

EDUCAUSE CDS Survey Guide

IT Organization, Staffing, and Financing

EDUCAUSE Core Data Service

JULY 2017

The EDUCAUSE Core Data Service (CDS) is a benchmarking survey consisting of multiple modules, the first of which (IT Organization, Staffing, and Financing) is required and offered every year, while others are optional and offered on a rotating basis. For first-time participants, a “Quick Start” version of the first module is available. This guide provides information and best practices to help you prepare for the IT Organization, Staffing, and Financing module of the CDS survey. It is intended to support the person at your institution who manages this survey, staff who are actively engaged in providing or collecting data for the survey, and anyone who would like a better understanding of the module and its questions.

Preparing for the Survey

In addition to the detailed directions provided for the IT Organization, Staffing, and Financing module, this guide provides information on several overall CDS best practices to help you complete the survey as efficiently as possible.

Who Should Be Involved

CDS focuses on core metrics related to central IT, defined by the CDS glossary as “the centralized information technology services and support organization reporting to the highest-ranking information technology administrator/officer in the institution.” Due to this focus, the central IT organization typically leads the effort to complete the CDS survey. At some institutions the CIO may complete the survey with input from others, while at other institutions a team is assembled to gather and prepare the data. Completing the CDS survey might require data and input from other areas of the institution; it is essential to work with these other offices across your institution. Best practices include involving these offices early in the process to ensure that accurate and appropriate information is reported.¹

It is best to have multiple sets of eyes on the data. If one person gathers the data, it is important that another person review the data prior to submission in order to affirm the reasonableness and accuracy of the data within the understood context of the question.

Data Collection

The usefulness of the data you get out of CDS is directly related to the quality of the data you put in, so it is worth the effort to review the resources available, including this guide, as you complete your data collection. To help ensure the

consistency of the data you enter from year to year, we recommend documenting the process you used to complete the survey and the decisions you made.

It is important that everyone involved in preparing data for and completing the survey review the [CDS Glossary](#) and [IT Domain Definitions](#). The same terms are used differently at different institutions, so understanding how your campus's terminology and structure maps to the CDS definitions will enable you to answer questions in a way that is comparable and consistent with other institutions and will ultimately make the resulting data more useful.

Some questions may require estimation. Please see the **Tips for Estimation** section for help with calculating informed estimates.

Completing the Survey

Before you start the survey, begin by reviewing the [EDUCAUSE CDS Steps You Complete list](#). There you will find suggestions on organizing to respond to the CDS, options for selecting the parts of the CDS your institutions will complete, a list of helpful resources, and a few requirements for participation. In addition, the **Multicampus Systems** section below will help you determine if your institution is part of a multicampus system, and it provides guidance on how to respond based on your specific role within the system. It is important to make this determination prior to preparing for or completing the survey.

This guide includes information about where to gather data specific to those questions. As you complete the survey, carefully read the information for each question to better understand the scope of what is being asked.

Once the survey is complete, be sure to submit feedback on the process. EDUCAUSE regularly reviews the feedback submitted at the end of each module and uses it to improve future versions of the survey and related resources.

Finally, there is value in having a post-submission meeting with your collaborators. Questions you may ask include: Are there easier ways to collect data throughout the year that will assist next year's survey? Should internal practices be modified to support CDS data collection? Reviewing these items can help to minimize the work in coming years.

Tips for Estimation

For some questions it may be difficult to obtain precise data. When completing the survey, it is better to use informed estimates for elusive data points than no answer at all. If possible, look at data from a prior year as a starting point for an estimate. Table 1 provides a suggested approach for arriving at an informed estimate, along with an example.

Table 1. Process and example for estimating data values

Estimating Procedure	Estimate of Money in Glove Compartment
An estimate of a data point can be thought of as a shorthand way of denoting a range within which you are pretty sure that the value falls.	An estimate that there is about \$8 in my glove compartment means that I am pretty sure there is more than \$5 but less than the \$20 I put there last week.
Start by choosing a range that includes the value you are estimating. Don't try to be too accurate. You will be able to revise this later. Pick a low estimate and a high estimate. Sometimes doing this gives insight into possible responses.	My initial range is between \$5 and \$20.
Speak with a few others who have some knowledge of what you are trying to estimate and ask them how they might revise your range.	My grandson remembers that I bought a hamburger and fries for him on Monday, and I recall that I paid for it with glove compartment money. I revise my range to between \$5 and \$14.
As you work on this you may recall some other factors that might affect the range. If so, make revisions. This will be your working range.	I think I bought a doughnut on the way to work, and I'm sure that there was some change left over from the week before. Now \$6 to \$12 looks reasonable.
Now pick a number between the high and low values of the working range—one that seems to be a reasonable estimate. Sometimes the number is the middle, but often information you've learned will lead you to pick a number closer to one end or the other.	All things considered \$8 seems like a reasonable estimate.
This is your informed estimate.	Actually there was \$9.14 in the glove compartment, but \$8 is a decent estimate, better than a stab in the dark and much more helpful than no answer at all.

