



IPEDS Finance User Guide

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The most widely used data source on college and university finances is the US Department of Education's Integrated Postsecondary Education Data System (IPEDS), which gathers a broad array of data annually from higher education institutions.

The IPEDS finance data contain basic information on college and university revenues, expenditures, assets, and liabilities. But the finance data are reported in three different files, one for most public institutions, one for private nonprofits, and one for for-profits, with inconsistent definitions (and accounting standards) across sectors. Researchers who use the data across multiple sectors must harmonize the three surveys to create comparable information. Analyzing trends is further complicated by changes in how institutions report data to IPEDS, including differences in accounting standards across sectors and changes over time.

The Urban Institute, building on prior work by the Delta Cost Project, has made available a harmonized version of the IPEDS finance files through its Education Data Portal.¹ This database addresses reporting differences across sectors and over time to the greatest extent possible and provides clear documentation that allows users to choose their preferred analytic solutions to data challenges.

This user guide provides an overview of the IPEDS finance data, a description of issues to be aware of when conducting analyses using these data, and an online Excel appendix with a detailed mapping of each variable to variables in the original IPEDS data, along with the year range each is available.

The Complicated History of IPEDS Finance Data

The Higher Education Act of 1965 mandated that institutions participating in Title IV federal student aid programs (e.g., Pell grants and student loans) report data on institutional finance. The IPEDS finance survey, conducted by the US Department of Education’s National Center of Education Statistics, serves this need. IPEDS collects data on revenues, expenses, assets and liabilities, scholarships, endowments, taxes, and pensions for all Title IV–eligible institutions.

IPEDS has collected institutional finance data since the 1986–87 financial year.² Before that, data were collected by the Higher Education General Information Survey. Unlike most other IPEDS components, the finance data are reported differently for public, private nonprofit, and private for-profit institutions. Today, most public institutions report using Governmental Accounting Standards Board (GASB) forms,³ and private institutions report using Federal Accounting Standards Board (FASB) forms, though the forms differ between nonprofit and for-profit institutions.

From 1986 through 1995, all institutions reported using the same “common form” (Aliyeva, Cody, and Low 2018). In 1996, private institutions began reporting on FASB forms (or F2 forms), with separate instructions for for-profits. Beginning in 1999, the F3 form was implemented for for-profit institutions. Public institutions were phased into GASB (F1) forms in 2001 and 2002, and all forms were revised in 2007 and 2008 with the introduction of the “aligned forms,” which continue to distinguish between F1, F2, and F3 forms.

Major revisions occurred in 1997, when the common form was replaced with FASB forms; in 2001–02, when GASB forms were phased in for public institutions; and in 2007–08, when the aligned forms were phased in. Table 1 provides a brief overview of these changes. Smaller revisions took place in other years as well (not shown). In general, data collected since 2002 are the most comparable over time.

In 2013, F3 forms were edited to provide more detail for for-profit institutions, such as providing the breakdown of expenditures between research and public service, rather than as a combined category. In 2016, deferred inflows and outflows were added to the financial position section for GASB institutions, and data on unfunded pension liabilities and expenses were also added.

In general, GASB institutions report the most granular data, for-profit institutions report the fewest variables, and private nonprofits are in the middle. GASB institutions, for example, report operating, nonoperating, and additional revenue sources, but the others do not make these distinctions.

Currently, IPEDS collects data⁴ on the following finance categories:

- **Financial position.** This includes assets and liabilities, changes in net position, and plant, property, and equipment.
- **Scholarships and fellowships.** This includes Pell grants as well as grants from other sources. Pell grant treatment is explained below.

- **Revenues.** This includes federal, state, and local appropriations, net tuition revenues (net of discounts and allowances from scholarships and fellowships, explained below), and revenues from other sources.
- **Expenses.** These are reported in both functional (e.g., instruction) and natural (e.g., salaries) classifications, explained below.
- **Pension information.** This is reported for public institutions only and is new as of 2014.
- **Endowments.** Institutions with endowments report their value at the beginning and end of the year.
- **Income tax expenses.** These are reported for for-profit institutions only.

