



Independent Government Cost Estimate (IGCE)

Handbook for Services Acquisition

Originally posted: December 2017

Last updated: February 2018

FOREWORD

In Fiscal Year 2017, the Department of Defense (DoD) obligated more than \$156 billion, or about 50 percent of the Department's contract spending, on service contracts to help achieve its mission. Independent Government Estimates (IGEs), the Government's best estimate of a contract's potential costs, are an important tool throughout the process of planning and awarding service contracts.

The Government develops the IGE without bias and typically without contractor input, and when done correctly, it is directly tied to comprehensive market research. The IGE supports efforts to ensure that the cost of meeting the Government's requirements for the service being acquired are known. Format and contents of the IGE will vary in accordance with the complexity and value of the requirement. It is imperative to remember that the IGE is a procurement-sensitive document and should be handled as For Official Use Only (FOUO).

The IGE may also be referred to as a Government Estimate (GE) or an Independent Government Cost Estimate (IGCE). This Handbook will use the term "IGCE" since it will focus primarily on the common elements of costs that may be found in an IGCE for Services Acquisition.

The content of this Handbook will help explain the importance of the IGCE and its purpose. This Handbook is not intended to cover every possible acquisition, but rather presents information regarding the minimum requirements for IGCE documentation. It will also assist with understanding the elements of a cost element and the tools available for its development.

The examples provided in the appendix are simply examples. They are not meant to be a one-size-fits-all or plug- and-play solution. They are meant to be thought-provoking and a jumping-off point for the development of a cost estimate.

This Handbook provides fundamental guidance only, and it is designed more for the less experienced IGCE preparer, who also may not be a member of the DoD's Acquisition Workforce (AWF).

Military Departments and other DoD components may issue additional guidance and implementing instructions to meet the unique IGCE needs of their agencies.

This is a living document. To suggest changes or edits, please email to:

osd.pentagon.ousd-atl.mbx.services-acquisition@mail.mil

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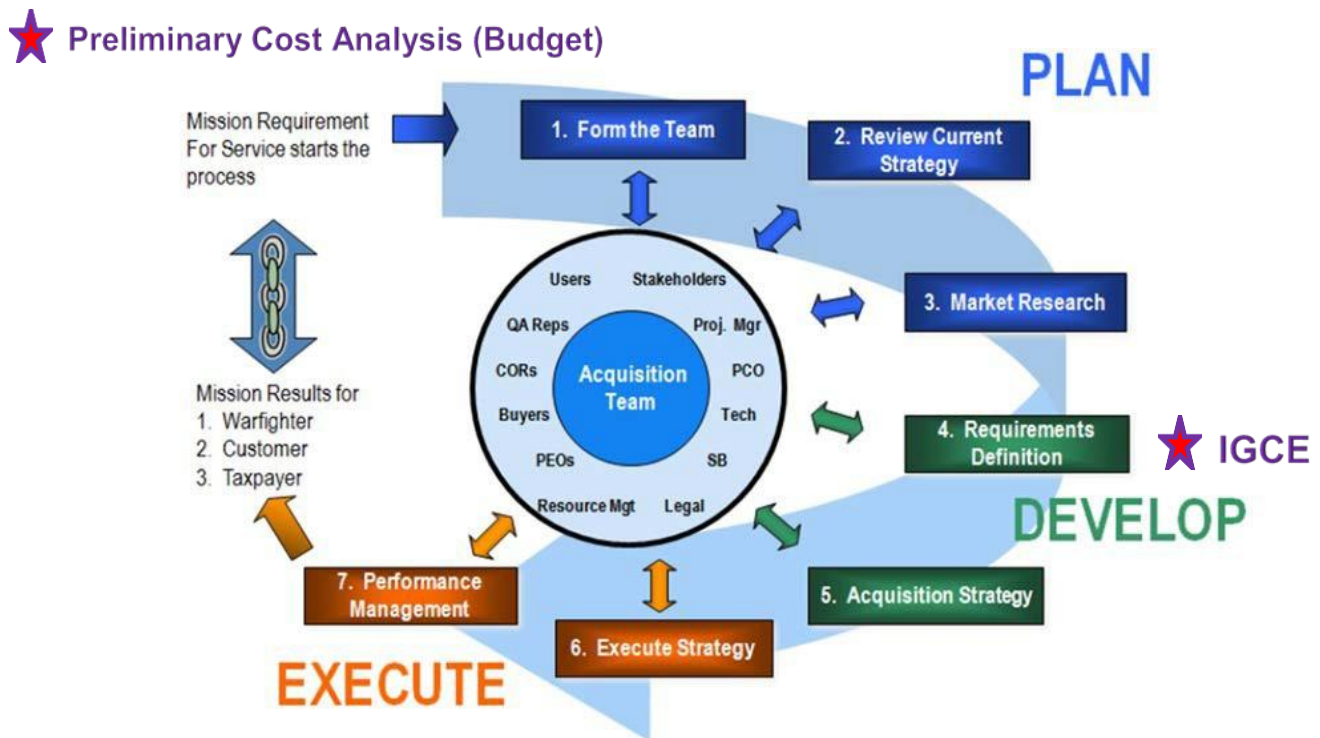
BACKGROUND

The IGCE is a cost estimate developed by the Government Requiring Activity, based on the requirements of the Performance Work Statement (PWS) or Statement of Work (SOW). An IGCE is required for every new acquisition that exceeds the simplified acquisition threshold (SAT).

The purpose of the IGCE is to develop an assessment of the probable cost of services being acquired and to help determine the reasonableness of an offeror's proposed costs and the offeror's understanding of the work. Further detail is required for cost-reimbursement type contracts. This should include a cost breakdown of all cost factors required for a contractor to complete the performance work statement, including an estimate of technical staff labor categories, hours, and rates; direct material and supplies; subcontracting; consultant services; travel, indirect rates; and fee.

While preliminary cost analysis may serve as the basis for budgeting and other pre-solicitation activities, the Requiring Activity members of the multi-functional team (MFT) prepare the IGCE during the *Requirements Definition Phase* of the 7-Step Services Acquisition Process (see Figure 1 below), correlating with the specific outcomes and tasks described in the PWS or SOW. Prior acquisition history or similar acquisitions should provide the basis for the preparation of an IGCE, as well as the data provided by thorough market research.

