

HAWAII STATE PROCUREMENT OFFICE

BASIC PRICING CLASS

July 2016

A majority of this manual is taken from the *Contract Pricing Reference Guide, Volume 1* from the Defense Acquisition University. The Full version can be found at:
<https://acc.dau.mil/CommunityBrowser.aspx?id=406579> (Note: You might get a notice about the site's certificate. Proceed anyway. This is a Federally managed safe site.)

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CHAPTER ONE: INTRODUCTION TO PRICING



1.0 Chapter Introduction

Contract Pricing Environment. An important part of your job as a procurement specialist is to conduct the price analyses necessary to ensure that the Government¹ purchases supplies and services from responsible sources at fair and reasonable prices. To begin your study of contract pricing, we will examine the pricing environment, including:

- Procurement Life Cycle (Section 1.1)
- The Regulations (Section 1.2)
- What is Fair and Reasonable Pricing? (Section 1.3)
- Planning (Chapter 2)
 - Independent Government Estimate (IGE) (Section 2.1)
 - Market Research (MR) (Section 2.2)
 - Strategy (Section 2.3)
- Solicitation & Award (Chapter 3)
 - Price Analysis (Section 3.2)

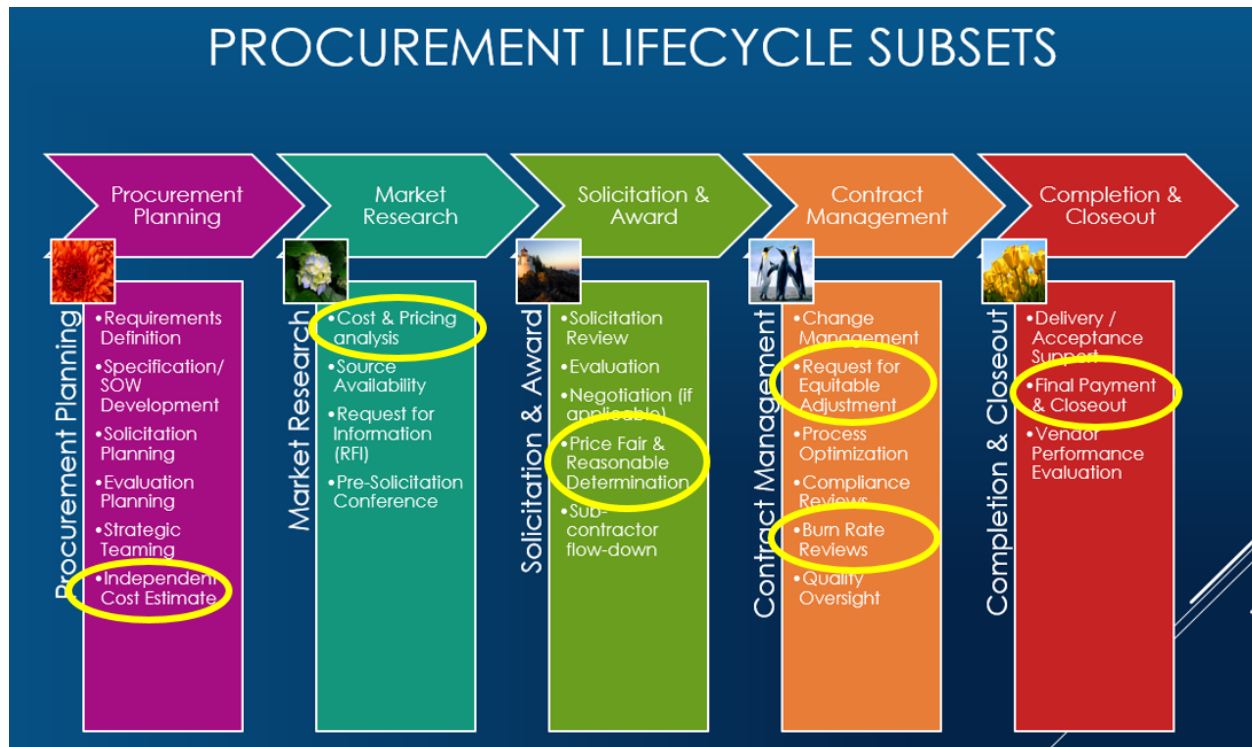
¹ The word 'Government' is synonymous to State, County and Public Agencies

- Contract Management & Closeout/Handover (Chapter 4)
 - Request for Equitable Adjustment (Section 4.1)
 - Burn Rate & Obligation Logs (Section 4.2)
 - Closeout issues (Section 4.3)

Scope of the Training. This Basic class introduces the concept of pricing analysis, and when and how to do it across the Procurement Life Cycle. It also presents an in-depth study of Price Analysis. Multiple tools, templates and recommended websites are included to give you active tools to assist. This training will NOT include any in-depth study on Cost Analysis or Cost Realism. These will be presented at a later, Intermediate training.

Although the structure of this training is based on Code from HRS103D, Goods, Services and Construction, all these best practices should be used as practicable for HRS103F, Health and Human Services as well.

1.1 The Procurement Life Cycle



Cost and pricing requirements do not stand in a vacuum. Rather, they are part of the larger procurement system called the Procurement Life Cycle. The Procurement Life Cycle denotes a holistic view of the entire procurement process, from inception of the need to procure to the completion of that need, or the handover to a continued need and a new procurement. Thus the Life cycle is circular.

For our purposes, the Procurement Life Cycle has five major steps:

1. Procurement Planning
2. Market Research
3. Solicitation and Award
4. Contract Management
5. Completion & Closeout

Although procurement planning and market research should happen in parallel, they are both such important areas to consider, each with substantial data of their own, that it substantiates their own Steps. The same could be said about contract management and closeout.

Cost and Pricing analysis is required in various steps throughout the Procurement Life Cycle. It is fair to say that a Professional Procurement Officer/Specialist must be considering the effects of costs throughout the life of a procurement. Being able to analyze and evaluate pricing, costs, realism, maintain burn rates and log payments and obligations are a vital part of the job.

1.2 The Regulations



Statute

The Procurement Code talks to the requirement for price and cost certification and analysis. The Hawaii Revised Statute, HRS 103D-312 was recently amended² and states:

103D-312 Fair and reasonable pricing policy; cost or pricing data.

- (a) A procurement officer shall purchase goods, services, and construction from responsible sources at fair and reasonable prices. A procurement officer shall make a written determination whether a price is fair and reasonable for, each contracting action, including change orders and contract modifications that adjust prices: In establishing whether a price is fair and reasonable, the procurement officer shall obtain:
- (1) Certified cost or pricing data for every contract to which subsection (c) applies; and
 - (2) Other data as necessary to perform a cost or price analysis of the data and determine a fair and reasonable price, regardless of whether subsection (c) applies to the contract.

² Legislative Session 2016, HB 2060 HD1, SD2

- (b) The policy board may adopt rules, pursuant to chapter 91, to establish an order of preference in the type of data required under subsection (a)(2).
- (c) A contractor, except as provided in subsection (e), shall submit cost or pricing data and shall certify that, to the best of the contractor's knowledge and belief, the cost or pricing data submitted is accurate, complete, and current as of a mutually determined specified date before the date of:
 - (1) The pricing of any contract awarded by competitive sealed proposals or pursuant to the sole source procurement authority, where the total contract amount is expected to exceed an amount established by rules adopted by the policy board; or
 - (2) The pricing of any change order or contract modification that is expected to exceed an amount established by rules adopted by the policy board. The requirement of this paragraph shall apply regardless of whether the original contract award did not require certified cost and pricing data.
- (d) Any contract, change order, or contract modification under which a certificate is required shall contain a provision that the price to the State, including profit fee, shall be adjusted to exclude any significant sums by which the State finds that the price was increased because the contractor furnished cost or pricing data that was inaccurate, incomplete, or not current as of the date agreed upon between the parties.
- (e) The requirements of this section, except for the requirements of paragraph (c) (2), shall not apply to original contract awards:
 - (1) Where the original contract price is based on adequate price competition;
 - (2) Where the original contract price is based on established catalog prices or market prices;
 - (3) Where the original contract prices are set by law or rule; or
 - (4) Where it is determined in writing in accordance with rules adopted by the policy board that the requirements of this section may be waived, and the reasons for the waiver are stated in writing; - provided that the requirements for price and costing data required under subsection (a) (2) shall not be waived without the approval of the chief procurement officer; provided further that the chief procurement officer shall not delegate this authority.”

Rules

Hawaii Administrative Rules (HARS) Subchapter 15, 3-122-121 through 130 supplements the Statute with additional cost and pricing guidance. Here is an excerpt from the Rules:

§3-122-123 Requirement for cost or pricing data. The procurement officer shall require cost or pricing data or both in support of the following, and may require for professional services pursuant to subchapter 7:

- (1) Any contract, resulting from competitive sealed proposals or sole source procurement, expected to exceed \$100,000;
- (2) Any price adjustment to a contract involving aggregate increases and decreases in costs plus applicable profits expected to exceed \$100,000, including a contract resulting from competitive sealed bidding, whether or not cost or pricing data were required in connection with the initial pricing of the contract, except when unrelated and separately priced adjustments, not requiring cost or pricing data if considered separately, are consolidated for administrative convenience; or
- (3) A written determination by a procurement officer that the circumstances warrant requiring submission of cost or pricing data provided, however, when less than complete cost analysis, for example; analysis of only specific factors will provide a reasonable pricing result on awards under \$100,000 without the submission of complete cost or pricing data, the procurement officer shall request only that data considered adequate to support the limited extent of the cost analysis needed and need not require certification.

§3-122-124 Exceptions to the requirement for cost or pricing data.

- (a) Cost or pricing data need not be submitted or certified where the contract price is based on:
 - (1) Adequate price competition which means at least two responsible offerers independently compete for a contract to be awarded to the offerer submitting the lowest evaluated price.
 - (2) Established catalogue price which means the price included in a catalogue, price list, schedule, or other form that is regularly maintained by a manufacturer or contractor; is either published or otherwise available for inspection by customers; and states the price at which sales are currently or were last made to a significant number of any category of buyers or buyers constituting the general (non-government) buying public for the goods or services involved.

- (3) Established market price which means a current price, established in the usual and ordinary course of trade between buyers and sellers, which can be substantiated from sources independent of the manufacturer or supplier and may be an indication of the reasonableness of price.
- (4) Prices set by law or regulation which means the price of a good or service is set by law or rule if some governmental body establishes the price that the contractor may charge the State and other customers.
- (b) If, despite the existence of an established catalogue price or market price, and after consultation with the prospective contractors, the procurement officer considers that the price is not reasonable, cost or pricing data may be requested. Where the reasonableness of the price can be assured by a request for cost or pricing data limited to data pertaining to the differences in the item or services being procured and those listed in the catalogue or market, requests should be so limited.
- (c) When the chief procurement officer or the head of a purchasing agency determines in writing to waive the applicable requirements of section 3-122- 123 (1) or 3-122 123(2) for submission of cost or pricing data in a particular pricing action and the reasons for the waiver are stated in the determination, a copy of the determination shall be kept in the contract file and made available to the public upon request.
- (d) If after cost or pricing data were initially requested and received, it is determined that adequate price competition does exist, the data need not be certified.

SPO Form 13 is a template used for Certification of Cost or Pricing Data. (Found at link: <http://spo.hawaii.gov/wp-content/uploads/2013/12/spo-013.pdf>)

**STATE OF HAWAII
CERTIFICATE OF CURRENT COST OR PRICING DATA**

This is to certify that, to the best of my knowledge and belief, cost or pricing data as defined in section 3-122-122 and submitted pursuant to section 3-122-125; either actually or by specific identification in writing to the procurement officer in support of _____*, are accurate, complete, and current as of _____**.
(month, date, year)

This certification includes the cost or pricing data supporting any advance agreement(s) between the offeror and the (State) which are part of the proposal. Please type or print:

| | |
|----------------|------------------------|
| Vendor / Firm: | Date of Execution: *** |
| Name: | Title |

(Signature)

(Print Name and Title)

(Date)

(End of Certificate)

* Describe the proposal, quotation, request for price adjustment or other submission involved, giving appropriate identifying number (e.g. RFP Number).

** The effective date shall be a mutually determined date prior to but as close to the date when price negotiations were concluded and the contract price was agreed to as possible. The responsibility of the offeror or contractor is not limited by the personal knowledge of the offeror's or contractor's negotiator if the offeror or contractor had information reasonably available at the time of the agreement, showing that the negotiated price is not based on accurate, complete, and current data.

*** This date should be as soon after the date when the price negotiations were concluded and the contract price was agreed to as practical.

SPO Form-13 (Rev. 7/1/02)

NOTE: Certification is not the end of this process. The Procurement Officer still needs to analyze the cost or pricing data submitted to find it fair and reasonable!

In addition to the above, the HARS also has guidance on Cost Principles in HARS, Chapter 123 based on HRS 103D-601 Cost Principles.

These Rules show what costs are allowable, appropriate and allocable. Typically, this area is more predominant in Cost Analysis. However, it is important to have a working knowledge of what costs contractors should not be proposing.

1.3 Determining PRICE Fair and Reasonable



What is Fair and Reasonable Pricing?

- ▀ Identify Government's Pricing Objectives
 - ▀ Pay a Fair and Reasonable Price
 - ▀ Price Each Contract Separately
 - ▀ Exclude Contingencies
- ▀ Identify Government Approaches to Contract Pricing
 - ▀ Price Analysis
 - ▀ Cost Analysis
 - ▀ Cost Realism Analysis

Definitions of Price. From both work and personal business dealings, most people think of price as the amount of money that a buyer pays a seller for the delivery of a product or the performance of a service. Price considerations emphasizes its components: Cost plus any fee or profit applicable to the contract type.

Both definitions of price are important. Primarily, price is defined as the amount the buyer pays for a product or service. However, it is important to remember that, if prices do not cover supplier costs and provide a profit, losses will occur. When a contract is priced below cost, performance risk increases. The contractor must finance contract performance with funds from other sources (e.g., profits from other contracts, financial reserves, or overpriced contract modifications). If contractor efforts to control costs result in unsatisfactory performance, contractor default is a real possibility.



Identify Government's Pricing Objectives

- Identify Government's Pricing Objectives
 - Pay a Fair and Reasonable Price
 - Price Each Contract Separately
 - Exclude Contingencies

1.3.1 Identifying Government's Pricing Objectives

This section covers the following topics:

- 1.3.1.1 - Pay A Fair and Reasonable Price
- 1.3.1.2 - Price Each Contract Separately
- 1.3.1.3 - Exclude Contingencies

Government Pricing Objectives. When buying for the Government, your primary pricing objective for all contract actions is to acquire supplies and services from responsible sources at **fair and reasonable** prices.



Fair and Reasonable

- Fair to the Buyer
- Fair to the Seller
- Price Evaluation Factors

1.3.1.1 Pay A Fair and Reasonable Price

Understand Fair and Reasonable. The first element of the Government pricing objective requires that contract prices be **fair and reasonable**.

The procurement officer's³ primary objective in pricing a contract is to balance the contract type, cost, and profit or fee negotiated to achieve a total result -- a price that is fair and reasonable to both the Government and the contractor. **[The contracting officer must consider the terms and conditions (delivery, financing, etc.) of each specific contract in order to determine if the price for that contract is fair and reasonable.]**

The term "fair and reasonable price," implies two tests:

- What is fair?
- What is reasonable?

What Is Fair? Buyers and sellers may have different perceptions on what price is fair.

1. Fair to the Buyer. To be fair to the buyer, a price must be in line with (or below) either of the following:

³ The term Procurement Officer is synonymous with Contracting Officer. This also applies to Procurement Specialists and Contract Specialists.

- The fair market value of the contract deliverable (if that can be ascertained through price analysis). Expect to pay the fair market value, given the prices of market transactions between informed buyers and sellers under similar competitive market conditions for deliverables with similar product, quality, and quantity requirements.
- The (1) total allowable cost of providing the contract deliverable that would have been incurred by a *well-managed, responsible firm using reasonably efficient and economical methods* of performance plus (2) a reasonable profit.

As a buyer, you should consider a price that is TOO HIGH to be unfair. What happens if you agree to a price that is too high?

- You will not be fulfilling your most basic responsibility as a Government procurement officer or procurement specialist.
- You will waste scarce tax-payer funds.
- Since you are publicly accountable as a State/County employee for your decisions, you may have to answer to your Agency Head, the Chief Procurement Officer, a Legislative committee, or the public at large.

2. Fair to the Seller. To be fair to the seller a price must be realistic in terms of the seller's ability to satisfy the terms and conditions of the contract.

- **Risk of Prices Unfair to the Seller.** Why should you care if a low offer is unrealistic? Because an unrealistic price puts both parties at risk. The risk to the Government is that the firm -- to cut its losses -- might:
 - Cut corners on product quality;
 - Deliver late;
 - Default, forcing a time-consuming re-procurement; or
 - Refuse to deal with the Government in the future or be forced out of business entirely.

Situations for Special Consideration. Fairness to the seller can be a concern in both competitive and noncompetitive situations.

- **Below-Cost Prices.** Below-cost prices are NOT necessarily unfair to the seller. A bidder, for various reasons, in its business judgment may decide to submit a below-cost bid; such a bid is not invalid. Whether the awardee can perform the contract at the price offered is a matter of responsibility.
- On the other hand, be on guard against the practice of buying-in -- submitting offers below anticipated costs, expecting to:
 - Increase the contract amount after award (e.g., through unnecessary or excessively priced change orders); or
 - Receive follow-on contracts at artificially high prices to recover losses incurred on the buy-in contract.

- **Mistakes.** The offered price may be unexpectedly low because the seller has made gross mistakes in estimating costs or is otherwise nonresponsible.
- The award of a contract to a supplier based on lowest evaluated price alone can be false economy if there is subsequent default, late deliveries, or other unsatisfactory performance resulting in additional contractual or administrative costs. While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer. A prospective contractor must affirmatively demonstrate its responsibility, including, when necessary, the responsibility of its proposed subcontractors.
- If a vendor offers a price that is far below other offered prices or your estimate of the probable price, treat the offer as a potential mistake. Conduct fact-finding to determine whether the offeror understands the work and can perform at the offered price.
- **Single-Source Procurements.** Do NOT force a below-cost price on the offeror even if you believe that the offeror has the financial ability to absorb the probable loss. Instead, negotiate a contract of a type and a price that is likely to cover all allowable costs of performance, assuming reasonable economy and efficiency, and provide a reasonable profit. Even your opening position in non-competitive negotiations should NOT be a "below cost" number. Rather, your opening position should be based on a more optimistic reading of the potential production improvements, risks, and costs of providing the contract deliverable than that of the target position on price.

What Is Reasonable? A **reasonable price** is a price that a prudent and competent buyer would be willing to pay, given available data on:

- **Market Conditions.** Economic forces such as supply, demand, general economic conditions, and competition change constantly. Hence, a price that is reasonable today may not be reasonable tomorrow.
 - **Supply and Demand.** The forces of supply and demand can have a significant effect on product prices:
 - If demand is constant, decreasing supply usually results in higher prices, while increasing supply usually results in lower prices.
 - If supply is constant, decreasing demand usually results in lower prices, while increasing demand usually results in higher prices.
 - **General Economic Conditions.** General economic conditions affect the prices of all products, but the effect will NOT be the same for every product. Inflation and deflation affect the value of the dollar. Boom, recession, and depression affect available production capacity.
 - **Competition.** When competition does not exist, the forces of supply and demand may not work effectively. The buyer or seller may have an advantage in the pricing decision process.

Price-Related Evaluation Factors. A prudent buyer will consider differences in the cost of acquiring and owning a deliverable that are not covered by the contract price. To consider these price-related factors in a competitive procurement, the solicitation must provide for such consideration. For example:

- **Direct Costs Not Included in The Contract Price.** The solicitation allowed offerors to submit offers either for f.o.b. destination or f.o.b. origin. Best practice expects that offer evaluation criteria provide for consideration of the shipping costs from f.o.b. origin points to destination, however, consider our geographic dis-location from the mainland and factor that in.
- **Costs of Ownership Not Included in The Contract Price.** Your market research indicates that several products could satisfy your requirement. However, the products differ substantially in maintenance and repair costs. Offer evaluation criteria should provide for consideration of the related costs to the Government.

Applying Judgment to the Determination.

Your determination of whether an offer is **fair and reasonable** is a matter of judgment. There is no simple formula in which you can just plug in a few values and receive a firm answer of **fair and reasonable**. Determining what is **fair and reasonable** depends on market conditions, your alternatives for meeting the requirement, price-related factors, and the non-price evaluation factors that relate to each procurement. It also depends on what price you can negotiate with an offeror.

A fair and reasonable price does not require that agreement be reached on every element of cost, nor is it mandatory that the agreed price be within the contracting officer's initial negotiation position. Taking into consideration the advisory recommendations, reports of contributing specialists, and the current status of the contractor's purchasing system, the contracting officer is responsible for exercising the requisite judgment needed to reach a negotiated settlement with the offeror and is solely responsible for the final price agreement.



1.3.1.2 Price Each Contract Separately

The second element of the Government pricing objective requires that contracts be priced separately.

Perspective. It is human nature to try to balance one contract against another in terms of financial results.

- A seller's position might be that the firm lost money on the last contract; therefore, an effort should be made to make up for that loss on the next contract.
- A buyer's position might be that the contractor made too much profit on the last contract; therefore, the next contract should be structured to restrict profit.

Government Contracting. While these attitudes may be understandable in a personal sense, they are not valid in Government contracting.

Government contracting is very complex because:

- Buyers and sellers do not have perfect knowledge of all transactions between a contractor and the Government.
- The market forces of competition, supply, and demand change.
- Business conditions change.

Thus, you must price each contract separately and independently to ensure that all proposed prices are fair and reasonable to all involved parties.

1.3.1.3 Exclude Contingencies

The third element of the Government pricing objective requires that contracts exclude contingencies that CANNOT be reasonably estimated at the time of award.

Contingency Definition. A **contingency** is a possible future event or condition arising from presently known or unknown causes, the outcome of which is not determinable at the present time.

Types of Contingencies. You should know that there are two types of contingencies that are important in Government contracting:

- Contingencies that may arise from presently known and existing conditions, the effects of which are foreseeable within reasonable limits of accuracy; and
- Contingencies that may arise from presently known or unknown conditions, the effects of which CANNOT be measured so precisely as to provide equitable results to the contractor and the Government

Pricing Decision. The following table shows you how to handle each type of contingency in terms of the contract price:

| Contingency | Examples | Contract Price |
|---|--|--|
| Foreseeable within reasonable limits of accuracy | <ul style="list-style-type: none">• Cost of rejects• Cost of defective work | Contingencies of this type should be included in contract cost estimates to make those estimates as accurate as possible. |
| CANNOT be measured so precisely as to provide equitable results to the contractor and to the Government | <ul style="list-style-type: none">• Results of pending litigation• Costs of volatile material price changes | Contingencies of this type should be excluded from the cost estimates under the several items of cost, but should be disclosed separately (including the basis on which the contingency is computed) to facilitate the negotiation of appropriate contract coverage. |

For example, if you have extensive production experience with a given product, the contractor and the Government can likely agree on the amount of scrap that can reasonably be expected during production. This type of contingency should be included in contract cost estimates.

On the other hand, in times of volatile material price changes, it would be unreasonable to both parties for an offeror to include a contingency to cover significant price increases when none may occur. In this situation, you should consider use of a contract type (e.g. fixed-price economic price adjustment) that provides for separate consideration of volatile price changes. Separate consideration will provide for better contract pricing and more effective competition.



What is Fair and Reasonable Pricing?

- Identify Government Approaches to Contract Pricing
 - Price Analysis
 - Cost Analysis
 - Cost Realism Analysis

1.3.2 Identifying Government Approaches to Contract Pricing


Approaches to Determine Fair and Reasonable Prices

As a procurement specialist, your primary objective as a Government buyer is to acquire supplies and services⁴ from responsible sources as **fair and reasonable** prices. You can use three basic approaches to attain this objective:

- Price analysis;
- Cost analysis; and
- Cost realism analysis.


For the purposes of this class, we will focus on Price Analysis only.

⁴ The term 'supplies and services' or 'goods and services' includes construction and professional services.



Two Methods for Determining Price Reasonableness?

- Price Analysis
 - Always
- Cost Analysis
 - As Required



Analysis Routes

1.3.3 Identifying Price Analysis Considerations

Definition of Price Analysis. Price analysis is the process of examining and evaluating a proposed price to determine if it is fair and reasonable, without evaluating its separate cost elements and proposed profit. Price analysis may be, when necessary, supplemented by evaluation of cost elements.

When to Use Price Analysis. When an offeror is not required to provide cost or pricing data, you must use price analysis to ensure that the overall price is fair and reasonable.

When an offeror is required to provide cost or pricing data, use cost analysis to evaluate the reasonableness of individual cost elements. Use price analysis to verify that the overall price offered is fair and reasonable.

Bases for Price Analysis. Price analysis **always** involves some form of comparison with other prices. As the contracting officer, you are responsible for selecting the bases for comparison that you will use in determining if a price is fair and reasonable, such as:

- Proposed prices received in response to the solicitation;
- Commercial prices including competitive published price lists, published commodity market prices, similar indexes, and discount or rebate arrangements;
- Previously-proposed prices and contract prices for the same or similar end items, if you can establish both the validity of the comparison and the reasonableness of the proposed price;

- Parametric estimates or estimates developed using rough yardsticks;
- Independent Government Estimates; or
- Prices obtained through market research for the same or similar items

The order in which the bases for price analysis are presented on this list represents the general order of desirability. However, the order is NOT set in concrete. For example:

- Comparisons with commercial catalog, market, or regulated prices can be just as desirable as comparisons with competitive offers. After all, the prices of commercial products are defined by commercial market competition.
- Independent Government estimates are normally considered to be the least desirable comparison base for price analysis. However, in cases (e.g., construction) where estimates are based on extensive detailed analysis of requirements and the market, the Government estimate can be one of the best bases for price analysis.

Moreover, you should use all bases for which you have recent, reliable, and valid data. For instance, you would be well advised to consider the last price paid in addition to current competitive prices -- especially if the prior contract was awarded at a reasonable price last month.

Buyer Evaluation and Documentation. Price analysis is a subjective evaluation. For any given procurement, different bases for price analysis may give you a different view of price reasonableness. Even given the same information, different buyers/contracting officers might make different decisions about price reasonableness.

It is the cognizant contracting officer who must be satisfied that the price is fair and reasonable.

You must document the file concerning the rationale used in making the pricing decision. Otherwise, the individuals who may review your file later may not know or understand the factors that affected your decision.

1.3.4 Identifying Cost Analysis Considerations

Definition of Cost Analysis. **Cost analysis** is the review and evaluation of the separate cost elements and proposed profit/fee of:

- An offeror's or contractor's cost or pricing data or information other than cost or pricing data and
- The judgmental factors applied in projecting from the data to the estimated costs.

The purpose of the evaluation is to form an opinion on the degree to which the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.

When to Use Cost Analysis. Perform cost analysis in **either** of the following situations:

- When the offeror is required to submit cost or pricing data. In this situation, the offeror must provide complete, accurate, and current data to support all proposed costs and profit/fee.
- When you require an offeror to submit cost information other than cost or pricing data to support your decision on price reasonableness or cost realism. In this situation, require only the information necessary to determine price reasonableness or cost realism. This may be required, for example, when you are comparing a proposed price to a price previously paid on a similar item. You may need cost information from the contractor to determine the impact, on the price, of the differences between the two items.

