



Dollars and Degrees

A Bellwether Series on Higher Education Finance Equity

How Are Public Institutions of Higher Education Funded?

#1 IN THE SERIES • APRIL 2024

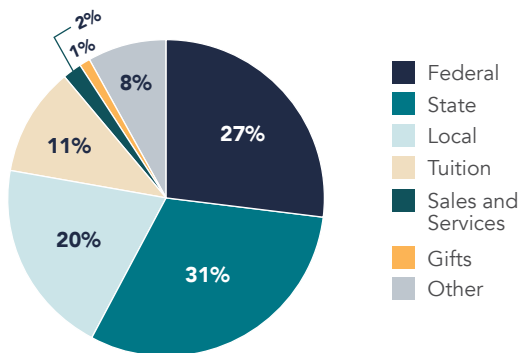
In the United States, public institutions of higher education (IHEs) are funded through myriad sources, including federal, state, and local governments; student-paid tuition; investment incomes from endowments; and other smaller sources.¹ Sources of revenue vary between two-year and four-year institutions. For example, two-year public IHEs receive a greater share of funding from local and state sources, while four-year IHEs receive a greater share of funding from tuition and the sale of services to students and the public. This brief describes each of the major funding sources for higher education and how they are set aside for, or “appropriated” to, IHEs.

NOTE

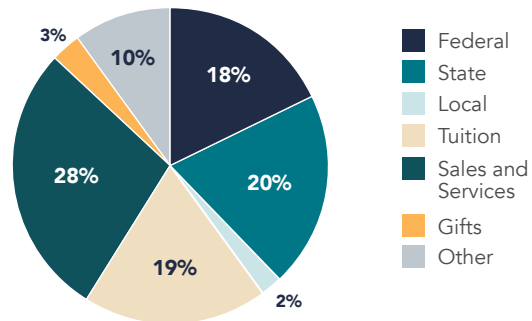
The Public Higher Education Landscape

America’s higher education system includes technical schools, two-year colleges (i.e., community colleges), and four-year colleges and universities. About 42% of these institutions are public, meaning they are substantially supported by public funds and governed by public officials or appointees.² The remaining are private entities that mainly rely on private funding — although many also benefit from public funds — and are governed by private boards. This series focuses primarily on public colleges and universities, and the approximately 12 million undergraduate students who attend them in the U.S., representing 77% of all undergraduate enrollment.³

REVENUE BREAKDOWN, TWO-YEAR PUBLIC IHEs, NATIONWIDE⁴



REVENUE BREAKDOWN, FOUR-YEAR PUBLIC IHEs, NATIONWIDE



Source: National Center for Education Statistics, “Integrated Postsecondary Education Data System,” 2022.

Federal Revenue

The federal government provides funding for higher education in three main ways: 1) student aid, 2) research and development (R&D), and 3) institutional support.

Student Aid

The largest of these three categories is student aid, distributed to individual students through grants and loans to help pay for tuition.⁵ These programs help lower students' immediate costs but do not provide additional revenue to public IHEs, unlike the two other forms of federal funding mentioned.⁶ Of the various aid programs in place, the federal Pell Grant is the main vehicle through which the U.S. Department of Education helps low-income undergraduate students pay for college.⁷ Unlike loans, Pell Grants do not have to be paid back. (Note: Federal revenue numbers reported in this brief do not include student loans because of this requirement.)

Research and Development

The federal government also spends a significant portion — over \$54 billion in 2022 — of its postsecondary funding on scientific research; over half of all IHE R&D spending is financed by federal sources.⁸ These dollars are typically project-specific, since the federal government does not provide significant sums of general-purpose funding to public IHEs.⁹

Institutional Support

The main exception to the above rule is a relatively small pool of money authorized by the Higher Education Act that flows to IHEs serving students of color who have been historically underrepresented in higher education, including historically Black colleges and universities, tribal colleges and universities, and other minority-serving institutions. These grants totaled \$843 million in fiscal year (FY) 2022, or less than 2% of total IHE allocations.¹⁰

