DEFENSE CONTRACT AUDIT AGENCY
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IN REPLY REFER TO

PIC 730.5.35.4 December 2, 2019

Introduction

Section 809 of the fiscal year (FY) 2016 National Defense Authorization Act (NDAA) established the 809 Panel to research and recommend improvements to the acquisition process. Subsequently, Section 803 of the FY 2018 NDAA required the Department of Defense (DoD) to adopt commercially accepted standards of risk and materiality in the performance of incurred cost audits. The 809 Panel drafted a Professional Practice Guide (PPG), in part, to develop a risk assessment framework intended to appropriately manage DoD's risk and materiality approaches to apply in incurred cost audits. DCAA was an active member of the Section 809 Panel and assisted in drafting the PPG.

Risk-Based Sampling of Incurred Cost Proposals

The DCAA adopted a new risk-based sampling framework for sampling incurred cost proposals for audit, largely based on the contents of the PPG in MRD 19-PIC-005(R), dated December 2, 2019, and in DCAA Contract Audit Manual (CAM) 6-104. The PPG Chapter 1, *Risk Assessment,* is included as an enclosure to this memorandum.

Materiality Standards

The DCAA adopted materiality standards for performing incurred cost audits, largely based on the contents of the PPG in MRD 19-PAS-003(R), dated July 19, 2019, and in CAM 6-107. The PPG Chapter 2, *Materiality in Audits of Incurred Costs*, and Appendix A: *Consideration of Materiality and Indirect Costs* are included as an enclosure to this memorandum.

Additional Questions

Please direct questions as follows:

- Contact the Incurred Cost Division (PIC) at DCAA-PIC@dcaa.mil for risk-based sampling related questions.
- Contact the Auditing Standards Division (PAS) at DCAA-PAS@dcaa.mil for materiality standards related questions.

FOR

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Enclosures:
Section 809 Professional Practice Guide excerpts:
Chapter 1, Risk Assessment
Chapter 2, Materiality in Audits of Incurred Costs
Appendix A: Consideration of Materiality and Indirect Costs

Department of Defense

Professional Practice Guide

Audits and Oversight of Defense Contractor Costs and Internal Controls

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CHAPTER 1: RISK ASSESSMENT

The Need for Risk Assessment

DoD's system of acquisition internal controls is subject to the same economic constraints as those faced in other government agencies, organizations, and corporations. Increasing resources become necessary to achieve desired risk levels approaching zero (i.e., absolute risk avoidance).

DCAA serves many roles within DoD's system of acquisition internal controls. Chief among them is DCAA's role as auditor of costs incurred by, and reimbursed to, commercial companies that perform flexibly-priced defense procurement contracts. DoD cannot reimburse commercial companies for their contract performance costs unless they comply with contract terms and conditions.

Each year, thousands of commercial companies incur costs while performing flexibly-priced defense contracts. Accordingly, this Chapter establishes a risk assessment framework intended to focus DCAA's finite resources such that DoD's risk is appropriately managed.

Risk Assessment Framework

The foundation for this risk assessment framework rests on the materiality concepts introduced in Chapter 2 of the PPG, insofar as it aligns increasing risk levels with the annual costs incurred by contractor business units (as represented on annual final indirect cost rate proposals, also referred to as incurred cost proposals (ICPs)). As annual costs increase, so does the likelihood of being audited.

The risk assessment framework also takes into consideration several qualitative factors that may either increase or decrease the likelihood of being selected for audit. The risk assessment framework provides incentives for contractors to achieve or maintain compliant cost accounting and internal controls over government contract compliance. It also provides disincentives for those contractors who have not.

The risk assessment framework provides for three levels, or *strata* of risk: low, medium, and high. These levels are based on a contractor business unit's Auditable Dollar Volume[1] (ADV). Within each risk strata, contractor ICPs fall within specified ranges of ADV and may be selected for audit based on the stratum's criteria. Each stratum is also affected by specific risk questions that affect the frequency of the contractor being audited. This aligns audit frequency with the performance of the contractor with regards to the history of questioned costs and status of business systems. The questions differ for each stratum but relate to the following risk factors:

- The significance of historic questioned costs.
- The existence of specific Department concerns.
- The status of the business systems.
- The existence of uncorrected system deficiencies (if any).
- The existence of significant accounting or organizational changes (e.g., merger).

