

Chapter Twenty

The Statement of Cash Flows

After completing this chapter, you should be able to:

- 1** Briefly describe the evolution of the statement of cash flows.
- 2** State the purposes of the statement of cash flows.
- 3** Describe the types of cash flows shown in each of the statement's three sections.
- 4** Prepare a statement of cash flows using the indirect method, the direct method, and the T-account approach.
- 5** Prepare a schedule disclosing direct exchange transactions.
- 6** Describe how the statement of cash flows is used by an enterprise's managers and by interested parties outside the organization.

ALPINE TRAILS PURCHASES COULTERTON TRANSIT STOCK

Coulterton, CO—The Coulterton Transit Company got a big boost this week as Alpine Trails Ski Resort made a major purchase of the small bus line's stock. Lance Martin, a spokesman for Alpine Trails, made the announcement yesterday and emphasized that the resort's management felt the investment was a wise one. Alpine Trails, one of the area's most popular ski resorts, depends on the Coulterton Transit Company to ferry skiers from Coulterton out to the resort's slopes. Martin stated that Alpine Trails' management was very happy with the service provided by the bus line, and stressed that Alpine would not seek any changes in the bus service's operations or management personnel. "Alpine Trails has felt for some time that we are in a sort of part-

nership with Coulterton Transit Company," said Martin. "Alpine depends on the bus line to get our skiers to the mountain, and Coulterton depends on Alpine for the bulk of its business. Alpine's management just felt that investing in the bus line made good business sense." When asked how Alpine Trails would finance the Coulterton Transit stock purchase, Martin cited Alpine Trails' recent strong cash flow. "Our cash flow from operations has been very solid the past couple of years. Skiing in the western slopes of the Rockies is growing by leaps and bounds, and we're getting our share of the growth. Alpine Trails' management wants to reinvest that cash flow from operations in ways that will strengthen our business in the future. This year we made two major

investments. One was the stock in Coulterton Transit, and the other was new snow-making equipment. We get a lot of snow out here, but occasionally we get a mild spell. Then we need to help out Mother Nature with a little extra white stuff. You never can predict. Take the Winter Olympics in Nagano, Japan, for example. In the weeks leading up to the games, they were worried about having enough snow. Then when the games got underway, they were inundated with snow. Several of the alpine events had to be postponed. We feel fortunate at Alpine Trails that we've got the cash flow to make the investments we need to in order to keep our business strong."

How was Chrysler Corporation able to acquire American Motors Corporation for \$1.646 billion? How was USAirways able to purchase Piedmont Airlines for \$1.28 billion? What type of financing did Marriott use when it introduced its new Courtyard Hotels? How did the top managers in each of these companies make the decision to go forward with such huge investments? The essential question in each example is, How did a company generate cash, and how was the cash used? How much cash did McDonald's Corporation generate last year through its operations, which involve the provision of food service to millions of people worldwide? How much cash did the company obtain through the issuance of debt or capital stock? How did McDonald's use the cash it generated?

These are the kinds of questions addressed by the *statement of cash flows*. In this chapter, we discuss how this important financial statement is prepared and used.

Evolution of the Statement of Cash Flows

LO 1 Briefly describe the evolution of the statement of cash flows.

Nowadays most managers, investors, and financial analysts consider the statement of cash flows to be as important as an organization's balance sheet or income statement. However, the statement of cash flows is a newcomer compared to the other major financial statements. Prior to 1961, accountants sometimes prepared a simple analysis of the changes in the firm's balance sheet accounts, which often was referred to as a "Where Got and Where Gone Statement." However, no formal statement of cash flows was required for external reporting purposes. In 1961, the American Institute of Certified Public Accountants (AICPA) sponsored research in the area of cash flow analysis. The resulting report recommended that some type of cash flow analysis be provided as part of a company's annual report. In 1971 the AICPA's Accounting Principles Board began requiring a statement of changes of financial position as part of a company's financial statements. Throughout the next two decades, this statement evolved in its form, content, and importance to financial statement users. In 1987, the Financial Accounting Standards Board (FASB) issued its Standard No. 95, which requires that the statement of cash flows be prepared in the manner described in this chapter.

Purpose of the Statement of Cash Flows

LO 2 State the purposes of the statement of cash flows.

The **statement of cash flows** provides information about the sources and uses of an enterprise's cash during a particular time period.

The primary purpose of the **statement of cash flows** is to provide information about the sources and uses of an enterprise's cash during a particular time period. This information provides financial statement users with insight about the enterprise's operating, investing, and financing activities as they relate to the provision and use of cash. According to the FASB's *Statement of Financial Accounting Standards No. 95*,¹ the statement of cash flows should provide financial statement users with insight about:

1. The organization's ability to generate positive future net cash flows.
2. The organization's ability to meet its financial obligations and pay dividends.
3. The future needs of the organization for external financing.
4. The reasons for the difference between net income and the net cash flows related to operating activities.
5. The effects of the organization's cash and noncash investing and financing activities.

¹ "Statement of Cash Flows," *Statement of Financial Accounting Standards No. 95* (Stamford, CT: FASB, 1987).

Cash and Cash Equivalents

Any enterprise needs to have cash available to pay its bills, compensate employees, purchase equipment, and so forth. At the same time, organizations try to manage their cash to avoid having more cash on hand than is necessary. As part of a cash-management program, most organizations invest some of their cash in short-term, highly liquid investments. Examples of such investments include money market accounts and U.S. Treasury bills. Such investments enable the organization to earn a return on the invested funds, yet at the same time keep the money readily available if it is needed. Because these highly liquid investments are turned into cash easily, they are, in a sense, *cash equivalents*. **Cash equivalents** are defined as highly liquid investments that may be converted easily into a known amount of cash and are near to their maturity dates.

Since cash equivalents are readily available when needed, the statement of cash flows focuses not only on cash but also on the total of an enterprise's *cash and cash equivalents*. The statement of cash flows is designed to show financial statement users the reasons behind the change in an enterprise's total cash and cash equivalents during a particular period of time.

Cash equivalents are highly liquid investments that may be converted easily into a known amount of cash and are near to their maturity dates.

Content and Organization of the Statement

The FASB has specified that the cash flow statement be organized into three sections. Each section details the cash flows that have arisen during the accounting period from a particular type of activity. The statement's three sections disclose the cash flows arising from *operating activities*, *investing activities*, and *financing activities*. Descriptions of each of these types of activities follow.

LO 3 Describe the types of cash flows shown in each of the statement's three sections.

Operating Activities

Operating activities are defined as all events and transactions that are not investing or financing activities. The cash flow from operating activities represents cash flows resulting from the normal, recurring operations of an enterprise in producing and selling its primary product or service. Any transactions that enter into the determination of net income generally are classified as operating activities. The operations of an enterprise include all activities related to the provision of goods or services. Thus, cash receipts from the sale of goods or services are included in the operating activities portion of the cash flow statement. The cash disbursements included in this section of the statement include all disbursements for the purpose of producing goods or services.

Also included in the operating portion of the cash flow statement are cash receipts from any interest-bearing securities or stock the company owns. In addition, cash disbursements to pay taxes or to pay interest on the company's debt are included in the operating portion of the statement. Exhibit 20–1 summarizes the types of cash flows included in the operating activities portion of the cash flow statement.

Operating activities are all events and transactions that are not investing or financing activities.

Investing Activities

Investing activities are defined as extending or collecting loans, acquiring or disposing of investments (such as other companies' bonds or stock), and buying or selling productive, long-lived assets. Notice that investment activity is defined to include changes in the principal amount of loans, but does not include the interest earned on such loans. As explained previously, cash receipts for interest are included in the operating portion of the cash flow statement. Exhibit 20–1 summarizes the cash flows included in the statement's investing activities section.

Investing activities are extending or collecting loans, acquiring or disposing of investments, and buying or selling productive, long-lived assets.

Exhibit 20–1Operating, Investing, and
Financing Activities**Operating activities (transactions that enter into the determination of net income):***Cash inflows from:*

- Sale of goods or services
- Returns on interest-bearing securities or stock
- Miscellaneous revenue (for example, renting excess space)

Cash outflows from:

- Production of goods or services (includes disbursements such as employee compensation, payments to suppliers of materials or services, and payments for utilities, rent, insurance, and so forth)
- Payment of taxes to the government
- Payment of interest on debt

Investing activities (transactions involved in the acquisition or disposition of long-lived assets):*Cash inflows from:*

- Sale of productive, long-lived assets
- Collection of loans
- Sale of other companies' interest-bearing securities or stock owned as an investment

Cash outflows for:

- Purchase of productive, long-lived assets
- Issuance of loans (for example, to another company)
- Purchase of other companies' interest-bearing securities or stock as an investment

Financing activities (transactions involving the company's debt or equity capital, excluding stock splits and stock dividends):*Cash inflows from:*

- Issuing debt such as bonds, notes, or mortgages
- Sale of the company's own capital stock

Cash outflows for:

- Payment of dividends to stockholders
- Reacquisition of the company's own stock
- Retirement of debt principal such as by paying off a loan

Financing Activities

Financing activities are transactions involving the company's debt or equity capital.

Financing activities are defined as transactions involving the company's debt or equity capital. Included in this section of the cash flow statement are cash receipts from the issuance of debt or the sale of the firm's own capital stock. Cash disbursements included in this section of the statement include repurchase of the company's own stock, payment of dividends to stockholders, and issuance of debt. Exhibit 20–1 summarizes the cash flows included in the financing section of the cash flow statement.

Notice that the financing section of the cash flow statement does not include cash disbursements to pay interest on the firm's debt. As previously noted, cash outflows for interest payments are included in the operating portion of the statement.

Preparation of the Statement

The process of preparing the statement of cash flows draws upon data from the following three sources:

LO 4 Prepare a statement of cash flows using the indirect method, the direct method, and the T-account approach.

1. **Income statement.** Determination of the cash provided by operations involves many of the accounts involved in the calculation of income.
2. **Comparative balance sheets.** This information shows the changes in the company's asset, liability, and owners' equity accounts during the year.

3. **Selected transactions.** In most cases other transaction data are needed to determine the sources and uses of cash during the accounting period.

Direct and Indirect Methods

Two alternative methods may be used to determine the cash flow from operating activities. Under the **direct method**, the statement preparer focuses on the firm's cash receipts and disbursements to determine which cash flows were related to operating activities. Then a cash-basis income statement is constructed, in which operating cash disbursements are subtracted from operating cash receipts. The net result is the cash provided by (or consumed by) operating activities. For example, instead of the sales revenue amount, which appears at the top of an income statement, the cash flow statement would start with cash receipts from customers.

The **indirect method** of preparing the operating activities section of the cash flow statement begins with the income statement, which already has been prepared on an accrual-accounting basis. The net income figure then is adjusted from an accrual basis to a cash basis. The resulting amount is the cash provided by (or consumed by) operations. The indirect method is also called the **reconciliation method**.

Both the direct method and the indirect method are illustrated in the remaining sections of this chapter. We begin with the indirect method.