Definition of Contract Cost. **Contract cost** is the sum of the allowable **direct and indirect costs** allocable to a particular contract, incurred or to be incurred, less any allocable credits, plus any allocable cost of money.

Direct cost is any cost that can be identified specifically with a final cost objective, such as a contract.

Indirect cost is any cost that CANNOT be directly identified with a single, final cost objective, but is identified with two or more final cost objectives or an intermediate cost objective.

For reasons of practicality, any direct cost of minor dollar amount may be treated as an indirect cost if the accounting treatment is consistently applied to all cost objectives and the treatment produces substantially the same results as treating the cost as a direct cost.

Definition of Profit/Fee. Profit/fee is the dollar amount **over and above allowable costs** paid to the contractor to motivate contractor performance. Together contract cost and contract profit/fee total contract price. Thus contract profit is an important element of contract price and must be considered in cost analysis. Each agency must establish a structured approach for analysis of proposed profit/fee.

Identifying Contract Costs. Not all contract costs are cash expenditures during the contract period. Major contract costs can fall in the following categories:

- Cash expenditures-the actual outlay of dollars in exchange for goods or services
- Expense accrual -expenses are recorded for accounting purposes when the obligation is incurred, regardless of when cash is paid out for the goods or services.

- Draw down of inventory -the use of goods purchased and held in stock for production and/or direct sale to customers. The term refers to both the number of units and the dollar amount of items drawn out of inventory.

Cost Analysis Supplements Price Analysis. Cost analysis is not a substitute for effective price analysis. Cost analysis should provide insight into what it will cost the firm to complete the contract using the methods proposed. However, cost analysis does not necessarily provide a picture of what the market is willing to pay for the product involved. For that you need price analysis.

1.3.5 Identify Cost Realism Analysis Considerations

Definition of Cost Realism Analysis. Cost realism analysis is the process of independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements:

- Are realistic for the work to be performed;
- Reflect a clear understanding of the requirements; and
- Are consistent with the unique methods of performance and materials described in the offeror's technical proposal.

When to Use Cost Realism Analysis. Perform a cost realism analysis of each cost-reimbursement contract offer to determine the probable cost of contract performance and use that estimate in your evaluation of the best value to the Government.

- The probable contract cost related to a cost-reimbursement contract offer may differ substantially from the proposed cost. Your most probable cost estimate should reflect your best estimate of the cost of any contract that is most likely to result from the offeror's proposal.
- Determine the probable cost for each offer by adjusting the proposed cost, and fee when appropriate, to reflect any additions or reductions in cost elements to realistic levels based on the results of the cost realism analysis.

You may also use cost realism analysis in evaluating competitive offers for fixed-price incentive contracts or, in exceptional cases, on other competitive fixed-price contracts.

- Give special consideration to using cost realism analysis to evaluate offers for fixed-price contracts when:
 - New requirements may not be fully understood by competing offerors;
 - There are quality concerns, or

- Past experience indicates that contractors' proposed costs have resulted in quality or service shortfalls.
 - When using cost realism analysis to evaluate offers for a fixed-price contract, you may use the results of your analysis in performance risk assessments and responsibility determinations. However, proposals must be evaluated using the criteria in the solicitation, and the offered prices must not be adjusted as a result of the analysis.
-

CHAPTER TWO: PLANNING STAGES

PROCUREMENT LIFE CYCLE STEPS 1 & 2:

PROCUREMENT PLANNING AND MARKET RESEARCH



2.0 Chapter Introduction

Market Research in the Planning Stages. In Government procurement, market research requires collecting and analyzing information about capabilities within the market to satisfy Government needs. Market research policies and procedures should be designed to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services. The personnel involved must ensure that legitimate needs are identified and trade-offs evaluated to acquire items which meet those needs.

To get the supplies and services that will best meet the needs of the Government, the Government members of the Procurement Team must understand the true needs of the Government and know what is available in the marketplace. Market research should be an on-going process for every member of the Procurement Team, but there are three points where effective market research is particularly important:

- The purchase request should reflect the results of market research conducted by the requester. The requester should consider input from other Government members of the Procurement Team, especially from the user (if different than the requester) and Government technical personnel. Procurement personnel should support and encourage requester market research efforts whenever possible. For example, the catalogs and price lists available in the Procurement office may be invaluable to the requester's market research effort. Procurement personnel should not take the responsibility for developing the requirements documents.
- Before soliciting offers for procurements with an estimated value in excess of the small purchases threshold, you must conduct market research to assure that together the requirements documents and the contract business terms form the most suitable approach to acquiring, distributing, and supporting supplies and services. This research may be a one-time analysis or part of your on-going effort to know and understand the marketplace for the items that you routinely procure. As you perform your market research, you may question the requirements documents, but you must never change those documents without authorization from the requester.
- Before soliciting offers for procurements with an estimated value less than the small purchases threshold, you should perform market research whenever adequate information is not available and the circumstances justify its cost.

Information for Market Research. When conducting market research, you should not request potential sources to submit more than the minimum information necessary. Most firms will gladly support Government market research as long as the result will benefit the firm. Most will provide complete information about how the products that they can provide will meet Government requirements. However, they are unlikely to provide information about problems with their products or about other products that could better meet the Government's needs at a lower total cost.

Generally, information on a particular product or industry is available from many sources other than potential offerors. These sources include:

- Knowledgeable individuals in Government and industry;
- The results of recent market research undertaken to meet similar or identical requirements;
- Government data bases that provide information relevant to agency procurements;
- Interactive, on-line communication among industry, procurement personnel, and customers;
- Source lists of similar items obtained from other contracting activities or agencies, trade associations or other sources; or
- Catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.

Market Research Results. Use the results of market research to:

- Determine if there are sources capable of satisfying the agency's requirements;
- Determine if commercial items or, to the extent commercial items are not available, nondevelopmental items are available that:
 - Meet the agency's requirements;
 - Could be modified to meet the agency's requirements; or
 - Could meet the agency's requirements if those requirements were modified to a reasonable extent.
- Determine the extent to which commercial items or nondevelopmental items could be incorporated at the component level;
- Determine the practices of firms engaged in producing, distributing, and supporting commercial items, such as terms for warranties, buyer financing, maintenance, and packaging and marking; and
- Ensure maximum practicable use of recovered materials and promote energy conservation and efficiency.

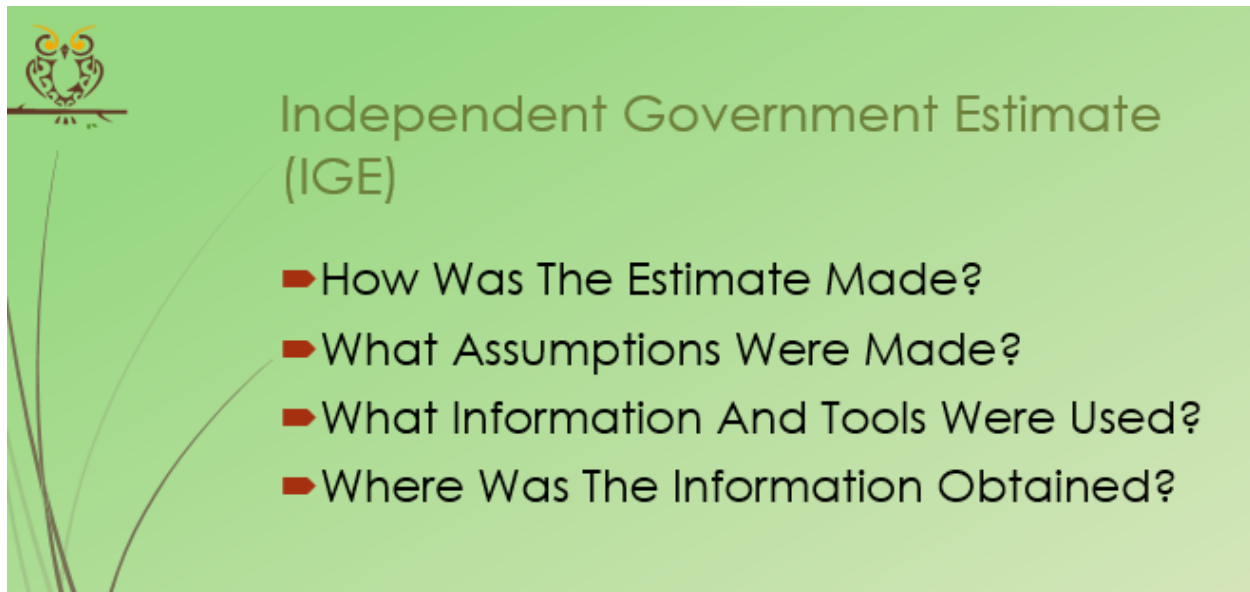
Market Research and Contract Pricing. Use the results of market research in developing requirements and determine how you will satisfy those requirements. This research is required because the decisions made in the pre-solicitation phase of the procurement process will be key factors in defining what the Government receives and the price that the Government will pay. For example, contracting decisions that:

- Increase contractor performance costs will normally increase contract price.
- Lower contractor performance costs will normally reduce contract price.
- Limit competition will normally increase contract price.
- Facilitate competition will normally reduce contract price.
- Increase contractor risk will normally increase contract price.
- Limit contractor risk will normally decrease contract price.

The better you understand the marketplace the better you will be able to make decisions that will enable you to meet the needs of the Government at a reasonable price.

This same understanding of the marketplace will enable you to develop a better estimate of a reasonable price for a contract that meets the needs of the Government. Your preliminary price estimate and the factors that affect contract price will be key inputs to the procurement planning process. For example, the method of contracting and required contract terms and conditions both depend on your estimate of contract price. In addition, your preliminary estimate of contract price will become a key input to your final determination of contract price reasonableness.

2.1 Independent Government Estimate (IGE)



2.1.1 Reviewing The Purchase Request and Related Market Research

When determining how much reliance you can place on the **Independent Government Estimate** in making contracting decisions, you must evaluate the depth and quality of the analysis involved in developing the estimate. As a minimum, you should consider the following four areas:

- 2.1.1.1 - How Was the Estimate Made?
- 2.1.1.2 - What Assumptions Were Made?
- 2.1.1.3 - What Information and Tools Were Used?
- 2.1.1.4 - Where Was the Information Obtained?

Purchase Request. The purchase request is the document that formally transmits the requirement to the contracting office. It is the purchase request that typically first combines the Government requirements document with the Independent Government Estimate of contract price. Normally, the purchase request will also include an assurance that funds are available or will be available to fund the procurement of the required supplies or services.

Independent Government Estimate. As the name implies, the Independent Government Estimate should be developed independently by the Government. Independent development is vital because this estimate normally provides your first indication of a reasonable contract price and it is also one of the bases that you should consider in contract price analysis. The estimate

development process may be automated or manual, but the best estimates reflect the requester's market research.

Reviewing Requester Market Research. Market research is required before developing new requirements documents for a procurement. Logically, this responsibility falls on the requester. The quality of the requester's Independent Government Estimate usually depends on the quality of the requester's market research. Because of the importance of the Independent Government Estimate to your selection of appropriate procurement techniques and eventually your decision on price reasonableness, you should review the estimates carefully, before initiating further procurement action.

2.1.1.1 How Was the Estimate Made?

Estimate Preparation. To judge the reliability of a Government estimate, you must know how the estimate was made.

- Manual Purchase Request Estimates
 - Estimates are typically prepared by the individual preparing the purchase request. Different organizations, and different individuals within the same organization, may have different methods of developing the Government estimate.
 - Estimates should reflect any market changes identified during market research. Unfortunately, many do not. Instead estimates are often based on the last unit price paid with no consideration of changes in the market situation.
 - You must determine how each individual estimate was developed so that the other questions concerning reliability can be examined.
-

2.1.1.2 What Assumptions Were Made?

Every estimate involves assumptions. Knowing and understanding those assumptions can give you an insight into the estimator's understanding of reliable estimate development.

Analysis of Assumptions. In many cases, user/technical/program personnel are not familiar with relevant cost factors and market forces that affect contract pricing. As a result, assumptions and estimates may not be accurate.

If the rationale used to develop the estimate is not clear or does not seem reasonable, ask questions! **IN PRICING, THERE ARE NO DUMB QUESTIONS!** If you do not know, ask! By asking questions about the Independent Government Estimate and accompanying

documentation, you can identify assumptions that are not consistent with market realities and work with the requester to improve the estimate before the contracting process begins.

Estimate Example 1: The requester used the last price paid for an item to estimate the price for the same item 10 years later.

- **Assumptions.** The requester has assumed that the last price paid was reasonable, and that the market situation has not changed in 10 years.
- **Analysis.** Over a few days or weeks, it may be reasonable to assume that the price has not changed if quantity, delivery, and other factors have not changed. But in this case the last purchase was made 10 years ago. Normally, it is not reasonable to assume that the price has not changed in 10 years. Once you identify the assumptions used in estimate development, you can evaluate them and adjust for any that do not appear consistent with market realities.

Estimate Example 2: The requester estimated the price of 100 warehouse trucks with 3 cubic foot capacity based on the price paid for 2 cubic foot units acquired during the last month.

- **Assumptions.** The requester has assumed that the recent price was reasonable, and that the unit price is not affected by changes in unit capacity.
- **Analysis.** The assumption that unit price will not be affected by the unit's capacity may or may not be reasonable. However, the great difference in capacity should lead you to subject this assumption to closer scrutiny during your market research.

2.1.1.3 What Information and Analysis Were Used?

It is important to determine what the requester knows about the item or service being requested and what type of analysis was used in estimate development.

Market Research Information. The most successful estimators know their item. Before they make an estimate, they collect information on the product and the market for that product. Their market research may be a one-time effort or part of an on-going process that is an integral part of their normal job.

The most reliable estimates are prepared by estimators who have performed detailed market research and can answer "yes" to the following questions that apply to a particular purchase request:

- Did the estimator perform a detailed analysis of the Government requirements documents?

- Did the estimator identify performance, quality, and/or acceptance criteria differences exist between new "requirement" and the information analyzed?
- Is the estimator familiar with the market for the item, including:
 - Last price paid?
 - General market price changes?
 - Current commercial market price?
 - Quantity price breaks?
 - Possible substitutes?

Estimating Analysis. Market information alone is usually not enough. The estimator must be able to apply appropriate analysis to estimate development. Reasoned analysis provides a much more supportable estimate than one that is simply based on estimator judgment and experience. The strongest estimates are usually the result of a reasoned analysis supported by the use of appropriate quantitative techniques.

Reasoned Analysis. A reasoned analysis is an analysis that sets forth the known information and clearly explains how it was used in estimate development. This analysis may or may not be supported by the use of quantitative techniques.

Quantitative Techniques. When appropriate, adjustments should be made using accepted quantitative techniques. For example, index numbers can be used to quantify price changes and adjust historical pricing data.

Estimate Support Comparison. Estimates supported by words such as "professional judgment," but no factual data and explanations about how that professional judgment was applied, are typically of little value. Estimates based on good information and the application of appropriate quantitative techniques or reasoned analysis will generally be more accurate and easier to support throughout the procurement process. For example, in an analysis of changes in technology, which of the following techniques would be more useful in price estimation?

Professional Judgment. "Based on my 20 years of experience as a Project Engineer and my knowledge of the product, I estimate the price of this unit at \$585,000."

Reasoned Analysis. "We are requesting new high sensitivity replacement units. A year ago, a product could not be produced with this level of sensitivity to high frequency sound. Today, units with similar sensitivity improvements are available at a 30 percent higher price than the less sensitive units they replaced. Therefore, the estimated price for this unit, \$585,000, is 30 percent higher than the \$450,000 price last paid for the less sensitive unit that it will replace."

2.1.1.4 Where Was the Information Obtained?

The breadth and depth of the requester's market information will have a substantial impact on the quality of the estimate, because some sources of information are better than others. Knowing the sources of information will make it easier for you to evaluate the reliability of the estimate.

Estimate Information Sources. Many estimators rely exclusively on historical prices as their base for estimate development. Historical prices are an excellent source of information on the price at some point in the past but market conditions and Government requirements change over time. Past prices for a similar item may have been based on detailed Government specifications while the current requirement is based on products commonly traded in the commercial market place. In that situation, historical prices may not provide a viable price estimate.

Encourage requesters to provide source data with their estimates. Information, such as a vendor catalog or portion thereof, will provide an excellent starting point for your market research.

Product Analysis. If the requirement is unique and there is no price history available, the estimator must develop a price estimate by some other form of analysis. One option is for the requester to develop an estimate based on an evaluation of the material and labor required to produce the product, as well as the risks associated with design, development, production, delivery, and acceptance. When such estimates are required, the more current the data used to develop the cost estimate, the more reliance you can place on the estimate.

Misleading Information. Many data sources, such as stock lists, can present information that is difficult to use in price estimating. The price information is usually not current and there is typically little information about its source. Prices may be historical prices from an unknown point in the past or even averages of historical prices. It is typically difficult or impossible to adjust these prices for changes in the market situation. As a result, you must be particularly careful when using such data as a base for estimated development.

Emphasize Estimator Independence. While use of vendor catalogs and other methods of market research should be encouraged, estimators **MUST BE DISCOURAGED FROM CONTACTING VENDORS FOR SPECIFIC QUOTATIONS**. This is particularly true in sole source situations, where the Independent Government Estimate may be a primary basis for determining price reasonableness. If both the estimate and the proposal come from the offeror, there is no independent measure of price reasonableness. If the estimator must contact a vendor to better understand specifications, pricing, discounts, etc. then two very important steps must be taken:

- First discuss the need to contact the vendor with the responsible procurement officer
- Also, make it very clear, in writing, to the vendor that you are performing market research and need more information about the product or pricing, and that you **ARE NOT REQUESTING A QUOTATION OF ANY KIND**.

2.2

Considering Contract Pricing in Your Market Research



The Independent Government Estimate is only one preliminary estimate of contract price. As a minimum, your research, should consider the following data sources:

- 2.2.1 - Historical Pricing Data for Market Research
- 2.2.2 - Published Data for Market Research
- 2.2.3 - Market Research Data from Prospective Offerors
- 2.2.4 - Market Research Data from Other Sources

Factors to Consider in Researching the Market. Each time you conduct market research the process will be different because of differences in Government requirements, market conditions, and other factors. The following table identifies research factors and outlines the type of questions that you should be able to answer when you complete your market research. Not all of the questions identified in the table will be valid for every procurement. For some procurements, you will have many specialized questions that are not covered in the following table. However, the research factors identified and the related questions provide a good framework for your market research.

| Pricing Factors to Consider in Market Research | |
|---|--|
| Research Factor | You Should Be Able to Answer Questions Such As... |
| Pricing History | <ul style="list-style-type: none"> • What information is available concerning past prices paid for the product and changes in the product or market since then? • Have there been historic differences between prices paid by the Government vis--vis other buyers? Why? |
| Current Competitive Conditions | <ul style="list-style-type: none"> • How many sellers are in the market? • How many buyers? |
| Current Overall Level of Demand | <ul style="list-style-type: none"> • What is the relationship of the quantity we intend to buy vis--vis the quantities that others buy? • Will our volume justify a lower than market price due to the seller's increased economies of scale? • Will our volume be so large as to drive the sellers to or beyond full capacity, resulting in unanticipated inflation? |
| Trends in Supply and Demand | <ul style="list-style-type: none"> • Will demand be higher or lower at the time of award than now? • Will supply capacity keep pace with demand? |
| Pattern of Demand | <ul style="list-style-type: none"> • Is there a cyclical pattern to supply and demand? • Would awarding six months from now result in lower prices than an immediate award? • Or would it be better to stock up now at today's prices? |
| Other Market Forces Expected to Affect Contract Price | <ul style="list-style-type: none"> • What forces might drive up prices in the near future? Strikes? Labor shortages? Subcontractor bottlenecks? Energy shortages? Other raw material shortages? • What forces might lead us to expect lower prices in the future? |
| Pricing Strategies | <ul style="list-style-type: none"> • What are the pricing strategies of firms in the market? • What are the implications for expected prices? |

| | |
|---------------------------------|---|
| Sources of Supplies or Services | <ul style="list-style-type: none"> • Which firms in the market are the most likely to submit offers to a Government solicitation? • Which are the least likely and why? |
| Product Characteristics | <ul style="list-style-type: none"> • What features distinguish one product from another? • Which commercial products match most closely with the Government requirements document (as it currently reads in the purchase request). • What is the apparent tradeoff between features and price? |
| Delivery/ Performance Terms | <ul style="list-style-type: none"> • What are the current distribution channels? • What are current transportation costs (if available and applicable)? • What are the commercial lead-times? |
| Ownership Costs | <ul style="list-style-type: none"> • What are the commercial warranty terms and conditions (if any)? • What are the historical repair costs for each product? • What are the historical maintenance costs for each product? |
| Contract Terms and Conditions | <ul style="list-style-type: none"> • What terms and conditions are used in commercial transactions? • What terms and conditions have been used in other Government procurements? • What type of contract is generally used in commercial transactions? Government procurements? |
| Problems | <ul style="list-style-type: none"> • What has been the historical default rate by firms performing similar contracts? • What performance problems have typically been encountered? • Have similar procurements been characterized by claims or cost overruns? |

2.2.1 Historical Pricing Data for Market Research

Prior to procuring, the procurement officer should review:

- The procurement history of the supplies and services; and
- A description of the supplies, including, when necessary for adequate description, a picture, drawing, diagram, or other graphic representation.

One of the reasons for this requirement is to ensure that prior prices are considered in estimating the proper price of the current procurement. However, you must also remember that information from Government historical price data bases provides a picture of what happened in the past. You must integrate this information with information from other market research to enhance the accuracy of your price estimate.

Sources of Procurement Histories.

Contract Files. Usually, the best source of information on past pricing decisions is the original file of the contract action. Detailed information, and the rationale used to determine price reasonableness should be available in the file.

Researching Historical Procurement Pricing Information. Historical prices are an excellent source of market information. Research of historical market information can tell you a lot about the procurement situation for the product at some point or points in the past. For that information to be useful, you must be able to determine what the market situation was in the past and how it has changed since then. The following table presents research elements that you should consider in your examination of historical procurement information and questions that you should consider in your research.

| Historical Procurement Data for Pricing | |
|--|--|
| Research Element | You Should Be Able to Answer Questions Such As... |
| Trends in Supply and Demand | <ul style="list-style-type: none"> • When did past procurements take place? • Is there any indication of prevailing market conditions at that time? |
| Pattern of Demand | <ul style="list-style-type: none"> • What quantities were solicited for each procurement? • What quantities were acquired? |
| Trends in Prices | <ul style="list-style-type: none"> • What was the contract price? • How did the unsuccessful offers compare with the successful offer? |
| Start-up Costs and Pricing Strategy | <ul style="list-style-type: none"> • Did the contract price include one-time engineering, tooling, or other start-up costs? • Should future contracts include similar or related costs? • Were necessary start-up costs paid for in a manner separate from the price for the item or service? |

| | |
|---------------------------------|---|
| Sources of Supplies or Services | <ul style="list-style-type: none"> • How many sources were solicited for the prior procurement? • What specific sources were solicited? • How many sources offered bids or proposals? • What specific sources offered bids or proposals? |
| Product Characteristics | <ul style="list-style-type: none"> • Are there any significant differences between the Government requirements documents for the prior contract and the current requirements? |
| Delivery/ Performance Terms | <ul style="list-style-type: none"> • What was the delivery or performance period in days, weeks, months, or years? • In what month(s) were the supplies to be delivered or the service to be performed? • Did the vendor meet the delivery targets? • What was the FOB point? • Was premium transportation required for timely delivery? |
| Ownership Costs | <ul style="list-style-type: none"> • What costs of ownership were associated with the procurement? |
| Procurement Method | <ul style="list-style-type: none"> • What procurement method was employed for past procurements? |
| Contract Terms and Conditions | <ul style="list-style-type: none"> • What were the general terms of past contracts? • Are there any significant differences between terms of the last contract (e.g., packing requirements, type of contract, and the like) and those recommended for this procurement? |
| Problems | <ul style="list-style-type: none"> • What problems (if any) were encountered during contract performance? |

2.2.2 Published Data for Market Research

This subsection presents examples of several types of published information that you can use in developing your preliminary estimates of contract price.

- 2.2.2.1 - Manufacturer and Dealer Catalogs
- 2.2.2.2 - Product Brochures and Promotional Material
- 2.2.2.3 - Trade Journals

- 2.2.2.4 - Source Identification Publications
- 2.2.2.5 - Government Procurement Data Sites
- 2.2.2.6 - Government Economic Data
- 2.2.2.7 - Non-Government Economic Data

Typical Data Available by Source. The table below summarizes the sources of pricing related data and typical data available for each source.

2.2.2.1 Manufacturer and Dealer Catalogs

Catalogs are familiar sources of data that can be found in both department stores and mail order houses. The manufacturer and dealer catalogs used in Government purchasing resemble these catalogs in the type of information they provide. [**These catalogs can often be found on the company's website.**] Typical data you can find in manufacturer and dealer catalogs include:

- Product descriptions
 - Pictures
 - Prices and quantity discounts
 - Minimum order requirements
 - Delivery data
 - Points of contact for quotes and orders
-

2.2.2.2 Product Brochures and Promotional Material

Brochures and promotional material provide much greater detail about specific products than would normally be included in a catalog with several thousand other products. [**This type of material may also be available on the company's website.**] While details on pricing and delivery are often included, this information may be excluded in order to provide greater latitude in negotiating the terms of sale.

The following are typical data you can find in product brochures and promotional material:

- Detailed specifications
 - Pictures
 - Available service guarantees and products
 - Points of contact for quotes and orders
 - Pricing information
 - Delivery data
-

2.2.2.3 Trade Journals

Trade journals provide a variety of information from different sources, including advertisements, product evaluations, and independent articles.

Trade Journal Data Sources.

Advertisements typically consist of product descriptions, often with pictures and comparisons with competitor's products. Sources to consult for additional information may also be identified.

Product evaluations provide independent information to members of the trade who may be considering the purchase of that product or a similar one. Evaluations usually deal with technical capabilities, but often include information on source locations, pricing, and warranties.

Articles about the trade may indirectly provide an independent analysis of product capabilities. Successes or failures in using particular products or services serve as evaluations of their quality.

The table below gives an overview of typical data you can find in trade Journals.

| Data Source | Typical Data |
|---|---|
| Advertisements for Products Used in the Trade | <ul style="list-style-type: none">• General product descriptions• Pictures• Comparisons with competitive products• List prices |
| Independent Product Evaluations | <ul style="list-style-type: none">• Strengths and weaknesses of products• Warranty or guarantee provisions• Comparisons with competitive products• Pricing information |
| Articles | <ul style="list-style-type: none">• Application of existing products to problem solving• Strengths and weaknesses of products in problem solving |

2.2.2.4 Source Identification Publications

There are thousands of publications designed to assist you in locating possible sources of product information. The most widely accepted of these are the Yellow Pages and the Thomas Register of American Manufacturers.