For some questions you may be asked for your confidence level in the estimates you provide. The following may be helpful:

- Multiply your estimates by .95 and 1.05. If you are pretty sure that the true value lies between them, check “Extremely accurate” ($\pm 0-5\%$). If not, then...
- Multiply your estimates by .90 and 1.1. If you are pretty sure that the true value lies between them, check “Somewhat accurate” ($\pm 5-10\%$). If not, then...
- Multiply your estimates by .80 and 1.2. If you are pretty sure that the true value lies between them, check “A little accurate” ($\pm 10-20\%$). If not, then...
- Check “Not at all accurate.”

Multicampus Systems

Before you complete the CDS survey, first determine if your institution is considered to be part of a multicampus system. To clarify what this is, take a look at the following definitions from the [CDS Glossary](#):

- **Multicampus system:** A group of two or more colleges or universities—each with substantial autonomy and headed by a chief executive or operating officer—that fall under a single governing board served by a system chief executive officer who is not also the chief executive officer of any of the individual institutions. Such a system is to be distinguished from a “flagship” campus with branch campuses and also from a group of campuses or systems, each with its own governing board, that is coordinated by some state body. Some examples of how IT might interface with campuses in a multicampus system are:
 - The system provides IT services that campuses are required to use but are not charged.
 - The system provides IT services that campuses are required to use, and campuses are charged.
 - The system provides IT services that campuses may opt to use for a fee.
 - The system provides IT services only for system offices.
 - The system provides all IT services system-wide.
- **District:** A group of community colleges with a common governing board (analogous to a multicampus system).
- **Central office:** In multicampus university or college systems or community college districts, the central office is a central administrative unit headed by the chief executive officers of the system or district. Most central offices include a central IT organization, some of which provide a wide range of services to individual campuses and some of which focus on coordinating the activities of IT organizations on the campuses.

If you are completing the survey as a flagship campus with branch campuses, you are not considered to be a multicampus system. In that case, you will want to include data for both the flagship campus and branch campuses in your response. Branch campuses should not complete their own survey.

It is important to be consistent in your responses throughout the survey. If you are part of a multicampus system, coordinate between the campuses and the central office to determine how you will complete the survey. For example:

- The central office completes its own survey, as do individual campuses.
- The central office and a primary campus (if designated) complete the survey as one unit; other campuses (if participating in CDS) complete their own surveys.

Please note that not all campuses in the multicampus system need to complete the survey. Question 16 of the IT Organization, Staffing, and Financing module asks about multicampus systems/districts. Please review the guidance on this question below to answer this question accurately and, as you complete the survey, look for specific guidance for multicampus systems throughout the guide.

Relevant CDS Resources

The usefulness of the data you get out of CDS is directly correlated to the quality of the data you put in, so it is worth the effort to review CDS guidelines and definitions prior to submitting your data to help ensure accurate comparisons.

- [Core Data Service](#)
Visit the CDS website for resources such as the CDS survey timeline, data use cases, the annual benchmarking report, and links to the CDS portal where you add data, access data, and create peer groups.
- [IT Organization, Staffing, and Financing Module](#)
PDFs of the CDS questions, including for this module, can be found from this page.
- [Step-by-Step Overview to Complete](#)
This checklist identifies steps you can take to organize your institution's participation in the CDS survey.
- [IT Domain Definitions](#)
Interpreting and understanding the CDS IT Domain Definitions helps ensure greater validity in comparisons across peer groups.
- [Survey Glossary](#)
This glossary covers terms from the CDS survey.
- [Frequently Asked Questions](#)
Questions are included in the following areas: general CDS questions, roles, accessing data, and adding data.

IT Organization, Staffing, and Financing Questions

A wealth of information is available through the benchmarking capabilities of the Core Data Service (CDS), and the greatest benefit is realized when you can make apples-to-apples comparisons. This guide—developed by the ECAR/CDS IT Organization, Staffing, and Financing Working Group—helps institutions prepare for and complete the IT Organization, Staffing, and Financing module (formerly Module 1) of the CDS survey by explaining the intent of each question and the data needed to answer the question. For each question or set of questions in the module, this guide provides a general description of the question(s), information on why the data are collected, and advice on how to collect the data locally.

Finally, this guide is intended for institutions that are completing the full version of the IT Organization, Staffing, and Financing module. If your institution is new to CDS or hasn't participated in several years, you will be eligible to complete the Quick Start version of the module. The Quick Start survey is a condensed version of the module that was created with the intent of helping new participants focus on key questions. If your institution is completing the Quick Start module, please consult the Quick Start Guide for information on responding to those specific questions.

