

## 6

## The Central IT Budget

*There is no dignity quite so impressive, and no independence quite so important, as living within your means.*

—Calvin Coolidge

The typical IT budget funds a diverse set of activities. It must sustain legacy technology and infrastructure, support the pursuit of innovations, and deliver utility-like services such as the network. Balancing these myriad missions is complex. Most CIOs are responsible for managing centrally allocated funds as well as fee-for-service revenues such as chargebacks. This chapter explores several dimensions of the central IT budget and asks:

- ◆ What primary revenue sources and expenses constitute the IT budget?
- ◆ Do IT budgets contain adequate flexibility to respond to change?
- ◆ Who has adopted chargebacks and student fees as a revenue source? How are they being used and what impact are they having?

The chapter discusses three main topics in turn:

- ◆ Funding Sources and Uses
- ◆ Budget Flexibility
- ◆ Role of Chargebacks and Student Fees

### Funding Sources and Uses

Survey respondents are at institutions with a very broad range of budget sizes. Respondents' central IT budgets ranged in size from less than \$1 million to more than \$30

### Key Findings

- ◆ IT budgets are increasingly consumed by fixed costs.
- ◆ The cost of maintaining existing technology is driving down institutions' ability to meet new user needs and pursue innovations.
- ◆ There is an emerging risk that institutions will lack sufficient funds to adequately maintain existing technology.
- ◆ Nearly 64 percent of respondents reported that their budgets were not increasing sufficiently to cover the costs of maintaining new technology.

million. The median budget for FY 2003 was \$3 million. For many institutions, the central IT budget funds most of their technology expenditures. However, at more decentralized institutions, the central budget is only part of the total IT spending picture.

Overall, respondents' central IT budgets fund 75 percent of their total technology spending. The remainder is spent by decentralized academic and administrative units. Respondents' median expenditure from all budgets was \$3 million. However, this proportion varies greatly by Carnegie class. Figure 6-1 shows the mean central IT budgets and total technology spending by Carnegie class.

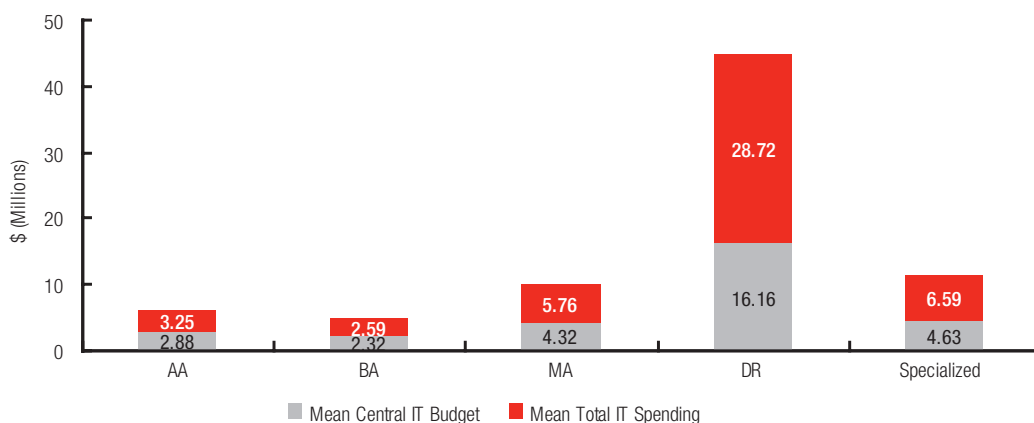
As we might expect, total technology spending at the more decentralized doctoral institutions significantly exceeds their central IT budgets. For these institutions, the mean central IT budget represents only 56.3 percent of total institutional spending on technology. For associate’s and bachelor’s institutions, the mean central IT budget contains nearly 89 percent of total IT spending. Master’s institutions spend on average 75 percent of their total IT spending centrally, and specialized institutions spend 70 percent.

This fragmentation means doctoral institutions face a greater challenge to optimize total institutional IT spending. In fact, we

asked respondents how well their institutions did at managing their total IT spending regardless of the budget it resides in. The responses differ significantly by Carnegie class (see Table 6-1).

Not surprisingly, respondents from more decentralized doctoral institutions with more fragmented IT spending were less able to manage their total IT spending. In fact, doctoral respondents are making a strong statement that the inability to coordinate or manage decentralized IT spending is a significant problem. Doctoral institutions’ mean response was 3.12, indicating that many respondents strongly or very strongly disagreed that their institutions

**Figure 6-1. Mean Central IT Budget (N = 433) and Mean Total IT Spending (N = 425), by Carnegie Class**



**Table 6-1. Leadership Management of Technology Expenditures (N = 440)**

Carnegie Class	Mean	Number	Standard Deviation
Associate’s	4.57	81	1.350
Bachelor’s	4.01	90	1.510
Master’s	3.68	145	1.437
Doctoral	3.12	98	1.473
Specialized	4.31	26	1.569
Total	3.83	440	1.527

Q: The institutional senior leadership actively manages its total technology expenditures even if they do not reside in a single budget unit. (1=very strongly disagree, 4=neutral, 7=very strongly agree)

were effectively managing their total technology spending. Conversely, respondents from associate's and bachelor's institutions felt they were able to manage total IT spending.