Yellow Pages. Every city, large or small, has a telephone book with an associated Yellow Pages. Larger cities and metropolitan areas typically have one or more Commercial Yellow Pages and Business Yellow Pages. Many firms advertise in both types, but the business Yellow Pages specialize in the business and industrial products that are more relevant to Government procurement. Both Commercial and Business Yellow Pages identify firms by the products or services that they provide. Listings may even include pictures of major products.

The Thomas Register of American Manufacturers. The Thomas Register of American Manufacturers, commonly referred to as the Thomas Register, devotes 23 volumes to assisting commercial buyers identify potential product sources. The volumes are divided into four sections:

- Products and Services -- companies listed by product or service.
- Company Profiles -- capabilities and contact information are presented for listed firms.
- Catalog Files -- detailed product information, specifications, drawings, photos, availability, and performance data.
- Inbound Traffic Guide -- intermodal guide to transportation sources.

The table below gives an overview of typical data you can find in the Yellow Pages and the Thomas Register.

| Data Source | Typical Data |
|-----------------|--|
| Yellow Pages | <ul style="list-style-type: none">• Sources of identified products and services by geographic location• Specific products within a product service category |
| Thomas Register | <ul style="list-style-type: none">• Sources of identified products and services• Source capabilities and contact information• Product specifications• Selected product pictures• Product availability• Product performance• Transportation sources |

2.2.2.5 Government Procurement Data Sites

The State and Federal Government maintains a variety of procurement databases, many of which can assist you in your market research. The following lists websites that you will find helpful in your research:

| | Title | Website |
|----|--------------------------------------|--|
| 1. | HI State Websites | HI-SPO Website - www.spo.hawaii.gov www.dbedt.hawaii.gov |
| 2. | GSA Supply Schedules & GSA Advantage | www.gsaelibrary.gsa.gov/ElibMain/home.do www.gsaadvantage.gov/advantage/main/elib.do?pg=home&src=elib |
| 3. | USAspending.gov | www.usaspending.gov |
| 4. | Dynamic Small Business Search | http://dsbs.sba.gov |
| 5. | Federal Business Opportunities | www.fbo.gov |

2.2.2.5.1 State Websites

The State Procurement Office website gives Procurement Officers access to all solicitations and award notices for the Executive Branch (not including DOE).



The Hawaii Government website includes links to the Department of Business, Economic Development and Tourism, which has metrics on current economic conditions.

Department of Business, Economic Development & Tourism
Research & Economic Analysis

Search this site

Home Data Forecasts Reports Charts/Maps Tourism Energy Labor Population DBEDT Home

Quarterly Statistical & Economic Report
2nd Quarter '16

QUARTERLY STATISTICAL & ECONOMIC REPORT
Read More

DBEDT Data Warehouse
Current Economic Conditions
Daily Passenger Counts
Weekly Unemployment Updates
Hawaii Census

Welcome to the Research & Economic Analysis Division (READ)

We provide economic forecasts that contribute to long-term statewide planning. READ collects, compiles, interprets and posts data and statistics on all aspects of business activity, the economy and demographic characteristics of the State. READ also creates research reports on the economy and emerging industries of the state. READ provides the statistical and economic foundation for the State's HIGrowth Initiative.

Sign Up
Products Mailing List
Sign up for our mailing list to be notified about recent releases

2.2.2.5.2 GSA Supply Schedules

The General Services Administration (GSA) directs and manages the Federal Supply Schedule program that provides Federal agencies with a simplified process for obtaining commonly used supplies and services at prices associated with volume buying.

NOTE: GSA Schedules are currently not available to Hawaii State to procure, however, you can still use GSA for pricing data!

GSA establishes indefinite delivery contracts with commercial firms to provide supplies and services at stated prices for given periods of time. The Federal Supply Schedule (FSS) program then issues Federal Supply Schedules (FSSs) that contain the information for placing delivery orders with contractors. Contracting offices can then issue delivery orders directly to the FSS contractors for the required supply or service.

The FSS provides you with sources for a wide variety of supplies and services. It is important to understand the basics for using the FSSs. Oversight organizations have found in the past that contracting officers sometimes simply compare a proposed price for a sole source item to prices posted on the FSS for similar items to determine price reasonableness. This is not sufficient, especially for larger purchases, nor does it meet the requirements for obtaining competition.

Use of the FSSs is considered a "competitive procedure" when the procedures established by the GSA Administrator are followed.

Supplies offered on the schedule are listed at fixed prices. Services offered on the schedule are priced either at hourly rates, or at a fixed price for performance of a specific task (e.g., installation, maintenance, and repair). **GSA has determined the prices of supplies and fixed-price services, and rates for services offered at hourly rates, to be fair and reasonable for the purpose of establishing the schedule contract. GSA's determination does not relieve the ordering activity contracting officer from the responsibility of making a determination of fair and reasonable pricing. The complexity and circumstances of each procurement should determine the level of detail of the analysis required.**

GSA Schedules: <http://www.gsaelibrary.gsa.gov/ElibMain/home.do>



The above is the main page for the GSA eLibrary. These categories will show the contractors' GSA contract along with price information.

Example 1 – Let's look up prices on a good. Click on Laboratory, Scientific and Medical:

Below, you will see all the main categories that fall under laboratory, Scientific, & Medical. Let's pick Medical Equipment and Supplies:

Category Guide

Laboratory, Scientific, & Medical

GSA provides a full range of commercial products and services covering such areas as scientific and medical research, public safety, electrical and electronic param

| Source | Description |
|---------|--|
| 621 I | PROFESSIONAL AND ALLIED HEALTHCARE STAFFING SERVICES |
| 65 I B | PHARMACEUTICALS AND DRUGS - Includes Antiseptic Liquid Skin Cleansing Detergents and Soaps, Dispensers and Accessories. |
| 65 II A | MEDICAL EQUIPMENT AND SUPPLIES |
| 65 II C | DENTAL EQUIPMENT AND SUPPLIES |
| 65 II F | PATIENT MOBILITY DEVICES - Includes Wheelchairs, scooters, walkers. |
| 65 V A | X-RAY EQUIPMENT AND SUPPLIES - Includes medical and dental x-ray film. |
| 65 VII | INVITRO DIAGNOSTICS, REAGENTS, TEST KITS AND TEST SETS |
| 66 | SCIENTIFIC EQUIPMENT AND SERVICES - Test and Measurement Equipment, Unmanned Scientific Vehicles; Laboratory Instruments, Furnishings and L Geophysical Testing Services |
| 66 III | CLINICAL ANALYZERS, LABORATORY, COST-PER-TEST |

Okay, now here is a category list of all the medical equipment and supplies. Let's pick Adhesive Tapes and Adhesive bandages:

Schedule Summary

For general questions, contact:
VA FSS Help Desk
Phone: 708-786-7737
E-mail: helpdesk.ammhinfss@va.gov

Laboratory, Scientific, & Medical

65 II A MEDICAL EQUIPMENT AND SUPPLIES

Vendors
Click here to view the current solicitation on FedBizOpps

65 II A Category list: - Categories -

Download Contractors (Excel)

| Category | Description |
|----------|---|
| A-1 | Adhesive Tapes and Adhesive Bandages |
| A-10 | Cannulas, Airways, Tubes and Accessories - All styles, types and sizes, except those relating to blood transfusion and IV apparatus |
| A-12 | Colostomy/Ostomy Products |
| A-16 | Stockings (Anti-embolism/compression only) |
| A-17 | Sutures, Suture Needles, Staples and Extractors (all types and sizes) |
| A-19 | Wound Drainage Systems and Kits/Evacuators - Excludes equipment and equipment accessories |
| A-200 | Equipment Maintenance and Repair |
| A-24 | Bands, Patient Identification |
| A-27 | Brush-Sponge Surgical Scrubs |
| A-28 | Charts and Chart Racks (Medical Only) |
| A-30 | Restraints, Adult and Pediatric - Medical application only |

Okay, now here is a list of all the vendors that have a contract on GSA. For goods information, you can either click on their contract or directly to GSA Advantage.

GSA eLibrary GSA Federal Acquisition Service Home eBay - quotes GSA Advantage - online shopping

Contractor Listing
For general questions, contact:
VA FSO Help Desk
Phone: 703-730-7737
E-mail: helpdesk.ammhdu@va.gov

65 II A MEDICAL EQUIPMENT AND SUPPLIES
Category: Description
A-1 Adhesive Tapes and Adhesive Bandages
52 contractors

Display: All Small Business Industries
Small Business
Vendor Small Business
Hold the 'Ctrl' key to select all that apply.

Search Contractor TSCs/Products

Download Contractors (Excel)

| Contractor | Contract # | Phone | City, State | Small Business | Contractor TSCs / Products | View Catalog |
|--|-------------|----------------------|--------------------|----------------|----------------------------|--------------|
| 3M MEDICAL DIVISION | V797P-40228 | 651-733-0131 | WASHINGTON, DC | S | | Advantage |
| ACTIMED PRODUCTS, CO. | V797P-2315D | 365-715-0303 | DORAL, FL | S/M | | Advantage |
| ANCHOR MEDICAL SUPPLY INC. | V797P-4935A | 212-643-6208 | NEW YORK, NY | S/M | | Advantage |
| ARGENTUM MEDICAL, LLC | V797D-40098 | 688-551-0185 | GENEVA, IL | S | | Advantage |
| ASPEN SURGICAL | V797P-44728 | 616-699-7100 EXT 243 | CALICOING, ME | S | | Advantage |
| AYCOR HEALTH CARE PRODUCTS, INC. | V797D-40257 | 617-551-0555 | AMPLINGTON, TX | S/M | | Advantage |
| AVKARE, INC. | V797P-40768 | 931-906-0028 | PULASKI, TN | S/M/10/12/16 | | Advantage |
| BAYSIDE MEDICAL SUPPLY CO., INC. | V797D-50499 | 813-279-2721 | TAMPA, FL | S/M | | Advantage |
| BEST MEDICAL WEAR LTD. | V797D-30189 | 718-959-5540 | BROOKLYN, NY | S/M/10/12/16 | | Advantage |
| BEST PRICED PRODUCTS, INC. | V797P-42468 | 924-345-3800 X1127 | BLUMFORD, NY | S/M | | Advantage |
| BIG APPLE BUYING GROUP CORPORATI (DBA: BIG APPLE) | V797D-30079 | 800-505-3963 EXT 211 | MONROE, NY | S/M/10/16 | | Advantage |
| BIHANI CORPORATION (DBA: AMERICAN MEDICALS) | V797P-40288 | 904-436-9431 | JACKSONVILLE, FL | S/10/16 | | Advantage |
| CARDINAL HEALTH 200, LLC | V797P-43048 | 847-769-4885 | WAUKEGAN, IL | S | | Advantage |
| COVENTURE I, LLC THE SHOWER SLEE | V797P-40576 | 602-885-1564 | DESKRIVER, IN | S | | Advantage |
| COVIDIEN SALES, LLC | V797P-4951A | 508-261-6230 | HANDFIELD, MA | S | | Advantage |
| CPR SAVERS AND FIRST AID SUPPLY | V797P-40288 | 800-8601277 | SCOTTSDALE, AZ | S | | Advantage |
| DYNATRONICS CORPORATION | V797P-2275D | (801) 569-7000 | SALT LAKE CITY, UT | S | | Advantage |
| ELGINEX CORPORATION (DBA: TARTAN GROUP) | V797P-40048 | 430-269-1000 | WESTMONT, IL | S/M | | Advantage |
| ESA HEALTH, LLC (DBA: VETERANS HEALTH) | V797D-40203 | 917-967-2216 | PORT WORTH, TX | S/16 | | Advantage |
| EUROAMERICAN DP, LLC | V797P-2315D | 954-977-2929 | BOHANNON BEACH, FL | S/M | | Advantage |

We clicked on a contract. Here's a look at some prices:

Argentum Medical, LLC: Silverlon™ Family of Advanced 7 Day Antimicrobial Wound, Burn, Surgical and Negative Pressure Dressings.

Authorized Federal Supply Schedule Price List 2/15/14 to 2/14/19
Contract No. V797D-40098

Silverlon™ Wound Contact Dressings

| FSS NET IN UOM | PRODUCT NO. | PRICE/UOM | PRODUCT DESCRIPTION | QTY/UOM |
|----------------|-------------|-----------|---------------------|---------|
| A-4(b) Box | WCD-22 | \$ 29.65 | 2" x 2" | 10 |
| A-4(b) Box | WCD-44 | \$ 105.53 | 4" x 5" | 10 |
| A-4(b) Box | WCD-412 | \$ 334.17 | 4" x 12" | 10 |
| A-4(b) Box | WCD-1012 | \$ 347.24 | 10" x 12" | 5 |
| A-4(b) | WCD-466 | \$ 139.30 | 4" x 66" | 1 EA |

Silverlon™ Wound Packing Strips

| FSS NET IN UOM | PRODUCT NO. | PRICE/UOM | PRODUCT DESCRIPTION | QTY/UOM |
|----------------|-------------|-----------|---------------------|---------|
| A-4(b) Box | WPS-112 | \$ 35.73 | 1" x 12" | 5 |
| A-4(b) Box | WPS-124 | \$ 71.11 | 1" x 24" | 5 |

Silverlon™ Adhesive Strips

| FSS NET IN UOM | PRODUCT NO. | PRICE/UOM | PRODUCT DESCRIPTION | QTY/UOM |
|----------------|-------------|-----------|---------------------|---------|
| A-1 Box | AS-6001 | \$ 74.62 | 1" x 3" | 150 |

Example 2 – Let's look up prices on a service. Click on *Scientific Equipment and Services*:

Category Guide

Laboratory, Scientific, & Medical

GSA provides a full range of commercial products and services covering such areas as scientific and medical research, public safety, electrical and electronic param

| Source | Description |
|---------|---|
| 621 I | PROFESSIONAL AND ALLIED HEALTHCARE STAFFING SERVICES |
| 65 I B | PHARMACEUTICALS AND DRUGS - Includes Antiseptic Liquid Skin Cleansing Detergents and Soaps, Dispensers and Accessories. |
| 65 II A | MEDICAL EQUIPMENT AND SUPPLIES |
| 65 II C | DENTAL EQUIPMENT AND SUPPLIES |
| 65 II F | PATIENT MOBILITY DEVICES - Includes Wheelchairs, scooters, walkers. |
| 65 V A | X-RAY EQUIPMENT AND SUPPLIES - Includes medical and dental x-ray film. |
| 65 VII | INVITRO DIAGNOSTICS, REAGENTS, TEST KITS AND TEST SETS |
| 66 | SCIENTIFIC EQUIPMENT AND SERVICES - Test and Measurement Equipment, Unmanned Scientific Vehicles; Laboratory Instruments, Furnishings and I Geophysical Testing Services |
| 66 III | CLINICAL ANALYZERS, LABORATORY, COST-PER-TEST |

Okay, now here is a category list of all the services. Let's pick Electric Testing and Analysis Services:

Learn and Mechanical and States, 1001, 1001 States, 1001 States and States approved for use in explosive and hazardous environments.

Mechanical, Chemical, Electrical, and Geophysical Testing Services

| Category | Description |
|----------|---|
| 873 1 | Mechanical Testing And Analysis - Services for mechanical testing and analysis include, but are not limited to, material strength testing (compression, ductility, fracture, fatigue, shear, torsion, and metallography); calibration and testing of mechanical equipment; acoustic/vibration testing(noise, shock resistance); hydraulic/pneumatic testing; Metrology(time, length, mass, volume, pressure, etc.); non-destructive evaluation(x-ray, radiographic, ultrasonic, leak); environmental simulation/climatic testing; forensic, failure analysis, and expert testimony; building and welding inspection (site monitoring, field surveys, quality assurance, certification; and related training. |
| 873 2 | Chemical Testing And Analysis Services And Related Chemistries, Supplies And Consumables - Services for chemical testing and analysis include, but are not limited to, wet chemistry and associated physical tests; viscosity/density testing; electrochemistry testing; chromatography (GC, LC, SFC, SFE, HPLC, GS/MS, LC/MS, GPC, GFC, IC, column, thin layer, paper); spectroscopy (AA, FT-IR, UV/VIS, XRD, NMR, ICP, MS, fluorescence, Raman); thermal analysis (DSC, DTA, TGA, TMA); surface analysis/microscopy(SAM, SEM, TEM, SIMS, Ion); Optic/photometry testing(appearance, color, reflectance, gloss, transmittance, luminance); occupational/drug testing (monitor or measure employees exposure to hazardous substance abuse screening); biological Testing (biochemical, toxicological, pharmacological, bacteriological); environmental and hazardous waste analysis (priority pollutants, pesticides, herbicides, metals, PCB's, petroleum); water analysis; food testing(taste, odor, texture); and related training. Includes, but not limited to, reagents, solutions and other directly related supplies. |
| 873 3 | Electric Testing And Analysis Services - Services for electrical testing and analysis include, but are not limited to, qualification, inspection, safety, performance, certification, and compliance testing of manufactured goods to nationally and internationally recognized reliability standards and regulatory requirements and directives (UL,CSA,FCC,ANSI,MIL-STD, etc.); marking services; circuit testing of semiconductors and microprocessors; EMI/EMC testing; dielectric strength and dielectric constant; dissipation factor; electrical insulating materials testing; electrostatic discharge testing; arc resistance testing; hi-pot testing, electrical power system components testing (transformers, dielectric oil, relays, circuit breakers, switchboards, power plants, substations, etc.) screening and destructive analysis of electronic components; and related training. |
| 873 4 | Geotechnical And Thermal/Fire Testing And Analysis - Services for geophysical and thermal/fire testing and analysis include, but are not limited to, construction material testing (concrete, roof, asphalt, etc.); geological material testing (soil, rock, etc.); geophysical testing; geosynthetic testing, seismographic testing, oceanographic testing; metrological testing; thermal/heat testing(temperature, fire, flammability, smoke/toxicity, conductivity); and related training. |

Okay, now here is a list of all the vendors that have a contract on GSA. For services information, you can either click on their contract or directly to GSA Advantage.

| | | | | | | | | | |
|---|--------------|--------------|-----------------|----------------|-----------------------------|----------------|--|--|--|
| 66 SCIENTIFIC EQUIPMENT AND SERVICES | | | | | | | | | |
| Mechanical, Chemical, Electrical, and Geophysical Testing Services | | | | | | | | | |
| Category Description | | | | | | | | | |
| 873 3 Electric Testing And Analysis Services Services for electrical testing and analysis include, but are not limited to, qualification, inspection, safety, performance, certification, and compliance testing of manufactured goods to nationally and internationally recognize reliability standards and regulatory requirements and directives (UL, CSA, FCC, ANSI, MIL-STD, etc.); marking services; circuit testing of semiconductors and microprocessors; EMI/EMC testing; dielectric strength and dielectric constant; dissipation factor; electrical insulating materials testing; electrostatic discharge testing; arc resistance testing; hi-pot testing; electrical power system components testing (transformers, dielectric oil, relays, circuit breakers, switchboards, power plants, substations, etc.) screening and destruction analysis of electronic components; and related training. | | | | | | | | | |
| 3 contractors | | | | | | | | | |
| <div> Download Contractors (Excel) Display: All Small-Business Indicators Small Business Go Search Contractor T&Cs/P </div> | | | | | | | | | |
| Hold the 'Ctrl' key to select all that apply | | | | | | | | | |
| Contractor | Contract # | Phone | City, State | Socio Economic | Contractor T&Cs / R/rollout | View Catalog | | | |
| FRANKLIN APPLIED PHYSICS, INC. | GS-07F-96985 | 6106666645 | OAKS, PA | 8 | | GSA Advantage! | | | |
| INTERTEK TESTING SERVICES, NA, INC. | GS-07F-0150V | 770-350-7431 | CORTLAND, NY | 4 | | GSA Advantage! | | | |
| SOUTHWEST RESEARCH INSTITUTE | GS-07F-0007P | 210-522-2230 | SAN ANTONIO, TX | 8 | | GSA Advantage! | | | |

We clicked on a contract. Here's a look at some labor rates (full burdened to include fringe benefits, overhead and profit):

CUSTOMER INFORMATION:

Prices shown herein are Net (discount deducted).

1a. TABLE OF AWARDED SPECIAL ITEM NUMBERS (SIN's)
873 3 Electric Testing and Analysis Services

1b. LOWEST PRICE TEST: N/A

1c. HOURLY RATES: *Prices shown herein are Net (discount deducted).*

| commercial job title | experience | functional responsibility | education | hourly rate |
|----------------------|--------------------|--|----------------|-------------|
| sr. staff scientist | 34 yr. at this job | supervises tests, interprets military and commercial specifications, plans the work in accordance with timetables and budgets, analyzes data, writes technical reports | Ph.D.(physics) | \$186.74 |
| staff scientist | 21 yr. at this job | plans and conducts tests, designs and fabricates instrumentation, writes technical reports | Ph.D.(physics) | \$102.84 |

2. MAXIMUM ORDER: \$100,000

3. MINIMUM ORDER: \$100

4. GEOGRAPHIC COVERAGE: Domestic, 50 states, Washington, DC, Puerto Rico, US Territories and to a CONUS port or consolidation point for orders received from overseas activities.

5. POINTS OF PRODUCTION: N/A

6. DISCOUNT FROM LIST PRICES: Government discount is 7.31% from accepted price list.
Prices shown herein are Net (discount deducted).

7. QUANTITY DISCOUNT: None

8. PROMPT PAYMENT TERMS: Net 30

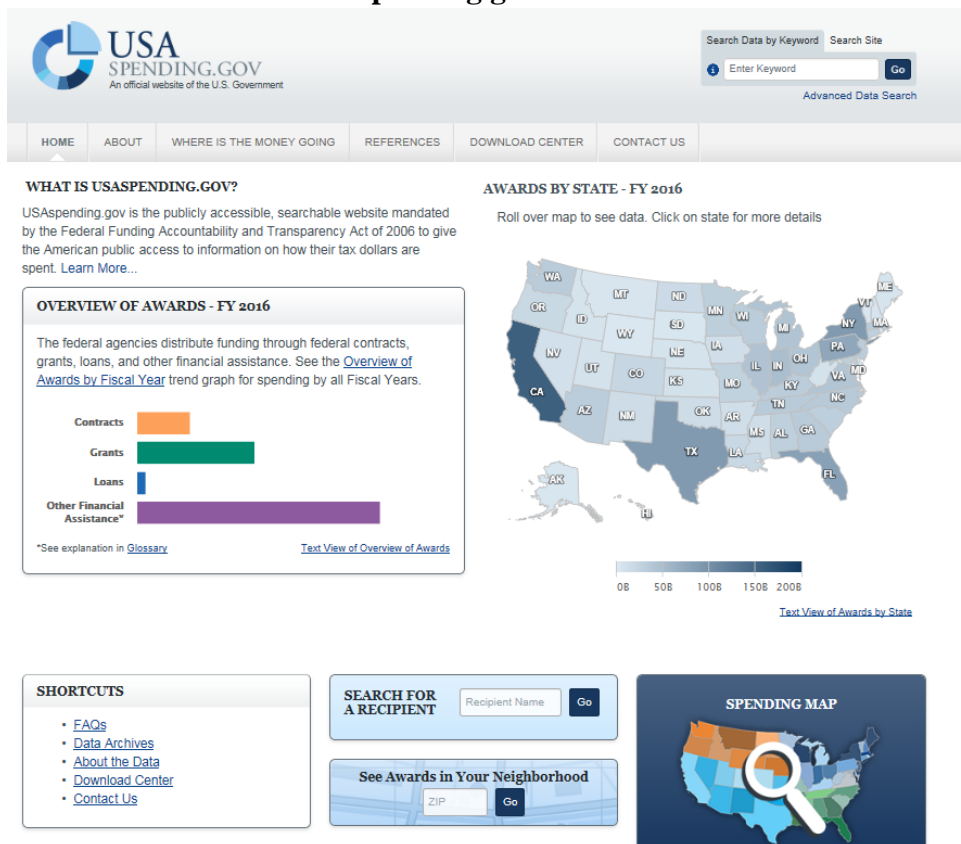
GSA Advantage. GSA Advantage is an electronic on-line shopping mall maintained by the General Services Administration to support Government operations. With GSA Advantage, you can instantly obtain a wide variety of product information that you can use in pricing the same or similar products.

<https://www.gsadvantage.gov/advantage/main/elib.do?pg=home&src=elib>

Research capabilities include:

- Browsing or searching for items using key words, part numbers, National Stock Numbers, or vendor names;
- Comparing features, prices, and delivery options; and
- Configuring products and adding accessories.
- The following gives an overview of typical data available in FSS including FSS available published from GSA Advantage:
 - Product descriptions
 - Pictures
 - Pricing and discount information
 - Delivery/performance terms

2.2.2.5.3 USAspending.gov



Remember: The statistics below are Federal funds only!

[USAspending](#) > [Where is the Money Going](#) > State Summary

STATE SUMMARY:HAWAII

Hawaii



Fiscal Year 2016



Go

Total Funds Awarded - FY 2016

\$5,409,674,516

Total Number of [Transactions](#) - FY 2016

13,434

Total SubAward Funds - FY 2016

\$242,529,563

Total SubAward [Transactions](#) - FY 2016

737

CONTRACT, GRANT, LOAN, AND OTHER FINANCIAL ASSISTANCE AWARDS



[View Spending Map](#)

| | # of Awards | Amount |
|-------------|----------------|-----------------|
| ● Contracts | 9,308 | \$617,397,084 |
| ● Grants | 1,060 | \$1,698,664,329 |
| ● Loans | 703 | \$3,934,803 |

TOP COUNTIES

| | |
|-------------|-----------------|
| 1. Honolulu | \$1,625,098,805 |
| 2. Hawaii | \$395,862,728 |
| 3. Maui | \$271,324,708 |
| 4. Kauai | \$133,770,361 |
| 5. Kalawao | \$75,888 |


[Text View and More Details on All Counties](#)

TOP CONGRESSIONAL DISTRICTS

| | |
|--------|-----------------|
| 1. N/A | \$3,068,206,898 |
| 2. 01 | \$1,949,227,283 |
| 3. 02 | \$284,628,671 |
| 4. 00 | \$93,193,479 |
| 5. 90 | \$12,298,713 |

[Text View and More Details on All Congressional Districts](#)

2.2.2.5.4 Dynamic Small Business Search



DSBS

Mobile View

Print

Exit

Help

DSBS

Quick Market Search

TM OnLine

Welcome to the Dynamic Small Business Search

All search form hotlinks open a new browser window.
All form fields that require typing in data have "tooltips" with data format information.

NEW

NEW FEATURES FOR MOBILE USERS:
Phone number hotlinks can be used to dial the number on mobile phones.
Address hotlinks can be used to show the address in Google Maps.

This is generally a self-certifying database. The SBA does not make any representation as to the accuracy of any of the data included, other than certifications relating to 8(a) Business Development, HUBZone or Small Disadvantaged Business status. The SBA strongly recommends that contracting officers diligently review a bidder's small business self-certification before awarding a contract.

