

# STATEMENT OF CASH FLOWS AND WORKING CAPITAL ANALYSIS

## I N T R O D U C T I O N

Historically, profit-oriented businesses have used the accrual basis of accounting in which the income statement, balance sheet, statement of ownership equity, and a statement of cash flows are created. Financial statements serve as a basis for measuring operating performance, financial position, ownership status, and an analysis of cash flows over a given accounting period.

Accrual financial statements indicate profitability (the income statement) and solvency or net worth (the balance sheet). However, these statements include noncash sales revenues and noncash expenses. Therefore, the basic balance sheet and income statement cannot in themselves answer questions regarding cash inflows and cash outflows that have occurred during an operating period.

The primary purpose of the statement of cash flows (SCF) is to identify and report the effects of cash receipts and cash disbursements for three specific areas of business activities. Normally a business operates within three specific areas of activity that occur over an operating period—*operations*, *investing*, and *financing*.

The day-to-day management of current assets and current liabilities is an important aspect of management of any business operation and as such working capital analysis shares the concept of identifying cash inflows and outflows, which increase or decrease working capital ( $CA - CL$ ). Coupled with the SCF, the statement of changes to working capital identifies sources (inflows) and uses (outflows) or working capital.

## C H A P T E R   O B J E C T I V E S

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After studying this chapter, the reader should be able to

- 1** Define the purpose of the statement of cash flows.
  - 2** Identify the three sections of the statement of cash flows and explain the nature of the types of transaction.
  - 3** Explain the effect that changes in current asset and current liability accounts have on the adjustment of accrual net income or net loss to cash-based net income or net loss.
  - 4** Explain how depreciation expense, amortization expense, and gains or losses on the disposal of noncurrent assets apply in increasing or decreasing the adjustment to net income.
  - 5** Define working capital.
  - 6** List and briefly explain some of the sources and uses that change working capital.
  - 7** Prepare a change to working capital accounts and identify the net change to working capital.
  - 8** Explain why cash does not always increase by an amount equal to net income.
  - 9** Explain the common uses of major elements in both the statement of cash flows and the various statements used to analyze working capital.
  - 10** Explain whether or not the hospitality industry can operate on a relatively low current ratio.
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## CASH FLOWS

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The statement of cash flows (SCF) provides a foundation to predict future cash flows. The ability to forecast cash needs and cash availability to purchase capital assets, repay noncurrent debt, and other noncurrent balance sheet items is essential. Owners and creditors assume that if a business generates positive cash flows in the past, the business will likely generate positive cash flows in the future. Since the SCF reports the business's ability to generate cash, it provides this information about cash availability. In addition, an SCF can also serve as a basis for the evaluation of management's performance regarding cash management.

## EVALUATING NET CASH FLOWS

In a hospitality operation, it is possible for an operation to have positive net income and, at the same time, produce a negative cash flow, or to show a net loss and have a positive cash flow. The **operating section** of a statement of cash flows adjusts and reconciles the net income or net loss for an operating period to the net cash flow from operations. It is the change in the cash account, which is identified when net cash flow, either positive or negative, is equal to the change in the cash account and the actual cash on hand at the end of the period is confirmed.

*Cash* includes cash on hand, cash in the bank, and cash equivalents. Cash equivalents typically consist of marketable securities and short-term investments, which can be immediately converted to cash when the need dictates. In this discussion, cash equivalents, marketable securities and short-term investments will be treated as current asset accounts, not actual cash accounts.

There are two ways of determining net cash flows from operations—the direct and the indirect method. The **direct method** uses cash receipts from operations and cash disbursements to create the income statement on a cash basis. The **indirect method** starts with net income and adjusts it for change in current asset and current liability accounts. However, the indirect method is generally the easier and more commonly used method, so only the indirect method will be discussed in detail in this chapter. The investing and financing sections are determined the same way regardless of the method used to determine cash flows from operations.

Management must understand the procedures and the necessity to implement effective cash management policies and procedures. The SCF can answer some of the following key questions:

- How much did the cash position increase or decrease from operating activities since the last accounting period?
- Did normal operation activities generate the major portion of cash inflows?
- How much was invested in capital assets, such as new furnishings, equipment, or other long-term physical assets?
- How much cash was recovered from the disposal of furnishings, fixtures, equipment, or other long-lived physical assets?
- How much cash was received from the disposal of long-term investments?
- How much cash was obtained by incurring long-term liabilities?
- How much cash was used to reduce or pay off long-term liabilities?
- How much cash was received through the sale of ownership equity?
- What amount was paid out as dividends?
- What amount of cash did the proprietor or the partners withdraw?

The SCF allows the identification of cash inflows and cash outflows within operating activities, investing activities, and financing activities. The three sections have the objective of identifying cash flows that occurred from the beginning to the end of a period of operations. To prepare an SCF, the reported accrual net income (or loss) is converted from an accrual basis to a cash basis by evaluating the balance sheet accounts that have changed during an operating period. The final result of the SCF is a positive or negative net cash flow, which is equal to the total change in the cash account between the beginning and the end of the year's balance sheets.

In the operating section, each active current asset and current liability account except cash is evaluated to determine the change in the account for the entire reporting period. The change is identified as an increase or decrease, and the type of account being evaluated determines how the change is treated. A positive cash flow is added, and a negative cash flow is deducted in the process of converting accrual net income (or net loss) to a cash basis.

## VALUE OF STATEMENT OF CASH FLOWS

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The SCF is of value to management because it allows an evaluation of the operation's liquidity and provides a basis for analysis of cash management. In addition, it guides management in its decisions regarding cash budgeting, and assists in decisions about its financing and investing requirements. It is also of value to creditors (such as suppliers of goods and services needed by the operation) to assess the operation's ability to meet its payment requirements. These creditors generally like to see that sufficient cash is being generated from operating activities to meet these obligations rather than relying on investing or financing activities to provide that cash.

Lenders of short-term as well as long-term funds can also use an SCF to determine the ability of an organization to continue to meet its debt obligations. Stockholders can use the SCF to assess the operation's ability to pay dividends, or possibly to increase its dividend payments.

The SCF is a historic document showing what has happened in a comparative review, and is an essential document for managers, creditors, lenders, and stockholders for evaluating and forecasting the future.

## SEGMENTING CASH FLOW ANALYSIS

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Operating activities evaluate and identify cash flow changes that occur within the major operating accounts—current assets and current liabilities. In addition, specific adjustments are considered that, by their nature, are noncash

adjustments. The greatest number of transactions affecting cash flows occurs within the major operating accounts during actual operations. The investing and financing sections evaluate noncurrent account transactions affecting cash flows, which typically are not considered normal daily operating transactions. Cash flows are segmented into three specific types of activity: operating, investing, and financing. This segmentation allows the adjustment of accrual net income or loss by adding positive cash flow changes and deducting negative cash flow changes. Each activity is discussed in the sequence that it appears in the SCF.

**1. Operating activities** involve the primary objective of business, the production of sales revenue inflows from the exchange of goods, merchandise, and services creating sales revenue inflows for cash or on credit. Credit card and accounts receivables are the current asset accounts created by revenue inflows on credit. In addition to cash, other current assets—such as supplies, inventory for resale, and prepaid expenses—are created and consumed to support sales revenue-generating operations.

The generation of sales revenue creates expense outflows, which are recognized when cash is paid or incurred on credit. *Accounts payable* is the primary current operating liability account. *Current liabilities*, when paid, represent cash outflows. Ongoing expense outflows occur for payment of cost-of-sales items, employee costs, insurance costs, facilities support, interest, taxes, and other necessary recurring costs of operations. As well, adjustments are made for noncash expenses such as depreciation and the recognition of gains or losses on the sales or disposal of long-term assets.

**2. Investing activities** involve transactions that affect noncurrent accounts. The purchase of a long-term asset creates a cash outflow; the sale of a long-term asset creates a cash inflow. The purchase of long-term noncash equivalent investment creates a cash outflow; the sale of a noncash equivalent investment creates a cash inflow.

**3. Financing activities** involve transactions that cause changes to ownership equity and the payment or borrowing of long-term debt. Investment or withdrawal of equity capital and operating returns of income (or losses) typically affect financing activities of a proprietorship or partnership. In an incorporated operation, financing activities are affected by the issuance of capital stock, a cash inflow, and the recovery by the corporation's own stock (treasury stock), a cash outflow. The reissue of treasury stock creates a cash inflow. The assumption of long-term debt creates a cash inflow; repayment of long-term debt (principal) creates a cash outflow. The payment of cash dividends to stockholders is a cash outflow.

The accrual income statement reports revenue inflows, expense outflows, and the resulting net income or net loss from operations for an entire operating period. The income statement, however, does not allow management to readily see why or how cash changes occurred.

Although the amount of net income or net loss may generally affect the cash account, the reported net income or net loss will not normally equal the increase

or decrease in the cash account. The reported net income or loss at the end of an accounting period is normally based on accrual accounting. The accrual method includes recognition of noncash expenses, losses, or gains on the sale of long-term assets and noncash revenue transactions.

Typical noncash accrual items deducted in arriving at net income (or loss) are depreciation and amortization expenses and losses on disposal of long-lived assets. These are noncash expense and loss items not requiring cash outflows, and are added back as adjustments in the operating activities section of the SCF. Gains on disposal of long-lived assets are noncash revenues not involving a cash inflow. These noncash gains are deducted as adjustments in the operating activities section since they are included in net income and, therefore, have inflated net income from normal operations.

To prepare an SCF, the following financial statements and information are required:

- Income statement for the current period
- Balance sheet for the current period
- Trial balance of the accounts and balances at the beginning of the period (or the prior period balance sheet and statement of retained earnings or a statement of capital)
- Statement of retained earnings for the current period
- Information relating to noncurrent transactions during the current period

A trial balance of accounts and balances at the beginning of the period, compared to the ending adjusted trial balance of accounts, will isolate changes in the accounts. If preferred, you could compare the prior and current year balance sheets and statements of retained earnings. This will provide the same changes occurring in the accounts.

Financial statements report key information necessary to complete an analysis of items affecting the conversion of reported accrual net income (or loss) to a cash basis. It is important that you review their structure, components, and sequence, as we discuss the conversion of an accrual income statement to a cash basis.

Each of the three sections of the SCF, indirect method, will be individually discussed, beginning with the net cash flow from operations followed by net cash flow from investing and net cash flow from financing. After all sections have been individually discussed, a completed SCF will be illustrated.

