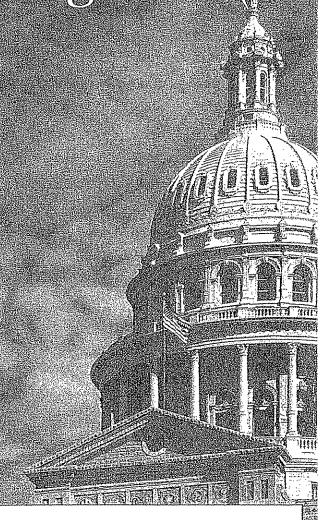
## OHAPTER 3

## Issues of Budgeting and Control



## LEARNING OBJECTIVES

After studying this chapter you should understand:

- The key purposes of budgets
- The need for more than one type of budget
- The various ways of classifying expenditures
- The benefits of performance budgets
- The key phases of the budget cycle
- Why budgets are generally prepared on a cash basis

- The limitations of budget-to-actual comparisons
- How budgets enhance control
- The means by which governments incorporate budgets into their accounting systems
- How an encumbrance system prevents overspending
- The circumstances under which budgetary and encumbrance entries are most beneficial

Budgets are to governments and not-for-profits what the sun is to the solar system. Trying to understand government and not-for-profit accounting without recognizing the centricity of the budget would be like trying to comprehend the earth's seasons while ignoring the sun. As emphasized in Chapter 1, and incorporated into generally accepted accounting principles, budgets are the key financial instruments:

Budgeting is an essential element of the financial planning, control, and evaluation processes of governments. Every governmental unit should prepare a comprehensive budget covering all governmental, proprietary, and fiduciary funds for each annual (or, in some states, biennial) fiscal period.<sup>1</sup>

Governments and not-for-profits are disciplined mainly by their budgets, not by the competitive marketplace. With few exceptions, governments reflect all significant decisions—whether political or managerial—in their budgets. As also pointed out in Chapter 1, a key objective of financial accounting and reporting is ensuring that an entity obtains and uses its resources in accordance with its budget. Budgeting exerts a major influence on accounting and reporting principles and practices.

The main purpose of this chapter is to provide an overview of budgets and the budgeting process, and thereby establish a basis for appreciating the relationship between budgeting and accounting. The first part of this chapter discusses functions of budgets, the different types of budgets, schemes of account classification, budgeting cycles, budgetary bases, and the significance of budget-to-actual comparisons. The second part shows how governments (and, to a lesser extent, other not-for-profits) promote budgetary compliance by integrating the budget into their accounting systems. They do this primarily by preparing journal entries to record both the budget and the goods and services that have been ordered but not yet received.

Although this chapter will describe budgetary procedures and related accounting practices mainly in the context of governments, most of the points can properly be extended to all not-for-profits. For example, whereas the legislatures of governments appropriate (a term reserved for governments) funds for expenditure, the boards of directors or trustees of private-sector not-for-profits authorize or approve outlays—performing essentially the same function. However, the budgets of governments have the force of law, and officials may be subject to severe penalties for violating them. To prevent overspending, governments are required to institute certain accounting controls—such as integrating both the budget and purchase orders into their accounting systems—that are optional for not-for-profits.

## What are the key purposes of budgets?

Budgets are intended to carry out at least three broad functions:

- Planning. In a broad sense, planning comprises programming (determining the activities that the entity will undertake), resource acquisition, and resource allocation. Planning is concerned with specifying the type, quantity, and quality of services that will be provided to constituents; estimating service costs; and determining how to pay for the services.
- Controlling and administering. Budgets help ensure that resources are
  obtained and expended as planned. Managers use budgets to monitor
  resource flows and point to the need for operational adjustments. Legislative

<sup>&</sup>lt;sup>1</sup>NCGA Statement 1, Governmental Accounting and Financial Reporting Principles, para. 77, 1979.

- bodies—such as city councils or boards of trustees—use budgets to impose spending authority over executives (such as city managers or executive directors), who in turn use them to impose authority over their subordinates (such as department heads).
- Reporting and evaluating. Budgets lay the foundation for end-of-period reports and evaluations. Budget-to-actual comparisons reveal whether revenue and spending mandates were carried out. More important, when tied to an organization's objectives, budgets can facilitate assessments of efficiency and effectiveness.

### WHY IS MORE THAN ONE TYPE OF BUDGET NECESSARY?

The benefits of the budgetary process cannot be fully achieved by a single budget or type of budget. A well-managed government or not-for-profit—just like a well-managed business—should prepare budgets for varying periods of time from multiple perspectives. These include:

- Appropriation budgets, which are concerned mainly with current operating revenues and expenditures
- Capital budgets, which focus on the acquisition and construction of long-term assets
- Flexible budgets, which relate costs to outputs and are thereby intended to help control costs, especially those of business-type activities

In addition, many governments and not-for-profits prepare performance budgets (discussed later in this chapter).

## APPROPRIATION BUDGETS

A government's current or operating budget covers its general fund. The operating budget is almost always an appropriation budget—one incorporating the legislatively granted expenditure authority, along with the related estimates of revenue. In most jurisdictions the operating budget must, by law, be balanced. For example, in accordance with state law and the city charter, Houston city council adopts a balanced budget each year for the general fund, debt service fund, special revenue funds, internal service funds, and proprietary funds. Public attention focuses on the appropriation budget because it determines the amount of taxes and other revenues that must be generated to cover expenditures. Owing to the importance of appropriation budgets and the influence they have had upon the establishment of accounting principles and practices, this chapter directs attention mainly to this type of budget.

Governments may require that appropriation budgets also be developed and approved for special revenue, debt service, or capital project funds, in addition to the general fund. However, such budgets may be unnecessary if a government has established adequate controls over spending by other means. For example, by accepting a federal grant and creating a special revenue fund to account for it, the government may implicitly approve expenditure of the grant resources. Similarly, by issuing bonds, it may authorize spending for specified capital projects. Still, principles of sound management dictate that a nonappropriation budget—a financial plan not subject

to appropriation—be prepared each year for such funds and organizational units. Budgets of some type are almost always necessary if activities are to be effectively planned, controlled, and evaluated.

Although the accounting cycle is traditionally one year, the budgeting process commonly extends for a considerably longer period. The needs of an organization's constituents must be forecast and planned for years in advance.

CAPITAL BUDGETS

A capital budget, in contrast to an appropriation budget, typically covers multiple years, often as many as five. It concentrates on the construction and acquisition of long-lived assets such as land, buildings, roads, bridges, and major items of equipment. These assets can be expected to last for many years. Therefore, in the interest of interperiod equity, they will generally be financed with long-term debt rather than taxes of a single year. The capital budget is, in essence, a plan setting forth when specific capital assets will be acquired and how they will be financed.

Capital budgets are closely tied to operating budgets. Each year a government must include current-year capital spending in its operating budget. If the capital projects are financed with debt, however, the capital expenditures will be offset with bond proceeds and will not affect the operating budget's surplus or deficit.

Legislators are sometimes more extravagant with capital than with operating resources. Capital projects, they reason, can be financed with debt rather than taxes, and thus will not affect the surplus or deficit of the general fund, the budget of which must be balanced. Their error is in failing to take into account the additional operating costs associated with new long-term assets. Roads must be repaired, buildings maintained, and equipment tuned up. Further, in future years the debt must be serviced with interest and principal payments made from operating resources.

Enterprise funds, which account for business-type activities, are generally not subject to the same statutory budget requirements as governmental funds. Nevertheless, budgets are as important to enterprise funds as they are to businesses and governmental funds. As a rule, governments should prepare the same types of budgets for enterprise funds as would a private enterprise carrying out similar activities. For certain, they should prepare a series of flexible budgets, each of which contains alternative budget estimates based on varying levels of output. Unlike fixed budgets, flexible budgets capture the behavior of costs, distinguishing fixed and variable amounts. Fixed budgets may be appropriate for governmental funds in which the expenditures and level of activity are preestablished by legislative authorization. Flexible budgets are especially suited to enterprise funds in which the level of activity depends on customer demand.

FLEXIBLE BUDGETS

## NOW ARE EXPENDITURES AND REVENUES CLASSIFIED?

How financial data are presented affects how they are used. Therefore, accountants, public administrators, political scientists, and economists have directed considerable attention to the form and content of budgets. They are aware that the way the budget is prepared and presented can significantly affect the allocation of resources among organizations, programs, and activities.

#### EXPENDITURES

The Governmental Accounting Standards Board (GASB) advises that "multiple classification of governmental expenditure data is important from both internal and external management control and accountability standpoints" as it "facilitates the aggregation and analysis of data in different ways for different purposes and in manners that cross fund and organizational lines." Suggested classifications include:

- By fund—such as the general fund, special revenue funds, and debt service funds
- By organizational unit—such as the police department, the fire department, the city council, and the finance office
- By function or program (a group of activities carried out with the same objective) such as general government, public safety, sanitation, and recreation
- By activity (line of work contributing to a function or program)—such as highway patrol, burglary investigations, vice patrol
- By character (the fiscal period they are presumed to benefit)—such as "current expenditures," which benefit the current period; "capital outlays," which benefit the current and future periods; and "debt service," which benefits prior, current, and future periods
- By object classification (the types of items purchased or the services obtained) such as salaries, fringe benefits, travel, and repairs<sup>2</sup>

#### REVENUES

In contrast to expenditures, revenues present less significant issues of classification. Most revenues are not designated for specific purposes (or, if they are, they are reported in separate funds); therefore, their classification is relatively straightforward. The GASB recommends that, in fund statements, revenues be classified first by fund (i.e., the columns on a statement of revenues and expenditures) and then by source (i.e., the rows). Suggested major revenue source classifications include:

- Taxes
- Licenses and permits
- Intergovernmental revenues
- Charges for services
- Fines and forfeits<sup>3</sup>

Most governments divide these classifications into numerous subclassificationsas property taxes, sales taxes, and hotel taxes.

## HY ARE PERFORMANCE BUDGETS NECESSARY?

The traditional, and most commonly prepared, budget is referred to as an object classification budget because it is characterized by the expenditure classification that categorizes objects—such as the type of goods or services to be acquired. Table 3-1 illustrates an excerpt of this type of budget for one department.

The primary virtue of an object classification budget is that it facilitates control. The managers who prepare the budget, and the legislators who pass it, establish rigid

<sup>&</sup>lt;sup>2</sup>NCGA Statement 1, Governmental Accounting and Financial Reporting Principles, para. 111, 1979.

<sup>&</sup>lt;sup>3</sup>NCGA Statement 1, Governmental Accounting and Financial Reporting Principles, para. 110, 1979.

TABLE 3-1

Houston Public Library—Excerpt from an Object Classification Budget

Expenditure Summary—General Fund							
Commit Item	Description	FY 2008 Actual	FY 2009 Current Budget	FY 2009 Estimate	FY 2010 Budget		
500010	Salary Base Pay—Civilian	\$15,467,500	\$18,739,240	\$17,519,225	\$19,351,703		
500030	Salary Part Time—Civilian	1,051,447	1,153,005	1,049,981	1,008,427		
500060	Overtime—Civilian	103,034	250,287	252,794	51,666		
500090	Premium Pay—Civilian	109,588	211,369	197,108	0		
500110	Bilingual Pay—Civilian	63,326	62,655	63,517	2,712		
500210	Pay for Performance—Municipal	0	0	0	218,679		
501070	Pension—Civilian	2,395,682	2,819,477	2,604,771	2,844,709		
501120	Termination Pay—Civilian	140,400	183,209	117,252	183,209		
501160	Vehicle Allowance—Civilian	12,649	16,864	12,471	12,616		
502010	FICA—Civilian	1,239,748	1,577,288	1,424,649	1,559,045		
503010	Health Ins—Act Civilian	2,107,711	2,718,117	2,478,680	2,822,223		
503015	Basic Life Insurance—Active Civilian	19,220	26,007	20,531	11,026		
503050	Health/Life Insurance—Retiree Civilian	0	1,000	1,000	1,000		
503060	Long Term Disability—Civilian	60,807	45,222	42,545	43,677		
503090	Workers Compensation—Civilian-Admin	109,416	109,723	127,399	118,053		
503100	Workers Compensation—Civilian-Claim	74,650	28,750	23,000	3,000		
504030	Unemployment Claims	6,928	18,210	10,726	17,983		
	Total Personnel Services	\$22,962,106	\$27,960,423	\$25,945,649	\$28,249,728		
511045	Computer Supplies	181,444	71,150	71,150	69,847		
511050	Paper & Printing Supplies	46,475	48,912	58,562	38,562		
511055	Publications & Printed Materials	1,739	12,553	11,500	5,000		
511060	Postage	10,797	22,227	19,250	12,000		
511070	Miscellaneous Office Supplies	140,969	159,525	144,303	91,177		
511075	Library Circulation Supplies	33,888	45,000	60,000	45,000		
511095	Small Technical & Scientific Equipment	9,324	2,000	2,000	0		
511110	Fuel	36,298	42,000	42,000	42,000		
511115	Vehicle Repair & Maintenance Supplies	0	5,200	5,200	5,200		
511120	Clothing	5,563	16,700	16,700	0		
511145	Small Tools & Minor Equipment	616	1,400	. 0	1,200		
511150	Miscellaneous Parts & Supplies	17,159	20,527	14,173	12,000		
	Total Supplies	\$ 484,272	\$ 447,194	\$ 444,838	\$ 321,986		

spending mandates and thereby direct, in detail, how every dollar should be spent. But this strength may also be a shortcoming:

- By expediting control, an object classification budget discourages planning. It encourages top-level decision makers to focus on specific line items rather than on overall entity objectives, strategies, and measurable performance targets. Thus, for example, the officials of a school district may focus on the need for increased appropriations for salaries, fuel, supplies, and food while failing to consider how the additional outlays will affect the school's primary educational mission.
- It promotes bottom-up rather than top-down budgeting, with each unit presenting its fiscal requirements for approval in the absence of coordinated sets of goals and strategies.
- It overwhelms top-level decision makers with details. As a consequence, the decision makers are induced to take budgetary shortcuts—such as increasing all expenditures by a fixed percentage.

 By failing to relate specific inputs (factors used to provide goods and services) to outputs (units of service) or outcomes (accomplishments in terms of organizational objectives), it limits post-budget evaluation to whether spending mandates were observed.

Owing to these deficiencies, many governments and not-for-profits have adopted performance budgets in place of, or as a supplement to, object classification budgets. Performance budgets focus on measurable units of efforts, services, and accomplishments. They are formulated so that dollar expenditures are directly associated with anticipated units of outputs or outcomes. Comprehensive performance budgeting systems require managers to specify objectives, consider alternative means of achieving them, establish workload indicators, and perform cost-benefit analyses.

To be sure, other sound managerial approaches can overcome the limitations of object classification budgeting. Performance budgets, however, institutionalize effective decision processes and help ensure that they are carried out.

The most common type of performance budgets are program budgets, whereby resources and results are identified with programs rather than traditional organizational units, and expenditures are typically categorized by activity rather than by object.

Table 3–2 illustrates an excerpt from a program budget. Program budgeting is discussed in detail in Chapter 15.

N. 49 4 6			TAB	LE	3 – 2		
Cit	y of	Alexa	indria	's Pu	blic M	orks E	ludget
Exc	erpt	fron	ı a Pro	opose	d Pro	gram l	Budget

REGIONAL TRANSPORTATION PLANNING— The goal of Regional Transportation Planning is to benefit taxpayers of the City by taking advantage of available			
public and private sector funding for transportation initiatives and to assure that the City's tax dollars are spent on projects that provide benefit to residents.	FY 2008 Actual	FY 2009 Approved	FY 2010 Proposed
Expenditures	\$181,095	\$349,201	\$284,163
FTE's	1.6	2.1	2.1
# of grants secured by Transit Services	6	6	4
\$ of grant revenues secured by Transit Services	\$4,180,000	\$4,200,000	\$3,040,000
% of Transit Services expenditures funded by grants	35%	45%	76%
ALTERNATIVE TRANSPORTATION PROMOTION & PLAN REVIEW—The goal of Alternative Transportation Promotion and Plan Review is to administer City employee, City resident, and private employer incentive programs			
and ensure that all major development projects include		• .	•
Transportation Management Plans (TMP) for alternative			
transportation in order to decrease congestion and improve			
air quality.	Charles of the artists of the		
Expenditures where the state of	\$1,254,546	\$901,211	\$938,841
FTE's with a second of the stronger of the stronger of	4.9	4.9	4.9
# of City employees receiving transit benefit	230	215	261
Cost per transit benefit provided	\$58.60	\$80.00	\$61.00
% of City workforce that participates in transit benefit program	6.1%	4.2%	9.8%



#### WHAT ARE THE KEY PHASES FOR THE BUDGET CYCLE?

Budgeting practices in neither governments nor not-for-profits are standardized; they differ from entity to entity. However, irrespective of whether the budget is of object classification or performance type, in most organizations budgeting is a continuous, four-phase process:

- Preparation
- Legislative adoption and executive approval
- Execution
- Reporting and auditing

Budgets are most commonly prepared by an organization's executive branch (e.g., the PREPARATION office of the mayor or executive director) and submitted to the legislative branch (e.g., a many city council or board of trustees) for approval. In some jurisdictions, particularly states, the legislature may either prepare its own budget (a legislative budget as opposed to an executive budget) or join with the executive branch in developing a common budget.

Budgeting generally necessitates flows of policies and information to and from all parties involved in the budgetary process. Legislators, for example, will apprise the executive branch as to what they think is politically feasible for revenue measures. Department heads will inform the legislative or executive budget committees as to what they see as their requirements. The committees, in turn, will develop guidelines for funding priorities and establish ranges of funding increases and cuts.

The preparation of a budget requires both forecasts and estimates. Relatively few types of revenues can be determined accurately in advance of the budget period. These types are limited mainly to those that are contractually established (e.g., from lease agreements), have been previously promised (e.g., grants from other/governments), or are set by law and affect a known number of parties (e.g., property taxes and special assessments). Most, however, depend on factors that are largely outside the government's control. Most types of tax revenues, for example, are influenced by economic conditions; revenues from fines and fees are affected by the predilections of the citizenry.

Some expenditures are fixed by legislative action or can be determined accurately. Examples of these types of expenditures include salaries of key officials (assuming no turnover), grants to other organizations, acquisitions of equipment, payments of interest, and repayments of debt. Others, however, are affected by acts of God or man. Snow removal, parades for championship sports teams, repair of equipment, and purchases of fuel are some examples of unpredictable expenditures.

The literature of public budgeting is replete with descriptions of forecasting models and techniques. However, these models or techniques are no better than the underlying assumptions and the legislative constraints faced by the officials, who have tried to balance their current budgets through various means (see "In Practice: Budgeting and Legislative Constraints"). Additionally, as might be expected, and exacerbated to a certain degree by the current economic crisis, the differences between actual results and budgetary estimates can be substantial (see "In Practice: Misestimating Revenues and Expenditures").

Significant errors in budget estimates, irrespective of direction or cause, thwart the political process and may lead to a distribution of resources that misrepresent what

#### DAY BEAVER HERE

The 2009-2010 California budget recently faced a massive budget crisis as state revenues fell short of projected spending by approximately \$22 billion. Since the budget was passed in early February, a weakening economy had caused tax revenues to decline but increased demand for social services. California Governor Arnold Schwarzenegger proposed a number of cuts to local programs to reduce the budget gap. These proposals included reducing school funding by \$5.3 billion, borrowing \$2 billion from local property taxes and taking \$750 million from gas tax revenues to pay debt service on bonds for state highways (The Bond Buyer, May 29, 2009). These proposals antagonized city and local governments who were also facing their own budget crisis. Los Angeles, California's biggest city, had a budget gap of \$530 million, which the city planned on reducing through social program cuts and public employee compensation reductions. If Gov. Schwarzenegger's proposal to borrow from local property taxes had gone through, it would have reduced L.A.'s revenue by \$68 million, money the city could not afford to give up. According to the New York Times (July 25, 2009), after much debate, the budget was approved in July 2009. Spending was cut by \$15 billion and the remainder of the deficit was filled with borrowing from local governments and one-time accounting maneuvers. Although the Senate had originally allocated \$4.7 billion from local governments, in the end the state only borrowed \$2 billion.

BUDGETING AND LEGISLATIVE CONSTRAINTS

was expressed by voters through their elected representatives. At the very least, as suggested by "In Practice: Budgeting and Legislative Constraints," they can make for colorful political contretemps. Insofar as budgets are used by investors or creditors, they may contribute to misguided fiscal decisions and misallocation of resources.

LEGISLATIVE ADOPTION AND EXECUTIVE APPROVAL

When the budget is presented to a legislature for consideration, it is typically turned over to one or more committees for review. In some legislatures—such as the U.S. Congress—the committees that act on revenues are separate from those that recommend expenditures. Moreover, the committees authorizing new programs may be different from those determining the amount to be spent on them. The committees typically make recommendations to the legislature as a whole; the legislature may revise their proposals as it deems appropriate.

Upon agreeing to the budget, a legislature officially adopts it by enacting an appropriation measure authorizing expenditures. Legislatures differ in the degree of control that they exert over the details of appropriations. Some appropriate lump sums to departments or programs, giving the executive branch the flexibility to allocate the resources among the various object classifications. Others go further, specifying not only the departments or programs, but also the object classifications on which authorized funds can be expended. Then, any subsequent shifts from one classification to another require legislative approval.

Property taxes are commonly *levied* (authorized by the legislature) annually. Most other revenues—such as income and sales taxes—are not authorized each year unless there is to be a change in rates or other provisions.

EXECUTION

The budget is executed (carried out) by an organization's executive branch. In some jurisdictions, expenditures are assigned particular months or quarters by allotments or apportionments. Both allotments and apportionments are periodic allocations of

### IN PRYNCIALOGE

Gloucester Township in Camden County, New Jersey provides an illustration of how a sinking economy can affect even a small town's fiscal condition. The township has a budget of \$45 million. According to the New York Times (May 3, 2009), a developer recently canceled a \$1.8 million contract for the purchase of municipal property nine months into the fiscal year and the police union was granted retroactive pay increases of 3.5 percent annually that must be paid from the current budget. There has been a decrease in construction permit fees by \$165,000, and \$500,000 of a special state aid payment was not renewed. To counteract the dwindling supply of cash, the town's Finance Board approved a tax increase that was \$3.1 million more than the state's 4 percent limit, increasing taxes on the typical Gloucester home by \$240 this year. The dire financial status of New Jersey's local governments has sparked a renewed interest in their possible consolidation.

MISESTIMATING REVENUES AND EXPENDITURES

funds to departments or agencies, usually made by the chief executive's office, to ensure that an entire year's appropriation is not dissipated early in the period covered by the budget. They also prevent a department or agency from spending resources that may not be available in the event that actual revenues fall short of budgeted revenues.

As shall be discussed later in this chapter, governments integrate their budgets into their accounting systems. In that way they are able to monitor continually how revenues and expenditures to date compare with the amounts that have been estimated or authorized. Moreover, to enhance control and facilitate end-of-period budget-to-actual comparisons, they use the same account structure for their budgets as for their actual revenues and expenditures.

Governments, like businesses, should issue interim financial statements to report on their progress in executing their budgets. Per GASB standards:

Appropriate interim budgetary reports should be prepared during the fiscal period to facilitate management control and legislative oversight of governmental fund financial operations. Such reports are important to both revenue and expenditure control processes and to facilitate timely planning and budgetary revisions.<sup>4</sup>

To complete the budget cycle, information on how the budget was executed must be provided to the analysts and governing officials who must prepare and adopt the subsequent budget. At a minimum, both governments and not-for-profits should include in their annual financial statements or supplementary reports budget-to-actual comparisons for each of the funds for which they have adopted budgets. These comparisons will be discussed later in this chapter:

Performance budgets, unlike traditional object classification budgets, create the basis for evaluating and auditing organizational efficiency and effectiveness. These budgets specify anticipated outputs or outcomes in a quantifiable, measureable form. They thereby provide auditors (both internal and independent) with objective benchmarks by which to gauge organizational accomplishments and to compare them with budgetary expectations. By assessing performance, instead of mere compliance with budgetary spending mandates, auditors can transform the audit from what administrators may perceive as an annoyance into an essential element of the management process. Performance audits are addressed in Chapter 16.

## REPORTING AND AUDITING

<sup>&</sup>lt;sup>4</sup>NCGA Statement 1, Governmental Accounting and Financial Reporting Principles, para. 93, 1979.

## On what basis of accounting are budgets prepared?

Despite the importance of budgets and the influence of budgeting on financial reporting, both the GASB and the Financial Accounting Standards Board (FASB) establish generally accepted principles only for financial reporting, not for budgeting. Budgetary principles are established either by individual governments or organizations or by the governments or organizations that supervise them (e.g., states may establish the principles for their cities, towns, and districts; national associations may establish principles for their local chapters).

Although it lacks the authority to establish standards for budgeting, the GASB nevertheless recommends that governments prepare their annual budgets for governmental funds on the modified accrual basis—the same basis they are required to use for reporting on the governmental funds in their external financial statements.<sup>5</sup>

The modified accrual basis does not allow for balance sheet recognition of long-term assets and debts. However, it does permit a wide array of transactions and events to be recognized when they have their substantive economic impact, not merely when they result in cash inflows and outflows.

Many governments, however, reject the GASB's advice. They opt to prepare budgets on a cash basis or a slightly modified cash basis.

Governments that budget on a cash basis assign revenues and expenditures to the period in which the government is expected to receive or disburse cash. Some governments modify the cash basis by requiring that encumbrances (commitments to purchase goods or services) be accounted for as if they were the equivalent of actual purchases. Others permit certain taxes or other revenues to be recognized in the year in which they are due rather than expected to be collected, as long as they are expected to be collected within a reasonable period of time.

### RATIONALE FOR BUDGETING ON THE CASH BASIS

Governments have valid reasons for budgeting on a cash basis. After all, bills must be paid with cash, not receivables or other assets; therefore, the required cash must be on hand in the year the payments have to be made. And goods or services must be paid for in the year of acquisition (or in the periods set forth in a borrowing agreement), not necessarily in the year or years in which the benefits will be received.

Correspondingly, when a government is able to defer payments, it need not have the cash on hand until disbursements are required. Taxpayers are understandably reluctant to part with their dollars so that the government can retain the cash as "savings" until the year needed. Suppose, for example, that government employees are permitted to defer until future years vacations that are earned in a current year. Although the services of the employees unquestionably benefit the period in which the vacations are earned, the government does not need—and the taxpayers might object to providing—the cash for the vacation payments until the employees actually take the vacations. Thus, in the face of a balanced budget requirement, the cash basis

<sup>&</sup>lt;sup>5</sup>NCGA Statement 1, Governmental Accounting and Financial Reporting Principles, para. 87, 1979.

of accounting ensures that the government receives in taxes and other revenues only what it is required to disburse.

The adverse consequences of the cash basis should not be overlooked. The cash basis ADVERSE may distort the economic impact of a government's planned fiscal activities. A budget that is balanced on a cash basis may be decidedly unbalanced as to economic costs and OF THE CASH revenues. It may give the appearance of a budget that has achieved interperiod equity when it really has not.

CONSEQUENCES BASIS

The cash basis permits a government to balance its budget by taking any number of steps that artificially delay cash disbursements and advance cash receipts which is very well illustrated in the "In Practice: States Balance their Budgets the Painless Way." Consider, for example, the quintessential budget-balancing tactic employed by a number of states and local governments: changing the date on which employees are paid from the last day of the month to the first of the next month. In the year of the change the government is able to pay its employees for one fewer payroll period than it would otherwise.

On the revenue side, a comparable scheme works equally well: advancing the due date of taxes or fees from early in the following budget year to late in the current year, thereby picking up an extra tax or fee payment in the year of the change. This tactic, like that of delaying the payday, can be employed only once for each revenue or expenditure. New devices must continually be developed.

In an article appropriately headlined, "When Budgets Get Rough, States get Gimmicky" the Associated Press reports on how several states are resolving their budget problems (at least in part). Here is an abbreviated list.

California moved up the collection dates on income tax withholding. Correspondingly it, moved back, by one day, the date on which state employees receive their paychecks. It thereby moved the payroll costs into the following fiscal year.

Washington changed the mortality assumptions used to calculate its pension expense, now figuring that employees will retire later but die sooner.

Alabama stopped paying for school supplies, thus transferring the cost to local school districts (which were having their own fiscal difficulties).

Kansas refinanced some bonds, temporarily lowering principal and interest payments.

Illinois authorized its governor to make over \$2 billion in budget cuts, but did not specify the costs to be reduced. Nevertheless the full amount of the cuts was assumed to be real savings. Other states did the same.

Several states simply moved dollars from various special revenue or rainy day funds into a general fund (i.e., from one pocket into another) and claimed the transfers as savings.

Source: Based on a report by Curt Woodward, July 30, 2009.

STATES BALANCE THEIR BUDGETS THE PAINLESS WAY

#### N PRACTICE

The fiscal outlook for U.S. cities and states is the worst since the Great Depression of the 1930s. Per projections of both the Government Accountability Office and the Congressional Budget Office, in the absence of major changes in revenue and expenditure policies, state and local governments collectively face increasingly large operating deficits for the next fifty years.

To meet the immediate challenges, state governments (according to the New York Times, June 22, 2009), are employing a variety of methods to eliminate their budget gaps. Most commonly, the states are targeting specific programs for cuts. Several states however, have imposed across-the-board reductions that affect (usually with some exceptions) all government activities. In addition states are reorganizing state agencies, requiring employees to take short-term furloughs, and reducing salaries. On the revenue side, they are drawing down their rainy day funds, increasing motor vehicle and other miscellaneous fees, and increasing tuition and fees at colleges and universities.

Cities are taking similar measures. Dallas, for example, to close a \$190 million deficit, eliminated a \$10,000 police recruitment bonus, deferred a planned expansion of its senior citizen homestead exemption for one year, furloughed civilian city employees for two days in the year, and increased both parking fines and parking meter fees.

In addition, of course, states and cities have been resorting to the types of gimmicks and one-shots described elsewhere in the chapter. But that type of fiscal magic will only increase the long-term pain of their citizenry.

RECESSION
PRESENTS CITIES
AND STATES WITH
MAJOR FISCAL
CHALLENGES

The deleterious consequences of cash basis budgeting are exacerbated by the use of fund accounting. Because each fund is a separate accounting entity, governments can readily transfer resources from a fund that has a budget surplus or that does not require a balanced budget to one that needs extra resources. Some governments budget interfund "loans" for the last day of one fiscal year and repayments for the first day of the next. Others delay, for one day, required payments from the general fund to other funds or sell assets, sometimes to entities that they themselves created and control, and lease them back. Still others reduce expenditures in ways that may balance the budget in the short-term but will unquestionably have deleterious consequences in the long-term (as illustrated by "In Practice: Balancing the Budget by Selling Assets to Yourself").

The "one-shot" budget balancing techniques would generally not affect revenues and expenditures as reported in the annual financial statements. Governments must prepare the external financial reports of their governmental funds on a modified accrual basis. As defined by the GASB, the modified accrual basis requires that short-term loan proceeds, whether from another fund or from an outside source, be accounted for as liabilities rather than revenues. Similarly, most required outlays are reported as expenditures in the period to which they apply, irrespective of when they are actually paid.

Cash basis budgeting complicates financial accounting and reporting. Governments must maintain their accounts to facilitate preparation of two sets of reports—one that demonstrates compliance with the budgetary provisions and one in accordance with GAAP.

### IN PRACTICE

On April 1, 1991—April Fools' Day—New York's Governor Mario Cuomo announced the sale of Attica prison to the state itself for over \$200 million—all of BUDGET BY which was counted as general revenues. The buyer was a state agency that financed the purchase by floating bonds. The bonds were backed by the state and were, therefore, economic obligations of the state. The purchaser immediately leased the prison back to the state under terms specifying that the "rent" payments would be exactly equal to the debt service on the bonds. In essence, the state balanced its operating budget with a loan in the amount of the prison's sale price. The benefits of the loan were reaped by the taxpayers of the year of the transaction; principal and interest will be paid by the taxpayers of the future.

In the previous year, the state sold its Cross Westchester Expressway to the New York Thruway Authority—also to itself—but that transaction was only for \$20 million. Following the lead of its neighbor, New Jersey sold a portion of its highway system to a state-owned agency, the New Jersey Turnpike Authority.

Unfortunately this example is not merely of historical interest. In a variation of a sale-lease back technique that is especially popular in California. In 2007 Oxnard, California (population approximately 200,000) sold its streets to a newly created finance authority (which consists of the council and mayor). The aim, according to the Los Angeles Times (December 31, 2008) was to pay for part of a \$150 million street paving project by issuing bonds to be repaid from the city's share of a state gasoline tax. The state constitution, however, forbids local governments to issue bonds against that revenue. Instead, the new finance authority issued the bonds with the intent of repaying them by eventually selling the streets back to the city. Where would the city get the money to buy back the streets? From its share of the state's gasoline tax, of course.

Sleight-of-fiscal-hand transactions of this type are not cost-free. Because the bonds issued by the finance authorities are more risky than conventional general obligation securities, they require the payment of substantially higher interest rates.

BALANCING THE SELLING ASSETS TO YOURSELF

## WHAT CAUTIONS MUST BE TAKEN IN BUDGET-TO-ACTUAL COMPARISONS?

As emphasized in Chapter 1, a primary objective of government financial reporting is to "demonstrate whether resources were obtained and used in accordance with the entities' legally adopted budget." Accordingly, generally accepted accounting principles dictate that governments include in their annual reports, as required supplementary information, a comparison of actual results with the budget for each governmental fund for which an annual budget has been adopted.6

<sup>&</sup>lt;sup>6</sup>GASB Concepts Statement 1, Objectives of Financial Reporting, para. 77b, 1987.

DIFFERENCES IN HOW ACTUAL RESULTS ARE DETERMINED

Whereas the GASB specifies the principles of accounting to which governments must adhere in reporting on their governmental funds, it is silent on those they can use in preparing their budgets. Unless a government reports its actual results using budgetary principles or its budget using generally accepted accounting principles (GAAP), a comparison between the budget and actual results would not be meaningful. Therefore, per Statement No. 34, the GASB requires that governments present their budget-to-actual comparisons on a budgetary basis and include a schedule that reconciles the budgetary and the GAAP amounts.

The differences between legally adopted budgets and the GAAP-based financial statements can be attributed to several factors. Among them are:

- Differences in basis of accounting. As previously noted, governments often prepare their budgets on a cash or near-cash basis, whereas their financial statements must be prepared on a modified accrual basis.
- Differences in timing. As shown in its budget, a government may appropriate resources for a particular project rather than for a particular period. For example, in approving resources for a construction project, the government will typically establish the total amount that can be spent. It will not allocate resources to specific years. By contrast, the annual report of the fund in which the project is accounted would have to present the expenditures year by year. Moreover, governments may permit departments to carry over to subsequent years resources not spent in the year for which they were budgeted. Thus, expenditures in a particular year may not have been budgeted in that year.
- Differences in perspective. Governments may structure their budgets differently from their financial reports. For example, a government may budget on the basis of programs. The programs, however, may be financed by resources accounted for in more than one fund. Thus, the amounts expended in each of the funds cannot be compared to any particular line item in the budget.
- requires that a government's reporting entity include organizations that are legally independent of the government, yet, in political or economic reality, an integral part of it. For example, a city may create a financing authority—a separate legal entity—to issue bonds on behalf of the city. If the city has political control over the authority (e.g., the mayor appoints the majority of the governing board) or is responsible for its financial affairs (e.g., approves its budget), then GAAP dictates that the authority be reported upon in the city's financial statements. Yet because the authority is a separate legal entity, the city may exclude it from its legally adopted budget.

GOVERNMENTS MUST REPORT BOTH ORIGINAL AND FINAL BUDGETS

Budget-to-actual comparisons may demonstrate either legal compliance or managerial effectiveness in adhering to budget estimates. One of the major improvements of the current GASB model over the old is that the current model requires governments to report their actual results and both their original and final appropriated budgets. Under the old model, governments could report only their amended (final) budget. For some governments, their final budget incorporates changes they authorized only after they were aware of the actual revenues and expenditures of the year. Thus, governments typically reported no significant variance between budgeted and actual amounts.

The GASB encourages, but does not require, governments to present in a separate column the variances (i.e., differences) between actual results and the budget. It recommends that, if presented, the variances be based on the final rather than the original budget. However, inasmuch as governments must include columns that show

both the original budget and the final budget, statement users can readily calculate the differences between actual results and the original budget as well as the changes in the budget that were authorized during the year.<sup>7</sup>

Table 3-3 presents the budget-to-actual comparison of Charlotte's general fund.

# How does budgeting in not-for-profit organizations compare with that in governments?

As discussed in Chapter 1, the not-for-profit sector covers organizations that range from those that depend entirely, or almost entirely, on donor contributions (e.g., certain social service organizations) to those that are run much like business (e.g., a university "co-op" bookstore). Accordingly, the budgeting process must be custom designed to suit each particular type of entity.

Not-for-profits differ from governments in at least one critical respect: they lack the authority to tax. Governments can first determine the level of services they wish to provide and then impose the taxes and fees sufficient to provide those services. Nonbusiness types of not-for-profits, by contrast, are limited in their ability to generate revenues and hence must adjust the level of services they provide to the corresponding level of revenues.

The general approach to budgeting suggested in this chapter for governments is relevant, with some obvious modifications, to not-for-profits. The budget process is the same four-phase process: preparation, adoption (although by a board of directors or trustees rather than a legislature), execution, and reporting and auditing.

Not-for-profits, of course, are not subject to the same types of penalties for violating budgetary mandates as governments are. Nevertheless, reliable estimates of revenues and expenditures are no less important. The consequences of underestimating costs or overestimating revenues are obvious. Not-for-profits, like businesses, are not guaranteed continued existence. The consequences of overestimating costs or underestimating revenues, while not as potentially devastating as the reverse, can also be severe—especially to the organization's intended beneficiaries. A homeless shelter may unnecessarily reduce the number of people that it serves; a church or synagogue can cut back programs that it otherwise could have provided; a private college may defer maintenance only to have to incur greater costs to play catch-up in the future.

## How do budgets enhance control?

Owing to the adverse consequences of violating budgetary mandates, both governments and not-for-profits can build safeguards into their accounting systems that help ensure budgetary compliance. These include preparing journal entries both to record the budget and to give recognition to goods and services that have been ordered but not yet received. We begin the discussion by describing the basic books of account maintained by governments and not-for-profits and showing how they accommodate these safeguards.

<sup>&</sup>lt;sup>7</sup>GASB Statement No. 34, Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments, para. 130 (June 1999); see also GASB Statement No. 41, Budgetary Comparison Schedules—Perspective Differences (May 2003).

TABLE 3-3 Charlotte, North Carolina

### General Fund

Statement of Budgetary Comparison for the Year Ended June 30, 2008 (in thousands)

	Budget	ed Amounts	Actual	Variance with Final Budge
	Original	Final	(Budgetary Basis)	Positive (Negative)
Resources (inflows):				
Property tax	\$259,435	\$260,220	\$267,309	\$ 7,089
Sales tax	61,430	61,430	61,675	245
Utilities franchise tax	30,702	30,702	33,818	3,116
Police services	14,858	14,858	15,914	1,056
Tax reimbursements	2,950	2,950	<b>3,045</b> ,	95
Solid waste fee	11,470	11,470	11,162	(308
Business privilege licenses	15,800	15,800	19,985	4,185
Licenses and permits	14,831	14,831	18,321	3,490
Fines, forfeits and penalties	3,256	3,256	3,267	. 11
Interlocal grants and agreements	5,474	5,662	5,953	291
Federal and state shared revenues	3,257	4,676	3,698	(978
General government	7,785	7,785	6,812	(973
Public safety	3,305	3,305	3,802	497
Cemeteries	504	504	552	48
Use of money and property	5,670	7,538	7,610	72
Sale of salvage and land	960	960	3,913	2,953
Other	1,086 -	1,049	1,410	361
Occupancy taxes	3,303	3,303	3,574	271
Intragovernmental	18,263	22,348	22,312	(36
Transfers from other funds	2,320	8,329	<u> </u>	(67
Resources available for appropriation	466,659	480,976	502,394	\$21,418
Fund balance appropriated (contributed)	30,422	41,027	8,760.	
Total amounts available for appropriation	\$497,081	\$522,003	\$511,154	•
	4		State of the state	
Charges to appropriations (outflows):		and the second of the second o		College
Police	\$175,525	\$175,374	\$174,782	\$ 592
Fire	85,673	86,438	86,438	- C
Solid waste	45,316	45,295	43,839	1,456
Transportation	25,336	25, <del>4</del> 63	23,604	1,859
Engineering and property management	22,026	22,248	21,787	461
Neighborhood development	8,086	8,073	7,780	293
Planning	5, <del>4</del> 65	5,966	4,73.7	1,229
Mayor and council	1,114	1,178	1,178	
City attorney	1,829	2,390	2,390	
City clerk	545	549	549	
City manager	13,596	16,738	14,764	1,974
Human resources	3,558	3,553	3,373	180
Finance	9,134	9,132	8,841	291
Business support services	18,721	21,945	21,434	511
Budget and evaluation	1,441	1,438	1,337	101
Non-departmentals	79,716	96,223	94,321	1,902
Total charges to appropriations	\$497,081	\$522,003	\$511,154	\$10,849
			and the second s	(Continues)

(Continues)

#### ÎABLE 3-3 Charlotte, North Carolina (*Conținued*)

Reconciliation of the Statement of Budgetary Comparison to the Statement of Revenues, Expenditures and Changes in Fund Balances General Fund for the Year Ended June 30, 2008 (in thousands)

Sources (inflows) of resources:	
Actual amounts (budgetary basis) "available for appropriation" from the statement of budgetary comparison	\$511,154
Differences—budget to GAAP:	
Contributed fund balance is a budgetary resource available for appropriation but is not a current-year revenue for financial reporting purposes.	(8,760)
Transfers from other funds are inflows of budgetary resources but are not revenues for financial reporting purposes.	(8,262)
Proceeds from the sale of salvage and land are budgetary resources but are regarded as other financing resources, rather than revenue, for financial reporting purposes.	(3,913)
Total revenues as reported on the statement of revenues, expenditures and changes in fund balances—governmental funds	\$490,219
Uses (outflows) of resources: Actual amounts (budgetary basis) "total charges to appropriations" from the statement of budgetary comparison	\$511,154
Differences—budget to GAAP:  Encumbrances for supplies and equipment ordered but not received are reported in the year the order is placed for budgetary purposes, but in the year the supplies are received for financial reporting purposes.  Transfers to other funds are outflows of budgetary resources but are not expenditures for financial	(11,042)
reporting purposes.	_(56,200)
Total expenditures as reported on the statement of revenues, expenditures and changes in fund balances—governmental funds	<u>\$443,912</u>

The basic books of account of both governments and not-for-profits correspond to those of businesses. They consist, either in manual or electronic form, of:

### THE BASIC BOOKS OF ACCOUNT

- Journals, in which journal entries are recorded. Most transactions are entered initially in a special journal—such as a property tax cash receipts journal, a parking fines cash receipts journal, a purchases journal, or a cash disbursements journal. Both nonroutine transactions and account totals from special journals are recorded in a general journal.
- Ledgers, in which all balance sheet and operating accounts are maintained. The general ledger consists of control accounts that summarize the balances of the detailed subsidiary accounts that are maintained in subsidiary ledgers.

