## wiley CPA exam review



Financial Accounting and Reporting FOURTHEDITION

Less Antman

- concepts
- problem-solving - terms
-rules and criteria

JOHN WILEY \& SONS, INC.

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## Preface

This publication is a comprehensive, yet simplified study program. It provides a review of all the basic skills and concepts tested on the CPA exam, and teaches important strategies to take the exam faster and more accurately. This tool allows you to take control of the CPA exam.

This simplified and focused approach to studying for the CPA exam can be used:

- As a handy and convenient reference manual
- To solve exam questions
- To reinforce material being studied

Included is all of the information necessary to obtain a passing score on the CPA exam in a concise and easy-to-use format. Due to the wide variety of information covered on the exam, a number of techniques are included:

- Acronyms and mnemonics to help candidates learn and remember a variety of rules and checklists
- Formulas and equations that simplify complex calculations required on the exam
- Simplified outlines of key concepts without the details that encumber or distract from learning the essential elements
- Techniques that can be applied to problem solving or essay writing, such as preparing a multiple-step income statement, determining who will prevail in a legal conflict, or developing an audit program
- Pro forma statements, reports, and schedules that make it easy to prepare these items by simply filling in the blanks
- Proven techniques to help you become a smarter, sharper, and more accurate test taker

This publication may also be useful to university students enrolled in Intermediate, Advanced and Cost Accounting, Auditing, Business Law, and Federal Income Tax classes.

Good Luck on the Exam,
Less Antman, CPA

## About the Author

Less Antman, CPA has been preparing individuals for the CPA exam since 1979. For many years, he taught CPA review classes on a full-time basis for various programs, including Mark's CPA Review Course and Kaplan CPA Review. He currently operates his own CPA review program in the state of California, under the name Antman CPA Review, located in Arcadia, California. He has taught more than 5,000 totally live CPA review classes, more than any other CPA review instructor in the United States, and his written materials have been used in several different instructor-based CPA review programs.

## Objectives of Financial Reporting

Financial statements are designed to meet the objectives of financial reporting:

| Balance Sheet | Direct Information | Financial Position |
| :--- | :--- | :--- |
| Statement of Earnings and |  |  |
| $\quad$ Comprehensive Income |  |  |$\quad$ Direct Information $\quad$ Entity Performance

## Qualitative Characteristics of Accounting Information



Focus on
Basic Concepts - Module 7

## Elements of Financial Statements

```
Assets - Liabilities = Equity
    Equity =
            N}\begin{array}{c}{\mathrm{ Comprehensive = Revenues - Expenses + Gains - Losses}}\\{\mathrm{ Income }}
    Comprehensive Income = Net income }\pm\mathrm{ Adjustments to stockholders' equity
```


## Basic Rules \& Concepts

Consistency
Realization
Conservatism
Recognition
Allocation
Matching
Full disclosure

You'll get more credit (CR) if you CRAM your essays FULL of
these rules and concepts

## Revenue Recognition

| Accrual method | Collection reasonably assured <br> Degree of uncollectibility estimable |
| :--- | :--- |
| Installment sale | Collection not reasonably assured |
| Cost recovery | Collection not reasonably assured |
|  | No basis for determining whether or not collectible |

## Installment Sales Method

Installment receivable balance
$\times$ Gross profit percentage
= Deferred gross profit (balance sheet)

Cash collections
$\times$ Gross profit percentage
= Realized gross profit (income statement)

## Cost Recovery Method

All collections applied to cost before any profit or interest income is recognized

## Converting from Cash Basis to Accrual Basis

Revenues
Cash (amount received) xx
Increase in accounts receivable (given) xx
Decrease in accounts receivable (given)xx
Revenues (plug) ..... xx
Cost of Sales
Cost of sales (plug) ..... XX
Increase in inventory (given) ..... XX
Decrease in accounts payable (given) ..... XX
Decrease in inventory (given) ..... XX
Increase in accounts payable (given) ..... XX
Cash (payments for merchandise) ..... XX

## Expenses

Expense (plug) ..... XX
Increase in prepaid expenses (given) ..... XX
Decrease in accrued expenses (given) ..... XX
Decrease in prepaid expenses (given) ..... XX
Increase in accrued expenses (given) ..... XX
Cash (amount paid for expense) ..... XX

## Balance Sheet

Current Assets<br>Cash<br>Trading securities<br>Current securities available for sale<br>Accounts receivable<br>Inventories<br>Prepaid expenses<br>Current deferred tax asset

## Current Liabilities

Short-term debt
Accounts payable
Accrued expenses
Current income taxes payable
Current deferred tax liability
Current portion of long-term debt
Unearned revenues

| Long-Term Investments | Long-Term Debt |
| :--- | ---: |
| Noncurrent securities available for sale | Long-term notes payable |
| Securities held to maturity | Bonds payable |
| Investments at cost or equity | Noncurrent deferred tax liability |
| Property, Plant, \& Equipment | Stockholders' Equity |
| Intangibles | Preferred stock |
| Other Assets | Common stock |
| Deposits | Additional paid-in capital |
| Deferred charges | Retained earnings |
| Noncurrent deferred tax asset | Accumulated other comprehensive income |

Focus on
Financial Statements - Module 7

## Current Assets \& Liabilities

## Assets

Economic resource
Future benefit
Control of company
Past event or transaction

## Current Assets

Converted into cash or used up
Longer of:
One year
One accounting cycle

## Liabilities

Economic obligation
Future sacrifice
Beyond control of company
Past event or transaction

## Current Liabilities

Paid or settled
Longer of:
One year
One accounting cycle
OR Requires use of current assets

## Special Disclosures

## Significant Accounting Policies

Inventory method
Depreciation method
Criteria for classifying investments
Method of accounting for long-term construction contracts

## Related-Party Transactions

Exceptions:
Salary
Expense reimbursements
Ordinary transactions

## Reporting the Results of Operations

## Preparing an Income Statement

Multiple step
Revenues

- Cost of sales
= Gross profit
- Operating expenses

Selling expenses
G \& A expenses
$=$ Operating income

+ Other income
+ Gains
- Other expenses
- Losses
= Income before taxes
- Income tax expense
$=$ Income from continuing operations

Single step
Revenues

+ Other income
+ Gains
= Total revenues
- Costs and expenses

Cost of sales
Selling expenses
G \& A expenses
Other expenses
Losses
Income tax expense
$=$ Income from continuing operations

## Computing Net Income

Income from continuing operations (either approach)
$\pm$ Discontinued operations
$\pm$ Extraordinary items
$=$ Net income
(Cumulative changes section was eliminated by SFAS 154)

## Errors Affecting Income

| Error (ending balance) | $\underline{\text { Current stmt }}$ | $\underline{\text { Prior stmt }}$ |
| :--- | :--- | :--- |
| Asset overstated | Overstated | No effect |
| Asset understated | Understated | No effect |
| Liability overstated | Understated | No effect |
| Liability understated | Overstated | No effect |
| Error (beginning balance - ending balance is correct) |  |  |
| Asset overstated | Understated | Overstated |
| Asset understated | Overstated | Understated |
| Liability overstated | Overstated | Understated |
| Liability understated | Understated | Overstated |

## Errors Affecting Income (continued)

| Error (beginning balance - ending balance is not correct) |  |  |
| :--- | :--- | :--- |
| Asset overstated | No effect | Overstated |
| Asset understated | No effect | Understated |
| Liability overstated | No effect | Understated |
| Liability understated | No effect | Overstated |

## Extraordinary Items

Classification as extraordinary -2 requirements (both must apply)

- Unusual in nature
- Infrequent of occurrence

One or neither applies - component of income from continuing operations

## Extraordinary

Negative goodwill on consolidation resulted from purchase (always)
Acts of nature (usually)

## Not Extraordinary

Gains or losses on sales of investments or prop, plant, \& equip
Gains or losses due to changes in foreign currency exchange rates
Write-offs of inventory or receivables
Effects of major strikes or changes in value of investments

## Change in Accounting Principle

Use retrospective application of new principle:

1) Calculate revised balance of asset or liability as of beginning of period as if new principle had always been in use.
2) Compare balance to amount reported under old method
3) Multiply difference by $100 \%$ minus tax rate
4) Result is treated on books as prior period adjustment to beginning retained earnings .
5) All previous periods being presented in comparative statements restated to new principle.
6) Beginning balance of earliest presented statement of retained earnings adjusted for all effects going back before that date.
```
Change in Accounting Principle (continued)
Journal entry:
    Asset or liability xxx
    Retained earnings
    Current or deferred tax liability (asset)
        Or
    Retained earnings xxx
    Current or deferred tax liability (asset)
        Asset or liability
xxx
        xxx
```


## Special Changes

Changes in accounting principle are handled using the prospective method under limited circumstances. No calculation is made of prior period effects and the new principle is simply applied starting at the beginning of the current year when the following changes in principle occur:

- Changes in the method of depreciation, amortization, or depletion
- Changes whose effect on prior periods is impractical to determine (e.g. changes to LIFO when records don't allow computation of earlier LIFO cost bases)
(Note: the method of handling changes in accounting principle described here under SFAS 154 replaces earlier approaches, which applied the cumulative method to most changes in accounting principle. SFAS 154 abolished the use of the cumulative method.)


## Change in Estimate

- No retrospective application
- Change applied as of beginning of current period
- Applied in current and future periods


## Error Corrections

Applies to:

- Change from unacceptable principle to acceptable principle
- Errors in prior period financial statements

When error occurred:


Focus on
Financial Statements - Module 7

## Discontinued Operations

When components of a business are disposed of, their results are reported in discontinued operations:

- Component - An asset group whose activities can be distinguished from the remainder of the entity both operationally and for financial reporting purposes.
- Disposal - Either the assets have already been disposed of or they are being held for sale and the entity is actively searching for a buyer and believes a sale is probable at a price that can be reasonably estimated.
All activities related to the component are reported in discontinued operations, including those occurring prior to the commitment to dispose and in prior periods being presented for comparative purposes.


## Reporting Discontinued Operations

Lower section of the income statement:

- After income from continuing operations
- Before extraordinary items

Reported amount each year includes all activities related to the component from operations as well as gains and losses on disposal, net of income tax effects

- Expected gains and losses from operations in future periods are not reported until the future period in which they occur.
Impairment loss is included in the current period when the fair market value of the component is believed to be lower than carrying amount based on the anticipated sales price of the component in future period


## Focus on

Financial Statements - Module 7

## Reporting Comprehensive Income

Statement of Comprehensive Income required as one of financial statements

- May be part of Income statement
- May be separate statement
- Begin with net income
- Add or subtract items of other comprehensive income

Other comprehensive income includes:

- Current year's unrealized gains or losses on securities available for sale
- Current year's foreign currency translation adjustments
- Current year's increase or decrease in an additional pension liability in excess of unamortized prior service cost
- Current year's unrealized gains or losses resulting from changes in market values of certain derivatives being used as cash flow hedges.


## Accounting for Changing Prices

## Accounting at Current Cost

Assets \& liabilities reported at current amounts
Income statement items adjusted to current amounts

- Inventory reported at replacement cost
- Cost of sales $=$ Number of units sold $\times$ Average current cost of units during period
- Differences in inventory \& cost of sales treated as holding gains or losses
- Depreciation \& amortization - Computed using same method \& life based on current cost


## Accounting for Changes in Price Level

Purchasing power gains \& losses relate only to monetary items

- Monetary assets - money or claim to receive money such as cash \& net receivables
- Monetary liabilities - obligations to pay specific amounts of money

Company may be monetary creditor or debtor

- Monetary creditor - monetary assets > monetary liabilities
- Monetary debtor - monetary liabilities > monetary assets

In periods of rising prices

- Monetary creditor will experience purchasing power loss
- Monetary debtor will experience purchasing power gain

Focus on
Financial Statements - Module 7

## Inventories

## Goods In Transit



```
Inventory Cost
Purchase price
    Goods on Consignment
    Consignee - Exclude from physical count
+ Freight in
+ Costs incurred in preparing for sale
= Inventory cost
Cost of goods on consignment =
Inventory cost
+ Cost of shipping to consignee
```

Abnormal costs expensed in current period instead of being included in inventory:

- Idle facility expense
- Wasted materials in production
- Double freight when items returned and redelivered


## Cost of Goods Sold

Beginning inventory

+ Net purchases
= Cost of goods available for sale
- Ending inventory
$=$ Cost of goods sold
Inventory Errors

|  | Beg. RE |  | COGS |  | Gross Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | | End RE |
| :--- |
|  |
| Beginning - overstated |

## Periodic Versus Perpetual

| Buy merchandise: | Periodic | Perpetual |  |
| :---: | :---: | :---: | :---: |
|  | Purchases Accounts payable | Inventory Accounts payable |  |
| Sell merchandise | Accounts receivableAccounts receiv Sales | able <br> Sales <br> Cost of goods sold Inventory |  |
| Record cost of goods sold | Ending inventory (count) <br> Cost of goods sold (plug) <br> Purchases (net amount) <br> Beginning inventory (balance) |  |  |
| FIFO - Same under either method <br> LIFO - Different amounts for periodic and perpetual <br> Average - Different amounts for periodic and perpetual <br> Periodic - Weighted-average |  |  |  |
|  | $\begin{gathered} \text { Focus on } \\ \text { Inventories - Module } 8 \end{gathered}$ |  | 29 |

## Inventory Valuation Methods

|  | Ending <br> Inventory | Cost of <br> Goods Sold | Gross <br> Periods of rising prices: <br> FIFO |
| :--- | :--- | :--- | :--- |
| LIFO | Highest | Lowest | Highest |
| Periods of falling prices: | Lowest | Highest | Lowest |
| FIFO | Highest | Lowest | Highest |