The federal government's primary emphasis on student rather than institutional investment is a foundational difference in the role federal funding plays in higher education versus K-12 systems. In higher education,

federal policymakers have historically sought to equalize students' choice and access to high-quality public IHEs. In K-12, federal policymakers use programs like Title I to help equalize resources so that schools serving higher-need students have the resources to meet those additional learning needs.¹¹

State Revenue

State funding is typically the largest source of revenue for community colleges and also represents a sizable share of revenue for four-year universities. Annual state funding for public IHEs is usually determined based on factors such as enrollment and prior-year allocations. This is known as a "base plus" approach, since the prior year acts as a funding base and revenues are increased or decreased relative to that base in order to keep funding relatively stable year over year.¹²

Once the total state funding level is established, state governments determine how much goes to each IHE. States usually determine each community college's funding through a formula established by either the state legislature or the state's higher education governing board. Such formulas are less common for four-year universities. The majority of states award funding to four-year institutions based on adjustments to prior-year funding levels and through line-item or programmatic decisions.¹³

Most state funding supports the ability of public IHEs to provide instruction and programs. States usually fund colleges and universities based on their enrollment and sometimes based on the courses of study they offer. Some state higher education funding formulas also award funds to institutions that meet certain state-determined benchmarks, like graduation rates.¹⁴ This is known as performance-based funding.

In the past, few states differentiated funding based on student demographics or the varying needs of institutions. However, some states now tie funding to student needs and other measures of equity, such as the enrollment of students from low-income backgrounds, students from underrepresented minority groups

(e.g., Black, Hispanic, and Native American), and students from rural areas. With these changes, states aim to better equip public IHEs, particularly community colleges, to serve students who may require additional support. California, Oregon, and Texas are examples of states that recently adopted these types of formula changes for their community college systems.¹⁵

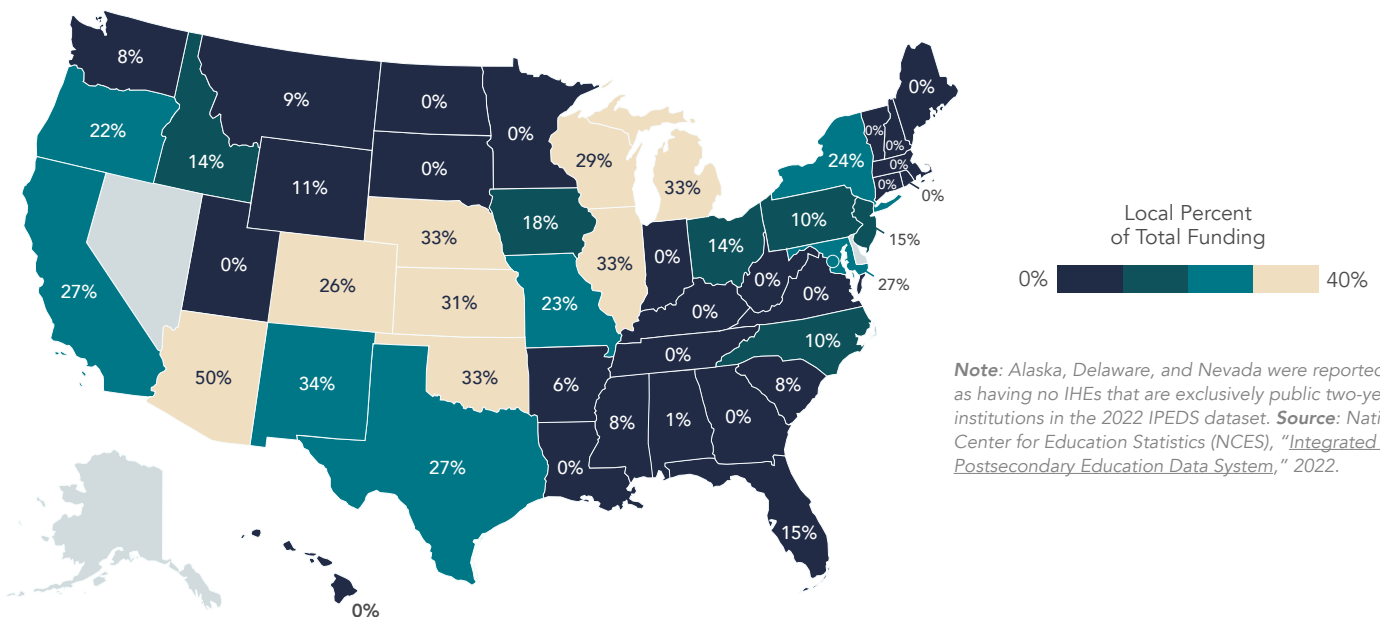
In addition to providing institutional allocations, some states have large need-based grant programs that, like federal aid programs, send funding directly to undergraduate students. These grants can work in the form of promise programs, which guarantee free or reduced tuition to qualifying students, or as general grants to pay for tuition or the full cost of attendance (e.g., course materials, housing, food, and transportation). Regardless of the grant type, support levels vary widely across states.¹⁶ For instance, Montana and New Hampshire both offer less than \$30 per full-time equivalent student in these grants whereas Georgia, Louisiana, South Carolina, and Washington all offer more than \$2,000 per student.¹⁷