A city or other general-purpose government is likely to maintain hundreds of accounts. For example, the control account, general property taxes, may be subdivided as follows:

#### General property taxes

3

Real property (e.g., land and buildings)

Personal property

Tangible personal (e.g., business inventories, machinery, household furnishings, and vehicles)

Intangible personal (e.g., stocks, bonds, and bank deposits)

In addition, these accounts would be further divided into accounts for each individual taxpayer.

Similarly, one branch of the expenditure tree for police might be structured as follows (with only a small number of the object classification accounts displayed):

#### Police .

Crime control and investigation

Crime laboratory...

Salaries ...

Regular

Overtime

Social Security contributions

Rentals

Land and buildings

Equipment and vehicles

Supplies -

Custodial

Fuel

Office

### BUDGETARY CONTROL FEATURES

As in a ledger for a business, each account consists of columns for debits, for credits, and for the balance (the difference between the two). However, the ledger accounts of governments (and some not-for-profits) incorporate budgetary control features not conventionally found in those of businesses.

The ledger accounts for revenues incorporate an additional debit column: estimated revenues. In this column the government posts the revenue side of an entry (to be described and illustrated in the next section) to record the budget. The difference between the estimated revenues (a debit), actual revenues recognized to date (credits), and any unusual adjustments (debits or credits) equals the amount of budgeted revenues still to be recognized. Thus, for example, the subledger account "Real Property Taxes" might appear as follows (dates and references omitted):

	Revenues—Real Property Taxes					
Estimated Revenues (Dr.)	Actual Revenues (Cr.)	Adjustments (Dr. or Cr.)	Balance (Dr. or Cr.)			
15,000,000	2,300,000 1,100,000 500,000		15,000,000 12,700,000 11,600,000 11,100,000			

Based on the data shown, the government budgeted real property tax revenue of \$15 million and has recognized \$3.9 million to date. Therefore, \$11.1 million remains to be recognized.

Similarly, the ledger accounts for expenditures incorporate two extra columns. One column—appropriations—corresponds to estimated revenues. In this column the government posts a credit for the amount appropriated per the budget. In the second extra column the government posts, as debits, encumbrances—commitments to purchase goods or services. The difference between the appropriation (a credit), resources encumbered (debits), actual expenditures to date (also debits), and any unusual adjustments equals the amount of the appropriation that is still uncommitted

and is therefore available to be spent (the unencumbered balance). Thus, crime laboratory expenditures might appear as follows:

Expenditures—Crime Laboratory						
Appropriations (Cr.)	Encumbrances (Dr.)	Expenditures (Dr.)	Adjustments (Dr. or Cr.)	Unencumbered Balance		
300,000				300,000		
•		50,000		250,000		
		30,000	e e e	220,000		
	15,000	40,000		165,000		

This account indicates that the government appropriated \$300,000 for the crime laboratory. To date it has spent \$120,000 and has outstanding commitments for goods and services of \$15,000. Therefore, it has \$165,000 available for future spending.

## WHAT ARE THE DISTINCTIVE WAYS GOVERNMENTS RECORD THEIR BUDGETS?

By recording its budget, a government builds into its accounting system a gauge that warns of excesses in spending and deficiencies in collections. This gauge serves only as an *internal* control function. The budgetary entries are reversed at year-end and have no impact on year-end financial statements. To external report users, budgetary entries are irrelevant. Nevertheless, because of their significance in controlling both revenues and costs, students need to be aware of how they affect the accounts.

Most students initially find budgetary entries counterintuitive and confusing. Mainly, that's because when a government records its budget, it debits estimated revenues and credits appropriations (in effect, estimated expenditures). Most students, of course, are used to crediting revenues and debiting expenditures. The practice of debiting estimated revenues and crediting appropriations makes sense, however, when you understand that each estimated revenue and appropriation account will be tied directly to its related actual revenue and actual expenditure account (see "Example: Budgetary Entries" for a case in point). The resulting differences equal the revenues yet to be recognized and the appropriations still available to be spent. Thus (ignoring encumbrances):

Estimated revenues (Dr.) – Actual revenues (Cr.) = Revenues still to be recognized and

Appropriations (Cr.) – Actual expenditures (Dr.) = Balance available for expenditure In a sense, the estimated revenue and appropriations accounts can be thought of as contra accounts to the actual revenue and expenditure accounts.

Moreover, the entries appear to put the cart before the horse. The difference between the debit to estimated revenues and the credit to appropriations is offset by fund balance. Thus, the entity's fund balance may be increased or decreased upon merely adopting the budget—that is, wishes and whims—rather than actual transactions. Fortunately, as with other widely used bookkeeping procedures that allow accounts to be temporarily in error (e.g., periodic inventory methods), the entries cause no harm as long as appropriate adjustments are made prior to the preparation of financial statements.

CREDITING OR DEBITING THE BUDGETED DEFICIT OR SURPLUS DIRECTLY TO FUND BALANCE

## EXAMPLE Budgetary Entries

A school district adopts a budget calling for total revenues of \$400 million and total expenditures of \$390 million. The following entries would record the budget:

Estimated revenues		(b1)	\$400	
Fund balance	est.			\$400
To record estimated revenues		(b2)		
Fund balance	* 1		\$390	
Appropriations	. 7			\$390
To record appropriations (estim	iated expenditur	res)		

The entries illustrated in this chapter will be made only to control accounts. In reality, corresponding entries would be made to the estimated revenue and appropriation subaccounts that support the control accounts. The sum of the debits and credits to the subaccounts should, of course, equal the entries to the respective control accounts.

Suppose that during the year both revenues and expenditures were as estimated and that all transactions were for cash. The transactions would be recorded with standard revenue and expenditure entries (with appropriate entries to the subaccounts as well):

e de la companya de La companya de la co	(1)	
Cash .		\$400
Revenues		\$400
To record revenues		× ' ×
••	(2)	4
Expenditures		\$390
Cash		\$390
To record expenditures		

At year-end, each of the budgeted and actual revenue and expenditure accounts would be closed (i.e., reversed) to fund balance. Thus:

			(cl 1)	· «
Appropriations			\$390	
Fund balance			10	•
Estimated revenues				\$400
To close budgetary accounts		1		
•			(cl 2)	
Revenues			\$400	
Expenditures		i i	and the	\$390
Fund balance				. 10
To close revenues and expenditu	ures			

The net effect of the entries is to increase fund balance by the difference between the actual revenues and expenditures—the same increase as would have been recorded had the budgetary entries not been made.

Suppose alternatively that actual revenues and expenditures differed from what were budgeted—for example, that actual revenues were \$420 and actual expenditures were \$415. Actual revenues and expenditures would have been recorded as follows:

Cash Revenues		(1a)		\$420	\$420
To record revenues  Expenditures  Cash		(2a)		<b>\$41</b> 5	\$415
To record expenditures					фтіл
Closing entries would take the same for	m as illustra	ated previou	sly:	٧	
Appropriations Fund balance Estimated revenues To close budgetary accounts	. 2 	(cl 1a)	1×.	\$390° 10°	\$400
Revenues Expenditures Fund balance To close revenues and expenditures		(cl 2a)	•.	\$420	\$415 5
Estimated Revenues		***************************************	Reve	enues	
(b 1) 400 (cl. 1a) 400		(cl. 2a)	420	(1a)	420
Appropriations			Expen	ditures	
(cl. 1a) 390 (b 2) 390		(2a)	415	(cl. 2a)	415
Cash		Fund B	alance	Unassign	ed
(1a) <u>420</u> (2a) <u>415</u>		(b 2) (cl. 1a)	390 10 400	(b1) (cl. 2a)	400 5  405
FIGURE 3-1 Illustration of Budgetary Entrie	es (Assúming	g Differences	Betwe	een Budgete	5 d and

FIGURE 3-1 Illustration of Budgetary Entries (Assuming Differences Between Budgeted and Actual Amounts)

In this situation, as shown in the T-accounts presented in Figure 3-1, the year-end fund balance would again be the difference between *actual* revenues and *actual* expenditures. Actual revenues were \$420 and actual expenditures were \$415. Ending fund balance, after the closing entries have been posted, is thus \$5—the same as if the budgetary entries had not been made.

The components of both the budgetary and the closing entries could, of course, have been combined differently. For example, appropriations and expenditures (rather than appropriations and estimated revenues) and revenues and estimated revenues (rather than revenues and expenditures) could have been closed in the same entry. The net impact on fund balance would have been the same:

AN ALTERNATIVE METHOD:
CREDITING OR
DEBITING THE
DIFFERENCE
BETWEEN
REVENUES AND
EXPENDITURES
TO "BUDGETARY
FUND BALANCE"

Some governments maintain an account called budgetary fund balance. In recording the budget they debit or credit this account instead of fund balance. Budgetary fund balance is a temporary account. At year-end, the appropriations and estimated revenues are closed to this account, so that after the closing entries are made, its balance is always zero.

Governments prefer (or in some cases, must take) this approach so as to avoid contaminating the actual fund balance with appropriations and estimated revenues. The actual fund balance is affected only by authentic revenues and expenditures, which, as in the "Budgetary Entries" example, are closed at year-end, to fund balance. The account reflects only genuine transactions, not forecasts (and in some cases mere hopes) of what will occur during the year.

Thus, when the government adopted the budget, it would make the following

entry:

Estimated revenues
Appropriations

\$400 \$390

\$ 10

390

Budgetary fund balance

10

To record estimated revenues and appropriations (estimated expenditures)

At year-end, irrespective of actual revenues and expenditures, the budgetary entry would be reversed:

Budgetary fund balance
Appropriations
Estimated revenues
To close revenues and expenditures

\$400

During the year actual revenues and expenditures would be recorded in the normal manner, and at year-end they would be closed to the ordinary fund balance account.

## How does encumbrance accounting prevent overspending?

Governments and some not-for-profits record encumbrances to help prevent overspending the budget. The entry to record an encumbrance is usually prepared when a purchase order is issued, a contract is signed, or a commitment is made (e.g., when a university makes faculty and staff appointments for a semester or year). Most organizations do not encumber all anticipated expenditures. Many, for example, do not encumber salaries and wages because it is a routine recurring expenditure, other expenditures below a specified amount, and expenditures that are adequately controlled by other means.

THE BASIC ENTRIES

The entry to record an encumbrance reduces the budgeted amount available for expenditure (as if the amount had already been spent) and concurrently designates a portion of what would otherwise be unassigned fund balance as committed or assigned for encumbrances (i.e., for expenditures to which the organization is obligated). The entry is reversed as the goods or services are received and expenditures are recorded, as shown in "Example: The Encumbrance Cycle—Year 1."

Whereas both budgetary entries and encumbrances are mainly internal control devices, encumbrances are of slightly greater concern to external parties since they have a minor impact on the basic financial statements. Outstanding obligations at year-end are to be reported under GASB Statement No. 54 on the entity's fund (not government-wide) balance sheet as a committed or assigned fund balance and accordingly reduce the unassigned portion of fund balance.

## EXAMPLE The Encumbrance Cycle—Year 1

A state university contracts for repair services that it estimates will cost \$5,000. The following entry will commit the funds to meet the anticipated expenditure:

Encumbrances

\$5,000

Reserve for encumbrances (committed or assigned)

\$5,000

To encumber \$5,000 for repair services

In addition to these control account entries, corresponding entries would be made in the repair-related subaccounts (e.g., encumbrances—electrical contractors).

The reserve for encumbrances account is a balance sheet account—a commitment of fund balance. The encumbrance account, although most definitely not an expenditure, is similar to an expenditure in that at year-end any remaining balance is closed to unassigned fund balance. The encumbrance account indicates the net amount that was transferred during the period from unassigned fund balance to fund balance that is assigned or committed.

The repairs are completed and, as anticipated, the university is billed for \$5,000. The repair expenditure must be recorded with the usual entry:

Expenditures

\$5,000

Accounts payable

\$5,000

To record repair expenditures

In addition, the reserve for encumbrance is no longer required. The services have been received and the expenditure has been charged. The reserve must be eliminated by reversing the entry establishing it:

Reserve for encumbrances (committed or

assigned)

\$5,000

Encumbrances

\$5,000

To reverse the encumbrance entry upon receipt of services

At year-end the expenditures would be closed out in standard fashion, thereby reducing fund balance.

Consider two alternative possibilities. Assume first that the contractor *completes* the repairs but bills the university for only \$4,800, not the encumbered \$5,000. The university must now record an expenditure for the actual amount to be paid:

Expenditure

\$4,800

Accounts payable

\$4,800

To record repair expenditures

As before, it must eliminate the entire reserve. With regard to the repairs, the university has no further commitment; it therefore needs no reserve:

Reserve for encumbrances (committed or assigned)

\$5,000

Encumbrances

To reverse the encumbrance entry upon receipt of services

\$5,000

If the contractor's bill were for more than the encumbered amount, the same approach would be taken. The expenditure would be charged for the amount to be paid; the full amount of the reserve would be eliminated. The university's error in encumbering less than its actual commitment would have no consequences for financial reporting. At worst, it temporarily increased the university's risk of overspending its budget.

As the second possibility, assume that in the current period the contractor completes only 40 percent of the repairs and accordingly bills the university for only \$2,000. It expects to fulfill the remainder of its contract in the following period. In this situation, only a part of the encumbrance entry can be reversed; the university still has an outstanding commitment for \$3,000. Thus:

Expenditures
Accounts payable
To record repair expenditures

\$2,000

\$2,000

Reserve for encumbrances (committed

or assigned)

\$2,000

\$5,000

Encumbrances

\$2,000

To reverse the encumbrance entry upon the contractor's completion of \$2,000 of the \$5,000 in anticipated services

At year-end, the expenditures and the encumbrances would be closed to fund balance. (The reserve for encumbrances need not be closed because it is a balance sheet account.) Continuing with the last set of assumptions (expenditures of \$2,000; balance in the encumbrances account of \$3,000), the following closing entry would be in order:

Fund balance—unassigned
Expenditures
Encumbrances
To close expenditures and encumbrances

\$2,000

\$3,000

As a consequence of these entries, \$3,000 of the university's fund balance—the amount committed for completion of the repairs—remains reserved (i.e., assigned or committed) for encumbrances. Hence, the reserve for encumbrance will be reported on the balance sheet as either "assigned fund balance" or "committed fund balance."

ACCOUNTING
FOR
COMMITMENTS
OUTSTANDING
AT THE START
OF A YEAR

Governments differ in how they budget—and therefore how they account—for contractual obligations (commitments made) outstanding (left over from the prior year). Many governments require that the cost of goods or services be charged against budgeted appropriations of the year in which they are received. In other words, all appropriations lapse at year-end. To satisfy its outstanding obligations (commitments), a government must reappropriate the funds for the following year or meet them out of whatever resources are budgeted for the following year within an applicable expenditure classification.

Other governments, for either all or only selected types of commitments (particularly long-term projects), allow appropriations to continue into future years. When

the goods or services are received, they are charged against the budget of the year of appropriation.

In the circumstances in which appropriations lapse and the government charges the cost of goods or services against appropriations of the year in which they are received, the accounting for commitments made in a previous year is relatively simple, as is shown in "Example: The Encumbrance Cycle—Year 2." At the start of the new year the government need only restore the encumbrances that were closed at the end of the previous year. This can be accomplished by reversing the closing entry (i.e., debiting encumbrances and crediting fund balance unassigned). By restoring the encumbrances, both the reserve for encumbrances (which, as a balance sheet account, was never closed) and the encumbrances would have the same balances as if the closing entries had not been made. Thereafter, the entries to record the fulfillment of the commitments would be the same as if the goods or services were received in the year the encumbrances and the reserve were initially established.

#### EXAMPLE The Encumbrance Cycle—Year 2

At the end of the first year—the start of the second—the university had \$3,000 of outstanding commitments for repairs. The following entry would restore the \$3,000 of encumbrances for repairs:

Encumbrances

\$3,000

Fund balance—unassigned

\$3,000

To restore encumbrances at the start of the new year

When the contractor completes the repairs, the university will charge expenditures for the amount billed and reverse the encumbrances and the reserve for encumbrances:

Expenditures

\$3,000

Accounts payable

\$3,000

To record repair expenditures

Reserve for encumbrances (committed

or assigned)

\$3,000

Encumbrances

\$3,000

To reverse the encumbrances entry upon the contractor's completion of the remaining \$3,000 of repairs8

Per GASB Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions, reserves for encumbrances should not be reported on the balance

Expenditures—Year 1 (prior year)

\$3,000

Accounts payable

\$3,000

To record repair expenditures

These expenditures would then be closed to the previously established reserve for encumbrances:

Reserve for encumbrances (committed or assigned)

\$3,000

Expenditures—Year 1 (prior year)

\$3,000

To close expenditures for the previous year and eliminate the applicable reserve for encumbrances

<sup>&</sup>lt;sup>8</sup>If the appropriation does not lapse and the government charges the cost of goods or services against appropriations of the year in which the commitment was made, then the encumbrance should not be restored. Instead, when the commitment is fulfilled, the expenditure should be "dated" to indicate that it is applicable to the previous year. Thus, for example:

sheet, but significant amounts should be disclosed in the notes. Encumbered amounts for specific purposes for which resources already have been restricted, committed or assigned would already be incorporated in the amounts reported as restricted, committed or assigned fund balance and therefore no further adjustment is required. By contrast, as indicated in the example, the encumbered amounts that were previously not restricted, committed or assigned should no longer be classified as unassigned, but should instead be incorporated into either committed or assigned fund balance. The decision as to whether they should be committed or assigned would depend on the specific characteristics of the amounts—whether they better fit the description of one category or the other.

The next example, "Impact of Encumbrances on Fund Balance," highlights the impact of the encumbrance procedures on fund balance by focusing on a single purchase commitment. Note that over the two-year period the total reduction in fund balance equals the total expenditures.

## EXAMPLE Impact of Encumbrances on Fund Balance

#### Year 1

As of January 1, a government's general fund balance sheet shows the following:

Cash \$1,000
Fund balance—unassigned \$1,000

During the year, the government orders \$1,000 of supplies (which are to be charged as expenditures when received):

Encumbrances \$1,000

Reserve for encumbrances (assigned)

To encumber \$1,000 for supplies on order (It is assumed in this example that the reserve for encumbrances will be classified as "assigned" fund balance.)

Part of the supplies order costing \$800 is received and paid for in cash:

Supplies expenditures \$800 Cash \$800

\$1,000

To record the receipt of, and payment for, supplies

Reserve for encumbrances (assigned) \$800 Encumbrances \$800

To reverse the encumbrance entry for the portion of the supplies order received

\*The government prepares the following year-end closing entries:

Fund balance—unassigned \$1,000

Encumbrances \$200

Supplies expenditures 800

To close encumbrances and expenditures

Table 3—4 presents the year-end balance sheet and a schedule of changes in unassigned fund balance.

#### Year 2

The government expects to honor its commitment for the supplies on order, and its budgeting policies dictate that the cost of the supplies on order be charged as expenditures of the year in which they are received. Therefore, at the start of the new year it restores the encumbrances that had been closed at the end of the prior year:

Encumbrances \$200
Fund balance—unassigned \$200
To restore encumbrances

It receives, and pays for, the remainder of the supplies. However, the additional charges are only \$150, not \$200 as encumbered:

Supplies expenditures \$150

Cash \$150

To record the receipt of, and payment for, supplies

Reserve for encumbrances (assigned) \$200 Encumbrances \$200

To reverse the encumbrance entry for the remainder of the supplies

It prepares appropriate year-end closing entries:

Fund balance—unassigned \$150
Supplies expenditures \$150

To close expenditures (Note: The balance in the encumbrances account is zero; it need not be closed)

	Encum	orances	
(a)	1,000	(c) (cl. 1)	800 200
(d)	200	(f)	200

	supplies Ex	xpenaiture	S
(b)	800	(cl. 1)	800
(e)	150	(cl. 2)	150

	Ca	ısh	
Beg. Bal.	1,000	(b)	800
Yr. 1 Bal.	<u>200</u>	(e)	150
Yr. 2 Bal.	50		

Reserve for Encumbrances—Unassigned			
(c)	800	(a)	1,000
(f)	200	Yr. 1 Bal.	200
Yr. 2 Bal.	- 0	7	

Fund Balance—Unassigned			
(cl. 1)	1,000	Beg. Bal.	1,000
(cl. 2)	150	Yr. 1 Bal. (d)	0 
		Yr. 2 Bal.	50

FIGURE 3-2 Summary of Budget Entries

Figure 3-2 summarizes the entries to the accounts. The government began the two-year period with an unassigned fund balance of \$1,000. During the two years it incurred expenditures of \$950. As shown in the T-account, its unassigned fund balance at the end of the second year is \$50—the same as if an encumbrance system were not being employed. The assigned fund balance in this example is simply the reserve for encumbrances. If there were other amounts of fund balance that had been assigned for purposes other than the encumbrances, then the reserve for encumbrances would have been added to those amounts. The fund's balance sheet at the end of each of the two years and a schedule explaining the change in unassigned fund balance are shown in Table 3-4.

٠.	i, a	TAB	LE	3-4
	En	cumbr	ance	Example

**Balance** Sheet

	Year 1	Year 2
Cash	<u>\$200</u>	<u>\$50</u>
Fund balance	* * *	
Assigned	\$200	\$ 0
Unassigned	0	<u>50</u>
Total fund balance	<u>\$200</u>	<u>\$50</u>

#### Schedule of Changes in Unassigned Fund Balance

	Year 1	Year 2	Total
Revenues	\$ 0	\$ 0	\$ 0
Expenditures	800	<u>150</u>	<u>950</u>
Excess of revenues over expenditures	(800)	(150)	(950)
Less: Increase/(decrease) in reserve for encumbrances	200	(200)	0
Net change in unassigned fund balance during the year [increase/(decrease)] Add: Beginning of year balance End of year balance	(1,000) <u>1,000</u> <u>\$</u> 0	50 0 <u>\$ 50</u>	<u>\$(950</u> )

Note: If the appropriations did not lapse, then the entry to restore the encumbrances would not have been made. Instead, when the goods were received, the following entries would be necessary:

Supplies expenditures—Year I	\$150	
Cash		\$150
To record the receipt of, and payment for, supplies		Marine Marine
Reserve for encumbrances	\$200	M Mar
Supplies expenditures—Year 1		\$150
Fund balance		19 19 50
To close the supplies expenditures for Year 1 and eliminate t	he reserve for encumbrances	

## ARE BUDGETARY AND ENCUMBRANCE ENTRIES REALLY NEEDED?

Some governments and most not-for-profits do not integrate their budgets into their accounting systems or encumber the cost of goods or services for which they are committed. Under what circumstances should they do so? The general answer is that they should do so when the benefits of added control are worth the costs (in both dollars and inconvenience).

Consistent with this answer, governments are more likely to establish these controls than are not-for-profits because the penalties for overspending government budgets are likely to be more severe. Similarly, governments are more likely to implement these mechanisms in their general fund than in some other governmental funds—such as their capital projects funds or their debt service funds—because adequate controls may already be in place in those funds. For example, sufficient controls over the cost of a capital project may be established simply by ensuring that the agreed-upon price with the contractor is within the amount of bond proceeds. The expenditures of a debt service fund may be set by the payments of principal and interest spelled out in the bond indentures.

Modern computer systems make it possible for the controls provided by both budgetary entries and encumbrances to be achieved by means other than formal journal entries. For example, a government can simply "load" the budget into its computer. The computer can be programmed to issue a warning whenever actual expenditures and commitments exceed a specified percentage of budgeted expenditures.

## SUMMARY

Almost all aspects of management in government and not-for-profit organizations revolve around the entities' budgets. The budget is at the center of planning, controlling, administering, evaluating, and reporting functions.

Budgets can take many forms. Appropriation budgets indicate governments' estimated revenues and authorized expenditures. Capital budgets concentrate on long-lived assets. Flexible budgets, which governments use for enterprise funds, contain alternative budget estimates based on different levels of output. Performance budgets focus on measured units of effort and accomplishment and relate costs to objectives.

Most governments follow a four-phase cycle for budgeting: preparation, legislative adoption and executive approval, execution, and reporting and auditing.

For legislative purposes, most governments prepare cash or near-cash budgets. But these may fail to capture the economic cost of carrying out government activities and are not an adequate basis for planning and assessing results.

To demonstrate that they complied with their budgets, governments are required to include in their annual reports.

a budget-to-actual comparison on a budget basis (that is, the same basis on which they prepare their budget, usually cash or near-cash). However, the revenues and expenditures from the budget may not be readily comparable to those in GAAP-based statements. Differences may be attributable to the basis of accounting (e.g., cash versus modified accrual), timing (e.g., period over which a project will be completed versus a single year), perspective (e.g., program versus object classification), and reporting entity (legal versus economic). Therefore, governments must both explain and reconcile the differences between budgeted and actual amounts on a GAAP basis.

The accounting systems of governments are similar to businesses in that they use comparable journals and ledgers. However, they differ in that governments include corporate budgetary control features to ensure adherence to spending mandates. In addition, they encumber goods and services in order to prevent themselves from overcommitting available resources.

## **XEY TERMS IN THIS CHAPTER**

allotments
apportionments
appropriation
appropriation budget
budget
budgetary fund balance
capital budget

encumbrances
fixed budget
flexible budget
object classification budget
performance budget
program budget

### EXERCISE FOR REVIEW AND SELF-STUI

To enhance control over both revenues and expenditures, a government health care district incorporates its budget: in its accounting system and encumbers all commitments... You have been asked to assist the district in making the entries to record the following transactions:

- Prior to the start of the year, the governing board adopted a budget in which agency revenues were estimated at \$5,600 (all dollar amounts in this exercise are expressed in thousands) and expenditures of \$5,550 were appropriated (authorized). Record the budget using only the control (summary) accounts.
- During the year, the district engaged in the following transactions. Prepare appropriate journal entries.
  - a. It collected \$5,800 in fees, grants, taxes, and other
  - b. It ordered goods and services for \$3,000. Except in special circumstances it classifies reserves for encumbrances as "assigned" fund balance.
  - c. During the year it received and paid for \$2,800 worth of goods and services that had been previously

- encumbered. It expects to receive the remaining \$200 in the following year.
- d. It incurred \$2,500 in other expenditures for goods and services that had not been encumbered.
- Prepare appropriate year-end closing entries.
- Prepare a balance sheet showing the status of year-end asset and fund balance accounts.
- Per the policy of the district's board, the cost of all goods and services is to be charged against the budget of the year in which they are received, even if they had been ordered (and encumbered) in a previous year. The next year, to simplify the accounting for the commitments made in the prior year, the district reinstated the encumbrances outstanding at year-end. Prepare the appropriate entry.
- During the year, the district received the remaining encumbered goods and services. However, the total cost was only \$150, rather than \$200 as estimated. Prepare the appropriate entries.

## UESTIONS FOR REVIEW AND DISCUSSION

- Why is it important that governments and notfor-profits coordinate their processes for developing appropriations budgets with those for developing capital budgets?
- Why may flexible budgets be more important to a government's business-type activities than to its governmental activities?
- What is the main advantage of an object classification budget? What are its limitations? How do performance budgets overcome these limitations?
- Why do most governments and not-for-profits budget on a cash or near-cash basis even though the cash basis does not capture the full economic costs of the activities in which they engage?
- A political official boasts that the year-end excess of revenues over expenditures was significantly greater than was budgeted. Are "favorable" budget variances necessarily a sign of efficient and effective governmental management? Explain.

- What are allotments? What purpose do they serve?
- Why may a government's year-end results, reported in accordance with generally accepted accounting principles, not be readily comparable with its legally adopted budget?
- The variances reported in the "final" budget-to-actual comparisons incorporated in the financial statements of many governments may be of no value in revealing the reliability of budget estimates made at the start of the year. Why? How can you rationalize this limitation of the budget-to-actual comparisons?
- In what way will budgetary entries and encumbrances affect amounts reported on year-end balance sheets or operating statements?
- 10. Why do many governments consider it unnecessary to prepare appropriation budgets for, and incorporate budgetary entries into the accounts of, their capital project funds?

## Exercises

#### E. 3-1

Select the best answer.

- 1. Appropriation budgets are typically concerned with
  - a. The details of appropriated expenditures
  - b. Long-term revenues and expenditures
  - c. Current operating revenues and expenditures
  - d. Capital outlays
- Which of the following types of budgets would be most likely to include a line item "purchase of supplies"?
  - a. Object classification
  - b. Performance
  - c. Capital
  - d. Program
- Per GASB Statement No. 34, a budget-to-actual comparison must include columns for the actual results and
  - a. The original budget only
  - b. The final budget only
  - c. Both the original and the final budget
  - d. Both the amended and the final budget
- 4. Apportionments are made during which phase of the budget cycle?
  - a. Preparation
  - b. Legislative adoption and executive approval
  - c. Execution
  - d. Reporting and auditing
- 5. In adopting and recording the budget a government should
  - a. Debit estimated revenues and credit revenues
  - b. Credit estimated revenues and debit fund balance
  - c. Debit revenues and credit fund balance.
  - d. Debit estimated revenues and credit fund balance
- 6. In closing budgetary and expenditure accounts at year-end a government should
  - a. Debit appropriations and credit expenditures
  - b. Credit appropriations and debit expenditures
  - c. Debit expenditures and credit fund balance
  - d. Credit appropriations and debit fund balance
- 7. The prime function of budgetary entries is to
  - a. Apportion appropriated expenditures to specific accounts
  - b. Help the government monitor revenues and expenditures

- c. Amend the budget during the year
- d. Facilitate the year-end budget-to-actual comparisons
- 8. A government should debit an expenditure account upon
  - a. Recording the budget
  - b. Approving an apportionment
  - c. Ordering supplies
  - d. Recording the receipt of an invoice from its telephone service provider
- 9. If a government records the budget, and actual revenues exceed budgeted revenues, what would be the impact on the year-end financial statements?
  - a. The difference between actual and budgeted revenues would be reported on neither the balance sheet nor the statement of revenues and expenditures
    - b. The difference between actual and budgeted revenues would be recorded as a budgetary reserve on the balance sheet
    - c. The difference between actual and budgeted revenues would be shown as a revenue contra account on the statement of revenues and expenditures
    - d. The actual revenues would be shown on the statement of revenues and expenditures as a deduction from estimated revenues
- 10. A "cash basis" budget relative to a "modified accrual basis" budget
  - a. Better facilitates the preparation of year-end financial statements in accordance with generally accepted accounting principles
  - b. Better facilitates the day-to-day management of an organization's cash flows
  - c. Limits the opportunities of an entity to balance its budget by arbitrarily delaying cash payments from one period to the next
  - d. Better ensures that a government will achieve interperiod equity

#### E. 3-2

Select the *best* answer.

- Upon ordering supplies a government should
  - a. Debit encumbrances and credit reserve for encumbrances
  - **b.** Debit reserve for encumbrances and credit encumbrances
  - c. Debit expenditures and credit encumbrances
  - d. Debit expenditures and credit vouchers payable

- 2. Upon receiving supplies that had previously been encumbered a government should
  - Debit reserve for encumbrances and credit encumbrances
  - b. Debit fund balance and credit reserve for encumbrances
  - c. Debit fund balance and credit expenditures
  - d. Debit réserve for encumbrances and credit expenditures
- 3. Upon closing the books at year-end a government should
  - a. Debit fund balance and credit reserve for encumbrances.
  - b. Debit encumbrances and credit reserve for encum-
  - c. Debit fund balance and credit encumbrances
  - d. Debit reserve for encumbrances and credit encumbrances
- 4. A government requires that all appropriations lapse at the end of a year. At the end of Year 1 that government has \$100,000 of goods and services on order. At the start of Year 2 the government should
  - a. Debit fund balance and credit encumbrances
  - b. Debit reserve for encumbrances and credit encumbrances
  - c. Debit encumbrances and credit reserve for encumbrances
  - d. Debit encumbrances and credit fund balance
- 5. Which of the following accounts would a government be most likely to debit as part of its year-end closing process?
  - a. Appropriations, encumbrances, and estimated revenues
  - b. Estimated revenues, appropriations, and reserve for encumbrances
  - c. Revenues, appropriations, and encumbrances
  - d. Revenues, appropriations, and fund balance
- 6. A government places an order for a particular item of equipment and encumbers \$5,500. The item arrives accompanied by an invoice for \$5,200. The entries that the government should make should include (but not necessarily be limited to):
  - a. A debit to expenditures for \$5,200, a debit to fund balance for \$300, and a credit to reserve for encumbrances for \$5,500
  - b. A debit to expenditures for \$5,200, a credit to encumbrances for \$5,200, and a credit to accounts payable for \$5,200

- c. A debit to expenditures for \$5,200, a credit to encumbrances for \$5,500, and a credit to accounts payable for \$5,200
- d. A debit to expenditures for \$5,200, a credit to reserve for encumbrances for \$5,200, and a credit to accounts payable for \$5,200
- 7. A primary virtue of an object classification budget is
  - a. Covers a period of more than one year
  - b. Facilitates control by establishing detailed spending mandates
  - c. Shows the impact on the budget of various possible levels of output
  - d. Relates inputs to measurable outcomes
- 8. Per GASB Statement No. 34, governments must
  - a. Prepare a general fund budget on a cash basis
  - b. Prepare a general fund budget on a modified accrual basis
  - c. Prepare a schedule that reconciles any differences between amounts reported on a GAAP basis and a budgetary basis
  - d. Prepare a schedule that reconciles any differences between the original budget and the amended budget
- The amount that a government has available to spend for a particular purpose in a particular year would be indicated by
  - a. Encumbrances minus the sum of appropriations, expenditures, and net adjustments
  - b. Reserve for encumbrances plus appropriations minus the sum of expenditures and net adjustments
  - Appropriations plus encumbrances minus the sum of expenditures and net adjustments
  - d. Appropriations minus the sum of expenditures, encumbrances, and net adjustments
- 10. For which of the following funds would a government be least likely to record its annual budget and thereby integrate it into its accounting system?
  - a. General fund
  - b. Special revenue fund
  - c. Capital project fund
  - d. Enterprise fund

E. 3-3

A county engages in basic transactions.

Kilbourne County engaged in the following transactions in summary form during its fiscal year. All amounts are in millions. You need not be concerned with the

category of funds balances to which reserves for encumbrances are classified on the fund balance sheet.

- 1. Its commissioners approved a budget for the current fiscal year. It included total revenues of \$860 and total appropriations of \$850.
- 2. It ordered office supplies for \$20.
- 3. It incurred the following costs, paying in cash:

Salaries	 \$610
Repairs	\$ 40
Rent	\$ 25
Utilities	\$ 41
Other operating costs	\$119

- It ordered equipment costing \$9.
- 5. It received the equipment and was billed for \$10, rather than \$9 as anticipated.
- 6. It received the previously ordered supplies and was billed for the amount originally estimated. The county reports the receipt of supplies as expenditures; it does not maintain an inventory account for supplies.
- 7. It earned and collected revenues of \$865.
  - a. Prepare journal entries as appropriate.
  - b. Prepare closing entries as appropriate.
  - c. What would have been the difference in the yearend financial statements, if any, had the county not made the budgetary entries?

#### E. 3-4

Encumbrances are recorded in a capital projects fund similar to a general fund.

Wickliffe County authorized the issuance of bonds and contracted with the USA Construction Company (UCC) to build a new sports complex. During 2011, 2012, and 2013 the county engaged in the transactions that follow. All were recorded in a capital projects fund:

- 1. In 2011 the county issued \$310 million in bonds (and recorded them as "bond proceeds," an account comparable to a revenue account).
- 2. It approved the sports complex contract for \$310 million and encumbered the entire amount.
- 3. It received from UCC an invoice for construction to date for \$114 million, an amount that the county recognized as an expenditure.
- 4. It paid UCC the amount owed.
- 5. In 2012 it received from UCC an invoice for an additional \$190 million.
- 6. It paid the amount in full.

- 7. In 2013 UCC completed the sports facility and billed the county an additional \$7 million. The county approved the additional costs, even though the total cost was now \$311 million, \$1 million more than initially estimated.
- 8. The county transferred \$1 million from the general fund to the capital projects fund.
- 9. The county paid the \$7 million.
  - a. Prepare the journal entries, including closing entries, to record the transactions in the capital projects fund. Assume that expenditures do not have to be appropriated each year. Hence, the county need not reestablish encumbrances at each year subsequent to the first. Instead, it can close the expenditures of the second and third years to reserve for encumbrances rather than fund balaance.
  - b. What other funds, other than the capital projects fund, statements, or schedules would be affected by the transactions?

#### E. 3-5

Both budgeted and actual revenues and expenditures are closed to the fund balance.

The budgeted and actual revenues and expenditures of Seaside Township for a recent year (in millions) were as presented in the schedule that follows.

- 1. Prepare journal entries to record the budget.
- 2. Prepare journal entries to record the actual revenues and expenditures. Assume all transactions resulted in increases or decreases in cash.
- 3. Prepare journal entries to close the accounts.
- 4. Determine the net change in fund balance. Does it equal the net change in actual revenues and expenditures?

	Budget	Actual
Revenues		
Property taxes	\$ 7.5	\$ 7.6
Sales taxes.	2.1	2.4
Other revenues	1.6	1.5
Total revenues	<u>\$11.2</u>	<u>\$11.5</u>
Expenditures		
Wages and salaries	\$ 6.2	\$ 6.1
Supplies	3.1	3.0
Other expenditures	1.3	1.2
Total expenditures	\$10.6	\$10.3
Increase in fund balance	\$ 0.6	<u>\$ 1.2</u>

#### E. 3-6

Encumbrance accounting has no lasting impact on fund balance.

London Township began Year 1 with a balance of \$10 million in its bridge repair fund, a capital projects fund. The fund balance is classified as restricted.

At the start of the year, the governing council appropriated \$6 million for the repair of two bridges. Shortly thereafter, the town signed contracts with a construction company to perform the repairs at a cost of \$3 million per bridge.

During the year the town received and paid bills from

the construction company as follows:

• \$3.2 million for the repairs on Bridge 1. The company completed the repairs, but owing to design changes approved by the town, the cost was \$0.2 million greater than anticipated. The town did not encumber the additional \$0.2 million.

\$2.0 million for the repairs, which were not com-

pleted, on Bridge 2.

At the start of the following year, the governing council reappropriated the \$1 million to complete the repairs on Bridge 2. During that year the town received and paid bills totaling \$0.7 million. The construction company completed the repairs, but the final cost was less than anticipated—a total of only \$2.7 million.

- Prepare journal entries to record the events and transactions over the two-year period. Include entries to appropriate, reappropriate, encumber, and reencumber the required funds; to record the payment of the bills; and to close the accounts at the end of each year.
- 2. Determine the restricted fund balance at the end of the second year. Is it equal to the initial fund balance less the total cost of the repairs?

#### E. 3-7

Encumbrances have an impact on unassigned fund balance, but do not affect total fund balance.

At the start of its fiscal year on October 1, Fox County reported the following (all dollar amounts in thousands):

Fund balance:

Committed for encumbrances \$200
Unassigned 400
Total fund balance \$600

During the year, the county (all dollar amounts in thousands):

- Estimated that revenues for the year would be \$6,300.
- Appropriated \$6,500 for operations.
- Ordered goods and services estimated to cost \$6,000. Of these, the county received (and used) goods and services that it had estimated would cost \$5,000. Actual cost, however, was \$5,200.
- Received (and used) all goods that it ordered in the previous year. Actual cost was only \$180.
- Recognized actual revenues of \$6,400.
- 1. Prepare a schedule, similar to that illustrated in the text, of changes in unassigned fund balance.
- 2. Show how the total fund balance (including the unassigned and committed portions) would be displayed at year-end.
- 3. Does the total fund balance at the beginning of the year, plus the actual revenues, minus the actual expenditures, equal the total fund balance at the end of the year?

## CONTINUING PROBLEM

- 1. In which section of the Comprehensive Annual Financial Report (CAFR) are the budget-to-actual comparisons of the major funds?
  - a. Are the actual amounts on a GAAP or a budgetary basis? Do the statements include a reconciliation of any differences between GAAP and budgetary amounts? If so, what are the largest reconciled items?
  - b. Are the reported variances based on the original budget or the year-end amended budget?
- 2. Does the GAFR include budget-to-actual comparisons of nonmajor funds? If so, in what section?
- 3. Does the government encumber goods or services that have been ordered but have not yet been received? How, if at all, are encumbrances reflected on the governmental fund balance sheet? How, if at all, are they reflected on the government-wide statement of net assets?
- 4. Do encumbrances that remain outstanding at year-end lapse? That is, do the amounts that will be expended in the following year, when the goods or services are received, have to be rebudgeted in the following year? How can you tell?

## ROBLEMS

#### P. 3-1

Is accrual-based budgeting preferable to cash-based budgeting?

The Disability Research Institute receives its funding mainly from government grants and private contributions. In turn, it supports research and related projects carried out by universities and other not-for-profits. Most of its government grants are reimbursement (expenditure-driven) awards. That is, the government will reimburse the institute. for the funds that it disburses to others.

The institute estimates that the following will occur in the forthcoming year:

- all of which will be paid out to subrecipients during the year. Of this amount, only \$4.5 million will be reimbursed by the government during the year. The balance will be reimbursed in the first six months of the next year. The institute will also receive \$200,000 in grant funds that were due from the previous year.
- It will receive \$600,000 in pledges from private donors. It expects to collect \$450,000 during the year and the balance in the following year. It also expects to collect \$80,000 in pledges made the prior
- It will purchase new furniture and office equipment at a cost of \$80,000. It currently owns its building, which it had purchased for \$800,000, and additional furniture and equipment, which it acquired for \$250,000. The building has a useful life of twenty-five years; the furniture and equipment have a useful life of five
- Employees will earn wages and salaries of \$340,000, of which they will be paid \$320,000 during the forthcoming year and the balance in the next year.
- It will incur other operating costs of \$90,000, of which it will pay \$70,000 in the forthcoming year and \$20,000 in the next year. It will also pay another \$10,000 in costs incurred in the previous year.
- 1. Prepare two budgets, one on a cash basis and the other on a full accrual basis. For convenience show both on the same schedule, with the cash budget in one column and the accrual in the other column.
- 2. Comment on which budget better shows whether the institute is covering the economic cost of the services that it provides.
- 3. Which is likely to be more useful to
  - a. Institute managers?
  - b. Members of the institute's board of trustees?
  - c. Bankers from whom the institute seeks a loan?

