



**GTPAC – What We Do**

- The Georgia Tech Procurement Assistance Center (“GTPAC”) teaches Georgia based companies about all aspects of government contracting – at the federal, state and local level.
- Our assistance comes in the form of teaching and coaching clients about the government marketplace. We also provide our clients with a set of electronic tools so they can research and identify government contracting opportunities.
- All GTPAC services are offered at no cost.
- Details at <http://www.gtpac.org/>

**gtpac**  
Georgia Tech  
Procurement Assistance  
Center

## GTPAC Is Part of EI2

- The Enterprise Innovation Institute (“EI2”) is Georgia Tech’s business outreach organization.
- EI2’s mission is to increase the competitiveness of enterprises in Georgia through the application of science, technology, and innovation.
- EI2 offers 14 different programs to help startup companies, industry, the public sector, and students improve their competitiveness and increase their economic impact.
- Be sure to visit <http://innovate.gatech.edu/programs>.



## EI2's Programs



**Advanced Technology Development Center (ATDC):** incubator that provides coaching, connections, and a community to foster the development of technology startups in Georgia. [Learn more](#)



**Innovation Corps (I-Corps):** prepares scientists and engineers to extend their focus beyond the laboratory and foster entrepreneurship that will lead to the commercialization of technology. [Learn more](#)



**The Contracting Education Academy:** assists government contracting officials and private industry personnel who are pursuing government contracting opportunities with the appropriate methodology for increasing small business contracting and subcontracting. [Learn more](#)



**Center for Economic Development Research:** fosters local economic development and drives innovation within communities. [Learn more](#)



**Faces of Manufacturing:** was developed by the Georgia Manufacturing Extension Partnership (GaMEP) at Georgia Tech and is supported by Georgia Tech. [Learn more](#)



**Integrated Program for Startups (GT:IPS):** provides training and support to Georgia Tech faculty and students interested in launching companies based on Georgia Tech intellectual property. [Learn more](#)



**Flashpoint:** helps early-stage startups minimize risk and accelerate growth through a process called Startup Engineering. [Learn more](#)



**Minority Business Development Agency (MBDA) Business Center:** helps Minority Business Enterprises (MBE) with accessing capital, increasing profitability, creating jobs, and becoming sustainable. [Learn more](#)



**Georgia Manufacturing Extension Partnership (GaMEP):** helps manufacturers increase top-line growth and reduce bottom-line costs through strategic planning, innovation management, process improvement, ISO standards, sustainability, and energy services. [Learn more](#)



**Southeastern Trade Adjustment Assistance Center (SETAAC):** provides federal funding to manufacturing firms that have experienced declines in employment and sales as a result of import competition. [Learn more](#)



**Georgia Tech Procurement Assistance Center (GTPAC):** helps Georgia businesses identify, compete for, and win government contracts in order to sustain and grow their businesses. [Learn more](#)



**Startup Ecosystems:** helps governments, communities, foundations, entrepreneurs, and small businesses foster value creation by applying innovative ideas, technology, and policy to initiatives focused on economic growth. [Learn more](#)



**health@ei2:** transforms the health-delivery system by helping professionals, employers, and consumers achieve higher-quality and lower-cost healthcare solutions. [Learn more](#)

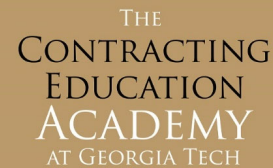


**VentureLab:** transforms the innovations of Georgia Tech faculty, research staff, and students into companies. [Learn more](#)

## An Associated Program

- The Contracting Education Academy at Georgia Tech offers professional education in the field of federal acquisition.
- Defense Acquisition University and Federal Acquisition Institute coursework is taught, along with custom courses.
- Courses range from 2 days to 4 weeks.
- Opportunity for government officials and contractors to learn side-by-side.

• Visit:  
<http://contractingacademy.gatech.edu>



# Essential Elements of a Cost/Price Proposal



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## Purpose



***As a result of participating in this workshop, you will be able to:***

- **Understand** how the government buys goods and services.
- **Calculate** indirect cost rates.
- **Prepare** responsive and effective proposals.
- **Improve** your chances at winning government contracts.

## Workshop Overview



1. **The Basics**
  - ✓ Learning the “rules of the road”
2. **Proposal Analysis**
  - ✓ How the government evaluates proposals
3. **Types of Costs**
  - ✓ Reviewing cost definitions
4. **Indirect Cost Rates**
  - ✓ How competitive is your proposal
5. **Execution**
  - ✓ Connecting the technical and the cost

## **You**

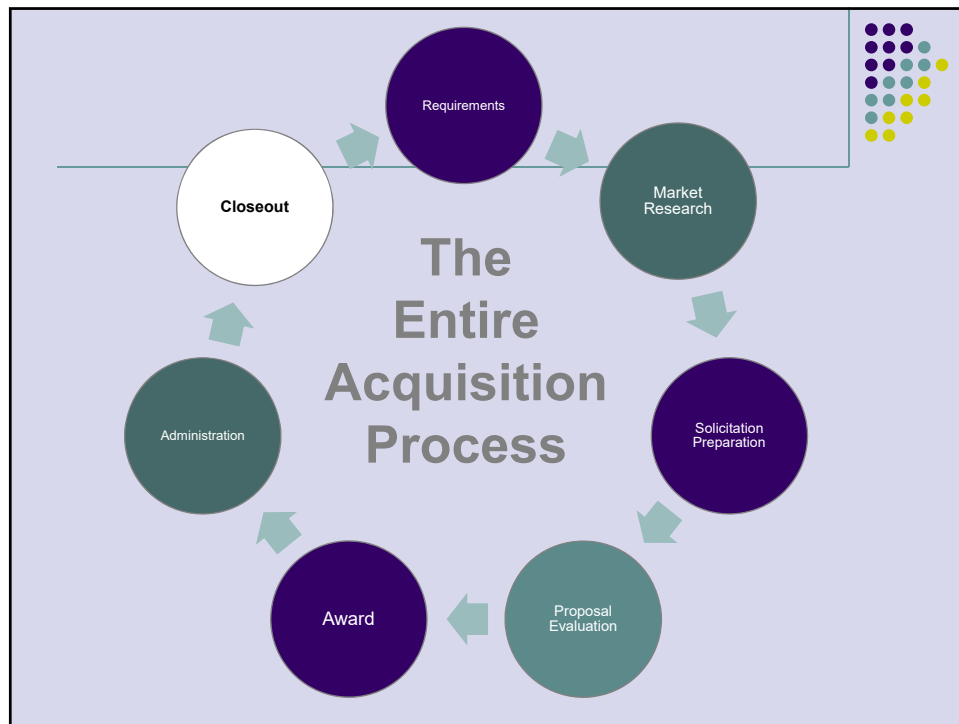


- **Introduce yourself**
- **Line of business**
- **Experienced government contractor, or new to the market?**
- **Why you're here**

## **The Basics**

**Learning the “rules of the road”**





## Acquisition Planning

**Purpose:** Define the Government's needs.

- Involves market research.
- Identifies potential sources.
- Determines acquisition strategy.
- Planning is the first step of the acquisition process. *(The other two are contract **formation** and **administration**.)*

## Market Research Techniques



- Contact subject matter experts
- Review recent market research results
- Catalogs, product literature
- Publish formal Requests for Information (RFIs)
- Query Government databases (contractdirectory.gov/contract directory, plus FPDS-NG, FedBizOpps archives, SAM.gov)
- Interaction with industry and other agencies
- Interchange meetings with industry

If no commercial or nondevelopmental item is available, agencies shall consider restating the need determine if commercial or NDI solution exists

**FAR 10.002(b)(2)**

## Purpose of Market Research



**To Support Acquisition Documentation and Decisions...**

### By understanding



### We can shape:

Commercial capabilities  
Risks, environment  
Key “discriminators”  
Contracting history  
Logistics  
Development history  
Acquisition history

System Requirements  
Acquisition Strategy  
Evaluation Factors  
Contractual Documents  
Support Plans  
Test Plans  
Milestone Decisions,  
Pricing strategy, Need  
for cost/pricing data!

