

Investigating the impact of philanthropic giving for financial aid on college student enrollments and social mobility

Executive summary

Philanthropic donors have a long legacy of lessening postsecondary students' expenses and enabling their academic endeavors. This project asked: 1) How has philanthropic giving for student aid changed over the past 20 years in relation to overall giving? 2) Does philanthropic giving for student financial aid relate to institutional aid dispensed to students? 3) Do philanthropic giving and institutional aid relate to historically underserved students' enrollment and social mobility? Data were drawn from multiple sources for a sample of 370 public and private four-year institutions between 2003 and 2021. We discovered that donations for financial aid grew, as did institutional financial aid payouts—especially for need-based aid. Philanthropic donations had a moderate association with institutional need-aid payouts for students. The relationship does not appear to be causal, in either direction, or a response to rising costs. Some signs indicate that institutional aid is increasingly used to support student financial need and that postsecondary participation is increasing among students from underserved minority groups. However, institutional aid (including the philanthropic gifts that contribute to it) hasn't increased the proportional representation of low-income or adult learners, nor does it appear to be impacting student social mobility, broadly.

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Introduction

In 2022, colleges and universities received an estimated \$59.5 billion in philanthropic gifts with \$11.6 billion (19.5%) of that directed toward student financial aid (Council for Advancement and Support of Education (CASE), 2023). Of the financial aid total, \$3.3 billion was for current use, and the rest was invested within institutional endowments. At this time, endowments held approximately \$807 billion and had an average payout rate of 4.17% (NACUBO-TIAA, 2023a). Most endowment disbursements (46% and \$11.9 billion) were used for student aid expenditures. That same year, colleges and universities granted a total of \$74.4 billion in institutional aid (Ma & Pender, 2022), which is more than six times the level of annual giving for this purpose.

These data suggest that institutions draw on multiple sources to provide student aid, with philanthropic dollars financing a meaningful—though not dominant—portion of that support. Annual studies by NACUBO (2023) reveal that tuition discounting (inclusive of philanthropic dollars) is a critical source of aid for students at private institutions and it is common at public institutions as well. Historical analyses show that philanthropy has a long legacy of lessening students' expenses and enabling their academic endeavors, with some giving focused on broadening access and increasing opportunity (Curti & Nash, 1965; Thelin, 2011; Thelin & Trollinger, 2014). These same analyses conclude that philanthropic dollars have enabled institutional and systemic change and innovation, been a venue for public input into institutional practices, patterns, and priorities, and provided fungible resources for institutions to deploy for strategic purposes.

Ample literature examines U.S. financial aid practices and systems, with attention to outcomes of grant-based aid (such as philanthropic scholarships) (See meta analyses by Herbaut & Geven, 2020; Nguyen et al., 2019; Sneyers & De Witte, 2018). A few studies focus attention on philanthropy's role in aiding students, most typically by assessing outcomes of specific scholarship programs (e.g., Angrist et al., 2022; Goldrick-Rab et al., 2016; Page et al., 2019). A few contemporary, national examinations of student financial aid assess aspects of philanthropic inputs, outputs, and/or outcomes (Baum et al., 2018; Baum & Lee, 2019; Bulman, 2022; Chronicle Staff, 2019a; De Alva & Schneider, 2015).

None of this literature, however, examines new philanthropic inputs and financial aid outputs and also uses a comprehensive dataset of public and private institutions over time. To be fair, this gap is not unexpected. Studies of higher education history and current context often underestimate and under examine philanthropy (Drezner & Huehls, 2014; Walton, 2019). Studies of philanthropy in higher education, meanwhile, are often limited in scope or in attention to the broader socioeconomic policy landscape and

sectoral context (Proper & Caboni, 2014). This study uses an innovative approach to collect and assess information about philanthropy's role in the contemporary financial aid landscape. The research questions that guided this study are: 1) How has philanthropic giving for student aid changed over the past 20 years in relation to overall giving? 2) Does philanthropic giving for student financial aid relate to institutional aid dispensed to students? 3) Do philanthropic giving and institutional aid relate to historically underserved students' enrollment and social mobility? In addressing these questions, we explore overarching trends at 370 public and private, four-year higher education organizations that represent 406 separately accredited institutions between 2003 and 2021. Data are drawn from the CASE Insights on the Voluntary Support of Education (VSE) survey, The Institute for College Access and Success (TICAS), the Department of Education's Integrated Postsecondary Education Data Set (IPEDS) and College Scorecard, and the Opportunity Insights project.

We discovered that philanthropy for financial aid has grown at a faster rate than giving overall, showing the public's growing interest in this cause. Institutional financial aid also grew during the study period and there was a moderate association between the two, stronger among some institutional groups. The relationship doesn't appear to be causal, in either direction, or a response to rising costs. Need-aid, which was notably more prevalent than non-need-based aid, comes from multiple sources and is a necessity, regardless of levels of philanthropy for this purpose. While there are some signs that institutional aid is increasingly used to support student financial need, and that postsecondary participation is increasing among students from underserved minority groups, institutional aid, and the philanthropic gifts that contribute to that aid, has not increased the proportional representation or social mobility of low-income or adult learners. Rather, it appears that institutional aid, and the philanthropic gifts that support it, is helping institutions continue to enroll students from middle- and upper-middle income strata who are also challenged financially, given record high tuition rates. This project examined only direct aid funds (and not additional ways in which students require and receive support), and available data don't distinguish whether philanthropic dollars were intended (or used) for need or non-need-based aid or which specific populations of students were the focus of the gifts, if any. Philanthropic gifts for financial aid

Ten VSE organizations comprise multiple accredited institutions. For example, Indiana University reports as a single institution within the VSE data collection but has seven separately accredited campuses within the federal IPEDS data collection system.

collectively serve a myriad of student, institution, community, and donor priorities and goals. Specifically, this study provides information about philanthropy's relationship with institutional financial aid practices and its impact, or lack thereof, on students with the most need.

This report begins with a three-part literature review. First, we provide an overview of the current context surrounding student financial aid. Second, we include a historical overview of philanthropy and aid practices. Third, literature is presented from contemporary studies of philanthropic giving related to financial aid. Subsequent sections explain the data and methods, present and interpret the findings, and, finally, discuss the findings, their implications, and opportunities for future research.

Affordability, debt, aid, and social mobility

Concern about college costs has been rising for years (Ma et al., 2018) and the cost of attendance has become a major barrier for students and families (Faheid, 2021; Marcus, 2022). Research has established that state reductions in funding to public higher education in the 2000s contributed to tuition increases (Mitchell et al., 2019). In 2022-2023, average annual tuition and fees for public four-year institutions was \$10,940 (in state) and \$39,400 for private four-year institutions (Ma & Pender, 2022). The total cost of attendance, inclusive of room, board, and expenses, is much higher. Fewer people are currently choosing to pursue higher education; just since the pandemic, postsecondary institutions' enrollments shrank by 1.3 million students (National Student Clearinghouse Research Center, 2022)even though many colleges and universities froze their tuition during the pandemic and have worked to limit increases (Ma & Pender, 2022). Indeed, over the last few years there has been a leveling off of tuition and fees and even a reduction, in inflation-adjusted dollars (Ma & Pender, 2022). Although some of the enrollment decline is related to demographic trends, college-going rates have decreased notably in recent years, declining from 70% in 2016 to 63% by 2021, with an even larger decline among males—from 67% in 2016 to 55% in 2021 (National Student Clearinghouse Research Center, 2022).

Public opinion of higher education in the current era is multifaceted, but collectively also raises concerns about future enrollments. One recent survey found that nearly two-thirds of college students believed the returns of higher education are not worth the investment (Klebs et al., 2021). Another study of those in college or planning to go to college say college is worth it and remains important (Marken, 2023). This evidence is confusing and worrisome, particularly in combination with a documented decline

in public trust of higher education (Bauer-Wolf, 2020; Choudaha, 2022). Still, studies also show contradictory evidence about trust levels. One study found lower trust levels among younger generations and first-generation students (though not first-generation graduates) (Choudaha, 2022), while another documented older adults expressing lower trust than younger people (Marken, 2019). In the latter study, though, only 41% young adults said a college degree is very important, as compared with 74% of young adults in 2009 (Marken, 2019). Finally, just over half of parents say they prefer that their children enroll right away in a four-year college—meaning that the other nearly half of parents presumably do not believe their students should enroll right away (Barshay, 2021).

Data about loan- and grant-based aid

To pay for tuition and expenses, students may supplement their own resources with loan-based (i.e., requires repayment) and grant-based (i.e., does not require repayment) forms of financial aid. Sixty percent of undergraduate students rely on student loans to pay for school and are graduating with an average debt of \$29,100 (Ma & Pender, 2022). The most recent national data show that in 2019-2020, Black undergraduate students were most likely to have loans (49%), followed by white students (38%) and students of two or more races (37%) (National Center for Education Statistics (NCES), 2023). Pacific Islander (36%), Hispanic (28%), Asian (27%), and American Indian/ Alaska Native (27%) students also borrowed. The amount of accumulated student debt is enormous—\$1.75 trillion (The White House, 2022). The federal government carries \$1.6 trillion of that debt for 43.8 million borrowers (92% of all loans); private entitles carry the remainder (Federal Student Aid, 2023). President Biden's administration is forgiving federal loan debt for borrowers meeting certain criteria beginning with an initial \$39 billion package in mid-2023. Additional federal debt-relief efforts are expected but are limited by the Supreme Court's decision striking down the administration's initial effort to forgive low- and middleincome families of approximately \$400 billion in debt (Knott, 2023).

Grant-aid is generally positively associated with enrollment, retention, persistence and completion (Herbaut & Geven, 2020; Nguyen et al., 2019b; Sneyers & De Witte, 2018). This type of aid comes from the federal government, employers, state legislatures and local governments, private scholarship providers, donations to institutions, and non-philanthropically funded institutional allocations. In 2021–2022, U.S. students received \$140.6 billion in grant aid; inclusive of federal loans and other benefits, students received \$234.6 billion (Ma & Pender, 2022). Since 2008's Great Recession, student borrowing and debt have been declining and millions fewer students have applied for Pell

Grants (Ma & Pender, 2022). Federal Pell Grant maximums have grown—from \$5,500 in 2011-2012 to \$6,895 in 2020-2021—but don't cover tuition, much less additional expenses at institutions that confer a bachelor's degree or higher (Ma & Pender, 2022; The White House, 2022). The contribution of Pell and other federal grants fell from 44% of total grant aid in 2010-2011 to just 26% in 2021-2022. Private and employer grants have held steady at 12% to 13% of aid as have state grants at 9%. Institutional grant aid, meanwhile, grew from \$47.0 billion in 2010–2011 to \$74.5 billion in 2021-2022, now constituting 53% of grant aid, up from 35% ten years ago (Ma & Pender, 2022). Rising institutional aid seems beneficial, though it may also be a necessity of rising tuition. Likewise declining loans and debt is a positive, but like the Pell Grant decline, may also suggest that fewer lower income students are choosing post-secondary education. These dynamics could change with the current overhaul of the Pell Grant program, which is anticipated to extend eligibility to another 200,000 students, increasing potential Pell expenditures by 25% overall (Blake, 2023). Another Pell-related proposal is to provide grants for short-term workforce-related educational programs; within this is a provision to pay for the program by ending federal loan eligibility for students at wealthy colleges, which has consequences for these institutions and their students (Harris, 2023).

Research on college attendance and social mobility

Social mobility has been shown to be higher among college graduates than those without college degrees (Hout, 2012; Ma et al., 2019; Torche, 2011); for example, bachelor's degree recipients have lower unemployment rates and higher median annual earnings compared with those without the degree (Ma et al., 2019). But there are nuances. Students attending "Ivy Plus"—which usually refers to the eight Ivy League institutions plus Stanford University, Massachusetts Institute of Technology, University of Chicago, Caltech, Duke University, Johns Hopkins University and Northwestern University—colleges instead of state flagship universities are more likely to reach the top 1% of income distribution (by age 33) (Chetty et al., 2023). On the other hand, a number of studies show students' earnings (not calculated considering educational investment) are not affected by attendance at more selective U.S. colleges (Dale & Krueger, 2014; Ge et al., 2018). Yet other evidence shows that when collegeeducated individuals' net worth ("college wealth premium") is considered, and as more people have completed college, the financial returns have declined for recent generations and especially for some groups (Emmons et al., 2019). For example, four-year college attendance for those born in the 1980s barely effects the net worth of white graduates and doesn't generate positive returns for those from other racial/ ethnic groups (Emmons et al., 2019).