Key Terms

The following organization, staffing, and finance terms—defined in the CDS Glossary—should be referenced prior to completing this module.

- [Carnegie classifications](#)
- [Carryover funds](#)
- [Central IT](#)
- [Central office](#)
- [District](#)
- [External providers expenditures](#)
- [Fee-based/cost-recovery funds](#)
- [Fixed-term labor](#)
- [Full-time equivalent \(FTE\)](#)

- [In-house infrastructure and services expenditures](#)
- [Multicampus system](#)
- [Peer group](#)
- [Prior fiscal year](#)
- [Professional development expenditures](#)
- [Utilities and space/facilities expenditures](#)

Questions 1–7: Organizational Profile

General Description

Responses to questions 1–7 provide an organizational profile that depicts the scope of responsibility for central IT and the CIO role. There are often substantial differences from one institution to the next in terms of what this scope does or does not include. For example, at some institutions responsibility for administrative systems or IT support for teaching and learning may rest outside central IT, while the library or research computing may be situated within central IT.

Questions 1–7

Q1–3 | Highest-Ranking IT Officer Position

1. What was the title of the highest-ranking IT administrator/officer in your institution during the prior fiscal year?
2. To whom did the highest-ranking IT administrator/officer in your institution report?
3. Was the highest-ranking IT administrator/officer a member of the president's or chancellor's cabinet?

Q4 | IT Issues

4. To contextualize your institution's central IT financial and staffing data, please rank the following top IT issues in terms of how important they were to your institution during the prior fiscal year (1 = most important, 10 = least important).

Q5 | Technology Adoption

5. What was your institution's preferred overall approach to adopting technology?

Q6 | Service Delivery

6. To contextualize your institution's central IT financial and staffing data, please indicate the services for which central IT had primary responsibility for providing during the prior fiscal year.

Q7 | Fiscal Year

7. In which month and year did your institution's prior fiscal year end?

Why Collect These Data?

This data from these questions enable comparison of total funding and funding sources for central IT across a group of institutions. For example, the data:

- Can help identify peer institutions that have similar structure and scope of responsibility as your institution and central IT organization, as well as those with significant differences.
- Provide useful context for financial and staffing data collected elsewhere in the CDS survey. Understanding peer structure and scope of responsibility can help explain differences in funding, expenditure, or staffing levels between institutions.
- Show which IT issues peer institutions are focusing on, providing a strategic context for resourcing such areas and insight on differences in funding, expenditure, or staffing within your peer group.
- Help identify institutions offering services your institution may be interested in adding, institutions that are not offering services you are interested in discontinuing, or similar comparisons on organizational scope. This information may be helpful if your institution is considering a change in services offered.
- Can be used in calculating important benchmarking metrics, such as “Percentage of institutions whose highest-ranking IT officer is on presidential cabinet,” which appears in the CDS Almanacs.

Guidance for Collecting These Data

- Q4 | IT Issues: This question is best answered by your CIO or other senior-level leader responsible for setting IT strategy and direction for your institution. Your rankings should reflect the relative attention, priority, and focus that your central IT organization gave to each area in the prior fiscal year. For instance, some areas may be ranked lower because strong programs already are in place or because your institution has plans to focus on that area later.
- Q6 | Service Delivery: Select all services that central IT had *primary* responsibility for providing to your institution, even if others collaborated to provide the service or if competing services exist. It is not necessary for central IT to have sole responsibility for a service for it to be included on this list. Include services provided by outside vendors if central IT remains responsible for ensuring that the service is provided to the institution and making decisions about the service characteristics or quality.

Question 8: Funding Source(s)

General Description

Question 8 asks for the funding available to central IT in the prior fiscal year. It asks both for total funding and for total funding broken down into several categories or funding types. You should report all available funding, regardless of what was budgeted or what was actually spent (expenditures are reported later in this module).

Q8 | Other funding source(s)

8. Please enter the actual funds available during the prior fiscal year from each of the categories listed.

Why Collect These Data?

- Available funds, both total and by category, allows CDS participants to compare their data with the level and sources of funding other institutions may have. This information can be useful in identifying peer institutions that may be candidates for more detailed conversations about IT service delivery.
- A comparison of funding proportions—such as the extent to which central IT is dependent on funds collected through user fees or chargebacks—relative to similar institutions can spur discussions about new budget models and result in changes to how central IT is funded.
- These data are used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Ongoing base funds available as a percentage of total central IT funds available
 - Student technology fee funds available as a percentage of total central IT funds available
 - Compensation paid from another source as a percentage of total central IT funds available
 - Fee-based/cost-recovery funds available as a percentage of total central IT funds available
 - One-time funds available as a percentage of total central IT funds available
 - Carryover funds available as a percentage of total central IT funds available

