Understanding Budget and Financial Audit Analysis

A Handbook for Higher Education Association Leaders

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PREFACE

In many ways, the economic climate of the past few years has been difficult for our nation in general, and for education in particular. This Handbook has been written to assist Association leaders in higher education as NEA-affiliated institutions meet the challenges imposed upon them by circumstances occurring beyond the walls of the institution.

The worldwide credit crisis and recession which struck in 2008 will have long-lasting repercussions on governmental revenues and expenditures for some time to come. The expansion of the federal deficit, the end of federal stimulus aid, the underfunding of Medicare, Medicaid, Social Security, and state and local pension programs have produced financial strains on the federal and state budgets not seen for many years. Less money is available for public and private higher education as state appropriations to public higher education continue to fall and endowments continue to shrink due to low investment returns and decreasing alumni contributions.

We think that these factors will be associated with several negative consequences for the nation and for our nation's postsecondary education system. With few exceptions, most high-salary positions both now and in the future will require higher levels of educational attainment in every state of the nation. With this demand, the price of tuition will continue to outpace inflation as state appropriations to higher education fail to keep up with the need. While federal financial aid programs have expanded, this will continue to be targeted towards low-income students,

leaving middle income students strapped for aid. Many students will be effectively locked out of traditional higher education opportunities.

We believe that the economic realities facing higher education today will impact higher education staff as well. Specifically, we think that the higher education workforce will continue to move away from full-time and tenured positions towards a part-time and contingency workforce. Those faculty and staff members who remain will face an increased expectations and workloads. Faculty and staff will also find that their salary increases will not keep up with inflation, and public calls for reduced benefits in the public sector will increase as the effects of allowing our manufacturing base to move overseas and the increasing disappearance of our middle class standard of living continue to be realized. It almost goes without saying that the number of tenured faculty positions will continue to decrease.

In the midst of this economic climate, the Governmental Accounting Standards Board (GASB) has released a number of statements that require greater accountability from higher education institutions. This edition of the handbook covers the changes through the second quarter of 2011. We recommend that faculty and staff Association leaders and their management counterparts work together on budget and/or finance committees to support the institutional mission and preserve the institution's long-term solvency without sacrificing the assets that provide the reputational capital that our higher education institutions currently enjoy. We also encourage faculty and staff Association leaders and members to learn the basics of accounting, financial reporting, and financial analysis. In higher education environments, faculty involved in teaching accounting, auditing, and finance should be asked to lend their assistance to this effort in a manner harkening back to the 'mutual aid' concept of unionism of the nineteenth century;

this assists the effort to understand college and university finances and helps associations in their internal organizing efforts (Bacharach, Bamberger, & Sonnenstuhl, 2001). In the spirit of this effort, we provide Association leaders with this Handbook in order to teach the basics of these ideas, identify the right questions to ask, and urge Association leaders to obtain the necessary documents in order to verify that the strategic plans of the institution are the best ones to implement to reach the institution's mission.

CHAPTER 1 INTRODUCTION

Objectives

After completing Chapter 1, readers will be able to:

- Differentiate the processes of accounting and auditing.
- Identify the differences between the financial information that is offered in a budget and that which is presented in the context of a financial audit.
- Understand how various accounting and financial reporting boards influence the development and presentation of the financial audits of higher education institutions.
- Articulate the objectives of accounting and financial reporting for public higher education institutions.

Introduction

George Lucas, the producer of the *Star Wars* series of movies, made a telling point about budgets in *THX 1138*, his first feature length science fiction film. The setting is an underground society controlled by computers and patrolled by robot guards. The hero makes a break for the outside, with the robots in hot pursuit. Then, just as the robots are about to overtake the hero, the computers order a halt. The cost of the chase has reached its budgetary limit.

As the budget determined the fate of the hero of *THX 1138,* so do the budgets of present-day American colleges and universities determine the educational and work experience of faculty, staff and students. Faculty members are, for example, told that an academic project cannot be implemented because "It isn't in the budget." They are very often given budgetary reasons for their salary increases, benefits, and support services. Yet many higher education employees are unaware of how to read or analyze a budget, despite the fact that every aspect of academic life is influenced by an institution's budget. What do these columns of numbers mean? What constitutes the entire budget of an institution? What revenue sources does the institution rely upon? What do the institution's expenditures say about the priorities of the institution? How can the financial health of an institution be determined? As educators, we know that ignorance is rarely bliss. It is certain disaster in budgetary matters.

This Handbook, written primarily to help faculty and staff members with little prior experience in college or university budgeting and financial audit analysis, provides an introduction to these subjects in order to demystify institutional finance for faculty and staff members so that they will be able to focus on pertinent questions, locate the most useful

information, and analyze college and university finances that exert control over so many facets of their academic life. In finance, as in other areas, knowledge is power.

Budgets

Organizational budgets are prepared in part by financial professionals who systematically record, analyze and report its financial transactions. The people who are in charge of this work are known as **accountants**, and they follow a specific set of rules and regulations in order to present a fair and accurate presentation of the organization's finances to its shareholders in the case of a private organization and to the public in the case of a public organization. A private organization is one that is controlled by an individual, group of individuals or shareholders, while a public organization is controlled by a government. **Auditors** are financial professionals who are specially trained to review the documents, records, reports, systems of internal control, accounting and other financial procedures of an organization in order to report on the fairness of the financial information reported by an organization in its financial statements and special reports. Both private and public organizations hire accountants and internal auditors to manage their finances; public organizations are also subject to regular audits from external auditors who work directly for or are contracted by governments to produce audit reports on an annual or biannual basis. Audit reports are founded in an organization's financial statements, which stem in part from the organization's budget.

Governments use two control mechanisms to ensure that the resources that are provided through taxation are used as intended: the budget and the governmental fund structure (GASB

Concepts Statement 1, *Objectives of Financial Reporting*, p. 10). The first will be discussed herein, while fund accounting will be covered Chapter 2.

The **budget** of an organization serves a variety of purposes. Since resources are always insufficient to satisfy the needs of all units in an institution, a budget serves as a mechanism for setting priorities among an institution's many activities. In addition, a budget summarizes the agreement between a given budget unit and the rest of the institution. That is, in exchange for a given level of funding in the budget, a department agrees to conduct a certain number of courses, advise students, and provide public service. A budget also serves as a mechanism (or norm) for monitoring and controlling expenses. Thus when a department seeks to exceed the expenditures assigned to it in the budget, it has to justify the variation. In addition, a budget serves as a mechanism for communications by informing the academic community of the priorities of the institution. As such, the budget reflects the outcome of a political process that may have many levels—from the legislature and the governor's office down through many levels of administration to the individual departments. Thus, budgets are an expression of public policy and financial intent, while they are also a form of legal control for the institution and its chief financial means for evaluating performance (GASB Concepts Statement No. 1, *Objectives of Financial Reporting*, p. 9).

Once implemented, budgets are compared to the actual financial experience of institutions over the course of time. At the conclusion of each fiscal year, financial professionals employed by the institution produce data from which the institution's **comprehensive annual financial report** (CAFR) is developed from its financial statements and related information and

is published for stakeholder review. For public higher education institutions, these stakeholders include the government and the general public. In developing and implementing the budget, institutional financial professionals rely upon a set of financial rules and regulations established for public and private institutions by one or more independent accounting and financial review boards.

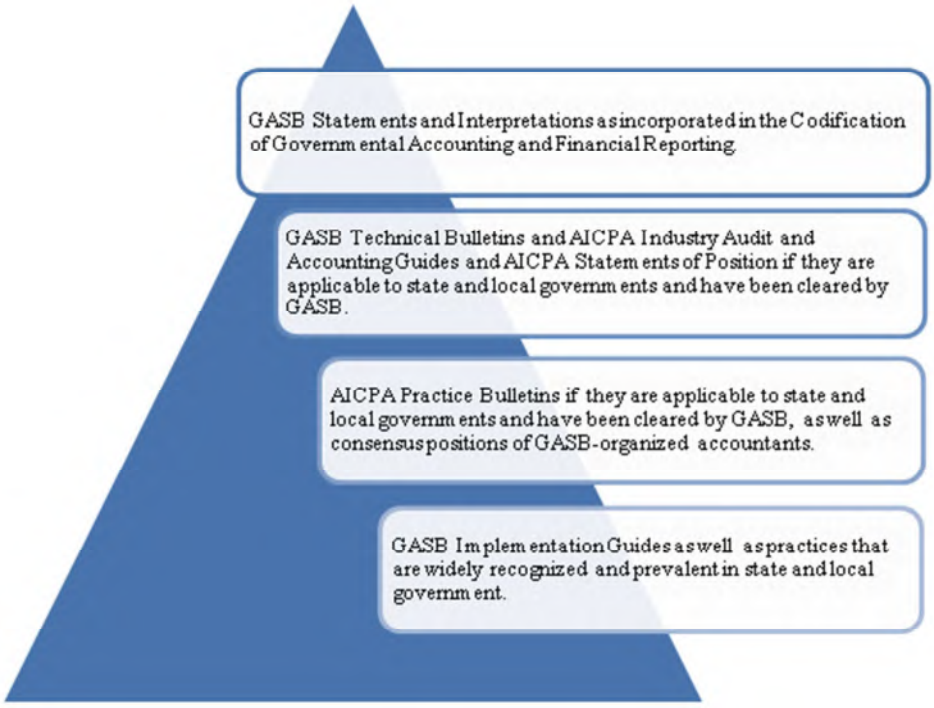
Accounting and Financial Reporting Boards

The financial rules and regulations of public and private institutions are governed by **generally accepted accounting principles** that are set by the **Financial Accounting Foundation** (FAF), an independent, private sector institution incorporated in 1972. FAF holds the responsibility for the oversight and administration of the **Federal Accounting Standards Advisory Board (FASAB)**, which provides accounting and financial reporting standards for the federal government, for the **Financial Accounting Standards Board** (FASB) and its advisory councils, which sets similar standards for profit-seeking businesses and nongovernmental not-for-profit organizations, and the **Governmental Accounting Standards Board** (GASB) and its advisory councils, which develops similar standards for state and local governments and public not-for-profit institutions. It also provides oversight and administration for the Financial Accounting Standards Advisory Council (FASAC) and the Governmental Accounting Standards Advisory Council (GASAC).

The accounting and financial reporting standards set by each Board are published in the form of statements. Each Board also develops and distributes interpretations in order to expand on the ideas embedded in the statements, and technical bulletins to assist organizations in the

implementation of the statements (Copley, 2011). To help financial professionals determine the relative priority of all these standards, bulletins, and interpretations, GASB produced a hierarchy of generally accepted accounting principles for state and local governments in March of 2009 in *GASB Statement No. 55*. Figure 1 illustrates the sources of accounting principles that are generally accepted in descending order of authority.[1]

Figure 1: ***GASB Hierarchy of Generally Accepted Accounting Principles***



[1] Here the role of the GASB Concept Statements relied upon in the field and in this Handbook should be noted. While they are not mentioned in the hierarchy illustrated in Figure 1, they are quite important. Their primary goal is to provide the "underlying philosophy and the boundaries for judgment" that guide the decision made by ever-changing GASB members with respect to accounting and financial reporting issues. In that context, they provide a link between the members of the GASB across the years, a foundation from which to decide issues of import for the field (Attmore, 2009).

In order to assist financial professionals in the conduct of their work, the **American Institute of Certified Public Accountants** (AICPA) produces guides that are applicable to each of the Boards. For the purposes of this Handbook, the authors will thus rely upon the GASB Standards and Interpretations and the *Audit and Accounting Guide for State and Local Governments of March 1, 2010* (American Institute of Certified Public Accountants, Inc., 2010) to assist Association leaders in conducting periodic reviews of the financial audits of public higher education institutions. In order to facilitate understanding between those standards that are applicable to private and public institutions, FASB and GASB worked with AICPA to define a 'government' in *AICPA's Audit and Accounting Guide: Not-for-Profit Organizations* text as follows:

> "Public corporations and bodies corporate and public are governmental organizations. Other organizations are governmental organizations if they have one or more of the following characteristics:
>
> 1. Popular election of officers or appointment (or approval) of a controlling majority of the members of the organization's governing body by officials of one or more state or local governments;
> 2. The potential for unilateral dissolution by a government with the net assets reverting to a government; or
> 3. The power to enact and enforce a tax levy."

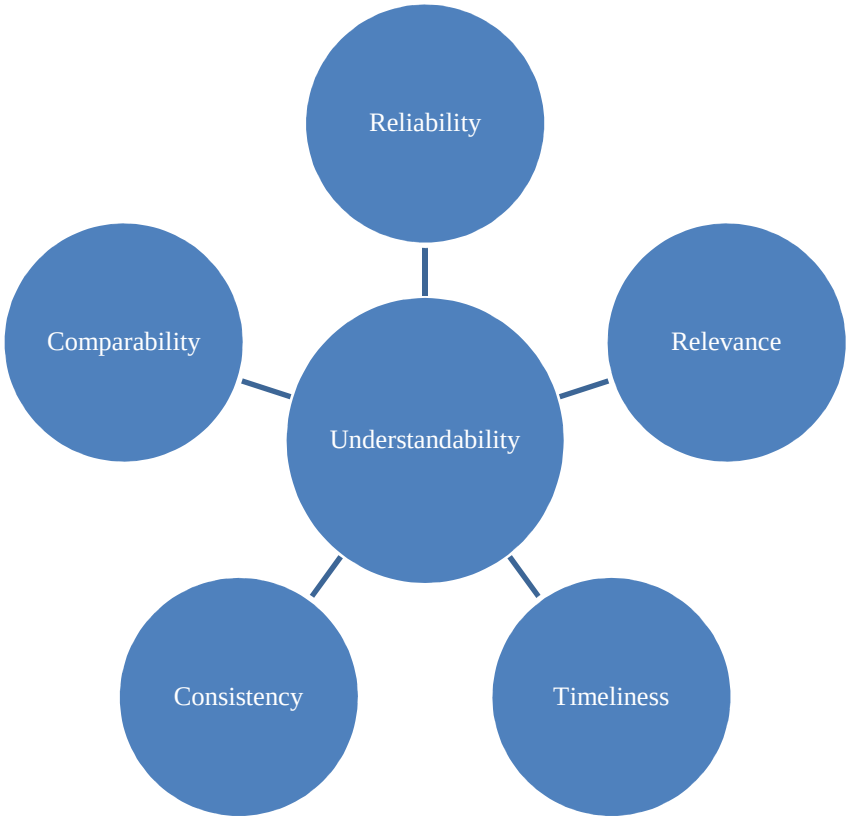
In addition, AICPA points out that institutions are presumed to be public if they have the ability to issue debt directly that pays interest exempt from federal taxation (Copley, 2011, p. 6). Hence, if a public higher education institution meets the standard set above, we can proceed with research and analysis using the AICPA and GASB resources identified in this Handbook.

Objectives of Accounting and Financial Reporting

GASB Concepts Statement No. 1, *Objectives of Financial Reporting*, promulgates the objectives of financial reporting for state and local governments in a complete and concise manner. For GASB, the purpose of financial accounting in the public sector is to fulfill government's duty to be publicly accountable and to satisfy the needs of users who have limited authority or access to the information. While financial statements are not the sole source of information regarding a public institution's finances, they are the core of financial reporting that ultimately culminates in its comprehensive annual financial report. For higher education leaders, financial statements that are reported according to generally accepted accounting principles represent a standardized set of numbers for both labor and management.

The goal of financial reporting is to provide effective information for users; for the GASB, this means that such information must be characterized by understandability, relevance, timeliness, consistency, and comparability. Effective financial communication is of paramount importance to systematic research and analysis, and relies upon financial statements that are developed and presented in compliance with generally accepted accounting principles, comprehensive notes to the financial statements, and, where understanding of the financial situation of the institution is still lacking, open communications with the financial professionals of the institution. Figure 2 summarizes the requirements of effective financial communications as developed in GASB Concepts Statement No. 1.

Figure 2: ***Characteristics of Effective Financial Communications***



The term ‘understandability’ describes the extent to which financial communications are expressed in terms that users of financial data can understand. As stated by the National Association of College and University Business Officers (NACUBO), “…financial information must be consistently compiled and reported in a manner that corresponds to users’ needs” (2006, p. 2). This reflects the thrust of the GASB concept statements, statements and interpretations that envision users as appointed and elected government officials, those who utilize the services of public institutions, and citizens in general. This first component of effective financial communications is the bedrock upon which the others are founded due to the fact that governments are given the power to compel taxes from its citizens in exchange for services of

value. Most governmental services are not exchange transactions, as when a user fee is charged when a citizen utilizes a service, but a timing transaction where the taxes levied in one fiscal year bear some relationship to the services that are generally available to all citizens during the same time period. As such, citizens have the right and responsibility to understand how its government agencies utilize the resources entrusted to them.

The second component of effective financial communications, reliability, measures the extent to which the financial information presented is unbiased, accurate, and comprehensive. Actual data should be separated from estimated numbers; where the latter are given; assumptions must be revealed and defended.

Effective financial communications must also be relevant. In this context, the information that is presented to a user must bear a logical relationship to the purpose for which it is needed. The test put forward by the GASB in this Statement is utility for the user: “Information is relevant if it is capable of making a difference in a user’s assessment of a problem, condition, or event” (pp. 23-24).

The last three standards of effective financial communications are closely related. Timeliness can be judged by the gap in time between the publication of financial data and the time required to utilize it in order to make decisions. Thus, governments compel public agencies to release financial statements within a set number of weeks after a fiscal year is completed in order to provide data that can be used to detect patterns, anomalies and trends in order to predict and verify evaluations of organizational performance. This use of financial data presumes that the financial information released over time by an organization is consistent, that is, that the

accounting principles, valuation methods, basis of accounting, and other things, remain the same over time. This component of effective financial communications has a potential conflict from the actions and advocacy of the GASB itself, as the Board continuously tries to meet the challenges of setting accounting and financial reporting standards for local and state governments and public not-for-profit institutions that operate in a continuously changing environment. To the extent that the GASB has been successful, the financial information released by local and state governments and public not-for-profit institutions must be comparable, so that true differences in organizational resources and actions can be detected over the 'noise' of accounting and financial reporting changes.

General purpose external financial reporting for state and local governments and not-for-profit institutions includes comprehensive annual financial reports and those that are general in nature. Such reporting concerns both governmental and business types of actions. Governmental-type activities are those that are based upon a 'timing' relationship rather than an 'exchange' relationship as noted above. Thus, these types of services are those that the citizens delegate to their elected and appointed leaders in order to carry out those functions which have historically been carried out by the government such as defense, infrastructure development and maintenance, education, and social services for the poor, injured and aged. In this respect there is no single measure of performance that is comparable to those available in the private sector such as return on investment (ROI) or return on equity (ROE). Rather, a combination of quantitative and qualitative measures comprises the tools required for a proper program evaluation (see, for example, Chen, 2005; Weiss, 1998; and Wholey, Hatry and Newcomer, 2004). Such evaluations

are necessary due to the constraints imposed upon governments by their citizens such as those related to the budget, fund accounting controls, and compliance-related laws.

On the other hand, business-type activities are characterized by an exchange relationship between the government or not-for-profit institution and the consumer wherein fees are charged for services rendered. Examples of such activities are the provision of water and sewage services, state park fees, turnpike tolls, and bus fares. Here, the measurement focus of financial reports closely resembles that of private institutions, with data aligned between inputs and outputs. Given the context of service delivery, however, the match is not perfect: the use of capital assets for revenue production, subsidies and revenue-sharing arrangements complicate first impressions. However, in governmental-type and business-type activities the objectives of financial reporting are the same under GASB Concepts Statement No. 1: financial reporting should enable users to assess: (1) the extent to which a government or not-for-profit institution has been accountable for the resources it has received; (2) the operating results of the institution during and across years; and (3) the level of services that have been provided by the institution and its ability to meet its obligations as they become due (pp. 27-28).

Higher Education Institutions

From the perspective of accountants and auditors, public higher education institutions are viewed as a special purpose governmental entity (American Institute of Certified Public Accountants, Inc., 2010, §§12.73 – 12.102). Among the statements released by GASB, Statement No. 35, *Basic Financial Statements- and Management's Discussion and Analysis—for Public Colleges and Universities—an Amendment of GASB Statement No. 34* is perhaps the most

preeminent for guidance in reviewing college and university financial statements in the context of comprehensive annual financial report development and financial statement analysis. In general, it applies GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, to higher education institutions. GASB Statement No. 35 was developed to address the unique needs of higher education institutions because the financial accounts held by an institution must be compatible with its organizational structure (National Association of College and Business Officers, 2006). While the utility of the exchange transaction in general is an issue that is beyond the parameters of this text, it must be seen that these institutions are unique among those impacted by AICPA and the GASB. This Handbook is dedicated to meeting the needs of those who seek to analyze the financial audits of these distinctive institutions. This effort is reflected in ten additional chapters, an appendix, a glossary, and a bibliography.

Handbook Overview

Chapter 2 of this Handbook describes the accounting principles governing college and university financial affairs. The two sets of accounting principles currently in use (one set for public institutions and the other set for private institutions) are described and compared. Of particular note is the fact that faculty and staff frequently confuse the current fund (or general fund or similarly titled fund) with the entire university budget, which consists of many funds. This chapter also covers the re-categorization of fund balances and governmental fund types that were promulgated in GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions.*

Chapter 3 provides information relative to the major funds that are reported in financial statements by primary governments and explains the difference between the basis of accounting and measurement focus for governmental, proprietary, and fiduciary funds. It classifies the financial statements required under GASB Statements Nos. 34 and 35 and FASB Statement No. 117 (now ASC Topic 958), and explains each financial statement for a fictitious institution, ABC University.

Chapter 4 introduces the fundamental characteristics of derivative instruments. It provides background information on the requirements of GASB Statement No. 53 relative to financial reporting for derivative instruments in colleges and universities, and provides several examples of the use of these instruments.

Chapter 5 provides an introduction to comparative and ratio analysis, providing a typology of such analyses. Here it is important to recall that comparisons between colleges and universities are most helpful when they have similar resources and missions. To the degree that variability exists, such comparisons offer decreasing utility for research and analysis. In some states, commonwealths and territories, postsecondary institutions vary little except by geography in order to emphasize access to higher education; in others, each contributes something unique to the system of higher education available to its citizens.

Chapter 6 describes the major components of an institution's income such as federal, state, and local appropriations (including formula funding), tuition, grants and contracts, gifts, and sales and services of auxiliary enterprises (including institution-owned hospitals). Also

described are factors to consider in projecting future income, such as demographics in relation to enrollments.

Chapter 7 examines the major components of an institution's expenditures, including instruction, research, public service, academic support, student services, institutional support, operation and maintenance of physical plant, scholarships, depreciation, auxiliary enterprises, and hospitals. How to find these expenditure categories in the budget and budget controls are also briefly discussed.

Chapter 8 describes the constraints and explores the flexibility associated with typical college and university budgets. Personnel and non-personnel costs are examined as well as gifts/endowments, grants and contracts, research institutes and foundations, and reserve accumulation. This chapter also describes how constraints and flexibility affect strategies used to reallocate funds as well as to deal with fiscal crises.

Chapter 9 describes privatization of some of the operations of higher education institutions. Arguments are provided against privatization as are factors that are often ignored in making the decision to privatize.

Chapter 10 provides sources for financial information about a given institution. Since the quality of any budgetary analysis is dependent upon the available data, becoming informed about sources of appropriate data is important. These sources include annual audits and where to find them, appropriation bills, reports to state and government agencies (including the IRS) made

by an institution, reports from the U.S. Department of Education, information provided by the NEA and other salary surveys.

At the conclusion of the text, appendices of recent GASB (up to Statement No. 55) and important FASB pronouncements are offered, as is a bibliography and glossary. Those pronouncements that are covered in the text are not repeated in the glossaries. Words that are displayed in **boldface type** are defined either in the text or in the glossary.

If you haven't done so already, we would recommend that you work as an Association to obtain a voting seat on your higher education institution's budget and/or finance committee. If that is not possible at this time, we recommend that you annually obtain a copy of the institution's budget, audited financial statements, comprehensive annual financial report (CAFR) and financial audit before they are presented before the highest decision-making governing body of the institution. If the Association is situated in a state that allows for collective bargaining, we recommend that you secure the right to participate in the financial decision-making of the institution and the right to obtain this information in your contract. Other recommendations that are tied to the subjects covered in this Handbook are embedded below.

CHAPTER 2 PRINCIPLES OF ACCOUNTING

Objectives

After completing this chapter, readers will be able to:

- Identify the major funds that are reported in financial statements by primary governments.
- Understand the basis of accounting and measurement focus for governmental, proprietary, and fiduciary funds.
- Identify the fundamental accounting equation utilized in the context of higher education finance.
- Be able to apply the re-categorization of fund balances and governmental fund types that were promulgated in *GASB Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions*.

Principles of Accounting

As you will recall from Chapter 1, budgets and the governmental fund structure are utilized as control mechanisms by governments to ensure that the resources that are provided through taxation are used as intended (GASB Concepts Statement 1, *Objectives of Financial Reporting*, p. 10). While in Chapter 1 we focused on how the budget, financial statements and audits are developed and reported, in chapter 2 we address fund accounting. This includes the accounting principles that govern the financial affairs of a college or university and the accounting terms used in conjunction with those principles, including those describing the kinds of funds found in college and university budgets and financial statements. The accounting system used herein is primarily GASB, although several FASB pronouncements impact the accounting and financial reporting operations of public colleges and universities. The presentations of such financial statements are modified from time to time by new regulations promulgated either by GASB or FASB. Efforts had been made to keep the accounting rules the same for both organizations, but recently they have begun to diverge significantly. The principles and terms are then illustrated through a fictitious institution, ABC University.

The importance of understanding accounting principles and terms is demonstrated by clearing up the most common budgetary misunderstanding among faculty: the assumption that the current fund (or general fund or the like) represents the entire budget of the institution. Thus, when the current fund shows a deficit for a given year, faculty may assume that the institution is in difficult financial straits. That could indeed be the case, but it could also be the case that the

institution is in excellent shape financially and that the deficit is the result of transfers of monies to other funds.

The following analogy makes this point clearer. Suppose that a friend has a checking account overdrawn by $2,000. In the absence of any other financial information, we might conclude that our friend is in serious financial difficulties. Suppose, however, that our friend has accounts in five other banks with an aggregate balance of $52,000. The $2,000 needed in the overdrawn account can be paid out from one of the other accounts, leaving our friend with a tidy $50,000 in the banks, rather than with serious financial difficulties.

Each of our friend's bank accounts is analogous to a different fund in an institution's budget. Thus we must examine the condition of all of the separate funds if we are to understand the true financial status of an institution.

Fund Accounting

In the interest of clarity, we introduce a series of definitions. A **fund** is a fiscal and accounting entity with a self-balancing set of accounts that record financial resources and liabilities which are segregated for the purpose of a specific set of activities or objectives that follow certain regulations, restrictions or limitations. This means that a fund reports its own assets, liabilities, and the fund balance, which equals assets minus liabilities. **Fund accounting** is the process by which financial resources are classified in accordance with their intended purpose and in compliance with their legal and contractual requirements (Copley, 2011; National Association of College and University Officers, 2006; National Council on Governmental

Accounting, 1982; Wang, 2006). To understand fund accounting, an analyst must identify the institution's basis of accounting and its measurement focus (see definition below). The term '**basis of accounting**' refers to the period of time when revenues, expenditures, expenses, and transfers are recognized in financial accounts and reported in the financial statements.

The **accrual basis of accounting** is used in higher education. Here revenues are recognized (booked) when they are earned, and expenses are recognized when the goods and services have been used by an institution. This provides a much more accurate measure of an institution's financial status than cash basis accounting, which recognizes income only when cash is received and similarly recognizes an expense only when cash is paid out by the institution. Governmental funds utilize the modified accrual basis of accounting, while proprietary and fiduciary funds use the accrual basis of accounting. In the **modified accrual basis of accounting**, revenues are recognized when they become available and measurable, and expenditures are recognized when a liability is incurred except for principal and interest on long-term debt, which are recorded when due.

The term '**measurement focus**' refers to the nature of the resources, the claims against those resources, and the flows of resources that are measured and reported by a fund in a financial report. According to GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, governments should report governmental, proprietary, and fiduciary funds to the extent that they utilize such funds (p. 25). As noted in the first chapter, public higher education institutions are viewed as a special purpose governmental entity (American Institute of Certified Public Accountants, Inc., 2010,

§§12.73 – 12.102). In this context, they can report as entities that are (1) engaged in only governmental-type activities, (2) engaged in only business-type activities, or (3) engaged in both. While most public higher education institutions report as being engaged in only business-type activities, those community colleges who are endowed with the ability to tax by a state legislature may report as being engaged in both activities (American Institute of Certified Public Accountants, Inc., 2010, §§12.04 – 12.07; Copley, 2011, p. 274). Once an auditor determines which types of activities a primary government engages in, they are tasked with the responsibility of determining whether or not a special-purpose government has presented the appropriate basic financial and required supplementary statements (American Institute of Certified Public Accountants, Inc., 2010, §§12.04 – 12.09).

Governmental funds have a budgetary orientation, and include the general fund, special revenue fund, capital projects fund, debt service fund, and the permanent fund. The **general fund** is the primary fund used to account for all assets and liabilities of a local or state government or not-for-profit institution. The **special revenue fund** is used to account for specific revenue sources that are designated for specific expenditures other than debt service or capital projects. The **capital projects fund** accounts for financial resources that are classified for capital expenditures. For the GASB, capital assets include land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period. The **debt service fund** is reserved for financial resources that are designated to be expended for principal and interest on

debt instruments, other than interest or principal on proprietary or fiduciary activities. The **permanent fund** accounts for resources that are restricted to the earnings (not the principal) of assets. Permanent fund proceeds must only be used for purposes that support the reporting government's programs (GASB Statement No. 34, paragraphs 63 – 65; Copley, 2011, p. 14).