Key variables in some of these categories are explained below.

TABLE 1

Integrated Postsecondary Education Data System Finance History

	Public	Private, nonprofit	Private, for-profit
1979			
1983			
1984			
1985			
1986			
1987			
1988			
1989	Common form	Common form	Common form
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998		FASB (F2)	FASB (F2)
1999	Common form (F1)		
2000			
2001	Common form (F1) /		
2002	GASB (F1A)		
2003		FASB (F2)	FASB (F3)
2004			
2005	GASB (F1A)		
2006			
2007	GASB /	FASB /	
2008	GASB aligned form (F1A)	FASB aligned form (F2)	FASB (F3)
2009			
2010			
2011			
2012			
2013	GASB aligned form	FASB aligned form	FASB (F3)
2014	(F1A)	(F2)	
2015			
2016			
2017			

Source: "IPEDS Finance Data FASB and GASB: What's the Difference? A Guide for Data Users," US Department of Education, Institute of Education Sciences, National Center for Education Statistics, accessed May 8, 2020, <https://nces.ed.gov/ipeds/report-your-data/data-tip-sheet-distinguishing-finance-standards-fasb-gasb>.

Note: FASB = Financial Accounting Standards Board; GASB = Government Accounting Standards Board.

Harmonizing Multiple Years of Data

Differences in data reporting by institution type and over time make it challenging to create a fully harmonized dataset. The Delta Cost Project first undertook this challenge for IPEDS finance data through 2004, later updating its database through 2014.⁵ Our work builds on and updates their work, including data through 2017. We include the Higher Education General Information Surveys from 1979, 1983, 1984, and 1985 (the years that are available on the IPEDS website), but few variables are

available in those years. Because of changes in GASB reporting standards, the most comparable data are available beginning in 2003.

Our attempts to harmonize the data took several forms, none of them perfect. The reporting forms differ by institution type and over time, so breaks in trends, particularly when the reporting formats changed, are important to note. To assist with this, we include the variable *reporting_form* to combine the IPEDS flags for the reporting form and form version that an institution reported on. We also created a *form_type* variable based on the actual file downloaded, which is almost, but not always, identical to the reporting form variable but lacks the form version (aligned or unaligned, applicable in 2007 and 2008).⁶ We created *form_type* because *reporting_form* does not exist for all years and because institutions may have answered that question incorrectly.

For most purposes, the *form_type* variable will be most useful, as it distinguishes between F1 (most public institutions), F2 (nonprofits), and F3 (for-profit) reporting formats. In particular, the *form_type* for all institutions is “Common form” from 1979 through 1995, “F1” for GASB institutions from 1996 through 2000 (and through 2002 for some), “F1A” for some GASB institutions beginning in 2001 and for all from 2003 on, “F2” for nonprofit FASB institutions beginning in 1996, and “F3” for FASB for-profit institutions beginning in 1997. The *reporting_form* variable is nearly identical but includes the aligned or unaligned version for 2007 and 2008.

These flags are important for ensuring that comparisons across institutions or over time are fair. In particular, breaks in trends caused by changes in survey forms or versions should not be interpreted as breaks in the underlying values. For example, the aligned forms introduced changes in expenditure reporting. In particular, for GASB institutions, the aligned forms now include operations and maintenance as a functional expense, rather than a natural expense.

We did not retain all variables that IPEDS finance collected in every year. We attempted to keep most of the variables that exist in the most recent data (2017–18), omitting some subcategories (e.g., distinctions between restricted and unrestricted funds). In general, GASB forms contain more variables than FASB forms, with forms for for-profit institutions providing the least detail. We created some new variables, such as “state and local appropriations, grants, and contracts,” to help with comparisons across institution types and over time, particularly for for-profit colleges.