## How the Agency Describes Needs



- **Statement of Work (SOW)** – is the portion of a contract which establishes and defines all non-specification requirements for contractor's efforts either directly or with the use of specific cited documents.
- **Performance Work Statement (PWS)** – means a statement of work for performance-based acquisitions that describes the required results in clear, specific and objective terms with measurable outcomes.
- **Statement of Objectives (SOO)** – means a Government-prepared document incorporated into the solicitation that states the overall performance objectives. It is used in solicitations when the Government intends to provide the maximum flexibility to each offeror to propose an innovative approach

*FAR 2.101*

## Statement of Work (SOW)



Describes work to be done through the use of:

Specifications & Detailed Quality Standards

Performance Standards

Minimum Requirements

Quantities

Time and Location of Performance

## Statement of Objectives (SOO)



## The Basics



### *Four words the Government uses ...*

1. **Solicitation** – An advertised invitation to submit a bid, a quote, or a proposal to fulfill a requirement of the government. Sometimes referred to as an IFB, RFQ, or RFP. Once issued, communication with vendors ceases.
2. **Presolicitation** – Summary of a forthcoming solicitation, not yet ready for a formal response. Usually issued at least 15 days before the Solicitation. During the pre-solicitation period, vendors normally are at liberty to pose questions and offer suggestions and information.

## The Basics



### 3. **Combined Synopsis/Solicitation** –

A streamlined solicitation for commercial items valued at less than the simplified acquisition threshold (generally \$250,000).

4. **Sources Sought** – A published synopsis to determine interest in a given acquisition. It requests interested parties to submit their capabilities to determine their ability to perform. *Often used to determine whether a set-aside to small businesses can be justified.*

## The Basics



### The Key Difference between Bids and Proposals:

- **Bids** are submitted in response to IFBs.
  - ✓ Awards are made based on price and price-related factors.
- **Proposals** are submitted in response to RFPs.
  - ✓ Awards are made based on price and non-price factors. Quality is most frequently considered.

*While there are similarities among bids and proposals, we're going to focus here on proposals submitted in response to RFPs.*

## Best Value Continuum



*An agency can obtain best value in negotiated acquisitions by using any one or a combination of source selection approaches. In different types of acquisitions, the relative importance of cost or price may vary.*

LPTA is used when **best value** is expected to result from the technically acceptable proposal with the lowest price.

Tradeoff is used when it is in the Government's best interest to award to other than the lowest priced offeror.

**FAR 15.101**

## The Basics



### What influences proposal selections

- Government's Requirement Is Clearly Defined
- Risk of Unsuccessful Performance Is Minimal

Clear Requirement  
+ Low Risk =  
Cost Is Dominant

**Cost or Price Plays a Dominant Role in Selection of Contractor**

- Government's Requirement Is Less Well-Defined
- Development Work Is Required
- Performance Risk is Higher

Requirement Is Not Exact + High Risk =  
Factors Other Than Cost Are Dominant

**Technical Factors or Past Performance Play a Dominant Role in Selection of Contractor**

## Contract Types



- **Fixed price**
  - Most common; government prefers.
- **Cost**
  - Used only when cost can't be fixed.
  - *Examples*: Cost Reimbursement, Incentive Fee, Time & Material.

*The solicitation document will tell you which form of pricing is expected.*

## Contract Type Solicitation Provision



Solicitations must contain the provision at FAR 52.216-1, *Type of Contract* unless they are for:

- a fixed-price acquisition made under simplified acquisition procedure
- information or planning purposes

*"The Government contemplates award of a \_\_\_\_\_ (Contracting Officer insert specific type of contract) contract resulting from this solicitation."*

**FAR 52.216-1**

## Fixed Price Contracts



### Features

- Risk/reward lies with contractor; incentive to control costs
- Price established at time of award and not subject to change based on costs incurred
- Minimal administrative burden

### Used when...

- Known quantity at a known price
- Known scope of work with minimal performance risk

## Cost Type Contracts



### Features

- Less risk to contractor
- Payment of allowable incurred costs
- Estimate total cost to establish funding ceiling
- Higher administrative burden
- Requires contractor to send a notification letter when approaching 75% of costs, to avoid overrun on contract

### Used when...

- Price is difficult to determine with certainty in advance
- Scope of work relatively unknown
- Common in research, A&E and development type contracts

## Time and Materials Contracts



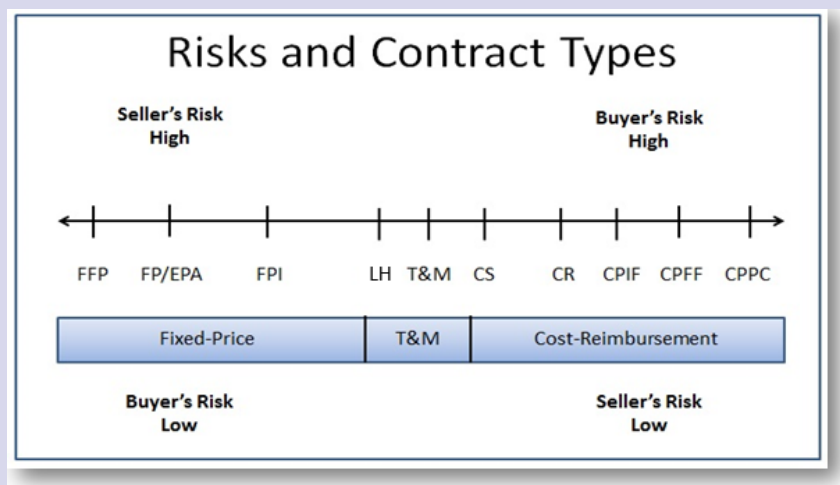
### Features

- Direct labor hours at specified fixed hourly rates including wages, fringe, overhead, G&A, and profit
- Actual cost of materials and ODCs

### Used when...

- Labor intensive work
- Frequently performed on best efforts basis with not-to-exceed amount
- Least preferred method by government; requires internal documentation and approval

## Risks in Relation to Contract Types



## Evaluation Criteria



Evaluation Criteria are the **factors** and **subfactors** listed in the solicitation that will be used to evaluate proposals.

Evaluation Factors and Sub-factors should:

- ✓ Represent the key areas of importance.
- ✓ Support meaningful comparison and discrimination between proposals.



## Evaluation Criteria



- Ensure that proposals are evaluated based solely on the factors and subfactors contained in the solicitation
- Proposals are not evaluated against each other for technical merit.
- *Protests* are a significant problem when we don't follow our own selection criteria!

## The Basics



### The Concepts of Responsiveness and Responsibility:

- Universally practiced in government – at federal, state and local levels – are the concepts of responsiveness and responsibility.
- A public contract is not awarded unless these two requirements are satisfied.

*So what do these terms mean?*

## The Basics



Responsiveness refers to your offer – your submittal in response to the invitation.

- *Following instructions.*

Responsibility refers to you – your qualifications and ability to perform.

- *A judgement is made about your wherewithal.*

## The Basics



In a bid, **responsiveness** is unforgiving.

- *If you make a mistake, leave something out, or don't follow the instructions, your bid probably will be rejected.*

In a proposal, **responsiveness**\* is still important, but a proposal can be revised to become acceptable if the Government decides to enter into negotiations with you.

\*Sometimes the government uses the term “**acceptable**” rather than “**responsive**” to describe a proposal that complies with the RFP.

## The Basics



### **Examples of Responsiveness:**

- Offer submitted on time to correct location.
- Pricing information is complete.
- References submitted in accordance with solicitation instructions.
- Offer takes no exceptions to specifications.
- Offer is signed in blue ink.
- Page limitation is obeyed.

## The Basics



A little more about **Responsibility** ...