Figure 1. 7-Step Services Acquisition Process and IGCE



PRINCIPLES

The IGCE is used during all phases of a program to include Life Cycle Cost and Total Operating Cost of a Services Acquisition project, as well as more limited estimates related to a subset of a current contract or even for a contract option period within an overall period of performance. It is:

- Developed by the Government without contractor influence;
- An aid in achieving best value and shared contract risk;
- Based on market research;
- An analysis of reasonable and required resources to perform the contract;
- The projected, anticipated, or probable cost/price of a proposed Federal acquisition; and
- A benchmark for establishing cost/price analysis.

The IGCE is used to:

- Project and reserve funds for the Federal procurement as part of the acquisition planning process;
- Determine if assumptions in a cost proposal are based on the same or similar assumptions as used by the Government;
- Assist in decisions related to project viability, structure, and resource requirements;
- Conduct an Analysis of Alternatives;
- Inform design trade-off decisions;
- Conduct in-process reviews of projects; and
- Satisfy public law and oversight requirements.

Figure 2 illustrates how the IGCE is used in the acquisition planning and contracting process.

The IGCE is prepared:

- For every new services acquisition in excess of the SAT (see specific agency policy);
- Prior to Request for Proposal (RFP), Request for Quotation (RFQ), and Invitation for Bids (IFB) for new fixed-price contracts and cost-reimbursement contracts;
- To cover the contract period of performance to include transition and multi-year periods;
- When requested for some individual projects under an existing contract;
- When requested (by the Contracting Officer) for any contract less than the SAT; and
- When there is a change to the PWS that impacts the contract cost.

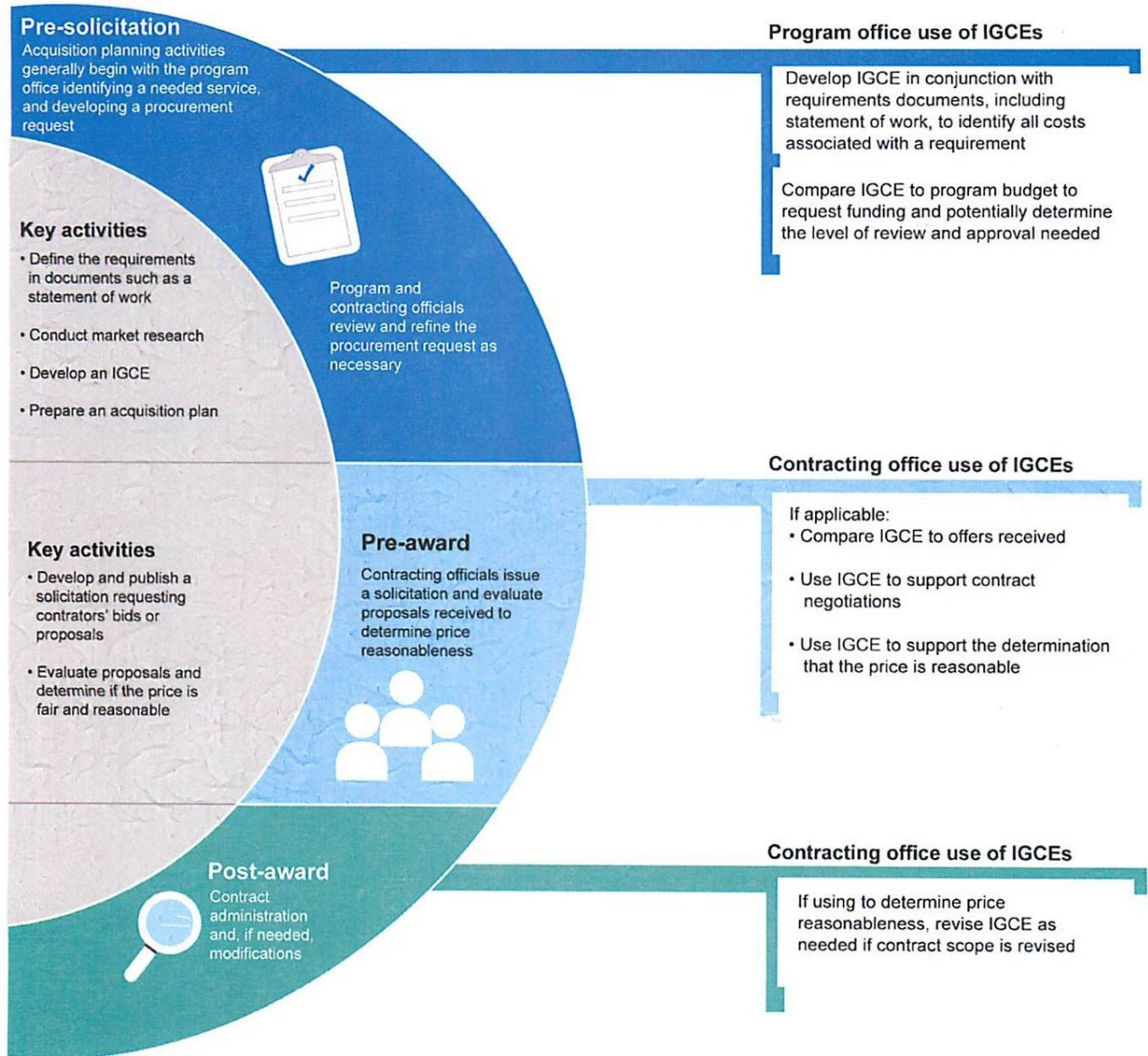
The IGCE is typically not required when:

- Modifying a contract to exercise priced options or to provide incremental funding; or when
- Placing relatively small dollar task/delivery orders under an indefinite-delivery contract for fixed-price services or supplies.

The estimate submitted with the procurement request shall include a basis for the Government's estimate using current validated data, whether at the price level or at the cost element level. The

estimator must provide an adequate narrative validating the source or the basis of the information comprising the estimate and ensuring the estimate is repeatable. Cost element or price values alone are not adequate without a basis to support the estimated values.

Figure 2: IGCEs in the Acquisition Planning and Contracting Process



In the narrative of the IGCE, the five primary questions to be answered are:

1. How was the estimate made?
2. What assumptions were made?
3. What information/tools were used?
4. Where was the information obtained from?
5. How did previous estimates compare with prices paid?

Prior to being accepted, the IGCE preparer should ensure that:

- The IGCE contains enough detail to assist the Contracting Officer or Cost/Price Team in the evaluation of the reasonableness of offered prices during the Source Selection process, especially for relatively high-dollar-value, complex acquisitions;
- The IGCE provides sufficient narrative and analytical detail, to include reference material, to support its preparation;
- The IGCE includes a certification that the Government developed the IGCE independently prior to seeking any formal proposals from contractors.