Proprietary funds are those that are used for a government's current operations that most closely resemble exchange relationships. Proprietary funds include enterprise and internal service funds. **Enterprise funds** account for resources that are provided primarily through the use of sales and service charges. Enterprise fund reporting requirements are outlined in GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, at paragraph 67, and GASB Statement No. 37, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments: Omnibus*, at paragraph 14. **Internal service funds** are used to account for any activity that provides goods or services to other funds, departments, or agencies of the primary government and its component units, or to other governments, on a cost-reimbursement basis (GASB Statement No. 34, paragraphs 63 – 68; Copley, 2011, p. 14). See 'GASB 39' and 'GASB 61' in Appendix A for more information on component units.

Fiduciary funds concern net assets and changes in net assets. These funds should only be used to report assets held in a trustee or agency capacity for others, and not for the primary government's own purposes. As such, four types of fiduciary funds are recognized: agency funds, pension (and other employee benefit) trust funds, investment trust funds, and private-purpose trust funds. **Agency funds** are used to report resources held by the reporting government

in a purely custodial capacity; they typically involve only the receipt, temporary investment, and remittance of fiduciary resources to individuals, private organizations, or other governments. **Pension (and other employee benefit) trust funds** account for resources that are required to be held in trust for the members and beneficiaries of defined benefit plans, defined contribution plans, other employment benefit plans, or other employee benefit plans. **Investment trust funds** are used to account for the external portion of investment pools reported by the sponsoring government. A **private-purpose trust fund** is used to report all other trust arrangements under which principal and income benefit individuals, private organizations, or other governments (GASB Statement No. 34, paragraphs 63 – 73; Copley, 2011, p. 15).

The term 'interfund transfers' refers to the transfer of funds between accounts; such transfers occur quite frequently. Suppose, for example, that a physics department has a standing order with a supplier of liquid helium. A researcher in the department orders liquid helium for research sponsored by a government grant. The physics department pays the helium supplier out of departmental funds that are part of the institution's unrestricted current fund. The grant (which is treated as a separate fund) then transfers the amount of the purchase to the physics department's current fund account. The current fund is now in balance, since the monies that it expended for the liquid helium have been repaid to it, and the grant fund is also in balance, since the order of liquid helium has been charged to it, reducing its fund balance. Fund balances are a special case of the fundamental accounting equation within fund accounting.

The Fundamental Accounting Equation

In the **fundamental accounting equation**, the difference between assets and liabilities indicates net assets or, as it is called in fund accounting, fund balance. Assets are economic values owned or under the control of an institution whose cost at the time of acquisition can be objectively measured. Assets generally are divided into two categories. The first category consists of cash and those financial assets which can readily be converted into cash such as investments and accounts receivable. The second category represents costs incurred at an earlier date that have not yet been attributed to a given fiscal period, such as buildings, depreciable equipment, prepaid expenses, and deferred charges. Buildings and other long-term assets of higher education institutions which follow FASB accounting regulations have been subject to depreciation due to the 1987 adoption of FASB Statement No. 93, *Recognition of Depreciation by Not-for-Profit Organizations*.[2] For institutions following GASB regulations, many institutions did not recognize depreciation of capital assets until the 1999 adoption of GASB Statement No. 35, *Basic Financial Statements and Management's Discussion and Analysis for Public Colleges and Universities—an Amendment of GASB Statement No. 34*.

Liabilities are also divided into two categories. The first category represents amounts that are owed to organizations or individuals outside the institution itself. Some of these liabilities must be paid immediately while others can be paid out over a period of many years. The second category of liabilities represents amounts that have been collected in cash by the

[2] Paragraph 7 of FASB 93 was amended by FASB 99, *Deferral of the Effective Date of Recognition of Depreciation by Not-for-Profit Organizations—an Amendment of FASB Statement No. 93*, paragraph 2 (1999), while footnote 1 of FASB 99 was amended by FASB 135, *Rescission of FASB Statement No. 75 and Technical Corrections*, paragraph 5(a) (1999).

institution (or whose collection is anticipated) but that have not yet been earned by the institution. Until this cash has been earned by the institution, it is carried as a liability to offset the fact that the cash itself is carried on the books as an asset. An example of this is tuition received by an institution in the spring semester for the following fall semester.

To reiterate, the fundamental accounting equation states that the institution's total assets minus its total liabilities equals its net assets. In fund accounting, a fund's assets minus its liabilities equal its fund balance. Again, please note that in fund accounting, the term 'fund' is used for a group of accounting entities, each of which has its own self-balancing set of accounts consisting of assets, liabilities, and net assets.

In fund accounting, real accounts are those that are used to record assets, liabilities, and net assets. These start with the inception of the organization and continue until the end of the organization or until the particular type of asset or liability no longer exists. Nominal accounts, however, are those that expire at the end of a given fiscal period (usually a fiscal year) and are created anew at the beginning of the next fiscal year. These accounts are called income and expense accounts and are used to provide detailed information about income and expenses throughout the year.

Financial reports usually deal exclusively with real or nominal accounts. Note that an institution's net assets are changed by increases or decreases in both assets and liabilities, that is, by both income and expenses. Remember that the fundamental accounting equation means that the accounting system must always remain in balance. Thus, any addition to an institution's assets by additional income must also appear as a combination of an increase in liabilities and/or

net assets. The total net assets of an institution must always equal the total of assets minus liabilities. Similarly, the total fund balance of a fund must always equal the total of its assets minus its liabilities.

In that context there are several other fund terms that must be understood. Prior to GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*,[3] Association leaders spent a great deal of time studying the unrestricted and restricted portions of an institution's net assets. Unrestricted funds are resources that the institution may use for any purpose whatsoever. Restricted funds were resources that have external, legally binding restrictions placed upon their use. For example, a government grant (minus any indirect cost in the award, which can be treated as unrestricted revenue) can only be expended for the purpose for which it was awarded. Similarly, gifts sometimes carry legally binding stipulations restricting their usage.

Similarly, expendable funds are monies that can be spent by an institution. However, there may be restrictions on the purposes for which the funds can be spent. Unexpendable funds are monies that cannot be spent by the institution. For example, endowment funds cannot be spent. They must be invested and only the income can be spent. In many cases income from endowments funds is also restricted income since it can only be spent for specified purposes. Student loan funds cannot be spent but must be loaned to students who will eventually repay them so that the funds can be loaned to other students.

[3] Published in February 2009, GASB Statement No. 54 became effective for financial statements for periods beginning after June 15, 2010, for those colleges or universities that report being engaged in governmental activities or both governmental and business-type activities.

A governing board sometimes places surpluses from a given fiscal year (or part or all of unrestricted gifts) into a fund named the quasi-endowment. This is legally quite different than the regular endowment because the governing board is free to spend an institution's quasi-endowment in any manner it chooses (unless, for example, part or all of it is pledged as collateral for an institutional bank loan or bond offering). Thus, in accounting terms, an institution's quasi-endowment funds are unrestricted assets. The administrators of an institution may state that they cannot use these funds. This reported inability is only true to the extent that only the governing board can use the funds, although the board can release all the funds to the administration for use at any time.

Separate funds are created to account for financial activities related to a particular restricted donation, to a grant or contract, or to funds designated by the governing board for special purposes. The separateness of each fund insures that the restrictions placed upon the resources in each fund will be observed. However, for the purposes of efficient management and financial reporting, funds with similar restrictions or designations are often grouped together into what are termed fund groups. Within each fund group we must distinguish between the unrestricted funds and the restricted funds. Accounting for each restricted fund balance separately is mandatory.

With the advent of GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*, fund balance reporting has changed beginning on financial statements for periods beginning after June 15, 2010. Henceforward, five categories will be utilized by higher education institutions which report governmental funds: nonspendable, restricted, committed,

assigned, and unassigned fund balances. Four of the five new fund balance classifications restrict fund balance levels. While we agree with the GASB that Statement No. 54 was needed to clarify fund balance categorization in GASB Statements Nos. 34 and 35, we expect that the implementation of the Statement will make it more difficult for Association leaders to bargain compensation increases in the future when they work for a college or university that reports being engaged in governmental activities or both governmental and business-type activities (such as community colleges which have the power to tax). It has already been the object of significant professional scrutiny (see, for example, Chase & Montoro, 2009; Brooks & Mead, 2010; and Chase & Roybark, 2010). To address this new challenge, Association leaders need to understand the new fund balance classification system.

The **nonspendable fund balance** classification includes amounts that cannot be spent because they are either not in spendable form or are under a legal or contractual obligation to remain intact. This will include items that are not to be converted to cash such as inventories, the long-term amount of loans and notes receivable, and property not acquired for resale. However, if the use of the proceeds from the collection of those receivables or properties is restricted, committed, or assigned, then they will be included in the appropriate fund balance classification (i.e., restricted, committed, or assigned) rather than the nonspendable fund balance (GASB Statement 54, paragraphs 6 and 7, p. 3).

The **committed fund balance** classification includes amounts that can only be used for specific purposes pursuant to constraints imposed by formal action of the government's highest level of decision-making authority. Those committed amounts cannot be used for any other

purpose unless that decision-making authority removes or changes the specified use by taking the same type of action it employed to previously commit these amounts (paragraphs 10-12, pp. 4-5).

The **restricted fund balance** classification includes amounts that are restricted when constraints are placed on the use of resources that are either externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments; or imposed by law through constitutional provisions or enabling legislation (paragraphs 8 and 9, p. 4).

The **assigned fund balance** classification includes amounts that are constrained by the government's intent to be used for specific purposes, but are neither restricted nor committed. Intent should be expressed by the governing body itself or a committee or official to which the governing body has delegated the authority to assign amounts to be used for specific purposes. In this classification, the authority for making an assignment is not required to be the government's highest level of decision-making authority. Furthermore, the nature of the actions necessary to remove or modify an assignment is not as prescriptive as it is with regard to the committed fund balance classification. GASB 54 also allows the assigned fund balance to include the following: all remaining amounts (except for negative balances) that are reported in governmental funds, other than the general fund, that are not classified as nonspendable and are neither restricted nor committed; and amounts in the general fund that are intended to be used for a specific purpose in accordance with the governing body itself or a committee or official to which the governing

body has delegated the authority to assign amounts to be used for specific purposes (paragraphs 13-16, pp. 5-6). This is essentially what is now 'designated.'

The **unassigned fund balance** classification represents the residual classification for the general fund. It includes fund balance that has not been assigned to other funds and that has not been restricted, committed, or assigned to specific purposes within the general fund (paragraph 17, p. 6). This is essentially what is now 'unreserved' and 'undesignated.' Figure 3 illustrates the difference between fund balance classifications before and after GASB 54.

Figure 3: ***Fund Balance Classifications Before and After GASB Statement No. 54***

Under GASB 54, the notes to the financial statements should detail the actions that were taken to classify amounts under the nonspendable, committed and assigned fund balances. They should also include the purpose for each major special revenue fund within the governmental funds category of funds, identifying which revenues and other resources are reported in each of

those funds. If an institution uses any type of rainy day fund (e.g., a budget or revenue stabilization fund, working capital fund, contingency, or emergency fund) the policies, conditions or circumstances that trigger expenditures should be a recorded formal action by the governing authority. The money in these funds are considered a specific purpose under GASB 54, and can be reported in the general fund within the restricted or committed fund balance if they meet their respective requirements, or, if they fail to do so, should be reported in the unassigned fund balance (pp. 6-13).

This re-classification of fund balance and governmental fund types will impact accounting and financial reporting in higher education institutions for some time to come. A sound understanding of these issues is important when analyzing financial statements and the notes to the financial statements, which is the subject of Chapter 3 of this Handbook.

The requirements of GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*, became effective for financial statements after June 15, 2010. The GASB recommends that the fund balance classifications that are promulgated in this Statement be applied retroactively by restating fund balance for all prior periods presented (paragraph 36). At a minimum, Association leaders should contact their institution's chief financial officer to ask for a restatement of the financial statements for FY 2010 to accompany the FY 2011 information.

CHAPTER 3 FINANCIAL STATEMENTS

Objectives

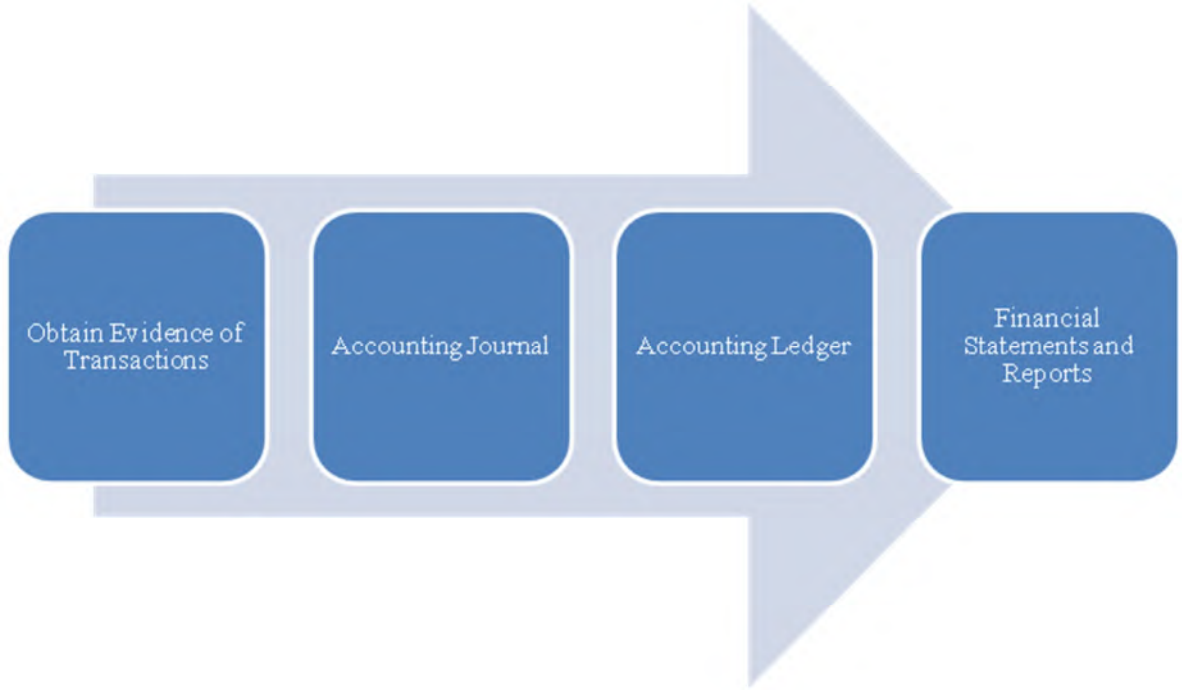
After completing this chapter, readers will be able to:

- Identify the major funds that are reported in financial statements by primary governments.
- Differentiate the basis of accounting and measurement focus for governmental, proprietary and fiduciary funds.
- Identify the fundamental accounting equation utilized in the context of higher education finance.
- Classify the financial statements required under GASB Statements Nos. 34 and 35 and FASB Statement No. 117 (now ASC Topic 958).

Financial Statements

Financial statements are the outcome of the four-phase accounting process. This process requires a financial professional to systematically obtain evidence of financial transactions, file such evidence in an accounting journal, and transfer the information to an accounting ledger in order to produce the information required in an institution's financial statements and reports (Figure 4).

Figure 4: ***The Accounting Process***



In the first phase, accounting professionals obtain evidence that a financial transaction has occurred through receipts, purchase orders, or the like. This information is then transferred into an accounting journal that classifies financial events across time. The journal is similar to a transaction register for a bank account; it tracks the description of transactions, dates, account

numbers, and amounts. This information is then transferred into an accounting ledger, which organizes all financial information by the institution's account numbers and establishes balances by account. At the conclusion of a financial period, this information is translated into financial statements in order to present to the institution and its stakeholders a true and accurate depiction of the financial status of the institution (Wang, 2006). Thus, a **financial statement** is a formal record of the financial activities of an organization that provides information about the financial position, performance and changes in financial position of an institution for the purpose of financial decision making and accountability. A **financial audit** is the verification of the financial statements of a legal entity, with a view to express an audit opinion. The audit opinion is a reasonable assurance that the financial statements are presented fairly, in all material respects, or give a true and fair view in accordance with the financial reporting framework.

PUBLIC COLLEGES AND UNIVERSITIES

Public and private higher education institutions produce their financial statements in two formats. In accordance with FASB Statement No. 17, *Financial Statements of Not-for-Profit Organizations*, and certain other FASB Statements, AICPA guides and NACUBO advisory reports indicate that the basic financial statements of private higher education institutions include a statement of financial position (balance sheet), a statement of activities, a statement of cash flows, and the notes to the financial statements. For public institutions, GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments* and GASB Statement No. 35, *Basic Financial Statements and Management's Discussion and Analysis for Public Colleges and Universities—an Amendment of GASB*

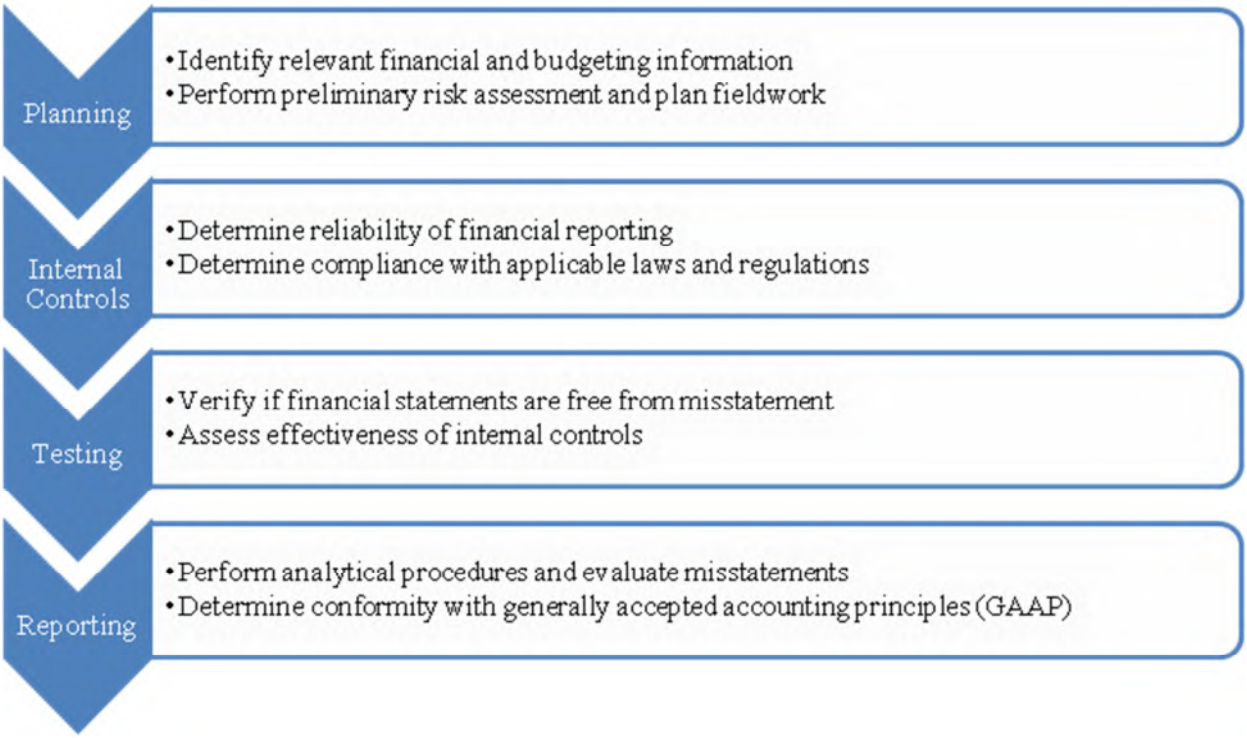
Statement No. 34 state that the presentation of financial statements depends upon the activities of the institution. Those public higher education institutions which report as being engaged only in business-type activities should present their activities using three enterprise fund financial statements: a statement of fund net assets of fund equity, a statement of revenues, expenses and changes in fund net assets or fund equity, and a statement of cash flows. Those public higher education institutions which report being engaged in governmental activities or both governmental and business-type activities (such as community colleges which have the power to tax) should present their activities using both the government-wide financial statements (i.e., a statement of net assets and a statement of activities) and the applicable fund financial statements required by GASB Statement No. 34 (American Institute of Certified Public Accountants, Inc., 2010, §12.76) and GASB Statement No. 35.

In the wake of GASB Statements Nos. 34 and 35, general purpose external financial statements must include management's discussion and analysis (MD&A), basic financial statements, notes to the financial statements, and required supplementary information other than MD&A. Management's Discussion and Analysis is an analytic section which precedes an institution's financial statement presentation. It should provide an analytical overview of the institution's financial activities based upon currently known facts, decisions, or conditions, and an assessment of the financial position of the institution (GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, paragraphs 8-11, pages 6-8; GASB Statement No. 35, *Basic Financial Statements and Management's Discussion and Analysis for Public Colleges and Universities—an*

Amendment of GASB Statement No. 34, paragraph 5, page 2); GASB Statement No. 37, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments: Omnibus).*

The notes to the financial statements should communicate information that is essential for fair presentation of the financial statements that is not included in those statements. This includes general disclosures, disclosures about capital assets, disclosures about donor-restricted endowments, and **segment** information (GASB Statement No. 34, *Basic Financial Statements- and Management's Discussion and Analysis- for State and Local Governments,* paragraphs 6, 113-123, pages 5 and 39-43; GASB Statement No. 35, *Basic Financial Statements and Management's Discussion and Analysis for Public Colleges and Universities—an Amendment of GASB Statement No. 34,* paragraph 5, page 2; GASB Statement No. 37, *Basic Financial Statements and Management's Discussion and Analysis—for State and Local Governments: Omnibus;* GASB Statement No. 38, *Certain Financial Statement Note Disclosures, and American Institute of Certified Public Accountants, Inc., 2011, §2.43 – 2.46)* . In all cases, these financial statements are created by auditors in consultation with the financial professionals of the higher education institution; this process is illustrated in Figure 5.

Figure 5: ***The Financial Auditing Process***



To illustrate how the financial statements are presented in a general purpose external financial report, we present an analysis of a fictitious public university's financial statements. ABC University (our fictitious institution) offers a number of bachelor, master and doctoral programs. It receives federal research grants and also has a number of auxiliary enterprises such as student housing, a staff dining facility, parking lots, and an institutional press. It does not have a hospital, medical school, or physicians' practice plan. For simplicity, we also assume that ABC University does not have a life income fund (in which the donor specifies that the annual income from a gift is to be paid to an outside party for as long as that party shall live). The institution is engaged only in business-type activities, and receives no local tax revenue. Thus, our analysis of ABC University's financial statements will be limited to a statement of net assets,

a statement of revenues, expenses and changes in net assets, and a statement of cash flows. ABC University also does not provide any post-employment benefits other than pensions. Hence, its financial statements do not reflect as a liability the estimated cost of these benefits. More information about other post-employment benefits is covered under GASB 45 in the Appendix.

Statement of Net Assets

As a government-wide financial statement, the statement of net assets is prepared in the modified accrual basis of accounting, where revenues are recognized revenues in the period in which they become available and measurable, and prepared using the current economic resources measurement focus, where assets and liabilities reported on the financial statements are limited to those representing current available resources or requiring expenditure of said resources.

The statement of net assets of ABC University for FY 2009 is presented in Table 1. It reports all of an institution's financial and capital resources at a single point in time. It is the only financial statement that reports general capital assets and general long-term liabilities (American Institute of Certified Public Accountants, Inc., 2010, § 2.16, page 17). Users read an institution's statement of net assets to identify its relative liquidity, its ability to meet institutional obligations, and its need for external financing (National Association of College and Business Officers, 2006, p. 87). Its format focuses on institutional assets, liabilities, and **net assets**, or the difference between its assets and liabilities at a single moment in time. Within the 'assets' category, the institution reports on current and non-current assets. Within the 'liabilities' category, the institution presents information on current and non-current liabilities. Net assets are reported as 'invested in capital assets, net of related debt, restricted, and unrestricted.'

Table 1: *ABC University Statement of Net Assets, FY 2009*

ASSETS		
Current Assets		
Cash and cash equivalents	$	2,120,000
Short-term investments		3,430,000
Accounts receivable, net		650,000
Inventories		800,000
Deposits with trustees		1,000,000
Other assets		400,000
Total current assets		8,400,000
Non-Current Assets		
Restricted cash and cash equivalents	$	3,700,000
Endowment investments		12,000,000
Loans receivable, net		6,000,000
Other long-term investments		-
Capital assets, net		96,800,000
Total non-current assets		118,500,000
Total assets	$	126,900,000
LIABILITIES		
Current Liabilities		
Accounts payable and aaccrued liabilities	$	1,080,000
Deferred revenue		350,000
Deposits		-
Current portion of debt oblgations		600,000
Total current liabilities		2,030,000
Non-Current Liabilities		
Long-term debt and other obligations	$	11,200,000
Total non-current liabililties		11,200,000
Total liabilities	$	13,230,000
Total assets less liabilities	$	113,670,000
NET ASSETS		
Invested in Capital Assets, Net of Related Debt	$	91,200,000
Restricted for:		
Nonexpendable		
Scholarships and fellowships	$	7,250,000
Research		1,500,000
Expendable		
Scholarships and fellowships		1,000,000
Research		850,000
Instructional departmental use		1,670,000
Loans		1,450,000
Capital projects		1,330,000
Debt service		720,000
Total restricted		15,770,000
Unrestricted		6,700,000
Total net assets	$	113,670,000

An **asset** is a resource with present service capacity that the government presently controls. An asset may be tangible, such as a building or a piece of equipment, or intangible such as the right to use intellectual property. It remains an asset so long as it is still capable of providing services. Assets are frequently listed at their historical cost minus depreciation. If an institution chooses to carry investments at market value, their values will change from reporting date to reporting date. All of the investments must be reported in the same manner, at historical cost or market value. A **current asset** is one which is easily convertible to cash in the present fiscal period. This could include cash, money market funds, or short-term certificates of deposit. A **non-current asset** is one which is not easily convertible to cash or not expected to become cash within the next year. This could include fixed assets, leasehold improvements, and intangible assets. Usually the assets of groups of funds are pooled. This means that normally no attempt is made to keep separate cash balances for each restricted fund. Rather, each fund is assigned a number of shares in the portfolio of the entire fund group.

Liabilities represent present obligations to utilize resources that the institution has little or no discretion to avoid. The use of the terms ‘current’ and ‘noncurrent’ follow the same logic as presented above for assets. GASB Statement No. 34, *Basic Financial Statements and Management’s Discussion and Analysis for State and Local Governments,* encourages institutions to report both present assets and liabilities in order of their relative liquidity. Accordingly, Table 1 reports ABC University’s assets in descending order of liquidity within current assets from cash and cash equivalents to deposits with trustees, and within non-current assets from restricted cash and cash equivalents to net capital assets. Similarly, institutional

liabilities are categorized as current and non-current. The difference between assets and liabilities are reported as net assets, and are displayed in three components according to the recommendations of GASB 34 and 35: invested in capital assets, net of related debt; restricted; and unrestricted. Each of the items reported in these three general categories are explained below.

While accounting and financial reporting rules and regulations allow institutions to present their net assets as assets less liabilities or the traditional balance-sheet format, the Statement must display net assets in three components: (1) invested in capital assets, net of related debt, (2) restricted (distinguishing between major categories of restrictions, and (3) unrestricted (American Institute of Certified Public Accountants, Inc., 2010, §2.17, page 18).

The investment in capital assets reflects the assets and liabilities concerned with the institution's long term assets such as land, buildings, equipment, library books, and museum collections. Most of these assets are depreciated but not appraised to determine their current values. Thus the actual value of these assets today may be greater than the value for them reflected in these funds. The fund balance of investment in capital assets is referred to as 'invested in capital assets, net of related debt.' Increases in net investments occur due to expenditures for capital assets as well as the paying down of related debt. Investment in capital assets, net of related debt, is not broken down into restricted or unrestricted because the assumption is that the resource in this category will remain there in perpetuity, that is, classroom buildings will not be sold to fund other purposes. A deduction in a fund due to a transfer has the

same effect as expenditure within the fund; both reduce the net increase in that category for the year.

Restricted net assets indicate that a constraint has been placed on the funds; this occurs when creditors, grantors, contributors, or governmental regulation places an external constraint on the funds or such a constraint is imposed by law through constitutional provisions or enabling legislation. Restricted net assets are reported in two categories, expendable and nonexpendable; the latter refers to those that are required to be retained in perpetuity (GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, paragraphs 34-37, page 16).

Statement of Revenues, Expenses, and Changes in Net Assets

As a proprietary fund financial statement, the statement of revenues, expenses and changes in net assets is prepared in the accrual basis of accounting, wherein revenues and expenses are recognized when earned or incurred, and prepared using the economic resources measurement focus, which reports all inflows, outflows, and balances affecting or reflecting an entity's net assets. The purpose of the Statement is to provide information to stakeholders regarding the operating performance of the institution and the effects of non-operating transactions and events that change the amount of net assets of the institution (National Association of College and University Business Officers, 2006). The format of the Statement focuses on revenues and expenses; within the former category, operating revenues are detailed, while in the latter category, operating expenses are separated from non-operating revenues (expenses). The Statement is presented in Table 2.

Table 2: ***ABC University Statement of Revenues, Expenses and Changes in Net Assets, FY 2009***

REVENUES		
Operating Revenues		
Tuition and fees (Net of scholarship allowance of $850,000)	$	15,670,000
Federal grants and contracts		2,800,000
State and local grants and contracts		2,190,000
Non-governmental grants and contracts		-
Sales and services of educational departments		800,000
Auxiliary enterprises (Net of allowance of $250,000)		8,600,000
Other operating revenues		50,000
Total operating revenues	$	30,110,000
EXPENSES		
Operating Expenses		
Instruction	$	21,340,000
Research		6,120,000
Public service		4,250,000
Academic support		3,960,000
Student services		2,800,000
Institutional support		5,100,000
Operation and maintenance of plant		5,220,000
Depreciation		2,000,000
Student aid		-
Auxiliary operations		8,600,000
Other Expenses		140,000
Total operating expenses		59,530,000
Operating income/loss		(29,420,000)
Non-operating Revenues (Expenses)		
State appropriations	$	31,000,000
Gifts		2,180,000
Investment income (Net of investment expense)		1,975,000
Interest on capital asset-related debt		(220,000)
Other non-operating revenues		-
Net non-operating revenues		34,935,000
Capital appropriations	$	-
Capital gifts and grants		835,000
Additions to permanent endowment		1,800,000
Total other revenues		2,635,000
Net increase in assets	$	8,150,000
Net assets		
Net assets beginning of year		111,520,000
Restatement of net assets		(6,000,000)
Net assets at end of year	$	113,670,000

In the statement of revenues, expenses and changes in net assets, activities are classified as either operating or non-operating. There will normally be an operating deficit since any state appropriation and gifts are classified as non-operating revenues. However, total revenues have not been reduced by their separation into two categories of revenues.

