# Financial Essentials for nonprofit Managers



# Copyright © 2005 by

#### DELTA PUBLISHING COMPANY

P.O. Box 5332, Los Alamitos, CA 90721-5332

All rights reserved. No part of this course may be reproduced in any form or by any means, without permission in writing from the publisher.

# **PREFACE**

Managers of nonprofit organizations generally are not skilled in financial matters. Or, managers are often preoccupied with its welfare objectives and ignore the operations efficiency and operating cost controls. A series of appropriate questions that nonprofit financial managers must address in connection with an organization's financial condition and activity include: 1. Do we have a profit or a loss? 2. Do we have sufficient reserves? 3. Are we liquid? 4. Do we have strong internal controls? 5. Are we operating efficiently? 6. Are we meeting our budget? 7. Are our programs valid? 8. Are we competing successfully? 9. Is our prioritizing of programs and activities reasonable?

The course is an attempt to help answer these questions. Furthermore, it attempts to address recent management planning tools, such as time series forecasting, aggregate production planning, ABC analysis, and material requirements planning, to facilitate better demand and resource management.

The course will be quite different from other courses in many ways:

- 1. It is practical and reader friendly.
- 2. It is up-to-date and comprehensive, covering all *new* developments in finance pertinent to the nonprofit sector.
- 3. There are many case studies, examples, and illustrations.
- 4. There is heavy emphasis on the use of financial software.
- 5. It is directed toward the practitioner.
- 6. It applies to all nonprofit organizations including colleges, hospitals and health care, libraries, charities, performing arts, religious institutions, community services, professional societies, fraternities, private foundations, museums, and research and scientific organizations.
- 7. It can be used by all people directly or indirectly involved with nonprofit entities including general managers, accountants, controllers, treasurers, financial managers, CFOs, attorneys, fund-raisers, and politicians.

# TABLE OF CONTENTS

- 1. What Every Nonprofit Manager Should Know About Accounting and Finance
  - . Characteristics of Nonprofit Organizations
    - . How Do Nonprofits Differ from For-profits?
    - . Goals of Financial Management in Nonprofit Organizations
    - . What Is Finance?
    - . Role of the Financial Manager
    - .Financing for Nonprofits
  - . More on For-Profit And Non-Profit Characteristics
    - . Investors and Contributors
    - . Assets and Liabilities/Revenues and Expenses
    - . Restricted and Unrestricted Funds
    - . Operations Control and Motivating Managers
    - . Budgetary System and Accounts
    - . More Need for Sound Information Systems
  - . Cost Concepts And Terminology
    - . Cost Classifications
    - . Costs by Managerial Functions
    - . Direct Costs and Indirect Costs
    - . Variable Costs, Fixed Costs, and Mixed Costs
    - . Costs for Planning, Control, and Decision Making
    - . More on Fixed and Variable Costs
  - . Break-Even and Cost-Volume-Revenue Analysis
- 2. Accounting Basics for Nonprofits
  - . Chart of Accounts
  - . Statement of Financial Position (Balance Sheet)
    - . Assets
    - . Liabilities
    - . Net Assets (Fund Balance)
  - . Accrual Vs. Cash Basis
  - . Statement of Activities
    - . Revenue
    - . Expenses
  - . Statement of Cash Flows
  - . Disclosures
  - . Supplementary Statements
  - . Restricted Resources
  - . Grants
  - . Contributions
  - . Pledges

- . Bargain Purchases of Goods and Services
- . Bequests
- . Fund Accounting
  - . Current Unrestricted Fund (General Fund, Operating Fund)
  - . Current Restricted Fund
  - . Fixed Asset (Plant) Fund
  - . Reclassifications (Transfers)
- . Encumbrances
- . Budget Recording and Accountability
- . Auditing
- . Internal Controls
- . Accounting by Specific Nonprofit Organizations
  - . Voluntary Health and Welfare
  - . College or University
  - . Library
  - . Religious Institution
  - . Performing Arts
  - . Community Service
  - . Professional Society or Association
  - . Fraternity
  - . Private Foundation
  - . Museum
  - . Research and Scientific
- 3. Cost-Volume-Revenue Analysis: Are We Breaking Even?
  - . Questions Answered by CVR Analysis
    - . Analysis of Revenues
    - . Analysis of Cost Behavior
    - . Variable Costs
    - . Fixed Costs
    - . Types of Fixed Costs Program-Specific or Common
  - . CVR Analysis with Variable Revenue Only
  - . Break-Even Analysis
    - . Graphical Approach in A Spreadsheet Format
    - . Determination of Target Surplus Volume
    - . Margin of Safety
    - . Some Applications of CVR Analysis and What-If Analysis
    - . CVR Analysis with Variable and Fixed Revenues
    - . Use of Spreadsheet Software
  - . Program Mix Analysis
  - . Management Options
- 4. Financial Analysis and Metrics: Avoiding Bankruptcy
  - . Trend Analysis
  - . Analysis of the Balance Sheet