Location of Profile

States:
CA - California
CO - Colorado
CT - Connecticut
DE - Delaware
DC - District of Columbia
FM - Federated States of Micronesia
FL - Florida
GA - Georgia
GU - Guam
HI - Hawaii

Searching within a State:
(Requires exactly one state from the State list at left.)
 Congressional District: [Help](#)
County: [Select 1 State, then press Lookup](#) [Lookup Help](#)

[How to make multiple selections.](#)
 Area Code or Phone Number Initial Fragment
 Metropolitan Statistical Area [Help](#)
 SBA Servicing Office [Help](#)
 Zip Code or Zip Code Initial Fragment

Government Certifications

8(a) Certified or 8(a) Joint Venture:
☐ Required (Active Certifications only)
☐ Required (Active Certifications and Previously Certified)
☐ Required (Previously Certified only)
☒ Not Required

HUBZone Certification:
☐ Required (Active Certifications only)
☐ Required (Active Certifications and Previously Certified)
☐ Required (Previously Certified only)
☒ Not Required

Small Disadvantaged Business:
☐ Required (Active Certifications only)
☐ Required (Active Certifications and Previously Certified)
☐ Required (Previously Certified only)
☒ Not Required

The SBA's 8(a), HUBZone and SDB certifications are also made available to external software via: [SBSS Public Web Services](#).
For more information, see also [SBA Certifications](#) in the search help page.

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2.2.2.2.5 Federal Business Opportunities

The screenshot shows the FEDBizOPPS.GOV website. At the top, there's a navigation bar with links: Home, Getting Started, General Info, Opportunities, Agencies, and Privacy. Below this is a search bar with the text "Search more than 32,000* active federal opportunities." and a search button. To the right of the search bar, there's a "RECOVERY" section with links to "SEARCH RECOVERY OPPORTUNITIES" and "SEARCH RECOVERY AWARDS". Below the search bar, there are several informational sections: "SAM.gov REGISTRATION IS FREE", "ATTENTION: Agency users are responsible for properly uploading controlled, unclassified materials to FBO", and "Important Password Update". At the bottom, there are two main sections: "Buyers / Engineers" and "Vendors / Citizens", each with a login form and links to "View Opportunities", "Register Now", "Password Reminder", and "Recovery FAQs".

FEDBizOPPS.GOV Federal Business Opportunities

Home Getting Started General Info Opportunities Agencies Privacy

Search more than **32,000*** active federal opportunities.

Posted Date: Last 90 Days Set-Aside Code: Any

Place of Performance: Any State or Territory Type: Any

Keyword / Solicitation #: Agency:

Search Additional criteria and multiple selections are available on the [advanced search form](#).
* Notices posted within the last 90 days.

SAM.gov REGISTRATION IS FREE: There is NO FEE to register, or maintain your registration, in the System for Award Management (SAM.gov). If you receive an email from a company claiming to represent SAM.gov, be cautious. If you get an e-mail from a company offering to help you register in SAM.gov asking you to contact them and pay them money, be cautious. These messages are not from the Federal Government. It is FREE TO REGISTER in SAM.gov for any entity.

ATTENTION: Agency users are responsible for properly uploading controlled, unclassified materials to FBO using the access control procedures for document packages and attachments detailed in the [FBO Buyers Guide](#). Do not upload ANY classified materials to FBO.

Important Password Update - Users and Interfacing Systems must reset their passwords as required every 90 days or the account will be disabled IAW GSA IT Security Policy, (CIO P 2100.1). Registered users will receive an email notification to remind them of this requirement. If your account has been disabled, contact the Federal Service Desk at 866-606-8220 (Monday - Friday 8 a.m. to 8 p.m. ET).

NOTE: If your account was re-enabled after contacting the FSD, you must reset your password before midnight on the day of the call to prevent it from being disabled once again.

Buyers / Engineers
Government users may post, manage, and award opportunities.

Username: Password: Login

[View Opportunities](#)
No login is required to view opportunities.
[Register Now](#)
[Password Reminder](#)
[Recovery FAQs](#)

Vendors / Citizens
Vendors and citizens may search, monitor, and retrieve opportunities.

Username: Password: Login

[Find Opportunities](#)
No login is required to view opportunities.
[Register Now](#)
[Password Reminder](#)
[Recovery FAQs](#)

RECOVERY
Locate actions funded by the American Recovery and Reinvestment Act.
[SEARCH RECOVERY OPPORTUNITIES](#)
[SEARCH RECOVERY AWARDS](#)

FBO RECOVERY REPORTS
[Click here for Opportunities](#)
[Click here for Awards](#)

Learn more [about FBO recovery reports](#).

SMALL BUSINESS EVENTS
[Learn more](#) about the Small Business Central Event Listing or [search now](#) for events.
[SEARCH SMALL BUSINESS EVENTS](#)

VENDOR COLLABORATION
FBO now contains the Vendor Collaboration Central Event Listing.
[Learn more](#) or [search](#).
[VENDOR COLLABORATION](#)

USER GUIDES
[Buyer](#)
[Vendor](#)
[Engineer](#)
[Location / Agency Admin](#)

Use [Adobe Acrobat Reader](#) to view files in PDF format.

DEMONSTRATION VIDEOS
Learn about FBO features and functionality in on-line videos.
[Watch the Videos](#)

This site won't necessarily give you information on cost & pricing data, but it will show you solicitations on how other Federal Agencies ask for cost information.

2.2.2.6 Government Economic Data

The Federal Government develops and publishes large amounts of economic data. Much of this information is used to make national economic decisions. It is valuable to buyers attempting to develop preliminary price estimates, because knowledge of the economy and market forces is vital.

Data are published by several Government departments and bureaus. The best known sources include:

- Department of Agriculture
- Department of Commerce
- Bureau of Labor Statistics (BLS)
- Federal Reserve System
- Congress

Index Numbers. Specific price comparisons, known as price index numbers, are particularly useful in making price comparisons over time. You can use price index numbers to adjust the price for any purchase or sale of a particular product at any time, to estimate the contract price for your current requirement. You can even make comparisons using information from several procurements involving several different vendors.

You can use indexes routinely published by the Government or you can tailor indexes to fit your particular needs. The organizations that prepare Government indexes may even be willing to construct a special price index to meet your estimating needs, if the need for the index justifies their cost of developing it.

Probably the best known Government index is the **Consumer Price Index (CPI)**, an index published by the Bureau of Labor Statistics. You may be able to use the CPI to evaluate price changes related to labor and labor intensive products. However, the index most commonly used by Government buyers is the **Producer Price Indexes (PPI)**, another index published monthly by the Bureau of Labor Statistics. You can use the PPI to monitor and estimate price changes for products traded at the wholesale level.

Example 1: Bonnie Kahakui – Car Rental Contract

In a recent analysis to determine whether or not to allow a price increase on the car rental contract, several factors were taken into consideration; 1) Inflation rate, 2) Industry rates, 3) Gasoline prices and 4) New vehicle costs. All information gathered from the United States Department of Labor, Bureau of Labor Statistics (not adjusted for Hawaii specifically).

1. Inflation rate 2016 – approximately 1.5 %

Table A. West Region CPI-U monthly and annual percent changes (not seasonally adjusted)

| Month | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|-----------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Monthly | Annual | Monthly | Annual | Monthly | Annual | Monthly | Annual | Monthly | Annual | Monthly | Annual |
| January | 0.5 | 1.4 | 0.4 | 2.6 | 0.3 | 1.7 | 0.3 | 1.7 | -0.3 | 0.7 | 0.5 | 2.6 |
| February | 0.6 | 1.9 | 0.4 | 2.5 | 0.8 | 2.0 | 0.4 | 1.3 | 0.6 | 0.9 | 0.1 | 2.1 |
| March | 0.9 | 2.6 | 0.9 | 2.4 | 0.4 | 1.5 | 0.6 | 1.5 | 0.8 | 1.1 | 0.2 | 1.5 |
| April | 0.6 | 3.0 | 0.2 | 2.1 | 0.0 | 1.3 | 0.3 | 1.8 | 0.3 | 1.0 | 0.5 | 1.8 |
| May | 0.3 | 3.2 | 0.2 | 2.0 | 0.2 | 1.3 | 0.6 | 2.3 | 0.8 | 1.2 | 0.5 | 1.5 |
| June | -0.2 | 3.1 | -0.2 | 2.0 | 0.1 | 1.5 | 0.1 | 2.3 | 0.0 | 1.1 | | |
| July | -0.1 | 2.9 | -0.3 | 1.8 | 0.0 | 1.9 | 0.1 | 2.3 | 0.3 | 1.3 | | |
| August | 0.2 | 3.0 | 0.5 | 2.1 | 0.1 | 1.5 | -0.1 | 2.1 | -0.1 | 1.3 | | |
| September | 0.4 | 3.5 | 0.5 | 2.2 | 0.2 | 1.3 | 0.1 | 2.0 | -0.2 | 1.0 | | |
| October | 0.0 | 3.4 | 0.4 | 2.5 | -0.1 | 0.9 | -0.1 | 2.0 | 0.0 | 1.1 | | |
| November | -0.2 | 3.2 | -0.7 | 1.9 | -0.4 | 1.3 | -0.6 | 1.7 | -0.2 | 1.5 | | |
| December | -0.3 | 2.7 | -0.5 | 1.7 | 0.0 | 1.8 | -0.5 | 1.3 | -0.1 | 1.8 | | |

2. Passenger Car Rental Rates (May 2016) 2% increase in prices (preliminary calculations)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-------|---------|--------|--------|--------|-------|------|------|------|-------|-------|-------|
| 2006 | 3.2 | 4.2 | 2.3 | 2.9 | -3.1 | 0.9 | 1.6 | 0.3 | -1.8 | -1.9 | 3.8 | 5.3 |
| 2007 | -0.4 | -1.1 | -5.3 | -1.5 | -5.3 | -3.6 | 5.0 | 11.3 | 3.6 | -0.5 | -2.3 | 4.7 |
| 2008 | 2.1 | -0.3 | 2.3 | -5.8 | -1.4 | 0.0 | 19.9 | 15.1 | 5.7 | -5.4 | -5.0 | -4.8 |
| 2009 | 1.5 | 8.8 | 13.5 | 5.3 | -1.4 | 2.4 | 7.3 | 9.6 | 3.7 | -5.7 | -10.2 | -10.6 |
| 2010 | -4.5 | 4.1 | 3.6 | -1.0 | -10.1 | -1.9 | 13.0 | 9.1 | -2.3 | -7.4 | -1.0 | -0.8 |
| 2011 | -6.9 | -3.3 | 8.3 | -0.5 | -7.5 | -6.7 | 14.2 | 20.5 | 1.5 | -12.0 | -13.5 | -15.7 |
| 2012 | -12.1 | -3.9 | 27.7 | 7.4 | -3.3 | -16.0 | 9.4 | 14.6 | 6.1 | -1.7 | 2.3 | 2.7 |
| 2013 | -5.5 | -0.7 | 6.5 | 0.4 | -14.6 | -7.1 | 7.7 | 20.2 | 1.6 | -2.8 | -9.6 | -6.2 |
| 2014 | 2.5 | 7.1 | 20.8 | 12.5 | 0.5 | -9.6 | 2.1 | 9.1 | -0.2 | -16.0 | -17.1 | -12.0 |
| 2015 | -0.6 | 4.3 | 12.8 | 0.1 | -2.4 | -10.0 | 4.3 | 7.2 | 1.0 | -5.8 | -10.5 | -4.7 |
| 2016 | -7.0 | -2.3(P) | 1.6(P) | 1.8(P) | 0.2(P) | | | | | | | |

P : Preliminary. All indexes are subject to revision four months after original publication.

3. Gasoline prices declined January to April, with increases beginning in May 2016

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | HALF1 | HALF2 |
|------|-------|-------|-------|------|-------|------|-------|------|------|-------|-------|-------|-------|-------|
| 2006 | -10.8 | 4.1 | 3.9 | 5.1 | 8.2 | 9.5 | 9.5 | 11.1 | -3.0 | -19.7 | -22.8 | -4.5 | | |
| 2007 | 4.2 | 6.8 | 5.4 | 11.7 | 15.4 | 8.2 | 5.6 | -1.7 | 1.4 | 1.7 | 13.4 | 11.2 | | |
| 2008 | 11.1 | 3.4 | 2.7 | 1.1 | 4.6 | 15.2 | 20.8 | 10.1 | -0.1 | -16.7 | -39.9 | -52.0 | | |
| 2009 | -42.2 | -9.3 | 8.1 | 4.7 | 1.7 | 27.7 | 25.7 | 26.4 | 6.2 | 8.0 | 6.5 | 4.9 | | |
| 2010 | 5.9 | -1.0 | -1.7 | -3.9 | -3.4 | -4.4 | -1.5 | 2.2 | 5.8 | 9.1 | 10.3 | 15.2 | | |
| 2011 | 10.4 | 9.1 | 8.6 | 12.4 | 12.4 | 3.2 | -1.7 | -2.7 | 1.6 | 0.3 | 0.8 | -2.8 | | |
| 2012 | 0.3 | 2.8 | 6.6 | 4.6 | -4.3 | -9.6 | -11.1 | 2.0 | 12.9 | 17.0 | 2.4 | -5.9 | | |
| 2013 | -8.1 | 4.1 | 1.0 | -3.5 | -11.6 | -5.3 | 0.0 | 2.7 | 2.1 | 1.2 | 0.6 | 2.2 | | |
| 2014 | 4.0 | 1.4 | -3.3 | -1.9 | -2.6 | -0.3 | -3.5 | -3.1 | -2.5 | -3.4 | -5.8 | -15.3 | | |
| 2015 | -28.7 | -24.0 | -13.7 | 3.2 | 7.7 | 6.7 | 8.4 | -1.2 | -9.6 | -9.4 | -5.5 | -3.1 | | |
| 2016 | -8.6 | -21.1 | -15.4 | -4.0 | 12.9 | | | | | | | | | |

4. New vehicle cost shows very minor deviations since the beginning of CY 2016.

3-Month Percent Change

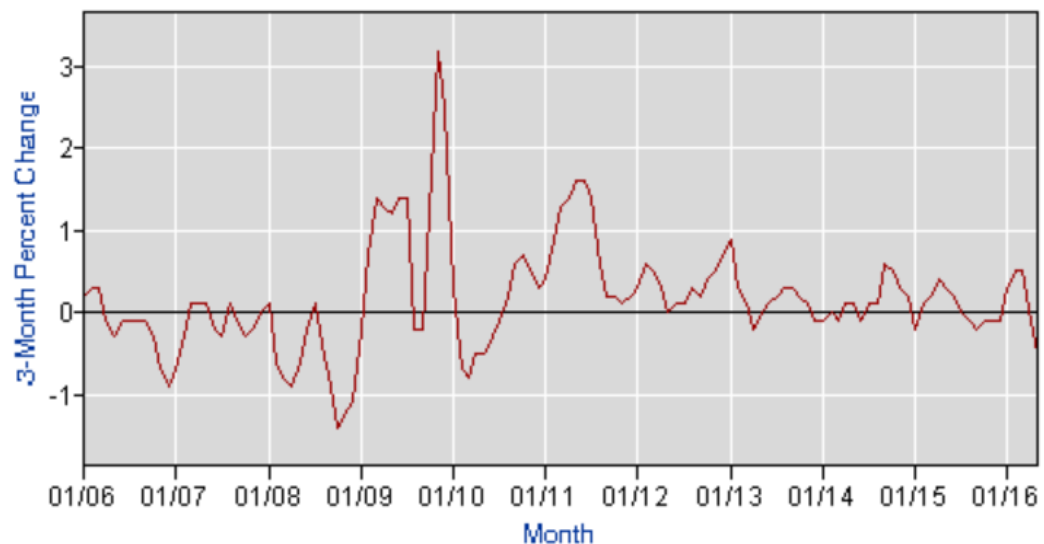
Series Id: CUSR0000SETA01

Seasonally Adjusted

Area: U.S. city average

Item: New vehicles

Base Period: 1982-84=100



I also did a current price comparison (for Hawaii only) for April through December 2016 on Excel. Here is a sample: (Rates do not include gasoline.)

| | | | | | | | | | | |
|--------------------|-------|------------|----------|--------|---------|--------|-------|-------|-----------|----------|
| May 1, 2016 | | | | | | | | | | |
| HONOLULU | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$50 | \$56.00 | \$75 | \$50 | \$48 | \$55 | \$82 | \$81 | \$49 | \$60.67 |
| Minivan | \$80 | \$88.00 | \$138 | \$83 | \$81 | \$89 | \$140 | \$139 | \$84 | \$102.44 |
| Standard SUV | \$64 | \$70.00 | \$108 | \$67 | \$65 | \$71 | \$110 | \$109 | \$73 | \$81.89 |
| | | | | | | | | | | |
| KONA | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$58 | \$58.00 | \$61 | \$55 | \$53 | \$58 | \$61 | \$61 | NA | \$66.43 |
| Minivan | \$75 | \$75.00 | \$111 | \$97 | \$90 | \$75 | \$111 | \$111 | NA | \$106.43 |
| Standard SUV | \$73 | \$73.00 | \$92 | \$92 | \$90 | \$73 | \$105 | \$92 | NA | \$98.57 |
| | | | | | | | | | | |
| LIHUE | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$56 | \$62.00 | \$63 | \$57 | \$54 | \$57 | \$63 | \$64 | \$53 | \$75.57 |
| Minivan | \$83 | \$86.00 | \$112 | \$87 | \$84 | \$87 | \$114 | \$115 | \$84 | \$121.71 |
| Standard SUV | \$72 | \$75.00 | \$86 | \$75 | \$73 | \$75 | \$87 | \$88 | NA | \$90.14 |
| | | | | | | | | | | |
| KAHULUI | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$56 | \$61.00 | \$61 | \$56 | \$55 | \$56 | \$61 | \$67 | \$48 | \$57.89 |
| Minivan | \$85 | \$85.00 | \$111 | \$85 | \$91 | \$85 | \$112 | \$111 | \$84 | \$94.33 |
| Standard SUV | \$96 | \$101.00 | \$97 | \$104 | \$103 | \$101 | \$108 | \$105 | \$84 | \$99.89 |
| | | | | | | | | | | |
| HILO | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$57 | \$60.00 | \$61 | \$55 | \$55 | \$57 | \$62 | \$67 | NA | \$59.25 |
| Minivan | \$66 | \$68.00 | \$111 | \$67 | \$67 | \$68 | \$112 | \$111 | NA | \$83.75 |
| Standard SUV | \$69 | \$71.00 | \$93 | \$69 | \$69 | \$71 | \$93 | NA | NA | \$66.88 |

| | | | | | | | | | | |
|------------------------|-------|------------|----------|--------|---------|--------|-------|-------|-----------|----------|
| December 7 2016 | | | | | | | | | | |
| HONOLULU | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$49 | \$52.00 | \$92 | \$51 | \$49 | \$52 | \$101 | \$100 | \$102 | \$72.00 |
| Minivan | \$82 | \$91.00 | \$144 | \$83 | \$81 | \$92 | \$147 | \$146 | \$183 | \$116.56 |
| Standard SUV | \$83 | \$93.00 | \$117 | \$83 | \$79 | \$93 | \$137 | \$119 | \$195 | \$111.00 |
| | | | | | | | | | | |
| KONA | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$51 | \$51.00 | \$51 | \$54 | \$52 | \$51 | \$66 | \$60 | NA | \$62.29 |
| Minivan | \$91 | \$91.00 | \$91 | \$99 | \$92 | \$97 | \$125 | \$99 | NA | \$112.14 |
| Standard SUV | \$91 | \$91.00 | \$91 | \$91 | \$89 | \$94 | \$125 | \$95 | NA | \$109.57 |
| | | | | | | | | | | |
| LIHUE | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$51 | \$51.00 | \$51 | \$54 | \$52 | \$53 | \$63 | \$68 | \$101 | \$77.71 |
| Minivan | \$91 | \$91.00 | \$91 | \$90 | \$87 | \$99 | \$106 | \$124 | \$182 | \$137.29 |
| Standard SUV | \$91 | \$91.00 | \$91 | \$91 | \$87 | \$94 | \$103 | \$108 | \$194 | \$135.71 |
| | | | | | | | | | | |
| KAHULUI | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$52 | \$52.00 | \$62 | \$54 | \$53 | \$51 | \$63 | \$68 | \$92 | \$60.78 |
| Minivan | \$90 | \$99.00 | \$99 | \$82 | \$89 | \$99 | \$106 | \$113 | \$165 | \$104.67 |
| Standard SUV | \$91 | \$95.00 | \$102 | \$102 | \$101 | \$102 | \$104 | \$108 | \$175 | \$108.89 |
| | | | | | | | | | | |
| HILO | Alamo | Enterprise | National | Dollar | Thrifty | Budget | Hertz | Avis | Advantage | ADR |
| Compact | \$52 | \$52.00 | \$54 | \$56 | \$56 | \$52 | \$65 | \$60 | NA | \$55.88 |
| Minivan | \$92 | \$93.00 | \$93 | \$92 | \$92 | \$93 | \$114 | \$111 | NA | \$97.50 |
| Standard SUV | \$91 | \$92.00 | \$93 | \$89 | \$89 | \$92 | \$106 | \$93 | NA | \$93.13 |

We ultimately negotiated with the vendor a 1-2% (depending on car size) increase for the 2016-2017 contract period.

The table below gives an overview of indexes and other data available from various Government departments and bureaus.

| Data Source | Typical Data |
|-----------------------------------|--|
| Department of Agriculture | <p>Agricultural Price Monthly --Monthly agricultural price information by commodity</p> <p>Agricultural Statistics -- Annual agricultural commodity information including price data</p> |
| Department of Commerce | <p>Monthly Wholesale Trade: Sales and Inventories -- Monthly data on wholesale trade and inventories</p> <p>Current Industrial Reports -- A series of periodic reports on production and consumption in identified industries</p> |
| Bureau of Labor Statistics | <p>Consumer Price Index -- Monthly report on changes in the prices paid by urban consumers for a fixed market basket of consumer goods and services</p> <p>Producer Price Index -- Monthly report on the selling prices received by domestic producers of goods and services</p> <p>Employment Cost Index -- Monthly report on the change in the cost of labor, free from the influence of employment shifts among occupations and industries</p> |
| Federal Reserve System | <p>Federal Reserve Bulletin -- Monthly economic indexes and business data</p> <p>The Beige Book -- Summary of comments on current economic conditions received from business and other contacts outside the Federal Reserve</p> |

2.2.2.7 Non-Government Economic Data

There are a number of non-Government sources of economic and market data, including:

- Purchasing organizations;
- Commodity or industry publications; and
- Economic analysis services.

Purchasing Organizations. The State has partnered with Alaska to form a joint The most noted purchasing organization that publishes market data is the Institute for Supply Management (ISM). The ISM provides members with monthly information on market price trends and product

availability. Data are based on the actual experience and projections of purchasing managers throughout the country.

Commodity or Industry Publications. Numerous commodity and industry publications provide specific market data. Periods of publication and the information presented vary.

Economic Analysis Services. Commercial economic analysis services have also been established to provide estimators with current analyses of general market conditions and price trends. Currently, the economic analysis service most widely accepted by Government purchasing organizations is Global Insights, Inc. A number of Government agencies contract with Global Insight which gives them access to Global Insight's economic analysis and forecasts. Global Insight, and similar companies provide a variety of services. As the timeliness and amount of information increases, the price also increases.

Data from Non-Government Economic Sources. The table below gives an overview of typical economic and market data that you can obtain from various non-Government sources.

| Data Source | Typical Data |
|---|---|
| Purchasing Organizations | Manufacturing NAPM Report on Business -- Monthly information on business activity, new orders, backlog of orders, supplier deliveries, and prices |
| Commodity or Industry Publications | <p><u>American Metal Market</u> -- Daily information on the metals industry from scrap to precious metals including prices</p> <p><u>Black's Guide</u> -- Periodic information on commercial and industrial real estate leasing in key U.S. metropolitan areas</p> <p><u>Chemical Marketing Reporter</u> -- Weekly information on market indexes, current prices, and price changes</p> <p><u>Platt's Oilgram Price Report</u> -- Daily information on current oil prices</p> <p><u>Pulp and Paper Week</u> -- Weekly information on paper industry prices, economics, and technology</p> <p><u>Random Lengths</u> -- Weekly information on prices of wood products</p> |
| Economic Forecasting Services | <u>Standard & Poor's DRI Cost Information Service</u> -- Information and forecasts for more than 650 prices and wages in North America, Europe, and the Pacific Rim |

Buyers and other experts are important sources of market information. This is especially true when they have been involved in the procurement of the same or similar items. They can refer you to official contract files that you may not otherwise find and they can provide tips and insights that may not appear in official files.

Data from Government Personnel Examples of Government personnel who can provide information useful in pricing include:

- Buyers;
- Contract administrators;
- Technical experts, and
- Auditors

The table below gives an overview of typical data you can obtain from Government buyers and analysts.

| Data Source | Typical Data |
|-------------------------|---|
| Buyers | <ul style="list-style-type: none">• Information on purchases of the same or similar products• Identification of potential sources• Information on the capabilities of sources already identified |
| Contract Administrators | <ul style="list-style-type: none">• Information on purchases of the same or similar products• Information on the capabilities of sources already identified• Contractor performance assessment review data |
| Technical Experts | <ul style="list-style-type: none">• Identification of potential sources• Information on the capabilities and efficiency of sources already identified• Identification of price drivers in the Government requirements |
| Auditors | <ul style="list-style-type: none">• Information from prior audits, including rate and other cost trends• Information from contractor compensation reviews |

Data from Personnel Outside the Government. Buyers and other experts from industry, state and local governments can also provide useful information, particularly for common supplies and services. The information that you can gather will depend on the personnel involved. For example, a buyer from outside the Government can provide the same type of information that you would expect to receive from a Government buyer. However, the amount and types of data that you can gather depends largely on the willingness of the source to release what is often considered proprietary data.

Collecting Information. Information can be gathered in several ways. The two most common methods are interaction at professional meetings and specific questions or surveys.

- **Professional Meetings and Presentations.** Discussions at professional meetings and presentations are a good way to gather general information on purchasing particular categories of supplies and services. Professional organizations such as the National Association of State Procurement Officers (NASPO) and the Institute for Public Procurement (NIGP) actively encourage such professional development.
 - **Surveys.** Telephone or email surveys can also provide useful information on potential sources in the area. Both government and non-government experts are usually anxious to respond to questions from fellow professionals. However, be aware that proprietary data restrictions may prevent many responses.
-

2.2.3 Market Research Data from Prospective Offerors

Encourage Early Exchanges. Potential offerors are a good source of information of market information for planning purposes. Early exchanges of information between potential offerors and members of the Government Procurement Team can identify and resolve concerns regarding the procurement strategy, the Government requirement, proposal instructions, offer evaluation criteria, reference documents, and other industry concerns.

Techniques to Promote Early Exchanges When draft Request for Proposals are released, they should be complete as possible, including factors for evaluation and price. Without this level of detail, offerors do not have sufficient insight into the Government's plans for the solicitation to be able to provide meaningful feedback. Techniques to promote early exchanges of information include:

- **Industry or Small Business Conferences.** Many industries sponsor periodic conferences to share information on technical achievements and business practices.
- **Public Hearings.** Government personnel can use public hearings to disseminate information about projected Government requirements. Prospective offerors and other interested parties can ask questions and provide input to the procurement decision makers.
- **One-On-One Meetings.** Any meetings with prospective offerors that are substantially involved with potential contract terms and conditions should include the contracting officer.
- **Requests for Information.** A request for information (RFI) may be used when the Government does not presently intend to award a contract, but wants to obtain price, delivery, or other information for planning purposes. Responses to an RFI are not offers and cannot be accepted by the Government to form a binding contract. Agency approval may be required before issuing an RFI.
- **Presolicitation or Preproposal Conferences.** When you use a preproposal or presolicitation conference, materials distributed at the conference should be made available to all potential offerors, upon request.

