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Estimate Costs
Determine Budget
Control Costs
Early stages of a project have the greatest influence in the overall costs associated with a project
Establishes the Precision Level to be used for cost estimates
Defines Units of Measure
Control Accounts
Control Thresholds
Performance Measurement Rules
Reporting Formats
Process Descriptions

Cost Estimating is not the same as Pricing
Inputs

Cost Estimating Templates
Historical Information

Technical Issues and Concerns
Analogous Estimating
Determine Resource Cost Rates
$^3, m^2, etc. Quotations$
Bottom-up Estimating
Parametric Estimating
$^3 Variable : estimate requires 1000 m^3 of concrete$
Vendor Bid Analysis
Reserve Analysis
Project Management Estimating Software

Basis of Estimates:

$f(x) = \frac{1}{1+e^{-t}}$**Project Time**
$\alpha f(x) = \frac{1}{1+e^{-t}} \alpha = 0.25 \alpha = 0.50 \alpha = 2.00 \alpha = 6.00$**Effect of Changing** α
$\beta \beta = 0.05 \beta = 0.25 \beta = 5.00 \beta = 15.00$**Effect of Changing** β

$\lambda f(x) = \frac{1}{1+e^{-t}} \lambda = 0.75 \lambda = 1.50 \lambda = 2.00 \lambda = 3.00$**Effect of Changing** λ

$\alpha \beta \lambda$
Assumptions
Results
Assumptions and known information
At time of Contract Start
Cost Increase to Contractor
$\times 1.06044 = 2,253,435.002,125,000 \times 1.0980 = 2,333,250.00$
Recoverable via CPA based on CPI
$\times 1.02723 = 5,136,150$**Loss to Contractor**
$336,685136,150 = 200,535$
Results of Analysis
Clause 4.9.3 Civil Engineering Works Designed by the Employer
Contractors need to learn how to price inflation risk
Latest ofWhat about planning?
Note:
$\alpha \beta \lambda$
Inputs
Tools and Techniques
CAUTION:
Funding Limit Reconciliation

Project Funding Requirements

Project Funding Requirements
Performance Reports
Work Performance Information

Tools and Techniques
Cost Variance