

## Planning

## 2

## Planning for Success: Budgeting

Organizations are not successful by accident. It takes careful thought and planning to excel. What is the organization trying to achieve? Why does it want to achieve that goal? How does it intend to translate that goal into results? The most successful organizations are the ones that specifically address these questions, rather than simply letting things happen. The budget is the organization's plan.

In the sphere of public service, budgeting is complicated by the fact that not all activities are directly related to maximizing the organization's profit. Although earning a surplus is a healthy financial result, governments, health-care organizations, and not-for-profit organizations often undertake activities that will not earn an immediate financial return. What is the benefit from spending additional resources for teaching math in public schools? In the long run, society is likely to benefit. In the budget for the coming year, however, this will simply be an additional expenditure. Planning is accomplished by establishing the mission for the organization, defining a strategy to accomplish the mission, developing a long-range plan that defines the organization's financial and nonfinancial objectives, and preparing specific, detailed budgets that define the resources needed to accomplish its goals and objectives.

The budget describes where resources will come from and how they will be used. As part of the budgeting process, it is essential to communicate goals to the people who must achieve them, forecast future events, develop alternatives, select from among alternatives, and coordinate activities.

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**LEARNING OBJECTIVES**

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**The learning objectives of this chapter are to:**

- define mission and describe the role of mission for public service organizations;
- define strategic plan and discuss the importance of selecting a strategy and identifying goals for the organization;
- explain the role of the long-range or operating plan in setting the organization's specific objectives to aid in achieving its goals;
- define budget and explain how the budget provides the detailed plan for accomplishing the objectives defined in the long-range plan;
- define and discuss different types of budgets, including special purpose, operating, capital, and cash budgets;
- explain the budgeting process, including budget preparation, review and adoption, implementation, and evaluation of results; and
- acknowledge the political aspects of the budget process.

The budget process includes the preparation of budgets; their review, revision, and ultimate adoption; their implementation; and evaluation of the results after the fact. A primary responsibility of management is to control results. Control represents a process of trying to keep to the plan. This is done by motivating people to achieve the plan, evaluating performance of both organizational units and individual persons, and taking corrective action when things are not going according to plan.

These issues are discussed in this chapter. Chapter 3 picks up where this chapter leaves off, looking at a variety of additional budgeting issues for governmental, health, and not-for-profit organizations. It examines a number of different types of budget presentations and ways to organize budgets, and also discusses a variety of budgeting techniques. That chapter finishes with a discussion of some unique aspects of budgeting for governmental organizations.

## MISSION

The organization's **mission** represents its *raison d'être*. Public, health-care, and not-for-profit organizations have missions that relate to providing a public service. Their mission may be to improve society by providing wide access to culture—through museums, opera, ballet, or symphony. Or the mission may relate primarily to healing the ill or feeding and sheltering the poor. For government, the mission may be to provide essential common services such as police, education, sewers, and fire protection.

For public, health, and not-for-profit organizations, then, profitability is a means to an end rather than the end itself. To some extent, the health-care industry is becoming more and more a part of the for-profit sector. Similarly, the for-profit education sector has grown. For such proprietary public service organizations, profits do play an important role in the organization's mission. However, their profit motive must be balanced with the public service elements of their mission.

Chapter 1 introduced Meals for the Homeless (Meals)—a hypothetical organization. One of the first activities for Leanna Schwartz, the new executive director of Meals, would be to examine the **mission statement**. To lead the organization, she must be thoroughly familiar with what the organization hopes to achieve.

A good mission statement answers five questions. The first three define the **domain** of the organization. They are, “*What* does the organization plan to do?,” “*Who* will it serve?,” and “*Where* will it operate?” The fourth is, “*How* does the organization plan to deliver its services?,” and the final question is “*Why* has Meals for the Homeless chosen its specific social purpose?” Here is the mission statement of Meals:

Meals for the Homeless recognizes the plight of the homeless residents of Middle City, and we hold that society must ensure at least some minimal level of food security for these individuals. It is, therefore, the mission of Meals for the Homeless to provide food to the homeless in Middle City whenever a homeless individual's nutritional needs are not being met by other sources.

Like all good mission statements, the mission of Meals includes both breadth and limitations. A mission should be targeted. If the goal is to do everything for everyone, the mission is unlikely to be achieved and the organization will lack clear direction. If the mission is too narrow, it may not provide the organization with sufficient challenge to sustain itself over time.

In the mission statement for Meals, there is breadth in that the goal of the organization is to meet the nutritional needs of every homeless person who cannot get food from other

sources. The limitations are that the organization is geographically limiting its efforts to Middle City and to supplying food. It is not providing jobs, shelter, medical care, or other services.

## STRATEGIC PLAN

Once the organization has a clearly defined mission, it can develop its **strategy** for accomplishing that mission. The **strategic plan** defines the primary approaches that the organization will take to achieve its mission. Generally, strategic plans do not have specific financial targets. However, they set the stage for specific, detailed budgets.

The mission of Meals is to ensure an adequate supply of nutritious food for the homeless. It could attempt to achieve that mission by a large number of approaches. Meals could be a lobbying organization, raising money and using it to lobby for legislation requiring the government to provide nutritious food to the homeless. Another strategy would be to start a “take a homeless person to dinner” campaign. This approach would consist primarily of advertising, with a goal of encouraging the general public to buy meals and give them directly to homeless people. The general strategy that Meals has taken is to solicit donations of food and money, and to use those resources to prepare and serve meals directly to the homeless. Meals uses two delivery trucks and one soup kitchen to carry out this strategy. This was pretty much the way things had been for the past 10 years, despite a growing number of homeless in Middle City.

When Leanna Schwartz became executive director of Meals she decided that it had a clear mission. It also had an overall strategy or approach for accomplishing that mission. However, it had no broad goals. As a result, as the needs of the homeless grew, Meals had not responded. Therefore, as one of her first priorities, Schwartz decided to form a subcommittee from her board of directors to establish a more formal strategic plan, including a set of goals for the organization. The strategic plan would serve as a link between the mission and activities that the organization would undertake to achieve that mission.

As part of the new strategic plan, Meals developed the following goals:

- Directly provide nutritious meals to the homeless of Middle City.
- Directly provide nutritious meals to the indigent in Middle City’s public housing.
- Increase the fraction of the target population served from 20 percent to 60 percent within 5 years.
- Expand funding sources to cover the increase in services, including corporate sponsorships and direct fundraising.

Schwartz was pleased with this set of goals. She believed that it pointed the organization in the direction its mission dictated. She also believed that it gave her some tangible targets to work toward. The next step would be to translate the goals of the strategic plan into attainable objectives.

## LONG-RANGE PLAN

While the strategic plan establishes goals and broad strategies, the **long-range plan** (sometimes referred to as the operating plan) considers how to achieve those goals. Long-range plans establish the major activities that will have to be carried out in the coming 3 to 5 years.

This process provides a link between the strategic plan and the day-to-day activities of the organization. Organizations that do not prepare a long-range plan are often condemned to just sustain current activities, at best. Many managers simply try to replicate the current year's results when they plan for the coming year. They take whatever has happened, add a few percentage points for inflation, and assume that they have an adequate plan for the future.

The problem with that approach is that after 5 years the organization will likely be exactly where it is today. It will be providing the same quantity and quality of services. It will not be able to look back at where it was 5 years ago, compare that to where it is today, and find that a satisfying amount of progress has been made. Most public service managers believe that they are trying to achieve something. They do not work in the field just to collect a paycheck, but rather to provide some service to society. Given that, it does not make sense to try to sustain operations without any significant gains over time.

Management needs vision. Great managers are those individuals under whose stewardship organizations make great strides forward. In some cases, vision may come from inspiration that only a few people ever have. In many cases, however, vision is a result of hard work and careful planning. It is the result of taking the time to think about the organization's mission, form a strategic plan with goals, and then establish the tactics to carry out that plan and achieve the goals.

For example, one element of the strategic plan for Meals is expansion of meals provided from 20 percent to 60 percent of the target population. This cannot be achieved by simply carrying out the existing daily routine, day after day, year after year. Nor can it happen overnight. A long-range plan must be developed that will specify how the organization expects to achieve that goal.

The managers of Meals will have to determine what must happen to attain its goals. Schwartz would likely start by having conversations with many interested parties about how best to get meals to the poor of the city. Then, a variety of approaches or tactics might be considered. Finally, a long-range plan will be formulated.

The long-range plan should focus on both financial and nonfinancial issues. For example, there are many dimensions to quality in providing a service. How long do the homeless have to wait in line for the meal? Do the homeless like the way the food tastes? What is the relationship between each soup kitchen and its community? Organizations, especially public service organizations, need to be concerned with more than just the number of units of service provided (**output**). The number of meals served is important. But Meals' long-range plan should more broadly help it to achieve its desired **outcomes**. Outcomes are the results that the organization is trying to achieve. These objectives are not all easily quantified in financial terms.

For example, Meals' mission calls for providing the homeless with an adequate amount of nutritious food. Therefore, a desired outcome is providing the homeless with nutritious meals. To achieve its mission, Meals might adopt a strategy of ensuring its meals meet all federal government daily recommended levels for a balanced diet. The long-range plan needs to include specific tactics for that strategy. Meals' long-range plan may indicate that every meal must contain some protein, fat, carbohydrates, vegetables, and fruit. The organization will only deem itself to be effective if it not only provides meals to enough homeless, but also provides meals that meet its nutritional targets.

Some objectives are more directly tied to financial issues. After gathering input and considering choices, Schwartz might decide that the most efficient way to expand from 20 percent to 60 percent coverage (the goal) would be to add three new locations, strategically located to be readily accessible to the largest number of homeless, and to add four more vehicles to its current fleet of two (specific tactics to achieve the goal). These changes will require specific financial resources.

All these tactics could probably be carried out within 3 months, except that the organization does not have the money for the expansion. Money will be needed to buy equipment and

vehicles, pay rent, buy food, and hire staff. The long-range plan will also have to address how to raise the money and when to spend it (more tactics). A reasonable long-range plan for Meals might include the following objectives:

- Year 1: Establish a fundraising campaign and begin fundraising. Raise enough money to open one new site.
- Year 2: Add a food distribution/soup kitchen location. Raise additional money to acquire and operate a vehicle and open another location. Solicit more restaurants for leftover food donations.
- Year 3: Add another food distribution/soup kitchen location and a new vehicle. Raise additional money to acquire and operate a vehicle and open another location. Solicit more restaurants for leftover food donations.
- Year 4: Add another food distribution/soup kitchen location and a new vehicle. Raise additional money to acquire and operate two vehicles. Solicit more restaurants for leftover food donations.
- Year 5: Add two new vehicles. Raise additional money to begin replacement of old kitchen equipment and old vehicles. Get enough contributions to at least reach a steady state in which replacements take place as needed.

As can be seen from the preceding objectives, unless planning is done in Year 1 to raise money, the organization will never be able to undertake the acquisition and expansion in Years 2 through 5. The organization cannot be satisfied with raising enough to get through the coming year. For it to thrive, rather than merely survive, it must think ahead. The long-range plan provides the opportunity to think ahead prior to making budgets for the coming year.

The objectives included in the long-range plan can be thought of as quantified targets. These targets can relate to both inputs and outputs. For example, we can think in terms of specific fundraising objectives, specifying the total dollar amount of donations we plan to receive each year over the coming 5 years. We can also think in terms of the specific number of delivery trucks to be purchased. These targets or objectives make it possible to create specific, detailed budgets for the organization in financial terms.

## BUDGETS

What is a **budget**? It is simply a plan. The plan indicates management's objectives and shows how it expects to obtain, pay for, and use resources to achieve those objectives. In some cases, the plan may be the result of enacted legislation. The budget indicates the amount of money that an organization expects to earn and receive from all sources for the period it covers, which is usually a year. It also indicates the amount of resources the organization expects to use in its operations, and the amount of money that it will pay for those resources. Thus, it provides managers with a detailed action plan. Based on the information in the budget, managers make decisions that they believe will help them carry out the plan and therefore accomplish the organization's objectives.

Budgets must be developed to plan for the accomplishment of goals and objectives. The process requires that a number of predictions and decisions be made. How many homeless will there be next year? What percentage of the homeless will be children? How many workers should the organization assign to fundraising? How many restaurants should be solicited for food? What vehicles will be purchased, and at what price? How much will kitchen employees be paid per hour and in total for the coming year? How much money will Meals receive in donations each month of the year? All these questions and many more must be answered in the process of developing the budgets for the organization.

Virtually all managers become involved in creating and using budgets. Budgeting is not the sole domain of financial managers. Budgets establish the amount of resources that are available for specific activities. As we learn from economics, resources are not unlimited. They must be used wisely. Organizations attempt to do this by planning the activities they will undertake and how much they will spend on them. However, budgets do not merely limit the resources that can be spent. They help the organization achieve its goals and objectives.

Budgets help the manager understand whether the organization expects that its financial inflows will exceed its outflows and a surplus (profit) will occur, or if outflows will exceed inflows, resulting in a deficit (loss). If the latter is the case, the budget may indicate how the organization plans to cover that deficit without having to cease operations. As discussed in detail below, how those inflows and outflows are measured and timed may make all the difference in assessing an organization's budgetary expectations.

Budgeting for governments as compared with budgeting for other types of public service organizations is significantly different. It is common for decisions by the board of trustees of a not-for-profit organization to require that the budget for the organization not show a deficit. In carrying out the plan, however, many times a not-for-profit organization will actually spend more than the amount in the approved budget, sometimes resulting in a deficit. For governments, however, by law the amount that is actually spent generally cannot exceed the budgeted amount. As a result, governments tend to place more controls on spending, and the options available to government managers are often more limited than those available to managers of other types of organizations. Also, governments overwhelmingly focus their planning on cash inflows and outflows, whereas not-for-profit organizations generally take a more comprehensive approach to budgeting.

Often, balancing the budget results in limiting services provided. This is true for all kinds of public service organizations. It is frustrating to managers to have to limit the amount of services provided to the organization's clients. However, it is worse to run out of money and to have to stop providing any services at all. Failure to plan carefully can result in a level of spending that exceeds an organization's resources and leads to a financial crisis; in some instances, the organization will even be forced to cease operations.

### Special Purpose Budget

Although most organizations prepare broad annual budgets that are intended to include all their activities for the year, at times a special opportunity may arise. An organization may wish to consider undertaking an activity, but there is no money set aside for it in the annual budget. This does not necessarily create an insurmountable roadblock. At any time during the year, a **special purpose budget** can be developed for a specific project, program, or activity. The organization can then decide whether it wishes to undertake the activity based on the proposed special purpose budget.

For example, suppose that Steve Netzer, the new chief operating officer (COO) of the Hospital for Ordinary Surgery (HOS), has an idea for a program that could help the public and might generate additional patients for the hospital. He would like to send nurses to local supermarkets to offer free blood pressure screenings. The hospital would pay for the nurses and the supplies. The costs of the nurses and supplies are **expenses**. Expenses are the resources used or consumed in the process of providing goods and services. The hospital expects to earn **revenues** from supermarket customers who become patients as a result of medical problems uncovered by the screening. Revenues are the resources the organization earns in exchange for providing goods or services.

Will the extra revenues from these new patients be enough to cover the expenses of care provided to them as well as the expenses related to the screening? A special budget comparing all the expenses and revenues can provide the information needed to answer this question.

If the revenues exceed the expenses as a result of the program, then a **profit** will be earned. Profit is simply the excess of revenues over expenses and is sometimes referred to as a surplus or as net income. If the expenses exceed the revenues, the excess of expenses over revenues is a loss or deficit. Once the expected profit or loss is known, the organization can decide if it would like to implement the plan. It is not necessary to wait until the next annual budget cycle to consider and implement special budgets.

Depending on the financial magnitude of the special activity, the organization's management may be able to approve the activity, or it may require approval by the board of directors, governors, or trustees. In the case of governmental bodies, the additional activity may constitute a change in the overall budget, and it is essential to ensure that such a change is legal.

## CASE STUDY

### SPECIAL PURPOSE BUDGET

To develop a more detailed special purpose budget example, assume that Dwight Ives, the town manager of Millbridge, received a call from one of the churches in town. The church had a very rudimentary accounting system, recording cash receipts when received and cash payments when made. As long as the church had money in the bank, its governing body assumed that everything was okay. When it ran out of money, the church made special appeals to its congregants. Over the years, this had created several financial crises, such as the winter when the boiler died and the church had no heat for weeks. In that instance, as now, the parish priest, Father Purtell, had asked his friend the town manager for advice on financial planning.

Father Purtell's current problem involved a proposal by some congregants to send a group of teenagers to the Holy Land for about two weeks during the coming summer. The concept called for the families of the students to pay part of the cost, the students to hold fundraisers, and the church to provide a subsidy. The church elders believed that the church could afford to contribute \$5,000 to the program, but that was all. Father Purtell had no idea how to decide how much to charge the families and whether the trip could be arranged within the limits of the subsidy. He did know that a decision must be made soon so that there would be time to enroll teenagers in the program and make all the necessary airline and hotel reservations. He called on Dwight for some advice. What did he think? Could the church run the program? He was worried about the consequences if it turned out that the church had to provide a subsidy above the \$5,000.

Dwight's first questions involved whether Father Purtell was comfortable with the basic concept: Was the church in the business of setting up trips to Israel? Did such a trip make sense, given the mission of the church? Father Purtell explained that he strongly believed that the concept of the trip was an appropriate church activity. First, the church was always struggling with developing programs to keep teenagers active with supervised activities during the summer months. Second, the visit to the Holy Land would include stops in Bethlehem and Jerusalem. The potential positive religious experience for young impressionable minds could not be surpassed by any other program he could imagine. Since the program did fit nicely with the overall mission of the church, Dwight indicated that the next step was to develop a plan to determine if the program could work. Only by developing a plan could one have an idea of how much to charge families and whether the program would likely be financially feasible.

Dwight suggested that they start the plan by calculating the profit or loss from the program. “How many participants are you expecting, and what will you charge them?,” asked Dwight. “That’s the problem,” Father Purtell replied. “I want to have enough participants and charge them the right amount so that the program can work. Can’t we calculate that? Maybe we should start with the costs and then determine the necessary price.”

Dwight explained that he thought the father was starting the process without gathering enough background information. The first element of the plan should be an environmental scan. What other trips to the Holy Land are available? How are they similar and dissimilar from what the church had in mind? What do other organizations charge for the trip? Why might some people prefer what the church was offering? Even if the trip fit with the church mission, was there really a need for the church to get into this new venture? Dwight cautioned that one must look around outside the organization to see what others are or are not doing before developing a reasonable plan for the organization’s proposed activity. Father Purtell agreed, and they scheduled a meeting for one week later.

At the next meeting, Dwight Ives and Father Purtell discussed the results of the environmental scan. The priest was grateful for having taken the approach. In his mind, he relayed to Dwight, he had assumed that at least half of the teenagers in his parish would jump at the opportunity to go on the church-sponsored trip. Having talked to travel agents, school authorities, a group of interested parents, and others, he had learned a lot. In fact, there were few if any formalized programs that would compete with the church for a trip to the Holy Land. However, a number of travel agents had attractive family packages, and some families had already purchased airline tickets and made hotel reservations for family trips to the Holy Land. The travel agents also had pointed out that many families make travel plans early, with a variety of destinations, and he should consider that. In fact, based on conversations with parishioners, he found that to be the case. He also found out that many of the teenagers already had plans to return to summer camps they had gone to in the past.