## Applying LIFO

Step 1 - Determine ending quantity
Step 2 - Compare to previous period's ending quantity
Step 3 - Increases - Add new layer
Step 4 - Small decreases (less than most recent layer) - Reduce most recent layer
Step 5 - Large decreases (more than most recent layer) - Eliminate most recent layer or layers and decrease next most recent layer

Step 6 - Apply appropriate unit price to each layer
For each layer:

| Inventory |
| :---: |
| Quantity |$\times \quad$| Price |
| :---: |
| per unit |$=\quad$| Inventory |
| :---: |
| Value |

## Application of LIFO

Information given:

|  | Ending <br> Quantity | Price <br> per unit |
| :---: | :---: | :---: |
| Year 1 | 10,000 units | $\$ 5.00$ |
| Year 2 | 12,000 units | $\$ 5.50$ |
| Year 3 | 15,000 units | $\$ 6.00$ |
| Year 4 | 13,500 units | $\$ 6.50$ |
| Year 5 | 11,200 units | $\$ 7.00$ |
| Year 6 | 13,200 units | $\$ 7.50$ |

Information applied:
Year 1:
Base layer


Focus on
Inventories - Module 832

Application of LIFO (continued)
Year 2:

| Year 2 layer |  | 2,000 units | \$5.50 | \$11,000 |
| :---: | :---: | :---: | :---: | :---: |
| Base layer |  | 10,000 units | \$5.00 | \$50,000 |
|  | Total | 12,000 units |  | \$61,000 |
| Year 3: |  |  |  |  |
| Year 3 layer |  | 3,000 units | \$6.00 | \$18,000 |
| Year 2 layer |  | 2,000 units | \$5.50 | \$11,000 |
| Base layer |  | 10,000 units | \$5.00 | \$50,000 |
|  | Total | 15,000 units |  | \$79,000 |

Focus on
Inventories - Module 8
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Application of LIFO (continued)
Year 4:

| Year 3 layer |  | 1,500 units | \$6.00 | \$9,000 |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 layer |  | 2,000 units | \$5.50 | \$11,000 |
| Base layer |  | 10,000 units | \$5.00 | \$50,000 |
|  | Total | 13,500 units |  | \$70,000 |
| Year 5: |  |  |  |  |
| Year 2 layer |  | 1,200 units | \$5.50 | \$6,600 |
| Base layer |  | 10,000 units | \$5.00 | \$50,000 |
|  | Total | 11,200 units |  | \$56,600 |

Focus on
Inventories - Module 8

Application of LIFO (continued)

## Year 6:

| Year 3 layer |  | 2,000 units | \$7.50 | \$15,000 |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 layer |  | 1,200 units | \$5.50 | \$6,600 |
| Base layer |  | 10,000 units | \$5.00 | \$50,000 |
|  | Total | 13,200 units |  | \$71,600 |

## Dollar Value LIFO

Less cumbersome than LIFO for inventory consisting of many items
Combines inventory into pools
Increases in some items within a pool offset decreases in others

## Applying Dollar-Value LIFO

Step 1 - Determine ending inventory at current year's prices
Step 2 - Divide by current price level index to convert to base year prices
Step 3 - Compare to previous period's ending inventory at base year prices
Step 4 - Increases - Add new layer at base year prices
Step 5 - Small decreases (less than most recent layer) - Reduce most recent layer
Step 6 - Large decreases (more than most recent layer) - Eliminate most recent layer or layers and decrease next most recent layer
Step 7 - Apply appropriate unit price to each layer
For each layer:

| Inventory amount at |
| :---: |
| base year prices |$\times \quad$| Price |
| :---: |
| index |$=$| Inventory amount |
| :---: |
| Dollar Value LIFO |

## Application of Dollar-Value LIFO

Information given:

|  | Ending <br> Inventory at <br> Current Prices | Price <br> level <br> index |
| :---: | :---: | :---: |
| Year 1 | $\$ 200,000$ | 100 |
| Year 2 | 243,800 | 106 |
| Year 3 | 275,000 | 110 |
| Year 4 | 255,200 | 116 |

Information applied:

| Year 1 | Base year prices | Index | Dollar Value LIFO |  |
| :--- | ---: | ---: | ---: | ---: |
| Base layer |  | $\$ 200,000$ | 100 | $\$ 200,000$ |
|  | Total | $\$ 200,000$ |  | $\$ 200,000$ |

Application of Dollar-Value LIFO (continued)
Year 2:
$\$ 243,800 \div 1.06=\$ 230,000$ (at base year prices)
Base year prices Index Dollar Value LIFO

Year 2 layer


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Base layer

|  | Base year prices | Index | Dollar Value LIFO |
| :---: | :---: | :---: | :---: |
|  | \$30,000 | 106 | \$31,800 |
|  | \$200,000 | 100 | \$200,000 |
| Total | \$230,000 |  | \$231,800 |

Focus on

## Application of Dollar-Value LIFO (continued)

## Year 3:

$\$ 275,000 \div 1.10=\$ 250,000$ (at base year prices)

|  | Base year prices | Index | Dollar Value LIFO |
| :---: | :---: | :---: | :---: |
| Year 3 layer | \$20,000 | 110 | \$22,000 |
| Year 2 layer | \$30,000 | 106 | \$31,800 |
| Base layer | \$200,000 | 100 | \$200,000 |
|  | \$250,000 |  | \$253,800 |

Focus on

## Application of Dollar-Value LIFO (continued)

## Year 4:

$\$ 255,200 \div 1.16=\$ 220,000$ (at base year prices)

|  |  | Base year prices | Index | Dollar Value LIFO |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 layer |  | \$20,000 | 106 | \$21,200 |
| Base layer |  | \$200,000 | 100 | \$200,000 |
|  | Total | \$220,000 |  | \$221,200 |

Focus on
Inventories - Module 8

## Dollar Value LIFO - Calculating a Price Level Index

Simplified LIFO - Company uses a published index

Double Extension Method - Cumulative index
Compare current year to base year
Ending inventory at current year's prices
Ending inventory at base year prices

Link Chain Method - Annual index
Compare current year to previous year
Ending inventory at current year's prices
Ending inventory at previous year's prices

## Lower of Cost or Market



Focus on
Inventories - Module 8

## Gross Profit Method for Estimating Inventory

If gross profit is percentage of sales:

$$
\text { Sales } \quad 100 \%
$$

- Cost of sales
$=$ Gross profit
If gross profit is percentage of cost:
Sales
- Cost of sales 100\%
$=$ Gross profit

To find cost of sales


## Conventional Retail (Lower of Cost or Market)

Beginning inventory

+ Net purchases
+ Freight in
+ Net markups
= Cost of goods available for sale
- Sales (retail)

Net markdowns
Employee discounts
Spoilage (retail)
$=$ Ending inventory at retail
$\times$ Cost to retail percentage
$=$ Ending inventory at approximate lower of cost or market

| Retail | C/R\% |
| :---: | :---: |
| xx |  |
| xx |  |
| $\underline{x x}$ |  |
| $x x \quad$ Cost / Retail |  |
| ( xx ) |  |
| xX |  |
| xX |  |

## Long-Term Construction Contracts

## Percentage of Completion

Use when:

- Estimates of costs are reasonably dependable
- Estimates of progress toward completion

Reporting profit

- Recognized proportionately during contract
- Added to construction in process

Balance sheet amount

- Current asset - excess of costs and estimated profits over billings
- Current liability - excess of billings over costs and estimated profits


## Calculating profit:

Step 1 - Total profit
Contract price xxx
Total estimated cost
Cost incurred to date (1) xxx
Estimated cost to complete + xxx
Total estimated cost (2) - $\mathbf{2 x x}$
Total estimated profit (3) = $\underline{\underline{x x x}}$
Step 2 - \% of completion (Cost to cost method)
Costs incurred to date (1) $\div$ Total estimated cost (2) $=\%$ of completion (4)
Step 3 - Profit to date
\% of completion (4) $\times$ Total estimated profit (3) = Estimated profit to date (5)
Step 4 - Current period's profit
Estimated profit to date (5) - Profit previously recognized = Current period's profit

## Recognizing Losses

When loss expected:

| Estimated loss | $x x x$ |
| :--- | :--- |
| + Profit recognized to date | $\underline{x x x}$ |
| = Amount of loss to recognize | $\underline{\underline{x x x}}$ |

## Completed Contract

Income statement amount

- Profit recognized in period of completion
- Loss recognized in earliest period estimable

Balance sheet amount

- Current assets - excess of costs over billings
- Current liabilities - excess of billings over costs


## Property, Plant, \& Equipment

## General Rule:

Capitalized amount $=$ Cost of asset + Costs incurred in preparing it for its intended use
Cost of asset $=$ FMV of asset received or
Cash paid + FMV of assets given
Gifts:
Asset (FMV) xx Income $x x$

Other capitalized costs for assets acquired by gift or purchase:
Shipping
Insurance during shipping
Installation
Testing

## Land and Building

## Total cost:

Purchase price
Delinquent taxes assumed
Legal fees
Title insurance
Allocation to land and building - Relative Fair Market Value Method
FMV of land
$+\quad$ FMV of building
$=$ Total FMV
Land $=$ FMV of land $\div$ Total FMV $\times$ Total Cost
Building $=$ FMV of building $\div$ Total FMV $\times$ Total Cost

## Capitalization of Interest

## Capitalize on:

Assets constructed for company's use
Assets manufactured for resale resulting from special order
Do not capitalize on:
Inventory manufactured in the ordinary course of business
Interest capitalized:
Interest on debt incurred for construction of asset
Interest on other debt that could be avoided by repayment of debt
Computed on:
Weighted-average accumulated expenditures

## Costs Incurred After Acquisition

## Capitalize if:

- Bigger - the cost makes the asset bigger, such as an addition to a building
- Better - the cost makes the asset better, such as an improvement that makes an asset perform more efficiently
- Longer - the cost makes the asset last longer, it extends the useful life

Do not capitalize:
Repairs and maintenance

## Depreciation and Depletion

## Basic Terms:

Straight-line rate $=100 \% \div$ Useful life (in years)
Book value = Cost - Accumulated depreciation
Depreciable basis $=$ Cost - Salvage value
Selection of Method:
Use straight-line when benefit from asset is uniform over life
Use accelerated when:
Asset more productive in earlier years
Costs of maintenance increase in later years
Risk of obsolescence is high
Use units-of-production when usefulness decreases with use

## Straight-Line

Annual depreciation =
Depreciable basis
$\times$ Straight-line rate

Partial year =
Annual depreciation
$\times$ Portion of year

## Double-Declining Balance

Annual depreciation =

## Book value

$\times$ Straight-line rate
$\times 2$
Partial year =
Book value
$\times$ Straight-line rate
$\times 2$
$\times$ Portion of year

## Sum-of-the-Years'-Digits

Annual depreciation =
Depreciable basis
$\times$ Fraction

| $1^{\text {st }}$ Year | $2^{\text {nd }}$ Year | $3^{\text {rd }}$ Year |
| :--- | :--- | :--- |
| n | $\mathrm{n}-1$ | $\mathrm{n}-2$ |
| $\mathrm{n}(\mathrm{n}+1) \div 2$ | $\mathrm{n}(\mathrm{n}+1) \div 2$ | $\mathrm{n}(\mathrm{n}+1) \div 2$ |

Partial year:
$1^{\text {st }}$ year $=1^{\text {st }}$ year's depreciation $\times$ portion of year
$2^{\text {nd }}$ year $=$ Remainder of $1^{\text {st }}$ year's depreciation
$+2^{\text {nd }}$ year's depreciation $\times$ portion of year
3 rd year $=$ Remainder of $2^{\text {nd }}$ year's depreciation
$+3^{\text {rd }}$ year's depreciation $\times$ portion of year

## Units-of-Production

Depreciation rate $=$ Depreciable basis $\div$ Total estimated units to be produced (hours)
Annual depreciation =
Depreciation rate
$\times$ Number of units produced (hours used)

## Group or Composite

Based on straight-line
Gains or losses not recognized on disposal
Cash (proceeds)
xx
Accumulated depreciation (plug) xx
Asset (original cost)
xx

## Impairment

Occurs if undiscounted future cash flow less than asset carrying amount from events such as:
A decrease in the market value of the asset
An adverse action or assessment by a regulator
An operating or cash flow loss associated with a revenue producing asset
When an impairment loss occurs:
Asset is written down to fair market value (or discounted net cash flow):
Loss due to impairment xx
Accumulated depreciation
xx
Note that test for impairment (future cash flow) is different from write-down amount (net realizable value)

## Application of Impairment Rules

## Example 1:

Asset carrying value $-\$ 1,000,000$
Undiscounted future cash flow expected from asset - \$900,000
Fair market value of asset - \$600,000
Impairment exists - \$900,000 expected cash flow less than \$1,000,000 carrying amount
Write asset down by $\$ 400,000(\$ 1,000,000$ reduced to $\$ 600,000)$

## Example 2:

Asset carrying value - \$800,000
Undiscounted future cash flow expected from asset - \$900,000
Fair market value of asset - \$600,000
No impairment adjustment - \$900,000 expected cash flow exceeds $\$ 800,000$ carrying amount

## Disposal of Property, Plant, \& Equipment

| Cash (proceeds) | xx |  |
| :--- | :---: | :---: |
| Accumulated depreciation (balance) | xx |  |
| Loss on disposal (plug) | xx |  |
| $\quad$ Gain on disposal (plug) |  | xx |
| Asset (original cost) |  | xx |

A disposal in involuntary conversion is recorded in the same manner as a sale

## Nonmonetary Exchanges

Cash (amount received)
Asset - New (FMV) xx
Accumulated depreciation (balance on old asset) xx
Loss on disposal (plug)
Cash (amount paid)
Gain on disposal (plug) xx
Asset - Old (Original cost) xx