- . Liquidity Analysis
- . Financial Flexibility
- . Asset Utilization
- . Analysis of Fixed Assets
- . Analysis of Liabilities
- . Appraisal of Solvency, Capital Structure, and Fund Balance
- . Evaluation of the Statement of Activities
  - . Revenue
  - . Costs
  - . Profitability
- . Disclosures
- . Performance Measures
- . Fund Raising Ability
- . Analysis of Pledges
- . Analysis of Contributions
- . Looking at Endowments
- . Evaluation of Grants
- . Risk/Return Analysis
- . Audit Reliability
- . Software
- . Spotting Potential Bankruptcy and Avoiding Financial Problems
- . Case Study in Financial Statement Analysis: Family Service Agency of Utopia
- . Appendix
- 5. Forecasting: Revenues, Costs, and Cash Flows
  - . Forecasting Methodology
  - . The Qualitative Approach
    - . Executive Opinions
    - . The Delphi Method
    - . A Word of Caution
  - . Common Features and Assumptions Inherent In Forecasting
  - . Steps in the Forecasting Process
  - . Moving Averages and Smoothing Methods
    - . Naive Models
    - . Smoothing Techniques
    - . Moving Averages
    - . Advantages and Disadvantages
  - . Exponential Smoothing
    - . The Model
    - . The Computer and Smoothing Techniques
  - . Regression Analysis
    - . The Least-Squares Method
    - . Use Of Lotus 1-2-3 (DOS) For Regression
    - . Using Regression on Excel
    - . A Word of Caution

- . Regression Statistics
- . Lotus and Excel Regression Output
- . Trend Analysis
  - . The Computer and Trend Analysis
- . Multiple Regressions
  - . The Model
- . Evaluation of Forecasts
- . Checklist
- . Measuring Accuracy of Forecasts
  - . MAD, MSE, RMSE, and MAPE
- . Survey of Forecasting Methods Used
- 6. The Budgeting Process: Device for Planning and Control
  - . Strategic Planning
  - ."What-if" Analysis
  - . Contingency Planning
  - . Types of Budgets
  - . Cash Basis Vs. Accrual Basis Budgets
  - . Capital Budget
  - . Operating Budget
    - . Budgeting Revenue
    - . Estimating Costs
  - . Cash Budget
  - . Budget Appraisal
  - . Variance Determination and Analysis
    - . Revenue Variances
    - . Cost Variances
    - . Variance Analysis Reports
  - . Budgetary Control
  - . Support or Capital Additions
  - . Encumbrances
  - . Budgeting for Specific NPOs
    - . Hospitals
    - . Libraries
    - . Leisure Activities Club
    - . Labor Union
    - . Social Services
- 7. Zero-Base Budgeting and Program Budgeting
  - . Zero Base Budgeting
    - . Zero Base Budgeting Procedures
    - . Activity Units
    - . The Evaluation of Decision Units
    - . Decision Packages
    - . Ranking Packages

. Conclusion

#### **Program Budgeting**

- . The Program Budgeting Process
- . Financial Aspects
- . Timing Considerations
- . Conclusion

#### 8. Cost Behavior, Cost Control, and Flexible Budgeting

- . Analysis of Cost Behavior
- . The High-Low Method
- . Regression Analysis
- . Flexible Budgeting and Cost Control
- . Standard Costs and Variance Analysis

#### 9. Enhancing Managerial and Department Performance

- . The Long and Short of Responsibility Accounting
- . Responsibility Accounting and Responsibility Center
- . Mission Centers and Service Centers
- . The Private Sector Measures
- . Segmental Reporting for Mission Centers
- . Performance Measures for Managerial Control