### IT Revenue Sources

We asked respondents to indicate the funding sources for their central IT budgets and their relative significance. Although respondents indicated that they derive funding from multiple sources, their allocation from the institutional operating budget is by far the most significant. Table 6-2 illustrates respondents' evaluation of how significant a portion of their funding each source represents.

The overwhelming majority of respondents' IT organizations are run financially as cost centers. Their activities are funded through an allocation from the central operating budget. More than half of the survey respondents charge student fees, but this represents a major revenue source for only 28 percent. Similarly, nearly 60 percent of responding IT organizations use chargebacks, but this is a major IT funding source for only about 10 percent. We discuss the use of stu-

dent fees and chargebacks in greater detail later in the chapter.

Nontraditional, more entrepreneurial revenue sources have yet to significantly impact most survey respondents. External grants, selling services to external entities, and technology transfer are above-average revenue sources for very few. Grants are presently the most significant entrepreneurial activity, representing an above-average revenue source for 10 percent of surveyed institutions.

The pursuit of entrepreneurial revenue varies by Carnegie class and is most prevalent among doctoral institutions. Grant funding is a revenue source for the widest range of institutions. Seventy-five percent of all institutions surveyed reported receiving some IT funding through grants. Royalties from technology transfer are the province of doctoral institutions, 33 percent of which received some revenue from this source. Technology transfer was a revenue source for fewer than 5 percent of associate's, bachelor's, or master's institutions.

The resale of services to external entities follows a similar pattern. Overall, 75 percent of

**Table 6-2. Revenue Sources for the IT Budget (N = 455)**

Source	Mean	Standard Deviation
Operating appropriation to central IT organization from the institutional budget	6.10	1.260
Student technology fee(s)	3.16	2.052
External grants, contracts, or partnerships	2.56	1.396
Direct state allocation for specific technology expenditure	2.21	1.656
Resale of services to other campus units (chargebacks)	2.20	1.548
Direct state allocation of funds to the IT budget for general operating costs	2.01	1.696
Resale of services to external entities	1.40	0.815
Technology transfer royalties	1.17	0.563

*Q: Please rate the following sources of IT funding at your institution. (1=none, 4=average source, 7=very major source)*

survey respondents reported receiving some revenue from this source. Again, doctoral institutions had the most significant share, with about 57 percent receiving some of their funding from this source. Fewer than 20 percent of bachelor's, master's, and associate's institutions reported revenue from this source. Drexel University is perhaps one of the most aggressive institutions in selling services externally. As detailed in a separate ECAR case study, Drexel has become an application service provider to other colleges. The value of this, according to Drexel CIO John Bielec, is that it reduces his organization's dependency on its operating allocation from the university. "The revenue we gather from outside the institution makes us less susceptible to cuts in the university budget and helps us to fund our growth," he explained.

## IT Costs

IT costs are driven largely by compensation, equipment purchases, and payments to vendors for technology maintenance. Prior to and just after the year 2000, most institutions experienced significant competition for IT staff, thanks to the twin effects of the Y2K problem and the dot-com boom. As a result, compensation costs grew quickly. Although compensation is still one of the largest components of the IT budget, it's no longer one of the fastest growing. Today's cost pressures are technology maintenance and support.

As Figure 6-2 illustrates, respondents reported that network equipment purchases, hardware and software maintenance contracts, and hardware purchases have been the fastest-growing components of the IT budget in the last three years.

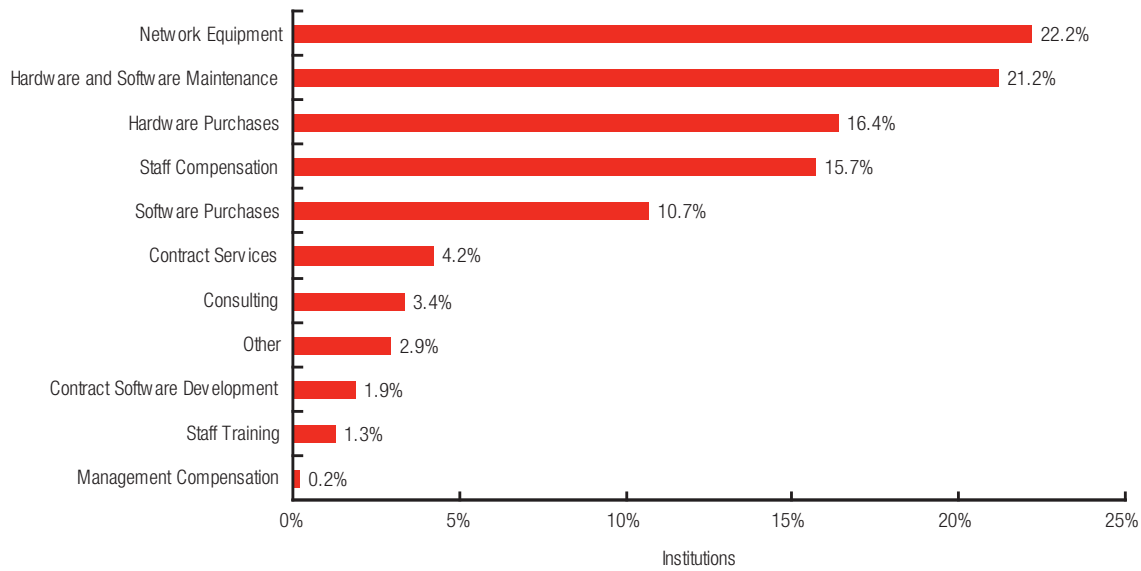
We also asked respondents what they thought would be the fastest-growing costs over the next three years (see Figure 6-3). Respondents anticipate that the same items will continue to grow fastest, and the relative order of the list will remain the same. Slightly

more respondents anticipate that maintenance contracts will surpass others as the fastest-growing cost in the next three years than in the last three. In addition, there is a continued expectation that compensation costs will not be among the fastest growing.

