Performance- or outcomes-based funding at public Carnegie Associate’s Colleges, Mixed Baccalaureate/Associate’s Colleges, Special Focus Two-Year Institutions, Technical Colleges, and those that are considered “less-than-two-year” but are not in the Carnegie Classification. Performance- or outcomes-based appropriations are any state tax dollars allocated on the basis of how well institutions accomplish goals or outcomes as defined by state or system programs. Data not available prior to 2020.

### TUITION AND FEE REVENUE

This section provides information about tuition revenues from students attending public institutions in each state. All data in this section are collected at both the sector (two-year, four-year) and state level. One of the intents of this section is to calculate net tuition and fee revenue, which is used in the SHEF report as a measure of how much institutional revenue is provided by students.

- **Gross tuition and fee revenue:** Gross tuition plus mandatory education and general fees from public institutions. Includes revenue from all fees required of such a large portion of all students that a student who does not pay the fee is the exception. Examples of mandatory
education and general fees include but are not limited to instructional fees, technology fees, and security fees. Excludes any student activity fees, auxiliary fees, instructional fees assessed at the program or course level, and one-time fees such as those assessed for graduation and transcripts. Gross tuition and fee revenue includes state and institutional financial aid.

- **Institutional discounts and waivers**: Institutional student aid transferred to a student’s account and tuition charges that are waived and not collected from a student. Excludes institutional dollars that would not otherwise be available (e.g., restricted funds from institutionally managed endowments or designated for tuition grants).

- **Medical tuition and fee revenue**: Tuition and mandatory education and general fees paid by public medical students. Medical public aid should be included in medical tuition and fee revenue entered here.

- **Net tuition and fee revenue (calculated)**: Gross tuition and fee revenue less state-funded student aid, institutional tuition discounts and waivers, and tuition revenue paid by medical students. This is a measure of the resources available from tuition and fees to support instruction and related operations at public higher education institutions and includes revenue from in-state and out-of-state students as well as undergraduate and graduate students. Net tuition revenue generally reflects the share of instructional support received from students and their families, although it is not the same as and does not take into account many factors that need to be considered in analyzing the “net price” students pay for higher education.

Calculations:

- \[ \text{Net Tuition and Fee Revenue} = \text{Gross Tuition and Fee Revenue} - \text{Institutional Discounts and Waivers} - \text{State Public Financial Aid} - \text{Medical Tuition and Fee Revenue} \]

- \[ \text{Two-Year Net Tuition and Fee Revenue} = \text{Two-Year Gross Tuition and Fee Revenue} - \text{Two-Year Institutional Discounts and Waivers} - \text{Two-Year State Public Financial Aid} \]

- \[ \text{Four-Year Net Tuition and Fee Revenue} = \text{Four-Year Gross Tuition and Fee Revenue} - \text{Four-Year Institutional Discounts and Waivers} - \text{Four-Year State Public Financial Aid} - \text{Medical Tuition and Fee Revenue} \]

- **Sector-level net tuition revenue (calculated)**: Net tuition and fee revenue at public two- and four-year institutions, reported separately. *Data not available prior to 2019.*

Calculations:

- \[ \text{Two-Year Net Tuition and Fee Revenue} = \text{Two-Year Gross Tuition and Fee Revenue} - \text{Two-Year Institutional Discounts and Waivers} - \text{Two-Year State Public Financial Aid} \]

- \[ \text{Four-Year Net Tuition and Fee Revenue} = \text{Four-Year Gross Tuition and Fee Revenue} - \text{Four-Year Institutional Discounts and Waivers} - \text{Four-Year State Public Financial Aid} - \text{Medical Tuition and Fee Revenue} \]

- **Tuition and fees used for debt service**: Tuition and fee revenue used for capital debt service/retirement of capital improvements. Excludes any revenue paid by students for auxiliary enterprise debt service. Tuition and fees used for debt service are not subtracted from net tuition and fee revenue.
TUITION AND FEE REVENUE BY RESIDENCY

The tuition and fee revenue by residency information in this section are state-level breakouts of net tuition and fee revenue by in-state and out-of-state residency. All data in this section are collected at both the sector (two-year, four-year) and state level. In some cases, tuition and fee revenue cannot be attributed to resident or nonresident students and is reported as uncategorizable. **Data are published as an additional dataset.**

- **In-state tuition and fee revenue:** The portion of net tuition and fee revenue at public institutions from students who are residents of the state according to state or institutional residency requirements for in-state tuition. Includes both in-district and in-state students. **Data not available prior to 2020; two-year sector data not available for most states.**

- **Out-of-state tuition and fee revenue:** The portion of net tuition revenue and fee revenue at public institutions from students who are not residents of the state according to state or institutional residency requirements for in-state tuition. Includes out-of-state and international students. **Data not available prior to 2020; two-year sector data not available for most states.**

- **Uncategorizable tuition and fee revenue:** Any funds included in net tuition and fee revenue at two- or four-year public institutions that could not be attributed to in-state or out-of-state tuition and fee revenue.