With the **direct method**, the statement preparer focuses on the firm's cash receipts and disbursements to determine which cash flows were related to operating activities.

With the **indirect method** of preparing the operating activities section of the cash flow statement, the preparer begins with the income statement already prepared on an accrual-accounting basis. Also called the **reconciliation method**.

Using the Indirect Method of Statement Preparation

To illustrate the statement of cash flows, we focus on a service industry firm. Alpine Trails Ski Resort operates a small winter resort on the western slopes of the Rocky Mountains. The firm owns a ski complex and several condominiums. The resort's primary sources of revenue are fees for use of the ski facilities and weekly rental of the condos. In addition, Alpine Trails receives rental revenue from an independent restaurant firm that operates a food concession in the ski lodge. Alpine Trails also operates a small ski shop, in which it sells ski equipment, sports clothing, and souvenirs. The company's most recent comparative balance sheets, income statement, and statement of retained earnings are displayed in Exhibits 20–2 and 20–3.

The format for the statement of cash flows, under the indirect method of preparation, is shown in Exhibit 20–4, which appears on page 10. Notice that the operating activities section of the statement begins with net income, and then adjustments are made to determine the net cash flow from operating activities. Beginning with the net income figure is the primary feature of the indirect method.

LO 4 Prepare a statement of cash flows using the indirect method, the direct method, and the T-account approach.



Operating Activities

Now let's begin preparing Alpine Trails' statement of cash flows. We start with net income from the firm's 20x1 income statement (Exhibit 20–3).

Starting point	Net income	\$110,000
-----------------------	------------------	-----------

We must make seven adjustments to determine the cash flow from operating activities, as follows:

Adjustment for Depreciation This is perhaps the easiest adjustment to understand. On Alpine Trails' income statement, depreciation of \$40,000 is recorded as an operating

Exhibit 20-2

Comparative Balance Sheets



Alpine Trails Ski Resort			
Comparative Balance Sheets			
December 31, 20x1 and 20x0			
(in thousands)			
Assets	20x1	20x0	Change
Current assets:			
Cash	\$ 17	\$ 20	\$ 3 Decrease
Marketable securities	10	10	—0—
Accounts receivable	130	140	10 Decrease
Merchandise inventory	60	25	35 Increase
Prepaid expenses	<u>8</u>	<u>5</u>	<u>3</u> Increase
Total current assets	<u>225</u>	<u>200</u>	<u>25</u> Increase
Investment in Coulterton Transit Company Stock ...	45	—0—	45 Increase
Facilities and equipment	470	400	70 Increase
Less: Accumulated depreciation	(140)	(100)	40 Increase
Land	<u>350</u>	<u>400</u>	<u>50</u> Decrease
Total assets	<u>\$950</u>	<u>\$900</u>	<u>\$ 50</u> Increase
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$ 85	\$ 70	\$ 15 Increase
Accrued salaries payable	<u>20</u>	<u>30</u>	<u>10</u> Decrease
Total current liabilities	105	100	5 Increase
Deferred income taxes	10	15	5 Decrease
Bonds payable	<u>190</u>	<u>250</u>	<u>60</u> Decrease
Total liabilities	<u>305</u>	<u>365</u>	<u>60</u> Decrease
Stockholders' equity:			
Common stock	255	235	20 Increase
Retained earnings	<u>390</u>	<u>300</u>	<u>90</u> Increase
Total stockholders' equity	<u>645</u>	<u>535</u>	<u>110</u> Increase
Total liabilities and stockholders' equity	<u>\$950</u>	<u>\$900</u>	<u>\$ 50</u> Increase

expense that reduced the company's net income for 20x1 by \$40,000. Did this \$40,000 expense represent a cash flow during the year? The answer is no. *Depreciation is a noncash expense.* Therefore, we must adjust Alpine Trails' net income by adding back its depreciation expense.

Adjustment 1: Add back depreciation expense +\$40,000

This is a step that confuses some users of a statement of cash flows. Remember, adding back depreciation expense to net income does not imply that depreciation is a source of cash. Depreciation expense has nothing to do with cash. We add back depreciation expense as an adjustment to net income because depreciation expense was subtracted in the process of determining net income. Since depreciation was not a use of cash, however, we must now add it back to cancel out its earlier subtraction. Thus,

Alpine Trails Ski Resort
Income Statement
For the Year Ended December 31, 20x1
(in thousands)

Revenue:		
Slope fees	\$300	
Condominium rentals	635	
Sales of merchandise	45	
	<u> </u>	
Total revenue		\$980
Less: Cost of merchandise sold		<u>30</u>
Gross margin		950
Less: Operating expenses:		
Salaries	\$270	
Insurance	80	
Property taxes	35	
Depreciation	40	
Utilities	90	
Maintenance	70	
Advertising	25	
Administration	155	
Interest on bonds	25	
	<u> </u>	
Total operating expenses		790
Income before taxes		160
Income-tax expense		<u>50</u>
Net income		<u>\$110</u>

Alpine Trails Ski Resort
Statement of Retained Earnings
For the Year Ended December 31, 20x1
(in thousands)

Retained earnings, December 31, 20x0	\$300
Add: Net income for 20x1	<u>110</u>
Subtotal	410
Deduct: Dividends declared in 20x1	<u>20</u>
Retained earnings, December 31, 20x1	<u>\$390</u>

Exhibit 20-3

Income Statement and
Statement of Retained
Earnings



depreciation expense is not a source of cash. We are merely making an adjustment for a noncash expense that had previously been subtracted in determining net income.

Alpine Trails' income statement does not show any depletion or amortization expenses. However, like depreciation, depletion and amortization are noncash expenses. If such expenses appear on an income statement, they must be added back to net income as an adjustment in determining the cash flow from operating activities.

Adjustment for Changes in Prepaid Expenses Alpine Trails must pay for its insurance and property taxes at the beginning of the time period to which these expenditures apply. The company paid for its 20x1 insurance and property taxes in January of 20x1. When a firm makes such a prepayment, an asset is created called Prepaid Expenses. Notice that on Alpine Trails' comparative balance sheets (Exhibit 20-2), the asset Prepaid Expenses increased during the year by \$3,000 (from \$5,000 on December 31, 20x0, to \$8,000 on December 31, 20x1). This means that Alpine Trails paid \$3,000 more in cash for its 20x1 insurance and property taxes than the actual 20x1 expense for

Exhibit 20-4

Format for Statement of Cash Flows under the Indirect Method



Alpine Trails Ski Resort		
Statement of Cash Flows		
For the Year Ended December 31, 20x1		
Cash flows from operating activities:		
Net income		XXX
Adjustments to net income to determine cash provided by operations		
List of individual adjustments • XX • XX • XX • XX Total adjustments <u>XX</u>		
Net cash flow from operating activities		XXX
Cash flows from investing activities:		
List of individual cash inflows and outflows • XX • XX • <u>XX</u>		
Net cash provided by (or used by) investing activities		XXX
Cash flows from financing activities:		
List of individual cash inflows and outflows • XX • XX • <u>XX</u>		
Net cash provided by (or used by) financing activities		XXX
Net increase (or decrease) in cash and cash equivalents		XXX
Cash balance, beginning of period		<u>XXX</u>
Cash balance, end of period		<u><u>XXX</u></u>

these items. From the company’s 20x1 income statement we note that the total of the insurance and property-tax expenses for 20x1 amounted to \$115,000 (\$80,000 + \$35,000). Using these facts, we conclude that Alpine Trails’ cash payment for insurance and property taxes in 20x1 was \$118,000, as shown below.

Total of insurance and property-tax expenses	\$115,000
Increase in the asset, Prepaid Expenses, during 20x1	<u>3,000</u>
Cash payment in 20x1 for insurance and property taxes	<u>\$118,000</u>

Since Alpine Trails’ actual *cash payment* in 20x1 for insurance and property taxes was \$118,000, but the income statement shows a total *expense* for insurance and property taxes of only \$115,000, the following adjustment is required:

Adjustment 2:	Subtract the increase in Prepaid Expenses . . .	-\$3,000
----------------------	---	----------

By subtracting \$3,000 from Alpine Trails' reported net income, we reflect that the firm's 20x1 cash disbursement for insurance and property taxes exceeded the expense shown on the income statement.

What adjustment would be made if instead Alpine Trails' Prepaid Expenses had *declined* during 20x1 by \$2,000? Try to answer this question in your mind before referring to footnote 2.

Adjustment for Changes in Accrued Liability Alpine Trails pays its employees at the end of the time period for which the salary expense is recorded. The company's income statement shows that the 20x1 salary expense was \$270,000. However, a glance at the comparative balance sheet shows that the firm's Accrued Salaries Payable account declined during 20x1 by \$10,000 (from \$30,000 on December 31, 20x0, to \$20,000 on December 31, 20x1). Thus, Alpine Trails' actual cash payments to its employees in 20x1 must have been \$280,000.

Salary expense	\$270,000
Decrease in Accrued Salaries Payable	10,000
Cash payment in 20x1 for salaries	<u>\$280,000</u>

The company's 20x1 cash payments to employees were sufficient to cover its 20x1 expense *and* reduce its Accrued Salaries Payable liability from \$30,000 at the beginning of the year to \$20,000 at year-end. Thus, we must make the following adjustment.

Adjustment 3: Subtract the decrease in accrued liabilities . . . $-\$10,000$

By subtracting \$10,000 from Alpine Trails' reported net income, we reflect the fact that the firm's 20x1 cash disbursement for salaries exceeded the expense shown on the income statement.

Suppose instead that Alpine Trails' Accrued Salaries Payable account had increased by \$7,500 during 20x1. Then what adjustment would be necessary? Think about this question before looking at footnote 3.

Adjustment for Changes in Inventory Alpine Trails purchases inventory for sale in its small ski shop. The income statement shows an expense of \$30,000 for cost of merchandise sold. However, the company's merchandise purchases during 20x1 were greater than \$30,000, because the balance sheet reveals that the asset Merchandise Inventory increased during 20x1. Since Merchandise Inventory increased by \$35,000 (from \$25,000 to \$60,000), Alpine must have purchased a total of \$65,000 in merchandise:

Cost of merchandise sold (expense)	\$30,000
Increase in Merchandise Inventory	35,000
Total merchandise purchases in 20x1	<u>\$65,000</u>

Since Alpine Trails' 20x1 merchandise purchases exceeded its expense for Cost of Merchandise Sold, the following adjustment is necessary.

²In this case, the opposite adjustment would be made. We would *add* \$2,000 to the company's net income to reflect the fact that the cash payment for insurance and property taxes was less than the expense reported on the income statement.

³In this situation, the opposite adjustment would be made. We would *add* \$7,500 to the company's net income to reflect the fact that the cash payment for salaries was less than the expense reported on the income statement.

Adjustment 4:	Subtract the increase in Merchandise Inventory	-\$35,000
----------------------	---	-----------

By subtracting \$35,000 from Alpine Trails' income, we reflect the fact that the company's purchases of inventory were greater than the expense for Cost of Merchandise Sold shown on the income statement.

