CHAPTER 14

Planning for Profit and Cost Control

LEARNING OBJECTIVES

After you have mastered the material in this chapter, you will be able to:

1 Describe the budgeting process and the benefits it provides.

2 Explain the relationship between budgeting and human behavior.

3 Prepare a sales budget and related schedule of cash receipts.

4 Prepare an inventory purchases budget and related schedule of cash payments.

5 Prepare a selling and administrative expense budget and related schedule of cash payments.

6 Prepare a cash budget.

7 Prepare a pro forma income statement, balance sheet, and statement of cash flows.

CHAPTER OPENING

Planning is crucial to operating a profitable business. Expressing business plans in financial terms is commonly called **budgeting.** The budgeting process involves coordinating the financial plans of all areas of the business. For example, the production department cannot prepare a manufacturing plan until it knows how many units of product to produce. The number of units to produce depends on the marketing department's sales projection. The marketing department cannot project sales volume until it knows what products the company will sell. Product information comes from the research and development department. The point should be clear: a company's master budget results from combining numerous specific plans prepared by different departments.

Master budget preparation is normally supervised by a committee. The budget committee is responsible for settling disputes among various departments over budget matters. The committee also monitors reports on how various segments are progressing toward achieving their budget goals. The budget committee is not an accounting committee. It is a high-level committee that normally includes the company president, vice presidents of marketing, purchasing, production, and finance, and the controller.

The Curious Accountant

People in television commercials often say they shop at a particular store because, "my family is on a budget." The truth is, most families do not have a formal budget. What these people mean is that they need to be sure their spending does not exceed their available cash.

When a family expects to spend more money in a given year than it will earn, it must plan on borrowing the funds needed to make up the difference. However, even if a family's income for a year will exceed its spending, it may still need to borrow money because the timing of its cash inflows may not match the timing of its cash outflows. Whether a budget is being prepared for a family or a business, those preparing the budget must understand the specific issues that entity is facing if potential financial problems are to be anticipated. There is no such thing as a "one size fits all" budget.

The **United States Olympic Committee (USOC)**, like all large organizations, devotes considerable effort to budget planning. Think about the Olympic Games, and how the USOC generates revenues and incurs expenditures. Can you identify any unusual circumstances the USOC is facing that complicate its budgeting efforts? (Answer on page 513.)

THE PLANNING PROCESS

LO 1

Describe the budgeting process and the benefits it provides.

Planning normally addresses short, intermediate, and long-range time horizons. Short-term plans are more specific than long-term plans. Consider, for example, your decision to attend college. Long-term planning requires considering general questions such as

- Do I want to go to college?
- How do I expect to benefit from the experience?
- Do I want a broad knowledge base, or am I seeking to learn specific job skills?
- In what field do I want to concentrate my studies?

Many students go to college before answering these questions. They discover the disadvantages of poor planning the hard way. While their friends are graduating, they are starting over in a new major.

Intermediate-range planning usually covers three to five years. In this stage, you consider which college to attend, how to support yourself while in school, and whether to live on or off campus.

Short-term planning focuses on the coming year. In this phase you plan specific courses to take, decide which instructors to choose, schedule part-time work, and join a study group. Short-term plans are specific and detailed. Their preparation may seem tedious, but careful planning generally leads to efficient resource use and high levels of productivity.

THREE LEVELS OF PLANNING FOR BUSINESS ACTIVITY

Businesses describe the three levels of planning as *strategic planning, capital budgeting,* and *operations budgeting.* **Strategic planning** involves making long-term decisions such as defining the scope of the business, determining which products to develop or discontinue, and identifying the most profitable market niche. Upper-level management is responsible for these decisions. Strategic plans are descriptive rather than quantitative. Objectives such as "to have the largest share of the market" or "to be the best-quality producer" result from strategic planning. Although strategic planning is an integral component of managing a business, an in-depth discussion of it is beyond the scope of this text.

Capital budgeting focuses on intermediate range planning. It involves such decisions as whether to buy or lease equipment, whether to stimulate sales, or whether to increase the company's asset base. Capital budgeting is discussed in detail in a later chapter.

Operations budgeting concentrates on short-term plans. A key component of operations budgeting is the *master budget* which describes short-term objectives in specific amounts of sales targets, production goals, and financing plans. The master budget describes how management intends to achieve its objectives and directs the company's short-term activities.

The master budget normally covers one year. It is frequently divided into quarterly projections and often subdivides quarterly data by month. Effective managers cannot wait until year-end to know whether operations conform to budget targets. Monthly data provide feedback to permit making necessary corrections promptly.

Many companies use **perpetual,** or **continuous, budgeting** covering a 12-month reporting period. As the current month draws to a close, an additional month is added at the end of the budget period, resulting in a continuous 12-month budget. A perpetual budget offers the advantage of keeping management constantly focused on thinking ahead to the next 12 months. The more traditional annual approach to budgeting invites a frenzied stop-and-go mentality, with managers preparing the budget in a year-end rush that is soon forgotten. Changing conditions may not be discussed until the next year-end budget is due. A perpetual budget overcomes these disadvantages.

ADVANTAGES OF BUDGETING

Budgeting is costly and time-consuming. The sacrifices, however, are more than offset by the benefits. Budgeting promotes planning and coordination; it enhances performance measurement and corrective action.

Planning

Almost everyone makes plans. Each morning, most people think about what they will do during the day. Thinking ahead is planning. Most business managers think ahead about how they will direct operations. Unfortunately, planning is frequently as informal as making a few mental notes. Informal planning cannot be effectively communicated. The business manager might know what her objectives are, but neither her superiors nor her subordinates know. Because it serves as a communication tool, budgeting can solve these problems. The budget formalizes and documents managerial plans, clearly communicating objectives to both superiors and subordinates.

Coordination

Sometimes a choice benefits one department at the expense of another. For example, a purchasing agent may order large quantities of raw materials to obtain discounts from suppliers. But excessive quantities of materials pose a storage problem for the inventory supervisor who must manage warehouse costs. The budgeting process forces coordination among departments to promote decisions in the best interests of the company as a whole.

Performance Measurement

Budgets are specific, quantitative representations of management's objectives. Comparing actual results to budget expectations provides a way to evaluate performance. For example, if a company budgets sales of $10 million, it can judge the performance of the sales department against that level. If actual sales exceed $10 million, the company should reward the sales department; if actual sales fall below $10 million, the company should seek an explanation for the shortfall from the sales manager.

Corrective Action

Budgeting provides advance notice of potential shortages, bottlenecks, or other weaknesses in operating plans. For example, a cash budget alerts management to when the company can expect cash shortages during the coming year. The company can make borrowing arrangements well before it needs the money. Without knowing ahead of time, management might be unable to secure necessary financing on short notice, or it may have to pay excessively high interest rates to obtain funds. Budgeting advises managers of potential problems in time for them to carefully devise effective solutions.

BUDGETING AND HUMAN BEHAVIOR

LO 2

Explain the relationship between budgeting and human behavior.

Effective budgeting requires genuine sensitivity on the part of upper management to the effect on employees of budget expectations. People are often uncomfortable with budgets. Budgets are constraining. They limit individual freedom in favor of an established plan. Many people find evaluation based on budget expectations stressful. Most students experience a similar fear about testing. Like examinations, budgets represent standards by which performance is evaluated. Employees worry about whether their performance will meet expectations.

The attitudes of high-level managers significantly impact budget effectiveness. Subordinates are keenly aware of management's expectations. If upper-level managers degrade, make fun of, or ignore the budget, subordinates will follow suit. If management uses budgets to humiliate, embarrass, or punish subordinates, employees will resent the treatment and the budgeting process. Upper-level managers must demonstrate that they view the budget as a sincere effort to express realistic goals employees are expected to meet. An honest, open, respectful atmosphere is essential to budgeting success.

Participative budgeting has frequently proved successful in creating a healthy atmosphere. This technique invites participation in the budget process by personnel at all levels of the organization, not just upper-level managers. Information flows from the bottom up as well as from the top down during budget preparation. Because they are directly responsible for meeting budget goals, subordinates can offer more realistic targets. Including them in budget preparation fosters development of a team effort. Participation fosters more cooperation and motivation, and less fear. With participative budgeting, subordinates cannot complain that the budget is management's plan. The budget is instead a self-imposed constraint. Employees can hold no one responsible but themselves if they fail to accomplish the budget objectives they established.

Upper management participates in the process to ensure that employee-generated objectives are consistent with company objectives. Furthermore, if subordinates were granted complete freedom to establish budget standards, they might be tempted to adopt lax standards to ensure they will meet them. Both managers and subordinates must cooperate if the participatory process is to produce an effective budget. If developed carefully, budgets can motivate employees to achieve superior performance. Normal human fears must be overcome, and management must create an honest budget atmosphere.

THE MASTER BUDGET

LO 1

Describe the budgeting process and the benefits it provides.

The **master budget** is a group of detailed budgets and schedules representing the company's operating and financial plans for a future accounting period. The master budget usually includes (1) *operating budgets,* (2) *capital budgets,* and (3) *pro forma financial statements.* The budgeting process normally begins with preparing the **operating budgets,** which focus on detailed operating activities. This chapter illustrates operating budgets for Hampton Hams, a retail sales company that uses (1) a sales budget, (2) an inventory purchases budget, (3) a selling and administrative (S&A) expense budget, and (4) a cash budget.

The sales budget includes a schedule of cash receipts from customers. The inventory purchases and S&A expense budgets include schedules of cash payments for inventory and expenses. Preparing the master budget begins with the sales forecast. Based on the sales forecast, the detailed budgets for inventory purchases and operating expenses are developed. The schedules of cash receipts and cash payments provide the foundation for preparing the cash budget.