### 10. Obtaining Funds: Short-Term and Long-Term Financing

- . Seed Capital
- . Joint Ventures
- . Internally Generated Funds
- . Annual Membership Dues
- . Sales of Merchandise
- . Trade Credit
- . Fund Raising
- . Advances
- . Grants and Contracts
- . Royalties and Licenses
- . Government Loans
- . Bank Loans
  - . Interest
  - . Compensating Balance
  - . Pledges Receivable as Security
  - . Intermediate-Term loans
  - . Long-Term Loans
- . Bridge Financing
- . Equipment Financing
- . Construction Financing
- . Long-Term Debt: Mortgages and Bonds Payable
  - . Mortgages

- . Bond Payable
- . Social Lenders
- . Friends and Foundations
- . Trustees and Officers
- . National Offices
- . Insurance Company Loans
- . Leasing
- . Risk Analysis
- . Software
- . Cost of Financing
- . Timing of Financing

#### 11. Managing Working Capital and Investing Surplus Funds

- . Using Working Capital Management Effectively
- . Cash Management
  - . Acceleration of Cash Inflow
  - . Delay of Cash Outlay
- . Cash Models
- . Taking Advantage of A Cash Discount
- . Banking Relationships
- . Management of Pledges and Other Receivables
- . Inventory Management
  - . Investment in Inventory
  - . Determining Carrying and Ordering Costs
  - . Economic Order Quantity (EOQ)
  - . The Reorder Point
  - . Quantity Discount
- . Investing Surplus Funds and Investment Strategies
  - . How Is This Surplus Cash Used?
  - . What Are The Factors To Be Considered In Investment Decisions?
  - . What Are The Questions To Be Asked For The Formulation Of Investment Strategies?
  - . What Are The Types Of Securities?
  - . How About Mortgage-Backed Securities?
- . Other Money-Market (Short-Term Fixed Income) Securities?
- . How To Compute The Yield On Securities
- . How Do You Choose Money Market Funds?
- . A Caveat About Derivatives

#### 12. Cost Management and Pricing Decisions

- . Cost Analysis For Pricing
- . Cost Finding and Pricing
- . Allocation of Service Center Costs To Mission Centers
- . Procedure For Service Center Cost Allocation
  - . Direct Method

- . Step-Down (Two-Stage) Method
- . Reciprocal Method
- . Organizational Considerations of Cost Control
- . Activity-Based Costing
  - . First-Stage Procedure
  - . Second-Stage Procedure
- . More on Why Use Activity-Based Costing (ABC)?
  - . Value Added and Nonvalue-Added Activities and Costs
  - . Product Costing Less Distorted
  - . Improving Performance
- 13. Analysis for Short-Term and capital expenditure decisions and Financial Modeling
  - . Make or Buy Decision
  - . Evaluating A Proposal To Discontinue A Program
  - . Capital Budgeting
    - . What Are The Types of Investment Projects?
    - .What Are The Features of Investment Projects?
  - . Understanding The Concept of Time Value Of Money
    - . How Do You Calculate Future Values How Money Grows?
    - . What Is Present Value How Much Money Is Worth Now?
    - . Present Value of Mixed Streams of Cash Flows
    - . Present Value of An Annuity
    - . Use of Financial Calculators and Spreadsheet Programs
  - . How Do You Measure Investment Worth?
    - . Payback Period
    - . Net Present Value
    - . Internal Rate Of Return
    - . Can A Computer Help?
    - . Benefit/Cost (B/C) Ratio
  - . How To Select The Best Mix of Projects with A Limited Budget
  - . The Choice of The Discount Rate and The Cost of Capital
    - . Cost of Long-Term Debt
    - . Cost of Grants and Contributions
    - . Measuring The Overall Cost of Capital
  - . Lease Versus Purchase
  - . Program Analysis Through Financial Modeling
    - . A Financial Model
    - . Budgeting and Financial Modeling
    - . Use Of Financial Modeling in Practice
    - . Developing Financial Models
    - . Model Specification
    - ."What-If" Model For College Planning
    - . HOFPLAN for Hospitals

#### **GLOSSARY**