Local Revenue

To the extent local revenue supports higher education, it most typically funds two-year community colleges. Most local revenues come from property taxes, based on the property wealth and tax rates in the tax jurisdiction in which the college is located, though local income and sales taxes also support community colleges in some states. For public IHEs that receive local funds, this revenue can constitute a significant portion of their total funding. In FY22, local dollars represented 20% of community college revenue in the U.S., with significant variance among states. For example, in Arizona, two-year institutions received 50% of their total funding from local sources, while in 19 states community colleges received no local appropriations.

While local funding can provide critical financial support to public IHEs, reliance on property taxes can also exacerbate inequities by generating more revenue for schools in areas with high property values. Although most states have not enacted mechanisms to equalize funding, in some, like Oregon, tools for mitigating variation in local revenue capacity exist, including adjusting the amount of state funding relative to the amount of property wealth in a college's taxing jurisdiction.¹⁸

LOCAL FUNDING AS A PERCENTAGE OF TOTAL TWO-YEAR PUBLIC IHE REVENUE, NATIONWIDE



Note: Alaska, Delaware, and Nevada were reported as having no IHEs that are exclusively public two-year institutions in the 2022 IPEDS dataset. Source: National Center for Education Statistics (NCES), "Integrated Postsecondary Education Data System," 2022.

Tuition

Tuition is the portion of IHE costs borne by the student and/or their family. In this brief, tuition includes institutional fees, for simplicity. Tuition represents a substantial portion of most institutions' budgets and is a particularly critical source of funding for public IHEs.¹⁹ Tuition serves as a counterbalance when other funding sources decline, either because of economic downturns or shifts in political support for public IHEs. Higher tuition can offset decreases in state funding to institutions, but it can also decrease student access. States approach tuition policy in one of two major ways, both of which carry costs and benefits:

- **Some states allow individual IHEs to set their tuition rates.** This has the benefit of allowing colleges and universities to respond to their own circumstances, but it also increases the probability that low- or middle-income students will be priced out of enrollment at some public IHEs. Some states mitigate this concern by setting caps on yearly increases or by requiring approval from the legislature to increase tuition beyond a set percentage. State examples include Illinois, Ohio, and Oregon.²⁰
- **In other states, tuition rates are set by the state legislature, or the university system has the decision-making power.** By centralizing tuition-setting authority and using that power to keep tuition reasonable across IHEs, states can maximize the number of affordable postsecondary options. This can, however, limit revenue-generating options for schools and constrain the number of academic programs or services they offer. State examples include California,²¹ Georgia, and Wisconsin.²²

Tuition and fees are typically lower at two-year institutions than at four-year universities, although amounts can vary dramatically from state to state. On average, tuition tends to be a larger percentage of total revenue for four-year institutions than community colleges.