Guidance for Collecting These Data

- Begin by writing down the amounts you know first. They may be complete amounts for a category (e.g., carryover) or partial amounts (e.g., fee based/cost recovery).
- If you do not know the amount for a funding source, ask around—the budget office may be a good place to start—and keep track of who answered in case you have a follow-up question and need to work with them in subsequent years. For example, central IT staff salaries and/or benefits may be funded from an institutional budget outside central IT, and you may need to ask HR or finance colleagues for help. Since employment costs are typically central IT's largest expenditure area, both the funding amount here and expenditure amounts later should be reported to more completely convey the funding and spending pictures for central IT at your institution.
- Take time to review your data— with your CIO if possible—before you enter it into the online survey tool.

Question 9: Student Technology Fees

General Description

Question 9 asks about fees charged to the majority of students by the institution to support information technology on campus.

Q9

9a. Did your institution charge a general student technology fee (that is, a fee designated wholly for IT that is levied on all students, as opposed to specific IT fees based on academic major or other criteria)?

9b. What amount in U.S. dollars (USD) was generated for the entire institution by the technology fee during the prior fiscal year?

9c. Were any funds allocated to central IT from revenue generated from the general student technology fee?

9d. Who participated in determining how student technology fee revenue is spent? (Check all that apply.)

Why Collect These Data?

Student technology fees are a common source of institutional funding for central IT. Data from this question:

- Can be used to determine the extent to which technology fees support central IT services in comparison with services provided by peers.
- Help when analyzing funding models, sources of funding, and proportions of funding from various categories.
- Can be used to develop plans for collecting student IT fees, setting student IT fee rates, or benchmarking student IT fee governance. For institutions that are still considering whether to collect student IT fees, the data provide information about appropriate fee rates and how fees are administered at other institutions.
- Are used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Percentage of institutions with a designated student technology fee
 - Student technology fee revenue generated for the entire institution per student FTE
 - Percentage of student technology fee funds allocated to central IT out of total student technology fee revenue generated for the institution

Guidance for Collecting These Data

- If you are unsure where to get the data to answer this question, inquire with the bursar or whoever is in charge of student accounts. You could also follow up with your institution's budget office.
- For the purposes of this question, only fees levied by the institution are considered *student technology fees*. Fees levied by individual faculties or departments should not be reflected in your responses to this question.

Questions 10–11: Central IT Expenditures

General Description

Central IT's total expenditures provide important metrics for comparative analysis and monitoring for shifts or changes across a peer group. The absolute amounts may be of some interest, but the real value is the relationship between the level of central IT's expenditures and institutional factors such as total expenditures or total headcount. Question 10 seeks both total expenditures by central IT and a breakdown of that total into some consistent categories, such as employment costs.

Q10–11 | Central IT Expenditures

10. Please enter the U.S. dollar (USD) amounts central IT spent during the prior fiscal year from each of the expenditure categories listed.

11. Were student employees compensated in whole or in part by work study or other sources that you did not report previously (i.e., as part of central IT funds available in Question 8, or that you did not include in item 2 of Question 10)?

Why Collect These Data?

- IT expenditure metrics are considered an industry standard, and when expressed in relation to institutional parameters such as total expenditures or headcount, these metrics enable CIOs to demonstrate the cost of central IT on their campus in comparison with that of peer institutions and of other service units on your campus.
- Expenditures provide a more complete picture of the relative costs of IT than budgets or funding.
- Comparative benchmarks on expenditures and categories of spending are helpful in annual budget planning. For example, by identifying peer institutions with similar service portfolios but different levels of expenditures you can begin a conversation about how to most efficiently support the same services. By comparing your expenditures to those at peer institutions with aspirational service portfolios, you can start to assess what it might take to evolve your service portfolio.
- A comparative analysis of distribution of expenditures across categories, such as the proportion of expenditures devoted to staffing or allocated to externally provided services or functions, can help determine an appropriate IT expenditure model for your institution type. Such comparative analysis can equip the institution with justification to argue for increased resources to close a gap or insight into how to reallocate resources more effectively.
- These data are used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Total central IT spending per institutional FTE (students, faculty, and staff)
 - Total central IT spending per institutional employee FTE (faculty and staff)
 - Total central IT spending per student FTE
 - Central IT spending on professional development per central IT staff FTE
 - Total central IT spending as a percentage of institutional expenses

- Percentage of institutions with a 5% or greater increase in total central IT spending
- Percentage of institutions with a 5% or greater decrease in total central IT spending
- Central IT ongoing compensation spending as a percentage of total central IT spending
- Central IT fixed-term labor spending as a percentage of total central IT spending
- Central IT professional development spending as a percentage of total central IT spending
- Central IT in-house infrastructure spending as a percentage of total central IT spending
- Central IT external provider spending as a percentage of total central IT spending