APPLICATION

Requirement for an IGCE in Services Acquisition

Regulatory requirements for an IGCE may be described as limited and spread out over a number of different regulatory and other policy documents. IGCE preparers should always check the guidance of their DoD agency for more information.

There are some regulations that address the requirement for an IGCE, such as for construction in Federal Acquisition Regulation (FAR) 36.203.

COR responsibilities as stated in the FAR and in DoDI 5000.72, state that the COR will participate, as appropriate, in pre-award requirements definition, acquisition planning, and contract formations processes (i.e., market research, independent government cost estimation, justification and approval documentation).

Importance of a Quality IGCE in Services Acquisition

The IGCE is the Government's estimate of the resources and projected cost of the resources a contractor will incur in the performance of a contract. A sufficiently detailed and accurate IGCE establishes a realistic budget and assists Services Requirements Review Boards (SRRBs) in their review, validation, prioritization, and approval of services requirements to meet mission need. During source selection, it aids the cost/price team and contracting officer in evaluating the reasonableness of offered prices pursuant to FAR 15.404-1. When required, it may also assist in cost realism analysis. Cost realism means that the offeror's proposal is realistic for the work to be performed and reflects a clear understanding of the requirement. When appropriate, contracting staff will document differences between the IGCE and final contract award value in the contract file.

Key Statutes that Govern Services Acquisitions

Some key statutes that govern the acquisition of products and services are: Competition in Contracting Act (CICA), Davis-Bacon Act (DBA), Federal Acquisition Reform Act, Federal Acquisition Streamlining Act (FASA), Javits-Wagner-O'Day Act (JWOD), Procurement Integrity Act, Service Contract Act (SCA), and Small Business Act. These statutes may impact cost estimation.

Time Phasing of Costs

In addition to looking at Services Acquisition costs aggregated in various ways, the MFT must also be able to determine when these costs will be incurred. It is important to allocate the costs to the fiscal years when funds will be required.

Total Ownership Costs (TOC)/Life Cycle Cost (LCC) in Services Acquisition

As distinguished from the costs of an IGCE for a particular contract requirement, Functional Services Managers are encouraged to look at all the costs associated with a Services Acquisition requirement. In light of shrinking budgets, DoD is focusing on reducing the overall cost of the DoD Services Acquisition establishment, with the goal of freeing up funding for modernization and recapitalization of weapons systems, the “tip of the spear.”

Total Ownership Cost (TOC) in Services Acquisition is defined as the sum of financial resources needed to organize, train, support, sustain, manage, and operate the contract service requirement while meeting mission goals, policies, and standards of readiness, environmental compliance, safety, and quality of life concerns. Sometimes even what appears to be a simple Services Acquisition may require a level of organizational commitment, financial resources, manpower, infrastructure, and other Government costs that are not reflected in the IGCE. The TOC of a Services Acquisition should be the same as its Life Cycle Cost (LCC), which includes all the elements, appropriations, and cost categories.

MARKET RESEARCH

Robust market research, supported by the MFT, facilitates the development of a sound IGCE by:

- Identifying potential vendors and published labor rates;
- Scoping market supply and demand and associated cost impacts;
- Identifying how other potential cost drivers such as certification standards, geographic, seasonality, and other factors impact direct and indirect costs; and
- Evaluating previous buys for relevancy and currency.

The *Market Research Report Guide for Improving the Tradecraft in the Acquisition of Services* provides useful information on preparation, considerations, and methods as well as optional report templates for market research. (See References Section for link.)

Sources of Information

- Historical cost information such as previous prices and quantities purchased as part of prior contracts, current or previous documents, and the previous IGCE. It is important to ensure that the information is relevant and recent and that the sources of information are for similar services;
- Commercial pricing sources, catalogs, and market surveys;
- Comparable data for specific firms/industries may be available from the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Agency (DCMA);
- Contracting Office personnel, including the Contracting Specialist and Contracting Officer, who have experience in evaluating cost elements.
- Requests for Information (RFIs);
- Industry Day;
- General Services Administration (GSA) One Acquisition Solution for Integrated Services (OASIS) Tool for Professional Services;
- GSA Acquisition Gateway Contract-Awarded Labor Category (CALC) Tool, which provides fully burdened labor rates; and
- Economic Research Institute (ERI). ERI databases can be used to set the benchmark for reasonable and acceptable rates.

It is important to note that not any one of the aforementioned sources of information will provide the MFT with everything that it needs in order to develop a sound IGCE; however, the MFT can get bits of information from each, as each has its own strengths and weaknesses.

COST ESTIMATION

The format and content of the IGCE will differ based on the type, complexity, and value of the acquisition. The IGCE consists of the anticipated costs to include direct costs (labor, products, equipment, travel, and transportation), indirect costs (burden on labor such as fringe benefits and labor overhead), material overhead, general and administrative (G&A) expenses, and profit.

This Handbook addresses key components of an IGCE but does not cover all probable acquisitions. As the complexity of an acquisition grows, so will the number of sub-components. The IGCE should be tailored to suit the size and complexity of the description of work (PWS/SOW).

Direct Costs. As defined at FAR 2.101, direct cost means any cost that is identified specifically with a particular final cost objective. Costs identified specifically with a contract are direct costs of that contract.

Labor Costs are typically the most significant part of the IGCE in terms of dollars for either services or construction contracts. Direct labor is the labor directly applied to the performance of the contract requirements. The IGCE should identify the labor categories and the number of hours required to perform the work, known as level of effort, for each category. Market Research is necessary to determine the appropriate labor category and labor mix that supports the PWS or SOW. Consideration should also be given to the geographical location and site

(Government versus contractor facility) in which the work will be performed.

In contracts for services and construction, direct labor may be covered by the Department of Labor wage determinations (see References Section for links) and is considered *non-exempt* (typically blue collar, but may cover some white-collar occupations, such as clerical, that do not require a professional license or college degree). As non-exempt employees, they must be paid no less than delineated on the associated wage determination or collective bargaining agreement (CBA). The provisions that govern non-exempt are the Service Contract Act (SCA) for services or the Davis-Bacon Act (DBA) for construction. The SCA Directory of Occupations and the Bureau of Labor Statistics (see Reference Section for links) provide labor categories, descriptions, and historical wage data. In contrast, management and professional salaried staff, are not covered by a wage determination and are considered *exempt* (white collar occupations that typically require a professional license or college degree). As exempt employees, they will receive benefits and wages comparable to those in industry and Government.