TUITION AND FEES FOR FULL-TIME UNDERGRADUATES, IN-STATE, NATIONWIDE, SCHOOL YEAR 2023-24

	Public Two-Year IHEs	Public Four-Year IHEs
National Average	\$3,990	\$11,260
Minimum	\$1,436 (California)	\$6,364 (Florida)
Maximum	\$8,660 (Vermont)	\$17,183 (Vermont)

Source: College Board, "Trends in College Pricing," 2023.

Investment Income From Endowments

Investment income pertains primarily to four-year IHEs, with only a handful of institutions having significant amounts of money or land set aside for investment purposes. For those that do, however, it can be substantial enough to swing national averages. The University of Texas (UT) System has the largest investment fund — known as an endowment — among public IHEs in the country, at \$43 billion. Following the UT System are the University of Pennsylvania, Texas A&M, and the University of Michigan, whose investment portfolios ranged from \$21 billion to \$17 billion each in FY22.²³

Endowment funds come from many sources but are generally a result of private donations; in rare cases, endowments are supported by states. The UT System is one such example: As a land-grant institution, much of its endowment revenue comes from oil and gas royalties that stem from its holdings in West Texas.²⁴

Economic volatility can complicate institutional reliance on investment income. For example, in FY21, four-year universities earned more than \$32 billion from their investments, while in FY22, they lost more than \$7 billion.²⁵

Other Revenue Sources

Beyond the major sources described above, two-year colleges and four-year universities — but especially universities — receive funding from a range of additional sources. Private gifts from alumni and other donors amounted to 3% of four-year university funds in FY22 and less than 1% for two-year institutions in that same time frame.²⁶ Sales and services consist of receipts from university bookstores, hospitals, testing services, and similar entities. For two-year institutions, these revenues are minimal — at about 2% in FY22 — but for four-year institutions, these revenues can be substantial — making up 28% of revenue in the same year.²⁷ University hospital receipts make up a large majority of this percentage, though these dollars, along with agricultural advising, capital appropriations, and other revenue streams, can all contribute varying amounts to IHEs depending on their specialization (e.g., having a large medical school or agricultural engineering program).²⁸

Questions for the Field

- *What process or formula does your state use to distribute its funding to public two- and four-year IHEs? To what extent does student and institutional need factor in?*
- *Do public IHEs receive local funding in your state? Are there any state mechanisms in place to equalize funding between more- and less-wealthy public institutions?*
- *How have tuition rates changed over time relative to your state's investments in public IHEs?*