Guidance for Collecting These Data

- This is a question where estimation may be required. Please see the **Tips for Estimation** section.
- Report expenditures regardless of whether some of the associated costs are recovered from other units or individuals through user fees, chargebacks, or pass-through. In other words, show the actual total spent, not just expenditures net of such recoveries.
- Total IT expenditures are those for the prior fiscal year. If money was spent in that 12-month period it should be included.
- In many cases, expenditures on salaried or hourly employees can account for a large portion of total expenditures. Compensation and fringe benefits, however, are not always funded from the central IT budget. This expenditure category requests compensation (salaries and fringe benefits) for *all* central IT staff regardless of where the funding comes from. If you reported funding in Question 8, item #3, the associated expenditures should be included in the amount reported in Question 10, item #1. It may be necessary to include estimates for fringe benefits amounts. To obtain an estimate of benefits funded outside of the central IT budget consult with your budget, finance, or HR department.

- When entering expenditure amounts, include *both* ongoing operating (OPEX) and one-time capital (CAPEX) expenditures in the total and in each category, as appropriate.

Question 12: Central IT Expenditures by IT Domain

General Description

Having a consistent classification of expenditures by functional division or area within central IT can be valuable for management, analysis, and planning purposes. This is what the CDS domain structure is meant to enable. An institution can use this breakdown to determine if it is resourcing certain areas at a level consistent with peers or best practices. The breakdown also helps the CIO identify and track resourcing trends across a peer group over time.

Q12 | Central IT Expenditures by IT Domain

12. Out of the central IT expenditures entered in Question 10, what amounts were spent in the following IT domain areas in the prior fiscal year?

Why Collect These Data?

Categorization of expenditures into domains provides additional value for more discrete analysis. The effort can be significant, but the payback can be high for institutions that want to assess whether they are resourcing certain areas at an appropriate level.

- Comparative analysis by domain area can equip the institution with justification to argue for increased resources to close a gap or insight into how to reallocate resources more effectively.
- The domain breakdown of expenditures enables more in-depth comparative analysis with peers. In areas that are or will be undergoing change, monitoring of expenditure trends can be helpful to reassure stakeholders that central IT is responding appropriately to the change. For example, institutions are increasingly devoting more resources to cybersecurity, information security, and privacy matters as the threat landscape continues to broaden and evolve. It can be very informative to see what proportion of total IT expenditures peers have been allocating to security-related activities and equipment in recent years and how this is changing. Similarly, the ERP system landscape continues to evolve, with some institutions moving to best-of-breed solutions rather than integrated ERP systems and some beginning their transition to

cloud-based ERPs. Such changes over time, or trends, will probably alter how resources are allocated (e.g., less on in-house personnel, more on contracts with cloud providers).

- These data are used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Central IT administration and management of IT spending as a percentage of total central IT spending
 - Central IT support services spending as a percentage of total central IT spending
 - Central IT educational technology services spending as a percentage of total central IT spending
 - Central IT research computing spending as a percentage of total central IT spending
 - Central IT communications infrastructure spending as a percentage of total central IT spending
 - Central IT enterprise infrastructure and services spending as a percentage of total central IT spending
 - Central IT information security spending as a percentage of total central IT spending
 - Central IT information systems and applications spending as a percentage of total central IT spending

Guidance for Collecting These Data

- When answering questions 12 and 14 (central IT staffing) for the first time, respondents will need to map central IT's financial account structure and staffing chart onto the CDS domains. This entails the grouping of personnel costs, equipment costs, contractor or consultant costs, and maintenance costs to correspond to the CDS domains. While this may take some time the first year, once you have mapped the CDS domain categories onto your accounts and organizational structure, the effort is significantly reduced in subsequent years.
- Some central IT organizations may find this breakdown more difficult when there is a limited number of IT managers and staff, since most employees probably contribute to multiple domain areas. In some cases, percentages of FTEs must be estimated and mapped to salary and benefit costs in order to derive expenditures by IT domain. Functional unit managers may be best able

to estimate the percentage of time staff allocate to different responsibilities—they should be asked for this information early in your preparation of the CDS responses.

- Salaries and benefits may all be paid from a central budget that exists outside central IT. However, to be complete, these “people costs” must be determined and included in relevant domain subtotals. They are unlikely to be exact but will probably be informed estimates of proportions. During comparative analysis it is often the relative proportions rather than the actual values that matter.

Question 13: Run, Grow, and Transform

General Description

Separating expenditures into run, grow, or transform categories is an opportunity to review the proportions your institution and your peers spend to “keep the lights on,” “grow existing services,” or “transform your institution” through technology. This categorization can inform discussions of the value of your investments in assisting the institution to change. Institutions that are trying to do more with less rarely have much discretionary funding to grow or invest in new opportunities for their institution. Peer comparisons over time may show that others are gradually shifting resources from running the organization to transforming as the institution pursues new opportunities.