## **NET CASH FLOW FROM OPERATING ACTIVITIES**

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The objective of this section is to discuss and describe the procedure to convert reported accrual net income (or net loss) to a cash basis. The accrual nature of reported net income (or net loss) means that sales and expenses are

recorded when earned and incurred, not when cash is actually received or paid. The basic format of the accrual income statement is

$$\begin{aligned} \text{Sales revenue} - \text{Cost of sales} &= \text{Gross margin} - \text{expenses} \\ &= \text{Operating income (or loss)} \end{aligned}$$

Sales are made only two ways, for cash or on credit. Expenses are incurred only two ways, paid when incurred or incurred on credit, which creates an accounts payable. The indirect method of determining cash flows from operations starts with reported accrual net income (or net loss). To accomplish the conversion of net income (or loss), each current asset and current liability account must be analyzed to find the change that occurred in the account over the operating period. Once the amount of the change is determined, identify whether the change increased or decreased over the operating period.

For example: The current income statement of a motel reported \$800,000 of room sales revenue. Accounts receivable increased from \$10,000 at the beginning of the period to \$15,000 at the end of the period. Considering only the \$5,000 increase to accounts receivable, reported room sales revenue was converted to a cash basis of \$795,000. Since less cash was received, it is called a *use of cash*. This adjustment, using the effect of only one current asset account, is determined as follows:

<b>Beginning accounts receivable</b>	–	<b>Ending accounts receivable</b>	=	<b>Increase, accounts receivable</b>
\$10,000	–	\$15,000	=	<u>\$5,000 Increase</u>
<b>Sales revenue</b>	–	<b>Increase, accounts receivable</b>	=	<b>Cash basis sales revenue</b>
\$800,000	–	\$5,000	=	<u>\$795,000</u>

In preparing the operating activities section of the SCF, the \$5,000 increase in accounts receivable is treated as a negative number and deducted from net income in the conversion of accrual net income to a cash basis. The actual cash inflow was \$795,000 due to the increase in accounts receivable during the period of \$5,000. The \$5,000 is considered a use of cash on the SCF. An increase in a current asset account represents a decrease to net income when converted to a cash basis. A decrease in a current asset account has the *opposite effect* of causing an increase in net income when it is adjusted to a cash basis as it relates to cash sales.

An increase in a current liability account represents an increase in expenses incurred on credit over a full operating period. This indicates that actual cash operating expenses were less than the total reported accrual operating expenses. The increase in a current liability account is treated as a positive number and an increase to net income in the conversion to the cash basis. The increase in cash is called a source (inflow) of each. This shows that actual cash outflow paid for operating expenses was less than the expenses reported in the accrual income statement.

For example, accrual income reports expenses when they are incurred, not when they are paid. Assume that total reported operating expenses were \$280,000, and that accounts payable, a current liability account, increased from \$10,000 to \$12,000 at the end of the period. The \$2,000 change in the account is treated as a positive number, and increases the reported net income in the conversion to the cash basis. Considering only the increase of \$2,000 to accounts payable, the cash used for the operating expense was \$278,000. The \$2,000 was expenses incurred on credit. This adjustment, using only one current liability account, is determined as follows:

<b>Beginning accounts payable</b>	–	<b>Ending accounts payable</b>	=	<b>Increase, accounts payable</b>
<b>\$10,000</b>	–	<b>\$12,000</b>	=	<b><u>\$2,000 Increase</u></b>
<b>Operating expenses</b>	–	<b>Increase, accounts payable</b>	=	<b>Cash basis expense</b>
<b>\$280,000</b>	–	<b>\$2,000</b>	=	<b><u>\$278,000</u></b>

This shows an addition to reported net income of \$2,000, indicating that actual cash outflow for operating expenses was \$278,000; accounts payable increased by \$2,000, indicating \$2,000 of operating expenses was recognized on credit, thus not requiring the payment of cash.

The net effect of the two basic adjustments on net income based on the foregoing examples involving a \$4,000 increase to a current receivable and a \$2,000 increase to a current payable follows:

		<i>Accrual Basis</i>	<i>Cash Basis</i>		<i>Effects of Changes</i>
Sales revenue	=	\$800,000	\$795,000	Sales revenue (decreased)	\$5,000
Operating expenses	=	( 280,000)	( 278,000)	Operating expense (increased)	<u>\$2,000</u>
Net Income	=	<u>\$520,000</u>	<u>\$517,000</u>	Net Income (decreased)	<u>\$3,000</u>

The foregoing examples show that changes to the primary operating accounts, current assets and current liabilities (with the exception of the cash amount), over an accounting period will cause an increase or decrease to the reported accrual income or loss when it is converted to a cash basis. Changes in each operating account provide a trail to identify accounts that have changed the balance of the cash account over the reported period.

The effect of changes in cash in the current operating accounts (current assets and current liabilities) during the conversion to a cash basis from accrual net income or net loss is shown as follows:

**Current Assets:** Decreases are sources (inflows), and increases net cash flows. Increases are uses (outflows), and decreases net cash flows.

**Current Liabilities:** Decreases are uses (outflows), and decreases net cash flows. Increases are sources (inflows), and increases net cash flows.

Some general rules apply to understanding the effect of changes to current assets and current liability accounts within the operating activities section of the SCF. The rules will identify how to treat the changes in current operating accounts and will specify whether the change is an increase in cash or a decrease in cash in determining the effect on accrual net income (or loss).

<b>Current asset increases</b>	=	<b>Negative cash outflow effect</b>	=	<b>Increase is deducted</b>
<b>Current asset decreases</b>	=	<b>Positive cash inflows effect</b>	=	<b>Decrease is added</b>
<b>Current liability increases</b>	=	<b>Positive cash inflows effect</b>	=	<b>Increase is added</b>
<b>Current liability decreases</b>	=	<b>Negative cash outflow effect</b>	=	<b>Decrease is deducted</b>

After evaluating and adjusting current assets and current liability accounts, the net income figure has to be further adjusted for noncash items that appear on the income statement that do not involve a cash inflow or cash outflow. As discussed earlier, the major noncash item typically used in most hospitality operations is depreciation. This transaction affects only depreciation expense and accumulated depreciation (a contra asset account). Since depreciation expense is deducted on the accrual income statement but no cash is involved to arrive at net income, depreciation must to be added back to net income to adjust cash from operations. In other words, depreciation expense can be considered a source of cash and added back to income (or loss).

In addition, if amortization expense was reported on the income statement, it would also be added back to net income like depreciation since it reduced net income but no cash was involved. Losses or gains on the disposal of long-term assets are reported on the accrual income statement. A gain has increased accrual net income above what it should be from operations and a reported loss has decreased accrual net income below what it should be from operations. Such losses or gains will be adjusted in the conversion of net income from operations to the cash basis. When reported on the income statement, losses will be added back as positive inflows and gains are deducted as negative outflows to adjust reported income (or loss) to the cash basis. The effects of depreciation, amortization, and losses or gains on the disposal of long-term assets should be adjusted automatically in the operating section of the SCF. These adjustments are summarized as follows:

<b>Depreciation expense</b>	=	<b>Positive effect</b>	=	<b>Add back cash</b>
<b>Amortization expense</b>	=	<b>Positive effect</b>	=	<b>Add back cash</b>
<b>Loss on the disposal of a long-term asset</b>	=	<b>Positive effect</b>	=	<b>Add back cash</b>
<b>Gain on the disposal of a long-term asset</b>	=	<b>Negative effect</b>	=	<b>Deduct cash</b>

## DETERMINING NET CASH FLOW

For the purposes of understanding the net cash flow from operating activities, we will focus on the income statement in Exhibit 10.1 and the comparative balance sheets in Exhibit 10.2 for information used in conversion of net income (or loss) to a cash basis. The income statement identifies the reported net income (or loss), depreciation and amortization expenses, and losses and gains on disposal of long-lived assets. Comparative balance sheets allow the analysis of current asset and current liability accounts to determine their balance changes and how to treat the change as a positive inflow, add adjustment, or a negative outflow, deduct adjustment. The statement of retained earnings in Exhibit 10.3 shows the net income (or loss) and cash dividends paid for the operating period being reported.

## CASH FLOW CONVERSION, OPERATING ACTIVITIES

Net income of \$141,100 is the first item shown and is the amount being converted to a cash basis through the operations activities section (Exhibit 10.4). If a net loss were reported, it would also be the amount being converted to a cash basis, but would be shown as a negative amount. Net income (or loss) is also reported in the statement of retained earnings.

1. One noncash adjustment, depreciation expense, is identified, which is a positive inflow and is automatically an added-back adjustment.

Sales revenue		\$7,262,400
Cost of sales		( 2,495,300)
Gross margin		\$4,767,100
Payroll expense	\$2,306,500	
Direct operating expenses	<u>1,609,900</u>	
Total direct operating expenses		( 3,916,400)
Contributory income		\$ 850,700
Depreciation expense	\$ 144,200	
Interest expense	52,900	
Total fixed expenses	<u>488,300</u>	
Total operating expenses		( 685,400)
Operating income		\$ 165,300
Income tax		( 24,200)
Net Income		<u>\$ 141,100</u>

### EXHIBIT 10.1

Condensed Income Statement, December 31, 0005

<i>Assets</i>	<b>12-31-0004</b>	<b>12-31-0005</b>		<b>Change</b>
<i>Current Assets</i>				
Cash	\$ 25,200	\$ 29,600	+	\$ 4,400
Credit card receivables	14,550	12,900	-	1,650
Accounts receivable	4,850	4,100	-	750
Inventories	9,700	8,000	-	1,700
Prepaid expenses	4,100	4,200	+	100
<i>Total Current Assets</i>	<u>\$ 58,400</u>	<u>\$ 58,800</u>	+	<u>\$ 400</u>
<i>Fixed and Noncurrent Assets</i>				
Land	\$ 194,000	\$ 194,000		-0-
Building	9,800,000	9,800,000		-0-
Equipment	736,400	753,400	+	\$ 17,000
Furnishings	184,000	184,000		-0-
Less: Total accumulated depreciation	( 2,400,000)	( 2,544,200)	+	( 144,200)
<i>Total Property &amp; Equipment: Net</i>	<u>\$8,514,400</u>	<u>\$8,387,200</u>	-	<u>\$127,200</u>
Other assets	509,000	609,000	+	100,000
<i>Total Fixed and Noncurrent assets</i>	<u>\$9,023,400</u>	<u>\$8,996,200</u>	-	<u>\$ 27,200</u>
<i>Total Assets</i>	<u>\$9,081,800</u>	<u>\$9,055,000</u>	-	<u>\$ 26,800</u>
<i>Liabilities &amp; Stockholders' Equity</i>				
<i>Current Liabilities</i>				
Accounts payable	\$ 14,700	\$ 16,700	+	\$ 2,000
Accrued payroll payable	3,200	4,000	+	800
Taxes payable	5,900	4,700	-	1,200
Current mortgage payable	14,300	14,900	+	600
<i>Total current liabilities</i>	<u>\$ 38,100</u>	<u>\$ 40,300</u>	+	<u>\$ 2,200</u>
<i>Long-Term Liabilities</i>				
Mortgage payable	\$7,710,200	\$7,704,300	-	\$ 5,900
<i>Total Liabilities</i>	<u>\$7,748,300</u>	<u>\$7,744,600</u>	-	<u>\$ 3,700</u>
<i>Stockholders' Equity</i>				
Capital stock	\$ 950,000	\$ 940,000	-	\$ 10,000
Retained earnings	383,500	370,400	-	\$ 13,100
<i>Total Stockholders' Equity</i>	<u>\$1,333,500</u>	<u>\$1,310,400</u>	-	<u>\$ 23,100</u>
<i>Total Liabilities &amp; Stockholders' Equity</i>	<u>\$9,081,800</u>	<u>\$9,055,000</u>	-	<u>\$ 26,800</u>