We also assume some comparability even when the survey terminology differs slightly. For example, forms for nonprofits refer to the difference between assets and liabilities as “net assets” while forms for for-profits refer to this as “equity.” We treat these quantities as equivalent in our final dataset.

Harmonizing Expenditure Categories

In accounting, expenditures can be reported as either “functional” or “natural” expenditures. Functional expenditures are grouped by activity, such as instruction, research, or public service. Natural expenditures are grouped by the type of expense, such as salaries, benefits, and operations and

maintenance. As of 2014, the IPEDS finance survey asks institutions to report expenditures in both functional and natural classifications, such that each set of expenditures sums to total expenditures.

In principle, all potential natural subclassifications of each functional category could be provided, such as “Research—benefits” or “Public service—operations and maintenance,” as they were in 2014 and 2015.⁷ But as of 2016, only the salary breakdown of each functional category is collected, and we follow this practice.

But the determination of whether a particular expense (e.g., operations or maintenance) is a functional or a natural expenditure can lead to inconsistencies. In past years, functional expenditures included, variously, operations and maintenance, interest, and depreciation, which are now included as natural expenditures. To provide some consistency over time, we have reclassified these expenditures as natural expenditures. This necessitated adjusting the remaining functional expenditure categories so they continued to sum to total expenditures. For more details, see the appendix.

Separate from changes in how data are collected over time, there are inconsistencies both across institutions and over time in how particular expenses are categorized. Definitions are vague, and institutions interpret them differently (Kolbe and Kelchen 2017). For example, professors not only provide instruction but conduct research and provide public service. Institutions may vary in how they spread expenditures on professors’ salaries and benefits across these categories and may change how they report the data. Placing too much weight in any institution’s reporting of a particular expenditure value is therefore inherently fraught. Expenditures are also not as granular as some analysts might like. For example, there is no category for “marketing” expenditures, nor can costs be disaggregated by program of study.

Harmonizing with For-Profit Institutions

Until recently, data for for-profit institutions were quite aggregated. For example, rather than eight categories of functional expenditures, for-profit institutions reported only four. To facilitate comparisons across sectors, we constructed equivalent variables for public and private nonprofit institutions, such as “expenditures on instruction, research, and public service” alongside each individual category, as the Delta Cost Project did. Similarly, until recently, such variables as state and local grants and appropriations were reported together for for-profit institutions, while they were broken out for other institutions. In the same vein, we replicated these aggregate categories for public and private nonprofit institutions for users’ convenience.

Parent-Child Reporting

Certain institutions report finance data not for individual campuses but for an entire system. These institutions are referred to as “parent” institutions, and the branch campuses are “child” institutions. Furthermore, some institutions report some finance components with the parent institution while reporting other components individually (“partial children”). In particular, partial children typically report their own revenues, expenses, scholarships, and (sometimes) endowments.⁸ In 2017, 3 percent of

institutions were parent institutions, and 12 percent were full or partial children. In 2001, these figures were 5 percent and 15 percent, respectively. This means most institutions report finance data at the individual campus level and are not affected by the parent-child issue.

Rather than aggregate all children to their respective parent institutions, we leave that decision to the data users.⁹ Instead, we provide the variable *parent_child_flag* (which indicates whether an institution is a parent, child, partial child, or neither) and the unit ID of the parent institution (*parent_unitid*). Ignoring these flags could lead to misleading inferences when examining, for example, institution-level averages. Aggregations, such as total amounts at the state level, would not be affected by this issue. For more guidance and background on parent-child reporting and other challenges with IPEDS finance data, see Jaquette and Parra (2014).