For contractors with final indirect cost rate proposals for which total incurred cost on DoD flexibly priced contracts is equal to or greater than $1 Billion of ADV, DoD will conduct an audit regardless of the above factors. For all other final indirect cost rate proposals, the frequency of audit should decrease

[1]ADV is the sum of all of the costs on flexibly-priced contracts for a contractor during a given fiscal year

provided the risk factors are met. The risk assessment framework is provided below and available on the DCAA website.

Table 1. Risk Assessment Framework

	Low Risk Strata	Medium Risk Strata	High Risk Strata
	< 100M	$100M-$500M	> $500M
Sampling Notes	N/A	$100M–$250M: Audit every 5th year if not selected during sampling process > $250M–$500M: Audit every 4th year if not selected during sampling process.	$1B or more: Audit > $500M–<$1B, if the answer to each of the question below is No, the contactor's ICP will move to the medium risk category with the possibility of being sampled for audit in that year. Must be audited every other year.
Risk Assessment Protocol	For contractors with < $5M ADV, answer questions 1 and 2 below. For contractors with $5M to <$100M ADV, answer all three questions below. 1) Assess the risk of incurred cost proposal using the questions (below). 2) If risk assessment identifies no areas of concern, the incurred cost proposal placed into sampling strata for chance of being selected. 3) If risk assessment identifies area of concern, the incurred cost proposal will be audited.	For contractors with $100M–$250M in ADV, was a determination letter used to close the prior four contractor fiscal years? (A YES response indicates proposal must be audited regardless of initial risk.) For contractors with > $250M–$500M in ADV, was a determination letter used to close the prior three contractor fiscal years? (A YES response indicates proposal must be audited regardless of initial risk.) 1) Assess the risk of incurred cost proposal using the six questions (below). 2) If risk assessment identifies no areas of concern, the incurred cost proposal placed into sampling strata for chance of being selected. 3) If risk assessment identifies area of concern, the incurred cost proposal will be audited.	For contractors with > $500M and <$1B in ADV, was a determination letter used to close the prior contractor fiscal year? (A YES response indicates proposal must be audited regardless of initial risk.) For contractors with $1B or more in ADV, an audit must be conducted every contractor fiscal year. 1) Assess the risk of incurred cost proposal using the six questions below. 2) If risk assessment identifies no areas of concern, the incurred cost proposal placed into sampling strata for chance of being selected. 3) If risk assessment identifies area of concern, the incurred cost proposal will be audited.
Risk Assessment Results	ICPs with ADV <5M placed in low risk strata sampling universe for sampling if the answers to questions 1 and 2 below are NO. Note: The regional Audit Manager must approve the performance of an audit. ICPs with ADV $5M – <100$M in low risk strata sampling universe if the answers to all the questions below are No.	ICPs with ADV of $100M–$500M placed in medium risk sampling universe for sampling if the answers to all six questions below are NO.	ICPs with ADV of > $500M–$1B placed in medium risk sampling universe for sampling if the answers to all six questions below are NO.
Question 1	Are there significant Questioned costs in the last completed incurred cost audit?	Are there significant Questioned costs in the last completed incurred cost audit?	Are there significant Questioned costs in the last completed incurred cost audit?
Question 2	Are there any Department concerns from the DCMA, COR, PCOs, or DCAA, etc. with a significant impact on this ICP?	Are there any Department concerns from the DCMA, COR, PCOs, or DCAA, etc. with a significant impact on this ICP?	Are there any Department concerns from the DCMA, COR, PCOs, or DCAA, etc. with a significant impact on this ICP?
Question 3	Does the contractor have a preaward accounting system survey that resulted in an *unacceptable* opinion, or a disapproved accounting system due to a postaward accounting system audit?	Does the contractor have a preaward accounting system survey that resulted in an *unacceptable* opinion, or a disapproved accounting system due to a postaward accounting system audit?	Does the contractor have a preaward accounting system survey that resulted in an *unacceptable* opinion, or a disapproved accounting system due to a postaward accounting system audit?
Question 4	N/A	Does the contractor have any business system deficiencies relevant to incurred costs for the year subject to audit?	Does the contractor have any business system deficiencies relevant to incurred costs for the year subject to audit?
Question 5	N/A	Does the contractor have any significant account practice changes in the year subject to audit?	Does the contractor have any significant account practice changes in the year subject to audit?
Question 6	N/A	Has the contractor experienced significant organizational changes in the year subject to audit?	Has the contractor experienced significant organizational changes in the year subject to audit?