**EXHIBIT 10.2**

Comparative Balance Sheets for the Years Ended 0004 and 0005

Retained earnings, December 31, 0004	\$383,500
Net income for the year 0005	<u>141,100</u>
Subtotal	\$524,600
Cash dividends paid in year 0005	( 154,200)
Retained earnings, December 31, 0005	<u>\$370,400</u>

**EXHIBIT 10.3**

Statement of Retained Earnings for the Year Ended December 31, 0005

2. Three of the current asset accounts shows a decrease between the beginning and the end of the year and are treated as a positive inflow that increases the cash from operations. The fourth current asset account, prepaid expenses, has increased and, therefore, shows a negative outflow that reduces the cash from operations.
3. Four current liability accounts were identified with changes in their balances. The change in the current mortgage payable is not considered in the operating section of the statement since it is not related to operations. Instead, it is paying off a long-term liability, which is part of financing activities. Two of the other three had increases in their balances and one had a decrease. The two current liability accounts that increase are treated as positive inflows and are added back; the third showing a decrease in its balance is treated as a negative outflow, and will be deducted in the adjustment. The result of these adjustments is shown in Exhibit 10.4.

<i>Adjustments to Reconcile Net Income to Net Cash Flow from Operating Activities</i>		
Net income from operations		\$141,100
Depreciation expense	\$144,200	
Credit card receivables (decreased)	1,650	
Accounts receivable (decreased)	750	
Inventory (decreased)	1,700	
Prepaid expenses (increased)	( 100)	
Accounts payable (increased)	2,000	
Accrued payroll payable (increased)	800	
Taxes payable (decreased)	( 1,200)	
Net Cash Flow Adjustment		<u>149,800</u>
Net Cash Flow from Operating Activities		<u>\$290,900</u>

**EXHIBIT 10.4**

Net Cash Flow from Operating Activities for the Year Ended December 31, 0005

## NET CASH FLOW FROM INVESTING ACTIVITIES

To determine cash flow adjustments from investing activities, we turn our attention to the comparative balance sheets in Exhibit 10.2. Now we will review the property and equipment (fixed assets) section to isolate the purchase and sale of long-lived assets and the purchase or sale of noncurrent investments.

1. No changes occurred in the land or building accounts.
2. The fixed asset section shows equipment has increased in year 0005 by \$17,000, which is treated as a negative outflow and deducted. However, an analysis of this account (Exhibit 10.5) shows equipment was sold for \$3,000, which is treated as a positive inflow and is added back to cash. In addition, \$20,000 of new equipment was purchased during the period, which is treated as a negative outflow and deducted. The only other account in the fixed asset section that changed was accumulated depreciation in the amount of \$144,200, which has already been used in the depreciation expense (non-cash) adjustment in the operating activities section.
3. The other assets section shows that the investment account increased \$100,000, which is treated as a negative outflow and deducted. However, an analysis of this account during this period shows an investment was sold for \$25,000, which is treated as a positive inflow and added. In addition, a new investment was purchased for \$125,000 during the period that is a negative outflow and deducted. The result of these adjustments is shown in Exhibit 10.5.

## NET CASH FLOW FROM FINANCING ACTIVITIES

To determine cash flow adjustments from financing activities, we look to the comparative balance sheets in Exhibit 10.2 and the statement of retained earnings, Exhibit 10.3. Our focus now turns to long-term liabilities and

<i>Cash flow adjustments, investing activities</i>		
Purchase of equipment	\$( 20,000)	
Sale of equipment	3,000	
Purchase of investment	(125,000)	
Sale of investment	<u>25,000</u>	
Net Cash Flow from Investing Activities		<u>(\$117,000)</u>

### EXHIBIT 10.5

Net Cash Flow from Investing Activities for the Year Ended December 31, 0005

stockholders' equity. Determine whether any long-term liability accounts have increased (a positive inflow) or decreased (a negative outflow) during the period. Determine whether any stock equity has been sold, a positive inflow, or repurchased (treasury stock), a negative outflow, and whether cash dividends have been paid, a negative outflow, during the period.

1. The long-term liability section shows the mortgage payable (on a building) account has been reduced by \$5,900 in year 0005. However, the amount of cash used was \$14,300. This amount is determined from the year 0004 current mortgage payable. By putting current mortgage payable on the balance sheet, the operation is committing to pay it within the next 12 months or during year 0005. Therefore, we need to do some additional analysis to determine if we borrowed any additional long-term debt during the year. If we use a T-account, we can see what is happening.

Debit	Credit	Explanation
\$14,900	\$7,710,200	January 1, 0004 balance
		Transferred to current mortgage payable during Year 0005
	\$7,695,300	Balance if there were no other transactions in long-term mortgage
	\$ 9,000	Borrowed during Year 0005
	\$7,704,300	December 31, 0005 balance

2. The statement of retained earnings reports the payment of cash dividends during year 0005 of \$154,200, which also creates a negative cash flow.
3. The stockholders' equity sections of the comparative balance sheets show the capital stock account has decreased by \$10,000 between December 31, 0004, and December 31, 0005. If capital stock account has increased, it would be a positive inflow while a decrease would be a negative outflow. Since the shareholders' equity decreased by \$10,000 during the year, stock was repurchased causing a use of cash.

<i>Cash flow adjustments, financing activities</i>	
Reduction of long-term mortgage	(\$ 14,300)
Borrow additional long-term debt	9,000
Redeem capital stock	( 10,000)
Cash dividends paid	( 154,200)
Net Cash Flow from Financing Activities	<u>(\$169,500)</u>

#### EXHIBIT 10.6

Cash Flow from Financing Activities for the Year Ended December 31, 0005

4. The last account to look at is retained earnings, as illustrated in Exhibit 10.3. This shows a beginning balance of \$383,500, which was the ending balance at the end of year 0004. Net income was \$141,100, and cash dividends of \$154,200 were paid during year 0005. The year 0005 ending balance of retained earnings is \$370,400. The result of these adjustments is shown in Exhibit 10.6.

## FINALIZING THE STATEMENT OF CASH FLOWS

A completed SCF using the information discussed in the example is shown in Exhibit 10.7. Note in Exhibit 10.7 the net cash flow increase of \$4,400 during year 0005 is added to year 0004's cash balance to confirm the cash flow

Net Income		\$141,100
Credit card receivables (decrease)	\$ 1,650	
Accounts receivable (decrease)	750	
Inventory (decrease)	1,700	
Prepaid expense (increase)	( 100)	
Accounts payable (increase)	2,000	
Accrued payroll (increase)	800	
Tax payable (decrease)	( 1,200)	
Depreciation expense	<u>144,200</u>	
<i>Net cash flow adjustments</i>		<u>149,800</u>
Net Cash Flow, Operating Activities		\$290,900
<i>Cash flow adjustments investing activities:</i>		
Purchase of equipment	(\$ 20,000)	
Sale of equipment	3,000	
Purchase of investment	( 125,000)	
Sale of investment	<u>25,000</u>	
Net Cash Flow, Investing Activities		( 117,000)
<i>Cash flow adjustments financing activities:</i>		
Reduction of mortgage	( 14,300)	
Borrow additional long-term debt	9,000	
Redeem capital stock	( 10,000)	
Dividends paid	<u>( 154,200)</u>	
Net Cash Flow, Financing Activities		( 169,500)
Net cash flow increase		\$ 4,400
Cash Balance, December 31, 2004		<u>25,200</u>
Cash Balance, December 31, 2005		<u>\$ 29,600</u>

### EXHIBIT 10.7

Statement of Cash Flows for the Year Ended December 31, 0005

change and the year 0005 ending cash balance. As discussed earlier, the final net cash flow change reported in the SCF should be equal to the change in the cash account that occurred over the reported period. If the change in the cash account is not the same as the final adjusted cash flow, an error has occurred and should be traced and corrected.

## RATIO ANALYSIS USING THE STATEMENT OF CASH FLOWS

The SCF provides additional information that can be used to calculate several useful ratios to analyze liquidity, profitability, and net worth or solvency.

### CASH FLOW FROM OPERATING ACTIVITIES TO CURRENT LIABILITIES

The **cash flow from operating activities to current liabilities ratio** is a measure of liquidity and is calculated as follows:

$$\frac{\text{Cash flow from operating activities}}{\text{Average current liabilities}}$$

The cash flow from operating activities in our situation is \$290,900 from Exhibit 10.7, and the current liabilities for year 0004 and year 0005 are shown in Exhibit 10.2. The result is

$$\frac{\$290,900}{(\$38,100 + \$40,300) / 2} = \frac{\$290,900}{\$39,200} = \underline{\underline{7.42 \text{ times, or } 742\%}}$$

This ratio has advantages over the current and acid test ratios, which are calculated at a single point in time on the balance sheet date. If, on the balance sheet date, the amounts used in the calculations are considerably higher or lower than normal, then distorted ratios will result. The cash flow from operations to current liabilities ratio overcomes this problem since the cash flow is for a year and average current liabilities from two successive balance sheets are used. All users of financial statements like to see this ratio higher rather than lower. It is suggested that a minimum of 200 percent is desirable, and the more the ratio exceeds that minimum figure, the better will be the operation's liquidity. Our result of 742 percent is considerably higher than the suggested minimum.

The use of this ratio does not mean that the traditional current and acid test ratios should be discontinued. They still have a value and, indeed, many lenders require that a minimum level of these ratios be maintained.