For example, the Pennsylvania State University main campus reports data for itself and for 22 “child” institutions, such as Penn State Great Valley and Penn State New Kensington. Ignoring these relationships might lead a user to overstate expenditures or revenues at the main campus. Users can either calculate a total full-time equivalent (FTE) share across all 23 campuses and note that the finance data cover all these students, or allocate the data proportionally across campuses using either one of the FTE figures or the *parent_child_allocation* variable, which IPEDS uses in its data feedback reports and to create derived variables. The *parent_child_allocation* variable dates back only to 2003, skipping 2004, so is not ideal for longer time panels, but it does provide a different allocation of costs than the FTE formula does. In particular, it indicates the share of resources allocated to each individual campus. For example, the *parent_child_allocation* variable for Arizona State University places more weight on the main campus than is implied by the FTE share, likely to reflect the disproportionate costs of research and other facilities.¹⁰

Key Facts about Key Variables

Full-Time Equivalent Students

Finance data users often want to divide by measures of student enrollment to compare statistics across institutions of varying sizes. Full-time equivalent enrollment is a commonly used measure of the number of students attending an institution, adjusted for the intensity of each student’s enrollment (e.g., full time, three quarters time, or half time).

We provide three measures of FTE students. The first two are reported FTE, or *rep_fte*, and estimated FTE, or *est_fte*. These tend to be nearly identical and are both taken from the 12-month enrollment IPEDS survey but date back only to 2003. To provide a longer time series, we also include a calculated FTE variable, *calc_fte*, based on the fall-enrollment IPEDS survey, provided back to 1986. The formula counts each full-time student as one FTE and assigns part-time students weights varying from one-third to three-fifths depending on sector and level of study. IPEDS provided this formula to the Delta Cost Project, and we use the same formula (Delta Cost Project 2011).

Inflation Indexes

We report all dollars in current dollars (i.e., as they were reported to IPEDS). But when reporting trends in the costs of and prices for higher education, it is common to adjust for trends in other prices over time. Although we remain agnostic as to the “right” adjustment, we include three inflation indexes that are commonly used in higher education. First, we include the standard Consumer Price Index for All Urban Consumers from the Bureau of Labor Statistics. This commonly used measure of inflation reflects costs consumers face for housing, transportation, food, apparel, and other expenditures. These costs may not be as relevant to higher education institutions, whose primary costs are salaries, benefits, and operations and maintenance.

We also include two higher education–specific price indexes: the Higher Education Price Index (HEPI) and the Higher Education Cost Adjustment (HECA). HEPI tracks changes in the prices colleges and universities pay and is based on trends in faculty salaries and price indexes from federal agencies. HEPI can be used to assess whether colleges raise enough money over time to meet general increases in costs across the sector. But because it is based in part on faculty salaries, it has been accused of being self-referential. HECA was created as an alternative to address this concern. This index is based on the employment cost index (75 percent) and the gross domestic product implicit price deflator (25 percent) and thus avoids HEPI’s partially self-referential nature (SHEEO, n.d.).

All three indexes are national only and can be used to adjust for price changes over time but cannot be used to adjust for cost differences faced by different institutions at a given point (e.g., in urban versus rural areas).

Pell Grant Treatment

One major difference across institutions is how Pell grants are treated because of differences in accounting standards.¹¹ GASB institutions report Pell grants as federal revenues and as allowances, reducing tuition revenues. FASB institutions can do the same or treat Pell grants as “pass-through” transactions that appear as tuition rather than federal revenues. (A pass-through transaction essentially applies the grant to a student’s account without recording a revenue or an expense.) This is captured by the *pell_grant_treatment* flag, which can be used to group institutions that treat Pell grants the same way so federal revenues and tuition revenues can be meaningfully compared.

Tuition and Fee Revenues

In older data, institutions reported only gross tuition and fee revenues (i.e., they did not net out discounts and allowances stemming from grant aid). Since 2001, IPEDS has collected net tuition revenue rather than gross tuition revenue. This is the tuition variable most users should use. The gross tuition revenue variable can help those who want to compare tuition revenues for the 1980s or 1990s.