STUDENT SHARE

- **Sector-level student share (calculated):** For two- and four-year public institutions separately, the proportion of total education revenue at public institutions that comes from students and their families (measured as net tuition and fee revenue). Net tuition and fee revenue used for capital debt service is included in net tuition and fee revenue, but excluded from total education revenue in calculating this figure. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector. **Data not available prior to 2019.**

  Calculations:

  - **Two-Year Student Share = Two-Year Net Tuition Revenue / Two-Year Total Education Revenue**
  - **Four-Year Student Share = Four-Year Net Tuition Revenue / Four-Year Total Education Revenue**

- **Student share (calculated):** The student share is a measure of the proportion of total education revenue at public institutions that comes from students and their families (measured as 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 this figure. Total education revenue includes federal stimulus funding. Sector-level total education revenue includes any portion of federal stimulus funding allocated specifically to each sector.

  Calculation: **Student Share = Net Tuition Revenue / Total Education Revenue**
ANNUAL FTE ENROLLMENT

This section includes information on student enrollment at public institutions, including all dual-enrollment, undergraduate, graduate, resident, and non-resident students enrolled in coursework creditable for a degree or certificate. All data in this section are collected at both the sector (two-year, four-year) and state level.

- **Gross full-time equivalent (FTE) enrollment**: FTE enrollment calculated from coursework creditable for a degree plus coursework in a vocational or technical program which results in a certificate or some other formal recognition. The FTE calculation differs for the type and level of instruction:
  - Contact hour courses: One annual FTE is the sum of total contact hours divided by 900.
  - Undergraduate credit hour courses: One annual FTE is the sum of total credits divided by 30 (for semester-based calendar systems) or 45 (for quarter systems).
  - Graduate and first-professional credit hour courses: One annual FTE is the sum of total credits divided by 24 (for semester systems) or 36 (for quarter systems).

- **Medical full-time equivalent (FTE) enrollment**: FTE enrollment in schools of medicine, dentistry, veterinary medicine, and osteopathic medicine.

- **Net full-time equivalent (FTE) enrollment (calculated)**: A measure of enrollment equal to one student enrolled full time for one academic year, calculated from the aggregate number of enrolled credit hours (including summer session enrollments). Excludes non-credit or non-degree program and medical school enrollments, but includes dual enrollment and coursework in vocational or technical programs. The use of FTE enrollment reduces multiple types of enrollment to a single measure to compare changes in total enrollment across states and sectors and to provide a straightforward method for analyzing revenue on a per-student basis.
  
  Calculation: \( Net \ FTE = Gross \ FTE - Medical \ FTE \)

- **Sector-level net full-time equivalent (FTE) enrollment (calculated)**: Net FTE enrollment at public two- and four-year institutions, reported separately. For the two-year sector, gross FTE is equal to net FTE. *Data not available prior to 2019.*
  
  Calculations:
  - \( Two\-Year \ Net \ FTE \ Enrollment = Two\-Year \ Gross \ FTE \)
  - \( Four\-Year \ Net \ FTE \ Enrollment = Four\-Year \ Gross \ FTE - Medical \ FTE \)
**NET FTE ENROLLMENT BY RESIDENCY**

The net full-time equivalent (FTE) enrollment by residency information in this section are state-level breakouts of net FTE enrollment by in-state and out-of-state residency. All data in this section are collected at both the sector (two-year, four-year) and state level. In some cases, students cannot be identified as residents or nonresidents and are reported as uncategorizable. *Data are published as an additional dataset.*

- **In-state net FTE**: The portion of total FTE enrollment at public institutions that are residents of the state according to state or institutional residency requirements. Includes dual enrollment and both in-district and in-state students, but does not include medical FTE. *Data not available prior to 2020; two-year sector data not available for all states.*

- **Out-of-state net FTE**: The portion of total FTE enrollment at public institutions that are not residents of the state according to state or institutional residency requirements. Includes out-of-state and international students. Includes dual enrollment but does not include medical FTE. *Data not available prior to 2020; two-year sector data not available for all states.*

- **Uncategorizable net FTE**: Any FTE enrollment at public institutions that could not be attributed to in-state or out-of-state FTE.