Based on his environmental review, he now believed that he could attract a group of 30 to 50 teenagers if the price was right. Travel agents were charging about \$2,500 per person for a similar trip. His trip had the added advantage of church chaperones and the benefit of the youngsters being able to spend a lot of time with other children their age.

Dwight thought that by using this they could start to develop a specific plan. He explained that a budget was needed to decide if the project was feasible. He sat down with the father near his computer and turned on a spreadsheet program, Excel.<sup>1</sup> Dwight suggested that they set up the budget in terms of anticipated receipts and payments related to the program. He typed in headings, resulting in Table 2-1.

“Whoa!” Father Purtell said. “What is that line for **uncollectibles**?” Dwight explained that it was certainly likely that some people would make a deposit but would never fully pay for the trip. It would be very risky to assume that everyone would pay the full amount charged. They then discussed the fact that to estimate the revenues they would need to project both an anticipated number of participants and an estimated price. They would also need to know what types of expenses would be incurred. They gave this some thought, trying to anticipate all the different things on which money would have to be spent. Working together, they generated Table 2-2.

The priest decided that 30 teens would be an easily obtainable goal, and he wanted to start out seeing if the church could afford the program making conservative assumptions. Line 6 in Table 2-2 shows the 30 teens. The value in line 6, column B, was then multiplied

<sup>1</sup> Excel is a registered trademark of Microsoft. There are a number of other spreadsheet programs, such as Apple Numbers, Google Sheets, Gnumeric, and Open Office.org Calc.



**TABLE 2-1** Holy Land Trip—Special Purpose Budget

|    | A                           | B | C |
|----|-----------------------------|---|---|
| 1  | <b>CHURCH OF MILLBRIDGE</b> |   |   |
| 2  | <i>Budget</i>               |   |   |
| 3  | <u>Holy Land Trip</u>       |   |   |
| 4  |                             |   |   |
| 5  | <b>PROJECTED RECEIPTS</b>   |   |   |
| 6  | Charges                     |   |   |
| 7  | Less Uncollectibles         |   |   |
| 8  | Net Charges                 |   |   |
| 9  | Fundraising                 |   |   |
| 10 | Total Receipts              |   |   |
| 11 |                             |   |   |

**TABLE 2-2** Holy Land Trip—Special Purpose Budget: Draft

|    | A                             | B                  | C             | D            |
|----|-------------------------------|--------------------|---------------|--------------|
| 1  | <b>CHURCH OF MILLBRIDGE</b>   |                    |               |              |
| 2  | <i>Budget</i>                 | <i>Projected</i>   | <i>Per</i>    |              |
| 3  | <u>Holy Land Trip</u>         | <u># of People</u> | <u>Person</u> | <u>Total</u> |
| 4  |                               |                    |               |              |
| 5  | <b>PROJECTED RECEIPTS</b>     |                    |               |              |
| 6  | Charges                       | 30                 | \$2,000       | \$ 60,000    |
| 7  | Less Uncollectibles           |                    |               | (1,800)      |
| 8  | Net Charges                   |                    |               | \$ 58,200    |
| 9  | Fundraising                   | 30                 | 250           | 7,500        |
| 10 | Total Receipts                |                    |               | \$ 65,700    |
| 11 |                               |                    |               |              |
| 12 | <b>PROJECTED PAYMENTS</b>     |                    |               |              |
| 13 | Airfare                       | 32                 | \$1,000       | \$ 32,000    |
| 14 | Hotels                        | 30                 | 1,200         | 36,000       |
| 15 | Chaperone Salaries            | 2                  | 3,000         | 6,000        |
| 16 | Food                          | 32                 | 600           | 19,200       |
| 17 | Admission Fees                | 32                 | 250           | 8,000        |
| 18 | Guide                         | 1                  | 3,000         | 3,000        |
| 19 | Local Transport (Bus)         |                    | 2,500         | 2,500        |
| 20 | Entertainment                 | 32                 | 300           | 9,600        |
| 21 | Other                         | 32                 | 200           | 6,400        |
| 22 | Contingency Fund              |                    |               | 2,500        |
| 23 | Total Payments                |                    |               | \$125,200    |
| 24 |                               |                    |               |              |
| 25 | Projected Surplus / (Deficit) |                    |               | \$ (59,500)  |

by an assumed charge of \$2,000 (line 6, column C) to get the total charges of \$60,000. After discussion, Dwight and the priest decided to use 3 percent of total charges as an estimate for uncollectibles. Assuming that each student not only paid \$2,000, but also raised \$250 through fundraising activities (e.g., bake sales, car washes), there would be an additional \$7,500 in receipts. Dwight believed this was a bit ambitious, but the father thought it was an attainable goal. He felt that if each teen committed to raising those funds, they would value the trip more and get more out of it. Dwight remained skeptical.

Based on his discussions with travel agents, Father Purtell was sure he could get airfare for \$1,000 or less. With a guarantee of 30 or more teens, the price would probably be substantially less. To be conservative, however, they used the \$1,000 airfare. The father decided that there would have to be one chaperone for every 15 teens. With 30 teens anticipated, there would be two chaperones, and their airfare was included.

They would need hotels for 15 nights. Hotel expenses were calculated based on what the travel agents said they could get, assuming double occupancy. The hotel expenses were calculated, therefore, at \$80 per person per night. For \$160 per night per room, they should be able to get something reasonable. The room cost was therefore \$1,200 per teen ( $\$160 \text{ per room} \div 2 \text{ teens per room} \times 15 \text{ nights}$ ). The travel agents assured him that hotels would provide free rooms for the chaperones if he booked rooms for the rest of the group.

The rest of the payment or expense budget was generated based on similar discussions, through line 21. When they got to line 22 Dwight suggested a contingency fund. "What for?" asked Purtell. "What will that money be used for?" Dwight explained that he had absolutely no idea. "That's why it's called a contingency fund. If we could identify something we need to spend money on, we'd list it specifically. This is to protect the church against costs it does not anticipate. Remember, you have no experience running trips of this sort." They finally agreed on a lump sum \$2,500 contingency fund.

When the projected deficit was calculated, Father Purtell was devastated. "We only set aside \$5,000 for a subsidy, not \$60,000!"

Dwight was less dejected. "A budget is a plan," he pointed out, "but we can work some more on the plan. Things don't always work out the way you first plan them. That's why we go through the planning process rather than just going full steam ahead." He suggested that the father spend a week working on each revenue and expense category, getting more information, and making some choices about the existing plan.

The next week they met again. "I've made some decisions," the father explained. "Let's put them in the computer and see what happens." He then relayed the following details to Dwight.

1. Raise the price to \$2,500.
2. Raise the number of teens to 50.
3. Lower the airfare to \$600.
4. Lower the hotel cost to \$40 per person per night.
5. Change the chaperone salaries to zero.
6. Cut the admission fees per person in half.

Dwight started to protest about several of the changes, but he changed the numbers in the spreadsheet, which automatically recomputed all the math, resulting in Table 2-3. The priest was elated when he saw the result.

"But how do you justify all of these changes?" Dwight gasped.

"Aha!" responded Father Purtell. "As you said, I just had to examine the plan and see what could be done about it."

"But you can't expect to raise the price and raise the number of participants," Dwight argued. "That flies in the face of the laws of supply and demand."

**TABLE 2-3** Holy Land Trip—Special Purpose Budget: Final

|    | A                                    | B                  | C             | D                 |
|----|--------------------------------------|--------------------|---------------|-------------------|
| 1  | <b>CHURCH OF MILLBRIDGE</b>          |                    |               |                   |
| 2  | <i>Budget</i>                        | <i>Projected</i>   | <i>Per</i>    |                   |
| 3  | <b>Holy Land Trip</b>                | <b># of People</b> | <b>Person</b> | <b>Total</b>      |
| 4  |                                      |                    |               |                   |
| 5  | <b>PROJECTED RECEIPTS</b>            |                    |               |                   |
| 6  | Charges                              | 50                 | \$2,500       | \$125,000         |
| 7  | Less Uncollectibles                  |                    |               | (3,750)           |
| 8  | Net Charges                          |                    |               | \$121,250         |
| 9  | Fundraising                          | 50                 | 250           | 12,500            |
| 10 | <b>Total Receipts</b>                |                    |               | <b>\$133,750</b>  |
| 11 |                                      |                    |               |                   |
| 12 | <b>PROJECTED PAYMENTS</b>            |                    |               |                   |
| 13 | Airfare                              | 54                 | \$ 600        | \$ 32,400         |
| 14 | Hotels                               | 50                 | 600           | 30,000            |
| 15 | Chaperone Salaries                   | 4                  | 0             | 0                 |
| 16 | Food                                 | 54                 | 600           | 32,400            |
| 17 | Admission Fees                       | 54                 | 125           | 6,750             |
| 18 | Guide                                | 1                  | 3,000         | 3,000             |
| 19 | Local Transport (Bus)                |                    | 2,500         | 2,500             |
| 20 | Entertainment                        | 54                 | 300           | 16,200            |
| 21 | Other                                | 54                 | 200           | 10,800            |
| 22 | Contingency Fund                     |                    |               | 2,500             |
| 23 | <b>Total Payments</b>                |                    |               | <b>\$136,550</b>  |
| 24 |                                      |                    |               |                   |
| 25 | <b>Projected Surplus / (Deficit)</b> |                    |               | <b>\$ (2,800)</b> |

“No,” said the priest. “It doesn’t. You see, I could tell that I would have to raise the price, and I know that I will probably only get 25, or perhaps even 20 at the higher price. So I went over to my colleague, Father Stewart, in West Oak and proposed that some of the teens from his parish come on the trip. Between the two parishes, we will be able to get 40 to 50 teens at the higher price. I’m sure of it. And if I’m wrong, we can cancel the trip with no lost money.”

“Well, that explains the price and the number of teens,” Dwight responded. “What about the other changes?” Father Purtell answered, “First, I realized that with the additional teens we would need at least one more chaperone. I started thinking about whom we could hire and came up with the most wonderful idea. Several of our adult parishioners would love to take a trip to the Holy Land but cannot afford it. If I can pay the airfare, hotel, and all expenses, they would be more than happy to go as chaperones and not charge any salary. Father Stewart and I decided that two parent chaperones would come from each parish.

“When I went to the travel agent and mentioned 54 people, we were able to get a substantial group discount on the flight and on all admission charges as well. The hotel cost is more of a problem; we will have to have four teens to a room. The rooms all have two double beds. They can double up or they can bring sleeping bags and take turns sleeping on the floor. I got our parish teen council involved, and it was their suggestion as a way to lower the cost per person. I found that getting more input in the budgeting process can open your eyes to things that you would not think of on your own. The four chaperones will share two rooms, which the travel agent will get for free when we book the rooms for the teens. We still have to rent only one bus for the whole group.”

“Well, this seems good, but what if you get only 40 teens instead of 50?”

“Oh, I don’t see that as a problem. The only reason that would occur is the price. Now, however, as you can see, we are projecting only a \$2,800 deficit. And the deficit will only be that high if we need to use the entire \$2,500 contingency fund. Our church is still willing to put up a \$5,000 subsidy. I convinced Father Stewart to come up with a similar \$5,000 subsidy from his parish. Even with the \$2,800 deficit, we still have over \$7,000 available for financial aid for those teens who cannot afford the full amount. We will give scholarships.

“I must say, this has worked out splendidly. If I hadn’t come to you, we might have just done the program without really planning the finances. We probably would have lost nearly \$60,000. It would have been a disaster. And I’m glad you told me not to be discouraged by our first plan. When I saw the \$59,500 deficit, my first reaction was just to assume we couldn’t do this wonderful program. But by having the budget, I had a plan to work with. You were so right to encourage me to reexamine each element of the plan to see what changes could be made. I was able to make changes and still accomplish the overall goal of getting teens over to the religious sites in the Holy Land. And the way the revised budget has come out, we will be able to send 50 teens instead of just 30!”

**LESSONS FROM THE CASE** This special purpose budget case study raises a number of important points. First, there is no magic to budgeting. Budgeting requires thought. Does the planned project fit with the organization’s mission? Does it make sense to undertake this, given what other organizations are already doing? Can the organization afford to undertake the project? Budgeting requires estimating all the likely receipts and all the likely payments. The more facts that are available, the better. Knowing the airline fares, the hotel prices, the willingness of teens to live four to a room, and the admission rates at various attractions leads to a more accurate budget. Inevitably, some assumptions must be made, such as the number of participants. The assumptions should be reasonable. A contingency plan should exist in case the assumptions do not all come out as anticipated. Moreover, the process is very likely to require a number of preliminary drafts and revisions before a feasible plan is developed and accepted by all parties. Even so, things may not occur according to the budget. Once approved, efforts must be made to try to keep as closely to the plan as possible.

### The Master Budget

Although some budgeting is done on an ad hoc basis, as in the case study discussed previously, most budgeting is done on a regular basis. The **master budget** incorporates and summarizes all the budget elements for the coming year. These elements provide the specific detail to accomplish both the routine ongoing activities of the organization and the coming year’s portion of the long-range plan. By incorporating service volume, prices, costs, cash flow, and capital spending, the master budget becomes the plan for everything the organization will be doing during the coming year. It is prepared each year.

The main elements of the master budget, sometimes called the comprehensive budget, are the **operating budget** and the **financial budget**. The operating budget presents a plan for revenues and expenses for the **fiscal year**. It poses the question: Do we expect to earn more resources during the budget period than we expect to use during the period? The financial budget includes a **cash budget** and a **capital budget**. The cash budget focuses primarily on

the coming year. It asks the question: Do we expect to receive enough money (from clients, residents, donors, etc.) during the budget period to make the payments (for salaries, supplies, rent, etc.) that we expect to make during that time? The capital budget plans for cash receipts and payments specifically for resources that will provide service for a period longer than just the coming year. Capital budgeting is discussed in Chapter 5.

Operating budgets estimate organizations' various types of revenues and expenses, while cash budgets estimate their cash receipts or payments. Payments are also referred to as disbursements or outlays. Governments, meanwhile, tend to refer to expenses as **expenditures**. Nongovernmental organizations may use the term "expenditures" synonymously with "cash payments." For example, for the HOS, the major sources of revenue in the operating budget may be patient revenue, donations, investment income, gift shop sales, and cafeteria sales. For the town of Millbridge, revenues would likely consist of real estate taxes, state aid, sewer taxes, and user fees. Meals is likely to have such items as donations, grants, and government aid. For all three types of organizations, typical expenses (or expenditures) would include salaries, supplies, and rent, among others.

Capital budgets focus on the acquisition of long-term resources. Expenses such as salaries, supplies, and rent would not appear in a capital budget. Instead, one might see a listing of pieces of equipment and/or buildings. Revenues are often not included in the capital budget, which focuses on the cost of, and the justification for, the acquisition. However, revenue flows that result from acquiring the items in the capital budget are considered in the capital budgeting process. Also, if old equipment or buildings are sold as they are replaced by new equipment and buildings, the revenues from the proceeds of those sales may be included in the capital budget.

**THE OPERATING BUDGET** The operating budget is a plan for expected revenues and expenses. For-profit organizations generally earn revenues in exchange for providing goods and services. Not-for-profit organizations may earn revenues in a similar fashion and may also receive support from contributions or grants. Governments may earn revenues from the sale of goods and services, but primarily they are entitled by law to collect tax revenues to be used to provide services. Expenses are the resources that the organization uses or consumes in carrying out its activities. There is often a gap between when an organization provides goods or services and when it receives cash payments for providing those goods or services. Similarly, there is often a gap between when an organization consumes resources in the course of providing goods or services and when it makes cash payments for those resources.

**Revenues and Other Support.** When patients are treated at HOS, they receive bills for the care provided. Suppose that a patient is billed \$5,000 for the care he or she has received. HOS may generate \$5,000 in revenue by merely providing the care and billing the patient. Alternatively, HOS may generate the revenue only after it receives payment for the care that it provided. It depends on HOS's accounting system, and this is discussed further below.

The basic approach to developing an operating budget is not substantially different from the approach taken in preparing the special purpose budget. One must consider all possible sources of revenue or other **support**; support includes cash donations and other contributions that are in support of an organization but do not directly derive from that organization's delivery of goods and services. Revenues can be calculated by predicting the volume of goods or services to be provided and their unit price. Multiplying the price per unit by the volume of units provides the organization with an estimate of its revenues.

In the case of governments, revenues are often calculated by multiplying tax rates by the tax base. For example, assume that in Millbridge the real estate has a total assessed value of

\$200 million. That amount is referred to as the town's tax base. The town's tax rate might be stated as \$50 per \$1,000 of assessed value. This means that the taxpayer would have to pay \$50 for every \$1,000 of assessed property value. Therefore, if the taxpayer's house is assessed at \$300,000, the taxes would be \$15,000. For the town as a whole, the taxes would be \$10 million ( $\$200 \text{ million tax base} \times [\$50 \div \$1,000]$ ).

When revenues are listed in the operating budget, they are generally separated by source. Suppose that the state gives the town of Millbridge \$2 million in aid for use in the school system. The town charges a sewer tax, which is \$80 per year for each residential property. There are 10,000 homes in the town, yielding a total sewer tax of \$800,000. Finally, the town charges users of the town pool, golf course, and tennis courts varying fees. Based on the number of users of each facility and the prices charged, the town expects to bring in a total of \$500,000 in user fees. In preparing its budget for the coming year, the town would likely have a listing such as the following:

| Town of Millbridge<br>Operating Budget<br>Projected Revenues |                     |
|--|---------------------|
| Real Estate Taxes  | \$10,000,000        |
| State Aid  | 2,000,000           |
| Sewer Tax  | 800,000             |
| Recreation User<br>Fees                                      | <u>500,000</u>      |
| Total Revenues   | <u>\$13,300,000</u> |

There is often great latitude in the budgeting process. Except in governmental situations, where laws may dictate the format and content of budgets, organizations can develop their budgets in any way that the managers believe will be most useful. Therefore, unless prohibited by law, Millbridge's revenue budget might be grouped as taxes and other sources, as follows:

|                |                     |
|----------------|---------------------|
| Taxes          | \$10,800,000        |
| Other Revenues | <u>2,500,000</u>    |
| Total Revenues | <u>\$13,300,000</u> |

In this format, real estate and sewer taxes have been grouped together. Other groupings are possible as well.

In addition to having a revenue budget that shows the revenues by each major source, there should be detailed supporting schedules backing up each line on a budget. This is true for an expense budget as well. These schedules provide the information that explains the derivation of each number that appears on the budget. For example, each piece of property and the assessed value of that property should be listed. These supporting schedules are not a part of the finished budget. However, they provide important backup information, especially if questions arise before the budget is adopted.

In preparing the revenue budget, it is extremely important to consider all possible sources of revenue or support. In addition to taxes or charges for services, these sources might include ancillary sources such as gift shops or restaurants, endowment income, gifts, or grants.

In predicting revenue for the coming year, managers should consider many issues. Managers need to be concerned not only with what they might want to do, but also with other factors such as the economy, inflation, growth, employment, and interest rates. In some cases, formalized forecasting of variables is needed to arrive at a sound budget. For example, Millbridge's town manager, Dwight Ives, would likely realize that he has to undertake a commonsense review of the likely impact of the economic environment on the organization. He would plan to use a variety of forecasting approaches to predict variables that would affect the town's revenues. (Forecasting is discussed in Chapter 3.)