#### P. 3-2

Missing data can be derived, and journal entries constructed, from information in the accounts.

The following schedule shows the amounts (in thousands) related to expenditures that a city welfare department debited and credited to the indicated accounts during a year (not necessarily the year-end balances), excluding closing entries. The department records its budget, encumbers all of its expenditures, and initially vouchers all payments.

Some information is missing. You are to determine the missing data and construct all entries (in summary form), • It will be awarded \$5 million in government grants, excluding closing entries, that the department made during the year.

(in tho Debit	usands) Credit
\$0	\$28
,	
.0	55
. ?	?
30	0
32	50
?	0
	\$0 ? .0 ? 30

#### P. 3-3

. Missing data can be derived, and journal entries constructed, from information in the accounts.

The following schedule shows the amounts related to supplies that a city debited and credited to the indicated accounts during a year (not necessarily the year-end balances), excluding closing entries. The city records its budget, encumbers all of its expenditures, and initially vouchers all payments. All revenue was collected in cash.

Some information is missing. By reconstructing the entries that the city made during the year, you are to determine the missing data and construct the journal entries (in summary form), excluding closing entries.

•	(in thousands)	
	Debits	Credits
Cash	\$117	\$ ?
Estimated revenues	7 '	0
Revenues	0	?
Vouchers payable	70	54
Appropriations	. 0	?
Encumbrances	. ?	58
Expenditures	2	0
Reserved for encumbrances	5	93
Fund balance—unassigned	115	120

#### P. 3-4

A city imposes an overhead charge on one of its departments to alleviate its fiscal problems.

A city's visitors' bureau, which promotes tourism and conventions, is funded by an 8 percent local hotel occupancy tax (a tax on the cost of a stay in a hotel). Because the visitors' bureau is supported entirely by the occupancy tax, it is accounted for in a restricted fund.

You recently received a call from the director of the visitors' bureau. She complained that the city manager is about to impose an overhead charge of a specified dollar hotel occupancy tax specifies that the revenues can be used only to satisfy "direct expenditures" incurred to promote tourism and bookings at the city's convention center. The manager says that she understands that the city is having difficulty balancing its budget, but she fails to see how the charge to her department will do much to alleviate the city's fiscal problems.

- 1. In light of the city's fiscal problems, what is the most likely motivation for the new charge? Will the new overhead charge achieve its objective?
- 2. What would be the impact of the new charge on the city's annual fund financial statements, prepared in accordance with GAAP (which requires that the city account for its governmental funds on a modified accrual basis)? Would the impact be the same if the city accounted for its governmental funds on a cash basis?
- 3. What would be the impact of the new charge on the city's government-wide statements, in which all governmental funds are consolidated? Would it have an impact on reported net assets?
- 4. In what way might the charge have a substantive impact on the city's economic condition?
- 5. Assuming that the city provided accounting, legal, and purchasing services to the visitors' bureau, do you think the charge would be consistent with the statutory requirement that the hotel occupancy tax be used to meet only "direct expenditures" related to tourism and use of the convention center (an issue not addressed in this text)?

#### P. 3-5

Government activities may be less "profitable" than they appear.

A city prepares its budget in traditional format, classifying expenditures by fund and object. In 2006, amid considerable controversy, the city authorized the sale of \$20 million in bonds to finance construction of a new sports and special events arena. Critics charged that, contrary to the predictions of arena proponents, the arena could not be fiscally self-sustaining.

Five years later, the arena was completed and began to be used. After its first year of operations, its general

managers submitted the following condensed statement of revenues and expenses (in millions):

Revenues from ticket sales	\$5.7	
Revenues from concessions	<u>2.4</u>	<u>\$8.1</u>
Operating expenses	6.6	
Interest on debt	1.2	<u>7.8</u>
Excess of revenues over expenses		<u>\$0.3</u>

At the city council meeting at which the report was amount on her department. Yet the statute creating the submitted, the council member who had championed the center glowingly boasted that his prophecy was proving correct; the arena was "profitable."

> Assume that the following information came to your attention:

- The arena is accounted for in a separate enterprise fund.
- The arena increased the number of overnight visitors to the city. City administrators and economists calculated that the additional visitors generated approximately \$0.1 million in hotel occupancy tax revenues. These taxes are dedicated to promoting tourism in the city. In addition, they estimated that the ticket and concession sales, plus the economic activity generated by the arena, increased general sales tax revenues by \$0.4 million.
- The city had to improve roads, highways, and utilities in the area surrounding the arena. These improvements, which cost \$6 million, were financed with general obligation debt (not reported in the enterprise fund). Principal and interest on the debt, paid out of general funds, were \$0.5 million. The cost of maintaining the facilities was approximately \$0.1
- On evenings when events were held in the arena, the city had to increase police protection in the arena's neighborhood. Whereas the arena compensated the police department for police officers who served within the arena itself, those who patrolled outside were paid out of police department funds. The police department estimated its additional costs at \$0.1 million.
- The city provided various administrative services (including legal, accounting, and personnel) to the arena at no charge at an estimated cost of \$0.1 million.
- The city estimates the cost of additional sanitation, fire, and medical services due to events at the center to be approximately \$0.2 million.
- 1. Would you agree with the council member that the arena was fiscally self-sustaining?
- 2. In which funds would the additional revenues and expenditures be budgeted and accounted for?

- Comment on the limitations of both the traditional object classification budget and fund accounting system in assessing the economic costs and benefits of a project—such as the sports and special events arena.
- 4. What changes in the city's budgeting and accounting structure would overcome these limitations? What additional problems might these changes cause?

#### P. 3-6

To what extent do the unique features of government accounting make a difference on the financial statements?

The transactions that follow relate to the Danville County Comptroller's Department over a two-year period.

#### Year 1

- The county appropriated \$12,000 for employee education and training.
- The department signed contracts with outside consultants to conduct accounting and auditing workshops.
   Total cost was \$10,000.
- The consultants conducted the workshops and were paid \$10,000.
- The department ordered books and training materials, which it estimated would cost \$1,800. As of year-end, the materials had not been received.

#### Year 2

- The county appropriated \$13,500 for employee education and training.
- The department received and paid for the books and training materials that it ordered the previous year. Actual cost was only \$1,700. The county's accounting policies require that the books and training materials be charged as an expenditure when they are received (as opposed to being recorded as inventory and charged as an expenditure when used).
- It authorized employees to attend various conferences and training sessions: Estimated cost was \$10,500.
- Employees submitted \$10,800 in reimbursement requests for the conferences and training sessions they attended. The department paid them the requested amounts and at year-end did not expect to receive any additional reimbursement requests.
- 1. Prepare all required journal entries that would affect the expenditure subaccount "education and training," including budgetary and closing entries. Assume that all appropriations lapse at year-end (thus, all expenditures in Year 2 would be charged against that year's appropriation of \$13,500, even if the goods and services were ordered in Year 1).

- 2. Indicate (specifying accounts and dollar amounts) how the transactions would be reported in the county's general fund:
  - a. Balance sheet
  - b. Statement of revenues and expenditures
- 3. Alternatively, suppose that the county did not record its budget and did not encumber its commitments. What would be the difference in the year-end financial statements?
- 4. Assume instead that appropriations for goods on order at year-end do not lapse. When the goods are received they are charged as expenditures against the budget of the year in which they were encumbered. How would this change affect your entries and the year-end financial statements? How would it affect the amount that the department had available to spend in Year 2 on goods

#### P. 3-7

Different budget-to-actual comparisons serve different purposes.

The following information was drawn from a county's general fund budgets and accounts for a particular year (in millions):

	Amended Budget	Original Budget	Actual Results (Budget Basis)
Revenues	-		
Property taxes	\$46.6	\$42.5	\$53.0
Sales taxes	16.3	13.6	15.1
Licenses and permits	1.1	1.0	1.0
Other	3.2	2.9	_ 3.4
Total revenues	<u>\$67.2</u>	<u>\$60.0</u>	<b>\$</b> 72.5
Expenditures			
General government	\$18.2	\$16.2	\$18.1
Public safety	29.2	25.1	28.5
Sanitation	9.7	9.4	9.6
Culture and recreation	8.1	7.8	8.1
Interest	1.4	1.4	1.4
Total expenditures	<u>\$66.6</u>	\$59.9	\$65.7
Excess of revenues			***************************************
over expenditures	<u>\$ 0.6</u>	<u>\$ 0.1</u>	<u>\$ 6.8</u>
You also learn the following	g:		
		ginning Year	End of Year
Encumbrances (commitme	nts)		
outstanding	-	\$2.7	\$1.1
Supplies inventories on har	nd	1.8	1.0
Wages and salaries payable	: · · · .	0.5	0.7
Property taxes expected to			
collected within 60 days	-	1.7	2.5

· For purposes of budgeting, the country recognizes encumbrances as the equivalent of expenditures in the year established; for financial reporting, it recognizes expenditures when the goods or services are received, as required by GAAP.

expenditures when the supplies are acquired; for financial reporting, it recognizes the expenditure

when the supplies are consumed.

· For purposes of budgeting, it recognizes wages and salaries when paid; for financial reporting, it recognizes the expenditures when the employees perform their services.

- For purposes of budgeting, it recognizes as revenues only taxes actually collected during the year; for financial reporting, it recognizes taxes expected to be collected within the first sixty days of the following year.
- 1. Prepare the following four separate schedules in which you compare the budget-to-actual results and compute the budget variance. You need to present only the total revenues, total expenditures, and excess of revenues over expenditures.
  - a. Actual results on a budget basis to the amended
  - b. Actual results on a budget basis to the original budget
  - c. Actual results as would be reflected in the financial statements to the amended budget restated so that it is on a financial reporting basis

- d. Actual results as would be reflected in the financial statements to the original budget restated so that it is on a financial reporting basis
- 2. The county executive has boasted that the "betterthan-anticipated results" (based on the comparison of For purposes of budgeting, it recognizes supplies the schedule that appears in the financial statements) are evidence of "sound fiscal management and effective cost controls" on the part of the county administration. Do you agree?
  - 3. Which of the three schedules best demonstrates legal compliance? Explain.
  - 4. Which schedule best demonstrates effective management? Explain.

#### P. 3-8

Budget variances have to be interpreted with caution.

The data presented below were taken from the books and records of the village of Denaville. All amounts are in millions. The village encumbers all outlays. As is evident from the data, some goods or services that were ordered and encumbered have not yet been received. City regulations require that all appropriations lapse at year-end.

- 1. Prepare summary entries to record
  - a. the budget
  - b. the encumbrance of the goods and services
  - c. the receipt of the goods and services All invoices were paid in cash.
  - d. the actual revenues (all cash receipts)
- 2. Prepare summary entries to close the accounts

#### Village of Depaville

#### Amounts Received

village of Denaville		ZXXXVX	CES ACCCETCA		
	Estimated/ Appropriated	Amounts Encumbered	Estimated Cost	Actual Cost	Actual Revenues
Revenues		<u> </u>		Egg/V	
Property taxes	\$ 7,900				\$ 7,800
Sales taxes	3,900				3,600
Licenses	300	• •			200
Other	700		;		400
	12,800		•	<b>*</b>	<u>\$12,000</u>
Expenditures/Appropriations			•		
General government	3,000	\$ 2,600	\$·2,400	\$ 2,800	
Public safety /	6,000	5,900	<u>5</u> ,000	4,900	
Recreation	1,200	1,200	800	900	
Health and sanitation	2,300	2,200	2,200	2,100	
	\$12,500	\$11,900	\$10,400	\$10,700	
Excess of estimated revenues			s de Sag		
over appropriations	300		1. 4		
Beginning unassigned fund	San		9 "		
balance	1,200		5		
Estimated unassigned ending		. *Y			
fund balance	\$ 1,500	•			

- 3. What would be the year-end
  - a. fund balance (unassigned)
  - b. reserve for encumbrance balance (irrespective of how classified)
- Prepare a schedule in which you compare budgeted to actual revenues and expenditures.
- 5. A citizen reviews the budget to actual schedule that you have prepared. She comments on the rather substantial favorable variance between budgeted and actual expenditures and questions why the government did not spend the full amount of money that it appropriated. Briefly explain to her the nature of the variance.

#### P. 3-9

A city's note to its financial statements provides considerable insight into its budget practices.

Shown below is an excerpt from a note, headed *Budgets*, from the City of Raleigh, North Carolina's, annual report for the fiscal year ended June 30.

- 1. The note distinguishes between the "budget ordinance" and the "more detailed line item budgets."
  - a. Provide examples of expenditures that you would expect to see in the budget ordinance.
  - b. Provide examples of expenditures that you would expect to see in the line-item budgets.
- 2. Why do you suspect that budgetary control is not exercised in trust and agency funds?
- 3. Generally accepted accounting principles require that governments reconcile differences between the entity's budget practices and GAAP in either the financial statements themselves or in accompanying notes. Raleigh's budget-to-actual comparison contained no such reconciliation. Why do you think a reconciliation was also omitted from the notes?
- 4. Explain how Raleigh's appropriation process for its general fund would differ from that for its capital projects fund. How would this difference most likely affect the city's budgetary entries?
- 5. The schedule included in the notes shows the original budget, total amendments, and the final budget. Where would a reader look to compare actual general fund expenditures with budgeted expenditures?

#### Note from City of Raleigh Annual Report

Budgetary control is exercised in all funds except for the trust and agency funds. The budget shown in the financial

statements is the budget ordinance as amended at the close of the day of June 30. The city is required by the General Statutes of the State of North Carolina to adopt an annual balanced budget by July 1 of each year. The General Statutes also provide for balanced project ordinances for the life of projects, including both capital and grant activities, that are expected to extend beyond the end of the fiscal year. The city council officially adopts the annual budget ordinance and all project ordinances and has the authority to amend such ordinances as necessary to recognize new resources or reallocations of budget. As of June 30, the effect of such amendments, less eliminating transfers, is shown below.

All budgets are prepared on the modified accrual basis of accounting, as is required by North Carolina law. Appropriations for funds that adopt annual budgets lapse at the end of the budget year. Project budgeted appropriations do not lapse until the completion of the project.

Budget control on expenditures is limited to departmental totals and project totals as specified in the budget ordinances. Administrative control is maintained through the establishment of more detailed line-item budgets, which correspond to the specific object of the expenditure. All budget transfers, at both the ordinance and the line-item levels, are approved by the city council. The city manager is authorized to transfer line-item budgeted amounts up to \$1,000 within a fund prior to their formal approval by the city council.

Encumbrances represent commitments related to unperformed contracts for goods or services. Encumbrance accounting—under which purchase orders, contracts, and other commitments for the expenditure of resources are recorded to reserve that portion of the applicable appropriation—is utilized in all funds. Outstanding encumbrances at year-end for which goods or services are received are reclassified to expenditures and accounts payable. All other encumbrances in the annual budgeted funds are reversed at year-end and are either canceled or are included as reappropriations of fund balance for the subsequent year. Outstanding encumbrances at year-end in funds that are budgeted on a project basis automatically carry forward along with their related appropriations and are not subject to an annual cancellation and reappropriation.

	Original Budget	Total Amendments	Budget June 30
General fund	\$145,259,996	\$2,965,856	\$148,225,852
Special revenue funds	49,087,784	5,034,632	54,122,416
General capital projects funds	135,304,688	4,038,509	139,343,197
Proprietary funds	145,984,461	2,557,523	148,541,984
Internal service funds	845,657	16,640	862,297

#### P. 3-10

Different types of funds justify different practices as to budgets and commitments.

Review the budget note to the City of Raleigh's financial statements presented in the previous problem:

Assume that the city engaged in the following transactions in 2011 and 2012:

- In 2011 it signed a service contract with a private .... security company. The company agreed to provide \$72,000 (\$6,000 per month). By year-end the company provided, and the city paid for, services for three
- In 2012, the company performed, and the city paid for, the remaining nine months of the contract. However, because of agreed-upon changes in the services provided by the company, the total charges for 2012 were reduced from \$54,000 to \$50,000.
- 1. The city properly budgeted for the services and appropriated the funds consistent with policies set forth in the note. Prepare all budgetary, encumbrance, and expenditure entries relating to the service contract that would be required in 2011 and 2012. In 2011, when the city signed the contract, it appropriated the entire \$72,000. Then, at the start of 2012, inasmuch as the city expended only \$18,000 in 2011, it reappropriated \$54,000.

a. Assume first that the contract was accounted for in Raleigh's general fund.

- b. Assume next that it was accounted for in a capital projects fund established for the construction of its Walnut Creek Amphitheatre. The city prepares annual financial statements for capital projects funds, but it does not close out its accounts. Moreover, it prepares budgets for the entire project, not for particular periods. The project was started in 2011 and completed in 2012.
- 2. Justify the city's practice of accounting differently for commitments in the two types of funds.

#### P. 3-11

Journal entries can be derived from a city's ledger.

Shown below is an excerpt from a city's subsidiary ledger for the first two months of its fiscal year. Missing is the column that explains or references each of the entries.

- 1. Prepare the journal entries that were most likely made in the account, adding to each a brief note of explanation. Each line of the account records a single transaction security services to the city for one year at a cost of (e.g., the receipt of an invoice); however, the entries on January 1 were made before the city engaged in any actual transactions (i.e., with outside parties).
  - 2. The appropriation for consulting fees was intended to last for the entire year. Apparently, the city is spending or committing funds at a faster pace than planned. Can you propose an additional control mechanism to help ensure that the funds are spent evenly throughout the year?

#### P. 3-12

Speeding up tax collections helps balance a state's appropriations budget.

The following is an excerpt (with dates changed) from Against the Grain, a series of recommendations by the State Comptroller of Texas as to how to "save" \$4.5 billion and thereby balance the state's budget:

Require an Annual August Remittance of One-Half of August's Sales Tax Collections by Monthly Taxpayers. The Legislature should require sales taxpayers to remit half of August's collections during that month.

#### Background

Currently, sales tax payments are remitted either monthly, quarterly, or annually. They also may be prepaid either on a quarterly or on a monthly basis.

Fund: General government

Date	Encumbrances Dr. (Cr.)	Expenditures Dr. (Cr.)	Appropriations Cr. (Dr.)	Available Balance
1/1			\$78,000	\$78,000
1/1	\$ 7,900			70,100
1/5	(4,000)	\$3,000		71,100
1/14		4,500		66,600
2/5	6,000			60,600
2/15	(3,200)	3,400		60,400

Monthly taxpayers, including those who collect taxes on their own purchase or use of taxable items, are required by law to remit to the state all tax collections—less any applicable discounts-by the twentieth day of the month following the end of each calendar month. The state's fiscal year ends on August 31.

#### Recommendation

The Legislature should require all monthly taxpayers to remit one-half of each August's sales tax collections during

Specifically, sales taxes collected between August 1 and August 15 would be due with their regular August 20th payment. Monthly taxpayers would remit tax in the usual manner during all other months.

This is not a prepayment plan, but a speeding up of the remittance of actual taxes collected and owed to the state. This would impose an additional burden and would reduce tax increase.

An annual payment by monthly filers of taxes actually collected during the first 15 days of August would increase August's collections and decrease September's collections. Although the initial imposition of this proposal might temporarily inconvenience some taxpayers, the prompt payment to the state of some of its sales tax revenues—collected, but not yet remitted—will enhance the revenue stream at a critical time each fiscal year. During the first year of implementation, all months would have normal collection patterns except August, which would be larger than usual, thereby producing a fiscal gain.

Each following year would see smaller than normal (current) collections in September and larger collections in August. These differences would essentially offset each other. It is important to stress that failure to speed up collections each year after implementation would cause a fiscal loss. The gain to the general fund in the year of implementation would be \$215 million.

Fiscal Year	Gain to the Revenue	
2010	\$215,1	13,000
2011	\$	0
2012	\$	0
2013	\$	0
2014	\$	0

- 1. On what basis does the state probably prepare its appropriation budget? Explain.
- 2. Do you believe the state will be better off, in economic substance, as the result of the proposed change?
- 3. According to the comptroller (last paragraph), the change would have no impact on revenues in future fiscal years as long as collections are also pushed forward in those years. Do you agree? If so, is there any reason not to adopt the proposal?

#### P. 3-13

Multiple funds provide multiple sources of revenue.

The following is a recommendation from Against the Grain, a series of proposals by the State Comptroller of Texas on how the state could enhance revenues and decrease expenditures:

#### Amend the Lottery Act to Abolish the Lottery Stabilization Fund

The state should amend the Lottery Act to abolish the Lottery Stabilization Fund requirement and use the income to fund critical services.

#### Background

The State Lottery Act requires the establishment of a Lottery Stabilization Fund. The fund will contain lottery revenue in excess of the Comptroller's Biennial Revenue Estimate. The taxpayer cash flow, but should be considered as preferable to a Lottery Stabilization Fund is then to provide revenue to the "General Revenue Fund if the lottery fails to generate monthly revenue as estimated.

In months that lottery revenue exceeds one-twelfth of the annual estimate, the Comptroller is required to deposit \$10 million plus the amount of net lottery revenue in excess of the estimate to the Lottery Stabilization Fund. The Act provides only two circumstances under which revenue could be transferred from the Lottery Stabilization Fund to the General Revenue Fund. In months that lottery revenue is less than 90 percent of one-twelfth of the annual estimate, the difference is to be transferred from the Lottery Stabilization Fund to general revenue. The Act also provides for the transfer of one-half of the balance of the Lottery Stabilization Fund to the General Revenue Fund on the first day of every hiennium.

In view of the seriousness of the state's fiscal situation, the Legislature should set aside the stabilization fund requirement. The state already maintains a significant "rainy day" fund, and effective revenue forecasting should be adequate to avoid problems with potential future revenue stream instability.

#### Recommendation

The state should repeal the provision in the State Lottery Act that establishes the Lottery Stabilization Fund. This action would provide additional revenue to the General Revenue Fund to be used for state programs at the Legislature's discretion.

#### Implications:

Releasing Lottery Stabilization Funds would increase the available revenue for state programs without increasing taxes. General revenue is reduced by at least \$10 million in months when lottery revenue exceeds one-twelfth of the annual lottery estimate. In effect, the state is penalized for correctly estimating lottery revenue and operating the lottery efficiently. Repealing the provision that establishes this fund would remove this penalty.

This action would increase general revenue about \$65 million per year in the next biennium.

- I. Explain briefly how the comptroller's recommendation would increase general revenue by \$65 million per year. In what way would the proposal affect the fiscal well-being of the state?
- 2. What impact would the comptroller's recommendation have on the state's budget if the state were to prepare
- a "consolidated" budget—one in which all funds are combined?
- 3. With reference to this recommendation, what are the advantages and disadvantages of budgeting on the basis of individual funds as opposed to combining all funds?

# 0

### QUESTIONS FOR RESEARCH, ANALYSIS, AND DISCUSSION

- 1. Generally accepted accounting principles require governments to include in their annual reports a comparison of actual results with the budget for each governmental fund for which an annual budget has been adopted. This information is generally presented as "required supplementary information" and as such is not subject to the same degree of auditor scrutiny as is data included in the basic financial statements or accompanying notes. Do you think the budget-to-actual comparison is sufficiently important to be included as part of the basic financial statements? Are governments permitted to include their budget-to-actual comparisons as part of the basic financial statements?
- 2. The GASB requires a government to prepare budgetary comparisons for its general fund and major special revenue funds that have a legally adopted annual budget. The city for which you work does not have a legally adopted budget prepared specifically for its general fund and major special revenue funds. Instead, the city prepares a legally adopted master budget for the entire government and divides it into functions and programs. With the functional and program information provided in the budget, the accounting department

- can specifically assign the budgetary amounts to governmental funds for budgetary control purposes. The government has a general fund and two special revenue funds. What budgetary comparison schedules should the government prepare, if any?
- 3. In your government, appropriations for goods and services that remain encumbered at year-end are automatically carried forward to the next year. Thus, the budget for the following year must include the amounts required to pay for the goods that were encumbered at year-end. The budget, however, must be adopted prior to the start of the following year, and therefore the amount of year-end encumbrances is not known when the budget is adopted. In presenting the original budget in an actual-to-budget comparison, should the amounts of encumbrances be included even though they were not included when the budget was first adopted?
- 4. Your government is permitted to amend the budget even after the end of the year. When presenting the final actual-to-budget comparisons, is it permitted to include the amendments that were adopted after the year-end?

### SOLUTION TO EXERCISE FOR REVIEW AND SELF-STUDY

1. Estimated revenues			
		\$5,600	
Appropriations			\$5,550
Fund balance—unass	igned		50
To record the budget	0		20
8			

The budget would specify in detail the revenues anticipated and expenditures appropriated. Hence, the corresponding subledger accounts should be debited and credited for amounts estimated or authorized.

2.
a. Cash
Revenues
To record revenues
\$5,800

b. Encumbrances \$3,000

Reserve for encumbrances
(assigned fund balance) \$3,000

To encumber resources reserved to fulfill commitments for goods and services on order

c. Expenditures	\$2,800
Cash	\$2,800
To record expenditures	
Reserve for encumbrances	•
(assigned Fund balance)	\$2,800
Encumbrances	\$2,800
To unencumber funds for goods and	services already received
that have been charged as exp	enditures
d. Expenditures	\$2,500
Cash	\$2,500
To record other expenditures	ŕ
3. Revenues	\$5,800
Estimated revenues	\$5,600
Fund balance	200
To close revenue and estimated re	evenue accounts
Appropriations	\$5,550
Expenditures	\$5,300
Encumbrances	200
Fund balance—unassigned	50
To close expenditures, encumbran	ices, and appropriations

The district's closing entries deviate slightly from those illustrated earlier in the text, in which the budget accounts were closed in one entry and the actual accounts in another. The end result is the same regardless of the grouping used for the closing entries.

4. The following schedule summarizes transactions on fund balance:	the impact of the
Revenues Expenditures Increase in total fund balance Less: Encumbrances (transfer from unassigned to assigned fund balance Net increase in unassigned fund balance	
The following balance sheet shows the asset and fund balance accounts:	status of year-end
Cash Fund balance Assigned	<u>\$500</u> \$200
Unassigned Total fund balance	300 \$500
5. Encumbrances Fund balance—unassigned To restore encumbrances of the previous	\$200 \$200. year
6. Expenditures  Cash  To record expenditures	\$150 \$150
Reserve for encumbrances (assigned fund balance) Encumbrances	\$200 \$200

To unencumber funds for goods and services already received

inasmuch as the entire order has been fulfilled; no

additional amount need be reserved)

and charged as expenditures (the entire \$200 is reversed,

# Recognizing Revenues in Governmental Punds

### LEARNING OBJECTIVE'S

After studying this chapter you should understand:

- Why governments focus on current financial resources and use the modified accrual basis to account for their governmental funds
- Why governments focus on all economic resources and use the full accrual basis in their government-wide financial statements
- The key distinctions between the modified and full accrual bases of accounting
- The distinction between exchange and nonexchange transactions
- The main types of nonexchange transactions

- The impact of the "available" criterion on revenue recognition
- How each of the following types of revenues are accounted for:
  - Property taxes
  - Fines
  - Sales taxes
  - Income taxes
  - Grants and donations
  - Investment gains and losses
  - Sales of capital assets
  - Licenses and permits
  - On-behalf payments

We now turn to what are among the most intriguing questions of government and not-for-profit accounting: when should revenues and expenditures be recognized, and how should the related assets and liabilities be measured?

In Chapters 4 and 5 we consider revenue and expenditure recognition in governments, and in Chapters 12, 13, and 14 we address revenue and expenditure recognition in other not-for-profit entities. Most of the examples in this and the next chapter will implicitly be directed toward governments' general funds. However, the discussion is equally applicable to all *governmental* funds, including special revenues funds, capital projects funds, debt service funds, and *permanent* funds. In Chapter 9 we examine the same issues as they apply to proprietary funds (those that account for business-type activities).

# Why and how do governments use the modified accrual basis?

The foundation for our discussion of revenue and expenditure recognition was laid in Chapter 1. In that chapter we pointed to two key objectives of financial reporting:

- Indicating the extent to which the entity achieved interperiod equity (i.e., whether current-year revenues were sufficient to pay for current-year services)
- Demonstrating whether the entity obtained and used its resources in accordance with its legally adopted budget

As suggested in Chapter 1, no set of financial statements prepared on a single basis of revenue and expenditure recognition can adequately fulfill both objectives. Therefore, standard setters must choose among three courses of action:

- · Adopt principles that fulfill one of the objectives, but not the other
- Adopt principles that compromise the two objectives, fulfilling both to some extent, but neither one adequately
- Develop a reporting model that incorporates more than one basis of revenue and expenditure recognition—either statements that embrace more than one basis of accounting or statements that incorporate two or more sets of statements within the same report

Generally accepted accounting principles as incorporated in the current Governmental Accounting Standards Board (GASB) model reflect the third approach. The government-wide statements consolidate all funds on a full accrual basis (except for fiduciary funds, which are not consolidated because the beneficiaries of their resources are parties other than the government). They thereby demonstrate whether the entity's current-year revenues were sufficient to pay for the current year's services. The fund statements, by contrast, present governmental funds on a modified accrual basis (and, for reasons to be explained in Chapter 9, proprietary funds statements are presented on a full accrual basis).

The modified accrual basis is far more budget-oriented than the full accrual basis in that the budgets of most governments focus on either cash or cash plus selected short-term financial resources. However, the budgetary principles of any individual government are determined by applicable state or local laws. Except for governments that elect or are required to budget on a modified accrual basis as defined by GAAP, the revenue and expenditure principles that underlie their fund statements would not

RATIONALE FOR THE MODIFIED ACCRUAL BASIS necessarily be identical to those of their legally adopted budgets. Hence, as discussed in Chapter 3, schedules that show the variances between budgetary estimates and actual results may have to include a reconciliation that indicates the portion of the variances attributable to differences in accounting principles.

In developing its current model, the GASB opted to retain the modified accrual basis of the previous model—rather than a budget basis—for governmental funds statements. This approach ensures that all governments report on the same basis and thereby facilitates comparisons among entities. Comparisons would have been difficult if each entity reported on its own particular budget basis.

RELATIONSHIP
BETWEEN
MEASUREMENT
FOCUS AND
BASIS OF
ACCOUNTING

The criteria by which an entity determines when to recognize revenues and expenditures necessarily stems from its measurement focus and its basis of accounting. As pointed out in Chapter 2, measurement focus refers to what is being reported on—that is, to which assets and liabilities are being measured. Basis of accounting refers to when transactions and other events are recognized. The two concepts obviously are closely linked. If an entity opts to focus on cash, then it will necessarily adopt a cash basis of accounting. Correspondingly, if it elects to focus on all economic resources (both current and long-term assets and liabilities), then it will adopt a full accrual basis of accounting.

Measurement focus and basis of accounting can be viewed as a continuum. As depicted in Figure 4-1, on one end of the continuum is a cash focus, and correspondingly the cash basis of accounting. On the other end is a focus on all economic resources, and thus the full accrual basis. Between the two ends of the continuum are any number of "modified accrual" (or "modified cash") bases of accounting in which the focus is on resources in addition to cash but not on the full array of economic resources.

If a government's budget is on a cash or near-cash basis, as is common, then a basis of accounting near the cash end of the continuum best satisfies the reporting objective of demonstrating that resources were obtained in accordance with the legally adopted budget. A basis on the full accrual end of the continuum best fulfills the interperiod equity objective. Any basis between the extremes would compromise the two objectives, satisfying both objectives to some extent, but neither one completely.

OVERVIEW OF THE MODIFIED ACCRUAL BASIS Per today's generally accepted practices, governmental funds are accounted for on a modified accrual basis. The measurement focus is on current financial resources: "Current financial resources" has been interpreted to mean "expendable financial resources"—cash and other items that can be expected to be transformed into cash in the normal course of operations (less current liabilities). The "other items" include investments and receivables but not capital assets.

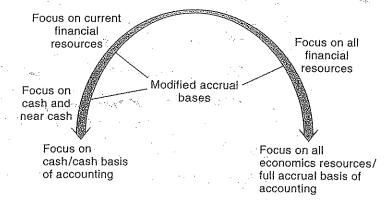


FIGURE 4-1 Measurement Focus and Basis of Accounting

As discussed in Chapter 5, inventories and prepaid items are also reported on the balance sheet, even though they do not fall within the conventional view of a financial resource. A frequently cited justification for this apparent inconsistency is that these assets will not ordinarily be transformed into cash (i.e., inventories will be consumed, not sold for cash), but they generally will result in short-term cash savings in that the entity will not have to expend additional cash to acquire them.

The current claims against financial resources include wages and salaries payable, accounts payable, and deferred credits. They exclude long-term obligations such as the noncurrent portions of bonds payable, and the liabilities for vacation pay, sick leave pay, and legal judgments. Consistent with conventional relationships between balance sheet and operating statement accounts, revenues and expenditures are accompanied by an increase or decrease in net financial resources (as opposed to increases or decreases in net economic resources, as would be true under the full accrual basis).

Accepting the accrual basis of accounting (even if modified) still leaves unresolved the thorny issue of when revenues should be recognized. What key economic event in the revenue generation process should trigger the recognition of revenue and the corresponding increase in net assets? In business accounting, revenues are ordinarily recognized when a firm has exerted a substantial portion of its production and sales effort and the amount of cash to be eventually collected can reasonably be ensured and estimated. But standard setters as well as individual firms still have to grapple with the problem of when the various types of revenue transactions satisfy these criteria. To enhance consistency of practice, standard setters have established specific guidelines for the recognition of such diverse revenues as those from ordinary sales, from sales of real estate, installment sales, interest, loan origination fees, license and royalty fees, and construction contracts.

The revenue-recognition issues facing governments are less tractable than those of businesses. Businesses derive their revenues mainly from exchange transactions—those in which each party gives and receives consideration of equivalent value. Governments (except those that engage primarily in business-type activities) derive their revenues mainly from nonexchange transactions—those in which one party gives or receives value without directly receiving or giving equivalent value in exchange.

GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions (1998), governs the recognition of revenue under both the modified accrual basis (for governmental funds) and the full accrual basis (for proprietary and fiduciary funds and the government-wide statements). The recognition guidelines discussed in the next sections are the same for both bases. However, when accounted for under the modified accrual basis, revenues are subject to an additional, extremely significant, stipulation. They cannot be recognized until they are both measurable and available to finance expenditures of the fiscal period.

The nonexchange revenues of governments are intrinsically associated with expenditures; they are generated solely to meet expenditures. Budgets are formulated so that each period's estimated revenues are sufficient to cover appropriated expenditures. Expenditures of a current period may either require cash outlays during the period or create liabilities that must be satisfied shortly after the end of the period. For example, goods or services that a government receives toward the end of one year would ordinarily not be required to be paid for until early the next year. Available therefore means "collected" within the current period or "expected to be collected soon enough thereafter to be used to pay liabilities of the current period."

RECOGNITION OF REVENUE

MEANING OF AND RATIONALE FOR "AVAILA-BLE TO FINANCE EXPENDITURES OF THE CUR-RENT PERIOD"

<sup>&</sup>lt;sup>1</sup>GASB Statement No. 33, Accounting and Reporting for Nonexchange Transactions (December 1998), n. 16.

E.

Business accounting principles dictate that the collection of cash must be reasonably ensured before revenue can be recognized. The "available" stipulation ensures that, in addition, the cash has been collected or will be collected soon enough to pay the liabilities they are intended to cover.

The liabilities that the revenues may be used to pay are only current liabilities. Recall that long-term liabilities are outside the measurement focus of governmental funds, and hence are not recorded by them. As discussed in the following chapter, under the modified accrual basis of accounting, transactions that result in long-term liabilities are not recorded as expenditures.

How many days after the close of the year must revenues be received to satisfy the criteria of having been received soon enough to pay the liabilities of the current period? With respect to property taxes—and only property taxes—existing standards provide that, in the absence of unusual circumstances, revenues should be recognized only if cash is expected to be collected within 60 days of year-end.<sup>2</sup>

Because existing standards provide no specific guidance as to time periods for recognition of other revenues, this "60-day rule" has become a widely used benchmark for all types of revenues, not just property taxes. However, many governments have established other time periods—30 days, 90 days, or even one year—for revenues other than property taxes.

# What are the main types of nonexchange revenues and the limitations on how and when they can be used?

GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, defines nonexchange transactions as those in which the government receives value without directly giving equal value in return. There are four types of nonexchange transactions.

- 1. Imposed nonexchange revenues. These are assessments imposed on individuals and business entities. The most prominent of these are property taxes and fines and are recognized in the year for which they are levied.
- 2. Derived tax revenues. These are taxes derived (i.e., that result) from assessments on exchange transactions carried on by taxpayers. They include sales taxes (derived from sales transactions), and income and other taxes on earnings or assets (derived from various income-producing commercial transactions) and are recognized in the period in which the income is earned.

1 M

ar i

- 3. Government-mandated nonexchange transactions. These occur when a government at one level (e.g., the federal or a state government) provides resources to a government at another level (e.g., a local government or school district) and requires the recipient to use the resources for a specific purpose. For example, a state may grant funds to a county stipulating that the resources be used for road improvements. Acceptance and use of the resources are mandatory and are recognized when all eligibility requirements are met.
- 4. Voluntary nonexchange transactions. These result from legislative or contractual agreements entered into willingly by two or more parties. They include grants

<sup>&</sup>lt;sup>2</sup>GASB Interpretation No. 5, Property Tax Revenue Recognition in Governmental Funds (November 1997).

given by one government to another and contributions from individuals (e.g., gifts to public universities). Often the provider imposes eligibility requirements or restrictions as to how the funds may be used. These types of transactions are similar to the government-mandated nonexchange transactions, but differ in that the recipient government is not required to accept the awards. However, if the government accepts the awards it must observe the accompanying requirements as to how they may be spent. Like the government-mandated nonexchange transactions they too are recognized when all eligibility requirements are met.

Statement No. 33 establishes standards, discussed in the next sections, for each of the four types of transactions. The standards for government-mandated and voluntary nonexchange transactions apply to both revenues and expenditures. Thus, payments from one government to another are expected to be accounted for symmetrically.

Statement No. 33 also identifies two types of limitations that constrain when and how a government may use the resources it receives in nonexchange transactions:

- 1. Time requirements. These specify the period during which resources must be used or when use may begin. For example, local governments typically levy property taxes designated for a particular fiscal year. Similarly, state governments that grant funds to local school districts may require that the funds be used during the state's fiscal year.
- 2. Purpose restrictions. These specify the purpose for which the resources must be used. For example, certain sales taxes must be used for road improvements, certain property taxes must be used to repay debt, and certain grants or private donations must be used to acquire specific goods or services.

As noted in the discussions of the various types of revenues, governments should not recognize revenue or expenditures on nonexchange transactions until time requirements have been met (e.g., until the start of the specific time period during which resources may be used). By contrast, however, they need not delay recognition of revenue until they have satisfied the purpose restrictions. Nevertheless, they must specifically identify resources that are subject to purpose restrictions by appropriately classifying a portion of fund balance in the general fund financial statements or by reporting the revenues in a special revenue fund. In government-wide statements they would identify restricted resources by denoting a portion of net assets as "restricted." These requirements continue in force until the restricted amounts are spent for the purposes specified.

## HOW SHOULD PROPERTY TAXES AND OTHER IMPOSED NONEXCHANGE REVENUES BE ACCOUNTED FOR?

Property taxes are the bread and butter of local governments. Although gradually being supplemented by other taxes and fees, they still account for approximately 25 percent of local government revenues (see Figure 1-1 in Chapter 1).

Classified as ad valorem taxes (based on value), property taxes are most typically levied against real property (land and buildings). However, some jurisdictions also include within the tax base personal property—such as automobiles, boats, and business inventories—and intangible assets, such as securities and bank deposits.

Property taxes are levied against the assessed value of taxable assets. Most jurisdictions are required to assess (i.e., assign a taxable value to) property at 100 percent of its

#### LANGUE REAL COMMONE

The ongoing housing crisis is hitting state and local governments with a double HOUSING WOES

First and foremost the falling housing prices result in major reductions in PROBLEMS FOR collections of property taxes, which are directly tied to the values of homes and commercial real estate. According to the New York Times ("Tax Bill Appeals Take Rising Toll on Governments," July 5, 2009), a survey conducted by the National Association of Counties reported that 76 percent of large counties said that falling property tax revenue was significantly affecting their budgets. In response, to minimize the revenue loss about 10 percent of these counties are raising their tax rates that are based on home values.

Second, "homeowners across the country are challenging their property tax bills in droves as the value of their homes drop, threatening local governments with another big drain on their budgets." Not only is the appeals process costly, but it is causing the governments to refund unprecedented—and unbudgeted—amounts in already collected taxes. "We've been absolutely getting killed," said Robert W. Singer, the mayor of Lakewood Township, New Jersey, and a state senator, whose town is setting aside \$2 million to pay tax refunds to homeowners. "We've never had this before. Usually they're undervalued. Now, everyone's overvalued."

Accountants and auditors take note: This means that governments that previously had not bothered to establish property tax receivable reserves for refunds had better do so now. And those that had established such reserves need to assess their adequacy. Otherwise they can count on major write-offs in the future.

Raise New ACCOUNTANTS AND AUDITORS

appraised fair market value. Many, however, assess property as a fraction of appraised value (perhaps in the hope of discouraging taxpayer protests) and then adjust the tax rate upward to offset the reduction in tax base.

Governments establish the property tax rate by dividing the amount of revenue required of the tax by the assessed value of the property subject to tax. For example, if a government needs \$400 million in tax revenue and its jurisdiction has \$22 billion in taxable property, then the tax rate would be the \$400 million in needed revenue divided by the \$22 billion in taxable property—1.818 percent, or 18.18 mils (dollars per thousand).

In reality the computation is somewhat more complex, as allowances must be made for discounts, exemptions, and taxes that will be delinquent or uncollectible. Most jurisdictions experience a relatively low rate of bad debt on property taxes because they are able to impose a lien (right to seize and sell) on the taxed property. However, it may take several years before the government is actually able either to collect from a property owner or to seize and sell the property.