*The Government must make **an affirmative determination** that you can perform.*

- *Have adequate financial resources.*
- *Comply with the delivery requirements.*
- *Have prior satisfactory performance.*
- *A good record of integrity and business ethics.*
- *Adequate management and technical skills.*
- *Adequate facilities/equipment.*
- *Otherwise eligible to receive an award.*

## Proposal Contents



- Technical Proposal
- Cost Proposal

# 1. Preliminaries Summary



*The “Rules of the Road” set the stage for proposal preparation.*

**You just learned:**

- The difference between a bid and a proposal.
- Contract awards based on proposals are made on the basis of price and other factors that may be more important than price.
- The importance of following instructions in an RFP (responsiveness/acceptability).
- The importance of being able to meet the responsibility standards set forth in an RFP.
- The meaning of various words the government uses.

## Proposal Analysis

**How the government evaluates proposals**



## Proposal Evaluation



- Cost or price evaluation
- Past performance evaluation
- Technical evaluation
- Cost information
- Small business subcontracting evaluation

**FAR 15.305**

## Proposal Analysis



*The objective of proposal analysis is ensure the final agreed upon price is fair and reasonable.*

Proposal analysis techniques include:

- Price Analysis
- Cost Analysis
- Cost Realism Analysis
- Technical Analysis
- Unit prices
- Unbalanced pricing

**Focus of this course is Price and Cost Analysis**

**FAR 15.404**

## Proposal Analysis vs. Proposal Evaluation



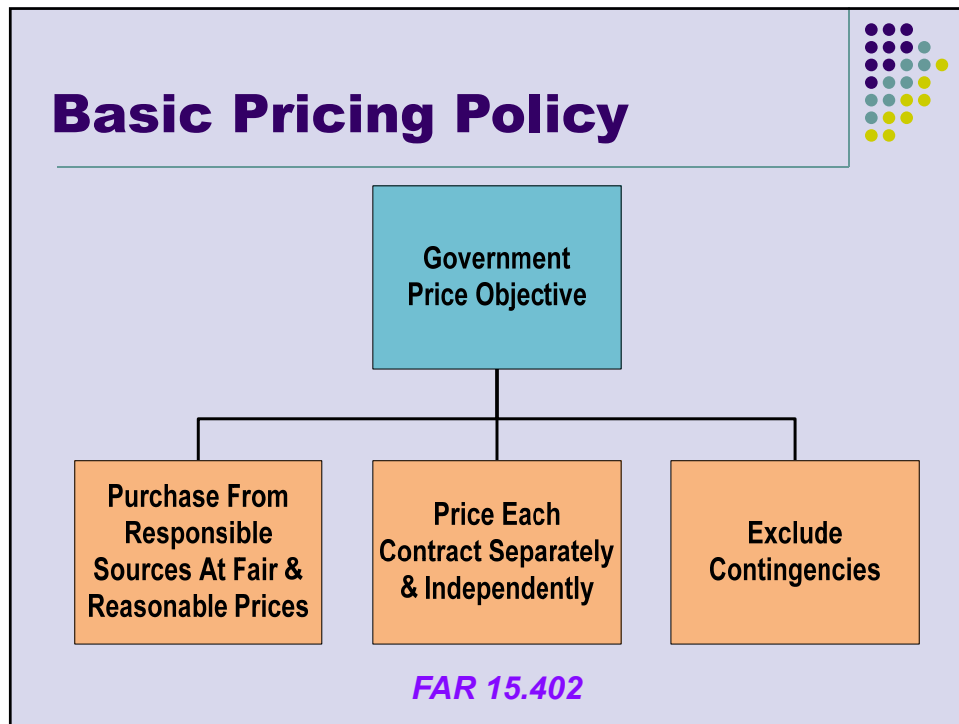
- Proposal Analysis (*FAR 15.404*)
  - Will review several techniques in this lesson
  - Purpose: Determine a price to be fair, reasonable and realistic
- Proposal Evaluation (*FAR 15.305*)
  - Used with respect to source selections
  - An assessment of an offeror's ability to perform the prospective contract successfully
  - Purpose: Evaluate a proposal's relative qualities solely with respect to evaluation criteria in solicitation

## The Contract Pricing Reference Guides (CPRG)



*Developed by the Air Force Institute of Technology and the Federal Acquisition Institute, the CPRG provides guidance on pricing and negotiation issues by expounding upon:*

- Price Analysis – Volume 1
- Quantitative Techniques for Contract Pricing – Volume 2
- Cost Analysis –Volume 3
- Advanced Issues in Contract Pricing – Volume 4
- Federal Contract Negotiation Techniques – Volume 5



## Fair and Reasonable Price

***Before we go further, let's discuss what price actually is, and the procurement officer's role in determining fair and reasonable price.***

## Price



What is price and how is it different from cost?

***Price means cost plus a fee or profit applicable to the contract price.***

***Price = Cost + Profit or Fee***

## “Fair and Reasonable”



- A fair and reasonable price is dependent on the market conditions, general economic conditions, promised quality, competition, alternative approaches, and timeliness of contract performance.
- A price must be considered fair to both parties. A “fair and reasonable” price for the buyer (state government) is the fair market value: the total allowable cost plus a reasonable profit/fee. A price that a **prudent and competent buyer** would be willing to pay is a reasonable price.
- A “fair” price for the seller (contractor) is what’s realistic in terms of seller’s ability to satisfy the terms and conditions of a contract.

## What Is TINA?



- Public Law 87-653 (codified by 10 USC 2306a) was originally enacted in 1962 to place the Government on equal footing with the contractor with respect to negotiating contracts and modifications
  - Requires contractors to give the Government cost and pricing data with their proposals – as a “surrogate” in the absence of normal market forces
  - Gives the Government informational parity with contractors and subcontractors during price negotiations so Government avoids excessive prices

Purpose: Enables the Government to determine proposed prices to be fair and reasonable when normal market forces are not in effect.

## TINA – What does it do?



- Requires contractors to submit cost or pricing data under certain circumstances
- Defines cost or pricing data
- In certain cases, requires certification that data are current, accurate, and complete
- Delineates exceptions to the requirement
- Provides right for Government to examine contractor records
- Provides rules governing defective pricing
  - Downward contract price adjustment
  - Recovery of overpayments (cost & profit) & interest

## TINA – Key Definitions



- Cost or pricing data
- Certified cost or pricing data
- Data other than certified cost or pricing data

*FAR 2.101*

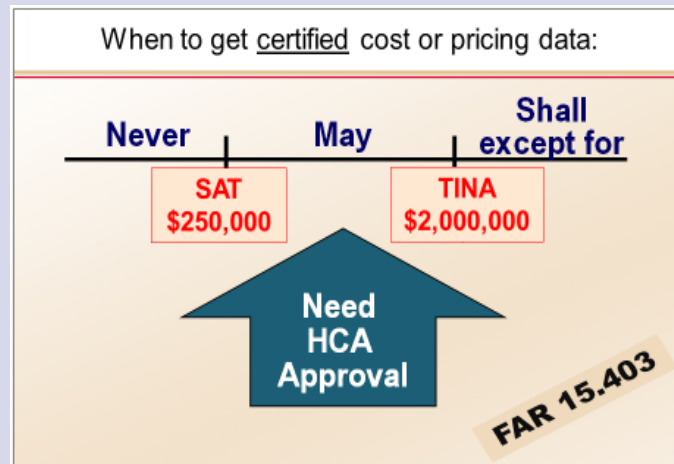
## TINA – Foundation of Pricing Policy



*Who makes the determinations to require the necessary cost and pricing data? Determines fair and reasonable?*

***The CO!***

## TINA and FAR 15.403



## Proposal Analysis Techniques

The process for determining proposed prices to be fair and reasonable is “Proposal Analysis”

Proposal analysis objective: ensure the final agreed to price is fair and reasonable

Proposal analysis techniques include:

- **Price Analysis - FAR 15.404-1(b)**
- **Cost Analysis – FAR 15.404-1 (c)**
- **Cost Realism Analysis - FAR 15.404-1(d)**
- Technical Analysis – FAR 15.404-1(e)
- Unit prices – FAR 15.404-1(f)
- Unbalanced pricing – FAR 15.404-1(g)