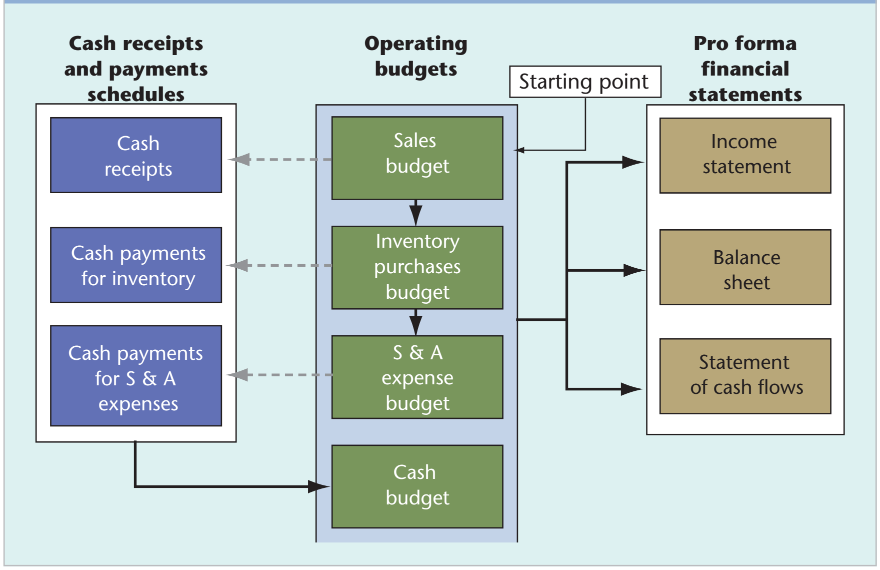
The **capital budget** describes the company's intermediate-range plans for investments in facilities, equipment, new products, store outlets, and lines of business. The capital budget affects several operating budgets. For example, equipment acquisitions result in additional depreciation expense on the S&A expense budget. The cash flow effects of capital investments influence the cash budget.

The operating budgets are used to prepare *pro forma statements.* **Pro forma financial statements** are based on projected (budgeted) rather than historical information. Hampton Hams prepares a pro forma income statement, balance sheet, and statement of cash flows.

Exhibit 14.1 shows how information flows in a master budget.

EXHIBIT 14.1

Information Flows in the Master Budget



HAMPTON HAMS BUDGETING ILLUSTRATION

Hampton Hams (HH), a major corporation, sells cured hams nationwide through retail outlets in shopping malls. By focusing on a single product and standardized operations, the company controls costs stringently. As a result, it offers high-quality hams at competitive prices.

Hampton Hams has experienced phenomenal growth during the past five years. It opened two new stores in Indianapolis, Indiana, last month and plans to open a third new store in October. Hampton Hams finances new stores by borrowing on a line of credit arranged with National Bank. National's loan officer has requested monthly budgets for each of the first three months of the new store's operations. The accounting department is preparing the new store's master budget for October, November, and December. The first step is developing a sales budget.

Sales Budget

LO 3

Prepare a sales budget and related schedule of cash receipts.

Preparing the master budget begins with the sales forecast. The accuracy of the sales forecast is critical because all the other budgets are derived from the sales budget. Normally, the marketing department coordinates the development of the sales forecast. Sales estimates frequently flow from the bottom up to the higher management levels. Sales personnel prepare sales projections for their products and territories and pass them up the line where they are combined with the estimates of other sales personnel to develop regional and national estimates. Using various information sources, upper-level sales managers adjust the estimates generated by sales personnel. Adjustment information comes from industry periodicals and trade journals, economic analysis, marketing surveys, historical sales figures, and changes in competition. Companies assimilate this data using sophisticated computer programs, statistical techniques, and quantitative methods, or, simply, professional judgment. Regardless of the technique, the senior vice president of sales ultimately develops a sales forecast for which she is held responsible.

To develop the sales forecast for HH's new store, the sales manager studied the sales history of existing stores operating in similar locations. He then adjusted for start-up conditions. October is an opportune time to open a new store because customers will learn the store's location before the holiday season. The sales manager expects significant sales growth in November and December as customers choose the company's hams as the centerpiece for many Thanksgiving and winter holiday dinner tables.

EXHIBIT 14.2

Sales Budget

	Hampton Hams Sales Budget				
				Pro Forma	
Section 1: Projected Sales	Oct	Nov	Dec	Data	
Cash Sales	$ 40,000	$ 48,000	$ 57,600		
Sales on Account	120,000	144,000	172,800	$172,800	(a)
Total Budgeted Sales	$160,000	$192,000	$230,400	$582,400	(b)
Section 2: Schedule of Cash Receipts					
Current Cash Sales	$ 40,000	$ 48,000	$ 57,600		
Plus Collections of Accounts Receivable	0	120,000	144,000		
Total Budgeted Collections	$ 40,000	$168,000	$201,600		

(a) Quarter-end accounts receivable balance on the balance sheet.
(b) Sales revenue on the income statement (sum of monthly amounts: $160,000 + $192,000 + $230,400).

The new store's sales are expected to be $160,000 in October ($40,000 in cash and $120,000 on account). Sales are expected to increase 20 percent per month during November and December. Based on these estimates, the sales manager prepared the sales budget in Exhibit 14.2.

Projected Sales

The sales budget has two sections. Section 1 shows the projected sales for each month. The November sales forecast reflects a 20 percent increase over October sales. For example, November *cash sales* are calculated as $48,000 [$40,000 + ($40,000 × 0.20)] and December *cash sales* as $57,600 [$48,000 + ($48,000 × 0.20)]. *Sales on account* are similarly computed.

Schedule of Cash Receipts

Section 2 is a schedule of the cash receipts for the projected sales. This schedule is used later to prepare the cash budget. The accountant has assumed in this schedule that Hampton Hams will collect accounts receivable from credit sales *in full* in the month following the sale. In practice, collections may be spread over several months, and some receivables may become bad debts that are never collected. Regardless of additional complexities, the objective is to estimate the amount and timing of expected cash receipts.

In the HH case, *total cash receipts* are determined by adding the current month's *cash sales* to the cash collected from the previous month's *credit sales* (accounts receivable balance). Cash receipts for each month are determined as follows.

- October receipts are projected to be $40,000. Because the store opens in October, no accounts receivable from September exist to be collected in October. Cash receipts for October equal the amount of October's cash sales.
- November receipts are projected to be $168,000 ($48,000 November cash sales + $120,000 cash collected from October sales on account).
- December receipts are projected to be $201,600 ($57,600 December cash sales + $144,000 cash collected from November sales on account).

FOCUS ON INTERNATIONAL ISSUES

CASH FLOW PLANNING IN BORDEAUX

The year 2009 was considered a great year for wine in the Bordeaux region of France, and the winemakers could look forward to selling their wines for high prices, but there was one catch; these wines would not be released to consumers until late in 2012. The winemakers had incurred most of their costs in 2009 when the vines were being tended and the grapes were being processed into wine. In many industries this would mean the companies would have to finance their inventory for almost four years—not an insignificant cost. The company must finance the inventory by either borrowing the money, which results in out-of-pocket interest expense, or using its own funds. The second option generates an opportunity cost resulting from the interest revenue that could have been earned if these funds were not being used to finance the inventory.

To address this potential cash flow problem, many of the winemakers in Bordeaux offer some of their wines for sale as "futures." That means the wines are purchased and paid for while they are still aging in barrels in France. Selling wine as futures reduces the time inventory must be financed from four years to only one to two years. Of course there are other types of costs in such deals. For one, the wines must be offered at lower prices than they are expected to sell for upon release. The winemakers have obviously decided this cost is less than the cost of financing inventory through borrowed money, or they would not do it.

Companies in other industries use similar techniques to speed up cash flow, such as factoring of accounts receivable. A major reason entities prepare cash budgets is to be sure they will have enough cash on hand to pay bills as they come due. If the budget indicates a temporary cash flow deficit, action must be taken to avoid the problem, and new budgets must be prepared based on these options. Budgeting is not a static process.

Pro Forma Financial Statement Data

The Pro Forma Data column in the sales budget displays two figures HH will report on the quarter-end (December 31) budgeted financial statements. Because HH expects to collect December credit sales in January, the *accounts receivable balance* will be $172,800 on the December 31, 2012, pro forma balance sheet (shown later in Exhibit 14.7).

The $582,400 of *sales revenue* in the Pro Forma Data column will be reported on the budgeted income statement for the quarter (shown later in Exhibit 14.6). The sales revenue represents the sum of October, November, and December sales ($160,000 + $192,000 + $230,400 = $582,400).

Inventory Purchases Budget

LO 4

Prepare an inventory purchases budget and related schedule of cash payments.

The inventory purchases budget shows the amount of inventory HH must purchase each month to satisfy the demand projected in the sales budget. The *total inventory needed* each month equals the amount of inventory HH plans to sell that month plus the amount of inventory HH wants on hand at month-end. To the extent that total inventory needed exceeds the inventory on hand at the beginning of the month, HH will need to purchase additional inventory. The amount of inventory to purchase is computed as follows.

Cost of budgeted sales	XXX
Plus: Desired ending inventory	XXX
Total inventory needed	XXX
Less: Beginning inventory	(XXX)
Required purchases	XXX

EXHIBIT 14.3

Inventory Purchases Budget

	A	B	C	D	E	
1		Hampton Hams				
2		Inventory Purchases Budget				
3						
4					Pro Forma	
5	**Section 1: Projected Purchases**	Oct	Nov	Dec	Data	
6	Budgeted Cost of Goods Sold	$112,000	$134,400	$161,280	$407,680	(a)
7	Plus Desired Ending Inventory	33,600	40,320	35,000	$35,000	(b)
8	Total Inventory Needed	145,600	174,720	196,280		
9	Less Beginning Inventory	0	33,600	40,320		
10	Required Purchases (on account)	$145,600	$141,120	$155,960	$62,384	(c)
11						
12	**Section 2: Schedule of Cash Payments for Inventory Purchases**					
13	Pay 60% of Current Month Accts Pay	$87,360	$84,672	$93,576		
14	Pay 40% of Prior Month Accts Pay	0	58,240	56,448		
15	Total Budgeted Disbursements for Inventory	$87,360	$142,912	$150,024		
16						
17	(a) Cost of goods sold reported on pro forma income statement					
18	(Sum of monthly amounts $112,000 + $134,400 + $161,280 = $407,680)					
19	(b) Ending inventory balance reported on pro forma balance sheet					
20	(c) Ending accounts payable balance reported on proforma balance sheet ($155,960 x .40)					

It is HH's policy to maintain an ending inventory equal to 25 percent of the next month's *projected cost of goods sold.* HH's cost of goods sold normally equals 70 percent of *sales.* Using this information and the sales budget, the accounting department prepared the inventory purchases budget shown in Exhibit 14.3.