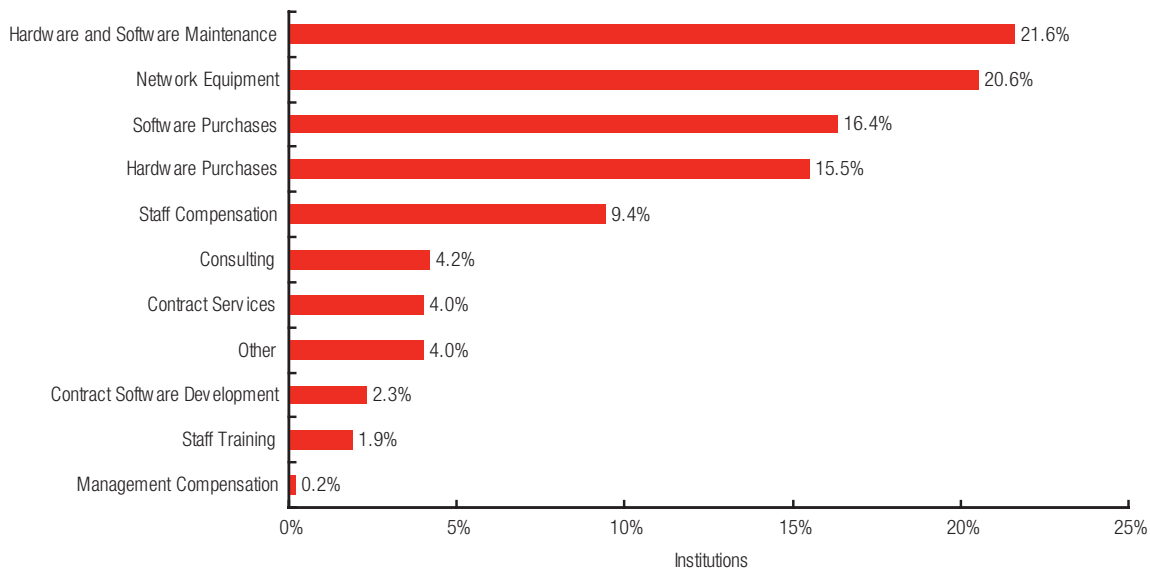
The costs of maintaining and renewing existing technologies have drawn and will continue to draw significant funding. In the last 10 years, institutions have invested significantly to expand their networks, modernize their core enterprise systems, and adopt new instructional technologies. These changes have increased both the number of users and the complexity of what they use. Although these changes have delivered many benefits, maintaining them requires significant resources. Integration across applications and between applications and middleware will also likely demand increased activity and expenditures.

Institutions also depend more than ever on commercial hardware and software vendors. We asked respondents to estimate what portion of their IT budget is committed to contractual payments to vendors. The mean of all responses was 22.9 percent. As Figure 6-4 illustrates, specialized institutions had the greatest portion of their budget dedicated to maintenance contracts and doctoral institutions had the least.

We looked at the impact the state of an institution's ERP system had on the percentage of their budget committed to vendor maintenance contracts. Somewhat surprisingly, we found no significant difference. Institutions that had implemented a complete ERP package devoted 23.9 percent of their budgets to maintenance contracts in FY 2004. Comparably, those that had not implemented a complete ERP package devoted 22.3 percent. There was also no appreciable difference between public and private institutions. However, we can't conclude from this data alone that no appreciable cost difference exists in supporting a complete ERP system. This data



**Figure 6-2.**  
Fastest-Growing IT Budget Item in the Last Three Years (N = 482)



**Figure 6-3.** Fastest-Growing Segment of IT Budget Anticipated in the Next Three Years (N = 482)



**Figure 6-4.** Percentage of Central IT Budget Committed to Vendor Maintenance (N = 355)

looks only at the maintenance payments to the vendor, not the functional and technical staff time required to apply upgrades and maintain the system.

Networks appear to have had a somewhat greater impact on the budget percentage committed to maintenance contracts. The mean response of those respondents with partially deployed high-speed networks was 22.5 percent of their total budget. Comparatively, those with fully deployed networks commit 26.3 percent of their total budget.

Finally, we noted a relationship between institutional enrollment and the percentage of the budgets consumed by maintenance contracts (see Figure 6-5). This is not surprising, as larger organizations spread software license costs over a broader set of activities and user base.