CHAPTER 2: MATERIALITY IN AUDITS OF INCURRED COSTS

This chapter presents guidelines and a framework for determining materiality for use in audits of incurred costs. However, this framework and the recommended materiality thresholds are not a substitute for professional judgment.

Materiality and Significance in Incurred Cost Audits

The term *incurred cost audit* means an audit of charges to the government by a contractor under a flexibility priced contract.[2] These charges are reported annually by contractor business units, in a final indirect cost rate proposal (also referred to as an incurred cost proposal), as required by FAR 52.216-7. This proposal represents the subject matter of the incurred cost audit. The risk to the government and others who rely on this information is that amounts are materially misstated due to contractors' noncompliance with contract terms or federal regulations. If the incurred cost proposal is not materially compliant and complete, it could adversely affect decision making by those who use the information.

The objectives of an incurred cost audit are to (a) provide assurance that contractors' incurred cost proposals can be relied on to settle final indirect cost rates and (b) communicate any misstatements that may affect contract cost reimbursements. Contract costs that do not comply with contract terms, federal regulations, or agreements are referred to in audits of contract costs as *misstatements*. An incurred cost audit is designed to identify material (or significant, as explained below) misstatements, based on both quantitative considerations (amount) and qualitative considerations (nature).

A material misstatement, as used throughout this guide, means misstatements, including omissions, individually or in the aggregate, that could reasonably be expected to influence relevant decisions of intended users that are made based on the subject matter. Materiality, by definition, is more than just a number and is considered in the context of qualitative factors and, when applicable, quantitative factors. The relative importance of qualitative factors and quantitative factors when considering materiality in a particular engagement is a matter for the practitioner's professional judgment.[3]

Audits of incurred costs can be performed using standards for performance audits (GAO, *Government Auditing Standards* 2018 revision), and standards for attestation examination engagements (AICPA, *Professional Standards,* Statements on Standards for Attestation Engagements). The definition of materiality is drawn from the attestation examination standards but is not limited to only these types of engagements. For the remainder of this document use of *materiality* is based on this definition. The Government Auditing Standards define *significance* for performance audits (FY 2018 Yellow Book, paragraph 8.15) as

> *The relative importance of a matter within the context in which it is being considered, including quantitative and qualitative factors. Such factors include the magnitude of the matter in relation to the subject matter of the audit, the nature and effect of the matter, the relevance of the matter, the needs and interests of an objective third party with knowledge of the relevant information, and the matter's effect on the audited program or activity. Professional judgment assists auditors when evaluating the significance*

[2] The term 'flexibly priced contract' has the meaning given the term 'flexibly-priced contracts and subcontracts' in part 30 of the Federal Acquisition Regulation (section 30.001 of title 48, Code of Federal Regulations).

[3] Paragraph A15 of AT-C section 205, *Examination Engagements (AICPA,* Professional Standards, *AT-C sec. 205)*

> *of matters within the context of the audit objectives. In the performance audit requirements, the term significant is comparable to the term material as used in the context of financial statement engagements.*

The definition of *significant* for performance audits is similar to the definition of *materiality* for attestation examination engagements. For purposes of this document, these terms may be used interchangeably.

Both the terms *materiality* and *significance* refer to characteristics of the subject matter that are important, or relevant, to the users of the information. The terms *significant cost element* or *significant account* in this chapter refer to items that require further evaluation, and possibly testing, due to the potential of material misstatements based on quantified materiality, qualitative characteristics, other risk factors, variability, or stated concerns of the contracting officer. During the planning and fieldwork phase of the audit, *significance* is used in the context of a potential risk of misstatement (quantitative or qualitative) in a cost element or account that is more than clearly trivial. During the reporting phase of the audit, *material* or *significant* misstatements will affect the auditor's opinion or conclusion.