## CASH FLOW FROM OPERATING ACTIVITIES TO TOTAL LIABILITIES

The often-used solvency (or net worth) ratio of total assets to total liabilities is calculated at a single point in time, the balance sheet date. As such, the numbers within the balance sheet are static. This ratio considers cash flow from operating activities over a period of time such as a year rather than debt of a specific date. The **cash flow from operating activities to total liabilities ratio** is calculated as follows:

$$\frac{\text{Cash flow from operating activities}}{\text{Average total liabilities}}$$

In our situation, given the net cash flow from operations of \$290,900 in Exhibit 10.7 and the total liabilities for year 0004 and year 0005 from Exhibit 10.2, the calculation is

$$\frac{\$290,900}{(\$7,748,300 + \$7,744,600) / 2} = \frac{\$290,900}{\$7,746,450} = 0.0376, \text{ or } \underline{\underline{3.8\%}}$$

Further, the total assets to total liabilities ratio does not take into account the different liquidities of the various assets used in the equation and the cash flow from operations to average total liabilities ratio overcomes that problem. The total assets to total liabilities ratio is more indicative of the operation's ability to pay its various types of debt. It is suggested that a minimum ratio of 20 percent is acceptable, and the higher this ratio is, the better the operation's ability to pay off its debts with cash. Our result of 3.8 percent is significantly lower than the suggested minimum. This low ratio would indicate that the operation has a very high debt and creditors may be concerned about the security of their loans.

## CASH FLOW FROM OPERATING ACTIVITIES TO INTEREST

The **cash flow from operating activities to interest ratio** is a solvency (or net worth) ratio and is calculated as follows:

$$\frac{\text{Cash flow from operating activities} + \text{Interest expense}}{\text{Interest expense}}$$

In our case, given the cash flow amount of \$290,900, and Exhibit 10.1, the calculation is

$$\frac{\$290,900 + \$52,900}{\$52,900} = \frac{\$343,800}{\$52,900} = 6.5 \text{ times, or } \underline{\underline{650\%}}$$

This ratio is a more realistic one than the ratio for the number of times interest earned because interest has to be paid with *cash*, not with net income. This ratio can provide a more obvious warning that an inability to pay interest may be on the horizon than does the traditional interest coverage ratio. The higher this ratio is, the more comfortable the creditors will be.

## CASH FLOW FROM OPERATING ACTIVITIES MARGIN

The **cash flow from operating activities margin ratio** is a profitability ratio and is calculated as follows:

$$\frac{\text{Cash flow from operating activities}}{\text{Sales revenue}}$$

In our case, given the cash flow amount of \$290,900 and Exhibit 10.1, the calculation is

$$\frac{\$290,900}{\$7,262,400} = 0.04, \text{ or } \underline{\underline{4\%}}$$

The ratio compares the amount of cash generated per dollar of sales. Although this ratio is similar to the profit margin ratio discussed earlier, it is again considered more realistic since it compares sales revenues with cash rather than net income.

In our case, because the cash flow of \$290,900 is higher than the net income of \$141,100, we know the cash flow from operating activities margin ratio will be higher than the profit margin ratio because both ratios use the same denominator.

## ANALYSIS OF CHANGES TO WORKING CAPITAL

The SCF provides additional information needed for effective cash management and budget planning. Working capital analysis is closely related to the SCF and provides another view of information in support of effective management of cash.

**Working capital** is defined as the excess of current assets compared to current liabilities, and indicates the amount of excess current assets relative to current liabilities available to conduct revenue-generating operations. Total current asset minus total current liabilities is the value of working capital ( $CA - CL$ ). These terms are defined as follows:

- *Current assets* consist of cash, marketable securities, notes receivable, credit card receivables, accounts receivable, inventories (for resale), supplies, and prepaid expenses. Current assets are resources that will be consumed in the production of sales revenue in the next operating period.
- *Current liabilities* consist of accounts payable, accrued expenses (e.g., wages and salaries payable, interest payable, taxes payable), and notes payable. Current liabilities represent operating costs that were incurred on credit and will be paid in the next operating period.

The preparation of a **statement of changes in working capital** is similar in many ways to the preparation of an SCF. However, the analysis of working capital differs in a number of ways from the cash flow analysis, and serves different purposes.

Working capital analysis evaluates changes to working capital over an operating period for the following purposes:

- It shows how working capital increased, by identifying the inflows that created the increase.
- It shows how working capital decreased, by identifying the outflow that created the decrease.
- It is used to find the net changes to working capital during the completed operating period.
- It provides management with information related to the effectiveness of working capital controls during the operating period.
- It provides prospective lenders with information so they can evaluate their risk in lending funds to the hospitality organizations.

## INFLOWS—SOURCES OF WORKING CAPITAL

The following are the major inflows or sources that will increase working capital.

- *Income from operations.* In general terms, accrued income is sales revenue less all expenses incurred (including income tax) in producing the sales revenue inflow. Sales revenue is generated by cash sales or on credit through receivables that eventually become cash. Expenses are incurred by immediate payment of cash or on credit through payables. The payables, accounts payable, and accrued payables will eventually be paid. Net income is expected to increase the organization's cash accounts and increase working capital.
- *Accrual net income.* This is determined after deducting noncash expenses. Such noncash expenses adjust the book or carrying value of long-term assets through depreciation and/or by recognizing amortization expense. To convert net income to the increase in working capital, all capitalized

expenses must be added back to net income. This uses the same procedure followed in the operating activities section of the SCF. Other items that are handled in the same way as depreciation and amortization expenses may consist of prepaid franchise fees or the amortization of other intangible assets such as goodwill.

- *Sale of long-term or other noncurrent assets.* These include land, building, furniture, equipment, or an investment. Their sale is treated as an inflow, which increases working capital. The sale will create an increase in a current asset, cash, or a current receivable with no corresponding effect to a current liability.
- *Increase in a long-term liability.* Creating or increasing a loan, mortgage, debenture, or bond achieves this, and is an inflow that increases working capital. Borrowing additional long-term debt will create an increase in a current asset, cash, or a current receivable with no corresponding effect to a current liability.
- *The issuance of stock.* Equity financing creates an inflow that increases working capital. In a proprietorship or partnership (an unincorporated company), stock is not issued; however, any investment by the owner(s) increases their equity capital accounts. The sale of equity or receipt of an owner's investment will create an increase in a current asset, cash, or a current receivable with no corresponding effect on a current liability.

## OUTFLOWS—USES OF WORKING CAPITAL

The following are the major outflows or uses that will decrease working capital:

- *Loss from operations.* Just as accrual net income is an increase in working capital, an accrual net loss is a decrease in working capital. When a loss occurs, operating expenses have exceeded sales revenue, which decreases working capital. Just as net income has to be adjusted for non-cash expenditures (depreciation, franchise, goodwill, write-downs, or amortization), the net loss is similarly adjusted. The net loss may be reduced by any noncash expense shown on the income statement.
- *Purchase of a long-term or other noncurrent asset.* This would include land, building, furniture, equipment, or other investment that is an outflow that decreases working capital. The cost of another noncurrent asset, such as the prepayment of a long-term franchise fee, is also an outflow that decreases working capital.
- *Payment of long-term liabilities.* Any payment reducing the principal amount owed on a long-term (noncurrent) liability is an outflow that decreases working capital.
- *Redemption of stock.* Any previously issued stock repurchased by the issuing company is called *treasury stock*, an outflow that decreases working capital.

- *Payment of cash dividends.* Previously declared, these are payable obligations, payment of which is an outflow that decreases working capital. In a nonincorporated company, a partnership, or proprietorship, any cash or other current asset withdrawals made by the owner(s) are reductions of their capital investment and are treated as an outflow, decrease of working capital.

The major activities that create sources that increase working capital (WC) and uses that will decrease working capital are summarized in the following:

<i>Effect</i>		<i>Sources</i>	<i>Activity</i>	<i>Uses</i>		<i>Effect</i>
Increase WC	=	Net Income	← Income or Loss →	Net Loss	=	Decrease WC
Increase WC	=	Sale of assets	← Long-term Assets → (or Other Asset)	Purchase assets	=	Decrease WC
Increase WC	=	Borrowed	← Long-term Liabilities →	Payment	=	Decrease WC
Increase WC	=	Sold equity	← Ownership Equity →	Buy back	=	Decrease WC
(No opposite)	=		Cash Dividends →	Payment	=	Decrease WC

## STATEMENT USES

A statement of changes to working capital is discussed first, followed by a statement of changes to individual working capital accounts. Let us consider the following three situations presented in Exhibits 10.8, 10.9, and 10.10, concerning three different restaurants. Each restaurant began the operating year with \$88,000 of working capital and ended the year with \$100,000 of working capital; each restaurant increased working capital by \$12,000. Each restaurant wants to borrow \$15,000 for three years with interest from the same bank. Information is readily available from their balance sheets, but it does not clearly identify the causes of the increase to working capital without a statement of working capital inflow sources and outflow uses. The statement, when completed, will clearly identify each source inflow and use outflow of working capital. We will assume the banker compiled the same information.

### Restaurant A: Exhibit 10.8

The information regarding Restaurant A shows it generated sufficient working capital from operations to pay out \$8,000 in dividends. If you assume that the restaurant's business will stay relatively the same over the next three years, it appears there is a low risk to the bank that is lending the restaurant money. The restaurant should be able to pay the interest and repay \$5,000 a year to retire the loan.

<i>Inflows of Working Capital</i>	
Net income (after tax)	\$20,000
<i>Outflows of Working Capital</i>	
Cash dividends declared and paid to stockholders	( 8,000)
Net Change, Increase to Working Capital	<u>\$12,000</u>

**EXHIBIT 10.8**

Restaurant A Statement of Changes, Working Capital for the Year Ended December 31, 0006

**Restaurant B: Exhibit 10.9**

Based on this information, the banker would consider the restaurant to be a moderate to high risk. While this restaurant also paid out cash dividends of \$8,000, it already has a loan outstanding that requires a payment of \$5,000 per year plus interest. If a new loan were granted, it might be questionable whether the restaurant could make and sustain yearly payments of \$10,000 per year plus interest. A modest decline in net income over the next few years would decrease the working capital and potentially create difficulties for the restaurant in meeting its debt obligations and paying dividends. If this should occur, the risk involved would grow in proportion to the reduction of net income. Thus, there is high risk to the lender.