### Budget Flexibility

Maintenance contracts are only one source of fixed costs within the IT budget. In fact, for most survey respondents the IT budget has become highly inflexible. We asked respondents to estimate what percentage of their IT budgets was in effect fixed costs—defined as full-time personnel costs, contractual payments to vendors, and any other cost that would be difficult to discontinue within one year. Most survey respondents indicated that between 70 and 90 percent of their IT budgets

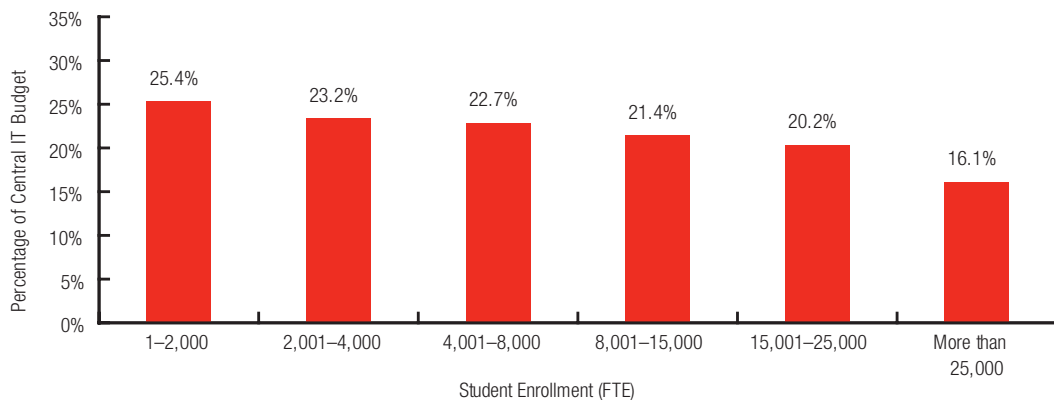
was allocated to fixed costs. The mean of all respondents was approximately 73 percent.

In many ways, this makes the IT budget comparable to any other budget in the institution. Personnel make up the greatest percentage of any higher education budget, often consuming 70 percent or more of the resources in administrative units and upward of 90 percent in many academic departments. For most, these costs are fixed because there are numerous contractual, cultural, and strategic barriers to rapidly changing the number of employees. This leaves little room for reallocation of funds.

Fixed budgets are challenging for an IT organization as well. “You need to have agility,” explained Laurie Antolovic, finance officer of the Indiana University IT organization. “You need discretion or you can’t react fast enough.”

Fixed budgets have made it difficult to respond to unexpected events. This became evident as many organizations scrambled to respond to campus information security threats. They also make innovation difficult. The successful IT organization must be a source of innovation, and it must be responsive to changes in user needs and technologies. Often, these changes do not fit neatly into an institutional budget cycle. So, flexible resources are critical to technology departments.

**Figure 6-5.**  
Maintenance Payments as a Percentage of IT Budget, by Enrollment (N = 374)



We looked at who was succeeding at maintaining flexible budgets and saw some interesting patterns. As Figure 6-6 illustrates, flexibility varies by Carnegie class. Surprisingly, associate’s institutions reported the greatest flexibility and doctoral institutions the least. Our hypothesis had been that doctoral institutions would have more resources and therefore greater flexibility.

Using regression analysis, we analyzed which factors best explain why some institutions have more or less of their IT budgets fixed. There appears to be a relationship between student enrollment and how much of the IT budget was fixed. However, the inverse of the anticipated relationship appears again:

institutions with relatively small enrollments have a greater degree of stated budget flexibility than those with larger enrollments (see Figure 6-7).

The data support no statistically valid conclusions as to why this is so, but we offer several potential explanations. First, smaller institutions with smaller IT staffs may be using consultants and contractors to supplement their IT staff. These costs are variable by their nature and provide the institution with the ability to quickly adjust them. This in turn gives these institutions greater discretion in how they use the IT budget. Similarly, smaller institutions may be using student employees as a more integral part of their staff.



Figure 6-6. Fixed Costs, by Carnegie Class (N = 433)

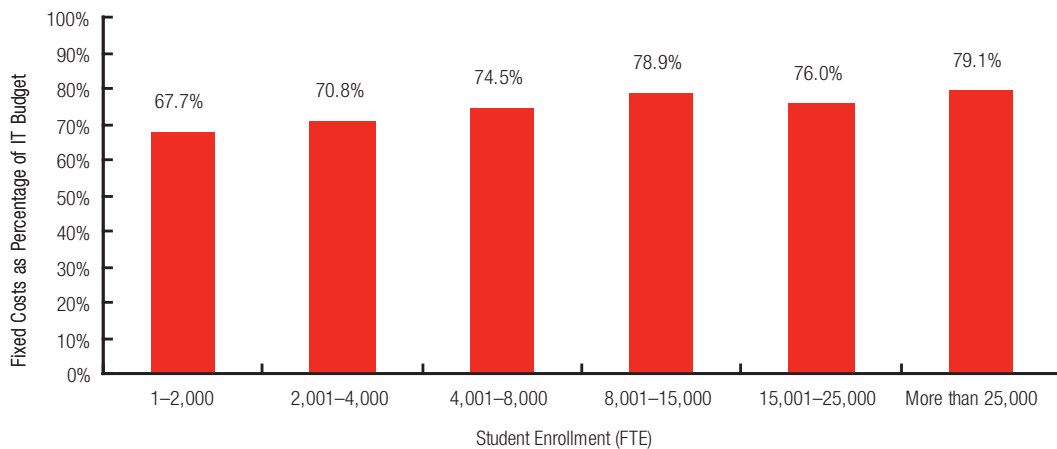


Figure 6-7. Fixed Costs, by FTE Enrollment (N = 460)

In fact, using external development firms appears to be a significant strategy to gain budget flexibility. We found a statistically significant relationship between an institution's use of external software development firms and the percentage of its budget that is fixed.