Considering the cost of attendance complicates the discussion further. Bachelor's degree holders generally receive a positive return on investment (ROI), but there is great variation by major and type of institution attended (Cooper, 2021). In general, public (four-year) universities' cost of attendance is lower and, therefore, these institutions provide a higher return on investment than their private counterparts (Carnevale et al., 2022). But low-income students have an average return on investment that is less than the average return for all students over a 40-year period. This is mostly because they're less likely to graduate and tend to earn less during their careers (\$756,000 versus \$822,000) but also because few attend the very best institutions for ROI and social mobility (Carnevale et al., 2022). The best ROI for low-income students is among 24 private, highly selective institutions (Carnevale et al., 2022). Overall, low-income students are dramatically less likely than affluent students to attend the institutions with the best mobility outcomes (i.e., the most selective colleges) (Chetty et al., 2017). Recent evidence from Ivy Plus colleges shows that, while students from high-income families are only slightly more likely to apply than those from low-income families, those from high-income families are much more likely to actually attend the institutions compared with those from low- and middle-income households (Chetty et al., 2023). Students from low- and middle-income households are far more likely to skip college than students from affluent families (Carnevale et al., 2022) and tend to enroll at community colleges and for-profit schools as well as less selective four-year institutions (Bastedo & Jaquette, 2011; Melguizo et al., 2013).

This section illustrates the investment of society, through the federal government, and institutions themselves in aid for students, but also suggests that it is not fully serving (or perceived to be serving) the purpose of promoting social mobility.

Philanthropy and financial aid through the centuries

This section provides a backdrop for the current context by describing philanthropy's role in the evolution of U.S. financial aid structures and strategies.

Colonial period through the 1800s

In the U.S. colonial period through the 1800s, college was the purview of the few, and students typically required significant encouragement to enroll—even as late as 1900 only 2% of high school graduates attended college (Adam, 2020; Zimmerman, 2023). The government subsidized private (and later, public) institutions, funding about two-thirds of institutional budgets (Adam, 2020). Americans'

wealth was limited and sparsely disbursed; in other words, there were few wealthy people and even the well-off weren't much better off than average people (Adam, 2020). Few could have afforded to pay for college and the associated expenses themselves and, in terms of philanthropy, college fundraisers accepted whatever items (books, corn, livestock) that people could provide to students and institutions (Thelin & Trollinger, 2014). Some institutions implemented modest tuition and fees to support their budgets, while also drawing on state-provided scholarships to cover student tuition (Adam, 2020). The first scholarship at the nation's first institution (Harvard College) was created in 1643 (Thelin, 2011). Others followed, but through 1850, privately funded scholarships were few and far between (Adam, 2020). Yet, the groundwork was set for philanthropy to impact not only postsecondary financing but also institutional operations, facilities, structures, and curriculum across the centuries (Curti & Nash, 1965; Thelin & Trollinger, 2014; Walton, 2019).

During these early centuries, postsecondary education was considered a "public good" with broad benefits for society, justifying social investment in the form of government-, community-, and donor-subsidized student tuition—though only white men qualified (Adam, 2020; Zimmerman, 2023). Public universities were created by states with a central goal of accessibility and affordability, but some scholars argue that the government never truly accepted the responsibly of fully paying for higher education, even while promoting the public good mantra (Zimmerman, 2023). Slowly, individual and community philanthropy, sometimes including additional support for living expenses, became a larger part of the funding mix (Adam, 2020; Thelin & Trollinger, 2014). Associations and organizations also began to create scholarships to encourage students to train for certain professions, such as the ministry (Thelin & Trollinger, 2014). Scholarships provided through institutions often carried the precondition of financial need and included additional donor-prescribed requirements for recipients, such as hailing from a particular geographic region, being descended from the benefactor, meeting ethnicity/race, gender, and/ or religion parameters, being a family member of a soldier, and/or pursuing a particular field of study (Adam, 2020). Scholarships continue to carry conditions of financial need and other criteria in the modern day, although what is legally allowable and socially acceptable has changed over time.

The late 1800s were a time of rapid growth and innovation in the higher education sector—by 1880 the United States had 811 higher education institutions. The Morrill Act of 1862 offered the promise of liberal and practical education for the working class through public institutions (Zimmerman, 2023). Despite this, still only a small proportion of Americans attended college and the cost-of-living expenses could put even public institutions (with their modest tuition expenses) out of reach for poorer students (Zimmerman, 2023). Native Americans, whose land was seized or appropriated

to facilitate the growth of the land-grant colleges, women, African Americans, and others were among those excluded from most institutions (Zimmerman, 2023).

Philanthropy evolved during this era and into the 1900s as industrial fortunes of the post-Civil War period enabling "windfall" philanthropy from newly wealthy members of society, creating new research universities with expanded missions, and supporting the expansion of higher education to a somewhat larger portion of society (Thelin, 2011). Some philanthropists funded new institutions and, at times, pushed for expansion of opportunities at existing ones for women, African Americans, and immigrants by providing scholarships and expanded eligibility for enrollment (Johnson, 2017; Thelin & Trollinger, 2014). Tuition discounting became common practice as tuition was set above cost and then reduced for disadvantaged students (Adam, 2020; Martin, 2012).

1900s and 2000s

Early in the twentieth century societal leaders increasingly perceived college as a "personal pursuit," aimed at individual benefit (Adam, 2020). Therefore, students (especially better-off students) should take a greater individual responsibility and cover more of their own college expenses (Adam, 2020). Institutional (and voluntary association) student loan programs grew in prominence, though they had begun earlier with the zero-interest loans offered by the Harvard Loan Program in 1838 (Adam, 2020; Thelin, 2011). Loans were popular tools as students—in the personal pursuit/private benefit model—were increasingly expected to contribute by repaying financial support (Adam, 2020). As today, students funded their educations in a combined manner: Scholarships were often paired with loans (from institutional sources or membership associations and newly incorporated foundations) and distributed across the enrollment period (Adam, 2020; Ma et al., 2020). Also, in alignment with the personal pursuit philosophy, academic merit was recognized with scholarship support. In the 1930s, Harvard personnel developed a test to identify academically gifted (male) students to whom scholarships would be awarded (Lemann, 2000). The test ultimately became the SAT, the standardized test offered by the College Board and a staple of admissions and scholarship decisions for decades to come (Lemann, 2000).

College fundraising methods changed greatly in this era. Philanthropy from 1890 to 1910 emphasized large gifts from wealthy people. The following period ushered in institutional infrastructure development to facilitate philanthropy (Adam, 2020; Thelin & Trollinger, 2014). This included the alumni association model and the creation of separate structures (i.e., the university foundation, athletic associations) for fundraising and concomitant solicitation of alumni donations for scholarship endowment campaigns (Thelin & Trollinger,

2014). Another important event was the creation of the Council for Financial Aid to Education (1952) by several philanthropic entities to encourage giving. The Council reminded the public of the importance of going to college, publicized the need for ongoing financial resources and promoted giving and took in and distributed corporate contributions. Thelin and Trollinger (2014) credit the Council and federal interest for rising emphasis on financial aid (and fundraising attention) within colleges and universities.

As the federal government increasingly saw higher education as a central avenue for fostering social mobility and economic opportunity for Americans, its attention to financial aid grew. The Servicemen's Readjustment Act of 1944 (G.I. Bill) permanently changed higher education (Fuller, 2014). It set the precedent for the federal government (and other entities) to provide private aid to citizens directly, not through institutions, on a massive level, and contributed to the doubling of college enrollments between 1944 and 1954 (though the influx was almost entirely limited to white men) (Fuller, 2014; Snyder, 1993; Zimmerman, 2023). Federal involvement expanded with passage of the National Defense Student Loan System (1958), later known as the Perkins Loan, and the Higher Education Act (HEA) of 1965, which guaranteed federal repayment of privately held loans for all student borrowers (building on the federal government's direct loan programs) (Fuller, 2014). Subsequent reauthorizations of HEA (1972 and 1980) established the Guaranteed Student Loan Program (i.e., Stafford Loan), in which the federal government covers interest while students are in college and the Pell Grant Program (originally the Basic Opportunity Grants Program), which does not require repayment. The cap on federal loans and those from private providers, however, was much higher than the Pell funding. State support of higher education waned and tuition began to soar (Zimmerman, 2023). By the 1990s more students were borrowing and borrowing more money than ever (Wei & Skomsvold, 2011). Students continued to borrow heavily into the 2010s before this trend began declining following the Great Recession of 2008 as enrollments flattened and the economy improved (Leukhina, 2020; Ma & Pender, 2022).

Private (philanthropic) scholarship providers—including the United Negro College Fund (UNCF) (1944), Dollars for Scholars (i.e., Scholarship America (1958), and Rotary Club's Rotary Scholarship (1947)—expanded from what membership associations had done previously in using collected funds to support scholarships. In this model many individual donors contributed to support students who attended institutions across the country. By 2000, there were hundreds of such providers, which include community and independent foundations, as well as individual donors operating outside of organizations and corporations (McSwain et al., 2005). A study of 500 private organizational providers found they prioritized academic achievement to

a greater degree than financial need, contributed a small proportion of overall student aid, but met a special local and specialized need by, for example, supporting students who would not otherwise receive grant-aid and providing additional college choice and better affordability (McSwain et al., 2005). Today, the focus may be shifting to give more attention to financial need. The largest private provider in the United States, Scholarship America, announced in 2023 that it is revamping its programs and awarding most scholarships to low-income students—those they believe will be most impacted by the financial support (Konrad, 2023; Nylund, 2023). (In 2022, low-income students received only 11% of the organization's scholarships.)

Philanthropy has long been integrated with a larger institutional strategy of "tuition discounting"—reducing students' tuition costs through institutional aid—that dates back to Harvard and the first scholarship (Davis, 2003; Martin, 2012). In contemporary times, this approach is a key component of the financial aid landscape used by nearly every college and university. Tuition discounting can include "unfunded aid," waivers of tuition with no actual funding transfers from internal or external sources; "funded aid," tuition payments made from philanthropic gifts and endowments (with actual funds transfers); and/ or combinations of the two (Allan, 1999; Martin, 2012). According to the NACUBO Tuition Discounting Study (2023), the estimated discount rate was 50.9% among all undergraduates and 82% among undergraduates who received aid (n = 341 private nonprofit colleges and universities). Public institutions also use this practice, but to a lesser degree (Baum & Ma, 2010). It is also possible that tuition discounting calculations may be made in consideration of federal/state government and private grants/scholarships, a practice that can result in a student receiving less overall support. Award/financial aid/ scholarship "displacement" has become a controversial practice and is banned in several states (Haas, 2022). It is likely that low-income students who qualify for need-based aid are disproportionately affected, compared with students who qualify only for merit aid, resulting in an unintended consequence of disincentivizing students from applying for scholarships. A nationally representative survey of students found that 50% of those who had received private scholarships had experienced displacement (Marcus, 2023).

Scholarship displacement—whether institutional aid is applied before or after federal forms of aid—is also relevant for application of grant-based "promise" program support. The promise concept originated in 2005 in Kalamazoo, Michigan, as guaranteed funding for high school students from that community to attend Michigan public college/universities (later expanded to select private liberal arts colleges) (Bozick et al., 2015). All graduates qualify for the Kalamazoo program, with variations based on their

in-district enrollment period, without financial need or academic achievement parameters. Promise programs are typically place-based initiatives that provide tuition and fee support to recent high school graduates to attend particular postsecondary institutions (Billings, 2018). There are more than 200 promise programs across the country, some funded by philanthropic contributions from community members, others from government (local, state) and institutional funding, and still others drawing on a combination of these sources (Erwin & Syverson, 2022). Most of the programs have more criteria than the Kalamazoo program; a study of 153 such programs showed that half had academic criteria and one-fifth included financial need criteria (Billings, 2018).

While philanthropic promise programs often compile gifts from many community members to fund scholarships, individual wealthy donors also make significant gifts for this purpose. For example, billionaire (and non-alumnus) Robert Smith paid off the debt of students in Morehouse University's class of 2019 with a \$34 million dollar contribution (Rendon, 2020). In 2018, Johns Hopkins alumnus Michael Bloomberg donated \$1.8 billion to enable more low- and moderateincome students to attend the university (Matthews, 2018). However, Bloomberg was criticized, as others have been, because the gift went to an already-wealthy institution that educates a small proportion of college students and a tiny fraction of low-income students (Babbitt, 2022; Bellafante, 2014; Foster, 2016; Inside Higher Ed, 2015; Matthews, 2018; Satija, 2018). A similar critique can be applied to David Geffen's \$150 million gift eliminating tuition at Yale University's drama school, which undoubtably has made a significant difference but only for a small group of students (Yale University, 2021). On the other hand, mega-donor MacKenzie Scott is giving to fund historically "underphilanthropized" historically Black colleges and universities (to the tune of hundreds of millions of dollars to dozens of institutions) and hoping to shift the focus of other big givers to institutions and organizations that serve underrepresented communities and enhance social justice (Freeman, 2022; Gasman et al., 2021). Scott's giving is unrestricted and thus not explicitly denoted for financial aid. These gifts, aimed at supporting student opportunity may be used to reduce institutional costs or provide broad forms of grant-based aid, suggesting that philanthropic financial aid support may be an outcome of unrestricted gifts as well.