**FAR 2.101**

## Price Analysis



**Definition:** The process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit

*Essentially, comparing “bottom line” proposed prices*

*FAR 15.404-1(b)*

## Price Analysis



Material	20,000
Material Overhead (10% × \$20,000)	+ 2,000
Direct Eng. Labor (1,000 hrs × \$80/hr)	+ 80,000
Overhead Rate (125% × \$80,000)	+ 100,000
Other Direct Cost	+ 10,000
Sub-Total Cost	\$ 212,000
General & Administrative (3% × \$212,000)	+ 6,360
Total Contract Cost	\$ 218,360
Profit (15%)	+ 32,754
Contract Price	\$ 251,114

**Price Analysis**  
Offeror's proposed unit or total price




## Price Analysis Techniques

- Comparison of prices received in response to the solicitation
- Comparison of previously proposed prices with current proposed prices for the same or similar items
- Parametric estimating methods
- Comparison with competitive published price
- Comparison with independent Government cost estimates
- Comparison with prices obtained through market research
- Analysis of pricing information provided by the offeror

*Normally, adequate price competition establishes a fair and reasonable price*

**FAR 15.404-1(b)(2)**



Preferred Techniques

Price Analysis Technique	Typical Situations for Use
1. Comparison of proposed prices received in response to the solicitation	Post-solicitation, when adequate price competition exists.
2. Comparison of the proposed prices to historical prices paid for the same or similar items.	Pre- and post- solicitation, when market research reveals historical data of the same or similar items.
3. Parametric estimating methods/application of rough yardsticks	Pre- and post-solicitation, when history of the same acquisition is unavailable, and we must compare to historical data of similar acquisitions.
4. Comparison with competitive published price lists, published market prices of commodities, similar indexes, and discount or rebate arrangements	Pre- and post-solicitation,
5. Comparison of proposed prices with independent Government cost estimates.	Pre- and post-solicitation.
6. Comparison of proposed prices with prices obtained through market research for the same or similar items	Primarily pre-solicitation, as an objective of market research, and a critical element of the market research documentation.
7. Analysis of data other than certified cost or pricing data	Primarily post-solicitation, based on TINA requirements for cost or pricing data.

## Price Analysis Techniques

Select prices for comparison

Identify factors that affect comparability

Determine the potential impact of these factors on prices selected for comparison

Adjust prices selected for comparison

Compare adjusted prices to the offer in line for award

## Bases for Price Analysis

- Other proposed prices
- Previously proposed prices & contract prices (historical data)
- Parametric estimates & rough yardsticks
- Competitive price lists, market prices, indexes, and other discounts
- Government estimates
- Market Research

The 6 Bases Covered in this Lesson

## 1. Other Proposed Prices



- Competing independently for contract award
- Meets Government requirements
- Award based on low price and greatest value
- Price not found to be unreasonable

## 2. Historical Prices



- Has the product/service been purchased before?
- What was the historical price?
- Was the historical price fair & reasonable?
- Is the comparison valid?

Research Element	You should be able to answer questions such as:
Trends in Supply and Demand	<ul style="list-style-type: none"> <li>When did past acquisitions take place?</li> <li>Is there any indication of prevailing market conditions at that time?</li> </ul>
Pattern of Demand	<ul style="list-style-type: none"> <li>What quantities were solicited for each acquisition?</li> <li>What quantities were acquired?</li> </ul>
Trends in Prices	<ul style="list-style-type: none"> <li>What was the contract price?</li> <li>How did the unsuccessful offers compare with the successful offer?</li> </ul>
Start-up Costs and Pricing Strategy	<ul style="list-style-type: none"> <li>Did the contract price include one-time engineering, tooling, or other start-up costs?</li> <li>Should future contract include similar or related costs?</li> <li>Were necessary start-up costs paid for in a manner separate from the price for the item or service?</li> </ul>
Sources of Supplies or Services	<ul style="list-style-type: none"> <li>How many sources were solicited for the prior acquisition?</li> <li>What specific sources were solicited?</li> <li>How many sources offered bids or proposals?</li> </ul>
Product Characteristics	<ul style="list-style-type: none"> <li>Are there any significant differences between the government requirements documents for the prior contract and the current requirements?</li> </ul>
Delivery/Performance Terms	<ul style="list-style-type: none"> <li>What was the delivery/performance period (days, weeks, months, years)?</li> <li>In what month(s) were supplies to be delivered/service to be performed?</li> <li>Did the vendor meet the delivery targets?</li> <li>What was the FOB point?</li> <li>Was premium transportation required for timely delivery?</li> </ul>
Ownership Costs	<ul style="list-style-type: none"> <li>What costs of ownership were associated with the acquisition?</li> </ul>
Acquisition Method	<ul style="list-style-type: none"> <li>What acquisition method was employed for past acquisition?</li> </ul>
Contract Terms and Conditions	<ul style="list-style-type: none"> <li>What were the general terms of past contracts?</li> <li>Are there any significant differences between terms of the last contract and those recommended for the acquisition?</li> </ul>
Problems	<ul style="list-style-type: none"> <li>What problems (if any) were encountered during contract performance?</li> </ul>

### 3. Parametric Estimates and Rough Yardsticks



- Typically expressed as “CERs”: ratios for an independent variable of a requirement to a dependent variable
- Enables estimating of prices for similar items based on the relationship of past prices with one or more product characteristics
- Common examples:
  - Dollars per square foot
  - Dollars per horsepower
  - Dollars per pound
  - Dollars per hour, day, month

## 4. Competitive Published Prices



- Competitive, published price lists
  - Federal Supply Schedules
  - Blanket Purchase Agreements
  - Catalogs
- Published market prices from investment firms, banks, stock exchanges
- Indexes for the same or similar items
  - Department of Labor
  - Commercial sources
- Discounts and rebate arrangements

## 5. Independent Government Estimate



- Gov's estimate of total project price
- Used to assess the reasonableness and realism of an offeror's bid price or cost proposal and are submitted by the program manager as part of a request for funding.
- Document government's assessment of the program's most probable cost and ensure that enough funds are available to execute it

## 5. Independent Government Estimate



- How was the estimate developed?
- What assumptions were made?
- Were any differences in the comparison accounted for?
- What information and tools were used?
- Where was the information obtained?
- How did previous estimates compare with prices paid?

## 6. Price Analysis of Market Research Data



- Analyzing **prices** from market research can reveal much about contractors **costs**.
- Remember:  $\text{Price} = \text{Total Cost} + \text{Profit}$   
and  $\text{Total Costs} = \text{Fixed Costs} + \text{Variable Costs}$   
Cost-Volume Analysis can be used as a price analysis technique to reveal the contractors fixed costs, total costs, and capacity.

## Cost Analysis



- **Definition:** The review and evaluation of any separate cost elements and profit or fee in an offeror's proposal, as needed to determine if price is fair and reasonable
- Also used to determine price or cost realism, how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency

*FAR 15.404-1(c)*

## Cost Analysis



Material	20,000
Material Overhead (10% × \$20,000)	+ 2,000
Direct Eng. Labor (1,000 hrs × \$80/hr)	+ 80,000
Eng. Overhead Rate (125% × \$80,000)	+100,000
Other Direct Cost	+ 10,000
Sub-Total Cost	\$212,000
G&A (3% × \$212,000)	+ 6,360
Total Contract Cost	\$218,360
Profit (15%)	+ 32,754
Contract Price	\$251,114

Cost Analysis:

Reasonableness  
of each cost  
element

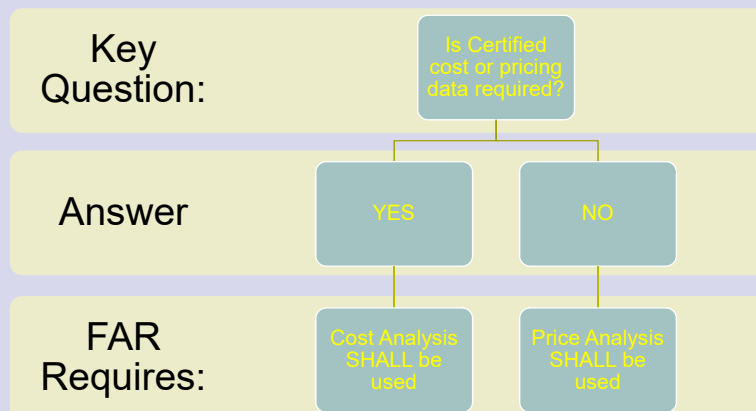
*Cost Analysis examines the details behind direct and indirect costs, allocation methodology for G & A and overhead.*

## Cost Analysis Techniques

- Verification of cost or pricing data
- Evaluation of current practices on future costs
- Evaluation of cost elements
- Comparison of proposed costs to historical data, other current cost estimates
- Proposed costs align with FAR Part 31
- Review of previous cost or pricing data

*FAR 15.404-1(c)(2)(i)*

## Absolute Authority for Price or Cost Analysis Decision



## Cost Realism Analysis



- Determination to see if proposed cost is:
  - Realistic for the work to be performed
  - Reflects a clear understanding of the requirement
  - Consistent with the approach outlined in the contractor's proposal
- Used for cost-reimbursement contracts

*FAR 15.404-1(d)*

## Process for Performing Cost Realism Analysis



- Assure the solicitation document states how the Cost Realism Analysis will be used in the award decision.
- Obtain other information necessary to support the analysis.
- Obtain analysis support from other members of the government team.
- Identify any costs/prices that are under/overstated for the required effort.
- Estimate the realistic cost of performance.
- Apply Cost Realism Analysis in the evaluation and selection process.

## Review



- **Price Analysis:** process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit
- **Cost Analysis:** review and evaluation of any separate cost elements and profit or fee
- **Cost Realism Analysis:** evaluates cost reimbursement contracts; minimizes the likelihood of underbidding

## Determining Allowability



- Reasonable
- Allocable
- Compliant with CAS, if applicable; otherwise, GAAP
- Terms of the Contract
- Any limitations set forth in this subpart in FAR 31.205

*FAR 31.201-2(a)*



## Types of Costs

### Reviewing cost definitions



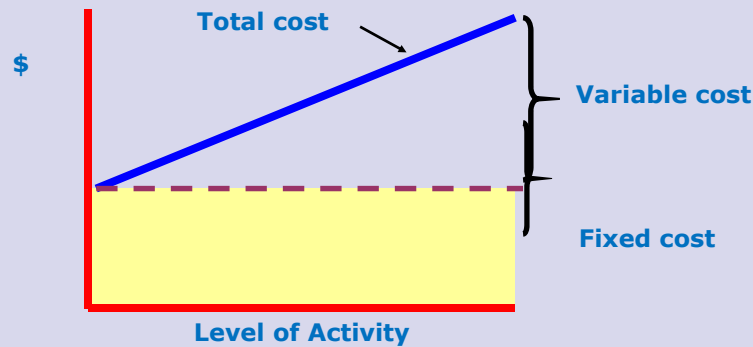
## Types of Costs

- **Fixed (F)** – an expense or cost that does not change with an increase or decrease in the number of goods or services produced or sold; expenses that have to be paid by a company, independent of any business activity
- **Variable (Vu)** – a cost that variables with the level of input.
- **Semi-Variable (Svu)** – a cost composed of a mixture of both fixed and *variable* components
- **Total (C)** – sum of all costs

## Total Cost

- Total Cost = Fixed Cost + Variable Cost

$$C = F + Vu \text{ (Quantity)}$$



## Cost-Volume-Profit Equation

- Up to now, we have only looked at the cost-volume relationship.
- Now we are going to expand that relationship to consider the relationship between cost, volume, and profit.
- Let's begin by looking at revenue and profit...

## Introducing Revenue and Profit



- Integrating our new terms:

$$\text{Revenue} = \text{Total cost} + \text{Profit}$$

$$R = F + Vu(Q) + \text{Profit}$$

- Finally, if we assume a firm sells all units produced, we can enhance our Revenue equation:

$$Ru(Q) = F + Vu(Q) + \text{Profit}$$

- This can be restated as:

$$P = \text{Revenue} - F - Vu(Q)$$

## Cost Volume Profit Analysis



- By considering revenue and profit, we can analyze the effect of a firm's purchasing decisions on profitability.
- For example: A firm has set a goal to earn \$5,000 profit on their next production run of widgets. They expect to produce between 6,000 and 8,000 units. Given the following cost information, what should they establish as their selling price per unit?
  - Fixed Cost: **\$15,000**
  - Variable Cost/Unit: **\$30**
  - Most likely sales: **6,500 units**
  - Target profit: **\$5,000**

## Cost Volume Profit Analysis



$$\begin{aligned}
 Ru(Q) &= F + Vu(Q) + P \\
 Ru(6,500) &= \$15,000 + \$30(6,500) + \$5,000 \\
 Ru(6,500) &= \$15,000 + \$195,000 + \$5,000 \\
 Ru(6,500) &= \$215,000 \\
 Ru &= \$215,000 / 6,500 \text{ units}
 \end{aligned}$$

$$Ru = \$33.08 \text{ per unit}$$

*Solution: To earn \$5,000 profit on a production of 6,500 units requires a selling price of \$33.08 per unit.*

## Cost Volume Profit Analysis



Potential good news ... it appears the firm will receive orders for 7,500 widgets. *Profitable?*

$$Profit = Ru(Q) - F - Vu(Q)$$

$$P = (\$33.08)(7,500) - \$15,000 + (\$30)(7,500)$$

$$P = (\$33.08)(7,500) - \$15,000 + \$225,000$$

$$P = \$248,100 - \$240,000$$

$$P = \$8,100$$

- Increasing production by 1000 units increased profit by \$3,100!
- But ... what assumptions did we make?***

*Variable costs remain the same*

## Cost Volume Profit Analysis



Uh, oh...tornadoes in the Midwest shifted demand. It appears the firm will only receive orders for 4,700 units. How will that affect their profit?

$$P = Ru(Q) - F - Vu(Q)$$

$$P = (\$33.08)(4,700) - \$15,000 - \$30(4,700)$$

$$P = \$155,476 - \$15,000 - \$141,000$$

$$P = -\$524$$

- ***At production of 4,700 units, the firm will have a negative profit, or a “loss” of \$524***

## From Cost-Volume-Profit Analysis to the Break-even Point



- Break-even point:
  - Quantity at which total revenue equals total cost
  - Profit is “zero” — all costs are covered (no losses), but no profit has been earned yet
- Why is the break even point important?
  - Enables an assessment of risk and seller strategy — how many widgets do I have to sell before I actually earn profit?

## Break-Even Point

- The break-even point is the quantity to produce and sell where revenue equals total costs, and profit is zero:

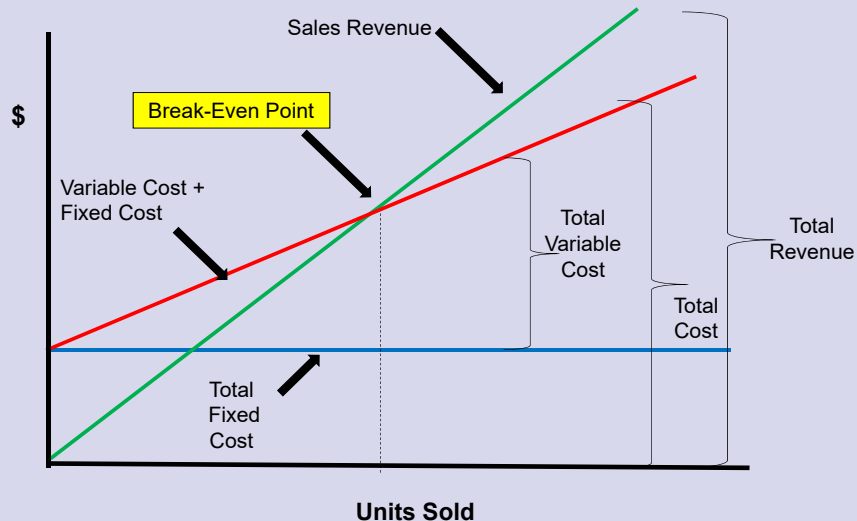
$$R = \text{Total Cost} + \text{Profit}$$

$$R = \text{Total Cost} + \$0$$

$$Ru(Q) = F + Vu(Q)$$

- A graphical depiction of the break-even point is on the next slide.