We asked respondents to describe their use of external software development firms. The options were

- ◆ not at all,
- ◆ as a strategy to absorb peaks in workload, and
- ◆ as an integrated part of the IT organization.

Table 6-3 shows the mean percentage of the IT budget that is fixed for responding institutions that follow each of these strategies.

Institutions that use external software development firms to absorb peak workloads or as part of an integrated staffing plan have more flexibility. However, the number of responses is too low to conclude if this is predominantly why smaller institutions report greater budget flexibility.

Another explanation could be that smaller institutions have a different cost structure than do larger ones. As discussed above, smaller institutions likely have small IT staffs; hence, as a percentage of total IT budget, they devote less to staff than do larger institutions. Therefore, they have more devoted to hardware and software purchases, which can be delayed or cancelled and therefore offer more flexibility.

## Value of Flexibility

Respondents with more-flexible budgets were better positioned to respond to new user needs and fund innovation.

As Figure 6-8 illustrates, once the budget's fixed component rises above 60 percent, respondents' confidence in the adequacy of their funding falls. Respondents whose IT budgets have fixed costs below 80 percent expressed more confidence that they had sufficient funding to meet new user needs and to research and experiment with new technology.

Finally, more than half of respondents (58 percent) agreed that greater budget flexibility would be valuable. However, most have been unable to achieve this to date. Despite the relative high number of institutions that value greater flexibility, only 14 percent of respondents are pursuing an explicit strategy to create it. There is a disconnect between desire and action. It is not clear, however, whether institutions haven't acted because they haven't focused attention on the issue or because they see no clear solutions. Many institutions may feel boxed in by their existing commitment to maintaining legacy systems and meeting users' expectations for new features and functionality with a relatively small staff. As we discuss in the next chapter, new revenue sources to augment the IT budget appear out of reach for many as well. So, there are significant impediments to gaining more flexibility.

**Table 6-3. Fixed Costs, by Staffing Strategy**

Use external software development firms?	Number	Mean Percentage Fixed Costs
Not at all	362	74.1
Absorb spikes in IT workload	75	70.0
Integrated component of staffing strategy	33	65.1

### Maintenance Funding: An Emerging Threat

The lack of discretionary funding in IT budgets is a problem that will likely worsen, not improve. As previously mentioned, respondents reported that they expect technology renewal and maintenance costs to be the fastest-growing budget components. These expenditures are critical to maintaining the performance of the campus technology infrastructure, yet few institutions have secured funding sources for maintaining new technology.

We asked survey respondents how they fund the cost of maintaining a technology once it's implemented. As Figure 6-9 shows, most pursue an ad hoc approach. The majority must request funding each year through the budget process. Only 28.3 percent of responding institutions fund maintenance costs by including them in the budget item for implementing a new technology or through an automatic set-aside of funds.

Many institutions stretch their existing budgets to fund the incremental costs of maintaining a new technology. Nearly 40

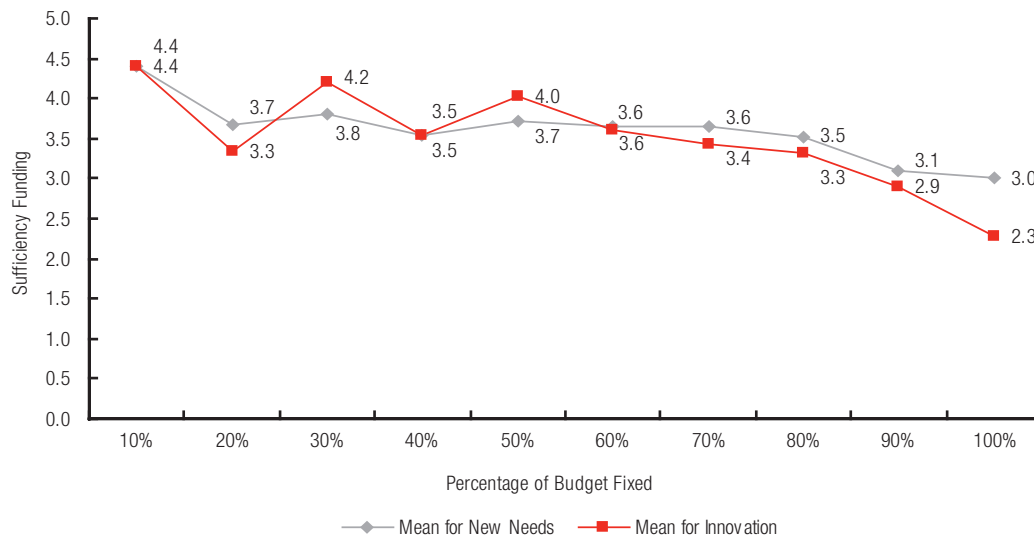


Figure 6-8. Adequate Central IT Budget for User Needs and Emerging Technologies (N = 473)

Q: The central IT budget contains adequate funds to respond to new user needs and interests and to research and experiment with emerging technologies.