Many jurisdictions grant discounts for early payment. For example, taxpayers may be given discounts of 3 percent, 2 percent, or 1 percent for paying, respectively, three months, two months, or one month prior to the due date. If they pay after the due date, taxpayers are generally subject to both interest and penalties.

Not all property within a jurisdiction is subject to tax. Property held by other governments and by religious institutions is ordinarily exempt. In addition, many jurisdictions grant homestead exemptions to homeowners on their primary residences. These exemptions include both basic allowances—often of a fixed dollar amount (e.g., \$5,000)—that are available to all taxpayers, and supplementary amounts granted to senior citizens and members of other designated classes. Thus, if a residence were assessed at \$200,000 and the homeowner was granted a \$5,000 exemption, the

property's net assessed value would be \$195,000. If the tax rate were 18.18 mils, the tax would be \$195,000 multiplied by 0.01818, or \$3,545.

Several events in the property tax timeline have potential accounting significance:

- The legislative body levies the tax, establishing the tax rate and estimating the total amount to be collected.
- Administrative departments determine the amount due from the individual GENERAT property owners, enter the amounts on the tax roll (a subsidiary ledger that PROCESS supports the taxes receivable control account), and send tax notices (bills) to property owners.
- The taxes are collected—most prior to the due date, some afterward.
- The taxes are due and the government has the right to impose a lien on that property for which taxes have not been paid.

The stated due date must be distinguished from the substantive due date. Some jurisdictions establish a due date but do not impose interest, penalties, or a lien until a later date. The substantive due date is that date on which interest and penalties begin to accrue or a lien is imposed.

The question facing governments concerns which of the events is sufficiently significant to warrant revenue recognition, subject (on the fund statements) to the "available" constraint.

In this and subsequent chapters, we spotlight accounting issues by placing them within the context of short examples. We prepare journal entries so as to emphasize the impact of the possible options on both the statement of operations and the balance sheet. In many of the examples, a single entry may be used to summarize what would be in practice many individual entries. The illustrated entry is intended to show the impact of the described events on the year-end financial statements. In most of the examples we assume, for convenience, that the entity's fiscal year ends on December 31, even though the fiscal year of most governments ends on the last day of June, July, August, September, or October.

#### EXAMPLE Property Taxes

In October 2010 a city levies property taxes of \$515 million for the year beginning January 1, 2011. During 2011 it collects \$410 million. It collects \$30 million of the remaining 2011 taxes during each of the first three months of 2012, and estimates that the \$15 million balance will be uncollectible.

In addition, in 2011 it collects \$20 million in taxes applicable to 2012. Taxes are due on January 31 of each year and the government has the right to impose a lien on the taxed property if it has not received payment by that date.

### GASB Standards

Governments should recognize assets from property taxes and other imposed nonexchange transactions in the period during which they first have an enforceable claim to the assets or when they first receive the assets, whichever comes first. For property taxes, the date when they have an enforceable claim is specified

SIGNIFICANT EVENTS IN THE REVENUE GENERATION PROCESS



in the legislation authorizing or imposing the tax, and is frequently referred to as the "lien date."

Governments should recognize revenues from property taxes in the period for which the taxes are levied. As a consequence of this provision, governments must delay recognition of taxes collected in advance until the period for which they have been budgeted, thereby satisfying the relevant time requirement. In addition, in their fund statements, the taxes must be "available"—that is, "collected within the current period or expected to be collected soon enough thereafter to be used to pay liabilities of the current period. Such time thereafter shall not exceed sixty days:"

If property taxes satisfy the criteria for asset recognition before they satisfy those for revenue recognition (e.g., if they are collected prior to the period for which they are budgeted or they will not be collected in time to pay liabilities of the current period), then the government should debit an asset (e.g., "cash" or "property taxes receivable") and offset it with a credit to a deferred revenue account (e.g., "taxes collected in advance" or "deferred property tax revenue").

In the property taxes example, therefore, the total amount of revenue to be recognized in 2011 on a modified accrual basis would be \$470 million—the \$410 million due and collected during the year and applicable to it, plus the \$60 million collected in the first 60 days of the next year. The \$30 million to be collected after 60 days would be recognized as deferred revenue. These transactions would be summarized in the following entries for 2011:

Property taxes receivable		\$515		
Deferred property tax revenue				\$500
Allowance for uncollectible property taxes		100		15
To record the property tax levy for 2011				
Cash	: .	\$410	,	. '
Property taxes receivable  To record the collection of cash in 2011	gradust states			\$410
Deferred property tax revenue		\$410		
Property tax revenue	•			\$410
To recognize revenue on the taxes collected				(migra)).
Deferred property tax revenue		<b>\$60</b>		7.02
Property tax revenue	*			\$60
To recognize revenue on the taxes to be received in	n the first (	50 days of 20	012 .	

(Because this entry would be made as of the year-end, it may appear to recognize only an estimate of the tax receipts of the first 60 days of 2012. In reality the government would record its actual collections. Few governments are able to close their books and prepare financial statements within 60 days of year-end. Therefore, by the time they close their books and prepare financial statements, they are able to determine exactly how much revenue from collections subsequent to year-end must be recognized.)<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>GASB Interpretation No. 5, Property Tax Revenue Recognition in Governmental Funds; paras. 1 and 4, 1997. In practice, governments may, at the start of the year to which the taxes are applicable, recognize as revenue (rather than deferred revenue) the full amount of taxes levied (less the amount estimated to be uncollectible). Then, at year end they would debit revenues, for the portion of the taxes estimated to be collected after the first 60 days of the following year, crediting deferred taxes.

Cash

\$20

Deferred property tax revenue

\$20

To record collection of property taxes received in advance of the year to which they are applicable

The taxes collected in advance are intended to cover 2012 expenditures. Hence, they should be recognized as revenue in 2012 and thereby matched with the expenditures.

At year-end, overdue taxes receivable should be reclassified as delinquent so they are not intermingled with the current receivables of the following year:

Property taxes receivable—delinquent

\$105

Property taxes receivable

\$105

To reclassify uncollected taxes as delinquent

This entry has no impact on revenues, expenditures, or net assets (nor, hence, on fund balance). It provides statement readers with additional information as to the status of property taxes receivable. An increase in delinquent property taxes relative to property tax revenues should serve as a warning of a possible economic downturn in the government's jurisdiction or of ineffective tax collection practices on the part of the government.

As the delinquent property taxes are collected, they would be recorded as follows:

Cash

\$60

Property taxes receivable—delinquent

\$60

To record the tax collections of the first two months of 2012, which had been recognized as revenue of 2011

Cash

\$30

Deferred property tax revenue

30

Property taxes receivable—delinquent

\$30

Property tax revenue (2012)

30

To record the tax collections of the third month of 2012, which had not been recognized as revenue of 2011

Despite their powers to enforce their claims against recalcitrant taxpayers, governments are not always able to collect the full amount of tax levies. In some instances, seized property cannot be sold at prices sufficient to cover outstanding balances. In others, the costs of recovery would be inadequate to cover the expected yield, so the governments elect not to exercise all available legal options.

As a government writes off uncollectible taxes, it should offset the reduction in taxes receivable with a corresponding reduction in the allowance for uncollectibles. Thus, if the \$15 million of taxes (now classified as delinquent) were written off:

Allowance for uncollectible property taxes

\$15

Property taxes receivable—delinquent

\$15

To write off delinquent taxes

This entry has no impact on revenues, expenditures, net assets, or fund balance. The government gave substantive accounting recognition to the potential uncollectible taxes in the period in which it established the allowance for uncollectible taxes.

Governments may accrue interest charges and penalties on delinquent taxes as they impose them. However, on their fund statements they should recognize revenue only when it is measurable and available. Until those criteria are satisfied, they should offset interest and penalties receivable with deferred revenue rather than actual revenue.

#### Differences in Government-Wide Statements

The same general rules of revenue recognition apply to government-wide statements as they apply to fund statements, with the exception that the "available" criterion does not have to be satisfied. Thus, a government can recognize revenue from property taxes as soon as it has either (1) an enforceable claim to the property taxes, or (2) collected the taxes (whichever comes first)—subject, of course, to the time requirement that the taxes not be recognized prior to the period for which they were budgeted.

In the example, the city could recognize \$500 million in revenue—the \$410 million actually collected during the year plus the entire \$90 million that it expects to collect. The taxes to be recognized as revenue no longer have to be collected within sixty days of year-end. The following entry summarizes the 2011 activity pertaining to the 2011 taxes:

Cash	\$410
Property taxes receivable—delinquent	105
Property tax revenue	\$500
Allowance for uncollectible property taxes	15
To summarize 2011 property tax activity pertaini	ng to 2011 taxes

For most governments, the difference between the amount of property taxes recognized as revenues on the fund statements and the amount on the government-wide statements is relatively small. As long as the ratio of property taxes levied to property taxes collected remains fairly constant, the governmentwide gains owing to the year-end accruals of taxes to be collected beyond the 60-day window will be offset by the losses attributable to the taxes collected in the current year but recognized as revenues in the previous year. However, the differences in the deferred taxes to be reported on the balance sheets will be more pronounced, because the full amount of the deferrals will be reported on the fund statements as additions to liabilities (and hence as reductions in fund balances).

It must be emphasized that the government-wide entries in this example and similar examples throughout the text are not ones that a government would actually make. Governments need not maintain two sets of books, one for fund statements and one for government-wide statements. Instead, governments typically maintain the accounts on a modified accrual basis, appropriate for the funds statements. Then, at year-end, they make the required adjusting entries using a multi-column worksheet. Thus, for example, because \$470 million of revenue would be recognized under the modified accrual basis and \$500 million would be recognized under the full accrual basis, the following entry would be appropriate:

Deferred property tax revenue	\$30
turb.	\$30
Property tax revenue  To convert from fund to government-wide st.	atements
, ,	

Some governments opt to "sell" their delinquent tax receivables to a third party, such as a collection agency. Similarly, they may sell other anticipated cash receipts, such as those from tobacco settlements, mortgages, or student loans. The supposed sale may enable the governments to have access to the cash immediately and avoid the hassles of collection. An accounting issue may arise in circumstances when the supposed sale is, in economic substance, not a sale at all but rather a collateralized borrowing arrangement. Assume, for example, that a city places a lien on a building owing to the failure of its owner to pay property taxes. The city "sells" the lien to a third party in exchange for cash. Per agreement between the two parties, the government will assist in collecting the delinquent taxes, and retains the right to substitute different liens for the one transferred to the third party. Further, the lien is transferred "with recourse" if the third party is unable to collect on the lien then it can "sell" it back to the government. In this instance, the arrangement is less a sale than a loan. GASB Statement No. 48, Sales and Pledges of Receivables and Future Revenues and Intra-Entity Transfers of Assets and Future Revenues, sets forth criteria for distinguishing between sales and borrowing arrangements. The key criterion is that in a sale, the government will have no continuing involvement with the receivable or with future revenues.

The other main type of imposed nonexchange revenues is fines. Although the question of when a government should recognize its revenues from fines is seldom important DATES AND in terms of dollar amount, it is nevertheless provocative. Consider, for example, the FVENTS several dates and events relating to parking tickets and other traffic violations:

FINES: KEY

- Tickets are issued; from historical experience the government can estimate the percentage of tickets that will actually be paid.
- Violators must either pay or protest the fines by specified dates; if they do not protest, the government has a legal claim to the basic fines plus penalties for late payment.
- · For ticketed parties who opt to protest, hearings are scheduled and held; if a party is found guilty, the government has a legal claim to the basic fine plus penalties for late payment.

#### EXAMPLE Fines

In November 2011 police issued \$200,000 in parking tickets. Of the fines assessed, \$130,000 are paid without protest by the due date of December 31, 2011. Of the balance, \$4,000 have been protested and are subject to hearings. The government estimates that an additional \$18,000 will trickle in, but will not be available for expenditure in 2011. The balance of \$48,000 will be uncollectible.

### GASB Standards

The GASB standards direct that both the assets and the revenues from fines, penalties, and most other imposed nonexchange transactions be recognized when the government has an enforceable legal claim to the assets to be received or has collected the cash. Most commonly a government has a legal claim to a fine only after the protest period expires (typically, upon the payment due date) or if a court imposes a penalty. However, in the fund statements, revenue recognition is, of course, also subject to the "measurable and available" stipulation.

Hence, in its fund statements the government should recognize as revenue only the \$130,000 actually received during the year—the only amount on which the government has a legal claim and which will be collected in time to satisfy liabilities of the current period. The government can recognize neither an asset nor revenue on the \$4,000 in tickets under protest because it has no enforceable claim upon the alleged violators unless and until the courts eventually rule in its favor. The following entry would be appropriate:

Cash \$130,000	
Parking tickets receivable (not protested) 66,000	
Revenue from parking fines	\$130,000
Deferred revenue from parking fines	18,000
Allowance for uncollectible parking tickets	48,000
To summarize 2011 activity related to November tickets	•

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

In the government-wide statements, revenue recognition is not subject to the "available" test. Therefore, both the fines that have been collected and those expected to be collected, for which the government has an enforceable legal claim, may be recognized as revenue:

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## HOW SHOULD SALES TAXES AND OTHER DERIVED IAX REVENUES BE ACCOUNTED FOR?

Sales taxes, along with income taxes, are categorized as *derived tax revenues*. They are derived from exchange transactions, such as the sale of goods or services, or other income-producing commercial transactions.

Sales taxes are imposed on customers who purchase goods or services. The merchant providing the goods or services is responsible for collecting, reporting, and transmitting the taxes. Unlike property taxes, which are government assessed, sales taxes are taxpayer assessed; the tax base is determined by parties other than the beneficiary government. Thus, the government must wait for, and rely on, merchant tax returns to become aware of the proceeds to which it is legally entitled.

Three significant dates underlie sales tax transactions:

- The date of the sales transaction and the collection of the tax by the merchant
- The date the merchant is required to file the tax return and transmit the taxes (generally the same)
- The date the merchant actually files the return and transmits the taxes

The date of the sale is arguably the most significant of the three dates because the transaction producing the tax takes place then, the amount of the tax is established, and the liability of the merchant to transmit the tax is created. However, the government is not entitled to the tax until the date the return is to be filed and the tax paid. Moreover, except for unusual circumstances, such as when a merchant files a return but fails to make timely payment, the government does not know what the amount will be until it actually receives the tax.

SIGNIFICANT EVENTS IN THE "EARNINGS PROCESS"

#### EXAMPLE Sales Taxes

In December 2011 merchants collect \$20 million in sales taxes. Of these, \$12 million are collected prior to December 15 and must be remitted by February 15, 2012; the remaining \$8 million must be remitted by March 15, 2012.

### **G**ASB Standards

Current standards, as set forth in GASB Statement No. 33, require that revenues from sales taxes and other derived nonexchange revenues be recognized at the time the underlying exchange transaction takes place. For sales taxes, this would be the date of the sale.

In the fund statements, the sales taxes must also satisfy the "available" test to be recognized as revenue. Neither GASB Statement No. 33 nor other official pronouncements provide guidance as to the length of the period after the close of the fiscal year in which resources must be received to be considered available. As noted previously, the "60-day rule" applies only to property taxes, not to other revenues. Hence, governments must exercise their own judgment as to what constitutes "available." At the very least they must ensure consistency of practice from one year to the next.

The standards also stipulate that governments should recognize assets from derived nonexchange transactions in the period in which the underlying transaction takes place. Thus a government should recognize an asset—sales taxes receivable—on taxes derived from sales of the current year even if the taxes will not be collected in time to be available to meet the current liabilities of that year.

Assuming that the government adopts 60 days as the "available" criterion, then it could recognize as revenue of 2011 only the \$12 million in taxes that it expects to collect within 60 days of year-end. The \$8 million balance must be deferred until 2012:

Sales taxes receivable
Sales tax revenue
Deferred sales tax revenue

\$20

\$12

To summarize December sales tax activity

8

Suppose instead that the sales taxes were imposed only on motor fuels and had to be used to construct and maintain roads. Would this purpose restriction affect the recognition of revenue?

Inasmuch as the revenues were now restricted, they should properly be reported in a special revenue fund rather than in the general fund. Special revenue funds, like the general fund, are governmental funds. The GASB rules (and the discussion in this and the following chapter on expenditures) apply uniformly to all governmental funds. Per GASB Statement No. 33, purpose restrictions should not affect the timing of revenue recognition. If the underlying transaction has taken place and the resources are measurable and available, then the government has benefited from an increase in net assets and, according to the GASB, it should recognize this increase.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The same general principles of revenue recognition apply to both the fund and the government-wide statements, with the exception that under the government-wide (full accrual) statements, the "available" criterion is inapplicable. Hence, in the example, the government should recognize the entire \$20 million of taxes derived from the sales of December:

Sales taxes receivable
Sales tax revenue
To summarize December sales tax activity

\$20

\$20

The government-wide statements consolidate the governmental funds, so that if the taxes were subject to a purpose restriction, they would not automatically be shown separately from unrestricted resources. To make the distinction between restricted and unrestricted resources, the GASB directs that until the resources are expended for the designated purpose, the resultant net assets (fund balance) should be shown on the government-wide balance sheet as restricted.

SALES TAXES
COLLECTED BY
ANOTHER
GOVERNMENT

Sales taxes are levied by both state and local governments. However, to avoid duplication of effort, most states collect and administer the sales taxes imposed by their local governments. For example, a state may impose a 5 percent sales tax, allowing local governments to add an additional 2 percent tax on sales within their jurisdictions. The state will collect the entire 7 percent tax, acting as an agent for the local governments with respect to their 2 percent.

The issue facing local governments is whether they can properly recognize revenue as soon as the state satisfies the recognition criteria or whether they must delay recognition until a later date—either when the state notifies them of the amount collected on their behalf or when it actually transmits the tax to them.

#### EXAMPLE Sales Taxes Collected by State

Assume a slight variation of the previous example. In November and December 2011, merchants collect \$20 million in sales taxes. Of these, \$5 million is remitted to the state as due by December 15, 2011; the remaining \$15 million is due on January 15, 2012. The state remits the taxes to the city 30 days after it receives them.

### GASB Standards

The GASB standards do not differentiate between taxes collected by the government itself and those collected by another government on its behalf. The critical date remains the same—that of the underlying sales transaction. Thus, the city should recognize revenue as if it had received the taxes directly, as long as they will be received in time to meet the "available" criterion.

In this example, the city should recognize as revenue for 2011 the entire \$20 million in taxes collected by the state in both December 2011 and January 2012, all of which will be received by the city in time to satisfy 2011 obligations:

Sales taxes receivable

\$20

Sales tax revenue

\$20

To summarize December sales tax activity

However, if it were the practice of the state to remit the taxes to the city 90 days after receipt—subsequent to when the city could use them to meet 2011 liabilities—then the city could recognize none of the taxes as 2011 revenue. It would have to report all as deferred revenue.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

Because the GASB standards do not distinguish between taxes collected by the government itself and those collected on its behalf by another government, the city should recognize the entire amount of December taxes, just as if it had collected them itself. The "available" criterion is inapplicable to the government-wide statements, so the date of anticipated collection is irrelevant.

Situations in which a state collects sales tax revenues on behalf of a local government must be distinguished from those in which the state imposes the tax but opts to share a designated portion of the tax revenues with local governments within its jurisdiction. In such situations the local government should consider the amount it receives from the state as a grant and should recognize revenue as it would any comparable grants.

Almost all states and a few major cities—such as New York, Philadelphia, and Detroit—impose taxes that are based on personal or corporate revenues or income. Some of these states impose what they call a "franchise" tax on businesses, but the tax is nevertheless based, at least in part, on gross revenues or net income.

INCOME TAXES: THE COLLEC-TION PROCESS and estimated tax payments received during the year (adjusted for settlements and refunds when tax returns are actually filed)—in essence that they recognize revenue on a cash basis.

In the example, the state collects \$102 billion in taxes (\$95 billion for 2010 and 2011 and \$7 billion for prior-year audits) and refunds \$15 billion—a net collection of \$87 billion. Hence on a cash basis (the pragmatic basis suggested by the GASB), the state would recognize \$87 billion in revenue. The GASB does not specifically address how the amounts billed—here, the \$3 billion still due from audited returns—should be accounted for, but there seems no reason why the state should not recognize them as assets. Thus:

Cash	i la t		d No	s iv	\$87	
Taxes billed but i	ot collected (a	receivab	le)		- 3	
Revenue from	income taxes					\$87
Deferred rever	ue					3
To recognize incom	e tames for the fi	scal near or	nding 7	1100 20		

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The general standards for the government-wide full accrual statements are the same, with the exception that all taxes receivable can be recognized as revenue regardless of whether they will be available to meet current-year obligations. Thus, consistent with the general standards (although not specifically addressed by the GASB), the state could recognize as revenue both taxes actually collected and those expected to be collected. Thus (assuming that the collections based on prior-year audits had not yet been recognized as revenue):

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# How should grants and similar government-mandated and voluntary nonexchange revenues be accounted for?

State and local governments receive grants and similar forms of financial assistance from both other governments and private sources. Some grants are mandated by a higher-level government; the lower-level government has no choice but to accept them (as when the federal government requires states to undertake specified environmental cleanup efforts and provides the necessary resources for them to do so). Most, however, are voluntary; the government can choose not to accept the funds if it is unwilling to accept the attached conditions or to carry out the specific programs the grant is intended to finance.

Income taxes present especially vexatious issues of revenue recognition, owing to their multistage administrative processes. Consider, for example, the following:

- The tax is based on income of either a calendar year or a fiscal year elected by the taxpayer, but such year might not coincide with the government's fiscal year.
- Taxpayers are required to remit tax payments throughout the tax year, either through payroll withholdings or periodic payments of estimated amounts. Within three or four months after the close of the year, they are required to file a tax return in which they inform the government of the actual amount of tax owed. At that time, they are expected to make a final settlement with the government, by either paying additional taxes due or requesting a refund of overpayments. Thus, the taxes received by the government during the year may be more or less than the amount to which it is entitled.
- Governments review all tax returns for reasonableness and select a sample for audit. Moreover, some taxpayers are delinquent on their payments. Thus, taxes continue to trickle in for several years after the due date. Although governments can reliably estimate the amount of late collections based on historical experience, they may not have a legal claim to the taxes until taxpayers either file their returns or agree to the adjustments resulting from an audit.

#### EXAMPLE Income Taxes

A state is on a June 30 fiscal year. However, income taxes are based on taxpayer income during the calendar year ending December 31. Employers are required to withhold taxes from employees and remit the withheld taxes monthly, and individuals with significant nonsalary earnings are required to make quarterly estimated tax payments. By April 15 of the year following the end of the calendar year, taxpayers must file a tax return on which they either request a refund of overpayment or pay any remaining tax owed.

In its fiscal year ending June 30, 2011, the state collects \$95 billion in income taxes for the calendar years 2010 and 2011. It refunds \$15 billion of taxes based on the returns filed by April 15, 2011. As the result of audits of prior-year returns, the state bills taxpayers \$10 billion for earlier calendar years; it collects \$7 billion of this before its fiscal year-end and expects to eventually collect the entire remaining \$3 billion.

. . .

### GASB Standards

Income taxes are derived from the transactions that produce the income. Therefore, in concept at least, governments should recognize the taxes as revenue during the period in which the income is earned. In practice, however, determining the amount of revenue attributable to income of a particular year is exceedingly difficult inasmuch as the government learns of actual earnings only when a taxpayer files a return or the government conducts its own audit. Moreover, the returns themselves cover a calendar year and therefore do not separate out income earned in each of the fiscal years. Therefore, in an illustration of how income taxes should be accounted for; the GASB suggests that governments base the amount of income to be recognized on the amount of withholding

Typical intergovernmental grants and similar nonexchange revenues include the following:

- Restricted grants. These are payments intended for designated purposes, projects, or activities. The most common form of grants, they are usually made to reimburse specific types of expenditures. They may be either mandated or voluntary.
- Unrestricted grants. These are payments that are unrestricted as to purpose, project, or activity.
- Contingent grants. These are grants contingent upon a specified occurrence or action on the part of the recipient (e.g., the ability of the recipient to raise resources from other parties).
- Entitlements. These are payments, usually from a higher-level government, to which a state or local government is automatically entitled in an amount determined by a specified formula. Entitlements are often designated for a broad functional activity, such as education.
- Shared revenues. These are revenues raised by one government, such as a state, but shared on a predetermined basis with other governments, such as with cities.
- Payments in lieu of taxes. These are amounts paid by one government to another in place of property taxes that it would otherwise be required to pay were it not a government and thereby tax-exempt. Such payments constitute an important source of revenue for governments that have within their jurisdiction a substantial amount of facilities of other governments. For example, the federal government, whose property is tax-exempt, may make payments to school districts in which military bases are located, to compensate for the cost of educating military dependents.

Examples of voluntary nonexchange revenues from private (i.e., from nongovernment) sources include donations to school districts and universities, contributions of land from developers (often tied, at least indirectly, to a project they are undertaking), and gifts of collectible items to museums or cultural centers. Sometimes they take the form of endowments. Endowments are gifts that stipulate that the contribution must be invested, and only the income from the investments can be spent.

### GASB Standards

Recipients of grants, irrespective of whether the grants are mandatory or voluntary, should recognize both revenue and related receivables only when all eligibility requirements have been met (subject, of course, in the fund statements to the "availability" criterion). Resources received before the eligibility requirements have been met should be reported as deferred revenue.

Reimbursement grants are generally considered to have an inherent eligibility requirement—the recipient is eligible for the grant only if and when it incurs allowable costs. Hence, recipients typically must recognize revenue from reimbursement grants during the period in which they make the expenditures for which they will be reimbursed.

Endowment contributions that stipulate that only the income from investing the contributions can be spent are subject to infinite time requirements. Does

this mean that the recipients can never recognize revenue from the gift? No. The GASB makes an exception to the general rule that revenue from contributions cannot be recognized until all time requirements have been satisfied. Per Statement No. 33, governments can recognize revenue from endowments and similar gifts in which the main benefit to the recipient is from the derived income, not the gift itself, as soon as they receive the gift. These revenues would most likely be recorded in a permanent fund. Similar rules apply to gifts of historical treasures and art works that the recipient agrees it will hold rather than sell.

#### EXAMPLE Unrestricted Grant with Time Requirement

In October 2011 a school district is notified that, per legislatively approved formulas, the state awarded it \$15 million in assistance. The funds, transmitted to the district in December 2011, may be used to supplement teachers' salaries, acquire equipment, and support educational enrichment programs. The funds can be used only in the year ending December 31, 2012.

The grant is unrestricted. The stipulation that the funds must be used to supplement teachers' salaries, acquire equipment, and support educational enrichment programs is not a purpose restriction. It is a requirement only in form, not in substance; the state demands nothing of the district that it would not otherwise do. However, the grant is subject to a time requirement—the resources must be used in 2012. Hence the school district must defer recognizing grant revenue until 2012:

Cash	\$15	
Deferred grant revenue		\$15
To record the receipt of state funds in 2011		
Deferred grant revenue	\$15	
Grant revenue		\$15
To recognize grant revenue in 2012		

#### EXAMPLE Grant with Purpose Restriction

In October 2011 a school district is notified that, per legislatively approved formulas, the state granted it \$15 million to enhance its technological capabilities. The funds, transmitted by the state in December 2011, must be used to acquire computers but may be spent at any time.

This grant is subject only to a purpose restriction. Purpose restrictions do not affect the timing of revenue recognition; the district should recognize the revenue as soon as the grant is announced. Nevertheless, owing to the purpose restriction, the district should record the grant in a special revenue fund, and in its government-wide statements it should report \$15 million of its net assets as "restricted to purchase of computers."

Cash
Grant revenue

\$15

To recognize grant revenue (in a special revenue fund) in 2011

#### EXAMPLE Reimbursement (Eligibility Requirement) Grant

In December 2011 a city is awarded a grant of \$400,000 to train social workers. During December 2011 it spends \$300,000 in allowable costs, for which it is reimbursed \$250,000. It expects to be reimbursed for the \$50,000 balance in January 2012, and to expend and be reimbursed for the remaining \$100,000 of its grant throughout 2012. The city is subject to an eligibility requirement in that to be eligible for the grant it must first incur allowable costs.

In this example, the government can recognize the grant only as it incurs allowable costs. Thus, in 2011 it can recognize \$300,000 in both revenue and increases in assets:

Expenditures to train social workers	\$300,000	
Cash (or payables)		\$300,000
To record allowable costs	1.00	•
Cash	\$250,000	
Grants receivable	50,000	
Grant revenue		\$300,000
To recognize grant revenue	•	·

#### EXAMPLE Unrestricted Grant with Contingency Eligibility Requirement

In January 2011, a private foundation agrees to match all private cash contributions up to \$20 million received by a state-owned museum during its 2011-2012 fund drive. In 2011 the museum receives \$14 million in private cash contributions.

The museum is eligible for the foundation's matching contribution only insofar as it receives funds from other sources. Thus, in 2011 it can recognize only \$14 million of matching foundation revenue (in addition, of course, to the \$14 million in private donations):

Grant receivable (foundation)	\$14
Grant revenue (foundation)	\$14
To recognize \$14 million of a foundation or	rant .

If the foundation will not actually make its contribution in time for the resources to be available to meet its 2011 current liabilities, then on its modified accrual fund statements the museum should recognize the grant as deferred rather than realized, revenue.

### EXAMPLE Endowment Gift

A private citizen donates \$1 million to a city to maintain and repair historical monuments. He stipulates that the principal remain intact permanently and that only the income be used for the intended purpose.

Endowments that are intended to support a government's activities and thereby benefit the public are accounted for in a permanent fund, a type of governmental fund. Inasmuch as the gift is intended to provide an ongoing source of income, the city should recognize the \$1 million as revenue upon receipt. In its government-wide statements, however, it should show \$1 million of its assets as restricted and thereby unavailable for general expenditure.

#### EXAMPLE Pledges

A private citizen pledges \$10,000 to a county-operated zoo. The government is confident that the promised donation will actually be made.

Governments should recognize revenue from pledges on the same basis as other grants—that is, as soon as they meet all eligibility requirements. Thus, if a government has to do nothing further to receive a donation (and the resources are probable of collection), it can recognize revenue at the time the pledge is made. However, in its fund statements, consistent with the "available" criterion, it must delay revenue recognition until the resources will be available to meet the current liabilities of the period. In effect, therefore, it would recognize a receivable (offset by deferred revenue) but must wait to recognize the revenue until the period in which the cash is to be received (or will be received within 60 days thereafter).

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The general standards for recognition of grant revenues are the same for fullaccrual government-wide statements as for modified accrual fund statements. As emphasized with respect to other revenues, however, recognition under the modified accrual basis is subject to the "available" test, whereas under the full accrual basis it is not.

Gifts of capital assets present an especially intriguing accounting issue, mainly because ACCOUNTING capital assets are not typically reported in governmental funds. Donated capital assets, FOR GIFTS OF current standards make clear, should be recorded in either the fund to which they relate if such fund is a proprietary fund or in the schedule of capital assets if such fund is a governmental fund. Are there instances, however, in which donated capital assets can properly be recorded in a governmental fund?

CAPITAL ASSETS

#### EXAMPLE Donations of Land for Differing Purposes

A builder donates two parcels of land to a city. Each has a fair value of \$4 million. The city intends to use one as a park and to sell the other.

In current practice, capital assets intended for use cannot be recorded in a governmental fund as assets; correspondingly, donations of capital assets cannot be recognized as revenue. The donated assets should be recorded in the schedule of capital assets. Thus, the land intended as a park would not be recorded in either the general fund or any other governmental fund. It would be recorded only in the schedule of capital assets and in the government-wide statement of net assets.

By contrast, capital assets held for sale are unlike capital assets held for use. From the perspective of the recipient government they are the equivalent of marketable securities or other short-term investments. They are expected to be transformed soon into cash. Arguably, therefore, capital assets intended to be sold should be recorded in governmental funds (such as the general fund or a capital projects fund), and donations of these assets should be recognized as revenues. Nevertheless, the Government

Finance Officers Association (GFOA) recommends that for governmental funds such as the general fund, the government should report the asset on year-end financial statements only if it has actually succeeded in selling the asset by the time it issues those statements. If the government sells the asset after year-end but within the availability period (e.g., within 60 days), then it would recognize revenue from the gift. Thus, it would make the following entry:

Land held for sale

Revenue from donations

\$4

To record a gift of land that the city sold within the availability period

If, however, the city sold the land after the availability period but before it issued the financial statements, then it would recognize the land as an asset but defer the recognition of revenue. Thus:

Land held for sale

\$4

Deferred revenue (from donations)

\$4

To record a gift of land that the city sold after the availability period but prior to the issuance of financial statements

If, by contrast, the city failed to sell the land by the time it issued the financial statements, then in a government fund it would not recognize the asset and not recognize either revenue or deferred revenue. The rationale for this position is that there is no arm's-length transaction with a third party to provide objective evidence of the land's value.5

Governments may report capital assets in their governmental funds for other reasons as well. For example, they may foreclose on properties because the owners failed to meet tax obligations. Almost always the governments intend to sell, rather than keep, these properties. Normally they would value them at the lower of the properties' liens or the anticipated net realizable values.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The GFOA takes a different (some may contend inconsistent) position with respect to government-wide statements. In government-wide, full accrual statements, it recommends that the government should account for the donation of capital assets just as it would a donation of any other type of asset. The government should recognize both the revenue and the property received, irrespective of whether and when the land was sold. If the land is not sold by the time the financial statements are issued, then the government should estimate

<sup>&</sup>lt;sup>5</sup>This recommendation is based on Stephen J. Gautier, Governmental Accounting, Auditing, and Financial Reporting (Chicago: Government Finance Officers Association, 2005), p. 79. This position is consistent with guidance provided by the GASB in Statement No. 11, Measurement Focus and Basis of Accounting - Government Fund Operating Statements; para. 11. We say "consistent with" rather than "per" Statement No. 11 because Statement No. 11 was never implemented and hence is not authoritative.

its value. Presumably, inasmuch as the government-wide statement of net assets, but not a governmental fund balance sheet, already includes other capital assets, the impact of any error in the estimated value of the donated asset would be relatively small. 

Some types of grants—those for which the recipient is required to distribute the ACCOUNTING resources to other parties or for which payment is made directly to a third party for the benefit of the recipient—raise the additional question of whether the grant should even be recognized by the recipient government. Suppose, for example, that a state, receives federal funds earmarked for each of its local school districts. Should the state record the receipt of the funds as revenue and the disbursement as an expenditure? Or alternatively, should it omit the grant from both its budget and its accounts on the grounds that, with regard to these funds, it is nothing more than an agent of the federal government?

Grants that a government must transfer to, or spend on behalf of, a secondary recipient are referred to as pass-through grants. Pass-through grants vary in the extent of responsibility they impose on the primary recipient. For example, a state may receive federal funds over which it has no discretion in determining how, or in what amounts, they can be disbursed. Once it distributes the funds, it may have no responsibility for monitoring how they are spent. At the other extreme, a state may be permitted to distribute federal funds within broad guidelines and it may be held accountable for ensuring that the funds are used in accordance with federal specifications.

In the past, some governments opted to exclude pass-through funds from both their revenues and their expenditures. Perhaps wanting to show that they held the line on spending, they accounted for the funds "off the budget" - often in agency funds in which only assets and liabilities are reported.

To reduce diversity of practice, in 1994 the GASB stated that "as a general rule, cash pass-through grants should be recognized as revenue and expenditures or expenses in governmental, proprietary, or trust funds."6 Only in those "infrequent cases" in which the government serves as a "cash conduit" may pass-through grants be reported in an agency fund. A government serves as a "cash conduit," the GASB explains, if it "merely transmits grantor-supplied moneys without having 'administrative involvement.'" Administrative involvement, would be indicated if the government selected the secondary recipients of the funds (even based on grantorestablished criteria) or monitored compliance with grant requirements.

Food stamps are a form of pass-through assistance. The federal government gives the stamps to the states, which distribute them in accord with specified guidelines. Until 1994, many governments gave no balance sheet or operating statement recognition to food stamps. Then, in its pronouncement on pass-through grants, the GASB asserted that food stamps received and distributed should be recognized as both revenue and an expenditure.7

FOR PASS-THROUGH **GRANTS** 

ACCOUNTING FOR FOOD STAMPS

<sup>&</sup>lt;sup>6</sup>GASB Statement No. 24, Accounting and Financial Reporting for Certain Grants and Other Financial Assistance, para. 5, 1994.

<sup>&</sup>lt;sup>7</sup>Ibid., para. 6.

#### EXAMPLE Food Stamps

A state receives \$100 million in food stamps, of which it distributes \$95 million.

## GASB Standards

According to the GASB, state governments should report both the revenue and the expenditure concurrently, when the stamps are distributed. They should be measured by the stamps' face value.

Moreover, the GASB directed that state governments report food stamps on hand at year-end as an asset (stated at face value). Inasmuch as governments should recognize revenue from food stamps only as the stamps are distributed—not when they are received—the credit offsetting the food stamp inventory should be to "deferred revenue."

The following entries summarize the transactions:

Expenditures—food stamps	\$95	
Revenues—food stamps		\$95
To record the receipt and distribution of food stamps	$\mathcal{F}_{\mathbf{q}} = \{ \mathbf{q} : \mathbf{q} \in \mathcal{F}_{\mathbf{q}} : \mathbf{q} \in \mathcal{F}_{\mathbf{q}} \} $	
Inventory of food stamps (paper)	\$ 5	
Deferred revenues—food stamps		\$ 5
To recognize food stamps on-hand at year-end	$1 = A^{\prime} + $	

States sometimes involve local governments in the food stamp distribution process. Nevertheless, overall administrative responsibility for the program rests with the states. The local governments serve mainly as agents of the state. Although the GASB does not deal with the issue of how local governments should account for their role in the food stamp programs, most governments have not been reporting stamps received and distributed as either revenues or expenditures. They have, however, been recognizing administrative costs as expenditures and administrative fees charged to the state as revenues.

Food stamps are now mostly electronic (like a debit card). According to GASB Statement No. 24, electronic food stamps are not expenditures until the recipient uses the benefit and there would generally be no inventory balance. Thus, the entry based on recipient's use of the benefit:

Expenditures—food stamps	*4		\$47	
Revenue—food stamps	W. es	- N	y Marin	\$47
To record the receipt and distributio	on of food stan	ups .	e e e e e e e e e e e e e e e e e e e	

Note: The journal entry will be the same for both funds-based and government-wide financials.

In the multigovernment system of the United States, one government may make ACCOUNTING payments for employee fringe benefits "on behalf" of (i.e., for the direct benefit of) another. For example, a state may contribute to a pension plan for school teachers on behalf of the independent school districts that employ the teachers.

FOR ON-BEHALF **PAYMENTS** 

The key issue concerning on-behalf payments is whether and in what circumstances the recipient government should recognize the payments as if it had received and then spent a cash grant—that is, whether it should recognize a revenue and an offsetting expenditure, or give no recognition at all to the transactions.

As with so many other accounting issues, the challenges of standard setting are compounded by the variety of forms that a transaction can take. Some state on-behalf payments, for example, are made in lieu of pensions or other compensation that the recipient local government would otherwise have been required by state law to provide on its own. Other payments are made by the state to cover programs or activities in which the local government would otherwise not engage. Some accountants believe that recipient governments should recognize only the on-behalf payments that cover costs for which they are legally responsible.

#### EXAMPLE On-Behalf Payments

A state government is responsible for funding the state's teacher retirement system. It contributes \$3 million to the system on behalf of an independent school district.

### **GASB** Standards

The GASB ruled, as another part of its grants project, that the recipient government should recognize both revenue and corresponding expenditures for all on-behalf payments of fringe benefits and salaries. Despite the objections of two of its five members, it required recognition irrespective of whether or not the beneficiary government was legally responsible for the payments.8

The school district would make the following entry:

\$3 Pension expenditures State aid—pensions (revenue) \$3 To record the on-behalf pension payments made by the state Correspondingly, the state would also record an expenditure: State aid to school districts (expenditure) \$3 To record the contribution to the pension fund on behalf of an independent school district

A paying government should classify its on-behalf payments in the same manner as similar cash grants to other entities. For example, if it classifies other educational grants as educational expenditures, then it should classify the payments to the pension fund as educational expenditures, not pension expenditures.

<sup>&</sup>lt;sup>8</sup>Ibid., paras. 7–13.

#### Mow should sales of capital assets BE ACCOUNTED FOR?

Governments sell capital assets for the same reasons businesses do—the services the assets impart can be provided more economically by another means or by replacement assets. The unique accounting problem faced by governments when they sell general capital assets is that the financial resources received are accounted for in a governmental fund, but the assets that are sold are not.

#### EXAMPLE Sales of Capital Assets

On December 31, 2011, a city purchases a new police car for \$40,000. On January 2, 2012, the vehicle is damaged in an accident. The vehicle is uninsured, the city is able to sell the nearly demolished vehicle for \$5,000.

Current practice requires the following seemingly odd entry:

\$5,000

Other financing sources—sale of vehicle

\$5,000

To record the sale of general capital assets

The entry is "seemingly odd" because "other financing sources" is reported on a statement of revenues, expenditures, and changes in fund balance (below the revenues and expenditures). Although not exactly revenue, it is similar to revenue in that it may be budgeted as revenue and it results in an increase in fund balance.

From an accounting perspective, therefore, the accident that destroyed a \$40,000 vehicle left the government \$5,000 better off; that is, the governmental fund's assets and fund balance increased by \$5,000. This outcome, while bizarre—and not suggestive of appropriate means by which governments should reduce their deficits—is inevitable when the measurement focus of governmental funds excludes capital assets. As indicated in Chapter 2, when governmental fund resources are used to acquire an asset, its cost is written off (i.e., charged as an expenditure) as it is paid for. Consequently, the police vehicle, which is clearly evident to most citizens, is invisible to the governmental fund's accountant.

Although this accounting outcome may seem bizarre, business accounting may produce a similar result. The capital assets of businesses are carried at historical cost less depreciation—amounts that may be considerably less than fair market values. Suppose that a vehicle owned by a business was destroyed in an accident and that the vehicle was insured for more than its book value. That accident, too, would cause the business to report a gain owing to the mishap.

Both businesses and governmental funds state their capital assets at amounts bearing little relationship to their economic worth. Whereas businesses carry them at historical cost less depreciation, governmental funds report them at zero.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

In their government-wide, full accrual statements, governments would report their capital assets just as businesses would. They would state them at historical cost, less accumulated depreciation. Upon sale of an asset, they would recognize a gain or loss in the amount of the difference between sale proceeds and book value. Hence, in the example, assuming that no depreciation had yet been charged, the government would recognize a loss of \$35,000—the difference between cost of \$40,000 and the sale price of \$5,000.