Suppose the balance in Merchandise Inventory had declined during the year by \$9,000. What adjustment would be appropriate in this case?⁴

Adjustment for Changes in Accounts Payable We are not finished with the adjustments related to Alpine Trails' merchandising operations. As we noted above, the company's 20x1 merchandise purchases amounted to \$65,000. However, this does not mean that the firm actually paid \$65,000 in cash for those purchases in 20x1. As is true of most retail firms, Alpine Trails buys its merchandise on account. Therefore, in order to determine the company's cash payments for merchandise during 20x1, we need to take into account the change in the Accounts Payable balance. As the balance sheet shows, Alpine Trails' Accounts Payable increased by \$15,000 during 20x1. What does this change imply about the company's cash payments for merchandise purchases? As the following analysis shows, the firm's cash payments must have been \$50,000.

Merchandise purchases (as derived in the preceding section)	\$65,000
Increase in Accounts Payable	<u>15,000</u>
Cash payments for merchandise purchases in 20x1	<u>\$50,000</u>

Since Alpine Trails' cash payments for merchandise were less than its purchases, the following adjustment is required.

Adjustment 5:	Add the increase in Accounts Payable	+\$15,000
----------------------	--	-----------

By adding \$15,000 to Alpine Trails' income, we reflect the fact that the company's cash payments for merchandise inventory were less than the firm's purchases.

Suppose instead that Alpine Trails' Accounts Payable balance had declined during the year by \$12,000. Then what adjustment would be appropriate?⁵

Adjustment for Changes in Accounts Receivable Some of Alpine Trails' patrons do not pay their bills in cash immediately, but prefer to put their charges on their accounts. Thus, Alpine Trails may actually collect a cash amount from customers during the year that differs from the revenue amount shown on the income statement. Alpine Trails' income statement discloses total revenue for 20x1 of \$980,000. However, the company's Accounts Receivable balance declined during 20x1 by \$10,000, as shown on the comparative balance sheets. Putting these two facts together, we conclude that Alpine Trails' 20x1 cash receipts from customers amounted to \$990,000.

Total revenue	\$980,000
Decrease in Accounts Receivable	<u>10,000</u>
Total cash receipts from customers	<u>\$990,000</u>

⁴ The opposite adjustment would be made. We would add \$9,000 to income.

⁵ The opposite adjustment would be made. We would subtract \$12,000 from income.

Because Alpine Trails' 20x1 cash receipts from customers exceeded its total revenue, the following adjustment is needed.

Adjustment 6: Add the decrease in Accounts Receivable . . . +\$10,000

The addition of \$10,000 to Alpine Trails' income reflects the fact that the firm's cash receipts from customers exceeded the total revenue reported on the income statement.

Suppose instead that Alpine Trails' Accounts Receivable balance had increased by \$1,000 during the year. What adjustment would be made then?⁶

Adjustment for Deferred Taxes One final adjustment remains in determining Alpine Trails' cash provided by operations. Taxes paid to the government are considered operating cash flows. As the income statement shows, the company's 20x1 income-tax expense was \$50,000. However, the comparative balance sheets show that Alpine Trails also has a balance in its Deferred Income Taxes account. The decline in this account of \$5,000 during 20x1 means that the company paid \$5,000 in income taxes during 20x1 that had already been reported as an expense in some previous year. Thus, Alpine Trails' cash disbursements for taxes in 20x1 amounted to \$55,000, as the following calculation shows.

Income-tax expense	\$50,000
Decrease in Deferred Income Taxes	<u>5,000</u>
Total cash payments for income taxes in 20x1	<u>\$55,000</u>

Since Alpine Trails' cash disbursements for income taxes exceeded its income-tax expense, the following adjustment is required.

Adjustment 7: Subtract the decrease in Deferred
Income Taxes –\$5,000

The subtraction of \$5,000 from Alpine Trails' income reflects the fact that the company's cash payments for income taxes exceeded the income-tax expense reported on the income statement.

What adjustment would be made if instead Alpine Trails' Deferred Income Taxes had increased during the year by \$4,000?⁷

Completing the Operating Activities Section of the Statement Now we have discussed all of the adjustments to income needed to determine Alpine Trails' cash provided by operations. Exhibit 20–5 summarizes these adjustments and shows the relationship between net income determined under accrual accounting and the cash provided by operating activities. The operating activities section of the statement is shown in Exhibit 20–6. As Exhibit 20–6 shows, Alpine Trails' operations provided \$122,000 in cash during 20x1.

Before we can complete Alpine Trails' entire statement of cash flows, we must prepare the financing and investing portions of the statement.

⁶ The opposite adjustment would be required. We would subtract \$1,000 from income.

⁷ The opposite adjustment would be required, so \$4,000 would be added to Alpine Trails' income. A \$4,000 increase in Deferred Income Taxes would mean that the company's cash payment for income taxes was exceeded by the income-tax expense reported on the income statement.

Exhibit 20-5

Summary of Adjustments to
Net Income: Alpine Trails Ski
Resort



Income Statement		Cash Flows from Operating Activities
(accrual basis of accounting)		(cash basis of accounting)
Revenue	+ Decrease in accounts receivable	Cash receipts from customers
Less: Cost of goods sold	- Increase in merchandise inventory + Increase in accounts payable	Less: Cash disbursements for merchandise purchases
Less: Operating expenses	+ Depreciation expense - Increase in prepaid expenses - Decrease in accrued liabilities - Decrease in deferred income taxes	Less: Cash disbursements for operating expenses
Net income		Cash provided by operations

Exhibit 20-6

Operating Activities Section of
Statement of Cash Flows:
Indirect Method



Alpine Trails Ski Resort (in thousands)		
Cash flows from operating activities:		
Net income		\$110
Adjustments to net income to determine cash provided by operations:		
1* Depreciation expense	\$40	
2 Increase in prepaid expenses	(3)	
3 Decrease in accrued liabilities	(10)	
4 Increase in merchandise inventory	(35)	
5 Increase in accounts payable	15	
6 Decrease in accounts receivable	10	
7 Decrease in deferred income taxes	(5)	
Total adjustments		12
Net cash flow from operating activities		\$122

*This is the number of the adjustment as explained in the preceding pages.

Investing Activities

The second section of the statement of cash flows focuses on Alpine Trails' investing activities. The company completed three major investment transactions during 20x1. These transactions, which are apparent upon examining the firm's comparative balance sheets, are discussed next.

Investment in Stock Coulterton Transit Company is a small bus line which operates in the vicinity of nearby Coulterton, Colorado. The firm provides transportation between Alpine Trails Ski Resort and the city of Coulterton. Since Alpine Trails Ski Resort depends on Coulterton Transit's services, Alpine's board of directors recently approved a plan to invest in the bus company's stock. In 20x1 Alpine Trails purchased 9,000

shares of Coulterton Transit Company stock for \$45,000. Thus, the following entry will appear in the investing activities section of Alpine Trails' statement.

Cash flows from investing activities:

Purchase of Coulterton Transit Company Stock \$(45,000)

Notice that the stock purchase also is apparent in Alpine Trails' comparative balance sheets, in which the balance in the Investment-in-Stock account increased by \$45,000 during 20x1.

Purchase of Equipment Another look at Alpine Trails' comparative balance sheets shows that during 20x1 the company purchased facilities and equipment costing \$70,000. Referral to the firm's long-lived assets records reveals that the company purchased new snowmaking equipment. The following entry will appear on the statement of cash flows.

Cash flows from investing activities:

Purchase of snowmaking equipment \$(70,000)

Sale of Land Early in 20x1 Alpine Trails sold several acres of land to a restaurant company which plans to build a restaurant near Alpine Trails Ski Resort. The land was sold at no gain or loss to Alpine Trails. The land sale is apparent on Alpine Trails' comparative balance sheets, where the balance in the land account declined from \$400,000 to \$350,000 during 20x1. The following entry will appear on Alpine Trails' statement of cash flows.

Cash flows from investing activities:

Sale of land \$50,000

Financing Activities

The final section of Alpine Trails' statement of cash flows focuses on the company's financing activities. The three financing transactions completed in 20x1 are discussed next.

Redemption of Bonds On December 31, 20x1, Alpine Trails Ski Resort redeemed bonds with a face value of \$60,000. The \$60,000 decrease in Bonds Payable is apparent on the comparative balance sheets. The following entry on the statement of cash flows highlights this important transaction.

Cash flows from financing activities:

Redemption of bonds \$(60,000)

Sale of Capital Stock Examination of Alpine Trails' comparative balance sheets shows that the company issued \$20,000 of capital stock during 20x1. The following entry highlights this transaction on the statement of cash flows.

Cash flows from financing activities:

Sale of capital stock	\$20,000
-----------------------------	----------

The sale of Alpine Trails Ski Resort's *own* capital stock is a *financing* transaction. The stock was sold to raise funds to expand and conduct operations. In contrast, Alpine Trails' purchase of Coulterton Transit Company's stock is an *investment activity*, and it was properly included in the investing activities section of the statement.

Payment of Dividends One final financing transaction occurred during 20x1. Alpine Trails' board of directors declared a \$20,000 dividend on the company's stock, and the dividend was paid in cash in December. This transaction, which is disclosed on the statement of retained earnings, is highlighted on the statement of cash flows by the following entry.

Cash flows from financing activities:

Payment of dividends	\$(20,000)
----------------------------	------------

Completed Statement of Cash Flows

Now we can combine all three sections of Alpine Trails' statement of cash flows. Exhibit 20-7 displays the completed statement. Alpine Trails had a \$3,000 decrease in its cash and cash equivalents during 20x1.

The statement of cash flows explains how this change occurred and summarizes how the company obtained and used cash. Much of the information included on the statement of cash flows also is disclosed in the other major financial statements. For example, the sale of land is disclosed on the balance sheet. The purpose of the statement of cash flows is to pull together all of the company's cash flow information and present it on one convenient statement.

Use of T-Accounts as an Aid in Preparing the Statement of Cash Flows

LO 4 Prepare a statement of cash flows using the indirect method, the direct method, and the T-account approach.

Some accountants find that T-accounts help them to organize their information when preparing a statement of cash flows. To illustrate this approach, let's prepare Alpine Trails' 20x1 statement using T-accounts.

Step One: Prepare T-Accounts

The first step is to prepare a T-account for each account on Alpine Trails' balance sheet. These T-accounts are shown in Exhibit 20-8; we analyze them in steps three, four, and five.

Step Two: Enter Account Balances

Next we enter the beginning and ending balances in each of the accounts, except for Cash and Cash Equivalents. We can skip this account, since the change in this account is the amount we are attempting to explain.