Once the MFT has determined the labor categories and labor mix required to support the PWS/SOW, it next must calculate the number of labor hours. An average work year is 2,080 hours, which is 40 hours a week multiplied by 52 weeks a year. It is important to determine the actual productive hours, which are the hours that the employee is actually performing his or her duties. For example, one full-time equivalent (FTE) of labor equates to 1,880 hours, which is 2,080 hours less 80 holiday hours, 80 vacation hours, and 40 sick hours. IGCE preparers should ensure that the IGCE only includes the FTE for the period of performance required by the PWS or SOW. It is important to note that FTE does not necessarily equate to the actual number of people working on a particular effort.

There are two types of labor costs:

- **Unburdened:** Includes only the salary.
- **Burdened** (Fully loaded): Includes salary plus an allocation of costs for overhead, G&A, profit/fee, and any escalation for option years.

Once the basic skills and hours have been assessed, payroll additives or labor burden (fringe benefits) must be calculated. Fringe benefits are indirect expenses allocated to direct labor in the same manner as labor overhead. Often contractors will include fringe as a component of their overhead rate rather than having a separate fringe rate as part of their forward pricing.

When estimating fringe benefits, a straightforward approach may be used, and an average burden rate can be applied across all wages. However, the straightforward approach is based on an assumption and is not necessarily precise. The IGCE preparer should be aware that some contractors use different fringe and overhead rates for different types of labor, such as engineering. Information on average burden rates can be found at the Bureau of Labor Statistics (see Reference Section for link). Historical fringe benefit rates may also be available from DCMA/DCAA (see References Section for links).

Typical groupings of fringe benefits and payroll taxes in the IGCE are below.

Health and Welfare (H&W) includes life, accident, health insurance plans, pension plans, leave, severance pay, and savings and thrift plans. When preparing the IGCE, the Requiring Activity

should research individual wage determinations for specific fringe benefits for H&W covered under SCA.

The Federal Insurance Contributions Act (FICA) tax rate is comprised of separate rates for Social Security and for Medicare. Current rates are published by the Social Security Administration (<https://www.ssa.gov/oact/progdata/taxRates.html>).

Federal Unemployment Tax Act (FUTA) taxes, along with State Unemployment Tax Act (SUTA) taxes, provide for payments of unemployment compensation to workers who have lost their jobs. Most employers pay both a Federal and a state unemployment tax. The FUTA tax rates are published by the Internal Revenue Service (<https://taxmap.irs.gov/taxmap/pubs/p15-013.htm>).

SUTA tax rates vary by state and are published by the respective state unemployment agencies (<https://workforcesecurity.doleta.gov/unemploy/agencies.asp>).

Workers Compensation Insurance (WCI) is an insurance that covers injuries from work-related injuries. WCI rates vary by state. WCI rates are published by the Bureau of Labor Statistics under the “Employment Cost Trends (ECT) Databases-Employment” section (<https://www.bls.gov/ncs/ect/data.htm>).

Other Direct Costs are other charges that are directly associated with the effort. Examples include but are not limited to software licenses, Defense Base Act (DBA) insurance, shipping, travel, consultants, and subcontracts.

Materials and Equipment are items that are directly essential for the performance of the contract. The item descriptions and cost details for development of the estimate can be found, among other places, in catalogs and price quotes.

Travel. Use the Joint Travel Regulations (JTR) (see References Section for link) to estimate travel. Ensure to calculate the individuals that need to travel, the number of trips, travel locations, and the number of days per trip.

Indirect Costs. As defined at FAR 2.101, an indirect cost means any cost not directly identified with a single final cost objective, but rather identified with two or more final cost objectives or with at least one intermediate cost objective. Examples include but are not limited to: utilities, facilities, janitorial supplies, office supplies, transportation, and depreciation. When estimating indirect costs, consult DCMA/DCAA.

G&A costs are associated with management, financial, and/or other expenses incurred as part of the overall “cost of doing business.” Examples include but are not limited to: officers’ salaries, legal, insurance, and training. When estimating G&A, consult DCMA/DCAA for a representative G&A rate based on a prior audit.

Profit/fee is the dollar amount over and above allowable costs that is paid to the firm for contract performance. When estimating profit or fee, it is calculated as a percentage of the total estimated costs. Be sure to document the profit or fee rationale in the assumptions area of the IGCE.

Escalation is a percentage that is applied to future contract years to account for changes in the economy and market volatility. The Department of Labor Consumer Price Index (CPI) (see References Section for link) provides data and percentage of change in inflation/escalation factors. The Department of Labor Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services.

Assumptions that are made when preparing the cost estimate must be documented and detailed so that the Contracting Officer can understand how the estimate was derived. Be sure to note and explain assumptions in the IGCE document. An example of an assumption is that prices obtained through competition will still be valid without adjustment, except for proper escalation into future years.

COST ESTIMATION METHODS

This section is not intended to address *how it is done*, but rather is a reference list for the developer of the IGCE to recognize the terms and a quick reference guide. If desired, additional information can be found in the Contract Pricing Reference Guides (CPRG).

An IGCE can contain any combination of cost estimation methods and expert opinions. The four primary cost estimation methods used to develop cost estimates are:

Analogy (Top Down)

- Estimates are based on historical data of a similar item/system.
- Adjusts the known costs by adding or subtracting elements of material, time, and economic or inflationary changes as necessary.
- Generally less costly and less time-consuming than other methods, but also generally less accurate.
- Example: In the past when landscaping at location “A” was purchased, it was \$20,000 for 100,000 square feet; therefore, estimates are made based on similar acquisitions.

Parametric (Statistical)

- Relies on statistical analysis to establish a relationship between a technical characteristic and the cost of the system.
- When there is a simple mathematical relationship between two tasks/elements, it is known as “Factor” cost estimating. For example, initial set-up is 10% of the operation and maintenance cost.
- Measurable base units may include man-hours, trips, moves, units, and square feet.
- Use in early planning stages of a contract service when specific tasks/elements are not yet known.
- Example: Painting: 500 square feet x \$15 per square foot = \$7,500.

Engineering (Bottom Up)

- Estimates are very detailed, separated into tasks/elements.
- The cost of individual tasks and elements are estimated to the greatest level of specified detail.