## Break-Even Point





# Cost Principles

*FAR Part 31*



## Allocable

A cost is allocable if it is assignable or chargeable to one or more cost objectives on the basis of relative benefits received ...

- Incurred specifically for the contract;
- Benefits both the contract and other work, and can be distributed to them in reasonable proportion to benefit received; or
- Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown

*FAR 31.201-4*

## Cost Allowability



- **Reasonableness (FAR 31.201-2)**
  - Nature or need for the cost and generally recognized as necessary.
  - No presumption that a cost actually incurred is a reasonable cost (negotiation of undefinitized contract actions, letter contracts, change orders, finals).
  - Contractor responsibility and burden of proof.
- **Allocability (FAR 31.201-4)**
  - Incurred specifically, distributed proportionally, or necessary to overall business
  - Direct (FAR 31.202) or indirect (FAR 31.203) – not both.
- **Accounting Principles**
  - Generally Accepted Accounting Principles (GAAP) – all contractors/contracts
  - Cost Accounting Standards (CAS) - CAS clause – no changes may increase cost to Government in aggregate

## Reasonable



- Generally recognized as ordinary and necessary for the conduct of the business or contract performance;
- Generally accepted sound business practices, arm's length bargaining and Federal and State laws and regulations;
- Contractor's responsibilities to the Government, other customers, the owners of the business and the public; and
- Contractor's established practices

**FAR 31.201-3**

## In-Class Introductory Exercise



- In groups, take a look at the classroom projection device.
- Assume your group will be going into the business of designing, manufacturing and selling the projection device.
- In your Student Guide, list **SPECIFIC costs** \* you are likely to incur in this business endeavor.

\* e.g., SPECIFIC means being more specific than saying you need material and labor to include specific materials and types of labor.



- Any questions?

?	?	?	?
Bulb	Wiring	R&D	Utilities
Lens	Shipping	Marketing	Bldg. ins.
Labeling	Screws	Executive mgt.	Rent
Case	Packaging	Travel	Security
Circuit boards	Inventory control	Legal	
Fan	Purchasing	Customer Service	
Remote Control	Mat Handlers	HR	
Design	Test equip	Fringe benefits	
Tech doc.	Super & admin	Adm. Assistant	
Test	CAD	Accounting	
Special config.	Training	IT	
Fabricators	Super & Admin	Office supplies	
Quality	Training	Trans	
Assemblers	Jigs/fixtures	Training	

Direct or Indirect Costs			
Direct Costs	Overhead	G&A	Intermediate Pools
Bulb Lens Case Circuit boards Fan Remote Control <b>DIRECT MATERIALS</b>	Wiring Shipping Screws Packaging Inventory Control Purchasing <b>MAT'L O/H</b>	R&D Marketing/Sales Management Travel Legal Customer Service HR Fringe Benefits Clerical Accounting Office Supplies Transportation Training	Utilities Building Insurance Rent Security Computer Services Copy Center
Design Technical Documents Test Spec Configuration <b>ENGR DL</b>	Test Equipment Supervisors & Clerical CAD Training <b>ENGR O/H</b>		
Fabricators Quality Assemblers <b>MGF DL</b>	Supervisors & Clerical Training Jigs/fixtures <b>MGF O/H</b>		

## Direct and Indirect Costs

- Regulations do not define the explicit criteria to determine what is direct and indirect
- Each individual contractor will define costs that are direct vs. indirect as long as company parameters
  - Generally meet the regulatory definitions of direct and indirect, and
  - Costs are treated consistently as direct/indirect every time such cost is incurred

## Final Cost Objective



Final cost objective is a final accumulation point in a job cost environment, could be:

- Contract
- Task Order
- Contract line item (CLIN), or
- Finished goods inventory (atypical in government contracting)

## Direct Costs



- Direct Cost - means any cost that is identified specifically with a particular final cost objective.
  - Direct costs of the contract shall be charged directly to the contract.
  - No final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose in like circumstances have been included in any indirect cost pool to be allocated to that or any other final cost objective

*Any cost that can be identified as benefiting one, and only one, contract*

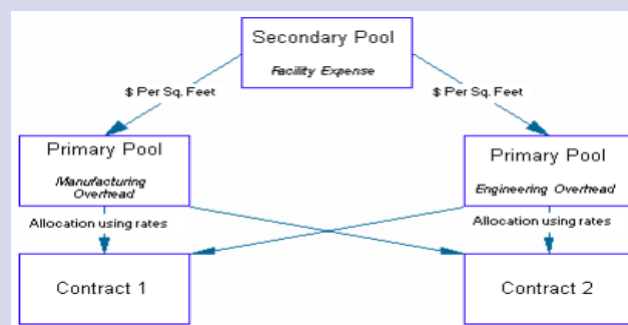
**FAR 31.202**

## Typical Direct Costs

- **Direct labor** – employee identifies actual hours worked toward one specific contract
- **Direct materials** – costs for hardware/supplies that can be identified, via specific purchase order, inventory cost system, or other identification system, to a single contract/end deliverable
- **Direct subcontracts** – awarded to a subcontractor under a specific prime contract for accomplishing objectives of that one prime contract
- **Direct travel** – costs of hotel, lodging, transportation, associated with a single contract

## Indirect Costs

Indirect cost means any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective



**FAR 2.101**

## Indirect Costs



Fundamental cost accounting guidelines in **FAR 31.203** – two parts to indirect cost allocation process:

- Indirect cost pools: accumulated in “logical cost groupings”
- Allocation base: should have causal/beneficial relationship to indirect cost allocated from indirect cost pool

*Any cost NOT classified as a direct cost.*

## Typical Indirect Costs



- Utilities
- Building rental
- Equipment depreciation
- Paid absences
- Health insurance
- Factory expendable supplies
- Selling & marketing
- Office supplies
- Building maintenance
- HR, accounting personnel salaries

## Typical Indirect Cost Pools



- Fringe Benefits
- Overhead – Company / Customer Site
- General & Administrative (G&A)
- Material Handling
- Subcontractor Handling
- Facilities
- Manufacturing
- Information Technology

## Fringe Benefits



- |                 |                            |
|-----------------|----------------------------|
| • Payroll taxes | • Retirement Plan          |
| • FICA          | • Paid time off (PTO)      |
| • FUTA          | • Cell phone reimbursement |
| • SUTA          | • Other employee benefits  |
| • Insurance     |                            |
| • Health        |                            |
| • Dental        |                            |
| • Vision        |                            |
| • STD / LTD     |                            |

## Overhead



Expenses that support functions most closely associated with contract performance, such as:

- Salaries for personnel supporting contracts
- Supplies and facilities supporting personnel working on contracts
- Warehousing/handling of direct materials
- Depreciation on factory equipment

## General and Administrative



- General management and administration of a company as a whole
  - Salaries, benefits & supporting facilities costs for HR, accounting, senior executives, etc.
  - Corporate insurance
  - Professional fees
  - Bid and proposal expenses

## Unallowable Costs



- Expressly unallowable costs – means a particular item or type of cost which, under the express provisions of an applicable law, regulation, or contract, is specifically named and stated to be unallowable.
- Accounting for unallowable costs
  - Separate series of accounts
  - Transactions coded as unallowable
  - Off the books spreadsheets