At a national level, recent actions by the federal government have a relationship with public perceptions of institutions' processes and consequences for philanthropy. In 2017, the Tax Cuts and Jobs Act was passed and included establishment of a 1.4% excise tax on private institutions with at least 500 students and net endowment assets of at least \$500,000 per student; passage of this act was at least in part related to discontent about the underrepresentation

of low- and middle-income students at these and other wealthy and highly selective institutions (Baum et al., 2018). Some fear this will ultimately be extended to a broader swath of institutions, as was proposed in 2022 by some lawmakers (Shaw, 2022). Although it was not explicitly mentioned in the Supreme Court ruling, some institutions are eliminating race as a consideration in awarding scholarships (Bellows, 2023), and further litigation is likely regarding race as a factor in scholarship aid.

The historical overview in this section demonstrates the complexity of philanthropy's intersection with America's financial aid landscape and the way philanthropy has contributed to institutional strategies. It also shows ongoing—and increased—government actions related to access and financial aid, and the level of interplay, even co-dependence, between private philanthropy and state and federal policies, regulations and laws.

Research on philanthropy and financial aid

In the context of philanthropy's long-standing involvement in U.S. higher education and intense public interest in college costs and debt, it is useful to examine the extant research about contemporary philanthropy for financial aid. This section includes information about donations designated for financial aid, reports on studies about donor populations' behaviors related to financial aid giving, outlines research about endowments and financial aid, and addresses philanthropically based aid and student outcomes.

Institutional fundraising and financial aid

Philanthropic donations to higher education institutions are either restricted for certain purposes (including financial aid) or unrestricted for use according to institutional discretion. Donations, which come from individuals (i.e., alumni and nonalumni) and organizations (i.e., foundations, corporations, donor-advised funds, others), are used for current needs and financing capital projects (structures, equipment, land purchases, etc.). Gifts also build endowments, collections of donated assets that are "invested by a college or university to support its educational and research mission in perpetuity," from which institutions spend a portion of the interest (American Council on Education, 2021, p. 1). The CASE Insights VSE survey (2023) shows more restricted giving (79%) than unrestricted giving (7%) (remaining funds were largely directed to capital projects). More contributions were for current operations (56.4%) than for endowment and capital giving (42.3%). Of the gifts with restrictions, endowment donations were more likely to support student financial aid (40.1%) than were current-purposes

contributions (10.3%). The CASE report does not describe financial aid giving trends over time. Secondary research examining longitudinal trends among 450 VSE institutions found that current-purposes donations for financial aid had increased from \$467.8 million (total, adjusted for inflation) in 1988 to \$1,205.6 billion in 2018 (Shaker & Borden, 2020). Organizations gave more dollars for financial aid than individuals, but individuals (who gave less generally) dedicated a larger proportion of their giving to financial aid. Giving grew from 1988 to 2018 and, although dollars increased for student aid, the proportion of current-use gifts designated for this purpose declined from 12.1% to 9.4%. This study didn't analyze endowment giving for financial aid.

The VSE and other sources show that philanthropic fundraising success varies greatly, with research/doctoral institutions (both public and private) raising the most funds, but financial aid receives larger proportions of the donations at private master's, baccalaureate, and associate's institutions (CASE, 2023). Some institutions raise far more dollars than others. An analysis of the top 20 public and private fundraising institutions found that the public institutions provided an average of \$9,043 to students receiving aid, and private institutions provided students with an average of \$41,267 (Chronicle Staff, 2019b). This aid equated to approximately one-quarter of students' tuition expenses at the institutions. According to the analysis, aid at all other public and private institutions in the educational landscape was at least 50% less (\$4,459 and \$15,232). In other words, the elite fundraising institutions provided more aid to their students. However, the elite fundraising institutions enrolled smaller proportions of Pell-eligible (public = 19.9%, private = 15.6%) and underrepresented minority (public = 18.6%, private = 21.0%) than on average across other institutions. This study didn't distinguish giving specifically for financial aid or examine the types of aid (need versus merit) the institutions provided. The study suggests institutions that receive more philanthropic gifts provide more aid generally but students with more need and who have been underrepresented in higher education don't enroll at these institutions as frequently as elsewhere.

Financial aid and individual and organizational giving

Studies addressing individual giving to higher education often have a singular focus: examining what influences giving behaviors (Proper & Caboni, 2014). Studies of individual giving related to financial aid are no different. For example, student loans are usually negatively associated with future giving to one's alma mater (Marr et al., 2005; Meer & Rosen, 2012; Monks, 2003), but not always (Cunningham & Cochi-Ficano, 2002). Scholarships (grant-based aid) are positively associated with donating (Cunningham & Cochi-Ficano,

2002; Marr et al., 2005; McDearmon & Shirley, 2009) but also may reduce gift sizes (Meer & Rosen, 2012). Moreover, scholarships do not predict future giving (McDearmon & Shirley, 2009; Meer & Rosen, 2012). These, and other studies of giving motivators and behaviors, do not put the contributions into a larger institutional context.

On the other hand, research on foundation contributors examines their funding goals, emphases, and donations' impact, identifying their significance in influencing higher education as a whole. Foundation funding activities have included attending to structures for organizing fields of knowledge, individual institutional financing, a system for "classifying" institutions by type, and financial supports for faculty financial security, among others (Bernstein, 2014; Geiger, 2015; Thelin & Trollinger, 2014). As time progressed, some scholars argue that foundations turned more toward supporting institutions' existing activities (Kelly & James, 2015). Frumkin and Kaplan (2010) conducted a two-pronged examination of the recipient institutions of foundations' largest grants (n = 50) (between 1967 and 2008) and the purposes to which 13,500 grants were directed in 2001. Based on the prominence of elite institutions in the giving patterns and the gifts' purposes, they concluded that foundation giving contributed more to institutions' core capacity and institution building as opposed to bigger societal imperatives, such as broadening access to higher education. Recently, researchers have documented a shift in foundation strategy toward a stronger advocacy-oriented approach. Increasing post-secondary degree attainment in society (i.e., "college completion agenda") and reducing persistent social inequities (Haddad & Reckhow, 2018; Kelly & James, 2015; McCambly & Anderson, 2020) are two areas of foundation focus. Long before these foundation efforts, college as an avenue for social mobility justified the Pell Grant, which aimed to increase family income through college attainment and to decrease class stratification (Goldrick-Rab et al., 2016; Hout, 2012).

Some of the key foundations in this space (i.e., Lumina Foundation, Strada Educational Foundation, Ascendium Philanthropy) were themselves created as outgrowths of student loan processing organizations, required by law to be nonprofit organizations and in need of charitable avenues to disburse profits. Foundations provide grant aid to colleges, universities, and other entities to support students' pursuit of postsecondary education goals, particularly students facing financial, social, and academic barriers. This philosophy also can include complementing financial aid with additional support, such as advising or tutoring, either through institutions or through foundations' independent programming. Recent research on foundation (and other) grant-based aid programs shows that combining financial aid and support structures has better outcomes than aid

alone (Angrist et al., 2016; Clotfelter et al., 2016; Page et al., 2019b). Foundations may also support research and lead public awareness campaigns related to student success through intermediary organizations such as membership organizations, educational nonprofits, and think tanks—meaning not all funds for this purpose go to postsecondary institutions or are in the financial aid category of giving to colleges and universities (Haddad, 2021; Haddad & Reckhow, 2018).

Endowments and student financial aid

A notable amount of research examines university endowments, most of which analyzes investment strategies and spending policies, often related to changing market conditions (e.g., Barber & Wang, 2013; Cejnek et al., 2013; Conti-Brown, 2011; Lee, 2008; Lerner et al., 2008; Merton, 1993; Meyer & Zhou, 2017). Importantly, institutions vary in reliance on endowment resources. Most hold small endowments that contribute little to annual revenues while a few have very large endowments and draw on them for a noteworthy proportion of annual revenues (Baum & Lee, 2019). A key conversation in the literature examines how wealth disparities affect institutions' initiatives, programs, facilities and approaches (Smith, 2015).

The group of institutions with the largest endowments is consistent, captured by the annual TIAA-NACUBO Study of Endowments (NACUBO-TIAA, 2023a), and well-commented upon in the public dialogue (i.e., Chronicle Staff, 2019b; Moody, 2023). Fifteen of the 20 largest endowments were held by private institutions (e.g., Harvard, Yale, Stanford, Princeton, MIT). All entities in the top 20 are doctoral/ research institutions aside from three public university systems with multiple institutions in their umbrella—i.e., University of Colorado, Indiana University, University of Minnesota (NACUBO-TIAA, 2023b). Indeed, of the 678 institutions in the study (265 public and 405 private), private colleges held 66.8% of the \$807.3 billion in endowment dollars and 132 institutions had endowments of \$1 billion or greater. These institutions own 84.2% of the endowment wealth. The institutions with the largest endowments also tend to be the institutions that raise the most new money annually (Chronicle Staff, 2019a, 2019b), suggesting that wealthy institutions outpace their peers in multiple ways.

Logically, the unequal distribution of endowment wealth could affect an institution's financial aid offerings, as could variances in student populations and their financial aid needs. Studies have examined the relationship between endowments, student need, and financial aid allocations, but usually only among private institutions and a cross-sectional sample. A Congressional Research Office analysis, including both private and public college endowments,

found that the larger an institution's endowment is, the less of its endowment payout goes to student financial aid (Sherlock, 2023). Those with endowments over \$1 billion spent less than a third on this purpose while those endowments that were \$25 million and less spent closer to three-quarters of the investment payouts on aid. Recalling that the vast majority of endowment monies are in funds that are restricted by purpose, this is a reminder that more of the money in smaller endowments is no doubt designated for student aid rather than other purposes. Considering the actual scale of support provided, a study of private colleges and universities found that those with large endowments were able to provide more aid than those with small ones (Baum et al., 2018; Baum & Lee, 2019; Bulman, 2022). At large-endowment private institutions low- and middleincome students pay lower net costs than at peer schools with smaller endowments (Baum et al., 2018; Baum & Lee, 2019). However, the better-endowed schools enroll fewer students overall and fewer Pell Grant students (Baum et al., 2018; Baum & Lee, 2019). For example, Baum and associates' studies (2018, 2019) noted that just 5% of all students attend the private doctoral institutions with the largest endowments and only 14% of these students receive Pell Grants. Bulman (2022), examining a sample of 200 private four-year institutions, also found that the institutions with large endowments enroll fewer lowincome and Black students. Previous studies drew similar conclusions: institutions with the most endowment wealth do not enroll the greatest proportion of students with the most need (De Alva & Schneider, 2015; Nichols & Santos, 2016). Indeed, Nicholas and Santos (2016) had found that of the small proportion (3.6%; 76 institutions) of institutions with endowments valued at \$500 million or more in 2012-2013, half were in the bottom 5% nationally for enrolling lowincome, full-time Pell Grant recipients.

Wealthier and more prestigious private universities have historically been most successful at fundraising and have raised more money for endowments than other types of institutions (Ehrenberg & Smith, 2003). This means already wealthy institutions have more opportunity to raise more money for financial aid and to draw on their growing endowments than less wealthy institutions. Still, Bulman (2022) found that as endowments grew over time, wellendowed private institutions did not exhibit larger or more diverse enrollments. There was no statistically significant reduction in costs and no increase in access for low-income students. The proportion of students receiving aid did not increase and there were only small increases in the amount of aid students received. In fact, the institutions became more selective and had higher admissions yields, but they did not enroll more students. The proportion of Black, Hispanic/Latino, and Native American students decreased

in comparison to white and Asian students. This study and the others discussed in this section suggest that institutional philanthropic wealth is not contributing to more diverse student populations at least at private institutions.

Philanthropic financial aid and student outcomes

A few studies examine large-scale philanthropic grant-aid endeavors where dollars follow the students to their chosen institutions. The funding has been found to make a difference for students and to be a positive investment for funders. The Wisconsin Scholars Grant program, for example, increased the likelihood of bachelor's degree completion for eligible students who received the grant as compared to those who didn't (21% completion versus 16%) and increased retention 1% to 3% per term (Goldrick-Rab et al., 2016). For lowincome students, the Dell Scholars Program features a GPA requirement, includes a precollege intervention, and ongoing monitoring and support. It didn't impact initial enrollment according to one, multiyear study, but positively affected persistence and completion (Page et al., 2019a). Although the Dell Scholars Program is an intensive investment (both financial grants and individual support), the increases in college completion were believed to provide the funder a positive rate of return. Another study, of the Susan Thompson Buffett Foundation's large merit scholarships for low-income, minority and first-generation students, found the program boosted recipients' degree completion at four-year institutions by 8 percentage points (Angrist et al., 2022). The projected earnings gains for low-income, non-white, urban, and first-generation students exceeded funder costs.

This study seeks to build on the efforts of other scholars and researchers to incorporate understanding about philanthropic efforts into the "bigger" story of grant-based aid for students with financial needs.