**Restaurant C: Exhibit 10.10**

In this last situation, it would be an extremely high risk for the bank to loan this restaurant \$15,000. A net income of \$4,000 was apparently adequate to meet the current debt payment of \$4,000, but not the interest. Payment of the dividend in this situation is in itself questionable. If net income remains at this level, the restaurant will not meet its current debt obligation, let alone pay dividends.

Although the Restaurant C illustration is somewhat extreme, it does point out the way in which information provided by the statement of changes to working capital can be of value in decision making.

<i>Inflows of Working Capital</i>	
Net income (after tax)	\$20,000
Loan payable (repayable over 4 years with interest)	<u>20,000</u> \$40,000
<i>Outflows of Working Capital</i>	
Investment in new building	\$20,000
Cash Dividends paid	<u>8,000</u> ( 28,000)
Net Change, Increase to Working Capital	<u>\$12,000</u>

**EXHIBIT 10.9**

Restaurant B Statement of Changes, Working Capital for the Year Ended December 31, 0006

<i>Inflows of Working Capital</i>		
Net income (after taxes)	\$ 4,000	
Loans payable (investor, repayable over 4 years with interest)	<u>16,000</u>	\$20,000
<i>Outflows of Working Capital</i>		
Dividends paid to stockholders		( 8,000)
Net Change, Increase to Working Capital		<u>\$12,000</u>

**EXHIBIT 10.10**

Restaurant C Statement of Changes, Working Capital for the Year Ended December 31, 0006

**TRANSACTIONS AFFECTING ONLY CURRENT ACCOUNTS**

Note that all the items discussed and listed earlier under inflows or outflows of working capital affected a current asset or current liability account and a non-current account. Transactions causing inflows and/or outflows of working capital identify the cause of such changes in net working capital. However, it does not show specific details of changes in individual current asset or current liability accounts. Transactions affecting only current asset or current liability accounts will not appear on the statement of changes to working capital. For example, consider the following partial balance sheet information:

<i>Current Assets</i>		<i>Current Liabilities</i>	
Cash	\$12,000	Accounts payable	\$10,800
Credit card receivables	800	Interest payable	200
Accounts receivable	2,000	Bank loan payable	4,800
Inventories (for resale)	8,000		
Total	<u>\$22,800</u>		<u>\$15,800</u>

The working capital,  $CA - CL = \$22,800 - \$15,800 = \$7,000$ . If \$4,500 cash were paid on accounts payable, only two current accounts would be affected. A new partial balance sheet would be:

<i>Current Assets</i>		<i>Current Liabilities</i>	
Cash	\$ 7,500	Accounts payable	\$ 6,300
Credit card receivables	800	Interest payable	200
Accounts receivable	2,000	Bank loan payable	4,800
Inventories (for resale)	8,000		
Total	<u>\$18,300</u>		<u>\$11,300</u>

Since the example transaction affected only two current accounts, current assets and current liabilities, working capital will not change. It is still \$7,000 (\$18,300 – \$11,300). This type of simple transaction affects only two current accounts; both accounts are changed by the same amount. If cash is received in payment of a receivable, a transaction is created that causes an exchange of one current asset for another current asset; no change to total current assets occurs.

The purchase of a current asset on credit affects only two current accounts for the same dollar amount. As a result of these examples, we will not be concerned with changes between individual current asset and current liability accounts.

The statement of changes to working capital views only the effects of transactions that will change total current assets and/or total current liabilities. To complete a statement of changes to working capital, we require the following information:

- A balance sheet at the close of the previous accounting period
- A balance sheet at the close of the current accounting period
- An income statement for the current period
- A statement of retained earnings at the close of the current period or detailed information about retained earnings on the balance sheet at the close of the current period
- Any other information not fully disclosed (e.g., information about the purchase or sale of individual long-term assets or details about long-term liabilities or share transactions)

## COMPLETION OF A STATEMENT OF CHANGES TO WORKING CAPITAL

To illustrate how a statement of changes to working capital can be developed, we will refer to the comparative balance sheets in Exhibit 10.11, including some information regarding retained earnings. As we move through the discussion, we will also reference Exhibit 10.12, a condensed income statement and, finally, look at Exhibit 10.13, a statement of retained earnings.

The use of working papers to gather the necessary information defining the changes to working capital is the most accurate proof of working capital evaluation, although working papers are not an absolute requirement. The easiest method is to evaluate the comparative balance sheets, the income statement, and the statement of retained earnings to identify relevant items as an inflow (increase) or an outflow (decrease) of working capital.

## CURRENT ACCOUNT INFORMATION, COMPARATIVE BALANCE SHEETS

From Exhibit 10.11, the first step is to find the change in working capital from the previous balance sheet ending date to the current balance sheet ending date ( $CA - CL = WC$ ):

Year ending 0007:	<i>Current assets</i>	–	<i>Current liabilities</i>	=	Working capital
	\$24,000	–	\$17,000	=	<u>\$7,000</u>
Year ending 0006:	<i>Current assets</i>	–	<i>Current liabilities</i>	=	Working capital
	\$18,000	–	\$15,000	=	<u>\$3,000</u>
Working capital 0007	–	Working capital 0006	=	Net change to working capital	
\$7,000	–	\$3,000	=	<u>\$4,000 Increase</u>	

Working capital has an increase of \$4,000. This figure must agree with the change in working capital that appears as the difference between inflow increases and outflow decreases on the statement of changes to working capital.

Having identified the change in working capital, the current asset and current liability sections of our comparative balance sheets can be ignored. Only information from noncurrent sections of the comparative balance sheets in Exhibit 10.11, the income statement in Exhibit 10.12, and the statement of retained earnings in Exhibit 10.13 will be required to complete the changes in working capital.

## NONCURRENT BALANCE SHEET INFORMATION

As already stated, we do not need to consider the current balance sheet accounts. The second step is to evaluate the noncurrent assets and noncurrent liabilities.

### Noncurrent Assets

The land account remained unchanged at \$30,000 and the building account remained unchanged at \$250,000 between year 0006 and year 0007. The furniture account increased by \$1,000, and the equipment account increased \$4,000 between year 0006 and year 0007. Since additional furniture and equipment were acquired during the year 0007 operating period, the total \$5,000 increase to two noncurrent asset accounts resulted from the use of cash.

**Use, Outflow, decrease to working capital:  
purchase of furniture, \$1,000, and equipment, \$4,000.  
Total decrease to working capital = \$5,000.**

<i>Assets</i>	<b>12-31-0006</b>	<b>12-31-0007</b>
<i>Current Assets</i>		
Cash	\$ 10,000	\$ 12,000
Credit card receivables	2,000	2,000
Accounts receivable	3,000	6,000
Inventories	<u>3,000</u>	<u>4,000</u>
<i>Total Current Assets</i>	\$ 18,000	\$ 24,000
<i>Fixed Assets</i>		
Land	\$ 30,000	\$ 30,000
Building	250,000	250,000
Equipment	28,000	32,000
Furniture	<u>7,000</u>	<u>8,000</u>
Total	\$315,000	\$320,000
Less: Accum. depreciation	( 15,000)	( 27,000)
<i>Total Fixed Assets</i>	<u>300,000</u>	<u>293,000</u>
Total Assets	<u>\$318,000</u>	<u>\$317,000</u>
<i>Liabilities &amp; Stockholders' Equity</i>		
<i>Current Liabilities</i>		
Accounts payable	\$ 4,000	\$ 5,000
Accrued expenses	-0-	4,000
Bank loan	<u>11,000</u>	<u>8,000</u>
<i>Total Current Liabilities</i>	\$ 15,000	\$ 17,000
<i>Long-term Liability</i>		
Mortgage payable	\$185,000	\$175,000
<i>Stockholders' Equity</i>		
Capital stock	\$100,000	\$105,000
Retained earnings	<u>18,000</u>	<u>20,000</u>
<i>Total Stockholders' Equity</i>	<u>\$118,000</u>	<u>\$125,000</u>
<i>Total Liabilities &amp; Stockholders' Equity</i>	<u>\$318,000</u>	<u>\$317,000</u>

**EXHIBIT 10.11**

Comparative Balance Sheets for Years 0006 and 0007

Sales revenue	\$100,000
Operating expense	( 82,000)
Income before depreciation expense	\$ 18,000
Depreciation expense	( 12,000)
Net income	<u>\$ 6,000</u>

**EXHIBIT 10.12**Condensed Income Statement for the Year Ended  
December 31, 0007

Retained earnings January 1, 0007	\$18,000
Add: Net income for year	<u>6,000</u>
Subtotal	\$24,000
Less: Dividends declared and paid	( 4,000)
Retained earnings December 31, 0007	<u><u>\$20,000</u></u>

**EXHIBIT 10.13**

Statement of Retained Earnings for the Year Ended December 31, 0007

In addition, the contra asset account, accumulated depreciation, increased by \$12,000 during the 0007 operating year, because of a noncash depreciation expense transaction. The effect of increasing accumulated depreciation is the reduction of the book value (carrying value) of related long-lived capital assets, which does not affect working capital and is ignored.

**Noncurrent Liabilities**

The long-term liability, mortgage payable, decreased during year 0007 by \$10,000. The reduction of the long-term liability was caused by an outflow of current assets, specifically cash.

**Use, Outflow, decrease to working capital:  
mortgage payable reduction = \$10,000**

**Stockholders' Equity**

In the final step, the capital stock account increased during year 0007 from \$100,000 to \$105,000. The increase to the capital stock account shows that \$5,000 of additional capital stock was issued for cash, which is an inflow of a current asset. Always assume stock is issued for cash unless specifically noted in the accounting records or as a footnote to the balance sheet.

**Source, Inflow, increase, to working capital:  
capital stock issued (sold) = \$5,000**

**Retained Earnings**

Retained earnings changed from year 0006 to year 0007. For details concerning this change, we need to refer to the statement of retained earnings (Exhibit 10.13) which we will do after we have looked at the income statement (Exhibit 10.12).

The income statement reports net income of \$6,000, which is treated as an inflow, increase to working capital. In arriving at net income, depreciation was

recognized under the accrual method and did not require a cash expenditure. As discussed earlier, depreciation is a noncash expense and is treated as an inflow, increase to working capital.

**Source, Inflow, increase to working capital: Net income = \$6,000**

**Source, Inflow, increase to working capital:**

**Depreciation expense = \$12,000**

The statement of retained earnings identifies the final item remaining to be evaluated from the statement of retained earnings, Exhibit 10.13. Two of the items appearing in the statement of retained earnings have already been evaluated. The first item was net income, which was treated as an inflow, increase to working capital of \$6,000. The second item was a noncash expense depreciation, which was treated as an inflow, increase to working capital. The only remaining retained earnings item is cash dividends of \$4,000, which is treated as an outflow, decrease to working capital.