Section 1 of the inventory purchases budget shows required purchases for each month. HH determined *budgeted cost of goods sold* for October by multiplying October *budgeted sales* by 70 percent ($160,000 × 0.70 = $112,000). Budgeted cost of goods sold for November and December were similarly computed. The October *desired ending inventory* was computed by multiplying November *budgeted cost of goods sold* by 25 percent ($134,400 × 0.25 = $33,600). Desired ending inventory for November is $40,320 ($161,280 × .25). Desired ending inventory for December is based on January projected cost of goods sold (not shown in the exhibit). HH expects ham sales to decline after the winter holidays. Because January projected cost of goods sold is only $140,000, the December desired ending inventory falls to $35,000 ($140,000 × .25).

Schedule of Cash Payments for Inventory Purchases

Section 2 is the schedule of cash payments for inventory purchases. HH makes all inventory purchases on account. The supplier requires that HH pay for 60 percent of inventory purchases in the month goods are purchased. HH pays the remaining 40 percent the month after purchase.

Cash payments are projected as follows (amounts are rounded to the nearest whole dollar).

- October cash payments for inventory are $87,360. Because the new store opens in October, no accounts payable balance from September remains to be paid in October. Cash payments for October equal 60 percent of October inventory purchases.
- November cash payments for inventory are $142,912 (40 percent of October purchases + 60 percent of November purchases).
- December cash payments for inventory are $150,024 (40 percent of November purchases + 60 percent of December purchases).

Pro Forma Financial Statement Data

The Pro Forma Data column in the inventory purchases budget displays three figures HH will report on the quarter-end budgeted financial statements. The $407,680 *cost of goods sold* reported on the pro forma income statement (shown later in Exhibit 14.6) is the sum of the monthly cost of goods sold amounts ($112,000 + $134,400 + $161,280 = $407,680).

The $35,000 *ending inventory* as of December 31, 2012, is reported on the pro forma balance sheet (shown later in Exhibit 14.7). December 31 is the last day of both the month of December and the three-month quarter represented by October, November, and December.

The $62,384 of *accounts payable* reported on the pro forma balance sheet (shown later in Exhibit 14.7) represents the 40 percent of December inventory purchases HH will pay for in January ($155,960 × .40).

CHECK YOURSELF 14.1

Main Street Sales Company purchased $80,000 of inventory during June. Purchases are expected to increase by 2 percent per month in each of the next three months. Main Street makes all purchases on account. It normally pays cash to settle 70 percent of its accounts payable during the month of purchase and settles the remaining 30 percent in the month following purchase. Based on this information, determine the accounts payable balance Main Street would report on its July 31 balance sheet.

Answer Purchases for the month of July are expected to be $81,600 ($80,000 × 1.02). Main Street will pay 70 percent of the resulting accounts payable in cash during July. The remaining 30 percent represents the expected balance in accounts payable as of July 31. Therefore, the balance would be $24,480 ($81,600 × 0.3).

Selling and Administrative Expense Budget

LO 5

Prepare a selling and administrative expense budget and related schedule of cash payments.

Section 1 of Exhibit 14.4 shows the selling and administrative (S&A) expense budget for Hampton Hams' new store. Most of the projected expenses are self-explanatory; depreciation and interest, however, merit comment. The depreciation expense is based on projections in the *capital expenditures budget.* Although not presented in this chapter, the capital budget calls for the cash purchase of $130,000 of store fixtures. The fixtures were purchased on October 1. The supplier allows a thirty-day inspection period. As a result, payment for the fixtures was made at the end of October. The fixtures are expected to have a useful life of 10 years and a $10,000 salvage value. Using the straight-line method, HH estimates annual depreciation expense at $12,000 ([$130,000 − $10,000] ÷ 10). Monthly depreciation expense is $1,000 ($12,000 annual charge ÷ 12 months).

Interest expense is missing from the S&A expense budget. HH cannot estimate interest expense until it completes its borrowing projections. Expected borrowing (financing activities) and related interest expense are shown in the *cash budget.*

Schedule of Cash Payments for Selling and Administrative Expenses

Section 2 of the S&A expense budget shows the schedule of cash payments. There are several differences between the S&A expenses recognized on the pro forma income statement and the cash payments for S&A expenses. First, Hampton Hams pays sales commissions and utilities expense the month following their incurrence. Because the store opens in October there are no payments due from September. Cash payments for sales commissions and utilities in October are zero. In November, HH will pay the October expenses for these items and in December it will pay the November sales commissions and utilities expenses. Depreciation expense does not affect the cash payments

EXHIBIT 14.4

Selling and Administrative Expense Budget

	A	B	C	D	E	F
1		**Hampton Hams**				
2		**Selling and Administrative (S&A) Expense Budget**				
3					Pro Forma	
4	**Section 1: Projected S&A Expenses**	Oct	Nov	Dec	Data	
5	Salary Expense	$24,000	$24,000	$24,000		
6	Sales Commissions, 2% of Sales	3,200	3,840	4,608	$ 4,608	(a)
7	Supplies Expense, 1% of Sales	1,600	1,920	2,304		
8	Utilities Expense	1,400	1,400	1,400	$ 1,400	(b)
9	Depreciation Expense on Store Fixtures	1,000	1,000	1,000	$ 3,000	(c)
10	Rent Expense	3,600	3,600	3,600		
11	Miscellaneous Expense	900	900	900		
12	Total S&A Expenses before Interest	$35,700	$36,660	$37,812	$110,172	(d)
13						
14	**Section 2: Schedule of Cash Payments for S&A Expenses**					
15	Salary Expense	$24,000	$24,000	$24,000		
16	100% of Prior Month Sales Commissions	0	3,200	3,840		
17	Supplies Expense, 1% of Sales	1,600	1,920	2,304		
18	100% of Prior Month Utilities Expense	0	1,400	1,400		
19	Rent Expense	3,600	3,600	3,600		
20	Miscellaneous Expense	900	900	900		
21	Total Payments for S&A Expenses	$30,100	$35,020	$36,044		
22						
23	(a) Sales commissions payable in January reported on the pro forma balance sheet.					
24	(b) Utilities payable in January reported on the pro forma balance sheet.					
25	(c) Accumulated depreciation on the pro forma balance sheet: sum of monthly amounts ($1,000 + $1,000 + $1,000 = $3,000)					
26	(d) S&A expense on the pro forma income statement: sum of monthly amounts ($35,700 + $36,660 + $37,812 = $110,172).					

schedule. The cash outflow for the store fixtures occurs when the assets are purchased, not when they are depreciated. The cost of the investment in store fixtures is in the cash budget, not in the cash outflow for S&A expenses.

Pro Forma Financial Statement Data

The Pro Forma Data column of the S&A expense budget displays four figures HH will report on the quarter-end budgeted financial statements. The first and second figures are the sales commissions payable ($4,608) and utilities payable ($1,400) on the pro forma balance sheet in Exhibit 14.7. Because December sales commissions and utilities expense are not paid until January, these amounts represent liabilities as of December 31. The third figure in the column ($3,000) is the amount of accumulated depreciation on the pro forma balance sheet in Exhibit 14.7. Because depreciation accumulates, the $3,000 balance is the sum of the monthly depreciation amounts ($1,000 + $1,000 + $1,000 = $3,000). The final figure in the Pro Forma Data column ($110,172) is the total S&A expenses reported on the pro forma income statement in Exhibit 14.6. The total S&A expense is the sum of the monthly amounts ($35,700 + $36,660 + 37,812 = $110,172).

Cash Budget

LO 6

Prepare a cash budget.

Little is more important to business success than effective cash management. If a company experiences cash shortages, it will be unable to pay its debts and may be forced into bankruptcy. If excess cash accumulates, a business loses the opportunity to earn investment income or reduce interest costs by repaying debt. Preparing a **cash budget** alerts management to anticipated cash shortages or excess cash balances. Management

EXHIBIT 14.5

Cash Budget

	A	B	C	D	E	F
1		Hampton Hams				
2		Cash Budget				
3					Pro Forma	
4	**Section 1: Cash Receipts**	Oct	Nov	Dec	Data	
5	Beginning Cash Balance	$ 0	$ 10,540	$ 10,428		
6	Add Cash Receipts (Exhibit 14.2)	40,000	168,000	201,600	$409,600	(a)
7	Total Cash Available	40,000	178,540	212,028		
8	**Section 2: Cash Payments**					
9	For Inventory Purchases (Exhibit 14.3)	87,360	142,912	150,024	$ 380,296	(b)
10	For S&A Expenses (Exhibit 14.4)	30,100	35,020	36,044	$ 101,164	(c)
11	For Interest Expense		2,180	2,300	$ 4,480	(d)
12	For Purchase of Store Fixtures	130,000	0	0	$ 130,000	(e)
13	Total Budgeted Disbursements	247,460	180,112	188,368		
14	**Section 3: Financing Activities**					
15	Surplus (Shortage)	(207,460)	(1,572)	23,660		
16	Borrowing (Repayment)	218,000	12,000	(13,000)	$ 217,000	(f)
17	Ending Cash Balance	$ 10,540	$ 10,428	$ 10,660	$ 10,660	(g)
18						
19	Pro forma data items (a) through (d) appear in the operating activities section of the pro forma statement of cash flows.					
20	Item (d), interest expense, also appears on the pro forma income statement. Each of these items is computed by summing					
21	the monthly amounts.					
22	(a) Cash receipts from customers: $40,000 + $168,000 + $201,600 = $409,600.					
23	(b) Cash payments for inventory purchases: $87,360 + $142,912 + $150,024 = $380,296.					
24	(c) Cash payments for S&A Expenses: $30,100 + $35,020 + $36,044 = $101,164.					
25	(d) Cash payments for interest expense: $0 + $2,180 + $2,300 = $4,480.					
26	(e) Investing activities section of the pro forma statement of cash flows.					
27	(f) Financing activities section of the pro forma statements of cash flows: $218,000 +12,000 - $13,000 = $217,000.					
28	and liabilities section of the pro forma balance sheet.					

can plan financing activities, making advance arrangements to cover anticipated shortages by borrowing and planning to repay past borrowings and make appropriate investments when excess cash is expected.

The cash budget is divided into three major sections: (1) a cash receipts section, (2) a cash payments section, and (3) a financing section. Much of the data needed to prepare the cash budget are included in the cash receipts and payments schedules previously discussed; however, further refinements to project financing needs and interest costs are sometimes necessary. The completed cash budget is shown in Exhibit 14.5.

Cash Receipts Section

The total cash available (Exhibit 14.5, row 7) is determined by adding the beginning cash balance to the cash receipts from customers. There is no beginning cash balance in October because the new store is opening that month. The November beginning cash balance is the October ending cash balance. The December beginning cash balance is the November ending cash balance. Cash receipts from customers comes from the *schedule of cash receipts* in the sales budget (Exhibit 14.2, section 2, row 13).