Alpine Trails Ski Resort
Statement of Cash Flows
For the Year Ended December 31, 20x1
(in thousands)

Cash flows from operating activities:

Net income		\$110
Adjustments to net income to determine cash provided by operations:		
Depreciation expense	\$ 40	
Increase in prepaid expenses	(3)	
Decrease in accrued liabilities	(10)	
Increase in merchandise inventory	(35)	
Increase in accounts payable	15	
Decrease in accounts receivable	10	
Decrease in deferred income taxes	(5)	
Total adjustments	12	
Net cash flow from operating activities		122
Cash flows from investing activities:		
Purchase of Coulterton Transit Company stock	\$(45)	
Purchase of snowmaking equipment	(70)	
Sale of land	50	
Net cash used by investing activities		(65)
Cash flows from financing activities:		
Redemption of bonds	\$(60)	
Sale of capital stock	20	
Payment of dividends	(20)	
Net cash used by financing activities		(60)
Net decrease in cash and cash equivalents		(3)
Balance in cash and cash equivalents, beginning of year		20
Balance in cash and cash equivalents, end of year		\$ 17

Exhibit 20-7

Statement of Cash Flows:
Indirect Method



Step Three: Analyze the Cash Flows from Operating Activities

Now we are ready to analyze the changes in Cash and Cash Equivalents for 20x1, as they relate to changes in Alpine Trails' other accounts during that period. For each account change, we make an entry in the Cash and Cash Equivalents account and in the related noncash account. When we are finished, we will have the basics of Alpine Trails' statement of cash flows represented by the entries in the Cash and Cash Equivalents account.

Net Income Since we are using the indirect method of statement preparation, we begin by entering Alpine Trails' 20x1 net income in the Cash and Cash Equivalents account and in the Retained Earnings account. Entries and adjustments that represent increases in cash are entered on the left (debit) side of the Cash and Cash Equivalents account. Since Alpine Trails' net income of \$110,000 increased the firm's retained earnings we also enter \$110,000 on the right (credit) side of the Retained Earnings account. To summarize, the following entry is made.

Cash and Cash Equivalents (increase)	110,000	
Retained Earnings		110,000

Adjustment 1: Depreciation Alpine Trails' 20x1 depreciation was \$40,000, so the following entry is made.

Exhibit 20-8

T-accounts Used in Preparing Statement of Cash Flows (all amounts in thousands)



Cash and Cash Equivalents			
Entries and Adjustments That Increase Cash		Entries and Adjustments That Decrease Cash	
Operating activities:			
Net income	110	3 Increase in prepaid expenses	2
1* Depreciation	40	10 Decrease in accrued liabilities	3
5 Increase in accounts payable	15	35 Increase in merchandise inventory	4
6 Decrease in accounts receivable	10	5 Decrease in deferred income taxes	7
Net cash flow from operating activities	122		
Investing activities:			
10 Sale of land	50	45 Purchase of Coulterton Transit Company stock	8
		70 Purchase of snowmaking equipment	9
Financing activities:			
12 Issuance of capital stock	20	60 Redemption of bonds	11
		20 Payment of dividends	13
		3 Decrease in cash and cash equivalents	

Accounts Receivable	Merchandise Inventory	Prepaid Expenses
Beg. bal. 140	Beg. bal. 25	Beg. bal. 5
10 6	4 35	2 3
End. bal. 130	End. bal. 60	End. bal. 8

Investment in Coulterton Transit Company Stock	Facilities and Equipment	Accumulated Depreciation
Beg. bal. 0	Beg. bal. 400	100 Beg. bal.
8 45	9 70	40 1
End. bal. 45	End. bal. 470	140 End. bal.

Land	Accounts Payable	Accrued Salaries Payable
Beg. bal. 400	70 Beg. bal.	30 Beg. bal.
50 10	15 5	3 10
End. bal. 350	85 End. bal.	20 End. bal.

Deferred Income Taxes	Bonds Payable	Common Stock
7 5	11 60	235 Beg. bal.
15 Beg. bal.	250 Beg. bal.	20 12
10 End. bal.	190 End. bal.	255 End. bal.

Retained Earnings
13 20
300 Beg. bal.
110 Net income for 20x1
390 End. bal.

*Boldface numbers reference the number of the adjustment in the surrounding pages.

Cash and Cash Equivalents (increase)	40,000	
Accumulated Depreciation		40,000

As previously noted, the adjustment for depreciation reflects the fact that depreciation expense was deducted previously in computing Alpine Trails' net income. Now it must be added back, since depreciation is a noncash expense.

Adjustment 2: Prepaid Expenses Since Alpine Trails' balance in Prepaid Expenses increased by \$3,000 during 20x1, the following entry is required.

Prepaid Expenses	3,000	
Cash and Cash Equivalents (decrease)		3,000

The company paid \$3,000 more in cash for insurance and property taxes in 20x1 than it incurred for those expenses.

Adjustment 3: Accrued Liabilities The following entry is required to record the \$10,000 decrease in Alpine Trails' Accrued Salaries Payable account.

Accrued Salaries Payable	10,000	
Cash and Cash Equivalents		10,000

The company paid \$10,000 more in cash to its employees than it incurred in salary expense for 20x1.

Adjustment 4: Merchandise Inventory A \$35,000 increase in Merchandise Inventory means that Alpine Trails purchased more inventory than it sold in 20x1. The following entry reflects this fact.

Merchandise Inventory	35,000	
Cash and Cash Equivalents (decrease)		35,000

Adjustment 5: Accounts Payable Alpine Trails' cash payments to its merchandise suppliers amounted to \$15,000 less than the firm's merchandise purchases. The following entry reflects this fact.

Cash and Cash Equivalents (increase)	15,000	
Accounts Payable		15,000

Adjustment 6: Accounts Receivable The following entry is needed to show that Alpine Trails' cash collections from its customers exceeded the company's 20x1 revenue.

Cash and Cash Equivalents (increase)	10,000	
Accounts Receivable		10,000

Adjustment 7: Deferred Taxes Alpine Trails' cash payments for income taxes in 20x1 exceeded the firm's income-tax expense. The following entry is required.

Deferred Income Taxes	5,000	
Cash and Cash Equivalents (decrease)		5,000

The seven adjustments complete the operating activities portion of the statement of cash flows. By calculating the balance in the Cash and Cash Equivalents account of Exhibit 20-8, we conclude that the cash provided by the operation in 20x1 amounted to \$122,000. This balance reflects only operating activities; Alpine Trails' financing and investing activities are analyzed in steps 4 and 5.

Step Four: Analyze the Cash Flows from Investing Activities

Alpine Trails had three major investing transactions in 20x1. The following three entries will record the effects of these transactions on the company's cash and cash equivalents.

Entry 8: Purchase of Coulterton Transit Company Stock Alpine Trails' purchase of stock as an investment is recorded as follows:

Investment in Coulterton Transit Company Stock	45,000	
Cash and Cash Equivalents (decrease)		45,000

Entry 9: Purchase of Snowmaking Equipment The following entry records this major use of cash.

Facilities and Equipment	70,000	
Cash and Cash Equivalents (decrease)		70,000

Entry 10: Sale of Land Alpine Trails' land sale generated \$50,000 in cash as shown by the following entry.

Cash and Cash Equivalents (increase)	50,000	
Land		50,000

Step Five: Analyze the Cash Flows from Financing Activities

Alpine Trails' three major financing activities are recorded by the following entries:

Entry 11: Redemption of Bonds The use of \$60,000 in cash to redeem bonds requires this entry:

Bonds Payable	60,000	
Cash and Cash Equivalents (decrease)		60,000

Entry 12: Issuance of Capital Stock Alpine Trails generated \$20,000 in cash through the issuance of capital stock, as the following entry shows.

Cash and Cash Equivalents (increase)	20,000	
Common Stock		20,000

Entry 13: Payment of Dividends The following entry reflects the \$20,000 cash outflow resulting from Alpine Trails' payment of dividends. Dividend payments reduce a firm's Retained Earnings account.

Retained Earnings	20,000	
Cash and Cash Equivalents (decrease)		20,000

This completes the entries needed to record Alpine Trails' investing and financing activities. Now we compute the final balance in the Cash and Cash Equivalents account. This shows that Alpine Trails' cash and cash equivalents decreased by \$3,000 during 20x1. Carefully examine the Cash and Cash Equivalents account in Exhibit 20-8. Compare the account with Alpine Trails' statement of cash flows in Exhibit 20-7. Notice that all of the information needed to prepare the statement is summarized in the Cash and Cash Equivalents account.

Using the Direct Method of Statement Preparation

When the direct method is used, the operating activities section of the statement of cash flows is approached differently than when the indirect method is used. Instead of beginning with net income and making adjustments, we will list each income statement item on the statement of cash flows. However, we still will make adjustments to reflect the difference between accrual accounting, which is used on the income statement, and cash-basis accounting, which is used on the statement of cash flows.

To illustrate the direct method of statement preparation, we will focus on the activities of Alpine Trails Ski Resort during 20x2. The company's comparative balance sheets, income statement, and statement of retained earnings are given in Exhibits 20–9 and 20–10.

Alpine Trails' completed statement of cash flows for 20x2 is displayed in Exhibit 20–11 which appears on page 23. The number next to each item on the statement is keyed to the following discussion, in which each statement item is explained.

LO 4 Prepare a statement of cash flows using the indirect method, the direct method, and the T-account approach.

Alpine Trails Ski Resort			
Comparative Balance Sheets			
December 31, 20x2 and 20x1			
(In thousands)			
Assets	20x2	20x1	Change
Current assets:			
Cash	\$ 22	\$ 17	\$ 5 Increase
Marketable securities	10	10	–0–
Accounts receivable	140	130	10 Increase
Merchandise inventory	35	60	25 Decrease
Prepaid expenses	3	8	5 Decrease
Total current assets	<u>210</u>	<u>225</u>	<u>15</u> Decrease
Investment in Coulterton Transit Company Stock ..	45	45	–0–
Facilities and equipment	450	470	20 Decrease
Less: Accumulated depreciation	(175)	(140)	35 Increase
Land	540	350	190 Increase
Total assets	<u>\$1,070</u>	<u>\$950</u>	<u>\$120</u> Increase
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$ 75	\$ 85	\$ 10 Decrease
Accrued salaries payable	25	20	5 Increase
Deferred revenue	5	–0–	5 Increase
Total current liabilities	105	105	–0–
Deferred income taxes	15	10	5 Increase
Bonds payable	190	190	–0–
Total liabilities	<u>310</u>	<u>305</u>	<u>5</u> Increase
Stockholders' equity:			
Common stock	270	255	15 Increase
Retained earnings	490	390	100 Increase
Total stockholders' equity	<u>760</u>	<u>645</u>	<u>115</u> Increase
Total liabilities and stockholders' equity	<u>\$1,070</u>	<u>\$950</u>	<u>\$120</u> Increase

Exhibit 20–9

Comparative Balance Sheets



Exhibit 20–10

Income Statement and
Statement of Retained
Earnings



Alpine Trails Ski Resort
Income Statement
For the Year Ended December 31, 20x2
(In thousands)

Revenue:		
Slope fees	\$330	
Condominium rentals	650	
Sales of merchandise	80	
Total revenue		\$1,060
Less: Cost of merchandise sold		55
Gross margin		1,005
Less: Operating expenses:		
Salaries	\$300	
Insurance	85	
Property taxes	40	
Depreciation	45	
Utilities	95	
Maintenance	60	
Advertising	15	
Administration	166	
Interest on bonds	19	
Total operating expenses		825
Income before taxes		180
Income-tax expense		55
Net income		<u>\$ 125</u>

Alpine Trails Ski Resort
Statement of Retained Earnings
For the Year Ended December 31, 20x2
(in thousands)

Retained earnings, December 31, 20x1	\$390
Add: Net income for 20x2	125
Subtotal	515
Deduct: Dividends declared in 20x2	25
Retained earnings, December 31, 20x2	<u>\$490</u>

Operating Activities

The operating activities section of the statement shows that Alpine Trails' operations provided \$195,000 in cash during 20x2. Explanations of the various items in this section of the statement follow.