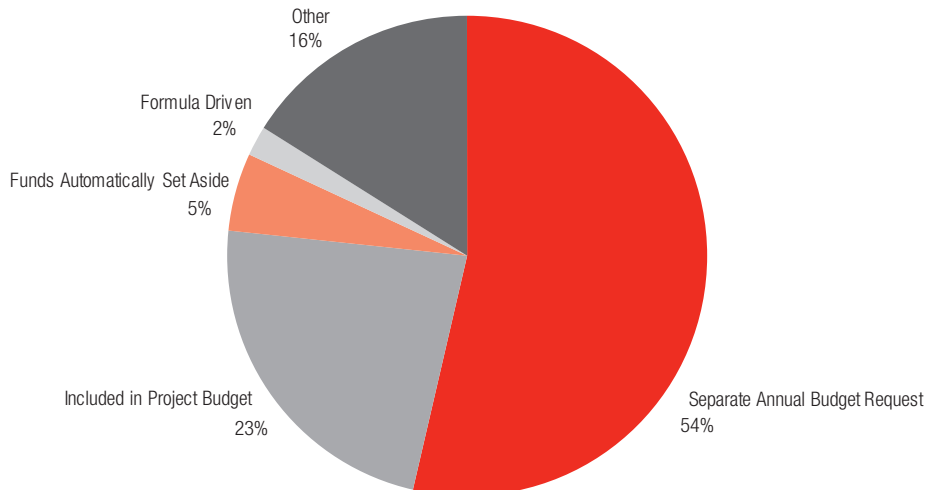


Figure 6-9. Sources of Maintenance Funding (N = 480)

percent of respondents reported that they fund maintenance this way.

Interestingly, we didn't find a significant relationship between the approach to and sufficiency of maintenance funding. We asked respondents whether their budgets increased sufficiently to cover a new technology's maintenance costs. We found only slight variations by maintenance funding source in the percentage of respondents who agreed that their budgets increased sufficiently. Regardless of maintenance funding mechanisms, about 50 to 60 percent of the respondents didn't feel that their budgets increased sufficiently. So, the method of budget increase doesn't guarantee its sufficiency.

Institutions may be aware of their maintenance needs but simply can't fund them. Or, cuts in other parts of the IT budget offset increased resources to support renewal and replacement. As David Harrison, director of Technical Support Services at Virginia Western Community College, explained, "Each year, we look at the value of our cumulative investment in our infrastructure and try to set aside one-quarter of total value for renewal and replacement. Some years we have done this and in others we have not. Sometimes, we have to make a conscious decision to set aside less than we need, knowing we will have to come up with even more money in a future year."

We do see some relationship between sufficiency of maintenance funding and institutional control. Private institutions agreed to a greater extent than public institutions that their budgets increased sufficiently to support maintenance costs. This likely reflects the broader differences in the level of IT funding available for public and private institutions.

Without significant IT budget growth, the challenge to fund maintenance will further decrease future IT budget flexibility. Already, nearly 64 percent of respondents reported that their budgets do not increase sufficiently

to cover the costs of maintaining new technology. The percentage of respondents from public institutions reporting that budgets aren't rising fast enough is even higher: nearly 69 percent of public institution respondents indicated they didn't have sufficient funds to cover the costs of maintenance, versus about 57 percent of private institutions. This seems to leave CIOs with the unenviable choice of either risking poorly maintained technology or sacrificing their ability to support new user needs and interests. The impact of this choice is beginning to manifest: nearly 14 percent of survey respondents reported that one or more technologies were currently behind the vendor-prescribed schedule for maintenance and upgrades.

## Role of Chargebacks and Student Fees

Although they're not significant sources of IT funding, chargebacks and student fees do garner much attention. For institutions that use one or both, they play a key role in defining the IT organization's relationship to its major customers. The perceived energy level and attention focused on both chargebacks and student fees drove us to include them in this study. For both, we sought to understand:

- ◆ Why and how are they being used?
- ◆ How is pricing set?
- ◆ What impact do they have on technology adoption? On user satisfaction?

## Chargebacks

First, who uses them? The use of chargebacks varies by Carnegie class and control. Among survey respondents, 46 percent use chargebacks to some degree. About 70 percent of the institutions that use chargebacks are public institutions. However, given that public institutions constitute about 62 percent of the total respondents, this may not be a significant indicator that chargebacks are more prevalent at public institutions. In fact, it may

have more to do with the institution’s degree of decentralization and budget philosophy.

As Table 6-4 indicates, they are used more prevalently at master’s and doctoral institutions.

As we might expect, a strong association appears between the use of chargebacks and institutional budget philosophy. Institutions with decentralized budget models, such as responsibility center management, employ chargebacks much more frequently than do institutions with a centralized budget model.