Depreciation is included in this statement as an operating expense. Revenues must be reported net of discounts and allowances. As a result, certain amounts previously reported as scholarship expenditures are reported as a reduction of tuition and related revenues. In addition, direct lending to students is not reported as federal revenue and scholarship expenditures but is treated as an agency expense.

Table 2 can be constructed from the pre-GASB 35 ABC University Statement of Activities with a number of restatements due to accounting changes. Here there are two major financial classifications: revenues, which include all operating revenues; and expenses, which include operating expenses and non-operating revenues (expenses). The term ‘operating revenues’ means that these revenue sources represent charges levied by the institution for services it has provided. Within this category, ‘tuition and fees’ are reduced by University reductions in the charges for tuition ($850,000, the amount paid from unrestricted funds). The revenues from ‘auxiliary enterprises’ are reduced by $250,000, the amount paid for room and board charges from unrestricted funds. This is important to note because under GASB 35, revenues are to be reported net of discounts and allowances. Hence amounts previously reported as scholarship expenditures will now be reported as an allowance against tuition and related

revenues such as room and board. Thus the scholarship expenditures in Table 2 are also reduced by $1,100,000 below the amount recorded in pre-GASB 35 financial statements.

In addition, direct lending by the government is not reported as federal revenue and scholarship expenditures but will instead be treated as an agency transaction. Hence Table 2 has a further restatement from pre-GASB 35 reports in that federal scholarship aid is removed from revenue from 'federal grants and contracts' and from expenditures for scholarships resulting in 'student aid' being listed as $0 in Table 2.

A few other observations are necessary to understanding the presentation of information in Table 2. Note that 'operating income/loss' has a loss of $29,420,000 because the 'state appropriation, gifts and investment income' have not yet been accounted for under 'revenues.'

The total of $4,815,000 in 'private gifts' is located in three places in Table 2: $2,180,000 for 'gifts under non-operating revenues,' $835,000 for 'capital gifts and grants,' and $1,800,000 as 'additions to permanent endowment.' When these are factored in (as well as the expenditure of $220,000 for interest) one arrives at an increase in net assets of $8,150,000 for the year ended June 30, 2009. The 'restatement of net assets' entry of ($6,000,000) is due to federal direct lending discussed above.

Lastly, please note that Table 2 has not changed the 'tuition and fees revenues' line to reflect the allocation of summer term revenues and expenses between fiscal years instead of deferring the entire session. We assume that this allocation had already taken place under the

earlier accounting systems before the adoption of GASB 35. The earlier 'net cash provided by investing activities' of $1,975,000 is identical to the 'investment income' in Table 2.

Statement of Cash Flows

As a proprietary fund financial statement, the statement of cash flows is prepared in the accrual basis of accounting, wherein revenues and expenses are recognized when earned or incurred, and prepared using the economic resources measurement focus, which reports all inflows, outflows, and balances affecting or reflecting an entity's net assets. The purpose of the Statement is to provide information to stakeholders regarding the cash receipts and cash payments of an institution during a specified time period. This can help readers estimate its ability to meet its obligations as they come due and determine its need for external financing (National Association of College and University Business Officers, 2006).

The format of the Statement focuses on cash flows from operating activities, non-capital financing activities, capital financing activities, and investing activities. The statement of cash flows of ABC University for FY2009 is presented in Table 3. Table 3 uses the **direct method** of presenting cash flows. Thus, the Statement starts with money received and then subtracts money spent to calculate the net cash flow. The amounts for a given revenue or expenditure category may vary from the corresponding number in Table 2. For example, 'tuition and fees' in Table 3 generated $16,000,000 for the year ending June 30, 2009, which is slightly more than the $15,670,000 reported in Table 2. This reflects the fact that cash payments for tuition and fees exceeded the amount earned during 2008-09 due to a change in deferred revenues. For

simplicity, Table 3 assumes that loans to students exactly cancel repayments for the given fiscal year. The 'state appropriation' level is unchanged from Table 2.

Table 3: ***ABC University Statement of Cash Flows, FY 2009***

Cash Flows from Operating Activities		
Tuition and fees	$	16,000,000
Research grants and contracts		4,990,000
Payments to suppliers		(8,790,000)
Payments to employees		(42,550,000)
Loans to students		(500,000)
Collection of loans from students		500,000
Auxiliary enterprise charges		(8,600,000)
Sales and services		9,400,000
Other receipts		50,000
Net cash used by operating activities	$	(29,500,000)
Cash Flows from Non-Capital Financing Activities		
State appropriations	$	31,000,000
Federal direct lending receipts		1,000,000
Federal direct lending disbursements		(1,000,000)
Gifts		2,180,000
Net cash provided by non-capital financing activities		33,180,000
Cash Flows from Capital Financing Activities		
Proceeds from capital debt	$	-
Capital appropriations		-
Capital grants and gifts received		835,000
Purchases of capital assets		(1,200,000)
Principal paid on capital debt		(3,000,000)
Interest paid on capital debt		(220,000)
Net cash used by capital financing activities		(3,585,000)
Cash Flows from Investing Activities		
Proceeds from sales of investments	$	1,975,000
Interest on investments		1,000,000
Purchase of investments		(1,000,000)
Net cash provided by investing activities		1,975,000
Net increase in cash and cash equivalents	$	2,070,000
Cash - Beginning of year		3,750,000
Cash - End of year	$	5,820,000

The significance of Table 3 is that it demonstrates that ABC University can meet its maturing debt obligations. It should be noted that many of the audited Statements of Cash Flow also contain a section which reconciles 'net operating expenses' to 'net cash from operating activities'. Table 3 does not contain such a section. A reconciliation of only a portion of the Statement of Revenues, Expenses and Changes in Net Assets to a change in cash from 'operating activities' alone does not seem helpful, especially in view of the fact that the state appropriation is not included in 'operating revenues.'

The adoption of GASB 35 accounting rules by public higher education institutions while private institutions continue to follow FASB accounting rules will make financial comparisons between formerly "comparable" institutions more difficult. For example, some institutions will include internal scholarship money as part of tuition income while those following GASB 35 accounting rules will net the scholarship funds against tuition. Thus the percentage of income from tuition would appear to be different for institutions whose only difference is the accounting rules they utilize. In addition, even for a given institution, the fiscal year in which GASB 35 accounting rules are adopted will exhibit a discontinuity in the trend analysis of institutional revenues and expenses over time. Only when we have accumulated several years of financial reports audited under GASB 35 accounting rules will it be possible to establish new trend analyses for revenues and expenditures.

Notes to ABC University Financial Statements

As stated earlier in this chapter, the notes to the financial statements should communicate information that is essential for fair presentation of the financial statements but is

not included in those statements. The principal guidance for note disclosures can be found in NCGA Interpretation No. 6, *Notes to the Financial Statements Disclosure*, as amended, as well as various FASB and GASB pronouncements.[4] Most importantly, these disclosures require a summary of significant accounting policies; a description of the government-wide financial statements; the measurement focus and basis of accounting used in the government-wide statements; the policy for applying FASB pronouncements issued after November 30, 1989, to business-type activities and to enterprise funds of the primary government; and material violations of finance-related legal and contractual provisions and the actions taken to address such violations (AICPA *Audit & Accounting Guide for State and Local Governments*, 2010, §§ 2.43 – 2.46). When this information is insufficient, the analyst must write to the chief fiscal officer of the college or university to get answers that the financial statements raise but the notes do not answer. Below, the notes to ABC University are given for the purpose of edification.

Note 1: Summary of Significant Financial Policies

Basis of Presentation - The financial statements of ABC University have been prepared in accordance with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB), including Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, and GASB Statement No. 35, *Basic Financial Statements and Management's*

4 The connection between the AICPA, FASB, GASB and the National Council on Governmental Accounting is recorded in Greathouse, F.L. (1985). The history and evolution of the National Council on Governmental Accounting. *Public Budgeting and Finance, 5*, 23-29; and Chan, J.L. (2000). *Reforming American government accounting in the 20th century*. In Liou, K.T. (Ed.). Handbook of Public Management Practice and Reform. NY: Marcel Dekker, Inc..

Discussion and Analysis for Public Colleges and Universities—an Amendment of GASB Statement No. 34. The presentation required by these pronouncements provides a comprehensive, entity-wide perspective of the University's assets, liabilities, net assets, revenues, expenses, and changes in net assets and cash flows. It replaces fund groups with net asset groups and requires the direct method of cash flow presentation. The University follows all GASB pronouncements as well as Financial Accounting Standards Board (FASB) Statements and Interpretations issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements. ABC University has elected not to apply FASB Statements and Interpretations issued after November 30, 1989.

Basis of Accounting – ABC University is a special-purpose government engaged only in business-type activities as defined by GASB Statements No. 34 and No. 35. Accordingly, the financial statements are presented using an economic resources measurement focus and are presented on the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned and expenses are recorded when incurred. All significant interfund transactions have been eliminated.

Net Assets – The University's net assets are categorized as described below:

Invested in Capital Assets, Net of Related Debt – This net asset class represents ABC University's investment in capital assets net of debt obligations related to those capital assets, except to the extent of debt proceeds not yet expended.

Restricted Net Assets, Nonexpendable – This net asset class represents the donor-contributed portion of University endowments. It also includes capital appreciation of those endowments where the donor has not adopted the University's endowment expenditure policy, meaning that the capital appreciation of those accounts remains a part of the corpus.

Restricted Net Assets, Expendable – Restricted expendable net assets represent assets that are restricted by a third party, either legally or contractually.

Unrestricted Net Assets, Unrestricted– Resources derived primarily from student tuition, fees, state appropriations, and auxiliary enterprises. These net assets are used for general obligations of ABC University. The may be used at the discretion of the Board of Trustees for any purpose furthering the University's mission.

Restricted vs. Unrestricted Resources – When an expense is incurred that can be paid using either restricted or unrestricted resources, the University's policy is to apply the expense at the discretion of University management.

Endowment funds are subject to restrictions of gift instruments requiring that the principal be invested in perpetuity and only the income be utilized. While amounts have been established by the Board of Trustees for the same purposes as endowment funds, any portion of such quasi-endowment may be expended at the Board's discretion for any legal purpose.

Operating activities as reported on the Statement of Revenues, Expenses and Changes in Net Assets are those that generally result from exchange transactions such as payments received for providing goods or services and payments made for goods or services received. All of ABC

University's expenses are from exchange transactions. Certain significant revenue streams relied on for operations are reported as non-operating revenues as required by GASB Statement No. 35, including state appropriations, investment income and state capital grants.

Inventories are stated at the lower of cost or market value, cost being determined principally on the first-in, first-out method or by retail method in the university's bookstore.

The University's tangible assets—land, buildings, and equipment—are stated at cost minus accumulated depreciation. Land, buildings, and equipment owned by the state that were constructed, purchased, or acquired for use by the university have been recorded in the university's records at the state's cost minus accumulated depreciation.

Note 2: Deposits with Trustees

ABC University has on deposit with trustees the amount of $1,000,000 established for debt reserve and debt escrow funds for its bonds, which are due in 2010. As of June 30, 2009, the face value of the outstanding bonds was $5,200,000 at an interest rate of four percent. The bonds are secured by a pledge of gross revenues from ABC University as well as by the securities on deposit with trustees.

Note 3: Mortgage

The mortgage on certain university properties was repaid early during fiscal year 2008-09. The interest rate paid on the mortgage was eight percent.

Note 4: Information about Capital Assets

This disclosure presents the beginning and ending balances and increases and decreases for the year for each major class of capital asset and the related accumulated depreciation.

Note 5: Information about Long-Term Liabilities

This disclosure presents the beginning and ending balances and increases and decreases for the year for each major type of long-term liability, such as bonds payable.

Note 6: Disclosure of Segment Information

A segment is an identifiable activity that has one or more revenue bonds or other revenue-backed debt instruments outstanding for which expenses, gains and losses, assets, and liabilities are identifiable.

Note 7: Retirement Plans

The retirement plans offered by the institution are described as well as whether these plans are fully funded.

Note 8: Postemployment Benefits Other Than Pension

ABC University offers no other postemployment benefits other than pension.

PRIVATE COLLEGES AND UNIVERSITIES

As written earlier, private institutions of higher learning almost always follow FASB accounting rules**.** FASB Statement No. 106*, Post Retirement Benefits Other Than Pensions*, went into effect for fiscal years beginning after December 15, 1992, for institutions following FASB accounting regulations. For most such institutions this was their 1993-94 fiscal year. This requires the institution to reflect in its financial statements as a liability the actuarially determined cost of its post-retirement benefits other than pensions. Typically these benefits include health care, life insurance, and education benefits for the children of retired faculty or staff. Prior to this rule, the costs of these benefits were recorded as they were paid, but no provisions for the future costs were made in the audited financial statements.

FASB Statements Nos. 116 and 117

Effective for fiscal years beginning after December 15, 1994, i.e. with the 1995-96 fiscal years of most private not-for-profit institutions, there were two new FASB statements that must be applied to higher education units. These are FASB Statement No. 116, *Accounting for Contributions,* and FASB Statement No. 117, *Financial Statements of Not-for-Profit Organizations*. It should be noted that some articles refer to these statements as SFAS 116 and SFAS 117 (Statement of Financial Accounting Standards 116 and 117) while others have simply used FASB Statements Nos. 116 and 117.

For many colleges and universities FASB 116 had only a minor impact. However, for some institutions the changes were significant. Previously, colleges and universities recorded

donations when they were received. Under FASB 116, institutions are required to record contributions, including pledges, when received. Contributions must be unconditional, voluntary, and nonreciprocal. Contributions are defined as an unconditional transfer of cash or other assets to an entity or a settlement or cancellation of its liabilities in a voluntary nonreciprocal transfer by another agency acting as other than an owner.

Previously, the expiration of restrictions on contributions was recognized when the money was spent. Under FASB 116, "A not-for-profit shall recognize the expiration of donor-imposed restriction in the period in which the restriction expires, that is, when the stipulated purpose for which the resource was restricted has been fulfilled, when the stipulated time has elapsed, or when another stipulated event has occurred."

The result of the above changes is that the unrestricted assets of the institution increase compared to the previous system since some of the pledges are for unrestricted funds, and restrictions on other funds will be removed sooner for some contributions than before. In addition, due to changes in definitions under FASB 117, contributions are categorized as restricted, temporarily restricted, or permanently restricted.

A further change due to FASB 116 is that the value of contributed services, which did not appear on most institutions' financial statements, must be recorded as contributions if they either created or enhanced non-financial assets or if they require skills that must be provided by specialists and which would typically be purchased if not provided as a donation. This also increases the value recorded for contributions.

Finally, under FASB 116, certain contributions of works of art would not have to be recorded as revenue as long as they meet the following criteria: held for public exhibition, education, or research in furtherance of public service rather than financial gain; protected, kept unencumbered, cared for and preserved; and subject to an organizational policy that requires the proceeds from sales of collection items to be used to acquire other items for the collection. Obviously, if a college or university has negligible contributions, these requirements have little effect on its "bottom line."

FASB 117 had a much greater impact on the budgets of colleges and universities following FASB accounting principles. First, it changed the categories of assets. The three categories previously were unrestricted, restricted, and net investment in plant. Under FASB 117, the definition of "unrestricted funds" changed to include "net investment in plant." This means that for fiscal years 1995-96 and beyond, colleges that adopt FASB 117 reported a new category: New Unrestricted Fund Balance = Old Unrestricted Fund Balance + Net Investment in Plant.

This would generally mean a huge increase in the Unrestricted Fund Balance as of June 30, 1996 compared to June 30, 1995—an increase that is simply the result of an accounting change. The institution's notes to the financial statements would no doubt reflect this accounting change. However, it is the increase in the unrestricted fund balance not due to its inclusion of net investment in plant or of unrestricted pledges that is of greatest significance. That portion of the increase in unrestricted funds is in principle available to address collective bargaining issues. In

addition to the new unrestricted funds, under FASB 117 there are two categories of restricted funds.

'Permanently restricted assets' are those resulting from donor-imposed restrictions that these assets be maintained permanently. However, the institution may expend part or all of the income from these donated assets. The clearest example of permanently restricted assets is the historical value of true endowment funds. Changes occur in this class of assets from additional contributions, gains or losses on investment transactions (if those gains must be retained permanently), income from investments (if this must be added to the permanent endowment), or a transfer of endowment assets to another entity by judicial or similar authority. Basically, the permanently restricted assets are the true endowment funds.

The second category of restricted funds is 'temporarily restricted assets,' which also result from donor-imposed restrictions that permit the institution to expend the donated assets only as specified. These restrictions may be satisfied either by actions of the institution or the passage of time. Temporarily restricted assets may be restricted to support only a particular activity of the institution, may be required to be invested for a specified term ("term endowment"), or may only be used after some future date. Assets listed as 'restricted' under the old accounting rules under FASB 116 and 117 became 'permanently restricted funds' if they were true endowments, while the remainder became either 'temporarily restricted' or 'unrestricted.'

There were also new financial statements required under FASB 117. First, the Statement of Financial Position replaced the Balance Sheet (by Funds). FASB 117 requires that this

Statement, together with accompanying notes, provide the total amount of assets, liabilities, and net assets; the total amount of each class of net assets, i.e., unrestricted, temporarily restricted, or permanently restricted; information about restrictions on net assets; and information about liquidity. Information about liquidity may be provided in a number of ways. Assets and liabilities may be sequenced according to their nearness to cash. In this format, the most liquid assets would be stated first (cash and cash equivalents) followed by those that would convert to cash in the near future (such as accounts receivable) and finally by those that would not usually be converted to cash (such as property, equipment, and plant). Liabilities would be listed by nearness to maturity, starting with accounts payable and accrued expenses and ending with long term debt. The notes also normally contain other information about liquidity such as the annual maturity of long-term debt over the next five years.

The institution has the option of preparing the Statement of Financial Position as a single column "corporate" model; as a set of columns, one for each class of net assets and a totals column; or as an operating/capital model which divides assets, liabilities, and each class of net assets between items used in ongoing operations and those retained for capital expenditures. The drawback of the single column model is that the reader may be misled into thinking that the institution has more assets (i.e. those net assets listed as unrestricted) available for the operation of the institution than is actually the case, because most such assets may be 'net investment in plant.' We present here under the FASB accounting principles the same financial data for ABC University for the same date (June 30, 2009) that was presented in Table 1 under GASB 35.

Note that under FASB 117, total net assets are $6,000,000 greater as of June 30, 2009, than under GASB 35 because $6,000,000 of loans receivable is treated as a liability under GASB 35 and thus reduces the net assets of the institution by that amount. Note also that the unrestricted total of $97,900,000 under FASB 117 in Table 4 equals $91,200,000 (invested in capital assets, net of related debt) + $6,700,000 (unrestricted) from Table 1 under GASB 35.

Table 4: ***ABC University Statement of Financial Position, FY 2008-09***

	2009	2008
Assets		
Cash	$ 5,820,000	$ 3,750,000
Accounts receivable, net	650,000	570,000
Unbilled charges	150,000	120,000
Inventories	800,000	750,000
Prepaid expenses	250,000	200,000
Investments	3,430,000	3,790,000
Loans receivable, net	6,000,000	5,850,000
Deposits with trustees	1,000,000	1,000,000
Land, building and equipment	96,800,000	97,600,000
Long-term investments	12,000,000	8,000,000
Total assets	$ 126,900,000	$ 121,630,000
Liabilities and Net Values		
Accounts payable and accrued	1,080,000	1,060,000
Short-term notes payable	600,000	600,000
Deferred income and credits	350,000	250,000
Long-term debt	5,200,000	8,200,000
Total liabilities	$ 7,230,000	$ 10,110,000
Net Assets		
Unrestricted	97,900,000	92,940,000
Temporarily restricted	13,020,000	12,530,000
Permanently restricted	8,750,000	6,050,000
Total net assets	119,670,000	111,520,000
Total liabilities and net assets	$ 126,900,000	$ 121,630,000

The second financial statement required by FASB 117 is called a Statement of Activities (Income Statement). FASB 117 identifies three possible formats for this statement. Format A is

a single column of revenues, expenditures, and other changes for a given fiscal year. Format B is a multi-column format of the same information, with a separate column for unrestricted, temporarily restricted, and permanently restricted funds, as well as a total. Format C is a two-statement approach. One statement would list unrestricted revenues, expenses, and other changes in net assets while the second statement would list changes in net assets. ABC University's Statement of Activities is presented in Table 5.

Table 5: ***ABC University Statement of Activities, FY 2009***

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Revenue and Gains				
Tuition and fees	$ 16,520,000	$	$	$ 16,520,000
State appropriations	31,000,000			31,000,000
Federal grants/contracts	950,000	3,950,000		4,900,000
State grants/contracts	180,000	1,840,000		2,020,000
Local grants/contracts	20,000	160,000		180,000
Private gifts	350,000	2,665,000	1,800,000	4,815,000
Investment income	230,000	460,000	300,000	990,000
Educational sales	800,000			800,000
Auxiliary enterprises	8,850,000			8,850,000
Realized gains in investments	150,000	225,000	600,000	975,000
Other sources	50,000			50,000
Total revenues/gains	$ 59,100,000	$ 9,300,000	$ 2,700,000	$ 71,100,000
Net assets released from restrictions	8,810,000	(8,810,000)		
Revenues/gains and other	$ 67,910,000	$ 490,000	$ 2,700,000	$ 71,100,000
Expenses and Losses				
Instruction	$ 21,340,000			21,340,000
Research	6,120,000			6,120,000
Public service	4,250,000			4,250,000
Academic support	3,960,000			3,960,000
Student services	2,800,000			2,800,000
Institutional support	5,100,000			5,100,000
Operations/maintenance	5,220,000			5,220,000
Scholarships	3,200,000			3,200,000
Auxiliary activities	8,600,000			8,600,000
Interest	220,000			220,000
Loan cancel/collect	140,000			140,000
Depreciation	2,000,000			2,000,000
Total expenses	$ 62,950,000	$ -	$ -	$ 62,950,000
Change in net assets	$ 4,960,000	$ 490,000	$ 2,700,000	$ 8,150,000
Net assets start of year	92,940,000	12,530,000	6,050,000	111,520,000
Net assets end of year	$ 97,900,000	$ 13,020,000	$ 8,750,000	$ 119,670,000

Among the important changes that are displayed in the Statement of Activities are that all expenditures will be made out of the unrestricted funds; depreciation is an unrestricted expense; and revenues are recorded by type of restriction. Donor-restricted contributions that are met in

the same reporting period in which contributions are made may be reported as either unrestricted revenues or temporarily restricted revenues. FASB 117 requires the reporting of expenses by "functional classification" (i.e. instruction, research, etc.). Institutions of higher learning are encouraged, but not required, to also report expenses by "natural classification" (i.e. salaries, rent, etc.). Table 5 represents a much-simplified version of a Statement of Activities for ABC University. It does not include a comparison with the comparable totals for fiscal 2008, as would probably appear in an actual audited financial statement. Note that the changes in each class of net assets are the same from the Statement of Activities (Table 5) as from the Statement of Financial Position (Table 4).

The third required statement is a Statement of Cash Flow. The purpose of this statement is to provide relevant information about the cash receipts and cash flow of the institution for a given fiscal year. The minimum requirements are that this statement provides total changes in cash and cash equivalents: total amount of net cash provided by or used for investing activities, financing activities, and operations; interest paid on debt; significant noncash financing and investment activities; and a reconciliation of change in total net assets to net cash provided by or used by operations. There are two methods of presentation of cash flows. The **direct method** reports cash inflows and cash outflows by the major classes of specific activities. This approach would be far easier for a faculty or staff member to understand since the cash received would be related to activities such as teaching or research. An example of the direct method was presented in Table 3. The second method, called the **indirect method**, starts with net change in total assets for a given fiscal year (the bottom line of the Statement of Activities) and makes numerous

adjustments to that number for the fiscal year to indirectly determine the cash flow. This cash flow number is the difference between the cash on hand as of the beginning and end of the fiscal year (the first line of the Statement of Financial Position.)

Table 6 presents the cash flow figures for just one year of ABC University using the indirect method. The indirect method is easier for financial officers to prepare, but much harder for faculty and staff to understand. Most Statements will include a second column to compare these with the corresponding numbers for the prior fiscal year.

To understand whether a given adjustment should be negative or positive, one must consider whether an increase in the given asset or liability will increase or decrease the cash available. For example, depreciation, while it represents a negative against the overall net assets, does not use up any cash. Hence the institution should have the cash equal to depreciation. An increase in accounts payable means that the institution owes more money to vendors, etc., but it has the cash until these accounts are paid. The purchase of buildings and equipment is a negative for the amount of cash flow, since the money is spent. An increase in accounts receivable is a negative entry in Table 6 since those funds have not yet been received. It should be noted that the net increase in cash of $2,070,000 from Table 6 is exactly the increase in cash given in the first line of Table 4. This represents an over-simplified version of the indirect method of cash flows. As was the case in GASB Statements Nos. 34 and 35, FASB Statement No. 117 requires that financial statements be presented along with the notes to the financial statements similar to the notes that were presented for Tables 1-3.

Table 6: ***ABC University Statement of Cash Flows (Indirect Method), FY 2009***

Cash Flows from Operating Activities		
Change in net assets	$	8,150,000
Adjustments to reconcile change in net assets to		
net cash provided by operating activities		
Depreciation	$	2,000,000
Increase in accounts receivable		(80,000)
Increase in unbilled charges		(30,000)
Increase in inventories		(50,000)
Increase in prepaid expenses		(50,000)
Increase in accounts payable		20,000
Increase in deferred income		100,000
Net cash provided by operating activities		1,910,000
Cash Flows from Investing Activities		
Purchases of fixed assets	$	(1,200,000)
Increase in long-term investments		(4,000,000)
Decrease in short-term investments		360,000
Increase in loans receivable		(150,000)
Net cash used by investment activities		(4,990,000)
Cash flows from financing activities		
Repayment of long-term debt	$	(3,000,000)
Net cash provided by financing activities		(3,000,000)
Net increase in cash and cash equivalents	$	2,070,000
Cash and cash equivalents at beginning of year		3,750,000
Cash and cash equivalents at end of year	$	5,820,000

In summary, the financial statements mandated by FASB 117 may be harder to understand and less useful to faculty and staff if the administration adopts certain options in preparing them. Faculty and staff will need to request that administrations keep these statements "user-friendly" if they are to be meaningful to the academic community in the future.

CHAPTER 4 DERIVATIVE INSTRUMENTS

Chapter Objectives

After completing this chapter, readers will be able to:

- Identify the fundamental characteristics of a derivative instrument.
- Understand the requirements of GASB Statement No. 53 relative to financial reporting for derivative instruments in colleges and universities.

Derivative Instruments

This chapter introduces the reader to GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments.* Since the impact of the use of derivative instruments has been substantial on the balance sheets of higher education institutions, as well as on the economy of the entire country, a detailed discussion of GASB 53 is necessary. Note that the comparable accounting rule for private institutions, FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*, was issued in June 1998 for institutions following FASB rules.[5]

GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, requires that institutions disclose the value of their financial arrangements known as derivatives in the notes to their financial statements and describes the extent to which these arrangements expose an institution to financial risk. While the use of such derivatives is often referred to in the audited financial statements of a number public colleges and universities, the risk associated with their use has not always been clearly identified, nor has a value been assigned to the derivative instruments in the statements of net assets. Derivative instruments have been partially responsible for the economic meltdown that occurred in calendar year 2008-09 and have been called "weapons of mass economic destruction" by more than one investor. The requirements of GASB 53 are effective for financial statements beginning after June 15, 2009, i.e. for the 2009-2010 fiscal year for most higher education institutions.

[5] Subsequent to that pronouncement, FASB Statement No. 133 was amended by SFAS No. 137, 138, 155, 161 and FSP FAS 133-1 & FIN 45-4.

The fair value of derivatives will be reported in the financial statements, as well as the change in fair value from year to year. The fair value of a derivative instrument is either the value of its future cash flows in today's dollars or the price it would bring if it could be sold on an open market.

Derivatives can be used to hedge against a specific risk. One example would be if a university sold bonds that had a variable interest rate based on such factors as the rate of inflation (which would make them more appealing to investors) and the institution entered into a hedge agreement with another firm to pay only a given rate of interest no matter what the actual rate of interest paid on its bonds.

The purpose of such an arrangement would be to have the total interest paid for the bonds be less than if the institution had to offer a higher fixed interest rate directly to bond holders at the time the bonds were offered. There are a number of risks for an institution which enters into this agreement, such as credit risk (the firm will not be able to fulfill its obligation), interest rate risk (the longer a derivative lasts, the greater the risk that changes in interest rates reduce the value of the transaction), termination risk (the derivative ends earlier than expected), etc.

Another use of derivatives is to hedge against an increase in the price of a commodity, for example, oil or gas to be used for heating buildings, or the future cost of electricity. We should caution the reader that this chapter provides only a very brief (and therefore very incomplete) introduction to the use of derivative financial instruments.

What are the fundamental characteristics of a derivative instrument? It has (1) settlement factors, (2) leverage, and (3) net settlement. Settlement factors include the reference rate, notional amount, and payment provisions. A reference rate may be the price or rate for an asset or liability but is not the asset or liability itself. It could be an interest rate, security price, commodity price, or even a climactic or geological condition such as temperature or earthquake severity. It must be a variable whose changes can be objectively determined. Common reference rates are the London Interbank Offered Rate (LIBOR), the Securities Industry and Financial Markets Association (SIFMA) swap index, or the price of heating oil at the New York City harbor pricing point.