Cash Payments Section

Cash payments include expected cash outflows for inventory purchases, S&A expenses, interest expense, and investments. The cash payments for inventory purchases comes from the *schedule of cash payments for inventory purchases* (Exhibit 14.3, section 2, row 15). The cash payments for S&A expenses comes from the *schedule of cash payments for S&A expenses* (Exhibit 14.4, section 2, row 21).

REALITY BYTES

BUDGETING IN GOVERNMENTAL ENTITIES

This chapter has presented several reasons organizations should prepare budgets, but for governmental entities, budgets are not simply good planning tools—law requires them. If a manager at a commercial enterprise does not accomplish the budget objectives established for his or her part of the business, the manager may receive a poor performance evaluation. At worst, the manager may be fired. If managers of governmental agencies spend more than their budgets allow, they may have broken the law. In some cases the managers could be required to personally repay the amount by which the budget was exceeded. Because governmental budgets are enacted by the relevant elected bodies, to violate the budget is to break the law.

Because budgets are so important for governments and are not to be exceeded, government accounting practices require that budgeted amounts be formally entered into the bookkeeping system. As you learned in your first course of accounting, companies do not alter their records when they order goods; they only make an entry when the goods are received. Governmental accounting systems are different. Each time goods or services are ordered by a government, an "encumbrance" is recorded against the budgeted amount so that agencies do not commit to spend more money than their budgets allow.

HH borrows or repays principal and pays interest on the last day of each month. The cash payments for interest are determined by multiplying the loan balance for the month by the monthly interest rate. Because there is no outstanding debt during October, there is no interest payment at the end of October. HH expects outstanding debt of \$218,000 during the month of November. The bank charges interest at the rate of 12% per year, or 1% per month. The November interest expense and cash payment for interest is \$2,180 (\$218,000 × .01). The outstanding loan balance during December is \$230,000. The December interest expense and cash payment for interest is \$2,300 (\$230,000 × .01). Determining the amount to borrow or repay at the end of each month is discussed in more detail in the next section of the text.

Finally, the cash payment for the store fixtures comes from the *capital expenditures budget* (not shown in this chapter).

Financing Section

HH has a line of credit under which it can borrow or repay principal in increments of \$1,000 at the end of each month as needed. HH desires to maintain an ending cash balance of at least \$10,000 each month. With the \$207,460 projected cash shortage in row 15 of the cash budget (\$40,000 cash balance in row 7 less \$247,460 budgeted cash payments in row 13), HH must borrow \$218,000 on October 31 to maintain an ending cash balance of at least \$10,000. This \$218,000 balance is outstanding during November. On November 30, HH must borrow an additional \$12,000 to cover the November projected cash shortage of \$1,572 plus the \$10,000 desired ending cash balance. HH projects a surplus of \$23,660 for the month of December. This surplus will allow HH to repay \$13,000 of debt and still maintain the desired \$10,000 cash balance.

Pro Forma Financial Statement Data

Figures in the Pro Forma Data column of the cash budget (Exhibit 14.5) are alphabetically referenced. The cash receipts from customers, item (a), and the cash payment items (b), (c), and (d) are reported in the operating activities section of the pro forma statement of cash flows (Exhibit 14.8). The interest expense, item (d), is also reported on the pro forma income statement (Exhibit 14.6). The figures are determined by summing the monthly amounts. The \$130,000 purchase of store fixtures, item (e), is reported in the investing activities section of the pro forma statement of cash flows. The $217,000 net borrowings, item (f), is reported in the financing activities section of the pro forma statement of cash flows (Exhibit 14.8) and also as a liability on the pro forma balance sheet (Exhibit 14.7). The $10,660 ending cash balance, item (g), is reported as the ending balance on the pro forma statement of cash flows and as an asset on the pro forma balance sheet.

CHECK YOURSELF 14.2

Astor Company expects to incur the following operating expenses during September: Salary Expense, $25,000; Utility Expense, $1,200; Depreciation Expense, $5,400; and Selling Expense, $14,000. In general, it pays operating expenses in cash in the month in which it incurs them. Based on this information alone, determine the total amount of cash outflow Astor would report in the Operating Activities section of the pro forma statement of cash flows.

Answer Depreciation is not included in cash outflows because companies do not pay cash when they recognize depreciation expense. The total cash outflow is $40,200 ($25,000 + $1,200 + $14,000).

Pro Forma Income Statement

LO 7

Prepare a pro forma income statement, balance sheet, and statement of cash flows.

Exhibit 14.6 shows the budgeted income statement for Hampton Hams' new store. The figures for this statement come from Exhibits 14.2, 14.3, 14.4, and 14.5. The budgeted income statement provides an advance estimate of the new store's expected profitability. If expected profitability is unsatisfactory, management could decide to abandon the project or modify planned activity. Perhaps HH could lease less costly store space, pay employees a lower rate, or reduce the number of employees hired. The pricing strategy could also be examined for possible changes.

Budgets are usually prepared using spreadsheets or computerized mathematical models that allow managers to easily undertake "what-if" analysis. What if the growth rate differs from expectations? What if interest rates increase or decrease? Exhibits 14.2 through 14.5 in this chapter were prepared using Microsoft Excel. When variables such as growth rate, collection assumptions, or interest rates are changed, the spreadsheet software instantly recalculates the budgets. Although managers remain responsible for data analysis and decision making, computer technology offers powerful tools to assist in those tasks.

EXHIBIT 14.6

HAMPTON HAMS
Pro Forma Income Statement
For the Quarter Ended December 31, 2012

		Data Source
Sales revenue	$ 582,400	Exhibit 14.2
Cost of goods sold	(407,680)	Exhibit 14.3
Gross margin	174,720	
Selling and administrative expenses	(110,172)	Exhibit 14.4
Operating income	64,548	
Interest expense	(4,480)	Exhibit 14.5
Net income	$ 60,068	

Pro Forma Balance Sheet

Most of the figures on the pro forma balance sheet in Exhibit 14.7 have been explained. The new store has no contributed capital because its operations will be financed through debt and retained earnings. The amount of retained earnings equals the amount of net income because no earnings from prior periods exist and no distributions are planned.

EXHIBIT 14.7

HAMPTON HAMS
Pro Forma Balance Sheet
As of the Quarter Ended December 31, 2012

			Data Source
Assets			
Cash		$ 10,660	Exhibit 14.5
Accounts receivable		172,800	Exhibit 14.2
Inventory		35,000	Exhibit 14.3
Store fixtures	$130,000		Exhibit 14.4 Discussion
Accumulated depreciation	(3,000)		Exhibit 14.4 Discussion
Book value of store fixtures		127,000	
Total assets		$345,460	
Liabilities			
Accounts payable		$ 62,384	Exhibit 14.3
Sales commissions payable		4,608	Exhibit 14.4
Utilities payable		1,400	Exhibit 14.4
Line of credit borrowings		217,000	Exhibit 14.5
Equity			
Retained earnings		60,068	
Total liabilities and equity		$345,460	

Pro Forma Statement of Cash Flows

Exhibit 14.8 shows the pro forma statement of cash flows. All information for this statement comes from the cash budget in Exhibit 14.5.

EXHIBIT 14.8

HAMPTON HAMS
Pro Forma Statement of Cash Flows
For the Quarter Ended December 31, 2012

Cash flow from operating activities		
Cash receipts from customers	$409,600	
Cash payments for inventory	(380,296)	
Cash payments for S&A expenses	(101,164)	
Cash payments for interest expense	(4,480)	
Net cash flow for operating activities		$ (76,340)
Cash flow from investing activities		
Cash outflow to purchase fixtures		(130,000)
Cash flow from financing activities		
Inflow from borrowing on line of credit		217,000
Net change in cash		10,660
Plus beginning cash balance		0
Ending cash balance		$ 10,660

Answers to The Curious Accountant

Budget preparation at the USOC is complicated by the fact that the timing of its revenues does not match the timing of its expenditures. The USOC spends a lot of money helping to train athletes for the United States Olympic team. Training takes place year-round, every year, for many athletes. The USOC's training facilities in Colorado must also be maintained continuously.

Conversely, much of the USOC's revenues are earned in big batches, received every two years. This money comes from fees the USOC receives for the rights to broadcast the Olympic games on television in the United States. Most companies have a one-year budget cycle during which they attempt to anticipate the coming year's revenues and expenses. This model would not work well for the USOC. For example, in 2008, a year of summer Olympics, the USOC reported revenues of $201.7 million and a deficit of $30.6 million. In 2007, a year with no Olympic games, the USOC reported revenues of $146.1 million and a deficit of $35.0 million. In 2006, a year of winter games, the USOC had revenues of $239.7 million and a surplus of $74.9 million.

Every business, like every family, faces its own set of circumstances. Those individuals responsible for preparing an entity's budget must have a thorough understanding of the environment in which the entity operates. This is the reason the budget process must be participatory if it is to be successful. No one person, or small group, can anticipate all the issues that a large organization will face in the coming budget period; they need input from employees at all levels.

Source: Form 990s filed by the USOC with the IRS.

CHECK YOURSELF 14.3

How do pro forma financial statements differ from the financial statements presented in a company's annual report to stockholders?

Answer Pro forma financial statements are based on estimates and projections about business events that a company expects to occur in the future. The financial statements presented in a company's annual report to stockholders are based on historical events that occurred prior to the preparation of the statements.

A Look Back <<

The planning of financial matters is called *budgeting.* The degree of detail in a company's budget depends on the budget period. Generally, the shorter the time period, the more specific the plans. *Strategic planning* involves long-term plans, such as the overall objectives of the business. Examples of strategic planning include which products to manufacture and sell and which market niches to pursue. Strategic plans are stated in broad, descriptive terms. Capital budgeting deals with intermediate investment planning. *Operations budgeting* focuses on short-term plans and is used to create the master budget.

A budget committee is responsible for consolidating numerous departmental budgets into a master budget for the whole company. The *master budget* has detailed objectives stated in specific amounts; it describes how management intends to achieve its objectives. The master budget usually covers one year. Budgeting supports planning, coordination, performance measurement, and corrective action.