Some variables are uncontrollable. However, not everything is outside of the control of the manager. For example, managers often have to make investment decisions. If the organization has money that it will not be using right away, it must decide how to invest that money. Managers can decide to invest in safe investments with low rates of return or can seek out somewhat riskier investments that have higher possible returns.

Also, things like user fees are subject to some degree of control. Suppose that last year the town sold 3,000 season pool passes at \$100 each. Since the town's population is fairly stable, the forecast is for similar results in the coming year. However, that represents a forecast of what will happen rather than a budget. Before the budget can be finalized, it is necessary to consider factors such as the impact of raising or lowering the price, competition from new county facilities, and the potential impact of making improvements at the town's pool.

Although it is true that not everything is out of the manager's control, neither can managers do whatever they want. In preparing the previously mentioned revenue budget, Ives made assumptions of modest increases in taxes and user fees. He knows, however, that if the expense budget is higher than the revenue budget, he will need larger increases in taxes. Such increases will be politically difficult to attain. At that point, there will be difficult negotiations with the mayor and town council over whether to increase taxes or cut services.

*Expenses.* Some organizations budget revenues before expenses, and some do the opposite. The order is not critical, since it is likely to be necessary to make revisions to arrive at an acceptable budget in any case. In many situations, the revenue and expense budgets will be prepared simultaneously. For example, government agencies may be preparing their expenditure budgets individually, while the central government administration is estimating total revenues that will be available.

Dwight Ives's first attempt at developing a budget for expenses—here, they are expenditures—considered all the costs currently incurred as well as additional expenditures required to incorporate elements of the town's long-range plan. Aggregating all the individual costs required to operate the town resulted in the following budget for expenditures:

| Town of Millbridge<br>Operating Budget<br>Projected Expenditures |                     |
|--|---------------------|
| Salaries   | \$10,800,000        |
| Utilities  | 1,800,000           |
| Supplies   | <u>1,500,000</u>    |
| Total Expenditures   | <u>\$14,100,000</u> |

*Surplus or Deficit.* The budgeted expenses or expenditures of the organization are subtracted from the budgeted revenues to determine whether the plan projects a surplus or deficit for the coming year. In some instances, a loss may be acceptable. Organizations with large amounts of accumulated profits from earlier years may be willing to lose money in other years. In other

cases, losses may be inevitable. In no case should an organization be indifferent. Unfortunately, Millbridge does not have a balanced operating budget, as can be seen:

| Town of Millbridge<br>Operating Budget<br>Projected Revenues and Expenditures |                     |
|---|---------------------|
| <i>Revenues</i>   |                     |
| Real Estate Taxes   | \$10,000,000        |
| State Aid   | 2,000,000           |
| Sewer Tax   | 800,000             |
| Recreation User Fees  | <u>500,000</u>      |
| Total Revenues  | <u>\$13,300,000</u> |
| <i>Expenditures</i>   |                     |
| Salaries  | \$10,800,000        |
| Utilities   | 1,800,000           |
| Supplies  | <u>1,500,000</u>    |
| Total Expenditures  | <u>\$14,100,000</u> |
| <b>Deficit</b>  | <u>\$ (800,000)</u> |

In general, the town council would not legally be allowed to adopt a budget containing a deficit. Ives would have to go back to each element of the operating budget, finding additional revenues and/or reducing expenditures. This would be similar to the process that Ives required Father Purtell to undertake to revise the Holy Land trip budget. It would be very helpful if Ives could look at the budgeted results for each main activity of the town. For example, is the town swimming pool expected to make money or lose money? Such breakdowns of budget information into more useful formats are discussed in Chapter 3.

The surplus or deficit reported in the operating budget relates just to the period covered by that budget. Each period's surplus or deficit is determined based just on the revenues and expenses of that period. The budgets presented in this chapter are very simplified. Table 2-4 presents a somewhat more realistic budget for one department in the hypothetical HOS.

**TABLE 2-4** Department Budget

| Hospital for Ordinary Surgery<br>Laboratory Department<br>Operating Budget |                      |
|--|----------------------|
| Account  | Budget               |
| 311. Revenues  |                      |
| 010 Routine  | \$ 31,244,410        |
| 020 Other  | <u>27,590</u>        |
| Total Revenues   | <u>\$ 31,272,000</u> |



|  |                          |
|--|--------------------------|
| 411. Personal Services (PS)              |                          |
| 010 Salaries—Regular                     | \$ 24,230,881            |
| 020 Salaries—Per Diem                    | 112,845                  |
| 030 Salaries—Overtime                    | 140,128                  |
| 050 FICA                                 | 1,575,007                |
| 060 Health Insurance                     | 862,125                  |
| 070 Pension                              | 1,211,544                |
| 090 Other                                | <u>217,228</u>           |
| Total PS Expenses                        | <u>\$ 28,349,758</u>     |
| 611. Other Than Personal Services (OTPS) |                          |
| 010 Laboratory Supplies                  | \$ 1,841,692             |
| 020 Office Supplies                      | 10,097                   |
| 030 Forms                                | 32,111                   |
| 050 Equipment                            | 91,553                   |
| 060 Seminars/Meetings                    | 4,163                    |
| 070 Books                                | 1,145                    |
| 080 Equipment Rental                     | 8,385                    |
| 090 Miscellaneous                        | <u>2,388</u>             |
| Total OTPS Expenses                      | <u>\$ 1,991,534</u>      |
| 911. Interdepartmental Expenses          |                          |
| 010 Central Supply                       | \$ 77,828                |
| 020 Pharmacy                             | 9,527                    |
| 030 Laundry                              | 16,046                   |
| 040 Maintenance                          | 28,977                   |
| 060 Telephone                            | 15,962                   |
| 070 Photocopy                            | 2,124                    |
| 090 Miscellaneous                        | <u>4,165</u>             |
| Total Interdepartment Expenses           | <u>\$ 154,629</u>        |
| Total Expenditures                       | <u>\$ 30,495,921</u>     |
| Excess of Revenues Over Expenses         | <u><u>\$ 776,079</u></u> |

*Cash versus Accrual Accounting.* In some organizations, revenues are acknowledged, or recognized, only when they are received in cash. In those cases, expenses are recognized only when they have been paid in cash. These are the **recognition** rules of the **cash basis** of accounting. For example, suppose that HOS treats a patient in December 2023 and issues a bill to the patient upon discharge on December 12, 2023. HOS receives payment for the care from the patient's insurance company January 18, 2024. Assuming HOS ends its fiscal, or accounting, year on December 31 of each year, when should it recognize the revenue from the patient? On the cash basis of accounting, the revenue is recognized in 2024. That is, HOS would project those revenues in its fiscal year (FY) 2024 budget rather than in its FY 2023 budget.

Many argue that preparing an operating budget based on cash inflows and outflows may result in a misleading depiction of an organization's results from its financial operations. In the case of HOS, the costs of caring for the patient (personnel, supplies, etc.) would be recognized as expenses in 2023 if HOS paid or expected to pay them in 2023. The related revenues, however, would be recognized in 2024, if HOS does not expect to receive them in cash until 2024. Across a large number of patients, it might seem that the organization had a deficit in 2023, even if the revenues that will ultimately be collected for those patients in 2024 will exceed the expenses. The operating budget for 2023 would provide an unduly pessimistic view of the expected financial results from treating patients.

It is generally considered better practice for organizations to have a **matching** of revenues and expenses. A matching means that for a given unit of service provided, the revenues arising from providing that service and the expenses incurred in providing that service are both recognized in the same fiscal period. In that way, the organization will be able to determine if the provision of specific services results in a profit or loss.

Should the money that HOS is entitled to receive for providing care be considered revenue in the year care is provided or the year payment is received? If the revenue is recognized in the year the service is or will be provided, the organization is using the **accrual basis** of accounting. As noted earlier, if revenue is recognized in the year the cash is or will be received, the organization is using the cash basis of accounting.

The choice of whether to use a cash or accrual accounting system is an often-debated topic. Cash accounting is easier. But it does not do a good job of letting managers understand whether the organization's activities are profitable. Accrual accounting is more difficult, but it provides a matching of revenues and expenses. When operating budgets are prepared using the accrual basis of accounting, the organization accrues, or anticipates, the eventual receipt of money once the service has been provided. When the organization provides its goods or services, it has earned its revenue. Thus, in the 2023 operating budget, HOS will include all amounts it expects to earn in 2023, even if they will not be received in cash by the end of 2023.<sup>2</sup>

The accrual approach applies not only to the sale of goods or services, but to charitable support as well. Suppose that the director of the Millbridge Ballet Company convinces the Millbridge Town Council to provide the not-for-profit organization with an annual subsidy of \$10,000 as long as it gives at least 20 performances a year. If it uses the accrual basis of accounting, Millbridge Ballet would recognize the town support if it gives 20 performances in the year, even if the town does not make the payment before the end of the year.

By the same token, under an accrual approach to preparing an operating budget, expenses are recognized in the year in which resources are consumed. If supplies are bought and used this year, they are considered to be a cost, or expense, in the operating budget, even if the supplier is not paid until the following year.

The accounting profession strongly endorses accrual accounting. Accrual accounting allows the organization to compare the money that it is entitled to receive for this year's activities to the cost of resources used up carrying out those activities. There is less room for manipulation than in a system based on cash. Imagine an operating budget that used cash receipts and disbursements. If one wanted to look especially poor, it is possible to accelerate payments and postpone collections. If one wanted to look like the year was especially good, the reverse could be done. By contrast, with accrual accounting the revenues and expenses are associated with a year based on actual activity and are much less subject to manipulation.

To better understand the implications of cash versus accrual, consider the following example. Tricky Hospital provides \$100 million of care each year and always eventually collects all

<sup>2</sup> Most organizations do not actually collect all of the money that is owed to them for goods or services they have provided. The amounts that are never collected are referred to as uncollectible accounts, implicit price concessions, or bad debts. Under accrual accounting the operating budget would show the full amount earned less the portion that it expects it will not be able to collect.

that money. Tricky consumes \$100 million of resources each year. In 2021 Tricky's board of directors wished to look especially needy so that they could encourage a donor to make a large gift. Tricky paid for all its current consumption and even prepaid for supplies that would not be received and used until sometime in 2022. Tricky also made no efforts to encourage rapid payment by its patients or the patients' insurers for the care Tricky provided in 2021. As a result, Tricky collected only \$90 million in cash but made payments of \$110 million.

In 2023, however, Tricky wanted to convince a bank that it was particularly financially solid so that the bank would lend Tricky \$300 million for a major expansion program. Tricky again provided \$100 million of care and consumed \$100 million of resources. However, in 2023 Tricky worked hard to collect as much cash as possible from patients and insurers. Meanwhile, it kept its employees and suppliers waiting for their payments until early in 2024. It wound up collecting \$110 million (partly from care provided in 2022 and the rest from care provided in 2023) and paying \$90 million in cash during 2023.

In both years, the amount charged for services provided was the same, and the cost of resources consumed was the same. However, consider the financial results that would be reported on a cash basis in contrast to an accrual basis:

|                  | Cash Basis             |                      | Accrual Basis      |                    |
|------------------|------------------------|----------------------|--------------------|--------------------|
|                  | 2021                   | 2023                 | 2021               | 2023               |
| Revenues         | \$ 90,000,000          | \$110,000,000        | \$100,000,000      | \$100,000,000      |
| Expenses         | <u>110,000,000</u>     | <u>90,000,000</u>    | <u>100,000,000</u> | <u>100,000,000</u> |
| Profit or (Loss) | <u>\$ (20,000,000)</u> | <u>\$ 20,000,000</u> | <u>\$ 0</u>        | <u>\$ 0</u>        |

Note that the accrual system is clearly not as subject to manipulation as the cash basis approach. When accrual accounting is used, the operating budget gives a good idea of how profitable the organization can expect to be based on its activities for a particular period. However, it does not give an accurate idea of how much cash it will have. Tricky Hospital really did use more cash in 2021 than it collected. Since cash may be received at different times than the revenues and expenses are reported on an accrual basis, it is necessary to have a cash budget as well as an operating budget to be sure enough cash is available to meet obligations as they come due.

**THE FINANCIAL BUDGET** The financial budget has two primary components: the cash budget and the capital budget. The cash budget plans for the cash receipts and disbursements of the organization. The capital budget plans for the acquisition of long-term resources, such as buildings and equipment.

**The Cash Budget.** The cash budget is a plan for expected cash receipts and payments. It is identical to the operating budget for organizations that use the cash basis of accounting. For organizations using the accrual basis of accounting, the cash budget provides vital additional information. It helps managers know when there will be cash available for investment and when a shortage of cash is expected. This information allows the organization either to arrange for sources of cash (such as a loan from the bank) to alleviate an expected shortfall or to change the organization's planned revenues and expenses to avoid the shortage.

In the case of HOS, the cash budget estimates the amount that will be paid during the year for expenses and the amount that will be collected during the year for patient treatment. Any other sources and uses of cash would also be included in the cash budget. The general format for cash budgets is as follows:

|  |
|--|
| Beginning Cash Balance                       |
| + Cash Receipts                              |
| = Available Cash                             |
| - Cash Payments                              |
| = Subtotal                                   |
| +/- Cash from Borrowing/(Lending)            |
| +/- Cash from Sale/(Purchase) of Investments |
| = Ending Cash Balance                        |

Note that cash budgets are similar to personal checking accounts. The amount of cash we have at the end of one period is still available at the beginning of the next period. So the beginning cash balance for any cash budget is identical to the ending cash balance from the previous period.

This budget is generally prepared for the coming year. However, it is also important to have more frequent cash projections. For example, within the annual cash budget there may be monthly cash budgets. Just knowing that cash receipts are sufficient to cover cash payments for the year may be inadequate. It is helpful to know if the organization expects to have enough cash to pay its bills each month.

For example, the town of Millbridge has variable cash flows. The town issues bills for its real estate taxes on a quarterly basis, its user fees mostly during the spring and early summer, its sewer taxes once a year near the beginning of the year, and its state aid once a year near the middle of the year. Even if annual cash receipts are enough to cover payments, Millbridge might need to borrow money to get through certain times of the year when cash receipts are low.

The cash flow is complicated by the fact that not only are billings not constant throughout the year, but different sources of money arrive with differing payment lags. Most people pay their taxes promptly, since the town charges a high interest rate on late payments. By contrast, the state does not make its payments until near the very end of the year. This allows the state to have the political advantage of being able to show aid to the municipalities and also keep the money in the state account earning interest until the very last possible day.

Let's consider an example of how a cash budget might work. For this example, assume that Meals has a fiscal year of January through December. It had \$15,000 cash at the end of last year and had no investments or outstanding loans as of the end of the year. If an organization finishes a year with \$15,000 cash, that cash will still be available at the beginning of the following year. Meals expects to earn \$10,000 a month from the city next year. However, this is a new contract and the city pays each month with a 1-month delay (also known as a lag), so the payment for January will not be received until February, and so on. Meals expects to receive \$60,000 in contributions for the coming year. However, most of them will be earned and received in December, when Meals holds its annual fundraising gala. Meals expects to receive \$3,000 of the \$60,000 total contributions every month from January through November, and the remaining \$27,000 in December. It also expects to receive \$5,000 every month from other sources. Despite the fairly wide fluctuations in the receipt of contributions, Meals provides its services evenly throughout the year. Meals pays \$1,000 in rent every month. It expects to pay its staff \$11,000 every month. Its supplies are increasing in cost due to inflation. In the last month of last year, it used \$4,500 of supplies, but it expects that cost to rise \$100 each month. Meals pays its suppliers with a 1-month lag, so the \$4,500 for December will be paid in the first month of the coming year. Other expenses that are paid in cash every month total \$3,000. Meals wants to be sure to begin every month after January

with \$4,000 cash available. If it has more or less than that amount at the end of a month, it invests or borrows money. The organization's plan is to pay back any outstanding loan balance in December, when it receives the bulk of its contributions. The monthly cash budget for the first quarter of the coming year would be

| Meals for the Homeless<br>Cash Budget |   |                 |                 |                 |
|---------------------------------------|---|-----------------|-----------------|-----------------|
|                                       | For the First Three Months of Next Year |                 |                 |                 |
|                                       | January                                 | February        | March           | Total           |
| Beginning Balance                     | \$15,000                                | \$ 4,000        | \$ 4,000        | \$15,000        |
| Cash Receipts                         |   |                 |                 |                 |
| City                                  |   | 10,000          | 10,000          | 20,000          |
| Donations                             | 3,000                                   | 3,000           | 3,000           | 9,000           |
| Other                                 | <u>5,000</u>                            | <u>5,000</u>    | <u>5,000</u>    | <u>15,000</u>   |
| Total Available Cash                  | <u>\$23,000</u>                         | <u>\$22,000</u> | <u>\$22,000</u> | <u>\$59,000</u> |
| Less Cash Payments                    |   |                 |                 |                 |
| Labor                                 | \$11,000                                | \$11,000        | \$11,000        | \$33,000        |
| Rent                                  | 1,000                                   | 1,000           | 1,000           | 3,000           |
| Supplies                              | 4,500                                   | 4,600           | 4,700           | 13,800          |
| Other                                 | <u>3,000</u>                            | <u>3,000</u>    | <u>3,000</u>    | <u>9,000</u>    |
| Total Cash Payments                   | <u>\$19,500</u>                         | <u>\$19,600</u> | <u>\$19,700</u> | <u>\$58,800</u> |
| Subtotal                              | \$ 3,500                                | \$ 2,400        | \$ 2,300        | \$ 200          |
| Borrowing/(Repaying or Investing)     | <u>500</u>                              | <u>1,600</u>    | <u>1,700</u>    | <u>3,800</u>    |
| Ending Cash Balance                   | <u>\$ 4,000</u>                         | <u>\$ 4,000</u> | <u>\$ 4,000</u> | <u>\$ 4,000</u> |

The cash budget is generally read one column at a time to find out what will happen in each time period, or by looking at rows to get information about a specific line item, such as donations or rent. For example, one might start to read this budget by first looking at January. Notice that the January column starts with a beginning cash balance of \$15,000. That would be identical to the amount of cash that we had at the end of the preceding year. Reading down the January column, we see that no cash is expected to be received from the city in January. The only expected receipts that month are from donations and other sources. The starting cash balance plus cash receipts in January provide available cash of \$23,000 for that month. Payments are made for labor, rent, supplies, and other. Note that the January payment for supplies is the \$4,500 for the supplies used during the previous month, but not paid until January. All four of these cash payment items total to \$19,500 in January. That total of cash payments is subtracted from the \$23,000 of available cash to arrive at a \$3,500 subtotal before borrowing or investing. Since Meals wants to start February with \$4,000 of cash on hand, it will have to borrow \$500 at the end of January.

The \$4,000 ending cash balance for January becomes the beginning balance in the February column. Looking at the February column of the cash budget, we see that during February

Meals expects to receive \$10,000 from the city as well as the \$3,000 donation and other cash inflows of \$5,000. Cash payments are the same as January except for the increasing supply payments. Despite the cash receipt from the city, payments once again are expected to exceed receipts, and Meals expects to have to borrow \$1,600 in order to end February and begin March with \$4,000 of cash.