The notional amount is simply the number of dollars, shares, barrels or other units specified in the derivative instrument. A payment provision may specify when a payment is to be made, for example, if a fuel price at a certain pricing point exceeds a certain price.

Leverage occurs if either a small investment or no initial investment allows for the derivative instrument to have changing cash flows or changing fair value that replicates a financial instrument that would normally require a much larger investment. For example, an interest rate swap may require no initial net investment. The swap's fair value will change as though the owner of the swap had made an initial investment in a fixed rate instrument with a principal amount equal to the swap's notional value. Some derivative instruments require a mutual exchange of assets at inception, in which case the initial investment is the difference between the fair values of the assets exchanged.

Net settlement requires that the settlement provisions meet one of the following criteria:

1. Neither party is required to deliver an asset that is associated with the reference rate and that has a principal amount equal to the notional amount (plus a premium or minus a discount). For example, most interest rate swaps do not require that either party deliver cash or assets equal to the notional amount of the contract.

2. One of the parties is required to deliver an asset described in (1) above, but there is a market mechanism that facilitates the net settlement. For example, a futures exchange offers an opportunity to enter into an offsetting contract.

3. One of the parties is required to deliver an asset described in (1) above, but that asset is readily convertible to cash or is itself a derivative instrument, for example, a forward contract that requires the delivery of a bond.

Among the financial instruments not included in the scope of GASB 53 are normal purchases and normal sales contracts. According to paragraph 14, “These contracts are distinguished from other purchases and sales contracts by their net settlement feature. That is, the government may have a choice to take or make delivery of the commodity or exchange the cash value of the contract to terminate the government’s rights or obligations. These contracts are not included in the scope of this Statement, provided that it is probable the government will take or make delivery of the commodity specified in the derivative instrument.” (One can substitute “college” or “university” for “government” throughout the wording of GASB 53.)

According to GASB 53, paragraph 22, “Hedge accounting should cease to be applied upon the occurrence of one of the following termination events:

1. The hedging derivative instrument is no longer effective.

2. The likelihood that a hedged expected transaction will occur is no longer probable.

3. The hedged asset or liability, such as a hedged bond, is sold or retired but not reported as a current refunding or advanced refunding resulting in a defeasance of debt.

4. The hedging derivative instrument is terminated.

5. A current refunding or advanced refunding in the defeasance of the hedged debt is executed.

6. The hedged expected transaction occurs, such as the purchase of an energy commodity or the sale of bonds."

GASB 53, paragraph 27 states that:

"A hedging derivative instrument is established if both of the following criteria are met:

1. The derivative instrument is associated with a hedgeable item; and

2. The potential hedging derivative instrument is effective in significantly reducing the identified financial risk."

Hedgeable items expose an institution to identified financial risks that can be expressed in terms of exposure to adverse changes in cash flow or fair values. Hedgeable items can be all or a specific portion of a single asset or liability (for example a bond issue), a group of similar assets or liabilities, or an expected transaction. Note that assets and liabilities that are measured at fair value (such as investments in many debt securities) do not qualify as hedgeable items.

GASB 53 goes into great detail to describe methods for evaluating the effectiveness of a potential hedging instrument. First the instrument is evaluated using the "consistent critical terms method." If it does not meet the criteria for effectiveness of that method, at least one "quantitative method" is to be applied before concluding that the potential derivative instrument is ineffective. Three quantitative methods are identified to evaluate effectiveness: the synthetic

instrument method, the dollar-offset method, and the regression analysis method. A description of these is beyond the scope of this book. However, if a hedging instrument is reported in the annual audit, presumably it has been found to satisfy the above evaluation criteria for effectiveness.

For all hedging derivative instruments, GASB 53 has the following note disclosure requirements: Institutions should disclose their objectives for entering into these instruments, the context needed to understand those objectives, the strategies for achieving those objectives, and the types of derivative instruments entered into. They should also disclose significant terms of these derivative instruments as well as their exposure to risks that could give rise to financial loss. These include credit risk, i.e., the credit rating of the counterparty by nationally recognized credit rating organizations. However, GASB 53 does not require the institution to disclose the identity of a counterparty to a derivative instrument.

Given the failure of rating agencies to accurately evaluate the risk in some investments which led to the 2008 economic meltdown, it is odd to find that the name of the counterparty does not have to be provided in the institution's annual financial statements. After all, if the counterparty were to go bankrupt, what would be the financial impact on the institution? One institution that the lead author recently examined had Lehman Brothers as its counterparty. The collapse of Lehman Brothers in 2008 cost that institution between $20 million and $200 million dollars.

Other risks that should be addressed and are to be disclosed include: interest rate risk (whether the hedging derivative instrument increases the risk that a given change in interest rates

will adversely affect the institution financially), basis risk, termination risk, rollover risk, market-access risk, and foreign currency risk. For investment derivative instruments, institutions are also required to disclose their exposure to the following risks that could give rise to financial loss: credit risk, interest rate risk and foreign currency risk.

The requirement that the institution present an analysis of each of these risks is a very positive aspect of GASB 53, since it will force administrators to recognize that there are risks associated with these derivative instruments. This may result in a more selective use of these derivatives by college and university administrations, thereby reducing the likelihood of future economic calamities striking some institutions who may in the past have not fully understood the risks they were taking when using these derivatives. Two examples will suffice to explain the potential impact of GASB 53 on financial reporting in public colleges and universities.

Example 1: Interest Rate Swap

ABC University issues $10 million dollars' worth of 20-year bonds. It wants to issue fixed rate bonds, but the market rate for 20-year fixed rate bonds is five percent interest since potential buyers are concerned that interest rates may rise substantially in the future. ABC University therefore issues variable rate bonds with an interest rate equal to the SIFMA (Securities Industry and Financial Market Association) swap index plus 0.2 percent. In order to protect itself against increases in the SIFMA index in the future, ABC University also enters into a swap with a counterparty. ABC University pays the counterparty 4.0 percent interest on $10 million and in exchange receives the SIFMA swap index on $10 million from the counterparty. If interest rates rise in the future, the increased payments that ABC University must make to its

bond holders is substantially offset by the increased payments it receives from the counterparty. In essence, ABC University is paying a total interest rate of 4 percent + 0.2 percent = 4.2 percent, substantially less than it would have paid (five percent) if it had issued fixed rate bonds.

Because the terms of the bonds and the interest rate swap are consistent, ABC University uses the consistent critical terms method to evaluate the effectiveness as of the end of each reporting period, i.e., its fiscal year. Because the critical terms are consistent, the changes in cash flows from the swap will substantially offset the changes in cash flow of the variable rate bonds attributable to changes in the SIFMA swap index. Hence the swap is a hedging derivative instrument, and hedge accounting is applied.

In the audited report at the end of each fiscal year, an interest expense of $420,000 will appear (4.2 percent of $10,000,000) in the Statement of Revenues, Expenses and Changes in Net Assets. In the Statement of Net Assets, the $10,000,000 in bond debt will appear each year until the debt is repaid in 20 years. There will also be an entry for deferred outflow of resources and a derivative instrument liability, both of which will differ from year to year depending upon the value of the SIFMA swap index.

Clearly, the example given above is advantageous to ABC University. But the advantage is dependent upon ABC finding a counterparty that would be willing to enter into the SIFMA swap index arrangement for a fixed payment of only 4.2 percent from the University while bondholders would have demanded five percent for a fixed rate bond. The question to ask is, why would a third party agree to this? And, if one could be found, would that third party still be in existence over a 20-year period? If the third party entered into too many such rate swaps that

were advantageous to the institutions making them, it could well be bankrupt before the end of the 20-year period, leaving ABC University with the obligation to pay the bondholders a much higher rate than the five percent fixed rate that was in effect at the time the bonds were sold.

Example 2: Cash Flow Hedge – Commodity Forward Contract

ABC University enters into a supply contract for the purchase of natural gas at the Henry Hub pricing point in Louisiana for gas received in December 2011. ABC University plans to buy 100,000 million British Thermal Units (MMBTUs) of natural gas. To hedge its market risk, ABC University enters into a commodity forward contract on April 1, 2011. ABC University agrees to pay a fixed price of $8.00 per MMBTU on a notional quantity of 100,000 MMBTUs and agrees to receive a variable payment based on the price of natural gas at the Henry Hub for the month of December 2011. Because the forward price for December 2011 for natural gas is $8.00 per MMBTU at the time the forward contract is executed, the forward contract is entered into at no cost. It thus has an initial zero fair value.

Based on the consistency of the terms of the forward contract and the expected purchase, ABC University determines that the forward contract is a hedging derivative instrument using the critical terms method. The increase in fair value of this forward contract is reported as a deferred inflow of resources in the statement of net assets as of June 30, 2011. Because the critical terms are consistent, the changes in the cash flows of the forward contract will substantially offset the changes in cash flow of the expected purchase. Hence the commodity forward contract is a hedging derivative instrument, and hedge accounting is applied.

If at December 2011 the cost of natural gas is $8.50 per MMBTU, then the forward contract will have a value of $.50 x 100,000 = $50,000, the amount saved on the purchase of 100,000 MMBTU's.

In summary, GASB 53 will require that annual audited financial statements of higher education institutions present and discuss all derivative financial instruments in their annual financial reports. Hopefully this will give the reader a more complete picture of the financial status of the institution, as well as save some money when either debt is issued or future purchases are made.

CHAPTER 5 COMPARATIVE AND RATIO ANALYSES

Objectives:

After completing this chapter, Association leaders will be able to:

- Define financial analysis and define its basic principles.
- Outline and formulate comparative analysis and ratio analysis techniques.
- Isolate the appropriate questions for an institutional ratio analysis request.
- Review the core ratio analyses to calculate for an institution.

Comparative and Ratio Analyses

In the present context, **financial analysis** refers to an assessment of the viability, stability and profitability of a business or the viability, stability and public accountability of a local or government. Financial analyses are conducted by accounting, finance, and auditing professionals who utilize financial information from institutional budgets, financial statements, and reports. This information assists management and Association leaders in making decisions relative to institutional plans, mission, revenues, investments, expenditures, operations and program evaluation. Finally, it points to alternatives, options and opportunities for institutional growth, and the accomplishment of institutional objectives and mission.

The basic principles of financial analysis are presented concisely in NACUBO's latest text on strategic financial analysis for higher education institutions (Tahey, Salluzo, Prager, Mezzina, & Cowen, 2010): (1) "Financial metrics and ratios should be used to measure success factors in order to improve the institution financially to achieve its mission; (2) The information being compared must be prepared on a fairly consistent basis; and (3) Peer comparisons are only a weak relative indicator and do not measure attainment of an institution's unique mission. Therefore, common sense, qualitative interpretation and internal interpretation are required" (p. 100).

Thus, this Handbook advocates for a joint labor-management approach to conducting financial analyses that begins with the development of Association finance committees that systematically and regularly analyze the budgets, financial statements, and audits of its institution. When that information is missing or unclear, we urge such committees to request such data through normal business operations or, when relations between labor and management

are not healthy, through Freedom of Information Act (FOIA) requests prior to bargaining. Third, we recommend that such committees communicate regularly with management to review the aforementioned financial information, discuss its consequences for the institution, and understand the accounting and financial reporting changes occurring in the wider society that will influence institutional accounting and financial reporting in the future. This presupposes that labor and management are aware of, and in agreement on, the institution's strategic plan and mission.

An institution's **strategic plan** is a statement of its strategies (i.e., set of plans of action to achieve certain goals) and a description of how it will make its decisions to allocate scarce resources to pursue these strategies to accomplish the **institutional mission**, or purpose. These scarce resources include both tangible and intangible assets. Examples of the former include personnel and capital; examples of the latter include intellectual capital and the institution's reputational capital. These two ideas should be embedded in institutional documents. While one would hope that the Association helped to develop the strategic plan and institution's mission, the Association should at the very least possess a copy of these documents. Information is the foundation of power.

Comparative Analysis

Once the Association has obtained the information that we recommended they receive in Chapter 2, it is ready to begin with fundamental comparative analysis. The purpose of a comparative analysis is to develop statements about the relative size or order of two variables or to state whether they are the same or not. Statements that follow from comparative analyses often

include proportions, trends, patterns, and anomalies.

A **proportion** is the quotient obtained when the magnitude of a part is divided by the magnitude of the whole. Proportions are useful to calculate when considering the components of a category, e.g., the proportion of total current assets that are represented in total current assets in Table 1 (25.2 percent). A **trend** represents a general direction or orientation. Thus, if we were to consider comparing four consecutive statements of net assets of an institution and find that each year the total net assets of the institution declined from its previous level, we could say that the institution was demonstrating a declining trend in net assets over that period of time. If the unrestricted funds of an institution's component unit were to suddenly decrease each time the institution's faculty collective bargaining agreement was due to expire, then revert to a high level in the years following the negotiation of each new collective bargaining agreement, we have observed a **pattern**. Thus, a trend goes in one direction during a particular time period, whereas a pattern follows a defined, systematic path through a particular time period.

In contrast, an **anomaly** represents a deviation from the normal course of events, a trend, or pattern. These events spark the interest of research analysts, as their existence calls for an explanation. When an anomaly occurs in a budget, Association leaders must ask for an explanation in writing. When it occurs in a financial statement, the notes to the financial statement must include an explanation. If no explanation is provided, the Association leader *must* write to the chief financial officer asking for an explanation.[6] Guidance from the Government Finance Officers Association (GFOA) advises financial analysts to utilize a public institution's

[6] According to GASB Concepts Statement No. 1, in order for financial communications to be effective, information in financial reports must be understandable, reliable, relevant, timely, consistent and comparable (GASB, 2010, B-22 through B-24). If the report does not possess these characteristics, the fault lies with the organization which generated the information.

own past performance as the context for analyzing its own current financial position and performance and to express an institution's financial position and performance emphasizing key indicators such as revenues, expenditures and fund balances. Moreover, the GFOA considers it a best practice to examine the percentage relationship among data elements over time to enhance the utility of trend data, and to use (at a minimum) five years of data to provide an effective trend analysis (GFOA, 2003). This advice should be placed in the context of GASB Concepts Statement No. 1 which implores analysts to use consistent and comparable data (GASB, 2010, B-22 – B-24).

Comparative analyses rely on analysts calculating proportions and detecting trends, patterns, and anomalies in budget and financial statement analyses. Such comparative analyses can be differentiated by time and focus. Here, time is a continuous variable that can be represented by a single or multiple fiscal years. Similarly, the focus of the analysis can be on the budget(s) or financial statement(s) of a single or number of institutions. This latter type of focus is the subject of peer comparisons in Chapter 6. If we differentiate among the types of comparative analyses that can be constructed on behalf of a higher education institution on the basis of time and focus, four basic types can be observed:

1. An analysis that compares components of a category or one or more categories within a budget or financial statement of a single institution using one or more proportions;
2. An analysis that compares components of a category or one or more categories between two or more budgets or financial statements of a single institution using proportions and trend/pattern/anomaly detection;
3. An analysis that compares components of a category or one or more categories across two or more budgets or financial statements of one institution's proportions and intra-institutional trend/pattern/anomaly detection; and

4. An analysis that compares components of a category or one or more categories across two or more budgets or financial statements of one institution's proportions and inter-institutional trend/pattern/anomaly detection.

The use of each type of comparative analysis is predicated on the information to be gleaned from the budget or financial statement. Comparative analysis is an exploratory data analytic tool in the sense that the analyst runs the numbers to identify what is to be learned from the financial figures. In contrast, ratio analysis is an evaluative tool when its purpose is to inform decision-making. Statements that follow from **ratio analyses** involve ratios in addition to trends, patterns, and anomalies within an institution at one point in time or across fiscal years. A **ratio** represents the relative magnitudes of two quantities and is usually expressed as a quotient. Peer comparisons are difficult to conduct appropriately because the ratios evaluate the extent to which an institution can meet its mission, and the mission of each institution is (in all likelihood) unique. As discussed in this Handbook, financial ratio analysis is to be used in financial statement analyses only.

Since 1982, KPMG has written a series of strategic financial analysis texts for higher education that have been recognized as the standard in the field. Each edition is unique and offers a particular perspective on the tasks required of a financial analyst. The current edition is the seventh (Tahey, Salluzo, Prager, Mezzina, & Cowen, 2010). It is available online at http://www.prager.com/FinancialAdvisory/StrategicFinancialAnalysis; chapters 11-14 cover ratio analyses. Another approach to ratio analysis for local and state governments is found in the 'financial condition analysis' chapter of XiaoHu Wang's *Financial Management in the Public Sector: Tools, Applications, and Cases* (2006). Finally, the Ohio Board of Regents uses a

financial ratio analysis framework from which to analyze and assist Ohio public colleges and universities in assessing their financial health (http://regents.ohio.gov/financial/campus_accountability/index.php). This system has proven to be quite successful in establishing a stable benchmark from which to judge higher education institutional accountability. While we cannot guarantee that any particular higher education institution outside Ohio includes ratio analysis in their planning and management processes, the practice has been popular among many higher education institutions. We want you to be able to ask for the appropriate documentation to identify whether or not they have adopted ratio analysis techniques, and ask the right questions to ensure that you understand the results of these analyses.

Financial ratio analysis has traditionally been defined as the evaluation and interpretation of an institution's financial data using standard financial ratios or accounting ratios to determine an institution's financial state or condition. Financial ratios are constructed from two values taken from an institution's financial statements. In applying this concept to higher education institutions, analysts focus on key financial data to answer questions raised by an institution's stakeholders. In that sense, they are unique to an institution and its strategic plan and mission. These ratios focus on trends, patterns and anomalies within the institution, and should include several years' worth of data to make assertions about the financial state or condition of the institution. In higher education, this means that financial ratios focus on the institution's relative ability to repay current and future debt (p. 106; Wang, 2006, p. 150) and whether the institution is using its financial resources effectively to meet its mission (Tahey, Salluzo, Prager, Mezzina, & Cowen, 2010, p. 109). There are numerous ways in which financial ratios can be calculated, so

Association leaders need to obtain the particular ratios utilized by the institutions, its calculations and assumptions prior to reviewing the administration's analyses.

Following the current guidance in the field, we review the two-step process to define, measure, and report the financial health of an institution. In this model, the first step requires the presentation of one question which, if answered affirmatively, leads to the presentation of four additional questions in a second step.

Liquidity Ratio

The first ratio seeks to determine if the institution has sufficient **liquidity**. A number of calculations of liquidity are possible depending on the term (short-term or immediate term measure) and the types of assets held by an institution. While there is no established standard, sources of liquidity ratio sources include cash and operating funds, operating funds held in an investment pool, endowment cash and other assets (net of securities lending requirements), net capital redemptions (calls), operating lines of credit, commercial papers, bond anticipation notes (B.A.N.), dedicated lines of credit, philanthropy, accounts receivable and payable, and external funds. The liquidity ratio is new to the KPMG series, and its exposition is short on prescriptions. Whichever sources are used, the authors of the text indicate that the liquidity ratio should be ≥ 1.0. If higher, the institution has some cushion; if below, it needs to raise cash and/or cash equivalents. Once the institution has established that it has the ability to convert its assets to cash without significant loss in the short-term, it can proceed with the second step in the process of understanding its financial condition (pp. 19-30, 110-111).

Here, the Wang text has more utility for the field than the KPMG text. For Wang, the financial condition of an institution is rooted in its ability to meet its financial obligations. An

institution is **solvent** if it can pay its obligations without resorting to raising additional revenues. Wang provides four types of solvency and eight ratios with which to measure them; we have chosen four to present herein for their clarity and usefulness.

The first type of solvency discussed by Wang is **cash solvency**, which refers to an institution's ability to generate sufficient cash from its current assets to pay for its current liabilities. Cash solvency can be estimated via the Q**uick Ratio**:

$$\textit{Quick Ratio} = \frac{\textit{Cash \& Cash Equivalents + Marketable Securities + Receivables}}{\textit{Current Liabilities}}$$

A higher quick ratio value indicates greater cash solvency (Wang, 2006, 150-151).

The second type of solvency addressed by Wang is **budgetary solvency**, which estimates an institution's ability to generate sufficient revenues to pay its expenses; it is estimated through the **Operating Ratio**:

$$\textit{Operating Ratio} = \frac{\textit{Total Revenues}}{\textit{Current Expenditures (Expenses)}}$$

Similar to the quick ratio, a higher operating ratio value indicates greater budgetary solvency (ibid).

The third type of institutional solvency defined by Wang is **long-run solvency**, which estimates an institution's ability to pay for the long-term obligations it has incurred. This is measured through the **Net Asset Ratio**:

$$\textit{Net Asset Ratio} = \frac{\textit{Total Net Assets}}{\textit{Total Assets}}$$

A higher net asset ratio value can be interpreted as higher long-run solvency, which in turn is connected to an institution's ability to last through tough fiscal times (ibid).

Lastly, **service solvency** can be defined as the extent to which an institution retains the ability to pay for the existing level and quality of services it is obligated to pay now and in the future. This is measured via the **Long-Term Debt per Capita Ratio**, which uses population in the denominator. In higher education, one can use headcount or full-time equivalent (FTE) students as the denominator.

$$\textit{Long-Term Debt per Capita Ratio} = \frac{\textit{Total Long-Term Debt}}{\textit{Population}}$$

Here, lower long-term debt per capita ratio values are associated with higher service solvency (Wang, 2006, 150-152). Similar to the KPMG series of ratio analysis texts, Wang recommends trend analyses using several years' worth of data to issue financial condition pronouncements. The question of institutional liquidity or solvency identifies whether or not institutional resources need to be increased in order to address its objectives. Once this question is answered, the analyst proceeds to the second step in the financial ratio analysis process. In this step, four questions are addressed:

1. Are resources sufficient and flexible enough to support the mission? The answer to this question is answered through the calculation of the Primary Reserve Ratio.
2. Are debt resources managed strategically to advance the mission? Here, analysts

calculate a Viability Ratio to provide an answer to this question.

3. Do asset performance and management support the strategic direction of the institution? Here, the Return on Net Assets Ratio is calculated.

4. Do operating results indicate the institution is living within available resources? This question can be answered through the calculation of the Net Operating Revenues Ratio (Tahey, Salluzo, Prager, Mezzina, & Cowen, 2010, p. 109).

Primary Reserve Ratio

The primary reserve ratio answers the question 'Are resources sufficient and flexible enough to support the mission?' Here, the financial strength of an institution is assessed by comparing its net assets to its total expenses. For private higher education institutions, it is calculated by dividing the expendable net assets of the institution by its total expenses. For public higher education institutions, the institution's expendable net assets plus the FASB component unit expendable net assets are divided by the institution's total expenses plus its FASB component unit's total expenses.

Over time, the primary reserve ratio of an institution will identify its financial condition; if it rises, its strength is risings; if it falls, it is weakening. Here, the threshold level is a quotient of ≥ 0.4, indicating that the institution has the flexibility that it needs to support its mission. This result indicates that the institution has the ability to cover five months of expenses (40 percent of 12 months) (112-114).

Viability Ratio

The viability ratio answers the question 'Do asset performance and management support the strategic direction of the institution?' This ratio measures the availability of expendable net

assets to cover debt should the institution need to settle its obligations as of the date indicated in the balance sheet or statement of net assets.

For private higher education institutions, it is calculated by dividing the expendable net assets of the institution by its plant-related debt. For public higher education institutions, the institution's unrestricted net assets and the expendable restricted net assets are added to the sum of the FASB component unit's unrestricted net assets plus the temporarily restricted net assets expendable net assets minus the net investment in plant are divided by the institution's total plant-related debt plus its FASB component unit's plant-related debt. While the quotient of the ratio is not associated with an absolute standard, institutions with a viability ratio of ≤ 1.0 are associated with significantly lower flexibility than those institutions that score higher (115-116).

Return on Net Assets Ratio

Calculating the return on net assets ratio helps to identify the extent to which asset performance and management support the strategic direction of the institution. Here, the total economic return of the institution can be tracked over time to determine its relative financial health. For private higher education institutions, it is calculated by dividing the institution's change in net assets by its total net assets; for public higher education institutions, the numerator is the institution's change in net assets plus FASB component unit's change in net assets, while the denominator is the institution's total net assets plus FASB component unit's total net assets. Again, while there are no absolute standards, a result of ≈ 3.5 percent may be appropriate (pp. 122-123).

Net Operating Revenues Ratio

The purpose of the net operating revenue ratio is to determine the extent to which operating results indicate that the institution is using its resources prudently. This ratio is highly correlated with the second, third and fourth ratios as it calculates how the surplus from operating activities impacts institutional net assets. The larger the ratio, the greater the institution's operating surplus is for the year.

To calculate it for a private higher education institution, divide the excess of unrestricted operating revenues over unrestricted operating expenses by the institution's total unrestricted operating revenue. For public higher education institutions, the numerator is the institution's operating income (loss) plus net non-operating revenues plus its FASB component unit's change in unrestricted net assets, while the denominator is the institution's operating revenues plus non-operating revenues plus its FASB component unit's total unrestricted revenue. Threshold values are dependent upon whether or not the institution uses a spending rate, so it is best to identify the institution's net operating revenue ratio target to identify its relative operating surplus. To understand the institution's financial situation, it will also help to identify the reasons for any surplus or deficit, and to look at this ratio over time (pp. 127-128).

In summary, financial ratio analysis poses one or more institutional liquidity question, then poses four more:

1. Are resources sufficient and flexible enough to support the mission? Answer this through the calculation of the Primary Reserve Ratio.
2. Are debt resources managed strategically to advance the mission? Here, analysts calculate a Viability Ratio to provide an answer to this question.

3. Do asset performance and management support the strategic direction of the institution? Here, the Return on Net Assets Ratio is calculated.

4. Do operating results indicate the institution is living within available resources? This question can be answered through the calculation of the Net Operating Revenues Ratio (Tahey, Salluzo, Prager, Mezzina, & Cowen, 2010, p. 109).

The primary reserve ratio, viability ratio, the return on net assets ratio, and the net operating revenues ratio answer these questions. These answers should be calculated within the institution over time to increase their utility for the analyst. While each state's approach to financial ratio analysis in higher education institutions may differ, the approach outlined above will fit the needs of most analysts.

In Ohio, the state's higher education coordinating board uses the viability, primary reserve and net income ratios individually and collectively to form a composite score for each public higher education institution. Based on the calculation of each ratio, scores are assigned to a five-point scale to interpret their relative financial health. Each scale is weighted to achieve a composite score, which is then reported annually by institution for the purpose of public accountability (http://regents.ohio.gov/financial/campus_accountability/index.php). Regardless of the way in which an institution or state estimates the financial health of an institution, it is important to understand the system by which they will use comparative or ratio analysis to define the financial condition of their institution or their state's higher education system. The important point for Association leaders to understand is that many higher education institutions use comparative and ratio analysis in their strategic planning and management process. If the institution in question does not do so, we would encourage its use in order to provide a systematic measurement process that utilizes standardized formulas to gauge the financial health

of the institution. Where institutions practice comparative and ratio analysis, Association leaders and members of the institution's budget or finance committee should familiarize themselves with the metrics utilized, the raw data, the assumptions used in their calculation, and 'the story' behind the numbers.

CHAPTER 6 ANALYSIS AND PROJECTION OF INCOME

Objectives

After completing Chapter 6, readers will be able to:

- Identify the major sources of income for higher education institutions and differentiate their importance for public and private higher education institutions.
- Isolate the appropriate questions for an information request prior to a budget analysis.
- Construct an analysis template of revenue sources within an institution, between departments, or relative to one of four comparison groups: competitor, peer, aspirational, and jurisdictional. These groups are defined in Chapter 7.

Analysis and Projection of Income

The major sources of income for higher education institutions include tuition and fees, appropriations (federal, state, and local), grants and contracts, gifts, endowment, and sales and services (of such auxiliary enterprises as dormitories, bookstores and hospitals). The percentage of total revenue by sources varies between public and private colleges and universities. These sources are quantified for public higher education institutions in Table 7 (Knapp, Kelly-Reid, & Ginder, 2009). Public institutions using FASB accounting principles account for a small amount of the total revenues of all public institutions and hence are omitted from Table 7. Similarly, Table 7 does not include private not-for-profit institutions, which also follow FASB accounting principles. Included in the discussion are factors faculty and staff need to consider in projecting income components into the future.

State Appropriations and Grants

State appropriations are the largest income source for most public institutions, representing 22.7 percent of total income for four-year institutions and 30.0% of total income for two-year institutions, but are of negligible importance to most private institutions (see Table 7). State appropriations to public institutions of higher education are determined in many states through a formula. Some of these states use formulas to appropriate funds, others only to review the adequacy of funding. In states using formulas to appropriate funds, the components of the formulas need to be examined to determine the relative impact on revenue of a variety of factors.