Like businesses, governments can take advantage of capital asset accounting to improve the look of their financial statements even in the absence of substantive fiscal improvement. Thus, for example, in its government-wide statements a government can recognize a gain and a corresponding increase in net assets by selling a capital asset having a market value greater than its book value. In its governmental fund statements it can report both "other financing sources" and a corresponding increase in fund balance by selling any capital asset, irrespective of the relationship between its book and market values.

# How should investment gains and losses be accounted for?

Investments, whether they are in debt or equity securities, fluctuate in value. Government portfolios generally contain mainly short-term debt securities. Because they are short-term, their values are not greatly influenced by swings in interest rates. Some portfolios, however, also hold longer-term instruments that are considerably more sensitive to changes in interest rates. In recent years, some governments—sometimes in violation of both accepted standards of sound fiscal management and common sense—have speculated in "derivatives" and other instruments that are extremely sensitive to interest rate changes.

Until 1993, both the GASB and the Financial Accounting Standards Board (FASB) directed that governments, not-for-profit organizations, and most businesses within their purview report short-term investments at either historical cost or the lower of historical cost or market value. In that year, the FASB broke with tradition and required businesses to divide their investment portfolios into three categories: trading securities (those that enterprises intend to hold for only a short period of time); held-to-maturity securities (mainly long-term bonds); and available-for-sale securities (other securities, such as stock held for the long term). They must carry their portfolios of both trading securities and available-for-sale securities at "fair" (i.e., market) values. However, the FASB explicitly exempted not-for-profits from the purview of Statement No. 115, opting to deal with them in a separate project.

In 1995, as the result of the promised project, the FASB extended its "mark-to-market" directives to not-for-profits. However, inasmuch as the requirement that investments be classified into the three categories was intended mainly to accommodate specialized industries, such as banks and insurance companies, it was omitted from the not-for-profit pronouncement. Instead, the statement requires that all debt and equity securities (except those accounted for by the equity method or those of consolidated subsidiaries) be stated at fair value. Moreover, gains and losses on investments, both realized and unrealized, must be recognized as such and reported in the statement of activities.

<sup>&</sup>lt;sup>9</sup>FASB Statement No. 115, Accounting for Certain Investments in Debt and Equity Securities (May 1993); also FASB ASC 320-10.

<sup>&</sup>lt;sup>10</sup>FASB Statement No. 124, Accounting for Certain Investments Held by Not-for-Profit Organizations (November 1995); also FASB ASC 958-320-15.

The reasons for reporting investments at fair value are as compelling for government organizations as for other not-for-profits and for businesses. Those frequently advanced include the following:

- For virtually all decisions involving investments, fair value is more relevant than historical cost.
- Investments are often held as cash substitutes. They can be liquidated with a phone call to the entity's broker or a quick computer entry.
- Fair values are objective, up-to-the-minute prices are available from computer and telephone information services.
- The performance of investment managers, and their employer governments, is measured by total return—dividends, interest, and changes in fair values. Insofar as government and not-for-profit portfolio managers are expected to achieve specified investment goals, statement users are entitled to the information needed to assess how well the managers have done.
- To be sure, prices that go up can also come down. But financial statements report on performance within specified periods. An increase in the value of a security in a particular year is indicative of sound investment performance in the year it occurs. A subsequent decline in the following year reflects poor performance in that year. Statement users are entitled to this information.

#### EXAMPLE Investment Income

The following table summarizes the 2011 investment activity in a county's general fund (all amounts in thousands):

	Cost	Fair Value on Jan. 1	Purchases	Sales (proceeds)	Fair Value on Dec. 31
Security A	\$120	\$120	and the state of	e se la granda	\$140
Security B	520	540			540
Security C	200	200	4	\$250	0
Security D	90		<u>\$90</u>		75
•	<u>\$930</u>	<u>\$860</u>	<u>\$90</u>	<u>\$250</u>	<u>\$755</u>

### GASB Standards

Following the FASB's lead, in 1997 the GASB determined that governments, like businesses and not-for-profits, should state their investments at fair value. GASB Statement No. 31, Accounting and Financial Reporting for Certain Investments and for External Investment Pools, requires that investment income, including changes in fair value, be reported in the operating statement or other statement of activities of all entities and funds.

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The GASB made a notable exception for short-term securities that are not subject to the same volatility as long-term instruments. Governments are permitted to report money market investments having a remaining maturity at time of purchase of one year or less at amortized cost rather than market value. These investments include certificates of deposit, commercial paper, and U.S. Treasury obligations.

Per the pronouncement, the investments should be reported on the county's December 31, 2011, statements at their fair value—\$755. The gain or loss to be reported on the country's 2011 operating statements can be determined by subtracting investment inputs from outputs. The inputs are the securities on hand at the start of the year (stated at fair value as of the beginning of the year) plus the purchases during the year. The outputs are the securities on hand at year-end (stated at fair value as of year-end) plus the proceeds from the sale of securities during the year. Thus:

Outputs	•	•	*	
Fair value, D	ecember 31		\$755	
Sales	, 	4 -	_250	\$1,005
		2.00	· ½	
Inputs				
Fair value, Ja	nuary 1		\$860	
Purchases	·		90	950
Increase (o	lecrease) in fair vestments	6.	,	\$ 55
The following entry	would therefore be a	appropriate:		
Investments			<b>\$</b> 55	
Revenue—inc	ease in fair value of	investments		\$55 <sup>11</sup>
	ase in the fair value of		s	22

Many local governments invest what would otherwise be idle cash in investment pools maintained by their states or other governmental units. These investment pools are similar to mutual funds. Each participant purchases shares in the underlying portfolio. Statement No. 31 specifies that governments should state their investments in a pool at the fair value per share of the pool's underlying portfolio. Each period they should recognize the change in fair value as a gain or loss.

#### NERRACTICE

Statement No. 31 requires governments to recognize gains and losses from changes in all marketable securities, including held-to-maturity debt securities that have a maturity greater than one year. Typically the longer the maturity of a debt security (such as a U.S. Treasury note or bond), the higher its interest rate. Thus, a two-year note would almost always provide a greater return than a one-year note.

Investment advisors report that some governments are opting to invest in one-year securities rather than two-year securities even though sound investment strategies would suggest that the two-year securities would provide the higher yield and would be more appropriate for their portfolios. As a consequence, they are losing up to 30 basis points (that is, 0.3% annual return) on their investments. Government officials are unwilling to assume the risks of having to report losses from the changes in market values of the two-year securities. In particular, they note that the political costs of having to report losses greatly outweigh the benefits of being able to report gains.

Some
Governments
May Make
Suboptimal
Investment
Decisions in
Order to Avoid
Financial
Statement
Volatility

<sup>&</sup>lt;sup>11</sup>Alternatively the city could have recognized a gain of \$50 at the time Security C was sold (i.e., the difference between the selling price of \$250 and the beginning-of-year market value of \$200). Then, at year-end, only a \$5 increase in the fair value of the investments would have been required to be recorded.

### How should interest and dividends be accounted for?

The GASB has not yet provided specific directives as to when governments should recognize interest and dividends on their investments. However, by recording the changes in fair value, governments will automatically accrue interest and dividends as they are earned.

#### EXAMPLE Interest Income

On December 1, a town purchased a \$1,000, two-year discount note for \$873, a price that reflects an annual yield of approximately 7 percent. As a discount note, the security provides no periodic payments of interest. However, assuming no change in prevailing interest rates or other factors that would also affect fair value, the note's fair value can be expected to increase by approximately \$5 the first month. On December 31, if the fair value of the note were \$878, the following entry would recognize the \$5 of investment income attributable in economic substance to the interest earned:

Investments \$5
Revenue—increase in fair value of investments \$5
To record the increase in the fair value of the investments

If the security were a short-term Treasury note (one year or less), the government would not look to fair value to adjust the security. Instead, it would amortize the initial discount over the life of the note. If, for example, the initial discount on a six-month, 6 percent, \$1,000 note were \$30, the following entry would recognize one month's interest income:

Discount on note (or investments) \$5

Revenue—interest income \$

To record one-month's interest

The impact of the two approaches on both net assets and change in fund balance is the same. Both would give recognition to the interest earned and the resultant change in the value of the underlying security.

The GASB approach to investments has been extremely controversial and unpopular among many government officials. It is easy to see why: it widens the gap between financial reporting and budgeting. The investment portfolios of many governments are dominated by notes and other securities having a fixed maturity date. If a government holds its securities to maturity, changes in market value have no impact on the cash that is available for expenditure. Yet increases in market value must be reported as revenues (increases in net assets) and decreases must be reported as expenditures (decreases in net assets). Imagine the difficulty of having to explain to members of governing boards why an increase in net assets is only a "paper gain" that cannot really be spent. Or try telling a TV reporter in 30 seconds why a decline in the value of a government's portfolio will have no impact on the amount for which the securities will eventually be sold.

# HOW SHOULD LICENSES, PERMITS, AND OTHER EXCHANGE TRANSACTIONS BE ACCOUNTED FOR?

Governments issue licenses (or permits) that allow citizens and businesses to carry out regulated activities over a specified period of time. However, the license period may not coincide with the government's fiscal year.

The primary concern relating to licenses is whether the revenue should be recognized when a license is issued and cash is received (usually concurrently), or whether it should be spread out over the period covered by the license. In other words, is the significant economic event the collection of cash or is it the passage of time?

The issue is by no means clear-cut in light of the following characteristics of licenses:

- Some license fees are intended to cover the cost of services provided to the licensee or related to the activity in which the licensee engages. These license fees have the characteristics of exchange transactions. The licensee pays cash and receives value in exchange. For example, the funds generated from restaurant licenses may be used to inspect restaurants, thereby ensuring customers that the restaurants meet minimum standards of cleanliness. Similarly, bicycle registration fees may support bicycle safety programs. Other fees, however, may bear little relation to the cost of services provided and may be imposed mainly as a source of general revenue. They are more in the nature of nonexchange revenues.
- Generally, license fees are not refundable. Therefore, unless a license fee is tied to specific services, once the government receives the fee it has no further obligation—actual or contingent—to the licensee.

#### EXAMPLE License Fees

In June 2011 a city imposed license fees on barber and beauty shops for the first time. It collected \$360,000. The fees are intended to cover the cost of health inspections. The licenses cover the one-year period from July 1 to June 30.

# GASB Standards

In Statement No. 33, the GASB acknowledged that license fees and permits are not always pure exchange transactions. They may not be paid voluntarily, and rarely is the amount paid reflective of the fair value of benefits received by the licensee. Still, the GASB maintains that they should be accounted for as if they were true exchange transactions. With respect to miscellaneous exchange transactions, the GASB standards state simply: "Miscellaneous Revenues." Golf and swimming fees, inspection charges, parking fees and parking meter receipts, and the vast multitude of miscellaneous exchange revenues are best recognized when cash is received." The following 12 entry would therefore summarize the 2011 activity:

Cash

\$360,000

Revenue from license fees
To summarize 2011 license fee activity

\$360,000

<sup>&</sup>lt;sup>12</sup>NCGA Statement No. 1, Governmental Accounting and Financial Reporting Principles, para. 67, 1979.

This current standard was developed prior to the issuance of Statement No. 33 and (in that it recognizes miscellaneous revenues on a cash basis) is inconsistent with the accrual basis of accounting. The accrual basis would require that the fees be recognized over the period covered by the license (as when a business grants a licensee permission to use a patent or trademark). The current standard was developed as a pragmatic approach to recognizing revenues that for most governments are not of major consequence.

The spirit of Statement No. 34 suggests that in government-wide statements exchange revenues should be accounted for on an accrual basis, as they are in businesses. However, mainly because these miscellaneous types of revenue are not of great significance; the GASB has not definitively stated whether in their government-wide statements governments must accrue these revenues (the conceptually sound approach) or may account for them on a cash basis as they do in their fund statements (the pragmatic approach).

# How should governments report revenues in their government-wide statements?

A primary objective of the government-wide statement of activities is to show the relative financial burden to the taxpayers of each function—the amount that has to be financed out of general revenues. As indicated in Chapter 2, the government-wide statement of activities reports the net expenses of each of the government's main functions. The net expenses of a function are its expenses less any revenues that can be directly attributable to it. As a consequence, governments must determine which revenues should be classified as program (function) revenues and which as general revenues: "General revenues" is the default classification; all revenues that cannot be classified as program revenues are considered general revenues.

As a rule, revenues from charges or fees imposed upon parties that benefit from specific activities are classified as program revenues. So also are grants from other governments or outside parties that must be used for specific purposes. By contrast, taxes that are imposed upon the reporting government's citizens are considered general revenues, even if they are restricted to specific programs. Thus, for example, a general sales tax would be classified as general revenue, even though it might be dedicated to education or road construction. Interest and other earnings from investments, as well as other nontax revenues, such as grants and contributions, would be counted as general revenues unless explicitly restricted for specific programs.

As illustrated in Chapter 2, Table 2-4, the government-wide statement of activities reports program-specific revenues in three separate columns and in as many rows as there are functions. The three columns are for:

- Charges for services. These would include fees for services such as garbage collection, licenses and permits, and special assessments for roads or other capital projects.
- Program-specific operating grants and contributions. These would include federal or state grants for specific operating purposes, such as law enforcement, education, and recreation.
- Program-specific capital grants. These would include grants for the purchase and construction of long-term assets; such as for buses, jails, and roads.

Some government grants are for multiple purposes. If the amounts can be identified with specific programs (through either the grant application or the grant notification), they should be apportioned appropriately. If they cannot, they should be reported as general revenues.

### SUMMARY

To better achieve two primary objectives of financial reporting—to provide information relating to interperiod equity and to demonstrate budgetary compliance—governments prepare two types of financial statements: fund and government-wide. The fund statements of governmental funds are on a modified accrual basis; the government-wide statements are on a full accrual basis.

Because the modified accrual statements focus on expendable financial resources, revenues must be available to pay liabilities of the current period before they can be recognized. The GASB has specified that property taxes can be considered "available" if they are collected during the year for which they are intended or within sixty days thereafter. Although the GASB leaves it to the judgment of individual governments to determine an appropriate number of days for other types of revenues, the "60-day rule" has become a widely accepted benchmark.

GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, provides guidance as to which events are most significant in the process of revenue generation and should therefore dictate the timing of revenue recognition. Nonexchange transactions are those in which one party gives or receives value without directly receiving or giving equivalent value in return.

Statement No. 33 is applicable to financial statements prepared on either the full accrual or the modified accrual basis. However, when reporting on the modified accrual basis, governments should recognize revenues only to the extent that they satisfy the "available" criterion. There is no difference between accrual and modified accrual accounting in the timing of recognition of assets, liabilities, or expenditures.

The revenue recognition guidelines set forth by the GASB in Statement No. 33, as well as other pronouncements, include the following:

Property taxes, which are imposed revenues, should be recognized as revenues in the period for which they are levied. If they are collected in advance of the period for which they are intended, they should be accounted for as deferred revenues. Governments should recognize revenues from fines and penalties—the other major type of imposed revenues—as soon as they either receive the assets or have an enforceable legal claim to them.

- Revenues that are derived from underlying exchange transactions should be recognized when the underlying transactions take place. Thus, sales taxes should be recognized in the period of sale. Income taxes should be recognized during the period in which the income is earned. However, if practical difficulties prevent them from determining when the income has been earned, governments may recognize income tax revenues in the period in which the taxes are collected (taking into account refunds and other adjustments).
- Grants should be recognized when the government has satisfied all eligibility requirements. Grants that cannot be spent until a specific date are considered to be subject to time requirements and therefore should not be recognized until that date. To be eligible for reimbursement grants, governments must first incur the costs for which they are to be reimbursed. Hence, they should recognize receivables and revenues only as they make the related expenditures.
- Revenues from the sale of capital assets and from other exchange transactions are recognized during the period of the exchange. Because governments do not report capital assets in their governmental funds, the book value of the assets is zero. Therefore, in the fund statements, the gain from the sale of a capital asset is equal to the sale proceeds. In the government-wide statements, by contrast, governments account for their capital assets as do businesses. The gain or loss is equal to the difference between the sales proceeds and the adjusted book value (i.e., cost less accumulated depreciation).
- Investments must be marked-to-market. Changes in the fair value of securities, including those attributable to anticipated receipts of interest and dividends, should be recognized as revenue as they take place.
- Revenues from most licenses and similar exchange transactions (even if not "pure" exchange transactions in that
  they may not involve exchanges of equal value) are generally recognized as cash is received (even if the benefits
  will be provided over more than one period), primarily
  for practical reasons.

Table 4–1 summarizes the principles of revenue and asset recognition as they apply to the main types of revenue-producing transactions in governmental funds.

しょうたい (前) オーロック じょうい たいいじん (質) ちゃっぱい ときさ しょい はだいがった しょうがく 持ち 間 (過ぎ)はより物 コードルギー	ABLE 4–1 ue Recognition in Governmental Funds
Imposed nonexchange transactions (Examples: property taxes and fines)	Revenue: In the period in which the revenue is intended to be used Asset: When the government has an enforceable legal claim or when resources are received, whichever comes first
Derived taxes (Examples: sales taxes, income taxes, hotel taxes, and fuel taxes)	Revenue: In the period of the underlying transaction  Asset: In the period of the underlying transaction or when resources are received, whichever comes first
Government-mandated nonexchange transactions (Example: a federal grant to pay for a required drug prevention program)	Revenue: When all eligibility requirements, including time requirements, have been met  Asset: When all eligibility requirements have been met, or when resources are received, whichever comes first
Voluntary nonexchange transactions (Examples: enti- tlements, federal grants for general education)	Same as for government-mandated nonexchange transactions
Exchange and "exchange-like" transactions (Examples: license fees, permits, and inspection charges)	Revenue: When cash is received  Asset: When cash is received
Investments (Examples: stocks, bonds, notes, shares in investment pools)	Revenue: As securities increase in value  Asset: As securities increase in value (i.e., should be "marked to market")

Note: The above guidelines apply to both the government-wide (full accrual) and governmental fund (modified accrual) statements. However, in the fund (modified accrual) statements, revenues should be recognized no sooner than the period in which the resources to be received are measurable and available to satisfy liabilities of the current period.

#### **NEY TERMS IN THIS CHAPTER**

contingent grants
current financial resources
derived tax revenues
entitlements
government-mandated nonexchange transactions
imposed nonexchange revenues
lien
on-behalf payments

pass-through grants
payments in lieu of taxes
purpose restrictions
restricted grants
shared revenues
time requirements
unrestricted grants
voluntary nonexchange transactions

#### EXERCISE FOR REVIEW AND SELF-STUDY

The town of Malvern engages in the following transactions during its fiscal year ending September 30, 2012. All dollar amounts are in thousands. Prepare summary journal entries to reflect their impact on year-end fund financial statements prepared on a modified accrual basis. Base your entries on generally accepted accounting principles now in

effect. In addition, indicate how your entries would differ if the statements were government-wide and prepared on a full accrual basis.

1. During fiscal 2012 the town levied property taxes of \$154,000, of which it collected \$120,000 prior to September 30, 2012, and \$5,000 over each of the next

- six months. It estimated that \$4,000 will be uncollectible.
- 2. On November 20, 2012, it received \$12,000 from the state for sales taxes collected on its behalf. The payment was for sales made in September that merchants were required to remit to the state by October 15.
- 3. In April the town was awarded a state training grant of \$400 for the period June 1, 2012, through May 31, 2013. In fiscal 2012 the town received the entire \$400 but spent only \$320. Although the funds were received in advance, the city would have to return to the state any amounts that were not used to cover allowable training costs.
- 4. The town requires each vendor who sells at its farmers' market to obtain an annual permit. The funds gene-

- rated by the sale of these permits are used to maintain the market. The permits, which cover the period from June 1 through May 31, are not refundable. In May 2012, the town issued \$36 worth in permits.
- 5. On September 1, 2012, with \$500 in funds available for temporary investment, the town acquired two-year, 6 percent U.S. Treasury notes. The notes pay interest upon maturity. On September 30, the market value of the notes was \$540.
- 6. Several years earlier the town received a donation of a parcel of land, upon which it expected to build. During fiscal 2012 it opted to sell the land for \$135. When acquired by the town, the land had a market value of \$119.

# 0

#### UESTIONS FOR REVIEW AND DISCUSSION

- Why is a choice of basis of accounting unavoidably linked to measurement focus?
- 2. What are the measurement focus and basis of accounting of governmental funds? What is the traditional rationale for this basis of accounting (used in governmental fund statements)—as opposed to, for example, either a full accrual basis or a budgetary basis?
- 3. What is the difference between an exchange and a nonexchange transaction?
- 4. What are the main categories of revenues per GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions?
- 5. What criteria must be met before revenues can be recognized on a modified accrual basis? What is the rationale for these criteria?
- 6. What is the general rule for recognizing property taxes as revenues? How would property taxes be accounted for differently in the fund statements, as opposed to in the government-wide statements?
- 7. What is the earliest point in the sales tax collection process that revenue may be recognized? How can you justify recognizing revenue on the basis of this event?
- 8. What special problems do governments face in measuring the income taxes associated with a particular year?

- 9. Explain the distinction between reimbursement grants and entitlements. How does this distinction affect the way each type of grant is accounted for?
- 10. A private citizen makes an unrestricted pledge of \$5 million to a city's museum. The city is confident that the donor will fulfill her pledge. However, the cash will not be received for at least two years. How will the amount of revenue recognized differ between the fund statements and the government-wide statements? Explain.
- 11. What are pass-through grants? Under what circumstances must a recipient government report them as both a revenue and an expenditure?
- 12. A student comments: "A government destroys a recently acquired car, sells the remains for scrap, and its general fund surplus for the year increases. That's ridiculous. Government accounting makes so much less sense than private-sector accounting." Explain why the situation described by the student arises. Does government accounting in fact differ so much from business accounting?
- 13. Until recently governments were not permitted to recognize revenue on increases in the value of investments. What arguments might you present in support of the current position that investments be stated at fair value and that changes in fair value be recognized as either revenues or expenditures?

### Exercises

#### E. 4-1

#### Select the best answer.

- 1. Under the modified accrual basis of accounting, reverences cannot be recognized
  - a. Until cash has been collected
  - b. Unless they will be collected within 60 days of year-end
  - c. Until they are subject to accrual
  - d. Until they are measurable and available :
- 2. "Available" (as in "measurable and available") means
  - a. Available to finance expenditures of the current period
  - b. Subject to accrual
  - c. Collectible
  - d. Available for appropriation
- 3. Property taxes are an example of
- a. An imposed exchange transaction
  - b. An imposed nonexchange transaction
  - c. A derived transaction
  - d. A government-mandated nonexchange transaction
- 4. To be considered "available," property taxes must have been collected either during the government's fiscal year or within
  - a. The time it takes for the government to liquidate its obligations from the prior year
  - b. Thirty days of year-end
  - c. Sixty days of year-end
  - d. The following fiscal year
- 5. For its fiscal year ending September 30, 2011, Twin City levied \$500 million in property taxes. It collected taxes applicable to fiscal 2011 as follows (in millions):

June 1, 2010, through September 30, 2010 October 1, 2010, through September 30,	•	20 140
2011 October 1, 2011, through November 30,	\$	15.
2011 December 2011	\$	4

The city estimates that \$10 million of the outstanding balance will be uncollectible. For the fiscal year ending September 30, 2011, how much should Twin City recognize in property tax revenue (in millions) in its general fund?

- a. \$440
- b. \$460
- c. \$475
- d. \$490

- 6. Assume the same facts as in the previous example. How much should Twin City recognize in property tax revenue (in millions) in its government-wide statement of activities?
  - a. \$440
  - **b.** \$460
  - c. \$475
  - **d.** \$490
- 7. Central City was awarded two state grants during its fiscal year ending September 30, 2011: a \$2 million block grant that can be used to cover any operating expenses incurred during fiscal 2012, and a \$1 million grant that can be used any time to acquire equipment for its police department. For the year ending September 30, 2011, Central City should recognize in grant revenue in its funds statements (in millions):
  - a. \$0
  - **b.** \$1
  - **c.** \$2
  - d. \$3
- 8. Assume the same facts as in the previous example. How much should the city recognize in grant revenue in its government-wide statements?
  - a. \$0
    - b. \$1
    - c. \$2
    - d. \$3
- Assuming that a government will collect its sales taxes in sufficient time to satisfy the "available" criterion, it would ordinarily recognize revenue from sales taxes in its governmental fund statements
  - a. When the underlying sales transaction takes place
  - b. On the date the merchant must remit the taxes to the government
  - c. On the date the merchant must file a tax return
  - d. When the taxes are received by the government
- 10. Assuming that a government will collect its sales taxes in sufficient time to satisfy the "available" criterion, it would ordinarily recognize revenue from sales taxes in its government-wide statements
  - a. When the underlying sales transaction takes place
  - b. On the date the merchant must remit the taxes to the government
  - c. On the date the merchant must file a tax return
  - d. When the taxes are received by the government

#### E. 4-2

The following relate to Hudson City for its fiscal year ended December 31, 2011.

- On January 31, 2011, the city purchased as an investment for its debt service fund a fifteen-year, 6 percent, \$1 million bond for \$998,000. During the year it received \$30,000 in interest. At year-end the market value of the bond was \$999,500.
- On December 31, 2010, the Foundation for the Arts pledged to donate \$1, up to a maximum of \$1 million, for each \$3 that the museum is able to collect from other private contributors. The funds are to finance construction of the city-owned art museum. During 2011, the city collected \$600,000 and received the matching money from the Foundation. In January and February 2012 it collected an additional \$2,400,000 and also received the matching money.
- During the year the city imposed license fees on street vendors. All vendors were required to purchase the licenses by September 30, 2011. The licenses cover the one-year period from October 1, 2011, through September 30, 2012. During 2011 the city collected \$240,000 in license fees.
- The city sold a fire truck for \$40,000 that it had acquired five years earlier for \$250,000. At the time of sale the city had charged \$225,000 in depreciation.
- The city received a grant of \$2 million to partially reimburse costs of training police officers. During the year the city incurred \$1,500,000 of allowable costs and received \$1,200,000. It expects to incur an additional \$500,000 in allowable costs in January 2012 and to be reimbursed for all allowable costs by the end of February 2012.

Match the items below with the amounts that follow. An amount may be selected once, more than once, or not at all.

- Amount of investment income that the city should recognize in its debt service fund
- Reported value of bonds in government-wide statements at year-end
- 3. Amount of investment income that the city should recognize in its government-wide statements.
- 4. Contribution revenue from Foundation for the Arts to be recognized in funds statements
- 5. Contribution revenue from Foundation for the Arts to be recognized in government-wide statements
- 6. Revenue from license fees to be recognized in funds statements
- Increase in general fund balance owing to sale of fire engine
- 8. Increase in net assets (government-wide statements) wing to sale of fire engine
- 9. Revenue in fund statements from police training grant

- 10. Revenue in government-wide statements from police training grant
  - a. \$0
  - **b.** \$1,500
  - c. \$15,000
  - d. \$30,000
  - **e.** \$31,500
  - **f.** \$40,000
  - g. \$60,000
  - h. \$200,000
  - i. \$225,000
  - j. \$240,000
  - D 470,000
  - k. \$600,000
  - 1. \$998,000 ;
  - **m.**\$999,500
  - n. \$1,000,000
  - **o.** \$1,200,000
  - **p.** \$1,500,000
  - q. \$2,000,000

#### E. 4-3

Property taxes are not necessarily recognized as revenue in the year collected.

The fiscal year of Duchess County ends on December 31. Property taxes are due March 31 of the year they are levied.

- Prepare journal entries (excluding budgetary and closing entries) to record the following property tax-related transactions in which the county engaged in 2011 and 2012.
  - a. On January 15, 2011, the county council levied property taxes of \$170 million for the year ending December 31, 2011. Officials estimated that 1 percent would be uncollectible.
  - b. During 2011 it collected \$120 million.
  - c. In January and February 2012, prior to preparing its 2011 financial statements, it collected an additional \$45 million in 2011 taxes. It reclassified as delinquent the \$5 million of 2011 taxes not yet collected.
  - d. In January 2012, the county levied property taxes of \$190 million, of which officials estimated 1.1 percent would be uncollectible.
  - e. During the remainder of 2012 the county collected \$2.5 million more in taxes relating to 2011, \$160 million relating to 2012, and \$1.9 million (in advance) applicable to 2013.
  - f. In December 2012 it wrote off \$1 million of 2011 taxes that it determined would be uncollectible.
- 2. Suppose the county were to prepare government-wide statements and account for property taxes on a full accrual basis of accounting rather than the modified accrual basis. How would your entries differ? Explain.

#### E. 4-4

Grants are not necessarily recognized as revenue when awarded.

Columbus City was awarded a state grant of \$150,000 to assist its adult literacy program. The following were significant events relating to the grant:

- The city, which is on a calendar year, was notified of the award in November 2011.
- During 2012:it expended \$30,000 on the literacy program and was reimbursed for \$20,000. It expected to receive the balance in January 2013.
- In 2013 it expended the remaining \$120,000 and was reimbursed by the state for the \$10,000 owing from 2012 and the amount spent in 2013.
- 1. Prepare journal entries to record the events.
- 2. Suppose the city received the entire reimbursement in advance, at the time the award was announced in 2011.
- 3. Suppose alternatively that the state awarded the city an unrestricted grant of \$150,000, which the city elected to use to support the adult literacy program. The city received the entire \$150,000 in cash at the time the award was announced in 2011. How much revenue should the city recognize in each of the three years? Explain.

#### E. 4-5

Transactions affect fund statements differently than they do government-wide statements.

Preston Village engaged in the following transactions:

- It issued \$20 million in bonds to purchase a new municipal office building. The proceeds were recorded in a capital projects fund.
- 2. It acquired the building for \$20 million.
- 3. It recognized, as appropriate, \$300,000 of depreciation on municipal vehicles.
- 4. It transferred \$2,060,000 from the general fund to a debt service fund.
- It paid \$60,000 in interest on long-term debt and repaid \$2 million of principal on the same long-term debt.
- 6. It sold for \$5 million village land that had been acquired for \$4 million. The proceeds were recorded in the general fund.
  - a. For each of the transactions, prepare journal entries to record them in appropriate governmental funds (which are accounted for on a modified accrual basis).
  - b. Prepare journal entries to reflect how the transactions would be reflected in government-wide statements (which are prepared on a full accrual basis).
  - c. How can governments justify preparing two sets of financial statements, each on a different basis?

#### E. 4-6

The accounting for contributions may depend on how they will be used

Green Hills County received the following two contributions during a year:

- A developer (in exchange for exemptions to zoning restrictions) donated several acres of land that the county intended to convert to a park. The land had cost the developer \$1.7 million. At the time of the contribution its fair market value was \$3.2 million.
- A local resident donated several acres of land to the county with the understanding that the county would sell the land and use the proceeds to fund construction of a county health center. The land had cost the resident \$2.5 million. The county sold the land intended for the health center for \$3 million thirty days after the end of its fiscal year.
- Prepare journal entries to record the contributions. Be sure to specify the appropriate fund in which they would likely be made.
- 2. Comment on and justify any differences in the way you accounted for the two contributions.
- Comment on how each of the contributions would be reported on the county's government-wide statements.
- 4. How would your answers differ if the land intended for the health center were not sold by the time year-end financial statements were issued?

#### E. 4-7

Sales taxes should be recognized when the underlying event takes place.

A state requires "large" merchants (i.e., those with sales over a specified dollar amount) to report and remit their sales taxes within fifteen days of the end of each month. It requires "small" merchants to report and remit their taxes within fifteen days of the end of each quarter.

In January 2012, large merchants remitted sales taxes of \$400 million owing to sales of December 2011. In February 2012, they remitted \$280 million of sales taxes owing to sales of January 2012. In January small merchants remitted sales taxes of \$150 million owing to sales of the fourth quarter of 2011.

- 1. Prepare an appropriate journal entry to indicate the impact of the transactions on the state's fund financial statements for the year ending December 31, 2011.
- 2. Suppose, instead, that 10 percent of the taxes received by the state were collected on behalf of a city within the state. It is the policy of the state to remit the taxes to the city 30 days after it receives them. Prepare an appropriate journal entry to indicate the impact of the transactions on the city's fund financial statements for the year ending December 31, 2011.
- 3. Suppose instead that it was the policy of the state to remit the taxes to the city 90 days after it receives them.

How would your response to part (2) differ? Explain. Would your response be the same with respect to the city's government-wide statements?

#### F. 4-8

The recognition of revenue from fines does not necessarily reflect the amount "earned" by merely issuing tickets.

In August 2012, the last month of its fiscal year, Goldwaithe Township issued \$88,000 worth of tickets for parking and traffic violations. Of these, the township collected \$45,000. It expects to collect an additional \$20,000 within 60 days of the close of the fiscal year and to collect \$3,000 subsequent to that. It will have to write off the balance. The tickets are due and the protest period expires on September 15.

- 1. How much revenue should the township recognize from the tickets issued in August 2012? Explain.
- 2. How might your answer change with respect to the township's government-wide statements?

#### E. 4-9

The amount of revenue to be recognized from grants depends on the type of grant.

The following relate to three grants that the town of College Hills received from the state during its fiscal year ending December 31, 2012.

Prepare journal entries to record the three grants.

- 1. A cash grant of \$200,000 that must be used to repair roads
- 2. \$150,000 in cash of a total grant of \$200,000 to reimburse the town for actual expenditures incurred in repairing roads; during the year the town incurred \$150,000 in allowable repair costs
- 3. A cash entitlement grant of \$200,000 that is intended to supplement the town's 2013 budget and must be expended in that year

# **CONTINUING PROBL**

Review the Comprehensive Annual Financial Report (CAFR) that you obtained.

- 1. What are the main sources of the government's revenues, including those from both governmental and business-type activities?
- 2. Which of the entity's governmental functions or activities had the greatest amount of directly identifiable revenues?
- 3. Does the report discuss the accounting basis for recognizing revenues?
- 4. Does the government's government-wide statement of net assets or governmental-fund balance sheet report "deferred revenue?" If so, what is the most likely reason this revenue has been deferred?

- 5. What is the government's property tax rate?
- 6. At what percentage of fair market value is real property assessed?
- 7. When are property taxes due? When do interest and penalties begin to accrue?
- 8. By what percentage did each of the three largest sources of tax revenue increase over the last ten years?
- 9. Did the government generate revenue from traffic fines? As best you can tell, are these revenues reported in the government-wide statements as program revenues (e.g., associated with police or public safety) or as general revenues?

#### PROBLEMS

#### P. 4-1

The general principles of revenue recognition are the same for both governmental and government-wide statements.

For each of the following situations, indicate the amount of revenue that the government should recognize in an appropriate governmental fund as well as in its

government-wide statement of activities in its fiscal year ending December 31, 2012. Briefly justify your response, making certain that, as appropriate, you identify the key issue of concern.

 In October 2011 a state received a federal grant of \$300 million (in cash) to assist local law enforcement

criteria governing how the funds should be distributed, and will monitor the funds to ensure that they are used in accordance with grant provisions. The grant is intended to cover any allowable expenditure incurred in the calendar years 2012 through 2015. In 2012 the state incurred \$160 million of allowable expenditures.

- 2. On October 15, 2012, the Pleasant Valley School District invested \$1 million in three-year, 6 percent U.S. Treasury notes: The district intends to hold the notes to maturity. The notes will pay interest (\$30,000) on April 15 and October 15. On December 31, 2012, the market value of the notes was \$1,012,000.
- million for the calendar year 2012. The taxes are due June 30, 2012. The city collects the taxes as follows:

\$ 30 million December 2011 \$440 million January 1, 2012 to December 31, 2012 \$ 24 million January 1, 2013 through March 31, 2013 (\$8 million per month) \$494 million Total :

It estimates the balance will be uncollectible.

- 4. In January 2012 a state received \$300 million in food stamps, of which it distributed \$280 million during the year. It expects to distribute the balance in January 2013.
- 5. In January 2012 a city received a cash gift of \$1 million to support its museum of city history. Per the wishes of the donor the funds are to be invested and only the income may be expended. In 2012, the endowment generated \$50,000 in income, none of which was spent during the year.
- 6. For the year 2012 the teachers of the Nuvorich School District earned \$26 million in pension benefits. In January 2013, the state in which the district is located paid the entire amount into the State Teachers Retirement Fund.

#### P. 4-2

Nonexchange revenues can be of four types.

The GASB has identified four classes of nonexchange revenues:

- Derived tax
- Imposed
- Government mandated
- Voluntary

For each of the following revenue transactions affecting a city, identify the class in which the revenue falls and prepare an appropriate fund journal entry for the current year (2012) as necessary. Provide a brief explanation of, or 3. justification for, your entry.

- efforts. The federal government has established specific. 1. In December, the state in which the city is located announced that it would grant the city \$20 million to bring certain public facilities into compliance with the state's recently enacted disability/accessibility laws. As of year-end the city had not yet received the funds, and it had not yet expended any funds on the state-mandated facility improvements:
  - 2. The city imposes a \$100 tax on each sale of real estate. The tax is collected by the title companies that process the sales and must be forwarded to the city within 30 days of the transaction. In December there were 600 sales of real estate. As of year-end the city had collected \$40,000 of the \$60,000 that it was owed.
- 3. In December 2011 a city levied property taxes of \$500 3. In December the state announced that the city's share of state assistance for the calendar year 2013 would be \$120 million.
  - 4. The city imposes a tax on all boats owned by residents. The tax is equal to 1 percent of the assessed value of a boat (determined by the city, taking into account the boat's original cost and age). The tax is payable on the last day of the year prior to the year for which the tax is applicable. In 2012 the city levied \$640,000 of 2013 boat taxes, of which it collected \$450,000.
  - 5. A local resident sends to the city a copy of her will in which she bequeaths \$3 million to the city museum upon her death.
  - 6. The U.S. Department of Justice announces that it will reimburse the city up to \$400,000 for the purchase of telecommunications equipment. As of year-end the city had incurred only \$200,000 in allowable expenditures.
  - 7. A resident donates \$10 million in securities to the city to support a cultural center. Only the income from the securities, not the principal, can be spent.

#### P. 4-3

Disproportionate assessments lead to inequities.

The town of Blair determines that it requires \$22.5 million in property tax revenues to balance its budget. According to the town's property tax assessor, the town contains taxable property that it assessed at \$900 million. However, the town permits discounts for early payment, which generally average about 2 percent of the amount levied. Further, the town grants homestead and similar exemptions equal to 3 percent of the property's assessed value.

- 1. Calculate the required tax rate, expressed in mils.
- 2. A resident's home is assessed at \$300,000. He is permitted a homestead exemption of \$10,000 and a senior citizen's exemption of \$5,000. What is the resident's required tax payment prior to allowable discounts for early payment?
- Blair assesses property at 100 percent of its fair market value. Sussex, a nearby town in the same county, assesses

property at only 80 percent of fair market value. The county bases its own tax assessments on the assessments of the individual towns. However, the county grants no exemptions or discounts. Its tax rate is 8 mils.

- a. A taxpayer in Sussex owns a home with a market value of \$300,000—the same as that of the Blair resident. Compute and compare the amount of county tax that would be paid by each resident.
- b. Comment on why governments find it necessary to "equalize" tax assessments based on assessments of other governments.

#### P. 4-4

A change to the full accrual basis may have little impact upon reported revenues.

A city levies property taxes of \$4 billion in June 2012 for its fiscal year beginning July 1, 2012. The taxes are due by January 31, 2013. The following (in millions) indicates actual and anticipated cash collections relating to the levy: 2. Prepare journal entries to summarize the county's sales

June 2012		\$	100	•
July 2012 through June 2013	•	\$3	,600	
July 2013 through August 2013		\$	80	
September 2013 through June 2014		\$	150	

The city estimates that \$30 million will eventually have to be refunded, owing to taxpayer appeals of the assessed valuation of their property, and that \$70 million will be uncollectible.

- 1. Prepare a journal entry that summarizes the city's property tax activity for the fiscal year ending June 30, 2013, based on:
  - a. The modified accrual basis (i.e., for fund statements)
  - b. The full accrual basis (i.e., for government-wide statements)
- 2. Indicate the differences in amounts that would be reported on both the statement of net assets and the statement of activities on a full accrual basis.
- 3. Suppose that in the following year the tax levy and pattern of collections were identical to those of the previous year. What would now be the difference in amounts reported on the statement of net assets and the statement of activities on a full accrual basis?

#### P. 4-5

Derived taxes are derived from underlying transactions.

A state imposes a sales tax of 6 percent. The state's counties are permitted to levy an additional tax of 2 percent. The state administers the tax for the counties, forwarding the proceeds to the counties 15 days after it receives the proceeds from the merchants.

The state requires merchants to file a return and transmit collections either monthly, quarterly, or annually, depending on the amount of taxable sales made by the

merchant. This problem pertains only to taxes that must be paid quarterly.

Merchants must file their returns and transmit their taxes within one month after the end of a quarter. The quarters are based on the calendar year. Thus, taxes for the quarter ending March 31 are due by April 30; those for the quarter ending June 30 are due by July 31.

The fiscal year of both the state and its counties ends on September 30.

For the quarter ending September 30, 2012, merchants collected and paid (in October) \$300 million in taxes. Of these, 80 percent (\$240 million) are applicable to the state; 2 percent (\$6 million) are applicable to Cayoga County.

- 1. Prepare journal entries to summarize the state's sales tax activity for its share of taxes for the quarter ending September 30, 2012:
  - a. On a modified accrual basis
  - b. On a full accrual basis
- tax activity for the quarter ending September 30, 2012:
  - : a. On a modified accrual basis
    - b. On a full accrual basis

Be concerned only with any entries that would affect the fiscal year ending September 30, 2012.

3. Some critics have charged that current standards (i.e., those of Statement No. 33) allow for premature recognition of sales tax revenue. What do you think is the basis for their position? What arguments can be made in defense of the Statement No. 33 standards?

#### P. 4-6

The "60-day rule" may not be applicable to all types of revenues.

Manor County was awarded a state grant to establish evening athletic programs for at-risk youth. The \$3.6 million award, to cover the calendar year 2012, was announced on November 15, 2011.

According to the terms of the grant, the county will be reimbursed for all qualifying costs within 30 days of its filing an appropriate request-for-reimbursement form.

During 2012 the county incurred \$300,000 of costs each month. It filed a reimbursement claim shortly after the end of each month and received a reimbursement check approximately 45 days after the end of the month in which it incurred the costs. Hence, it received 12 checks, the first on March 15, 2012, and the last on February 15, 2013.