- The task/element costs are then summarized or “rolled up” to higher levels.
- Cost and accuracy influenced by the size and complexity of tasks/elements.
- Example: An enterprise-wide telephone system with switches, components, and handsets.

Actual Costs (Extrapolation)

- Typically associated with tasks/elements in progress or material items when taking the actual cost of previous production lots.
- Adjusted for inflation, labor saving, production and technology changes, and other factors.

In the absence of one of the four primary cost estimates, the MFT may have to rely on the following cost estimation method:

Expert Opinion

- Relies on subject matter experts’ opinion of what something should cost.
- Typically used as a last-resort method.

GENERAL BEST PRACTICES

- Employ a Team Approach to include members of the Project Office, Contracting, Finance, General Counsel, and other stakeholders as appropriate.
- Understand the Requirement. Know the importance of the PWS.
- Be sure to follow the internal review and approval processes.
- Be sure to:
 - Engage early and often with other members of the MFT.
 - Take it one piece at a time: Do not get overwhelmed!
 - Thoroughly document IGCE methodologies, assumptions, sources, and calculations.
 - Ensure estimate reflects the period of performance, inflated properly for multi-year IGCEs.
 - Use multiple sources of market research – not just one.
 - Include the standard cost elements (e.g., direct labor, overhead), but also tailor to meet specific needs.
 - Ensure that the estimate is updated, as appropriate.

AVAILABLE TOOLS

Acquisition Center of Excellent (ACE) for Services Community

<https://www.dau.mil/cop/ace/Pages/Default.aspx>

This site serves as a platform to connect Services Acquisition practitioners from across the community, including those in the non-Acquisition Workforce.

Services Acquisition Mall (SAM)

<https://shortcut.dau.mil/sam>

Automated Requirements Roadmap Tool (ARRT) Suite

- DAU’s Services Acquisition Mall (SAM) provides usable tools and templates to create performance-based services acquisition requirements.
- Within SAM there are nine “Wings” that directly align to the SA Portfolio Groups, in accordance with DoDI 5000.74.
- The suite includes:
 - ARRT Requirements Definition: helps to write performance-based requirements (Performance Work Statement (PWS), Quality Assurance Surveillance Plan (QASP), Performance Requirements Summary (PRS))
 - ARRT Evaluation Factors: helps develop source selection factors.
 - ARRT Performance Assessment: assists CORs in executing an assessment schedule in accordance with (IAW) the QASP.
 - ARRT Cost Estimation: guides through the process of estimating costs of services detailed in the PWS, which helps create the IGCE.

General Services Acquisition (GSA) One Acquisition Solution for Integrated Services (OASIS)

<https://www.gsa.gov/portal/category/104731>

Tool pulls information from the System for Award Management (SAM) and Federal Procurement Data System, Next Generation (FPDS-NG).

- OASIS and OASIS Small Business (SB) are multiple-award, Indefinite Delivery Indefinite Quantity (IDIQ) contracts that provide flexible and innovative solutions for complex professional services.
- The core disciplines of the contract include:
 - Program Management Services
 - Management Consulting Services
 - Logistics Services
 - Engineering Services
 - Scientific Services
 - Financial Services
- Estimating Tool:
 - The automated estimating tool can be used to build realistic estimates for the labor portion of the requirements.

- Quick-to-use tool for creating the task order Independent Government Estimate.
- Incorporates statistics based on Bureau of Labor Statistics (BLS).

Acquisition Gateway – Contract-Awarded Labor Category (CALC)

<https://calc.gsa.gov/>

- Allows you to conduct market research on professional service labor categories quickly and easily.
- Facilitates searching awarded ceiling rates for specific labor categories. Therefore, results shown are awarded hourly rates from General Services Administration (GSA) IDIQ service schedules.
- Provides the +/- standard deviation and the average.
- Does not provide a breakdown of the fully burdened rate, but can provide a benchmark of where to start.

Contract Pricing Reference Guides (CPRG)

<https://shortcut.dau.mil/JST/cprg>

- Focus is on Contract Cost, Price, and Finance.
- Five Volumes:
 - Volume 1. Price Analysis
 - Volume 2. Quantitative Techniques for Contract Pricing
 - Volume 3. Cost Analysis
 - Volume 4. Advanced Issues in Contract Pricing
 - Volume 5. Negotiation Techniques

Economic Research Institute (ERI)

<https://www.eri.com/>

- ERI databases can be used to set the benchmark for reasonable and acceptable rates.

REFERENCES

- Acquisition Community Connection (ACC) Contract Pricing Reference Guides (CPRG) <https://acc.dau.mil/CommunityBrowser.aspx?id=499374>
- Bureau of Labor Statistics <https://www.bls.gov/home.htm>
- Commercial Item Guidebook Part A and Part B – *draft*, February 24, 2017 http://www.acq.osd.mil/dpap/cpic/cp/commercial_item_guide.html
- COR Handbook, Mar 2012 http://www.acq.osd.mil/dpap/cpic/cp/docs/USA001390-12_DoD_COR_Handbook_Signed.pdf
 - DAU Courses: CON 100, 121, 124, COR/CLC 206, 222, CLC 106, and CLB 007
- <https://www.dau.mil/training>
- Defense Acquisition University (DAU) Services Acquisition Mall (SAM): Acquisition Requirements Roadmap Tool (ARRT) Suite <https://shortcut.dau.mil/JST/arrt>
- DCAA <http://www.dcaa.mil/>
- DCMA <http://www.dcma.mil/>
- Defense Acquisition Guidebook (DAG), 2017 release <https://www.dau.mil/tools/dag>
- Defense Contingency COR (DCCOR) Handbook, Sep 2012 <http://www.acq.osd.mil/dpap/ccap/cc/corhb/>
- Defense Federal Acquisition Regulation Supplement (DFARS) and Procedures, Guidance, and Information (PGI)
- Department of Labor <http://www.wdol.gov/sca.aspx> or <http://www.bls.gov/bls/wages.htm>
- Department of Labor Consumer Price Index (CPI) <http://www.bls.gov/cpi/>
- DoDI 5000.72 DoD Standards for Contracting Officer’s Representative (COR) Certification, Mar 2015
- DoDI 5000.74 Defense Acquisition of Services, Jan 2016
- Federal Acquisition Institute (FAI) Contracting Professionals Smart Guide <https://www.fai.gov/drupal/resources/contracting-professionals-smart-guide>
- Federal Acquisition Regulation (FAR)
- GAO Cost Estimating Assessment Guide (GAO-09-3SP)
- Acquisition Gateway, Contract-Awarded Labor Category (CALC) <https://calc.gsa.gov/>
- One Acquisition Solution for Integrated Services (OASIS) Tool <https://www.gsa.gov/portal/category/104731>
- Guide to the Project Management Body of Knowledge (PMBOK®), 6th Ed. (September 6, 2017)
- Joint Travel Regulations (JTR) <http://www.defensetravel.dod.mil/site/travelreg.cfm>
- Market Research Report Guide for Improving the Tradecraft in Services Acquisition, Mar 2017 [http://www.acq.osd.mil/dpap/cpic/cp/docs/2017_Market_Research_Guide_\(Final\).pdf](http://www.acq.osd.mil/dpap/cpic/cp/docs/2017_Market_Research_Guide_(Final).pdf)
- SCA Directory of Occupations <https://www.dol.gov/whd/regs/compliance/wage/SCADirV5/SCADirectVers5.pdf>
- OUSD(AT&L) Memo “Taxonomy for Acquisition of Services and Supplies & Equipment” Aug 2012