Table 7: ***Revenues of Title IV Institutions, by Level and Control of Institution, Accounting Standards Utilized, and Source of Funds: United States, FY 2007***

Source of funds	4-year Revenues (in thousands)	4-year Percent	2-year Revenues (in thousands)	2-year Percent
	Public institutions using GASB standards			
Total revenues and other sources	$ 213,133,579	100.0	$ 47,747,294	100.0
Operating revenues	125,077,577	58.7	17,876,282	37.4
Tuition and fees (net of allowances and discounts)	35,126,676	16.5	7,637,171	16.0
Grants and contracts	37,908,321	17.8	7,626,341	16.0
Federal (excludes FDSL loans)	24,992,863	11.7	4,780,975	10.0
State	5,335,342	2.5	2,209,723	4.6
Local	7,580,116	3.6	635,642	1.3
Sales and services of auxiliary enterprises after deducting discounts and allowances	17,967,295	8.4	1,892,608	4.0
Sales and services of hospitals	20,758,904	9.7	-	0.0
Independent operations	663,373	0.3	-	0.0
Other operating revenues	12,653,008	5.9	720,163	1.5
Non-operating revenues	74,532,913	35.0	26,914,625	56.4
Federal appropriations	1,764,493	0.8	131,709	0.3
State appropriations	48,395,487	22.7	14,302,710	30.0
Local appropriations	446,923	0.2	8,653,541	18.1
Nonoperating grants	2,403,244	1.1	1,977,044	4.1
Federal	1,625,932	0.8	1,280,066	2.7
State	705,405	0.3	638,179	1.3
Local	71,908	0.0	58,799	0.1
Gifts	4,745,220	2.2	256,212	0.5
Investment income	13,412,528	6.3	984,209	2.1
Other non-operating revenues	3,365,017	1.6	609,199	1.3
Total other revenues and additions	13,523,089	6.3	2,956,388	6.2
Capital appropriations	5,064,705	2.4	2,291,293	4.8
Capital grants and gifts	3,161,015	1.5	350,189	0.7
Additions to permanent endowments	1,016,329	0.5	23,096	0.0
Other revenues and additions	4,281,040	2.0	291,809	0.6

However, even in those states where a formula determines the overall appropriation for an institution, the components of the formula usually do not determine how an institution spends its appropriation. For example, if an institution receives $1,000,000 by formula for maintenance, that exact amount need not necessarily be spent on maintenance.

The rather complex appropriations formula adopted by the Tennessee legislature some years back for its higher education funding provides a useful example of formula funding. The formula contained the following components:

1. ***Instruction and Academic Support***: The formula recommends funds based upon faculty salaries and student/faculty ratios at comparable institutions. These comparable institutions are a group of ten peer institutions selected for each of four Tennessee institutional groups based upon size, program mix, and other factors.

    a. Average faculty salaries are computed for the peer institutions using national salary data. The funding calculation then divides the projected student credit hour estimation by the student/faculty ratios to determine the number of instructional personnel required. This number is multiplied by the average salary factor of the predetermined peer institutions. Adjustments are then made for graduate teaching assistants, equipment, and clerical support, and to recognize enrollment fluctuations among terms.
    b. A funding factor for library needs is then calculated per full-time equivalent (FTE) student. This factor varies with the type of institution.
    c. Expenditures for other instructional support is then built into the formula as a percentage of the instructional expense by type of institution.

2. ***Maintenance and Operation of Physical Plant***: The formula recognizes that the maintenance and operation of the physical plant cost 12 percent of the total institutional expenses. This charge is distributed over each square foot of education and general space, plus an additional amount per square foot constructed prior to 1960 and not renovated since then.

3. ***Institutional Support***: The formula assumes that institutional support accounts for 12 percent of total expenditures.

4. ***Student Services***: Expenditures for student services, including admissions and records, financial aid, student health, and athletics are assumed to be ten percent of total expenditures. The formula rate is $X per headcount student plus $Y for FTE student, where 15 undergraduate credit hours or 12 graduate credit hours per semester constitutes one FTE student.

5. ***Research***: The research function comprises one percent of total expenditures. Funds are allocated based upon the institution's historical expenditures for research and its ability to attract sponsored research funds.

6. ***Public Service***: Each institution receives a flat amount plus one percent of instructional costs for the administration of public services.

7. ***College Preparatory Programs***: College preparatory programs are recognized in the formula by a specific credit hour rate multiplied by the number of hours taught at each eligible institution over the past calendar year.

8. ***Staff Benefits***: Staff benefits are analyzed in relation to previous annual expenditures. Fluctuations in benefit costs are considered in making recommendations for the subsequent year.

9. ***Student Aid***: Requests for student aid funds are analyzed in relation to previous annual expenditures.

10. ***Special Allocation***: Institutions may request funds for specific projects that cannot be adequately addressed through regular allocations.

11. ***Desegregation***: Institutions may request funds for desegregation purposes that cannot be adequately addressed through other formula components.

12. ***Performance Funding***: The formula provides a sum up to five percent of appropriations to recognize and reward efforts to evaluate and improve instruction.

13. ***Equipment Replacement Supplement***: The formula includes an amount equal to five percent of equipment investment, to supplement equipment budgets.

14. ***Longevity***: The formula includes an amount for longevity pay to reward state employees for each year of service beyond three years.

15. ***Inflation***: The formula includes inflation factors for utilities, non-salary expenditures, and library acquisitions.

Note that several factors in this formula depend directly or indirectly on projections of student enrollments. Because an anticipated decrease in student enrollment could lead to a decrease in the funds appropriated under this formula, Tennessee "cushioned" institutions against such a decrease in appropriations by regulations that supplemented the formula. Note also that this formula uses the salaries paid at a predetermined set of comparable institutions to determine the salary per faculty member (in Instruction and Academic Support, factor 1a). This approach builds in cost-of-living increases for faculty since faculty salaries at comparable institutions increase with inflation. Other funding formulas, however, relate this instruction and academic support cost factor only to the salaries paid at the institution to which the formula is being applied. Because of such wide variation in formula details from state to state, one must study each specific formula in use in order to project the impact of enrollment and other changes on the state appropriation for a given institution.

In many states, capital appropriations are legislatively separated from ongoing operations appropriations. Normally, an institution's administration submits an ordered list of requests for such capital projects as new buildings, major renovations, and teaching or research equipment. Then, depending upon available funds, some or none of the highest priority items may be funded in a given year.

Calculating the precise impact of enrollment changes on an institution's appropriation based on overall increases or decreases in enrollments may be difficult. For example, an increase in 80 students at the master's level in physical sciences might justify an increased funding of ten faculty members in the physical sciences while an increase of 80 physical science students in

freshman courses might justify an increased appropriation for only four faculty. In fact, for a formula as sophisticated as Tennessee's, without access to enrollment projections by instructional level and discipline, it is probably impossible for a faculty or staff member to calculate precisely the impact on an institution's state appropriation of an overall increase or decrease in FTE students.

For many states, however, appropriations are not determined by formula. In order to project the probable state appropriation for a given institution in those states—and even in the formula funding states—we need to have extensive knowledge of the state's economy and its political processes. One guideline to use in estimating the future is looking at the immediate past. For example, if an institution has received a five percent increase in its state appropriation in each of the past four years, it is likely to receive a five percent increase next year. But extrapolating from past data provides no certain guide, especially at a time when the national economy is experiencing a long-term downturn, such as started in 2008, and unemployment remains high. State revenues will then be reduced. Unless the state enacts tax increases to compensate, a decrease in revenues will mandate a decrease in overall state appropriations since states are required to run balanced budgets. But the state's economy is only half the story. Future funding priorities of the legislature and the governor are equally important. Nationwide, state support for higher education has fallen over the past decades. Overall state appropriations to higher education have fallen more than 40 percent from over $10.50 per $1,000 of personal income in the 1970s to about $6.30 per $1,000 of personal income in 2011 (Zumeta, 2012). The decrease in this key ratio occurred in all 50 states.

Consequently, state appropriations for higher education as a share of public university revenue have also declined. In 1977, state appropriations represented 46.5 percent of public four-year university revenue. In 2007, Table 7 indicates that this had decreased to only 22.7 percent of public four-year university revenue. This decline has continued: in total, higher education in the 49 reporting states saw a three-percent decrease in funding between FY 2007 and FY 2012, which included a seven-percent decrease from FY2011 and FY2012 (Zumeta, 2012).

Furthermore, the federal government provides financial incentives to the states to increase their funding for the Medicaid program, but not for higher education. A dollar in Medicaid services for its residents costs the state much less than a dollar of state funds for higher education. Hence if a state reduces spending on Medicaid it loses federal funds. By contrast, when a state reduces its funding for higher education (resulting in higher tuition charges for students), state residents may receive additional federal funds in the form of greater eligibility for federal student loans and increased tax credits.

College and university administrations normally have full- or part-time lobbyists whose duties include providing the institution's president and governing board with up-to-date information on future funding increase possibilities and, of course, trying to influence these probabilities in favor of the given institution. An institution's president often spends a significant amount of time talking with legislators and state officials when appropriations are working their way through the legislative process. Faculty or staff members or faculty or staff committees normally do not have access to this information. This means that faculty and staff must either rely on the estimates given them by their administration on state funding levels in the future, or

they must belong to a higher education organization that has its own lobbyists in the state capital. NEA state affiliates have these resources and can assist higher education Associations with such support. There is no substitute for inside political intelligence in projecting future state funding.

Federal Appropriations and Grants

The federal government makes certain appropriations to public and private higher education institutions such as land grant aid, educational equity programs, and categorical support for college libraries as well as provides substantial grant support. As Table 7 shows, the aggregate of these appropriations for four-year public institutions amounts to 11.7 percent for federal grants and contracts and 0.8 percent for federal appropriations of the total revenue for FY 2007 and 10.3 percent combined total for public two-year institutions.

Federal, state, and local governments award grants and contracts to colleges and universities, usually on a competitive basis. These funds may be crucially important to institutions with a major commitment to research and other sponsored projects. There are two cost components to most grants and contracts: direct costs and indirect costs. Funds to cover direct costs can only be expended for the purpose stated in the grant application. But funds to cover indirect costs can be added to the general revenue of an institution and expended in any manner, providing financial flexibility to the institution.

The classification of particular costs as direct or indirect depends in some cases upon how an institution is structured to conduct research and other sponsored activities. Direct costs are those that may be readily identified as belonging to a given project, such as salaries and benefits

of those working on the project, supplies and equipment for the project, and travel to carry out the project. Secretarial costs and computer charges can appear as direct costs if these are charged to the grant account for services rendered, but usually they are treated as centrally administered services without charge-backs and thus are part of indirect costs. Typically, administrative and purchasing support, office and laboratory space, libraries, office supplies, maintenance, and janitorial services are treated as indirect costs.

Colleges and universities determine their indirect cost rates using guidelines prepared by the federal government. These guidelines also provide the methodology to calculate the fringe benefit rates to be applied to the salaries of employees working on sponsored research. The rates are reviewed by federal auditors to determine that they are in agreement with the guidelines prepared by the Office of Management and Budget (*OMB Circular A-110, Revised 11/19/1993, Further Amended 09/30/1999*). For more information on the federal government's methodology, please go to http://www.whitehouse.gov/omb/circulars_a110.

Institutions normally apply the same indirect cost rates to state, local and private grants as to federal awards. However, some private foundations have policies that do not permit any payments for indirect costs. In these cases the indirect costs become, in essence, an institutional contribution to the research similar to the institution's contribution of faculty release time.

Private colleges and universities generally budget indirect cost reimbursements as unrestricted income. Public higher education institutions in some states have to turn all such funds over to the state. In other states these institutions may retain some or all overhead cost reimbursement as unrestricted income.

The projection of direct and indirect cost revenues from grants and contracts involves knowledge of who is responsible for obtaining an institution's current grants. If several key research-oriented faculty leave an institution, their grants will probably leave with them. Usually the largest grants are received by medical school researchers from such sources as the National Institutes of Health and the National Science Foundation. Grant income is sensitive to the funds appropriated to major funding sources. For example, the National Institute of Health's budget can substantially affect the level of grant funding at many research-oriented higher education institutions.

Local Appropriations

In some cases, particularly for community colleges, local governments provide direct appropriations to an institution. As Table 7 indicates, in FY 2007 local appropriations represented 0.2 percent of the revenues of four-year institutions and 18.1 percent of the revenues of two-year colleges. This appropriation may be tied to the state appropriation. For example, one state requires the county government to provide one third of the total revenue for a community college located within its boundaries while the state provides an equal appropriation for each such community college. Another state permits a portion of local property taxes to be levied expressly for the benefit of its community colleges. In any case, local appropriations have historically proven to be more variable from one year to the next than either state or federal appropriations.

Tuition and Fees

As Table 7 indicates, tuition and fees are the second largest source of funds for public institutions after state appropriations. In contrast, they represent the largest source of funds for private higher education institutions. Unlike most prices, tuition represents only a portion of the cost incurred in providing instructional services to students. Many factors are considered in setting tuition rates, including the tuition at peer institutions, student financial aid needs, the general state of the economy, the philosophy of the institution or the state system and, last but not least, state legislative imperatives borne of the need to balance the state budget.

The setting of tuition rates can be critically important to the enrollment level and to the types of students faculty find in their classrooms. Higher tuition rates generally mean that fewer students seek admission. Furthermore, higher tuition rates dramatically reduce the availability of higher education to students in certain economic strata. Such institutions as the Ivy League universities may not need to be concerned when they reduce demand by substantially raising tuition rates because they have a surplus of well-qualified applicants. But colleges and universities with a more regional service area are much more restricted in setting tuition levels if they wish to maintain or increase enrollment levels. In the public sector, enrollment levels may affect an institution's level of state appropriations, harming institutions in the short- and long-term. Furthermore, in the public sector, an agency of the state may have to approve tuition increases or increases may be tied to the state's formula for higher education appropriations.

In recent years the percentage increases in tuition has been far greater than the inflation rate. In the area of student aid, tuition level has a significant impact on expenditures. Institutions

with a strong commitment to student aid must plan to increase their own aid expenditures to parallel the increase in tuition so as not to price themselves out of reach of a substantial number of their traditional students. Also, an institution's own student aid becomes more important if the federal government is threatening to reduce its aid.

The federal government funds a number of student grant and loan programs. These programs fund part or all of the tuition of several million students annually. Some of these programs provide funds to the institutions, which distribute them to student applicants, and other programs provide funds directly to the students. Some states also provide student tuition grants or loans. A major concern in estimating future revenues is taking account of the demographics of the region from which a given institution draws the great majority of its students.

Student Financial Aid

In 1994-95, while states provided $42.8 billion directly to higher education institutions, student aid from all sources was about $51.8 billion. That year marked a turning point where direct student aid exceeded direct government appropriations to higher education institutions. Over time, student aid has continued to increase with more than half of it in the form of loans. In fact, according to the U.S. Department of Education's National Postsecondary Student Aid Studies, the percent of all public and private higher education students not receiving any type of aid has decreased from 24.5 percent in the 2003-04 school year to 20.5 percent in the 2007-08 school year (http://nces.ed.gov/surveys/npsas/)). Adding the tax credits associated with college enrollment increases the purchasing power of students even more. Given the political popularity of direct student aid, this trend will likely continue.

This shift of funding directly to students means that a student attending any accredited institution of post-secondary education is eligible for student aid. This availability of student aid dollars in turn has attracted new post-secondary education organizations that do not operate or educate students in the same manner as traditional colleges.

The University of Phoenix is an example of this new type of for-profit educational organization. It uses technology (such as the Internet) to support classes taught by inexpensive adjunct faculty. It designs and controls the curriculum centrally, most of its students are working adults, and it does not provide the range of student services and activities of a traditional college. Thus it is able to deliver a college-level program tailored to a specific student population at a lower cost to the for-profit college than the cost incurred by many traditional colleges. Tuition, however, is not lower for these for-profit colleges, which is how they earn a profit. Competition for student tuition dollars from institutions like the University of Phoenix is bound to increase in the future. Because education over the Internet is not limited by state boundaries, it may be difficult to project the impact of these competitors on the future tuition revenues of traditional public and private institutions of higher education. In addition, these competitors are most likely to skim off the most profitable enrollments in such areas as business and education courses for adults. This issue has been addressed by the federal government: The U.S. Senate's Committee on Health, Education, Labor and Pensions has conducted substantive research and held multiple hearings on for-profit higher education and released a report in July 2012 entitled *For-Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success.*

Private Gifts, Grants, and Contracts

As already noted, private grants and contracts are usually treated like federal grants and contracts with respect to indirect cost reimbursement. Gifts are recorded as unrestricted or restricted. Unrestricted gifts may be spent for any purpose by an institution and hence are another source of financial flexibility. Restricted gifts are limited by the donors to be used only for specified purposes. However, if these purposes are high on the priority list of institutional activities, these restricted funds may be substituted for general institutional funds, thereby freeing the latter funds for other uses.

Increases in fundraising efforts generally take both time and money. Increased staffing for a development office means increased investment, and that investment may take one to three years to produce substantial increases in gift income. Since the most difficult funds to raise are unrestricted gifts, institutions often establish a development plan that presents high-priority institutional projects to possible contributors, thereby enhancing restricted gifts that can be used to replace unrestricted institutional funds.

Endowment Income

The endowment income is substantial for only a small number of institutions. The endowment income is dependent upon the types of investments made with endowment funds and the returns on these investments. Many endowments have suffered in the stock market decline of 2008 and 2009. Hence endowment income has been negatively impacted.

Sales and Services of Educational and Auxiliary Activities

Sales and services of educational activities include non-credit workshops, testing services, a physicians' practice plan, and a college theater. Auxiliary activities include residence and dining halls, intercollegiate athletics, a bookstore, a university press, a university-owned faculty club, and university-owned parking facilities. Normally these auxiliary enterprises are supposed to break even or show a profit. Some of them, such as intercollegiate athletics and university presses, often run a deficit.

Hospitals

Although the overall income from hospitals tends to be concentrated within four-year doctoral higher education institutions, those institutions that do own a hospital find that it probably accounts for a quarter or more of total revenue. If the institution in addition has a medical school and thus a physicians' practice plan, these three related operations—hospital, medical school, and physicians' practice plan—may together account for more than 50 percent of the entire income of the institution. In these cases the entire institution either prospers or suffers financially depending upon the fortunes of these major operations.

Hospitals have been faced with concerted efforts by federal and state governments to contain the rising costs of medical services. The federal government developed a set of diagnostic related groups (DRGs) to which a given illness or treatment could be assigned. The government then assigned a given dollar payment for each patient treated for each such DRG. This has resulted in hospitals not being fully reimbursed for their costs in providing some health

services. The patient "mix" between Medicare, Medicaid, Blue Cross & Blue Shield, and other private health insurance carriers is crucial to the financial viability of a hospital. Occupancy rates and discharge rates are also critically important. A hospital typically seeks to have all of its beds filled but at the same time wants the patient stays (for those on Medicare and Medicaid for whom the payment will be a fixed dollar amount no matter how long they stay) to be as short as is warranted medically. University hospitals that provide free or only partially reimbursed care for the indigent sometimes are subsidized by the city in which the hospital is located.

In 2010, Congress passed legislation to address health insurance reform through two pieces of legislation. The first, the Patient Protection and Affordable Care Act (PPACA) (P.L. 111-148), was signed into law by President Obama on March 23, 2010, expanding Medicaid eligibility, providing incentives for employers to provide health insurance, providing certain employees and employers with support for health insurance premium payments, prohibiting the denial of coverage for children on the basis of pre-existing conditions, establishing health insurance exchanges and providing additional support for medical research, among other things. A week later, President Obama signed the Health Care and Education Affordability Reconciliation Act (HCEAR) (P.L. 111-152) into law, which made several technical changes to PPACA, also included a rider on financial aid for college students. This important legislation will impact the incomes of hospitals and medical schools over the next several years, both positively and negatively. While the positive aspects of the bill for higher education are concentrated in workforce issues, the negative aspects will vary according to hospital productivity and quality.

Within the workforce portion of the reform effort, the federal government will increase the number of Graduate Medical Education (GME) training positions by redistributing currently unused slots and promoting training in outpatient settings by July 1, 2010.

Within the hospital portion of the reform effort, the federal health reform legislation will allow the federal government to reduce annual market basket updates for inpatient and outpatient hospital services, long-term care hospitals, inpatient rehabilitation facilities, and psychiatric hospitals and begin adjusting payments for productivity in FY 2010. Beginning FY 2011, the federal health reform legislation intends to cease federal payments to states for Medicaid services related to certain hospital-acquired infections. Similarly, beginning October 1, 2012, the federal government will reduce Medicare payments that would otherwise be made to hospitals to account for preventable hospital readmissions. Beginning October 1, 2014, the federal government will begin to reduce Medicare Disproportionate Share Hospital (DSH) payments initially by 75 percent and subsequently increases payments based on the percent of the population uninsured and the amount of uncompensated care provided. Medicaid DSH payments to hospitals providing uncompensated care will also decrease, on the assumption that more of the uninsured will now have health insurance. Lastly, the federal government intends to reduce Medicare payments to certain hospitals for hospital-acquired conditions by 1 percent beginning in FY 2015. This summary was taken from the Henry J. Kaiser Foundation's *Health Reform Source* online at http://healthreform.kff.org/, which offers readers a variety of resources in regards to federal health reform. No matter how regulation and implementation efforts

proceed, federal health reform will have a major impact on university hospitals and medical centers now and for some time to come.

CHAPTER 7 ANALYSIS AND PROJECTION OF EXPENDITURES

Objectives

After completing this chapter, readers will be able to:

- Identify the major sources of expenditures for higher education institutions and differentiate their importance for public and private higher institutions.
- Isolate the appropriate questions for an information request prior to a budget analysis.
- Construct an analysis template of expenditure sources within an institution, between departments, or relative to one of four comparison groups: competitor, peer, aspirational, and jurisdictional.

Analysis and Projection of Expenditures

This chapter presents and examines the major components of an institution's expenditures, including instruction, research, public service, academic support, student services, institutional support, physical plant operation and maintenance, depreciation, scholarships, auxiliary enterprises, and hospitals. Also described are the factors that Association leaders need to consider in projecting expenditure components into the future.

Table 8 (Knapp, Kelly-Reid, & Ginder, 2009) provides an overview of the expenditures for public higher education institutions. It can be observed that there are substantial differences between the expenditures of public four-year and two-year institutions. The greatest difference is that instructional costs are larger in two-year institutions, while expenditures for research and hospital services are notably higher in four-year institutions. It may be helpful for a given institution to record the percentage for each expenditure component over a number of years to identify trends in expenditures.

Expenditure Components

Before considering each expenditure line in detail, we need to define a cost in terms of the accounting basis of the financial statement being examined. As you'll recall, information about cost is accumulated in accounting records and summarized periodically in the financial reports of the institution. To understand these financial reports, we need to be aware of certain accounting concepts that were covered in Chapter 1 and that will be expanded in this chapter.

The most important of these is determining when to recognize that a financial event has transpired and thereby should be reported in the financial statement.

Table 8: ***Expenditures of Title IV Institutions, by Level and Control of Institution, Accounting Standards Utilized, and Source of Funds: United States, FY 2007***

Type of expense	4-year Expenses (in thousands)	4-year Percent	2-year Expenses (in thousands)	2-year Percent
	Public institutions using GASB standards			
Total expenses	$ 188,903,134	100.0	$ 43,661,404	100.0
Operating expenses	181,465,178	96.1	42,661,404	97.7
Instruction	49,011,204	25.9	16,937,833	38.8
Research	22,643,224	12.0	18,166	0.0
Public service	9,257,235	4.9	696,911	1.6
Academic support	12,613,550	6.7	3,243,335	7.4
Student services	7,145,804	3.8	4,013,131	9.2
Institutional support	13,560,449	7.2	6,048,742	13.9
Operation and maintenance of plant	11,624,749	6.2	3,869,146	8.9
Depreciation	9,140,557	4.8	1,642,527	3.8
Scholarships and fellowships (excluding discounts and allowances)	6,016,596	3.2	2,943,457	6.7
Auxiliary enterprises	15,809,103	8.4	2,203,330	5.0
Hospital services	20,335,825	10.8	-	0.0
Independent operations	763,621	0.4	-	0.0
Other operating expenses and deductions	3,543,224	1.9	1,044,874	2.4
Non-operating expenses	7,437,956	3.9	1,017,110	2.3
Interest	3,129,141	1.7	697,384	1.6
Other non-operating expenses and deductions	4,308,815	2.3	319,727	0.7

In cash basis accounting, financial events involving either the receipt or the expenditure of cash are the only events recognized in the accounts. Under this system, expenditure accounts report only those entries for which cash has been disbursed. Such cash-basis accounting has a major

shortcoming since the institution may owe a great deal of money but simply not have paid its bills.

Accrual-basis accounting overcomes this difficulty by recognizing financial events when an obligation to a second party is incurred or when a claim against the second party is legally established. At these times the financial event is recorded in the appropriate account. Many weeks or even months may pass before the event produces a change in cash to or from the institution. Virtually all institutions of higher education operate on accrual-basis accounting, and expenditures are reflected when obligations to outside parties are incurred rather than when cash is paid to these parties.

Instruction

The accurate determination of instructional costs has been a major goal of financial analysis in higher education institutions for some time. These instructional costs can then be used to compare different departments within a college or different colleges within a university for cost effectiveness. In theory, different institutions can also be compared by this procedure.

There are a number of ways to perform cost analyses. The three-tiered approach involving a five-step procedure described here was recommended by the National Association of College and University Business Officers (NACUBO) in *Cost Accounting Handbook for Colleges and Universities* (Hyatt, 1983). The approach assumes the existence of an institutional cost accounting system that can provide a database over a period of years. Comprehensive cost analysis assigns costs to cost centers for later attribution to cost objectives. In the instructional

area, cost centers can be defined as departments, schools, or colleges; although in principle the term could be applied to individual faculty or even individual courses. The most frequently used cost objectives are those listed in the “Operating Expenses” column in Table 8.

In the three-tiered approach, first tier costs are all those that are readily identifiable with a given cost center. For the instruction portion of the budget, this includes salaries and fringe benefits, supplies and services, travel, contractual services, and non-capital equipment. In some institutions they also include the costs of computing support for instruction programs.

The second tier costs consist of all first tier costs plus indirect costs that are attributable to a given cost center. Indirect costs consist of the costs of services that support instruction and may include such costs as those for plant maintenance, computing facilities, accounting services, libraries, and general administration. Because several competing allocation schemes are available, administrators are more likely to be in agreement on the distribution of direct costs than on a methodology for distributing indirect costs.

Third tier costs include all second tier charges plus a depreciation charge on facilities and capital equipment (depreciation charges are discussed in a later section of this chapter). The procedure for cost accounting is to (1) designate specific cost centers, (2) choose appropriate cost categories, (3) assign all first tier costs to the selected cost centers and categories, (4) assign all second tier and third tier costs to these selected cost centers and categories, and (5) calculate unit costs.

The unit costs selected for instruction are usually semester credit hour (SCH) or full-time equivalent student (FTE). These costs vary with the level of instruction provided. The cost per SCH is lowest for lower division undergraduate courses, more for upper division undergraduate instruction, and highest for graduate, professional, and doctoral level instruction. These costs also vary by instructional program. Thus, in order to project future instructional costs, we need to know the details of future student enrollments. From the estimated distributions of students by categories, we can determine the needed number of full-time faculty by using historical student-faculty ratios for each level of SCH. Then we multiply the number of needed faculty by the appropriate average faculty salary to determine the overall faculty salary budget.

There are pitfalls in determining future instructional costs by this approach. One is that we must know the future salaries of the faculty who will teach these courses, and these may depend upon collective bargaining agreements not yet concluded or upon appropriations not yet made by the state. Another is that we must predict the costs of fringe benefits. The cost growth in health insurance plans (i.e., medical, pharmaceutical) has outstripped inflation for many years. Although it is difficult to project cost increases for medical coverage years into the future, we can predict that, as the average age of college faculty increases, the costs of medical, dental, and life insurance benefits are going to rise substantially based upon an institution's experience in the use of each benefit. Thus, an analyst must gather the annual renewal development statements for each of the university's health insurance plans in order to estimate future costs. Some fringe benefit costs are more easily projected. For example, Social Security payments are made at a preset rate up to a preset maximum salary. This means that, if we know future staff salaries, we

can calculate future Social Security costs, because the existing statute gives these rates and the maximum payments for years to come.

In analyzing instructional costs it is important for us to distinguish between average cost and marginal cost per student. If we divide the total instructional costs by the number of FTE students, the result is an average cost per FTE, which normally is substantially larger than the marginal cost per FTE, that is, the cost of providing instruction to an additional student.

Most of the second tier costs are relatively fixed and do not vary with the number of students. Even first tier costs may not vary with a small increase or decrease in students. A given lecture course may need one instructor whether there are 25, 30, or 35 students enrolled. For such a course an increase or decrease of five students may have no impact on the cost of instruction. Thus the marginal cost of five more students in that one course would be zero, rather than the average cost per FTE.

When student enrollments are increasing annually, as they do in times of economic stress, a state appropriation formula based on average costs per student will probably provide incremental funding that exceeds incremental costs. The institution may use these “extra” dollars anywhere in its budget. Conversely, should enrollments fall, thereby decreasing the state appropriation by formula, the decrease in funding is likely to exceed the decrease in incremental costs. This may require the institution to undertake additional cost-cutting interventions. Some states are trying to cushion public institutions against budgetary cutbacks due to small variations in enrollments, while others are not; much depends upon the state in which the analysis occurs.

Comparisons are often made between "peer" institutions by state agencies or others on a number of variables, including the cost per SCH or FTE student. An institution whose cost per SCH or FTE is low may be praised by state officials for efficiency and even rewarded by additional appropriations. Thus, knowing the factors that were used in determining the cost per SCH is important. Were the costs only first-tier costs or were they second-tier costs? Does each institution being compared treat the costs the same? We must determine if some institutions treated the second-tier costs, and even the first-tier costs, differently.

An even more fundamental question is involved in comparing educational statistics between institutions: which institutions are truly comparable? The method for determining comparison groups is sometimes influenced by the issue(s) to be considered. Among these issues are mission, faculty salaries and benefits, tuition rates charged, room and board charges, student-faculty ratios, administrator-faculty ratios, class sizes, degrees awarded by field and level, and cost per SCH. Some researchers have defined four types of comparison groups: competitor, peer, aspirational, and jurisdictional.

A competitor group consists of institutions competing with one another for students, faculty, and/or research. For example, suppose that an institution identifies a comparison group solely on the basis of competition for faculty. If these institutions are compared only with respect to faculty salaries and benefits, the comparison group may withstand scrutiny even if some of the comparison institutions are quite different on other grounds and the comparison group inappropriate for other purposes.

A peer group consists of institutions with similar missions and scope. We never find exact matches, however, and it is a matter of judgment as to what constitutes a sufficient match.

An aspirational group consists of institutions that are different from the home institution but are worthy of emulation by it. When a comparison group contains many institutions that are clearly superior to the home institution, it is probably an aspirational comparison. Problems arise when peer groups are confused with aspirational groups, particularly if the confusion is noted by individuals in the political arena outside of the institution since it raises serious credibility questions concerning any comparisons that are made.