Endnotes

- 1 “Student-paid tuition” is the portion of tuition the student pays, including loans but excluding federal grants (e.g., Pell Grants). This calculation avoids double-counting dollars that are captured within the federal portion of institutional revenue.
- 2 “Table 317.20. Degree-Granting Postsecondary Institutions, by Control and Classification of Institution and State or Jurisdiction: 2020–21,” *Digest of Education Statistics*, National Center for Education Statistics, https://nces.ed.gov/programs/digest/d21/tables/dt21_317.20.asp.
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- 4 Authors’ calculation using Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics, 2022, <https://nces.ed.gov/ipeds/datacenter/InstitutionByName.aspx?goToReportId=5&sid=3cb1f15f-6c60-413b-a7b0-c09466849ce3&rtid=5>. All calculations were completed using “Public, 4-Year and Above” and “Public, 2-Year” institutions under Sector. Revenue data was pulled from “Public institutions — GASB 34/35,” and “Revenues and other additions” for FY22. Federal, state, and local revenues were calculated by summing operating grants and contracts, appropriations, and non-operating grant variables for the three levels of government.
- 5 Student aid, including grants, loans, and work study, amounted to \$111.6 billion in 2022. R&D expenditures accounted for about \$54 billion, and support for minority-serving institutions was approximately \$1.3 billion; *FY 2022 Annual Report*, Federal Student Aid, <https://studentaid.gov/sites/default/files/fy2022-fsa-annual-report.pdf>; Michael T. Gibbons, “R&D Expenditures at U.S. Universities Increased by \$8 Billion in FY 2022,” *National Center for Science and Engineering Statistics (NCSES)*, NSF 24-307 (November 2023), <https://nces.nsf.gov/pubs/nsf24307>; *Programs for Minority-Serving Institutions Under the Higher Education Act*, Congressional Research Service, March 2023, <https://crsreports.congress.gov/product/pdf/R/R43237>.
- 6 To see how tuition as a share of overall education spending has changed over time, see: *State Higher Education Finance (SHEF) Report*, State Higher Education Finance, https://shef.sheeo.org/report/?report_page=distribution-of-revenue#student-share.
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- 8 “R&D Expenditures at U.S. Universities Increased by \$8 Billion in FY 2022,” National Center for Science and Engineering Statistics, <https://nces.nsf.gov/pubs/nsf24307>.
- 9 “University Research: The Role of Federal Funding, Association of American Universities,” January 2011, <https://files.eric.ed.gov/fulltext/ED517263.pdf>.
- 10 *Fiscal Year 2024 Budget Summary*, U.S. Department of Education, <https://www2.ed.gov/about/overview/budget/budget24/summary/24summary.pdf>.
- 11 Thomas Snyder, Rachel Dinkes, William Sonnenberg, and Stephen Cornman, *Study of the Title I, Part A Grant Program Mathematical Formulas*, National Center for Education Statistics, May 2019, <https://nces.ed.gov/pubs2019/titlei/>.
- 12 For a more detailed explanation of base plus and other approaches to state funding for IHEs, see: Sophia Laderman, Dillon McNamara, Brian Prescott, Sarah Torres Lugo, and Dustin Weeden, *State Approaches to Base Funding for Public Colleges and Universities*, State Higher Education Executive Officers Association, October 2022, https://sheeo.org/wp-content/uploads/2022/10/SHEEO_2022_State_Approaches_Base_Funding.pdf.
- 13 Ibid.
- 14 Sara Weissman, “‘More Refined’ Performance-Based Funding for Community Colleges,” *Inside Higher Ed*, June 15, 2023, <https://www.insidehighered.com/news/institutions/community-colleges/2023/06/15/new-performance-based-funding-formulas-community#>.
- 15 “Updated Public University Funding Formula Ties Taxpayer Funding to Student Success and Equity Goals,” Higher Education Coordinating Commission, Feb. 11, 2021, <https://www.oregon.gov/highered/public-engagement/Documents/News-Updates/Press-Releases/2021-PR-Univ-Funding-Formula-Update.pdf>; Madaleine Rubin, “With New Funding Formula, Community Colleges Can Better Prepare Students for Texas Workforce, Experts Say,” *The Texas Tribune*, Dec. 6, 2023, <https://www.texastribune.org/2023/12/06/texas-legislature-community-colleges/>; *Student Centered Funding Formula White Paper*, Rancho Santiago Community College District, October 2018, [https://www.rscdd.edu/Departments/Educational-Services/POE-Committee/Documents/POE%202018-2019/All%20Additional%20Mtg%20Handouts-Aft%20Mtg%20sent%20items%20\(POE%20102418\).pdf](https://www.rscdd.edu/Departments/Educational-Services/POE-Committee/Documents/POE%202018-2019/All%20Additional%20Mtg%20Handouts-Aft%20Mtg%20sent%20items%20(POE%20102418).pdf).

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About Bellwether

Bellwether is a national nonprofit that exists to transform education to ensure systemically marginalized young people achieve outcomes that lead to fulfilling lives and flourishing communities. Founded in 2010, we work hand in hand with education leaders and organizations to accelerate their impact, inform and influence policy and program design, and share what we learn along the way. For more, visit bellwether.org.

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ABOUT THE SERIES

Dollars and Degrees is a crash course in the essentials of higher education finance for policymakers, advocates, and others interested in improving postsecondary funding. Learn more and read the other briefs in this series [here](#).

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