Notice, in the total column for the 3 months, that the first and last rows are not summed across the columns. That is, the starting cash balance in the total column is simply the \$15,000 Meals begins the year with. And the ending cash balance in the total column is the \$4,000 that Meals has at the end of March. But we can add the cash receipts, cash payments, and borrowing values across all columns to get the totals for the 3-month period. In the Totals column, the starting cash balance of \$15,000 plus all the cash receipts in total for the 3 months, less all the cash payments in total for the 3 months, equals a \$200 subtotal for the 3 months. (Note that this subtotal is arrived by adding down the total column, not across the subtotal row.) Combined with the \$3,800 total amount that has been borrowed over the 3 months, we get the \$4,000 cash value at the end of the quarter. Notice that Meals had to borrow money every month in the quarter, but it appears that if things keep going as they are, the \$27,000 of expected cash receipts from donations in December should be enough to allow for repayment of the total outstanding loan by the end of the year. Being able to demonstrate in a cash budget that you know when you will be able to repay a loan increases the likelihood of obtaining a loan.

To further reinforce the differences between cash and accrual accounting, Meals' operating budget on an accrual basis for the same period would be

| Meals for the Homeless<br>Operating Budget |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|
| For the First Three Months of Next Year    |                  |                  |                  |                  |
|  | January          | February         | March            | Total            |
| Revenues                                   |                  |                  |                  |                  |
| City                                       | \$10,000         | \$10,000         | \$10,000         | \$30,000         |
| Donations                                  | 3,000            | 3,000            | 3,000            | 9,000            |
| Other                                      | <u>5,000</u>     | <u>5,000</u>     | <u>5,000</u>     | <u>15,000</u>    |
| Total revenues                             | <u>\$18,000</u>  | <u>\$18,000</u>  | <u>\$18,000</u>  | <u>\$54,000</u>  |
| Expenses                                   |                  |                  |                  |                  |
| Labor                                      | \$11,000         | \$11,000         | \$11,000         | \$33,000         |
| Rent                                       | 1,000            | 1,000            | 1,000            | 3,000            |
| Supplies                                   | 4,600            | 4,700            | 4,800            | 14,100           |
| Other                                      | <u>3,000</u>     | <u>3,000</u>     | <u>3,000</u>     | <u>9,000</u>     |
| Total expenses                             | <u>\$19,600</u>  | <u>\$19,700</u>  | <u>\$19,800</u>  | <u>\$59,100</u>  |
| Profit or (Loss)                           | <u>\$(1,600)</u> | <u>\$(1,700)</u> | <u>\$(1,800)</u> | <u>\$(5,100)</u> |

One distinction is immediately obvious: There are no opening balances, subtotals, or ending balances. Operating budgets prepared on the accrual basis are for planning an organization's profitability—that is, the organization's ability to generate resources above and beyond the value of the resources it uses or consumes in providing goods and services. Organizations

do not begin a fiscal year with last year's profitability, though they do begin with last year's cash on hand. Also, amounts borrowed, repaid, and invested do not appear on an operating budget. When an organization borrows cash, it has not earned revenue. Similarly, when an organization repays cash it has borrowed, it has not consumed a resource—it has merely returned another organization's or person's property—nor has it consumed a resource when it invests cash.

A final distinction is that operating budgets do not reflect lags or leads in cash receipts or payments. Whereas “lags” are delays in cash receipts or payments (i.e., amounts are received or paid after a good has been consumed or a service has been provided), “leads” mean amounts have been received or paid in advance of consuming goods or providing services. Therefore, Meals plans for \$10,000 in revenues from the city each month, despite the 1-month lag in the cash receipt. As for supplies, on the accrual basis Meals budgets the value of the supplies it will consume each month, not the cash payments it will make on those supplies, which reflect a 1-month lag. Ignoring lags or leads, in combination with not considering amounts borrowed, yields a result that varies from the organization's cash budget. Though Meals will have a positive cash balance on the cash basis, for the first quarter of next year it will have a small but increasing deficit on the accrual basis. Nonetheless, it appears the \$27,000 Meals expects to earn via its December gala will be sufficient to ensure a profitable year.

*The Capital Budget.* Another type of budget is a capital budget. A capital budget is a plan for acquisitions of capital assets. **Capital assets** are resources that have lifetimes that extend beyond the year in which they are acquired. This typically includes buildings and equipment.

One reason the capital budget is used relates to the issue of accrual accounting. If Meals buys a delivery truck with a 5-year life, it would be inappropriate to charge the entire cost of the truck to the coming year. Suppose that a delivery truck costs \$40,000. Even if Meals will pay \$40,000 cash for the truck next year, and therefore it will be a \$40,000 reduction in the cash budget, Meals will not fully use up the truck in the 1 year. Part of the truck will be used in future periods. It would not be reasonable to charge the entire \$40,000 cost of the truck as an expense in its first year. Organizations that use accrual accounting would spread the \$40,000 cost of the truck out over the years it is used, charging a portion as an expense each year. Thus, the full cost of the truck will be included in the capital budget, but only a 1-year portion of the cost of the truck will be included as an expense, called **depreciation expense**, in the operating budget each year.

For example, we expect the \$40,000 delivery truck to last for 5 years. At the end of 5 years assume that we will just dispose of it. It will have no value at that point and cannot be sold for anything. We simply divide the \$40,000 cost by the 5-year expected lifetime. The resulting \$8,000 ( $\$40,000 \div 5 \text{ years} = \$8,000$ ) per year is the amount of expense that we will record each year as we use the truck. That expense is depreciation expense. Depreciation can become complicated. There are issues concerning how we determine the lifetime, the amount the asset can be sold for at the end of its lifetime, and whether it is reasonable to assume that an equal amount of the asset is used up each year. Depreciation is discussed further in Chapter 10 and Appendix 10-B.

Most organizations that do not use accrual accounting do not use a true cash basis. Rather, they use a **modified cash basis**. Under such a modified cash approach, routine revenues and expenses are recognized on a cash basis, but capital assets, such as buildings and equipment, are recognized as expenses gradually over the years they are used rather than all in the year the organization pays for them.

Capital budgets are closely coordinated with the long-range plan. Often, in order to carry out that long-range plan, it is necessary to make major investments in buildings and equipment that will have relatively little initial benefit. However, the long-range plan looks far enough into the future to recognize the long-term benefit that may come from that current

investment. Chapter 5 examines financial management methods used to evaluate the financial impact on the organization of capital asset acquisitions.

Capital acquisitions are evaluated in a separate budget from the operating budget for a number of reasons. First, as noted, it does not make sense to include the full cost of the capital asset in the operating budget for 1 year, since it is not fully used up in that year.

A second reason for having a separate capital budget is that capital assets often represent large costs for major pieces of equipment and buildings. A poor decision could be costly, so it is worthwhile to give the decision focused attention. Since capital items will last for a number of years, the organization is making a long-term commitment. If it makes an error in selection, it will be committed to that error for a long time. In the case of governments, capital budgets are often mandated by law or regulation.

A third reason that capital assets receive special attention is related to their financing. Since capital items are often expensive, the organization often has to make special arrangements to acquire the financing necessary to buy them. However, as we will discuss in Chapter 5, the decision to acquire an asset and the decision about how to finance it, while related, are separate and distinct decisions. For example, suppose that HOS plans on building a \$100 million new wing that will generate \$40 million a year in revenue. The revenue over the life of the wing may be sufficient to pay for its construction. However, the cash receipts from the wing in the first year will certainly not pay the full construction costs. That money may have to be borrowed. The revenue earned in the future has to be great enough to repay both the amount borrowed and the interest on that loan and a premium that justifies taking the risks related to making the investment. This requires careful calculations related to the timing of the cash receipts and payments related to the project, including all the costs of obtaining the money needed for the capital purchase. Capital budgeting, as noted previously, is discussed further in Chapter 5.

### The Budget Process

Although a budget is a plan, budgeting is a process of planning and control. In the budget process, resources are allocated, efforts are made to keep as close to the plan as possible, and then the results are evaluated. “Properly applied, budgeting can contribute significantly to greater efficiency, effectiveness, and accountability in the overall management of an organization’s financial resources.”<sup>3</sup>

The budgeting process is one of exploring possibilities. Organizations determine what things they can do and what they cannot. They examine alternatives and choose those that will likely yield the best results. They become attuned to possible problems and can work to find solutions. Ideally, budgeting causes managers, policy makers, and legislators to think ahead, have clear expectations against which to measure performance, and coordinate the activities of the organization so that everyone is working toward a common purpose.

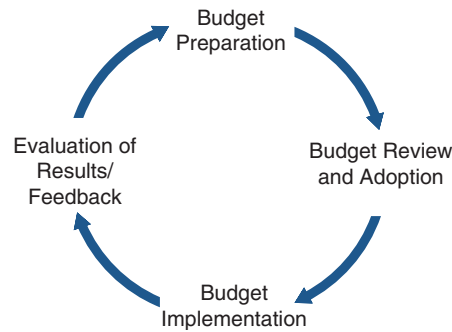
In larger organizations, coordination is inherently more difficult, and the budget process can become cumbersome. Such organizations will often have budget departments that devote substantial efforts to aid managers and policy makers in developing budgets. Governmental budgeting is often subject to a variety of laws, making the need for assistance even greater.

The budget preparation process includes developing revenue and spending projections. In modern government management, approaches for making projections vary from simple guesses to projections based on the current year plus inflation to use of sophisticated econometric forecasting. Forecasting is discussed further in Chapter 3.

<sup>3</sup>Alan Walter Steis, *Financial Management in Public Organizations* (Pacific Grove, CA: Brooks/Cole, 1989), 146.



*THE BUDGET CYCLE* In most organizations, the budget process consists of a cycle of activities. We can summarize this cycle as follows:



The budget is first prepared. After review by the body with the authority to adopt the budget (often the board of trustees or the legislature), it is adopted, with or without changes. It is not uncommon for the decision-making body to request or make changes prior to approval. Once approved, the budget is implemented. It is the responsibility of the management of the organization or the executive branch of the government to ensure that the adopted budget is carried out. Finally, the results must be evaluated. Often, actual results will vary from the adopted budget. This may be because of inefficiency, or it may be due to noncontrollable factors. All significant variations should be analyzed. This evaluation in turn will provide information to be used for feedback in preparing the next budget.

*Budget Preparation.* Initially, a draft budget must be prepared. Generally, top executives will prepare a set of assumptions and guidelines that department or agency managers should use as they develop detailed budgets for their areas. In government, the chief executive will generally provide a **budget guidance memorandum**, which provides policies, goals, and performance expectations.<sup>4</sup> The managers in the organization (unit and department heads or bureau chiefs and agency directors) then prepare draft budgets, considering their responsibility center's needs and the guidelines they have received. A responsibility center approach divides the budget into units for which individual managers are held accountable, called **responsibility centers**.

Organizations quantify their budgets, often assigning measures in dollars or units or both. For example, during the budget preparation process Meals will need estimates of not only the dollar cost of meals, but also the number of pounds of food needed and the number of meals they expect to serve. This requires plans to become specific so they can be summarized in a document that can be shared across the organization.

Budgets are prepared using forms that are generally unique to each organization. The forms help guide the manager to assess the need for resources to carry out the objectives of the responsibility center. The budget process will generally require the manager to justify the need for the requested resources. Chapter 3 provides additional discussion about the elements of a budget and some of the techniques that can be used in preparing budgets. Chapter 4 addresses issues related to planning for costs. Chapter 5 addresses special issues related to the capital budget.

<sup>4</sup>Steis, 151.

It is common for budget requests to be “supported by detailed **objects of expenditure**—tabulations of the myriad items required to operate each program, including salaries and wages, rent, office supplies, travel, equipment and other inputs.”<sup>5</sup>

*Budget Review and Adoption.* Budget requests are reviewed to ensure that the forms have been completed fully and without error. The various budget requests from all responsibility units are aggregated to determine the total resources that have been requested. There is also a review to ensure that all the department budgets follow the same assumptions about salary increases, expected workload, and other factors that need to be consistent across departments.

It is common for the total of all spending requests to exceed projected revenues. In most cases, this requires the organization to go through a process of negotiation. The first goal of this process should be to eliminate any inefficiency in the budget. If this leaves the budget still unbalanced, it is necessary to find additional sources of revenue or to reduce spending. Spending reductions should be selected so as to minimize the impact on the accomplishment of the organization’s goals and objectives. In many instances this requires the organization to establish priorities. Managers should be given the opportunity in this process to provide their rationale for why their budget requests are high priorities and should not be among the first items cut.

Once the top management of an organization is comfortable with the budget, it submits it to the decision-making body for review and approval. In the case of the government, the executive branch submits the budget to the legislative branch for review. In many cases, the legislative process includes an opportunity for public scrutiny and comment. In some cases, the public actually votes on the budget, but this is less common and occurs primarily with respect to school budgets. If the executive is unhappy with changes made by the legislature, the budget can be vetoed. In many cases the veto can be for the entire budget; in some cases, the veto may be line item by line item. Generally, there is some provision for the legislature to override a veto.

The body that must approve the budget should receive not only the budget, but also an executive summary. This summary should focus on the policy implications of the proposed budget. One should try to avoid letting the trees get in the way of seeing the forest. Often the extreme detail provided with budgets causes managers to lose sight of the goals that should be accomplished as the budget is implemented.

Finally, after discussing and perhaps requiring changes in the budget, it is accepted by the board or, in the case of government, passed by a legislative vote in favor of an **appropriation**. When a legislative body—be it a senate or an assembly, a town committee or a council—approves spending for a specific line item, it is called an appropriation. Appropriations create the authorization for spending the amount in the budget.

*Budget Implementation.* Once adopted, the budget must be implemented or executed. Steis describes this part of the process:

Budget execution is both a financial process and a substantive operational process. This stage of the budget cycle involves the initiation of authorized projects and programs within an established time schedule, within monetary limits, and ideally, within standard cost limits. Budget execution is the longest stage in the budget cycle, covering the full fiscal year and overlapping both the formulation and review stages of the budget for the succeeding and prior years, respectively.<sup>6</sup>

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<sup>5</sup>Steis, 146.

<sup>6</sup>Steis, 153.

Budgets authorize and limit the amount of spending for each responsibility center in an organization. Appropriations tend to be specific in terms of the amount that can be spent and what it can be spent on. Governments next make **allocations**, subdividing the appropriation into more detailed categories, such as responsibility centers, programs, or objects of expenditure. Sometimes, spending is further broken down into **allotments**. Allotments refer to a system that allocates budget resources to specific periods or for use only after a certain event occurs. This allotment process serves “(1) to avoid premature exhaustion of appropriations, necessitating supplemental appropriations; (2) to keep the rate of expenditures in line with the flow of revenue; and (3) to provide the funds agencies actually need in the course of budget implementation and no more.”<sup>7</sup> While the process is not quite as formalized in other public service organizations, the same elements apply.

Part of the budget implementation process focuses on expenditure control. A widely used technique in governments and some not-for-profit organizations is a system of **encumbrances**. When the organization places an order for a resource, an encumbrance is created. The encumbrance identifies the portion of the budget for a specific line item that has already been spoken for by purchase commitments that have been made.

For example, suppose that the Millbridge Town Council has adopted a budget that includes an appropriation of \$20,000 for computer equipment. On the first day of the government’s fiscal year, October 1, an order is placed for \$15,000 worth of equipment. The equipment arrives 2 months later. The government pays for the equipment a month after that. In the interim between the placing of the order and the payment for the computers, Dwight Ives, the town manager, would like to know how much money is available for computer purchases. He knows that the budget was \$20,000, but he suspects that some purchases may have already been made. As soon as an order is placed, the government accounting system records an encumbrance in the dollar amount of the order. If Ives looks at the town budget report on November 1, he will see that the budget is \$20,000, but that there is a \$15,000 encumbrance. The available, or unencumbered, balance is \$5,000. Special approvals are generally required to place additional orders that would exceed the unencumbered balance.

When the computers that were ordered have been received, the encumbrance will be removed. At that point the financial records would show a budget for computers of \$20,000, an expenditure of \$15,000, an encumbered balance of \$0, and an unencumbered balance of \$5,000.

Other aspects related to managing the organization within the limits of the adopted budget are discussed in Chapter 7, which looks at management of the short-term resources and obligations of the organization, and Chapter 8, which focuses on issues of accountability and control.

*Evaluation of Results.* The last element in the budget cycle is the evaluation of results. Budgets not only create plans, but also can be used to help accomplish those plans. One way that this is done is by comparing actual results to the budget. This is sometimes referred to as performance evaluation. This is especially helpful if done on an interim basis, during the year. That allows problems to be corrected midstream, helping the organization accomplish its budget.

Things do not always go as planned. It is important to attempt to assess why. In some cases, money is being wasted through inefficiency. If so, the inefficiency should be determined, and corrective action should be taken. In other cases, events have occurred (e.g., price increases in supplies that are essential) that are beyond the control of the organization or its managers. However, not all deviations from budgets are negative. Often, careful review can reveal opportunities an organization can use to its advantage. In any case, there should be a thorough investigation of why variations occur.

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<sup>7</sup>Donald Axelrod, *Budgeting for Modern Government* (New York: St. Martin’s Press, 1988), 12.

Looking at its results, the organization can assess what needs to be corrected and where organizations can take advantage of opportunities. How good a job did the organization's management do? How well did the organization itself do? Ideally, the organization's performance should be evaluated in a number of different ways. Meals wants to know if it served as many meals as expected and whether those meals cost more or less than expected. However, it also wants to know if the meals met its standards for nutrition. It wants to know if the homeless thought that the meals tasted good. The measurement of performance is discussed in Chapter 3.

To evaluate performance, one must have a standard or benchmark to use for comparison with actual results. The budget establishes the organization's expectations. When actual results vary from those expectations, the organization can use feedback to investigate the cause of the variations. The results of such investigation can provide the information needed to improve the management of the organization in the future. The difference between a budgeted amount and an actual result is called a variance. Variance analysis is discussed in detail in Chapter 8.

Governments often have a formal midyear review. This review serves a critical function. Since state and local governments must have a balanced budget, it is critical to examine whether the organization is on track for spending no more than the appropriated amount. If it turns out that spending is above the budget level, or that revenues are less than budgeted, then actions must be taken to avoid a deficit. Often this requires cutting expenditures for the remainder of the year to a lower level than had been expected when the budget was passed. Many health and not-for-profit organizations undertake similar reviews for the same purpose.

Another purpose of performance evaluation is to enhance accountability. All organizations want to ensure that their resources are used efficiently and effectively. The efficient and effective use of resources is enhanced if the organization can hold managers and responsibility centers accountable for their activities and results. Accountability is partly ensured by frequent comparison of the budget with actual results and analysis of the causes of variances. Another element critical to accountability is the audit process.

An **audit** is an examination of records or procedures. Operating audits (sometimes called "performance" or "efficiency and economy" audits) seek to identify inefficiencies in the way the organization operates so that they can be avoided in the future. Financial audits examine whether financial reports are presented in a fair manner and whether all resource use has complied with relevant laws, rules, or regulations.<sup>8</sup> Although not all audits are intended to dig deeply enough to discover all fraud and embezzlements, some audits are conducted specifically to determine if resources have been used for their intended purposes.

Mikesell uses the example of a state's purchase of salt for its roads to distinguish between a financial audit and an operations (or efficiency and economy) audit:

A financial audit would consider whether the agency had an appropriation for salt purchased, whether salt purchased was actually delivered, whether approved practices were followed in selecting a supplier, and whether agency reports showed the correct expenditure on salt. An efficiency and economy audit would consider whether the salt inventory is adequately protected from the environment, whether the inventory is adequate or excessive, and whether other methods other than spreading salt would be less costly to the community.<sup>9</sup>

Clearly, audits serve an important role in ensuring accountability in the use of resources.

