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This module describes analytic considerations that should be kept in mind when using data collected through the Integrated Postsecondary Education Data System, or IPEDS. The module describes data analysis considerations pertaining to Institutional Characteristics, Enrollment, Completions, Graduation Rates and Outcome Measures, Admissions, Student Financial Aid, Human Resources, Finance, and Academic Libraries.

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There are a number of things to take into account when using Institutional Characteristics, or IC, data. First, control and level determine which survey forms institutions receive. For example, institutions of different controls receive different finance forms and therefore will have different variables. A private for-profit institution receives a different form than a private not-for-profit institution receives, which is different from the one that a public institution receives. This is important to keep in mind when analyzing a group of institutions that includes multiple control types. Institution level also impacts the data collected so that 4-year institutions will have some different variables than 2-year institutions, and non-degree granting institutions will have somewhat fewer variables than either 2-year or 4-year institutions. You can view the different survey forms used to collect data across institutional controls and levels by clicking on the link to the **Archived Survey Library** and selecting a data collection year.

The combination of the control variable and the level variable determine the institution's sector. Sector is used for many groupings in publications and other presentations of institutional data.

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An institution's calendar system determines its reporter type, which impacts almost every other IPEDS survey component. The three reporter types are academic, program, and hybrid. Academic reporters are what most people think of as a traditional college or university. They charge tuition based on a portion of an academic year, such as a semester or trimester. Program reporters include institutions such as cosmetology schools and truck driving schools, which charge a particular cost for an entire program. Hybrid reporters are institutions that enroll students year-round but charge tuition like an academic year reporter would. They complete the Institutional Characteristics surveys for academic year tuition reporters, but complete a program reporter version of the Student Financial Aid, Graduation Rates, and Graduation Rates 200 surveys. One of the major considerations for analyzing tuition and cost of attendance across a group of institutions that includes both academic reporters and program reporters is to select the appropriate variables. It is important to select both the academic year and the program year variables to ensure that you get tuition and cost of attendance data for all the schools of interest.

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There are differences between tuition and cost of attendance, or COA. Tuition data are collected for all undergraduate and graduate students, as well as selected doctor's professional practice programs. The tuition variable is the figure computed as the tuition for each of these student levels, averaged across all levels. Full-time charges are collected based on the definition of full-time given by the Office of Federal Student Aid, which is carrying at least 12 semester or quarter credits. Part-time, per credit charges are also collected.

The COA data are only for full-time, first-time students and it is used to calculate the net price of attendance. COA includes the costs of tuition, fees, books and supplies, room and board by living situation (which includes students living on campus, students living off campus with family, and students living off campus without family), and other expenses.

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Fall enrollment is generally more useful for academic reporters than for program reporters because program reporters tend to more frequently enroll students year-round. Only credit activity is counted, so students taking only non-credit courses are not included in Fall enrollment. The reporting of age and migration is required every other year – age in odd years and migration in even years. Retention rates are calculated only for full-time-first-time and part-time-first-time undergraduates. For bachelor's degree-granting institutions, retention data are only reported for the bachelor's cohort. So, for example, if an institution grants bachelor's and associates degrees and certificates, only the retention rate for students pursuing bachelors' degrees is reported.

Finally, it is important to note that IPEDS adopted new aggregate categories for reporting race/ethnicity data in accordance with the guidance issued by the U.S. Department of Education in October 2007. These changes were required to be implemented by institutions gradually, on a structured basis, beginning with the 2008-09 Collection Year and finalized in 2011-12. Therefore, if you are analyzing trends in data before and after 2007, it is important to keep in mind that race/ethnicity variables have changed over time. The IPEDS website provides details about the implementation, as well as additional resources related to this change, which are available by clicking on the corresponding underlined screen text.

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In contrast to Fall enrollment, 12-month enrollment is generally more useful for program reporters than for academic reporters. Two types of credit activity are reported: credit hours and contact hours. Credit hours are generally reported by academic reporters whereas contact hours are more common among program reporters. IPEDS collects two full-time equivalent, or FTE, numbers, which are designed to provide a single enrollment figure that combines full-time and part-time students. One is the IPEDS FTE, which NCES calculates using a standard calculation and the other is the Institution FTE, which institutions are allowed to submit if they believe the IPEDS FTE does not correctly represent their institution. For example, for program reporters, IPEDS calculates an FTE

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based on the federal student aid definition of 900 contact hours. Many beauty colleges require 1200 hours for an academic year, so these institutions would submit an FTE that used a 1200-hour divider instead of a 900-hour divider. Additional information on the FTE calculations can be obtained by clicking on the link shown, which will take you to the appropriate page in the IPEDS glossary. This component is also impacted by changes in race/ethnicity.

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Completions data are part of an extremely large file. The data are collected by 10 different award levels, nine race/ethnicity categories, and hundreds of six-digit Classification of Instructional Program, or CIP, codes. Unless you have a small number of well-defined categories that you wish to analyze when using IPEDS data, the best way to work with Completions data is to download the entire file.

Much like the enrollment surveys, completions data were impacted by changes in race/ethnicity categories and you will need to consider this when analyzing trends. The data have also been impacted by changes in CIP codes, which change approximately every 10 years. Additional information regarding the CIP code changes to assist you with your analyses is available by clicking on the link shown. Finally, a variable indicating whether or not a program is available through distance education was added in the 2014-15 data collection year. This does not mean that the program is only offered through distance education, but that it can be completed entirely via distance education.