A jurisdictional group consists of institutions belonging to the same political or legal jurisdiction, normally a state. The reason for this grouping is obvious: state officials want to compare the institutions (particularly in the public domain) that are being supported with public funds. Whether or not the comparisons are valid depends upon the issue(s) being compared.

Institutional classifications established to facilitate national reporting represent another basis for comparing colleges and universities. Among the classifications that are used are those of the National Center for Education Statistics, the National Education Association *Almanac* (reporting faculty compensation), the National Center for Higher Education Management Systems, and the Carnegie Commission on Higher Education.

The importance of selecting the proper comparison group for a given issue cannot be overemphasized because the institutions selected may well predetermine the outcome of the comparison. For example, in the collective bargaining arena the faculty representative may

demonstrate, based on the faculty-selected comparison group, that the faculty are underpaid, while the administration's negotiating team may show that, from the comparison group it has selected, the faculty are overpaid. In some cases, arbitrators or even the courts have had to select comparable institutions for faculty compensation issues.

A major issue in the comparison of instructional costs between institutions is the use of part-time faculty. They are generally paid less per course than full-time faculty and enjoy fewer fringe benefits. Consequently, two institutions with markedly different fractions of teaching conducted by part-timers are likely to have markedly different unit instruction costs. Chapter 8 examines the use of part-time faculty in more detail.

Research

Research includes all activities organized specifically to produce a research outcome. Comparing the amount of indirect costs assigned as revenue to the unrestricted fund with the amount of expenditures from that fund for research may be informative. Some expenditure of restricted research funds can substitute for unrestricted fund expenditures. For example, a grant may pay part or all of the academic year salary of a faculty or staff member.

Public Service

Public service includes all activities conducted primarily to provide non-instructional services for individuals and groups external to the institution. These activities include workshops

and seminars, free legal service from a law school, community recreation services, and broadcasting services.

Academic Support

Academic support includes all institutional operations that provide support services to the basic missions of teaching, research, and public service. In most institutions the library system is part of this component instead of being treated separately. Among expenditures in this area are those for academic administration, academic computer operations, audiovisual services, course and curriculum development, and personnel development.

Student Services

Student services include all institutional operations that enhance students' intellectual, cultural, emotional, and physical well-being outside the classroom. Among these are academic advising, career counseling, student admissions, student records, financial aid, student health services, and some student activities. Other student activities, such as intercollegiate athletics, are normally treated as auxiliary enterprises and are discussed under that section.

Institutional Support

Institutional support includes all institutional operations that provide support for day-to-day operations, excluding physical plant operations and maintenance. Encompassed are the fiscal departments of the institution (such as the comptroller's office and accounts payable), the purchasing department, the executive officers of the institution and their office staffs, public

relations, the development office, and institutional charges such as liability insurance. At many schools the administrative staffs have grown relative to the size of the faculty. One reason for this growth in nonteaching professionals is the growth in counseling, financial aid, and other student support programs. Examining the size of the administration at a given institution over a number of years can prove informative, although this is often difficult to accomplish because college administrative staffs may have their compensation reported, at least in part, under the instructional, research, or public service categories. This examination may show how staff work has migrated or changed over time as well as how much teaching the "non-instructional" staff are actually doing.

Plant Operation and Maintenance

Plant operation and maintenance include all institutional operations involving the physical plant, except for those expenses allocated to auxiliary enterprises or to a university-owned hospital. Among these are custodial service, repairs and maintenance, property insurance, rents paid, utilities, and debt service. This expenditure is most likely to involve many other funds (generally referred to as physical plant funds) in addition to costs listed under the current fund. There are usually interfund transfers for physical plant expenditures, including debt service.

Expenditures for utilities are sometimes difficult to predict exactly since the weather (a very cold winter or very hot summer) can substantially alter them from an average value for prior years. The opening of any new building always increases overall institutional utility costs (unless

an older, less energy efficient building is closed). In addition, the market price and availability of oil and other sources of energy can dramatically affect utility costs.

Scholarships and Fellowships

Scholarships and fellowships normally include only the institutional funds that are expended for scholarship aid and for trainee stipends at both the undergraduate and graduate levels. Under GASB 35, the reported income from tuition and fees is reduced for scholarship allowances rather than reporting these as scholarship expenditures. Federal or state scholarship funds that are distributed by an institution are usually placed in a restricted fund and disbursed directly from that fund to the students (or to the institution's current fund in the form of tuition income).

Auxiliary Enterprises

Auxiliary enterprises are entities that furnish services directly to faculty, staff, and students, and that receive fees for these services. Such services may include parking, dining facilities, dormitories, student stores, a university press, and intercollegiate athletics. Physical plant charges are normally assigned to each auxiliary enterprise. The goal is generally to have each auxiliary activity at least break even financially, but this does not always happen. Funds assigned to auxiliary enterprises sometime act as discretionary funds for the administration.

Perhaps the auxiliary enterprise that has attracted more faculty attention than any other is intercollegiate athletics. Football and basketball coaches are often paid more than an institution's

president. Millions are sometimes spent on sports stadiums that are used only a small fraction of the year, and star coaches and athletes often get far more of the publicity generated about an institution than do its best faculty. Among justifications offered for large athletic expenditures are that (1) athletics make money for the institution, (2) athletics generate a great deal of publicity about an institution which in turn attracts students, and (3) athletics attract donors to the institution. Let us examine each of these points in turn.

Research published by the National College Athletic Association found that only one percent of the reporting institutions listed the financial goal of their athletic program as earning money to support the rest of the institution (Raiborn, 1986). Thus few institutions receive net income from athletics. Also, when an institution does make money on a sports program, the tendency is to expend the profits on more sports. The rest of the university, on the other hand, underwrites losses.

The claim that the fame of a successful sports program attracts more students, from a wider geographic area, is probably true but difficult to quantify. A student may select an institution for many reasons, only one of which is its having a successful sports program. Even student surveys are not likely to provide conclusive proof for the claim or to provide any quantitative data to compare with the subsidy that the athletic program may require. The assertion that a successful sports program attracts more donors is also probably true, but these donors, interested in sports, will probably earmark their contributions solely for the sports programs.

In conclusion, it is important to note that many institutions charge students an "activity fee" or "athletic fee," which is then assigned as income mainly to intercollegiate athletics. In essence, this "income" reduces what would otherwise be a larger deficit for the athletic operations. Put another way, if there were no separate athletic fees even more athletic programs would need a subsidy from tuition or other institutional funds.

Hospitals

As indicated in Chapter 5, university hospitals are hard pressed to break even. There are often conflicts in assigning costs between a hospital and a related medical school and one or more physicians' practice plans. Note that an examination of the costs of a hospital discloses the existence of a cost, depreciation, which is able to be passed on to third-party payers as a part of the daily room charge. Consequently, a hospital may record many millions of dollars per year of depreciation on its physical plant and equipment but be reimbursed for all of this cost. This is a different cost from others in that dollars for depreciation, unlike dollars budgeted for salaries, are not necessarily spent by the institution in the budget year in which they are received. Rather, they can be set aside to replace equipment and buildings, or even be used for other purposes (although there may be constraints placed on the use of these funds by, for example, the federal or state government).

Finding These Components in the Budget

In examining the current fund budget of your institution, you may not find some of the components or categories listed in this Handbook. Normally there will be a summary budget

page with expenses listed by categories nearly identical to those in Table 8. The pages of budgetary detail following the summary page may be arranged, for example, by institutional officer. A provost or vice president for academic affairs might supervise units that contribute to teaching, research, public service, and academic support. A college or university's budget may simply state an overall budget and not break it down by the expense categories in Table 8. If you are serving on a budget committee, you may wish to ask for the individual budget components that contributed to the overall expenditure categories in Table 8. Requesting that each college's or even each department's budget be broken down into its individual cost components will allow you to identify the fraction of a college budget that is allocated to teaching or research, for example, and then to compare this to the fraction at other "comparable" colleges, either internal or external to the university. This comparison can provide objective data to assess the commitment to teaching or research of your institution.

Depreciation

Not-for-profit organizations must recognize the cost of using up the future economic benefits or service potentials of their long lived tangible assets (depreciation) and must disclose the following:

1. Depreciation expense for the period.
2. Balances of major classes of depreciable assets, by nature or function, at the balance sheet date.
3. Accumulated depreciation, either by major classes of depreciable assets or in total, at the balance sheet date.

4. A general description of the method or methods used in computing depreciation for major classes of depreciable assets.

Under FASB 117 and GASB 35, depreciation is treated as a current expense. What impact does this have on an institution operating under these standards? Consider, for example, the present dilemma facing many institutions of not having the funds to replace antiquated buildings and equipment. How did this situation come about? For years administrators did not set aside adequate funds for renovations and replacements. Legislatures did not approve funds for these purposes because they were not embedded in the budget. Put another way, if a legislator or trustee saw that a given institution was operating with a balanced budget, what was there to worry about? Few of them realized that the balanced budget was misleading because it did not take depreciation into account. In that sense, the budget system itself may have contributed to the outcome of antiquated physical plants with inadequate reserves to replace them.

The impact of depreciation may therefore be to demonstrate to all that institutions do not have balanced budgets unless they have set aside funds for depreciation. This in turn may either be a financial blessing or a disaster. If, for example, a legislature appropriates additional funds to an institution to cover the cost of depreciation, many institutions, for the first time, will have adequate funds to modernize their facilities. But if the state orders administrators to set aside part of their current appropriations for this purpose without augmenting these funds, institutions may be left with no way of balancing their budgets except by resorting to measures usually associated with a fiscal crisis.

Budget Controls

The institution's budget sets allocations for each budget unit or cost center. Adequate controls are needed to ensure that expenditures do not exceed allocations. Usually one or more institutional budget offices are given the responsibility to monitor the expenditures of each unit and to bring overspending of budgets to the attention of the appropriate institutional officials. In addition, it is the primary responsibility of each budget unit head to monitor that unit's budget.

"Position control" is sometimes a part of budget controls. In some institutions, departments are able to use the funds budgeted for unfilled positions for other purposes. In other institutions, any vacant position has its funds withdrawn immediately from the department. At state-supported institutions, the savings from vacant positions may revert to the state.

Institutions normally use budget reports as a way of implementing budgetary controls. These budget reports are normally made at least monthly and compare budgeted amounts to those actually spent by each budget unit during the preceding month and cumulatively from the beginning of the current budget year. Comparisons to the prior year are also sometimes included. Modern computerized budget systems allow budget heads to see the status of their budgets on the computer screen as of a given moment in time. They instantly reflect the cost of any purchase order. If these systems are tied into payroll, a budget unit head may no longer be able to hire someone without the prior approval of superiors because the financial system will not permit the printing of a payroll check for the individual. In short, these computerized systems provide stronger central control over all budgets.

Budget revisions often occur during a budget cycle. The changes are caused either by changes in income from the amounts budgeted or changes in expenditures. Small changes can usually be accommodated without revising the budget. Many institutions have a contingency expenditure line included in the budget, and unforeseen expenses can be paid from this line without requiring the modification of other budget lines. Similarly, if the shortfall in revenue is small, this line can be used to make up for the revenue shortfall by simply not spending part or all of the funds assigned to "contingency." Sometimes the unforeseen expenditures and/or revenue shortfall are too large to be paid for by this line, and in that case many parts of the institution's budget may have to be modified. Budget reductions made in the middle of an academic year may be particularly painful since much of the institution's costs may be set for the year. This matter is discussed further in the next chapter on constraints in the budget.

CHAPTER 8 CONSTRAINTS AND FLEXIBILITY IN THE BUDGET: FISCAL CRISES

Objectives

After completing this chapter, readers will be able to:

- Define sources of constraint and flexibility in higher education institutional finances.
- Predict the behavioral responses of management to short- and long-term institutional changes which require reallocation of resources.
- Determine Association planning requirements to meet institutional changes in the short- and long-term.
- Implement an Association budget committee capable of reviewing and predicting institutional revenue and enrollment levels.

Constraints and Flexibility in the Budget: Fiscal Crises

This chapter examines the constraints and flexibility that exist in typical college and university budgets. This tension between constraint and flexibility is important in several situations. Under normal operations, shifting the allocation of funds from one budget unit to another within an institution is often necessary. For example, enrollments may increase in engineering, requiring the addition of further funds for engineering faculty and laboratories in order to satisfy student demands. Or the establishment of a many-times-delayed new computer laboratory finally becomes unavoidable. In such cases the institution must seek a source of funds to meet these new needs. If external funding sources, such as the state legislature, could be depended upon to fund each of these increased needs with additional revenue, the entire issue of budgetary flexibility would be of little importance. Since this is not likely to be the case, an analysis of sources of funds for new initiatives becomes imperative.

For institutions with unionized faculty, collective bargaining negotiations involve the search for funds that may be used for faculty salaries and benefits. Constraints that prevent the shifting of funds for these uses clearly have a negative impact on the outcome of negotiations from the point of view of the faculty.

Midyear budget corrections, as indicated in the preceding chapter, may be needed because of unforeseen decreases in revenue (caused, for example, by an unexpected drop in enrollment) or to make unforeseen expenditures (caused, for example, by an unanticipated increase in utility rates or storm damage to buildings). Whatever the cause, administrators are

sometimes faced with the need to identify funds that can be moved into the needed category. Even more drastic needs for budgetary flexibility occur in fiscal crises.

Personnel Costs

Personnel costs for all employees at a college or university (including fringe benefits) typically constitute 60 to 80 percent of the institution's budget. When a fiscal crisis occurs, major personnel cuts may thus become unavoidable unless other funds can be shifted to meet crisis needs.

Collective Bargaining, Personnel Policies, State Regulations

Personnel costs are constrained by many factors, including collective bargaining agreements, internal personnel policies, market factors, and state regulations. Salaries and benefits are specified for covered employees by most collective bargaining agreements for the duration of the contract. Salary increases are usually specified by a percentage of the prior year's salary or by a dollar amount, although future salary increases are sometimes dependent on such factors as inflation, student enrollment, and/or state appropriations. Thus an institution that is unionized can precisely project salary costs into the future, provided that it can project the number and type of employees needed each year. Similarly, reasonable budget makers know that it is highly unlikely that labor representatives will negotiate away benefits that are currently enjoyed. Thus the present level of benefits and their future costs provides a constraint in future budget projections.

Most faculty collective bargaining agreements also specify workload and overload. These clauses prevent an administration from increasing the workload, and decreasing the number of faculty (and hence the overall cost of salaries and benefits), to meet a fiscal crisis. In fact, some agreements specify a maximum ratio of FTE students to full-time faculty. In those cases, the administration must hire additional faculty to meet increased enrollments.

Finally, most collective bargaining agreements contain termination clauses that specify the ‘due notice’ and/or severance pay required in order to terminate employees. The last employees to be terminated, and those that receive the longest ‘due notice’ or the largest severance settlements, are usually tenured faculty. Unfortunately, some institutions have attempted to limit the number or percentage of tenured faculty on their staffs in order to maintain a degree of personnel flexibility. Some have established tenure quotas by department or by college, so that for a department at its tenure quota limit, no new faculty member is granted tenure until a presently tenured faculty member leaves that department through retirement or resignation.

For tenured faculty, due notice requirements for retrenchment are often specified in internal personnel policies as well as in collective bargaining agreements. Similarly for non-tenured, full-time faculty, termination notice provisions are normally included either in a collective bargaining agreement or in the institution’s own personnel regulations. Since most full-time non-tenured faculty are appointed for one to three year periods, an alternative to

terminating such faculty during the course of their contracts is not to reappoint them at the completion of their contracts.

State regulations constitute yet another level of constraints in personnel matters in those states that have adopted “position control” of faculty and staff lines. This means that a vacant employee position results in the funding for the position reverting to the state rather than being available for use elsewhere in the institution. An administration may also be constrained from hiring additional regular full-time staff even when enrollments increase, and in such cases the institution may have no alternative but to hire part-time or temporary faculty or to increase class size to meet increased enrollments.

Some states have introduced a budgetary device called “salary savings,” based on the fact that an institution never has all its budgeted positions filled all the time. When an employee leaves his or her position, some time may elapse before it is filled. Historically, the savings have amounted to about two to four percent of the salary and benefits budget of an institution. In the past, most states have collected whatever salary monies were unspent at the end of each fiscal year. Under salary savings methodology, each institution is assigned a target for these savings at the beginning of the fiscal year. These targets are thus constraints on the expenditure of salary and benefit dollars.

But even though the salary savings budgetary device contains constraints, it also points to an area of flexibility and gives a clear indication that the best way to achieve any necessary reductions in personnel costs is by not filling vacancies. The termination cost of eliminating a

vacant position is zero. The cost of arbitration or litigation over the elimination of a vacant position is also zero. Moreover, no personnel need be terminated. Thus, from both fiscal and humanitarian perspectives, the use of unfilled positions to meet budgetary problems is to be preferred. However, as described later in this chapter, not filling vacant positions may be sufficient to meet a fiscal crisis only when the institution has a relatively long time period in which to decrease its personnel budget by natural attrition.

Part-time and Temporary Faculty

Administrators often put forward the following four arguments to justify the use of contingent, i.e., part-time and temporary, faculty in colleges and universities. The first argument is that contingent faculty members provide flexibility for the institution. Since most contingent faculty are appointed to teach a given course for a given term or two, they can simply not be reappointed if enrollments fall. Severance pay is usually nonexistent for them. The second argument is that part-time faculty members represent a source of expertise that may not be present among the full-time faculty and may not be needed frequently enough to justify hiring a full-time faculty member with such expertise. Third, part-time or temporary faculty may allow an institution to experiment with a new course or curriculum offering, at little financial risk to the institution. The fourth argument is that contingent faculty members are less expensive than full-time faculty. In other words, if six courses per year constitute the load of a full-time faculty member at an institution, these six courses could be taught less expensively by six part-time faculty members, each hired to teach one course, than by one full-time faculty member.

Furthermore, the fringe benefits given to part-time faculty are usually substantially less than those of full-time instructors.

Nevertheless, there are many arguments against the excessive use of part-time faculty. They often teach at more than one institution and therefore may not be able to have the kind of institutional commitment of full-time faculty. They may be less available for advising students. They may not have the time for course and curriculum development. However, despite these and other arguments against using an excessive number of part-time faculty, their presence is strong. According to the Digest of Education Statistics, 2011, in the fall of 2009 the percent of full-time faculty in public four-year institutions was 68 percent; in public two-year institutions, it was 32 percent[7] (U.S. Department of Education, 2011). As Benjamin (2002) points out, however, significant variation at both types of institutions exists in the percent of part-time faculty by discipline.

To counter this trend, the percentage of full-time faculty at an institution or the number of credit hours taught by full-time faculty should be tracked at each higher education institution in a state. This metric is recommended as a 'top 10' strategic indicator for improving performance in higher education systems (Taylor, 1993). In fact, the tacit assumption is that the vast majority of faculty at any higher education institution provides the foundation for the components of the third criterion (i.e., 'student learning and effective teaching') of the Higher Learning Commission's *Handbook of Accreditation* (Higher Learning Commission, 2003).

[7]At the same time, full-time nonprofessional staff in public four-year institutions was 86 percent; in public two-year institutions it was 66 percent (U.S. Department of Education, 2011).

Several studies have examined the extent to which a significant reliance on contingent faculty adversely impacts a variety of student learning and institutional quality measures (see, for example, Jacoby, 2006; Benjamin, 2003; Ehrenberg & Zhang, 2004; Harrington & Schibik, 2001; and Umbach, 2007). The overall picture that emerges is that greater use of part-time faculty by higher education institutions is associated with less effective interactions with students, lower curricular cohesion, lower instructional quality, lower student learning, and lowers rates of student persistence.

Rank Reduction

Another area of flexibility—and a variation on eliminating positions completely in order to meet budgetary goals—is replacing faculty who are leaving the institution with lower ranked faculty. For example, if a professor making $100,000 a year retires, the replacement could be an assistant professor making $45,000 a year. Similarly, an experienced administrative assistant who leaves a department could be replaced with an entry level assistant at a lower rate of pay. Note, however, that although it may be perfectly reasonable to make both of these decisions in some cases, applying this policy systematically can lead to a serious distortion of departmental faculty experience and expertise and of academic support services.

Non-personnel Costs

Many constraints are placed on the expenditure of non-personnel dollars. For example, if an institution has a three-year service contract with a security firm to provide 50 guards per year, it has to take those 50 guards per year even if administrators want to cut the security force to 40

guards so that reductions will not have to be made elsewhere. Long-term rental leases also have to be honored, even if the institution no longer needs the space (although an institution should clearly include a clause in any such agreement permitting it to sublet the property). In addition, payments must be made on outstanding institutional bonds or mortgages. Remember that issuing bonds in order to build facilities means that an institution must budget not only to maintain the facilities but also to repay the bonds.

Rate increases produce constraints and spur searches for flexibility. If the telephone company raises its local and long distance rates, for example, telephone charges could rise significantly, as could the cost of Internet access. Institutions need to explore whether having their own internal telephone system rather than using one provided by a telephone company would make cost savings available. The cost of copiers could increase dramatically, due to increased usage or to increased rates paid for rental machines. The only way to contain these costs may be to restrict the use of the copiers. Most importantly, an institution is also subject to the effect of increases in the rates charged it by public utilities. If the rate charged for electricity increases by ten percent in a given year, the institution may have no choice except to pay the higher bill.

There have been dramatic increases in the prices for books and periodicals over the past decade, constraining library purchases. Further steep increases have to be anticipated. The only response possible for some institutions will be to reduce purchases of these materials and seek less costly online access to them.

Inventories of academic and laboratory supplies may be increased or decreased, depending upon circumstances. An institution may wish to increase its supplies of stationery items if it knows that a large price increase for them is imminent. Conversely, it may wish to decrease certain categories of laboratory supplies in order to invest the funds tied up in inventory in revenue producing securities.

Purchasing, however, is often constrained by state agencies for public institutions. State regulations may mandate advertising bids for any purchase or service contract over a specified amount. This may present no difficulty in some cases, but in others it may prevent cost savings that could be achieved by simultaneously negotiating a number of service contracts with a given vendor.

Travel represents one cost that is normally easy for an institution to control. As travel costs escalate dramatically due to the price of airline fuel skyrocketing, less travel is supported by an institution; and certainly in a fiscal crisis, travel expenditures will be drastically reduced.

Gifts/Endowments

Gifts may be restricted or unrestricted. Unrestricted gifts provide maximum fiscal flexibility and can be expended for any institutional purpose. Restricted gifts can be expended for only specified purposes in a given fiscal year or can enhance the institution's endowment, the income of which can only be expended for the purposes of the endowment.

However, in some cases even restricted funds or endowment income can substitute for unrestricted current funds. For example, if an endowment funds a faculty chair, the salary and benefits for that faculty member are paid out of earnings from the endowment, thereby relieving the current fund budget of that expense. Whether or not these funds can be used elsewhere in the public sector normally depends on the level of flexibility permitted the institution by the state.

Grants and Contracts

External grants and contracts have two revenue components. One pays the direct costs associated with the projects for which the grants or contracts were received. As in the case of gifts, restricted grant funds can in some cases replace unrestricted current funds. The unrestricted revenue component comes from the indirect costs that are paid by outside agencies on many grants and contracts and that may be used by an institution for any purpose. Once again, the only constraints on the use of these funds are state regulations, which might require that they be turned over to the state treasury.

Research Institutes and Foundations

In order to avoid many of the constraints on the use of grants, contracts, and gifts, some institutions that receive substantial amounts of such types of external funding have established legally separate research institutes or foundations. The research institute receives the grant or gift and performs the research. It can always retain the indirect cost part of the grant, and its finances are normally not under the supervision of the state. Purchases of research equipment may be made from the indirect costs received by the research institute rather than from university funds.

Salaries and benefits for university personnel working on the research projects are partially or fully paid by the research institute. These private sector entities do not have the same reporting and disclosure requirement as public entities. Therefore, accessing budgets and financial documents can be difficult if not impossible. Conversion of such entities from part of a public college or university to a private spin-off can mean that employees lose their public sector employer and coverage under the collective bargaining agreement.

Accumulated Reserves

If an institution has reserves that can be expended for any purpose, budgeting becomes easier. Many institutions budget a contingency line and use it to meet unforeseen financial difficulties or to take advantage of unexpected opportunities. The amount budgeted for contingency is usually small, on the order of one percent or so of an institution's budget. By the end of the year these funds have either been transferred to operating budgets or into institutional reserves.

The term quasi-endowment is often used to describe accumulated past surpluses of an institution, that is, unrestricted revenues that exceeded unrestricted expenditures. Unlike a true endowment, quasi-endowment funds may be expended for any purpose by the governing board. An institution with a substantial quasi-endowment has little difficulty in meeting an unexpected fiscal problem since it can always transfer funds from its quasi-endowment into its operating budget to meet the problem. However, in the public sector many states take back unexpended funds from an institution, making it impossible for the institution to establish a

quasi-endowment. As can be expected, such institutions often spend budgeted funds heavily near the end of a fiscal year. There is little incentive for them to return funds to the state.

Block Appropriations

It is clearly in the interest of institutions to receive their entire state appropriation as a block award, which can be expended for any purpose. Just as clearly, this is not likely to happen for all institutions in the foreseeable future. However, continuing efforts should be made to obtain at least some portion of the state appropriation as a block grant. In addition, efforts should be made to allow institutions to retain some portion of unspent current revenues. For public institutions, these two budgetary changes might go a long way in reducing fiscal crises, to be discussed next.

Fiscal Crises

Probably nothing short of loss of accreditation is as traumatic for the educational community as a serious financial crisis. Such crises tend to result in adversarial stances between faculty and/or staff and administrators (with students often caught between the two sides) and even among faculty or staff themselves. Employees may find themselves threatened in three ways. First, their salary increases may not keep pace with inflation. Second, their workloads may be increased. Finally, they may find themselves or their colleagues replaced by part-time faculty or temporary staff. Consequently, recognizing the difference between a normal reallocation of resources and a true fiscal crisis is imperative. It is also helpful to be able to measure the severity

of a fiscal crisis and to suggest alternative courses of action for dealing with it than the reactions illustrated above.

Reallocation of Resources

The first factor to consider if an institution declares a fiscal crisis is whether the situation is a real crisis or merely the consequences of short-term scarcity. Frequently budgetary crises are confused with ongoing needs to reallocate scant resources. For example, student enrollment patterns may change so that one department or college has too few students for the size of its faculty while another department or college has too many students for its faculty to service. The need to add new faculty to the over enrolled department or college is obvious. But where will the funds come from to pay for these new faculty?

Distinguishing a normal reallocation problem from a fiscal crisis is relatively easy. Note first, however, that normal reallocation problems that are ignored can eventually lead to a true fiscal crisis. Thus, recognizing and solving reallocation problems before they become severe is important. In a normal reallocation case, the overall institutional income is not predicted to decrease in subsequent years. Instead, overall institutional resources will probably be projected to increase at a rate about equal to that of inflation. Similarly, overall enrollments will be level or perhaps even projected to increase slightly. The institution may assert that inflation (including salary and benefit increases) will use up all of its projected increase in income and, thus, it will not be in a position to support any overall increase in staff. It may assert that, for additional

faculty to be hired in one area, the number of faculty need to be reduced in another area. Let us consider these assertions further.

As stated earlier, personnel account for 60 to 80 percent of the expenditures of a higher education institution, but there is substantial flexibility in personnel costs if there is sufficient time in which to implement changes. Remember that normal reallocations rarely require sudden massive shifts in resources. Since most such reallocations will be driven by changing enrollment patterns, and these patterns change gradually with time, institutions will have several years to cope with the problem, providing that action is initiated early enough. In order for this to occur, however, the institution needs to have in place a regular schedule of program review. But in order for a review to be effective, an institution must have adopted an orderly planning process involving several components.

First, the institution needs to have a detailed mission statement against which to judge its programs. Second, an institution must have detailed personnel procedures that cover such matters as termination of service, length of appointments, and early retirement plans. In institutions covered by collective bargaining, the contract probably includes these items. Third, the institution needs to have a set of planning principles, which should include the collection of appropriate data on which to make revenue and enrollment projections. Finally, the institution needs to have a list of principles and procedures for reviewing programs.

These program reviews could lead to a decision to reduce or even eliminate a program. However, there are many personnel actions that can greatly mitigate the adverse effect of these

decisions on faculty and staff. The magnitude of the impact of these actions depends upon the time period over which the staffing changes must be accomplished and on provisions in the relevant collective bargaining agreements. Possible actions to consider include the following:

- Not replacing any faculty or staff members who leave the departments that are experiencing serious declines in enrollment. This seems obvious, but its application could present some problems for departments that an administration wishes to reduce in size but not eliminate completely. The best faculty members in a department tend to be the most mobile and hence the most likely to obtain a position at another institution. If, for example, all of the senior faculty in the department were to leave, continuing an effective program without hiring any replacements might be difficult. Also, a faculty member with a sub-specialty that is crucial to the program may need to be replaced. Likewise, leaving key administrative positions empty could compromise important departmental or program functioning, e.g., the timely submission of grant applications and funding reports.

- Limiting contracts for part-time or temporary contract faculty. These contracts are generally where the institution has the most flexibility. However, the dollar reduction per faculty line reduction will be less for part-time faculty and staff as their salary and benefits are less than tenured or permanent faculty and staff.

- Transferring personnel to other appropriate departments or programs, such as tenured faculty to suitable teaching positions in other programs. Institutions should be willing to retrain faculty for duties in alternative programs, including subsidizing formal graduate study by them. Some institutions have interdisciplinary programs that are staffed by faculty from many departments. These programs may be able to utilize faculty or research and administrative or other staff from overstaffed departments with little retraining.