- **Site Visits.** Visits to contractor plants or proposed sites of Government contract performance can facilitate information exchange.

Public Disclosure of Information. When specific information about a proposed procurement that would be necessary for proposal preparation is disclosed to one or more potential offerors, that information must be made available to the public as soon as practicable, but no later than the next general release of information, in order to avoid creating an unfair competitive advantage. Information provided to a potential offeror in response to that offeror's request must not be disclosed if doing so would reveal the potential offeror's confidential business strategy.

The table below gives an overview of typical data available from these various mechanisms for exchanging information with prospective offerors.

| Data Source | Typical Data |
|--|---|
| Industry or Small Business Conferences | <ul style="list-style-type: none"> • General information about industry capabilities and business practices |
| Public Hearings | <ul style="list-style-type: none"> • Industry feedback on projected Government requirements |
| One-On-One Meetings | <ul style="list-style-type: none"> • Individual company feedback on ways and means to meet Government requirements |
| Draft Request for Proposal | <ul style="list-style-type: none"> • Comments on requirements that will unreasonably restrict competition and increase price • Comments on unreasonably complex or potentially biased evaluation criteria |
| Request For Information | <ul style="list-style-type: none"> • Comments on quantity breaks for discounts • Comments on delivery terms • Information on market conditions affecting the proposed solicitation • Comments on the proposed requirement |
| Presolicitation Conferences | <ul style="list-style-type: none"> • Information on uncertainties that may drive up prices • Information on noncommercial requirements that may drive up prices • Information on other aspects of the requirement that may limit competition or affect pricing |

| | |
|-------------|--|
| Site Visits | <ul style="list-style-type: none"> • Plant site visits may provide information on industry methods and capabilities • Prospective offeror visits to Government contract performance sites may provide unique insights into factors that will affect contract price and performance |
|-------------|--|

2.2.4 Market Research Data from Other Sources

Other important sources of market data include trade and professional associations, state and local watchdog agencies, and interactive on-line communication groups.

Trade and Professional Associations. Trade and professional associations can provide information about sources, source responsibility, commercial standards, and cost drivers.

Chamber of Commerce and Better Business Bureau. Professional organizations devoted to business development and the maintenance of responsible business practices, such as the Chamber of Commerce and Better Business Bureau, can provide substantial information on pricing, available competition, and the responsibility of identified sources.

State and Local Watchdog Agencies. State and local watchdog agencies can provide information on the capabilities and pricing of sources, particularly sources accused of price gouging or poor performance.

2.3 Using Market Research to Estimate Probable Price

This section covers the following topics:

- 2.3.1 - Evaluating Your Market Research
- 2.3.2 - Developing Your Price Estimate

Use Market Research to Estimate Probable Price. As you perform your market research, document the sources of information that you considered and what you found. Consider how you can increase competition that includes firms that commonly sell the same or similar items in the commercial market. At the same time, consider how current requirements, particularly Government-unique requirements will affect competition and contract price. Generally, both tasks will focus on the same requirements, because requirements that unnecessarily limit competition will also unnecessarily increase contract price.

2.3.1 Evaluating Your Market Research

Questions to Consider in Evaluating Your Research. The better your research, the more reliance you should be able to place on the price estimate that you develop from that research. The list below contains questions that you can use to evaluate the quality of your market research. Note that there may be some procurements where a particular question does not apply. For example, the first question deals with the use of historical price. If the Government has never acquired the product or a similar product, this question would not apply in your evaluation of estimate quality.

Factors to Consider in Developing an Estimated Price

In preparing your price estimate, have you considered:

- Historical prices paid for the product and changes in the product or market since then?
- The current level of competition between prospective offerors and how it will affect contract price?
- How increasing or decreasing the quantity being acquired would likely affect contract price?
- How changing the timing of the procurement would likely affect contract price because of projected trends in supply or demand?
- How changing the timing of the procurement would likely affect contract price because of projected cyclical changes in supply or demand?
- How other forces are expected to affect prices in the near future?
- How the pricing strategies of prospective offerors will affect contract price?
- Which firms in the market are expected to respond to the solicitation and how their prices compare with the firms that are not expected to respond?
- Whether the requirements document will unnecessarily increase prices proposed by offerors?
- Whether delivery/performance requirements will unnecessarily increase prices proposed by offerors?
- Whether different products from different vendors will have different costs of ownership?
- Whether contract terms and conditions will unnecessarily increase prices proposed by offerors?
- Ways to improve the risk related to problems associated with performance of similar contracts?

Evaluating Your Research. If you can answer "Yes" to all the questions in the list above, you have done an excellent job of market research for estimate development. When you must answer "No," your research is incomplete. For smaller dollar procurements, an incomplete evaluation may be acceptable as long as the evaluation covers the factors that you feel are most likely to affect contract price. However, as the estimated price increases, the need for in-depth research also increases.



Developing Your Price Estimate

2.3.2 Developing Your Price Estimate

Different Data, Different Estimates. As you perform your market research, you will likely find different data that could lead you to different preliminary estimates of contract price. Using the price that you paid for the item 11 months ago, your estimate might be \$19,700. If you use the last price paid for the item plus 4 percent inflation your estimate might be \$20,488. The catalog price for a similar item from a commercial vendor might be \$19,750. The catalog price for a comparable item from a second vendor might be \$19,900.

Consider Various Estimates. Which estimate is correct? There is no one answer. They all appear to be valid estimates based on the information used to develop them. This demonstrates a common situation -- there is no single estimate that you can say is right to the exclusion of all other estimates. In fact, they define a range of reasonable prices from \$19,700 to \$20,488.


You could document the various estimates in a paragraph or in a table similar to the following:

| Preliminary Estimate of Contract Price | |
|--|--|
| Price Estimate | Estimating Rationale |
| \$19,700 | Estimate based on the price determined fair and reasonable 11 months ago under contract XX-9X-XXXX. |
| \$20,488 | Estimate based on the price determined fair and reasonable 11 months ago under contract XX-9X-XXXX plus 4 percent inflation estimated using the Producers Price Index for similar items. |
| \$19,750 | Estimate based on current FloMo Systems catalog price for the quantity required. |
| \$19,900 | Estimate based on current Acme Products catalog price for the quantity required. |

Point Estimate. Given this same information, different estimators could have different opinions as to which of these estimates you should use as your preliminary price estimate. That is one reason why it is so important to present the range of possible estimates and the rationale for each. However, in this case an estimate of \$19,750 appears most reasonable because it is based on a current catalog price. Remember, the lower \$19,700 estimate is 11 months old.

2.4 Developing Your Procurement Strategy





Who is Responsible for Determining Price Reasonableness?

The Procurement Officer is responsible for documenting the determination of price reasonableness in all procurements and contracting actions but may obtain assistance from:

- **Procurement Specialist**
- **Project Managers** (in-house estimates, technical evaluations, labor mix evaluation, etc.)
- **Estimators**
- **Auditors** (desk audits, detailed audits of cost or pricing data)

2.4.1 Identifying Potential Procurement Team Members

The Procurement Team includes everyone involved in the procurement -- beginning with the customer and ending with the contractor providing the product or service. This text refers to Government participants in the procurement process as the Government Procurement Team.

The Government is committed to providing training, professional development, and other resources necessary for maintaining and improving the knowledge, skills, and abilities of all Government Procurement Team participants. This commitment applies both to the individual's particular area of expertise within the Government and the individual's role as a Team member.

Potential Team Members. For most contracts, the Government Procurement Team will be relatively small. The following will typically play a key role in contract pricing:

- Procurement officer or procurement specialist;
- Requirements manager (i.e., program or project manager);
- End user; and
- Commodity specialist.

You might also obtain assistance from one or more of the following:

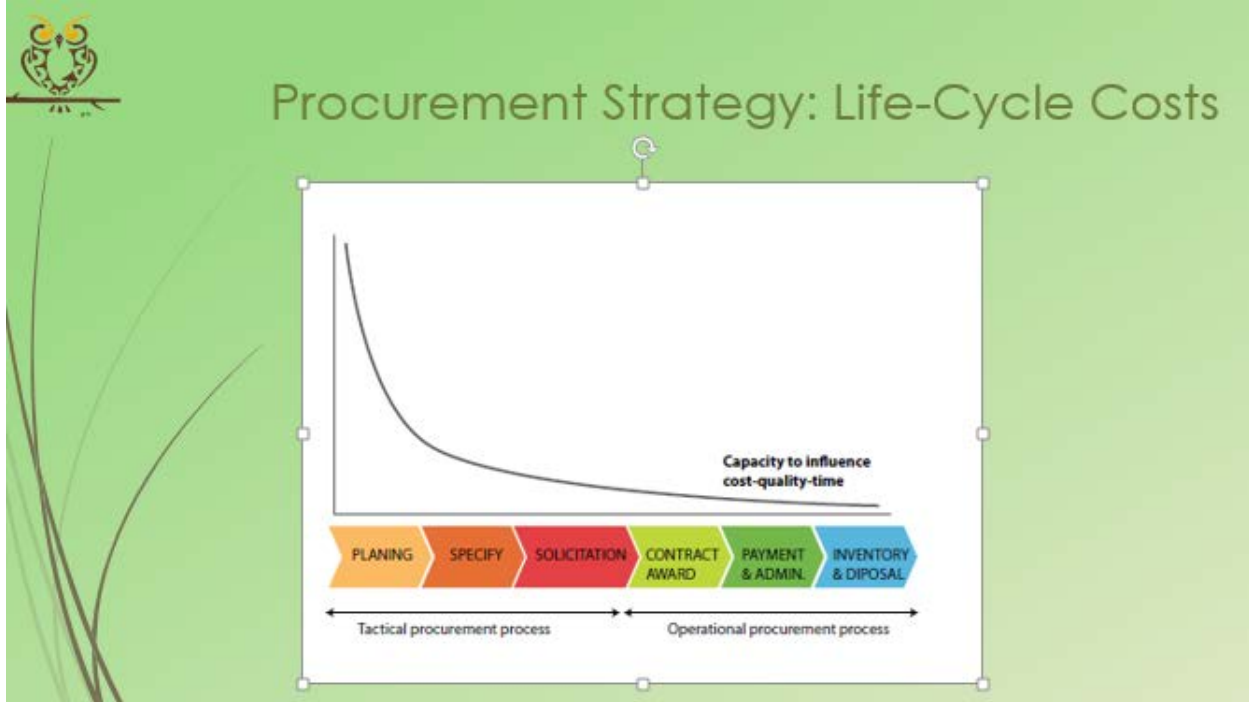
- Inventory manager;
- Auditor;
- Technical specialist;

- Transportation, property, or logistics managers;
- Legal counsel;
- Administrative services office; or
- Cost/price analyst.

This table summarizes the role that potential Government Procurement Team members might play in making or supporting the contract pricing decision.

| Potential Members | |
|----------------------------------|--|
| Typical Role in Contract Pricing | |
| Procurement Officer | The Procurement officer is the person with authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer operating within the limits of their authority as delegated by the Procurement officer. |
| Procurement Specialist | A Procurement specialist may be responsible for performing a wide variety of contracting activities under the authority of the Procurement officer assigned to the contract. In this capacity, a Procurement specialist will likely provide key input to the pricing decision, but the ultimate decision on price reasonableness rests with the Procurement officer. |
| Requirements Manager | Requirements managers initiate procurements by preparing purchase requests. Purchase requests specify the requirement and generally include an Independent Government Estimate. After you receive of the purchase request, requirements managers often can help: <ul style="list-style-type: none"> • Review alternatives for improving the solicitation, • Identify potential price-related factors for award, • Account for significant discrepancies between different comparison bases used in price analysis, and • Provide advice and information for price-related decisions. |
| End User | The end user may or may not be the requirements manager. If the requirements manager is not the end user, you may find it useful to consult the end user when building the solicitation and making price-related decisions. In addition, the end user may be more knowledgeable about the product and a better source for an Independent Government Estimate than the requirements manager. |
| Inventory Manager | Inventory managers keep track of large stocks of products in Government warehouses and other such facilities. Among other things, inventory |

| | |
|---|---|
| | managers generate purchase requests for replacement supplies as users draw on the Government stocks. They tend to be especially concerned about the solicitation/contract, in terms of its potential impact on delivery, inventory levels, and inventory costs. |
| Auditor | Auditors are accountants with specialized training and experience in examining and analyzing cost or pricing data provided by offerors and contractor records (particularly accounting records). Their support can be invaluable in cost proposal analysis. |
| Technical Specialist | <p>These specialists generally write specifications or statements of work and technical evaluation factors and evaluate technical proposals. In many procurements, the requirements manager acts as the technical specialist. Larger procurements, however, may involve teams or panels of technical experts (who, depending on the specific deliverable, may be engineers, scientists, or other similar professionals).</p> <p>From a pricing standpoint, technical specialists may have a good understanding of the costs necessary to build a deliverable and also of the types and sources of commercial products that may be available to satisfy a requirement.</p> |
| Transportation, Property, or Logistics Managers | These specialists can help you select and apply price-related factors that involve transportation costs, Government-furnished property, and ownership costs. All may be involved if you plan to solicit based on a full life-cycle cost model. |
| Legal Counsel | Lawyers may play a role in clearing contracts and reviewing justifications for such price-related decisions as cancellation of an IFB after opening. Look to them for advice on the solicitation and on making the price-related decisions. |
| Agency ASOs | Some Departments have dedicated administration offices. These offices are often involved in pre-award reviews of contract pricing proposals because contract administrators have more complete information on the production and pricing practices of specific offerors. Administrative officers may also be responsible for pricing certain kinds of contract modifications. |
| Cost/Price Analyst | Some contracting activities have dedicated cost/price analysts who can assist in performing the tasks described in this book. However, such analysts are typically only available for higher dollar, more complex procurements. |



2.4.2 Life Cycle Costs

Life Cycle Cost. Life Cycle cost is the total cost to the Government of acquiring, operating, supporting, and (if applicable) disposing of the items being acquired.

- Procurement costs are all costs, including contract costs, associated with acquiring an item for Government use. For complex items, several contracts may be required and costs may involve research and development as well as production, delivery, and installation of the item.
- Operating and support costs are all costs, including contract costs, associated with equipment, supplies, and services needed to operate and maintain an operational system.
- Disposal costs are all costs, including contract costs, associated with removing equipment from service and disposing of it. Evaluations that consider life-cycle cost should also consider any significant salvage or resale value at the time of disposal.

When to Consider as a Price-Related Factor. Consider life-cycle cost in procurement planning whenever the costs of item of system operation, support, and disposal are significant in comparison with the cost of procurement. Consideration is particularly important when you expect that offers will include items that have substantially different operation, support, and disposal costs.

Source selection consideration can be appropriate for an item as simple as an automobile tire or as complex as a major weapon system. For more complex systems, planning should also address:

- Factors with a significant effect on life-cycle cost results, and implement tradeoff studies to evaluate alternative actions which could reduce costs related to those factors.
- Life-cycle costs in product design.
- Contract commitments (when appropriate) that will affect control of life-cycle cost results.

Follow-on efforts subsequent to purchase to further reduce life cycle cost.

Solicitation Requirements. If you intend to consider life cycle costs in offer evaluation, the solicitation must:

- Advise prospective offerors how life cycle costs will be considered in making the contract award decision.
 - Award may be made based on lowest evaluated cost, including life-cycle costs, or life-cycle costs may be considered as a factor in an award decision that also considers other characteristics of the item or system.
 - When life-cycle costs continue over a period of years, solicitations will often provide for adjustments to consider one or more of the following:
 - Time value of money.
 - Cost uncertainty.
 - Inflation.
- Require offerors to estimate key elements of life cycle cost. To estimate preparation, the solicitation must provide relevant information (e.g., projected item usage, operating environment, and the operating period that will be considered in offer evaluation).
- Require offerors to provide relevant cost estimates along with appropriate information to support life-cycle cost estimates.
 - Estimate requirements typically include elements such as:
 - Average unit price, including (when appropriate) recurring and nonrecurring production costs;
 - Unit operating and support costs (e.g., manpower, energy, and parts requirements);
 - Unit disposal costs (e.g., the cost of removing equipment from the Government facility);
 - Unit salvage or residual value.
 - Related information should provide estimate support (e.g., test or operational data).

General Evaluation Requirements.

Step 1. Determine Solicitation Provisions.

When life-cycle costs will be considered as a price-related factor in offer evaluation, the solicitation must identify life-cycle cost estimate requirements, the information needed to support those estimates, and how those estimates will be considered in making the contract award decision.

Step 2: Determine Offered Price(s).

Determine the price(s) for each offer. Also identify and evaluate life-cycle cost estimates required for offer analysis. Ask questions such as the following:

- **Is the estimating methodology reasonable and supported by the information provided?**
- **Are the costs realistic when compared with other known information, including past cost performance?**
- **Is the estimate complete in its consideration of all identified cost elements?**

Step 3. Evaluate Possible Award Combinations.

Evaluate offers using the specific criteria set forth in the solicitation, including any adjustments for:

- Time value of money;
- Cost uncertainty; or
- Inflation.

Step 4. Make Award Decision.

Award to the firm whose offer provides the best value to the Government under the terms of the solicitation.

2.4.2.1 Lease Vs. Purchase Factors

Lease vs. Purchase Decision. Agencies should consider whether to lease or purchase equipment based on a case-by-case evaluation of comparative costs and other factors.

- As a minimum, the procurement team should consider the following factors:
 - Estimated length of time that the equipment will be used and the extent of use during that period;
 - Financial and operating advantages of alternative types of equipment;
 - Cumulative rental payments for the estimated period of use;
 - Net purchase price;
 - Transportation and installation costs;
 - Maintenance and other service costs; and
 - Potential obsolescence of the equipment because of imminent technological improvements.
- In addition, the procurement team should consider the following factors (as appropriate) depending on the type, cost, complexity, and estimated period of equipment use:
 - Availability of purchase options;
 - Potential for use of the equipment by other agencies after its use by the acquiring agency;
 - Trade-in or salvage value;
 - Imputed interest; and
 - Availability of a servicing capability, especially for highly complex equipment.

When to Purchase. Generally, the purchase method is appropriate if the equipment will be used beyond the point at which cumulative leasing costs exceed purchase costs. The procurement team should not rule out equipment purchase, in favor of leasing, merely because future technological advances might make the selected equipment less desirable.

When to Lease. The lease method is appropriate when it is advantageous to the Government. The lease method may also serve as an interim measure when the circumstances:

- Require immediate equipment use to meet program or system goals; but
- Do not currently support procurement by purchase.

When to Consider as a Price-Related Factor. Generally the lease vs. purchase decision is not made as part of an evaluation of competitive offers. Rather, it is made based on data collected especially for that purpose.

However, there are situations in which it may make sense to solicit such competition. For example, if equipment requires a unique maintenance capability, you might solicit competition to determine which alternative offers the best value, lease including maintenance or purchase with contract or in-house maintenance.

Evaluation Example.

Step 1. Determine Solicitation Provisions.

Assume that you have a requirement for material handling equipment to replace existing equipment that is beyond repair. Even with the new equipment, the present operating facility will close in 24 months. At that time, purchased equipment will be sold at auction. Rental equipment will be returned to the vendor. Because of the limited period of use, you are soliciting offers for lease as well as for purchase. You expect the operation and maintenance cost to be the same with all items offered, as a result you will only consider the costs related to procurement and disposal.

The solicitation states that award will be made to the responsible offeror with a technically acceptable offer and the lowest discounted cost to the Government. It also includes the following provision:

The Government will acquire the equipment identified in Section B by either lease or purchase. The method of procurement and the successful offeror will be determined based on the lowest discounted total cost to the Government for procurement and disposal. Operation and maintenance costs will not be considered in offer evaluation.

Step 2. Determine Offered Price(s).

Offers were received from two firms. One offer was based on Government purchase of the item, the other on Government lease. The proposed lease is for a two-year period.

| Offer | Government Expenditure Beginning of Year 1 | Government Expenditure End of Year 1 |
|---------------------|---|---|
| 1 (Purchase) | \$146,000 | N/A |
| 2 (Lease) | \$70,500 | \$70,500* |

* The lease payment is due at the beginning of each year. For analysis purposes, the beginning of Year 2 is the same as the end of Year 1.

Step 3. Evaluate Possible Award Combinations.

To evaluate the cost to the Government, you must consider all of the relevant costs and receipts that would result from purchase or lease of the equipment.

- **For the purchase**, there would be an expenditure of \$146,000 at the beginning of Year 1 to purchase the equipment. There would also be a receipt at the end of Year 2 when the equipment is sold at auction. Your best estimate of the sale value is \$6,000.

For the lease, there would be an expenditure at the beginning of Year 1 for the first 12-month lease cost. There would be a second expenditure at the end of Year 1 for the second 12-month lease cost. There would be no receipt or expense at the end of Year 2.

| Offeror | Government Expenditure Beginning of Year 1 | Government Expenditure End of Year 1 | Government Receipt End of Year 2 |
|-----------------|--|--------------------------------------|----------------------------------|
| 1 (Purchase) | \$146,000 | N/A | \$12,000 |
| 2 (Lease) | \$70,500 | \$70,500 | N/A |

As stated in the solicitation provision, expenditures and receipts must be "discounted." In terms of your analysis, discounting refers to adjustment for the net present value of a dollar expenditure or receipt at a later time.

- A dollar spent at the beginning of Year 1 would not be adjusted.
- If the interest rate is 10 percent:
 - The net present value of \$1.00 spent at the end of Year 1 would be \$.90909 (i.e., \$.90909 invested at 10 percent will be worth approximately \$1.00 at the end of one year).


The net present value of a dollar to be spent or received at the end of Year 2 is \$.82645 (i.e., \$.82645 invested at 10 percent will be worth approximately \$1.00 at the end of two years).

Using the established values for net present value at the end of one year and at the end of two years, the net present value of the purchase and lease options would be:

| Offeror | Government Expenditure Beginning of Year 1 | Government Expenditure End of Year 1 | Government Receipt End of Year 2 | Evaluated Price |
|-----------------|--|--------------------------------------|----------------------------------|-----------------|
| 1 (Purchase) | \$146,000 | N/A | \$9,917 (\$12,000 x.82645) | \$136,083 |
| 2 (Lease) | \$70,500 | \$64,091 (\$70,500 x.90909) | N/A | \$134,591 |

Step 4. Make Award Decision.

Make award to the offeror with the lowest evaluated cost to the Government, Offeror 2.



Procurement Strategy: Lease vs. Purchase

| Offer | Government Expenditure Beginning of Year 1 | Government Expenditure End of Year 1 | Government Receipt End of Yr 2 | Evaluated Price |
|-----------------|--|---------------------------------------|--------------------------------------|-----------------|
| 1 (Purchase) | \$146,000 | N/A | \$12,000 Discounted to \$9,917 | \$136,083 |
| 2 (Lease) | \$70,500 | \$70,500 Discounted to \$64,091 | N/A | \$134,591 |

Excel:
=PV(Rate #Periods, Pmts, FV, Type)
 Type: pvt at beginning of period =1
Pvt at end of period = 0

CHAPTER THREE: SOLICITATION & AWARD

PROCUREMENT LIFE CYCLE STEP 3:

SOLICITATION AND AWARD



3.1 Responsibility

Price Analysis and Offeror Responsibility (HRS103D-310). There may be a direct connection between the apparent successful offer and the firm's ability to perform. The firm's price may be very attractive because the firm does not understand the contract requirements, or because it does not have the required investment in technology and equipment to perform the contract.

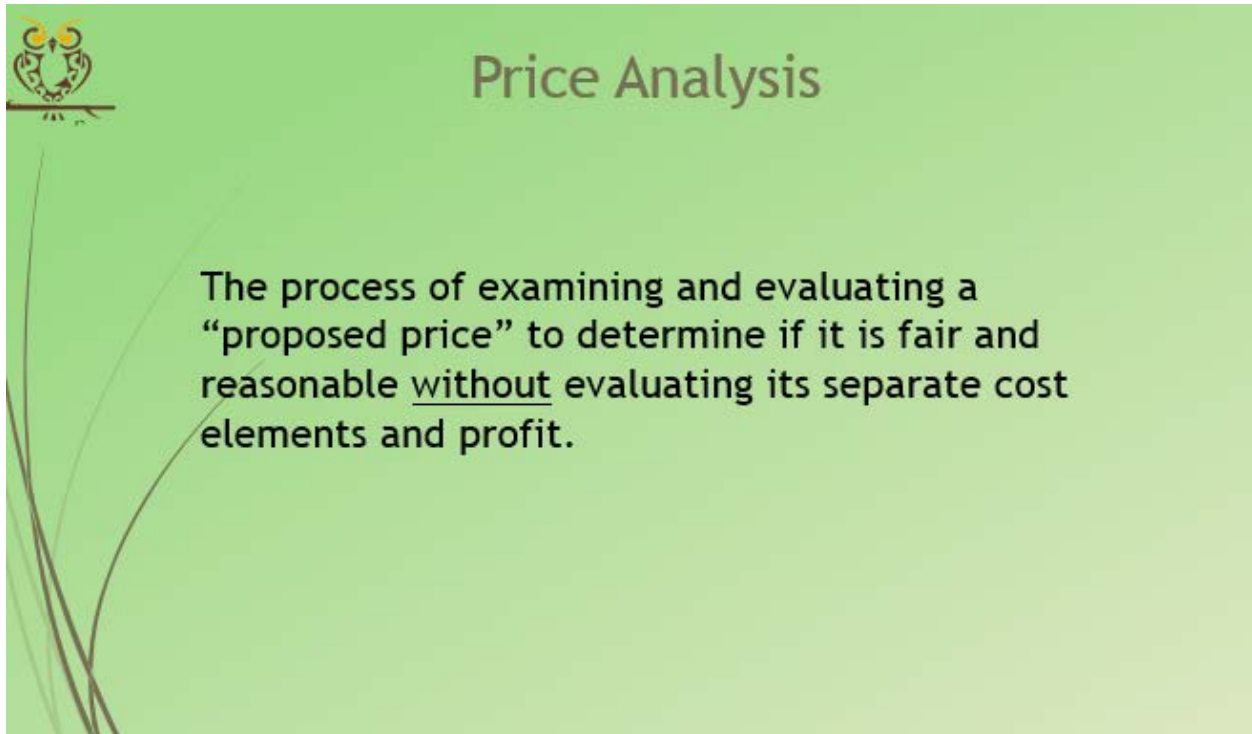
Always remember that a contractor who cannot perform is never a good deal at any price.

The award of a contract to a supplier based on lowest evaluated price alone can be false economy if there is subsequent default, late deliveries, or other unsatisfactory performance resulting in additional contractual or administrative costs. While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer. A prospective contractor must affirmatively demonstrate its responsibility...

Hence, if the low offer is significantly lower than other offers or your estimate of the should-pay price, the burden is on the offeror to affirm its ability to perform at that price. Anytime you find this situation, you must take affirmative action to ensure that the low price is fair and reasonable. In sealed bidding, a "mistake in bid" procedure has been established in part to provide you with an opportunity to verify that a bidder can perform at a price that is greatly out of line with other bids. In negotiated procurements, you can directly ask the offeror to affirm its ability to perform at the proposed price during discussions. When a low price is significantly lower than other offers or your should-pay price, this indicates that the low offeror may have misunderstood the requirements, that the requirements were not clear, that the low offeror has a competitive advantage over its competitors, etc.