Question 13

13a. Out of the central IT expenditures entered in Question 10, approximately what percentage was spent to run, grow, and transform the institution in the prior fiscal year?

13b. How accurate is the response provided in Question 13a?

Why Collect These Data?

Categorizing spending by run, grow, and transform helps shift discussions on IT spending from a cost perspective to a value perspective. Understanding the relative percentages for run, grow, and transform helps convey the different ways central IT is providing value to the institution.

- This metric can be used as a benchmark against higher education as a whole, institutions in your category, and peer institutions. It also helps drive discussion on subsequent year spending as grow and transform numbers rise, unless cuts are made in run areas. Collected over time, these data will help

explain to stakeholders that these three expenditure categories are in fact interrelated. Increased expenditures on grow and transform initiatives are likely to result in changes in run costs in the future.

- A breakdown of spending by run, grow, and transform is an industry-standard benchmark that can be used to compare higher education IT spending to IT spending in other industries, such as healthcare or other education sectors.
- Data from this question allow you to benchmark your budget across dollars spent to determine the blend of innovation spending and operating spending that supports your institution's goals
- These data are used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Percentage of total central IT spending on running the institution
 - Percentage of total central IT spending on growing the institution
 - Percentage of total central IT spending on transforming the institution

Guidance for Collecting These Data

- There needs to be a balance between the ease of collecting these data and accuracy. Estimates are acceptable. Question 13a asks for a percentage, while question 13b then asks for an estimate of how accurate you believe your response to 13a was.
- An annual review of projects can be a good place to start categorizing larger run/grow/transform expenditures. Sometimes projects may fall into two categories—for example, a programming project may be fixing bugs in one portion of an application, while new enhancements are added to assist with recruiting in another. Again, this question is really about overall proportions, and estimates are acceptable; a detailed analysis of expenditures should not be necessary.

Question 14: Central IT Staffing

General Description

This question groups central IT staffing, including students, into the core IT domains that are used throughout the CDS survey. It is common for some staff to

devote part of their time to different domains, and thus it is necessary to estimate that percentage when completing the survey.

Q14 | Central IT Staffing

14. How many full-time equivalent (FTE) staff—including clerical, support, and management staff—and students were employed in central IT in each of the IT domain areas below for the prior fiscal year?

Why Collect These Data?

The distribution of staff across IT domain areas is one way of comparing the allocation of IT human resources to IT priorities. These data are most useful in constructing ratios (e.g., FTE IT staff divided by employee/student population) that allow staffing level comparison with larger or smaller institutions:

- A ratio of the FTE student IT staff to the total FTE central IT staff including students provides a way of evaluating student contribution to central IT, especially when coupled with the distribution of student FTEs across IT domains.
- The ratio of central IT staff to distributed IT staff (see question 15) provides a rough measure of how centralized IT is on a campus.
- These data are further used in calculating several important benchmarks, such as the following CDS Almanac metrics:
 - Central IT staff FTEs as a percentage of institutional employee FTEs
 - Student worker FTEs as a percentage of total central IT FTEs
 - Central IT FTEs per 1,000 institutional FTEs
 - Central IT administration and management of IT FTEs per 1,000 institutional FTEs
 - Central IT support services FTEs per 1,000 institutional FTEs
 - Central IT educational technology services FTEs per 1,000 institutional FTEs
 - Central IT research computing services FTEs per 1,000 institutional FTEs
 - Central IT communications infrastructure services FTEs per 1,000 institutional FTEs
 - Central IT enterprise infrastructure and services FTEs per 1,000 institutional FTEs

- Central IT information security FTEs per 1,000 institutional FTEs
- Central IT information systems and applications FTEs per 1,000 institutional FTEs

Guidance for Collecting These Data

- It can be helpful to devise a spreadsheet (see [CDS FTE Calculator](#) for a sample) to summarize how each employee contributes to each domain. For each person, estimate how their responsibilities fit in the CDS domains. Double-check that your nonstudent staff total equals your total FTE for central IT.
- Student number should be entered in FTEs. This may be different from the total number of student workers. For example, 4 students working 10 hours a week each would count as 1 FTE. The following methods may be used to calculate this number. If you know the total number of student worker hours allocated to distributed IT during the fiscal year, divide that number by 2,000 (number of hours/year based on a 40-hour workweek). If you know the total number of dollars used for student workers, divide that number by the average hourly wage and then divide the result by 2,000.

Question 15: Distributed IT

General Description

Questions 15a–15c aim to learn about the ratio between central and distributed IT at your institution.

Q15 | Distributed IT

15a. Based on the proportions of IT expenditures and staff in central IT as compared to elsewhere in the institution, to what extent is IT at your institution centralized?