1. **Cash receipts from customers.** Alpine Trails' income statement in Exhibit 20–10 shows that total sales revenue amounted to \$1,060,000 in 20x2. However, this is not the amount of cash collected from customers, for two reasons. First, the comparative balance sheets in Exhibit 20–9 show that Accounts Receivable increased in 20x2 by \$10,000. Therefore, \$10,000 of the firm's 20x2 sales were not paid for in cash during 20x2. Second, the current liabilities section of Alpine Trails' comparative balance sheets shows a \$5,000 increase in Deferred Revenue during 20x2. Deferred Revenue is a liability that results when the company receives cash from customers for services not yet rendered. In Alpine Trails' case, the \$5,000 in Deferred Revenue resulted when customers made advance deposits during 20x2 to hold condo reservations for the following year.

Statement of Cash Flows: Direct Method
Alpine Trails Ski Resort
For the Year Ended December 31, 20x2
(in thousands)

Cash flows from operating activities:

1	Cash receipts from customers		\$1,055
	Cash payments:		
2	To suppliers of merchandise	\$ 40	
3	To employees	295	
4	For interest	19	
5	For income taxes	50	
	For other operating expenses:		
6	Insurance and property taxes	120	
7	Utilities	95	
7	Maintenance	60	
7	Advertising	15	
7	Administration	<u>166</u>	
	Total cash payments		<u>860</u>
	Net cash flow from operating activities		195

Cash flows from investing activities:

Sale of equipment		\$ 10	
Purchase of land		<u>(190)</u>	
Net cash used by investing activities			(180)

Cash flows from financing activities:

Issuance of capital stock		\$ 15	
Payment of dividends		<u>(25)</u>	
Net cash used by financing activities			<u>(10)</u>
Net increase in cash and cash equivalents			5
Balance in cash and cash equivalents, beginning of year			<u>17</u>
Balance in cash and cash equivalents, end of year			<u>\$ 22</u>

Exhibit 20-11

Statement of Cash Flows:
Direct Method



The following calculations show that Alpine Trails collected a total of \$1,055,000 from its customers in 20x2.

Total revenue (from income statement)		\$1,060,000
Subtract: Increase in Accounts Receivable		(10,000)
Add: Increase in Deferred Revenue		<u>5,000</u>
Cash collected from customers		<u>\$1,055,000</u>

2. **Cash payments to suppliers of merchandise.** Alpine Trails' 20x2 income statement includes an expense for cost of merchandise sold of \$55,000, but the statement of cash flows shows cash payments to suppliers of \$40,000. The following calculations reconcile this difference.

Cost of Merchandise Sold (from income statement)		\$55,000
Subtract: Decrease in Merchandise Inventory		(25,000)
Add: Decrease in Accounts Payable		<u>10,000</u>
Cash payments to suppliers of merchandise		<u>\$40,000</u>

3. **Cash payments to employees.** Salary expense of \$300,000 is included on Alpine Trails' income statement. However, the firm's cash payments to employees amounted to \$295,000 in 20x2, as the following analysis shows.

Salary expense (from income statement)	\$300,000
Less: Increase in Accrued Salaries Payable	(5,000)
Cash payments to employees	<u>\$295,000</u>

4. **Cash payments for interest.** Alpine Trails' \$19,000 interest payment is shown on the income statement.
5. **Cash payment for income taxes.** Income-tax expense on Alpine Trails' income statement is \$55,000. However, the two balance sheets show that the company's liability for Deferred Income Taxes increased by \$5,000 during 20x2. This means that Alpine Trails' cash payments for income taxes amounted to \$5,000 less than the firm's actual income-tax expense.

Income-tax expense (from income statement)	\$55,000
Less: Increase in Deferred Income Taxes	(5,000)
Cash payments for income taxes	<u>\$50,000</u>

6. **Cash payments for insurance and property taxes.** These two expenses total \$125,000 on Alpine Trails' income statement. However, the comparative balance sheets show that the firm's prepaid expenses declined by \$5,000 during 20x2. This means that Alpine's 20x2 cash payments for insurance and property taxes amounted to \$5,000 less than its expenses.

Insurance and property tax expenses (from income statement)	\$125,000
Less: Decrease in Prepaid Expenses	(5,000)
Cash payments for insurance and property taxes	<u>\$120,000</u>

7. **Cash payments for utilities, maintenance, advertising, and administration.** These cash payments are the same as the expense items listed on the income statement.

Depreciation Notice that there is no entry on the statement of cash flows for depreciation. Under the direct method of statement preparation, we list only the cash receipts and disbursements. Since depreciation is a noncash expense, no entry is necessary.

Investing Activities

Alpine Trails' 20x2 statement of cash flows lists two cash flows from investing activities.

Equipment Sale The company sold a truck with a book value of \$10,000 for \$10,000 in cash. The truck's original cost was \$20,000, and its accumulated depreciation at the time of the sale was \$10,000. Notice that the comparative balance sheets show a \$20,000 decline in Facilities and Equipment during 20x2. The balance sheets also show a \$35,000 increase in Accumulated Depreciation during 20x2, which is explained as follows:

Accumulated Depreciation, December 31, 20x1	\$140,000
Add: Depreciation expense for 20x2 (from income statement)	45,000
Subtract: Accumulated depreciation on truck sold in 20x2	(10,000)
Accumulated Depreciation, December 31, 20x2	<u>\$175,000</u>

Land Purchase As the comparative balance sheets show, Alpine Trails purchased land for \$190,000 during 20x2. The company's management purchased the land for planned future construction of additional condominiums.

Financing Activities

Two financing transactions are disclosed on Alpine Trails' 20x2 statement of cash flows.

Issuance of Capital Stock The company issued \$15,000 in capital stock during 20x2, as the comparative balance sheets show.

Payment of Dividends Alpine Trails paid \$25,000 in cash dividends during 20x2, as the statement of retained earnings shows.

Completed Statement of Cash Flows

Exhibit 20–11 shows Alpine Trails' 20x2 statement of cash flows. As the statement shows, cash and cash equivalents increased by \$5,000 during 20x2.

Reconciliation Between Net Income and Net Cash Flow from Operating Activities When the direct method is used, a separate schedule must be provided to reconcile net income with the cash provided by operating activities. This schedule takes the same form as the operating activities section of the statement when it is prepared using the indirect method. The required schedule to accompany Alpine Trails' 20x2 statement is displayed in Exhibit 20–12.

Other Issues in Preparing the Statement of Cash Flows

Two other issues concerning preparation of the statement of cash flows merit discussion: (1) gross versus net cash flows and (2) direct exchange transactions.

Gross versus Net Cash Flows

Suppose that in 20x3 Alpine Trails Ski Resort purchases one parcel of land for \$80,000 and sells another property for \$25,000. In preparing the statement of cash flows, Alpine Trails should report both investing transactions at their gross amounts, rather than reporting a net land purchase of \$55,000 (\$80,000 purchase minus \$25,000 sale).

Alpine Trails Ski Resort		
Reconciliation of Net Income to the Net Cash Flow from Operating Activities		
For the Year Ended December 31, 20x2		
Net income		\$125
Adjustments to reconcile net income to the net cash flow from operating activities:		
Depreciation expense	\$45	
Decrease in prepaid expenses	5	
Increase in accrued liabilities	5	
Decrease in merchandise inventory	25	
Decrease in accounts payable	(10)	
Increase in accounts receivable	(10)	
Increase in deferred income taxes	5	
Increase in deferred revenue	5	
Total adjustments	<u>70</u>	
Net cash flows from operating activities		<u>\$195</u>

Exhibit 20–12

Reconciliation of Net Income to the Net Cash Flow from Operating Activities



Correct Presentation (gross amounts)

Cash flows from investing activities:	
Purchase of land	\$(80,000)
Sale of land	25,000
Cash used for investing activities	<u>\$(55,000)</u>

Incorrect Presentation (net amount)

Cash flows from investing activities	
Net purchase of land	<u>\$(55,000)</u>

The practice of reporting gross transaction amounts extends to all items in the investing and financing portions of the statement. However, *net* amounts are used in the operating activities section. For example, when Alpine Trails has several transactions during the year involving Accounts Payable, only the net change in Accounts Payable would be used in calculating the cash flow from operating activities.

Direct Exchange or Noncash Transactions

LO 5 Prepare a schedule disclosing direct exchange transactions.

The statement of cash flows focuses on transactions involving cash inflows or outflows. Sometimes, however, an enterprise experiences a substantive investing or financing transaction that does not involve a cash flow. An example of such a transaction is the purchase of a productive, long-lived asset through the issuance of debt or stock. Suppose, for example, that in 20x3 Alpine Trails Ski Resort purchases a parcel of land valued at \$100,000 by giving the seller a \$100,000 note payable. The journal entry to record this transaction is shown below.

Land	100,000	
Note Payable		100,000

No cash was exchanged in this transaction; yet the event involved a significant investing transaction (the purchase of land) and a significant financing transaction (the issuance of a note payable). Such a transaction, which does not involve cash, is called a **direct exchange (or noncash) transaction**.

A **direct exchange (or noncash) transaction** is a transaction in which no cash is involved.

Significant direct exchange transactions are not included in the body of the statement of cash flows. However, such transactions should be disclosed in a separate schedule accompanying the statement. In this manner, users of the company's financial statements will be alerted to these significant events. Alpine Trails' 20x3 statement of cash flows should be accompanied by the following schedule.

Schedule of direct exchange (noncash) transactions involving significant investing and financing activities:

Purchase of land valued at \$100,000 through the issuance of a note payable in the amount of \$100,000.

Using the Statement of Cash Flows

LO 6 Describe how the statement of cash flows is used by an enterprise's managers and by interested parties outside the organization.

The statement of cash flows provides useful information for both the managers of an enterprise and interested parties outside the organization. For both groups, the statement provides a convenient way of reconciling a company's income with its net cash flow. Many managers find the cash flow concept to be a more intuitively appealing measure of an organization's performance than income based on accrual accounting. In addition, the statement helps managers in determining the firm's dividend policy and needs for borrowing. Perhaps most important is the information provided by the statement about the ability of the enterprise to invest in facilities, equipment, or expanded operations. In short, the statement of cash flows provides managers with insight about what the enterprise can afford.