Employees may be uncomfortable with budgets, which can be constraining. Budgets set standards by which performance is evaluated. To establish an effective budget system, management should recognize the effect on human behavior of budgeting. Upper-level management must set a positive atmosphere by taking budgets seriously and avoiding using them to humiliate subordinates. One way to create the proper atmosphere is to encourage subordinates' participation in the budgeting process; *participative budgeting* can lead to goals that are more realistic about what can be accomplished and to establish a team effort in trying to reach those goals.

The primary components of the master budget are the *operating budgets,* the *capital budgets,* and the *pro forma financial statements.* The budgeting process begins with preparing the operating budgets, which consist of detailed schedules and budgets prepared by various company departments. The first operating budget to be prepared is the sales budget. The detailed operating budgets for inventory purchases and S&A expenses are based on the projected sales from the sales budget. The information in the schedules of cash receipts (prepared in conjunction with the sales budget) and cash payments (prepared in conjunction with the inventory purchases and S&A expense budgets) is used in preparing the cash budget. The cash budget subtracts cash payments from cash receipts; the resulting cash surplus or shortage determines the company's financing activities.

The capital budget describes the company's long-term plans regarding investments in facilities, equipment, new products, or other lines of business. The information from the capital budget is used as input to several of the operating budgets.

The pro forma financial statements are prepared from information in the operating budgets. The operating budgets for sales, inventory purchases, and S&A expenses contain information that is used to prepare the income statement and balance sheet. The cash budget includes the amount of interest expense reported on the income statement, the ending cash balance, the capital acquisitions reported on the balance sheet, and most of the information included in the statement of cash flows.

>> A Look Forward

Once a company has completed its budget, it has defined its plans. Then the plans must be followed. The next chapter investigates the techniques used to evaluate performance. You will learn to compare actual results to budgets, to calculate variances, and to identify the parties who are normally accountable for deviations from expectations. Finally, you will learn about the human impact management must consider in taking corrective action when employees fail to accomplish budget goals.

www.mhhe.com/edmondssurvey3e

A step-by-step audio-narrated series of slides is provided on the text website at www.mhhe.com/edmondssurvey3e.

SELF-STUDY REVIEW PROBLEM

The Getaway Gift Company operates a chain of small gift shops that are located in prime vacation towns. Getaway is considering opening a new store on January 1, 2012. Getaway's president recently attended a business seminar that explained how formal budgets could be useful in judging the new store's likelihood of succeeding. Assume you are the company's accountant. The president has asked you to explain the budgeting process and to provide sample reports that show the new store's operating expectations for the first three months (January, February, and March). Respond to the following specific requirements.

Required

a. List the operating budgets and schedules included in a master budget.

b. Explain the difference between pro forma financial statements and the financial statements presented in a company's annual reports to shareholders.

c. Prepare a sample sales budget and a schedule of expected cash receipts using the following assumptions. Getaway estimates January sales will be $400,000 of which $100,000 will be cash and $300,000 will be credit. The ratio of cash sales to sales on account is expected to remain constant over the three-month period. The company expects sales to increase 10 percent per month. The company expects to collect 100 percent of the accounts receivable generated by credit sales in the month following the sale. Use this information to determine the amount of accounts receivable that Getaway would report on the March 31 pro forma balance sheet and the amount of sales it would report on the first quarter pro forma income statement.

d. Prepare a sample inventory purchases budget using the following assumptions. Cost of goods sold is 60 percent of sales. The company desires to maintain a minimum ending inventory equal to 25 percent of the following month's cost of goods sold. Getaway makes all inventory purchases on account. The company pays 70 percent of accounts payable in the month of purchase. It pays the remaining 30 percent in the following month. Prepare a schedule of expected cash payments for inventory purchases. Use this information to determine the amount of cost of goods sold Getaway would report on the first quarter pro forma income statement and the amounts of ending inventory and accounts payable it would report on the March 31 pro forma balance sheet.

Solution to Requirement a

A master budget would include (1) a sales budget and schedule of cash receipts, (2) an inventory purchases budget and schedule of cash payments for inventory, (3) a general, selling, and administrative expenses budget and a schedule of cash payments related to these expenses, and (4) a cash budget.

Solution to Requirement b

Pro forma statements result from the operating budgets listed in the response to Requirement *a.* Pro forma statements describe the results of expected future events. In contrast, the financial statements presented in a company's annual report reflect the results of events that have actually occurred in the past.

Solution to Requirement c

General Information

Sales growth rate 10%				Pro Forma Statement Data
Sales Budget	**January**	**February**	**March**	
Sales				
Cash sales	$100,000	$110,000	$121,000	
Sales on account	300,000	330,000	363,000	$ 363,000*
Total sales	$400,000	$440,000	$484,000	$1,324,000†
Schedule of Cash Receipts				
Current cash sales	$100,000	$110,000	$121,000	
Plus 100% of previous month's credit sales	0	300,000	330,000	
Total budgeted collections	$100,000	$410,000	$451,000	

*Ending accounts receivable balance reported on March 31 pro forma balance sheet.

†Sales revenue reported on first quarter pro forma income statement (sum of monthly sales).

Solution to Requirement d

General Information

Cost of goods sold percentage 60%
Desired ending inventory percentage of COGS 25%

Inventory Purchases Budget	January	February	March	Pro Forma Statement Data
Budgeted cost of goods sold	$240,000	$264,000	$290,400	$794,400*
Plus: Desired ending inventory	66,000	72,600	79,860	79,860†
Inventory needed	306,000	336,600	370,260	
Less: Beginning inventory	0	(66,000)	(72,600)	
Required purchases	$306,000	$270,600	$297,660	89,298‡
Schedule of Cash Payments for Inventory Purchases				
70% of current purchases	$214,200	$189,420	$208,362	
30% of prior month's purchases	0	91,800	81,180	
Total budgeted payments for inventory	$214,200	$281,220	$289,542	

*Cost of goods sold reported on first quarter pro forma income statement (sum of monthly amounts).
†Ending inventory balance reported on March 31 pro forma balance sheet.
‡Ending accounts payable balance reported on pro forma balance sheet ($297,660 × 0.3).

KEY TERMS

Budgeting 498
Capital budget 502
Capital budgeting 500
Cash budget 508
Master budget 502
Operating budgets 502
Operations budgeting 500
Participative budgeting 502
Perpetual (continuous) budgeting 500
Pro forma financial statements 502
Srategic planning 500

QUESTIONS

1. Budgets are useful only for small companies that can estimate sales with accuracy. Do you agree with this statement?
2. Why does preparing the master budget require a committee?
3. What are the three levels of planning? Explain each briefly.
4. What is the primary factor that distinguishes the three different levels of planning from each other?
5. What is the advantage of using a perpetual budget instead of the traditional annual budget?
6. What are the advantages of budgeting?
7. How may budgets be used as a measure of performance?
8. Ken Shilov, manager of the marketing department, tells you that "budgeting simply does not work." He says that he made budgets for his employees and when he reprimanded them for failing to accomplish budget goals, he got unfounded excuses. Suggest how Mr. Shilov could encourage employee cooperation.
9. What is a master budget?
10. What is the normal starting point in developing the master budget?
11. How does the level of inventory affect the production budget? Why is it important to manage the level of inventory?
12. What are the components of the cash budget? Describe each.
13. The primary reason for preparing a cash budget is to determine the amount of cash to include on the budgeted balance sheet. Do you agree or disagree with this statement? Explain.
14. What information does the pro forma income statement provide? How does its preparation depend on the operating budgets?
15. How does the pro forma statement of cash flows differ from the cash budget?

MULTIPLE-CHOICE QUESTIONS

Multiple-choice questions are provided on the text website at www.mhhe.com/edmondssurvey3e.

EXERCISES

All applicable Exercises are available with McGraw-Hill's *Connect Accounting*.

Exercise 14-1 *Budget responsibility*

LO 1, 2

Sonya Huffman, the accountant, is a perfectionist. No one can do the job as well as she can. Indeed, she has found budget information provided by the various departments to be worthless. She must change everything they give her. She has to admit that her estimates have not always been accurate, but she shudders to think of what would happen if she used the information supplied by the marketing and operating departments. No one seems to care about accuracy. Indeed, some of the marketing staff have even become insulting. When Ms. Huffman confronted one of the salesmen with the fact that he was behind in meeting his budgeted sales forecast, he responded by saying, "They're your numbers. Why don't you go out and make the sales? It's a heck of a lot easier to sit there in your office and make up numbers than it is to get out and get the real work done." Ms. Huffman reported the incident, but, of course, nothing was done about it.

Required

Write a short report suggesting how the budgeting process could be improved.

Exercise 14-2 *Preparing a sales budget*

LO 3, 7

Welch Company, which expects to start operations on January 1, 2011, will sell digital cameras in shopping malls. Welch has budgeted sales as indicated in the following table. The company expects a 10 percent increase in sales per month for February and March. The ratio of cash sales to sales on account will remain stable from January through March.

Sales	January	February	March
Cash sales	$ 40,000	?	?
Sales on account	100,000	?	?
Total budgeted sales	$140,000	?	?

Required

a. Complete the sales budget by filling in the missing amounts.

b. Determine the amount of sales revenue Welch will report on its first quarter pro forma income statement.

Exercise 14-3 *Preparing a schedule of cash receipts*

LO 3, 7

The budget director of Ginger's Florist has prepared the following sales budget. The company had $300,000 in accounts receivable on July 1. Ginger's Florist normally collects 100 percent of accounts receivable in the month following the month of sale.

Sales	July	August	September
Sales Budget			
Cash sales	$ 70,000	$ 75,000	$ 80,000
Sales on account	90,000	108,000	129,600
Total budgeted sales	$160,000	$183,000	$209,600
Schedule of Cash Receipts			
Current cash sales	?	?	?
Plus collections from accounts receivable	?	?	?
Total budgeted collections	$370,000	$165,000	$188,000

Required

a. Complete the schedule of cash receipts by filling in the missing amounts.

b. Determine the amount of accounts receivable the company will report on its third quarter pro forma balance sheet.

LO 3

Exercise 14-4 *Preparing sales budgets with different assumptions*

Applebaum Corporation, which has three divisions, is preparing its sales budget. Each division expects a different growth rate because economic conditions vary in different regions of the country. The growth expectations per quarter are 4 percent for East Division, 2 percent for West Division, and 6 percent for South Division.

Division	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
East Division	$100,000	?	?	?
West Division	300,000	?	?	?
South Division	200,000	?	?	?