15b. Please estimate distributed IT expenditures and staffing at your institution during the prior fiscal year.

15c. How accurate are the responses provided in Question 15b?

Why Collect These Data?

Many of the metrics in the CDS survey focus on central IT only. Central IT funding, expenditure, and staffing data are, however, only one component of the full IT resource picture at institutions with significant distributed IT resources. Estimates of distributed IT expenditures and staffing provide a view into total

institutional IT resources. The ECAR working group paper [*Calculating the Costs of Distributed IT Staff and Applications*](#) provides further explanation of the importance of distributed IT spending in understanding total institutional IT spending. A comparison of your institution's level of centralization, distributed IT expenditures, and distributed FTE staff with those of peer institutions may uncover opportunities for alternative service delivery strategies.

These data are used in calculating several important benchmarks, such as the following CDS Almanac metrics:

- Percentage of institutions with less than 75% centralization of IT expenditures
- Distributed IT spending per institutional FTE at institutions with less than 75% centralization of IT expenditures
- Distributed IT spending as a percentage of total institutional IT expenditures at institutions with less than 75% centralization of IT expenditures
- Percentage of institutions with less than 75% centralization of IT staff
- Distributed IT FTEs per 1,000 institutional FTEs at institutions with less than 75% centralization of IT staff
- Distributed IT staff FTEs as a percentage of total institutional IT staff FTEs at institutions with less than 75% centralization of IT staff

Guidance for Collecting These Data

- Consult the ECAR Working Group paper [*Calculating the Costs of Distributed IT Staff and Applications*](#). That paper includes multiple recommendations for this area and should be referenced as an additional resource when answering this question.
- Use the best data you can obtain as a basis for your estimate. Your finance, institutional research, or budget offices may also have some data or can help prepare estimates. For example, human resources may classify distributed IT staff with particular codes.
- A standardized methodology is necessary to accurately measure the investment of staff resources in IT systems. You should limit distributed IT staff to persons who don't report to central IT but who work 50% or more on IT activities and who have IT staff job titles (e.g., programmers, DBAs, etc.) consistent with the CDS domain definitions.²
- If providing estimates for distributed IT expenditures and staffing, see the **Tips for Estimation** section.

Question 16: Multicampus Systems/Districts

General Description

Responses to this question provide an organizational profile that can contextualize the responses provided to other questions.

Q16 | Multicampus Systems/Districts

16a. In the prior fiscal year, was your institution part of a multicampus system or district?

16b. How many degree-granting “component” institutions of each of the following Carnegie Classifications make up your multicampus system?

Why Collect These Data?

- These data may help contextualize differences in expenditures in some areas and provide useful context for staffing data elsewhere in CDS.
- The data collected here can help identify other institutions that have similar structure to your institution, as well as those with significant differences. Use these questions as filters to identify or exclude institutions that do not have a similar structure to your institution.

Guidance for Collecting These Data

The guidance provided here will help you answer Question 16; for guidance on how the institutional structure you select influences how to answer other questions in the CDS, refer to the section on multicampus systems above.

- Appropriate individuals to answer this question include the CIO or other senior leaders in your institution.
- Review the descriptions carefully to determine the selection that best suits your needs.
- If you are filling out the survey for a flagship campus with branch campuses, rather than a multicampus system (according to the definition), select “the response to this module represents a campus only,” even though you may refer to your institution as having multiple campuses.
- If you are filling out this survey for a multicampus system, make sure that the option you select reflects how you will answer other questions in the survey. If you select “central office and a campus,” you should include information for both the central office and the campus in all your answers; if you select

“campus only,” do not include information about the central office in your answers; if you select “central office only,” do not include information about the campus in your answer.

Question 17: Institutions Outside the United States

General Description

CDS draws on the [National Center for Education Statistic’s IPEDS](#) data to obtain key institutional benchmarking parameters for U.S. colleges and universities, but this information is not available from IPEDS for institutions outside the United States. This section provides institutions in other countries with a place to report enrollment, employee FTE, and expenditure figures for their institutions, as well as the exchange rate used in converting financial amounts to U.S. dollars.

Q17 | Institutions Outside the United States

17a. In the prior fiscal year, was your institution’s primary location outside the United States?

17b. In which country was your institution primarily located?

17c. What were the total expenses in U.S. dollars (USD), not including student financial aid, for your institution during the prior fiscal year?

17d. What was the total research income in U.S. dollars (USD) for your institution during the prior fiscal year?

17e. What exchange rate did you use to convert your local currency to USD for financial data in this survey?

17f. How many full- and part-time graduate and undergraduate students (i.e., headcount) were enrolled in your institution during the prior fiscal year?

17g. How many full-time equivalent (FTE) employees, including faculty, were employed by your institution during the prior fiscal year?