## FMV

Use fair value of asset received or
Fair value of asset given

+ Cash paid
- Cash received


## Exception

Applies to exchanges when:

- FMV is not determinable
- Exchange is only to facilitate subsequent sales to customers (e.g. ownership of inventory in one city is swapped for similar inventory in another to facilitate prompt delivery to customer in distant city)
- Transaction lacks commercial substance (risk, timing, and amount of future cash flows will not significantly change as a result of the transaction).
Loss - FMV of asset given < Carrying value of asset given
Cash (amount received) xx
Asset - New (FMV) xx
Loss on disposal (plug) xx
Cash (amount paid) xx
Asset - Old (carrying value) xx

Gain - FMV of asset given > Carrying value of asset given
Gain recognized only when cash received

## FMV of asset given

$\underset{\substack{ \\=\\=\\ \times \\ \text { Total gain } \\=\\ \text { Pain recognized }}}{\text { Catal proceeds (Cash + FMV of asset received) }}$ Cash received

| Cash (amount received) | xx |  |
| :--- | :--- | :--- |
| Asset—New (plug) | xx |  |
| Gain on disposal (computed amount) |  | $x x$ |
| Asset—Old (carrying value) |  | $x x$ |

No gain recognized when cash paid or no cash involved

| Asset - New (plug) | xx |  |
| :--- | :---: | :---: |
| Accumulated depreciation (balance on old asset) | xx |  |
| Cash (amount paid) |  | xx |
| Asset - Old (original cost) |  | xx |

## Intangibles

## General Characteristics

Lack physical substance
Uncertain benefit period
Associated with legal rights

## Initial Accounting

Capitalize costs of purchasing intangibles
Expense costs of developing intangibles internally
Capitalize costs of preparing for use
Legal fees
Registration fees

## Amortization

Straight-line amortization
Amortized over shorter of:
Legal life
Useful life
Units of sales amortization used if greater than straight-line
Tested for impairment when events suggest undiscounted future cash flow will be less than carrying value of intangible - written down to fair market value

Intangibles with no clear legal or useful life (trademarks, perpetual franchises) tested annually for impairment and written down whenever fair market value is less than carrying value

## Goodwill

## Acquisition

Must be part of (purchase) business combination
Excess of purchase price over fair value of underlying net assets

## Internal costs

May incur development or maintenance costs
All costs are expensed

## Amortization

No amortization recorded
Test annually for impairment of value
Goodwill written down whenever fair market value less than carrying value

## Leasehold Improvements

Amortize over shorter of:

- Useful life
- Remaining term of lease


## Patents

Legal costs of defending a patent

- Successful - capitalize legal costs as addition to carrying value of patent
- Unsuccessful - recognize legal costs as expense and consider writing down patent


## Research and Development ( $R$ \& D)

Research - aimed at discovery of new knowledge
New product or process
Improvement to existing product or process
Development - converting new knowledge into plan or design

## R \& D assets:

Used for general R \& D activities
Capitalize
Depreciate
Charge to R \& D expense
Used for specific project
Charge to R \& D expense

## Startup Costs

Costs associated with startup of organization should be immediately expensed

## Franchises

Initial fee - generally capitalized and amortized
Subsequent payments - generally recognized as expense in period incurred

## Software

Expense - cost up to technological feasibility
Capitalize and amortize - costs from technological feasibility to start of production

- Coding and testing
- Production of masters

Charge to inventory - costs incurred during production

## Software (continued)

Time line:


Amortization of capitalized software costs - larger of:

| Straight-line | or | Ratio <br> Carrying value |
| :---: | :---: | :---: |
|  |  | Current revenues $\times$ Carrying value |
| Remaining useful life | Estimated remaining revenues |  |
| (Current period + future periods) |  | (Current revenues + future revenues) |

## Additional amortization:

Carrying value (after amortization) > Net realizable value (based on future revenues)

Excess is additional amortization

## Bank Reconciliation

## Bank balance

+ Deposits in transit
- Outstanding checks
$\pm$ Errors made by bank
= Corrected balance


Book balance
Amounts collected by bank + Unrecorded bank charges Errors made when recording transactions $\pm$

Corrected balance =


## Accounts Receivable



Net realizable value $=$ Accounts receivable - Allowance for Uncollectible Accounts

## Uncollectible Accounts

Income Statement Approach
Credit sales
$\times$ \% uncollectible (given)
= Bad debt expense


Accounts written off


Beginning balance
Bad debt expense
Reinstatements

Ending balance

Calculate expense and plug balance or calculate balance and plug expense

## Uncollectible Accounts

## Allowance Methods - GAAP

Matching concept - Bad debt expense in period of sale
Measurement concept - Accounts receivable at net realizable value
Direct Write-off Method - Non-GAAP
Violates matching concept - Bad debt expense when account written off
Violates measurement concept - Accounts receivable overstated at gross amount

Focus on
Receivables - Module 10

## Notes Received for Cash

## Calculating Payment

Principal amount $\div$ Present value factor $=$ Payment amount
Present value factor for annuity based on number of payments and interest rate

## Allocating Payments

Payment amount - Interest = Principal reduction

## Calculating Interest

Beginning balance
$\times$ Interest rate
$\times$ Period up to payment
= Interest up to payment

Add together for total interest

## Notes Received for Goods or Services

## Note Balance

```
Short-term: Amount = Face value
Long-term: Amount =
    Fair value of goods or services
    Present value of payments if fair value not known
Journal entry:
    Note receivable - Face amount (given) xxx
    Revenue - Calculated amount xxx
    Discount on note receivable (plug) xxx
```


## Notes Received for Goods or Services

## Interest Income

Face amount of note

- Unamortized discount
$=$ Carrying value of note
$\times$ Interest rate
= Interest income
Journal entry:
Discount on note receivable xxx
Interest income xxx


## Financing Receivables - Discounting

## Proceeds From Discounting

Face amount

+ Interest income (Face $\times$ Interest rate $\times$ Term)
= Maturity value
- Discount (Maturity value $\times$ Discount rate $\times$ Remaining term)
= Proceeds


## Financing Receivables

## Financing Without Recourse

Treated as sale - referred to as factoring
Cash xxx
Loss on sale (plug) xxx
Accounts receivable (balance) xxx

## Financing With Recourse

Treated as loan - may be referred to as assignment
Cash - Proceeds (given)
xxx
Note payable secured by receivables
xxx
Accounts receivable assigned
xxx
Accounts receivable (balance)

## Financial Statement Analysis

## Ratios Involving Current Assets \& Liabilities

Working capital = current assets - current liabilities
Current ratio = current assets $\div$ current liabilities
Quick ratio = quick assets $\div$ current liabilities
Quick assets - current assets readily convertible into cash

- Cash
- Accounts receivable
- Investments in trading securities


## Ratios Involving Receivables

Accounts receivable turnover $=$ Credit sales $\div$ Average accounts receivable
Days to collect accounts receivable $=365 \div$ Accounts receivable turnover or
Days to collect accounts receivable $=$ Average accounts receivable $\div$ Average sales/day
Average sales/day $=$ Credit sales $\div 365$

## Ratios Involving Inventories

Inventory turnover = Cost of sales $\div$ Average inventory
Days sales in inventory $=365 \div$ Inventory turnover
or
Days sales in inventory = Average inventory $\div$ Average inventory sold/day
Average inventory sold/day $=$ Cost of sales $\div 365$

Monetary Assets \& Liabilities - Module 10

## Other Ratios

Operating cycle = Days to collect accounts receivable + Days sales in inventory
Debt to total assets $=$ Total debt $\div$ Total assets
Debt to equity $=$ Total debt $\div$ Total stockholders' equity
Return on assets $=$ Net income $\div$ Average total assets

## Accounts Payable

Purchase<br>shipment terms<br>Shipping point<br>Destination

Payable already recorded<br>No adjustment<br>Adjust - deduct

Payable not already recorded

Adjust - add
No adjustment

## Contingencies

## Loss Contingencies

Probable - Accrue \& disclose

- Not estimable - Disclose only
- Estimable within range - Accrue minimum of range

Reasonably possible - Disclose only
Remote - Neither accrued nor disclosed

## Gain Contingencies

Never accrue (until realization occurs or is assured beyond reasonable doubt)
May disclose

## Estimated \& Accrued Amounts

Money $1^{\text {st }}-$ Goods or services $2^{\text {nd }}$

- Expenses - prepaid
- Revenues - unearned

Goods or services $1^{\text {st }}-$ Money $2^{\text {nd }}$

- Expenses - accrued
- Revenues - receivable


## Revenue Items

Calculate amount earned or amount collected

1) Determine changes in accrual items:

|  | Debit | Credit |
| :--- | :--- | :---: |
| Revenue receivable | Increase | Decrease |
| Unearned revenue | Decrease | Increase |

2) Prepare journal entry
Cash xxx

Revenue receivable $\quad x x x$ or $x x x$
Unearned revenue $\quad x x x$ or $x x x$
Revenues
xxx
3) If amount collected is given, that is the debit to cash and the amount required to balance the entry is the amount earned. If the amount earned is given, that is the credit to revenues and the amount required to balance the entry is the amount collected

## Expense Items

Calculate amount incurred or amount paid

1) Determine changes in accrual items:

Prepaid expense
Accrued expense

| Debit | $\underline{\text { Credit }}$ |
| :--- | :--- |
| Increase | Decrease |
| Decrease | Increase |

2) Prepare journal entry

| Expense | xxx |  |  |
| :--- | :--- | :--- | :--- |
| Prepaid expense | xxx | or | xxx |
| Accrued expense | xxx | or | xxx |
| $\quad$ Cash |  |  | $x x x$ |

3) If amount paid is given, that is the credit to cash and the amount required to balance the entry is the amount incurred. If the amount incurred is given, that is the debit to expense and the amount required to balance the entry is the amount paid

## Insurance

Prepaid insurance (end of year)
Total premiums paid $\times$ Months remaining / Total \# of months
Insurance expense
Prepaid insurance (beginning) + Premiums paid - Prepaid insurance (ending)

## Royalties

Royalty income for current year
$1^{\text {st }}$ payment - includes royalties earned in latter part of previous period early in current period

- Include payment
- Deduct royalties from previous period
$2^{\text {nd }}$ payment - received for royalties earned during current period
- Include entire payment

Additional royalties

- Add royalties earned for latter part of current period


## Service Contract

Service contract revenues - fees received uniformly during period
Fees received
$\times \%$ earned in $1^{\text {st }}$ period
$\times 50 \%$
Deferred service contract revenues
Fees received

- service contract revenues


## Coupons

Discounts on merchandise
Number of coupons not expired
$\times$ \% expected to be redeemed
$\times$ Cost per coupon (face + service fee)

- Amount already paid
= Liability

Premiums (Prizes)
Number of units sold
$\times \quad \%$ expected to be redeemed
$\div$ number required per prize

- Prizes already sent
$\times$ Cost per prize
$=$ Liability


## Warranties

## Warranty expense

Sales
$\times$ \% of warranty costs
$=$ Expense for period

Warranty liability

| Estimated warranty liability |  |
| :--- | :--- |
| Payments | Beg. bal. <br> Expense |
|  | End bal. |

## Compensated Absences

Four conditions:

- Past services of employees
- Amounts vest or accumulate
- Probable
- Estimable

When all conditions met:

|  | Vest | Accumulate |
| :---: | :---: | :---: |
| Vacation pay | Must accrue | Must accrue |
| Sick pay | Must accrue | May accrue |

Monetary Assets \& Liabilities - Module 10

## Miscellaneous Liabilities

## Refinancing Liabilities

To exclude from current liabilities -2 requirements:

- Company intends to refinance on a long-term basis
- Company can demonstrate ability to refinance

The ability to refinance can be demonstrated in either of 2 ways:

- Refinance on long-term basis after balance sheet date but before issuance
- Enter into firm agreement with lender having ability to provide long-term financing

Monetary Assets \& Liabilities - Module 10

## Accounting for Leases

## Lessee Reporting

Rights \& risks of ownership transfer from lessor to lessee?


Capital lease


Operating lease

## Transfer of rights \& risks of ownership - At least 1 of 4 criteria

## Actual transfer

- Title transfers to lessee by end of term
- Lease contains bargain purchase option


## Transfer in substance

- Lease term $\geq 75 \%$ of useful life
- Present value of min lease payments $\geq 90 \%$ of fair market value

To calculate present value - lessee uses lower of:

- Incremental borrowing rate
- Rate implicit in lease (if known)


## Capital Leases

## Inception of lease

Journal entry to record lease:
Leased asset xxx
Lease obligation
XXX

Amount of asset \& liability = PV of minimum lease payments:

- Payments beginning at inception result in annuity due
- Payments beginning at end of first year result in ordinary annuity
- Payments include bargain purchase option or guaranteed residual value (lump sum at end of lease)


## Lease payments

Payment at inception:
$\begin{array}{ccc}\text { Lease obligation } \\ \text { Cash } & \text { xxx } & \\ \text { xxx }\end{array}$
Subsequent payments:
$\begin{array}{ccc}\text { Interest expense } & \text { xxx } & \\ \text { Lease obligation } & \text { xxx } & \\ \text { Cash } & & \text { xxx }\end{array}$
Interest amount:
Balance in lease obligation
$\times \quad$ Interest rate (used to calculate PV)
$\times \quad$ Time since last payment (usually 1 year)
$=$ Interest amount

## Periodic Expenses - Depreciation

Actual transfer (1 of first 2 criteria)

- Life = useful life of property
- Salvage value taken into consideration

Transfer in substance (1 of latter 2 criteria)

- Life = shorter of useful life or lease term
- No salvage value


## Periodic Expenses - Executory costs

Consist of insurance, maintenance, \& taxes
Recognized as expense when incurred

## Balance Sheet Presentation

## Leased asset

- Reported as P, P, \& E
- Reported net of accumulated depreciation

Lease obligation

- Current liability = Principal payments due in subsequent period
- Noncurrent liability = Remainder


## Disclosures

- Amount of assets recorded under capital leases
- Minimum lease payments for each of next 5 years and in aggregate
- Description of leasing activities


## Lessor Reporting



Transfer of rights \& risks of ownership - At least 1 of 4 criteria

- Same criteria as lessee
- To calculate present value - lessor uses rate implicit in lease


## Additional Criteria

- Collectibility of lease payments reasonably predictable
- No significant uncertainties as to costs to be incurred in connection with lease

Are both additional criteria met?