Auxiliary Enterprise Revenues and Expenditures

Auxiliary enterprises include room and board, athletics, bookstores, and other operations. As with tuition revenues, institutions reported gross revenue amounts in earlier years and net amounts since 2002. Gross revenues from auxiliary enterprises are provided for more recent years only to enable comparisons with data from the 1980s or 1990s. There are also expenditures associated with auxiliary enterprises, defined as “the sum of all operating expenses associated with essentially self-supporting operations of the institution that exist to furnish a service to students, faculty, or staff and that charge a fee that is directly related to, although not necessarily equal to, the cost of the service. Examples are residence halls, food services, student health services, intercollegiate athletics (only if essentially self-supporting), college unions, college stores, faculty and staff parking, and faculty housing.”¹²

Instructional Expenditures

Instructional expenditures include “compensation for academic instruction, occupational and vocational instruction, community education, preparatory and adult basic education, and remedial and tutorial instruction conducted by the teaching faculty for the institution's students.”¹³ This variable is commonly studied, especially in relation to student outcomes (Griffith and Rask 2016; Webber 2012). But one pitfall (aside from general concerns regarding separating teaching costs from other aspects of professors’ roles) is that undergraduate and graduate instruction are not separately broken out.

Student Services

Research shows that expenditures on student services can matter more than instructional expenditures at some institutions (Webber and Ehrenberg 2010). But student services is a broad category, including “the sum of all operating expenses associated with admissions, registrar activities, and activities whose primary purpose is to contribute to students’ emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instructional program. Examples include student activities, cultural events, student newspapers, intramural athletics,¹⁴ student organizations, supplemental instruction outside the normal academic program (remedial instruction for example), career guidance, counseling, financial aid administration, and student records.”¹⁵

Digging Deeper

IPEDS finance data users may require a deeper understanding of particular variables. Users can obtain this information using the online Excel appendix to this user guide to identify the original IPEDS variables used to construct it, and then consulting the original IPEDS data dictionaries to learn more.¹⁶ Additional context can be found in the original surveys found at the IPEDS survey archive. The appropriate survey can be identified using the *form_type* variable.¹⁷

For example, *rev_appropriations_state* for 2017 comes from the variable F1B11 for F1 institutions, F2D03 for F2 institutions, and F3D03 for F3 institutions. The IPEDS data dictionary provides the following description for F1B11: “State appropriations are amounts received by the institution through

acts of a state legislative body, except grants and contracts and capital appropriations. Funds reported in this category are for meeting current operating expenses, not for specific projects or programs.”