Data and methods

We employed a combination of descriptive and correlational analysis, drawing on data from multiple sources for the period 2003 to 2021. Our approach centers on comparing philanthropic trends using three-year rolling averages to provide a clearer, more consistent representation of data while adjusting dollar values to the 2021 Consumer Price Index (CPI) for accurate longitudinal comparisons. This framework allows us to examine the interplay between philanthropic giving and student financial aid in higher education, with a particular focus on marginalized student populations.

Our study primarily utilized data from two data sources: the CASE Voluntary Support of Education (VSE) survey spanning 2003 to 2021 and the National Center Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). The VSE survey, conducted annually since 1957, stands as the most comprehensive and long-standing higher education philanthropy survey in the United States. It gathers data on fundraising outcomes and provides estimates of total charitable support for institutions nationwide, including those that don't respond to the survey (CASE, 2023). The NCES IPEDS surveys, initiated in the 1980s, provide extensive insights into various institutional dimensions—such as student enrollments, degrees conferred, financials, human resources, and other pivotal institutional characteristics.

We supplemented these primary sources with a few secondary sources that pull data from IPEDS and other extant systems. Specifically, we obtained data on institutional need- and merit-aid dispensed from The Institute for College Access and Success (TICAS), an indicator of first-generation student participation from the U.S. Department of Education College Scorecard, and social mobility data from the Opportunity Insights projects. More detailed information about the data is presented in Table 1.

TABLE 1. OVERVIEW OF DATA

	Start	End
Voluntary Support of Education (VSE)		
Total Giving	2003	2021
Total Curr Ops/Student Financial Aid	2003	2021
Endowment: Restricted to Student Financial Aid (Deferred at PV)	2003	2021
US ED Integrated Postsecondary Education Dataset (IPEDS)		
Number/percent of underrepresented minorities*	2003	2021
Number/percent of Pell-funded undergraduates	2008	2021
Number/percent of undergraduates aged 25 and over	2003	2021
The Institute for College Access and Success (TICAS)		
Total need-based institutional grants awarded	2004	2019
Total non-need-based institutional grants awarded	2004	2019
US ED College Scorecard		
Percentage of first-generation undergraduate students	2003	2017
Opportunity Insights		
Social mobility rates**	Early 2000s	2014

*Includes Black/African American, Hispanic/Latinx, American Indian/Alaskan Native, Pacific Islander, and those of two or more races. Does not include white, Asian American, or international.

The use of three-year rolling averages is crucial for mitigating the impact of exceptionally large or irregular contributions. Doing so ensures a more consistent and reliable representation of trends, smoothing out the fluctuations and irregularities often presented in annual data. This approach also allows us to include more institutions that are missing only a year or two of data (as long as the gap is not continuous).

Furthermore, we used several standard clustering characteristics to examine differentiation by institutional type. These characteristics include the basic 2021 Carnegie Classification category, control of institutions (public/private), and endowment size. We extracted institutional characteristics related to control (public/private) and Carnegie Classification from IPEDS data. Although IPEDS provides information on endowment size, we decided to maintain consistency in our data sources by extracting all philanthropic giving data from the same source, the VSE survey.

To investigate trends and relationships between philanthropic donations and student financial aid in higher education for marginalized students, we identified a longitudinal sample of 370 public and private postsecondary

institutions, including several large systems that comprise multiple institutions, thus representing 406 individually accredited postsecondary institutions. The sample size was based on a key criterion: the inclusion of postsecondary institutions with extensive data records covering a minimum of 16 years of the 19 years within the VSE and IPEDS time frames. Specifically, we required data records on Total Current Operations/Student Financial Aid and Endowment: Restricted to Student Financial Aid. Institutions lacking data for this minimum duration were excluded from our analysis. The definitions for the categories of gift aid employed within the VSE system are displayed in the sidebar (CASE, 2011). Consequently, out of the initially extracted VSE data from around 1,050 public and private postsecondary institutions for the period from 2003 to 2021, our final sample size was narrowed down to 406 individually accredited postsecondary institutions represented by 370 VSE-reporting organizations. This sample was chosen to ensure a robust and longterm perspective on trends and relationships between philanthropic donations and student financial aid in higher education, particularly for marginalized students. Further details regarding the characteristics of our sample are comprehensively outlined in the Findings section.

^{**}Percentage of total students who come from the bottom 20% of the income distribution and percentage of the bottom 20% of students who reach the top 20%.

Using VSE responses on philanthropic giving, we present a mostly descriptive and quantitative analysis of giving at the sampled institutions across 18 years (2001 to 2021). Owing to the incomplete VSE and IPEDS data for 2022, specifically regarding detailed student profile information like the number of historically minority undergraduates, undergraduates aged 25 and over, and Pell-awarded undergraduates, we excluded 2022 from our study. Consequently, our analysis is confined to the period between 2003 and 2021.

In our investigation into the dynamics of philanthropic giving in relation to institutional aid (both need-based and non-need-based) and student demographics, we employed time series cross-correlation analysis using the SPSS software (version 27). This statistical method measures the relationship between two-time series, shedding light on the extent to which the trends are synchronized over time. The cross-correlation function (CCF) examines the strength of the relationship at varying lags or time intervals. Typically, a high CCF at a certain lag suggests predictability or a strong connection between the series with that time

delay. However, our study revealed that the most substantial correlations occurred with no lag time, indicating that the strongest associations between philanthropic contributions and institutional aid, alongside student profiles, were most pronounced when compared within the same time frames. This suggests these trends are somewhat spuriously related. That is, there are other factors that influence both similarly, rather than one influencing the other directly.

In the data sourced from the VSE survey, we encountered variations in reporting practices among institutions with multiple accredited campuses. Some reported their data as a single entity, while others provided details for each individual campus. To align this with the IPEDS data, we matched IPEDS data to the corresponding campuses and created an aggregated organization for those institutions that report their philanthropic activities system-wide, encompassing several campuses across different Carnegie Classifications. In the cases of these multicampus organizations, we consolidated the data from individual campuses.

VSE definitions

Type of funds

Restricted current operations: Funds the donor restricts for use in a particular department or a specific use. Does not include gifts to endowment, even if they have no further restrictions on them. Gifts for or of property are also excluded from this category.

Endowment, income restricted: Funds the donor uses to establish or add to an endowment restricted to a specific use, such as to endow a scholarship or faculty chair.

Purpose of restricted gifts

Student financial aid: Funds the donor restricts for financial aid to students. Such aid includes need-based and merit scholarships, graduate fellowships, athletic scholarships, student awards and prizes, and contributions made in support of student work-study arrangements. As an accounting convenience, you may credit funds made available for graduate and doctoral assistantships as part of a larger grant for support of a research project under the "Research" category if the funds originate as part of a philanthropic gift or grant as above under "Research." Note: If an individual or organization channels funds through the institution to support a specific named student, these funds are not gift funds and should not be reported. If a student recipient undertakes specific activities of economic benefit to the funder (e.g., research projects, work placements, etc.), do not report these funds as gifts.

Source: Council for Advancement and Support of Education, 2011

Sample characteristics

The sample includes 370 higher education organizations, several of which, as noted, are public universities comprised of multiple institutions as recorded in the IPEDS federal data system and the other sources used in the analysis. As a result, the 370 sample institutions are linked to 406 different institutions as reported through IPEDS. See the appendix for the listing of sample institutions. For VSE organizations that are associated with multiple IPEDS institutions, enrollments are summed, which further exaggerates the differences in size between public and private institutions. In addition, institutions that are combined are categorized according to the Carnegie Category of the largest institution, the research flagship of the system.

Display 1 provides general descriptive statistics of the sample. Partly because of the large systems, about half of all institutions are in the doctoral/research category with the reminder about equally split between the master's and bachelor's categories. The distribution of institutions

by control (public versus private, nonprofit, hereinafter referred to as just "private") show that a significant majority of doctoral/research institutions and a slight majority of master's institutions are public, while the majority of bachelor's institutions are private. Examining undergraduate enrollment shows an even greater skew toward the public institutions, and especially public, doctoral/research universities. Whereas public doctoral/research universities tend to have notable majorities of undergraduate enrollments, private research universities typically have as large or larger graduate-level compared to undergraduate-level student bodies.

There are very large differences in endowment size by institutional type as shown in the box and whisker charts of display 2. Private doctoral/research universities have the largest endowments, followed by public, doctoral/research universities and private bachelor's institutions. Both public and private master's institutions, as well as public bachelor's institutions, have much smaller endowments.

DISPLAY 1. SAMPLE INSTITUTIONS

Number	thousands)	
number ((thousands)	

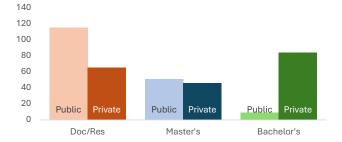
	•				
	Public	Private	Total	Public	Private
Doc/Res	115	65	180	64%	36%
Master's	51	46	97	53%	47%
Bachelor's	9	84	93	10%	90%
Total	175	195	370	47%	53%
Percent					
Doc/Res	66%	33%	49%		
Master's	29%	24%	26%		
Bachelor's	5%	43%	25%		

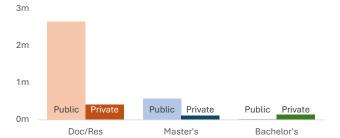
Total Undergraduate Enrollment (2019-22, thousands)
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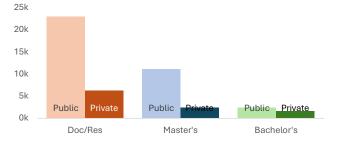
	Public	Private	Total	Public	Private
Doc/Res	2,643	410	3,053	87%	13%
Master's	567	110	676	84%	16%
Bachelor's	22	138	160	14%	86%
Total	3,231	659	3,890	83%	17%
Percent					
Doc/Res	82%	62%	78%		
Master's	18%	17%	17%		
Bachelor's	1%	21%	4%		

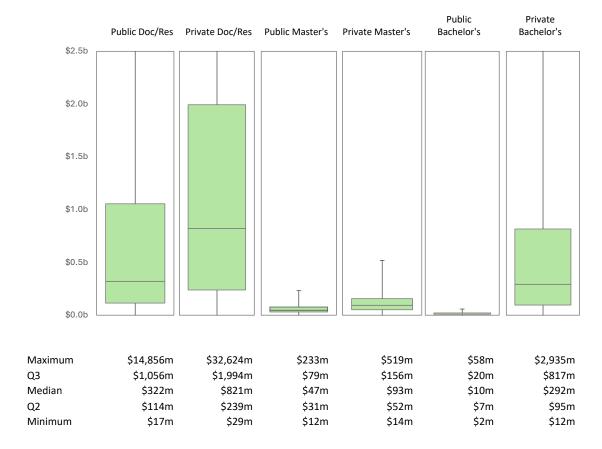


	Public	Private	Total	Public	Private
Doc/Res	22,981	6,315	29,296	78%	22%
Master's	11,110	2,385	13,495	82%	18%
Bachelor's	2,411	1,649	4,060	59%	41%
Total	36,502	10,349	46,851	78%	22%
Percent					
Doc/Res	63%	61%	63%		
Master's	30%	23%	29%		









DISPLAY 2. ENDING ENDOWMENT SIZE BY INSTITUTION TYPE

The plots show the middle fiftieth percentile as the box, with the median as the middle line, and "whiskers" to the maxima and minima. Note that for the first two and last charts, the maxima are well off the charts.

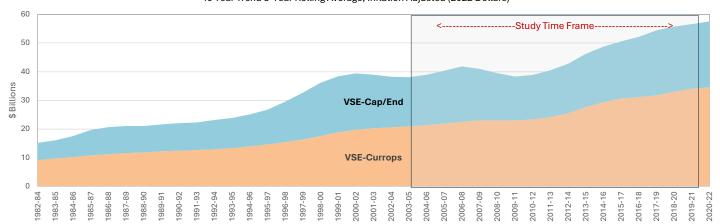
Trends in philanthropic giving

Our analysis of giving trends begins with the trends in total annual giving in an even longer time frame than our analysis, from 1982 through the most recently available year at the time of this analysis, 2022. The longer trend is shown using three-year rolling averages as we use for the fuller analysis. The overall trend shown in display 3, while generally positive, shows a few periods of mixed increases and declines, especially in giving for capital/endowment purposes. The study time frame is from 2003 to 2021, allowing us to match VSE data with other available data from the National Center for Education Statistics (NCES) IPEDS collection and the other sources described earlier. Although giving increased through most of this time frame there was a slight decline in capital/endowment giving after the recession of the late 2000s. Giving for current operations flattened during that time but did not decline. The institutions included in the

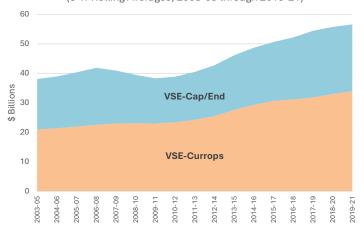
sample—those that had sufficient data to calculate threeyear rolling averages—comprise about one-third of the total VSE sample in terms of giving. The sample shows the same general trends as the nonsampled institutions. However, it's important to note that the nonsampled institutions are not a consistent group. Due to our sampling criteria, the nonsampled institutions are those that didn't respond to the VSE survey consistently over the years. The table summarizes these trends showing that the overall trends were slightly lower during the study time frame than in earlier years. The sample institutions exhibited higher growth than institutions not included in the sample, likely reflecting the bias of the sample toward institutions that are more established fundraisers, as reflected in their diligence in completing the survey every year and presumably monitoring their trends closely.