OTHER HELPFUL LINKS

Agency Specific Policy

- Department of Defense
 - <http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html>
- Air Force
 - SCA Specific - <http://ww3.safaq.hq.af.mil/Contracting>
- Army
 - [https://acc.dau.mil/adl/en-US/31479/file/5705/Army ContractingAgency Guide on IGEs.doc](https://acc.dau.mil/adl/en-US/31479/file/5705/Army_ContractingAgency_Guide_on_IGEs.doc)
- Navy
 - <http://www.secnav.navy.mil/rda/Pages/PolicyGuidance.aspx>
- Marine Corps
 - <http://www.marcorsyscom.marines.mil/Professional-Staff/Programs-AC-PROG/Assessments-Branch/>
- Missile Defense Agency
 - https://www.mda.mil/business/acq_resources.html

Types of Service

- Davis-Bacon Act – Construction/Repair of Government Buildings
 - <https://www.dol.gov/whd/govcontracts/dbra.htm>
- Part 7.4 – Equipment Leasing and Purchasing
 - [https://www.acquisition.gov/sites/default/files/current/far/html/Subpart 7 4.html](https://www.acquisition.gov/sites/default/files/current/far/html/Subpart%207.4.html)
- Part 35—Research and Development Contracting
 - <https://www.acquisition.gov/sites/default/files/current/far/html/FARTOCP35.html>
- Part 36—Construction and Architect-Engineer Contracts
 - <https://www.acquisition.gov/sites/default/files/current/far/html/FARTOCP36.html>
- Part 37 – Service Contracting
 - <https://www.acquisition.gov/sites/default/files/current/far/html/FARTOCP37.html>
- Part 37.2 – Advisory and Assistance Services
 - <https://www.acquisition.gov/sites/default/files/current/far/html/Subpart>

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- Part 37.4 – Non-Personal Medical Services
 - https://www.acquisition.gov/sites/default/files/current/far/html/Subpart_37_4.html#wp1073873
- Part 39 – Acquisition of Information Technology
 - <https://www.acquisition.gov/sites/default/files/current/far/html/FARTOCP39.html>
- Part 41 – Acquisition of Utility Services
 - <https://www.acquisition.gov/sites/default/files/current/far/html/FARTOCP41.html>
- Part 47.2 – Acquisition of Transportation Services
 - https://www.acquisition.gov/sites/default/files/current/far/html/Subpart_47_2.html

Work Breakdown Structure (WBS)

- Cost Handbooks
 - http://www.gao.gov/key_issues/leading_practices_acquisition_management/issue_summary
 - GAO Cost Estimating Guide - http://www.gao.gov/resources/federal_managers/overview
 - <https://www.ncca.navy.mil/tools/csruh/index.cfm>
 - <https://www.nasa.gov/offices/ooe/CAD/nasa-cost-estimating-handbook-ceh/>
- MIL-STD 881C WBS Guidance
 - <http://dcarc.cape.osd.mil/csdr/Planning.aspx>

Data Sources of Exempt Salary

- Bureau of Labor Statistics – National Compensation Survey
 - <http://www.bls.gov/ncs>
- Payscale.com
 - <http://www.payscale.com>
- The Riley Guide
 - <http://www.rileyguide.com>

Types of Labor

- Multiple OMB Regulations
 - <http://www.fedgovcontracts.com/omb-toc.htm>

- Service Contract Regulation
 - https://www.acquisition.gov/sites/default/files/current/far/html/Subpart22_10.html
- Wage and Hour Division of the Department of Labor
 - <http://www.dol.gov/whd/>
 - <http://www.dol.gov/whd/recovery/pwrb/toc.htm>
- Wage and Hour Division – Minimum Wage Laws in the States, Jan 1, 2014
 - <http://www.dol.gov/whd/minwage/america.htm>
- Economic Research Institute (ERI)
 - <https://www.eri.com/>

Data Sources for Rates

- OPM Website for annual salary with locality pay
 - <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/>
- Process for Obtaining Wage Determination
 - <http://www.wdol.gov/e98.aspx>
- SCA Directory of Occupations
 - <https://www.dol.gov/whd/regs/compliance/wage/>
- Strategic Sourcing Website
 - <https://strategicsourcing.gov>
- Wage Determinations Online Website
 - <http://www.wdol.gov/>
 - User's Guide - <http://www.wdol.gov/usrguide>

Travel Policy

- Airfare (City Pair Program) Rates
 - <https://cpsearch.fas.gsa.gov/>
- Hotel and Per Diem Rates
 - <http://www.gsa.gov/portal/content/104877>
- Joint Travel Regulations (JTR)
 - <http://www.defensetravel.dod.mil/site/travelreg.cfm>