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Graduation rates data are only applicable to full-time-first-time students. The calculation is based on the Student Right to Know Act. Like most of the IPEDS surveys, Graduation Rates survey data are impacted by changes in race/ethnicity categories, however, the Graduation Rates 200 survey data are not affected, because this survey does not collect data by race/ethnicity. The graduation rate calculation is calculated automatically within the survey, so respondents are able to review it. The **Student Right to Know** graduation rate, calculated in the Graduation Rates component, is the number of students that graduate within 150% of normal time divided by the initial cohort minus any standard exclusions. Other rates are calculated for different cohorts, which are detailed on the next screen.

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This chart shows the graduation rate cohorts using data from the 2013-14 data collection. A 4-year institution, for example, has both a bachelor's cohort and a non-bachelor's cohort, and more rates are calculated for the bachelor's cohort. The numbers in rates column represent percentages. For example, the 4-year bachelor's cohort includes graduation rates for those graduating within 100% of normal time, or 4 years, 125% of normal time, or 5 years, 150% of normal time, or 6 years, and 200% of normal time, or 8 years. For the 2013-14 collection year, the 4-year cohorts started in 2007 for the Graduation Rates calculation, which is the rate for those graduating within 150% of normal time, or 6 years. The 4-year cohorts started in 2005 for the Graduation Rates 200 calculation, which is the rate for those graduating within 200% of normal time, or 8

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years. Two- and less-than-2-year cohorts started in 2010 for Graduation Rates, which is the rate for those graduating within 150% of normal time, or 3 years, and in 2009 for Graduation Rates 200 which the rate for those graduating within 200% of normal time, or 4 years.

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The outcome measures component covers four entering cohorts from 8 years prior to data collection—full-time-first-time, part-time-first-time, full-time-non-first-time-entering, and part-time-non-first-time-entering. This component is not collected by race/ethnicity or gender. The outcomes reported include the number of students who received an award and the numbers who did not receive an award who are still enrolled at the reporting institution, who subsequently enrolled at another institution, and whose subsequent enrollment status is unknown.

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Admissions data are only applicable to institutions that do not have open admission policies, so this data file will have a lot of blanks because many institutions do not report these data. An open admission policy is a policy whereby the school will accept any student who applies, with limited exceptions. Admissions data are only applicable to first time students and, prior to 2014-15, institutions could choose to report for either the current year or the prior year. When analyzing data on years prior to 2014-15, you will need to select the reporting period variable within Admissions, to know for which year the institution reported.

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There have been many changes in the Student Financial Aid data collected since 2012, including the addition of new variables, which is an important consideration if you are interested in trending data for a particular variable. In addition, information on the Post-9/11 GI Bill and Department of Defense Tuition Assistance Program benefits for both undergraduate and graduate students began with the 2014-15 data collection year. There are four different groups of students for which a majority of Student Financial Aid data are reported and different levels of data are reported for each group as will be shown on the next screen.

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The most encompassing group, Group 1, includes all undergraduates.

Within this group, Group 2 consists of all first-time-full-time undergraduates.

Group 3 is all first-time-full-time undergraduates who received grants or scholarship aid from the federal, state, or local government or from the institution. For this group, public institutions include only those students paying in-state or in-district tuition rate. Program reporters only include those students enrolled in the institution's largest program.

Group 4 is all first-time-full-time undergraduates who were awarded any Title IV federal student aid.

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The smaller the group size, the more information is collected for the group. The net price calculation for example, is calculated for Group 3 and Group 4.

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Human Resources data are impacted by changes in race/ethnicity categories as well as changes in the Standard Occupational Classification, or SOC, system, which is a system of codes used by federal agencies to classify employees and jobs into occupational categories for statistical reporting purposes. The IPEDS Human Resources survey was revised effective with the 2012-13 data collection year to incorporate changes to the SOC system. The IPEDS website includes a number of resources related to this change, including a comparison chart of the previous and revised occupational categories, which can assist you in analyzing trends over time. The resources can be accessed by clicking on the link shown.

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Particular institution characteristics dictate which Finance survey form an institution completes and the data collected varies across forms. These characteristics include an institution's control and accounting standards. Most public institutions, with a few exceptions, use the Government Accounting Standards Board, or GASB, standards, whereas most private not-for-profit institutions use the Financial Accounting Standards Board, or FASB, standards. For-profit institutions have their own accounting methods that do not fall under either standards board. IPEDS provides a guide to the GASB and FASB accounting standards for IPEDS data users, which can be accessed by clicking on the link shown.

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One example of how the Finance data collected varies across forms is that only public institutions that use GASB standards must report scholarship and fellowship data, whereas student grants data are required for private not-for-profit institutions that use FASB, as well as for-profit institutions. For-profit institutions are also required to report equity data. Prior to 2014-15, it was very difficult to compare for-profit institutions with private not-for-profit and public institutions because very little data were provided. However, more detailed information began to be collected for these institutions with the 2014-15 data collection.

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The first year of Academic Libraries, or AL, data collection in IPEDS was 2014-15. Prior to that time, the data were collected biannually by NCES through the Academic Libraries Survey, or ALS, and reporting by institutions was not mandatory. You may obtain more information about the NCES ALS Data Collection and obtain resources for comparing ALS data with that of the IPEDS AL Component by clicking on the links shown. The data are for degree-granting institutions only and reporting requirements differ depending on expenditures.

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This module has described the analytic considerations that should be kept in mind when using data collected through the Integrated Postsecondary Education Data System. Specifically, this module described the analysis considerations for data pertaining to Institutional Characteristics, Enrollment, Completions, Graduation Rates, Outcome Measures, Admissions, Student Financial Aid, Human Resources, Finance, and Academic Libraries.

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Additionally, important resources that have been noted throughout the module are summarized here for your reference. This concludes the IPEDS dataset training. You may now click the exit button to return to the landing page.