Sales-type or direct-financing lease


Operating lease

## Sales-Type \& Direct-Financing Leases

## Inception of lease

Journal entry to record lease:
Receivable xxx

Accumulated depreciation (if any) xxx
Asset
xxx
Gain (if any)
XXX
$\underline{\text { Receivable }=\text { fair value of property \& present value of lease payments (rate implicit in lease) }}$
Asset \& accum dep - To remove carrying value of asset from lessor's books

## Gain

- If amount needed to balance the entry, it is a gain or loss and this is a sales-type lease
- If the entry balances without a gain or loss, this is a direct financing lease


## Collections

At inception of lease:
Cash xxx
Receivable
XXX
Subsequent collections:
Cash Xxx
Interest income (formula) $x x x$
Receivable xxx
Interest amount:
Balance of receivable
$\times$ Interest rate (implicit in lease)
$\times$ Time since last payment (usually 1 year)
= Interest amount

## Balance Sheet Presentation

## Receivable

- Current asset - Principal collections due within one year
- Noncurrent asset - Remainder


## Operating Leases

## Lessor Accounting

## Rent revenue

Various expenses (depreciation on asset, taxes, insurance, \& maintenance)

## Lessee Accounting

## Rent expense

Miscellaneous expenses (taxes, insurance, \& maintenance)

## Rent revenue or expense

- Recognized uniformly over lease
- Total of rents over term of lease $\div$ Number of periods $=$ Rent per period


## Sale-Leaseback Transactions

## Minor Leaseback

Leaseback $\leq 10 \%$ of fair value of property sold

- Sale and leaseback recognized as separate transactions
- Gain or loss on sale


## Other Leasebacks

Seller-lessee retains significant portion of property

- Some or all of gain deferred
- Deferred amount limited to present value of leaseback payments
- Deferred amount spread over lease
- Remainder recognized in period of sale


## Bonds

## Issuance - Interest date

Cash (present value approach) xxx
Discount or premium (plug) $\quad \mathrm{xxx}$ or xxx
Bonds payable (face amount)
xxx

## Issuance - Between interest dates

Cash (sales price approach + interest amount) xxx
Discount or premium (plug)
xxx or $x x x$
Interest payable (interest amount) xxx
Bonds payable (face) xxx

## Proceeds

Present value approach
Present value of principal (lump sum) at yield rate

+ Present value of interest (ordinary annuity) at yield rate
Sales price approach
- Sales price given as percentage of face amount
- Multiplied by face to give proceeds amount


## Interest

Bond issued between interest dates
Calculated amount
Face amount of bonds
$\times$ Stated rate
$\times$ Portion of year since previous interest date
= Interest amount

```
Bond Interest
Effective interest method - GAAP
```

Interest payable Face amount
$\times$ Stated rate
$\times$ Portion of year since previous interest date
= Interest payable

Interest expense
Carrying value
$\times$ Yield rate
$\times$ Portion of year since previous interest date
= Interest expense


## Straight-line method - Not GAAP

Interest payable
Face amount
$\times$ Stated rate
$\times$ Portion of year since previous interest date
= Interest payable

Amortization
Premium or discount
$\div$ Months in bond term
= Amortization per month interest date
$\times$ Months since last interest date
= Amortization

Interest expense $=$ interest payable $\pm$ amortization

-     + Amortization of discount
-     - Amortization of premium


## Recording Interest Expense:

Interest expense xxx
Bond premium or discount (amortization) $\quad \mathrm{xxx}$ or xxx
Cash or interest payable xxx

## Bond Issue Costs

Recorded as asset

- Deferred charge
- Amortized (straight-line) over term of bond
- Not considered part of carrying value


## Bond Retirement

| Bond payable (face amount) | xxx |  |  |
| :--- | :--- | :--- | :--- |
| Bond premium or discount (balance) | xxx | or | xxx |
| $\quad$ Gain or loss (plug) | xxx | or | xxx |
| Bond issue costs (balance) |  |  | xxx |
| Cash (amount paid) |  |  | xxx |

Gain or loss is extraordinary if retirement is determined to be both unusual and infrequent

## Convertible Bonds

Recorded as bonds that are not convertible
Upon conversion:

| Book Value Method |  |  |
| :--- | :--- | :--- |
| Bonds payable (face) | xx |  |
| Prem or disc (bal) | xx or | xx |
| Com stk (par) |  | xx |
| APIC (diff) |  | xx |

Market Value Method
Bonds payable (face) xx
Prem or disc (bal) xx or xx
Com stk (par) xx
APIC (computed) xx
Gain or loss (diff) $\quad x x$ or $x x$

## Book value method

- Issuance price of stock = Carrying value of bonds
- No gain or loss


## Market value method

- Issue price of stock = Fair market value
- Gain or loss recognized


## Detachable Warrants

Allocate proceeds using relative fair value method
Fair value of bonds (without warrants)

+ Fair value of warrants (without bonds)
= Total fair value
Bonds $=$ Proceeds $\times$ Value of bonds/total value
Warrants $=$ Proceeds $\times$ Value of warrants/total value
Record issuance:

```
Cash (total proceeds) xx
Discount or premium (plug**) xx or xx
    APIC (amount allocated to warrants) xx
    Bonds payable (face amount)
    XX
```

** Bonds payable - Discount or plus premium = Amount allocated to bonds

## Disclosures

A bond issuer should disclose:

- The face amount of bonds
- The nature and terms of the bonds including a discussion of credit and market risk, cash requirements, and related accounting policies
- The fair value of the bonds at the balance sheet date, indicated as a reasonable estimate of fair value


## Troubled Debt Restructuring

## Transfer property to creditor

Liability (amount forgiven) xxx
Gain or loss on disposal
xxx or $x x x$
Asset (carrying value)
xxx
Extraordinary gain on restructure xxx
Gain (or loss) on disposal = Fair value of asset - Carrying value of asset
Gain on restructure = Carrying value of debt - Fair value of asset

## Issuance of equity

Liability (amount forgiven) XXX
Common stock (par value) xxx
APIC (based on fair value) $x x x$
Gain on restructure xxx
APIC = Fair value of stock issued - Par value of stock issued
Gain on restructure $=$ Fair value of stock - Carrying value of debt

## Modification of Terms

Total payments under new terms:

- If $\geq$ carrying value of debt - no adjustment made
- If < carrying value of debt - difference is gain


## Treatment of restructuring gain

Reported in ordinary income unless it is determined that the restructuring is both unusual and infrequent.

## Bankruptcy

Order of distribution:

1) Fully secured creditors

- Receive payment in full
- Excess of fair value of asset over debt added to remaining available money

2) Partially secured creditors

- Receive payment equal to fair value of collateral
- Difference considered unsecured debt

3) Unsecured creditors

- All receive partial payment
- Remaining available money $\div$ Total of unsecured claims $=$ Ratio
- Ratio multiplied by each claim to determine payment


## Pension Plans

## Pension Expense

Service cost

+ Interest
- Actual return on plan assets
$\pm$ Amortization of prior service cost
$\pm$ Gains or losses to extent recognized
= Pension expense

Service cost - Increase in plan's projected benefit obligation (PBO) resulting from services performed by employees

Interest - Beginning PBO $\times$ discount (interest) rate
Actual return on plan assets - Increase in plan assets after eliminating contributions and adding back distributions

Gains or losses - 2 components

- Difference between actual return and expected return
- Amortization of accumulated amount when beginning balance > greater of $10 \%$ of beginning PBO or $10 \%$ of market related value of beginning plan assets


## Accrued or Prepaid Pension Expense

When expense > payments - difference is accrued pension expense
When expense < payments - difference is prepaid pension expense
Either accrued or prepaid pension expense will appear on balance sheet.

## Additional Pension Liability

Minimum liability reported when:
Accumulated benefit obligation $(A B O)>$ Fair value of plan assets
ABO

- Fair value of plan assets
$=$ Minimum liability


## Additional Pension Liability

Additional pension liability will be reported when minimum liability > accrued pension expense
Minimum liability

- Balance in accrued pension expense or
+ Balance in prepaid pension expense
$=$ Additional pension liability
To record additional pension liability
Deferred pension asset (limited to balance in
unamortized prior service cost) xxx
Stockholders' equity account - part of accumulated
other comprehensive income (plug) xxx
Additional pension liability $x x x$


## Disclosures

- Description of funding policies and types of assets held
- Pension expense for the period
- Fair value of plan assets
- Reconciliation of funded status with accrued or prepaid pension expense reported on the balance sheet


## Postretirement Benefits

## Types of Benefits

Company pays for:

- Health care
- Tuition assistance
- Legal services
- Life insurance
- Day care
- Housing subsidies

Individuals covered:

- Retired employees
- Beneficiaries
- Covered dependents


## Postretirement Benefit Expense

Service cost

+ Interest
- Actual return on plan assets
$\pm$ Amortization of prior service cost
$\pm$ Gains or losses to extent recognized
$=$ Postretirement benefit expense


## Accounting for Income Taxes

## Income Tax Expense

Taxable income = Pretax accounting income

- No temporary differences
- Income tax expense = Current income tax expense
- No deferred tax effect

Taxable income $\neq$ Pretax accounting income

- Temporary differences
- Income tax expense = Current income tax expense $\pm$ Deferred income taxes


## Current Income Tax

Current income tax expense $=$ Taxable income $\times$ Current tax rate
Current tax liability $=$ Current income tax expense - Estimated payments
Taxable income:
Pretax accounting income (financial statement income)
$\pm$ Permanent differences
$\pm$ Changes in cumulative amounts of temporary differences
= Taxable income

## Permanent \& Temporary Differences

## Permanent differences

- Nontaxable income (interest income on municipal bonds) \& nondeductible expenses (premiums on officers' life insurance)
- No income tax effect

Temporary differences

- Carrying values of assets or liabilities $\neq$ tax bases
- May be taxable temporary differences (TTD) or deductible temporary differences (DTD)

Assets
Financial statement basis > tax basis = TTD
Financial statement basis < tax basis = DTD
Liabilities
Financial statement basis > tax basis = DTD
Financial statement basis < tax basis = TTD

## Deferred Tax Assets \& Liabilities

TTD $\times$ Enacted future tax rate $=$ Deferred tax liability
DTD $\times$ Enacted future tax rate $=$ Deferred tax asset
Selecting appropriate rate:

1) Determine future period when temporary difference will have tax effect (period of reversal)
2) Determine enacted tax rate for that period

## Deferred Tax Asset Valuation Allowance

May apply to any deferred tax asset

- Is it more likely than not that some or all of deferred tax asset will not be realized
- Consider tax planning strategies

Valuation allowance = portion of deferred tax asset that will not be realized

## Deferred Income Tax Expense or Benefit

1) Calculate balances of deferred tax liabilities and assets and valuation allowances
2) Combine into single net amount
3) Compare to combined amount at beginning of period

- Increase in net liability amount = deferred income tax expense
- Decrease in net asset amount = deferred income tax expense
- Increase in net asset amount = deferred income tax benefit
- Decrease in net liability amount $=$ deferred income tax benefit


## Balance Sheet Presentation

Identify current and noncurrent deferred tax assets, liabilities, and valuation allowances
Current - TTD or DTD relates to asset or liability classified as current
Noncurrent - TTD or DTD relates to asset or liability classified as noncurrent
TTD or DTD does not relate to specific asset or liability (such as result of net operating loss carryforward) - classify as current or noncurrent depending on period of tax effect

1) Combine current deferred tax assets, liabilities, and valuation allowances into single amount
2) Report as current deferred tax asset or liability
3) Combine noncurrent deferred tax assets, liabilities, and valuation allowances into single amount
4) Report as noncurrent deferred tax asset or liability

## Stockholders' Equity

## Issuance of Common Stock

Stock issued for cash, property, or services:
Journal entry:
$\begin{array}{ccc}\text { Cash, property, or expense (fair value) } & \text { xxx } & \\ \text { Common stock (par or stated value) } & & \text { xxx } \\ \text { APIC (difference) } & \text { xxx }\end{array}$

## Common Stock Subscribed

Subscription - Journal entry:

| Cash (down payment) | xxx |  |
| :--- | :--- | :--- |
| Subscriptions receivable (balance) | xxx |  |
| Common stock subscribed (par or stated value) | xxx |  |
| APIC (difference) | xxx |  |

Collection and issuance of shares - Journal entries:

| Cash (balance) | xxx |  |
| :---: | :---: | :---: |
| Subscriptions receivable |  | xxx |
| Common stock subscribed (par or stated value) <br> Common stock (par or stated value) | xxx |  |
|  |  | xxx |

## Treasury Stock

## Acquisition of shares:

| Cost Method |  |  |  |
| :---: | :---: | :--- | :---: |
| TS (cost) |  | Par Value Method |  |
| Cash | xx |  | TS (par value) |
|  |  | xx | APIC (original amount) |
|  |  | RE (difference) | xx |
|  |  | or | xx |
|  |  | APIC from TS (difference) |  |
|  |  | Cash (cost) | xx |