- Establishing early retirement incentive plans. Under such programs, faculty and staff who satisfy specified age and service requirements are able to retire early. The forms of these plans vary considerably. Some institutions offer to contribute additional funds to private or state retirement plans so that the retiree will not lose out on contributions made. A plan reviewed by the lead author involved paying one-third of a faculty member's academic year salary and most fringe benefits for up to seven years or until the retiree reached age 67, whichever came first. The advantage of such a plan, which paid one third of a salary for a given period of time, is that the institution experiences an immediate reduction in its payroll on the day the faculty member retires- namely two-thirds of the member's salary that will not be spent. However, accrual accounting rules require the

institution to "book" the early retirement incentive plan costs in the fiscal year in which the faculty member retires since it represents a current and future obligation of the institution. Thus, the accounts of the institution will reflect the entire retirement cost in budget year one, even though the payments will not be completed for years. Later year budgets will then reflect no cost (and perhaps even reflect credits) as the payments are made to the retirees.

These early retirement incentive plans will help solve the reallocation problem only if the individuals using such plans are from departments whose enrollments are decreasing. Thus, many early retirement incentive plans are restricted to faculty from departments with falling enrollments. The faculty members taking early retirement are not replaced, resulting in a net financial saving that can be used elsewhere in the institution. The effectiveness of early retirement incentive plans to reduce the faculty of given departments will depend on at least two factors: the terms of the retirement plan and the average age of the faculty. Clearly, a more generous plan would interest more faculty than a less generous one. Also, early retirement plans will intrinsically be more appealing to faculty members in their late fifties or early sixties than to younger faculty members. Generally, when a new early retirement plan is introduced, the retirement rate increases substantially. It then decreases to a rate somewhat higher than that before the plan was introduced.

- "Buying out" a faculty member's contract or tenure. Here, unlike the early retirement plans, there are no age requirements for eligibility. Buyouts are usually offered to all members of a given department or college. The amount of the buyout varies, with one or two years of salary common for a buyout of a tenured faculty member. The faculty accepting these buyouts are often the most mobile faculty, who can quickly find a position elsewhere. Those who are less mobile and too young to retire are less likely to take a buyout. A modification of this is a partial buyout in which a faculty member is guaranteed a part-time appointment for any number of years up to a maximum. The benefits package might be continued in part or in whole, and each year as a part-timer might count as a full-time year for purposes of retirement pay.

The longer the period of time an institution has to achieve a specified level of reduction in faculty or staff in a department, the more likely that these five strategies will bring about the desired level of reduction while minimizing or preventing involuntary terminations. However,

the time period available to achieve given personnel reductions depends in part upon how early the enrollment problem was identified.

In a given department or program, we might expect to have at least three years to accomplish a significant reduction. Students already in the program will need two or three years to complete their courses. If the department is expected to continue at a reduced size, the course offerings will probably be reduced and the curriculum for a major modified.

Moreover—and this is critically important to recognize—a department should not assume that a decrease in enrollment in the future is inevitable. A department's faculty may be able to stem the decrease by offering new services or elective courses, by offering mini-courses on a weekend, by expanding evening offerings, or by asking that admissions policies be changed to increase admissions in areas in which enrollments have decreased. Many predictions of disastrous enrollment declines have turned out to be incorrect. Academia was warned that major enrollment decreases were likely to happen in the early 1980s because of predicted changes in demographic factors. The demographics were, of course, correct, but the conclusions drawn from the statistics were wrong. The percentage of high school graduates who immediately went on to college increased as did the percentage of women over 25 who enrolled in colleges. These two factors more than offset the demographic downturn in 18- to 24-year olds, and overall college enrollments in the nation increased. Similarly, aggressive marketing of a department, coupled perhaps with some changes in an institution's required courses, may eliminate or drastically reduce enrollment problems.

Real Financial Crises

We next consider the types of fiscal problems that are closer to real crises than the "normal" reallocation problems discussed above. Often, administrations have not used the term "financial exigency" to describe a fiscal crisis but used instead such terms as "state of urgency" or "financial stringency." Whatever the term used, the accompanying comments by administrators should clearly indicate that they view the situation as either a potential or real fiscal crisis.

How can one estimate the severity of a fiscal crisis? Two pieces of information are crucial in making such an assessment. The first is knowledge of the precise cause of the crisis so that one can determine if it is a one-time or recurring problem that will last into the foreseeable future. For example, a continuing decline in enrollment for an institution as a whole, and the corresponding decrease in tuition revenue and/or state appropriation (which may be determined by an enrollment-driven formula), might be ongoing or might improve dramatically in the near future, depending upon demographic projections for the geographic regions from which the institution draws most of its students.

Another possible cause for a fiscal crisis may be a substantial decrease in the state's appropriation for an institution. State support for higher education has been decreasing as a percentage of state expenditures for many years. In one state reviewed by the lead author, elementary and secondary education accounted for 35 percent of state general fund spending, Medicaid 16.5 percent and higher education 11.5 percent in FY 2011. In the 1980s, higher

education expenditures had been a larger percentage of the budget than Medicaid in that state. In any case, an Association budget committee should identify the state expenditure levels in the state in which their institution resides. Preferably, the committee will identify the expenditure levels of these programs for the past 15 fiscal years and participate in state committees or workshops to determine probable expenditure levels in the future. If the decreased appropriation is due to a decrease in state revenues because of a recession, a relevant issue is the length of time that the recession is expected to last.

In addition, Association leaders must identify whether or not its state legislature is likely to raise taxes or otherwise increase revenues (adding new or increased user fees or closing tax loopholes, e.g.) the following year to make up for the shortfall. If, on the other hand, the cause of the shortfall is a reduction in the taxes enacted or in revenues collected due to an economic downturn, it may be that the entire state government will have to operate at reduced funding levels for a number of years. In that case, the institution's fiscal problems are going to continue for years to come unless other funding sources can make up for the loss of state funds. Another factor to consider in projecting state revenues for the institution is whether or not the state's priorities for higher education funding are likely to be significantly affected by future legislative and/or gubernatorial elections. For institutions that receive local tax revenues similar issues arise. Will a county be willing to raise property taxes to avoid drastic cuts in support to area community or technical colleges? Can the voting public be persuaded to support such tax increases?

The second crucial piece of information is an accurate estimate of the severity of the fiscal crisis. Here there are two parameters to consider: (1) What is the dollar amount of the crisis? That is, what dollar amount annually must be achieved through increased revenues and decreased costs? Note that a fiscal crisis can be resolved by finding new revenue sources or expanding existing ones. The problem does not have to be solved through budget cuts alone; (2) What is the length of time available to resolve the difficulty? The timeframe is generally shorter than in the typical resource reallocation described earlier in this chapter. The problem may have to be solved in a given budget year, which has already started. The shorter the period of time available to achieve a given level of budget cuts and/or increased revenues, the harder it will be to achieve the budgetary goals without drastic actions.

Association leaders faced with a fiscal crisis should request access to the institution's financial records if they do not already have such access. In public institutions, state regulations usually require that these records be made available to the public. An issue that an Association budget committee must address in examining the financial records is whether or not its members have sufficient budgetary experience to adequately analyze the situation. A fiscal crisis is often the worst situation in which to learn about budgets because of the speed with which decisions have to be made. Ideally, each institution should have in place a faculty/staff budget committee whose members have gained some degree of budgetary expertise before the fiscal crisis occurs.

The financial records should indicate the total unrestricted fund balances in all of the institution's funds as well as the unrestricted funds in any related foundation(s). Remember, as

described in Chapter 2, the budget of an institution is reflected in more than simply its current fund (or general fund or similarly named fund). Instead, the budget is reflected in all of the institution's funds. If the total of all the unrestricted fund balances (other than net investment in plant) at the end of the year is $5,000,000, then the institution might be able to use this amount to meet the crisis if it wishes to do so. Be careful not to assume that all unrestricted fund balances are available to meet the crisis. A balance in the unrestricted retirement of indebtedness fund at the end of the previous year might be needed for debt retirement in the current crisis year. For private institutions under FASB regulations, investment in plant is currently treated as unrestricted funds. However for public institutions operating under GASB Statement No. 35 regulations, investment in capital assets, net of related debt, is separate from unrestricted funds, as explained in Chapter 2.

Administrators sometimes state that they are "restricted" from using some unrestricted funds. However, these "restrictions" may only be resolutions of a governing board of the institution. Often governing boards designate some of these unrestricted funds for specified purposes. In that case, it is true that the officers of the institution cannot spend the funds for other purposes, but the governing board can re-designate these funds at its next meeting to meet the fiscal crisis if it chooses to do so. By contrast, funds that are legally restricted (according to accounting standards) cannot be used for purposes other than those stated for them by external agencies or individuals. Truly restricted funds cannot be used for other purposes by either the institution's administrators or its governing board. GASB Statement No. 54 changed the parameters of this discussion for some colleges and universities beginning in FY 2011.

The total of these unrestricted fund balances (less the net investment in plant, if applicable) can provide a measure of the severity of the crisis. If these unrestricted funds exceed the size of the fiscal crisis, part or most of the problem can be met by using these funds. However, governing boards will generally be reluctant to use all of these unrestricted funds because they represent a major component of the flexible resources available to an institution. These funds may have been accumulated over many years.

In considering the use of an institution's reserves to cover a fiscal crisis, a three to five-year projection of revenues and expenses should be prepared. If fiscal stability cannot be achieved in that timeframe without taking actions in addition to the use of reserves, then additional actions will probably have to be taken. If the crisis involves a decrease in income that is likely to continue for a number of years, it may indeed be imprudent to use up an institution's reserves in meeting the crisis for only the first year. As already noted, knowing the detailed cause of the fiscal crisis and whether or not it will continue for a number of years is important. If it is only a short-term question of scarcity, a governing board may be more likely to approve the use of institutional reserves to meet it. Needless to say, if there is a contingency line in the institution's budget, it should be used to meet the crisis. However, if the budgeted contingency funds were sufficient to solve the problem, it is unlikely that a fiscal crisis would ever have been announced.

If the degree of the crisis exceeds the unrestricted fund balances of the institution, the crisis is probably going to be severe, unless it is a nonrecurring crisis, such as a large liability

judgment against the institution not covered by insurance. A solution to this kind of crisis might be to borrow some of the needed money, which would then be repaid over a number of years. In that case, the institution must find the funds to make the annual payment to the banks. However, the bank loan may reduce the amount of other expenditures that would have to be cut by a factor of four or five if the payments (including interest charges) are spread over four or five years.

Suggestions for Increasing Revenues

Naturally, solving a fiscal crisis by increasing revenues is less painful than by reducing expenses. What follows are some useful revenue enhancement suggestions to consider, although not all are appropriate for all institutions or fiscal crises and some may not be popular. Keep in mind that one is seeking to ensure the long-term survival of the institution.

- Increase enrollments. Offer additional courses and workshops to attract students, conduct mini-courses over weekends, or offer courses on the premises of area businesses. Compare the enrollment trends at nearby institutions. If enrollment decreases have occurred at your institution, were comparable decreases experienced at other area institutions? If the answer is “no,” examine the recruitment program of your institution. Unless someone has a convincing explanation as to why only your institution is suffering an enrollment decline, this examination may reveal ways of substantially improving recruitment. Here it is imperative to work with the administration of the institution to investigate ways in which faculty can provide programmatic ideas for course and program expansion.

- Improve student retention. One way to offset fewer students arriving on your campus is to reduce the number of students who leave without completing their program. For example, it is not unusual for public urban universities to have a 40 to 50 percent attrition rate at the baccalaureate degree level. Thus, 40 to 50 percent of the entering freshmen do not receive a bachelor’s degree from the institution, depriving the institution of students in their sophomore, junior, and senior years. Obviously faculty and staff could play a decisive role in improving retention rates by working with the administration to determine the cause of attrition, involving themselves in student advising, registration, and other support; offering tutorial sessions to students; and decreasing the

depersonalization of higher education.

- Raise tuition, fees and room and board charges. Consider adopting different tuition rates where high cost or high demand programs charge higher tuition. Also consider imposing higher tuition for juniors and seniors, who are very unlikely to leave the institution because of a somewhat higher tuition rate (justified by higher instructional costs). Public institutions could also consider increasing the number of nonresident students (who are usually charged higher tuition rates).

- Increase research geared to the needs of business, industry, and government—thereby increasing both direct grant income and indirect cost income. This strategy allows the institution to charge academic year salaries to grants and contracts, thereby reducing salary and benefit charges to the unrestricted current fund.

- Change the investment portfolio in order to sacrifice growth to some extent to maximize current income. An institution's reliance on derivative instruments, long-term investments and hard to sell investments diminishes its ability to do so.

- Use a "total funds approach" to budgeting, thereby reducing current fund expenditures by replacing them with other funds available to budget units. For example, reduce funds being set aside in a physical plant fund for future building construction and modernizations. In the midst of a fiscal crisis plans for physical plant expansions have to be placed on hold. Also funds set aside by the governing board as "quasi-endowment" funds may need to be transferred by the board to the current fund.

- Increase unrestricted gifts by emphasizing them in fund raising. Pursue fund raising strategies more aggressively.

- Form private practice plans similar to a physicians' practice plan in which medical fees are paid directly to the institution. In this scenario, the physicians share the revenues generated with the institution. The plans could generate more income for both faculty and the administration. Possible areas in which to consider such plans are business, architecture, engineering, and some of the basic sciences.

- Try to increase the state appropriation. This is an obvious action for any public institution, but it may also yield positive results for a private institution in financial distress. For example, work with your Association and community allies to support tax policy reforms that enhance state or local revenues, e.g., closing tax loopholes.

- Try to increase local appropriations. Seek allies to help lobby county and local officials who can increase aid to your institution. Also, support tax policy reforms such as reassessing property values which may have been unchanged for decades.

- Investigate the potential to commercialize and share the revenue of start-up businesses based upon faculty intellectual property that could result in marketable products and services.

All of these suggestions for increasing revenues should be examined by the administration and the Association even in the absence of a financial crisis. Additional revenues will always be helpful, and prudent planning can often mean the difference between short- and long-term revenue downturns. To read more about the effects of the current economic conditions on higher education, please review Zumeta, 2010 and 2012; and Rhoades, Smith, & Dougherty, 2010.

CHAPTER 9 PRIVATIZATION IN HIGHER EDUCATION

Objectives

After completing this chapter, readers will be able to:

- Identify arguments to use against administrative support for privatization efforts.
- Articulate strategies to employ against privatization efforts.
- Construct cost analyses of in-house and external services.
- Understand the information to obtain in order to successfully defend the institution against private contractors.

Privatization in Higher Education

An issue growing rapidly in importance is the privatization of an increasing array of operations in institutions of higher education. This is one component of a trend towards privatizing higher education generally. The fundamental cause of this trend has been the steady reduction in state support for higher education. Public colleges and universities drew nearly half of their operating support from state taxpayers in the 1980s. As indicated in Chapter 6, this support is now below 30 percent. For some of the most prominent public universities it is less than ten percent. This has forced institutions to seek funds elsewhere to make up for the shortfalls in state and local funding and to streamline costs and adopt new technology to become more "efficient." One result has been to dramatically change the hiring practices for faculty. According to a September 2007 NEA Higher Education Research Center *Update*, all types of higher education institutions increased their share of part-time faculty since 1987, with 22 percent in public doctoral universities to 67 percent in public two-year colleges. This trend continues. Contingent faculty members are less likely to be included in institutional decision-making. All of this has eroded collegiality as more institutions adopt corporate models typical of the private sector.

This chapter deals with one aspect of the overall issue of privatization, namely the outsourcing of certain functions in higher education institutions. According to the National Center for the Study of Privatization in Higher Education, in 2002 the following percentages of colleges and universities outsourced these particular functions: 76 percent for vending, 63 percent for food services, 52 percent for laundry services, 41 percent for bookstore operations,

39 percent for concessions, 39 percent for travel services, 23 percent for printing services, 14 percent for entertainment, 14 percent for daycare, and 12 percent for health services. Other outsourced services were done by less than 10 percent of colleges and universities. A later survey reported that 67 percent of colleges and universities had further increased privatization during the past five years. Colleges reported that the primary reasons for turning to outside contractors were to save dollars, followed by the quest to improve institutional operations.

Outsourcing is also being used in relation to the curriculum itself. Colleges and universities are offering more courses online while some for-profit and public institutions have expanded distance education by offering complete degrees online. Student support services, such as enrollment, information technology, and career services, are also being outsourced.

Overview of Privatization

There are usually early warning signs before formal steps to privatize an operation are commenced. These signs include rumors that if costs of a given operation are not reduced, the administration will consider subcontracting. Also, a budget crisis may have been announced. This is sometimes the justification given for considering subcontracting. Other questions to answer include finding out if there have been major changes in the higher level administrators (i.e. a new Vice President for Finance), and if outside consultants have been retained to review various institutional operations to make them “more efficient.”

The first formal step may be the issuance of a Request for Proposal (RFP). The RFP is usually a large document containing the complete bid specifications for the product or service

being purchased. It details the service needs of the institution, any unique circumstances it needs to have accommodated and the types of flexibility the institution will want to retain. It should contain enough specific information to allow contractors to make realistic proposals without being so specific as to effectively eliminate all but one predetermined bidder.

There may be a pre-bid conference at which Association representatives can ask questions of both the administration and potential bidders. Certainly Association representatives should attend the conference and ask appropriate questions. This will be followed by a due date for all bids. Finally, if the institution goes forward with privatization, there will be an award date set at which the administration announces which bidder is awarded the contract.

Strategies for Opposing Privatization

There are at least four approaches that can be used by local associations to prevent the contracting out of bargaining unit members' work.

1. The legal arena: challenges to the legality of privatizing using binding arbitration (for violation of contract provisions and good faith bargaining) and also using the courts.
2. Bargaining strategies: conducting negotiations in order to prevent privatization.
3. Local public relations and community action to bring local pressure on the administration and the governing board against contracting out of jobs.
4. Budgetary analysis of the RFP and the bids submitted to demonstrate that privatization will not achieve the goals proclaimed by the administration of yielding both better service and lower cost.

This Handbook will concentrate on discussing the fourth point. While the analysis of the fourth point is important, it is imperative that the other three points also be aggressively pursued.

For more information about the other points, two excellent sources of information are *Beat Privatization: A Step by Step Crisis Organizing Manual (National Education Association, 2011) and* the *Privatization/Subcontracting Manual* published in 1997 by the Pennsylvania State Education Association. Many of the suggestions in this chapter are modifications of strategies given in these two publications (both of which were written for K-12 privatization).

You will need to gather information in order to meet the challenge of privatization. Among the needed information are budgetary documents about the institution so that the true financial status of the institution can be determined. The most accurate such documents are the annual audited financial reports about the institution. Chapter 3 describes the kind of information to be found in these audited financial reports. In addition, the RFP needs to be carefully analyzed. Separate budgetary data about the operation(s) considered for privatization will also need to be requested from the administration so that the bargaining representative can calculate the present costs associated with providing the service in house. The Association representative should also seek information about the bidders and their past performance at other institutions.

The following is a list of issues, many of which are included in the NEA 2011 privatization manual (modified for application to higher education institutions). These issues should be addressed with the administration as early in the process as possible. The answers to these questions may dissuade the administration from pursuing privatization.

1. What expertise does the private sector offer that is not now found in the institution?
2. What impact will privatization have on the academic experience and outcomes of students?

3. How much specific day-to-day control of the privatized operation will the institution relinquish to the private sector?

4. What specific problem(s) will be solved by the private sector? Further, what specific challenges will be created by privatization?

5. Has the administration tried to solve these specific problems internally?

6. What results came from these attempted solutions?

7. What other institutions of higher education have used this contractor and now no longer do?

8. What are the reasons for this?

9. What institutional goals have already been set that the private sector will help achieve?

10. What precisely do you want the private sector to do?

11. How will you know that you have achieved your goals?

12. What guarantee will the private sector give that their lower costs will result in high or higher levels of service? How will these costs be tracked or measured?

13. Will the administration visit other higher educational institutions where the private contractors are doing business and ask tough questions?

14. What well-defined private sector contractual agreements have been developed and are on hand in the institution that will guarantee the service you are looking for?

15. What institutional plans exist to monitor private sector services? What additional staff will be required in order to do so in a prudent manner?

16. What institutional plans exist to evaluate private sector services? Who will do these evaluations?

17. Will the private sector contract have provisions to ensure accountability or penalties for failure to perform?

18. What is the private sector's employee turnover rate in similar institutions?

19. If service improvement is the goal, what has the administration done to date to implement programs that manage, train and equip current institutional employees to function more effectively and efficiently?

20. Most important: What is the cost analysis done by the administration that demonstrates that the privatization will be done less expensively that keeping the function in-house?

Cost Analysis Associated with Privatization

Administrators often claim that privatizing this or that operation of a college or university will improve performance and save money. This is contrary to everyday experience. In many aspects of life one expects that if you pay more for a given product or service you will get a better product or service or at least more of the product or service than if you pay less. In addition, the private company expects to make a profit for providing the service. Common sense should dictate that it is impossible to skim off profit dollars for providing a service and still provide better (and/or) more service at a lower cost than was provided in-house. Yet this is exactly what administrators often claim. Let us examine how they reach these conclusions and where they go wrong in their reasoning. Keep in mind, however, that subcontracting rarely is really about money alone; it is sometimes about control over the workforce.

Cost Analysis of the In-house Operation

The administration will often begin its privatization campaign by comparing its estimate of the fully allocated in-house cost of providing the operation to be privatized with the contractor's bid to "save money." The first thing to do is to try to reach agreement with the

administration on the various cost components of the calculation. For the calculation of the in-house cost of the operation, the cost should be separated as follows:

> *Fully Allocated In-house Cost = "Avoidable" Direct Costs + "Avoidable" Indirect Costs + "Retained Costs"*

In this equation, the full cost of keeping the work in-house, also called the fully loaded or fully allocated cost, will be the sum of two kinds of "avoidable" costs (direct and indirect) plus any remaining costs, i.e., costs which the institution will still incur if the operation is contracted out. The administration often subtracts the cost of the bid from the fully allocated costs and claims that the difference is a "savings." This is incorrect. Fully allocated costs include items such as administrative overhead, which the institution will assume even if the work is subcontracted out. Put another way, the calculation of savings due to contracting out should reflect *only* those costs which would be eliminated, or "avoided" if the operation is contracted out. The costs which "go away" are called "avoidable costs." Any costs which will still be paid by the administration after the work is contracted out should not be included in the estimate. In Chapter 6, second tier costs were described and assigned to each cost center. These included a portion of the cost of general administration. They will be included in the "fully allocated" cost of each operation, yet they will not be reduced by subcontracting the operation. The institution will still have a President (and the staff of a President's office), a Vice President for Finance, etc., with or without privatizing a given operation. No money from these "second tier" costs will be saved by privatization. Yet

often the cost of an external bid is compared to the sum of the direct costs plus all indirect costs, including those that will remain even after the operation is privatized!

Other examples of "Retained Costs" are maintenance, custodial and security services that continue to be provided by the institution for a cafeteria if the food service is contracted out. The direct costs of an operation include, but are not limited to, the following: wages of employees doing the work; benefits of employees doing the work, materials and supplies used in the operation; and equipment used in the operation. The indirect costs of an operation include, but are not limited to, the following: utilities, rent, and facility management; administrative overhead, and debt service. The depreciation of equipment used will probably be included under direct costs; check to see if this has been overstated in order to increase the apparent cost of doing the operation in-house. For example, if a computer has been depreciated over a five-year useful life, no depreciation should be charged for a computer that is six years old.

Cost Analysis of the Request for Proposal

The request for proposal (RFP) should be analyzed in terms of the services to be rendered by the contractor and a host of other issues. The RFP may contain provisions which differ from current conditions in the operation but which, if implemented, could result in improved efficiency or cost-saving without subcontracting. If this is the case, evaluate whether these changes could be made without a detrimental effect on bargaining unit members. If so, the union can ask the administration to implement them without privatizing. The RFP, if well written, should contain the following items:

***Background Information*:** Bidders should be required to submit financial information about their company as well as provide a list of other (similar) institutions at which they currently provide the same service.

***Bid Bond*:** The RFP should require all bidders to include a bid bond equal to a specified percentage of the total bid. Posting the bid bond protects the institution against contractors withdrawing or changing their bids.

***Pre-Bid Meeting*:** This is where the Association can discover the identity of the prospective bidders.

***Termination Agreement*:** Can the administration terminate the contract at any time? How long will it take to get rid of a contractor whose performance is unsatisfactory? What costs will be incurred in terminating the outside contractor?

***Employees*:** Is the contractor required to supply a specified number of employees, guaranteeing that a minimum level of service will be provided? If contractors are able to submit bids based on a smaller workforce than that currently performing the work in-house, the contractor's employees may not be able to adequately fulfill the job duties. If a contractor's bid is based on a smaller workforce, the contractor will have an automatic price advantage.

Other items of interest in the RFP concern the proposed personnel under contract. Do displaced college employees have first rights to the contractor's jobs? Does the college dictate the compensation levels of the contractor's employees? Any dollar savings the college may

realize by outsourcing may be offset by a loss of quality from less qualified employees. What control does the institution have over the identity of the contractor's employees? Can the administration demand that employees be retrained, suspended or fired if their performance is unsatisfactory?

***Supplies and Equipment*:** Where and from whom will supplies be purchased? If the contractor is a national company, it may be cheaper to buy supplies in bulk from one supplier. In that case the Association may gain support from local merchants whose business will suffer from privatizing. Will the contractor provide all the equipment that is now provided by the institution for the operation? If so, who will pay for the equipment if the contract is terminated? Will the equipment remain with the institution or leave with the contractor? This could be of enormous importance if computer operations are being considered for privatization, for example. If the institution initially provides the equipment, can the contractor replace it at will, perhaps with older or cheaper equipment, allowing the contractor to convert the institution's equipment to its own use?

***Statement of Work*:** The RFP should clearly state the institution's expectations about required tasks and the frequency and manner in which they are to be performed. Expected outcomes and quality or performance standards should be included. If all the duties performed by institutional employees are not included, they either won't be done or the institution will be charged extra for them.

***Protections for the Institution*:** How much flexibility does the institution have? What if the institution wants to change the academic year or workday? What will happen during weather or emergency cancellation of classes? What types of insurance are required and who pays for it? Must contractors post a performance bond to protect the institution against contract default, poor performance or temporary interruption of service? The amount required is usually at least ten percent of the value of the contract. Must the contractor submit all costs as fixed costs, or can the contractor bill the institution for some of the costs of goods and services it uses in fulfilling the contract? If the latter is the case the contractor can pass on the costs of production inefficiencies and may also be tempted to pad those costs when submitting bills to the institution.

Quality Assurance: Can the terms of the contract's deliverables be tied to some objective measurement?

***Other Considerations*:** What is the duration of the contract? If it is a multi-year contract, can either party renegotiate the price of products or services during the life of the contract? Will all bids be final and binding or will the administration open the bids and then let contractors revise them—essentially forcing them to re-bid against one another in a downward spiral? This may be a useful point to raise at any pre-bid meeting since it may well discourage contractors from bidding at all.

Analyzing the Contractor's Total Costs

The contractor's total cost will usually exceed the "bid" price because of several factors. The equation used to determine the total contract cost is as follows:

Total Contract Cost = Bid Price + Retained Cost

where the bid price equals the total price the contractor says it will charge the institution for performing the service; and the retained costs represent the costs that continue to be borne by the institution after the operation is contracted out.

Several other costs are important to keep in mind, including all of the following:

Administrative Costs: These include costs such as contract negotiations and award, processing invoices, and the monitoring and evaluation of contractor performance. These costs have been estimated to be in the range of 10 percent to 20 percent of the base bid with the smaller percentage applying to larger contracts.

***Conversion Costs*:** These are one-time costs such as unemployment compensation and/or severance pay for displaced employees.

***Other Costs*:** If the contractor will charge an additional amount for adding or deleting services, the best estimate of such changes should be made. Although this item is often omitted from cost comparison publications, it may be substantial. It may be one of the reasons that the federal government suggests as a guideline that a privatization contract should save at least ten percent of the current costs of providing the service. Otherwise it should not be done.

New Revenues: Any additional revenues the institution will receive as a result of contracting, such as the sale of unused equipment or facilities, should be included herein.

Why do a private contractor's prices appear to be so low?

There are four common ways in which private contractors appear to save money:

1. They pay lower wages and benefits to employees.
2. They provide fewer services with fewer or less experienced employees.
3. All costs associated with contracting out are not included in the cost comparison.
4. Contractors "low-ball" their first bid to lock in the service and later raise prices significantly. In addition, the contractor may profit from the transfer of institutional assets.

Comparing In-house and Contracted Costs

If one were to combine the two prior equations, one arrives at the savings (if any) of contracting:

Savings Due to Contracting = (Avoidable In-house Costs + Retained In-house Costs) - Total Contractor Costs

All of this financial analysis overlooks other important issues. Perhaps the most important of these is the loss of dedicated employees who have worked their entire lives in the collegial atmosphere of putting students first. Providing excellent services to these students as the paramount concern is replaced in privatization with concern for the bottom line. Again, many public agencies, including the federal government, suggest a service not be contracted out unless the contractor's price is at least ten percent below in-house cost. Even then, students may pay the hidden price of concern solely with the "bottom line."

One example of privatization in higher education occurred many years ago at a major East Coast university which privatized its computer operations. After a couple of years, the administration began to realize that the institution had lost control of this crucial operation. Eventually all aspects of the computer operation were brought back under the institution's control. Employees loyal to the institution, not to an outside vendor, did an exemplary job of solving the "Year 2000 Problem." It is doubtful that an outside vendor could have been as effective in solving this critical problem since it would have had other client institutions to service simultaneously.

In summary, privatization forces Associations to 'own the mission' of the higher education institution more than the administration by researching the short- and long-term costs to the institution of privatizing campus operations. The pressure to create an ever-more efficient organization is expected to build in the near-term, and Association representatives need to stand ready to prove their value to the institution's stakeholders both by examining the costs, aims and strategies of privatization while articulating the additional value that dedicated employees bring to the table.

CHAPTER 10 SOURCES OF FINANCIAL INFORMATION

Objectives

After completing this chapter, readers will be able to:

- Identify, access and utilize financial information to reach Association objectives.