17h. Was your institution a member of any of the following higher education IT organizations or consortia? (Check all that apply.)

Why Collect These Data?

The data gathered here:

- Enable the calculation of a variety of core metrics for non-U.S. institutions.
- Ensure comparison of financial amounts are based on a common currency (U.S. dollars).

- Provide data needed to calculate the [CHEITA Global Complexity Index](#). This index is a value based on research funding, FTE staff, and FTE students that can be calculated for any institution and used as a basis for identifying peer institutions regardless of country of origin.

Guidance for Collecting These Data

The following steps can help ensure greater consistency in financial amounts reported in CDS each year and hence in any subsequent comparative analyses.

- Where possible you should seek official sources for the data needed for this section. A good place to start may be your institution's department of institutional research, which probably publishes or reports these numbers each year.
- Where feasible, institutions in one country should agree on what exchange rate to use each year when converting financial amounts to U.S. dollars.
- If possible, determine the average exchange rate for the 12-month prior fiscal year period.

Questions 18–19: Supplemental Information

General Description

The supplemental information provides an opportunity to add context to the information an institution enters. Should other institutions choose to benchmark against you, it provides them with background information to better understand differences. Additionally, when institutions compare themselves from year to year, the supplemental information acts as a reminder to the initiatives that were current at a given time and can help explain fluctuations in benchmarks.

Q18–19 | Supplemental Information

18. Please provide, in a paragraph or two, any background information about IT organization, staffing, and financing in your institution that could be useful to other CDS participants who may be using your data in their benchmarking. Examples: "We hired a consultant to redesign our funding model"; "In the past year we migrated student e-mail to a cloud service." (optional)

19. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)

Why Collect These Data?

Answering this question allows you to provide context for the data reported in CDS. For example, many university IT departments receive one-time funding for major projects, like a large-scale ERP system deployment or the replacement of large infrastructure elements. Here you can explain significant fluctuations in funding, expenditures and staffing, or other environmental changes of significance.

- When benchmarking against peers, this information may help explain differences.
- When performing longitudinal comparisons, this information may help explain anomalies in the trend data.

Guidance for Collecting These Data

When answering the questions here, think about what was different in the prior year, such as major projects or infrastructure expansion. Try to briefly outline any changes that have a sizable effect on your responses to CDS that year. For instance:

- Were there significant changes in the scope of central IT's responsibilities?
- Was a hiring freeze lifted, enabling you to fill a number of vacant positions?

Questions 20–23: Module Feedback

The module feedback questions are an opportunity to give EDUCAUSE your thoughts and comments on the survey, including feedback about the amount of time respondents spent on the survey and changes that you might like to see to the questions. The feedback is valued, reviewed, and processed. Survey changes may be made based on your feedback.

Q20–23 | Module Feedback

20. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year's survey. We'd also like to know if any questions in this module are not relevant to your institution. How else could this module of the CDS survey be improved?

21. How many people participated in preparing and completing the answers to the questions in this module?

22. Approximately how much time did you spend on the following?

23. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

Next Steps

Once you have completed the survey, EDUCAUSE takes a few months to gather the data, process, and analyze it. The results are summarized and published in *EDUCAUSE Review* and posted on the EDUCAUSE CDS website. The CDS website includes past-year publications, a series of articles on benchmarking, and suggestions on how to utilize information from the survey. It is an excellent resource to take your next step on the CDS journey.

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Notes

1. While central IT is the focus of the survey, this module does ask about the extent of centralized/distributed IT at your institution in question 15. For more about distributed IT costs and how they are assessed in this survey, see the ECAR Working Group paper [Calculating the Costs of Distributed IT Staff and Applications](#).
2. This recommendation is derived from [Calculating the Costs of Distributed IT Staff and Applications](#). The paper includes additional recommendations for this area and should be consulted as an additional resource when answering this question.

About EDUCAUSE

EDUCAUSE is a nonprofit association and the foremost community of IT leaders and professionals committed to advancing higher education. EDUCAUSE programs and services are focused on analysis, advocacy, community building, professional development, and knowledge creation because IT plays a transformative role in higher education. EDUCAUSE supports those who lead, manage, and use information technology through a comprehensive range of resources and activities. For more information, visit educause.edu.

About CDS

Since 2002, the EDUCAUSE [Core Data Service](#) (CDS) has been providing higher education CIOs and senior IT leaders with the benchmarks they need to make strategic decisions about IT at their institutions. On average, more than 800 institutions (both within and outside the United States) participate in a survey about IT financials, staffing, and services. Survey participants can access CDS data through a self-service portal that enables them to benchmark their IT organizations against those of their peers. Institutions also participate in CDS to study their IT organization, to benchmark against past performance, to look at trends over time, to start gathering and using metrics, and to have data available “just in case.”

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