## Sale - more than cost:

| Cost Method |  | Par Value Method |  |
| :---: | :---: | :---: | :---: |
| Cash (proceeds) | xX | Cash (proceeds) | xX |
| TS (cost) | xx | TS (par) | xx |
| APIC from TS | xx | APIC (difference) | xx |
| Sale - less than cost: |  |  |  |
| Cost Method | Par Value Method |  |  |
| Cash (proceeds) | xx | Same entry as above |  |
| APIC from TS (difference up to balance) | xx |  |  |
| RE (remainder of difference) | x $x$ |  |  |
| TS (cost) | xx |  |  |

## Characteristics of Preferred Stock

Preference over common stock

- Receive dividends prior to common stockholders
- Paid before common on liquidation

Cumulative preferred stock

- Unpaid dividends accumulated as dividends in arrears
- Paid in subsequent periods prior to payment of current dividends to common or preferred
- Not considered liability until declared

Participating preferred stock

- Receive current dividends prior to common stockholders
- Receive additional dividends, in proportion to common stockholders, in periods of high dividends


## Equity Instruments With Characteristics of

## Liabilities

Financial instruments shares should be classified as liabilities on the balance sheet, even when they appear to be in the form of equity, when any of these characteristics apply:

- Preferred shares have a mandatory redemption date payable in cash
- An obligation exists to repurchase shares through the transfer of assets to the shareholder.
- Shares are convertible to other shares when the exchange rate is based on a fixed monetary value of issuer shares or is tied to variations in the fixed value of something other than the issuer's shares.
Note that convertible shares whose conversion rate is not adjusted for changes in values do not fall into this category (e.g. preferred stock convertible at a fixed 10 for 1 ratio to the common stock would not be a liability)


## Dividends

## Cash Dividends

Recorded when declared

1) Dividends in arrears to preferred stockholders if cumulative
2) Normal current dividend to preferred stockholders
3) Comparable current dividend to common stockholders
4) Remainder

- Allocated between common and preferred shares if preferred stock is participating
- Paid to common stockholders if preferred stock is nonparticipating


## Property Dividends

Journal entry
Retained earnings (fmv of property) xxx
Gain (or loss) xxx or xxx
Asset (carrying value of property) xxx

Focus on
Stockholders' Equity - Module 13

## Liquidating Dividends

Journal entry
Retained earnings (balance) xxx
APIC (plug)
xxx
Cash or Dividends payable

## Stock Dividends

Journal entry - Normal stock dividend - usually 20\% or less
Retained earnings (fmv of stock issued)
xxx
Common stock (par or stated value) xxx
APIC (difference) xxx
Journal entry - Large stock dividend - usually more than $25 \%$ - referred to as stock split affected in the form of a stock dividend

Retained earnings (par or stated value) xxx
Common stock (par or stated value) xxx

## Preferred Stock - Special Issuances

## Preferred with Detachable Warrants

Cash (proceeds) xxx
APIC from warrants (amount allocated) $x x x$
Preferred stock (par) xxx
APIC from preferred stock (difference) xxx
Amount allocated to warrants using relative fair value method:
Fair value of warrants

+ Fair value of stock
$=$ Total fair value
Allocation:
- Fair value of warrants $\div$ Total fair value $\times$ Proceeds $=$ Amount allocated to warrants
- Fair value of stock $\div$ Total fair value $\times$ Proceeds $=$ Amount allocated to stock
Convertible Preferred Stock
Journal entry - Issuance
Cash (proceeds) xxx
Preferred stock (par) ..... xxx
APIC from preferred stock (difference) ..... xxx
Journal entry - Conversion
Preferred stock (par) xxx
APIC from preferred stock (original amount) xxx
Common stock (par or stated value) ..... xxx
APIC (difference) ..... xxx


## Retained Earnings

## Appropriations

Set up to disclose to financial statement users future commitments that are not subject to accrual.

Journal entry:
Retained earnings xxx
Retained earnings appropriated for... xxx
When the commitment is met, accrued, or avoided, the appropriation is reversed.
Journal entry:
Retained earnings appropriated for... xxx
Retained earnings xxx

## Prior Period Adjustments

Made to correct errors in financial statements of prior periods
Adjustment to beginning retained earnings

- Equal to net amount of errors from periods prior to earliest period presented
- Reduced by tax effect

Presented on statement of retained earnings

- Unadjusted beginning balance reported
- Increased or decreased for prior period adjustment
- Result is adjusted beginning balance


## Statement of Retained Earnings

Beginning retained earnings, as previously reportedxxx
$\pm$ Prior period adjustments
XXX
$=$ Beginning retained earnings, as adjusted $x x x$

+ Net income for period xxx
- Dividends xxx
- Appropriations xxx
+ Appropriations eliminated $\underline{x x x}$
$=$ Ending retained earnings $\underline{\underline{x x x}}$


## Stock Options Plans

## Noncompensatory Plans

Noncompensatory when:

- All employees participate
- Participation uniform among employees
- Option period limited to reasonable time
- Discount below market price limited to reasonable amount


## Compensatory Plans

Journal entry
Deferred compensation XXX
APIC - Options XXX

Options must be accounted for using FMV at date of grant based on:

- Market price of options with similar characteristics
- Option pricing model
- Binomial distribution model
- Black-Scholes model
- Intrinsic value (stock price - exercise price) only used when FMV cannot be determined at grant date and must be replaced by FMV as soon as estimate is available

Compensation recognized over service period

## Stock Appreciation Rights

Calculating liability

## Stock price

- Amount specified in stock appreciation rights
= Amount per share
$\times$ \# of stock appreciation rights
$=$ Total liability
$\times$ Portion of service period elapsed
= Liability on balance sheet date
Amount needed to increase or decrease liability is recognized as compensation expense


## Quasi Reorganizations

Journal entry:

| Common stock (reduction in par value) | xxx |  |
| :---: | :--- | :--- |
| APIC (plug) | xxx or | xxx |
| Retained earnings (eliminate deficit) |  | xxx |
| Assets (eliminate overstatements) |  | xxx |

## Book Value Per Share

Calculation:
Total stockholders' equity

- Preferred stock (par value or liquidation preference)
- Dividends in arrears on cumulative preferred stock
$=$ Stockholders' equity attributable to common stockholders
$\div$ Common shares outstanding at balance sheet date
= Book value per common share


## Disclosure of Information About Capital Structure

Rights \& privileges of various debt \& equity securities outstanding

- Number of shares of common and preferred stock authorized, issued, \& outstanding
- Dividend \& liquidation preferences
- Participation rights
- Call prices \& dates
- Conversion or exercise prices or rates \& pertinent dates
- Sinking fund requirements
- Unusual voting rights
- Significant terms of contracts to issue additional shares


## Reporting Stockholders' Equity

6\% cumulative preferred stock, $\$ 100$ par value, 200,000 shares
authorized, 120,000 shares issued and outstanding
\$ 12,000,000
Common stock, $\$ 10$ par value, 1,500,000 shares authorized,
$1,150,000$ shares issued and 1,090,000 shares outstanding

$$
11,500,000
$$

Additional paid-in capital
3,650,000
27,150,000
Retained Earnings:
Unappropriated \$ 6,925,000
Retained earnings appropriated for plant expansion $\quad 1,400,000$ Accumulated other comprehensive income:

Accumulated unrealized gain due to increase
In value of marketable securities available for sale 750,000
Accumulated translation adjustment $(515,000)$

235,000

$$
35, \overline{710,000}
$$

Less: Treasury stock, 60,000 shares at cost
780,000
Total Stockholders' Equity

## Earnings Per Share

## Reporting Earnings Per Share

Simple capital structure

- No potentially dilutive securities outstanding
- Present basic EPS only

Complex capital structure

- Potentially dilutive securities outstanding
- Dual presentation of EPS - basic EPS \& diluted EPS

Potentially dilutive securities - Securities that can be converted into common shares

- Convertible bonds and convertible preferred stock
- Options, rights, and warrants


## Basic EPS

## Numerator - Income Available to Common Stockholders

Income from continuing operations

- Dividends declared on noncumulative preferred stock
- Current dividends on cumulative preferred stock (whether or not declared)
= Income from continuing operations available to common stockholders
$\pm$ Discontinued operations
$\pm$ Extraordinary items
= Net income available to common stockholders


## Denominator

Weighted-average common shares outstanding on the balance sheet date

## Diluted EPS

Adjust numerator \& denominator for dilutive securities

- Assume conversion into common shares
- Dilutive if EPS decreases


## Convertible Preferred Stock

Dilutive if basic EPS is greater than preferred dividend per share of common stock obtainable:

- Add preferred dividends back to numerator
- Add common shares that preferred would be converted into to denominator


## Convertible Bonds

Dilutive if basic EPS is greater than interest, net of tax, per share of common stock obtainable:

- Add interest, net of tax, to numerator
- Add common shares that bonds would be converted into to denominator


## Options, Rights, \& Warrants

Dilutive when market price exceeds exercise price (proceeds from exercise)
The treasury stock method is applied

$$
\begin{aligned}
& \begin{array}{l}
\text { Number of options } \longrightarrow \\
\times \text { Exercise price }
\end{array} \\
& =\text { Number of options } \\
& \div \text { Aveceeds from exercise } \\
& =\text { Shares reacquired with proceeds } \longrightarrow
\end{aligned}
$$

Calculation done on quarter-by-quarter basis

## Presentation of EPS Information

## Income Statement

Simple capital structure - Basic EPS only

- Income from continuing operations
- Net income

Complex capital structure - Basic \& Diluted EPS

- Income from continuing operations
- Net income

Additional Disclosures (income statement or notes)

- Discontinued operations
- Extraordinary items


## Methods of Reporting Investments

## Method

Consolidation
Equity

Cost

## Special Rules

(FASB \#115)

Conditions
Majority owned (> 50\%)
Less than majority owned
Ability to exercise significant influence
Ownership generally $\geq 20 \%$
Less than majority owned
Unable to exercise significant influence
Ownership generally < 20\%
Not an investment in marketable securities
Less than majority owned
Unable to exercise significant influence
Ownership generally $<20 \%$
Investment in marketable securities

## Equity Method

## Carrying Value of Investment

Cost

+ Earnings
- Dividends
= Carrying value of investment


## Earnings

Income reported by investee
$\times$ \% of ownership
= Unadjusted amount

- Adjustments
$=$ Investor's share of investee's earnings


## Equity Method

## Adjustments to Earnings

1) Compare initial investment to FMV of underlying net assets
2) Portion of excess may be due to inventory

Deduct from income in the first year (unless inventory not sold during year)
3) Portion of excess may be due to depreciable asset

Divide by useful life and deduct from income each year
4) Portion of excess may be due to land

No adjustment (unless land sold during year)
5) Remainder of excess attributed to goodwill

Test each year for impairment and deduct from income if it has occurred

|  | $\begin{gathered} \text { Focus on } \\ \text { Investments - Module } \mathbf{1 4} \end{gathered}$ | 160 |
| :---: | :---: | :---: |

## Equity Method

| Application of Equity Method |  |
| :--- | ---: |
| Information given: | $25 \%$ |
| Investment | $\$ 400,000$ |
| Cost | $\$ 900,000$ |
| Book value of investee's underlying net assets |  |
| Undervalued assets: | 100,000 |
| $\quad$ Inventory | 400,000 |
| $\quad$ Building (20 yrs) | 200,000 |
| $\quad$ Land | $\$ 225,000$ |
| Investee's unadjusted income | $\$ 40,000$ |

## Application of Equity Method (continued)

Information Applied
Value of investment - \$400,000 $\div 25 \%$
Book value of underlying net assets Difference
Reconciliation of difference Inventory
Building
\$ 100, 000
Land
400,000
\$1, 6000, 000

Total
Earnings
Income reported by investee

- Adjustments
$=$ Adjusted amount
$\times$ \% of ownership
= Investor's share
$\mathbf{2 0 0 , 0 0 0}$
$\$ \underline{700,000}$
$\div 20$
Earnings adjustment
\$100, 000
20,000
$\$ 120,000$



## Changes to and from the Equity Method

Equity Method to Cost Method

- No longer able to exercise significant influence
- Usually associated with sale of portion of investment
- Apply equity method to date of change
- Apply cost method from date of change

Cost Method to Equity Method

- Now able to exercise significant influence
- Usually associated with additional purchase
- Apply equity method retroactively
- Affects retained earnings and investment for prior periods

Marketable Securities

|  | Trading Securities | Available for Sale | Held to Maturity |
| :---: | :---: | :---: | :---: |
| Types of securities in classification | Debt or equity | Debt or equity | Debt only |
| Balance sheet classification | Current | Current or noncurrent | Noncurrent until maturity |
| Carrying amount on balance sheet | Fair market value | Fair market value | Cost, net of amortization |
| Unrealized gains and losses | Income statement | Equity section of balance sheet | Not applicable |
| Realized gains and losses <br> * Excluded from net | Income statement cluded in comp | Income statement <br> sive income | Should not occur |
|  | Focu <br> vestments | odule 14 | 164 |

## Life Insurance

## Payment of premium:

Cash surrender value
of life insurance (increase in value)
xxx
Insurance expense (plug)
xxx
Cash (premium amount)
xxx

Death of insured:
Cash (face of policy)
xxx
Cash surrender value of
life insurance (balance) xxx
Gain (difference) xxx

## Statement of Cash Flows

## Purpose of statement

Summarizes sources and uses of cash and cash equivalents
Classifies cash flows into operating, investing, and financing activities

## Cash Equivalents

Easily converted into cash (liquid)
Original maturity $\leq 3$ months

## Format of statement

Cash provided or (used) by operating activities
$\pm$ Cash provided or (used) by investing activities
$\pm$ Cash provided or (used) by financing activities
$=$ Net increase or (decrease) in cash \& cash equivalents