McDonald's Corporation			
Consolidated Statement of Cash Flows			
	Year 3	Year 2	Year 1
Operating activities:			
Net income	\$ 1,572.6	\$ 1,427.3	\$ 1,224.4
Adjustments to reconcile to cash provided by operations:			
Depreciation and amortization	742.9	709.0	628.6
Deferred income taxes	32.9	(4.2)	(5.6)
Changes in operating working capital items:			
Accounts receivable increase	(77.5)	(49.5)	(51.6)
Inventories, prepaid expenses and other current assets increase	(18.7)	(20.4)	(15.0)
Accounts payable increase	44.5	52.6	105.4
Accrued interest increase (decrease)	5.0	13.0	(25.5)
Taxes and other liabilities increase	116.4	158.3	95.2
Other—net	42.9	10.1	(29.7)
Cash provided by operations	2,461.0	2,296.2	1,926.2
Investing activities:			
Property and equipment expenditures	(2,375.3)	(2,063.7)	(1,538.6)
Purchases of restaurant businesses	(137.7)	(110.1)	(133.8)
Sales of restaurant businesses	198.8	151.6	151.5
Property sales	35.5	66.2	66.0
Notes receivable additions	(36.4)	(33.4)	(15.1)
Notes receivable reductions	59.2	31.5	56.7
Other	(314.4)	(151.1)	(92.6)
Cash used for investing activities	(2,570.3)	(2,109.0)	(1,505.9)
Financing activities:			
Net short-term borrowings (repayments)	228.8	(272.9)	521.7
Long-term financing issuances	1,391.8	1,250.2	260.9
Long-term financing repayments	(841.3)	(532.2)	(536.9)
Treasury stock purchases	(599.9)	(314.5)	(495.6)
Common and preferred stock dividends	(232.0)	(226.5)	(215.7)
Other	157.0	63.6	39.4
Cash provided by (used for) financing activities	104.4	(32.3)	(426.2)
Cash and equivalents increase (decrease)	(4.9)	154.9	(5.9)
Cash and equivalents at beginning of year	334.8	179.9	185.8
Cash and equivalents at end of year	\$ 329.9	\$ 334.8	\$ 179.9
Supplemental cash flow disclosures:			
Interest paid	\$ 369.0	\$ 331.0	\$ 323.9
Income taxes paid	\$ 558.1	\$ 667.6	\$ 621.8

Exhibit 20–13

Comparative Statements of Cash Flows: McDonald's Corporation for Three Recent Years (in millions)

Investors, creditors, and financial analysts use the information in the statement of cash flows to help in predicting an enterprise's future performance. Is the company in a strong position to grow or to take advantage of opportunities? Or, at the other extreme, is the firm in danger of insolvency? What sort of dividend stream is likely in the future? Outside parties find the information in the statement of cash flows important in answering these and many other questions about an enterprise's future performance.

Illustration of the Statement of Cash Flows

McDonald's Corporation's comparative statements of cash flows for three recent years are displayed in Exhibit 20–13. Notice that the company's cash provided by operations

has increased steadily over the three-year period. The investing activities section shows that McDonald's has invested heavily in property and equipment. Apparent from the statement's financing activities section is McDonald's steadily increasing dividend payment. All in all, the statement provides a picture of a vibrant, growing company that is in a strong financial position.

Chapter Summary

The statement of cash flows has evolved over a period of 30 years from an informal cash flow analysis into a major financial statement. The statement is required by the FASB for external reporting, and it is considered to be of equal importance to the balance sheet and income statement. The purpose of the statement of cash flows is to provide financial statement users with insight about: (1) the organization's ability to generate positive future cash flows, (2) the organization's ability to meet its obligations and pay dividends, (3) the needs of the organization for external financing, (4) the reasons for the differences between net income and the net cash flow from operations, and (5) the effects of cash and noncash investing and financing activities.

The statement has three sections, which describe the organization's cash flows from operating activities, investing activities, and financing activities. The operating activities section of the statement may be prepared using the direct method, under which a cash-basis income statement is prepared by analyzing each of the firm's cash flows, the income statement accounts, and the changes in the balance sheet accounts. Alternatively, the indirect method may be used, in which the analyst begins with the firm's net income determined under accrual accounting. Then net income is adjusted to reflect the differences between operating cash flows and the revenues and expenses reported on an accrual basis. T-accounts may also be used as an aid in preparing the statement.

Key Terms

For each term's definition refer to the indicated page, or turn to the glossary at the end of the text.

cash equivalents, pg. 5

direct method, pg. 7

indirect method
(or reconciliation
method), pg. 7

operating activities, pg. 5
statement of cash
flows, pg. 4

direct exchange (or noncash
transaction, pg. 26

financing activities, pg. 6

investing activities, pg. 5

Review Questions

- 20-1. List five purposes for the statement of cash flows.
- 20-2. What is meant by the term *cash equivalent*?
- 20-3. Describe the organization of the statement of cash flows.
- 20-4. Define each of the following terms: *operating activities*, *investing activities*, and *financing activities*.
- 20-5. For each of the following transactions, indicate whether it belongs in the operating, investing, or financing section of the statement of cash flows.
 - a. Purchase of land.
 - b. Sale of the firm's own capital stock.
 - c. Sale of stock owned in another company.
 - d. Payment of a utility bill.
 - e. Collection of accounts receivable.
 - f. Collection of a loan made to another company.
- 20-6. Explain the difference between the direct and indirect methods of preparing the operating activities section of the statement of cash flows.
- 20-7. Explain the treatment of depreciation under the indirect method.
- 20-8. Describe the implications of an increase in accounts receivable when the indirect method is used.
- 20-9. Is depreciation a source of cash? Explain your answer.
- 20-10. Describe the adjustment made to net income under the indirect method when accounts payable is increased by \$2,000 and inventory is decreased by \$800.
- 20-11. Explain the difference between gross and net cash flows. Which of these types of cash flow is used in the statement of cash flows? Why?
- 20-12. Define the term *direct exchange transaction*. Give two examples.
- 20-13. What are the sources of information from which the statement of cash flows is prepared?
- 20-14. Last year Robinson Corporation reported a net loss of \$200,000, but the company's net cash provided by operations amounted to \$50,000. Moreover, the firm's cash balance did not change during the year. Explain how these events could occur.
- 20-15. How might the management of a company use the statement of cash flows? Of what use is the statement to outside parties?

- 20–16.** Of what use is the statement of cash flows, given that most of the information can be deduced from an income statement and comparative balance sheet?
- 20–17.** Assuming the indirect method of preparing the statement of cash flows, describe the effects of the following items on the cash provided by operations.
- Increase in deferred income taxes.
 - Decrease in deferred revenue.
 - Increase in prepaid expenses.
- 20–18.** Suppose a company sold a factory building to its former president in exchange for a \$600,000, five-year note. Would this transaction be reported in the company's statement of cash flows? If it would be disclosed, explain how.
- 20–19.** Would the sale of land be considered an investing activity or a financing activity? Explain.
- 20–20.** Suppose an airline sold three aircraft for \$6,000,000 and purchased seven others for \$22,000,000. How would these transactions be reported on the statement of cash flows?

Exercises

Celeste Furniture Stores had \$9,000 in prepaid expenses on December 31, 20x0. This account relates to a prepaid insurance bill. During 20x1, the company's insurance expense was \$76,000. At the end of 20x1, the balance in prepaid expenses was \$7,000.

Required:

- What was Celeste's total cash payment for insurance during 20x1? Show your calculations.
- What adjustment will be needed for prepaid expenses if the indirect method is used in preparing Celeste's statement of cash flows? Explain your answer.

■ **Exercise 20–21**
Adjustment for Prepaid Expenses
(LO 3, LO 4)

Frost Wholesalers sells produce to the grocery stores in southern Florida. The beginning and ending balances in the company's Inventory and Accounts Payable accounts during the most recent year were as follows:

	January 1	December 31
Inventory	\$25,000	\$20,000
Accounts Payable	15,000	13,000

Frost's cost of goods sold for the year was reported at \$280,000 on its income statement.

Required:

In completing the following requirements, assume that Frost Wholesalers uses the indirect method in preparing the statement of cash flows.

- What adjustment is required for the change in the inventory balance? Explain your answer. How much produce inventory was purchased during the year?
- Prepare a schedule that computes Frost's total cash payments to its produce suppliers during the year.
- What adjustment is necessary for the change in the accounts payable balance on the statement of cash flows for the year? Explain your answer.

■ **Exercise 20–22**
Adjustments for Inventory and Accounts Payable
(LO 3, LO 4)

On December 31, 20x0, Sandburg Plastics Company showed \$760,000 in Accumulated Depreciation on its balance sheet. During 20x1, the company sold a building with accumulated depreciation of \$120,000. At year-end, the balance in the Accumulated Depreciation account was \$695,000.

Required:

- What adjustment is required for depreciation on Sandburg's 20x1 statement of cash flows:
 - If the indirect method is used?
 - If the direct method is used?
- Explain why your answers differ in (a) and (b) above.

■ **Exercise 20–23**
Adjustment for Depreciation
(LO 3, LO 4)

Thurber Advertising Agency's balance in Accounts Receivable increased by \$45,000 during the year just ended. The firm's service revenue during the year amounted to \$640,000.

■ **Exercise 20–24**
Adjustment for Changes in Accounts Receivable
(LO 3, LO 4)

Required:

1. If Thurber uses the indirect method, what adjustment will be necessary on its statement of cash flows for the year? Explain your answer.
2. If Thurber uses the direct method, what amount will be shown for cash received from clients on the statement of cash flows? Explain your answer.
3. Can you determine the amount of cash received from clients during the year which stemmed from services provided during the year? If yes, what is the amount? If no, what additional information would you need to determine the amount?

■ **Exercise 20–25**
Adjustment for Deferred
Taxes
(LO 3, LO 4)

Irving Company operates a tour bus line in St. Louis. On December 31, 20x0, the company's balance in the Deferred Income Taxes account was \$48,000. On December 31, 20x1, the Deferred Income Taxes balance was \$57,000. The firm's income-tax expense for 20x1 was \$128,000.

Required:

1. If Irving Company uses the indirect method, what adjustment will be required for deferred income taxes? Explain your answer.
2. If Irving Company uses the direct method, what amount will be shown on the statement of cash flows for cash payments for income taxes?
3. In what section of the statement of cash flows will the items referred to above appear?