DISPLAY 3. TRENDS IN OVERALL GIVING

Overall Giving for Current Operations and Capital Purposes/Endowment 40 Year Trend 3-Year Rolling Average, Inflation Adjusted (2022 Dollars)



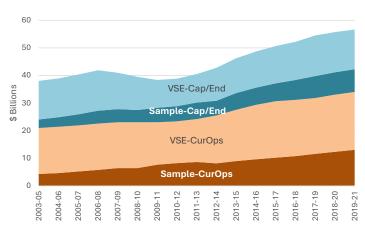
Overall Giving Trends within Study Time Frame (3-Yr Rolling Averages, 2003-05 through 2019-21)



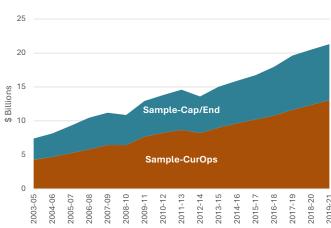
Average Annual Percentage Change					
	Total	Current	Capital/		
	Total	Operations	Endowment		
VSE 1982-84 to 2021-22	3.6%	3.6%	3.6%		
VSE Early (82-84 to 02-04)	4.1%	5.5%	4.7%		
VSE Study Time Frame	3.1%	1.8%	2.5%		
Sample Study Time Frame	6.8%	7.2%	6.3%		
(Outside Sample*)	0.9%	0.2%	6.8%		
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*Sample institutions are consistent over time but "outside sample" institutions vary as they include those that do not consistently respond to the VSE Survey.





Study Sample Trends in Giving



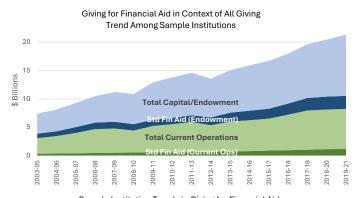
Trends in giving for financial aid among sample institutions

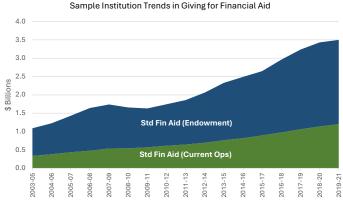
Display 4 tracks giving for financial aid among the sample institutions—both current operations and endowment gifts—as a portion of overall giving. The top left chart and the top table to its right show giving for financial aid purposes as a proportion of giving for all purposes and in both forms: current operations and endowment.² Overall giving for financial aid at first declined as a proportion of total giving before gaining in proportion. The trend differed between current operations giving, which increased in proportion of total current operations giving from 12% to 17%, mostly in the last 15 years, whereas endowment-related financial aid giving declined in proportion before returning to its earlier levels.

The rates of change in financial aid giving are summarized by the lower charts and table.³ Within gifts to endowment, financial aid as a target changed at the same rate as overall endowment giving, a healthy 7.2% annually. In contrast, financial aid gifts for current operations purposes outpaced giving for other current operations purposes as well as financial aid endowment gifts, averaging 8.3% a year.

Finally, the bottom right table clearly illustrates the impact of the recession of the late 2000s on both types of giving, but especially on endowment gifts. The trend lines (dashed) are included to show the overall pattern across this time frame, with the increases in proportion of current operations giving leading the total percentage of giving for student financial aid purposes upward, despite the more erratic and slight negative trend for aid gifts within the endowment category.

DISPLAY 4. TRENDS IN FINANCIAL AID GIVING WITHIN SAMPLE INSTITUTIONS





Financial A	id as a	Percent	οf	Annual	Giving
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	2003-05	2011-13	2019-21
Total	14.8%	12.7%	16.4%
Endowment	21.4%	16.2%	21.3%
Current Operations	12.1%	12.3%	17.1%

Average Annual Percentage Change in Giving to Sample Institutions

		Capital/	Current
	Total	Endowment	Operations
Total	6.8%	7.2%	6.7%
Student FinAid	7.6%	7.2%	8.3%
Other than Fin Aid	6.7%	7.2%	5.6%

Financial Aid Giving as a Percent of Total Giving



- Within the VSE, endowment giving is part of the broader category of capital purposes, which includes gifts to endowment, property, buildings, equipment and loan funds.
- 3 Rate changes were calculated using compound interest calculation methods. Specifically, if a is the starting amount, b the final value, and n the number of years that have passed, the formula for rate of change is: $_{r=\exp\left(\frac{\ln(b)-\ln n}{a}\right)-1}$

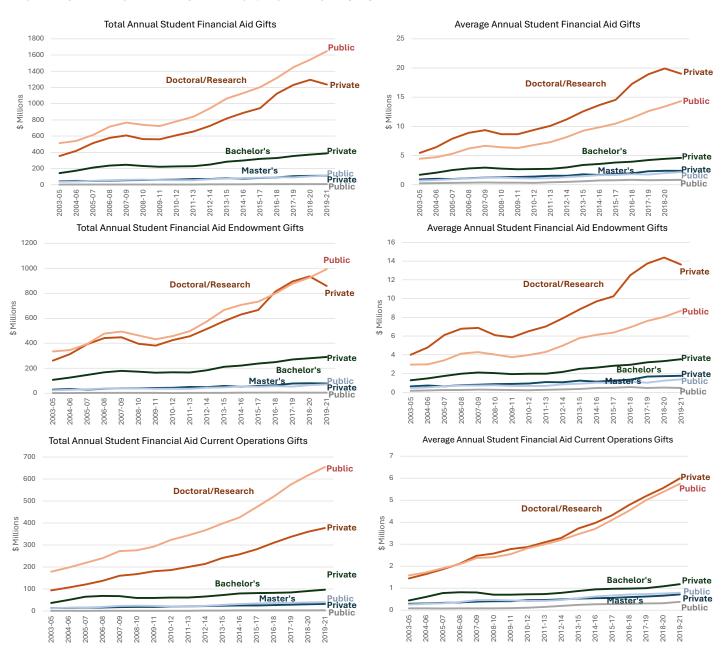
Trends in student financial aid gifts by institutional type

We next examine giving trends among sampled institutions by institution type (displays 5 and 6). Because control (public versus private) and Carnegie Classification (Doctoral/Research, Master's, and Bachelor's) are intertwined, as noted in the sample description earlier, we generally divide institutions into the six categories that result from the combination of the two factors: public doctoral/research, private doctoral/research, public master's, private master's, public bachelor's, and private bachelor's. Additionally, because public institutions have larger undergraduate student enrollments, we show both aggregate totals and institutional averages for the six groups as they tell a slightly different story.

Both public and private doctoral/research institutions have experienced the most dramatic growth in giving, overall,

as well as for financial aid purposes. When examined in the aggregate (left side charts), public research/doctoral universities have the largest amounts and largest growth rates, with private doctoral/research universities trailing slightly. However, when examined by institutional average levels, private research/doctoral institutions have outpaced the public ones in growth rate. Again, this reflects large differences in enrollment between the public and private institutions in this category. Private bachelor's, while notably lower than the doctoral research universities, are notably higher than institutions in the three remaining categories: public and private master's institutions and public bachelor's institutions. However, because of their smaller number, the private doctoral/research universities generally fare better than the public ones when examining the average per-institution amounts. This is less noticeable, however, for financial aid giving for current operations purposes.

DISPLAY 5. TRENDS IN FINANCIAL AID GIVING BY INSTITUTIONAL TYPE



To distinguish among institutions by endowment size, we grouped the institutions into three categories based on their most recent endowment levels. Small-endowment institutions are those with total endowments of less than \$100 million. Medium-endowment institutions are those with endowments of at least \$100 million but less than \$1 billion. Finally, large-endowment institutions are those with endowments of at least \$1 billion. The "small" group includes 137 (37%) of the sample institutions, the "medium" group

159 (43%), and the "large" group 74 (20%) of the sampled institutions.

Display 6 summarizes differences in giving by endowment size, showing that the rates of increase are closely related to endowment size, with the large group showing the highest rates of increase and the small group the lowest rates of change.

DISPLAY 6. TRENDS IN FINANCIAL AID BY INSTITUTIONAL ENDOWMENT SIZE



The numerical differences in giving by institutional type (Carnegie Category and control) and by endowment size are provided in the Display 7. These charts reveal additional nuances in the trends. For example, although the few (9) public bachelor's institutions in the sample generally experience relatively low levels of giving, their rates of

change are higher than the much larger group (84) of private bachelor's institutions, which generally have the lowest rates among the institutional types. Additionally, although the institutions with small endowments experienced the lowest rates of increase in total giving, they had more favorable rate increases in giving for financial aid.

DISPLAY 7. CHANGES IN GIVING, OVERALL AND FOR FINANCIAL AID

Average Annual 1	otal Giving (\$Millions) by Institutional Type

	0 ()	,	/ I ⁻ -	
			Chang	e
	2003-05	2019-21	\$	%
By Carnegie Type and C	ontrol			
Doctoral/Research				
Public	33.4	97.3	63.9	6.9%
Private	37.8	118.8	81.0	7.4%
Master's				
Public	3.1	7.9	4.8	6.0%
Private	4.5	8.8	4.4	4.4%
Bachelor's				
Public	1.3	3.2	1.9	6.0%
Private	8.6	18.5	9.8	4.9%
By Endowment Size				
Large	69.1	211.3	142.2	7.2%
Medium	11.6	30.0	18.4	6.1%
Small	3.2	6.5	3.3	4.5%

Average Annual Giving for Financial Aid (\$Thousands) by Institutional Type

			Chang	e
	2003-05	2019-21	\$	%
By Carnegie Type and C	Control			
Doctoral/Research				
Public	4,464	14,330	9,865	7.6%
Private	5,458	19,022	13,564	8.1%
Master's				
Public	710	2,176	1,466	7.3%
Private	914	2,394	1,480	6.2%
Bachelor's				
Public	246	839	593	8.0%
Private	1,709	4,607	2,898	6.4%
By Endowment Size				
Large	9,635	30,430	20,795	7.5%
Medium	1,849	6,271	4,421	7.9%
Small	622	1,833	1,211	7.0%

Average Annual **Current Operations Student Financial Aid** (\$Thousands) by Institutional Type

			Chai	nge
	2003-05	2019-21	\$	%
By Carnegie Type and C	Control			
Doctoral/Research				
Public	1,582	5,743	4,162	8.4%
Private	1,443	5,989	4,547	9.3%
Master's				
Public	259	790	530	7.2%
Private	291	717	426	5.8%
Bachelor's				
Public	79	378	299	10.3%
Private	440	1,181	741	6.4%
By Endowment Size				
Large	2,859	10,518	7,659	8.5%
Medium	594	2,149	1,555	8.4%
Small	229	670	442	7.0%

Average Annual **Endowed/Restricted Student Financial Aid** (\$Thousands) by Institutional Type

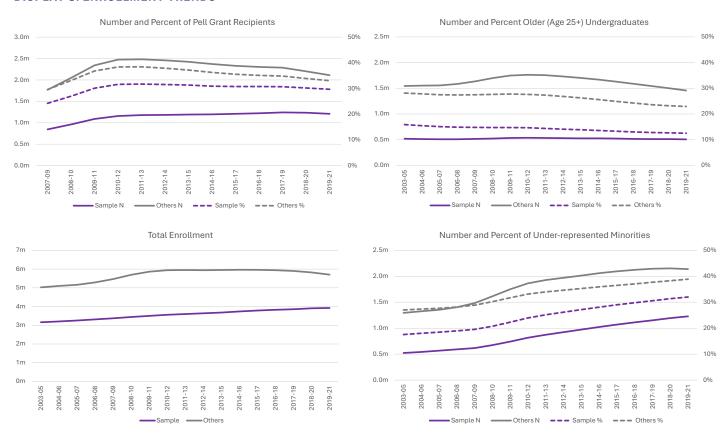
		Chang	е
2003-05	2019-21	\$	%
Control			
2,962	8,712	5,750	7.0%
4,015	13,636	9,621	7.9%
464	1,386	921	7.1%
637	1,769	1,132	6.6%
167	461	294	6.6%
1,289	3,538	2,249	6.5%
6,776	19,912	13,136	7.0%
1,267	4,202	2,935	7.8%
410	1,227	817	7.1%
	2,962 4,015 464 637 167 1,289	2,962 8,712 4,015 13,636 464 1,386 637 1,769 167 461 1,289 3,538 6,776 19,912 1,267 4,202	2,962 8,712 5,750 4,015 13,636 9,621 464 1,386 921 637 1,769 1,132 167 461 294 1,289 3,538 2,249 6,776 19,912 13,136 1,267 4,202 2,935

Overall enrollment trends

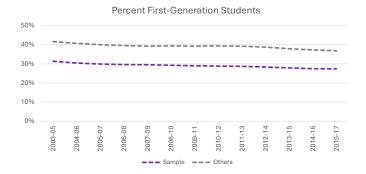
The next set of charts (display 8) examines trends in undergraduate enrollment, overall and among historically underserved populations, among the sample institutions compared to all other public and private four-year institutions.⁴

In contrast to giving, undergraduate enrollments have been more stable during the study time frame. Specifically, the overall trend shows increases from 2003 through 2012, after which the trend flattens, and then declines over the last few years of the time span.