**Use, Outflow, decrease, to working capital, cash dividends = \$4,000**

Since no other information is given, we have all the data required for compiling our statement of source and use of working capital:

Use, outflow, decreases to working capital:	Purchase furniture	\$ 1,000
Use, outflow, decreases to working capital:	Purchase equipment	\$ 4,000
Use, outflow, decreases to working capital:	Reduction of mortgage payable	\$10,000
Source, inflow, increases to working capital:	Additional capital stock issued	\$ 5,000
Source, inflows, increases to working capital:	Net income and depreciation	\$18,000
Use, outflow, decreases to working capital:	Payment of cash dividends	\$ 4,000

This information can now be arranged in an orderly fashion in the form of a statement of changes to working capital as shown in Exhibit 10.14. Note that the net change in working capital shown on this statement, an increase of \$4,000, agrees with the amount of the change in working capital previously determined from the years 0006 to 0007 from Exhibit 10.11.

To clarify specific transactions used in the completion of the statement of changes in working capital, additional information than that shown in the financial statements and statement footnotes is often required. For example, the furniture account shown in Exhibit 10.14 shows that it increased by \$1,000, and the equipment account increased by \$4,000, for a total of \$5,000 from year 0006 to year 0007. It was stated earlier that we can assume furniture and equipment had been purchased for a total of \$5,000; however, in practice, it is necessary to refer to the actual ledger accounts in the general ledger, and the related invoices. The following situation could have occurred with an item not being

Inflows, Increases:		
Net income	\$18,000	
Capital stock issued	<u>5,000</u>	
Total inflows, Increases		\$23,000
Outflows, decreases:		
Purchase furniture	\$ 1,000	
Purchase equipment	4,000	
Reduction, mortgage payable	10,000	
Payment cash dividends	<u>4,000</u>	
Total Outflows, Increases		( 19,000)
Net Working Capital Change, Increase		<u>\$ 4,000</u>

**EXHIBIT 10.14**

Statement of Changes to Working Capital for the Year Ended December 31, 0007

shown. To this effect, we will assume that a receipt was located showing old furniture being sold during year 0007 for \$42,000.

Furniture account, December 31, 0006	\$7,000
Use, outflow, decrease furniture purchased during year 0007	3,000
Source, inflow, increase old furniture sold during year 0007	( 2,000)
Furniture account, December 31, 0007	<u>\$8,000</u>

The sale of old furniture for \$2,000 showing a decrease in the account has occurred but not noted. This means that \$2,000 of cash received from the sale of the old furniture and \$1,000 of cash was paid for new furniture. These two transactions should be recorded separately on the statement of source and use of working capital.

**Source, inflow, increase to working capital:  
furniture sold \$2,000**

**Use, outflow, decreases to working capital:  
new furniture purchased \$1,000**

Any other noncurrent accounts where similar working capital inflow and outflow transactions occurred during the operating period would have to be analyzed in detail. This procedure can ensure the changes to the working capital statement will provide complete disclosure of such working capital changes during the period.

The statement of changes to working capital shows only the net change in total working capital from an outflow decrease and inflow increase basis

	<i>Yr. 0006</i>	<i>Yr. 0007</i>	<i>Increase</i>	<i>Decrease</i>
<i>Current Assets</i>				
Cash	\$10,000	\$12,000	\$2,000	
Accounts receivable	5,000	8,000	3,000	
Inventories (for resale)	3,000	4,000	1,000	
Total Current Assets	<u>\$18,000</u>	<u>\$24,000</u>	\$6,000	
<i>Current Liabilities</i>				
Accounts payable	\$ 4,000	\$ 5,000		\$1,000
Accrued expenses payable	-0-	4,000		4,000
Bank loan payable	11,000	8,000	<u>3,000</u>	
Total Current Liabilities	<u>\$15,000</u>	<u>\$17,000</u>		
Working Capital	<u>\$ 3,000</u>	<u>\$ 7,000</u>		
			<u>\$9,000</u>	<u>\$5,000</u>
Net Change, Working Capital			<u>\$9,000</u>	<u>\$4,000</u>
Totals			<u>\$9,000</u>	<u>\$9,000</u>

**EXHIBIT 10.15**

Statement of Changes to Individual Working Capital Accounts for the Year Ended December 31, 0007

occurring from noncurrent account transactions in one complete operating time period. It does not show how the individual accounts that are part of working capital have changed. If this information is wanted, or required, it is shown separately in a statement of changes to individual working capital accounts. If we use the current asset and current liability sections of the balance sheet in Exhibit 10.11, we could summarize the changes in individual working capital accounts, as in Exhibit 10.15.

An analysis of individual account changes can be made as a result of preparing a statement of changes in working capital. Questions could then be asked. For example, assume the cash account has increased by \$2,000, or 20 percent (\$2,000 divided by \$10,000); do we need extra cash on hand, or should the extra cash be used to pay off some of a bank loan and save interest expense? By reducing interest expense, net income may increase. The receivables have gone up by \$3,000, or 60 percent; has our total revenue increased 60 percent, or have we changed our credit policies, or are we not following up effectively on the collection of accounts? The information in the statement of changes in working capital accounts raises these and other questions.

The problem of cash management and the control of individual working capital accounts, such as inventory, accounts receivable, and accounts payable, will be discussed in Chapter 11.

As a point of review, the effects of changes to current assets and current liabilities and their effect on working capital can be summarized using a simple base data set, as follows:

Effects of change in *WC* shown in a symbol format:

↑ = Increased    ↓ = Decreased    NC = No change  
*CA* = Current assets    *CL* = Current liabilities    *WC* = Working capital

↑ *CA* - NC in *CL* = ↑ *WC*    ↓ *CA* - NC in *CL* = ↓ *WC*  
 NC in *CA* - ↑ *CL* = ↓ *WC*    NC in *CA* - ↓ *CL* = ↑ *WC*

## DETERMINING REQUIRED WORKING CAPITAL

How much working capital does a hotel, motel, restaurant, or bar need during an operating period? This question cannot be answered in general terms that identify an absolute dollar amount. For example, suppose it were a rule of thumb that an operation should have working capital of \$5,000 available. A small restaurant that maintains small amounts of cash, inventories for resale, credit card and accounts receivables, and other items that are current assets, might find itself with the following working capital:

<b>Current assets</b>	<b>\$15,000</b>	<b>Current Ratio</b>
<b>Current liabilities</b>	<b>( 10,000)</b>	<hr/>
<b>Working capital</b>	<b><u>\$ 5,000</u></b>	$\frac{CA \$15,000}{CL \$10,000} = \underline{\underline{1.5:1}}$

A much larger restaurant would need larger amounts of cash, inventories for resale, credit card receivables and accounts receivables, and other items that are current assets. It would also be expected to have larger amounts in its various current liability accounts. Its working capital could look like this:

<b>Current assets</b>	<b>\$100,000</b>	<b>Current Ratio</b>
<b>Current liabilities</b>	<b>( 95,000)</b>	<hr/>
<b>Working capital</b>	<b><u>\$ 5,000</u></b>	$\frac{CA \$100,000}{CL \$95,000} = \underline{\underline{1.05:1}}$

The smaller restaurant is in much better financial shape than the larger one. The former has \$1.50 of current assets for each \$1.00 of current liabilities, a comfortable cushion. The latter has \$1.05 of current assets for each dollar of current liabilities, a not-so-comfortable cushion.

As a general rule, a business would prefer to have a 2:1 current ratio, or at least \$2.00 of current assets for each \$1.00 of current liabilities. This would mean that its working capital (current assets, \$2.00, minus \$1.00) is equivalent to its current liabilities. However, this rule is primarily for companies that need to carry large inventories that do not turn over very rapidly. Inventories of food

and beverages are, in part, perishable, and they are easily and frequently replaced. Thus, a hospitality business can operate with a current ratio of less than 2:1.

Hotels and motels have an inventory that is primarily made up of rooms that appear under fixed, long-lived assets. Relatively speaking, this allows hotels and motels to frequently operate with a very low ratio of current assets to current liabilities, often as low as 1:1. In other words, for each \$1.00 of current assets, there is \$1.00 of current liabilities. This means that the hotel or motel in fact has no working capital.

At certain times of the year, seasonal hospitality operations may work in a negative working capital position, where current liabilities are greater than current assets. During its peak operating period, such an operation would have current assets in excess of current liabilities. The reverse situation will prevail in the off-season. During the preopening period of a hospitality operation, a negative working capital will normally exist.

## COMPUTER APPLICATIONS

Specific hospitality software programs and spreadsheet applications can be used to accomplish the evaluation of cash flows and the statements involved in working capital analysis.

## S U M M A R Y

Two of the most useful documents to support financial statements are the SCF and a statement of changes in working capital. These two statements are related because they both analyze current assets and current liabilities.

The SCF determines the changes that have occurred in the cash account over a specified operating period. The statement is used to convert accrual net income (or net loss) to a cash basis. The conversion process identifies sources and uses of cash, and is commonly used to evaluate the liquidity and solvency (or net worth) of a business entity.

In general, the statement is broken into three separate areas of business activities in which net cash flows are shown as an increase or decrease. The first section analyzes net cash flows from operations. Sources of cash include net income and decreases in current asset operating accounts (except cash). An operating net loss and increases in current asset accounts are treated as cash outflows. The operating activities section also recognizes noncash expenses such as depreciation and amortization by adding back such noncash expenses to the

reported accrual income or loss. In addition, reported losses on the disposal of long-term assets are added back and gains of the disposal of such items are deducted from the reported accrual income or loss.

The final proof of the correctness of an SCF is to verify that final net cash flow (positive or negative) is, in fact, the same amount that occurred. This amount is shown in the change in the cash account over the operating period.

The general rule to describe the effects of changes in the current accounts that cause increases or decreases in the conversion of the reported net income (or net loss) to the cash basis:

### *Symbols Identification*

Current Asset = <i>CA</i>	Current Liability = <i>CL</i>
Change in account = Increase = ↑	Decrease = ↓
Deduct = (−)	Add = (+)
Effects of changes to the balances of current accounts	
<i>CA</i> ↑ = (−)	<i>CL</i> ↑ = (+)
<i>CA</i> ↓ = (+)	<i>CL</i> ↓ = (−)

As we have seen, current assets and current liabilities are also the major accounts viewed during an analysis of working capital. This analysis shows where cash is coming from and where it is going. From that aspect, the SCF also helps measure the effectiveness of cash management.