Sources of Financial Information

Budgetary analysis is dependent upon available budgetary data. This chapter reviews the data that may be obtained about a given institution and, in some cases, about comparable institutions. Ideally, all higher education administrators should share budgetary data with an appropriate employee group, such as a Faculty Senate budget committee, and/or the employee Association. When this is the case, the sources of budgetary data described in this chapter will probably be utilized only to the extent that comparison with other institutions may be helpful in assessing performance.

Audited Financial Statements

As Chapter 3 indicated, the most reliable information about the status of an institution's finances comes from its annual audited financial statements. For public colleges and universities these should be publicly available, or available through a Freedom of Information Act (FOIA) request. If the administration is not required to provide them to the appropriate Association representative directly, they can usually be found on the institution's website. Then one will have to search for the location of the audited financial statements. A couple of examples are presented below.

For Michigan State University, go to http://www.msu.edu, which is the official website for that institution. If you just enter the name of an institution into a search engine it may come up with quite a few non-official websites that are very unlikely to host the financial data you seek. Once at the MSU website, go to the box labeled SEARCH and type in "Audited Financial

Statements". They will appear and you can log onto, for example, the 2009-10 Financial Report and then download it.

For Southern State Community College in Ohio, you have to search for its audits through the Auditor of State's website (http://www.auditor.state.oh.us/). To conduct an audit search, you click on the appropriate box, enter in the institution name, and download the appropriate file.

For Temple University, go to http://www.temple.edu and first try administration and officers. Go to the Budget Office and Budget Information. Unfortunately this leads you to the current budget, not to the audits. What to do next? Well, one needs to know that the annual audits of Temple University are referred to as "Treasurer's Reports." Using that information, one can use the "Search Temple" button and type in "Treasurer's Reports," and then the audited Financial Statements appear and can be downloaded.

These three examples demonstrate that one may need to try a variety of approaches to get the all-important audited financial statements, but they should be obtainable with a little effort and patience.

Public institutions are mandated by state law to provide a variety of financial information that is open to the public. Appropriation bills for each institution are a matter of public record. In some states the appropriation is determined by a formula (as described in Chapter 5). If the formula includes a group of comparable institutions where faculty averages are used to calculate one of the terms in the formula, it is useful to compare the average salaries of faculty at your institution to those of its comparable institutions. Copies of the funding formula and such details

as to which institutions are comparable should be available from the state bureaucracy that supervises the formula. A current listing of such agencies is available through the State Higher Education Executive Officers (SHEEO) organization at http://www.sheeo.org/our-members.

States usually publish reports that evaluate the effectiveness of state-supported higher education institutions. These reports may be issued by a Department of Education, another executive branch operation, or perhaps by an agency reporting to the legislature. They may contain enrollment statistics, faculty salary data, workload averages, and the calculations of the cost of instructional output, such as the cost per student credit hour produced, which may be differentiated by level as well as by discipline. In some states, faculty and staff salaries are a matter of public record. In unionized higher education institutions, those representatives usually have a legal right to the listing of salaries and benefits of the members of the bargaining unit, plus other data needed to negotiate a contract.

Association leaders may also wish to examine the budget submission of the institution to the state government. Some states mandate separate budget requests for capital appropriations, and the capital requests may state the needs of the institution, in priority order, for several years into the future. When this is the case, administration priorities may become evident from the capital budget request.

Some of this data may also be available from the appropriate state agencies for private institutions. In addition, financial information is submitted annually to the federal government by higher education institutions. The data are compiled by the U.S. Department of Education and

the National Center for Education Statistics in Washington, D.C. (http://nces.ed.gov/). The data from this organization are used by a number of organizations to analyze the state of higher education.

Additionally, each public higher education institution (except for-profit institutions) has to file an annual report with the Internal Revenue Service (IRS) as an organization exempt from income tax. The report, filed on Form 990, contains a statement of revenue, expenses, and changes in fund balances. It also contains a beginning and end of fiscal year balance sheet, including a listing of the value of land, buildings, and equipment owned by the institution as well as a listing of mortgages, bonds, and other notes payable. Finally, it lists the salaries and fringe benefits of the chief administrators of the institution. Many faculty associations and unions obtain a copy of their institutions' IRS report each year. Note, however, that the report received will probably be at least a year old. For example, in response to a request in the fall of 2010, you may receive your institution's IRS report for the fiscal year July 1, 2008-June 30, 2009.

The American Association of University Professors (AAUP) annually obtains and analyzes faculty compensation data directly from about 1,900 institutions covering about 350,000 full-time faculty members. For each of these institutions, the AAUP reports the average salary by rank and sex and the number of full-time men and women in each rank in the institution. It also presents fringe benefits as a percentage of salary and the percentage of salary increase that each rank at the institution received that year for continuing faculty. The AAUP survey assigns a rating to the average compensation in a given rank. The data also include the

percentage of tenured faculty. Thus, you may ascertain from the data how salaries, benefits, and salary increases at a given institution compare to those at similar institutions. This report is published annually in the journal *Academe*. Similarly, the National Education Association makes a variety of data available on its higher education website, http://www.nea.org/he (click on the "Research and Tools" and "Higher Education Publications" links). These resources include:

The NEA Almanac of Higher Education— Published annually, the *Almanac* provides national salary data based on salary reports filed by colleges and universities with the National Center for Educational Statistics (NCES). Since NCES surveys all institutions (3,500) at a different time of year than AAUP, national and institutional averages may differ. In addition, the *Almanac* has chapters on faculty workload, the economic conditions in states, the numbers and compensation of support personnel on the campuses and trends in bargaining.

Faculty Salary Reports— This research tool provides data by state of average faculty salaries for public institutions by rank, gender, and length of contract (9/10 month or 11/12 month). In addition, the annual Special Issue of the *NEA Higher Education Advocate* provides a comparison of public institution average faculty salary and benefits data by state, institution type, and faculty rank.

NEA College and University Data Analysis System (CUDAS) — This online database provides financial and institutional information based on IPEDS data from the U.S. Department of Education (http://nces.ed.gov/ipeds/). Ten-year time trends for revenues and expenditures provide an overview of an institution and the changes that have occurred. CUDAS also contains

salary data by contract length, rank, race/ethnicity, and gender as well as student enrollment and program/degree, and collective bargaining agent information. The application allows automatically generated as well as user-defined peer institution comparisons across these various measures.

Higher Education Contract Analysis System (HECAS) — The NEA Higher Education Research Center has over 1,600 higher education contracts in this online database. These include contracts for faculty (full- and part-time), support staff, graduate assistants, and academic professional staff represented NEA as well as by any other national or independent unions. The system searches these contracts for specific language and is updated as new contracts become available. This database is available through the NEA higher education website and is password-protected. Higher education Association leaders can access HECAS through state Association higher education staff.

Budget and Financial Audit Analysis— NEA trains state Association staff and leaders in higher education budget and financial audit analysis. Higher education locals needing more in-depth analysis by an outside expert can request that assistance as well through their state Association staff.

Appendix A

Applicable Statements of the Governmental Accounting Standards Board

GASB 34

In June 1999 the Governmental Accounting Standards Board issued GASB Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*. GASB 34 articulated a new model for financial reporting based on the notion of tying governmental services to their costs. Aligning state and local government financial reports to this model will require a report that includes a section of management discussion and analysis (MD & A) that reviews the financial performance of the governmental entity, basic financial statements that are government-wide and fund-based, and detailed notes to the financial statements. GASB 34 intensified the long-term perspective of institutions, expanded the public accountability of districts, and increased scrutiny of district priorities and finances. It also created more relevant and comprehensible information for citizens, legislative bodies, and investors and creditors (See GASB Concepts Statement No. 1, *Objectives of Financial Reporting,* at paragraph 30).

The new reporting requirements articulated under GASB 34 added a level of insight, detail and purpose to the annual statements required by law. The statements are comprised of management's discussion and analysis of the district's financial activities, a statement of net assets and a statement of activities, fund-based statements about the major and minor governmental and enterprise funds, notes to financial statements, and required supplementary information that includes a budgetary comparison of the district's original, final and actual

information regarding its general fund and major special revenue funds. For state and local government employees and the public at large, the net result of these changes was a clearer understanding of the financial inputs and service outputs of districts separated by function, with a new emphasis on the value of infrastructure and other long-term assets.

GASB Statement No. 34 echoes the impact of FASB Statement No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions,* in its elevation of the importance of operating debts such as post-employment employee costs such as pension and health care, and aligns the perspective of public administrators with the reality of multi-year budgeting under the new Statement. GASB 34 required all state and local governments to report their financial statements using the accrual rather than the cash basis of accounting, and collect data relative to infrastructure costs. Implementation occurred in different time periods according to a state or local government's revenues: Institutions with total annual revenues of $100 million or more should have applied GASB 34 in the first fiscal year ending after June 15, 1999; those institutions with total annual revenues of between $10 and $100 million should have implemented the changes for the first fiscal year ending after June 15, 2000; and institutions with total annual revenues of less than $10 million should have applied the changes for the first fiscal year ending after June 15, 2001.

Two additional Statements were offered by the GASB to assist government implementation of GASB 34: Statements No. 37, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments: Omnibus, an amendment of GASB*

Statements No. 21 and No. 34; and 38, *Certain Financial Statement Note Disclosures*, which were both published in June 2001.

GASB 35

In November 1999, the Governmental Accounting Standards Board issued GASB Statement No. 35, *Basic Financial Statements- and Management's Discussion and Analysis for Public Colleges and Universities, an Amendment of GASB Statement No. 34*. GASB Statement No. 35 extends the requirements of GASB 34 to public colleges and universities. The effective date of GASB 35 varies by institutional revenue: Institutions with total annual revenues of $100 million or more should have applied GASB 35 changes in financial statements for periods beginning after June 15, 2001; those institutions with total annual revenues of between $10 and $100 million should have implemented the changes for periods beginning after June 15, 2002, while institutions with total annual revenues of less than $10 million should have applied the requirements of GASB 35 for periods after June 15, 2003.

GASB 39

In May 2002, the GASB published Statement No. 39 that addressed the determination of whether certain organizations are component units. GASB Statement No. 39 is an amendment of GASB Statement No. 14, *The Financial Reporting Entity*, issued in June 1991. GASB 39 applies to financial reporting by primary governments and other stand-alone governments, organizations for which the primary government is financially accountable and other organizations for which the nature and significance of their relationship with the primary government are such that

exclusion would cause the reporting entity's financial statements to be misleading or incomplete. It became effective for financial statements for periods beginning after June 15, 2003.

GASB 39 requires the governments and organizations identified above to discretely present financial information of component units in each of the financial statements addressed most recently in GASB 35 and, in so doing, allows for greater governmental financial transparency. It was also designed to create more relevant and comprehensible information for citizens, legislative bodies, and investors and creditors (See GASB Concepts Statement No. 1, *Objectives of Financial Reporting*, paragraph 30.). GASB Statement 39 indicates that a legally separate, tax-exempt organization should be reported as a component unit of a reporting entity if all of the following criteria are met:

1. The economic resources received or held by the separate organization are entirely or almost entirely for the direct benefit of the primary government, its component units, or its constituents.
2. The primary government is entitled to, or has the ability to otherwise access a majority of the economic resources received or held by the separate organization.
3. The economic resources received or held by an individual organization that the specific primary government, or its component units, is entitled to, or has the ability to otherwise access, are significant to that primary government.

Component units that meet the criteria listed above should be discretely presented. Financial statements of the reporting entity should provide an overview of the entity that is sufficient to allow readers to distinguish between the primary government and its component unit(s). In some cases, component unit financial reporting will be presented in the financial

statements of the primary government; in other cases, component unit financial reporting will be presented in the financial statements of a separate financial audit.

GASB 45

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions,* became effective as of the financial period starting after December 15, 2006 (i.e. the 2007-2008 fiscal year) for most public higher education institutions following GASB accounting rules. The comparable accounting rule for private institutions, *FASB 106, Employers' Accounting for Postretirement Benefits Other Than Pensions,* went into effect in fiscal 1993-94 for institutions following the FASB rules.

GASB 45 requires institutions to calculate the present value liability of these future benefits. Prior to the adoption of GASB 45, public institutions merely reported current expenditures for these benefits. GASB 45 uses the abbreviation OPEB for *other postemployment benefits* and ARC for *annual required contribution* to fund the benefits. The goal of GASB 45 is to recognize the cost of benefits in periods when the related services are received by the institution rather than when the benefits are provided many years later, and to provide accurate information about the actuarial accrued liabilities for these past services and to what extent those benefits have been funded. The ARC is calculated to include the normal cost for the given year of providing these benefits plus an amount to amortize the unfunded liabilities of the plan over a period up to 30 years.

Institutions had to calculate an initial OPEB obligation when GASB 45 was first included in their annual financial reports. When a net OPEB obligation has a liability balance (i.e., it is not fully funded), the annual OPEB cost for an employer is equal to the ARC plus one year's interest on the beginning balance of the net OPEB obligation, less an adjustment to the ARC to offset the amount included in the ARC for amortization of the past contribution deficiencies.

The impact on the institution's net assets can be substantial. One large Midwestern institution estimated that the liability created by the application of GASB 45 was more than $800 million dollars. However, there are major uncertainties in calculating the OPEB obligation. They include: the cost of providing health care for up to 30 years in the future; the age at which covered employees will choose to retire (the later they retire the fewer retirement years will need to be covered by the post-retirement benefits); the life span of retirees after they retire; and the investment return assumption (discount rate) used to estimate the long-term investment yields on the investments to be used to finance the benefits (the higher the yield the smaller the current liability). None of these factors can be accurately estimated decades into the future. Thus, the calculated OPEB obligation will have a substantial uncertainty in its stated amount.

However, the size of this liability has led some institutions which made similar calculations under FASB 106 to eliminate or reduce post-employment benefits or to require co-payments by employees. It is important that collective bargaining representatives whose members presently enjoy postemployment benefits to familiarize themselves with GASB 45.

GASB 46

GASB Statement No. 46, *Net Assets Restricted by Enabling Legislation*, clarifies the meaning of the phrase "legally enforceable" as it applies to restrictions imposed on net asset use by enabling legislation. This statement was effective with the 2005-06 fiscal year.

GASB 47

GASB Statement No. 47, *Accounting for Termination Benefits*, provides accounting and reporting guidance for both voluntary and involuntary termination benefits. This statement was effective with the 2005-06 fiscal year. It may have a small effect on calculations of the costs under GASB 45 for post-employment benefits other than pensions.

GASB 48

GASB Statement No. 48, *Sales and Pledges of Receivables and Future Revenues and Intra-Entity Transfers of Assets and Future Revenues*, provides accounting and reporting guidance on the exchange of an interest in future cash flows or specific future revenues for immediate cash payments. This will have a greater significance for some state governments than for colleges or universities. This statement was effective with the 2007-2008 fiscal year.

GASB 49

GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, provides accounting and reporting standards for pollution remediation obligations.

As with GASB Statement No. 48, this will have a greater impact on state and local governments than on colleges and universities. This statement was effective for the 2008-2009 fiscal year.

GASB 50

GASB Statement No. 50, *Pension Disclosures—an amendment of GASB Statements No. 25 and No.27,* more closely aligns the financial reporting requirements for pensions with those of other postemployment benefits (OPEB) such as those mandated in GASB Statement No. 45, and in doing so enhances the information disclosed in the notes to the financial statements or presented as required supplementary information by pension plans and by employers who provide pension plans. This statement was effective as of the 2007-2008 fiscal year.

GASB 51

GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets,* deals with whether or when intangible assets should be treated as capital assets. This has significance for state and local governments which have assets such as water rights, timber rights, easements, etc. It may also have some relevance for colleges and universities which may own patents, copyrights, etc. This statement became effective as of the 2009-2010 fiscal year.

GASB 52

GASB Statement No. 52, *Land and Other Real Estate Held as Investments by Endowments,* will require that endowments report real estate held as investments at their current value rather than at their historical cost.

GASB 55

In March 2009, GASB released Statement No. 55 to clarify the hierarchy of generally accepted accounting principles and prioritize pronouncements for all state and local governments. The sources of accounting principles were prioritized as follows: GASB Statements and Interpretations; GASB Technical Bulletins, AICPA Practice Bulletins, and GASB Implementation Guides.

GASB 56

GASB Statement No. 56, *Codification of Accounting and Financial Reporting Guidance Contained in the AICPA Statements on Auditing Standards,* was issued in March 2009 in order to incorporate three accounting principles—related party transactions, going concern considerations, and subsequent events— into the GASB authoritative literature. As such, it does not establish new accounting standards, but incorporates AICPA standards into the GASB standards.

GASB 61

GASB Statement No. 61, the *Financial Reporting Entity: Omnibus, an amendment of GASB Statements No. 14 and No. 34,* was issued in November 2010 in order to clarify the requirements for inclusion of component units in a financial reporting entity, for amending the criteria for reporting component units as if they were part of the primary government, and

clarifying the reporting of equity interests in legally separate organizations. State and local governments must implement GASB 61 for the fiscal year ended June 30, 2013.

Appendix B

Applicable Pronouncements of the Financial Accounting Standards Board

FASB 124

Effective for fiscal years beginning after December 15, 1995, i.e., with the 1996-97 fiscal years of most not-for-profit institutions, those institutions were to adopt FASB Statement No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations,* concerning the valuation to be listed for certain investments. It requires these institutions to list at fair market value equity securities with easily determinable fair values and all investments in debt securities. Gains and losses from these investments were to be reported in the Statement of Activities. In a bull market the result of applying FASB 124 to an institution's investments is to increase the value of most stock and bond holdings relative to carrying them at their original purchase price. Should the stock and bond markets experience a major "correction," however, FASB 124 results in a substantial decrease in the value of these investments relative to carrying them at their original purchase price.

FASB 158

FASB Statement No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—an Amendment of FASB Statements No. 87,88, 106 and 132 (R),* requires employers to recognize the overfunded or underfunded status of a defined postretirement plan as an asset or liability in its statement of financial position. Although FASB 106 required an institution to recognize the potential cost of postretirement benefits other than pensions, it did not

require the underfunded or overfunded status to appear on an institution's Statement of Financial Position. As previously mentioned under the discussion of GASB 45 for public institutions, the application of this resulted in a huge decrease in the net assets of some private institutions, which led to pressure for the governing board to reduce or eliminate some postretirement benefits. FASB Statement No.158 became effective in the 2006-07 fiscal year.

FASB 161

This pronouncement is effective for fiscal years beginning after November 15, 2008. This was an amendment to FASB 133 and was entitled "Disclosures about Derivative Instruments and Hedging Activities." Institutions must disclose their objectives for holding or issuing derivative instruments, the context needed to understand those objectives, and their strategies for achieving those objectives. A distinction must be made between instruments used for risk management and those used for other purposes. The fair value amount of each derivative must be listed in the statement of financial position, and the amounts of gains and losses must also be listed.

FASB 168

Effective for fiscal years ending after September 15, 2009, FASB Accounting Standards Codification (ASC) became the source of authoritative U.S. accounting and reporting standards for nongovernmental entities, in addition to guidance issued by the Securities and Exchange Commission. This provides the generally accepted accounting principles in a topically organized structure. FASB Statement No. 168 was the final standard issued by FASB in that form. In the future, FASB will issue *Accounting Standards Updates*.

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Glossary

Accountant A financial professional who is skilled in the practice of accounting or who is in charge of public or private accounts. An accountant is responsible for reporting financial results, whether for a company or for an individual, in accordance with government and regulatory authority rules.

Accounts Receivable Refers to a debt owed by an organization that arises in the normal course of dealings and is not supported by a negotiable instrument. In this sense, the charge accounts of a business are accounts receivable, but income from investments usually is not. Accounts receivable generally arise from sales or service transactions. They are not necessarily due or past due. Insurance may be purchased to protect against the risk of being unable to collect on accounts receivable if records are damaged or lost.

Accrual Basis of Accounting A basis of accounting under which revenues are recorded when earned and expenditures/expenses are recorded as soon as they result in liabilities for benefits received, notwithstanding that the receipt of cash or the payment of cash may take place, in whole or in part, in another accounting period.

Agency Fund A type of fund that is used to report resources held by the reporting government in a purely custodial capacity; they typically involve only the receipt, temporary investment, and remittance of fiduciary resources to individuals, private organizations, or other governments.

American Institute of Certified Public Accountants (AICPA) Organization of certified public accountants that provides auditing guidance when approved by FASB and/or GASB.

Asset A resource with present service capacity that the government currently controls. An asset may be tangible, such as a building, a piece of equipment, or intangible such as the right to use intellectual property. It remains an asset so long as it is still capable of providing services.

Assigned Fund Balance A fund balance classification which includes amounts that are constrained by the government's intent to be used for specific purposes, but that are neither restricted nor committed. Intent should be expressed by the governing body itself or a committee or official to which the governing body has delegated the authority to assign amounts to be used for specific purposes.

Auditor An individual qualified to conduct audits. An auditor may be an internal auditor (an individual whose primary job function is to audit his or her own company) or an external auditor

(an individual from outside the company, who typically is employed by an auditing firm who handles many different clients).

Budget A plan of financial operation embodying an estimate of proposed expenditures for a given period and the proposed means of financing. As stated in GASB Concepts Statement No. 1, *Objectives of Financial Reporting*, most governments have annual operating budgets that are legally adopted. Although often not required by law, some governments also prepare long-term operating budgets and capital budgets.

Capital Assets Includes land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period.

Capital Projects Fund A type of governmental fund that accounts for financial resources that are classified for capital expenditures.

Cash Equivalents Short-term, highly liquid investments that are both readily convertible into known amounts of cash and are so near their maturity that they present insignificant risk of changes in value due to changes in interest rates. Examples of cash equivalents instruments include money market funds and three-month certificates of deposit. The GASB has offered numerous pronouncements that require various disclosures about cash and cash equivalents; AICPA lists 18 required disclosures (American Institute of Certified Public Accountants, Inc., 2011, §5.44, pages 128-129) that reflect the GASB's concerns with accountability and full disclosure.

Chart of Accounts An organizing system that classifies each financial transaction according to the appropriate accounting principles and the reporting needs of the institution, both internal and external. Each account usually has both a descriptive name and a numerical or alphanumeric designation to facilitate encoding.

Committed Fund Balance A fund balance classification that includes amounts that can only be used for specific purposes pursuant to constraints imposed by formal action of the government's highest level of decision-making authority. Those committed amounts cannot be used for any other purpose unless that decision-making authority removes or changes the specified use by taking the same type of action it employed to previously commit those amounts.

Comprehensive Annual Financial Report (CAFR) As a governmental unit's official annual report prepared and published as a matter of public record, a CAFR should contain introductory

material, basic financial statements, required supplementary information, schedules to demonstrate compliance, and statistical tables.

Current Asset An asset which is easily convertible to cash in the present fiscal period. This could include cash, money market funds or short-term certificates of deposit.

Debt Service Fund A type of governmental fund that is reserved for financial resources that are designated to be expended for principal and interest on debt instruments, other than interest or principal on proprietary or fiduciary activities.

Direct Method A way of presenting cash flow information that focuses on major classes of operating cash receipts and payments. Using this method of preparing a cash statement starts with money received and then subtracts money spent, to calculate net cash flow. Depreciation is excluded altogether because, although it is an expense that affects net profits, it is not money spent or received.

Enabling Legislation Legislation that authorizes the government to assess, levy, charge, or otherwise mandate payment of resources and includes a legally enforceable requirement that those resources be used only for the specific purposes stipulated in the legislation. See GASB Statement No. 46, *Net Assets Restricted by Enabling Legislation*, for more information.

Enterprise Fund A type of proprietary fund that accounts for the acquisition, operation, and maintenance of governmental facilities and services that are entirely or predominantly self-supporting by user charges.

Fair Value The amount of money at which an investment could be exchanged in a current transaction, other than a forced or liquidation sale, between willing parties.

Federal Accounting Standards Advisory Board (FASAB) Standards-setting body that promulgates federal government accounting and financial reporting standards.

Financial Accounting Foundation (FAF) By setting the general policy direction, raising funds and selecting Board members, the FAF provides oversight to the Financial Accounting Standards Board (FASB) and the Governmental Accounting Standards Board (GASB).

Financial Accounting Standards Board (FASB) Independent seven-member body designated to set accounting and financial reporting standards for commercial entities and nongovernmental not-for-profit institutions.

Financial Audit The verification of the financial statements of a legal entity, with a view to express an audit opinion. The audit opinion is a reasonable assurance that the financial statements are presented fairly, in all material respects, or give a true and fair view in accordance with the financial reporting framework.

Financial Statement A formal record of the financial activities of an organization that provides information about the financial position, performance, and changes in financial position of an institution for the purpose of financial decision-making and accountability.

Fund A fiscal and accounting entity with a self-balancing set of accounts that record financial resources and liabilities which are segregated for the purpose of a specific set of activities or objectives that follow certain regulations, restrictions or limitations.

Fund Accounting The process by which financial resources are classified in accordance with their intended purpose and in compliance with their legal and contractual requirements.

Fundamental Accounting Equation (Also known as the balance sheet formula). Here, *Assets – Liabilities = Net Assets.*

General Fund A type of governmental fund that is the primary fund used to account for all assets and liabilities of an institution except those particularly assigned for other purposes in another more specialized fund.

Generally Accepted Accounting Principles (GAAP) Body of accounting and financial reporting standards as defined by Rule 203 of the American Institute of Certified Public Accountants (AICPA).

Governmental Accounting Standards Board (GASB) Independent agency designated to set accounting and financial reporting standards for state and local governments and for governmentally related not-for-profit institutions. Seven Board members are appointed by the Trustees of the FAF for a five-year term and may serve up to ten years.

Indirect Method This method of presenting cash flow information begins with the net income figure taken from the income statement (profit and loss account) and then makes several adjustments which fall under three main headings: (1) Expenses not involving cash outflows such as depreciation, deferred taxes, increased accounts payable, which are added back; (2) Cash outflows not recorded as expenses such as increases in inventory, which are subtracted; and (3) Revenues not involving cash inflows such as increased accounts receivable and profit on sale of property, which are subtracted. These adjustments convert the net income into net cash flow

from operating activities. To this amount cash inflows from investing activities and financing activities are added and related cash outflows are deducted. The resulting figure gives the cash balance at the end of the period for which the statement was prepared. The indirect method shows the relationship between the two other critical financial statements, balance sheet and income statement. Also, it avoids the duplication of effort where a supplementary schedule to reconcile net income with cash flows from operating activities is needed. However, it does not disclose operating cash receipts and payments.

Inflow of Resources An acquisition of net assets by the government that is applicable to the reporting period.

Inventory Unexpired costs representing economic values that will have utility in the following year(s). It includes consumable supplies and supplies for resale, such as textbooks. Costs of these items must be determined on a consistent basis for all inventories using any of several accounting techniques (such as average cost).

Internal Service Fund A type of proprietary fund that accounts for financing services and commodities furnished by a designated department to other departments within a single governmental unit or to other governmental units. Resources used by the fund are restored either from operating earnings or by transfers from other funds so that the original fund capital is kept intact.

Investment Trust Fund A type of fiduciary fund that is used to account for the external portion of investment pools reported by the sponsoring government.

Liabilities Present obligations to utilize resources that the government has little or no discretion to avoid.

Liquidity A measure of the ability of an institution to convert assets to cash without significant loss at a particular point in time.

Management's Discussion and Analysis An unaudited component of a financial report that provides a narrative explanation and analysis of an institution's financial activities.

Measurement Focus A way of presenting an institution's financial performance and position by considering which resources are measured (financial or economic) and when the effects of transactions or events involving those resources are recognized (the basis of accounting). The measurement focus of government-wide financial statements, proprietary fund financial

statements, and fiduciary fund financial statements is economic resources. The measurement focus of governmental fund financial statements is current financial resources.

Modified Accrual Basis of Accounting A basis of accounting wherein revenues are recognized when they become available and measurable, and expenditures are recognized when a liability is incurred except for principal and interest on long-term debt, which are recorded when due.

Net position The residual of all other elements presented in a statement of financial position. It is measured by the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources.

Non-Current Asset An asset that is not easily convertible to cash or not expected to become cash within the next year. This could include fixed assets, leasehold improvements, and intangible assets.

Nonspendable Fund Balance Fund balance classification which includes amounts that cannot be spent because they are either not in spendable form or under a legal or contractual obligation to be maintained intact.

Obligation A social, legal or moral requirement, such as a duty, contract, or promise that compels an institution to follow or avoid a particular course of action.

Outflow of Resources A consumption of net assets by the government that is applicable to the reporting period.

Pension (and Other Employee Benefit) Trust Fund A type of fiduciary fund that accounts for resources required to be held in trust for the members and beneficiaries of defined benefit plan, defined contribution plans, other employment benefit plans, or other employee benefit plans.

Permanent Fund Accounts for resources that are restricted to the earnings (not the principal) of assets.

Present Service Capacity Existing capability to enable the government to provide services, which in turn enables the government to fulfill its mission.

Private-Purpose Trust Fund A type of fiduciary fund that is used to report all other trust arrangements under which principal and income benefit individuals, private organizations, or other governments.

Resource A supply or other means that can be drawn on when needed. In the governmental context, a resource is an item that can be drawn on to provide services to the citizenry.

Restricted Fund Balance Fund balance classification which includes amounts that are restricted when constraints are placed on the use of resources that are either externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments; or imposed by law through constitutional provisions or enabling legislation.

Segment An identifiable activity reported as or within an enterprise fund or other stand-alone entity for which one or more revenue bond or other revenue-backed debt instruments are outstanding. A segment has a specific identifiable revenue stream pledged in support of revenue bonds or other revenue-backed debt and has related expenses, gains and losses, assets, and liabilities that can be identified.

Short-Term Investments Investment vehicles purchased by an organization that are expected to be held for less than 12 month. These investments include securities that are bought in anticipation that their sale will generate income on short-term price differences. Examples of short-term investments include stocks and bonds.

Special Revenue Fund A type of governmental fund that is used to account for specific revenue sources that are designated for specific expenditures other than debt service or capital projects.

Unassigned Fund Balance A fund balance classification which represents the residual classification for the general fund. It includes fund balance that has not been assigned to other funds and that has not been restricted, committed, or assigned to specific purposes within the general fund.