The county operates on a fiscal year beginning Octo-

- 1. Prepare journal entries to summarize the county's grantrelated activity for its fiscal year ending September 30, 2012 on a modified accrual basis.
- 2. Suppose alternatively that the state would reimburse the county for its costs in four installments, the first on June 30, 2012, and the last on March 31, 2013. Do you think that the county, in its fund financial statements,

2012, as revenue of the county's fiscal year ending September 30, 2012? Justify your answer.

License fees present challenging, although not necessarily consequential, issues of revenue recognition.

Bartar Barrell Commence

Kyle Township charges residents \$100 per year to license household pets. As specified in a statute enacted in 2012, residents are required to purchase a license by October 1 of each year; the license covers the period October 1 through September 30

The license fees are not refundable. The statute authorizing the fees specifically states that the revenues are to be used to support the township's animal control program. The program, which will be carried out throughout the year, is not expected to receive financial support from any other sources.

During the calendar year 2012 (which corresponds to the township's fiscal year), the township collected \$36,000 in license fees for the 2012-2013 licensing period.

- 1. Prepare a journal entry to record the township's receipt of the license fees.
- 2. Would you consider the license fees to be exchange or nonexchange revenue? Explain.
- 3. How do you justify the accounting standard on which your entry is based (especially since the license period overlaps two fiscal years)?

The distinction between an entitlement and a reimbursement grant is not always obvious.

A city received two state grants in fiscal 2012. The first was an award for a maximum of \$800,000, over a two-year period, to reimburse the city for 40 percent of specified costs incurred to operate a job opportunity program. During 2012, the city incurred allowable costs of \$1.4 million (paid in cash) on the program. It was reimbursed for \$500,000 and anticipates that it will receive the balance of what it is owed for 2012 early in fiscal 2013.

The second was an award of \$600,000, also to cover a two-year period, to assist the city in administering a day care program. Granted only to selected cities, the award was based on several criteria, including the quality of the program and need for assistance. The amount was calculated as a percentage of the funds incurred by the city on the program in the prior year. Although the award must be spent on the day care program, there are no specific matching requirements. During the year the city received the entire \$600,000. It spent \$550,000 (in cash) on the program.

- should recognize the reimbursement of December 31, ~ 1. Prepare entries to summarize the grant activity during 2012.
  - 2. In a few sentences, justify any differences in your approach to the two grants.

It's not always obvious whether governments should recognize the revenues or expenditures associated with grants and awards.

For each of the following grants and awards, indicate whether the recipient government should recognize revenues and expenditures. In a sentence or two, justify your response.

- 1. As the result of damaging floods, the state of New York receives disaster assistance relief that it must distribute in predetermined amounts to specified cities and towns. The governor had appealed to the president to declare the affected areas as being in a "state of emergency," but the state has no responsibility for monitoring how the funds are spent by the localities.
- 2. Cleveland receives money from the state to distribute to private health and welfare organizations within the city. The organizations applied for the funds directly to the state, but Cleveland is responsible for ensuring that the approved programs are audited by independent CPAs.
- Santa Fe serves as a representative of the state in administering the federal food stamp program. State governments, which participate in the program, receive stamps from the federal government. The federal government establishes eligibility requirements and the scale of benefits. The states, however, are responsible for selecting the recipients and distributing the stamps.

Some states involve both local governments and private institutions, such as banks and check-cashing outlets, in the administrative process. Under a contract with the state, Santa Fe, for example, checks the eligibility of stamp applicants and distributes the stamps to them. It serves all stamp applicants and recipients who come to its offices, irrespective of whether they are residents of the city. It receives an annual fee for its administrative services.

4. Arlington Township is responsible for all costs of operating its volunteer fire department, with one exception. Its volunteer firefighters receive medical insurance through a state program. The state pays 80 percent of their insurance premiums and the firefighters themselves pay the rest. The township has no legal responsibility for providing insurance benefits to its firefighters. The insurance program was adopted by the state mainly to encourage citizens to join the volunteer departments.

#### P. 4-10

Seemingly minor changes in the terms of a grant can affect the

timing of revenue recognition.

The Foundation for Educational Excellence has decided to support the Tri-County School District's series of teacher training workshops intended to improve instruction in mathematics. The foundation is considering four ways of wording the grant agreement, which would be dated December 1, 2012:

- 1. The foundation agrees to reimburse the district for all workshop costs up to \$200,000.
- 2. The foundation is pleased to enclose a check for \$200,000 to be used exclusively to support a series of teacher training workshops intended to improve instruction in mathematics.
- 3. The foundation will donate \$200,000 to the school district as soon as the district conducts its planned series of teacher training workshops, intended to improve instruction in mathematics.
- 4. The foundation is pleased to enclose a check for \$200,000 to be used exclusively to support a series of teacher training workshops intended to improve instruction in mathematics. The workshops are to be conducted between January 1 and December 31, 2013.

The school district expects to conduct the workshops in 2013.

Explain how the wording of the grant agreement would affect the year in which the school district recognized revenue. Indicate the relevant restriction, contingency, or eligibility requirement (e.g., time requirement; purpose restriction) to which each grant is subject and explain how it bears upon the issue of revenue recognition.

#### P. 4-11

Policy changes and other measures will have varying effects on

reported revenues.

The board of trustees of an independent school district is contemplating several policy changes and other measures, all of which it intends to implement within the fiscal year that ends August 31, 2012. It requests your advice on how the changes would affect the reported general fund revenues. For each of the proposals, indicate the impact on revenues (or accounts comparable to revenues, such as proceeds from sale of capital assets) and provide a brief explanation. Address the impact on both the fund and the government-wide financial statements.

 Allow a three-month grace period for the payment of property taxes. District property taxes for the fiscal year ending August 31 are currently payable in 10 installments. The final installment is due on August 31. The proposed change would give taxpayers a threemonth grace period before interest and penalties are

- assessed. The district estimates that the change would affect \$2 million in receipts.
- 2. Sell a parcel of land that the district purchased three years earlier for \$450,000. Current market value is \$500,000.
- 3. Request that a donation be advanced from December 2012 to August 2012. An alumnus of a district high school has indicated a willingness to donate to the district laboratory equipment having a fair market value of \$400,000, along with real estate having a fair market value of \$300,000. The district intends to use the equipment in student labs. It plans to sell the real estate as soon as possible and, in fact, has an acceptable offer from a buyer.
- 4. Redeem the district's shares in the State School District Temporary Investment Fund, a state-managed investment pool in which school districts can temporarily invest cash. The shares were initially purchased for \$98,000. Current redemption value is \$101,000.
- 5. Sell parking permits to students in the semester prior to that for which they are applicable. The district now sells parking permits to students at the beginning of the fall semester. The permits cover the period from September 1 through June 30. To reduce the start-of-year administrative burden upon staff, the district proposes to begin sale of the permits the previous spring. It estimates that in spring 2012 it will sell \$6,000 worth of permits that would otherwise be sold the following September.

#### P. 4-12

In some types of transactions assets are recognized concurrently with revenues; in others they are not.

In October 2012, the Village of Mason levied \$80 million of property taxes for its 2013 fiscal year (which is the same as the calendar year). The taxes are payable 50 percent by December 31, 2012, and 50 percent by June 30, 2013. The village collected \$55 million of the 2013 taxes by year-end 2012 and the \$25 million balance by the end of 2013. The government has a legally enforceable claim on the taxed property on the first due date—that is, December 31, 2012.

In December 2012, the state announced that the village would receive \$3 million in state assistance. The funds were paid in January 2013 and could have been used (per terms of the state legislation) to cover any legitimate village expenditures incurred in 2013.

- 1. Prepare fund journal entries to summarize the property tax and grant activity for the fiscal years ending December 31, 2012 and 2013.
- 2. How would you justify any apparent inconsistencies as to if and when you recognized the taxes receivable as opposed to the grants receivable?

#### P. 4-13

Unrealized investment gains and losses may be difficult to explain to legislators and constituents.

A government held the securities shown in the following table in one of its investment portfolios. All the securities are either stocks, or bonds that mature in more than one year.

- 1. Ignoring dividends and interest, how much gain or loss should the government recognize during the year?
- 2. What was the government's "realized" gain or loss (i.e., sales proceeds less cost) for the year? Which gain or loss—the amount that would have to be reported on the financial statements as computed in part (1), or the realized gain or loss—would be more indicative of the change in resources available for future expenditure?
- 3. Suppose that Security B is a long-term bond that the government intends to hold to maturity. What is the most probable reason for the decline in fair value during the year? In what sense is the reported loss indicative of an economic loss?

- Shares in an investment pool of government debt securities that provides a fixed return of 6 percent per year. The pool pays no dividends; the returns are reflected as an increase in the value of the shares.
  - 1. Assuming no changes in prevailing interest rates between the date of purchase and year-end, what would you expect to be the market value of each of the three investments? Explain.
  - 2. Prepare journal entries, as appropriate, to record investment income and changes in market values as of the year ending August 31.
  - 3. Why might it be said that your entry for the two-year note is inconsistent with the general rule for fund statements that revenues should be recognized only when they are "measurable" and "available"? Why might it also be argued that your entry is perfectly consistent with the rule?

	Beginni	ng Balance	Transactions d the Year	•	Endir	ng Balance
	Cost	Fair Value	Purchases	Sales	Cost	Fair Value
A.	\$100	\$100	1,444 N		\$100	\$120
В	520	540		T. 1	520	510
C	200	240		\$250		0
D	<u>\$820</u>	<u>\$880</u>	\$330 \$330	<u>\$250</u>	330 \$950	<u>315</u> <u>\$945</u>

#### P. 4-14

Recording investments at fair value may provide a measure of income similar to that if investments were stated at amortized bistorical cost, but is it consistent with the "measurable and available" criteria?

On August 2, 30 days prior to the end of its August 31 fiscal year, a government issues \$3 million of general obligation bonds. The proceeds are being accounted for in a capital projects fund (a governmental fund). To earn a return on the bond proceeds before they have to be spent, the government invests \$1 million in each of three financial instruments:

- A 60-day discount note with a face value of \$1,010,000. The note pays no interest. The purchase price of the note is \$1 million (a price that provides an annual yield of 6 percent—0.5 percent per month).
- A two-year note that pays interest at an annual rate of 6 percent. Both interest and principal are payable upon the maturity of the note.

#### P. 4-15

The reporting of on-behalf payments may have political consequences.

In 2012, the Bakersville Independent School District incurred \$12 million in expenditures for teachers' salary and benefits. In that year, the legislature of the state in which the district is located voted to enhance the pension benefits of all teachers in the state. Starting in 2013, the state would contribute to the Teachers' Retirement Fund an amount equal to 2 percent of teachers' salaries. This amount would be in addition to the contributions currently being made by the school districts in the state.

As a result of this measure, the state contributed \$240,000 on behalf of teachers in the Bakersville district.

- 1. How would the state's contribution to the pension fund be accounted for on the books of Bakersville? Prepare a summary journal entry (if required).
- 2. In the 2014 election for school board, one of the candidates charged that the incumbent board had promised to hold the line on school district spending. Yet despite its

promises, the board increased expenditures on teachers' compensation by 2 percent. Do you think the school district should be required to report the state's contribution as an expenditure, even though the district did not make the payment and had no say in whether it should be made? Would your response be different if the state had given the district a grant of \$240,000 with the requirement that the money be used to increase the district's contribution to the Teachers' Retirement Fund?

3. Suppose instead that the state made a contribution of \$240,000 to the Teachers' Retirement Fund on behalf of the school district. This contribution enabled the district to reduce its payment from what it had previously been and for which the school district is legally responsible. Do you think that the district should be required to report the state's contribution as an expenditure?

#### P. 4-16

The distinction between exchange and nonexchange revenues is not akways obvious.

You are the independent auditor of various governments. You have been asked for your advice on how the following transactions should be accounted for and reported. Characteristic of each transaction is ambiguity as to whether it is an exchange or a nonexchange transaction.

For each transaction indicate whether you think it is an exchange or a nonexchange transaction and make a recommendation as to how it should be accounted for (i.e., the amount and timing of revenue recognition). Justify your

response. Note: The GASB has not explicitly distinguished between exchange and nonexchange transactions. Hence, in this problem, you should consider how you think the transaction should be accounted for; you need not be limited by current GASB standards.

- 1. A government receives from a developer a donation of 1,000 acres of land valued at \$4 million. In return, the government grants the developer zoning variances on nearby property.
- 2. A college of pharmacy receives a grant of \$2 million from a drug company to carry out research on a new formulation. The college agrees to submit the results to the company and to publish them only with the company's approval.
- 3. A city charges a developer an "impact fee" of \$15,000 to compensate, in part, for improvements to the infrastructure in the area in which the developer plans to build residential homes. The city will make the improvements when construction on the new homes gets underway.
- 4. A city charges restaurants a license fee of \$2,500. The license covers a period of two years. The fees must be used for health department inspections.
- 5. The city issues permits for residents to use city tennis courts. The fee is \$100 per year—a small fraction of what it would cost to play on comparable private courts and an amount that covers only a small portion of the cost of constructing, maintaining, and operating the courts.

#### QUESTIONS FOR RESEARCH, ANALYSIS, AND DISCUSSION

- 1. The GASB has established a "60-day" rule for the recognition of property taxes in governmental funds. On what basis can you justify such a rule for property taxes but not for other revenues. Do you think the 60-day rule should be extended to all revenues?
- 2. The Hensley School District was notified by the state education department that it has been awarded a \$2 million grant to implement a unique elementary school reading program. The district has met all eligibility requirements for the grant. As of the end of the district's fiscal year, however, the state legislature had not yet appropriated the resources for the grant. Do you think that the district should recognize revenue in the period in which it was notified of the grant, or delay recognition until the state officially appropriates the resources?
- 3. The Lewiston School District receives a \$200,000 grant from the Bates Foundation to upgrade its high school computer labs. Total cost of the upgrade is estimated at \$450,000. Because the grant is restricted, it accounts for the grant in a special revenue fund. During the year the district incurs \$225,000 in upgrade costs, paying for them out of general revenues. Can the district continue to report the \$200,000 received from the foundation as restricted resources?
- 4. Going 70 mph in a 60-mph zone, you've just been caught in the infamous Goldwaithe Township speed trap. You pay your fine of \$150. In the government-wide statement of activities, revenues must be associated with the specific programs (e.g., public safety) that generate them. However, state law applicable to Goldwaithe specifically requires that all fines be considered

general revenues; they cannot be restricted to specific programs, activities, or departments. How would you recommend your fine be accounted for in Goldwaithe's statement of activities?

5. A school district is awarded a cash grant to conduct a teacher-training program. As part of the grant, the

district is given, rent-free, both office space and training facilities in the building of the state education department. How, if at all, should the district account for and report the value of the office space and the training facilities?

#### SOLUTION TO EXERCISE FOR REVIEW AND SELF-STUDY

# 1. Modified accrual basis: \$120,000 Cash \$120,000 Property taxes receivable 34,000 Property tax revenue \$130,000 Deferred property tax revenue 20,000 Allowance for uncollectibles 4,000 To record property tax revenue 34,000

Revenue would be recognized on actual collections plus those of the 60 days following the end of the period—hence, \$120,000 plus \$10,000. The \$20,000 of taxes expected to be collected in the following four months would be reported as deferred revenue.

#### Full accrual basis:

Cash	\$ 120,000	J. 12
Property taxes receivable	34,000	
Allowance for uncollectibles		\$ 4,000
Property tax revenue		150,000
To record property tax revenue		ĺ

Revenue would be recognized on all actual and anticipated collections.

#### 2. Modified accrual basis:

Sales taxes receivable	\$ 12,000	•
Sales tax revenue		\$ 12,000
To record sales taxes		•

Sales taxes are derived from sales transactions. The sales transactions took place in September. Therefore, as long as the city received the taxes in time for them to satisfy the "available" criterion it should recognize them as September revenues. It is assumed that when it received the cash in November (and thus first became aware of the amount of the revenue), it had not yet closed its books for the year ending September 30, 2012.

#### Full accrual basis:

The taxes should be recognized in the period of sale irrespective of when they will be received by the city. In this case the entry would be the same.

3. Modified accrual b	oasis:		
Cash		\$ 80	
Expenditures		320	
Grant revenues	10 × 20		\$320

80

To record grant expenditures and revenues

The revenue from this reimbursement grant would be recognized as the related costs are incurred. Hence, only the funds that were expended can be recognized as revenue; the difference between the cash receipts (\$400) and the expenditures (\$320) must be reported as deferred revenue.

#### Full accrual basis:

Deferred revenue

The government is eligible for the grant only as it makes the required expenditures. Therefore, as under the modified accrual basis, it would recognize revenue only to the extent of the \$320 actually expended.

#### 4. Modified accrual basis:

Cash	\$36	
Revenue from permits		\$36
To recognize revenue from permits		

According to current standards, miscellaneous exchange revenues, such as those from permits, are best recognized as cash is received.

#### Full accrual basis:

The revenue recognition standards—and hence the entry—are the same.

#### 5. Modified accrual basis:

Investment in notes	100 100 100 100 100 100 100 100 100 100	\$500	••
Cash	134		\$500
To record investments	75		,
Investment in notes	a State	\$40	
Investment revenue			\$40
To record the increase in the fa	ir malnie of m	\tac	

The notes would be stated at fair value and the increase in value would be recognized as revenue.

#### Full accrual basis:

The entries would be the same.

#### 6. Modified accrual basis:

Cash
Proceeds from sale of land
\$135

To record the sale of land

When the land was acquired, the city would not have recorded it as a general fund asset because capital assets are not recognized in governmental funds. Therefore, when the city sells the land it would recognize the entire proceeds as "proceeds from the sale of land"—an "other financing source."

Full accrual basis:

Cash \$135

Donated land \$119

Gain on sale of land (revenue) 16

To record the sale of land

Under the full accrual basis, the donation of land would have been recognized as revenue when the land was received. The increase in market value would be recognized as a gain at time of sale.

# Recognizing Bapandiures; in Governmental Punds -

### LEARNING OBJECTIVES

After studying this chapter you should understand:

- The modified accrual basis of accounting for expenditures and the rationale for differences between that basis and the full accrual basis
- How each of the following expenditures are accounted for:
  - Wages and salaries
  - Compensated absences
  - Pensions
  - Claims and judgments

- Acquisition and use of materials and supplies
- Prepayments
- · Acquisition and use of capital assets
- · Interest and principal on long-term debt
- Grants
- The different types of interfund activity and how they are reported
- What constitutes other financing sources and uses
- The overall rationale for, and limitations of, the fund statements

In the previous chapter we addressed the question of when revenue should be recognized in governmental funds. We turn now to the other side of the ledger and consider how expenditures should be accounted for.

Like revenues, expenditures can be of two types: exchange and nonexchange. Our discussion of revenues centered mainly upon nonexchange revenues, as most governmental fund revenues are of that type. By contrast, our discussion of expenditures focuses primarily on exchange expenditures. Most governmental fund expenditures result from exchanges—the acquisition of goods and services for cash or other assets. This is not to say that governments do not engage also in nonexchange transactions. Just as governments receive grants from other governments, they also provide them—to other governments, to private (mainly not-for-profit) organizations, and to individuals (e.g., assistance payments). GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, applies to both nonexchange revenues and nonexchange expenditures. Nonexchange expenditures, per the statement, should be accounted for as the mirror image of nonexchange revenues. Therefore, we need direct only minimal attention to nonexchange expenditures.

Governmental fund expenditures, like revenues, are accounted for on a modified accrual basis on the fund statements but on full accrual basis on the government-wide statements. As made clear in Statement No. 34, which establishes the standards for the current reporting model, governments should generally look to FASB standards for guidance on when to recognize exchange expenditures on a full accrual basis (just as they do for business-type activities). This chapter, therefore, is devoted mainly to accounting for and reporting expenditures on a modified accrual basis—the area in which governmental accounting is unique. As we did in the previous chapter with respect to revenues, however, we also note how the various expenditures would be accounted for differently on the full accrual basis.

# How is the accrual concept modified for expenditures?

Under the modified accrual basis of accounting, governmental funds are concerned with expenditures. By contrast, proprietary funds, like businesses, focus on expenses. Expenditures are narrower in scope than expenses. Whereas expenditures are decreases in net financial resources, expenses are decreases in net economic resources. Expenditures are generally recognized when an asset is acquired; expenses when it is consumed. Thus, for example, funds that are accounted for on a modified accrual basis would report equipment costs as "capital outlays"—expenditures to be recognized at the time of acquisition. By contrast, those that are accounted for on a full accrual basis would report the equipment costs as "depreciation"—expenses to be recognized over the life of the equipment.

THE
DISTINCTION
BETWEEN
EXPENDITURES
AND EXPENSES

As pointed out in the previous chapter, the accrual basis of accounting is generally considered the superior method of accounting for organizations because it captures the substance of events and transactions, not merely the inflows and outflows of cash or near-cash.

We have seen that the accrual concept is applied differently in governmental funds than in businesses or in proprietary funds, which are accounted for as if they were businesses, as well as in government-wide statements. Governmental fund accounting

THE VIRTUES OF ACCRUAL ACCOUNTING AND THE RATIONALE FOR MODIFICATIONS is heavily influenced by governmental budgeting. Owing to the importance of the budget, expenditures are closely tied to cash flows and near-cash flows rather than to flows of economic resources. In addition, governmental funds report only current, not long-term, liabilities. They focus on obligations that must be funded by current, not future, taxpayers.

Although the general principles of accrual accounting apply to governmental funds, there are key differences between how they are applied in governmental funds and how they are applied in businesses. In this chapter we will discuss seven key differences in how expenditures are accrued in governments versus businesses. The differences are consistent with the concept that under the modified accrual basis of accounting, expenditures are decreases in net current financial resources—current assets less current liabilities. But unlike a business's current liabilities, defined as those that must be paid within a year, a government's liabilities are considered current only when they must be liquidated with expendable available financial resources.

In the context of governmental funds, financial resources refers to current financial resources—cash and other assets that are expected to be transformed into cash in the normal course of operations. Net financial resources refers, then, to financial resources less claims against them.

A government should recognize an expenditure when its net expendable available financial resources are reduced—that is, when it either pays cash for goods or services received or accrues a liability. But when should it accrue (i.e., give accounting recognition to) a liability? Under the modified accrual basis a government should, as a general rule, accrue a liability in the period in which it incurs (i.e., becomes obligated for) the liability. This general rule, however, does not by itself distinguish the modified accrual basis from the full accrual basis. What does distinguish the two bases are the several exceptions to this general rule set forth by the GASB.¹ These exceptions permit governments to delay recording both a governmental fund liability and its associated expenditure until the period in which the liability must be paid—that is, when payment will reduce expendable available financial resources. Until that period, the government need report the liability only in its government-wide statements (as well as in its schedule of long-term obligations).

# How should wages and salaries be accounted for?

Wages and salaries may be earned in one fiscal year but paid in the next. Most governments pay their employees periodically—on a specified day of a week or month. Whenever the end of a pay period or the pay date does not coincide with the end of the fiscal year, then the government must carry over wages earned in one year until the next. Therefore, the question arises as to whether the wages and salaries should be reported as expenditures in the period earned or in the period paid.

<sup>&</sup>lt;sup>1</sup>See discussion in GASB Interpretation No. 6, Recognition and Measurement of Certain Liabilities and Expenditures in Governmental Fund Financial Statements (March 2000).

#### IN PRACTLE

Some "expenditures" are never recorded at all in the financial statements of governments (local and state as well as federal). Typically called "tax expenditures," they are actually reductions in revenue. They result from tax benefits that are targeted at either a single taxpayer, a narrow group of taxpayers, or specified transactions engaged in by taxpayers.

Suppose, for example, that to lure a major employer to its jurisdiction, a city grants a company property tax abatement. That is, it agrees to waive the property taxes on company assets either permanently or for a specified number of years. Obviously, by waiving the taxes the city incurs a cost. However, the lost taxes would be recorded neither as an expenditure (inasmuch as the city would not make an actual payment to the company) nor as a reduction of revenue.

Far better, according to some accountants, the government should be required to record the lost taxes as revenue, offset by a corresponding expenditure.

Tax
Expenditures
That are
Actually
Reductions in
Revenue

### EXAMPLE Wages and Salaries

A city pays its employees for the two-week period ending January 4, 2013 on January 9, 2013. The portion of the payroll applicable to December 2012 is \$40 million, an amount included in the city's 2012 budget.

# GASB Standards

The GASB Codification does not specifically address wages and salaries. Hence, the general principles of modified accrual accounting apply. Wages and salaries should be recognized in the period in which the employees earn their wages and salaries, as long as the government's obligation will be liquidated with expendable available financial resources.

In this example, the employees will be paid within days of year-end and with resources budgeted for 2012 expenditures—resources that would generally be assumed to be available and expendable. Thus (ignoring the usual payroll-related taxes, withholdings, and benefits):

Payroll expenditures \$40
Accrued wages and salaries \$40
To record the December payroll (in 2012)

In the following year, when the employees are paid, the entry to record the 2012 portion of the payroll would be:

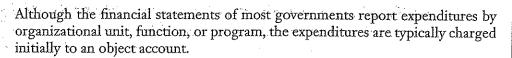
Accrued wages and salaries \$40

Cash \$40

To record the payment of wages and salaries recognized as 2012

expenditures (in 2013)

The entries in this chapter designate an object classification (such as payroll, insurance, supplies, etc.). Alternatively, they could designate an organizational unit (such as police department, fire department, sanitation department) or a function or program (such as public safety, general government, culture and recreation).



#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS.

Wages and salaries are already recognized on an accrual basis; no change would be required by a shift to a full accrual basis.

#### How should compensated absences be accounted for?

Governments compensate employees for time not worked for a variety of reasons: vacations, holidays, sick leave, sabbatical leave, jury duty, or military reserve. In concept, the accounting issues are similar to those of wages and salaries earned in one period but paid in another. But there are differences as well. Most significantly, compensated absences are earned in one period, but they are often not paid until several periods later. Hence, the liability cannot be considered current. In addition, the amount of compensation to be paid is not always certain. First, some employees may leave the organization before they take all the time off to which they are entitled. Second, the amount of compensation is almost always based on the employee's wage or salary rate in effect when the time off is taken, not when it is earned.

# ACCOUNTING FOR VACATIONS

As in the private sector, government employees are almost always granted paid vacation after completing a specified period of service. The number of vacation days generally varies with years of employment. While on vacation, employees are paid at their current wage rate, irrespective of when they earned their vacation. From their perspective, the paycheck they receive for vacation days is usually indistinguishable from that received

#### N PRACTACE

In Texas, as in many cities and states, state government employees receive their monthly paycheck on the first day of the month following that to which it is applicable. They used to receive it a day earlier, on the last of the month. Why the change? In one year the state needed additional funds to balance its budget. What better way than to move the pay date forward by one day, thereby shifting one complete payroll from the current fiscal year to the next? This scheme worked, of course, for budgeting purposes only, since the state budgets on what is essentially a cash basis. For reporting purposes, however, most of the payroll is accounted for in governmental funds, which are on a modified accrual basis. Therefore, the expenditure must be reported in the fiscal year in which the employees earn their wages and salaries, irrespective of the date that the state issues and distributes their checks.

CHANGING THE PAY DATE BY ONE DAY for working days. Employers, however, usually charge the expenditure to a vacation pay account instead of their standard wages or salary account:

#### EXAMPLE Vacation Leave

City employees earn \$8 million in vacation leave. Of this amount, they are paid \$6 million in 2012 and defer the balance until future years. The leave vests (i.e., employees are legally entitled to it, even if they resign or are discharged) and can be taken any time up to retirement or as additional compensation at the time of retirement.

## GASB Standards

GASB standards state that vacation leave and comparable compensated absences should be accrued as a liability as the benefits are earned by the employees if both of the following conditions are met:

- The employees' rights to receive compensation are attributable to services already rendered.
- It is probable that the employer will compensate the employees for the benefits through paid time off or some other means, such as cash payments at termination or retirement.

The compensation should be based on the wage or salary rates in effect at the balance sheet date, and employers should adjust for benefits that are expected to lapse.<sup>2</sup> Although this guidance may appear to sanction accrual of vacation pay, there is a catch. GASB standards explain that compensated absence liabilities are normally liquidated with expendable available resources in the periods in which the payments to employees are made. Therefore, both the vacation pay expenditures and the related fund liabilities should be recognized in the periods in which the payments are due. Until those periods, the liabilities should be reported only on the government-wide statement of net assets and a schedule of long-term obligations, not on a governmental fund balance sheet.

The following entry, in the general fund or other appropriate governmental fund, would give effect to the GASB standards:

Vacation pay expenditures

Cash (or wages payable)

\$6

\$6

To record vacation pay

The \$2 million deferred until future periods should not be recognized as either an expenditure or a liability in the governmental fund. Instead, it should be reported only on the government-wide statement of net assets and a schedule of long-term obligations.

The deferred amount should, of course, he recognized in the general fund as an expenditure in the years the vacations are taken and paid for.

<sup>&</sup>lt;sup>2</sup>GASB Statement No. 16, Accounting for Compensated Absences (November 1992), para. 7.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

Consistent with the accrual concept as applied in the FASB business model, the government-wide statements provide for balance sheet recognition of long-term liabilities. Accordingly, the "standard" accrual entry would be appropriate:

\$6

Vacation pay expense Cash (or wages payable) Accrued vacation pay To record vacation pay

Each year the accrued vacation pay account would be adjusted to reflect not only the vacation days taken by the employees, but also any changes in wage rates.

#### ACCOUNTING FOR SICK LEAVE

It might appear as if sick leave is a compensated absence with characteristics similar to those of vacation leave and should, therefore, be accounted for in the same way. However, there is at least one critical distinction between the two types of leave. Vacation leave, along with most other types of paid time off, is within the control of the employee or the employer. Separately or together they decide when the employee will take a vacation or a paid holiday. Sick leave, by contrast, is beyond the control of both the employer and the employee.

In the public sector, sick leave most commonly accumulates, but either only a portion or none of it vests. That is, employees can store sick days that they don't take in a particular year until they need it. However, if they resign or are terminated, they are not entitled to compensation for all of their unused leave.

#### EXAMPLE Sick Leave

A city allows employees one day of sick leave a month and permits them to accumulate any sick leave that they do not take. If they terminate after at least 10 years of service, they will be paid for unused sick leave up to 30 days. In 2012, employees earned \$12 million of sick leave that they did not take during the year. The city estimates that of this amount \$8 million will be paid to employees in future years as sick leave; \$1 million will be paid to 10-year employees upon their termination; and \$3 million will not be paid.

# **G**ASB Standards

GASB standards state that sick leave should be recognized as a liability only insofar as "it is probable that the employer will compensate the employees for the benefits through cash payments conditioned on the employees' termination or retirement ('termination benefits')" (emphasis added). In other words, sick leave should be recorded only to the extent that it will not be paid to employees who are sick. Instead, it should be recorded only when expected to be paid to employees

upon their discharge, resignation, or retirement.<sup>3</sup> The standards are grounded in the rationale that sick leave, other than the portion that vests, is contingent upon an employee getting sick. The key economic event, therefore, is not the employee's service, but rather his or her illness.<sup>4</sup>

In the example, therefore, the city would recognize a liability only for the \$1 million to be paid in termination benefits. However, as with vacation pay, only the portion of the liability expected to be liquidated with expendable available financial resources may be recorded in a governmental fund. Assuming, therefore, that none of the termination benefits will be paid with funds budgeted for the current year, no entry is required in the general or other governmental fund. The obligation would be recognized only in the government-wide statement of net assets and a schedule of long-term obligations.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

Recognition of sick leave on a full accrual basis would not affect the measurement of the obligation, only where and when it is reported. As with vacation pay both the expense and the obligation would be reported in the government-wide financial statements in the period the sick leave is earned. Thus,

Sick leave termination benefit expense Accrued sick leave

\$1

\$1

To record sick leave termination benefits

As with vacation pay, the accrued sick leave must be adjusted each year to take into account both the sick days taken during the year and changes in the wage rates:

Government entities, mainly colleges, universities, and public schools, may offer employees sabbatical leaves. After a specified term of service, commonly seven years, employees (usually teachers) may be granted a paid leave of either a semester or an academic year.

As with sick leave, sabbatical leaves may appear to be similar to vacations and accounted for as such. Few teachers, however, perceive them as a time for rest and relaxation. Vacations are provided as a fringe benefit in lieu of salaries and wages. They are compensation for service already rendered. Sabbaticals, by comparison, are typically offered to benefit both the employee and the employer in the future, not the past. Employees are commonly required to perform research or public service, to take courses, or to engage in other activities that will enhance their job-related abilities. The accounting issue relating to sabbaticals is when the employer should first recognize the sabbatical costs. There are three possibilities:

ACCOUNTING FOR SABBATICAL LEAVE

<sup>&</sup>lt;sup>3</sup>GASB Statement No. 16, Accounting for Compensated Absences (November 1992), para. 8.

FASB Statement No. 43, Accounting for Compensated Absences (November 1980), draws a similar distinction between sick leave and other types of compensated absences. Whereas employers are required to accrue the costs of other types of compensated absences, they are not required to accrue a liability for nonvesting sick leave; also FASB ASC 710-10.

<sup>&</sup>lt;sup>5</sup>GASB Statement No. 16, Accounting for Compensated Absences (November 1992), provides detailed guidance as to how government entities should estimate the amounts to be paid upon termination.

- . As they are earned by the employee in the period leading up to the leave
- Over the course of the leave
- Over the years to be benefited from the leave (e.g., from the end of one leave until the start of the next)

### EXAMPLE Sabbatical Leave

A school district grants faculty members a one-year leave after each seven years of service to engage in research, further study, or other authorized activities. In a particular year it paid \$2 million to faculty on leave. In addition, it estimated that faculty "carned" \$2.4 million toward leaves they are likely to take in the future.

# **GASB** Standards

GASB standards prescribe that the accounting for sabbatical leave depends on the purpose of the leave. If the leave is to provide employees with relief from their normal duties so they can perform research, obtain additional training, or engage in other activities that would "enhance the reputation of or otherwise benefit the employer," then the sabbatical should be accounted for in the period the leave is taken. No liability should be accrued in advance of the leave. If, however, the leave is for "compensated unrestricted time off," then the government should accrue a liability during the period that the leave is earned.<sup>6</sup>

In the example, the sabbatical leaves are restricted to approved activities. Therefore, they should be accounted for during the period of the leave; the school district need not accrue amounts expected to be paid in the future. Only the amount actually paid to employees on leave should be recorded as an expenditure:

Sabbatical leave expenditure
Cash (or salaries payable)
To record the salaries of faculty on sabbatical

\$

\$2

If, by contrast, the leave were unrestricted as to purpose, then a liability must be accrued in advance, and, as with other compensated absences, only the portion expected to be liquidated with expendable available resources would be reported in a governmental fund. The balance of the liability would be recorded on the government-wide statement of net assets and in a schedule of long-term obligations.

The accounting for compensated absences, including vacation pay, sick leave, and miscellaneous leave, represents the *first* major difference between how the accrual basis is applied in governmental funds and how it is applied in businesses.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The switch to the full accrual basis would not affect the criteria as to whether the sabbatical costs should first be recognized prior to, or during, the leave.

<sup>&</sup>lt;sup>6</sup>GASB Statement No. 16, Accounting for Compensated Absences (November 1992), para, 9.

Assuming, therefore, that the sabbatical leave is for approved activities, and not for unrestricted time off (the usual case), then both the expenditure and the related liability need not be recognized until the period in which the leave is taken. The entry at that time would be the same as that for the fund statements.

# How should pensions and other post-employment benefits be accounted for?

Pensions are sums of money paid to retired or disabled employees owing to their years of employment. Under a typical plan, an employer makes a series of contributions to a special fund over the working lives of its employees. Under some plans the employees also contribute.

Calculating the employer contribution to the plan is necessarily complex and based on a number of estimates including employee life expectancy, employee turnover, and anticipated earnings of fund investments. The issue of how to compute the required annual contribution and the related question of how to measure and report a pension plan's actuarial liability are addressed in Chapter 10, which deals with fiduciary funds.

In this chapter, we address the relatively straightforward concern of how a governmental fund should report the expenditure for its required annual contribution, assuming that the contribution has been properly calculated. In its simplest form, the required annual contribution is the share of the pension costs attributable to a particular period (i.e., the pension benefits earned by the employees in that period). If the government makes its required contribution in full, the amount to be reported as an expenditure is obvious; it would be the amount of the contribution. But what if, owing to budgetary constraints, it pays into the pension fund only a portion, or none, of the required contribution? Should the expenditure be the required contribution, which is indicative of the economic value of the pension benefits provided to the employees? Or should it be merely the actual payment, which is likely to be indicative of the amount budgeted for pension costs?

#### EXAMPLE Pension Contributions

A city is informed by its actuary that it should contribute \$55 million to its pension fund, an amount calculated in accordance with generally accepted accounting and actuarial principles. It elects, however, to contribute only \$45 million.

# **G**ASB Standards

GASB standards for pensions, as set forth in GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers, and amended by GASB Statement No. 50, Pension Disclosures, are consistent with those for other compensated absences. The expenditure should be the amount that will be liquidated with expendable available financial resources.

Although, in this example, the economic cost of providing employees with pension benefits would be \$55 million, the city would report an expenditure of only \$45 million. The balance would be disclosed in notes and reflected as a liability in the city's government-wide statement of net assets, its schedule of long-term obligations, and in its required pension note, but not in a governmental fund. The following entry would be required in the general fund or other appropriate governmental fund:

Pension expenditure

\$45

Cash (or current pension liability)

To record the pension expenditure for the year

GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, directed that retiree health benefits be accounted for almost identically to pensions. Accordingly, as it would do with pensions, a government should report as an expenditure in their governmental funds only the amount that will be liquidated with expendable available financial resources. The difference between that amount and the required actuarial contribution to a health benefit retirement fund should be reported only on the government-wide statement of net assets, a schedule of long-term obligations, and an appropriate note.

Pension and post-employment benefit accounting represents the second difference between how the accrual concept is applied in governmental funds and in businesses.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

In their government-wide statements, governments should report as their pension or post-employment benefit expense their required annual contribution the amount representative of the economic cost—not an amount based on the government's predilection to contribute. This approach also conforms to that directed by Statements No. 27 and 43 as they apply to proprietary funds, which are currently accounted for on a full accrual basis. Thus:

Pension expense

Cash (or current pension liability)

\$45

Pension liability

10

To record the pension expense and liability

#### MOW SHOULD CLAIMS AND JUDGMENTS BE ACCOUNTED FOR?

Governments face many types of claims and judgments. Common examples include those arising from:

- Injuries to employees (e.g., workers' compensation)
- Negligence of government employees (e.g., medical malpractice in city hospitals, failure to properly repair streets, auto accidents, wrongful arrests)
- Contractual disputes with suppliers
- Employment practices (e.g., civil rights violations, sexual harassment, wrongful discharge)

As in the private sector, the key accounting questions relating to claims and judgments are when and in what amounts expenditures and liabilities should be reported. These questions arise, first, because of the considerable length of time between when an alleged wrong takes place and when the claim is ultimately resolved and, second, because of the uncertainties as to the likelihood and dollar amount of a required payment.

In governmental funds, the major constraint in accounting for claims and judgments is identical to that faced in accounting for compensated absences. The event causing the claim or judgment usually precedes by one or more years the actual disbursement of financial resources. Yet the governmental fund balance sheet has no a

place for long-term obligations.

#### EXAMPLE Claims and Judgments

A county is sued for personal injuries resulting from negligence on the part of a road maintenance crew. The case is settled for \$400,000, to be paid in four annual installments of \$100,000 beginning in the current year. Inasmuch as the country uses a discount rate of 10 percent to evaluate all long-term projects, officials determine the "present value" of the eventual payment to be \$348,685.

# GASB Standards

GASB standards for recognizing the liability for claims and judgments are drawn from FASB Statement No. 5, Accounting for Contingencies. They are set forth in GASB Statement No. 10, Accounting and Financial Reporting for Risk Financing and Related Insurance Issues. A liability for claims and judgments should be recognized when information available before the issuance of financial statements indicates:

- It is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements, and
- The amount of the loss can be reasonably estimated.<sup>8</sup>

However, as with compensated absences, only the portion of the total liability that would be paid with available financial resources would be reported in the governmental fund. The balance would be reported on the government-wide statement of net assets and a schedule of long-term obligations. Thus, the expenditure would be reported in the period that the liability is liquidated, not when the offending incident took place or a settlement was agreed upon or imposed.

In the example, the county estimates the present value of its liability to be \$348,685, only \$100,000 of which is expected to be liquidated with available financial resources. Thus, it would make the following entry in the current year (assuming that it makes its required payment):

Claims and judgments (expenditures)

\$100,000

Cash

\$100,000

<sup>&</sup>lt;sup>7</sup>FASB ASC 958-450-25.

<sup>&</sup>lt;sup>8</sup>GASB Statement No. 10, Accounting and Financial Reporting for Risk Financing and Related Insurance Issues (November 1989), para. 53.

It would make similar entries in each of the next three years. The accounting for claims and judgments is the third difference between governments and businesses in the application of the accrual concept.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

As with compensated absences and pensions, the full accrual basis would require that the expense be recognized at the time the loss liability first satisfies the criteria of FASB Statement No.5: Per GASB Statement No. 10, "The practice of presenting claims liabilities at the discounted present value of estimated future cash payments (discounting) is neither mandated nor prohibited. However, claims liabilities associated with structured settlements should be discounted if they represent contractual obligations to pay money on fixed or determinable dates." The statement defines a structured settlement as "a means of satisfying a claim liability, consisting of an initial cash payment to meet specific present financial needs combined with a stream of future payments designed to meet future financial needs, generally funded by annuity contracts."9 The state of the winter and the compression of the professional section of the first

In the example at hand the settlement is clearly structured, so the county would make the following entry in the current year:

Claims and judgments (expense)

\$348,685

Cash

\$100,000

Liability for claims and judgments

248,685

To record the cost of settling the lawsuit and the first cash payment

Then, in each subsequent year, two entries would be necessary—one to adjust the liability to its new present value (i.e., to add interest to the balance) and the other to account for the payment. Thus, in the year in which the second payment is made:

Interest expense

\$24,869

Liability for claims and judgments

\$24,869

To adjust the liability to its new present value (10 percent of \$248,685)

Liability for claims and judgments

\$100,000

Cash

\$100,000

To record the second cash payment

In the following two years, of course, the interest expense would be different; it would be calculated as 10 percent of the extant liability for claims and judgments.