The second section of the SCF reviews investing activities, such as the acquisition or sale of long-lived assets and the acquisition or sale of long-lived investments. The acquisitions of such items are treated as cash *use* outflows, and the sale of such items are treated as cash *source* inflows.

The third section of the SCF views cash inflows and outflows by reviewing the two primary methods used to acquire capital—the sale of ownership equity and the assumption of long-term debt. If ownership equity (stock) is sold or long-term debt is borrowed, the proceeds are treated as cash inflow source. On the other hand, if ownership equity is repurchased (treasury stock) by the business entity or long-term debt is repaid, they are treated as cash use outflows. If a cash dividend is paid during the operating period, the dividend is a cash use outflow.

A statement of source inflows and use outflows of working capital also relies heavily on an effective analysis of the major operating accounts, current assets and current liabilities. Working capital is defined as current assets minus current liabilities.

In addition to showing how working capital has changed from one operating period to the next, the statement of source inflows and use outflows shows management how effectively working capital is being managed. This statement, along with a SCF, will provide creditors with insight into the use of credit by the business operation.

The major source inflows of working capital are

- Income for operations, with noncash expense items of depreciation and amortization added back
- Sales of long-term or other assets
- The borrowing of additional long-term debt
- The sale of stock equity

The major uses of working capital are

- Net loss from operations
- Purchase of long-term or other assets
- Payments on the principal of long-term debt
- Repurchase by the business of its own outstanding stock (treasury stock)
- Payment of cash dividends

A transaction that affects only two current asset accounts will not affect working capital. For example, if payment of \$100 is received on a receivable, the cash account will increase by \$100 and the current receivable will decrease by the same amount; no overall change to current assets has occurred, the \$100 of a current receivable has simply been reclassified. If a single current asset account changes, and in the same transaction a single current liability account changes, no change in working capital will exist. The exchange of a current asset for a current asset or the creation of a current asset and a current liability in the same amount in a transaction would not appear on a statement of source inflows and use outflows.

To prepare a statement of source inflows and use outflows of working capital, the following are required:

- Balance sheets for the two latest consecutive periods of operations
- An income statement for the operating period just ended
- A statement of retained earnings and necessary supporting information for the operating period just ended
- Other necessary supporting information regarding changes in property plant and equipment (fixed assets) and long-term liability accounts, and other assets not available in the balance sheets

The statement of source (inflows) and use (outflows) of working capital identifies only the change and the cause of the changes that determined net working capital. This statement will not identify changes to individual current asset and current liability working capital accounts. This detail is shown in the SCF, indirect method that was discussed in this chapter.

## DISCUSSION QUESTIONS

1. What is the purpose of the SCF?
2. What are the major operating accounts by category analyzed in the SCF, indirect method?
3. If a current asset account increases, how is the increase treated in the statement of cash flows?
4. What is the typical noncash item, by name, that is automatically added back in the operating activities section of the SCF?
5. The financing section of an SCF can analyze three different items by category. What are they?
6. What are the primary items by category analyzed in the SCF, investing section?
7. What is working capital?
8. Of what use is the statement of source inflows and use outflows of working capital?
9. List the three major common source inflows and the three major common use outflows of working capital.
10. Explain why depreciation expense is treated as a source inflow of working capital.
11. What is a statement of source inflows and use outflows of working capital?
12. If a business operation has a current ratio of 1.25:1, what does this mean relative to working capital?

## ETHICS SITUATION

A motel owner needs to borrow money from the bank. The bank manager has asked for statements of cash flows for the past three years to support the loan application. In preparing these statements, the motel owner omits to show that dividends of \$10,000 a year were paid out in each of the last three years. Discuss the ethics of this situation.

## EXERCISES

- E10.1** The following lists current asset and current liability accounts. Identify each account as a current asset (*CA*) or a current liability (*CL*) account. After classifying each account, determine how the change in the account balance is treated in the conversion of accrual net income to the

cash basis, indirect method. If cash increases, use the word *source*; if cash decreases, use the word *use*.

<i>Account Title</i>	<i>CA or CL</i>	<i>Increase</i>	<i>or</i>	<i>Decrease</i>
Credit card receivables	_____	_____		_____
Accounts payable	_____	_____		_____
Inventory (for resale)	_____	_____		_____
Accounts receivable	_____	_____		_____
Prepaid expenses	_____	_____		_____
Accrued payroll payable	_____	_____		_____
Interest payable	_____	_____		_____
Marketable securities	_____	_____		_____

- E10.2** A monthly income statement reported net income of \$80,000. Inventory for resale increased by \$14,000. Accounts payable increased by \$16,000. Using only these three items, determine the net cash flow from operations, indirect method.
- E10.3** Net income is \$260,000; Depreciation expense is \$42,000; Accounts receivable increased \$2,500; Credit card receivables decreased \$4,600; Prepaid insurance increased \$2,400; Inventory increased by \$4,500; Accounts payable decreased \$3,000; and Accrued payroll payable increased \$3,600. Complete net cash flow from operations activities, indirect method.
- E10.4** Identify how each of the following items would be treated in an analysis of changes to working capital. Answer with the word *Inflow* to show an increase or *Outflow* to show a decrease in working capital.

Net income	_____	Sale of equity stock	_____
Net loss	_____	Purchase of equipment	_____
Depreciation	_____	Repayment of long-term debt	_____
Cash dividends	_____	Increasing long-term debt	_____
Sale of equipment	_____	Redemption of stock	_____

- E10.5** A hotel provided the following information for year 2006: The cash flow from operating activities was \$143,200, average current liabilities were \$68,300, average total liabilities were \$823,300, and total revenue for the year was \$2,406,800. Interest was \$68,000. Calculate the following ratios:
- The cash flow from operating activities to current liabilities ratio
  - The cash flow for operating activities to total liabilities ratio
  - The cash flow from operating activities margin ratio
  - The cash flow from operating activities to interest ratio

- E10.6** Given the following information regarding investing and financing activities of an SCF, evaluate each of the given transactions and identify to which section, investing (invest) or financing (finance), the transaction belongs. In addition, identify how the amount is handled. Use Increase for positive or Decrease for negative for the cash flow adjustment conversion in the SCF.

<i>Invest or Finance</i>	<i>Increase (+) or Decrease (-)</i>	
_____	_____	Purchased equipment.
_____	_____	Sold shares of equity stock.
_____	_____	Sold office furniture.
_____	_____	Purchased a long-term investment.
_____	_____	Declared and paid a cash dividend.
_____	_____	Repurchased equity stock.
_____	_____	Increased long-term debt.

- E10.7** Assume working capital was \$44,000 for a given year. During this year, accounts receivable decreased by \$1,400, inventory increased by \$8,000, and accounts payable decreased by \$2,000. Determine the amount of cash from operations.
- E10.8** Assume the book value of an item of equipment shows \$50,000 in year one and \$44,000 in year two. Would the \$6,000 difference be treated as an inflow source, outflow use, or not shown at all with regard to its effect on working capital?
- E10.9** A review of a balance sheet indicated the beginning and ending totals of current assets and current liabilities for a one-year operating period. Determine the working capital at the beginning and the end of the year. Calculate the change in current assets, current liabilities, and working capital.

	<i>Current Assets</i>	<i>Current Liabilities</i>	<i>Working Capital</i>
January 1, 2004	\$178,500	\$99,250	\$
December 31, 2004	<u>122,400</u>	<u>76,500</u>	_____
Change, current assets	<u>\$</u>		
Change, current liabilities		<u>\$</u>	
Change in working capital			<u>\$</u>

- E10.10** Assume a business enterprise reports its total current assets as \$24,000 and its total current liabilities as \$16,000. Answer the following:
- What is the amount of working capital?
  - What is the current ratio (also called the working capital ratio)?

- c. Will the working capital or its ratio change if a transaction collects \$2,800 in cash from its credit card receivables?
- E10.11** A restaurant purchased new kitchen equipment for \$35,000. Old kitchen equipment was sold for \$800. A long-term investment was sold for \$50,000. Equity stock was bought back (repurchased) for \$12,000, and a cash dividend was paid in the amount of \$40,000. The company increased its long-term debt by \$70,000.
- Determine the net cash flow from investing activities.
  - Determine the net cash flow from financing activities.
- E10.12** The following are operating transactions that occurred during the current year. Analyze each transaction and explain if the transaction will increase, decrease, or have no effect on working capital.
- Purchased inventory on account, \$5,400; terms 2/5, n/30.
  - Borrowed \$40,000 on a long-term note.
  - Sold old equipment with a book value of \$1,000 for \$650.
  - Sold marketable securities at a gain of \$2,400.
  - Paid \$1,200 for insurance covering one year from the date of purchase.

## P R O B L E M S

- P10.1** The following is provided to complete the operating activities section of a statement of cash flows, indirect method.
- Net income for the year is \$20,000.
  - Accounts receivable increased by \$12,000.
  - Inventory decreased by \$4,000.
  - Depreciation expense for the year is \$8,000.
  - Accounts payable decreased by \$6,000.
  - Other current liabilities increased by \$2,000.
- P10.2** Balance sheet information for a resort hotel reflects the changes to current accounts that occurred over the annual operating period ended December 31, 2005. Cash account balance at December 31, 2004, was \$14,000 and the ending cash balance at December 31, 2005, is \$27,600.

<i>Current Asset Accounts</i>	<i>Change</i>	<i>Amount</i>
Cash	Increased	\$13,600
Credit card receivables	Increased	1,680
Accounts receivable	Increased	1,120
Inventories	Increased	800
Prepaid expenses	Decreased	500

<i>Current Asset Accounts</i>	<i>Change</i>	<i>Amount</i>
<i>Current Liability Accounts</i>		
Accounts payable	Decreased	\$ 1,100
Accrued payroll payable	Increased	1,200
Taxes payable	Decreased	800

Additional information applying to the current year ending December 31, 2005:

- a. Net income for the year 2005 was \$113,400.
- b. Depreciation expense for the year 2005 was \$121,500.
- c. Furnishings with a book value of \$1,400 were sold for \$5,400.
- d. Equipment with a book value of \$2,200 was sold for \$1,800.
- e. New furnishings were purchased for \$14,800.
- f. New equipment was purchased for \$22,200.
- g. A total of \$55,600 was paid to reduce long-term debt.
- h. Cash dividends of \$128,300 were declared and paid.

Using the information provided, complete an SCF, in good form using the indirect method.

**P10.3** You have the following comparative balance sheets for a restaurant for the years ending December 31, 2004, and December 31, 2005. Calculate the change in working capital and prepare the restaurant's statement of sources and uses of working capital for the year ending December 31, 2005.