Effect on Contract Pricing. You cannot make a determination of price reasonableness based on a price comparison with an offer that is technically unacceptable or an offer submitted by a firm that is not responsible.

3.2 Price Analysis



3.2.1 Comparisons in Price Analysis

Price analysis:

- Is the process of examining and evaluating a proposed price to determine if it is fair and reasonable without evaluating its separate cost elements and proposed profit. Price analysis may, however, be supported by cost analysis of cost elements and/or profit when price analysis alone cannot determine a fair and reasonable price necessary.
- Always involves some form of comparison with other prices.

Hence, you compare prices to determine whether the price from the apparent successful offer is fair and reasonable. The basis for your comparison should be a price that has been determined a reasonable estimate of the price a reasonable person is willing to pay.



Should-Pay Price

❑ **Should-pay price** - the price that the State should reasonably expect to pay for the item based on available information concerning competitive offers, historical prices, commercial prices, pricing yardsticks, and Internal Government Estimates.

❑ **Apples-to-apples**

❑ For price analysis, the items being compared must have enough similar characteristics or qualities to make the comparison meaningful.



Should-Pay Price. The should-pay price, used for comparison, is the price that, in your best judgment, the Government should reasonably expect to pay for the deliverable based on available information concerning competitive offers, historical prices previously paid, validated commercial prices, pricing yardsticks, and Independent Government Estimates (IGE).

Bear in mind that your should-pay price is an estimate and therefore just an approximation of the price the Government can expect to pay. Being an estimate, it is by definition inexact. If the estimate was developed using validated and supported information, with sound rationale, and you have done a good job of price analysis, your should-pay price should be sufficient for negotiations. Still, don't be dogmatic about your the estimate - to the point of rejecting offers that are close to, but not exactly at, your should-pay price estimate.

If the apparent successful offer is significantly higher or lower than your the developed Government estimate:

- Determine Investigate the possible reasons why there is a significant variance between the should-pay price and that offered price, document you findings, and then determine if the Government should open communications or discussions, which ever is relevant.

Make the critical price-related decisions in awarding contracts through sealed bidding or negotiations.

3.2.2 Considering Contract Pricing

When to Account for Differences. Your price analysis should compare the offered price with available estimates of a reasonable price -- should-pay price estimates. The offered price may not be the same as any single should-pay price estimate. However, the offered price should fall within the range of should-pay estimates.

If the apparent successful offer is substantially above or below your best should-pay price estimate(s), you should attempt to account for differences. Remember that performance risk associated with a firm fixed-price that is too low may be as unacceptable as a price that is too high. In cost-reimbursement contracting, an unreasonably low cost estimate may result in a substantially higher final price, because the Government must reimburse all allowable costs.

Accounting for Differences. Accounting for differences between offered prices and should-pay estimate(s) should be part of your continuing market research during the contracting process.

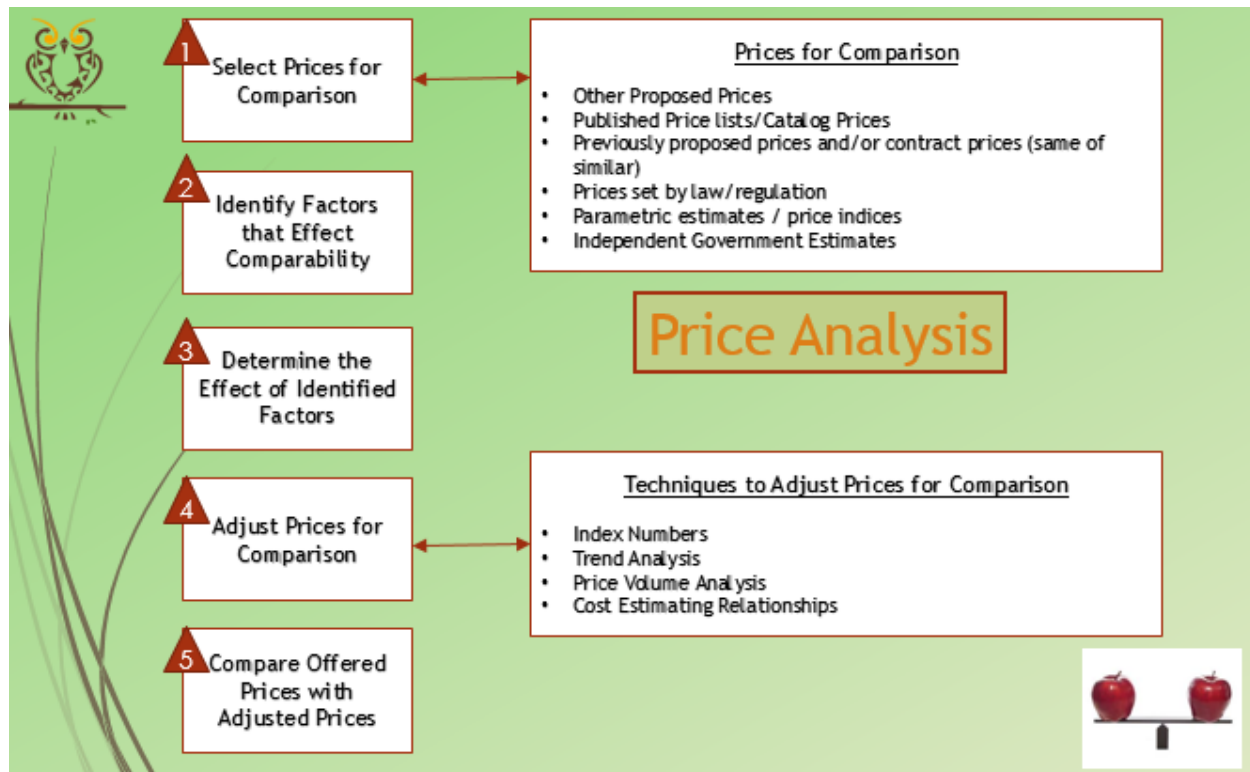
You should attempt to collect additional information about the apparent successful offeror or the market in general that will account for apparent differences between an offered price and should-pay price estimate(s). Then consider your findings as you make the price-related decisions.

Based on your findings, you might eventually determine that:

- The price of the apparent successful offer is reasonable despite the identified differences;
- The price of the apparent successful offer is unreasonable;
- The differences result from problems with the solicitation or other mistakes that require solicitation cancellation; or
- Some other course of action is appropriate.

3.2.3 Price Analysis Process

The figure below depicts the process involved in making price comparisons for price analysis.



Comparison Steps. Each different comparison will involve different information and some bases will require substantial adjustment prior to making your analysis. However, the comparison process is described in five steps outlined below.

| Step | Action | Questions to Consider |
|------|--|---|
| 1 | Select prices for comparison: <ul style="list-style-type: none"> • Other proposed prices; • Commercial prices; • Previously-proposed prices and contract prices; • Parametric estimates or | Would this comparison be valid? Are more comparable prices available? Were previously proposed prices considered from reasonable sources and can be validated? Was the validity of the comparison and the reasonableness of the previous price(s) paid established and supported? It is not adequate to just compare the price to a previous contract unless the contract used for comparison can establish price reasonableness to include supporting rational. |

| | | |
|---|--|---|
| | rough yardstick estimates; or <ul style="list-style-type: none"> Independent Government Estimates | |
| 2 | Identify factors that affect comparability. | <p>Have I considered all potentially significant factors, including differences in:</p> <ul style="list-style-type: none"> Market and economic conditions; Quantity or size; Geographic location; Purchasing power of the dollar; Extent of competition; Technology; or Terms and conditions under contracts (e.g., differences in features or capabilities, delivery lead-times, one-time costs, etc.) resulting from adequate competition. |
| 3 | Determine the potential impact of these factors on prices selected for comparison. | How substantial is the impact? In view of these factors and their impact, will the contemplated comparison have any credibility? |
| 4 | Adjust prices selected for comparison. | <p>Have I accounted for all factors that can impact the price?</p> <p>What techniques should be applied in making the adjustment?</p> <p>How much reliance can I place on the resulting estimate?</p> |
| 5 | Compare adjusted prices to the offer in line for award. | <p>How much weight should I place on each comparison?</p> <p>If adjusted prices differ substantially from the apparent successful offer, what price should the Government reasonably expect to pay?</p> <p>Are significant factors identified and are the substantial differences accounted for?</p> |



Price Analysis

- ☐ Price Analysis always involves some form of comparison with other prices.
- ☐ Purchasing Specialist / Procurement Officer is responsible for selecting basis for comparison and determining whether a price is fair and reasonable.
- ☐ Must Document the basis of
 - ☐ Proposed Price
 - ☐ Comparison Price

Comparability. Comparability is the quality or state of being comparable and having features in common with something else to permit or suggest comparison. Products do not have to be alike to be compared. Any two things can be compared, but the comparison may show that they have no characteristics in common. However, If you are attempting to evaluate price reasonableness, the comparison will not be of any value if the items are unlike in every way.

For price analysis, the items being compared must have enough similar characteristics or qualities to make the comparison useful. The more similar the items are, the easier the comparison. If your examination discloses significant differences, you may need to quantify the effect of those differences (e.g., procurement of different products, at different times, or in different places, or under different terms and conditions) and make adjustments before you can reach valid conclusions about price reasonableness. The greater the dissimilarities and the more subjective your adjustment, the greater the possibility for doubts about your conclusions and the less likely that your analysis will be persuasive.

Multiple Comparisons. Use the information gathered during your market research to make multiple comparisons in determining price reasonableness and increase confidence in your pricing decision.

For example, adequate price competition is normally considered one of the best bases for price analysis. However, you can have apparent competition and still have prices that are unreasonably high. How would you know? You must consider other bases for price analysis (e.g., historical prices, catalog prices, or market prices).

The number of comparisons that you consider should depend on the availability of information and the pricing risk involved in the procurement.

- If the information is readily available in a form that can be used for price analysis, why not consider it? A quick comparison will increase your confidence of price reasonableness.

If the price is too high, too low, or you still have concerns about price reasonableness after your initial comparison, the risk involved makes it particularly important to consider other comparisons.



Price Analysis

☐ Basis for Price Analysis comparisons (in order of desirability):

- ☐ Comparison of competitive proposals. Adequate price competition
- ☐ Comparison to prior competitive purchase orders/contracts for same or similar items/services.
- ☐ Comparison with previous invoices for same or similar item.
- ☐ Comparison with a published price list, catalog or GSA Federal Supply Schedule.
- ☐ Prices or Labor Rates set by law/regulation (e.g., Davis Bacon, Service Contract Act, Minimum Wage, Union Labor Agreements, utilities)
- ☐ Recognized Price Indices (professionals, materials, equipment) National, regional, or local agreements.
- ☐ Comparison with internal or independent estimate.

Relationship between Market Research and Price Analysis?

3.2.4 Selecting Prices for Comparison

This section identifies and defines five potential bases for various price analysis techniques. After defining each base technique, special considerations for using each technique base are outlined.

- 3.2.4.1 - Other Proposed Prices
- 3.2.4.2 - Commercial Prices
- 3.2.4.3 - Previously-Proposed Prices and Contract Prices
- 3.2.4.4 - Parametric and Rough Yardsticks Estimates
- 3.2.4.5 - Independent Government Estimates

Price Analysis Techniques Potential Bases. You may select any of the following techniques bases for price analysis:

- Comparison of Other proposed prices received in response to the solicitation;
- Comparison with commercial prices including competitive published price lists, published commodity market prices, similar indexes, and discount or rebate arrangements;
- Comparison to previously-proposed prices, historical prices paid by the Government or other than the Government, and contract prices for the same or similar end items, if you can establish both the validity of the comparison and the reasonableness of the previously proposed prices;
- Parametric estimates or estimates developed using rough yardsticks; or

- Independent Government Estimates.

One of the techniques basis for price analysis identified in the FAR is "prices for the same or similar items obtained through market research." Because market research can span commercial prices, previously-proposed prices, contract prices, parametric or rough yardstick estimates, and Independent Government Estimates, this technique basis for price analysis will not be considered separately.

Types of comparisons used in price analysis typically vary with the estimated dollar value of the contract.

Micro-purchases. (Under \$2,500) Micro-purchases may be awarded without soliciting competitive quotes if the procurement officer or individual delegated authority to procure considers the price to reasonable. The administrative cost of verifying the reasonableness of the price may more than offset potential savings from the effort, so verifying price reasonableness need only be taken if -

- You suspect or have information to indicate that the price may not be reasonable; or
- Purchasing a supply or service for which no comparable pricing information is readily available.

Small Purchases. (Under \$100,000 for goods and services) Comparing competitive quotes is the preferred method for pricing these procurements.

- If you only receive one quote, consider the following bases for price analysis:
 - Prices identified during market research;
 - Prices found reasonable for previous purchases;
 - Current price list, catalog, or advertised prices;
 - Prices for similar items in a related industry;
 - Price estimates developed during value analysis;
 - Personal knowledge of item prices;
 - The Independent Government Estimate; or
 - Any other reasonable base for price analysis.

Contracts over the Simplified Procurement Threshold. Consider every type of comparison which you believe provides a valid should-pay price.

- For example, if you have data on previous or historical contract prices paid and have reason to believe that these data reflect good prior decisions on price reasonableness or the data has been validated, then compare the apparent successful offer to those prices. If you have reason to believe that previous contract prices were not reasonable, then give little or no weight to those prices as you perform your price analysis. If you have no price history, you must rely on other comparison techniques bases for your price analysis. If

you do compare to previous or historical contract prices, make sure that you adjust those prices to reflect differences in quantity, economic conditions, and the differing terms & conditions.

3.2.4.1 Other Proposed Prices

Proposed Prices. Comparison of a proposed price with other proposed prices received in response to the same solicitation is generally considered one of the preferred techniques best bases for price analysis, because all offers were submitted to meet the same requirement during the same time period.

Using Proposed Prices. Any proposed price used as a base for prices analysis must meet the following general requirements:

- The price must be submitted by a firm competing independently for contract award.
- The price must be part of an offer that meets Government requirements.
- Award must be made to the offeror whose proposal represents the best value to the Government.

If you have more than one competitive offer, you could use more than one offer in your analysis.

Do not use the price from any offer that you would not consider for contract award as a basis for price analysis.

- Never use an offer from a firm that you have determined is nonresponsible.
- In sealed bidding, never use a nonresponsive bid.

In negotiations, never use a price from a proposal that is technically unacceptable.

You should normally place less reliance on comparisons with other proposed prices when:

- The solicitation was made under conditions that unreasonably denied one or more known and qualified offerors an opportunity to compete.
- The apparent successful offeror has such a decided advantage that it is practically immune from competition.
- The apparent successful offeror's price is significantly different (higher or lower) than the next rated offeror. This could indicate that there is a mistake in bid, a misunderstanding of the contract requirements, etc. In this situation, you should take steps to verify the offeror's bid and/or use another technique to analyze the price.

- Another price comparison, cost analysis, or a cost realism analysis indicates that the apparent successful offer may be unreasonable (too high or too low).
 - Government requirements permit offerors to propose widely different technical approaches to contract performance. For example, a ceramic mug and a paper cup may both meet a requirement to hold 8 ounces of coffee, but that does not mean that \$1.00 price for a paper cup is reasonable because it is less than a \$5 price for a ceramic mug. Even if no other offeror is proposing to provide a paper cup, the key element of your price analysis should be to compare the paper cup offer with prices paid for similar paper cups.
 - All offerors are expected receive contract awards. In such cases, there may not be sufficient competitive pressure to foster fair and reasonable pricing.
-

3.2.4.2 Commercial Prices

Commercial prices are prices being paid by the general public for a product. **These prices can be used for comparison purposes when purchasing that product or one that is similar to that product.** The circumstances of your purchase may be different from the commercial sales, but data on commercial sales can provide valuable information for use in contract pricing.


Using Commercial Prices. You can classify the sources of commercial pricing information into three categories:

- **Competitive Published price list** -- prices taken from a catalog, price list, schedule, or other verifiable and established record that is regularly maintained by a manufacturer or vendor and is published or otherwise available for customer inspection. For pricing purposes (but not cost or pricing data exception purposes), you can consider published pricing information from the firm submitting the offer and/or published pricing information from other firms offering similar products.
- **Competitive Published market prices of Commodities** -- prices established in the course of ordinary and usual trade between buyers and sellers free to bargain that can be substantiated from sources independent of the offeror. Normally, market pricing information is taken from independent market reports, but a market price could be established by surveying the firms in a particular industry or market.
- **Similar indexes** -- commercial item prices established using a means other than those described above. For example, an offeror might provide information on the prices charged commercial customers over a period of time. Such a record would not qualify as published price list or market price since the price was not independently verifiable, but it would provide a good record of the firm's commercial pricing practices.

Discounts Arrangements. Commercial sales typically include discounts for different types of customers. Discount amounts typically depend on the product and the marketing strategy of the firm. Common factors affecting discounts include, services provided by the seller (e.g., wholesale and retail sales) and the importance of the sale (e.g., dollars involved or the relationship to other sales).

Rebate Arrangements. Rebates are often offered to various customers based on the customer's total purchases over a specific period of time. For example, automobile manufacturers typically offer dealers rebates, based on total sales. That is one reason why dealers can advertise sales "at invoice." Dealer profit is based on the rebate amount.

Contracting Situation Differences. Remember that your contracting situation may be different than the situation in the commercial market. For example, the offeror may provide services to commercial customers that are not required by the Government. If the Government is receiving less, you should expect to pay less. You must identify these differences and determine what impact, if any, they have on the price of the item. This analysis will form the basis of both the negotiation of the terms and conditions (including price) related to your contract and the associated price reasonableness determination.



Price Analysis - Example

Fair and Reasonable Justification

HP Designjet T1200 HD Multifunction Printer

Agency is unable to join / enroll in WSCA 10-01 due to the cooperative agreement's start a year ago. HP is able to provide the HP Designjet T1200 HD Multifunction Printer for \$17,913.00, Four Year Next Business Day Hardware Support for \$3,827.00, and the required ink cartridges for \$414.00. Amazon.com was able to provide the same printer and ink cartridges at \$18,561.24 and \$449.34 respectively. CDW.com's pricing was quoted at \$19,795.99 and \$383.94. A comparative table below displays the price of the 3 companies while supplying the warranty directly from HP as the manufacturer. Below are the quotes that support this justification.

| | <u>HP</u> | <u>Amazon.com</u> | <u>CDW.com</u> |
|--------------------|--------------------|--------------------|--------------------|
| HP Designjet T1200 | \$17,913.00 | \$18,561.24 | \$19,795.99 |
| Ink Cartridges | \$414.00 | \$449.34 | \$383.94 |
| Warranty | \$3,827.00 | \$3,827.00 | \$3,827.00 |
| Total | \$22,154.00 | \$22,837.58 | \$24,006.93 |

3.2.4.3 Previously-Proposed Prices and Contract Prices

Historical Prices. Previously-proposed prices and validated contract prices that were paid (whether by the Government or other than the Government) are historical prices paid for same or similar items-- prices related to past purchasing activity. The purchase associated with a particular price may have been made by your office or another office with similar requirements.

Note: The prior price used for comparison must be validated and reasonably current in order to be used for comparison analysis.

Using Historical Prices. Whenever you consider using historical prices to analyze price reasonableness, ask the following questions:

- *Has the product been purchased before?*

The purchase may have been made by your procurement office or by another purchasing office.

- *What was the historical price?*

You can obtain price information from purchase files, computer data files, or manual inventory item records.

- *Was the historical price fair and reasonable?*

For a historical price to be useful in determining the reasonableness of an offered price, you must know that the historical price was fair and reasonable. Be careful! It is not uncommon to review an item purchase history and find that no other than that the last price paid has a significant time lapse between the last procurement and the present one, the terms and conditions are significantly different, been used for years to determination of price reasonableness may be uncertain. In one study, the entire pricing histories for several items were reviewed and analysts found that for every procurement except the first, the determination of price reasonableness was based on the last price paid. Analysts also found that the first procurement was a multiple-item procurement and while there was an analysis of the reasonableness of the overall procurement price, no one ever examined the reasonableness of individual item prices. In other words, for years contracting officers found prices reasonable based on an arbitrary decision made during the first procurement. The analysis You must ensure that the prior price was determined fair and reasonable based on an adequate price or cost analysis and the basis can be validated. Often, this may only require a phone call to the other contracting activity to obtain assurance that an adequate price/cost analysis was previously performed.

- *Is the comparison valid?*

For the comparison to be valid, you must be able to identify and consider any item or market differences that might significantly affect contract price. A proper analysis validates the basis on

which the prior price paid was determined fair and reasonable by examining the prior price to ensure there has not been a significant time lapse, the terms and conditions are not significantly different, and the reasonableness of the price is not uncertain. If these conditions cannot be met or information is lacking in documentation, then the prior price may not be a valid basis for comparison.

- ***Was the Price Adjusted?***

The prior price must be adjusted to account for materially differing terms and conditions, quantities and market and economic factors. For similar items, the contracting officer must also adjust the prior price to account for material differences between the similar item and the item being procured. The analysis must also account for minor modifications.

3.2.4.4 Parametric and Rough Yardsticks Estimates

Cost Estimating Relationships. Cost estimating relationships (CERs) are used to develop parametric and rough yardstick estimates. A CER is a formula for estimating prices based on the cost prices with one or more product physical or performance characteristics (e.g., cost per square foot or dollars per horsepower). Whenever you can relate item price with physical or performance characteristics, you can use the relationship to estimate price. For example, builders commonly estimate the price of a building by multiplying the number of square feet in the building by an estimated cost per square foot. Differences or conditions such as weather conditions, site conditions, and other factors may require discussions with the seller to adjust the data used to estimate price.

Using Cost Estimating Relationships

Whenever you consider using a CER to estimate price, ask the following questions:

- ***Has the CER been widely accepted in the market place?***

Determine whether both buyers and sellers agree on the validity of a particular relationship/yardstick and the reasonableness of values used in estimating. Sellers may use a relationship/yardstick that produces an estimate higher than that normally accepted by buyers.

- ***Does the CER produce reasonable results?***

The user of the relationship/yardstick has the burden of demonstrating that the relationship/yardstick produces reasonable estimates. The user should be able to demonstrate the data and calculations used to develop the relationship/yardstick.

- ***How accurate is the CER?***

Validate the using known product data and prices. Examine the accuracy of the results. Remember that even a properly developed pricing relationship/yardstick will not always predict price exactly. Some relationship/yardsticks are very accurate others will only give you a rough approximation of the proper price. If the variation is wide and there is no other means to determine price reasonableness then data other than certified cost or pricing data may be required from the offeror. As relationship/yardstick accuracy decreases, the weight that you place on the relationship/yardstick in your pricing decision should also decrease.

3.2.4.5 Independent Government Estimates (IGE)

Independent Government Estimates. As the name implies, an Independent Government Estimate is an estimate made by the Government. This section will define and consider three types of Independent Government Estimate.

- The most common is the Independent Government Estimate, also known as the Independent Government Cost Estimate (IGCE), that accompanies the **purchase request**.
- A **value analysis estimate** results from a specialized analysis of the function of a product and its related price. It may literally involve taking the item apart to determine how it is made and why it costs what it does.
- A **visual analysis estimate** results from a visual inspection of an item, or drawing of an item, to estimate its probable value.

General Guidelines on Using Independent Government Estimates. The IGE is a useful tool used for comparison to the proposed price. The IGE is developed based on the most recent data determined to fulfill the Governments requirement and should accompany the procurement request. The submitted cost estimate shall include a basis for the Governments estimate using current validated data whether at the price level or at the cost element level. If an industry standard is used for validation then state why the selected industry standard is the most appropriate authority. The dollar value, type procurement, and the complexity of the procurement will determine how detailed the IGE is to be. Cost element or price values alone are

not adequate without a basis to support the estimated values. The cost estimate does not have to be an exact match to the offerors proposal to be used as a comparison, but should have adequate information to determine how the Governments approach to the estimate compares to the offerors understanding of the requirement. Differences in the comparison shall be analyzed and documented. The IGE should not be adjusted to the offerors price as the offerors approach may have differences the Government did not account for and may warrant additional pricing inquiry. The analyst must provide an adequate narrative validating the source or the basis of the information comprising the estimate. The details of the IGE are significantly more critical in a sole source environment where no competition exists and or where an exemption may exist from obtaining cost or pricing data from the offeror. The IGE may also be used as a comparison where two or more offers are received but only one offer is considered technically acceptable. Earlier in this text , you learned questions to ask when analyzing the reliability and validity of Government purchase request estimates. Ask the same questions of any Independent Government Estimate before using it as a basis for comparison with offered prices.

- *How was the estimate developed made?*
- *What assumptions were made?*
- *Were any differences in the comparison work statement accounted for?*
- *What information and tools were used?*
- *Where was the information obtained?*
- *How did previous estimates compare with prices paid?*
- *Were unique conditions applied to the prior procurements and do not apply now?*

Special Considerations for Using Value Analysis. You may apply the techniques of value analysis to any product, regardless of its complexity. However, generally consider only those products offering potential cost reductions that merit the time and cost of the analysis required.

Value analysis provides information on product value in comparison with possible substitutes. It is particularly useful when:

- The Independent Government Estimate is the only price analysis technique base available; or
- The product does not seem to be worth the price quoted.

To be effective, value analysis must be performed by individuals familiar with the product, or product material differences, and its use by the Government. Actual analysis should follow a 5-step process:

1. Determine procurement costs based on current proposal or other estimates.
2. Assure Government requirement documents reflect the minimum needs of the Government.

3. Identify alternative products or methods of meeting the minimum needs of the Government. This is typically the key step in the analysis. The following are examples of questions you should consider:

- *Can any part of the product be eliminated?*
- *Can a standard part replace a special part?*
- *Can a lower cost material or method be used?*
- *Can paperwork requirements be reduced?*
- *Can the product be packaged more economically?*

4. Estimate the costs associated with alternative products or methods that would meet the minimum needs of the Government.
5. Document the reasonableness of the current prices or recommend appropriate changes. Assure that the process and results of the value analysis are clearly documented and include a copy of the documentation in the contract file. When you are satisfied that the value received supports the offered price, use that information to support your determination of price reasonableness. When you are not satisfied, use the information to document efforts to bring price in line with perceived value.

For example: Suppose you are purchasing a pair of shoes. Shoes are used to walk in, to protect the feet, to keep the feet warm, and to enhance appearance. If shoes are to be attractive, they must be made of certain types and quality of material. If appearance is not important to the Government, a less attractive, less expensive, but possibly more durable material can be used. By changing the quality of material required, price will change.

Special Considerations for Using Visual Analysis. In visual analysis, the analyst examines obvious external features of the product to determine value and related price. This technique is nothing more than technical experts comparing the product with other products by sight.

Consider using visual analysis as a pricing tool:

- In place of value analysis for products that do not offer potential cost reductions that merit the time and cost of analysis required for detailed value analysis.
- To review large numbers of products to identify any that appears to offer potential cost reductions that merit the time and cost associated with detailed value analysis.