**FAR 31.001**

Number	Title	1 of 4
31.205-1	Public Relations and Advertising Costs	
31.205-2	Reserved	
31.205-3	Bad Debts	
31.205-4	Bonding Costs	
31.205-5	Reserved	
31.205-6	Compensation for Personal Services	
31.205-7	Contingencies	
31.205-8	Contributions or Donations	
31.205-9	Reserved	
31.205-10	Cost of Money	
31.205-11	Depreciation	
31.205-12	Economic Planning Costs	
31.205-13	Employee Morale, Health, Welfare, Food Service, and Dormitory Costs and Credits	

Number	Title	3 of 4
31.205-14	Entertainment Costs	
31.205-15	Fines, Penalties and Mischarging Costs	
31.205-16	Gains and Losses on Disposition or Impairment of Depreciable Property or Other Capital Assets	
31.205-17	Idle Facilities and Idle Capacity Costs	
31.205-18	Independent Research and Development and Bid and Proposal Costs	
31.205-19	Insurance and Indemnification	
31.205-20	Interest and Other Financial Costs	
31.205-21	Labor Relations Costs	
31.205-22	Lobbying and Political Activity Costs	
31.205-23	Losses on Other Contracts	
31.205-24	Reserved	
31.205-25	Manufacturing and Production Engineering Costs	
31.205-26	Material Costs	

Number	Title	3 of 4
31.205-27	Organization Cost	
31.205-28	Other Business Expense	
31.205-29	Plant Protection Cost	
31.205-30	Patent cost	
31.205-31	Plant Reconversion Cost	
31.205-32	Precontract Cost	
31.205-33	Professional and Consultant Services Cost	
31.205-34	Recruitment Cost	
31.205-35	Relocation Cost	
31.205-36	Rental Cost	
31.205-37	Royalties and Other Costs for Use of Patents	
31.205-38	Selling Costs	
31.205-39	Service and Warranty Cost	

Number	Title
	4 of 4
31.205-40	Special Tooling and Test Equipment Costs
31.205-41	Taxes
31.205-42	Termination Costs
31.205-43	Trade, Business, Technical and Professional Activity Costs
31.205-44	Training and Education Costs
31.205-45	Reserved
31.205-46	Travel Costs
31.205-47	Costs Related to Legal and Other Proceedings
31.205-48	Research and Development Costs
31.205-49	Goodwill
31.205-50	Reserved
31.205-51	Cost of Alcoholic Beverages
31.205-52	Asset Valuations Resulting from Business Combinations



# Indirect Cost Rates

How competitive is your proposal

## Financial Statements



- Income Statement
- Balance Sheet
- Cash Flow Statement
- Trial Balance

## Creating a Budget

**Budget:** an estimate of income and expenditure for a set period

**Why is it important?**

*Cash Flow*



## Cost Estimating



Process of forecasting how much a product or service (or combination thereof) will cost to acquire, produce, or maintain, given a defined scope for a specific time period

*Profit & Loss Statement is a great starting point!*

## Standard Chart of Accounts



- 1000s – Assets
- 2000s – Liabilities
- 3000s – Owner's Equity
- 4000s - Revenue
- 5000s – Direct Costs
- 6000s – Fringe Benefits
- 7000s – Overhead
- 8000s – General & Administrative
- 9000s - Unallowables

## Basis of Estimate



Expense	Basis of Estimate
Labor	Rate of Pay & Number of Employees
Rent	Fixed Contract
Fringe Benefits	% of Labor
Telecommunications	Historical Average
Bank Service Charges	Historical Average
Depreciation	Depreciation Schedule
Corporate Insurance	Fixed Contract

## Sample Budget



- Revenues

## Indirect Cost Allocation Base



- Some measure of direct contractor effort that can be used to allocate pool costs based on benefits accrued by the multiple cost objectives
- Examples of typical bases:
  - Direct labor hours
  - Direct labor dollars
  - Number of units produced
  - Number of machine hours

## Calculating Indirect Cost Rates



$$\text{Indirect Cost Rate} = \frac{\text{Indirect Cost Pool}}{\text{Indirect Cost Allocation Base}}$$

*Pool is always going to be \$, but base can be dollars, hours, etc.*

*If both pool & base are dollars, will need to multiply by 100 to get %*

## Indirect Cost Rate Formulas

$$\text{Fringe Rate} = \frac{\text{Total Fringe}}{\text{Total Labor}}$$

$$\text{Overhead Rate} = \frac{\text{Total Overhead}}{\text{Direct Labor}}$$

$$\text{G\&A Rate} = \frac{\text{Total G\&A}}{\text{Total Cost Input}}$$

## Say you have \$20M per year in engineering overhead costs

How would you charge it out if you had

- One contract?
- Two contracts of equal size?
- Four contracts where

	1X	10%	\$2M
One is twice the size of another	2X	20%	\$4M
Another is three times the size	3X	30%	\$6M
Another is four times the size	4X	40%	\$8M
	10X	100%	\$20M

## Cost Accounting Exercise



Based on their total sales forecast for the coming year, the ABC Company is expecting to incur \$75,000 in material and subcontracts, \$100,000 in direct engineering labor, and \$50,000 in direct manufacturing labor. The company's total expected indirect overhead expense of \$187,500 consists of: \$7,500 in indirect material expenses; \$80,000 in indirect engineering expenses; \$100,000 in indirect manufacturing expenses. They also have \$41,250 in general and administrative (G&A) expenses. Assume the company uses direct material and labor costs to allocate their respective overheads and a TCI base (total cost input - i.e. all direct and indirect overhead cost) to allocate G&A expense.

1. Compute the ABC Company plant-wide indirect rates.

## Cost Accounting, ABC Company



	Expense <u>Pool</u>	Allocation <u>Base</u>	Rate (Pool÷Base)
Mat. O/H	\$ 7,500	\$ 75,000	$\$7,500 \div \$75,000 = .10 = 10\%$
O/H	\$80,000	\$100,000	$\$80,000 \div \$100,000 = .80 = 80\%$
Mfg. O/H	\$100,000	\$ 50,000	$\$100,000 \div \$50,000 = 2.00 = 200\%$
	-----	-----	
	\$ 187,500	\$ 225,000	
		+ <u>\$ 187,500</u>	
G&A	\$ 41,250	\$ 412,500	$\$41,250 \div \$412,500 = .10 = 10\%$

## Fully Burdened Labor Rates



- Administrative and Advisory Services contract schedule rate for senior engineer is \$181.50.
- How much goes to paying the individual support engineer?
- If fringe included at 200% were to be reduced to 100%, would billings be reduced?

DL Rate	\$ 50.00/hr
FB (200%)	<u>\$100.00/hr</u>
Subtotal	\$150.00/hr
OH (10%)	<u>\$ 15.00/hr</u>
Subtotal	\$165.00/hr
G&A (10%)	<u>\$ 16.50/hr</u>
Total	\$181.50/hr

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## Overhead Rate Decreased from 200% to 100%



DL Rate	\$ 50.00/hr
FB (200%)	<u>\$100.00/hr</u>
Subtotal	\$150.00/hr
OH (10%)	<u>\$ 15.00/hr</u>
Subtotal	\$165.00/hr
G&A (10%)	<u>\$ 16.50/hr</u>
Total	\$181.50/hr

DL Rate	\$ 50.00/hr
FB (100%)	<u>\$ _____ ?</u>
Subtotal	\$ _____ ?
OH (10%)	<u>\$ _____ ?</u>
Subtotal	\$ _____ ?
G&A (10%)	<u>\$ _____ ?</u>
Total	\$ _____ ?

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# Execution

Connecting the technical and the cost



## Execution

### Read the RFP document

- Read and re-read it!
- Assume nothing.
- Understand everything.
- If given the opportunity, submit questions.
- Order any specs and standards immediately.
- **Bonus:** *Be aware of the type of solicitation and type of pricing. (next 4 slides ...)*

## Solicitation Types



**Recognize there are different forms of solicitation documents:**

- Sources Sought (market survey)
- Presolicitation
- Combined Synopsis/Solicitation
- Solicitation
- Request for Proposal (RFP)
- Invitation to Bid (IFB)
- Request for Quote (RFQ)

## Special process for A&E services



- Architectural/Engineering services are solicited differently.
- Multi-stage process:
  1. Submit proposals.
  2. Gov't makes "short list" of qualified firms/teams.
  3. Firms/teams interviewed and ranked.
  4. Price is then negotiated with firm/team ranked #1.