DISPLAY 8. ENROLLMENT TRENDS



DISPLAY 9. TREND IN PERCENT FIRST GENERATION STUDENTS



4 Four-year institutions include those with a bachelor's or higher-level degree. While the vast majority of our sampled institutions confer bachelor's degrees, a few confer only graduate degrees but are still considered "four-year" institutions. However, we examine only undergraduate enrollments with an assumption that gifts for financial aid purposes are primarily used to support undergraduate students.

The sample institutions had a steadier trend, averaging a 1.2% annual rate of change whereas other institutions reached a plateau around 2010 and experienced a slight decrease in the last few years, resulting in a 0.8% annual increase rate.

Because of steady increases in overall enrollment, it is important to consider increases in both number and percent of subgroups.

Number and percent of underrepresented minorities

All types of institutions increased in both number and percent of underrepresented minorities (URM). Up through when NCES/IPEDS altered the race/ethnicity categories in 2008–2009, the underrepresented counts included Black/ African American, Hispanic/Latinx, and American Indian/ Alaskan Native. Not included are White, Asian American, and Non-Resident Alien. After the change, when Native Hawaiian/ Pacific Islanders, and Two or More Races were added as categories, both were included with the counts of URM. The change in categories allowed for the recognition of more historically underrepresented racial minority groups, but also produces a slight over-representation, since the Two or More Races group includes those who identify as White and Asian American.

Sample institutions had overall lower proportions, but a slightly higher rate of increase in number, thanks to more robust enrollments compared to nonsampled institutions.

Number and percent of Pell Grant recipients among all undergraduates

NCES started collecting data on financial aid for all undergraduates in 2007–2008. The totals and percentages increased for both the sample and other institutions until about 2013, when the trend flattened. Although the number of Pell Grant recipients within sample institutions climbed very slightly, the percentages have decreased slightly since the peak.

Number and percent of older (Age 25+) undergraduates

Representation among nontraditional-aged undergraduates (age 25 or higher) declined in the overall population and in the sample. For the sample, the numbers were generally stable, so the percentages declined as overall enrollment increased.

Note the overlap between these historically underrepresented groups. According to the most recently available data $(2019-2020)^5$, 38.3% of students enrolled at all types of institutions (including two-year and for-profit institutions not in this analysis) were Pell Grant recipients. The rate was highest among Blacks (64.3%), followed by Hispanics (54.3%), American Indian/Alaskan Native (48.6%), Pacific Islanders (39.2%) and two or more races (36.7%), with lower rates for Asian Americans (32.8%) and whites (29.1%). Similarly, older students receive Pell Grants at higher rates than their traditional age peers. Specifically, the rate is 35.0% among students younger than 25,56.7% among students ages 25 to 29 and 50.6% for those aged 30 or older.

Percentage of first-generation students

The data for percentage of first-generation students comes from a different source than all the other enrollment indicators, which were taken from the federal IPEDS collection. These data were extracted from the College Scorecard data, which uses as its source the Free Application for Federal Student Aid (FAFSA). Display 9 shows that first-generation percentages have been declining with the sample institutions generally enrolling lower proportions than institutions not included in our sample. If the level of accessibility of higher education remains stable, one would expect this measure to decline as the proportion of the adult population with a college degree rises.

Trends in institution-provided student financial aid

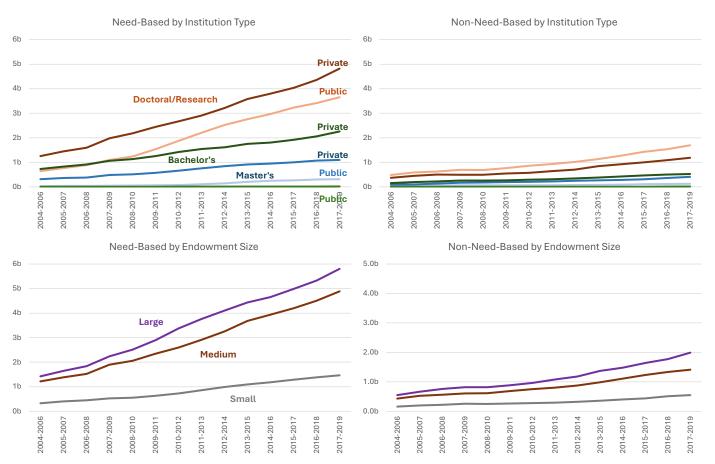
Display 10 summarizes the trends in institutional aid dispensed to meet need as well as funds dispensed based on other criteria, disaggregated by institutional type and endowment size. The charts are presented on a common scale that reaches an aggregate of \$6 billion. This is notably larger than the scale of the annual financial aid giving, where the aggregate total for public doctoral/research universities reached \$1.6 billion.

It is also notable that need-based aid exceeds non-need aid by a considerable amount. This is qualified by the common practice of designating any portion of a merit-based scholarship that meets students' documented need as being need-based. Finally, it's worth noting that the public master's and bachelor's institutions generally dispense the least aid, as these relatively low-tuition institutions tend to rely more on public sources of aid for their students to meet their financial need. However, as we show in the next section, these institutions have the largest rate of growth, in part because of the small base upon which they are building.

Finally, it is important to note how differences in tuition levels between private and public institutions are reflected in these trends, especially given the robust increases among public doctoral/research universities. These trends reflect the degree to which these public universities attract out-of-state students, who pay rates more like attending private universities, although not as much as the most elite private institutions

Display 11 summarizes the changes in need-based and non-need-based institutional aid over the time span for which these data are available, which trims one three-year period off the beginning, and three from the end of the other data sources. The average annual rates of change for institutional aid disbursement, which are inflation adjusted, are still higher than the rate of tuition and fee inflation, which has generally doubled the consumer price index rate in recent years. However, the increases in dispensed need-aid also reflect the modestly growing enrollments within the sample. The changes in non-need-aid have been similar to but generally less than the increases in need-aid, which is not surprising since as tuition increases, more need is created and so the funding shifts slightly.

DISPLAY 10. TRENDS IN DISBURSEMENT OF NEED- AND NON-NEED-BASED INSTITUTIONAL FINANCIAL AID



DISPLAY 11. CHANGES IN DISBURSEMENT OF INSTITUTIONAL FINANCIAL AID, 2004-2006 THROUGH 2017-2019

Need-Based (\$ Millions)					
				Cha	inge
		2004-06	2017-19	\$	%
By Carnegie Ty	pe and Contro	I			
Doctoral/	Public	642	3,653	3,010	14.3%
Research	Private	1,253	4,820	3,567	10.9%
Master's	Public	31	312	281	19.5%
	Private	312	1,098	786	10.2%
Bachelor's	Public	2	17	15	18.3%
	Private	728	2,258	1,531	9.1%
By Endowment Size					
	Large	1,423	5,804	4,381	9.2%
	Medium	1,218	4,887	3,670	9.1%
	Small	327	1,467	1,140	9.8%

	Non-Nee	d-Based (\$ N	Millions)		
				Cha	ange
		2004-06	2017-19	\$	%
By Carnegie Ty	pe and Contro				
Doctoral/	Public	484	1,694	1,210	10.1%
Research	Private	369	1,185	817	9.4%
Master's	Public	39	126	87	9.4%
	Private	91	408	317	12.2%
Bachelor's	Public	3	15	12	12.6%
	Private	154	524	370	9.9%
By Endowment Size					
	Large	431	1,412	981	7.7%
	Medium	549	1,990	1,441	8.4%
	Small	159	549	390	8.0%

Associations between giving for financial aid and institutional financial aid disbursement

Our analysis next examines the associations between the trends in financial aid gifts and financial aid disbursement using cross correlations. Cross correlations are most appropriate for examining associations between time trends as in this analysis. As noted earlier, the cross-correlation function examines the strength of the relationship at varying lags or time intervals, with an interval suggesting direction and strength of causality. Within the current context, student aid gifts, especially those for current operations, would be expected to lag perhaps a year or two, in terms of their influence on institutional aid. The impact time frame for endowed gifts would be even longer.

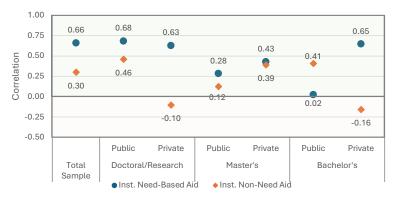
The cross-correlation software used for this analysis, IBM/SPSS, Version 27, includes an assessment of the lag time that produces the highest association values. In all cases, the highest associations occurred with no lag at all. This itself is a meaningful result, suggesting that spending for aid is not dependent directly on prior years' giving for student financial

aid. Rather, the two trends appear to run in parallel, although the degree of association varies considerably by institution type.

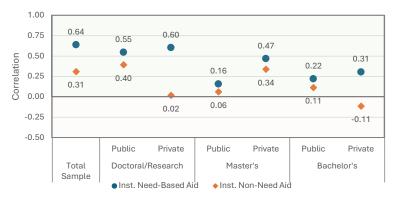
The three charts in display 12 summarize these cross correlations for total SFA gifts, current ops SFA gifts, and endowment SFA gifts. For the total sample, the correlation is high between student aid gifts and need aid dispensed but lower between gifts received and non-need-based aid. However, these correlations vary notably by institution type. They are consistently highest among the types of institutions that have large endowments and get lots of gifts: public and private doctoral/research universities and private bachelor's institutions. The correlations with need-based aid are particularly high, and the correlation with non-need-based aid particularly low for the two private institution groups (doctoral/research and bachelor's). This is very likely due to the differences in tuition costs at these institutions that generates more need even among students from middle- and upper-middle-class families.

DISPLAY 12. CROSS CORRELATIONS BETWEEN STUDENT FINANCIAL AID GIFTS RECEIVED AND INSTITUTIONAL AID DISPENSED

Differences in Correlations between **Total SFA** Giving and Need/Non-Need Institutional Aid (Overall Correlations = 0.66/0.30)



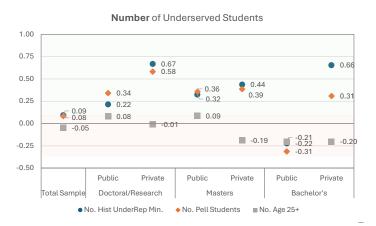
Differences in Correlations between **Current Ops SFA**Giving and Need/Non-Need Institutional Aid
(Overall Correlations = 0.66/0.30)

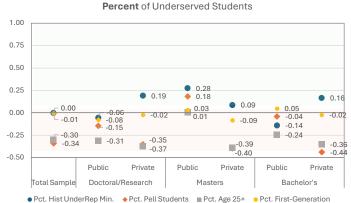


Differences in Correlations between **Endowment SFA**Giving and Need/Non-Need Institutional Aid
(Overall Correlations = 0.66/0.30)



DISPLAY 13. CROSS CORRELATIONS BETWEEN INSTITUTIONAL NEED-BASED AID AND STUDENT CHARACTERISTICS





It is also interesting to note that the public doctoral/research and small group of public bachelor's institutions show a higher association between gift aid received and non-need institutional aid dispensed, which may be related to the same reason: the middle- and upper-middle-class families don't have as high a need and so aid monies used to attract them to enroll would go further beyond their financial need than is the case for the higher-tuition private institutions.

Finally, while the correlation patterns are similar between types of financial aid gifts (current operations and endowed), they're slightly higher with the endowed gifts factor. While this is surprising given the no lag time condition, it may be a result of the larger scale of endowed giving, providing more variation, which contributes to higher correlations.