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<sup>8</sup> Often audits seek to determine if financial statements have been prepared in accordance with rules that are referred to as Generally Accepted Accounting Principles (GAAP). See Chapter 9 for further discussion of GAAP.

<sup>9</sup> John L. Mikesell, *Fiscal Administration: Analysis and Applications for the Public Sector*, 9th ed. (Boston: Wadsworth, Cengage Learning, 2014), 68.

**BUDGET PRESENTATION** Another element in accountability is the presentation of the budget. Organizations formalize their budgets by recording them in written form. This allows the budget to be used to communicate to all its managers. Human resource managers can do their job better by knowing the staffing plans of other departments. The managers of the recovery room in a hospital can manage their department better if those managers know the number of surgeries that are expected by the operating room department.

The choice of revenue and expense groupings and the level of detail of information shown in the budget can have a dramatic impact on the amount of information that is communicated by the budget. In the case of government, budgets become public documents. An effective presentation can give the public a tool to keep government accountable for its actions. The specific contents and presentation of budgets are discussed further in Chapter 3.

**A BUDGET TIMELINE** The budget process can be quite complicated and time-consuming. The process may take 1 to 3 months in small organizations, and 4 to 6 months or even longer in larger ones. In order to ensure that the budget is ready for adoption sufficiently early to be implemented at the start of the coming year, many organizations prepare a budget calendar or budget timeline. Government timelines are often set by law or regulation. Examples of timelines are provided in Exhibits 2-1 and 2-2. These timelines indicate the deadline by which each major activity must be completed in order to ensure the possibility of timely adoption of the budget.

Note the word “possibility” in the previous sentence. Even if every deadline in the timeline is met, except for approval, the budget may not be adopted on time. The body that must approve the budget may decide that the budget is not acceptable. The process of revising the budget until it is acceptable may extend into the next fiscal year. In the case of not-for-profit organizations, the board generally will authorize that operations continue pending adoption of the budget, but often at a reduced level of activity or on an austerity basis. This can be

### EXHIBIT 2-1 Hospital Budget Timeline

| Activity   | Responsibility          | Deadlines    |
|--|-------------------------|--------------|
| 1. Appointment of the budget committee                                     | CEO                     | June         |
| 2. First meeting of budget committee                                       | Committee chair         | July         |
| 3. Complete assumptions and guidelines and communicate to department heads | Budget committee        | August 31    |
| 4. Complete <b>long-range budget</b>                                       | Budget committee        | September 30 |
| 5. Unit capital and operating budgets                                      | Unit managers           | October 15   |
| 6. Negotiation between units and their department heads                    | Department heads        | October 22   |
| 7. Compilation of all unit budgets into department budgets                 | Department heads        | October 30   |
| 8. Development of cash budget  | Chief financial officer | November 15  |
| 9. Negotiation and revision process  | All managers            | December 15  |
| 10. Approval   | Board of trustees       | December 16  |
| 11. Implementation   | All managers            | January      |

**EXHIBIT 2-2** Simplified Example of State Budget Timeline

|  |                          | <i>April to Mid-September</i> |
|--|--------------------------|-------------------------------|
| <i>(a) Agency Budget Planning</i>                        |                          |                               |
| • Governor policy letter issued                          | Governor's office        | April                         |
| • Bureau chiefs prepare budget requests                  | Bureau chiefs            | April–June                    |
| • Agencies review bureau requests                        | Agency directors         | July–August                   |
| • Agency budgets prepared                                | Agency directors         | August–first half September   |
| <i>(b) State Budget Review</i>                           |                          |                               |
| • Agencies submit requests to Department of Budget (DoB) | Agency directors         | One week after Labor Day      |
| • Analysis by DoB  | DoB                      | September–November            |
| • Informal hearings                                      | Budget examiners         | September–November            |
| • Formal hearings—comparative data                       | Budget director          | September–November            |
| • Final recommendations                                  | Budget examiners         | Mid-December                  |
| • Preparation of alternative plans                       | Fiscal analysts          | Mid-December                  |
| <i>(c) Final Review</i>                                  |                          |                               |
| • Budget director recommendations on policy              | Budget director          | Mid-December to Mid-January   |
| • Governor's decisions on policy                         | Governor                 | Mid-December to Mid-January   |
| • Fiscal analyst plan recommendations                    | Fiscal analysts          | Mid-December to Mid-January   |
| • Governor and budget director formulate plan            | Governor/budget director | Mid-December to Mid-January   |
| • Budget message prepared                                | Governor                 | Mid-December to Mid-January   |
| <i>(d) Passage of Budget Bill</i>                        |                          |                               |
| • Governor submits budget bill to legislature            | Governor                 | Mid-January to February 1     |
| • Analysis, hearings, passage                            | Legislature              | Mid-January to April          |
| • Passage of special appropriation bills                 | Legislature              | Mid-January to April          |
| • Fiscal year begins—implementation of budget            | Agency directors         | April 1                       |

*Source:* Adapted from New York State Division of the Budget, *Budget Request Manual* (Albany: New York State, 1983). This simplified timeline is not meant to indicate the current specific process of New York State.

quite deleterious to the organization. At times, the final budget adopted calls for less spending than occurred during the period the organization operated without an approved budget. This results in even harsher cuts in spending for the remainder of the year. In rare cases, the organization will actually come to a halt, with only the most essential activities continuing. This happened to the US federal government several times in the latter half of the 20th century and, more recently, in 2013, early in 2018, and again from December 2018–January 2019.

The budget timelines in Exhibits 2-1 and 2-2 both stop at the point of implementation. However, the process of auditing results, analyzing variances, and providing feedback for the next budget cycle is critical; this is shown in some organizations' timelines.

### Political Realities in the Budget Process

The process of developing budgets is highly politicized. This is true in most public service organizations. To the extent possible, managers should try to establish and use an objective budget process that best leads to the accomplishment of the organization's mission, goals, and objectives. In reality, it is inevitable that politics will play at least some role in almost all organizations.

Politics may take a variety of forms. The politics may be personal. A department manager may be a relative of a member of the board and may get, or be perceived as getting, special breaks at budget time. More broadly, however, politics often revolves around agendas. Proponents of a particular service or program will lobby for resources for that program. This is true in most organizations.

Politics is of special concern in the government, which is, after all, a political arena. It is at least partly through the political process and voting that the public makes its desires known. Politics serves a major role in resource allocation in governments. Although budgets should be objective in trying to accomplish the goals and objectives of the organization, politics has an appropriate role in setting those goals and objectives.

Politics in the public sector takes many different shapes: It takes the form of special interest groups lobbying for their cause. It takes on the perspective of competing policies to accomplish similar or different objectives. Sometimes politics in budgeting is manifested as a power struggle between the branches of government or between political parties.

Managers should be aware of the political nature of budgets within their organization. This can help them better define their role in the budget process.

## BEHAVIORAL ASPECTS OF THE BUDGET PROCESS

Although it sometimes seems that budgets are all about numbers, this is not the case. Once a budget has been adopted, it is up to the employees of the organization to come as close as possible to achieving the budget. People are the key to successful budgeting. It is critical to understand that the actions of people within an organization have a tremendous impact on how well the organization does. If people work to accomplish the goals of the budget, we are likely to have much better outcomes than if they are indifferent about accomplishing those goals or, even worse, if they work in opposition to accomplishment of the organization's goals. The numbers on paper are just that. People—their attitudes, needs, and desires—are the key to budgeting. If we do not specifically focus on why people would want to accomplish the organization's goals as defined by the budget, we are not likely to achieve the best possible actual outcomes.

Therefore, an essential part of the budget process is understanding what motivates the organization's employees. We need to understand why employees would make their best effort to accomplish the organization's goals and why they would not. And we need to understand how incentives can be used to motivate employees to work at their highest level to accomplish the organization's goals.

The more input employees have in making plans, the more likely it is that they will strive to achieve them. People working in a unit or department of an organization know a great deal

about how that unit or department functions. They are in a good position to be able to propose changes that will improve efficiency. If we solicit input from managers and staff members in preparing budgets, and develop budgets based on that input, employees are likely to become vested in showing that the approaches they have proposed are sound. If budgets are prepared without staff input, staff will likely be much less motivated to meet the budgets that have been handed down to them.

### Budgets and Motivation

Motivation is the critical underlying key to budget success. One of the best features of budgets is that they present a measurable goal. When there is a clearly stated goal, managers and staff can work toward that goal. Most people are inherently motivated to do a good job. They want to gain a sense of accomplishment from their job, and a budget goal can help them do that. Setting demanding but realistic budget goals, combined with public praise and rewards when goals are met or exceeded, can enhance motivation and resulting performance.

Compare the likely progress of a dieter with specific weight-loss goals to one who simply wants to lose a lot of weight, or compare an athlete who has measurable objectives to one who just wants to be strong or run fast. Setting specific goals and working toward them is a tremendous self-motivator. Most employees want to have a sense of pride in their organization and want their organization to do well. Nevertheless, a goal of spending as little as possible is no better than the dieter's hope to lose weight. A more specific goal, such as, "Let's reduce electric consumption by 10 percent as compared to the prior year" is likely to be a better motivator.

Control is complicated by the fact that even when the primary goal is clearly stated, it is the basic nature of individuals that their own personal goals will often be different from the goals of their employer. This does not mean that human nature is bad—just that there is such a thing as human nature and it is foolish to ignore it. For example, most employees would prefer a salary that is substantially larger than the salary they are currently receiving. There is nothing wrong with employees wanting more money. In fact, ambition is probably a desirable trait. On the other hand, employers generally will not provide employees with more money because they lack the revenues to pay those higher wages. While the employees are not wrong to desire large raises, the employer is not wrong to deny such raises. Inherently, a tension or conflict exists as a result.

Nor is it just an issue of salaries. Often employees would like larger offices with new furniture and remodeled facilities. They would certainly like more staff to enable them to carry out their department's mission more effectively. However, organizations have limited resources and must make choices concerning how to spend those limited resources.

As a result, even when morale is generally excellent and is not considered to be a problem, an underlying tension naturally exists. Even though the employees may want to achieve the mission of the organization, their personal desires will be for things the organization cannot or will choose not to provide. This is referred to as **goal divergence**. For example, employees might prefer to take long breaks frequently throughout the day. Doing so, however, might well impair their ability to efficiently get their work done.

To best achieve its goals, the organization must bring together the interests of the individual with its own interests so they can work together. In the budgeting process, the organization wants to control spending. But it is not the organization that controls costs: it is the human beings involved in the process. There must be some motivation for the human beings to want to control costs. We need to find a way for the employees to believe that it is in their interests not to take frequent, long breaks. Bringing the individuals' desires and the organization's needs together is referred to as **goal congruence**.



Since congruent goals are not inherently the norm, it is necessary to address formally how convergence is to be obtained. An organization generally achieves such convergence or congruence by setting up a system of incentives that makes it serve the best interests of the employees to serve the best interests of the organization.

## Incentives

Although employees serving in government, health, and not-for-profit organizations are motivated by factors other than money, it would be foolish to ignore the potential of monetary rewards to influence behavior. Public service organizations must search for the proper mix of incentives that will motivate managers and staff to control costs. Financial incentives are frequently used. The most basic financial incentives are the ability to retain one's job and the ability to get a good raise. We can use a carrot or a stick to motivate. The stick: If you constantly take long breaks frequently throughout the year, you may be fired.

Another common motivating tool that incentivizes employees is a bonus system. This is a carrot approach. For example, one could tell a manager that her department budget for the year is \$3 million. However, if her department spends less than \$3 million, she and her staff can keep 20 percent of the savings. If the department spends only \$2.9 million, the manager and the staff will get a bonus of \$20,000 (i.e., \$3 million less \$2.9 million, multiplied by 20%) to share. The total cost to the organization is \$2,920,000 including the bonus, as opposed to the \$3 million budget, so it has saved \$80,000 after paying the bonus. The staff benefits and the organization benefits. In this case, goal congruence is likely to be achieved. Workers will not take frequent, long breaks because they are trying to work more efficiently so they will earn the available bonus.

Many public service organizations have in fact added bonus systems. The use of bonus systems has both positive and negative aspects. The positives relate primarily to the strong motivation employees have to reduce costs. The negatives relate to the fact that bonuses sometimes create unintended incentives. For example, bonuses give employees a strong incentive to lower quality of services provided in order to reduce costs and earn a bonus. Careful metrics must be put in place to ensure that the bonus is not being earned at the expense of the quality of products and services provided. Managers must try to anticipate unintended consequences when developing incentive systems. Also, the bonus must be adequately large to achieve the desired congruence. If you can get away with taking frequent long breaks, and you are inclined to do so, a bonus that adds up to only \$10 a week for each employee might not provide sufficient motivation to change that behavior. Would \$50 a week per employee be sufficient? \$100? Each organization must give careful thought to developing a motivation system that provides sufficient incentives to achieve an appropriate level of goal congruence.

Another potential problem with bonuses relates to changes in volume of services provided. A bonus should not reward employees for lower spending that results simply from lower volume. Nor should employees fail to get a bonus simply because costs increased as a result of higher volume. We do not want to provide an incentive that results in employees being motivated to reduce the volume of service provided. Making the bonus system adjust automatically for changes in volume can avoid creating an incentive to reduce the volume of services provided.

Bonuses are not the solution to all motivational problems. Bonus systems have a variety of other problems. Some bonus systems reward all employees equally if overall spending is reduced. But if everyone gets a bonus, no one feels that her or his individual actions have much impact. Individuals may believe that they do not have to work particularly hard to reap the benefits of the bonus. They will let everyone else do the hard work, and they will share in the bonus distributed. That can lead to a situation in which no one makes any effort to control

costs. There will not be a bonus to be shared, and the organization will not keep costs under control. In that case, the bonus system will not be providing the incentives we need. On the other hand, bonuses given to only some employees based on their individual performance may create jealousy and discontent.

There are incentive alternatives to bonuses. For example, one underused managerial tool is a letter from supervisor to subordinate. All individuals responsible for controlling costs should be evaluated explicitly with respect to how well they control costs. That evaluation should be communicated in writing. This approach costs little to implement but can have a dramatic impact. Most people respond well to praise and other forms of positive feedback about their personal performance and their department's performance. Framed certificates of achievement along with a moderate monetary reward for an outstanding achievement can be a strong motivator. Employee of the month and other similar programs can be strong motivational tools as well.

Telling individuals they have done a good job and that their boss and their boss's boss know that they have done a good job can be an effective way to get people to continue trying to do a good job in the future. We tend to take a biased approach, complaining to employees when there is a problem without correspondingly praising them for a job well done when there are no problems. In the real world praise is both cheap and, in many cases, effective. On the other hand, fair criticism, especially in writing, can have a stinging effect that managers and staff will work hard to avoid in the future. Ultimately, however, people tend to respond better to praise than to criticism.

### Unrealistic Expectations

There is no question that many people do attempt to satisfice—to do just enough to get by. One thing incentives are used to accomplish is to motivate those individuals to work harder. A target that requires hard work and stretching, but that is achievable, can be a useful motivating tool. If the target is reached, there might be a bonus, or there should be at least some formal recognition of the achievement, such as a letter. At a minimum, the worker will have the self-satisfaction of having worked hard and reached the target.

However, it is important to recognize that budget targets should be achievable. Some organizations have adopted the philosophy that if a high target makes people work hard, a higher target will make them work harder. This may not be the case. If targets are placed out of reach, they will probably not result in people reaching to their utmost limits to come as close to the target as possible. In fact, that approach may lead to cynicism and hostility toward a management that promises to make bonuses available and then places them out of reach. It may seem that the organization is short-changing itself whenever someone achieves a target. One may think, "We set the target too low. Perhaps if the target were higher, the higher target would have been achieved." The problem with that logic is that there are risks associated with it. If an employee fails to meet a target because of incompetence or because of insufficient hard work, the signal of failure that is sent is warranted. In fact, repeated failure may be grounds for replacing that individual in that job. But if an employee is both competent and hardworking, failure is not a message that should be sent. Even if it is desirable to encourage the individual to achieve even more, the signal of failure will be discouraging.

When people work extremely hard and fail, they often question why they bothered to work so hard. If hard work results in failure to achieve the target, then why not ease off? If they are going to fail anyway, why try very hard? And when people get discouraged, they may become angry. This situation can lead to turnover and even sabotage by angry persons who believe their supervisors are against them and that they are being set up to fail. Thus managers at every level of the organization must be extremely careful to ensure that all goals assigned are reasonable, or results may be less favorable than they otherwise would be.

## CASE STUDY

### DEVELOPING A GOVERNMENT BUDGET

To gain a better sense of the budget development process, we will now discuss the development of a hypothetical budget for Millbridge. According to Ives, Razek, and Hosch, these are some of the specific steps that must be taken:

- Prepare budgetary policy guidelines
- Prepare a budget calendar
- Prepare and distribute budget instructions
- Prepare revenue estimates
- Prepare departmental (or program) expenditure requests
- Consolidate departmental expenditure requests and revenue estimates
- Prepare the budget document
- Present the budget document to the legislative body
- Determine the property tax (millage) rate<sup>10</sup>

We will consider each of these steps in turn.

#### Prepare Budgetary Policy Guidelines

As noted, the first step in budget preparation is for the top management to prepare a budget guidance memorandum that provides assumptions and guidelines about policies, goals, and performance expectations that managers should use as they develop detailed budgets for their areas. The Millbridge guidelines indicate that, given current economic conditions, an average increase in all taxes and fees of 3 percent would be considered acceptable. Due to a housing boom in the town, population growth of 5 percent is expected and this will translate into increased property values and sales tax. Inflation in the cost of supplies is expected to be 4 percent; if possible, employees will be given 5 percent salary increases.

#### Prepare a Budget Calendar

The budget process can take 3 to 6 months, or even longer. To ensure that everything is done efficiently, Millbridge prepares a budget calendar (see Exhibit 2-3).

#### Prepare and Distribute Budget Instructions

As we can see from Exhibit 2-3, the budget committee meets to set guidelines from July 1 to 5. These guidelines are distributed to department heads on July 10, along with specific instructions for completing the budget. The materials provided should give each department head information about their current year budget, their actual expenditures to date, and projected expenditures through the end of the year. Additionally, it should provide guidance regarding anything that would impact the departments, but of which the department heads

<sup>10</sup> Martin Ives, Joseph R. Razek, and Gordon A. Hosch, *Introduction to Governmental and Not-for-Profit Accounting*, 5th ed. (Upper Saddle River, NJ: Pearson Education, 2004), 71.

might be unaware. For example, the school superintendent should be informed if new housing construction will likely affect the number of students in the school system. The same housing construction and resulting expansion of the town population might also impact the service demands on police, fire, ambulance, and public works. Each department must be informed for its budgets to reflect the resources needed to maintain the desired level of services.