## Execution



### Digest the Statement of Work (SOW)

- Make sure you can perform all the work.
- If not, call in others who can assist.
- Begin to articulate ***why you should be awarded the contract*** ...
- ... And plan to incorporate this thinking into your proposal.
- ... And ***be prepared to rate yourself objectively*** against any evaluation criteria.

## Execution



### Determine your potential

- Is the opportunity consistent with your business plan?
- Do you have adequate capacity, equipment and personnel?
- Do you have (or can you acquire) sufficient experience?
- Can you beat the competition?
- Is the risk manageable?
- Can you make money?
- Make a “Go / No-Go” decision - *tool on next slide*

Proposal Manager _____				Client Name _____								
Office Location _____				Procurement Name _____								
Business Unit _____				Estimated Total Value _____								
Estimated B&P Cost _____				Per Year Value _____								
<b>Go/No Go Decision</b>												
Bid Factors	Bid Factor Scoring Scale										Estimated Score	
	Negative			Neutral			Positive				Our Company	Top Competitor
	1	2	3	4	5	6	7	8	9	10		
1. Are you known by the client?	Unknown to this client			Known to client, but not fully cultivated			Well-developed working relationship; previous contracts					
2. Is this the first you heard of procurement?	Did not expect RFP; unprepared			Generally up-to-date; no major negatives			Known 3-12 months; good favorable, confirmed intelligence					
3. What is our overall technical capability/position?	Not qualified; weak relevant experience			Capable; understand problem; experienced			Can meet/exceed every requirement; technically superior					
4. Can we provide proof of qualified staff?	Limited in-house staff available			Good in-house staff available			Best in-house staff available					
5. Are subcontractors needed?	Yes, but will dilute position			Yes, but will have little or no effect			Yes, and will enhance overall proposal					
6. What is the financial potential?	Marginal long term; no short term return			Good long term; questionable short term			Excellent long term; excellent short term					
7. Can we respond with a complete, compelling proposal?	Unclear understanding of problem/project needs; limited response			Understand problems, project & client needs; can respond			Can meet/exceed all requirements; have compelling story; know hot buttons					
8. Who are our competitors?	Competitor is strongly favored or UNKNOWN			Open competition with no strong favorite			We are strongly favored over competition; incumbent					
9. Is project within our geographic region?	Poor geographic presence/experience			Good geographic presence/experience			Strong geographic presence and experience					
10. What is our pricing competitiveness?	Must cut corners; cost share; risky			Reasonable & competitive; reasonable risks			Honest, credible price within known limits; acceptable risks					
<b>Total score of factors evaluated</b>												
<b>Maximum potential score</b> (number of factors evaluated times 10)												
<b>Decision</b> (Total score should be about 75+% of maximum score for a "Go" decision, or better than the top competitor.)											Go	No

## Execution



### Understand the terms and conditions

- Often called the “boilerplate.”
- Don’t discount their importance.
- No shortcuts – read the Terms & Conditions (T’s & C’s) at least once.
- Research anything you’re not sure of.
- The government expects you to understand all of the T’s & C’s.

## Execution



### Master the evaluation (selection) criteria

- Understand that these are the grounds on which you will be selected – or not.
- If you were the buyer, think about what qualities in a vendor you would look for.
- Hang the selection criteria on the wall above your work space, so you can refer to the criteria – often – and figure out how you can incorporate them into your proposal.

## Execution



### Assign responsibilities and update schedule

- Make sure everyone knows their role, who's in charge, and what the deadlines are.
- Update proposal development schedule daily.
- Establish back-up plans.
- Don't forget to allow time for delivery.

## Execution



### Estimating Techniques

- Analogy
- Engineering build up
  - “bottoms-up” or “grass roots”
- Parametric

## Execution



### Estimating Resource Requirements

- Document all assumptions
- Use the WBS structure
- Ensure all ground rules are clearly understood
- Techniques for estimating Direct Labor
- Techniques for estimating Direct Material
- Techniques for estimating Other Direct Cost
- Applying indirect cost rates

## Execution



### Document all assumptions

- Uncertainty always exists – assumptions are an integral part of the preparation process
- Necessary to prepare the estimate
- Available technology and how those assumptions changed the amount of resources in the estimate
- Customer actions such as the timeliness of approvals and the impact on the resource estimate

## Execution



### Estimating Direct Labor

- Estimates may be based on:
  - Historical costs or hours from similar programs
  - Analysis of the contracts specific technical requirements
  - Industrial engineering assessments of required tasks
  - Work study activities
- Use appropriate labor categories
- Understand the impact of labor mix on labor costs
- Understand definition of terms such as person-month, or person-year

## Execution



### Estimating Direct Labor

- Current direct labor rates by labor category
- Labor-management agreements
- Labor costs from prior contracts for similar work adjusted for quantity, inflation, and improvement curves
- Labor hours from prior contracts for similar work adjusted for quantity, inflation, and improvement curves

## Execution



### Estimating Direct Labor

- |  |   |
|--|---|
| • Labor mix                            | • Key personnel issues                          |
| • Labor rates                          | • Service Contract Act issues                   |
| • Learning curves                      | • Validity of any cost estimating relationships |
| • Historical labor hour or cost data   |   |
| • Changes in approach or manufacturing |   |

## Execution



### Estimating Direct Labor

- Ensure:
  - The labor in the cost proposal matches the labor in the SOW and technical proposal
  - There is a detailed justification for the estimated labor hours
- Use consistent formulas to facilitate summary schedules and evaluating “what if” scenarios
- Use “labor crosswalks” for time and material and level of effort contracts

## Execution



### Estimating Direct Material

- Basis of estimate:
  - Engineering drawings
  - Bill of material
  - Scarp and rework factors
  - Direct materials used on similar contracts

## Execution



### Estimating Direct Subcontractor

- Basis of estimate:
  - Subcontractor participation on similar contracts
  - Estimates obtained from proposed subcontractors

## Execution



### Estimating Other Direct Costs

- Need to have clear definitions of what constitutes ODCs
- Include only those allowed by company policy
- Examples of typical ODCs:
  - Special tooling or test equipment
  - Packaging and transportation
  - Travel

## Execution



### Applying indirect cost rates

- Use appropriate rates based on budget
- Do not attempt to achieve a target cost by adjusting indirect cost rates

## Execution



### The marriage

- Consistency between the technical proposal and the cost proposal is paramount
- Ensure the technical approach described in the technical proposal is consistent with the resources estimated in the cost volume
- Ensure the skill sets are consistent
- Ensure subcontractor estimates are consistent with the technical approach

## Execution



### Packaging the Cost Proposal

- CO expects to see detailed budgets for each year of proposed performance
- Information on pricing proposal cover sheet:
  - Solicitation, contract, and/or modification number
  - Name and address of offeror
  - Name and telephone number of point of contact
  - Name of contract administration office (if available)
  - Type of contract action
  - Proposed cost; profit or fee; and total
  - Whether you will require the use of Government property in the performance of the contract, and, if so, what property

***FAR 15.408 Table 15-2***

## Execution



### Follow all instructions, complete the proposal, and submit it.

- Attention to detail is paramount!
- Look for proposal-writing instructions in the RFP (*section L in federal RFPs*).
- Your proposal will be judged now as your work later.
- If you are asked to answer 10 questions, answer 10 – *not 9 or 11*.
- You cannot be late!



- Have available and make use of current customer information (know the factors driving price)
- **Know what it costs your company to do business**
- Know what your competitors' costs are to do the same business
- Provide a well-designed work breakdown structure (WBS) that ties to the performance work statement & is supported by basis of estimates
- Actively determine your company investments in the project you are bidding
- Be the company that is easy to do business with
- Be cost competitive and get creative about it