#### MOW SHOULD THE ACQUISITION AND USE OF MATERIALS AND SUPPLIES BE ACCOUNTED FOR?

The acquisition and use of materials and supplies (and the related issue of prepaid expenditures, to be discussed in the next section) present unique accounting problems in governmental funds. Materials and supplies (and prepaid items) are not strictly

GASB Statement No. 10, Accounting and Financial Reporting for Risk Financing and Related Insurance Issues (November 1989), para. 24.

expendable available financial resources, in that they will neither be transformed into cash nor can they be used to satisfy governmental fund obligations. Nevertheless, having supplies on hand obviates the government from needing to purchase the items in the future.

Unlike businesses, governments do not generally acquire inventories with the intention of either reselling them or using them in manufacturing processes. They do, however, maintain inventories of office supplies, road maintenance and construction materials, spare parts, and other materials needed to carry out day-to-day operations.

Among the primary issues pertaining to governmental fund materials and supplies are:

- The timing of the expenditure; specifically, should governmental funds recognize an expenditure when they acquire, pay for, or use the materials and supplies?
- The reporting of the asset; specifically, should inventory be reported as an asset, even though it is not strictly an expendable available financial resource?

#### EXAMPLE Supplies

During the year a city purchases supplies that cost \$3.5 million, pays for \$3.0 million of the supplies, and uses \$3.3 million of them. At the start of the year it had no inventory on hand. Hence, at year-end it has \$0.2 million of supplies available for future use.

# GASB Standards

GASB standards permit a choice. Governments may recognize inventory items either when purchased (the *purchases* method) or when consumed (the *consumption* method). However, irrespective of which method is used, significant amounts of inventory should be reported on the balance sheet. Governments may not account for inventories on a payment (cash) basis.

#### The Purchases Method

Using the purchases method, a government would record the purchase of the inventory as an expenditure. Thus, in the example:

Supplies expenditure

\$3.5

\$3.5

Accounts payable

To record the acquisition of supplies

Although the accounting is seemingly unambiguous, there's a complexity. Current standards state that significant amounts of inventory must be reported on the balance sheet. Metaphorically, they prescribe that governments may eat their cake yet have it too. By writing off the inventory upon acquisition, governments implicitly deny its existence. How, then, can governments account for the full amount of the inventory acquired as an expenditure, yet still report the unused inventory as an asset? Simple,

<sup>&</sup>lt;sup>10</sup>NCGA Statement No. 1, Governmental Accounting and Financial Reporting Principles (March 1979), para. 73.

according to current standards! Show the inventory as an asset, offset by a fund balance—nonspendable (reserve). The following entry would do the trick:

Supplies inventory

\$0.2

Fund balance—nonspendable (supplies inventory) To record the inventory on hand at year-end

\$0.2

The year-end entry increases reported assets and increases the nonspendable fund balance. It has no impact on either expenditures or unassigned fund balance.

In subsequent years, the supplies inventory and the nonspendable fund balance would be adjusted to reflect the change in inventory during the year. If, at the conclusion of the following year, inventory on hand were only \$150,000, then both supplies inventory and the nonspendable balance would be reduced by \$50,000 (the difference between the \$200,000 on hand at the end of the previous year and the \$150,000 on hand at the end of the current year):

Fund balance—nonspendable (supplies inventory)

\$0.05

Supplies inventory

\$0.05

To adjust the supplies inventory and related fund balance designation to reflect inventory on hand (following year)

#### The Consumption Method

Using the consumption method, a government would account for inventory the same as would a business, with one additional feature—the designation of an amount equal to the inventory balance as nonspendable, as opposed to spendable. As it acquires inventory, the government would record it as an asset:

Supplies inventory

\$3.5

Accounts payable

\$3.5

To record the acquisition of supplies

Then, as it uses the inventory, it would record an expenditure and reduce the balance in the inventory account:

Supplies expenditure

\$3.3

Supplies inventory

\$3.3

To record the consumption of inventory

The reported expenditure for the year would be \$3.3 million—the amount of supplies consumed. At year-end, the inventory balance would be \$0.2 million—the amount of supplies on hand. Hence, a portion of fund balance equal to this amount would now have to be designated as nonspendable:

Fund balance—unassigned

Fund balance—nonspendable (supplies inventory)

\$0.2

To reclassify fund balance to reflect year-end inventory

In the example, irrespective of whether it uses the purchases or the consumption method, the government would record the payment for the goods purchased with the conventional entry:

Accounts payable

Cash

\$3.0

To record payment of amounts owed to suppliers

Inventory accounting, specifically the option to use the purchases method, is the fourth difference in how expenditures are accrued in governments and businesses.

#### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The purchases method is inconsistent with full accounting. Hence, inventory should be reported on a consumption basis. Thus, the entries would be similar to those illustrated above for the consumption method, with the exception that as the supplies are used supplies expense rather than supplies expenditure would be debited. There would be no need for any reclassification of net assets (the government-wide equivalent of fund balance).

#### OW SHOULD PREPAYMENTS BE ACCOUNTED FOR?

Prepaid expenditures are economically comparable to inventories. For example, a government purchases an insurance policy. As with materials and supplies, it will consume a portion in one period and the balance in the following periods. Or, by paying rent in one period, it acquires the right to use property in a subsequent period.

#### EXAMPLE Prepayments

On September 1, 2012, a town purchases a two-year insurance policy for \$60,000 (a cost of \$2,500 per month).

# GASB Standards

GASB standards offer governments the same choice in accounting for prepaid expenditures as they do for inventories: they may use either the purchases or the consumption method. "Expenditures for insurance and similar services extending over more than one accounting period need not be allocated between or among accounting periods," the standards state. Instead, they "may be accounted for as expenditures of the period of acquisition."

In contrast to the standards for inventories, however, the GASB does not prescribe that governments using the *purchases* method report material amounts of prepayments on the balance sheet.

If the town were to use the *purchases* method, it would make the following entry in 2012:

Insurance expenditure

\$60,000

Cash (or accounts payable)

\$60,000

To record purchase of a two-year insurance policy

No additional entries would be required either in 2012 or the subsequent two years.

<sup>11</sup>NCGA Statement No. 1, Governmental Accounting and Financial Reporting Principles (March 1979), para. 73.

If the town were to use the consumption method, then it would make the following entry upon purchasing the insurance policy: " where the state of

Prepaid insurance

\$60,000

Cash (or accounts payable)

\$60,000

To record purchase of a two-year insurance policy and the second purchase of a two-year insurance policy.

Then, each month for the next two years (or at year-end by way of a summary entry) it would record both an expenditure and a reduction in the balance of prepaid insurance:

\$2,500

Insurance expenditure \$2,500
Prepaid insurance
To recognize insurance expenditure for one month

Whereas under the purchases method, the town would recognize the full \$60,000 as an expenditure in 2012, under the consumption method it would recognize only \$10,000, the economic cost of four months of insurance.

# GASB Standards

GASB standards do not distinguish between "current" and "long-term prepayments." Thus, the unused portion of an insurance policy for two or more years would be reported as an asset—the same as a one-year policy. Like inventories, prepayments are not spendable and therefore the offsetting fund balance has to be classified as nonspendable.

The accounting for prepayments, specifically the option to use the purchases method, is the fifth difference in the way in which expenditures are accounted for on the full accrual basis by governments as opposed to businesses.

## DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The use of the purchases method in full accrual government-wide statements is as inappropriate for prepayments as for inventories. Only the consumption method may be used.

# OW SHOULD CAPITAL ASSETS BE ACCOUNTED FOR?

Capital (fixed) assets provide services in periods beyond those in which they are acquired. In that regard, the accounting issues pertaining to capital assets are comparable to those of each of the costs addressed so far in this chapter. A three-year sinsurance policy benefits a government over the period covered by the policy, irrespective of whether it is paid for before, during, or after the policy period. Similarly, a computer with a three-year useful life benefits the government over the same number of years regardless of the timing of payments.

In businesses, the cost of a capital asset is recorded on the balance sheet when the asset is acquired. This cost is allocated over the asset's productive life, through the process of depreciation, to the periods in which it provides its benefits. In that way, the cost of the asset is matched to the revenues that it helps to generate.

Governmental funds could, of course, account for capital assets in the same way as businesses. Many statement users and accountants have suggested that they should. As emphasized earlier, however, governmental accounting aims to provide information as to both the extent to which interperiod equity was achieved and whether resources were used in accordance with the entity's legally adopted budget. Governments must budget and appropriate the resources for capital assets in the periods when they are to be paid for, not those in which they will be used. Therefore, accounting practices in which capital asset expenditures are tied to services rather than to payments may not provide the sought-after budget-related information.

# EXAMPLE Capital Assets

A village purchases road maintenance equipment for \$90,000 and pays for it at the time of acquisition. The equipment is expected to have a useful life of three years.

# GASB Standards

"General capital assets" are the capital assets of a government that are not specifically related to activities that are reported in proprietary or fiduciary funds. Most often they result from the expenditure of governmental fund financial resources. As pointed out in previous chapters, GASB standards preclude governments from reporting general capital assets on governmental fund balance sheets or from depreciating them on governmental fund statements of revenues, expenditures, and changes in fund balance. Instead, governments report them in the period requiring the outflow of expendable available financial resources.

In the example, the following entry would be appropriate when the assets are acquired:

Capital assets—expenditure

\$90,000

Ĉach

\$90,000

To record the acquisition of equipment

Regardless of the argument as to whether capital assets should, in fact, be depreciated (which is taken up in Chapter 7), note an obvious inconsistency. Assume that the government rented equipment for a three-year period, paying the entire rental costs in advance. Then, if the rental equipment agreement qualified as an operating rather than a capital lease, the government would be permitted to account for the prepaid rent using the consumption method, thereby spreading the rent expenditure over the life of the rental agreement.

The main accounting issue presented by the acquisition of capital assets with debt arises because the purchase of the asset does not coincide with the repayment of the debt and, in effect, with the outflow of the cash or other expendable resources required to obtain the asset. Thus, it is not obvious when the expenditures associated with the acquisition of the asset and the repayment of the debt should be recorded. For example, should the cost of the asset be recognized at the time of purchase, even in the absence of a cash outflow, or only as the debt is repaid?

When governments issue bonds to acquire assets, they often account for the debt proceeds in a capital projects fund. However, governments may also account for debt

ACQUISITION OF CAPITAL ASSETS FINANCED WITH DEBT proceeds in other governmental funds, such as the general fund or special revenue funds. The debt may take the form of conventional notes, installment notes, or capital leases. The accounting for capital projects funds is discussed in Chapter 6. At this time it should be noted, however, that because capital projects and special revenue funds are governmental funds, the same general principles of accounting apply to them as to the general fund.

# EXAMPLE Installment Notes

As in the "Capital Assets" example, a village purchases road maintenance equipment for \$90,000. This time, however, the equipment is acquired on an installment basis with three annual installments of \$36,190—the amount required to liquidate a loan of \$90,000 over three periods at an interest rate of 10 percent.

Inasmuch as long-term obligations are not reported in governmental funds, GASB standards require that the proceeds of long-term debt be reflected as "other financing sources" in the recipient fund's operating statement. 12 Thus, were the village to borrow \$90,000 cash, the following entry would be appropriate in the governmental fund receiving the proceeds:

Cash \$90,000

Other financing sources—installment note proceeds To record a loan

\$90,000

Were the government to use the proceeds to acquire a capital asset, the governmental fund entry illustrated in the previous example would be appropriate:

Capital assets—expenditure \$90,000 Cash \$90,000

To record the acquisition of equipment

In the example at hand, the government borrowed the purchase price (through the installment note) and acquired the asset, but at the time of acquisition did not actually receive or pay cash. Hence, it could properly make the following combining entry that eliminates the debit and credit to cash:

Capital assets—expenditure \$90,000 Other financing sources—installment note proceeds \$90,000 🕾 To record the acquisition of equipment

The related accounting question is how the loan repayment should be recorded. Specifically, to what type of account should the payment be charged, since no long-term liability is reported on the governmental fund balance sheet?

Current practice requires that the repayment be charged as an expenditure. Thus, the following entry would recognize the first payment of principal and interest:

Debt service expenditure (note principal)

\$27,190

Debt service expenditure (interest)

9.000

\$36,190

To record the first payment of installment note interest (10 percent of \$90,000) and principal

<sup>12</sup> NCGA Statement No. 1, Governmental Accounting and Financial Reporting Principles (March 1979), para. 108.

On the government fund statement of revenues and expenditures, none of these revenues and expenditures would be shown along with ordinary operating amounts. The proceeds of the installment note would be reported in the section of the statement for other financing sources (uses); the capital asset expenditure would be reported in that for capital outlays; the repayment of the note principal and the payment of the interest would be reported in that for debt service. Subsequent payments would be recorded in the same way, with only the division of the payment between principal and interest changing from period to period. As a result of these entries, neither the equipment nor the related long-term debt would be shown on the fund balance sheet. They would, of course, be reported on the government-wide statement of net assets as well as on any schedules of capital assets and long-term debt.

The series of entries may be disconcerting in that it results in the asset being recorded as an expenditure twice—once when acquired and again as the loan is repaid. Nonetheless, the double-counting does not cause fund balance to be misstated because the expenditure recorded upon acquisition of the asset is offset by "other financing" sources"—a credit to fund balance that adds back the amount of the charge.

A capital lease is the equivalent of a purchase-borrow transaction. In economic CAPITAL LEASES substance, the lessee (the party that will use the property) becomes the owner of the leased asset. The lessee treats the lease as a purchase of the asset. It makes periodic payments, each of which represents a partial repayment of the amount "borrowed" (the value of the property at the inception of the lease), plus interest. By contrast, an operating lease is a conventional rental arrangement under which the lessor remains the owner of the property both in legal form and in economic substance. FASB Statement No. 13, Accounting for Leases, established criteria to distinguish between operating and capital leases.<sup>13</sup> These criteria have been adopted by the GASB.

#### EXAMPLE Capital Leases

Instead of purchasing the \$90,000 of equipment, the village leases it under an arrangement that satisfies the criteria of a capital lease. The term of the lease is three years. The village agrees to make three annual payments of \$36,190, an amount that reflects interest at an annual rate of 10 percent...

Current standards specify that capital leases should be accounted for similarly to other purchase/borrow acquisition of capital assets. 14 Thus, in the example, the village would record the lease in the same way as it did the installment purchase, varying only the account descriptions:

Capital assets—expenditure Other financing sources—capital léase To record the acquisition of equipment under a capital lease \$90,000

\$90,000

<sup>&</sup>lt;sup>13</sup>FASB Statement No. 13, Accounting for Leases, (FASB ASC 958-810-55).

<sup>14</sup>NCGA Statement No. 5, Accounting and Financial Reporting Principles for Lease Agreements of State and Local Governments (December 1982).

Debt service expenditure (lease principal)
Debt service expenditure (lease interest)

\$27,190

\$36,190

To record the first lease payment consisting of interest (10 percent of \$90,000) and principal

As with the installment note, subsequent payments would necessitate a different division of the payment between principal and interest.

The accounting for capital assets, whether they are acquired for cash or paid for over time, is the *sixth* difference between expenditure accruals in businesses and governments.

# DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

Capital assets, irrespective of whether acquired for cash, in an installment purchase or by capital lease, are reported on the government-wide statement of net assets (balance sheet) at historical cost, net of accumulated depreciation. Correspondingly, the debt associated with the assets is also given balance sheet recognition. A charge for depreciation of the assets is included in the statement of activities (a statement of revenues and expenses). The accounting for capital assets, including special rules pertaining to infrastructure, is discussed in greater detail in Chapter 7.

# How should interest and principal on long-term debt be accounted for?

Interest on long-term debt is a major expenditure for many governments. Most typically, government debt takes the form of bonds, which pay interest twice per year. Many governments accumulate the resources to pay both the interest and principal on their debts in a debt service fund (a governmental fund). However, the original source of payments is likely to be either general revenues or revenues specially dedicated for debt service. As the scheduled payments from the debt service fund must be made, the government transfers the necessary cash from the general fund or a special revenue fund.

Long-term debts, as previously emphasized, are not recorded as liabilities in governmental funds; they are included only in the government-wide statements and listed in the schedule of long-term obligations. When bonds or other forms of debt are issued, the increase in (debit to) cash is offset by a credit to "bond proceeds," an operating statement account, rather than to "bonds payable," a balance sheet account. Therefore, when the bonds are repaid the offset to cash cannot be to a liability account. Instead, it must be to an expenditure or a comparable operating statement account.

The key accounting issues with regard to long-term debt interest and principal arise because debt service payments may extend beyond a fiscal year. A six-month interest payment may cover some months in one year and some in another. Similarly, a principal repayment may be due every six months, a period that extends over two fiscal years. Should the expenditures be allocated proportionately among the years (i.e., accrued), or should they be recognized entirely in the year of payment?

Given the virtues of the accrual basis of accounting in capturing the economic substance of events and transactions, the answer may appear obvious: allocate proportionately among the years. But bear in mind that debt service may involve large dollar amounts. Taxpayers obviously prefer to provide resources only as they are required to satisfy current obligations. Most governments budget (appropriate) resources for principal and interest only for the period in which they must make actual payments. They do not set aside resources for payments to be made in the future. Therefore, the goal of reporting on budgetary compliance, in contrast to that of reporting on interperiod equity, would suggest that the expenditures be recognized entirely in the year the payments are due.

#### Long-term Debt EXAMPLE

A state issues \$100 million of 20-year bonds on August 1, 2011, at an annual rate of 6 percent. Interest of \$3 million per semiannual period is payable on January 31 and July 31. The bonds are sold for \$89.3 million, a price that reflects an annual yield of 7 percent (semiannual yield of 3.5 percent). The first payment of the interest is due. on January 31, 2012.

# GASB Standards

GASB standards specify that in governmental funds neither interest nor principal on long-term debt should be accrued in advance of the year in which it is due. Both should be accrued only in the period in which they are due. Until then, they are not current liabilities; they will not require the liquidation of expendable available financial resources.

In the example, the government would make no entry in 2011 to accrue either interest or principal on the debt. It would not record an interest expenditure until January 31, 2012, when the first interest payment is due. The following entry would then be required in the fund out of which the payment was to be made:

Debt service, interest—expenditure

Matured interest payable:

To record obligation for interest due

\$3

When the bonds mature in July 2027, the government would make a comparable entry to record the obligation for principal:

Debt service, principal—expenditure

\$100

Matured bonds payable

\$100

To record obligation for matured bonds payable

Consistent with the standards that neither interest nor principal should be accrued until ADVERSE due, current standards for governmental funds make no provision for recognizing and amortizing bond discounts or premiums. As a result, the reported interest expenditure fails to capture the true economic cost of using borrowed funds. Instead, it indicates merely the required interest coupon payments. In the above example, the state

**CONSEQUENCES** OF FOCUS ON CASH PAYMENTS

borrowed only \$89.3 million (the amount of the proceeds), not \$100 million (the face value). Its true economic cost of using the borrowed funds in the six months ending January 31, 2012, was \$3.1 million (\$89.3 million times the effective interest, or yield. rate of 3.5 percent per period), not \$3.0 million (the required payment). Nevertheless, as illustrated, the state would record an interest expenditure equal to the \$3.0 million required payment.

The failure of current standards to recognize premiums and discounts may not be particularly serious when the difference is small between a bond's coupon rate and yield rate. But when the difference is large, it results in financial statements that seriously distort borrowing costs: Consider an extreme case. A government issues \$100 million in 20-year zero coupon bonds. The bonds are sold for \$25.26 million, a price that provides an annual yield of about 7 percent (3.5 percent per semiannual period). As implied by their name, these bonds pay zero interest each period. Instead, they are sold at a deep discount, in this case a discount of \$74.74 million. Upon maturity, the investor, who loaned the government \$25.26 million, would receive \$100 million. Inasmuch as \$25.26 million is the present value of \$100 million discounted at a rate of 3.5 percent for 40 periods, the bonds provide a return of 3.5 percent (compounded) per semiannual period.

Under current standards for governmental funds the government would record no interest or principal costs until the bonds mature. In the period of maturity it would recognize the entire \$100 million as a debt service expenditure. Fortunately, users are informed of the economic costs through the government-wide statements in which long-term debt is accounted for on a full accrual basis.

ACCRUAL OF INTEREST AND PRINCIPAL WHEN RESOURCES ARE TRANSFERRED

GASB standards make one exception to the general rule that neither interest nor principal be accrued. If resources to service the debt are transferred to a debt service fund from another governmental fund in a current year for payment of principal and interest due early the next year (within no more than a month) then both the expenditure and related liability may be (not required to be) recognized in the recipient debt service fund. 15

Suppose that in the example, in 2011 the general fund transferred to the debt service fund \$2.5 million of the \$3 million interest payment due on January 31, 2012. The debt service fund would, of course, recognize the cash received as an asset and would record an increase in fund balance. Per the standard, to avoid reporting a misleadingly high fund balance, the debt service fund would be permitted also to accrue the related interest expenditure. Thus:

Debt service, interest—expenditure

\$2.5

Accrued interest payable

To accrue interest in the amount of resources received from the general fund

The accounting for interest and principal is the seventh difference in the application of the accrual concept.

# DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

Just as long-lived assets must be recorded at cost less accumulated depreciation in the government-wide statements, long-term debt must be reported at face value

<sup>&</sup>lt;sup>15</sup>GASB Interpretation No. 6, Recognition and Measurement of Certain Liabilities and Expenditures in Governmental Fund Financial Statements (March 2000).

plus any unamortized premiums or less any unamortized discounts. Interest must be accrued; the timing of cash payments is irrelevant to the period in which the expense is recognized. Thus, the state would record the issuance of the bonds as follows:

Cash
Discount on bonds payable
Bonds payable
To record the issuance of operating debt

\$100.0

Then as it pays interest, it would record the payment (\$3.0 million), the interest expense (the yield rate times the net carrying value of the bonds), and the amortization of the premium or discount (the difference between the two). As of December 31, 2011, the end of the first period, in which no interest was yet paid, the following entry would be appropriate to accrue five months' interest:

Interest expense
Accrued interest payable
Discount on bond payable

\$2.6 \$2.5

0.1.

To accrue five months' interest (interest expense = 5/6 of the effective interest rate of 3.6 percent times the effective liability of \$89.3 million; accrued interest payable = 5/6 of the required payment of \$3.0 million; discount on bond payable = the difference between the two, i.e., 5/6 of the total amount of bond discount to be amortized at time of the first interest payment)

Long-term debt is addressed in detail in Chapter 8.

# How should nonexchange expenditures be accounted for?

Chapter 4, "Recognizing Revenues in Governmental Funds," deals primarily with nonexchange revenues, as most governmental fund revenues are derived from nonexchange transactions. This chapter, however, is directed mainly to exchange expenditures, as relatively few types of government expenditures are associated with nonexchange transactions. Governments, for example, do not typically pay taxes or fines (nonexchange transactions), though they do make grants to other governments (also nonexchange transactions).

# GASB Standards

Nonexchange expenditures should generally be recognized symmetrically with their revenue counterparts. Thus, providers of grants should recognize an expenditure when the recipient has satisfied all eligibility requirements, including time requirements.

# EXAMPLE Unrestricted Grant with Time Requirement

In December 2012, a county's council approves a \$300,000 grant to a not-for-profit health clinic. The funds are to be paid in 2013 out of funds budgeted for that year and are intended to support the clinic's activities in 2013.

Inasmuch as the funds are intended to be used in 2013, the grant is subject to a time requirement. The county should not recognize either a liability or an expenditure until then, when the time requirement is satisfied.

# EXAMPLE Grant with Purpose Restriction

In December 2012, a state department of transportation awards a county \$400,000 for road improvements. Payment is made at the time the award is announced. The county is permitted to use the funds upon receipt, but intends to use them in 2013.

Purpose restrictions have no impact on the timing of either expenditure or revenue recognition, nor does the county's intent to use them in a particular year. The state must recognize an expenditure as soon as it makes the award:

\$400,000

\$400,000

Grant expenditure
Cash
To record grant expenditure (in 2012)

# EXAMPLE Reimbursement (Eligibility Requirement) Grant

In December 2012, a state awards a city \$200,000 for the acquisition of an emergency telephone system. The grant is to be paid as the city incurs and documents allowable costs. In 2012 the city submits claims for \$150,000, of which the state pays \$125,000. The state expects to pay the \$25,000 balance of submitted claims in January 2013 and the \$50,000 balance of the grant by June 2013.

The city is eligible for the award only as it incurs and documents allowable costs. In 2012, the city became eligible for \$150,000 of the grant—the amount that the state should recognize as an expenditure.

Grant expenditure \$150,000 Cash S125,000
Grants payable 25,000
To recognize a reimbursement grant expenditure (in 2012)

### DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

The standards of GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, are applicable to both modified and full accrual statements. On the modified, but not the full, accrual statements, revenues must be available for expenditure before they can be recognized. That requirement is not, of course, relevant to expenses. Hence, the grants would be recognized as expenses in the same period in the government-wide as in the fund statements.

# How should interfund transactions be accounted for?

As stressed in Chapter 2, each of a government's funds is an independent fiscal and accounting entity. When the focus is on individual funds, many types of activity between funds create revenues and expenditures. Yet when the government is viewed as a whole, most of these activities are nothing more than intragovernmental transfers. If certain types of activities were classified as revenues of one fund and expenditures of another, then the revenues and the expenditures of the government as a whole would be overstated.

# EXAMPLE Interfund Transfer

A government transfers \$3 million from its general fund to a debt service fund for payment of interest. When the debt service fund pays the interest, it will record the payment as an expenditure.

Should the general fund record the payment to the debt service fund as an expenditure and the debt service fund record the receipt as a revenue? As independent entities, both funds incur expenditures; the debt service fund also earns revenue. Yet if each fund recognizes an expenditure, the government as a whole would recognize the interest cost as an expenditure twice (once in the general fund when the resources are transferred to the debt service fund and again when the interest is paid out of the debt service fund).

# EXAMPLE Interfund Purchase/Sale

A government department, which is accounted for in the entity's general fund, acquires \$30,000 of supplies from a supply center that is accounted for in an internal service fund.

The internal service fund will report the cost of the supplies "sold" as an expense. Should the general fund also report an expenditure? If it does not, then its reported expenditures—the measure of the cost of general government operations—would be less than if it had purchased the same supplies from outside vendors.

# **G**ASB Standards

Statement No. 34 differentiates between two types of interfund activity:

- 1. Reciprocal interfund activity. This is the internal equivalent of exchange transactions (those in which the parties receive and surrender consideration of approximately equal value). They include:
  - Payments for the purchase of goods and services at a price that approximates their external fair value, such as when the general fund acquires goods from an internal service fund. These transfers should be reported as revenues in the seller fund and expenditures (or expenses) in the purchasing fund.

- Loans and repayments of loans. If the loans are expected to be repaid within a reasonable period of time, the lending fund should report the loan as a receivable and the borrowing fund should report it as a payable. This activity should not be reported as other financing sources or uses in the fund financial statements. If the loans are not expected to be repaid within a reasonable period of time (and hence are not bona fide loans), then the transaction should be accounted for by the disbursing fund as a nonreciprocal transfer-out and by the receiving fund as a nonreciprocal
- Nonreciprocal interfund activity. This is the internal equivalent of nonexchange transactions. They include:
  - Transfers of cash for which goods or services of equivalent value have not been received, such as when the general fund transfers cash to a debt service fund for payment of principal or interest on long-term debt or when the general fund transfers cash to a newly established internal service fund for "start-up capital." These transfers should be reported as other financing uses in the funds making the transfers and as other financing sources in the funds receiving transfers.
  - Interfund reimbursements—repayments from a fund responsible for an expenditure to the fund that initially paid for them. These should not be reported at all in the financial statements. Thus, for example, if the general fund paid a bill for a cost that was the responsibility of a capital projects fund, the expenditure and the corresponding reduction in cash should be reported only in the capital projects fund—as if the capital projects fund had paid the bill itself. The capital projects fund should not report a transfer-out to the general fund; the general fund should report neither a payment to the vendor nor a transfer-in from the capital projects fund.

In the "Interfund Transfer" example, the payment of interest by the general fund to the debt service fund would be recorded by the general fund as nonreciprocal transfer-out and by the debt service fund as a nonreciprocal transfer-in:

Nonreciprocal transfer-out to o	lebt service fund (other			
financing use)			\$3	
Cash	The second second	W. L. L. & C. C.		\$3
To record transfer to debt service f	und (in general fund)	2,000	. :	* 11
Cash	$\mathcal{E}'$	20 de 2000 1.00 de	\$3	
Nonreciprocal transfer-in fro	om general fund (other	resident		
financing sources)	•			\$3
To record transfer from general fu	nd (in debt service fund)			

In the "Interfund Purchase/Sale" example, by contrast, the payment by the general fund to the internal service fund for supplies would be considered a reciprocal transaction and hence recorded as if it were an exchange transaction:

Supplies expenditure \$30,000 Cash	\$30,000
To record the purchase of supplies (in the general fund)	450,000
Cash \$30,000	
Sales revenue  To record the sale of supplies (in the internal service fund)	\$30,000

## DIFFERENCES IN GOVERNMENT-WIDE STATEMENTS

As implied by their title, government-wide statements present revenues and expenses from the perspective of the entity, not individual funds. Reported expenses are generally those of the entity as a whole (divided into columns for governmental and business-type activities), not of individual funds. To avoid double-counting, interfund revenues and expenditures must be eliminated.

Special provisions of GASB Statement No. 34 direct how interfund activity involving internal service funds should be eliminated. Internal service fund residual balances (those remaining after the interfund activity has been eliminated) are included in the governmental activities column because they provide services mainly to governmental funds. These provisions are addressed in Chapter 9 pertaining to business-type activities.

# What constitutes other financing sources and uses?

Governmental funds receive or use resources from transactions that, under a full accrual basis, would affect long-term assets or liability accounts. For example, if a business issues long-term debt, it would establish a long-term liability. However, the measurement focus of governmental funds excludes both capital assets and long-term liabilities. Therefore, resources received from the issuance of bonds cannot be recorded as liabilities. Although similar to revenues in that they increase fund balance, they lack the characteristics of conventional revenues in that they will need to be repaid. Similarly, the proceeds from the sale of equipment can neither reduce a reported asset nor be interpreted as a revenue.

Generally accepted accounting and reporting standards direct that certain governmental resource flows that would otherwise affect long-term assets or liabilities be classified on statements of revenues, expenditures, and changes in fund balances as other financing sources and uses. The main types of other financing sources and uses are:

#### Sources

- Proceeds of long-term debt.
- · Proceeds from the sale of capital assets
- Present value of assets and liabilities created by capital leases
- Nonreciprocal transfers-in

### Uses

- Payments to bond "escrow" agents who maintain accounts for the eventual repayment of long-term obligations
- Nonreciprocal transfers-out

# BOW SHOULD REVENUES, EXPENDITURES, AND OTHER ENANCING SOURCES AND USES BE REPORTED?

In light of the variety of activities and transactions in which the multitude of entities engage, governments need flexibility as to the form and content of their financial statements. At the same time, though, a certain degree of uniformity is required if statement users are to make meaningful comparisons among governments. Therefore, the GASB has set forth only the general framework of the statement of revenues, expenditures, and changes in fund balances.

# GASB Standards

AS BURNET CONTRACTOR FOR THE SECOND STORY

Revenues, expenditures, and changes in fund balances should be reported in governmental funds in a statement that takes the following form:

Revenues (detailed)	\$100	
Expenditures (detailed)	90	
Excess of revenues over expenditures	10	
Other financing sources and uses, including transf	ers (5)	
(detailed)	e de la companya de l	
Special items (detailed)	1	
Extraordinary items (detailed)	7	
Net change in fund balance	13	
Fund balances beginning of period	11	
Fund balances end of period	<u>\$ 24</u>	

Expenditures would generally be shown by function (e.g., public safety, recreation, administration) rather than by object (e.g., salaries, travel, rent).

Extraordinary items are transactions or other events that are both unusual in nature and infrequent in occurrence. These are transactions that are clearly incidental or unrelated to the ordinary activities of the entity. Special items, while similar to extraordinary items in that they are also unusual in nature and infrequent in occurrence, are significant transactions that are within the control of management. 16 Moreover, special items include transactions that meet one of the two criteria but not the other—that is, transactions which are either unusual in nature or infrequent in occurrence, but not both. 17

The governmental funds statements of revenues, expenditures, and changes in fund balances of Charlotte, North Carolina, were illustrated in Chapter 2, Table 2-6.

<sup>&</sup>lt;sup>16</sup>GASB Statement No. 34, Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments (June 1999), paras. 55 and 56.

<sup>17</sup> Stephen J. Gautier, Governmental Accounting, Auditing, and Financial Reporting (Chicago: Government Finance Officers Association, 2005), p. 55.

# What is the significance of the current financial governmental fund statements? An overview

The ultimate question faced by governmental fund financial statement readers is, "What does it all mean?" A governmental fund balance sheet presents the fund's resources at a particular point in time; its operating statement accounts for the net change in those resources during a particular period of time. All measurements, however, are in accord with generally accepted accounting principles (GAAP).

As made apparent in this and the previous chapter, governmental fund revenues and expenditures are frequently determined on different bases for purposes of budgeting rather than for financial reporting. Assuming the budget is on a cash or near-cash basis, examples of significant differences include:

- For purposes of budgeting, governments may recognize taxes as revenues only as collected; in accord with GAAP, they must recognize them as revenues only when they are both measurable and available to finance expenditures of the fiscal period.
- For purposes of budgeting, governments may account for wages and salaries on a
  cash basis; as required by GAAP, they must accrue compensation expenditures as
  long as the payments will be made with expendable available financial resources.
- For purposes of budgeting, governments may account for supplies and prepayments on a cash basis; as permitted by GAAP, they may use the consumption method.

Consequently, the reported revenues and expenditures, and the resultant surplus or deficit, may not be comparable with corresponding budgeted amounts.

Moreover, the balance sheet may not present a clear picture of either resources available for appropriation or the claims against those resources. It may not reflect taxes and other receivables that the government may be able to use to cover expenditures of the following and future years. Correspondingly, it may not show all of the claims against the fund's resources, such as those for deferred compensation, interest, and legal judgments.

The operating statement also cannot be counted on to reveal the true economic costs of government operations or the economic value of resources that it actually received or to which it became entitled during the year. Because they are based on modified rather than full accounting, governmental fund operating statements fail to recognize the cost of using as opposed to purchasing supplies, of renting equipment or other property as opposed to making the rent payments, and of using as opposed to acquiring capital assets.

The GASB standards of revenue and expenditure recognition satisfy both the interperiod equity and the budgetary compliance objectives of financial reporting, but only to a limited extent. The government-wide statements provide greater information on the economic costs of operations and on the economic value of resources. However, in the absence of other changes in principles, the fund statements will continue to fall short of indicating budget-based revenues and expenditures and the resources that are legally available for appropriation.

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The limitations of the fund statements do not, by themselves, imply criticisms of either the statements themselves or the rule-making authorities responsible for them. As suggested in Chapter 1, it is questionable whether a single set of financial statements can satisfy all of the key accounting and reporting objectives. It is for that reason that the complete government reporting model encompasses two sets of financial statements—fund and government-wide.

# SUMMARY

Rulemaking authorities recommend use of the accrual basis to the fullest extent practicable in the government environment. But they have substantially modified the accrual basis from the way it is applied in governmental funds as opposed to businesses, proprietary funds, and government-wide statements.

As pointed out in the previous chapter, for revenues to be recognized in governmental funds not only must a key underlying event take place, but also the resources to be received must be measurable and available to finance expenditures of the fiscal period.

In this chapter, we stressed that governmental fund expenditures are defined as "decreases in net financial resources," in contrast to expenses, which represent outflows or consumption of overall net assets. As a consequence, we identified seven differences in how the accrual concept is applied in governments as opposed to businesses. These are accounting for compensated absences, pension and open, claims and judgments, inventories, prepayments, capital assets, and principal and interest payment on debt.

We also noted that governmental fund nonexchange transactions (mainly grants) are accounted for symmetrically to nonexchange revenues. Hence, grants are recognized as expenditures when the recipient has met all eligibility requirements and the grantor thereby incurs an obligation. Table 5–1 summarizes the general principles of expenditure and expenses recognition.

# TABLE 5-1 Summary of Expenditure/Expense Recognition Principles

- I. Governmental fund statements are accounted for on an accrual basis.
  - A. However, the accrual basis is modified in the following ways as to when expenditures are recognized.
    - Vacations, sick leave, and other compensated absences are not accrued unless they will be liquidated with current financial resources.
    - 2. The reported pension expenditure includes only the governmental fund's actual contribution for the year, not, as in businesses, an actuarial contribution.
    - 3. Claims and judgments are reported as expenditures only insofar as they will be paid out of current financial resources.
    - 4. Inventory (and hence the cost of using supplies) may be accounted for using either a purchases or a consumption method, but any significant amounts of inventory must be reported in the financial statements regardless of the accounting method used.
    - 5. Prepaid items (and the related costs) may also be accounted for on either a purchases or a consumption basis, but significant amounts of prepayments need not necessarily be reported on the balance sheet.
    - 6. The costs of capital assets are reported as expenditures when the assets are acquired capital assets are not depreciated.
    - 7. Repayment of long-term capital debt is reported as an expenditure as payments are made; interest on the debt is ordinarily not accrued. However, interest and principal may be accrued in a debt service fund if resources have been transferred in from another fund to make payments that are due early the next year (within no more than a month).
  - B. Liabilities are recognized in governmental fund statements only to the extent that they will be liquidated with current financial resources.
  - C. Nonexchange transactions are recognized symmetrically to their revenue counterparts. (See Chapter 4.)
- II. Government-wide statements are accounted for on a full accrual basis. Hence expenses are generally recognized as they are in businesses and in governments' proprietary funds.

# Key terms in this chapter

consumption method
expenditures
expenses
extraordinary items
financial resources
nonreciprocal interfund activity

object
purchases method
reciprocal interfund activity
special items
zero coupon bonds

## EXERCISE FOR REVIEW AND SELF-STUDY

For years beginning January 1, 2012, the City of Arbor Hills will finance its parks and recreation activities with a special property tax levy. Accordingly, it will account for resources related to parks and recreation in a special revenue fund. During 2012 it engaged in the following transactions:

- 1. The fund received \$6 million from the city's special parks and recreation property tax levy.
- 2. During the year the parks and recreation employees earned \$4.5 million in wages and salaries. Of this amount, the city paid \$4.1 million in 2012 and is to pay the balance early in 2013.
- 3. Parks and recreation employees earned \$0.26 million in vacation leave and were paid for \$0.20 million. The city estimates that it will pay the entire balance in the future.
- 4. The employees earned \$0.17 million in sick leave but were paid for only \$0.14 million. The leave accumulates but does not vest.
- 5. According to city actuaries, employees earned \$0.37 million in pensions. However, the city had budgeted only \$0.30 million. During the year it contributed to its pension fund \$0.25 million and plans to contribute an additional \$0.05 million in early January 2013.

- 6. During 2012 the city ordered \$0.80 million in parks and recreation supplies. Of this amount, it received \$0.70 million, used \$0.55 million, and paid for \$0.50 million. The city uses the purchases method to account for supplies inventory.
- 7. In January 2012 the city purchased \$1 million in parks and recreation equipment. It paid \$0.20 million in cash and gave an installment note for the balance. The first payment on the note (\$0.30 million plus interest of \$0.05 million) is due on January 12, 2013.
  - a. Prepare journal entries to summarize the transactions that affected the special revenue fund in 2012.
  - b. Prepare a statement of revenues, expenditures, and changes in fund balance and a balance sheet for the Parks and Recreation Fund as of December 31, 2012.
    - c. Indicate any assets or liabilities that would be reported in the city's schedules of capital assets or long-term obligation as a consequence of the transactions engaged in by the Parks and Recreation Fund.
    - d. Comment on how each of the transactions would be reported on the city's government-wide statements.

## **Q**UESTIONS FOR REVIEW AND DISCUSSION

- What is the distinction between expenditures and expenses as the terms are used in governmental accounting?
- 2. A government expects to pay its electric bill relating to its current fiscal year sometime in the following year. An official of the government requests your advice as to whether the anticipated payment should be charged
- as an expenditure of the current or the following year. How would you respond?
- 3. Under pressure to balance their budgets, governments at all levels have resorted to fiscal gimmicks, such as delaying the wages and salaries of government employees from the last day of the month to the first day of the following month. In the year of the change they

- thereby had one fewer pay periods. How would the change affect the reported expenditures of a governmental fund under GAAP?
- A government permits its employees to accumulate all unused vacation days and sick leave. Whereas (in accord with current standards) it may have to "book" a liability for the unused vacation days, it may not have to record an obligation for the unused sick leave. Explain and justify the applicable standards:
- A school district grants teachers a sabbatical leave every seven years. Yet, consistent with GAAP, it fails to accrue a liability for such leave over the period in which the leave is earned—not even in its government-wide statements. How can you justify such accounting?
- A government accounts for inventory on the consumption basis. Why do some accountants believe that it should offset the year-end inventory balance with a fund balance—nonspendable when no comparable fund balance is required for cash, taxes receivable, or most other assets?
- A government accounts for inventory on the purchases basis. Why must it offset its year-end inventory balance with an addition to fund balance?
- Many accountants note that for most governments the reported "bottom line" of their financial statements (i.e., revenues less expenditures/expenses and other charges that affect fund balance/net assets) will not greatly differ between their government-wide statements and their fund statements insofar as the expenditures/expenses relate to long-term assets and the long-term liabilities issued to finance those assets. That's because governments typically repay the debt

- evenly over a period which approximates the economic life of the related asset. Assuming the accountant's assumption as to means of financing to be correct, will the expenditures and related charges affecting fund balance of the governmental fund statements approximate the expenses of the government-wide statements?
- Governments are not required to accrue interest on long-term debt in governmental funds even if the interest is applicable to a current period and will be due the first day of the following year. Explain and justify the standards that permit this practice.
- 10. A school district accounts for its pension costs in a governmental fund. In a particular year the district's actuary calculates the district's required contribution for the year to be \$18 million. The district, however, had only budgeted \$15 million and chooses to contribute only what was budgeted. What should the district report as its pension expenditure for the year? Explain.
- 11. A city's electric utility transfers \$40 million to its general fund. Of this amount, \$30 million is a return of the general fund's initial contribution of "start-up capital." The balance is a payment in lieu of property taxes that a private utility operating in the city would have had to pay. Explain how each element of the transfer would be reported in the general fund's operating statement.
- 12. A government's unassigned fund balance in the general fund at year-end should be indicative of the amount that the government has available for appropriation in future years. Explain and provide an example to support your answer.

#### E. 5-1

Select the best answer.

Assume that Nolanville's fiscal year ends on December 31.