**DUAL FTE ENROLLMENT**

This section includes information on dual- or concurrently-enrolled students at public institutions, collected at the sector (two-year, four-year) level.

- **Total dual FTE enrollment (calculated)**: Dual FTE enrollment, reported separately for two- and four-year public institutions, refers to annual full-time equivalent enrollment calculated for students who enroll in college courses offered by an institution of higher education while enrolled in high school as part of a state, local, or postsecondary system program. May include dual credit, concurrent enrollment, and joint enrollment programs. Data not available for all states or years.
  - Includes all postsecondary courses, regardless of course delivery mode, course location, course instructor, and whether secondary credit is also offered.
  - Excludes credit-by-exam models (AP, IB), articulated credit, and any other courses or programs in which postsecondary credit is not awarded immediately following completion of the course.

  Calculation: Total Dual FTE Enrollment = Two-Year Dual FTE Enrollment + Four-Year Dual FTE Enrollment + Uncategorizable Dual FTE Enrollment
DATA ADJUSTMENTS

SHEF data are at times adjusted by several different metrics. Data adjustments are indexed to the SHEF year (for inflation) and the U.S. (for state adjustments).

- **Cost of Living Index (COLI):** The cost of living varies greatly across the 50 states, from 83.1% of the U.S. average in Mississippi to 1.41 times the U.S. average in Hawaii. While a cost of living adjustment does not solve the problem of differing intrastate costs of living, it offers a way to get a rough estimate of these differences by adjusting for interstate unit cost data. Financial metrics in the SHEF report are adjusted down in states with a high cost of living and up in states with a low cost of living. This allows for more accurate comparisons on a state’s contribution to public higher education.

State-level comparisons in SHEF are adjusted by the state-level Cost of Living Index (COLI), calculated annually by the Council for Community and Economic Research (C2ER). This index is based on county-level data collected by C2ER. A state index is calculated based on the weighted average of all the counties in each state. COLI is referenced in the Census Bureau’s Statistical Abstract of the U.S., and has also been used by the U.S. Bureau of Labor Statistics and the President’s Council of Economic Advisors, among others.

The C2ER data is updated yearly, includes Alaska and Hawaii, and has publicly available methods. Although COLI is calculated for Washington, D.C., it is not included in the U.S. average.

SHEEO applies the latest COLI to all prior-year data. Regional comparisons include an adjusted version of COLI, weighted by the proportion of FTE enrollment in each state.

- **Consumer Price Index (CPI):** A measure of change over time in the prices consumers pay for a variety of goods and services in the U.S.

Developed by the Bureau of Labor Statistics, CPI is a well-known measure of inflation, but less precisely reflects changing costs in the higher education sector. CPI is presented as an alternative to HECA throughout the interactive visualizations in the SHEF report. CPI is most appropriately used when considering a consumer (student) perspective, rather than a state or institutional perspective.

- **Enrollment Mix Index (EMI):** Enrollment mix differences pose a challenge for interstate financial comparisons. Each level of higher education, from the first years of undergraduate work through doctoral studies, is progressively more expensive. A state or institution with a large proportion of enrollment in graduate programs will generally have a higher cost per FTE than a state or institution with a larger proportion of enrollment in undergraduate and two-year degree programs.

SHEEO developed an adjustment for interstate enrollment mix differences based on the proportion of enrollment in each state compared to the national proportions of enrollment by Carnegie Classification. Financial metrics in the SHEF report are adjusted down in states with a more expensive enrollment mix and up in states with a less expensive enrollment mix. This allows for more accurate comparisons on a state’s contribution to public higher education.

The most recent calculation used financial information from fiscal year 2019 and fall 2018 FTE enrollment data.
The proportion of each state’s FTE in each Carnegie Classification is multiplied by the national average cost per FTE for that classification. For each state, the products for each classification are summed, which yields the state’s enrollment mix unit cost for the year. The ratio of enrollment mix unit cost to aggregated national unit cost constitutes each state’s enrollment mix “index.”

