Construction Cost Estimating



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INTRODUCTION

Part 1: Understanding and Evaluating Construction Estimates

Understanding and evaluating construction estimates is for everyone who deals with buildings or construction. Construction projects are VERY expensive (most people spend 20-50% of their income on their residence), and yet so few people have the skill to analyze the fairness and value of construction costs. Therefore, being able to understand, summarize and analyze construction costs is a very skill that can save or make lots of money.

Construction cost estimating is a profession with specialized skills, training, education, and certifications; but it's not rocket science. And there is some math, so it's scary to a LOT of people. There are a lot of moving parts in a big construction cost estimate: designers, insurance, labor, materials, equipment, subcontractors... The list can go on and on.

Part 2: Budgeting and Estimating

The process begins with deciding on the level of detail and exactitude required. It continues with deciding on and organizing the elements that will be included in the estimate, so that the scope of work and methods of construction can be documented and easily referenced, summarized and understood. Application of prices to the scope and method of construction is next. Ultimately an estimator will format, coordinate peer review, finalize and publish the completed estimate. And often the estimator or another professional will summarize, analyze or compare budgets and estimates for the purpose of quality decision-making.

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PROGRAM OUTLINE

Understanding & Evaluating Construction Cost Estimates

1. Introduction
2. How Do You Know?
3. Detailed Analysis
4. Burden
5. Match Game
6. Xactimate

Budgeting & Estimating for Construction, Maintenance, Repairs & Claims

7. Order of Magnitude (PFCS Level 1)
8. Putting It All Together
9. Conceptual & Preliminary (PFCS Levels 2-3)
10. Detailed & Bid/Construction/Trial (PFCS Levels 4-5)
11. Conclusion

LEARNING OBJECTIVES

1. Understand the principles and tools of estimating.
2. Explore the process of estimating.
3. Budget and estimate for construction, maintenance, repairs and claims.
4. Examine different estimate levels, including order of magnitude, conceptual, preliminary, detailed and bid/construction.
5. Consider case studies and examine real world examples of construction cost estimates.

BACKUP MATERIALS

1. Level 5 Estimating
2A. Estimate Summary & Estimate Detail Page
2B. Estimate Backup Samples
3A. Estimate (by Others) for Analysis #1
3B. Estimate Analysis & Memo (of #1)
3C. Estimate Analysis Worksheet
4A. Estimate to Demonstrate Burden Calculations
5A. Estimate (by Others) for Analysis #2
5B. Estimate Comparison
5C. Comparison of Multiple Estimates
5D. Estimate Comparison Worksheet
6A. Xactimate Estimate (by Others) for Analysis #3 (Analyzed in Section 3)
6B. Xactimate Discussion Memo
7A. Order of Magnitude (Level 1) Estimate
7B. Blank Estimate Worksheets
8A. Uniformat Codes
8B. Detailed Estimate (Level 5) w Many Components
9. Conceptual Estimate for a $222 Million Hotel
10A. Sample Estimate: Siding Repair on a Hotel
10B. Sample Estimate: Construction Defect Repairs on Condos
11C. A List of Awesome Estimating Articles

PROGRAM CONTENTS

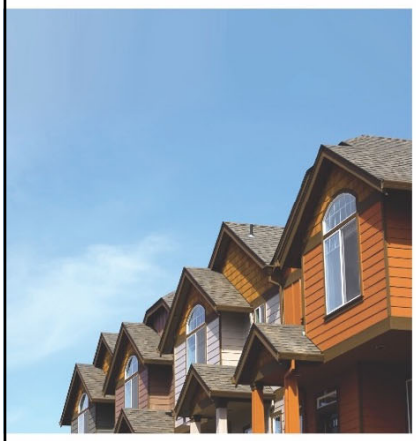
Understanding & Evaluating Construction Cost Estimates

1. Introduction
    - A. We Know Buildings
    - B. Project Types
    - C. Clients
    - D. Program Outline
    - E. Learning Objectives
    - F. Program Introduction
2. How Do You Know?
    - A. Time Spent on Summary & Analysis
    - B. Explain It to My Mom
    - C. Estimate Summary
    - D. Level 5 Estimating Analysis
    - E. Keep Asking
    - F. Show Your Work!
    - G. Case Study
3. Detailed Analysis
    - A. Thinking Scientifically
    - B. Estimating Errors
    - C. Estimating Basics
    - D. Labor
    - E. Indirect Construction Costs
    - F. Other Project Costs
    - G. If You Can't Explain It Simply
    - H. Case Study
4. Burden
    - A. What's Burden Include?
    - B. Burden Calculations
    - C. Why Do We Care?
    - D. Fun with Numbers
5. Match Game
    - A. Analyzing Multiple Estimates
    - B. A Sensible List
    - C. "Normalizing"
    - D. Case Study
6. Xactimate
    - A. Insurance Industry Standards
    - B. Certification
    - C. Pros
    - D. Cons
    - E. PFCS Position

Budgeting & Estimating for Construction, Maintenance, Repairs & Claims

7. Order of Magnitude (PFCS Level 1)
    - A. Case Study: Otto's Outhouse
    - B. Level 1: 10 Steps
    - C. Case Study: Order of Magnitude
    - D. Case Study: Commercial
    - E. Your Room Using Uniformat
8. Putting It All Together
    - A. 10 Steps Summary
    - B. 5 Levels – 10 Steps
    - C. Decide on the Level of Detail
    - D. A Sensible List
    - E. Estimate Setup
    - F. Relating the Parts
    - G. Resources
    - H. Estimate Backup
9. Conceptual & Preliminary (PFCS Levels 2-3)
    - A. Level 2 & Level 3: 10 Steps
    - B. Level 2 + Estimating
    - C. Using the Estimate Components
    - D. Estimate Details
    - E. Quantity Take-Off (QTO)
    - F. Case Study: Otto's Outhouse
    - G. Case Study: Hotel Bid
10. Detailed & Bid/Construction/Trial (PFCS Levels 4-5)
    - A. Detailed Estimate
    - B. Level 4 & Level 5: 10 Steps
    - C. Detailed Estimating
    - D. Refine the Estimate
    - E. Peer Review
    - F. Case Studies
11. Conclusion
    - A. Estimating is a Skill and Profession
    - B. Estimator Certification
    - C. Learning Objectives
    - D. Backup Materials

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