+ Beginning balance
= Ending balance


## Operating Activities

Direct Method - Top to bottom
Collections from customers
Direct Method - Top to bottom
Net income

+ Interest \& dividends received
+ Proceeds from sale of trading securities
+ Other operating cash inflows
- Payments for merchandise
- Payments for expense
- Payments for interest
- Payments for income taxes
- Payments to acquire trading securities
- Other operating cash outflows
$=\quad$ Cash flows from operating activities


Must be equal
Noncash revenues -
Noncash expenses +
Gains on sales of investments Losses on sales of investments +
Gains on sales of plant assets -
Losses on sales of plant assets +
Increases in current assets -
Decreases in current assets +
Decreases in current liabilities Increases in current liabilities +
Cash flows from operating activities =

Statement of Cash Flows - Module 15

## Components of Direct Method

| Collections from customers (plug) | xxx |  |
| :--- | :---: | :---: |
| Increase in accounts receivable (given) | xxx |  |
| $\quad$ Decrease in accounts receivable (given) |  | xxx |
| $\quad$ Sales (given) | xxx |  |
| Increase in inventory (given) | xxx |  |
| Decrease in accounts payable (given) | xxx |  |
| Cost of sales (given) |  | xxx |
| $\quad$ Decrease in inventory (given) |  | xxx |
| Increase in accounts payable (given) | xxx |  |

## Adjustments Under Indirect Method

Increase in accumulated depreciation

+ Accumulated depreciation on assets sold
$=$ Addition to income for depreciation expense
Equity in earnings from equity method investment
- Dividends received from equity method investee
$=$ Reduction to income for equity in earnings (should equal increase in investment)


## Investing Activities

Principal collections on loans receivable

+ Proceeds from sale of investments (except trading securities)
+ Proceeds from sale of plant assets
- Loans made
- Payments to acquire investments (except trading securities)
- Payments to acquire plant assets
$=$ Cash flows from investing activities


## Financing Activities

Proceeds from borrowings

+ Proceeds from issuing stock
- Debt principal payments
- Payments to reacquire stock
- Payments for dividends
$=$ Cash flows from financing activities


## Other Disclosures

With direct method:
Reconciliation of net income to cash flows from operating activities (indirect method)
With indirect method:
Payments for interest
Payments for income taxes
With all cash flow statements:
Schedule of noncash investing and financing activities

## Business Combinations

Consolidation is required whenever the entity has control over another entity.

- Investor is identified as parent and investee as subsidiary in control situations
- Ownership of majority of voting stock generally indicates control
- Consolidation is required even if control situation is temporary
- Consolidation is not appropriate when a majority shareholder doesn't have effective control:
- Company is in bankruptcy or reorganization
- Foreign exchange controls limit power to keep control of subsidiary assets
- All consolidations are accounted for as purchases


## Accounting for a Purchase

## Combination - Records combined

Assets (at fair market values) xxx
Goodwill (plug)
Liabilities (at fair market values) xxx
Stockholders' equity (2 steps) * xxx
OR
Cash (amount paid) xxx

* Credit common stock for par value of shares issued and credit APIC for difference between fair value and par value of shares issued


## Combination - Records not combined

Investment (fair value of net assets) xxx
Stockholders' equity (same 2 steps) xxx
OR
Cash (amount paid) xxx

## Earnings

Consolidated net income:
Parent's net income

+ Subsidiary's net income from date of acquisition
$\pm$ Effects of intercompany transactions
- Depreciation on difference between fair value and carrying value of sub's assets
- Impairment losses on goodwill (if applicable)
= Consolidated net income


## Retained Earnings - Year of Combination

Beginning retained earnings - Parent's beginning balance

+ Consolidated net income
- Parent's dividends for entire period
$=$ Ending retained earnings


## Consolidations

Eliminate the Investment
Example 1 - Date of combination - no goodwill or minority interest
Inventory (excess of fair value over
carrying value) ..... xxx
Land (excess of fair value over carrying value) ..... xxx
Depreciable assets (excess of fair value over Carrying value) ..... xxx
Common stock (sub's balance) ..... xxx
APIC (sub's balance) ..... XXX
Retained earnings (sub's balance) ..... xxxInvestmentXXX

```
Example 2 - Date of combination - no goodwill with minority interest
Inventory (excess of fair value over
    carrying value) xxx
Land (excess of fair value over carrying value) xxx
Depreciable assets (excess of fair value over
    carrying value) xxx
Common stock (sub's balance) XXX
APIC (sub's balance) XXX
Retained earnings (sub's balance) XXX
Minority interest (sub's total stockholders'
equity \(\times\) minority interest percentage) \(\quad\) xxx
Investment xxx
```

Focus on
Consolidated Statements - Module 16
Example 3 - Date of combination - goodwill and minority interest
Inventory (excess of fair value over carrying value) ..... XXX
Land (excess of fair value over carrying value) ..... xxx
Depreciable assets (excess of fair value overcarrying value)xxx
Goodwill (plug) ..... xxx
Common stock (sub's balance) ..... xxx
APIC (sub's balance) ..... xxX
Retained earnings (sub's balance) ..... xxX
Minority interest (sub's total stockholders'equity $\times$ minority interest percentage) xxx
Investment ..... xxx
Calculating goodwill - 4 steps1) Determine amount paid for acquisition2) Compare to book value of sub's underlying net assets3) Subtract difference between fair values and book values of sub's assets4) Remainder is goodwill

Additional entries - after date of acquisition

- Debit cost of sales instead of inventory for fair market value adjustment
- Recognize depreciation on excess of fair value over carrying value of depreciable assets
- Recognize impairment of goodwill (if FMV of goodwill is less than carrying amount)
Eliminating Entries
Intercompany Sales of Inventory
Eliminate gross amount of intercompany sales

Sales ..... xxx
Cost of sales ..... xxx
Eliminate intercompany profit included in ending inventoryCost of salesxxxInventoryxxx
Eliminate unpaid portion of intercompany sales
Accounts payable ..... xxx
Accounts receivable ..... xxx

## Intercompany Sales of Property, Plant, \& Equipment

Eliminate intercompany gain or loss
Gain on sale (amount recognized) xxx
Depreciable asset
xxx
Adjust depreciation
Accumulated depreciation (amount of gain divided by remaining useful life)
xxx
Depreciation expense
xxx

## Intercompany Bond Holdings

Eliminate intercompany investment in bonds
Bonds payable (face amount of bonds acquired) xxx Bond premium or discount (amount related to Intercompany bonds)
xxx or xxx
Gain or loss on retirement (plug) xxx or xxx
Investment in bonds (carrying value) xxx

## Investments in Derivative Securities

Derivatives - Derive their value from other assets. Examples:

- Stock option - value based on underlying stock price
- Commodity futures contract - value based on underlying commodity price

Initially recorded at cost (or allocated amount) - Reported on balance sheet at fair value

- Trading security - unrealized gains and losses on income statement
- Available for sale security - unrealized gains and losses reported as other comprehensive income in stockholders' equity


## Characteristics of Derivatives

Settlement in cash or assets easily convertible to cash (such as marketable securities)
Underlying index on which value of derivative is based (usually the price of some asset)
No net investment at time of creation:

- Futures-based derivative involves no payments at all when derivative created
- Such a derivative must be settled on settlement date in all cases
- Options-based derivative involves small premium payment when derivative created
- Option holder has right not to settle derivative if results would be unfavorable
- Payment of premium when derivative created is price of this option.


## Use of Derivatives

Speculative - Attempt to profit from favorable change in underlying index

- Gain or loss on change in fair value reported in ordinary income

Fair Value Hedge - Attempt to offset risk of existing asset, liability, or commitment

- Hedge must move in opposite direction to offsetting item
- Movement must be between $80 \%$ and $125 \%$ of offsetting item to be effective hedge
- Gain or loss on change in derivative reported in ordinary income
- Should approximately offset loss or gain on item being hedged

Cash Flow Hedge - Attempt to offset risk associated with future expected transactions

- Gain or loss excluded from ordinary income until offsetting future event affects income
- Reported as part of other comprehensive income until that time


## Financial Instruments

Risk of loss:
Market risk - Losses due to fluctuations in market place
Credit risk - Losses due to nonperformance of other party
Concentration of credit risk - Several instruments have common characteristics resulting in similar risks

## Required Disclosures

- Off-balance-sheet credit risk - credit risk that is not already reflected as an accrued contingency
- Concentration of credit risk


## Segment Reporting

## Definition of Segments

Segments identified using management approach:

- Component earns revenue and incurs expenses
- Separate information is available
- Component is evaluated regularly by top management


## Reportable Segments - 3 Tests

Revenue test - Segment revenues $\geq 10 \%$ of total revenues
Asset test - Segment identifiable assets $\geq 10 \%$ of total assets
Profit or loss test

- Combine profits for all profitable segments
- Combine losses for all losing segments
- Select larger amount
- Segments profit or loss $\geq 10 \%$ of larger amount


## Disclosures for Reportable Segments

Segment profit or loss

- Segment revenues include intersegment sales
- Deduct traceable operating expenses and allocated indirect operating expenses
- Do not deduct general corporate expenses

Segment revenues
Segment assets
Interest revenue \& expense
Depreciation, depletion, \& amortization
Other items

## Partnership

## Admitting a Partner

Calculating the Contribution - No Goodwill or Bonus
Partnership equity (before new partner's contribution)
$\div 100 \%$ - new partner's percentage
= Total capital after contribution
$\times$ New partner's percentage
$=$ Amount to be contributed
Journal entry:
Cash xxx
New partner's equity xxx

## Excess Contribution by New Partner - Bonus Method

## Partnership equity (before new partner's contribution)

+ New partner's contribution
New partner's contribution
= Total capital after contribution
$\times$ New partner's percentage
= New partner's capital
- New partner's capital
$=$ Bonus to existing partners
Journal entry:
Cash (new partner's contribution) XXX
Capital, new partner (amount calculated)
xxx
Capital, existing partners (bonus amount)
xxx
Bonus is allocated to existing partners using their $P \& L$ percentages

```
Excess Contribution by New Partner - Goodwill Method
    New partner's contribution
    < New partner's percentage
    = Total capital after contribution
    - Total capital of partnership (existing capital + contribution)
    = Goodwill to existing partners
Journal entry:
\begin{tabular}{lll} 
Cash (new partner's contribution) & xxx & \\
Capital, new partner (new partner's contribution) & & xxx \\
\begin{tabular}{c} 
Goodwill (amount calculated) \\
Capital, existing partners
\end{tabular} & & xxx
\end{tabular}
```

Goodwill is allocated to existing partners using their $P$ \& $L$ percentages

## Contribution Below New Partner's Capital - Bonus Method

Partnership equity (before new partner's contribution)

+ New partner's contribution
= Total capital after contribution
$\times$ New partner's percentage
= New partner's capital
- New partner's contribution
$=$ Bonus to new partner
Journal entry:
Cash (new partner's contribution) xxx
Capital, existing partners (bonus amount) xxx
Capital, new partner (amount calculated) xxx
Bonus is allocated to existing partners using their $P$ \& L percentages


## Contribution Below New Partner's Capital - Goodwill Method

Partnership equity (before new partner's contribution)
$\div 100 \%$ - new partner's percentage
= Total capital after contribution
$\times$ New partner's percentage
= New partner's capital

- New partner's contribution
= Goodwill
Journal entry:
Cash (new partner's contribution) xxx
Goodwill (amount calculated) xxx
Capital, new partner (total)
xxx


## Retiring a Partner

Payment Exceeds Partner's Balance - Bonus Method
Capital, retiring partner (existing balance) xxx

Capital, remaining partners (difference - bonus) xxx
Cash (amount paid)
XXX
Bonus is allocated to existing partners using their $P$ \& L percentages

## Payment Exceeds Partner's Balance - Goodwill Method

## Amount paid to retiring partner

$\div$ Retiring partner's percentage
$=$ Value of partnership on date of retirement

- Partnership equity before retirement
= Goodwill
Journal entries:
Goodwill (amount calculated) xxx
Capital, all partners xxx
Goodwill is allocated according to the partners' $P$ \& L percentages
Capital, retiring partner xxx
Cash (amount paid to retiring partner)


## Partnership Liquidation - 5 steps

1) Combine each partner's capital account with loans to or from that partner
2) Allocate gain or loss on assets sold to partners
3) Assume remaining assets are total loss - allocate to partners
4) Eliminate any partner's negative balance by allocating to remaining partners using their P \& L percentages
5) Resulting balances will be amounts to be distributed to remaining partners

## Foreign Currency

## Foreign Currency Transactions

Receivable or payable

- Record at spot rate
- Adjust to new spot rate on each financial statement date

Journal entry:

Receivable or payable
Foreign currency transaction gain
OR
Foreign currency transaction loss
Receivable or payable
xxX
xxx
xxx
xxx

Gain or loss $=$ Change in spot rate $\times$ Receivable or payable (in foreign currency)

## Forward Exchange Contracts

All gains and losses measured using forward rate - rate expected to be in effect when settled
Hedge - Protection against change in exchange rate related to existing receivable or payable

- Change in forward rate results in gain or loss on hedge
- This will approximately offset loss or gain on change in spot rate on receivable or payable


## Special hedge contracts:

- Hedge of foreign currency investment - gains or losses reported in equity - excluded from net income but included in comprehensive income
- Hedge of foreign commitment - gain or loss deferred and offset against transaction

Speculative contracts - Entered into in anticipation of change in rate

- Change in forward rate results in gain or loss


## Foreign Currency Financial Statements

## Conversion to U.S. \$:



Functional Currency - Currency of primary economic environment in which entity operates.