Factors That Affect Comparability

- ☐ Market conditions;
- ☐ Quantity or size;
- ☐ Geographic location;
- ☐ Schedule;
- ☐ Purchasing power of the dollar;
- ☐ Extent of competition;
- ☐ Technology; and
- ☐ Government unique requirements.

3.3 Identifying Factors That Affect Comparability

Introduction. When comparing prices, you must attempt to account for any factors that affect comparability. The following factors deserve special consideration because they affect many price analysis comparisons:

- Market conditions;
- Quantity or size;
- Geographic location;
- Purchasing power of the dollar;
- Extent of competition;
- The specific terms and conditions of the procurement;
- Technology; and
- Government unique requirements.

Market Conditions. Market conditions change. The passage of time usually is accompanied by changes in supply, demand, technology, product designs, pricing strategies, laws and regulations that affect supplier costs, and other such factors. An effort to equate two prices, separated by five

years, through a simple inflation adjustment may not be successful. Too many characteristics of the market are likely to have changed. Do not stretch data beyond their limits.

Generally select the most recent prices available. The greater the time lapse between the last procurement and the current one difference, the greater the likelihood and impact of differences in market conditions. If you are comparing a current offer with a prior price, the ideal comparison would be with a contract price agreed to yesterday. That comparison would limit the effects of time on market conditions.

However, do not select a price for comparison merely because it is the most recent. **Look instead for prices that were established under similar terms and market conditions.** For instance, if you are buying commodity in the month of October, offers from the previous October may be more comparable to current offers than prices paid last February, given the cyclical pattern of supply and demand in the market for a particular commodity.

Consider the most current available data on trends and patterns in market conditions. Remember that lags often occur between data collection and contract award. Changes in market conditions over that period can reduce the usefulness of the data assembled.

Quantity or Size. Variations in quantity can have a significant impact on unit price. A change in quantity can have an upward effect, a downward effect, or no effect at all.

In **supply and equipment** procurements, we usually assume that larger supply procurements command lower unit prices. Where economies of scale are involved, that should be the case. However, economies of scale do not always apply.

- Increases in order size beyond a certain point may tax a supplier's capacity and result in higher prices.
- Market forces may impose opportunity costs on a supplier which result in higher unit costs for greater volumes. For example, if the price of oil is expected to increase 20 percent over a 12-month period, a supplier may choose to withhold a portion for a sale at a later date when the price is higher. In such a market, the effect of purchase quantity on price may not be as expected; at some point, increases in volume will result in higher unit prices as the supply of the lower priced oil is exhausted.
- Finally, if a price comparison is based on standard commercial items that are produced at a regular rate, variations in quantity may have no effect at all.

A meaningful comparison of prices requires that the effect of volume on price be accounted for. The best way to do this is to select prices for comparison based on equal volumes. If that is not possible, examine the specific suppliers and the nature of the market at the time of the purchase.

In **service procurements**, the issues or problems are different. Variations in size can sometimes be neutralized by reducing the comparison to price per square foot or price per productive labor hour. Because these approaches are not always effective, try to factor out size or quantity variations as much as possible. If you don't succeed, the price comparison will have little value.

Geographic Location. Geography can have a range of effects on comparability. Prices for many nationally advertised products will not vary much from place to place. Nevertheless, because geographic location can affect comparability, you should first try to compare offered prices with prices obtained from the same area. In major metropolitan centers, you should generally be able to identify comparable bases for price analysis in the region. In more remote, less urban areas, you must often get pricing information from beyond the immediate area.

When you must compare prices across geographic boundaries, take the following actions to enhance comparability.

- Check for differences in the level competition that may affect price comparisons.
- Identify labor rate differences that must be neutralized for valid price comparisons. You cannot compare labor rates for U.S. labor with similar labor of a foreign nation unless you account for the economic differences and neutralize them using a constant variable.
- Check freight requirements and accompanying costs. These can vary considerably, especially for chemicals and other hazardous materials.

Identify geographic anomalies or trends. For example, an item may be more expensive on the West Coast than in the East Coast or more localized, rent for office space within the city central business district is higher as opposed to other locations within the same city for the same type office and square footage.

Purchasing Power of the Dollar. Inflation undermines comparability by eroding the real value of money. Because prices over time are expressed in the same currency (dollars and cents), the denominations must have comparable purchasing power if comparison is to be meaningful. You can normally use price index numbers to adjust for the changing value of the dollar over time.

Extent of Competition. When comparing one price with another, assess the competitive environment shaping the prices. For example, you can compare last year's competitive price with a current offer for the same item. However, if last year's procurement was made without competition, the analyst will need to understand the terms and conditions to ensure they are not significantly different to be valid basis for comparison. A poorly written specification and an urgent need may have combined to make competition impossible last year, but now the specifications have been rewritten and the delivery is not urgent. Given these circumstances, a current offer could be the same as (or less than) last year's best price and still not be reasonable.

Terms and Conditions. The terms and conditions related to a contract include things like packaging, delivery, financing, discounts, payment terms, etc. The analysis must account for these differences prior to examining the price. This is so the analysis does not produce a premise that the price is determined unreasonable. Prices on contracts for delivery in 90 days may well be higher than those for delivery in 180 days because the contractor may have to hire additional employees or pay overtime to expedite manufacturing to meet the shorter delivery date. A requirement that is not within the normal production line lot output and delivery constraints or when the Government has other complex demands or urgent delivery requirements may cause the price to be significantly higher than usual. An example would be the Government solicits for ten widgets and demands immediate delivery prior to a full lot size of fifty being produced which may account for a full load onto a single rail car. In this instance, the contractor has to account for the special circumstances and adjust the price upward to account for taking ten widgets out of the normal production line and paying for an entire rail car. Ten widgets are 20% of the rail car capacity, but the railcar rates and any tariffs remain unchanged. The cost per widget is now increased to account for all of this. Based on the Government's requirements the contractor is proposing a price based on those conditions and therefore may be determined reasonable.

Technology. Prices from dying industries can rise because the technologies don't keep pace with rising costs. Conversely, technological advances in growth industries can drive prices down. The computer industry is an example. Technological advances have been made so fast that a comparison of prices separated by only a few weeks must account for these advances if the comparison is to have any value.

Engineering or design changes must also be taken into account. This means you must identify the new or modified features and estimate their effect on price.

Government-Unique Requirements. Often, the Government's requirements vary to some degree from the commercial requirements for similar products. The question is the impact these variations have on price. For example, the Government may require that the carpet in a Navy ship be fireproof to a far greater extent than any commercial carpet. That may justify a substantial difference in price over otherwise comparable commercial carpets.

Similarly, you must often incorporate clauses in contracts that are not required in commercial market transactions. For example, contracts between buyers and sellers in the private sector do not include provisions relating to the Davis-Bacon Act, the Service Contract Act, clean air and water, and many other special conditions. Consequently, comparison of an offer with commercial prices may be difficult. Unique terms and conditions affect prices, but it is often extremely difficult to assign a dollar value to their effects.

Just as Government requirements may be different from commercial requirements, Government requirements at a specific time and place may be different than requirements at another time and place. These differences will also affect price comparisons.

3.4 Determining the Effect of Identified Factors

Introduction. Once you have identified the factors that may affect comparability, you must determine the effect on each specific comparison with the offered price. As you determine the effect of various factors on price comparisons, you must ask yourself the following questions:

- **What factors affect this specific comparison?**
- **How do these factors affect the comparison?**
- **Does this comparison, even with its limitations, contribute to the price analysis?**

Other Proposed Prices. In sealed bidding, all bids are priced against the contract requirements. Comparison with competitive prices is a straight forward comparison that normally requires no adjustments unless the evaluation process involves the use of price-related factors.

Comparing proposals may not be as simple as comparing bids, when:

- The offer in line for award departs from the stated solicitation requirements. If the departure does not meet stated contract requirements, but is acceptable to the Government, provide other offerors the opportunity to submit a revised proposal based on the revised requirements. However, you must not reveal any information about the proposed solution or any other offeror information entitled to protection.
- Offers differ in their basic approaches to meeting performance or functional requirements. Remember, the price of a ceramic mug is little help in determining if the price of a paper cup is reasonable, even though both can satisfy a requirement for a container that will hold eight ounces of coffee.

Commercial Prices. Any of the general factors identified earlier in this chapter could affect the comparability of commercial prices (i.e., market conditions may have changed since the effective date of published prices; the purchasing power of the dollar may have changed; the published prices may have been based on different terms and conditions than solicited by the Government).

During your analysis, you should give special consideration to asking how the following have affected price analysis comparisons:

- Is there a difference between the services provided commercial and Government customers? Are published prices retail, wholesale, or distributor prices?
- Is there a difference between the catalog (or suggested price) and the price paid by commercial customers with requirements similar to the Government's requirements?
- Are there different prices for different customer classes (e.g., are there different prices for different classes of customers-public vs. brokers vs. retailers?)
- What special rebates or discounts are offered commercial customers?
- Are published prices within a competitive market that have already generated sales?

What is the value of extras provided commercial customers for promotional purposes (e.g., free packaging, free transportation, free insurance, etc.) without extra charge?

Previously Proposed Prices and Contract Prices. Consider all general factors identified earlier in the chapter. At minimum, ask the following:

- ***How have the specific changes in the contracting situation affected contract price?***

You need to understand the procurement situation as it existed in the previous situation and how the current procurement situation differs. Important data elements include:

- Sources
- Quantities
- Production/Delivery Rates
- Start-up Costs
- Terms of Purchase

- ***How have changes in the general economic situation affected contract price?***

Economic changes are reflected in the general level of inflation or deflation related to the product that you are acquiring. Have prices gone up or down. If they have, how much have they changed?

Parametric and Rough Yardstick Estimates. Consider all general factors identified earlier in the chapter. In particular, consider the questions above that apply to historical prices. After all pricing yardsticks are based on historical pricing information.

In addition, you must ask if the historical relationship remains valid. As a minimum, consider the following questions:

- **How have changes in market conditions affected the estimating relationship?**
- **How have changes in technology affected the estimating relationship?**
- **How have changes in production efficiency affected the estimating relationship?**
- **How have changes in the purchasing power of the dollar affected the estimating relationship?**

Independent Government Estimates. Consider all general factors identified earlier in the chapter for possible effects on comparability.

Independent Government Estimates, especially those developed previously for such purposes as preparing budgets, may no longer be valid. Budget optimism or pessimism can have a significant effect on budget estimates. In addition, many estimates are developed years before the actual

contract action is initiated and may not be current. Ensure the IGE utilized in the analysis has current supporting information validating the data.

3.5 Adjusting The Prices Selected for Comparison

Introduction. If you have a price analysis comparison technique base that does not require adjustment, use it! If you must make an adjustment, try to make the adjustment as objectively as possible. You may need to use statistical techniques or algebraic formulas to establish a common basis for comparison.

You must complete two basic tasks in order to establish comparability:

- Identify and document price-related differences, taking into account the factors affecting comparability.
- Factor out price-related differences.

Restoring comparability by establishing a common basis for comparison requires that you assign a dollar value to each identified difference. However, you cannot always do this. The cost of terms and conditions peculiar to Government contracts is hard to estimate, so exercise discretion in such cases.

Other Proposed Prices. Apply any price-related factors established in the solicitation, to adjust the offered prices for comparison with one another.

Other Information. The challenge is to use the available information and to estimate the price that the Government should pay.

Use available information to estimate the effect of each factor on contract price. In this effort use appropriate quantitative analysis techniques.

If you cannot objectively adjust the prices for the factor involved, you may need to make a subjective adjustment. For example, estimating the effect on price of unique Government terms and conditions. Remember, even a subjective adjustment should have a supported basis for its unique purpose to the particular procurement.

Every procurement situation will be different. Whatever method you use, always document the information that you used and how you used it in making the adjustment.

3.6 Comparing Adjusted Prices

Introduction. Use adjusted prices to estimate range of reasonable prices. Use the price that appears most reasonable as your should-pay price.

If the should-pay price departs significantly from the apparent successful offer, analyze the differences. You will then be ready to make the price-related decisions required to determine the successful offeror and make contract award.

Other Proposed Prices. Comparing competitive offers is normally the easiest form of price analysis. It also tends to be the most valid, because you are comparing offers prepared for the same requirement under the same market conditions within the competitive market. However, the weight placed on this type of comparison depends on the circumstances of the procurement. Place less weight on competitive prices (relative to other price comparisons) when:

- Adequate price competition does not exist (regardless of the number of offers) - in which case the weight should be zero.
- Relatively few of the responsible firms in the industry submitted responsive offers (especially if the conditions of the solicitation unreasonably denied such firms a chance to compete).
- The apparent offeror appears to enjoy an unfair competitive advantage.
- Having used a performance or functional specification, the apparent successful offeror's proposed approach is less comparable to other proposed approaches than (a) to work performed under prior contracts or (b) commercial contracts.
- The deliverable in line for award is less comparable to other offered deliverables than to (a) those acquired under prior contracts or to (b) commercial contracts.
- The apparent successful offer is significantly out of line with other offers.
- The apparent successful offer is significantly out of line (either lower or higher) with estimates of the should-pay price from other types of comparisons (to the extent that other comparisons are reliable and valid indicators of the should-pay price).
- The cost of the procurement is substantial. The larger the dollar value of the contract, the more importance you should place on sizable differences in dollars between different types of comparisons (even if the differences are modest when expressed as percentages).

Commercial Prices. Ask the following questions to determine the weight that should be placed on comparisons with commercial prices.

- ***Can the offeror explain any differences between the offered price and its own commercial prices?***

The offeror must be able to explain any differences between the offered price and commercial prices. You may base prices for a family of products on a single base product. For example, a radio transceiver may require different connectors and adapters to work with different systems.

The part number may even be different for each system, but the basic component is the same. If the offeror can support the price of the various related products by using the price of the basic component, plus the cost of the additional devices, you can use that data to price the entire family of products.

- ***Is your purchase situation different from the typical commercial market situation?***

Even when you grant an exception from the submission of cost or pricing data based on commercial pricing, you do not have to accept the commercial price as the contract price. If you feel that the circumstances of your purchase are different, you should attempt to negotiate a different price.

- ***Do other price analysis techniques bases confirm that the offered price is reasonable?***

If other techniques bases indicate that the offered price is fair and reasonable, use that information in preparing your price negotiation objectives.

Previously Proposed Prices and Contract Prices. Ask the following questions to determine the weight that should be placed on comparisons with historical prices.

- ***How does the offered price compare with the historical prices paid, considering changes in the contracting situation?***

You may be able to use quantitative techniques to adjust prices for changes in the contracting situation. If you cannot, you must subjectively analyze the changes.

- ***Do other types of price comparisons confirm that the offered price is reasonable?***

Because of the changes in the procurement situation, historical prices typically do not provide a precise base for determining price reasonableness. If possible, use other bases of price analysis to confirm that the offered price is fair and reasonable.

Parametric and Rough Yardstick Estimates. Ask the following questions to determine the weight that should be placed on comparisons with parametric or rough yardstick estimates.

- ***How does the offered price compare with the price developed using the pricing relationship?***

Use the appropriate price analysis technique(s) to estimate the should-pay price. Compare the offered price with the estimated price, and carefully document the techniques and the judgment you used in your analysis.

- ***Do other types of price comparisons confirm that the offered price is reasonable?***

Because of item differences, pricing relationships typically cannot precisely confirm or refute price reasonableness. If possible, use other price comparisons to confirm that the offered price is fair and reasonable.

Independent Government Estimates. Remember that your reliance on Independent Government Estimates should always be tempered by your answers to the following questions:

- ***How Was the Estimate Made?***
- ***What Assumptions Were Made?***
- ***What Information and Tools Were Used?***
- ***Where Was the Information Obtained?***
- ***How Did Previous Estimates Compare with Prices Paid?***
- ***Is the IGE supported with validated information if used in the analysis?***

Place no weight on an Independent Government Estimate that originated with an offeror or is a sheer guess. It is vital to validate the basis of the IGE to ensure it was developed using realistic and relevant data that can be supported. If the Independent Government Estimate turns out to be a historical past contract price, analyze and validate the price(s) as you would any historical price.

On the other hand, you might place great confidence in Independent Government Estimates built through detailed analysis - depending on how well that analysis was done.



How do we know we are getting a fair and reasonable price in the following?

- ☐ Sole Source
- ☐ Exemption
- ☐ Emergency
- ☐ Procurement Violation
- ☐ Professional Services
- ☐ Extensions to the period of performance
- ☐ Change Orders / Amendments with Price Adjustments

3.7 Unbalanced Bids



Identify Unbalanced Pricing. Analyze all bids with separately priced line items or subline items to determine if prices are unbalanced.

Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly over or understated as indicated by application of cost or price analysis techniques.

Consider Risk to the Government. Whenever you identify unbalance pricing, you must consider the probability that award to the bidder with the unbalanced price will:

- Increase contract performance risk; or
- Result in payment of unreasonably high prices.

The risk is normally greatest when:

- Startup work, mobilization, first articles, or first article testing are separate line items;
- Base quantities and option quantities are separate line items; or
- The evaluated price is the aggregate of estimated quantities to be ordered under separate line items of an indefinite-quantity contract.

Reject Bids with Unacceptable Risk. You may reject a bid if the contracting officer determines that the lack of balance poses an unacceptable risk to the Government. Such bids are generally described as materially unbalanced. A bid is **materially unbalanced** IF it is **mathematically unbalanced** AND one of the following is true:

- There is reasonable doubt that the lowest evaluated bid will actually result in the lowest cost to the Government.
- The offer is so grossly unbalanced that its acceptance would be tantamount to allowing an advanced payment.

A bid is **mathematically unbalanced** IF it is based on prices that are significantly less than cost for some line items AND significantly more than cost for other line items.

Identification of Materially Unbalanced Bids. In sealed bidding, you must normally use price analysis to determine if bids are materially unbalanced.

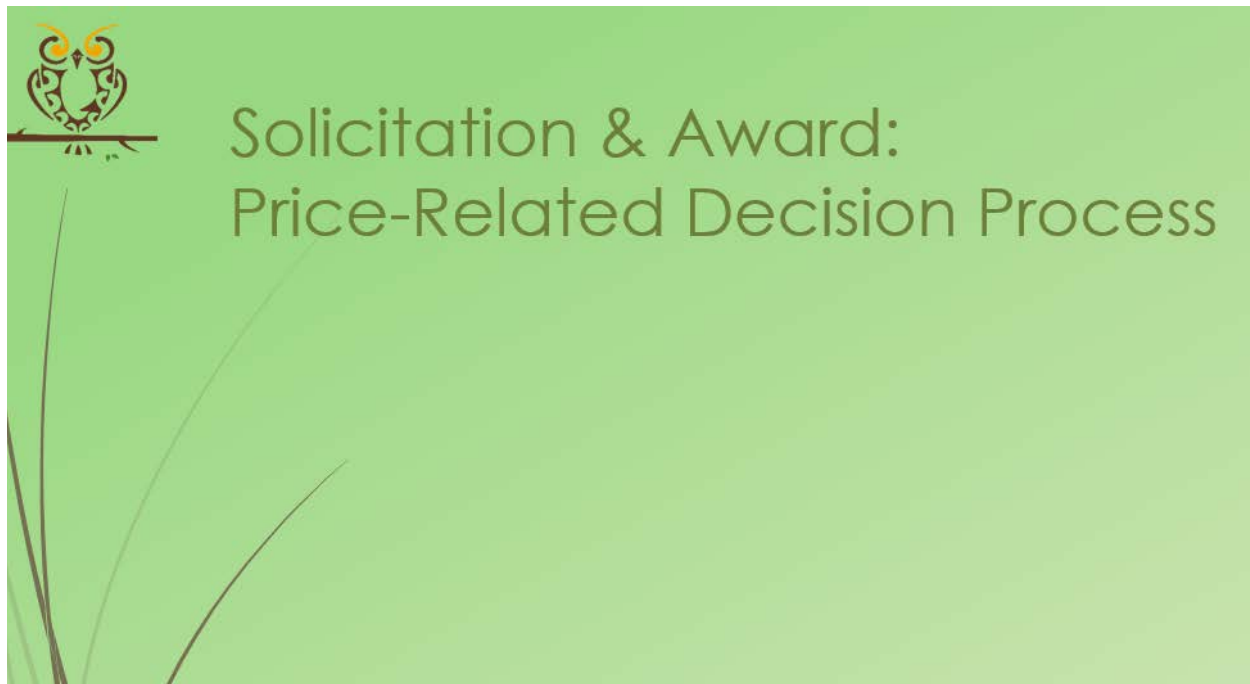
Example. You could use the following price analysis comparisons to determine if bid prices for a contract requiring both first article testing and production are materially unbalanced:

- Compare all bids to determine if the structure of any bid differs significantly from the structure of other bids concerning the pricing for first articles and production units. (Does one bid contain a first article price that is significantly greater than other bids, while production units are significantly cheaper?)
- Compare the production unit price with the price of similar production units.
- Compare the difference between the first article price and the production unit price, with the price differences experienced between first article and production units on contracts for similar items.
- Compare the difference between the first article price and the production unit price, with the Independent Government Estimate of the price of first article test effort, excluding the price of the units required for test.
- Compare the price for the first article and the price for production units with the Independent Government Estimates.

Document Analysis of Unbalanced Bids. Carefully document your analysis of bids that appear to be materially unbalanced. This documentation will form the basis for any determinations and Government actions.

- If analysis supports a determination that unbalanced pricing poses an unacceptable risk to the Government, the documentation will serve as a basis for rejecting the bid.
- If analysis shows that the risk is acceptable, the documentation will provide information on the facts as they were considered during analysis.

3.8 Price-Related Decision Process



3.9 Establish Pre-Negotiation Price Positions

This section covers the following topics:

- 3.9.1 – Analyze Risk
- 3.9.2 – Develop Negotiation Positions

Pre-negotiation Objectives. Pre-negotiation objectives establish the Government's initial negotiation position and assist in determining whether a price is fair and reasonable. They should be based on the results of proposal analysis, taking into consideration all pertinent information including:

- Field pricing assistance;
- Audit reports;
- Technical analyses;
- Fact-finding results;
- Independent Government Estimates; and
- Price histories.

In addition to your price objective, your prenegotiation positions should also consider the range of reasonable prices around that objective.

3.9.1 Analyze Risk

Risk in Pricing. As you begin to develop your price negotiation positions, you must analyze the risk involved. The procurement may be the 99th procurement of a standard commercial item or it may be the first procurement of complex state-of-the-art equipment manufactured to precise Government specifications.

Procurement of the standard commercial item may involve little pricing risk. You have price histories, commercial item price comparisons, and competition. All will likely lead you to the same should-pay price or very similar should-pay prices.

The state-of-the-art item will likely have a much higher level of pricing risk. You may have only the Independent Government Estimate. Commercial items may permit only very general comparisons. These different price estimates may lead you to a wide range of prices that appear reasonable.

Risk Assessment and Should-Pay Prices. You must begin to estimate should-pay prices when you begin procurement planning, and you should continue to refine your estimate as information is collected throughout the procurement process. Use judgment in evaluating the reliability of each estimate when developing the total estimate of the price the Government should pay.

Judgment in Risk Assessment. It is likely that, given the same data, buyers and sellers will develop different judgments on which price is most reasonable. These judgments will be based on different perspectives and different assessments of the risk involved. Sellers are concerned about being able to complete contracts, cover costs, and make a profit. Buyers are concerned about their customer's needs, contract completion, budgets limitations, fairness to all offerors, and the public perception of their actions.

3.9.2 Develop Negotiation Positions

Price Positions in Noncompetitive Negotiations. In noncompetitive negotiations, you should define the range of reasonable prices using three pricing positions. These positions should be based on your should-pay estimates developed during the procurement process. As you prepare these positions, remember that:

- **The minimum price position** should be your starting place in negotiations and your first offer. Never offer a price that cannot be supported by reasoned analysis.
- **The objective (or target) price position** should be the price that you think is most reasonable, based on your analysis of the reliability of different price estimates. It should be the price that you think the Government should pay.
- **The maximum price position** should be the highest price that you can reasonably accept, given the information you have at the beginning of negotiations. The maximum price may change during negotiations if additional information is presented by the offeror that changes the situation.

Both parties to a negotiation expect movement by the other party. If you offer one price throughout the negotiation, you may appear inflexible and that appearance could jeopardize agreement. Different positions also provide you with an opportunity to collect information needed to understand the offeror's perspective on a reasonable price, and to sell the reasonableness of your negotiation positions.

Price Positions in Competitive Discussions. Before entering into competitive discussions, develop separate minimum, objective, and maximum positions for each proposal. Use these positions in identifying the strengths, weaknesses, deficiencies, and uncertainties in the offeror's proposal.

As you prepare these positions, remember that they will be used to advise the offeror of deficiencies in its proposal so that the offeror is given an opportunity to improve its proposal.

- Include your reasons (if any) for believing that the offeror's pricing is deficient based on comparisons with historical prices, commercial prices, parametric estimates, rough yardstick estimates, or the Independent Government Estimate.
- Be prepared to point out any indicators that the proposed price is too high or too low.

Remember that you will not be able to engage in offers and counteroffers during discussions. The offeror must determine how to modify its proposal in order to increase the value offered.



Price Discussion Memorandum (PDM)

| Line Item //Cost Element | Proposed | Objective | Considered Achieved | Reference |
|--------------------------------|-------------|-------------|------------------------|------------|
| Computer Hardware | \$1,000,000 | \$900,000 | \$925,000 | See Para A |
| IT Help Desk Services | \$2,500,000 | \$2,025,000 | \$2,127,500 | See Para B |
| Program Management | \$3,500,000 | \$2,925,000 | \$3,052,500 | |
| Procurement Support | \$350,000 | \$292,500 | \$305,250 | See Para C |
| Total Cost | \$3,850,000 | \$3,217,500 | \$3,357,750 | |

3.10 Identifying Documentation Requirements

Need for Documentation. Documentation must identify the significant facts and issues that affected the discussed contract price. As a minimum, it should include:

- The proposal and any related information submitted by the contractor;
- The Price Discussion Memorandum (PDM) detailing your price objectives;
- Copies or references to the location of any technical or audit analysis reports considered during the discussions; and
- A record of any request for additional contractor information to support the proposal and the contractor's response.

Price Discussion Memorandum. At the close of discussions, you should prepare a PDM outlining the principle elements of the contract discussions and include a copy in the contract file. Formats vary, but the PDM must include the following information:

- Purpose of the discussion (new contract, final pricing, etc.)
- Description of the acquisition, including appropriate identifying numbers (e.g., RFP number).
- Name, position, and organization of each person representing the contractor and the Government in discussions.

- The current status of any contractor systems (e.g., purchasing, estimating, accounting, or compensation) to the extent that they affected and were considered in the discussions.
- If the offeror was not required to submit cost or pricing data to support any price negotiation over the cost or pricing data threshold, the exception used (e.g. procurement of a commercial item) and the basis for using it.
- If the offeror was required to submit cost or pricing data, the extent to which the procurement officer:
 - Relied on the cost or pricing data submitted and used in discussing price;
 - Recognized any cost or pricing data submitted as inaccurate, incomplete, or noncurrent:
 - The action taken by the contracting officer as a result of that recognition;
 - The action taken by the contractor as a result of that recognition; and
 - The effect of the defective data on the price negotiated; or
 - Determined that an exception applied after the data were submitted and, therefore, did not consider the submission to be cost or pricing data.
- A summary of the contractor's proposal, any field pricing assistance recommendations, including the reasons for any pertinent variances from them, the Government's negotiation objective, and the negotiated position.
 - When the determination of price reasonableness is based on cost analysis, the summary must address each major cost element.
 - When determination of price reasonableness is based on price analysis, the summary must include the source and type of data used to support the determination.
- The most significant facts or considerations controlling the establishment of the pre-negotiation objectives and the negotiated agreement including an explanation of any significant differences between the two positions.
- To the extent such direction has a significant effect on the action, a discussion and quantification of the impact of direction given by Legislators, other agencies, and higher-level officials (i.e., officials who would not normally exercise authority during the award and review process for the instant contract action).
- The basis for the profit/fee pre-discussion objective and the profit/fee discussed.
- Documentation that the discussed price is fair and reasonable.