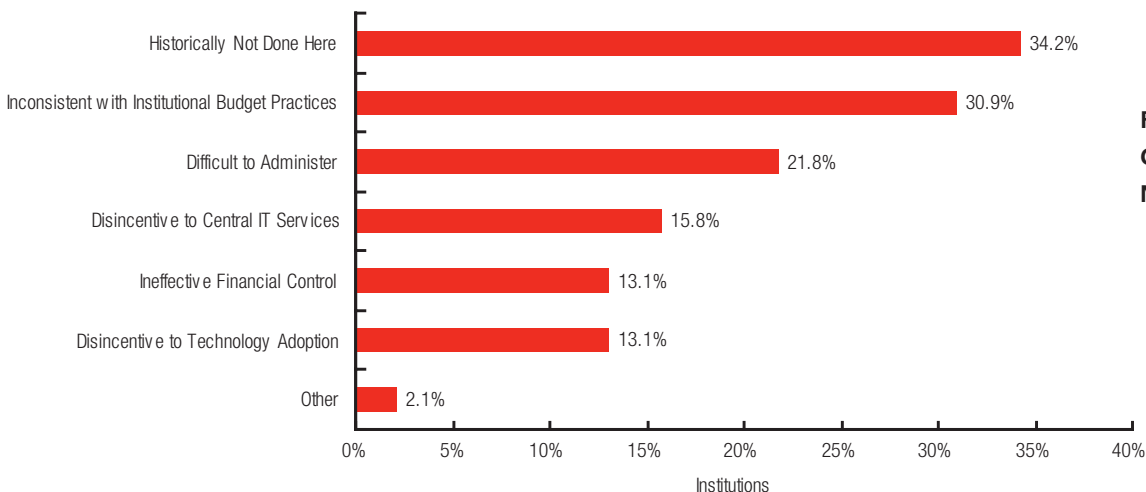
The institution’s broader management practices also seem to determine whether an institution uses chargebacks. Highly decentralized institutions are likely to use chargebacks

for many internally delivered services. In fact, for those respondents who use chargebacks, the most frequently cited reason was to give users options for how much service to buy. This is very much in keeping with the philosophy of a decentralized budget system. The second most frequently cited reason was that chargebacks are a historical practice of the institution.

The converse also appears true: institutions that don’t use chargebacks are also complying with their broader philosophy and practices (see Figure 6-10). We asked respondents who do not use chargebacks to identify the primary reasons why. The most frequently identified reason was that it had not been historically done at their institution. That was followed

**Table 6-4. Use of Chargebacks, by Carnegie Class**

Carnegie Class	Percentage Don't Use	Percentage Use
Associate's	75.3	24.7
Bachelor's	71.1	28.9
Master's	49.7	50.3
Doctoral	21.4	78.6
Specialized	70.4	29.6



**Figure 6-10. Why Chargebacks Are Not Used**

closely by chargebacks being inconsistent with the institutional budget philosophy. Interestingly, relatively few institutions rejected chargebacks out of fear that they would impede technology adoption.

Chargebacks are used most often to fund IT services that different users consume in variable amounts. This appears consistent with a motivation to use chargebacks to create choice for customers. Respondents use chargebacks most often to fund telephone, print, or network services. They employ chargebacks least frequently to fund institutional or emerging services, such as instructional technology or IT security.

The rates for chargebacks are set at the actual cost of the service or at the cost plus an additional charge to fund equipment renewal and replacement. Relatively few respondents were relying on chargebacks to fund general IT department operations.

Finally, we asked respondents a series of questions about their use of chargebacks. Our purpose was to explore their opinions on how pricing is determined, their chargebacks' impact on technology use and adoption, and the effort required to administer chargebacks. Table 6-5 summarizes the responses. Overall, respondents agreed that chargebacks accurately reflect the cost of providing the service. But they were split on whether the chargebacks recouped sufficient monies to pay overhead costs as well as the direct costs of the service. Both of these items had relatively high standard deviations, suggesting that there are many respondents on both sides of this question.

Our hypothesis at the study's outset was that chargebacks create a disincentive to technology adoption. Respondents appear to disagree. The mean responses to our questions about chargebacks' impact on

**Table 6-5. Respondents' Opinions on Effectiveness of Chargebacks (N = 218)**

	Mean	Standard Deviation
<b>Chargeback Pricing</b>		
The rates charged for IT services accurately reflect the cost of providing the service.	4.55	1.438
Overhead is always included in the cost charged for an IT service.	4.00	1.476
<b>Impact on Adoption and Use of Technology</b>		
The use of chargebacks makes users less willing to adopt new technology.	3.70	1.188
The presence of chargebacks makes it more likely that departments will develop their own shadow IT services.	3.83	1.466
The presence of chargebacks makes users more likely to comply with institutional IT policies.	3.82	1.066
<b>Administrative Burden</b>		
The time spent negotiating chargebacks is a significant distraction to the IT organization.	3.35	1.315
The time and effort required to administer chargebacks outweighs the value of having them.	3.38	1.296

1=very strongly disagree, 4=neutral, 7=very strongly agree

technology adoption or the use of central IT services were all below 4. Survey respondents did not agree that chargebacks make users less willing to adopt new technology or that they make it more likely that departments will develop their own shadow IT services. Similarly, respondents did not think chargebacks would make a user more likely to comply with policy (for example, if I pay for my network usage, I am more likely to comply with security policies). These findings further reinforce the notion that use of chargebacks results from broader institutional budget practices, not a specific IT management objective.

Finally, respondents did not seem to mind administering chargeback programs. They disagreed with the notion that chargebacks require significant time to negotiate. Nor did they feel that the time and effort required to manage chargebacks outweighed their benefit. Both of these findings run somewhat counter to the urban legend that has grown around chargebacks.

Respondents seem fairly satisfied with their present use of chargebacks. Of those who do employ them, 89 percent anticipate that their use will stay the same or increase in the next three years. Conversely, only 8.6 percent of institutions that do not use chargebacks anticipate introducing them in the next three years.