1) Functional currency = local currency

- Translate from local currency to U.S. \$

2) Functional currency = U.S. \$

- Remeasure from local currency to U.S. \$

3) Functional currency neither local currency nor U.S. \$

- Remeasure from local currency to functional currency
- Translate from functional currency to U.S. \$


## Remeasurement and Translation

## Remeasurement

Historical rate:
Nonmonetary assets and liabilities
Contributed capital accounts
Revenue and expense accounts
Current rate:
All other items
Difference:
Remeasurement gain or loss
Reported on income statement

Translation
Rate at balance sheet date:
Assets and liabilities
Rate in effect on transaction date
(or weighted-average rate for period):
Revenues and expenses
Gains and losses
Difference:
Translation gain or loss
Component of stockholders' equity
Excluded from net income
Included in comprehensive income

## Interim Financial Statements

## General Rules

1) Revenues \& expenses recognized in interim period earned or incurred
2) Same principles as applied to annual financial statements

## Special Rules

## Inventory Losses

Expected to recover within annual period

- Not recognized in interim period
- Offset against recovery in subsequent interim period
- Recognized when clear that recovery will not occur

Not expected to recover within annual period

- Recognized in interim period
- Recovery in subsequent interim period recognized


## Income Taxes

Estimate of rate that applies to annual period

## Other Items

Property taxes - allocated among interim periods
Repairs \& maintenance

- Generally recognized in interim period when incurred (including major repairs)
- Allocated to current \& subsequent interim periods when future benefit results

Disposal of a segment - recognized in interim period in which it occurs
Extraordinary item - recognized in interim period in which it occurs

## Personal Financial Statements

## Basic Statements

Statement of Financial Condition
Statement of Changes in Net Worth

## Principles Applied

Assets \& liabilities - Reported at fair market values
Business interests - Reported as single amount
Real estate

- When operated as business - reported net of mortgage
- When not operated as business - asset and mortgage reported separately


## Retirement plans

- Contributions \& earnings on contributions by employee included
- Contributions \& earnings on contributions by employer included to extent vested


## Principles Applied (continued)

Life insurance - Cash surrender value minus borrowings against policy
Income taxes - 2 components

- Income taxes on individual's income for year to date
- Tax effect on difference between tax basis and fair values of assets and liabilities Other liabilities
- Current payoff amount, if available
- Otherwise, present value of future payments


## Governmental Accounting

Objective of governmental accounting \& reporting - accountability

- Provide useful information
- Benefit wide range of users

Governmental financial information should:

- Demonstrate operations within legal restraints imposed by citizens
- Communicate compliance with laws \& regulations related to raising \& spending money
- Demonstrate interperiod equity - current period expenditures financed with current revenues
To demonstrate full accountability for all activities, information must include:
- Cost of services
- Sufficiency of revenues for services provided
- Financial position


## Funds

Government comprised of funds - self-balancing sets of accounts - 3 categories

- Governmental
- Proprietary
- Fiduciary


## Methods of Accounting

Funds of a governmental unit use two methods of accounting

- Most funds use modified accrual accounting
- Some funds use accrual accounting


## Modified Accrual Accounting

Differs from accrual accounting:

- Focus of financial reporting is financial position \& flow of resources
- Revenues are recognized when they become available \& measurable
- Expenditures are recorded when goods or services are obtained
- Expenditures classified by object, function, or character


## Financial statements of Governmental Units

General purpose financial statements - referred to as Comprehensive Annual Financial Report (CAFR) - 5 components

- Management discussions \& analysis - Presented before financial statements
- Government-wide financial statements
- Fund financial statements
- Notes to financial statements
- Required supplementary information - Presented after financial statements and notes Users should be able to distinguish between primary government \& component units component units may be blended when either:
- Governing body of component is essentially the same as that of the primary government
- The component provides services almost exclusively for the primary government Most component units will be discretely presented


## Management Discussion \& Analysis (MD \& A)

Introduces basic financial statements \& provides analytical overview of government's financial activities

Should include:

- Condensed comparison of current year financial information to prior year
- Analysis of overall financial position and results of operations
- Analysis of balances and transactions in individual funds
- Analysis of significant budget variances
- Description of capital assets and long-term debt activity during the period
- Currently known facts, decisions, or conditions expected to affect financial position or results of operations


## Government-Wide Financial statements

Consist of:

- Statement of Net Assets
- Statement of Activities

Report on overall government

- Do not display information about individual funds
- Exclude fiduciary activities or component units that are fiduciary
- Distinction made between primary government and discretely presented component units
- Distinction made between government-type activities and business-type activities of primary government
- Government-type activities include governmental funds \& internal service funds
- Business-type activities include enterprise funds only


## Characteristics of Government-Wide Financial Statements

Use economic measurement focus for all assets, liabilities, revenues, expenses, gains, \& losses
Apply accrual basis of accounting
Revenues from exchanges or exchange-like transactions recognized in period of exchange
Revenues from nonexchange transactions:

- Derived tax revenues imposed on exchange transactions recognized as asset \& revenues when exchange occurs
- Imposed nonexchange revenues imposed on nongovernment agencies recognized as asset when government has enforceable claim \& as revenues when use of resources required or permitted
- Government-mandated nonexchange transactions provided by one level of government for another recognized as asset \& revenue (or liability \& expense) when all eligibility requirements met
- Voluntary nonexchange transactions recognized similarly to government-mandated nonexchange transactions


## Statement of Net Assets

Presents assets \& liabilities

- Assets \& liabilities in order of liquidity
- Current \& noncurrent portions of liabilities reported
- Assets - Liabilities = Net assets

3 categories of net assets

- Net assets invested in capital assets, net of related debt - All capital assets, including restricted assets, net of depreciation \& reduced by bonds, mortgages, notes, \& other borrowings
- Restricted net assets - Assets with externally imposed restrictions on use distinguishing major categories of restrictions
- Unrestricted net assets - Remainder


## Format of Statement of Net Assets

Assets, liabilities, \& net assets reported for primary government

- Separate columns for government-type activities \& business-type activities
- Amounts combined in total column

Assets, liabilities, \& net assets also reported for component units

- Amounts reported similarly as those for primary government
- Column is not combined with totals for primary government


## Statement of Activities

Self-financing activities distinguished from those drawing from general revenues
For each government function

- Net expense or revenue
- Relative burden

Governmental activities presented by function
Business-type activities presented by business segment
Items reported separately after net expenses of government's functions:

- General revenues
- Contributions to term \& permanent endowments
- Contributions to permanent fund principal
- Special items - those that are unusual or infrequent
- Extraordinary items - those that are unusual and infrequent
- Transfers


## Items on Statement of Activities

Depreciation - indirect expense charged to function with asset

- Allocated among functions for shared assets
- Not required to be allocated to functions for general capital assets
- Not allocated to functions for general infrastructure assets

Revenues classified into categories

- Amounts received from users or beneficiaries of a program always program revenues
- Amounts received from parties outside citizenry are general revenues if unrestricted or program revenues if restricted to specific programs
- Amounts received from taxpayers always general revenues
- Amounts generated by the government usually general revenues
- Contributions to term \& permanent endowments, contributions to permanent fund principal, special \& extraordinary items, \& transfers reported separately


## Format of Statement of Activities

Information for each program or function reported separately:

- Expenses
- Charges for services
- Operating grants \& contributions
- Capital grants \& contributions

Difference between expenses \& revenues reported for each program

- Equal to change in net assets
- Separated into columns for governmental activities and business-type activities
- Combined into a total column

Remaining items (general revenues, grants \& contributions, special \& extraordinary items, \& transfers) reported separately below functions \& programs

- Divided into governmental activities \& business-type activities with total column
- Provides change in net assets \& ending net assets with same amounts as Statement of Net Assets
- Separate column for component units not combined into total


## Additional Characteristics of Government-Wide Financial

## Statements

Internal Amounts

- Eliminated to avoid doubling up
- Interfund receivables \& payables eliminated
- Amounts due between government-type \& business-type activities presented as offsetting internal balances
Capital assets include the following:
- Land, land improvements, \& easements
- Buildings \& building improvements
- Vehicles, machinery, \& equipment
- Works of art \& historical treasures
- Infrastructure
- All other tangible \& intangible assets with initial useful lives > a single period


## Accounting for Capital Assets \& Infrastructure

Capital assets reported at historical cost

- Includes capitalized interest \& costs of getting asset ready for intended use
- Depreciated over useful lives
- Inexhaustible assets not depreciated
- Infrastructure assets may be depreciated under modified approach

Infrastructure includes:

- Capital assets with longer lives than most capital assets that are normally stationary
- Roads, bridges, tunnels, drainage systems, water \& sewer systems, dams, \& lighting systems
Eligible infrastructure assets not depreciated
- Must be part of network or subsystem maintained \& preserved at established condition levels
- Additions \& improvements increasing capacity or efficiency capitalized
- Other expenditures expensed


## Fund Financial Statements

Governmental funds include:

- General fund
- Special revenue funds
- Capital projects funds
- Debt service funds
- Permanent funds

Proprietary funds include:

- Enterprise funds
- Internal service funds

Fiduciary funds include:

- Pension \& other employee benefit trust funds
- Investment trust funds
- Private purpose trust funds
- Agency funds


## Financial Statements of Governmental Funds

Statements of governmental funds

- Balance sheet
- Statement of revenues, expenditures, and changes in fund balances

Focus is to report sources, uses, \& balances of current financial resources

- Apply modified accrual accounting
- Capital assets \& long-term debt not reported as assets or liabilities

Reports include separate columns for each major governmental fund and single column for total of all nonmajor funds:

- General fund is always major
- Others major if assets, liabilities, revenues, expenditures meet the 5\% and $10 \%$ tests:
- Fund at least $5 \%$ of "total" column in government-wide financial statements
- Fund at least $10 \%$ of "government-type" column in government-wide financial statements.


## Balance Sheet

Reports assets, liabilities, \& fund balances

- Reported separately for each major governmental fund
- Fund balances segregated into reserved \& unreserved

Total fund balances reconciled to net assets of governmental activities in government-wide financial statements

Statement of Revenues, Expenditures, \& Changes in Fund Balances
Reports inflows, outflows, and balances of current financial resources

- Reported separately for each major governmental fund
- Revenues classified by major source
- Expenditures classified by function

Format of statement:
Revenues

- Expenditures
= Excess (deficiency) of revenues over expenditures
$\pm$ Other financing sources and uses
$\pm$ Special and extraordinary items
= Net change in fund balances
+ Fund balances - beginning of period
= Fund balances - end of period
Change in fund balances reconciled to change in net assets of governmental activities in government-wide financial statements

Governmental Accounting - Module 19

## Financial Statements of Proprietary Funds

Statements of proprietary funds

- Statement of net assets
- Statement of Revenues, Expenses, and Changes in Fund Net Assets
- Statement of Cash Flows

Preparation of statements

- Emphasis is measurement of economic resources
- Prepared under accrual basis of accounting

Reports include separate column for each enterprise fund meeting $5 \%$ and $10 \%$ tests:

- Fund at least $5 \%$ of "total" column in government-wide financial statements
- Fund at least $10 \%$ of "business-type" column in government-wide financial statements.
- Total of non-major enterprise funds in a single column
- Total of all internal service funds in a single column


## Statement of Net Assets

Prepared in classified format

- Current \& noncurrent assets \& liabilities distinguished
- Net assets reported in same categories as used in government-wide financial statements


## Statement of Revenues, Expenses, \& Changes in Fund Net Assets

Amounts should be the same as net assets \& changes in net assets shown for business-type activities in government-wide financial statements

- Revenues reported by major source
- Operating \& nonoperating revenues \& expenses distinguished
- Nonoperating revenues \& expenses reported after operating income Format of statement of revenues, expenses, \& changes in fund net assets

Operating revenues (listed by source)

- Operating expenses (listed by category)
= Operating income or loss
$\pm$ Nonoperating revenues \& expenses
= Income before other revenues, expenses, gains, losses, \& transfers
$\pm$ Capital contributions, additions to permanent \& term endowments, special \& extraordinary items, \& transfers
= Increase or decrease in net assets
$+\quad$ Net assets - beginning of period
= Net assets - end of period


## Statement of Cash Flows

Shows sources \& uses of cash by major classification

- Operating activities reported using direct method
- Noncapital financing activities
- Capital \& related financing activities
- Investing activities

Operating income reconciled to cash flows from operating activities (indirect method)

## Financial Statements of Fiduciary Funds

Statements of fiduciary funds

- Statement of Net Assets
- Statement of Changes in Fiduciary Net Assets

Focus of fiduciary financial statements

- Emphasis on measurement of economic resources
- Prepared using accrual basis of accounting

Report includes separate column for each major fiduciary fund and column for total of all nonmajor fiduciary funds.

