Tools for Decision Making, Second Edition

Table of Contents

Preface

Part I. Introduction

- 1. The Role of Analysis in Local Government
- 2. A Few Basics
- 3. Smoothing Data Trends by Using Moving Averages
- 4. Sampling for Analysis

Part II. Graphic Techniques for Planning, Monitoring, and Evaluating

- 5. Gantt Charts and PERT/CPM
- 6. Demand Analysis
- 7. "Map It Out" for Improved Efficiency

Part III. Work Flow and Measurement

- 8. Process Flow Charts
- 9. Work-Distribution Analysis
- 10. Performance Measurement and Monitoring
- 11. Using Performance Standards

Part IV. Simple Mathematical Computations: Analytic Building Blocks

- 12. Adjusting for Inflation When Comparing Revenues or Expenditures
- 13. Basic Investment Calculations: Figuring Interest Rates and Yields

14. The Time Value of Money: Opportunity Costs, Discounting, Compounding, Future Value, and Present Value

Part V. Identifying Costs and Analyzing Options

15. Simple Options for Annualizing Costs of Capital Items: Usage-Rate and Straight Line Depreciation

- 16. Identifying Full Costs of a Program
- 17. Calculating "Go Away Costs" for Privatization Decisions
- 18. Life-Cycle Costing
- 19. Sensitivity Analysis
- 20. Lease or Buy?

21. Cost-Effectiveness Analysis: A Truncated Version of Cost-Benefit Analysis Part VI. Surveying

Citizens and Service Users

22. Citizen Surveys and Customer Surveys

23. Analyzing Survey Data: Revealing Graphics and Simple Statistics Part VII. Selected Applications of Analytic Techniques in Local Government

- 24. Staffing Analysis
- 25. Staffing Factor Calculation: Projections for Extended-Hour or Uninterruptable Services
- 26. Correlation Coefficients and Advanced Demand Analysis
- 27. Financial Condition Analysis
- 28. Break-Even Analysis
- 29. Potential Gains through Timely Invoicing
- 30. Forecasting Via Trend Analysis and Time Series Analysis
- 31. Analysis of Operations via Benchmarking Part VIII. Wrap Up
- 32. The Role of Analysis in a Political Environment

Appendix A: Applying Analytic Techniques

Appendix B: Future Value Interest Factors (FVIF)

Appendix C: Sum of Annuity Factor (SAF)

Appendix D: Distribution of Chi-Square

Appendix E: Instructions for Performing Regression Using Microsoft Excel