## Student Technology Fees

More than half (58.6 percent) of surveyed institutions collect student technology fees. As with chargebacks, we found a strong association between institutional control

and the presence of a student technology fee. Respondents from public institutions reported using student fees in significantly greater numbers than those from private institutions (see Table 6-6). This likely stems from broader governance issues more than anything else. Often, public institutions have far more latitude to raise revenues through fees than tuition.

Respondents used student fees most frequently to fund instructional technology, followed by desktop/user support services and network services (see Table 6-7). These are arguably the services from which students derive the most direct benefits. In addition, more than 23 percent of respondents reported using student fees to fund administrative systems development or operations.

Student fees aren't set to recoup the full cost of the services they support. Rather, they are a supplemental source of revenue. In fact, only about 7 percent of respondents agreed that the student fee at their institution covers the cost of the technology services it supports.

Respondents were split evenly on the question of whether their fees were likely to rise in the next three years. Most respondents (84 percent) agreed that students understood the need for the technology fee. However, 35 percent of respondents felt their students didn't understand what services the student technology fee funds. This is a potential early warning sign that students are not completely clear on what value they receive in exchange for their student fees. In fact, 40.9 percent of respondents neither agreed nor

**Table 6-6. Presence of Student Fee, by Control**

Institution Type	No Student Fee (N = 193)	Student Fee (N = 274)
Private	60.2%	39.8%
Public	29.4%	70.6%

**Table 6-7. Uses of Student Fees**

Services Funded by Student Fees	Number	Percentage
Instructional technology	199	41.3
Desktop/user support services	175	36.3
Network services	165	34.2
Print services	110	22.8
Other IT services	97	20.1
IT security	73	15.1
Data center operations	71	14.7
Web development/hosting	67	13.9
Media services	64	13.3
Administrative systems operations	61	12.7
Administrative systems development	51	10.6
Telephone services	34	7.1

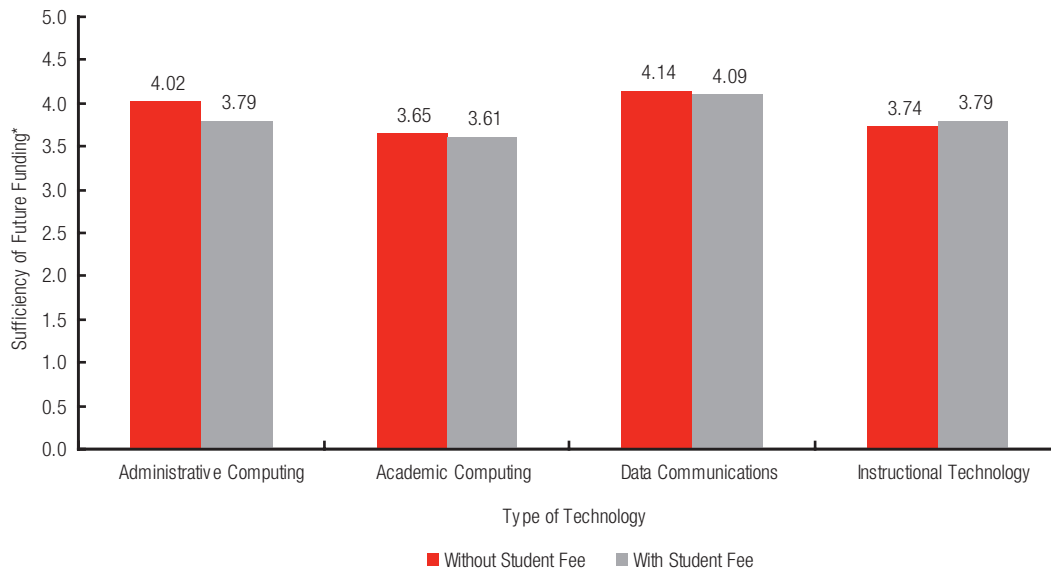
disagreed with the statement that students believe they get commensurate value for their technology fee.

The number of institutions charging a fee will likely increase. Nearly 24 percent of respondents without fees anticipate introducing one in the next three years. The intention to introduce a student fee also breaks out differently between private and public institutions. About 13 percent of private institutions without a fee plan to introduce one in the next three years, compared with nearly 37 percent of public institutions.

Although public institutions have widely adopted student fees, this revenue source has had no appreciable impact on their confidence in their IT funding's sufficiency. In fact, public institutions that charge a student fee were

on average less confident in their institution's ability to provide sufficient funding to keep pace with technological advancements (see Figure 6-11).

The difference in confidence levels is widest for administrative computing and narrowest for instructional technology. This is somewhat expected, as student fees most often fund instructional technology and network activity. However, it doesn't explain why a public university without a student fee would feel more confident than one that charges a fee in its ability to fund administrative technology in the future. We might explain some of this gap by the institution's anticipation of introducing a student fee to augment future funding. Or it could just be masking the effect of a completely different factor.



**Figure 6-11.**  
Sufficiency of Future Funding for Technology Advancements, by Student Fees (N = 286)

Q: The institution is projected to have sufficient funding to keep current with technology advancements.

## Summary

What we hear from the survey respondents is that the costs to maintain existing technology are squeezing central IT budgets. With the overall decline in institutional budgets, most IT organizations now spread even fewer resources over broader needs. This further erodes their ability to respond to

new needs or unexpected events. We see significant concern about the adequacy of funding to support maintenance. If this need is not addressed, higher education could face significant erosion of its technology infrastructure or its ability to pursue new innovations.