- Selection of major funds based on judgment of entity management
- No $5 \%$ and $10 \%$ tests since fiduciary funds weren't included in government-wide financial statements


## Notes to Government Financial Statements

Intended to provide information needed for fair presentation of financial statements
Notes will include:

- Summary of significant accounting policies
- Disclosure about capital assets \& long-term liabilities
- Disclosure about major classes of capital assets
- Disclosure about donor-restricted endowments
- Segment information


## Required Supplementary Information

Presented in addition to MD \& A
Consists of:

- Schedule of Funding Progress for all Pension Trust Funds
- Schedule of Employer Contributions to all Pension Trust Funds
- Budgetary comparison schedules for governmental funds (reporting basis is same as that chosen by legislative body for budget, and not necessarily that used for financial statements)
- Information about infrastructure reported under the modified approach
- Claims development information for any public entity risk pools


## Governmental Funds

A governmental unit maintains 5 types of governmental funds

- General fund - all activities not accounted for in another fund
- Special revenue funds - account for revenues earmarked to finance specific activities
- Capital projects funds - account for construction of fixed assets
- Debt service fund - accumulates resources for payment of general obligation debts of other governmental funds
- Permanent funds - account for resources that are legally restricted


## General Fund Accounting

A governmental unit will have one general fund

- Annual budget is recorded at the beginning of the year
- Revenues, expenditure, \& other financing sources \& uses are recorded during the year
- Adjustments are made at the balance sheet date
- Budgetary accounts are closed at year-end


## Beginning of Year

Governmental unit adopts annual budget for general fund
Budget recorded with following entry:

| Estimated revenues control | xxx |  |  |
| :--- | :--- | :--- | :--- |
| Estimated other financing sources | xxx |  |  |
| Budgetary fund balance | xxx | or | xxx |
| Appropriations |  |  | xxx |
| Estimated other financing uses |  |  | xxx |

Estimated revenues control = revenues expected to be collected during the year
Estimated other financing sources $=$ estimate of proceeds from bond issues \& operating transfers in

Budgetary fund balance = plug - amount required to balance the entry
Appropriations = expenditures expected during the year
Estimated other financing uses $=$ expected operating transfers out

## During the Year

Revenue cycle consists of billing certain revenues, such as property taxes, collecting billed revenues, writing off uncollectible billings, \& collecting unbilled revenues
Billing of revenues:
Taxes receivable xxx
Allowance for estimated uncollectible taxes $x x x$
Deferred revenues xxx
Revenues control xxx
Taxes receivable = amount billed
Allowance for estimated uncollectible taxes = billings expected to be uncollectible

- This amount may be adjusted upward or downward during the year
- Offsetting entry will be to revenues control

Deferred revenues $=$ portion of billed taxes expected to be collected more than 60 days after close of current year
Revenues control = portion of billed taxes expected to be collected during the current year or within 60 days of close

During the Year (continued)
Collecting billed revenues:
Cash xxx
Taxes receivable
xxx
Writing off uncollectible amounts:
Allowance for estimated uncollectible taxes xxx
Taxes receivable
xxx
Collecting unbilled revenues:
Cash xxx
Revenues control xxx

```
During the Year (continued)
Spending cycle consists of ordering goods & services, receiving the goods & services, and
paying for them
Ordering goods & services:
    Encumbrances control (estimated cost) xxx
        Budgetary fund balance reserved for
                encumbrances
            xxx
Receiving goods & services:
    Budgetary fund balance reserved for
        encumbrances (estimated cost) xxx
            Encumbrances control
                xxx
    Expenditures control (actual cost) xxx
            Vouchers payable
                xxx
Payment:
    Vouchers payable xxx
        Cash
            XXX

\section*{During the Year (continued)}

Other financing sources \& uses are recorded as the transactions occur:
- Proceeds of long-term debit issues are recorded as other financing sources when received
- Operating transfers to or from other funds are reported as other financing uses or sources as the funds are transferred

\section*{Adjustments at Balance Sheet Date}

Closing entry - eliminating revenues, expenditures, \& encumbrances:
\[
\begin{array}{llll}
\text { Revenues control } & \text { xxx } & & \\
\text { Unreserved fund balance (plug) } & \text { xxx } & \text { or } & \text { xxx } \\
\quad \text { Expenditures control } & & & \text { xxx } \\
\text { Encumbrances control } & & & \text { xxx }
\end{array}
\]

The remaining balance in the budgetary fund balance reserved for encumbrances is transferred to a nonbudgetary account:

Budgetary fund balance reserved for encumbrances xxx

Fund balance reserved for encumbrances
xxx
The governmental unit may decide to recognize inventory as an asset:
Inventories (increase)
xxx
Fund balance reserved for inventories xxx
or
Fund balance reserved for inventories
Inventories (decrease)

\section*{End of Year}

Budget recorded in beginning of year is reversed:
\begin{tabular}{llll} 
Appropriations & xxx & & \\
Estimated other financing uses & xxx & & \\
Budgetary fund balance & xxx & or & xxx \\
Estimated revenues control & & & xxx \\
Estimated other financing sources & & xxx
\end{tabular}

\section*{Special Revenue Fund}

Used to account for revenues that must be used for a particular purpose
- Accounting identical to general fund

\section*{Capital Projects Fund}

Used to account for construction of fixed assets
- Fund opened when project commences \& closed when project complete
- Accounting similar to general fund

Differences in accounting for capital projects fund:
1) Budgetary entries generally not made
2) Expenditures generally made under contract
- Credit contracts payable
- Credit retention payable for deferred payments

\section*{Debt Service Fund}

Used to account for funds accumulated to make principal \& interest payments on general obligation debts
- Expenditures include principal \& interest payable in current period
- Resources consist of amounts transferred from other funds (other financing sources) \& earnings on investments (revenues)

Amounts used for interest payments separated from amounts used for principal payments
\[
\text { Cash for interest } \quad \text { xxx }
\]

Cash for principal xxx
Other financing sources
xxx

\section*{Proprietary Funds}

Account for governmental activities conducted similarly to business enterprises
Enterprise fund:
- Used to account for business-type activities
- Uses accrual basis accounting
- Earned income recognized as operating revenues
- Shared taxes reported as nonoperating revenues

Internal service fund:
- Used to account for services provided to other governmental departments on a fee or cost-reimbursement basis
- Resources come from billings to other funds
- Reported as operating revenues

\section*{Fiduciary Funds}

\section*{Pension Trust Fund}

Accounts for contributions made by government \& employees using accrual accounting
Additional information in notes and supplementary information following notes will include:
- Description of plan and classes of employees covered
- Summary of significant accounting policies
- Information about contributions including description of how contributions are determined and required contribution rates of plan members
- Information about legally required reserves at reporting date

\section*{Investment Trust Fund}

Accounts for assets received from other governments units to be invested on their behalf.
- Uses accrual accounting

\section*{Private Purpose Trust Fund}

Accounts for resources held on behalf of private persons or organizations.
- Uses accrual accounting

\section*{Agency Fund}

Accounts for money collected for various funds, other governments, or outsiders
- Includes only balance sheet accounts
- Assets always equal liabilities
- Uses modified accrual accounting

\section*{Interfund Transactions}

Nonreciprocal transfers are transfers of resources from one fund to another without any receipts of goods or services, such as a transfer of money from the general fund to a capital projects fund
Paying fund:
Other financing uses control xxx
Cash
xxx
Receiving fund:
Cash xxx
Other financing sources control xxx

\section*{Interfund Transactions (continued)}

Reciprocal transfers occur when one fund acquires goods or services from another in a transaction similar to one that would occur with outsiders

Paying fund:
Expenditures control or Expenses xxx
Cash XXX
Receiving fund:
Cash
xxx
Revenues control
XXX
Reimbursements occur when one fund makes payments on behalf of another fund
Reimbursing fund:
Expenditures control or Expenses xxx
Cash
XXX
Receiving fund:
Cash xxx
Expenditures control or Expenses
XXX

Interfund Transactions (continued)
Loans may be made one fund to another
Lending fund:
Due from other fund (fund identified) xxx
Cash
XXX
Receiving fund:
Cash xxx
Due to other fund (fund identified) xxx

\section*{Solid Waste Landfill Operations}

Environmental Protection Agency imposes requirements on solid waste landfills
- Procedures for closures
- Procedures for postclosure care

Procedures represent long-term obligations accounted for as long-term debt
- Costs to be incurred by governmental funds accounted for in general long-term debt account group
- Expenditures in governmental funds reduce general long-term debt account group balances
- Costs to be incurred by proprietary funds accounted for directly in funds
- Costs associated with closure and postclosure procedures accounted for during periods of operation

\section*{Accounting for Nonprofit Entities}

\section*{Financial Statements of Not-for-Profit Organizations}

All not-for-profit organizations must prepare at least 3 financial statements
Not-for-profit organizations include:
- Hospitals
- Colleges \& universities
- Voluntary health \& welfare organizations (VHW)

Required financial statements for all types include:
- Statement of Financial Position
- Statement of Activities
- Statement of Cash Flows

VHWs must also prepare a Statement of Functional Expenses

\section*{Statement of Financial Position}

Includes assets, liabilities, \& net assets
- Unrestricted net assets - available for general use, including those set aside by board of trustees
- Temporarily restricted net assets - donated by outside party \& restricted to specific purpose
- Permanently restricted net assets - donated by outside party \& required to be invested with earnings restricted or unrestricted

\section*{Statement of Financial Position (continued)}

Not-for-Profit Company
Statement of Financial Position
December 31, 20X2
Assets:
    Cash 100
    Marketable securities 300
    Accounts receivable, net 40
    Inventory 120
    \(P, P, \& E \quad \underline{80}\)
    Total assets \(\underline{\underline{640}}\)
Liabilities:
Accounts payable ..... 50
Notes payable ..... 100
Bonds payable ..... 100
Total liabilities ..... \(\underline{250}\)
Net assets:
Unrestricted ..... 45
Temporarily restricted ..... 305
Permanently restricted ..... 40
Total net assets ..... 390
Total liabilities \& net assets ..... \(\underline{640}\)

\section*{Statement of Activities for NPO}

Similar to income statement
- Reports revenues, gains, expenses, \& losses
- Also reports temporarily restricted assets released from restriction
- Categorized activities among unrestricted, temporarily restricted, \& permanently restricted to provide change in net assets for each
- Change added to beginning balance to provide ending net assets for each category

Expenses classified by:
- Object - nature of item or service obtained
- Function - program or activity to which attributed
- Character - period or periods benefited from payments
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Statement of Activities} & \multicolumn{2}{|l|}{\begin{tabular}{l}
(continued) \\
Not-for-Profit Company Statement of Activities For Year Ended December 31, 20X2
\end{tabular}} & \multirow[b]{2}{*}{Temporarily Restricted} & \multirow[b]{2}{*}{Permanently Restricted} \\
\hline & Total & Unrestricted & & \\
\hline Revenues \& gains & & & & \\
\hline Donations & 665 & 265 & 360 & 40 \\
\hline Investment income & 10 & 10 & & \\
\hline Total revenues \& gains & 675 & 275 & 360 & 40 \\
\hline Net assets released from restriction & & & & \\
\hline Research restrictions & & 100 & (100) & \\
\hline Time restrictions & & & & \\
\hline Property restrictions & & 20 & (20) & \\
\hline Total net assets released from restriction & & 120 & (120) & \\
\hline Expenses \& losses & & & & \\
\hline Depreciation & (10) & (10) & & \\
\hline Program expenses & (190) & (190) & & \\
\hline General \& administrative & (85) & (85) & & \\
\hline Salaries & (70) & (70) & & \\
\hline Total expenses \& losses & (355) & (355) & & \\
\hline Change in net assets & 320 & 40 & 240 & 40 \\
\hline Net assets at December 31, 20X1 & 70 & 5 & 65 & \\
\hline Net assets at December 31, 20X2 & 390 & 45 & 305 & 40 \\
\hline
\end{tabular}

\section*{Statement of Cash Flows for NPO}

Similar to statement of cash flows under GAAP
- Special treatment for donated assets restricted for long-term purposes
- Classified as cash flows from financing activities

\section*{Statement of Functional Expenses}

Classifies expenses into program services \& support services
- Program services - expenses directly related to organization's purpose
- Support services - expenses necessary, but not directly related to organization's purpose such as fund-raising \& administrative expenses
Expenses classified by (similar to statement of activities):
- Object
- Nature
- Character

\section*{Contributions Made to and Received by Not-for-Profit Organizations}

In general, contributions are income to a not-for-profit organization
- Those that are part of the major, ongoing, \& central operations are revenues
- Those that are not are gains

Unrestricted cash donations:

Cash
Donations (unrestricted funds)
Permanently restricted donations:
Cash
Donations (permanently restricted funds) xxx
xxx
Donated services:
Program expense (fair market value)
xxx
Donations (unrestricted funds)
xxx
xxx
xxx

\section*{Contributions Made to and Received by Not-for-Profit Organizations (continued)}

Cash donations restricted for a specific purposes: When made:

Cash
XXX
Donations (temporarily restricted funds)
When used:
Temporarily restricted net assets
Unrestricted net assets
Expense
Cash
XXX
XXX
\(X X X\)

XXX
Cash donated for purchase of property:
When made:
Cash
XXX
Donations (temporarily restricted funds)
When used:
Temporarily restricted net assets
xxx
Unrestricted net assets
XXX
Property
Cash
xxx
xxx

\section*{Pledges}

Promises by outside parties to donate assets
- Recognized in period of pledge
- Allowance for uncollectible amount established
- Some or all may have time restriction - temporarily restricted
- Some or all may be unrestricted

Pledges xxx
Allowance for uncollectible pledges xxx
Donations (unrestricted funds) xxx
Donations (temporarily restricted funds) xxx

\section*{Other Donations}

Donations of art, antiques, or artifacts not recognized if:
- Asset held for research or exhibition
- Asset preserved \& unaltered
- Proceeds from sale of asset to be used to buy additional art, antiques, \& artifacts

Donated assets to be held in trust
- Not recognized by not-for-profit organization
- Disclosed in footnotes to financial statements

\section*{Hospital Revenues}

Patient service revenue recorded at gross value of services
- Billing may be less due to Medicare allowance or employee discount
- Difference recorded in allowance account
- Statement of activities will report net amount

Services provided for free due to charity not recognized as revenues
Special transactions:
- Bad debts recognized as expense on statement of activities, not reduction of revenues
- Miscellaneous revenues from cafeteria, gift shop, parking lot fees, \& educational programs classified as other revenue
- Donated supplies reported as operating revenue \& expense when used
- Donations of essential services and unrestricted donations are nonoperating revenues

\section*{College Tuition Revenues}

Students may receive refunds or price breaks
Refunds to students reduce tuition revenues
Price breaks may result from scholarships or reductions for family members of faculty or staff
- Tuition recognized at gross amount
- Price break recognized as expense

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