Required

a. Complete the sales budget by filling in the missing amounts. (Round figures to the nearest dollar.)

b. Determine the amount of sales revenue that the company will report on its quarterly pro forma income statements.

LO 3

Exercise 14-5 *Determining cash receipts from accounts receivable*

Janice's Dress Delivery operates a mail-order business that sells clothes designed for frequent travelers. It had sales of $560,000 in December. Because Janice's Dress Delivery is in the mail-order business, all sales are made on account. The company expects a 30 percent drop in sales for January. The balance in the Accounts Receivable account on December 31 was $96,400 and is budgeted to be $73,600 as of January 31. Janice's Dress Delivery normally collects accounts receivable in the month following the month of sale.

Required

a. Determine the amount of cash Janice's Dress Delivery expects to collect from accounts receivable during January.

b. Is it reasonable to assume that sales will decline in January for this type of business? Why or why not?

LO 3

Exercise 14-6 *Using judgment in making a sales forecast*

Contrell Inc. is a candy store located in a large shopping mall.

Required

Write a brief memo describing the sales pattern that you would expect Contrell to experience during the year. In which months will sales likely be high? In which months will sales likely be low? Explain why.

LO 4

Exercise 14-7 *Preparing an inventory purchases budget*

Naftel Company sells lamps and other lighting fixtures. The purchasing department manager prepared the following inventory purchases budget. Naftel's policy is to maintain an ending inventory balance equal to 10 percent of the following month's cost of goods sold. April's budgeted cost of goods sold is $75,000.

	January	February	March
Budgeted cost of goods sold	$50,000	$54,000	$60,000
Plus: Desired ending inventory	5,400	?	?
Inventory needed	55,400	?	?
Less: Beginning inventory	5,000	?	?
Required purchases (on account)	$50,400	?	?

Required

a. Complete the inventory purchases budget by filling in the missing amounts.

b. Determine the amount of cost of goods sold the company will report on its first quarter pro forma income statement.

c. Determine the amount of ending inventory the company will report on its pro forma balance sheet at the end of the first quarter.

Exercise 14-8 *Preparing a schedule of cash payments for inventory purchases* LO 4

Sciara Books buys books and magazines directly from publishers and distributes them to grocery stores. The wholesaler expects to purchase the following inventory.

	April	May	June
Required purchases (on account)	$100,000	$120,000	$132,000

Sciara Books' accountant prepared the following schedule of cash payments for inventory purchases. Sciara Books' suppliers require that 90 percent of purchases on account be paid in the month of purchase; the remaining 10 percent are paid in the month following the month of purchase.

Schedule of Cash Payments for Inventory Purchases

	April	May	June
Payment for current accounts payable	$90,000	?	?
Payment for previous accounts payable	8,000	?	?
Total budgeted payments for inventory	$98,000	?	?

Required

a. Complete the schedule of cash payments for inventory purchases by filling in the missing amounts.

b. Determine the amount of accounts payable the company will report on its pro forma balance sheet at the end of the second quarter.

Exercise 14-9 *Determining the amount of expected inventory purchases and cash payments* LO 4

Tobert Company, which sells electric razors, had $300,000 of cost of goods sold during the month of June. The company projects a 5 percent increase in cost of goods sold during July. The inventory balance as of June 30 is $28,000, and the desired ending inventory balance for July is $29,000. Tobert pays cash to settle 80 percent of its purchases on account during the month of purchase and pays the remaining 20 percent in the month following the purchase. The accounts payable balance as of June 30 was $35,000.

Required

a. Determine the amount of purchases budgeted for July.

b. Determine the amount of cash payments budgeted for inventory purchases in July.

Exercise 14-10 *Preparing a schedule of cash payments for selling and administrative expenses* LO 5

The budget director for Metro Cleaning Services prepared the following list of expected operating expenses. All expenses requiring cash payments are paid for in the month incurred except salary expense and insurance. Salary is paid in the month following the month in which it is incurred. The insurance premium for six months is paid on October 1. October is the first month of operations; accordingly, there are no beginning account balances.

	October	November	December
Budgeted S&A Expenses			
Equipment lease expense	$ 6,000	$ 6,000	$ 6,000
Salary expense	6,100	6,600	7,000
Cleaning supplies	2,800	2,730	3,066
Insurance expense	1,200	1,200	1,200
Depreciation on computer	1,800	1,800	1,800
Rent	1,700	1,700	1,700
Miscellaneous expenses	700	700	700
Total S&A expenses	$20,300	$20,730	$21,466
Schedule of Cash Payments for S&A Expenses			
Equipment lease expense	?	?	?
Prior month's salary expense, 100%	?	?	?
Cleaning supplies	?	?	?
Insurance premium	?	?	?
Depreciation on computer	?	?	?
Rent	?	?	?
Miscellaneous expenses	?	?	?
Total disbursements for S&A expenses	$18,400	$17,230	$18,066

Required

a. Complete the schedule of cash payments for S&A expenses by filling in the missing amounts.

b. Determine the amount of salaries payable that the company will report on its pro forma balance sheet at the end of the fourth quarter.

c. Determine the amount of prepaid insurance the company will report on its pro forma balance sheet at the end of the fourth quarter.

LO 4

Exercise 14-11 *Preparing inventory purchases budgets with different assumptions*

Executive officers of Dominick Company are wrestling with their budget for the next year. The following are two different sales estimates provided by two different sources.

Source of Estimate	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Sales manager	$380,000	$310,000	$280,000	$480,000
Marketing consultant	520,000	460,000	410,000	650,000

Dominick's past experience indicates that cost of goods sold is about 60 percent of sales revenue. The company tries to maintain 10 percent of the next quarter's expected cost of goods sold as the current quarter's ending inventory. This year's ending inventory is $29,000. Next year's ending inventory is budgeted to be $30,000.

Required

a. Prepare an inventory purchases budget using the sales manager's estimate.

b. Prepare an inventory purchases budget using the marketing consultant's estimate.

LO 5, 7

Exercise 14-12 *Determining the amount of cash payments and pro forma statement data for selling and administrative expenses*

January budgeted selling and administrative expenses for the retail shoe store that Kathy Sibley plans to open on January 1, 2011, are as follows: sales commissions, $25,000; rent, $16,000; utilities, $5,000; depreciation, $4,000; and miscellaneous, $2,000. Utilities are paid in the month after incurrence. Other expenses are expected to be paid in cash in the month in which they are incurred.

Required

a. Determine the amount of budgeted cash payments for January selling and administrative expenses.

b. Determine the amount of utilities payable that the store will report on the January 31st pro forma balance sheet.

c. Determine the amount of depreciation expense the store will report on the income statement for the year 2011, assuming that monthly depreciation remains the same for the entire year.

Exercise 14-13 *Preparing a cash budget* LO 6, 7

The accountant for Teresa's Dress Shop prepared the following cash budget. Teresa's desires to maintain a cash cushion of $14,000 at the end of each month. Funds are assumed to be borrowed and repaid on the last day of each month. Interest is charged at the rate of 2 percent per month.

Cash Budget	July	August	September
Section 1: Cash receipts			
Beginning cash balance	$ 42,500	$?	$?
Add cash receipts	180,000	200,000	240,600
Total cash available (a)	222,500	?	?
Section 2: Cash payments			
For inventory purchases	165,526	140,230	174,152
For S&A expenses	54,500	60,560	61,432
For interest expense	0	?	?
Total budgeted disbursements (b)	220,026	?	?
Section 3: Financing activities			
Surplus (shortage)	2,474	?	?
Borrowing (repayments) (c)	11,526	?	?
Ending cash balance (a − b + c)	$ 14,000	$ 14,000	$ 14,000

Required

a. Complete the cash budget by filling in the missing amounts. Round all computations to the nearest whole dollar.

b. Determine the amount of net cash flows from operating activities Teresa's will report on the third quarter pro forma statement of cash flows.

c. Determine the amount of net cash flows from financing activities Teresa's will report on the third quarter pro forma statement of cash flows.

Exercise 14-14 *Determining amount to borrow and pro forma financial statement balances* LO 6, 7

Athena Sudsberry owns a small restaurant in New York City. Ms. Sudsberry provided her accountant with the following summary information regarding expectations for the month of June. The balance in accounts receivable as of May 31 is $60,000. Budgeted cash and credit sales for June are $150,000 and $600,000, respectively. Credit sales are made through Visa and MasterCard and are collected rapidly. Eighty percent of credit sales is collected in the month of sale, and the remainder is collected in the following month. Ms. Sudsberry's suppliers do not extend credit. Consequently, she pays suppliers on the last day of the month. Cash payments for June are expected to be $700,000. Ms. Sudsberry has a line of credit that enables the restaurant to borrow funds on demand; however, they must be borrowed on the last day of the month. Interest is paid in cash also on the last day of the month. Ms. Sudsberry desires to maintain a $30,000 cash balance before the interest payment. Her annual interest rate is 9 percent. Disregard any credit card fees.

Required

a. Compute the amount of funds Ms. Sudsberry needs to borrow for June, assuming that the beginning cash balance is zero.

b. Determine the amount of interest expense the restaurant will report on the June pro forma income statement.

c. What amount will the restaurant report as interest expense on the July pro forma income statement?

LO 7

Exercise 14-15 *Preparing pro forma income statements with different assumptions*

Norman Jelen, the controller of Wing Corporation, is trying to prepare a sales budget for the coming year. The income statements for the last four quarters follow.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Sales revenue	$170,000	$200,000	$210,000	$260,000	$840,000
Cost of goods sold	102,000	120,000	126,000	156,000	504,000
Gross profit	68,000	80,000	84,000	104,000	336,000
Selling & admin. expense	17,000	20,000	21,000	26,000	84,000
Net income	$ 51,000	$ 60,000	$ 63,000	$ 78,000	$252,000

Historically, cost of goods sold is about 60 percent of sales revenue. Selling and administrative expenses are about 10 percent of sales revenue.

Sam Wing, the chief executive officer, told Mr. Jelen that he expected sales next year to be 10 percent for each respective quarter above last year's level. However, Glenda Sullivan, the vice president of sales, told Mr. Jelen that she believed sales growth would be only 5 percent.

Required

a. Prepare a pro forma income statement including quarterly budgets for the coming year using Mr. Wing's estimate.

b. Prepare a pro forma income statement including quarterly budgets for the coming year using Ms. Sullivan's estimate.

c. Explain why two executive officers in the same company could have different estimates of future growth.