	<b>Yr. 2004</b>	<b>Yr. 2005</b>
<b>ASSETS</b>		
Cash	\$14,800	\$15,600
Accounts receivable	8,300	7,700
Food and beverage inventories	7,900	9,700
Furniture and equipment	15,500	19,500
Accumulated depreciation	( 3,500)	( 4,500)
Total	<u>\$43,000</u>	<u>\$48,000</u>
<b>LIABILITIES &amp; STOCKHOLDERS' EQUITY</b>		
Accounts payable	\$ 5,600	\$ 7,800
Income tax payable	1,400	200
Long-term loan	25,800	27,800
Common stock	4,200	5,200
Retained earnings	6,000	7,000
Total	<u>\$43,000</u>	<u>\$48,000</u>

- a. Net income for year \$7,000. Annual depreciation of \$1,000 was included as an expense to arrive at net income.
- b. New equipment costing \$4,000 was purchased.
- c. Dividends of \$6,000 were paid out.
- d. New shares (100 at \$10 each) were issued.
- e. The long-term loan was increased by \$2,000.

**P10.4** Refer to information provided in the preceding P10.3 and complete in good form an SCF using the indirect method.

**P10.5** A motel has the following comparative balance sheets for two years:

Assets	12-31-04	12-31-05
<i>Current Assets</i>		
Cash	\$ 4,100	\$ 5,200
Credit card receivables	4,700	5,500
Accounts receivable	1,200	700
Inventory	3,000	3,600
Marketable securities	8,000	7,000
Prepaid expenses	1,200	1,500
<i>Total Current Assets</i>	<u>\$ 22,200</u>	<u>\$ 23,500</u>
<i>Fixed Assets</i>		
Land	\$ 30,000	\$ 30,000
Building	150,000	150,000
Accum. Depreciation, building	( 41,900)	( 50,200)
Furniture & equipment	22,700	25,400
Accum. Depreciation, furniture & equipment	( 15,400)	( 19,100)
<i>Total Fixed Assets</i>	<u>\$145,400</u>	<u>\$136,100</u>
Total Assets	<u>\$167,600</u>	<u>\$159,600</u>
<i>Liabilities &amp; Stockholders' Equity</i>		
<i>Current Liabilities</i>		
Accounts payable	\$ 6,900	\$ 7,000
Accrued expenses payable	1,400	1,700
Income taxes payable	2,000	1,500
Current portion of mortgage payable	11,500	10,400
<i>Total Current Liabilities</i>	<u>\$ 21,800</u>	<u>\$ 20,600</u>
<i>Long-Term Liabilities</i>		
Long-term mortgage payable	100,000	89,600
<i>Total Liabilities</i>	<u>\$121,800</u>	<u>\$110,200</u>

(continued)

<b>Assets</b> ( <i>con'd</i> )	<b>12-31-04</b>	<b>12-31-05</b>
<i>Stockholders' Equity</i>		
Capital stock, common	23,000	23,000
Retained earnings	<u>22,800</u>	<u>26,400</u>
<i>Total Stockholders' Equity</i>	<u>\$ 45,800</u>	<u>\$ 49,400</u>
<i>Total Liabilities &amp; Stockholders' Equity</i>	<u>\$167,600</u>	<u>\$159,600</u>

From this information, prepare a statement of changes to individual working capital accounts.

- P10.6** With the balance sheet information from Problem 10.5, and the additional information from the income statement and statement of retained earnings, prepare the motel's statement of changes to working capital for the year ending December 31, 2005.

#### Income Statement for Year Ended December 31, 2005

Sales revenue	\$204,900
Operating costs	( 173,800)
Income before depreciation and interest and tax	31,100
Depreciation, building	( 8,300)
Depreciation, furniture and equipment	( 3,700)
Income before interest and tax	\$ 19,100
Interest	( 10,800)
Operating income (before tax)	\$ 8,300
Income tax	( 1,500)
Net income	<u>\$ 6,800</u>

#### Statement of Retained Earnings for Year Ended December 31, 2005

Retained earnings, January 1, 2005	\$ 22,800
Add: Net income for year	<u>6,800</u>
Subtotal	\$ 29,600
Deduct: Dividends paid	( 3,200)
Retained earnings December 31, 2005	<u>\$ 26,400</u>

- P10.7** Referring to the preceding Problems 10.5 and 10.6 that presented a comparative balance sheet, income statement, and a statement of retained earnings, complete a statement of cash flows in good form using the indirect method.

**P10.8** A catering company reported the following additional financial statements and information for two successive years:

**Additional financial information:**

1. In Year 2005, the building that was previously rented was purchased for \$150,000. The company paid \$10,000 cash and assumed a long-term mortgage for \$140,000. Depreciation on the building is \$7,500 for Year 2005. At the end of year 2005, \$7,100 of the mortgage payable was reclassified as a current liability payable in Year 2006.
2. New stock was issued for cash, 200 shares at \$50.00 each.

*Statement of Retained Earnings*  
*For the Year Ended December 31, 2005*

Retained earnings December 31, 2004	\$29,900
Operating loss for Year 2005	( 8,100)
Retained earnings December 31, 2005	<u>\$21,800</u>

The equipment account, and its accumulated depreciation account, is shown below:

	<i>Equipment</i>	<i>Accum. Depr.</i>
Balance December 31, 2004	\$31,700	\$5,800
Purchased new equipment	6,300	
Disposed of fully depreciated old equipment	( 4,100)	( 4,100)
Depreciation expense year 2005		<u>4,500</u>
Balance December 31, 2005	<u>\$33,900</u>	<u>\$6,200</u>

**Comparative Balance Sheet**

	<b>12-31-2004</b>	<b>12-31-2005</b>
<i>Current Assets</i>		
Cash	\$ 8,600	\$ 15,000
Accounts receivable	19,800	15,800
Inventory, food	6,100	6,300
Prepaid expenses	<u>1,200</u>	<u>1,700</u>
Total Current Assets	\$35,700	\$ 38,800
<i>Noncurrent, Fixed Assets</i>		
Building	-0-	150,000
Accumulated depreciation, building	-0-	( 7,500)
Equipment	31,700	33,900
Accumulated depreciation, equipment	( 5,800)	( 6,200)
Total Non-current, Fixed Assets	<u>\$25,900</u>	<u>\$170,200</u>
Total Assets	<u>\$61,600</u>	<u>\$209,000</u>

	12-31-2004	12-31-2005
<i>Liabilities and Stockholders' Equity</i>		
<i>Current Liabilities</i>		
Accounts payable	\$21,200	\$ 25,400
Accrued expenses	7,500	8,800
Current portion of mortgage payable	-0-	7,100
Total Current Liabilities	<u>\$28,700</u>	<u>\$ 41,300</u>
<i>Long-Term Liabilities</i>		
Long-term mortgage payable	-0-	\$132,900
<i>Stockholders' Equity</i>		
Common stock	\$ 3,000	\$ 13,000
Retained earnings	29,900	21,800
Total Stockholders' Equity	<u>\$32,900</u>	<u>\$ 34,800</u>
Total Liabilities and Stockholders' Equity	<u>\$61,600</u>	<u>\$209,000</u>

Calculate the changes in working capital and prepare the company's statement of sources (inflows) and uses (outflows) for the year ended December 31, 2005.

**P10.9** A motel has the following balance sheets at the end of each of its most recent two years of operation.

	12-31-2004	12-31-2005
<i>Assets</i>		
Cash	\$ 8,800	\$ -0-
Accounts receivable	17,200	30,600
Inventory	2,100	5,500
Land	20,000	20,000
Building	50,600	100,600
Accumulated depreciation, building	( 30,000)	( 40,000)
Total Assets	<u>\$68,700</u>	<u>\$116,700</u>
<i>Liabilities and Stockholders' Equity</i>		
Accounts payable	\$ 6,700	\$ 12,800
Bank loan payable	-0-	7,900
Long-term mortgage on building	-0-	30,000
Common stock	2,000	2,000
Retained earnings	60,000	64,000
Total Liabilities and Stockholders' Equity	<u>\$68,700</u>	<u>\$116,700</u>

The income statements provide the following information:

	<i>Dec. 31, 2004</i>	<i>Dec. 31, 2005</i>
Sales revenue	\$100,000	\$110,000
Operating costs	<u>90,000</u>	<u>93,200</u>
Net income	<u>\$ 10,000</u>	<u>\$ 16,800</u>

The statement of retained earnings for year 2005 shows:

Retained earnings December 31, 2004	\$60,000
Net income for Year 2005	<u>16,800</u>
Subtotal	76,800
Cash dividends	<u>( 12,800)</u>
Retained earnings December 31, 2005	<u>\$64,000</u>

The owner cannot understand why he has \$64,000 of retained earnings and a net income of \$16,800 after tax from year 2005 but has no money in the bank. Give the owner any explanations you can using this information.

## C A S E 1 0

Given the budgeted balance sheet for 4C Company shown on p. 455 and reference and information in Case 2, prepare a budgeted statement of cash flows for year 2005.

**4C Company**  
**Pro Forma Balance Sheet as of December 31, 2005**

**Assets***Current Assets*

Cash		\$ 41,903	
Credit card receivable		17,502	
Accounts receivable		5,834	
Food inventory	\$ 6,352		
Beverage inventory	<u>2,195</u>	8,547	
Prepaid expenses		<u>2,176</u>	
<i>Total Current Assets</i>			\$ 75,962

**Assets***Fixed Assets*

Equipment	\$171,524		
Less: Accumulated depreciation	( 27,504)		
Net equipment		\$144,020	
Furnishings	\$ 53,596		
Less: Accumulated depreciation	( 12,744)		
Net furnishings		<u>40,852</u>	
<i>Total Fixed Assets</i>			<u>184,872</u>
Total Assets			<u>\$260,834</u>

**Liabilities & Stockholders' Equity***Current Liabilities*

Accounts payable	\$ 8,817		
Accrued payroll payable	2,917		
Income taxes payable	13,090		
Current portion, bank loan	<u>42,741</u>		
Total current liabilities		\$ 67,565	

*Long-Term Liabilities*

Bank loan payable		<u>82,517</u>	
<i>Total Liabilities</i>			\$150,082

*Stockholders' Equity*

Common stock		\$ 30,000	
Retained earnings, December 31, 2004	\$ 34,342		
Net income, 2005	<u>46,410</u>		
Retained earnings, December 31, 2005		<u>80,752</u>	
<i>Total Stockholders' Equity</i>			<u>\$110,752</u>
Total Liabilities & Stockholders' Equity			<u>\$260,834</u>