Associations between institutional need-based aid dispensed and student characteristics

We next examine the associations between institutional need-aid dispensed and changes in the number and percent of students from historically underserved groups in display 13. The correlations for total aid and the component current operations and endowment portions were very similar, so we show in this section the correlations with total annual student financial aid gifts. The correlations across the entire sample are negligible for the number of students enrolled

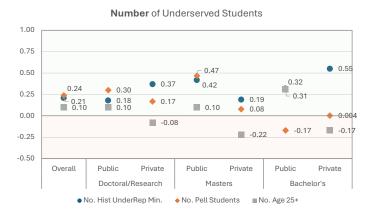
from these historically excluded groups. Moreover, the correlation between need-aid dispensed and older and Pell recipient students are modestly negative (-0.30 and -0.34, respectively). However, there are notable differences in the associations between need-aid and especially the number of underrepresented minorities for private institutions in each sector

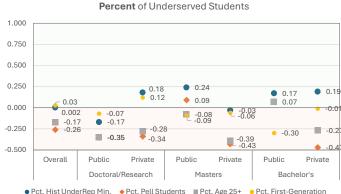
There are also moderate correlations between needaid and number (but not percentage) of Pell recipient undergraduates within most sectors, except the small public bachelor's group.

The relationship between need-based aid trends and enrolling nontraditional age students is, if anything, negative. In addition to flat demographic population trends, most forms of financial aid require at least three-quarter-time attendance, whereas older students include a larger proportion of part-time attendees.

A measure of percentage first-generation students (but not number) was available from the NCES College Scorecard. This measure is included within the percent change chart, showing virtually no correlation between the generally robust upward trend in need-aid dispensed and the proportion of first-generation students attending any of these types of institutions.

DISPLAY 14. CROSS CORRELATIONS BETWEEN ANNUAL STUDENT FINANCIAL AID GIFTS RECEIVED AND STUDENT CHARACTERISTICS





Associations between student financial aid gifts and student characteristics

Under the logic that gifts for student financial aid contribute to an institution's ability to provide need- and non-need-based aid to students, one would expect larger correlations between aid dispensed and the number and proportion of historically underserved students than between aid gifts and number and percentage of students representing these historically underserved groups. However, the results of this analysis don't follow that logic as shown in display 14.

First, it was just shown that the correlation between aid dispensed and numbers and percent of students from these underserved groups is mixed, with an association noted within primarily the private sector and primarily for underrepresented minorities, who have grown in number in part because of changes in reporting protocols.

Analysis of the sample data revealed generally modest but positive correlations between aid gifts and the number of enrolled students from these historically underserved groups, except for older students who, as noted, likely include a larger proportion of part-time students who are limited in their aid eligibility.

However, the story is less positive in relation to the percentage of students represented in these historically underserved groups. Across the sample, the correlations are minimal to modestly negative, especially for the percent of Pell grant recipients. Indeed, the negative correlation with percent Pell recipients is highest in the private sector institutions across the sample. Within the public doctoral/research universities, which enroll two-thirds of the students in the sample, the robust increasing trend in annual student aid gifts has allowed these institutions to grow, even in

numbers of students from most of these underserved groups (except older students). But the trend is not associated with an increase in the representation, that is, the proportion of these students.

There are three somewhat positive correlations of aid gifts with percentage of underrepresented minorities—at private research/doctoral (0.18), public master's (0.24), and both public (.17) and private (.19) bachelor's institutions. While the correlational nature of this analysis does not allow us to conclude that the impacts are direct, there have been increases in the number and proportion of students from historically underrepresented minority groups across the sample, as there has been in the general U.S. population.

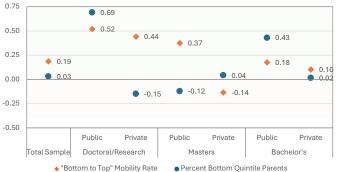
Association between giving for financial aid and social mobility

Display 15 shows the bivariate correlations between the single point in time social mobility measures that we have obtained from the Opportunity Insights project, and two end-of-time-frame measures of student financial aid gifts: the last three-year rolling average (2019-2021) of the annual aid gift amount, and the change in amount of student aid gifts from the first to the last three-year rolling averages.

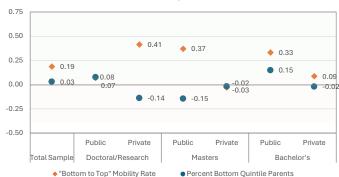
The measures taken from Opportunity Insights include a mobility rate and a service to low-income families measure. These measures are based on tracking persons born from 1980 to 1991, capturing their familes income level at high school age and their own income level in their late 20s or early 30s. The "bottom to top" mobility rate is the proportion of students who started in the lowest income quintile and rose to the top income quintile. The second measure indicates the percentage of students entering college whose parents were from the bottom economic quintile.

DISPLAY 15. CORRELATIONS BETWEEN SOCIAL MOBILITY AND STUDENT GIFT AID RECEIVED





Change From Beginning to End Time Student Aid Gifts with Social Mobility Measures



Overall there are again mixed correlations across the different types of institutions in the sample between the two student gift aid measures—level in the most recent three-year period, and change between earliest and latest time periods—and the two social mobility measures—percentage of bottom-totop mobility and the proportion of bottom quintile parents. Interestingly, the correlations appear identical (as rounded), for the total sample. However, there is a notably high correlation between the percentage of parents in the bottom quintile and level of student gift aid received among public doctoral/research universities. In contrast, there is a slightly negative correlation between bottom quintile parents and level of gift aid received at private, nonprofits. This could possibly be linked to the sources of funding for these two types of universities, with public institutions receiving more organizational funding (likely linked to access initiatives) but private institutions relying more on individual donors.

Despite mixed, and in some cases negative correlations, there is evidence from this analysis that there are some positive associations between student gift aid and the ability to serve low-income students but those associations are not direct. The institutions for which student aid gifts have been and continue to be relatively large, have been able to serve increasing numbers of students, even while their tuitions have risen notably. The institutions appear to be serving more students of all groups, including most historically underrepresented groups, but by the nature of student aid eligibility, it appears that part-time students, who are proportionately among the older students attending college, are less well served by these gifts.

Summary and discussion

Philanthropic donations go hand in hand with the development of financial aid in the United States and have grown along with the higher education sector and student enrollments (Adam, 2020; Thelin & Trollinger, 2014). Still,

only sporadic attention has been paid to these now-multiple billions of dollars in contributed and endowed funds as a tool for achieving sector-wide goals for students. This project examined the relationships between student aid donation trends, institutional aid dispensed, and the enrollment and social mobility of historically underserved students. It drew on a distinctive combination of data sources to examine financial aid inputs and outputs at a wide swath of fouryear public and private institutions over time-making it complimentary to but different from (the few) other studies in this space (i.e., Baum et al., 2018; Baum & Lee, 2019; Bulman, 2022; Chronicle Staff, 2019b; De Alva & Schneider, 2015). The study responds to public interest (and outcry) about higher education philanthropy, college costs, failure to meet students' financial needs, and graduates' social mobility (Babbitt, 2022; Baum et al., 2018; Klebs et al., 2021; Ma et al., 2019; Marken, 2019; Mitchell et al., 2019; Satija, 2018; Webber, 2017). This section returns to the study's core research questions and discusses the study's contributions to scholarship and practice. It summarizes key results within the broader context of research and policy, explores implications, discusses limitations, and integrates ideas for future research.

The study provides several insights about philanthropy for financial aid through addressing the first research question. Donors gave more dollars and an increased proportion of their support for student financial aid. Financial aid endowment giving averaged twice the level of current use financial aid giving during the study period. This fits with the full VSE sample in which student financial aid is the top recipient of endowment gifts at most institutions (CASE, 2023). A consequence of the endowed nature of many of these gifts is that much of the money is not available to be spent wholesale and rather provides annual income payouts whose aggregate outcomes are a long-term proposition rather than intended to maximize short-term outcomes. This aligns with concerns about the holding of philanthropic funds in endowments

rather than raising and spending of these monies for the most pressing current needs (Thelin & Trollinger, 2014). On the other hand, it shows institutional emphasis on fundraising for financial aid and donors' recognition that student financial needs are ongoing and increasing.

It's promising that all categories of institutions in this study benefited from the upward trend in financial aid giving—but some institutional categories certainly raised more than others. Existing philanthropic resources (endowments) were a distinguishing feature. Institutions with the largest endowments (mostly private institutions, but also including public research universities) raised the most for financial aid, followed by medium-endowment institutions (a mix of private and public institutions), and then those in the smallest category (a mix of private and public institutions). Doctoral/research institutions (mostly public) raised the most for student aid and had the largest percentage growth in the study period. To be fair, there were not dramatic differences in financial aid giving rates of change among the institutional groups—all were raising more money for this purpose—but it is notable that even institutions that started with lower levels of student financial aid gifts, like public master's and bachelor's institutions, had among the highest annual rates of change.

In terms of philanthropic wealth, small- and mediumendowment institutions—the majority of study samplesimply don't have the same level philanthropic resources and can't "catch up," even with respectable growth in new monies. This aligns with the common concern that big philanthropy is often directed at already wealthy institutions (Babbitt, 2022). This historic disadvantage makes seeking "transformational" gifts to support those with fewer philanthropic resources even more important; there are some promising signs. There are more reports of large gifts for financial aid to atypical recipient institutions (i.e., private colleges with small endowments and public master's colleges) (Alumnus Gives Largest Gift in Augustana History – \$40 Million, n.d.; Anonymous Donor Gives \$10 Million for Idaho State University Student Scholarships, 2022; Nietzel, 2023). Historically black colleges and universities (and community colleges) received an impressive portion of MacKenzie Scott's largess for their unrestricted use (Gasman et al., 2021). Also, and although it is recognized as a challenging work, fundraising programs are growing at regional institutions (McClure & Anderson, 2020) as is attention to the key role these institutions play in educating many and a diverse array of students (Nietzel, 2019); two characteristics that are good for raising more money.

The second research question asked whether philanthropic giving related to college and university aid for students, which required exploring aid payouts. Just as philanthropy increased, so too did institutional aid, in alignment with national trends (Ma & Pender, 2022). Across the years,

private doctoral/research and bachelor's institutions dispensed the highest amount of aid, but public doctoral/ research institutions moved from totals less than the private bachelor's sector to totals closer to their private doctoral/ research peers. These results dovetail with research about private colleges showing that the largest endowed institutions provide more aid in general (Baum et al., 2018; Baum & Lee, 2019; Bulman, 2022) and extend this finding to public institutions. Need-based aid was the overarching priority. Need-based aid totals were much larger (three times larger) than non-need-based totals in the sample. Institutions with the largest endowments, primarily private institutions, gave the most need-based aid (approximately \$6 billion), while medium-endowment institutions, a closer split between public and private institution, gave the most non-need-based aid (approximately \$2 billion), with the best-endowed institutions close behind in allocations of non-need aid. One study found that, between 2001 and 2017, about \$2 out of every \$5 public universities (n = 339) provided in aid went to students who didn't qualify for federal financial aid, arguing that these institutions were in a "merit arms race" for the most academically talented students (Burd, 2020). Our findings do raise some similar concerns, but with the caveats that need has risen even among those who don't qualify for federal aid and that our results don't reflect quite this proportion of non-need-based aid compared with need-based aid (Baum et al., 2018). While there are signs that all institutions are serving larger numbers and proportions of students from historically excluded racial groups, some of this trend is due to more inclusive methods of counting students in these groups (that is, changes in reporting categories) and the parallel change in U.S. census representing these groups than to the provision of more aid for them.

Following the descriptive calculations and to further address the research question, we completed a correlation analysis to examine the trends in new philanthropic gifts and aid. We found a moderate correlation between student financial aid giving in all forms (current operations, endowment and total) and institutional aid. Specifically, the correlation was 0.66 between total student aid gifts and need-aid dispensed, and 0.30 between total gifts and non-need aid. The correlations were similar for both current operations and endowed gifts. The lack of difference between current operations and endowment, and the fact that a lag of zero years produced the highest correlations in all cases, signifies that these are contemporaneous trends and likely not causal associations. Differences in the association were evident across types of aid and institutions. For example, philanthropic giving was more strongly correlated with need-based aid distributions than non-need-based aid. At private institutions needbased aid was more notably associated with philanthropic dollars received, considering both current operations

and endowment contributions. At public institutions the relationship between need-based and non-need-based aid was closer in both current operations and endowment giving, but the correlation to aid was especially low for master's and baccalaureate financial aid outputs (which totaled less than \$200 million for both institutional groups). These results suggest that philanthropy directed toward student aid isn't leading the trend toward conferring more institutional aid, but rather trending along with need-aid increases.

There are several possible explanations for the inconsistent relationships between giving and aid awarded as well as the differences among groups of institutions. The study period coincided with reduced state support for public education, tuition hikes, and increased attention to college costs and student debt (CASE, 2023; Ma et al., 2018; Mitchell et al., 2016; NCES, 2023; The White House, 2022; Webber, 2017). Perhaps in response to some of these events, financial aid donations grew in the study period, showing financial aid as a philanthropic priority. However, as significant as the donations were, they were not nearly as large as institutional aid outputs in the study, aligning with sector-wide trends (CASE, 2023; Ma & Pender, 2022). Institutional aid and tuition discounting strategies include philanthropic dollars but also institutional resources from other sources (Allan, 1999), meaning that as much as donations factor into aid other resources are considered and used. A reason for the stronger correlations with philanthropy and need-based aid at private universities could relate to tuition costs. At private institutions tuition is higher generally, as reflected among the sample institutions (Ma & Pender, 2022). Even affluent students probably have financial need in this context, thus philanthropic dollars are more likely to help address need, whether the agreements with donors included a provision for student need or not. However, since the VSE data does not detail specifics about the purposes of the aid donations additional research is required to fully understand this trend. Studying philanthropy's percentages and uses within institutional aid packages would also be helpful in unpacking these results further.