ACRONYMS

ACC	Acquisition Community Connection
ACE	Acquisition Center of Excellence
ARRT	Acquisition Requirements Roadmap Tool
AWD	Area Wage Determination
AWF	Acquisition Workforce
BLS	Bureau of Labor Statistics
CALC	Contract-Awarded Labor Category
CBA	Collective Bargaining Agreement
CER	Cost Estimating Relationship
CICA	Competition in Contracting Act
COR	Contracting Officer's Representative
CPI	Consumer Price Index
CPRG	Consumer Price Reference Guide
DAU	Defense Acquisition University
DBA	Davis-Bacon Act (Construction Services) or Defense Base Act (Insurance)
DCAA	Defense Contract Audit Agency
DCCOR	Defense Contingency Contracting Officer's Representative
DCMA	Defense Contract Management Agency
DFARS	Defense Federal Acquisition Regulation Supplement
DLC	Direct Labor Cost
DoD	Department of Defense
DoDI	Department of Defense Instruction
E	Exempt (FLSA Status)
ECT	Employment Cost Trends
ERI	Economic Research Institute
FAI	Federal Acquisition Institute
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
FCCM	Facilities Capital Cost of Money
FICA	Federal Insurance Contributions Act
FLSA	Fair Labor Standards Act
FOIA	Freedom of Information Act
FOUO	For Official Use Only
FPDS-NG	Federal Procurement Data System, Next-Generation
FSM	Functional Services Manager
FSS	Federal Supply Schedule
FTE	Full-Time Equivalent
FUTA	Federal Unemployment Tax Act
G&A	General and Administrative
GAO	Government Accountability Office
GSA	General Services Administration
H&W	Health and Welfare
IAW	In Accordance With
ICE	Independent Cost Estimate
IDIQ	Indefinite Delivery Indefinite Quantity
IFB	Invitation for Bids
IGCE	Independent Government Cost Estimate
IGE	Independent Government Estimate

JTR	Joint Travel Regulations
JWOD	Javits-Wagner-O'Day
MFT	Multifunctional Team
MIL-STD	Military Standard
NE	Non-Exempt (FLSA Status)
O&M	Operations and Maintenance
OASIS	One Acquisition Solution for Integrated Services
ODC	Other Direct Cost
OMB	Office of Management and Budget
OT	Overtime
PCO	Procurement Contracting Officer
PEO	Program Executive Office
PGI	Procedures, Guidance, and Information
PMBOK®	Project Management Body of Knowledge
PPI	Producer Price Index
PRS	Performance Requirements Summary
PWS	Performance Work Statement
RFI	Request for Information
RFQ	Request for Quotes
QA	Quality Assurance
QASP	Quality Assurance Surveillance Plan
SA	Services Acquisition
SAM	Services Acquisition Mall; Also, System for Award Management
SAT	Simplified Acquisition Threshold
SB	Small Business
SCA	Service Contract Act
SOW	Statement of Work
SRRB	Services Requirements Review Board
SUTA	State Unemployment Tax Act
TINA	Truth in Negotiations Act
TOC	Total Ownership Cost
UO	Uncompensated Overtime
USC	United States Code
WBS	Work Breakdown Structure
WCI	Workers Compensation Insurance

APPENDIX

- A-1 Sample IGCE Format for Firm Fixed Price Contract or Task Order
- A-2 Sample IGCE Format for Cost Reimbursement Contract or Task Order
- A-3 Knowledge-Based Services Example
- A-4 Facilities Related Services Example

**APPENDIX A-1 – Sample IGCE Format
for Firm Fixed Price Contract or
Task Order**

PROGRAM DATA

- a. Program Title:
- b. Action Officer:
- c. IGCE Preparer: <SIGNATURE>
- d. Activity Code:
- e. Phone:
- f. Date:
- g. Document/Reference No.
- h. Description of Purchase:

(Provide a narrative that explains the source of the data listed on the IGCE)

- How was the estimate made?

- What assumptions were made?

- What information/tools were used?

- Where was the information obtained from?

- How did previous estimates compare with prices paid?

Description of Goods or Service	Quantity (items or hours)	Estimated Unit Price or Labor Rates*	Estimated Fixed Price Per Line Item
		X	=
		X	=
		X	=
		X	=
		X	=
		Estimated Total Firm Fixed Price	\$

*Estimated unit prices may be obtained through market research, catalog prices, published price lists, GSA schedules, and previous purchases.

**APPENDIX A-2 – Sample IGCE Format for
Cost Reimbursement Contract or Task
Order**

PROGRAM DATA

- i. Program Title:
- j. Action Officer:
- k. IGCE Preparer: <SIGNATURE>
- l. Activity Code:
- m. Phone:
- n. Date:
- o. Document/Reference No.
- p. Description of Purchase:

*** (Provide a narrative that explains the source of the data listed on the IGCE) ***

- How was the estimate made?

- What assumptions were made?

- What information/tools were used?

- Where was the information obtained from?

- How did previous estimates compare with prices paid?

<u>Direct Labor by Category</u>	<u>Person Hours</u>	<u>Rate</u>	<u>Total</u>
	X	-	=
	X	-	=
	X	-	=
	X	-	=
		Labor Subtotal	\$
Fringe Benefits (xx% of labor)			\$
Overhead (xx% of labor & fringe)			\$
Other Direct Costs (ODC)			
Subcontracts			
Material, Equipment, etc.			
Travel & Per Diem			
Consultants			
Other			
Total Other Direct Costs		ODC Subtotal	\$
General and Administrative Expense (xx% of labor, fringe, overhead & ODC)			\$
Total Estimated Cost (Labor + Fringe+Overhead+ODC+G&A)		Subtotal	\$
Fee*/Profit (xx% of Total Estimated Cost)			\$
Total Estimated Cost & Fee**		Total	\$

* Statutory fee limitations, as presented at FAR 15. 404-4(b), areas follows:

(4)(i) The contracting officer shall not negotiate a price or fee that exceeds the following statutory limitations, imposed by 10 U.S.C. 2306(d) and 41 U.S.C. 254(b):

(A) For experimental, developmental, or research work performed under a cost-plus-fixed-fee contract, the fee shall not exceed 15 percent of the contract's estimated cost, excluding fee.

(B) For architect-engineer services for public works or utilities, the contract price or the estimated cost and fee for production and delivery of designs, plans, drawings, and specifications shall not exceed 6 percent of the estimated cost of construction of the public work or utility, excluding fee.

(C) For other cost-plus-fixed-fee contracts, the fee shall not exceed 10 percent of the contract's estimated cost, excluding fee.