■ **Exercise 20–26**
Understanding the Operating
Activities Section of the
Statement of Cash Flows
(LO 4, LO 6)

Steinbeck Broadcasting Company operates several radio stations in the Midwest. The operating activities section of the company's statement of cash flows for the year just ended is as follows:

Net income	\$1,480,000
Adjustments to net income to determine cash provided by operations:	
Depreciation expense	\$410,000
Decrease in prepaid expenses	14,000
Decrease in accrued liabilities	(12,000)
Decrease in supplies inventory	9,000
Decrease in accounts payable	(14,000)
Increase in accounts receivable	(27,000)
Increase in deferred income taxes	10,000
Total adjustments	<u>390,000</u>
Net cash flow from operating activities	<u>\$1,870,000</u>

Required:

A good friend of yours is perplexed by the preceding information. In particular, he is puzzled as to why the changes in account balances result in the indicated adjustments. Write a note to your friend explaining the adjustments on Steinbeck's statement of cash flows.

■ **Exercise 20–27**
Adjustment for Deferred
Revenue
(LO 3, LO 4)

Whittier Publishing Company had received \$25,000 in advance subscriptions from its magazine customers as of December 31, 20x0. This amount was shown as deferred revenue on the company's balance sheet. The balance in the Deferred Revenue account on December 31, 20x1, was \$10,000.

Required:

What adjustment will be necessary when Whittier's controller prepares the company's 20x1 statement of cash flows using the indirect method? Explain your answer.

■ **Exercise 20–28**
Direct Exchange
Transactions
(LO 5)

Poe Nurseries grows and sells trees and shrubs for landscaping. In May of the most recent year, the company acquired 200 acres of land appraised at \$410,000 from Clemens Orchards, Inc. In exchange for the land, Clemens Orchards, Inc. received a five-year note from Poe Nurseries in the amount of \$410,000.

Required:

Show how this transaction will be disclosed in the statement of cash flows prepared by (1) Poe Nurseries and (2) Clemens Orchards, Inc.

Alcott Theater Supplies Company engaged in the following transactions during the year just ended.

- Acquired land for \$300,000.
- Purchased an office building for \$200,000.
- Sold a warehouse for \$400,000. The accumulated depreciation on the warehouse was \$170,000, and its original cost to Alcott Theater Supplies was \$570,000.

■ **Exercise 20–29**
Gross versus Net Cash
Flows
(LO 4)

Required:

Prepare the investing activities section of Alcott Theater Supplies' cash flow statement.

Problems

Diamond Electronics Company's most recent financial statements are as follows. The firm did not dispose of any long-lived assets.

■ **Problem 20–30**
Operating Cash Flows;
Indirect Method
(LO 4, LO 6)

**Diamond Electronics Company
Comparative Balance Sheets
December 31, 20x1 and 20x0**

Assets	20x1	20x0
Current assets:		
Cash	\$ 50,000	\$ 60,000
Accounts receivable	30,000	40,000
Inventory	140,000	100,000
Prepaid expenses	8,000	10,000
Total current assets	\$228,000	\$210,000
Long-lived assets	162,000	100,000
Accumulated depreciation	(30,000)	(20,000)
Total assets	\$360,000	\$290,000

Liabilities and Stockholders' Equity

Current liabilities:		
Accounts payable	\$ 55,000	\$ 50,000
Salaries payable	35,000	45,000
Total current liabilities	\$ 90,000	\$ 95,000
Stockholders' equity:		
Common stock	\$100,000	\$100,000
Retained earnings	170,000	95,000
Total liabilities and stockholders' equity	\$360,000	\$290,000

**Diamond Electronics Company
Income Statement
December 31, 20x1**

Sales	\$645,000
Cost of goods sold	400,000
Gross margin	\$245,000
Less: Selling and administrative expenses	120,000
Income before income taxes	\$125,000
Income-tax expense	50,000
Net income	\$ 75,000

Required:

- Prepare the operating cash flows section of Diamond Electronics' statement of cash flows for 20x1. Use the indirect method.
- Did Diamond Electronics declare a cash dividend during 20x1? If so, how much was it?

■ **Problem 20–31**
Changes in Balance Sheet
Accounts; Effect on the
Statement of Cash Flows;
Indirect Method
(LO 4, LO 6)

The following changes occurred in Baltimore Delivery Service's balance sheet accounts during the most recent year.

- a. Accounts Payable, increase of \$39,000.
- b. Accounts Receivable, decrease of \$23,000.
- c. Prepaid Expenses, decrease of \$30,000.
- d. Accumulated Depreciation on Vehicles, increase of \$100,000.
- e. Buildings, increase of \$120,000.
- f. Bonds Payable, increase of \$250,000.
- g. Deferred Income Taxes, increase of \$20,000.
- h. Salaries Payable, decrease of \$12,000.
- i. Supplies Inventory, increase of \$9,000.

Required:

For each of the balance sheet account changes listed, indicate how the item will be handled on the company's statement of cash flows. Assume that the indirect method will be used. Be sure to state which section of the statement will be affected by each item.

■ **Problem 20–32**
Determining the Effect of
Transactions on the
Statement of Cash Flows
(LO 4, LO 6)

The following transactions relate to Metro Daily, Inc., a large newspaper company serving several cities on the east coast.

- a. Purchased new presses for \$840,000 in cash.
- b. Declared and paid cash dividends of \$41,000.
- c. Sold stock in a radio broadcasting company. The stock was sold for \$115,000 in cash, the same amount that had been paid for the stock.
- d. Issued Metro Daily common stock in exchange for a piece of land appraised at \$310,000.
- e. Paid off an income-tax liability from the prior year, \$80,000.
- f. Sold fully depreciated equipment costing \$200,000 for \$15,000.
- g. Paid deferred income taxes of \$18,000.
- h. Purchased newsprint costing \$95,000 on account.
- i. Recorded depreciation expense of \$81,000.

Required:

Prepare a table with the following headings, and classify each of the transactions described above. Metro Daily, Inc. uses the direct method.

Transaction	Type of Activity			Increase, Decrease, or No Effect on Cash	On the Statement of Cash Flows	
	Operating	Investing	Financing		Yes	No

■ **Problem 20–33**
Statement of Cash Flows;
Indirect Method
(LO 4, LO 6)

Mind Challenge, Inc. is a manufacturer of unique educational toys for preschoolers. The company's founder and president is considering the acquisition of another small company that manufactures kites. As an aid in making his decision, the president has asked for a set of financial statements for Mind Challenge, Inc. The controller has prepared the comparative balance sheets and income statement shown on the next page.

Depreciation expense of \$20,000 is included in operating expenses. The company constructed a prefabricated storage building for \$50,000. Long-term debt of \$10,000 was retired. The company incurred no income tax expense in 20x1, and no dividends were paid.

Required:

1. The controller has asked you, the assistant controller, to prepare Mind Challenge's statement of cash flows for 20x1. The controller has a preference for the indirect method.
2. Prepare a memo to the company's president explaining why the cash balance increased during the year.

Mind Challenge, Inc.
Comparative Balance Sheets
December 31, 20x1 and 20x0

Assets	20x1	20x0
Cash	\$ 64,000	\$ 27,000
Accounts receivable	90,000	132,000
Marketable securities	17,000	17,000
Inventory	100,000	129,000
Prepaid expenses	9,000	10,000
Land	140,000	85,000
Buildings	750,000	700,000
Less: Accumulated depreciation	(170,000)	(150,000)
Total assets	<u>\$1,000,000</u>	<u>\$950,000</u>
Liabilities and Stockholders' Equity	20x1	20x0
Accounts payable	\$125,000	\$100,000
Accrued liabilities	47,000	40,000
Income tax payable	1,000	13,000
Interest payable	7,000	4,000
Short-term notes payable	12,000	15,000
Long-term notes payable	170,000	180,000
Total liabilities	<u>362,000</u>	<u>352,000</u>
Common stock	560,000	520,000
Additional paid-in capital	45,000	40,000
Retained earnings	33,000	38,000
Total stockholders' equity	<u>638,000</u>	<u>598,000</u>
Total liabilities and stockholders' equity	<u>\$1,000,000</u>	<u>\$950,000</u>

Mind Challenge, Inc.
Income Statement
For the Year Ended December 31, 20x1

Sales	\$ 600,000
Cost of goods sold	345,000
Gross margin	<u>255,000</u>
Operating expenses	250,000
Operating income	5,000
Interest expense	10,000
Net loss	<u>\$ (5,000)</u>

Refer to the information given in the preceding problem for Mind Challenge, Inc.

Required:

Using T-accounts, prepare the firm's 20x1 statement of cash flows using this approach.

Refer to the information given in Problem 20–33 for Mind Challenge, Inc.

Required:

Prepare the company's 20x1 statement of cash flows using the direct method.

In Shape, Inc. is a retailer of home fitness equipment such as stationary bicycles and treadmills. The firm's recent comparative balance sheets and income statement are as follows:

■ **Problem 20–34**
Statement of Cash Flows;
Use of T-Accounts
(LO 4, LO 6)

■ **Problem 20–35**
Statement of Cash Flows;
Direct Method
(LO 4, LO 6)

■ **Problem 20–36**
Statement of Cash Flows;
Direct and Indirect Methods
(LO 4, LO 6)

In Shape, Inc.
Comparative Balance Sheets
December 31, 20x1 and 20x0

Assets	20x1	20x0
Current assets:		
Cash	\$ 43,250	\$ 20,000
Accounts receivable	70,000	50,000
Merchandise inventory	210,000	250,000
Prepaid expenses	9,000	7,000
Total current assets	332,250	327,000
Buildings and furnishings:		
Buildings and furnishings	600,000	510,000
Less: Accumulated depreciation	(150,000)	(125,000)
Net buildings and furnishings	450,000	385,000
Total assets	\$782,250	\$712,000
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$123,000	\$115,000
Salaries payable	47,250	72,000
Interest payable	27,000	25,000
Total current liabilities	197,250	212,000
Long-term debt:		
Bonds payable	70,000	100,000
Total liabilities	267,250	312,000
Stockholders' equity:		
Common stock (\$10 par)	370,000	280,000
Retained earnings	145,000	120,000
Total stockholders' equity	515,000	400,000
Total liabilities and stockholders' equity	\$782,250	\$712,000

In Shape, Inc.
Income Statement
For the Year Ended December 31, 20x1

Sales	\$1,255,250	
Cost of merchandise sold	712,000	
Gross margin	543,250	
Expenses:		
Salary expense	252,100	
Interest expense	75,000	
Other expenses	8,150	
Depreciation expense	25,000	
Total expenses	360,250	
Operating income	183,000	
Income-tax expense	43,000	
Net income	\$ 140,000	

The following additional information concerns the firm's transactions during 20x1.

- All sales during the year were made on account.
- All merchandise was purchased on account, comprising the total Accounts Payable account.
- Buildings and furnishings costing \$90,000 were purchased by paying \$40,000 in cash, and issuing 5,000 shares of stock.

- The “other expenses” are related to prepaid items.
- All income taxes incurred during the year were paid during the year.
- In order to supplement its cash, In Shape, Inc. issued 4,000 shares of common stock at par value.
- Cash dividends of \$115,000 were declared and paid at the end of the year.