These results also led us to run an additional analysis to explore whether the correlated trends between gift aid and need-based aid dispensed were both in response to the rising costs of attending college. Specifically, we examined the correlation between the trend in total price and the two variables, total gift aid received and need-aid dispensed. While rising costs were notably correlated with need-based aid dispensed (0.55 overall) and higher especially for higher-cost private universities (e.g., 0.70 for private doctoral/research universities), the lag that produced the optimal correlations was again zero years. Additionally, there was a more modest correlation of total price trends and total aid gifts (0.25) that was optimal with a zero lag in time. In all, these results don't support the hypothesis that the correlated rising trends both total aid gift giving and need-based aid

dispensed are a response to rising costs. Rather it appears all three factors are inextricably intertwined, suggesting an explanation more in line with Howard Bowen's (1980) famous revenue theory of higher education that universities raise as much money as they can and spend that money in an attempt to increase the prestige and quality of education.

The third research question asked about the relationship between philanthropic giving, aid and institutional outcomes for historically underserved students. Building on prior analysis of new donations (which grew) and aid provided (which also grew except for older students and firstgeneration students), we then examined enrollment trends and social mobility outcomes. We discovered that total enrollment within the study sample had grown from around 3.2 million students to nearly 4 million students. Enrollments for students over 25 were largely flat. In terms of proportion within the overall population, there was a decline for students over 25 and first-generation students—the latter of whom there will naturally be fewer of overtime because more parents have gone to college—but increases for Pell-funded and underrepresented minority students. However, only increases for all but underserved minority groups went beyond similar or larger increases among traditionally wellserved students and so the proportional representation has not been impacted. This is especially true for older, firstgeneration and lower-income students.

We concluded that philanthropy designated for direct financial aid has not discernably impacted the representation of historically underserved students or the social mobility of students from families with the most limited income. Correlations between student aid philanthropy received and institutional student profiles show a very weak positive correlation with the number of these students and a weak negative correlation with the percentage of these students this is in consideration of both current operations giving and endowment giving. There was also little association between institutions' need-based aid outflows and changes in the student profile, according to another correlation analysis. This suggests that philanthropy's lack of impact was part and parcel of a general trend in which need-based aid (alone) was not achieving (at least some) of the goal of raising enrollments of historically underserved students at four-year institutions. The noted increases in need-based financial aid appear to bode well for students in the upper-middle, middle, and perhaps some in the lower-middle classes. However, they do not bode as well for students who qualify for Pell grants, nor for older students and, more generally, those who attend part-time, given their limited eligibility for financial aid. These are specific populations and circumstances that need attention by policy makers. Although there are efforts to expand the availability of Pell Grants to other populations, Pell funding levels and rules related to part-time attendance and financial aid eligibility are large barriers.

It is worth noting that although our sample was large, we examined only four-year institutions over the past 20 years that completed the VSE survey; findings regarding institutional need-based aid enrollment-related outcomes could certainly be different during other periods, at other types of institutions (community colleges), and among those that did not consistently complete the VSE survey. Institutions spend more of their endowment wealth on student financial aid than anything else (NACUBO-TIAA, 2023a). Yet, previous research found that institutions with the most philanthropic wealth—which also are the institutions that raise the most new money-don't enroll the most low-income students (Chronicle Staff, 2019b; De Alva & Schneider, 2015; Nichols & Santos, 2016). In a subsequent study, it would be interesting to work backward, looking first at institutional enrollments of student populations of interest and then examining aid outflows and philanthropic inflows. It would also be helpful to extend beyond studying philanthropy for direct aid to explore institutions' use of other funds—such as unrestricted dollars—to create broader systems of support for students as well as related effects on enrollments. This is because simply providing direct aid is not typically enough to ensure student success and that philanthropically-funded programs that incorporate complementary structures with direct aid have had some success (Goldrick-Rab et al., 2016; Page et al., 2019b).

This study answered several key questions about philanthropic donations for financial aid, these dollars within the larger context of institutional aid, and associations of the two with particular outcomes for select groups of students. It shows both the complexity of philanthropy itself and the challenges of understanding its potential impacts within the large context of institutional, sector, societal, and governmental goals for U.S. higher education. This study focused on two specific outcomes for historically underserved students collectively across many institutions related to one category of giving purpose. Ultimately, financial aid donations aim to help many kinds of students achieve various goals. These designations align with donors' wishes, institutional goals, and/or community needs; examining the specific designations of the financial aid contributions was not possible in the data and beyond the purview of this study.

Additional research is needed to better understand gifts' original purposes and how institutions have individually and collectively leveraged contributed dollars to achieve desired outcomes for students. This work would be especially salient considering the Supreme Court decision curtailing race as a consideration in admissions and the impact this decision is already beginning to have on scholarship selection processes (Bellows, 2023).

The study did not dive deeply into giving outcomes at single institutions or from specific scholarship programs and for individual students. Undoubtedly philanthropic scholarships have been instrumental in students' educational journeys and institutions' efforts to build better structures of support. We recognize those gifts and those students' accomplishments. To achieve big aims around shifting student enrollments. however, necessitates cross-campus efforts and philanthropy can certainly help on a variety of fronts beyond the direct aid explored in this study (i.e., staffing for academic and nonacademic support, faculty development for inclusive instruction). Philanthropy is funding many efforts to make college more affordable, accessible and achievable for a greater number of students. These include undertakings to eliminate tuition for particular fields of study, to build endowments and hold down tuition costs, to end the need for student loans, to meet all outstanding need for students (sometimes an increasingly high family income threshold), to create holistic programs for underserved students (and even including family programs), to prioritize need-based aid, and to provide unrestricted support to institutions that serve diverse populations of students (Aronson, 2022; Babbitt, 2022; Centre College, n.d.; Gasman et al., 2021; Knott, 2023; The St. John's College Freeing Minds Campaign Raises More Than \$326 Million, 2023). More examination is warranted to understand past philanthropic successes and to document and replicate what works. Ideally, new philanthropic interventions should (and some do) include evaluative elements right from the start, associating raising and making large gifts with known or new strategies for opportunity and innovation and with metrics for evaluating how efforts are going before adapting as needed.

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Appendix

LIST OF SAMPLE INSTITUTIONS BY CARNEGIE CLASSIFICATION 2021 BASIC

IPEDS ID	Institution Name	IPEDS ID	Institution Name
Doctoral/R	esearch Universities (Total: 180)	Master's Co	olleges & Universities (Total: 96)
100663	University of Alabama at Birmingham	110422	California Polytechnic State University-San Luis Obispo
100706	University of Alabama in Huntsville	110486	California State University-Bakersfield
100858	Auburn University	110495	California State University-Stanislaus
104179	University of Arizona	110529	California State Polytechnic University-Pomona
106397	University of Arkansas	110538	California State University-Chico
106458	Arkansas State University	110592	California State University-Los Angeles
110510	California State University-San Bernardino	110608	California State University-Northridge
110556	California State University-Fresno	110617	California State University-Sacramento
110565	California State University-Fullerton	122755	San Jose State University
110574	California State University-East Bay	123554	Saint Mary's College of California
110583	California State University-Long Beach	128771	Central Connecticut State University
110635	University of California-Berkeley	129215	Eastern Connecticut State University
110644	University of California-Davis	134079	Florida Southern College
110653	University of California-Irvine	136950	Rollins College
110662	University of California-Los Angeles	137546	Stetson University
110671	University of California-Riverside	138354	The University of West Florida
110680	University of California-San Diego	139861	Georgia College & State University
110714	University of California-Santa Cruz	144892	Eastern Illinois University
111948	Chapman University	147660	North Central College
120883	University of the Pacific	147828	Olivet Nazarene University
121150	Pepperdine University	150534	University of Evansville
122409	San Diego State University	151306	University of Southern Indiana
122597	San Francisco State University	151777	Manchester University
122612	University of San Francisco	153001	Buena Vista University
122931	Santa Clara University	153250	Dordt University
126775	Colorado School of Mines	153366	Graceland University-Lamoni
127918	Regis University	155681	Pittsburg State University
129020	University of Connecticut	157401	Murray State University
129242	Fairfield University	161554	University of Southern Maine
129525	University of Hartford	162584	Frostburg State University
130226	Quinnipiac University	163204	University of Maryland Global Campus
130794	Yale University	163462	Mount St. Mary's University
131159	American University	163851	Salisbury University
131469	George Washington University	164076	Towson University
131496	Georgetown University	167394	College of Our Lady of the Elms
132903	University of Central Florida	168430	Worcester State University
133669	Florida Atlantic University	169080	Calvin University
133951	Florida International University	173920	Minnesota State University-Mankato

135726	University of Miami	175078	Southwest Minnesota State University
137351	University of South Florida	179043	Rockhurst University
139755	Georgia Institute of Technology-Main Campus	181020	Doane University
139931	Georgia Southern University	181446	Nebraska Wesleyan University
139940	Georgia State University	183080	Plymouth State University
139959	University of Georgia	186201	Ramapo College of New Jersey
142115	Boise State University	186283	Rider University
144050	University of Chicago	189705	Canisius College
146719	Loyola University Chicago	190512	CUNY Bernard M Baruch College
149231	Southern Illinois University-Edwardsville	190594	CUNY Hunter College
150136	Ball State University	191968	Ithaca College
152080	University of Notre Dame	192819	Marist College
152600	Valparaiso University	193584	Nazareth College
153126	Clarke University	195164	St Bonaventure University
153603	Iowa State University	195474	Siena College
153658	University of Iowa	195544	St. Joseph's University-New York
154235	Saint Ambrose University	196121	SUNY Brockport
155317	University of Kansas	196130	SUNY Buffalo State
155399	Kansas State University	196149	SUNY Cortland
156286	Bellarmine University	196167	SUNY College at Geneseo
157085	University of Kentucky	196194	SUNY College at Oswego
157289	University of Louisville	196200	SUNY College at Potsdam
159656	Loyola University New Orleans	196264	SUNY Empire State College
161253	University of Maine	197045	Utica University
163268	University of Maryland-Baltimore County	197869	Appalachian State University
163286	University of Maryland-College Park	203368	John Carroll University
163338	University of Maryland Eastern Shore	204617	Ohio Dominican University
164924	Boston College	204936	Otterbein University
165015	Brandeis University	211158	Bloomsburg University of Pennsylvania
166513	University of Massachusetts-Lowell	211361	California University of Pennsylvania
166629	University of Massachusetts-Amherst	211644	Clarion University of Pennsylvania
166638	University of Massachusetts-Boston	212160	Edinboro University of Pennsylvania
166683	Massachusetts Institute of Technology	212656	Geneva College
167358	Northeastern University	213321	King's College
168148	Tufts University	213349	Kutztown University of Pennsylvania
168421	Worcester Polytechnic Institute	213507	Lebanon Valley College
169248	Central Michigan University	213996	Messiah University
169716	University of Detroit Mercy	214041	Millersville University of Pennsylvania
169910	Ferris State University	214157	Moravian University
170082	Grand Valley State University	215743	Saint Francis University
171100	Michigan State University	215770	Saint Joseph's University
171571	Oakland University	215929	University of Scranton
172699	Western Michigan University	215947	Seton Hill University
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235316 Gonzaga University 215266 University of Pittsburgh-Bradford	234076	University of Virginia-Main Campus	213783	Mansfield University of Pennsylvania
	235316	Gonzaga University	215266	University of Pittsburgh-Bradford

236595	Seattle University	216287	Swarthmore College
238032	West Virginia University	216524	Ursinus College
240727	University of Wyoming	216667	Washington & Jefferson College
445188	University of California-Merced	218070	Furman University
600002	Arizona State University	220710	Maryville College
600003	University of Colorado	221351	Rhodes College
600007	Indiana University	221519	The University of the South
600009	University of Michigan	228981	Texas Lutheran University
600010	University of Minnesota	229267	Trinity University
600012	Rutgers University	230816	Bennington College
600014	University of New Mexico	230959	Middlebury College
600017	Ohio State University	231059	Saint Michael's College
600020	University of South Carolina	232681	University of Mary Washington
600021	University of Washington	233301	Randolph College
		233374	University of Richmond
		233426	Roanoke College
		233718	Sweet Briar College
		236328	University of Puget Sound
		237057	Whitman College
		237181	Bethany College
		239017	Lawrence University
		239512	Northland College
		239628	Ripon College
		239716	Saint Norbert College
		*Special Foo	cus Four-Year (Total: 1)
		164580	Babson College*

^{*}Added into Master's Colleges and Universities category

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