### **EXHIBIT 2-3** Millbridge Budget Calendar

|                 |   |
|-----------------|---|
| July 1–5        | Mayor, town manager, and other key officials meet to develop budget guidelines.                                       |
| July 10         | Department heads receive budget guidelines and forms.   |
| August 31       | Department budget requests must be submitted to town manager.   |
| September 10–15 | Meetings are held between mayor, town manager, and department heads to discuss individual department budget requests. |
| September 16–30 | Department heads revise and resubmit budget requests.   |
| October 15      | Town budget is presented to town council.   |
| October 15–31   | Town council holds meetings to discuss budget.  |
| October 31      | Town council proposes adjustments to the budget.  |
| November 1–15   | Budget is revised and printed.  |
| November 15     | Budget is mailed to residents.  |
| December 1–15   | Public hearings on the budget are held.   |
| December 16     | Town council votes on budget.   |
| January 1       | New budget year begins.   |

#### **Prepare Revenue Estimates**

The money available to the town for the coming year will consist of its revenues generated for the year as well as any surplus carried over from the previous year. Therefore, the finance department of the town, working with each department manager, should estimate any surpluses that will likely exist at the end of the current year. In Exhibit 2-4 we can see that total projected 2023 revenues of \$14,757,133 are about \$53,000 above budgeted revenues of \$14,704,150. However, any changes in expenses from the budget would also have to be considered before knowing if Millbridge expects to have a surplus at the end of the current year.

The next step is to determine revenues for the coming year. For each department we first attempt to determine what current year results will be. Typically, a budget worksheet would provide the information shown in Exhibit 2-4. The first numerical column in this table shows the actual results for the entire year prior to the current year. Next, the budget for the current fiscal year 2023 is shown. From the first two columns we can see the expected changes from last year to the current year. That information may be helpful in planning the changes from the current year to the coming year. Next, we see the actual revenues for the current

**EXHIBIT 2-4** Millbridge Revenue Budget, Fiscal Year 2024

| Department            | 2022                 | 2023                 | Jan–June<br>2023    | July–Dec.<br>2023   | Total 2023           | 2024                 |
|-----------------------|----------------------|----------------------|---------------------|---------------------|----------------------|----------------------|
|                       | Actual               | Budget               | Actual              | Projected           | Projected            | Budget               |
| General Government    |                      |                      |                     |                     |                      |                      |
| Property Tax          | \$ 6,344,928         | \$ 6,747,196         | \$ 3,373,598        | \$ 3,373,598        | \$ 6,747,196         | \$ 7,297,093         |
| Sales Tax             | 253,797              | 269,888              | 127,387             | 173,920             | 301,307              | 325,864              |
| Education             | 4,856,028            | 5,163,900            | 2,581,950           | 2,581,950           | 5,163,900            | 5,318,817            |
| Public Safety         | 1,198,855            | 1,274,862            | 601,735             | 702,351             | 1,304,086            | 1,343,209            |
| Public Works          | 0                    | 0                    | 0                   | 0                   | 0                    | 0                    |
| Health and Sanitation | 355,920              | 378,485              | 178,645             | 193,028             | 371,673              | 382,823              |
| Recreation            | 529,541              | 405,344              | 148,523             | 264,333             | 412,856              | 589,834              |
| Water                 | 294,305              | 312,964              | 147,719             | 159,612             | 307,331              | 316,551              |
| Sewer                 | 142,478              | 151,511              | 71,513              | 77,271              | 148,784              | 153,247              |
| <b>Total</b>          | <b>\$ 13,975,852</b> | <b>\$ 14,704,150</b> | <b>\$ 7,231,070</b> | <b>\$ 7,526,063</b> | <b>\$ 14,757,133</b> | <b>\$ 15,727,438</b> |

*Note:* Line items may not precisely sum due to rounding.

year to date. Assume that Millbridge's fiscal year is identical to the calendar year. Since this information is provided to Millbridge department managers in July, only 6 months' worth of actual data are provided. A projection must then be shown for the remaining months of the current year as well as for the entire current year.

This projection requires care. One cannot just assume that the second half of the year will be like the first half. In Exhibit 2-4 we see that property tax revenues for general government and education revenues are expected to split evenly between the two halves of the year. By contrast, sales tax revenues are not. The total projected sales tax for 2023 is above the budget for the year, possibly indicating that by the time the 2024 budget was being prepared, the expectations were that the 2023 Christmas sales season was going to be stronger than had been anticipated a year earlier.

The managers should use forecasting approaches (see Chapter 3 for a discussion of forecasting) to estimate their likely revenues for the coming year. The budget guidelines for Millbridge have also provided the town's managers with some information. Specifically, tax rates are expected to increase by 3 percent, and population is expected to grow by 5 percent. That population growth is expected to impact both property and sales taxes. Managers considered those factors when preparing the 2024 budget (Exhibit 2-4).

Additionally, individual managers may be aware of specific reasons why their revenues might differ for the coming year. For example, suppose that the town's pool was closed during the current year for major renovations. This would adversely impact the revenues of the recreation department. Notice that the 2023 budget for recreation revenues was down from

the 2022 actual result in anticipation of the renovations. Next year the pool will be open, and with the improvements it will likely attract more members than ever before. The head of Millbridge Recreation Department has taken that revenue growth into account in preparing the budget for the coming year.

Some departments may not have any direct revenue. For example, the Public Works Department may be funded by the general revenues of the town. In such instances, its budget will not include a revenue component.

In Exhibit 2-4 the revenue increases that are projected are largely the result of an increasing tax base due to construction and an assumption that all tax rates will be increased by 3 percent. At this point the budget has not been approved, and tax rate increases that are ultimately approved may be greater or smaller than that amount, requiring adjustments to the revenue budget. According to the timetable in Exhibit 2-3, the revenue budgets would have to be submitted by August 31.

### Prepare Departmental (or Program) Expenditure Requests

Each department must prepare a detailed listing of the items that it believes it needs to fund for the coming year. Often the requests of all departments, when combined, will exceed revenues. At that point either revenues will have to be raised (by actions such as tax increases) or negotiations will take place with departments to reduce their expenditure levels.

Ives, Razek, and Hosch suggest that to prepare the expenditure budget one should take seven steps. First, one should ascertain the expenditures for the last year and project what they will be for the coming year. Second, in order to arrive at a stand-still level of spending, it is necessary to incorporate inflation and cost of living, and to allow for uncontrollable factors. Third, changes have to be accounted for by determining which new activities, if any, will be undertaken, as well as expansion, contraction, or discontinuance of any current activities. Fourth, the amount to be spent must be adjusted for the changes identified in step 3. Fifth, justifications must be prepared for all changes identified in step 3. These justifications should account for the impact of both undertaking each change and not undertaking each change. The sixth step is to develop a worksheet for each of the various types of expenditures. These worksheets will need to be tailored for each type of expenditure, but in all cases should include information in detail for the previous year, current year, and projected year being budgeted. Finally, the individual worksheets should be summarized.<sup>11</sup>

Generally, departmental expenditure budgets are divided into budgets for personnel, known as personal or personnel services (PS), other than personal services (OTPS), and capital budgets. Based on the timetable in Exhibit 2-3, all the expenditure budget requests would have to be submitted by August 31.

#### *Personal Services*

The personnel budget lists all the categories of employees, the number of paid hours expected for the category, the pay rate, and the total pay. Frequently, the document will include not only the budget request for the coming year, but also the actual value for the prior year, and the projected spending for the current year. See Exhibit 2-5 for an example of the Millbridge Recreation Department personnel budget for the 2024 year. A similar budget would be required for each department. Millbridge assumes that a full-time worker will be paid for 40 hours a week for 52 weeks a year. Therefore, the director of the Recreation Department, who is a full-time year-round employee, will be paid for 2,080 hours. The three

<sup>11</sup> Ives, Razek, and Hosch, 81.

manager positions cover only the 4 summer months, so they are budgeted for 693 paid hours each year. The lifeguard and maintenance hours dropped during 2023, when the town pool was being renovated. Both figures are expected to increase in 2024, once the renovation is complete.

**EXHIBIT 2-5** Millbridge Recreation Department Expenditure Budget,  
Personnel Services, Fiscal Year 2024

| Position Code | Position Title      | 2022 Actual   |          |                      | 2023 Estimated |          |                      | 2024 Budget   |          |                      |
|---------------|---------------------|---------------|----------|----------------------|----------------|----------|----------------------|---------------|----------|----------------------|
|               |                     | Hours         | Rate     | Amount               | Hours          | Rate     | Amount               | Hours         | Rate     | Amount               |
| 1001          | Director            | 2,080         | \$ 40.10 | \$ 83,408.00         | 2,080          | \$ 41.30 | \$ 85,904.00         | 2,080         | \$ 43.37 | \$ 90,209.60         |
| 1002          | Pool Manager        | 693           | 20.50    | 14,206.50            | 693            | 21.12    | 14,636.16            | 693           | 22.17    | 15,363.81            |
| 1003          | Golf Course Manager | 693           | 18.40    | 12,751.20            | 693            | 18.95    | 13,132.35            | 693           | 19.90    | 13,790.70            |
| 1004          | Tennis Club Manager | 693           | 18.40    | 12,751.20            | 693            | 18.95    | 13,132.35            | 693           | 19.90    | 13,790.70            |
| 1010          | Lifeguards          | 6,240         | 12.00    | 74,880.00            | 4,160          | 12.36    | 51,417.60            | 6,411         | 12.98    | 83,214.78            |
| 1020          | Maintenance Workers | 10,400        | 10.25    | 106,600.00           | 9,360          | 10.56    | 98,841.60            | 10,574        | 11.09    | 117,265.66           |
| 1030          | Clerical            | <u>4,160</u>  | 14.75    | <u>61,360.00</u>     | <u>4,160</u>   | 15.19    | <u>63,190.40</u>     | <u>4,160</u>  | 15.95    | <u>66,352.00</u>     |
|               |                     | <u>24,959</u> |          | <u>\$ 365,956.90</u> | <u>21,839</u>  |          | <u>\$ 340,254.46</u> | <u>25,304</u> |          | <u>\$ 399,987.25</u> |

*Note:* Line items may not precisely sum due to rounding.

The budget for 2024 includes raises of 5 percent, in accordance with the budget guidelines provided to each manager, but does not include fringe benefit costs, which would often be added directly by the government's finance department when the individual department budgets are combined to get the overall costs of the governmental body. Fringe benefits are usually calculated as a percentage of wages. Fringes include payments into the Social Security system (Federal Insurance Contributions Act, or FICA), health-care benefits, retirement plan payments, and a variety of other costs. The fringes are not determined employee by employee. Rather, an average rate is used for a large segment of employees. A typical rate might be around 30 percent of wages in a not-for-profit or health organization, and in excess of 50 percent in government. Fringes can have a dramatic impact on any organization's spending. For example, one of the largest components of the overall fringe rate is the cost of employee health insurance. If health insurance costs increase more than expected, the fringe benefit rate can easily increase at least several percent, creating a large budget imbalance for the organization.

Many government bodies adopt personnel classification systems that list the various types of positions that exist and establish a pay grade for each. Individual pay grades often have steps, allowing employees to move up in pay over time, even if they are not promoted to a new position. In a given year an employee may move up a step to reflect experience

and longevity, and also receive a general salary increase that is applied across the board to all grades and steps. Once individuals have reached the top step for their grade, they must change to a different position at a higher grade or else receive only general salary increases each year.

Some of the benefits of a classification system are a greater degree of uniformity in pay for positions requiring similar skills. They also allow for systematic and consistent consideration of employee experience and longevity. Also, if budgeted positions are vacant when the budget is prepared, or new positions are being added in the coming year's budget, the budget can still be prepared with some degree of certainty about expenditures, because the classification system dictates the wages that will be earned when the positions are filled. Some critics are concerned, however, that when the public is told that raises are going to be 5 percent for government employees for the coming year, they may not be aware that many employees receive substantially bigger raises than 5 percent, when their step increases are considered.

#### *Other Than Personal Services*

The other major part of the operating budget for departments is referred to as the other than personal services (OTPS) budget. This would include a variety of different types of expenses such as office supplies, subscriptions, and copying costs. Again, the actual budget form would typically include information about the prior and current years as well as the projected budget request for the coming year. In making their budget projections for the coming year, managers must carefully determine what most influences the amount that must be spent on each item. For example, office supply costs might vary based solely on inflation. However, the amount spent on the supply items to test the composition and safety of the pool water might vary most with the number of hours the pool will be open (assuming that the water is tested once an hour during all hours of operation). If the renovated pool will be open more hours, then we must anticipate the cost of additional supplies to test the water.

Some organizations budget for OTPS costs using a formula to simplify budget calculations. For example, a government may have found that historically, the amount spent on supplies can be related to the number of workers. To budget supply costs for the future, one would first determine the increase or decrease in the number of workers. Then one could estimate the change in supply cost due to inflation. Suppose that an agency spent \$80,000 on supplies last year and expects a 2 percent increase in manpower and a 3 percent increase in the price of supplies. The budget for the coming year would increase to \$81,600 to cover the manpower increase ( $\$80,000 + [2\% \times \$80,000] = \$81,600$ ) and then to \$84,048 to cover the price increase ( $\$81,600 + [3\% \times \$81,600] = \$84,048$ ). This is a much easier approach than trying to figure out exactly how many pens, pads, and paper clips will be needed.

Similar rules of thumb can be used in budgeting for other OTPS costs. For example, when planning on the purchase of blacktop for pothole repair, the department of transportation might develop a formula based on tons of blacktop needed in a typical year per mile of two-lane road that must be maintained. That could be adjusted for roads that have more than two lanes.

#### *Capital Budgets*

Earlier in the chapter capital budgets were discussed, and it was explained that a separate capital budget is generally prepared. We will assume that Millbridge is not planning any capital expenditures for the coming year. Capital budget issues are discussed further in Chapter 5.



### Consolidate Departmental Expenditure Requests and Revenue Estimates

Once the revenue estimates and expenditure requests have been prepared, all the elements from all the departments can be consolidated so that the initial projected surplus or deficit can be calculated. Based on the timetable presented in Exhibit 2-3, this consolidation would take place during the first 10 days of September. We can see in Exhibit 2-6 that the general revenues of Millbridge are expected to be substantially more than the amount needed to cover general administrative costs. Also, the school system is budgeted to just cover its costs. However, a number of departments are projecting deficits. Public Works, which has no revenues of its own, is projecting the largest deficit amount. Public Safety is another department that requires large amounts of support from the general revenues of the town. On the other hand, the Recreation, Water, and Sewer departments have all submitted budget requests that project surpluses.

#### EXHIBIT 2-6 Town of Millbridge, Draft Fiscal Year 2024 Budget

|                           | Projected Revenues | Projected Expenditures | Projected Net |
|---------------------------|--------------------|------------------------|---------------|
| General Revenues          |                    |                        |               |
| Property Taxes            | \$ 7,297,093       |                        |               |
| Sales Tax                 | <u>325,864</u>     |                        | \$ 7,622,957  |
| General Administration    |                    |                        |               |
| PS                        |                    | \$ 3,104,095           |               |
| OTPS                      |                    | <u>1,076,523</u>       | (4,180,618)   |
| Education                 |                    |                        |               |
| School Taxes              | 5,318,817          |                        |               |
| PS                        |                    | 4,295,403              |               |
| OTPS                      |                    | <u>1,023,414</u>       | 0             |
| Public Safety             |                    |                        |               |
| Fines and License Revenue | 1,343,209          |                        |               |
| PS                        |                    | 2,357,349              |               |
| OTPS                      |                    | <u>423,520</u>         | (1,437,660)   |
| Public Works              |                    |                        |               |
| Revenue                   | 0                  |                        |               |
| PS                        |                    | 2,139,542              |               |
| OTPS                      |                    | <u>924,008</u>         | (3,063,550)   |

(Continued)

**EXHIBIT 2-6** Continued

|                       |         |                |                           |
|-----------------------|---------|----------------|---------------------------|
| Health and Sanitation |         |                |                           |
| Fee Revenue           | 382,823 |                |                           |
| PS                    |         | 295,468        |                           |
| OTPS                  |         | <u>98,463</u>  | (11,108)                  |
| Recreation            |         |                |                           |
| Fee Revenue           | 589,834 |                |                           |
| PS                    |         | 399,987        |                           |
| OTPS                  |         | <u>180,549</u> | 9,298                     |
| Water                 |         |                |                           |
| Usage Charges         | 316,551 |                |                           |
| PS                    |         | 228,435        |                           |
| OTPS                  |         | <u>73,058</u>  | 15,058                    |
| Sewer                 |         |                |                           |
| Usage Charges         | 153,247 |                |                           |
| PS                    |         | 84,375         |                           |
| OTPS                  |         | <u>42,058</u>  | <u>26,814</u>             |
| Total                 |         |                | <u><u>(1,018,809)</u></u> |

*Note:* Line items may not precisely sum due to rounding.

The mayor, town manager, and other key top-level executives of Millbridge would review the consolidated budget from September 10 to September 15. Overall, the consolidated budget requests result in a projected deficit of over \$1 million. If the town has a requirement to show a break-even or surplus budget, then the draft budget in Exhibit 2-6 will be unacceptable. It will be necessary to either increase tax rates further, find other revenues, or trim expenditures. According to the budget timetable in Exhibit 2-3, department heads will revise budgets during the last half of September so that the finalized budget can be submitted to the town council on October 15.

#### Prepare the Budget Document

Once the budget has been changed (which may take a number of rounds back and forth), and the chief executive officer (CEO; in the case of Millbridge, the mayor and the town manager) has decided that the budget is acceptable, a formal budget document is prepared. This document will include a message to the reader addressing the financial situation of the government and discussing what the budget tries to accomplish. New programs will be discussed, as will significant changes in revenues or expenditures. The budgeted revenues and expenditures are shown along with detailed supporting schedules allowing the reader to better understand what the summary numbers represent. Justifications will typically also be provided so that the reader understands the negative consequences of eliminating any of the elements of the budget. This does not mean that the budget must be adopted as

submitted, but rather that the reader should understand the implications of various types of changes.

### Present the Budget Document to the Legislative Body

Once prepared, the budget document is sent to the legislative body for review and adoption. In the case of Millbridge, the budget is presented to the town council on October 15. For the next 2 weeks, the council holds meetings to discuss the budget. The council members may accept the budget as proposed or they may adjust it. If adjustments are made, the budget must be modified and then printed, and in the case of Millbridge, mailed to all residents for their review. This is followed by public hearings on the budget before the final vote by the Town Council. Public hearings are common practice by governments, although not universal. The timing of the public hearings will vary as well. They may come at an earlier point than they do in this example. The budget is adopted by passage of an appropriation ordinance or act, which establishes the maximum spending by the government body for the coming year. The approved Millbridge budget, as revised by department managers and by the Town Council, appears in Exhibit 2-7.

### EXHIBIT 2-7 Town of Millbridge, Approved Fiscal Year 2024 Budget

|                           | Projected Revenues | Projected Expenditures | Projected Net |
|---------------------------|--------------------|------------------------|---------------|
| General Revenues          |                    |                        |               |
| Property Taxes            | \$ 7,671,435       |                        |               |
| Sales Tax                 | <u>325,864</u>     |                        | \$ 7,997,299  |
| General Administration    |                    |                        |               |
| PS                        |                    | \$ 3,001,435           |               |
| OTPS                      |                    | <u>983,564</u>         | (3,984,999)   |
| Education                 |                    |                        |               |
| School Taxes              | 5,318,817          |                        |               |
| PS                        |                    | 4,295,403              |               |
| OTPS                      |                    | <u>1,023,414</u>       | 0             |
| Public Safety             |                    |                        |               |
| Fines and License Revenue | 1,343,209          |                        |               |
| PS                        |                    | 2,139,743              |               |
| OTPS                      |                    | <u>388,426</u>         | (1,184,960)   |
| Public Works              |                    |                        |               |
| Revenue                   | 0                  |                        |               |
| PS                        |                    | 1,983,045              |               |
| OTPS                      |                    | <u>884,356</u>         | (2,867,401)   |

(Continued)

(Continued)

## Health and Sanitation

|             |         |               |          |
|-------------|---------|---------------|----------|
| Fee Revenue | 382,823 |               |          |
| PS          |         | 295,468       |          |
| OTPS        |         | <u>98,463</u> | (11,108) |

## Recreation

|             |         |                |       |
|-------------|---------|----------------|-------|
| Fee Revenue | 589,834 |                |       |
| PS          |         | 399,987        |       |
| OTPS        |         | <u>180,549</u> | 9,298 |

## Water

|               |         |               |        |
|---------------|---------|---------------|--------|
| Usage Charges | 316,551 |               |        |
| PS            |         | 228,435       |        |
| OTPS          |         | <u>73,058</u> | 15,058 |

## Sewer

|               |         |               |               |
|---------------|---------|---------------|---------------|
| Usage Charges | 153,247 |               |               |
| PS            |         | 84,375        |               |
| OTPS          |         | <u>42,058</u> | <u>26,814</u> |

|       |  |  |                 |
|-------|--|--|-----------------|
| Total |  |  | <u><u>0</u></u> |
|-------|--|--|-----------------|

*Note:* Line items may not precisely sum due to rounding.