**Repeat for each option year.

Appendix A-3 – Knowledge-Based Services Example¹

Direct Labor:

<u>Labor Category</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Price</u>
Program Manager	80	\$112.00	\$ 8,960.00
FOIA Specialist	9600	\$87.50	\$840,000.00
Administrative Assistant	1920	\$34.00	<u>\$ 65,280.00</u>
Total Labor			\$914,240.00

Other Direct Costs (ODCs):

Material (include detailed description)	\$ 2,500.00
Travel	\$ 10,000.00
Total ODCs	\$ 12,500.00
 Total Price	 \$926,740.00

Notes:

- A separate IGCE is needed for each year of the requirement, along with a summary IGCE for the total effort.
- GSA FSS labor rates are fully loaded (i.e., inclusive of G&A, overhead, and profit).
- For requirements not to be awarded under GSA FSS, G&A, overhead and profit must be included as separate cost elements in the IGCE.
- Travel is always IAW the Joint Travel Regulations (JTR). The contract may provide for restrictions on payment of local travel (within a 50-mile radius of the workplace) and profit on travel.

¹ Mission and Installation Contracting Command, Independent Government Cost Estimate Guide, January 2013

Appendix A-4 – Facility-Related Services Example²

Independent Government Cost Estimate Operation of Waste Water Treatment Plant/Process Fort Huge, Texas

Requirement: The requirement is for operation and maintenance of the wastewater treatment plant at Fort Huge, Texas. The basic specifications are: the aeration pond on the west end is 20 acres, the oxidation pond is 90 acres, and the polishing pond on the east end is 18 acres. Total volume in all three ponds is about 883 acre-feet (287,878,300 gallons), and the permitted treatment capacity for the pond system is 10.2 million gallons per day.

Performance: The performance area will be in Bell County, Texas, for the purposes of the Service Contract Act (SCA). Wages for non-exempt personnel will be based on Area Wage Determination (AWD) 2005-2523 (Revision 10 effective 6/15/2010).

The contract duration encompasses a base year and four (4) one-year option periods, a total of 60 months. Incorporation of the cost impact of FAR 52.217-8, Option to Extend Services, is procedural and is not included in this IGCE. The following cost estimate is for the base year, which is anticipated to encompass 12 months from xxxxxxxx to yyyyyy. The IGCE is based on anticipated award of a firm fixed-price contract with constant staffing year to year. The base-year detail summary is shown in the cost schedule below.

Labor							
	Labor Classification	FLSA	AWD	FTEs	Hours	Hrly Rate	Labor \$
	Superintendent	E	N/A	1	1920	\$ 24.18	\$ 46,425.60
	Foreman	E	25210	3	5760	\$ 17.18	\$ 98,956.80
	Stationary engineer	E	25070	1	1920	\$ 18.97	\$ 36,422.40
	Secretary II	NE	01312	1	1920	\$ 13.39	\$ 25,708.80
	Accounting Clerk III	NE	01313	1	1920	\$ 14.69	\$ 28,204.80
	Carpenter, Maintenance	NE	23130	2	3840	\$ 15.84	\$ 60,825.60
	Plumber, Maintenance	NE	23810	6	11520	\$ 18.49	\$ 213,004.80
	WTP Operator	NE	25210	6	11520	\$ 15.62	\$ 179,942.40
	Mechanic, Maintenance	NE	23110	3	5760	\$ 15.95	\$ 91,872.00
	Helper/Laborer	NE	23580	3	5760	\$ 13.19	\$ 75,974.40
	TOTAL DIRECT LABOR	NE					\$ 857,337.60
	Fringe Benefits/Payroll Taxes				\$ 857,337.60	39.372%	\$ 337,550.96
	Labor Overhead				\$ 857,337.60	11%	\$ 94,307.14
	TOTAL LABOR COST						\$ 1,289,195.70
	Supplies				\$ 1,289,195.70	15%	\$ 193,379.35
	Replacement Equipment				\$ 193,379.35	150%	\$ 290,069.03
	Other direct Costs						\$ 27,635.00
	TOTAL COST INPUT BASE						\$ 1,800,279.08
	G&A Expense				\$ 1,800,279.08	15%	\$ 270,041.86
	Profit Base				\$ 2,070,320.94	8%	\$ 165,625.68
	TOTAL PRICE						\$ 2,235,946.62

²Op. cit.

Basis of Estimate: The following narrative provides explanation for the various elements of cost and profit that comprise the IGCE.

Direct Labor:

Staffing: The labor classifications and staffing (number of FTEs) were determined based on studies of similar Waste Water Treatment Plants in Texas and encompass operation and maintenance of the facility.

Wages: Inasmuch as a number of the occupations are subject to the SCA and an AWD will likely be incorporated into any awarded contract, the IGCE depicts labor positions in terms of those that are exempt from (“E”) and those that are subject to the provisions of the SCA (“non-exempts” or “NE”). Based on the current revision of the applicable AWD, the labor position code for the specific position is indicated, and the associated minimum wage was used to estimate the labor costs. The Superintendent position is based on current wages for the Water Treatment Operator position plus 10% for supervisory duties (hence the code, despite the “E” indicator of Fair Labor Standards Act (FLSA) status). Stationary Engineer is based on the AWD position (code 25070), although it is treated as an exempt.

Fringe benefits/Payroll Taxes: Were based on determining the total percentage rate using the various benefits (paid time off, payroll taxes, H&W, and WCI). It was chosen so as to at least meet the AWD requirements for leave and H&W. Retirement is usually not part of the benefits “package” based on previous experience and is not required by the AWD.

Labor Overhead: Was estimated at 11% of total labor based on the average of previous billings over a ten-year period.

Supplies: This cost element encompasses everything from chemicals used in the water treatment processes to paper used in office paperwork. Unit prices were based on the lowest of three (3) prices displayed on various websites for each of the major items in similar quantities, and discounts were taken where quantity discounts were listed. This has also been determined through billings and invoices to correlate to 15% of total labor cost during a given year.

Replacement Equipment: Refers to those assemblies and subassemblies of processing equipment which would be scheduled for replacement during the particular year as part of remedial maintenance. This has been determined through billings and invoices to be approximately 150% of the cost of supplies during a given year; unit price checks and this cost relationship were used to estimate this element of cost.

G&A: A rate of 15% was used based on previous billings over a 10-year period. The base was total cost input.

Profit: A rate of 8% of total costs was estimated based on previous billings over a 10-year period, as well as review of similar services at other Army installations.

Escalation in the Option Years: Escalation of 3% per annum was applied to exempt labor, supplies and replacement equipment, which produced various total escalation factors used to establish the option year amounts shown in the price schedule below. The overall rates of escalation are shown in the rightmost column. The 3% rate was based on previous experience at Fort Huger (amounts billed).

This produced the following total amounts by option year, with the overall increase shown in the rightmost column. The cost buildup by option year is in the attached Excel workbook.