SHEEO updates the EMI in odd years of the SHEF report and applies the latest EMI to all prior-year data. Regional comparisons include an adjusted version of EMI, weighted by the proportion of FTE enrollment in each state. Although EMI is calculated for Washington, D.C., it is not included in the U.S. average.

- **Higher Education Cost Adjustment (HECA):** SHEEO developed the Higher Education Cost Adjustment (HECA) to estimate inflation in the costs paid by colleges and universities. Prior-year data in SHEF are adjusted up by HECA to match the comparable amount in today’s dollars.

  HECA is constructed from two federally developed and maintained price indices—the *Employment Cost Index (ECI)* and the *Gross Domestic Product Implicit Price Deflator (GDP IPD)*. The ECI reflects employer compensation costs, including wages, salaries, and benefits. The GDP IPD reflects general price inflation in the U.S. economy. The HECA has the following advantages:

  1. It is constructed from measures of inflation in the broader U.S. economy;
  2. It is simple, straightforward to calculate, and transparent; and
  3. The underlying indices are developed and routinely updated by the Bureaus of Labor Statistics and Economic Analysis.

Because the best available data suggest that faculty and staff salaries account for roughly 75% of college and university expenditures, the HECA is based on a market basket with two components—personnel costs (75% of the index) and non-personnel costs (25%). SHEEO constructed the HECA based on the growth of the ECI (for 75% of costs) and the growth of the GDP IPD (for 25% of costs).
STATE EFFORT AND CAPACITY

- **Actual tax revenue (ATR):** The total general revenues derived from taxation by state and local governments.

  Source: U.S. Census Bureau, Annual Surveys of State and Local Government Finances

- **Allocation to higher education (calculated):** Higher education support as a proportion of actual tax revenues and lottery profits. The percentage of revenues allocated to higher education compares available state and local funds from taxable revenues and lottery profits relative to the amount of these funds appropriated to higher education. It provides a direct assessment of a state’s inclination to allocate tax revenues to higher education.

  Calculation: \( \text{Allocation to Higher Education} = \frac{\text{Total State and Local Support Excluding Stimulus}}{\text{Actual Tax Revenues + Lottery Profits}} \)

- **Effective tax rate (calculated):** Actual tax revenue per capita divided by total taxable resources per capita, expressed as a percentage.

  Sources: Population and Actual Tax Revenue from the U.S. Census Bureau; Total Taxable Resources from the Bureau of Economic Analysis, Office of Economic Policy, U.S. Department of the Treasury.

  Calculation: \( \text{Effective Tax Rate} = \frac{\text{Actual Tax Revenues}}{\text{Total Taxable Resources}} \)

- **Lottery profits:** Total lottery revenues from all lotto games and gaming operations, where applicable, that are transferred to beneficiaries.

  Source: North American Association of State and Provincial Lotteries

- **Personal income:** The income received by all persons from participation in production, from government and business transfer payments, and from government interest. Personal income is the sum of net earnings by place of residence, rental income, personal dividend income, personal interest income, and transfer payments. Net earnings are earnings by place of work (wage and salary disbursements, and proprietors’ income) less personal contributions for social insurance, including an adjustment to convert earnings by place of work to earnings by place of residence. Personal income is measured before the deduction of personal income taxes.

  Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Income Division.

- **Population:** The number of individuals (both civilian and military) who reside in a state.

  Source: U.S. Census Bureau Population and Housing Unit Estimates.

- **Support per capita (calculated):** Higher education support per capita normalizes state funding for a state’s population. It assesses effort because states with larger populations generally should have a broader tax base and, therefore, may be able to direct greater resources toward higher education.

  Calculation: \( \frac{\text{Total State and Local Support Excluding Stimulus}}{\text{Population}} \)

- **Support per $1,000 personal income (calculated):** Higher education support per $1,000 of personal income measures the amount a state pays for higher education relative to its
capacity to pay. It provides context regarding the scale of support for higher education in relation to a state’s available tax base since most state revenue comes from income and sales or consumption taxes.

Calculation: \[
\text{Support Per $1,000 of Personal Income} = \frac{\text{Total State and Local Support Excluding Stimulus}}{\text{Personal Income (in thousands)}}
\]

- **Total taxable resources (TTR):** The unduplicated sum of the income flows produced within a state (gross state product) and the income flows received by its residents (state personal income) which a state can potentially tax, minus components presumed not taxable by the state plus various components of income derived from out-of-state sources.

Source: U.S. Department of the Treasury