Notes

- ¹ See the website for the Education Data Portal at <https://educationdata.urban.org>.
- ² Throughout this guide and our data, years typically refer to the fall semester of an academic year. For example, 1986 refers to the 1986–87 academic or fiscal year.
- ³ About 20 public institutions, primarily in Pennsylvania and Delaware, report using FASB forms.
- ⁴ Data collected by IPEDS are not necessarily the only or most definitive source of institutional financial information, and IPEDS does not audit the data it collects. See, for example, the University of Wisconsin system’s Redbook at “2018–2019 Redbook,” University of Wisconsin System, accessed May 8, 2020, <https://www.wisconsin.edu/budget-planning/annual-operating-budget/2018-2019-redbook/>.
- ⁵ “Delta Cost Project Database,” Delta Cost Project, accessed May 1, 2020, <https://deltacostproject.org/delta-cost-project-database>.
- ⁶ Aligned forms were phased in in 2007 to provide greater comparability between F1 institutions, on one hand, and F2 and F3 forms, on the other. For two years, 2007 and 2008, both aligned and unaligned versions exist. Reporting forms can be found in the IPEDS survey archive at “Archived Survey Materials,” US Department of Education, Institute of Education Sciences, National Center for Education Statistics, accessed May 1, 2020, <https://nces.ed.gov/ipeds/use-the-data/annual-survey-forms-packages-archived>.
- ⁷ “IPEDS Finance Data FASB and GASB: What’s the Difference? A Guide for Data Users,” US Department of Education, Institute of Education Sciences, National Center for Education Statistics, accessed May 1, 2020, <https://nces.ed.gov/ipeds/report-your-data/data-tip-sheet-distinguishing-finance-standards-fasb-gasb>; and “Forms and Instructions (30D FRN),” regulations.gov, accessed May 1, 2020, <https://www.regulations.gov/document?D=ED-2016-ICCD-0020-0070>.
- ⁸ Indicated by an “own endowments” flag.
- ⁹ We depart from the Delta Cost Project in our approach here.
- ¹⁰ In 2015, an additional parent-child flag was added: *parent_child_system_flag*. This variable distinguishes between parent-child systems where there is one parent and multiple children (either full or partial) and systems where one of the partial children also reports data for one of the other children. Few systems fall into this latter category (in 2017, there was only one: the Maricopa Community College System). One of the children in this system, GateWay Community College, reports data for yet another child, GateWay Community College—Central City. Thus, although GateWay Community College reports the Maricopa Community College System as its parent, the Central City campus reports GateWay Community College as its parent. (The *parent_child_flag* for GateWay Community College also indicates that it reports data for one of its branch campuses.)
- ¹¹ “IPEDS Finance Survey Tips: Scholarships, Grants, Discounts, and Allowances,” US Department of Education, Institute of Education Sciences, National Center for Education Statistics, accessed May 1, 2020, <https://nces.ed.gov/ipeds/report-your-data/data-tip-sheet-reporting-finance-data>.
- ¹² IPEDS finance data dictionary, f1718_f1a.
- ¹³ IPEDS finance data dictionary, f1718_f1a.
- ¹⁴ There is a flag that indicates whether athletic expenses are treated as student services expenditures or auxiliary enterprise expenditures.
- ¹⁵ IPEDS finance data dictionary, f1718_f1a.
- ¹⁶ “IPEDS: Use the Data,” US Department of Education, Institute of Education Sciences, National Center for Education Statistics, accessed May 1, 2020, <https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx>.
- ¹⁷ “Archived Survey Materials,” US Department of Education.

References

- Aliyeva, Aida, Christopher A. Cody, and Kathryn Low. 2018. *The History and Origins of Survey Items for the Integrated Postsecondary Education Data System (2016–17 Update)*. Washington, DC: US Department of Education, National Postsecondary Education Cooperative.
- Delta Cost Project. 2011. “Delta Cost Project Documentation of IPEDS Database and Related Products.” Washington, DC: Delta Cost Project.
- Griffith, Amanda L., and Kevin L. Rask. 2016. “The Effect of Institutional Expenditures on Employment Outcomes and Earnings.” *Economic Inquiry* 54 (4): 1931–45.
- Jaquette, Ozan, and Edna E. Parra. 2014. “Using IPEDS for Panel Analysis: Core Concepts, Data Challenges, and Empirical Applications.” In *Higher Education: Handbook of Theory and Research*, vol. 29, edited by Michael B. Paulsen, 467–533. New York: Springer.
- Kolbe, Tammy, and Robert Kelchen. 2017. *Identifying New Metrics Using IPEDS Finance Data*. Washington, DC: National Postsecondary Education Cooperative.
- SHEEO (State Higher Education Executive Officers Association). n.d. “The Higher Education Cost Adjustment: A Proposed Tool for Assessing Inflation in Higher Education Costs.” Boulder, CO: SHEEO.
- Webber, Douglas A. 2012. “Expenditures and Postsecondary Graduation: An Investigation Using Individual-Level Data from the State of Ohio.” *Economics of Education Review* 31 (5): 615–18.
- Webber, Douglas A., and Ronald G. Ehrenberg. 2010. “Do Expenditures Other Than Instructional Expenditures Affect Graduation and Persistence Rates in American Higher Education?” *Economics of Education Review* 29 (6): 947–58.

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