PROBLEMS

All applicable Problems are available with McGraw-Hill's *Connect Accounting.*

LO 3

excel

CHECK FIGURES
c. Feb.: $194,000
March: $233,400

Problem 14-16 *Preparing a sales budget and schedule of cash receipts*

McCarty Pointers Inc. expects to begin operations on January 1, 2012; it will operate as a specialty sales company that sells laser pointers over the Internet. McCarty expects sales in January 2012 to total $200,000 and to increase 10 percent per month in February and March. All sales are on account. McCarty expects to collect 70 percent of accounts receivable in the month of sale, 20 percent in the month following the sale, and 10 percent in the second month following the sale.

Required

a. Prepare a sales budget for the first quarter of 2012.

b. Determine the amount of sales revenue McCarty will report on the first 2012 quarterly pro forma income statement.

c. Prepare a cash receipts schedule for the first quarter of 2012.

d. Determine the amount of accounts receivable as of March 31, 2012.

LO 4, 7

CHECK FIGURES
a. May: $71,000
c. June: $76,760

Problem 14-17 *Preparing an inventory purchases budget and schedule of cash payments*

Spratt Inc. sells fireworks. The company's marketing director developed the following cost of goods sold budget for April, May, June, and July.

	April	May	June	July
Budgeted cost of goods sold	$60,000	$70,000	$80,000	$86,000

Spratt had a beginning inventory balance of $3,600 on April 1 and a beginning balance in accounts payable of $14,800. The company desires to maintain an ending inventory balance equal to 10 percent of the next period's cost of goods sold. Spratt makes all purchases on account. The company pays 60 percent of accounts payable in the month of purchase and the remaining 40 percent in the month following purchase.

Required

a. Prepare an inventory purchases budget for April, May, and June.
b. Determine the amount of ending inventory Spratt will report on the end-of-quarter pro forma balance sheet.
c. Prepare a schedule of cash payments for inventory for April, May, and June.
d. Determine the balance in accounts payable Spratt will report on the end-of-quarter pro forma balance sheet.

Problem 14-18 *Preparing pro forma income statements with different assumptions*

LO 7

CHECK FIGURE
a. 12.75%

Top executive officers of Zottoli Company, a merchandising firm, are preparing the next year's budget. The controller has provided everyone with the current year's projected income statement.

	Current Year
Sales revenue	$2,000,000
Cost of goods sold	1,400,000
Gross profit	600,000
Selling & admin. expenses	260,000
Net income	$ 340,000

Cost of goods sold is usually 70 percent of sales revenue, and selling and administrative expenses are usually 10 percent of sales plus a fixed cost of $60,000. The president has announced that the company's goal is to increase net income by 15 percent.

Required

The following items are independent of each other.

a. What percentage increase in sales would enable the company to reach its goal? Support your answer with a pro forma income statement.
b. The market may become stagnant next year, and the company does not expect an increase in sales revenue. The production manager believes that an improved production procedure can cut cost of goods sold by 2 percent. What else can the company do to reach its goal? Prepare a pro forma income statement illustrating your proposal.
c. The company decides to escalate its advertising campaign to boost consumer recognition, which will increase selling and administrative expenses to $340,000. With the increased advertising, the company expects sales revenue to increase by 15 percent. Assume that cost of goods sold remains a constant proportion of sales. Can the company reach its goal?

Problem 14-19 *Preparing a schedule of cash payments for selling and administrative expenses*

LO 5, 6

CHECK FIGURE
a. Sept.: $28,510

Prestia is a retail company specializing in men's hats. Its budget director prepared the list of expected operating expenses that follows. All items are paid when the expenses are incurred except sales commissions and utilities, which are paid in the month after they are incurred. July is the first month of operations, so there are no beginning account balances.

	July	August	September
Salary expense	$18,000	$18,000	$18,000
Sales commissions (4 percent of sales)	1,700	1,700	1,700
Supplies expense	360	390	420
Utilities	1,100	1,100	1,100
Depreciation on store equipment	3,000	3,000	3,000
Rent	6,600	6,600	6,600
Miscellaneous	690	690	690
Total S&A expenses before interest	$31,450	$31,480	$31,510

Required

a. Prepare a schedule of cash payments for selling and administrative expenses.
b. Determine the amount of utilities payable as of September 30.
c. Determine the amount of sales commissions payable as of September 30.

LO 6

CHECK FIGURE

Feb. cash surplus before financing activities: $7,010

Problem 14-20 *Preparing a cash budget*

Kinnion Medical Clinic has budgeted the following cash flows.

	January	February	March
Cash receipts	$100,000	$106,000	$126,000
Cash payments			
For inventory purchases	90,000	72,000	85,000
For S&A expenses	31,000	32,000	27,000

Kinnion Medical had a cash balance of $8,000 on January 1. The company desires to maintain a cash cushion of $5,000. Funds are assumed to be borrowed, in increments of $1,000, and repaid on the last day of each month; the interest rate is 1 percent per month. Kinnion pays its vendor on the last day of the month also. The company had a monthly $40,000 beginning balance in its line of credit liability account from this year's quarterly results.

Required

Prepare a cash budget. (Round all computations to the nearest whole dollar.)

LO 3, 4, 5

eXcel

CHECK FIGURES

c. 1st QTR purchases for peaches: $141,120
2nd QTR purchases for oranges: $312,840

Problem 14-21 *Preparing budgets with multiple products*

Fresh Fruits Corporation wholesales peaches and oranges. Lashanda King is working with the company's accountant to prepare next year's budget. Ms. King estimates that sales will increase 5 percent for peaches and 10 percent for oranges. The current year's sales revenue data follow.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Peaches	$220,000	$240,000	$300,000	$240,000	$1,000,000
Oranges	400,000	450,000	570,000	380,000	1,800,000
Total	$620,000	$690,000	$870,000	$620,000	$2,800,000

Based on the company's past experience, cost of goods sold is usually 60 percent of sales revenue. Company policy is to keep 20 percent of the next period's estimated cost of goods sold as the current period's ending inventory. (*Hint:* Use the cost of goods sold for the first quarter to determine the beginning inventory for the first quarter.)

Required

a. Prepare the company's sales budget for the next year for each quarter by individual product.
b. If the selling and administrative expenses are estimated to be $700,000, prepare the company's budgeted annual income statement.
c. Ms. King estimates next year's ending inventory will be $34,000 for peaches and $56,000 for oranges. Prepare the company's inventory purchases budgets for the next year showing quarterly figures by product.

LO 3, 4, 5, 6, 7

eXcel

Problem 14-22 *Preparing a master budget for a retail company with no beginning account balances*

Patel Company is a retail company that specializes in selling outdoor camping equipment. The company is considering opening a new store on October 1, 2012. The company president formed a planning committee to prepare a master budget for the first three months of operation. He assigned you, the budget coordinator, the following tasks.

CHECK FIGURES

c. Dec. purchases: $113,250

g. Nov. surplus before financing activities: $19,505

Required

a. October sales are estimated to be $120,000 of which 40 percent will be cash and 60 percent will be credit. The company expects sales to increase at the rate of 25 percent per month. Prepare a sales budget.

b. The company expects to collect 100 percent of the accounts receivable generated by credit sales in the month following the sale. Prepare a schedule of cash receipts.

c. The cost of goods sold is 60 percent of sales. The company desires to maintain a minimum ending inventory equal to 10 percent of the next month's cost of goods sold. However, ending inventory at December 31 is expected to be $12,000. Assume that all purchases are made on account. Prepare an inventory purchases budget.

d. The company pays 70 percent of accounts payable in the month of purchase and the remaining 30 percent in the following month. Prepare a cash payments budget for inventory purchases.

e. Budgeted selling and administrative expenses per month follow.

Salary expense (fixed)	$18,000
Sales commissions	5 percent of Sales
Supplies expense	2 percent of Sales
Utilities (fixed)	$1,400
Depreciation on store fixtures (fixed)*	$4,000
Rent (fixed)	$4,800
Miscellaneous (fixed)	$1,200

*The capital expenditures budget indicates that Patel will spend $164,000 on October 1 for store fixtures, which are expected to have a $20,000 salvage value and a three-year (36-month) useful life.

Use this information to prepare a selling and administrative expenses budget.

f. Utilities and sales commissions are paid the month after they are incurred; all other expenses are paid in the month in which they are incurred. Prepare a cash payments budget for selling and administrative expenses.

g. Patel borrows funds, in increments of $1,000, and repays them on the last day of the month. The company also pays its vendors on the last day of the month. It pays interest of 1 percent per month in cash on the last day of the month. To be prudent, the company desires to maintain a $12,000 cash cushion. Prepare a cash budget.

h. Prepare a pro forma income statement for the quarter.

i. Prepare a pro forma balance sheet at the end of the quarter.

j. Prepare a pro forma statement of cash flows for the quarter.

Problem 14-23 *Behavioral impact of budgeting*

LO 2

CHECK FIGURES

a. NI: $630,000

c. NI: $690,000

Shahid Corporation has three divisions, each operating as a responsibility center. To provide an incentive for divisional executive officers, the company gives divisional management a bonus equal to 20 percent of the excess of actual net income over budgeted net income. The following is Chaudhry Division's current year's performance.

	Current Year
Sales revenue	$4,000,000
Cost of goods sold	2,500,000
Gross profit	1,500,000
Selling & admin. expenses	900,000
Net income	$ 600,000

The president has just received next year's budget proposal from the vice president in charge of Chaudhry Division. The proposal budgets a 5 percent increase in sales revenue with an extensive explanation about stiff market competition. The president is puzzled. Chaudhry has enjoyed revenue growth of around 10 percent for each of the past five years. The president had consistently approved the division's budget proposals based on 5 percent growth in the past. This time, the president wants to show that he is not a fool. "I will impose a 15 percent revenue increase to teach them a lesson!" the president says to himself smugly.

Assume that cost of goods sold and selling and administrative expenses remain stable in proportion to sales.

Required

a. Prepare the budgeted income statement based on Chaudhry Division's proposal of a 5 percent increase.

b. If growth is actually 10 percent as usual, how much bonus would Chaudhry Division's executive officers receive if the president had approved the division's proposal?

c. Prepare the budgeted income statement based on 15 percent increase that the president imposed.

d. If the actual results turn out to be a 10 percent increase as usual, how much bonus would Chaudhry Division's executive officers receive since the president imposed a 15 percent increase?

e. Propose a better budgeting procedure for Shahid.