Nolanville's payroll for one of its departments is \$15,000 per week. It pays its employees on the Thursday of the week following that in which the wages and salaries are earned. In 2012, December 31 fell on a Wednesday. For the workweek beginning Monday, December 29, 2012, and ending Friday, January 2, 2013, employees were paid on Thursday, January 8, 2013. For fiscal 2012, what amount should the city recognize as wage and salary expenditure/expense pertaining to the week ending Friday, January 2, 2013, in its fund statements and its government-wide statements?

### Fund Statements Government-wide Statements

,			
a.	\$ 0	A.	\$ 0
b.	\$9,000	4.35	\$9,000
c.	\$ 0		\$9,000
d.	\$9,000	and the second second	\$ 0

- 2. In its fund financial statements, the city would recognize the receipt of a new computer (to be used for general administrative purposes) that it had ordered the previous year as an
  - a. Encumbrance
  - **b.** Expense
  - c. Expenditure
  - d. Asset

- 3. In 2012, city employees earned \$1.4 million in sick leave that they did not take during the year. The city estimates that of this amount \$0.8 million will actually be paid to employees who take sick leave. Of the balance, \$0.1 million will be paid to employees upon their retirement or resignation and \$0.5 million will not have to be paid (since employees are limited in the number of sick days that they can carry over from one year to the next). The amount that the city should add to a fund-statement liability account as of year-end 2012 is
  - a. \$0
  - **b.** \$0.1 million
  - c. \$0.8 million
  - d. \$0.9 million
- 4. Assume the same facts as in the previous question. The amount that the city should add to a government-wide statement liability account as of year-end 2012 is
  - a. \$0
  - b. \$0.1 million
  - c. \$0.8 million
  - d. \$0.9 million
- 5. In 2012 city employees earned \$3.6 million in vacation pay that they did not use during the year. The city estimates that of this amount \$2.8 million will be paid in 2013 (out of amounts budgeted for that year), \$0.6 million will be paid in subsequent years, and the balance of \$0.2 million will not have to be paid. The amount that the city should add to a fund-statement liability account as of year-end 2012 is
  - a. \$0
  - b. \$2.8 million
  - c. \$3.4 million
  - d. \$3.6 million
- 6. Assume the same facts as in the previous question. The amount that the city should add to a government-wide statement liability account as of year-end 2012 is
  - a. \$0
  - **b.** \$2.8 million
  - c. \$3.4 million
  - d. \$3.6 million
- 7. Nolanville starts fiscal 2012 with \$25,000 in supplies. During the year it orders \$180,000 in supplies, receives \$170,000, and uses \$190,000. It accounts for inventories on the purchases basis. In its 2012 governmental fund financial statements it should report

Expenditure	Nonspendable Fund Balance
a. \$180,000	\$ 0
<b>b</b> . \$170,000	\$ 5,000
<b>c.</b> \$190,000	\$ 0
<b>d</b> . \$190,000	\$15,000

8. Assume the same facts as in the previous question. In its 2012 government-wide financial statements it should report

Expense	Net Asset Reserve		
a. \$170,000	\$ 0		
<b>b</b> . \$170,000	\$15,000		
c. \$190,000	\$ 0		
<b>d</b> . \$190,000	\$15,000		

9. On December 1, 2012, Nolanville issued \$10 million of 30-year, 8 percent bonds for \$9.78 million, a price that reflects a semiannual yield of 4.1 percent. Interest (\$400,000 per semiannual period) is payable on May 31 and November 30, beginning May 31, 2013. In its 2012 fund and government-wide statements, Nolanville should report an interest expenditure/expense of

#### Fund Statements Government-wide Statements

a. \$ 0	\$ 0
<b>b</b> . \$66,667	\$66,667
<b>c.</b> \$66,830	\$66,830
<b>d.</b> \$ 0	\$66,830

10. In May 2012, Nolanville repaid \$2 million of the bonds that it had issued in 2007. In its 2012 fund and government-wide statements, Nolanville should report an expenditure/expense relating to the repayment of the bonds of

#### Fund Statements Government-wide Statements

	··········
a. \$0	\$0
<b>b</b> . \$2 million	\$0
<b>c.</b> \$0	\$2 million
d. \$2 million	\$2 million

#### E. 5-2

The Eaton School District engaged in the following transactions during its fiscal year ending August 31, 2012.

- It established a purchasing department, which would be accounted for in a new internal service fund, to purchase supplies and distribute them to operating units.
   To provide working capital for the new department it transferred \$1.7 million from its general fund to the internal service fund.
  - During the year, operating departments that are accounted for in the general fund acquired supplies from the internal service fund for which they were billed \$300,000. Of this amount the government transferred

\$200,000 from the general fund to the internal service fund, expecting to transfer the balance in the following fiscal year. The supplies had cost the purchasing department \$190,000. During 2012, the operating departments used only \$220,000 of the supplies for which they were billed. They had no supplies on hand at the start of the

The school district transferred \$150,000 from its general fund to its debt service fund to make its required March 31, 2012, interest payment. This amount was paid from the debt service fund when due. It represented interest on \$8 million of bonds that were issued, at par, on September 30, 2011. The next interest payment of \$150,000 is due on September 30, 2012. The district also transferred \$75,000 from the general fund to the debt service fund to provide for the eventual repayment of principal.

The district transferred \$4.5 million from the general fund to its pension fund (a fiduciary fund) in partial payment of its actuarially required contribution of

\$5.0 million for the year.

On August 31, the district acquired school buses at a cost of \$900,000. The district gave the supplier installment notes that required the district to make three annual payments of \$361,903. The first payment is due in August 2013. The buses have a useful life of 10 years, with no salvage value.

Match the items below with the amounts that follow. An amount may be selected once, more than once, or not at all.

- 1. Amount that the general fund should recognize as supplies expenditure, assuming that inventory is accounted for on a purchases basis
- Amount that the district should recognize as a pension expenditure in its general fund
- Amount that the district should recognize as a pension expense in its government-wide statements
- Amount that the general fund should recognize as nonreciprocal transfers-out
- Amount that the district should recognize as total debt service expenditures in its governmental funds
- Amount that the government should recognize as total debt service expense in its government-wide statements
- 7. Amount that the district should recognize as other financing sources in its general fund financial state-
- Amount that the district should recognize as capitalrelated expenditures, including depreciation, pertaining to its buses in its governmental fund financial statements (the district recognizes a full year's depreciation on all capital assets in the year of acquisition)

- 9. Amount that the district should recognize as capitalrelated expenses, including depreciation, pertaining to its buses in its government-wide financial statements (the district recognizes a full year's depreciation on all capital assets in the year of acquisi-
- 10. Amount that the district should recognize as nonspendable fund-balance in its governmental fund statements. The Miner product of frage
  - va. \$0
    - **b.** \$75,000
  - **c.** \$80,000
  - d. \$90,000
  - ∞e. \$137,500 · · ·
- \_\_\_\_\_**f.** \$150,000
  - . g. \$220,000

  - **h.** \$275,000 i. \$300,000

  - j. \$900,000
  - k. \$1,925,000
  - 1. \$4,500,000
  - m.\$5,000,000
  - n. \$8,000,000

  - o. \$8,900,000

#### E. 5-3

The purchases method differs from the consumption method.

The Boyd School District began a recent fiscal year with \$3,000 of supplies in stock. During its fiscal year, it engaged in the following transactions relating to supplies:

- It purchased supplies at a cost of \$22,000.
- It paid for \$19,000 of the supplies.
- It used \$20,000 of the supplies and therefore had \$5,000 in supplies inventory at year-end.
- Record the transactions assuming that the district uses the purchases method.
- Record the transactions assuming that the district uses the consumption method.
- Comment on any differences between the two as they would affect:
  - a. The district's general fund balance sheet
  - b. Its general fund statement of revenues and expen-

#### E. 5-4

Inventory transactions can be derived from a limited amount of

The following schedule shows the amounts related to supplies that a city debited and credited to the indicated accounts during a year (not necessarily the year-end balances), excluding closing entries. The organization records its budget, encumbers all of its expenditures, and initially vouchers all payments. It accounts for supplies on a purchases basis.

		(in thousands)	
		Debits	Credits
Cash		\$ 0	\$ 70
Inventory		*******	0
Vouchers payable			
(Appropriations)		0	115
Encumbrances			
Expenditures		58	0
Reserve for encumbrances		58	. 93
Unassigned fund balance			0
Nonspendable fund balance	-	`,	3
(supplies inventory)		. 0	·

- 1. Some information is missing. By reconstructing the entries that the organization made during the year, you are to determine the missing data. The city began the year with \$5,000 of supplies in inventory and ended the year with \$6,000.
- 2. Assume instead that the city accounts for supplies on a consumption basis. Which of the above amounts (assuming that appropriations remained unchanged) would be different? What would be the new value(s)?

#### E. 5-5

Fund balance, both nonspendable and unassigned can be computed from a limited amount of information.

The schedule that follows reports the beginning balances and activity during the year in a town's supplies fund (a governmental fund). The government accounts for supplies on a purchases basis (in thousands).

Fund balance (unassigned),	
January 1	\$ 400
Fund balance, assigned	
(encumbrances), January 1	240
Fund balance, nonspendable	
(inventory), January 1	170
Total fund balance, January 1	\$ 810
Appropriations (for purchases of	
supplies)	\$3,400
Estimated revenues	3,200.
Actual revenues	3,300
Supplies ordered	3,160
Supplies received	3,360
Supplies paid-for	2,800
Supplies used	3,280
• •	

- 1. Compute the following (and show your computations):
  - a. Fund balance, nonspendable (inventory), December 31
  - b. Fund balance, assigned (encumbrances), December 31
  - c. Fund balance (unassigned), December 31

2. How can you justify the continued use of the purchases method when it appears so contrary to everything you learned in classes pertaining to business accounting?

#### E. 5-6

Irrespective of how capital assets are acquired, they are recorded differently in governmental funds than in businesses.

In a recent year Ives Township acquired six police cars at a total cost of \$200,000. The vehicles are expected to have a useful life of four years.

- 1. Prepare the journal entries that the township would make in its general fund in the year of acquisition for each of the following assumptions:
  - a. It paid for the cars in cash at the time of acquisition.
  - b. It leased the cars and agreed to make, starting in the year of acquisition, four equal payments of \$63,095, an amount that represents the annuity required to liquidate a loan of \$200,000 at 10 percent interest.

    The lease would satisfy the criteria necessary to be accounted for as a capital lease.
    - c. It issued \$200,000 in installment notes to the car dealer, agreeing to repay them in four annual payments of \$63,095, starting in the year of acquisition.
- 2. Comment on how any "off the balance sheet" assets or obligations would be reported in supplementary schedules and the government-wide statements.

#### E. 5-7

Expenditures for vacations do not necessarily reflect the amounts the employees have earned.

In 2012, employees of Pecos River County earned \$5 million in vacation pay. They were paid for \$4.2 million but deferred taking the balance of their earned vacations until subsequent years. Also, employees were paid \$0.7 million for vacation earned in previous years.

- 1. Prepare the journal entry in the general fund to reflect the vacation pay earned in 2012.
- Prepare the journal entry to reflect the payments for vacation days that had been earned in prior years.
- 3. Comment on how the schedule of long-term obligations would be affected by these transactions.
- 4. Comment on how the government-wide statements would be affected by these transactions. Specifically, what would be the reported vacation expenses for 2012, and what would be the year-end accrued liability for vacation pay assuming that the beginning of year liability was \$0.7 million?

### E. 5-8

Obligations for sick leave should not be recognized as liabilities if they are to cover the wages of employees who actually become ill.

Lemon Gounty permits employees to accumulate any sick leave that they do not take. If employees do not use accumulated sick leave, then they will be paid for those days upon retirement or termination (up to a maximum of

45 days). In 2012 employees earned \$4.0 million in sick 3. \$38,000 to reimburse the capital projects fund for leave. Of this amount they were paid \$3.1 million. The county expects that they will be paid \$0.6 million as they, take sick days in future years and \$0.2 million upon retirement or termination. The balance of \$0.1 million will not of electric services have to be paid.

- 1. Based on current standards, prepare journal entries in the general fund to reflect the sick leave earned and paid for in 2012. Indicate the amount to be reported in the schedule of long-term obligations and the government-wide statements.
- What is the rationale for the standards that underlies your entries?

The manner in which a transfer is accounted for depends on its

Prepare general fund journal entries to record the following cash transfers that a city made from its general fund to other funds. Be sure your entry reflects the nature of the transfer.

- \$4,000,000 to provide start-up capital to a newly established internal service fund that will account for the city's data processing activities
- \$50,000 to pay for data processing services provided by the data processing internal service fund

- equipment rental costs that it incurred on behalf of activities accounted for in the general fund
- 4. \$300,000 to pay the electric utility fund for four months
- 5. \$600,000 to enable the debt service fund to make stimely payments of principal and interest on outstanding general obligation debt

### E. 5-10

Prepayments may be accounted for on a purchases or consumption basis.

During its fiscal year ending June 30, 2011, the Parkville Independent School District enters into a twoyear lease for office space covering the period May 1, 2011, through April 30, 2013. Annual rent is \$60,000. The lease specifies that the entire rent for each year is to be paid, in advance, on May 1.

- 1. Prepare journal entries to record the lease payments and the lease expenditures for fiscal years ending June 30, 2011, 2012, and 2013, assuming that the district uses the consumption method.
- Prepare journal entries to record the lease payments and the lease expenditures for the same years assuming that the district uses the purchases method.

Review the Comprehensive Annual Financial Report (CAFR) that you obtained.

- 1. How does the government classify its governmental expenditures, by function or by "object"? Are the classifications approximately the same in both the government-wide and the fund statements?
- 2. What are the major differences in expenditures/expenses (i.e., reconciling items) as they are reported in the government-wide and the governmental fund statements?
- 3. On what basis does the government account for its inventories (purchases or consumption)? Does it

- maintain a reserve for inventories (if it has not yet implemented GASB Statement No. 54)?
- 4. On what basis does it account for insurance or other prepaid items in its governmental funds? How can you tell?
- 5. To and from which funds or component units have there been general fund transfers?
- 6. Explain the nature of any governmental-fund balance sheet reserves (or classifications) related to expenditures.
- 7. Does the entity report depreciation as an expense in its government-wide statements? If not, why not?

# Problems

#### P. 5-1

All paid time off may not be the same.

A city has adopted the following plan for compensated time off:

- City employees are entitled to a specified number of days each year for holidays and vacation. The number depends on length of service (20 days for employees with fewer than five years of service, 25 days for employees with between five and ten years, 30 days for employees with more than ten years). Employees may accumulate up to 40 days, which they can either carry over to future years or be compensated for upon termination.
- Employees are also entitled to seven sick days per year. They may carry over to future years up to 60 sick days. However, upon termination they can be paid for no more than 20 unused days.

During 2012 the city paid employees \$4.2 million for holidays and vacations during the year. Of this amount, \$0.4 million was for days carried over from previous years. In addition, employees earned \$0.5 million in time off that they expect to use, and be paid for, in the future.

The city also paid \$1.5 million in sick leave, none of which was paid to employees upon termination. Of this amount, \$0.3 million was carried forward from previous years. The city estimates that employees earned an additional \$0.8 million in unused sick leave. Of this, \$0.5 million will eventually be paid for as time off, \$0.2 million will be paid upon termination, and \$0.1 million will lapse.

- 1. Prepare a general fund journal entry to record the holiday and vacation compensation. Indicate the amount of any other liability that would be recorded on both the government-wide statements and the schedule of long-term obligations.
- 2. Do the same for the sick leave:
- 3. Justify any differences between the two sets of entries.
- 4. Suppose additionally that for the first time in 2012 the city offered up to eight weeks of paid maternity leave to eligible employees. In 2012 the city paid \$0.2 million to employees on leave. In addition, employees earned an estimated \$0.3 million in leave to be taken in the future. Consistent with your previous entries and justifications,

explain how (and why) you would account for this leave (which is not specifically addressed by current GASB pronouncements).

#### P. 5-2

The guidance on sabbatical programs leaves much to the judgment of school officials and their accountants.

The Allendale School District recently signed a contract with its teachers' union. The contract provides that all teachers will receive a one-semester sabbatical leave after seven continuous years of employment. The preamble to the contract provision stresses that the leave is intended for "renewal, additional education, and academic enrichment." It provides examples of the types of activities it is intended to promote: formal post-baccalaureate courses, service with public or not-for-profit organizations, and independent study and research.

The contract indicates that the leave is guaranteed to all teachers who satisfy the time in service and other specified criteria. Although teachers must apply for the leave, the district is required to approve it if the criteria are met. If a teacher opts not to take the leave after seven years, then he or she may accumulate it and either take it in the future or receive payment for it upon retirement. Teachers do not have to report to the school officials either on what they plan to accomplish while on leave or what they actually accomplished.

School officials estimate that the new sabbatical provision will add to its annual compensation costs approximately \$3,000 per currently employed teacher per year (after taking account of teachers who will never satisfy the leave criteria). The district currently employs 2,500 teachers. The program will be phased in gradually; the first teachers will be eligible to take their leaves in seven years.

Another school district, the Balcones West School District, which is not unionized, adopted a similar sabbatical program the same year. However, the Balcones West program does not guarantee teachers a leave. Instead they must be granted the leave on the basis of an interview and lengthy application, which includes a schedule of planned activities. Teachers who win approval for the leave must agree to work for the district for at least one year subsequent to the leave. If they fail to return to the district, they will be required to reimburse the district for salary and benefits received while on leave. Moreover, they must submit

a written report to the district on their accomplishments during the leave.

Balcones West officials estimate that the cost of its leave will be approximately \$2,000 per currently employed teacher per year. The district currently employs 1,000 teachers. As with the Allendale district, the program will for leaves in seven years.

(1) the Allendale District and (2) the Balcones West District statements of the city of Dallas (dates changed): prepare in the first year after adopting their sabbatical The state of the s accounting standards.

### P. 5-3

Inventory transactions can be derived from year-end balances.

The following schedule indicates selected accounts from a city's preclosing 2012 and postclosing 2011 general fund trial balances:

	December 31, 2012 (Preclosing)	December 31, 2011 (Postclosing)
Expenditures	\$315,000	<u>-</u>
Supplies	<b>V</b>	
Inventory	81,000	\$54,000
Encumbrances	36,000	· · · —
Fund Balance assigned		9,000
Reserve for		
Encumbrances	45,000	
Nonspendable fund		
balance (Supplies)	54,000	54,000

All of the amounts shown relate only to supplies. All purchases during the year were paid in cash.

- 1. Assume that the city uses the consumption method to account for supplies.
  - a. Reconstruct all journal entries relating to supplies that were made in 2012.
  - b. Make any additional entries that would be required at year-end 2012 to close the accounts.
- 2. Assume instead that the city uses the purchases method to account for supplies. Assume also that the supplies inventory balance as reported on the preclosing December 31, 2012, balance sheet is \$54,000 (not \$81,000 as shown in the schedule), even though actual supplies on hand are still \$81,000. (This adjustment is necessary because under the purchases method inventory is maintained throughout the year at the beginning of year balance; it is adjusted only at year-end when the closing entries are made.)
  - a. Reconstruct all journal entries relating to supplies that were made in 2012.

b. Make any additional entries that would be required at year-end 2012 to close the accounts.

#### P. 5-4

Generally accepted modified accrual accounting practices perbe phased in gradually and the first teachers will be eligible taining to inventories may not fulfill the objectives of financial reporting.

Prepare, any entries that you would recommend that ...... The following is an excerpt from a note to the financial

The city prepares its annual appropriated general programs. Specify the fund in which your entries would fund, debt service fund, and proprietary operating funds be made. Explain and justify your answers, citing relevant budgets on a basis (budget basis) which differs from generally accepted accounting principles (GAAP basis) .... The major differences between the budget and GAAP bases are that encumbrances are recorded as the equivalent of expenditures (budget) rather than a reservation of fund balance (GAAP) in the governmental funds.

> The city accounts for inventories on the purchases basis. One of the city's departments, which is accounted for in the general fund, budgeted \$195,000 in supplies expenditures for fiscal 2012. It began the 2012 fiscal year with \$30,000 of supplies on hand. It also had \$12,000 of supplies on order. During the year it ordered an additional \$180,000 of supplies, received (and paid for in cash) \$185,000 of supplies, and consumed \$178,000 of supplies.

- 1. Prepare all journal entries, consistent with GAAP, including budgetary and encumbrance entries that the department should make in 2012.
- 2. Indicate the accounts and amounts related to supplies that the city would report on its year-end statement of revenues, expenditures, and changes in fund balance and balance sheet.
- 3. By how much did the department over- or underspend its supplies budget (on a budget basis)?
- 4. Comment on the extent to which the city's statement provides a basis to:
  - a. Assess the "true" economic costs associated with

2

- b. Determine whether the city adhered to budgetary spending mandates
- 5. Suppose that in the last quarter of the year, department officials realized that the department was about to overspend its supplies budget. They therefore ceased placing new orders for supplies. However, they imposed no restrictions on the use of supplies and thereby allowed the supplies inventory to decline to near zero.
  - a. What impact would these cost-cutting measures have on supplies expenditures as reported in an actual-tobudget comparison (on a budget basis)?
  - b. What impact would the year-end measures have on reported supplies expenditures (per GAAP)? Would your response be different if the city accounted for supplies on the consumption basis?

#### P. 5-5

Can a government sell assets to itself to generate revenue?

A city is having fiscal problems in 2012. It expects to report a deficit in its general fund, the only fund that is statutorily required to be balanced.

To eliminate the anticipated deficit the city opts to "sell" its city hall—to itself—for \$5 million. The city establishes a "capital asset financing agency." The agency is a separate legal entity but will have to be reported as a component unit (per standards to be discussed in Chapter 11). As such it will be accounted for in a fund other than the general fund. The city structures the transaction as follows:

- The financing agency pays the city \$5 million in 2012 in exchange for "ownership" of city hall. The city hall has been carried as general capital asset.
- The agency acquires the necessary cash by issuing 20-year, 6 percent notes. The notes will be repaid in twenty annual installments of \$435,920. The notes are guaranteed by the city at large. Hence, they are ultimately a liability payable from the general fund.
- The agency leases the city hall back to the city at large. Lease payments are to be paid out of general fund resources.
- 1. Prepare journal entries in the general fund to record the sale and concurrent lease-back of the city hall. The lease-back satisfies the criteria of a capital lease transaction.
- 2: Prepare journal entries in the general fund to record the first lease payment, which was made in 2012.
- 3. Will the transaction, in fact, reduce the 2012 anticipated fund deficit? Briefly justify the accounting principles that actual economic costs nor mirror those for interest revenues. underlie this type of accounting.

#### P. 5-6

How an acquisition is financed may dictate the annual reported

The Mainor School District is about to establish a 30-machine computer lab. It is considering six alternative means of acquiring and financing the machines:

- 1. Buy the machines outright; cost will be \$60,000:
- 2. Buy the machines and finance them with a \$60,000. three-year, 10 percent interest term note. The district will repay the note and pay the entire interest with a single payment of \$79,860 when the note matures.
- 3. Buy the machines and finance them with a \$60,000, three-year, 10 percent interest, installment note. The district will repay the note (plus interest) in three endof-year installments of \$24,127 each.
- 4. Lease the equipment under a standard operating lease. The district will make three end-of-year lease payments of \$24,127 each.
- 5. Lease the equipment under an operating lease, but pre-pay the entire rent (\$60,000) in advance.

6. Lease the equipment, but structure the lease so that it satisfies the criteria of a capital lease. The district will make three \$24,127 end-of-year lease payments.

The district estimates that the equipment has a useful life of three years.

- a. Prepare a table in which for each alternative you indicate the net expenditure that the district would record in its general fund in the year of purchase and the following two years. Ignore any expenditures that are offset by "other financing sources." For the fifth option (the operating lease with the rent paid in advance), assume first that the district accounts for prepayments on the purchases basis and then that it accounts for them on the consumption basis.
- b. Determine the present value (using a discount rate of 10 percent) of the cash payments under each option.
- c. Comment on any incentives that district officials might have either to spread out the payments over the three-year period (either by a lease or borrowing arrangement) or to postpone the full payment until the third year, rather than to pay for the computers entirely in the year of acquisition.
- d. Comment on any significant differences in how the six options would be accounted for in governmentwide statements instead of governmental fund statements. How would each year's reported expense be determined?

#### P. 5-7

Accounting practices for interest expenditures may neither reflect

A town plans to borrow about \$10 million and is considering three alternatives. A town official requests your guidance on the economic cost of each of the arrangements and advice as to how they would affect the town's reported expenditures.

- 1. For each of the town's three alternatives, determine (1) what the town's economic cost would be of using the funds in the year ending December 31, 2012, and (2) what amount of interest expenditure the town would be required to report for the year ending December 31, 2012, in its governmental funds.
  - a. The town would issue \$10 million of 20-year, 6 percent coupon bonds on July 1, 2012. The bonds would be issued at par. The town would be required to make its first interest payment of \$300,000 on January 1,
  - b. The town would issue \$10 million of 20-year, 6 percent bonds on June 30, 2012. The bonds would be sold for \$9,552,293, a price that reflects an annual yield (effective interest rate) of 6.4 percent. The town would be required to make its first interest payment of \$300,000 on December 31, 2012.

- c. The town would issue \$32,071,355 of 20-year zero coupon bonds on July 1, 2012. The bonds would be sold for \$10 million, an amount that reflects an annual yield of 6 percent. The bonds require no payment of principal or interest until June 30, 2032.
- 2. Suppose that the town elects the first option and issues \$10 million of 20-year, 6 percent coupon bonds at par on July 1, 2012. The town establishes a debt service fund to account for resources that it sets aside to pay principal and interest on the bonds. On December 31, 2012, the town transfers \$300,000 from the general fund to the debt service fund to cover the first interest payment that is due on January 1, 2013.

  - b. How would the transfer be reported in the debt service fund? What options are available to the town to record 2012 interest in the debt service
- 3. Suppose that the town borrowed \$10 million on July 1, 2012, and temporarily invested the proceeds in twoyear, 6 percent Treasury notes. The first payment of interest, \$300,000, is payable on January 1, 2013.
  - a. What would be the town's economic gain from investing the funds in the year ending December 31, 2012? Ignore borrowing costs.
  - b. How much investment revenue should the town report for the year ending December 31, 2012? Assume there was no change in prevailing interest

#### P. 5-8

Not all interfund activities are classified as "transfers."

The following information was abstracted from a note, headed "Interfund Transactions," to the financial statements of Independence, Missouri.

#### **Interfund Charges for Support Services**

Interfund charges for support services (which would otherwise be acquired from outsiders) and rent paid to the General Fund during the fiscal year were as follows:

	Interfund Charges	Rent
Tourism fund		\$ 4,372
Power and light fund	\$1,285,011	230,933
Water fund	522,244	<sub>:</sub> 3,6,883
Sanitary sewer fund	629,442	34,243 =
Central garage fund	152,330	<u>3,411</u>
	\$2,589,027	\$309,842

Rent charges, which consist of leased office space and computer charges, are included in other revenue of the general fund.

### Payments in Lieu of Taxes

The payments of \$5,161,609, \$628,371, and \$880,637 in the fiscal year by the power and light, sanitary sewer, and water (enterprise) funds, respectively, to the general fund in lieu of taxes represent franchise taxes and real estate taxes on plants in service. The franchise tax rate, established by city ordinance at 9.08 percent for the year, is applied to gross billed operating revenues less amounts written off to a. How would the transfer be reported in the general arrive at the franchise tax due the general fund. Real estate taxes are charged at a set amount.

### **Interfund Operating Transfers**

Interfund operating transfers for the fiscal year were as follows:

Transfer to		Transfer from	
General	\$ 173,617	\$ 944,327	
Special revenue		307,772	
Debt service	930,000	T.	
Capital projects	440,551	157,918	
Enterprise		3,000	
Internal service	1.	140,604	
Permanent	9,453		
Total operating transfers	<u>\$1,553,621</u>	<u>\$1,553,621</u>	

- 1. Based on the information provided, prepare four journal entries (for support services, rent, payments in lieu of taxes, and interfund operating transfers) to record the transfers into the general fund. Be sure the account titles you use make clear the nature of the transaction (e.g., revenue, reciprocal transfer, nonreciprocal transfer).
- 2. Justify any differences in how you classified the interfund transactions.

#### P. 5-9

Analysts may (depending on account classification) be able to derive information on cash flows from a statement of revenues, expenditures, and changes in fund balance and balance sheets.

Highbridge County imposes a motor fuel tax to finance road maintenance. It therefore accounts for all road maintenance in a special revenue fund, the entire fund balance of which is legally restricted. The fund's statement of revenues, expenditures and changes in fund balance and balance sheet are presented as follows.

## Road Maintenance Special Revenue Fund Statement of Revenues, Expenditures, and Changes in Fund Balance for Year Ending December 31, 2012 (in thousands)

Motor fuel tax revenues		\$710
Expenditures:		
Wage and salaries	\$410	
Contribution to pension fund	35	
Supplies	190	
Acquisition of equipment	90	5
Legal settlement	. 3	å
Other expenditures	_70	798
Excess of revenues over expenditures	,	<i>(</i> 88)
Other financing sources:		
Proceeds of long-term debt		90
Increase in supplies inventory		8
Total other financing sources		98
Excess of revenue and other financing		10
sources over expenditures		*
Fund balance, beginning of year		_`69
Fund balance, year-end		<u>\$ 79</u>

### Balance Sheet as of December 31 (in thousands)

	2012	2011
Assets:		
Cash	\$26	\$17
Motor fuel taxes receivable	15	11
Prepaid expenditures	. 18	22
Supplies inventory	40	32
Total assets	<u>\$99</u>	\$82
Liabilities and fund balances:		
Accounts payable (for supplies)	\$ 6	\$ 4
Accrued wages and salaries	7	9
Claims and judgments payable	3	0
Current obligation to pension fund	4	0
Total liabilities	20	. 13
Fund balance		
Total fund balance—restricted	79.	69
Total liabilities and fund balance	<u>\$99</u>	<u>\$82</u>

- 1. The county prepares its budget for the road maintenance special revenue fund on a strict cash basis—no accruals whatsoever. Based on the information in the financial statements, prepare a schedule in which you account for all inflows and outflows of cash. The county reports inventories on a purchases basis. Be sure that your schedule accounts for the entire \$9,000 increase in cash during the year.
- 2. Are you able to determine from the fund statements presented any of the following?

- a. The actual amount of any claims and judgments incurred during the year
- b. The fund's required contribution to its pension fund
- The interest cost applicable to the long-term debt issued

If not, would this information be reported elsewhere in the financial statements? Explain.

3. Most governments do not classify their expenditures by object classification as in this example. Instead they report them by function, such as general government, public safety, recreation, and so on. However, they present their assets and liabilities in a fashion similar to that in the example. Is it possible, therefore, to derive information on cash flows from the statement of operations and balance sheets? Explain. Why do you think governments report expenditures by function rather than by object classification?

#### P. 5-10

Fund balance deficits may not be all bad.

The balance sheet and statement of revenues, expenditures, and changes in fund balance for Boulder, Colorado's Permanent Parks and Recreation Fund, a special revenue fund, for the year ending December 31, 2009, follow (dates changed). This balance sheet was prepared prior to the implementation of GASB Statement No. 54, which established the new classifications for fund balance.

## Boulder, Colorado Statement of Revenues, Expenditures, and Changes in Fund Balance for Year Ended December 31, 2009 (in thousands)

Revenues:	
General property taxes	\$ 855
Other taxes—Development excise	663
Development fees	13
Golf expansion fees	138
Interest earnings	42
Lease/rent from land	24
Other	209
Total revenues	1,944
Expenditures:	
Culture and recreation	1,881
Interest	119
Total expenditures	2,000
Excess (deficiency) of revenues over	
expenditures	(56)
Other financing uses operating transfers out	(123)
Excess (deficiency) of revenues and other	/
sources over expenditures and other uses	(179)
Fund balance, beginning of year	(367)
Fund balance, year-end	<u>\$(546</u> )

# Balance Sheet as of December 31, 2009 (in thousands)

(in thousands)	12(14) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
Assets:	
Cash and equivalents with the secret control of the secret control	\$ : 3 .
Investments at cost or amortized cost	902
General property taxes receivable:	
Accrued interest	8
Other	9
Due from other funds	14
Restricted asset, cash for special purposes	4
Total assets	<u>\$1,878</u>
Liabilities:	
, odono and an	\$ 120
Salaries and wages payable	9
Advances from other funds	1,357
Deferred revenue—General property taxes	938
Total liabilities	<u>2,424</u>
Fund equity:	
Reserved for:	
Encumbrances	112
Special purposes	24
Unreserved	(682)
Total fund equity	(546)
Total liabilities and fund equity	<u>\$1,878</u>

A note to the financial statements states the following:

#### **Fund Deficits**

The Permanent Parks and Recreation Fund has a fund balance deficit of \$546,539. This deficit is the result of the Permanent Parks and Recreation Fund expenditures: one-half of the cost of a central irrigation system for city parks and the acquisition of Roper Fields for soccer fields. The cost of the central irrigation system was shared with the Water Utility Fund to improve water conservation. The Permanent Parks and Recreation Fund has funded these projects through interfund loans with December 31, 2009, balances of: Water Utility Fund (\$52,870) and Flood Control Utility Fund (\$1,274,524).

- 1. Suppose that you are the chief accountant of the Parks and Recreation Department. A member of the city council accuses you and your department of mismanagement as evidenced by the substantial fund deficit. How would you defend yourself? What is the significance of the fund deficit?
- 2. Prepare journal entries (as best you can with the information provided) in the Permanent Parks and Recreation Fund to record:
  - a. The acquisition of the central irrigation system and the Roper Fields (assuming that the cost of the assets is equal to the December 31, 2009, interfund loan balances even though the acquisition was, in fact,

made prior to 2009 and a portion of the balances had already been repaid by December 31, 2009)

- b. The interfund loans
- 3. A schedule of changes in general capital assets by function and activity indicates the following with respect to parks and recreation (in thousands):

General capital assets as of January 1, 2009	\$24,100
Additions, 2009	1,291
Deductions, 2009	(3.73)
General capital assets as of December 31, 2009	\$25,018

How are the additions (which are other than the irrigation system and the soccer fields) and deductions most likely reflected in financial statements of the Permanent Parks and Recreation Fund?

#### P. 5-11

Nonexchange expenditures are the mirror image of nonexchange revenues.

A state government provided several grants to school districts and local governments during its fiscal year ending August 31.

- 1. On August 1, 2012, it announced a \$2 million grant to a local school district for the purchase of computers. The district can spend the funds upon receipt. On September 15, 2012, the state mailed a check for the full amount to the district. The district spent \$1.5 million on computers during fiscal 2013 (i.e., the year ending August 31, 2013) and expects to spend the remaining \$0.5 million in fiscal 2014.
- 2. On the same date the state announced a \$10 million grant to another school district for the acquisition of equipment. However, per the provisions of this grant the state will make payments only upon receiving documentation from the district that it has incurred allowable costs. In fiscal 2013, the district incurred and documented allowable costs of \$8 million. Of this, the state paid only \$7 million, expecting to reimburse the district for the balance early in fiscal 2014.
- 3. The state also announced a \$5 million grant to a third school district, again for the acquisition of computers. The state will make annual five \$1 million payments to the district, starting on September 15, 2013. The district is required to expend the funds in the fiscal year in which they are received.
- 4. Toward the end of fiscal 2013, it awarded a \$500,000 contract to the accounting department of a local university to support a review of the state's cost accounting system. The department intends to carry out the review during 2014 and issue its final report to the state in early 2015. Upon announcing the award, the state made an advance payment of \$100,000

to the department. It intends to pay the balance when the department completes the project to the satisfaction of the state.

- a. Prepare the journal entries that the state would make in fiscal 2013 to record the awards in an appropriate governmental fund. Briefly justify the amount of expenditure that you recognized.
- b. What, if any, adjustment to the amount of expenditure recognized would the state have to make in preparing its government-wide statements?
- c. Describe briefly how the recipients would account, in both fund and government-wide statements for the awards.

# QUESTIONS FOR RESEARCH, ANALYSIS, AND DISCUSSION

- Which of the following do you think a city should classify as "special" items:
  - a. The settlement of an age discrimination lawsuit
  - b. The sale, at a sizable gain, of city-owned land to a private developer
  - c. The unreimbursed cost of providing housing and other assistance to hurricane victims who have relocated from other areas
  - d. A major donation, which the city had actively solicited from a local corporation to support a city science center Explain.
- 2. A state's department of human resources is responsible for providing certain training courses for various agencies within the state. The department does not actually conduct the training itself. Instead it contracts with outside consultants. The department then bills the recipient agencies for the actual costs of the consultants. How should both the department and the agencies account for the payment by the agencies to the department?

A city acquires \$1 million of public safety emergency communication equipment by entering into a capital lease. The city divides its first rent payment of \$135,868 between lease interest and lease principal as follows:

\$60,000 Lease interest Lease principal \$75,868

The city comptroller is not sure how to report the lease payment on the government-wide statement of activities—specifically whether all, none, or a portion of the lease payment should be reported as a public safety expense. What is your advice?

A city on the coast of Florida has incurred losses (including impairment of assets, clean-up costs, additional public safety costs, etc.) of \$50 million owing to a recent hurricane. This was the third time in as many years in which the city was hit by major storms. Should the losses be classified as "extraordinary"?

# OLUTION TO EXERCISE FOR REVIEW AND SELF-STUDY

Journal entries (in millions) Cash \$6.00 Property tax revenue. \$6.00 To record property tax revenues

The general rule is that revenues and expenditures are recognized in governmental funds, such as special revenue funds, on an accrual basis. There are exceptions, but wages and salaries are not among them.

Wages and salaries—expenditure \$4.10 Cash Accrued wages and salaries 0.40

To record wages and salaries

Vacation leave should be accrued as a liability as long as employees have earned the time off and the employer is expected to compensate employees for it in the future. However, only the portion of the liability expected to be liquidated with expendable available financial resources should be reported as a governmental fund obligation. The balance should be reported as a liability on the government-wide statement of net assets.

\$0.20 Vacation pay expenditure \$0.20 Cash To record vacation pay

4. Unused sick leave should be accrued only insofar as employers expect to compensate employees for the leave as a termination benefit. In this case, the leave only accumulates; it does not vest. Thus, the city will not have to compensate employees for leave not taken as a termination benefit. It should charge as an expenditure only the amount that was liquidated with expendable financial resources. It need not report a liability even on the government-wide statement of net assets.

Sick leave expenditure \$0.14

Cash \$0.14

To record sick-leave pay

5. Pension costs should be reported as an expenditure only insofar as they were, or will be, liquidated with expendable financial resources (in this case, actual amounts paid plus amounts to be paid early in the following year). The difference between what the city should contribute and what it actually contributes should be reported as a liability in the government-wide statements.

Pension expenditure	\$0.30	
Cash		\$0.25
Current obligation to		0.05
pension fund		
To record pension contributions	فالواصد المسوار	

6. Since the city accounts for inventories on the purchases method, it should report as an expenditure only the supplies actually acquired. However, it should give balance sheet recognition to material amounts of inventory on hand at year-end, offsetting the addition of the inventory to assets with an increase to fund balance.

Supplies expenditure	\$0.70	
Cash		\$0.50
Accounts payable		0.20
To record supplies purchased		
Supplies inventory	\$0.15	
Fund balance—restricted		\$0.15
To record the inventory on hand at	year-end	

If these transactions were carried out in the general fund the government would have to classify portions of fund balance as nonspendable (for the inventories) and as either assigned or committed (for the encumbrances). However, inasmuch as the transactions are being recorded in a special revenue fund that is legally restricted to support parks and recreation, the entire fund balance is automatically classified as "restricted." Hence no further adjustment is required.

7. Capital assets should be recognized as expenditures as acquired. The proceeds of noncurrent debt issued to finance them should be reported as "other financing sources." Interest and principal on long-term debt need not be recognized as expenditures until they are due.

a.		
Capital assets—expenditures	\$1.00	
Other financing sources—		
installment note proceeds	\$	8.03
Cash		0.2
To record the acquisition of a michaelest		

#### b. Statements

### Statement of Revenues, Expenditures, and Changes in Fund Balance for Year Ending December 31, 2012

Decembe	COL, ZOLZ	٠.
Property tax revenue		\$6.00
Expenditures:	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
Wages and salaries	\$4.50	
Vacation pay	0.20	
Sick leave	0.14	
Pensions	0.30	
Supplies	0.70	
Acquisition of capital		•
assets	1.00	6.84
Excess of revenues over		ζ*
expenditures		(0.84)
Other financing sources:	•	
Proceeds of installment		
notes		0.80
Increase in supplies		
inventory		0.15
Total other financing		
sources		0.95
Excess of revenues and	A Marketine Committee Comm	
other financing sources	•	
over expenditures		0.11
Fund balance, beginning of		•
year	4 ft.	0.00
Fund balance, year-end	7- # P -	\$0.11
14.		***************************************

Note: The increase in supplies inventory must be reported as an "other financing source" since the addition of the inventory to assets was offset directly by a credit to fund balance. It was not credited to a revenue account and thereby not included among the items that affect the "excess of revenues over expenditures."

# Balance Sheet Parks and Recreation Fund as of December 31, 2012

Assets	
Cash	\$0.61
Supplies inventory	0.15
Total assets	<u>\$0.76</u>
Liabilities and fund balances	
Accounts payable	\$0.20
Accrued wages and salaries	0.40
Current obligation to pension fund	0.05
Total liabilities	0.65
Fund balance—restricted	0.11
Total liabilities and fund balance	<u>\$0.76</u>

c. The following assets or liabilities (in millions) would be reported in the city's schedules of capital assets or long-term obligations.

Capital assets Parks and recreation equipment	\$1.00
Long-term obligations. Obligation for vacation pay Obligation for pensions Installment note	\$0.60 \$0.07 \$0.80

d. Impact on government-wide statements

- 1. No difference. The taxes would be recognized as revenue.
- 2. No difference. Wages and salaries would be accrued—same as on the fund statements.
- 3. The entire \$0.26 million of vacation pay would be accrued and charged as an expense.
- 4. The same measurement rules apply to sick leave on both the full and modified accrual basis. In this case, since the leave would not be paid as a termination benefit (it does not vest), only the \$0.14 million paid need be charged as an expense.
- 5. The entire \$0.37 million earned by employees (the required contribution per the actuaries) would be charged as an expense.
- 6. Supplies must be accounted for on a consumption basis. Hence, the \$0.55 million of supplies used would be charged as an expense.
- Capital assets would be capitalized and depreciated. The \$0.05 million (approximately) of interest for the period must be accrued and charged as an expense.