Required:

1. Compare and contrast the direct method and the indirect method for reporting cash flows from operating activities.
2. Prepare a Statement of Cash Flows for In Shape, Inc. for 20x1, using the direct method. Be sure to support the statement with appropriate calculations.
3. Using the indirect method, calculate the net cash flow from operating activities only for In Shape, Inc. for 20x1.

(CMA, adapted)

The Cookery Corner, Inc., is a distributor of kitchen utensils, pots and pans, and culinary items in Sacramento. The following financial statements are the company’s most recent comparative balance sheets, income statement, and statement of retained earnings.

■ **Problem 20–37**
Statement of Cash Flows;
Indirect Method
(LO 4, LO 6)

The Cookery Corner, Inc.			
Comparative Balance Sheets			
December 31, 20x1 and 20x0			
(in thousands)			
Assets	20x1	20x0	
Current assets:			
Cash	\$ 33	\$ 30	
U.S. Treasury bills	11	12	
Accounts receivable	122	113	
Merchandise inventory	80	70	
Prepaid expenses	2	5	
Total current assets	\$248	\$230	
Investment in stock of Jasper Corporation	90	70	
Buildings and equipment	480	400	
Less: Accumulated depreciation	(255)	(210)	
Land	227	200	
Total assets	<u>\$790</u>	<u>\$690</u>	
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$ 63	\$ 56	
Accrued salaries payable	32	34	
Total current liabilities	\$ 95	\$ 90	
Deferred income taxes	25	30	
Bonds payable	210	250	
Total liabilities	<u>\$330</u>	<u>\$370</u>	
Stockholders' equity:			
Common stock	\$130	\$100	
Additional paid-in capital	100	90	
Retained earnings	230	130	
Total stockholders' equity	<u>\$460</u>	<u>\$320</u>	
Total liabilities and stockholders' equity	<u>\$790</u>	<u>\$690</u>	

The Cookery Corner, Inc.
Income Statement
For the Year Ended December 31, 20x1
(In thousands)

Sales	\$1,100
Cost of goods sold	<u>600</u>
Gross margin	\$ 500
Less: Selling and administrative expenses:	
Selling expenses	\$100
Administrative expenses	<u>200</u>
Total selling and administrative expenses	<u>300</u>
Income before taxes	\$ 200
Income-tax expense	<u>80</u>
Net income	<u>\$ 120</u>

The Cookery Corner, Inc.
Statement of Retained Earnings
For the Year Ended December 31, 20x1
(in thousands)

Retained earnings, December 31, 20x0	\$130
Add: Net income for 20x1	<u>120</u>
Subtotal	\$250
Deduct: Dividends declared and paid in 20x1	<u>20</u>
Retained earnings, December 31, 20x1	<u>\$230</u>

The Cookery Corner purchased two buildings in 20x1. For one building, the company paid \$40,000 in cash. In exchange for the other building, the firm issued common stock. The building was appraised at \$40,000, and the common stock had a par value of \$30,000. No other stock was issued during 20x1.

Required:

1. Use the indirect method to prepare The Cookery Corner's statement of cash flows for 20x1. (*Hint:* Treasury bills are cash equivalents.)
2. Write a memo to the company's new president explaining the change in cash and cash equivalents.

■ **Problem 20–38**
Statement of Cash Flows;
Use of T-Accounts
(LO 4, LO 6)

Refer to the information given in the preceding problem for The Cookery Corner, Inc.

Required:

Set up T-accounts, and use this approach to prepare the company's 20x1 statement of cash flows.

■ **Problem 20–39**
Statement of Cash Flows;
Direct Method
(LO 4, LO 6)

Refer to the information given in Problem 20–37 for The Cookery Corner, Inc.

Required:

Use the direct method to prepare the firm's statement of cash flows for 20x1.

■ **Problem 20–40**
Straightforward
Development of Statement
of Cash Flows; Indirect
Method
(LO 4, LO 6)

The following financial statements relate to Alpine Trails Ski Resort: comparative balance sheets as of December 31, 20x3 and 20x2; income statement for 20x3; and statement of retained earnings for 20x3.

Alpine Trails Ski Resort
Comparative Balance Sheets
December 31, 20x3 and 20x2
(in thousands)

	Assets	20x3	20x2
Current assets:			
Cash		\$ 25	\$ 22
Marketable securities		10	10
Accounts receivable		130	140

Assets (continued)	20x3	20x2
Merchandise inventory	\$ 40	\$ 35
Prepaid expenses	10	3
Total current assets	215	210
Investment in Coulterton Transit Company stock	55	45
Facilities and equipment	450	450
Less: Accumulated depreciation	(225)	(175)
Land	653	540
Total assets	<u>\$1,148</u>	<u>\$1,070</u>
Liabilities and Stockholders' Equity	20x3	20x2
Current liabilities:		
Accounts payable	\$ 80	\$ 75
Accrued salaries payable	15	25
Deferred revenue	3	5
Total current liabilities	98	105
Deferred income taxes	20	15
Bonds payable	190	190
Total liabilities	<u>308</u>	<u>310</u>
Stockholders equity:		
Common stock	270	270
Retained earnings	570	490
Total stockholders' equity	840	760
Total liabilities and stockholders' equity	<u>\$1,148</u>	<u>\$1,070</u>

Alpine Trails Ski Resort
Income Statement
For the Year Ended December 31, 20x3
(In thousands)

Revenue:		
Slope fees	\$340	
Condominium rentals	625	
Sales of merchandise	75	
Total revenue		\$1,040
Less: Cost of merchandise sold		50
Gross margin		990
Less: Operating expenses:		
Salaries	\$310	
Insurance	80	
Property taxes	35	
Depreciation	50	
Utilities	100	
Maintenance	50	
Advertising	20	
Administration	170	
Interest on bonds	15	
Total operating expenses		830
Income before taxes		160
Income-tax expense		50
Net income		<u>\$ 110</u>

Alpine Trails Ski Resort
Statement of Retained Earnings
For the Year Ended December 31, 20x3
(In thousands)

Retained earnings, December 31, 20x2	\$490
Add: Net income for 20x3	110
Subtotal	600
Deduct: Dividends declared in 20x3	30
Retained earnings, December 31, 20x3	<u>\$570</u>

Alpine Trails did not buy or sell any facilities or equipment during 20x3.

Required:

Using the indirect method, prepare the company's statement of cash flows for 20x3.

Refer to the financial statements given in the preceding problem for Alpine Trails Ski Resort.

Required:

Set up T-accounts to use as an aid in preparing the company's statement of cash flows. Prepare the statement for 20x3.

Refer to the financial statements given in Problem 20–40 for Alpine Trails Ski Resort.

Required:

Using the direct method, prepare the company's statement of cash flows for 20x3.

■ **Problem 20–41**

Straightforward Development of Statement of Cash Flows; Using T-Accounts (LO 4, LO 6)

■ **Problem 20–42**

Straightforward Development of Statement of Cash Flows; Direct Method (LO 4, LO 6)

Case

■ **Case 20–43**

Statement of Cash Flows; Loan Application; Ethics (LO 2, LO 4, LO 6)

Eight years ago Emily Regis invented a unique fiber optic coupling device used in the telecommunications industry. She began her own firm called OptiComm, and the business expanded rapidly. After three years, Regis took her company public and now is the majority stockholder. Regis is a hands-on company president who gets involved in every phase of the business. It has become increasingly apparent to Regis that a plant expansion will be necessary to keep up with the company's sales orders. She approached the Great Lakes National Bank about a loan. The bank requested a statement of cash flows.

OptiComm's comparative balance sheets as of December 31, 20x1 and 20x0, and a statement of income and retained earnings for the year ended December 31, 20x1, are as follows:

OptiComm, Inc.
Comparative Balance Sheets
December 31, 20x1 and 20x0
(in thousands)

Assets	20x1	20x0
Current assets:		
Cash	\$ 60	\$ 100
U.S. treasury bills	0	50
Accounts receivable	610	500
Inventory	720	600
Total current assets	<u>1,390</u>	<u>1,250</u>
Long-lived assets:		
Land	80	70
Buildings and equipment	710	600
Less: Accumulated depreciation	(180)	(120)
Patents (less amortization)	105	130
Total long-lived assets	<u>715</u>	<u>680</u>
Total assets	<u>\$2,105</u>	<u>\$1,930</u>

Liabilities and Stockholders' Equity	20x1	20x0
Current liabilities:		
Accounts payable	\$ 360	\$ 300
Income taxes payable	25	20
Notes payable	400	400
Total current liabilities	785	720
Notes payable	200	200
Total liabilities	<u>985</u>	<u>920</u>
Stockholders' equity:		
Common stock	830	700
Retained earnings	290	310
Total stockholders' equity	1,120	1,010
Total liabilities and stockholders' equity	<u>\$2,105</u>	<u>\$1,930</u>

OptiComm, Inc.
Income and Retained Earnings Statement
For the Year Ended December 31, 20x1
(in thousands)

Sales		\$2,408
Less: Expenses:		
Cost of goods sold	\$1,100	
Salaries and benefits	850	
Heat, light, and power	75	
Depreciation	60	
Property taxes	18	
Patent amortization	25	
Miscellaneous expenses	10	
Interest	55	2,193
Net income before income taxes		215
Income taxes		105
Net income		110
Retained earnings, January 1, 20x1		310
		420
Stock dividend*		130
Retained earnings, December 31, 20x1		<u>\$ 290</u>

*The stock dividend shown on the statement of income and retained earnings had no effect on the company's cash flows. The \$130,000 stock dividend reduced the Retained Earnings account by \$130,000 and increased the Common Stock account by \$130,000.

Required:

- As OptiComm's new controller, Dave Peterson was asked to prepare a statement of cash flows for 20x1 to submit to the bank. Peterson delegated the task to you, his assistant. Use the direct method. (*Hint:* Treasury bills are cash equivalents.)
- When Dave Peterson presented the statement of cash flows to Emily Regis, he expressed several concerns:

Peterson: I'm worried about the bank's likely reaction to this statement. Although our profit for 20x1 wasn't too bad, our cash flow from operations was pretty low. When you combine that fact with the increases in inventory and accounts receivable, Great Lakes may say no to our loan request.

Regis: We can explain the increases in inventory and accounts receivable, Dave. The inventory was produced for a government program that got canceled, and the accounts receivable are due to Avantronics not paying us the \$100,000 yet on their contract.

Peterson: I know, but the bank's not going to be impressed.

Regis: Dave, we need this loan badly. I'm no accounting whiz, but I remember enough to know that there's such a thing as creative accounting. Here's an idea. I just signed a contract with General Communications for \$250,000. It's only January 3, and we'll be delivering later this month. Let's just book the sale and cash receipt in 20x1. I know General Communications' president, and I'm sure he'll agree to pay cash on the barrelhead. That will bump up sales, income, and cash flow for 20x1.

Peterson: But Emily, it didn't happen in 20x1.

Regis: We need the loan, Dave.

Comment on the ethical issues in this scenario.

(CMA, adapted)