ANALYZE, THINK, COMMUNICATE

ATC 14-1 Business Applications Case *Preparing and using pro forma statements*

Nancy Pinedo and Justin Johnson recently graduated from the same university. After graduation they decided not to seek jobs at established organizations but, rather, to start their own small business hoping they could have more flexibility in their personal lives for a few years. Nancy's family has operated Mexican restaurants and taco-trucks for the past two generations, and Nancy noticed there were no taco-truck services in the town where their university was located. To reduce the amount they would need for an initial investment, they decided to start a business operating a taco-cart rather than a taco-truck, from which they would cook and serve traditional Mexican styled street food.

They bought a used taco-cart for $15,000. This cost, along with the cost for supplies to get started, a business license, and street vendor license brought their initial expenditures to $20,000. Five-thousand dollars came from personal savings they had accumulated by working part time during college, and they borrowed $15,000 from Nancy's parents. They agreed to pay interest on the outstanding loan balance each month based on an annual rate of 6 percent. They will repay the principal over the next few years as cash becomes available. They were able to rent space in a parking lot near the campus they had attended, believing that the students would welcome their food as an alternative to the typical fast food that was currently available.

After two months in business, September and October, they had average monthly revenues of $20,000 and out of pocket costs of $16,000 for rent, ingredients, paper supplies, and so on, but not interest. Justin thinks they should repay some of the money they borrowed, but Nancy thinks they should prepare a set of forecasted financial statements for their first year in business before deciding whether or not to repay any principal on the loan. She remembers a bit about budgeting from a survey of accounting course she took and thinks the results from their first two months in business can be extended over the next 10 months to prepare the budget they need. They estimate the cart will last at least five years, after which they expect to sell it for $5,000 and move on to something else in their lives. Nancy agrees to prepare a forecasted (pro forma) income statement, balance sheet, and statement of cash flows for their first year in business, which includes the two months already passed.

Required

a. Prepare the annual pro forma financial statements that you would expect Nancy to prepare based on her comments about her expectations for the business. Assume no principal will be repaid on the loan.

b. Review the statements you prepared for the first requirement and prepare a list of reasons why actual results for Justin and Nancy's business probably will not match their budgeted statements.

ATC 14-2 Group Assignment *Master budget and pro forma statements*

The following trial balance was drawn from the records of Havel Company as of October 1, 2011.

Cash	$ 16,000	
Accounts receivable	60,000	
Inventory	40,000	
Store equipment	200,000	
Accumulated depreciation		$ 76,800
Accounts payable		72,000
Line of credit loan		100,000
Common stock		50,000
Retained earnings		17,200
Totals	$316,000	$316,000

Required

a. Divide the class into groups, each with four or five students. Organize the groups into three sections. Assign Task 1 to the first section, Task 2 to the second section, and Task 3 to the third section.

Group Tasks

(1) Based on the following information, prepare a sales budget and a schedule of cash receipts for October, November, and December. Sales for October are expected to be $180,000, consisting of $40,000 in cash and $140,000 on credit. The company expects sales to increase at the rate of 10 percent per month. All of accounts receivable is collected in the month following the sale.

(2) Based on the following information, prepare a purchases budget and a schedule of cash payments for inventory purchases for October, November, and December. Cost of goods sold for October is expected to be $72,000. Cost of goods sold is expected to increase by 10 percent per month in November and December. Havel expects January cost of goods sold to be $89,000. The company expects to maintain a minimum ending inventory equal to 20 percent of the next month's cost of goods sold. Seventy-five percent of accounts payable is paid in the month that the purchase occurs; the remaining 25 percent is paid in the following month.

(3) Based on the following selling and administrative expenses budgeted for October, prepare a selling and administrative expenses budget for October, November, and December.

Cash payments for sales commissions and utilities are made in the month following the one in which the expense is incurred. Supplies and other operating expenses are paid in cash in the month in which they are incurred. As of October 1, no amounts were payable for either commissions or utilities from the previous month.

Sales commissions (10% increase per month)	$ 7,200
Supplies expense (10% increase per month)	1,800
Utilities (fixed)	2,200
Depreciation on store equipment (fixed)	1,600
Salary expense (fixed)	34,000
Rent (fixed)	6,000
Miscellaneous (fixed)	1,000

b. Select a representative from each section. Have the representatives supply the missing information in the following pro forma income statement and balance sheet for the fourth quarter of 2011. The statements are prepared as of December 31, 2011.

Income Statement	
Sales Revenue	$?
Cost of Goods Sold	?
Gross Margin	357,480
Operating Expenses	?
Operating Income	193,290
Interest Expense	(2,530)
Net Income	$190,760

Balance Sheet		
Assets		
Cash		$ 9,082
Accounts Receivable		?
Inventory		?
Store Equipment	$200,000	
Accumulated Depreciation Store Equipment	?	
Book Value of Equipment		118,400
Total Assets		$314,682
Liabilities		
Accounts Payable		?
Utilities Payable		?
Sales Commissions Payable		?
Line of Credit		23,936
Equity		
Common Stock		50,000
Retained Earnings		?
Total Liabilities and Equity		$314,682

c. Indicate whether Havel will need to borrow money during October.

ATC 14-3 Research Assignment *Analyzing budget data for the United States government*

The annual budget of the United States is very complex, but this case requires that you analyze only a small portion of the historical tables that are presented as a part of each year's budget. The fiscal year of the federal government ends on September 30. Obtain the budget documents needed at www.gpoaccess.gov/usbudget by following these steps:

- Under the "Previous Budgets" heading, click on "Browse"
- Under the Barack H. Obama heading, click on "Fiscal Year 2010"
- There are two options that can be used on the page that appears next:
  - Under the "Budget Documents" heading, you can select the PDF link beside the "Historical Table" subheading.
  - Scroll down to the "Spreadsheets" heading and click on the "Historical Tables" subheading. This option provides the data in an Excel compatible format.
- Under whichever option you choose above, you will need to review Table 1.1, Table 1.2, and Table 4.2 to complete the requirements below.

Required

a. Table 1.2 shows the budget as a *percentage of gross domestic product* (GDP). Using the data in the third column, "Surplus or Deficit," determine how many years since 1960 the budget has shown a surplus and how many times it has shown a deficit. Ignore the "TQ" data between 1976 and 1977. This was a year that the government changed the ending date of its fiscal year.

b. Based on the data in Table 1.2, identify the three years with the highest deficits as a percentage of GDP. What were the deficit percentages for these years? Which year had the largest surplus and by what percentage?

c. Using your findings for Requirement *b*, regarding the year with the highest deficit as a percentage of GDP, go to Table 1.1 and calculate the deficit for that year as a *percentage of receipts.*

d. The president of the United States from 1993 through 2000 was Bill Clinton, a Democrat. The president from 2001 through 2009 was George Bush, a Republican. These men had significant input into the federal budget for the fiscal years 1994–2001 and 2002–2009, respectively. Table 4.2 shows what percentage of the total federal budget was directed toward each department within the government. Compare the data on Table 4.2 for 1994–2001, the Clinton years, to the data for 2002–2009, the Bush years. Identify the five departments that appear to have changed the most from the Clinton years to the Bush years. Ignore "Allowances" and "Undistributed offsetting receipts." Note, if you wish to approach this assignment more accurately, you can compute the average percentage for each department for the eight years each president served, and compare the two averages. The gpoaccess website includes a spreadsheet version of the historical data tables, allowing for a reasonably easy Excel analysis.

ATC 14-4 Writing Assignment *Continuous budgeting*

Toll Brothers, Inc., is a large builder of luxury homes across the United States. From 2000 through 2006 it experienced continuous growth in revenues that averaged over 24 percent annually. Not only did it experience growth from year to year, but its revenue grew in each quarter of 2005 and 2006. Then things started to slow down. In 2007 its revenue dropped by 24 percent compared to 2006. Additionally, its revenue declined in two of the four quarters of 2007. Management of the company commented as follows in the company's 2007 annual report.

> *In the late summer and fall of 2005, there was a modest deceleration in the growth rate of demand. Additionally, in the aftermath of Hurricane Katrina, gas prices rose to $3.00/gallon and consumer confidence dropped precipitously. When the music stopped, many territories were overwhelmed with excess home inventories. . . . We believed that a national geographic presence would provide some diversification of risk to insulate us from the type of local market crashes or regional declines that had characterized previous industry downswings. . . . However, the national scope of this downturn and the rapidity with which it swept across the nation suggest that there was greater correlation among regional housing markets than we had previously believed.*
>
> * * *
>
> *In January 2006, it appeared that consumer confidence was starting to firm until a wave of subprime fears in late February 2007 took the momentum away. The financial markets began to develop jitters as word spread that subprime loan foreclosures might soon bring hundreds of thousands of additional homes onto the market. . . .*

Required

Assume you are Toll Brothers' budget director. Write a memo to the management team explaining how the practice of continuous budgeting could overcome the shortcomings of an annual budget process in an uncertain market situation.

ATC 14-5 Ethical Dilemma *Bad budget system or unethical behavior?*

Clarence Cleaver is the budget director for the Harris County School District. Mr. Cleaver recently sent an urgent e-mail message to Sally Simmons, principal of West Harris County High. The message severely reprimanded Ms. Simmons for failing to spend the funds allocated to her to purchase computer equipment. Ms. Simmons responded that her school already has a sufficient supply of computers; the computer lab is never filled to capacity and usually is less than half filled. Ms. Simmons suggested that she would rather use the funds for teacher training. She argued that the reason the existing computers are not fully utilized is that the teachers lack sufficient computer literacy necessary to make assignments for their students.

Mr. Cleaver responded that it is not Ms. Simmons's job to decide how the money is to be spent; that is the school board's job. It is the principal's job to spend the money as the board directed. He informed Ms. Simmons that if the money is not spent by the fiscal closing date, the school board would likely reduce next year's budget allotment. To avoid a potential budget cut, Mr. Cleaver reallocated Ms. Simmons's computer funds to Jules Carrington, principal of East Harris County High. Mr. Carrington knows how to buy computers regardless of whether they are needed. Mr. Cleaver's final words were, "Don't blame me if parents of West High students complain that East High has more equipment. If anybody comes to me, I'm telling them that you turned down the money."

Required

a. Do Mr. Cleaver's actions violate the standards of ethical conduct shown in Exhibit 10.17 of Chapter 10?

b. Explain how participative budgeting could improve the allocation of resources for the Harris County School District.