### Determine the Property Tax (Millage) Rate

Once the budget has been passed, the legislative body must enact legislation to provide revenues in support of the budget. Some revenues are recurring and do not require any annual action on the part of the government. For example, Millbridge might have a sales tax that continues at a set rate unless specifically changed by the government. Similarly, rates are established for parking tickets, licenses, and other sources of revenue. However, for many local governments one of the primary sources of revenue, the property tax, is adjusted each year.

This approach is not universal. In some localities, the property tax is a flat percentage of assessed property value, and that percentage does not change from year to year. As assessed values change, the revenues from the tax will change correspondingly. That does not require any action on the part of the legislature each year. However, it also substantially limits the ability of the local government to control its revenues. As a result, expenditures must be matched to available revenues. In localities where the property tax rate is adjusted each year, the government has a greater ability to adjust revenues to meet expenditure needs.

Millbridge is assumed to have a property tax rate that is adjusted annually. Usually such rates go up from year to year, but that is not necessarily the case. For example, in an older community with a falling number of school-age children, the costs of the educational system may drop enough to actually allow property tax rates to decline. Also, if property values are rising rapidly, then the assessed property tax base may rise enough to offset the need for a tax increase. In the case of Millbridge, additional housing construction is increasing the tax

base. Also, with the opening of a new direct rail connection to the nearby large city, house prices in the town have risen dramatically. The overall increase in the assessed value therefore offsets some of the additional costs of services that will be incurred due to the larger town population.

From Exhibit 2-7 we see that the property taxes for general revenues will be \$7,671,435 and school taxes will be \$5,318,817 for Millbridge for the coming year. In the case of Millbridge, both of these property taxes are collected by the town, but the tax rates are stated separately. Due to exemptions from tax for not-for-profit organizations, veterans, and the elderly, not all property in Millbridge is taxed. Also, based on past experience, Millbridge has found that a portion of billed taxes is never collected from property owners. They have found that adding 1 percent to the amount needed for the budget provides an appropriate cushion to cover those uncollectible amounts. Millbridge would take the following approach to set its tax rates:

|  |                         |
|--|-------------------------|
| Total Assessed Value of Property in Township         | \$ 1,423,540,000        |
| Property Exempt from Tax                             | <u>(180,243,000)</u>    |
| Net Assessed Value of Property                       | <u>\$ 1,243,297,000</u> |
| Amount Needed for General Revenues (see Exhibit 2-7) | \$ 7,671,435            |
| Allowance for Uncollectible Taxes (1%)               | <u>76,714</u>           |
| Required Levy for General Revenues                   | <u>\$ 7,748,149</u>     |
| Amount Needed for Schools                            | \$ 5,318,817            |
| Allowance for Uncollectible Taxes (1%)               | <u>53,188</u>           |
| Required Levy for Schools                            | <u>\$ 5,372,005</u>     |

Calculation of Tax Rate:

|                                    |   |   |           |
|------------------------------------|---|---|-----------|
| Tax or Millage Rate                | = | $\frac{\text{Required Tax Levy}}{\text{Net Assessed Property Value}}$ |           |
| Town General Revenues Property Tax | = | $\frac{\$7,748,149}{\$1,243,297,000}$                                 | = 0.00623 |
| School Property Tax                | = | $\frac{\$5,372,005}{\$1,243,297,000}$                                 | = 0.00432 |
| Combined Property Tax Rate         | = | $0.00623 + 0.00432$   | = 0.01055 |

For a homeowner with a house appraised at \$300,000, the taxes would be calculated by multiplying the rate by the appraised value:

$$\$300,000 \times 0.00623 = \$1,869.00 \text{ Town Tax}$$

$$\$300,000 \times 0.00432 = \$1,296.00 \text{ School Tax}$$

$$\$300,000 \times 0.01055 = \$3,165.00 \text{ Total Property Tax}$$

These rates would normally be multiplied by \$1,000 to get the tax rate per \$1,000 of assessed value. For example, the overall property tax rate would be \$10.55 per \$1,000 of assessed value ( $0.01055 \times \$1,000$ ). The rates per thousand dollars of assessed valuation are called **mill rates**. New tax bills should be mailed out as early as possible to ensure that the government collects its property taxes on time.

In this example, Millbridge found it sufficient to just add 1 percent to the total tax bill to account for uncollectible taxes. Estimates of uncollectible taxes are often based on historical experience and estimated as a percentage of the tax bills sent to residents. Were that the case, Millbridge would calculate the amount of the required levy by dividing the total amount by one minus the uncollectible tax rate to calculate the required tax levy. In this example, \$7,671,435 needed for general revenues would be divided by  $1 - .01 = .99$  resulting in a general revenue tax levy of \$7,748,924. That would add \$775 to the required general revenue tax levy, a small difference, but one that would grow with both the size of the budget and the proportion of the tax levy that went uncollected.

## SUMMARY

Having a plan is essential for getting the most out of any organization. Planning is accomplished by establishing the mission for the organization, defining a strategy to accomplish the mission, developing a long-range plan that defines the organization's objectives, and preparing specific detailed budgets that define the resources needed to accomplish its goals and objectives.

A budget is simply a plan. The plan shows how management expects to obtain and use resources to achieve the organization's objectives. It provides a detailed action plan. There is no magic to budgeting. It requires thought. Budgeting requires estimating all the likely receipts and all the likely payments. The process usually requires a number of preliminary drafts and revisions before a feasible plan is developed and accepted by all parties. Once approved, efforts must be made to try to keep as close to the plan as possible.

Although some budgeting is done on an ad hoc basis (special purpose budgets), most budgeting is done at regular intervals. The master budget incorporates and summarizes all the budget elements for the coming year. The main elements of the master budget, sometimes called the comprehensive budget, are the operating budget and the financial budget. The operating budget presents a plan for revenues and expenses for the fiscal year. The

financial budget includes a cash budget and a capital budget. While the cash budget focuses on cash flows for the fiscal year, the capital budget considers outlays for resources that will provide service for a number of years into the future.

Some organizations acknowledge, or recognize, support and revenues only when they are received in cash. In those cases, expenses are recognized only when they have been paid in cash. They are said to use a cash basis of accounting. By contrast, if revenue is recognized in the year service is provided, the organization is said to be using an accrual basis of accounting. Accrual accounting is more difficult than cash accounting, but it provides a matching of revenues and expenses, allowing the manager to get a better sense of the profitability of the organization's activities.

The process of developing budgets is highly politicized. To the extent possible, managers should try to use an objective budget process that best leads to the accomplishment of the organization's mission, goals, and objectives. All organizations seek to accomplish some end. Hospitals exist to provide health-care services to their communities. Museums exist to provide the public with access to fine art. Governments exist to provide essential services. The budget becomes the tool to facilitate the accomplishment of these missions.

## KEY TERMS FROM THIS CHAPTER

|                                |                         |                            |
|--------------------------------|-------------------------|----------------------------|
| accrual basis, 42              | expenditures, 37        | objects of expenditure, 50 |
| allocations, 51                | expenses, 30            | operating budget, 36       |
| allotments, 51                 | financial budget, 36    | outcomes, 28               |
| appropriation, 50              | fiscal year, 36         | output, 28                 |
| audit, 52                      | goal congruence, 56     | profit, 31                 |
| budget, 29                     | goal divergence, 56     | recognition, 41            |
| budget guidance memorandum, 49 | long-range budget, 53   | responsibility centers, 49 |
| capital assets, 47             | long-range plan, 27     | revenues, 30               |
| capital budget, 36             | master budget, 36       | special purpose budget, 30 |
| cash basis, 41                 | matching, 42            | strategic plan, 27         |
| cash budget, 36                | mill rates, 70          | strategy, 27               |
| depreciation expense, 47       | mission, 26             | support, 37                |
| domain, 26                     | mission statement, 26   | uncollectibles, 32         |
| encumbrances, 51               | modified cash basis, 47 |                            |

## QUESTIONS FOR DISCUSSION

- 2-1.** How does planning help an organization?
- 2-2.** What is the organization's mission and why is it important?
- 2-3.** What is the purpose of the strategic plan?
- 2-4.** What is the role of the long-range plan?
- 2-5.** Why are budgets used?
- 2-6.** Why would a special purpose budget be used?
- 2-7.** What are the different types of budgets?
- 2-8.** How are budgets useful for motivation?
- 2-9.** How do individual goals differ from organizational goals?
- 2-10.** No matter how carefully we budget, things sometimes differ from our plan. If you were the manager of an organization in 2020, how do you think the COVID pandemic might have impacted your organization's actual results as compared to the budget?
- 2-11.** See question 2-10 above. Assuming your organization was significantly impacted by the COVID pandemic what actions would you have taken moving forward?
- 2-12.** Discuss the concept of goal congruence.
- 2-13.** What are several incentive approaches? Are there weaknesses in any of the approaches?
- 2-14.** What are some negative consequences of unrealistic budget expectations?
- 2-15.** What are the elements of the budget cycle?
- 2-16.** How does the basis of accounting affect what is in a budget?
- 2-17.** What is a modified cash basis of accounting?
- 2-18.** What is the purpose of a budget timeline?

## PROBLEMS

- 2-19.** Finn Fixes is a new charity that repairs donated cars for use by unemployed job seekers. Finn collects the cars from area junkyards. The first year Finn is in operation, jobs programs bought cars from the organization for \$60,000. They paid Finn \$45,000 during the year and owe \$15,000. Finn uses donated, unskilled labor and free garage space at a local high school. Its only cost is for parts. Total parts cost \$58,000 for the year. During that first year Finn paid its parts suppliers \$52,000. It owes its suppliers the balance.
1. What is the profit or loss to Finn Fixes on a cash basis?

2. What is the profit or loss to Finn Fixes on an accrual basis?
  3. If Finn Fixes were to stop operating at the end of the first year but received payment from the jobs programs and paid its suppliers, what would its cash budget for the next year be?
  4. How much cash would Finn Fixes have on hand at the end of the second year? How does that amount compare to its budgeted accrual basis profit or loss for the first year?
  5. Which basis reflects the long-term stability of the organization?
- 2-20.** Accrual budgets plan for expenses for supplies when \_\_\_\_\_, while cash budgets plan for the expense when \_\_\_\_\_.  
(choose from below)
1. they are ordered
  2. they will be delivered to the organization
  3. they will be paid for
  4. they will be consumed
  5. It depends of the type of expense.
- 2-21.** Although the COVID pandemic was devastating to millions of people and organizations, not everyone suffered equally. While small businesses without backup resources were closing, and while millions waited on food lines to get supplies needed to literally survive, organizations with significant endowments, such as Universities and Museums, were better able to weather the storm. Assume your organization had \$100 million invested in a S&P 500 Stock Index fund on February 1, 2020, just as the pandemic was starting. How much was that endowment worth on August 31, 2021, just a little more than a year and a half into the pandemic? Does this give you a new perspective on the importance of fund-raising and developing an organizational endowment? (Hint: you need to do an Internet search to find the data you need.)
- 2-22.** Answer the following questions about methods of accounting.
1. On the accrual basis of accounting, revenues and support are recognized when an organization \_\_\_\_\_ an amount that it is likely to collect, and it recognizes expenses when it \_\_\_\_\_ a resource.
  2. Accrual-based expenses associated with capital assets are called \_\_\_\_\_.
  3. Capital projects are evaluated on the \_\_\_\_\_ basis of accounting.
  4. Loan repayments are resource outflows on the \_\_\_\_\_ basis of accounting, but not on the \_\_\_\_\_ basis of accounting.
  5. Borrowed amounts are resource inflows on the \_\_\_\_\_ basis of accounting, but not on the \_\_\_\_\_ basis of accounting.
- 2-23.** Monroe Outpatient Surgery Center (MOSC) is developing an operating budget for the month ending June 30, 2024. MOSC expects to perform 80 surgical procedures during the month. MOSC's average charge (price) per surgical procedure is \$2,500. The cost of disposable surgical supplies is \$300 per surgical procedure. MOSC also contracts with orthopedic surgeons at a fee of \$1,500 per surgical procedure. The monthly salaries for MOSC's receptionist, bookkeeper, and two surgical nurses total \$10,500. MOSC's occupancy costs, which include space rental, insurance, and all utilities, are \$8,200 per month. Average monthly communication costs are \$1,200. Office and operating room equipment was installed at a cost of \$240,000. The equipment is expected to have a 5-year life and has no salvage value. Prepare MOSC's operating budget for the month of June 2024.
- 2-24.** Westchester City is constructing a new city hall. The building will cost \$40 million and is estimated to have a useful life of 40 years. Based on the experience of similar cities and the best estimates of the city's engineers, Westchester's planners expect that at the end of 40 years the building will have to be torn down and rebuilt, so it is not expected to have any value at the end of 40 years. It will cost \$6 million to acquire equipment for the new center. Equipment is assumed to last for 10 years. The city estimates that the equipment can be sold for 20 percent of its cost at the end of its useful life. If the city undertakes this project, what will the building and equipment expense be in the first year after the center is opened?
- 2-25.** Children's Best Hope (CBH) provides day-care services to low-income families. CBH bills the state for its services under a service contract. Billings for the first 4 months of 2023 are anticipated to be as follows:

| January   | February  | March     | April     |
|-----------|-----------|-----------|-----------|
| \$220,000 | \$200,000 | \$240,000 | \$230,000 |



CBH finds that it collects 25 percent of the amounts billed in the month of service with the balance collected in the month following service.

CBH is planning to acquire a new building as an additional site for its services in March 2023. The full \$250,000 purchase cost of the building will be financed with a mortgage loan. CBH anticipates a February 28, 2023, cash balance of \$26,000. CBH anticipates the following expenses and disbursements for the month of March 2023:

|                       |           |
|-----------------------|-----------|
| Payroll payments      | \$170,000 |
| Personnel expenses    | \$160,000 |
| Payments to suppliers | \$ 45,000 |
| Supplies expense      | \$ 48,000 |
| Depreciation expense  | \$ 12,000 |
| Interest expense      | \$ 6,000  |

Prepare an operating budget, cash budget, and capital budget for CBH for the month of March 2023.

- 2-26.** Middleboro Township plans to order supplies every quarter of the year. It expects to receive the supplies in the quarter after they are ordered. It expects to use them the quarter after that and to pay for them the

|                          | Jan.–March | April–June | July–Sept. | Oct.–Dec. | Total       |
|--------------------------|------------|------------|------------|-----------|-------------|
| Supply Orders            | \$300,000  | \$360,000  | \$ 390,000 | \$330,000 | \$1,380,000 |
| Salaries                 | 600,000    | 750,000    | 825,000    | 720,000   | 2,895,000   |
| Income Tax Cash Receipts | 600,000    | 600,000    | 1,200,000  | 600,000   | 3,000,000   |

- 2-27.** Local Hospital (LH) has decided that it would like to send nurses to a local supermarket to provide a free health screening for interested supermarket customers. The screening will consist of measuring the individual's blood pressure and taking a drop of blood, which will immediately be tested for several critical indicators. The director of public relations at the hospital believes that 100 people will take advantage of the screening each day. The plan is to provide the screening every day for 1 week; thus a total of 700 screenings are expected. LH expects the supermarket to provide a \$1,000 grant to help defray the costs of the program (since it will likely draw more customers to the store). LH anticipates the following expenses:

|                       |         |  |
|-----------------------|---------|--|
| Test equipment rental | \$500   | For 1 week                               |
| Nurses                | \$50/hr | A total of 10 nurse hours/day for 7 days |
| Blood tests           | \$1     | Per individual tested                    |

Create a special purpose budget for the program. Show revenues and expenses by line item and show the expected profit or loss. If there is an expected loss, should LH necessarily abandon the project or are there other factors that must be considered?<sup>12</sup>

- 2-28.** Roche City has two major sources of revenues, property tax and sales tax, which are billed according to the schedule at the top of the next page.

quarter after that. For example, if it orders supplies in the first quarter of the year, it will receive them in the second quarter, use them in the third quarter, and pay for them in the fourth quarter. The township pays salaries in the quarter that the employees work.

The township earns its income tax revenues in equal amounts throughout the year. However, it receives substantially more cash in April, when tax returns are filed. It plans to borrow \$35,000 on a 20-year, 5 percent annual interest note on the first day of the fourth quarter. Interest will be paid once each year at the end of the third quarter. Interest is paid only on outstanding debt—that which has not yet been repaid.

The town prepares its operating budget following the unique rules of modified accrual accounting used by governments. Under these rules expenses are recognized when the town receives goods or services and becomes legally obligated to pay for them. It does not matter if they have been used or not. Also, cash inflows or proceeds from long-term loans are treated as if they were revenues. Using the information from the table below, prepare an operating budget and a cash budget for Middleboro Township for the fourth quarter only. Assume the town has \$300,000 in cash when the fourth quarter starts.

<sup>12</sup> This problem and problems 2-28, 2-32, and 2-33 are adapted from problems written by Dwight Denison.

| 2023              | July   | August | Sept.      | Oct.   | Nov.   | Dec.    |
|-------------------|--------|--------|------------|--------|--------|---------|
| Property Tax (\$) | —      | —      | 45,000,000 | —      | —      | —       |
| Sales Tax (\$)    | 50,000 | 55,000 | 62,000     | 50,000 | 68,000 | 112,000 |

Traditionally, property tax revenues have been received in cash according to the following schedule:

40 percent in the first month following the billing date

20 percent in the second month

10 percent in the third month

10 percent in the fourth month

8 percent in the fifth month

5 percent in the sixth month

7 percent are not collected

The state collects the sales tax revenues and will transfer cash to the city on March 1, 2024, for the sales tax revenues earned in the last quarter of 2023.

Roche City is not planning any capital asset purchases during the next 3 months. Monthly cash disbursements for general operations are \$3.7 million. Beginning cash balance for January 1, 2024, is \$500,000. Roche City will borrow to ensure that the ending cash balance each month is at least \$100,000.

Use this information to prepare a monthly cash budget for Roche City for January, February, and March of 2024.