PDM Cost Element Summary. When you use cost analysis, your cost element summary should address the offeror's estimating rationale, the Government's objective, and the amount considered achieved. Commonly, this summary begins with a tabular presentation similar to the following:

****Note:** This PDM is breaking the price down using Cost Analysis. This will be further discussed in a later training.

| Cost Element | Proposed | Objective | Considered Achieved | Reference |
|--------------------------|-----------------|------------------|----------------------------|------------------|
| Engineering Direct Labor | \$1,000,000 | \$900,000 | \$925,000 | See Para A |
| Engineering Overhead | \$2,500,000 | \$2,025,000 | \$2,127,500 | See Para B |
| Subtotal | \$3,500,000 | \$2,925,000 | \$3,052,500 | |
| G&A | \$350,000 | \$292,500 | \$305,250 | See Para C |
| Total Cost | \$3,850,000 | \$3,217,500 | \$3,357,750 | |

Using this type of tabular cost element summary, you can identify the areas and degree of differences and provide a general format more detailed analysis.

- In Paragraph A, summarize:
 - The rationale used by the offeror in developing the proposal.
 - Any technical or audit recommendations. Focus on any differences between the proposal and the recommendations.
 - The reasons for any differences between technical or audit recommendations and the Government objective.
 - The reasons for any differences between the Government objective and the amount considered negotiated. (Note: You and the contractor will likely not agree on each element of cost so the amount considered negotiated is your analysis of the cost used to arrive at a reasonable price.)
- In Paragraphs B and C, address the same subjects covered in Paragraph A with one major addition. Since dollars are calculated using overhead and G&A rates, you need to address whether the dollar differences are the result of differences in the application base, the rates themselves, or both.

| | | |
|---------------------------------|--|----------------------------------|
| PDM Cost Element Summary (cont) | <ul style="list-style-type: none"> • In the example above, the differences in engineering overhead dollars result from differences in both the base and the rate. | |
| | Engineering Overhead | Calculations |
| | Proposed | \$1,000,000 x 250% = \$2,500,000 |
| | Objective | \$900,000 x 225% = \$2,025,000 |

| | | | | | |
|------------------|--|--------------------------------|-------------------------------|------------|------------|
| | Considered Negotiated | \$925,000 x 230% = \$2,127,500 | | | |
| | <ul style="list-style-type: none">• The differences in G&A expense dollars relate only to differences in the base. The rate is the same for all three positions. | | | | |
| | G&A Expense | | Calculations | | |
| | ed | | \$3,500,000 x 10% = \$350,000 | | |
| | | | \$2,925,000 x 10% = \$292,500 | | |
| | | | \$3,052,500 x 10% = \$305,250 | | |
| | | | | | |
| PDM Fact Summary | each | | | | |
| | to | | | | |
| | the following | | | | |
| | Item | Rate | Reference | | |
| | 0001 | \$15,000 | See Para A | | |
| | 0002 | \$10,000 | \$9,750 | See Para B | |
| | 0003 | \$4,500 | \$4,400 | \$4,500 | See Para C |
| | <ul style="list-style-type: none">• If the same rationale applies to all items, a single explanatory paragraph should be enough.• If different rationales apply to different items, you may need to provide several explanatory paragraphs. | | | | |

PDM Analysis of Facts or Considerations Affecting Price. As you document the significant facts or considerations affecting the proposal, your objective, and the amount negotiated, consider the effect of the following:

- Items or services being purchased;
- Quantities being purchased;
- Place of contract performance;

- Delivery schedule or period of performance;
- Any difference(s) between the proposed delivery schedule, the objective schedule, and the achieved schedule;
- Any previous buys of similar products including:
 - When,
 - How many,
 - Schedule/production rate,
 - Contract type, and
 - Unit prices or total prices, including both target and final prices, if applicable;
- Any Government-furnished material that will be provided as a result of the contract; and
- Any unique aspects of the contract action.

Technical and Audit Reports. Technical and audit reports provide key insights into the rationale that you used in developing your pre-discussion objectives. Normally, you should include a copy of each relevant report in the contract file. However, if the report is large or only available electronically, it may not be practical to include a copy in the contract file. In such situations, you must at least include information on where the full report can be found.

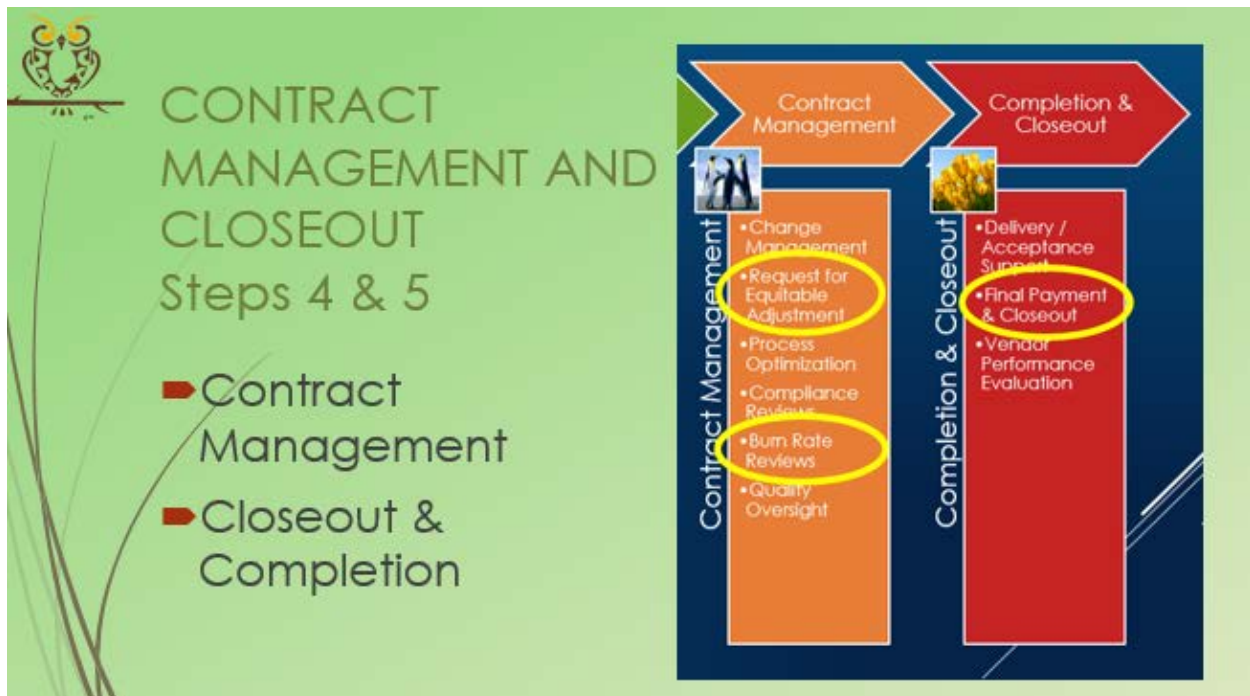
Record of Any Additional Information. The contract file should also include a record of any request(s) that you submitted to the contractor for additional information along with the contractor's response.

CHAPTER FOUR:

CONTRACT MANAGEMENT AND CLOSEOUT

PROCUREMENT LIFE CYCLE STEPS 4 & 5:

CONTRACT MANAGEMENT AND CLOSEOUT





Contract Management

► Request for Equitable Adjustments

4.1 Recognizing Special Considerations for Equitable Adjustments

Clauses Providing for Equitable Adjustment.

You may need to negotiate an equitable adjustment under one of several different contract clauses that provide for an equitable adjustment in certain situations under HRS 103D-501 and HARS 3-125. These include:

- Changes;
- Government Property;
- Suspension of Work;
- Government Delay of Work;
- Stop-Work Order; or
- Differing Site Conditions.

There are two basic types of contract modifications permitted under the contract Changes clause:

- **Bilateral modifications** are signed by both the contractor and the contracting officer. You can use them to:
 - Define all aspects of the contract modification, including an equitable adjustment, at the time that the modification is made;
 - Incorporate a negotiated equitable adjustment that resulted from a unilateral contract change.
- **Unilateral modifications** are signed only by the Procurement officer and do not require contractor consent.

- Known as Change Orders, these unilateral changes are for changes in the work within the scope of the contract and changes in the time of performance of the contract that do not alter the scope of the contract work.
- The contractor is required to continue performance of the contract as changed and can request an equitable adjustment within the period prescribed.

Preference for Bilateral Modifications. When time permits, the contracting officer should generally modify contract requirements using a bilateral contract modification for three reasons:

- Only one contract document is required.
 - If you make a bilateral contract modification, you can use a single document to modify the contract requirements and incorporate any necessary equitable adjustment.
 - If you make a unilateral contract modification, you must use one document to make the contract modification and a second document to incorporate any necessary equitable adjustment.
- The equitable adjustment is established before work begins. When you use a unilateral contract modification, the contractor must continue to perform the modified contract.
 - While continuing to perform, the contractor incurs actual costs related to the change. As a result the contractor's proposal for an equitable adjustment must include a combination of actual and estimated costs. Each day work is completed so actual costs change and the estimated cost for uncompleted work changes. Negotiations are like trying to hit a constantly moving target.
 - Each day of contractor performance reduces the possibility that you can further influence how the contractor will interpret the modified contract requirements.
- Contracting officers must definitize unilateral modifications within the shortest practicable time. Contracting officers commonly perceive this requirement as additional pressure for timely settlement on them but not on the contractor.

Other Reasons for Equitable Adjustments. An equitable adjustment may also be necessary when:

- Either the Government or the contractor fails to meet its contract obligations. (e.g., the Government fails to deliver Government furnished property when and where required); or
- There is a change in the contracting situation (e.g., a differing site condition on a construction contract).

Equitable Adjustment Objective. As the term implies, your objective should be an "equitable" adjustment. The Government relies on the judgment of the procurement officer and precedents established by the Courts and Boards of Contract Appeals. In general, an equitable adjustment is one that is **fair** to all concerned. Many define it as leaving the contracting parties in a position no better or worse than before the action or inaction that necessitated the adjustment.

Equitable Adjustment Elements. An equitable price adjustment should consider changes in contract price and other terms affected (e.g., schedule).

- Price changes should consider the reasonable cost of completing the contract before the act that necessitated the adjustment and the reasonable cost of performing the contract after it.
- Contract terms (e.g., schedule) should consider the effect of the act on contract performance. For example, production must stop because parts that meet new requirements will not be available at any price for six months, but parts that met the original requirements were in stock.
- Elements of the adjustment can be traded off. For example, when contract requirements increase, the contractor might request a higher price to make the change and meet the required delivery schedule. However, the contractor might accept a lower price increase if you extend the delivery schedule.

Special Problems in Equitable Adjustment Negotiation. An equitable adjustment negotiation often presents special negotiation problems. The biggest problems are usually related to adjusting contract price. As stated above, the objective is a fair adjustment that leaves the contracting parties in a position no better or worse than before the action or inaction that necessitated the adjustment.

The preferred method of pricing the adjustment is by negotiating the difference between the reasonable cost of performing the contract before the action or inaction that necessitated the adjustment and the reasonable cost after. Depending on the type of equitable adjustment profit may or may not also be adjusted.

The main problem is deciding what costs are reasonable:

- The same rules on cost allowability that apply to new contract negotiations also apply to equitable adjustments. Unfortunately, many contractors not familiar with cost negotiations often do not understand that they cannot recoup such unallowable costs as interest expense.
- You may have to rely on the opinions of experts concerning actual costs incurred by the contractor. This is particularly likely when the contractor does not have an adequate cost accounting system.
- You may have to rely on the opinions of experts concerning work actually completed. This is particularly likely when the contractor does not have a well-documented system for managing contract performance. This is a special problem if the contractor overestimates the work completed to support an unreasonably low estimate of the cost of work deleted and not performed.
- Most contractors are very reluctant to accept estimates showing that the costs for work deleted would have been more than estimated at the time of contract award. Some look at

equitable adjustments as an opportunity to recoup losses associated with unrealistically low cost estimates at the time of contract award.

Contractor Advantages in Equitable Adjustment Negotiation. An equitable adjustment negotiation may provide the contractor with negotiation advantages not present before contract award.

- Negotiations are noncompetitive. Pricing alternatives on the original contract may have been limited by competition.
- Contracting officers can have time limits to complete definitization (ie. incorporate an equitable adjustment into the contract) of unilateral contract modifications. Those limits increase pressure on the contracting officer to complete negotiations. However, they do not directly increase pressure on the contractor.
- While performing under a unilateral modification, the contractor is incurring actual costs. The fact that the costs have already been incurred provides strong support for the position that the costs are reasonable.

Government Advantages in Equitable Adjustment Negotiation. An equitable adjustment negotiation may also provide the Government with negotiation advantages that it did not have in the original contract award.

- The contractor performance must continue, so the Government is not faced with a lack of progress in meeting its needs.
- Payment for affected items delivered may be withheld until unit prices have been adjusted as part of the equitable adjustment, increasing pressure on the contractor to negotiate.
- The contractor is incurring actual costs, but you are precluded from paying any cost that is not reasonable (actual cost or not). Until the adjustment is consummated, the contractor assumes the risk that its actual costs will be accepted as reasonable. As this actual cost increases, so does the pressure to negotiate.
- The clauses that provide for equitable adjustment also provide for a unilateral contracting officer decision if no agreement can be reached. Of course, the contractor can dispute the decision, but the process is expensive and long. Most importantly, there is no guarantee that the dispute will be successful, particularly when the contracting officer's final decision is reasonable.

Win/Win Benefits of Negotiated Adjustments. A negotiated agreement is generally a better deal for both sides because:

- A unilateral contracting officer's decision may give the impression of being win/lose no matter how reasonable it is.
- Disputes are long and expensive for both parties involved.

- If the Government wins, the contracting officer's decision may still appear one-sided to the contractor.
 - If the contractor wins, it appears that the Government adopted a win/lose position and lost.
-



Contract Management

► Burn Rate Logs

4.2 Burn Rate & Obligation Logs

The burn rate is a measure of how long a company can keep operating until it has to seek more financing or in other words, how quickly the obligated funds are being spent.

It is important for the Contract Administrator to have a clear understanding throughout the life of the contract on how fast the funds are being spent, and also keeps a running balance of any additional funds added through modification.

a. Contract Funding Log

The Procurement Officer needs to keep a reconciliation of all monies associated with a contract. This is especially true for large fund contracts with multiple funding modifications along the way. A Contract funding log will show a running balance of the funds for the contract, plus any funded modifications, less payments to the contractor.

Here is an example of a Contract Funding Log:

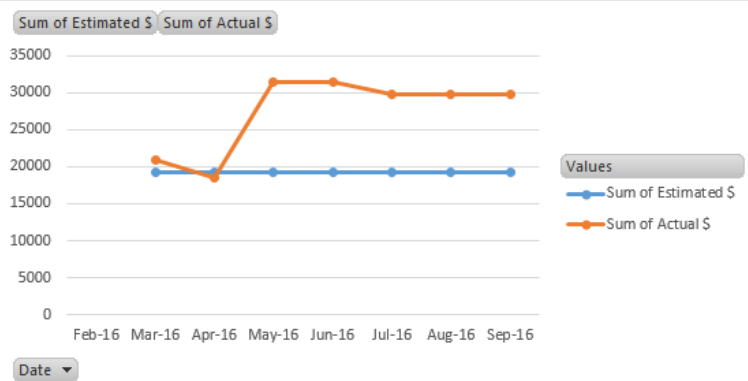
| Date | Description | \$ | Balance | Notes |
|-----------|--|-----------|-----------|--|
| 1-Mar-15 | Base Award: Period of Performance (POP) 1 Base Year + Four One Year Options. | 4,500,000 | 4,500,000 | Amt is for base year only. Extension funds will be added as options are exercised. |
| 31-May-15 | Contractor Lump Payment (23% complete) | (478,000) | 4,022,000 | |
| 6-Aug-15 | Modification 001: Equitable Adjustment for Steel reinforcement | 350,000 | 4,372,000 | |
| 28-Nov-15 | Modification 001: Government Delay | 130,000 | 4,502,000 | |
| 1-Dec-15 | Contractor Lump Payment (23% complete) | (560,000) | 3,942,000 | |

b. Burn Rate Log

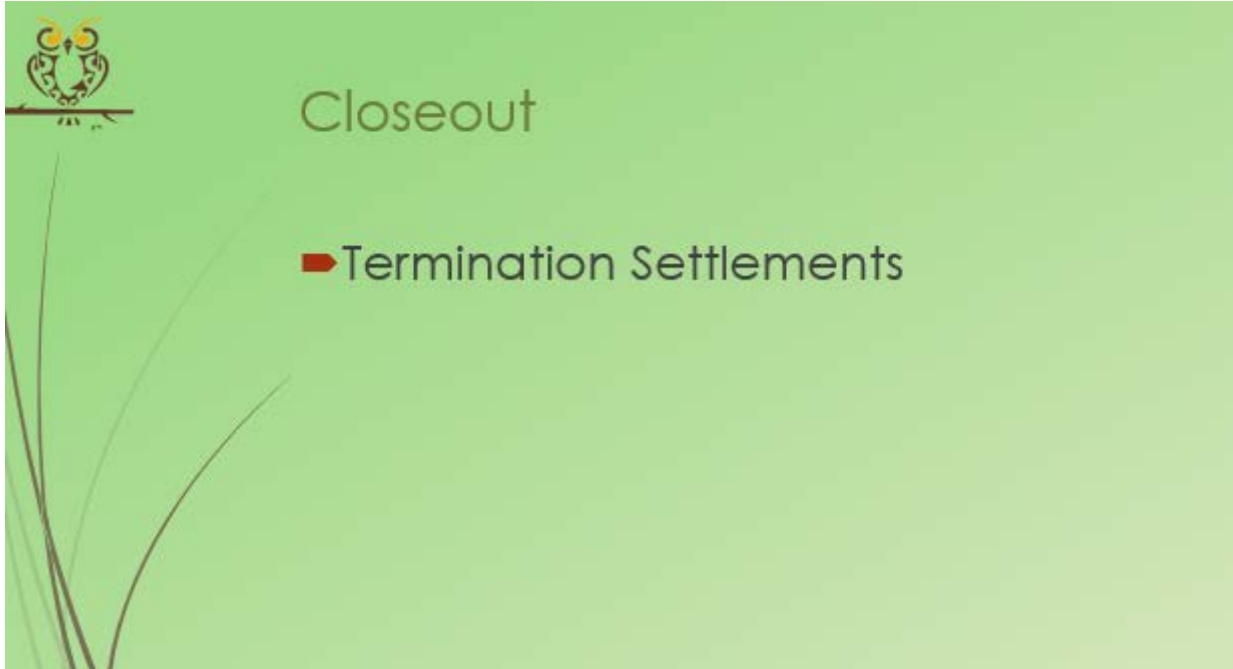
A Burn Rate Log is very similar to a Contract Log, except it is comparing the estimated monthly costs to the actual contractor burn. These logs are especially helpful when you are working with services and labor hour contracts.

Here is an example of a Burn Rate Log:

| Date | Description | Estimated Burn | Estimated \$ | Actual Burn | Actual \$ | Under / (Over) Variance | Contract Balance | Notes |
|-------------|-----------------------------------|---------------------|------------------|------------------|-----------|-------------------------|------------------|---|
| Feb-16 | Base Funding | | | | | | 450,000 | |
| Mar-16 | IT Services & 60 hrs @ \$320/hr | | 19,200 | 65hrs @ \$320/hr | 20,800 | (1,600) | 448,400 | |
| Apr-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 58hrs @ \$320/hr | 18,560 | 640 | 449,040 | |
| May-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 90hrs @ \$350/hr | 31,500 | (12,300) | 436,740 | Sprint had to be reperformed, and rates increased |
| Jun-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 90hrs @ \$350/hr | 31,500 | (12,300) | 424,440 | Additional sprints added to scope |
| Jun-16 | Modification 001 | | | | | 24000 | 448,440 | Additional funds for sprints |
| Jul-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 85hrs @ \$350/hr | 29,750 | (10,550) | 437,890 | |
| Aug-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 85hrs @ \$350/hr | 29,750 | (10,550) | 427,340 | |
| Sep-16 | IT Services & N 60 hrs @ \$320/hr | | 19,200 | 85hrs @ \$350/hr | 29,750 | (10,550) | 416,790 | |
| Row Labels | | Sum of Estimated \$ | Sum of Actual \$ | | | | | |
| Feb-16 | | | | | | | | |
| Mar-16 | | 19200 | 20800 | | | | | |
| Apr-16 | | 19200 | 18560 | | | | | |
| May-16 | | 19200 | 31500 | | | | | |
| Jun-16 | | 19200 | 31500 | | | | | |
| Jul-16 | | 19200 | 29750 | | | | | |
| Aug-16 | | 19200 | 29750 | | | | | |
| Sep-16 | | 19200 | 29750 | | | | | |
| Grand Total | | 134400 | 191610 | | | | | |



You will see that using a Pivot Chart will give you and your management a clear understanding of how fast the money is being spent. You should set a quarterly meeting to discuss the burn rate with the contractor to ensure you have enough funds to maintain the contract for the full year and/or obtain your deliverables before the money runs out.



4.3 Recognizing Special Considerations for Termination Settlements

Contract Terminations (HRS 103D-501 (c)(3)(4)). There are two general types of contract terminations.

- **Termination for Convenience.** The contract termination for convenience clause gives the Government the right to terminate the contract when it is in the Government's best interest to do so. Specific provisions for settlement will depend on the commercial or noncommercial nature of the product and the contract type. You can also partially terminate a contract for scope.
- **Termination for Default or Cause.** The contract termination for default clause or termination for cause clause gives the Government the right to terminate the contract when the contractor fails to meet its obligations under the contract. Specific Government rights depend on the commercial or noncommercial nature of the product and the contract type.

Termination Settlement Negotiation.

Noncommercial fixed-price termination for convenience settlements typically require more and more complex negotiations than any other type of termination settlement.

- Commercial contract termination for convenience settlements center on determining the percentage of contract work performed prior to the notice of termination and reasonableness of charges related to the termination. The termination settlement is

calculated by multiplying the contract price by the percentage of work performed and adding the reasonable charges related to the termination.

- Cost-reimbursement contract terminations for convenience require little negotiation because the contractor is entitled to receive all allowable costs and any related fee.
- Settlements for terminations for default or cause normally require little negotiation because the general requirements for settlement are described in the clause. In fact, most negotiations related to terminations for default or cause involve contractor efforts to convince the Government that there are factors that justify converting the termination for default or cause into a termination for convenience.

Noncommercial Fixed-Price Termination for Convenience Settlement Objective.

For a noncommercial fixed-price contract termination for convenience, your objective should be a settlement that compensates the contractor **fairly** for the work done and the preparations made for the terminated portions of the contract including a reasonable allowance for profit.

- Fair compensation is a matter of judgment and cannot be measured exactly.
- Various methods may be equally appropriate for arriving at fair compensation.
- The use of business judgment, as distinguished from strict adherence to accounting principles, is the heart of settlement.
- The parties may agree upon a total amount to be paid to the contractor without agreeing on or segregating the particular elements of cost or profit comprising that total.

Noncommercial Fixed-Price Termination for Convenience Guides for Settlement.

The primary objective is to negotiate a settlement by agreement.

- Cost and accounting information provide guides for negotiating a fair settlement, but they are not a rigid measure.
 - In appropriate cases, costs may be estimated, differences compromised, and doubtful questions settled by agreement.
 - Other types of data, criteria, or standards may furnish equally reliable guides for fair compensation.
- The amount payable under a settlement (not including settlement costs) must not exceed the contract price less payments otherwise made under the contract. From that amount you must deduct any disposal or other credits.

Special Problems in Fixed-Price Terminations for Convenience Settlement Negotiation. A fixed-price contract termination for convenience settlement negotiation may also present special problems.

- The biggest problem is often the atmosphere surrounding the termination process. While the atmosphere surrounding a new contract negotiation is one of hope and a new

beginning, the atmosphere surrounding a termination is one of lost opportunities. Many times it is an atmosphere of distrust and resentment. You must not allow this atmosphere to drag you into a win/lose negotiation.

- Contractors are required to submit final settlement proposals within one year of the contract termination but the period for submission can be extended by the termination contracting officer. The long period of time between the termination and settlement negotiation can affect the availability of information and your ability to verify the facts surrounding the termination. Work in process inventory, special tooling, special test equipment, or important records may be lost during this extended period of time. Costs incurred after the termination may be mixed with costs incurred before the termination.
- The same rules on cost allowability that apply to new contract negotiations and equitable adjustments also apply to termination settlements. Unfortunately, many contractors not familiar with cost negotiations often do not understand that they cannot recoup unallowable costs.
- You may have to rely on the opinions of experts concerning actual costs incurred by the contractor. This is particularly likely when the contractor does not have an adequate cost accounting system.
- In a partial termination settlement, the contractor may propose increased costs in the continued portion of the contract related to the termination. Never consider these costs as part of the termination settlement. However, you may consider the need for a separate equitable adjustment.

Contractor Advantages in Fixed-Price Termination for Convenience Settlement Negotiation. A fixed-price contract termination for convenience settlement negotiation may provide the contractor with negotiation advantages not present before contract award.

- Negotiations are noncompetitive. Pricing alternatives on the original contract may have been limited by competition.
- When the contractor's accounting system permits cost identification and tracking, actual costs should be available. There should be few cost estimates.

Government Advantages in Fixed-Price Termination for Convenience Settlement Negotiation.

A fixed-price contract termination for convenience settlement negotiation may also provide the Government with negotiation advantages that it does not have in the original contract award.

- Normally, the Government will owe the contractor additional funds when the settlement is reached. This should increase the contractor's desire to reach an agreement.
- The fixed-price termination for convenience permits the contracting officer to unilaterally settle the termination by paying the amounts determined reasonable. Of course, the contractor can dispute the determination, but the process is expensive and long. Most importantly, there is no guarantee that the dispute will be successful, particularly when the contracting officer's determination is reasonable.

Win/Win Benefits of Negotiated Settlements. A negotiated agreement is generally a better deal for both sides.

- A unilateral contracting officer settlement determination gives the impression of being win/lose no matter how reasonable it is.
- Disputes are long and expensive for both parties involved.
 - If the Government wins, the contracting officer's determination may still appear one-sided to the contractor.
 - If the contractor wins, it appears that the Government adopted a win/lose position and lost.



Mahalo!

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References

- Contract Pricing Reference Guide – Defense Acquisition University
- HRS 103D-312
- HRS 3-122-120 to 130