- 2-29.** Because of the downturn in the state's economy, the mayor of Stratton thinks that uncollectible taxes are likely to increase from 5 percent of total tax bills to 10 percent in the coming fiscal year. The total value of all the properties in the town of Stratton is \$300 million and the approved budget is \$3.5 million. Properties are assessed at their full value. A total of \$5 million worth of properties is exempt from taxation. To minimize tax increases in the coming fiscal year, the mayor and town council have decided to take \$500,000 out of the town's rainy-day fund (a reserve used to meet short-term budget shortfalls) and apply that money toward the coming year's budget. How much does the town have to charge per \$1,000 of assessed valuation to raise the needed \$3.5 million? Show your calculations. You may round your answer to the nearest penny. Be sure to check your answer by multiplying the amount you propose billing by the

expected tax-collections rate to show that the amount you expect to collect is enough to meet Stratton's fiscal needs.

- 2-30.** Select from the choices below to answer the following questions:

- increase
- decrease
- stay the same
- cannot tell from the information given

- If the amount of uncollectible school taxes increases, the mill rate that citizens must pay on their school taxes will \_\_\_\_.
- If the value of taxable properties rises from \$300 million to \$310 million and the amount that the town needs to raise does not change, the mill rate that the town charges its citizens will \_\_\_\_.
- If the value of tax-exempt properties decreased from \$100 million to \$75 million and the amount that the town needs to raise does not change, the mill rate that the town charges its citizens will \_\_\_\_.

- 2-31.** River County is planning several capital acquisitions for the coming year. These include the purchase of two new garbage trucks at \$150,000 each, one new bulldozer at \$240,000, three new riding lawn mowers at \$16,000 each, and construction of an activity center in the park for \$650,000. The expected lifetime of the various capital items is 10 years for the garbage trucks, 8 years for the bulldozer, 5 years for the lawn mowers, and 40 years for the activity center. Prepare a capital budget for the items to be acquired, showing their estimated lifetimes and their per unit and total costs.

- 2-32.** Zoo Extravaganza is a not-for-profit organization. Zoo Extravaganza took over the county zoo, with the provision that the county would provide a subsidy for its operations. The county provides \$7,000 per month. The rest of the zoo's revenues come from admission charges, which are as follows: \$20 for a family admission (the average family has four people), \$3 per child in school groups, \$5 per child ticket when not in a school group, and \$8 per adult ticket.

Each ticket entitles the visitor to ride on the “Train Around the Zoo.” However, only one third of all visitors actually ride the train.

The zoo expects the following number of visitors per month:

| Visitor Type | Monthly Number of Admission Tickets |
|--------------|-------------------------------------|
| Adult        | 800                                 |
| Child        | 950                                 |
| Schoolchild  | 1,000                               |
| Families     | 300                                 |

The zoo has the following monthly expenses in four general areas:

|                |                                    |
|----------------|------------------------------------|
| Administration | \$12,000                           |
| Zoo staff      | \$10,000                           |
| Train rides    | \$1 per person who rides the train |
| Maintenance    | \$1 per visitor                    |

Create a monthly operating budget. Show revenues and expenses by line item and show the expected profit or loss.

**2-33.** Draft a quarterly cash budget for Zoo Extravaganza (ZE) for the first two quarters of the coming year. Use just the information in this problem.

- Interest is paid on the last day of the year and can be ignored in Quarters 1 and 2.
- Annual expenses are \$220,000 for administration and ZE staff (other than maintenance workers). Those costs are paid evenly throughout the year.
- Assume the cash balance on January 1 is \$5,000 and ZE policy is to have at least a \$5,000 ending cash balance each quarter.

- Train expenses are incurred in the same seasonal pattern as admissions and are paid with a one quarter lag. The budgeted annual expense for this year is \$20,000. Last year the annual cost for the train was \$18,000.
- The cost of the maintenance crew is 20 percent of admissions revenue each quarter. Maintenance workers are paid in the quarter in which they work.
- The total annual county grant of \$84,000 is received on the last day of the fourth quarter of the year.
- ZE collects all admissions in cash at the time of admission. Total admissions revenues are \$180,000 for the year. The seasonal pattern of admissions is shown in the following table.

|                       | Quarter |     |     |     |
|-----------------------|---------|-----|-----|-----|
|                       | 1       | 2   | 3   | 4   |
| Admissions by Quarter | 30%     | 25% | 15% | 30% |

**2-34.** Prisons Counselors (PC) delivers counseling services to prison inmates for the state on a fee-for-service basis. It is preparing its cash budget for the month of March. Its operating budget reflects accrued fee-for-service revenues of \$12,500, \$13,000, and \$14,000, respectively, for the months of January, February, and March. PC bills the state electronically at the end of each month for the services that it delivers to its fee-for-service clients. PC collects 60 percent of its fee-for-service billings in the month following the delivery of service, with the remainder being collected in the second month after the delivery of services. What are PC’s total cash receipts from the state for the month of March?

**2-35.** You are the executive director of a community service agency in the inner city. Your operation is funded through a combination of cash contributions, federal government grants, and city contracts. Your revenue budget for the coming fiscal year is shown below.

| Source of Revenue | Revenue Budget for Coming Fiscal Year |                  |                  |                  |
|-------------------|---------------------------------------|------------------|------------------|------------------|
|                   | Q1                                    | Q2               | Q3               | Q4               |
| Contributions     | \$ 25,000                             | \$ 35,000        | \$ 35,000        | \$ 50,000        |
| Federal Grants    | \$250,000                             | \$375,000        | \$350,000        | \$250,000        |
| City Contracts    | <u>\$240,000</u>                      | <u>\$300,000</u> | <u>\$320,000</u> | <u>\$360,000</u> |
| Total             | <u>\$515,000</u>                      | <u>\$710,000</u> | <u>\$705,000</u> | <u>\$660,000</u> |

You know from past experience that not all your revenue and support is collected when you earn it. Cash contributions are collected in the quarter they are pledged. Federal government grants are collected one quarter after you send the granting agency a bill. The city pays 25 percent of what it owes you one quarter after you send in the bill. An additional 25 percent is collected from the city in two quarters, and the remaining 50 percent takes three quarters to collect. Starting with the revenue budget above, calculate the amount you can expect to collect in the fourth quarter of the coming fiscal year.

**2-36.** Re: Plate is a not-for-profit grocery store that buys unused edible food from restaurants and for-profit grocery stores and sells the food at below-market prices. It also offers cooking classes for a fee throughout the year. Its fiscal year (FY) is January 1–December 31. The following apply to FY 2023:

1. Re: Plate will begin the year with \$21,000 in cash.
2. Re: Plate plans to buy 1 million pounds of food at \$1.25 per pound in cash throughout the year. (Use “Food” as the line item in the budgets.)
3. Re: Plate expects to sell all its 1 million pounds of food in inventory it acquires throughout the year, at an average price of \$1.65 per pound. (Use “Grocery sales” as the line item in the budgets.)
4. Re: Plate plans to offer three cooking classes per week throughout the year. Each class will have 10 participants, each of whom will pay a \$25 fee. (Use “Class fees” as the line item in the budgets.)
5. Re: Plate will pay \$10,000 per month in rent, up from \$9,500 per month in FY 2022. Rent will be \$10,500 per month in FY 2024. Re: Plate pays rent 1 month in advance.
6. Re: Plate’s total payroll will be \$210,000 in salaries, up from \$180,000 in FY 2022. In addition to salary, Re: Plate’s employees are paid benefits valued at 40 percent of their salaries. The benefits rate will be unchanged from FY 2022. Employees are paid monthly with a 1-month lag. (Use “Salaries and benefits” as the line item in the budgets.)
7. Re: Plate will take out a \$40,000 loan July 1. The loan will have an annual interest rate of 2 percent. An interest payment and a principal repayment of \$10,000 will be due December 31.
8. Re: Plate will use the loan to purchase a new forklift that will have a useful life of 10 years and a salvage value of \$5,000. Re: Plate also owns

computer equipment it purchased in 2021 for \$50,000; the equipment has no salvage value and a useful life of 5 years. Prepare an annual operating budget and a semiannual cash budget (showing the first half of the year, the second half of the year, and annual amounts in three side-by-side columns) for Re: Plate for FY 2023. Interest expense and depreciation expense are further discussed in Chapters 5 and 10, respectively.

**2-37.** The county has an initiative for students in underperforming schools. To get funding, schools provide each student with eight 2-hour group tutoring sessions each month. Also, parents must agree to pay \$10 per month for each child they register for the program. The county will pay each school \$200 per enrolled child, per month.

Schools must provide one tutor for every five students enrolled in the program, at a cost of \$50 per hour at a teacher’s home school or \$60 per hour if the teacher has to commute from another school in the system.

Schools that participate also need to acquire a site license for a self-study computer program, at a cost of \$2,400 per year regardless of the number of students. Schools also incur a cost of \$1.50 per child, per tutoring session, for workbooks that are tied to the self-study program.

Generally, the county takes 1 month to pay bills submitted by schools. Parents pay all tuition bills at the beginning of each month. Participating teachers are paid for all afterschool programs at the end of each month. The full cost of the software must be paid by the end of the first month of the program. Workbooks are paid for in the month they are used.

You are the budget manager for Typical County School (TCS). Five teachers in your school have agreed to be tutors. Since you expect to need 15 tutors by the end of the year, you will also use 10 teachers from other schools, as needed. Your calculations indicate an expected 25 students in the program during the first month it is offered, 41 in the second month, and 52 in the third month. As budget manager,

1. prepare operating budgets for each of the first 3 months of the program;
2. summarize the three monthly budgets into a quarterly operating budget; and
3. Starting from a zero cash balance, prepare a cash budget for the first quarter (3 months) of the

program. You do not have to prepare monthly cash budgets.

### 2-38. Marquoya College<sup>13</sup>

#### Part I

Marquoya College (MC) is a medium-sized private school located in the Midwest. In the past, MC administrators established a budget for the next academic year by adding a specific percentage (e.g., 6 percent, 8 percent) to the tuition revenue and operating expenses. This year MC has asked for your assistance in developing its budget for the next academic year. You are supplied with the following data for the current year:

|                                |                   |
|--------------------------------|-------------------|
| Enrollment                     | 4,300 students    |
| Tuition                        | \$3,300/year      |
| Full-time faculty              | 250 (72% tenured) |
| Fees                           | \$280/year        |
| Average faculty salary         | \$36,000/year     |
| Full tuition-only scholarships | 400 students      |

For the next academic year, enrollment is expected to increase by 300 students, with each student taking an average of 32 credit hours. Tuition will increase by \$100/year. Prepare a schedule computing the next academic year's tuition and fee revenue budget. Explicitly show the effect of scholarships.

#### Part II

The additional students will require MC to hire 20 adjunct faculty members. Each adjunct will teach 18 credit hours and will be paid at the rate of \$750/credit hour. Full-time faculty members will receive a 5 percent pay increase. Additional merit increases to be awarded to individual faculty members will amount to \$280,000.

Prepare a schedule computing the next academic year's budget for faculty salaries. The payroll budget should reflect payroll taxes using a rate of 10 percent.

#### Part III

The current budget is \$1.2 million for operation and maintenance of plant and equipment, including

\$190,000 for salaries and wages. Experience of the past 3 months suggests that the current budget is realistic. However, expected increases for next year are \$10,000 in salaries and \$50,000 in other expenditures for maintenance of plant and equipment.

The IRS has determined that MC has unrelated business income. In the year just past, MC paid \$48,000 of federal income taxes and a penalty of \$2,000. MC's administrators think that proper allocation of costs and timely payments to the IRS will result in a total tax liability of \$36,000.

Estimates for other costs include the following:

|                                   |   |
|-----------------------------------|---|
| Mortgage payments                 | \$ 264,000 (reducing principal by \$100,000)  |
| Administrative and general        | 1,440,000 (including salaries of \$1,200,000) |
| Library                           | 1,800,000 (including salaries of \$1,000,000) |
| Health and recreation             | 750,000 (including salaries of \$300,000)     |
| Athletics                         | 320,000 (including salaries of \$60,000)      |
| Insurance and retirement benefits | 548,000                                       |
| Capital improvements              | 1,300,000                                     |

Where applicable, use a payroll tax rate of 10 percent. Anticipated revenues, other than tuition for the next academic year, are as follows:

|  |             |
|--|-------------|
| Endowment receipts (e.g., interest, dividends) | \$ 514,000  |
| Net income from auxiliary services             | \$ 538,000  |
| Athletics                                      | \$1,580,000 |

MC's remaining source of revenue is an annual alumni support campaign. Last year the alums were very generous (MC's basketball team was ranked high throughout the cage campaign) and contributed over \$600,000.

MC borrowed \$200,000 from the Golden Dome Bank for summer operations on June 15. The principal plus interest (at an annual rate of 12%) is to be paid on September 15. On the basis of the

<sup>13</sup>This problem was written by Ken Milani and Jim Gaertner. Used with permission.

tuition and fee revenue budget and faculty salaries budget computed in parts I and II, prepare a schedule computing the amount that must be raised during the annual support campaign to cover the expenditures budgeted.

#### Part IV

Using anticipated alumni support of \$750,000, prepare a cash budget for the first quarter (September,

October, November) of the MC fiscal year. (Round all calculations to the nearest hundred dollars.) The following patterns of cash flows are anticipated:

MC must maintain a cash balance of \$3,000. Financing can be arranged at the Golden Dome Bank at a rate of 8 percent. Borrowing occurs in \$1,000 increments. All loans are repaid as soon as possible, but a minimum of 1 month's interest is charged. Estimated cash on September 1 is \$3,700.

|  | Sept.                           | Oct. | Nov. | Dec. | Jan. | Feb. | Mar.–Aug. |
|--|---------------------------------|------|------|------|------|------|-----------|
| Tuition revenue                                  | 20%                             | —    | 15%  | 5%   | 30%  | 15%  | 15%       |
| Fee revenue                                      | 50%                             | —    | —    | —    | 50%  | —    | —         |
| Endowment income                                 | 25%                             | —    | —    | 25%  | —    | —    | 50%       |
| Net income from auxiliary services               | 10%                             | 10%  | 10%  | 10%  | 10%  | 10%  | 40%       |
| Athletic revenue                                 | 10%                             | —    | 50%  | 10%  | 10%  | 5%   | 15%       |
| Alumni support                                   | 2%                              | 2%   | 12%  | 25%  | 6%   | 3%   | 50%       |
| Faculty salaries                                 | 10%                             | 10%  | 10%  | 10%  | 10%  | 10%  | 40%       |
| Operation and maintenance of plant and equipment | 8%                              | 8%   | 10%  | 10%  | 10%  | 8%   | 46%       |
| Insurance and retirement                         | 10%                             | 10%  | 10%  | 10%  | 10%  | 10%  | 40%       |
| Athletic expenditures                            | 10%                             | 5%   | 10%  | 10%  | 15%  | 10%  | 40%       |
| Capital improvements                             | —                               | 80%  | —    | 10%  | —    | —    | 10%       |
| Federal income tax                               | —                               | —    | —    | —    | 25%  | 25%  | 50%       |
| All others                                       | 12 equal receipts/disbursements |      |      |      |      |      |           |

## EXTENDED PROBLEM (2-39)

### DENISON SPECIALTY HOSPITAL—PART I

Denison Specialty Hospital is planning its master budget for the coming year. The budget will include operating, capital, cash, and flexible budgets. The hospital is noted for its three fine programs: oncology (cancer), cardiac (heart), and rhinoplasty (nose jobs).

#### Section A

The managers at Denison have been busy working. They have reviewed past records and considered changes in competition, the general economy, and overall medical trends. Using past charges and anticipated rates of medical inflation, they have also made a first attempt at setting their prices.

Based on a thorough review and discussion of these data, they have projected that next year they will have 240 patients. They expect 120 oncology patients, 80 cardiac patients, and 40 rhinoplasty patients.

The charge, or list price, for oncology patients will average \$50,000. Cardiac patients will be charged an average of \$40,000, and rhinoplasty patients, \$25,000. However, those charges often are not the actual amount ultimately received.

The amount the hospital receives depends on whether patients pay their own hospital bills or have health-care insurance. Assume that private insurance companies pay the full charge or list price. However, Medicare and Medicaid have announced rates they will pay for the coming year as follows: oncology patients \$40,000, cardiac patients \$30,000, and rhinoplasty patients \$10,000. Self-pay patients are supposed to pay the full charge, but generally 25 percent of Denison's charges to self-pay patients are not collected. Expected amounts that will not be collected reduce the amount of revenue reported. No payment for charity care is ever received, and **charity care is not shown as a revenue or expense**.

The payer mix is as follows:

|             | Private Insurance | Medicare/Medicaid | Self-Pay | Charity |
|-------------|-------------------|-------------------|----------|---------|
| Oncology    | 30%               | 50%               | 10%      | 10%     |
| Cardiac     | 20%               | 60%               | 10%      | 10%     |
| Rhinoplasty | 10%               | 20%               | 60%      | 10%     |

Gift shop revenue is projected to be \$120,000 for the current year and is expected to remain the same. However, this revenue will increase or decline in proportion to changes in patient volume.

Denison Hospital has an endowment of \$1 million. It is invested as follows:

- \$500,000 in 6 percent US Government Bonds that pay interest annually
- \$250,000 in AT&T stock, which pays a dividend of 8 percent annually
- \$250,000 in growth stocks that pay no dividend

#### Section A Requirements:

1. Calculate patient revenue on an accrual basis for the coming year. Subdivide revenue by program, and within each program subdivide it by type of payer.
2. Calculate endowment revenue on an accrual basis for the coming year.
3. Prepare a revenue budget on an accrual basis, including all sources of revenue discussed previously. The revenue budget does not have to show all the detail from requirements 1 and 2, but should show each major source of revenue, such as patient services and endowment.

#### Section B

The hospital expects to employ workers in the following departments:

|          | Radiology          | Nursing            | Administration   | Total              |
|----------|--------------------|--------------------|------------------|--------------------|
| Managers | \$ 100,000         | \$ 200,000         | \$200,000        | \$ 500,000         |
| Staff    | <u>1,900,000</u>   | <u>4,200,000</u>   | <u>300,000</u>   | <u>6,400,000</u>   |
| Total    | <u>\$2,000,000</u> | <u>\$4,400,000</u> | <u>\$500,000</u> | <u>\$6,900,000</u> |

(Continued)

(Continued)

Supplies are expected to be purchased throughout the year for the departments, as follows:

|                | Total            |
|----------------|------------------|
| Radiology      | \$360,000        |
| Nursing        | 160,000          |
| Administration | <u>20,000</u>    |
| Total          | <u>\$540,000</u> |

Assume that *all* supply use varies with the number of patients.

Denison Hospital currently pays rent on its buildings and equipment of \$300,000 per year. Rent is expected to be unchanged next year. The rent is paid \$75,000 each quarter.

To better serve its patients, Denison would like to buy \$500,000 of new oncology equipment at the start of next year. It would be paid for immediately upon purchase. The equipment has a 5-year life and would be expected to be used up evenly over that lifetime. Although the capital budget would normally include justification for why the equipment is needed, it is sufficient for our purposes to know that the capital budget for Denison is \$500,000 and the equipment to be purchased has a 5-year useful life. It will have no value left at the end of the 5 years. Denison charges the cost of its capital acquisitions on a straight-line depreciation basis. That means that the cost is spread out over the useful life, with an equal share being charged as an expense, called depreciation expense, each year.

*Section B Requirements:*

1. Calculate an expense budget on an accrual basis for the coming year. The expense budget does not require detailed information by program or department but should show each type of expense such as salaries and supplies. Be sure to consider the impact of capital acquisitions on the expense budget.
2. Combine the revenue (Section A) and expense budgets to present an operating budget for the coming year.

*Note:* Part II of this extended problem appears at the end of Chapter 3.