Compatibility of Commercially Accepted Standards for Risk and Materiality

The commercial concepts of risk and materiality are compatible with the objectives of contract cost auditing. They represent auditors' professional responsibility to determine *what matters* (i.e., the risk that costs do not comply with contract terms and federal regulations) and *how much matters* (i.e., materiality) in the context of a particular audit. What and how much matters depends on the use of the audited information.

With respect to financial statement audits of for-profit companies, the owners, potential investors, and banks use audited financial information to make investment and lending decisions. With respect to contract cost audits, contracting officers use audited financial information to negotiate contract prices, reimburse contract costs, and evaluate a contractors' compliance with contract terms. To ensure the integrity of information on which economic decisions will be made, organizations (in the context of financial statements of for-profit companies) and contracting officers (in the context of procurement contracts) use auditors to provide assurance on that information.

Commercial standards of risk and materiality conceptually apply to contract cost audits, yet the process in which they are applied is viewed through the lens of contracting officers and their responsibility to expend public funds fairly and reasonably. Auditors' evaluation of what matters (i.e., risk or significance) is made in the context of the engagement type and contracting officers' (or other government customers') needs. The auditors' assessment of what matters is also a necessary precondition to determining how much matters (i.e., materiality).

Materiality in the Context of Contract Cost Audits

The concepts of materiality and significance expressly acknowledge that some degree of imperfection is acceptable to the users of financial information. This point is emphasized throughout the commercial and government auditing standards, regulations for the oversight of financial markets, FAR and the Cost Accounting Standards (CAS). This chapter discusses materiality, consistent with commercial standards, as a guide to help auditors when performing audits of incurred contract costs.

Materiality, in the context of contract costs, represents the government's acknowledgement, consistent with the Federal Acquisition System's Guiding Principles, that there is an acceptable level of imprecision when determining or settling fair and reasonable contract prices. *Material* misstatements, individually or in aggregate, would reasonably be expected to influence the economic decisions of the government.[4] *Immaterial* misstatements would not adversely affect the economic decisions of the government as a buyer of goods and services in the commercial marketplace.

Commercial standards of risk and materiality provide for both *qualitative* and *quantitative* considerations. In the context of government contract costs, an auditor is concerned with both the nature (i.e., quality) and the amount (i.e., quantity) of a cost.

Audits of incurred contract costs generally focus on cost allowability and the completeness of contractors' cost representations. Contract cost auditors evaluate contractors' cost accounting and presentation for compliance with contract terms, FAR Part 31 cost principles (and CAS, as applicable), and other agreements between contractors and the government (e.g., advance agreements). Auditors are encouraged to discuss quantitative and qualitative materiality considerations with contracting officers or other government customers to obtain their perspectives on what is important to them. For example, auditors may be informed by contracting officers of the importance of a certain aspect of the information, such as a cost element or account, which auditors may take into consideration in their determination of materiality.

Definitions

For the purposes of this PPG, the terms below are defined as follows:

Table 2. Audit Terminology

Term	Definition
Total Subject Matter Amount	The incurred cost claimed on flexibly priced contracts during the fiscal year. It includes different categories of contract cost such as labor, materials, other direct costs, indirect costs, and is adjusted for certain types of contracts and activity such as commercial contracts. The FY 2018 NDAA, Section 803, defines *incurred cost audit* as an audit of charges to the government by a contractor under a flexibly priced contract. See Appendix B for additional information.
Accounts	Records used to group same or similar types of financial transactions during a fiscal period. An expense account's balance at the end of a fiscal period reflects the total dollar amount of transactions recorded to that account. For example, a labor expense account will include individual transactions associated with amounts paid to employees.
Cost Element	Represents the summation of accounts of a similar character and type that is included in the total subject matter. For example, the direct materials cost element is comprised of all material costs on government contracts, and may include, for example, accounts for direct purchases, allocations from company owned inventory, and allocations for material factors. The cost element is similar to a line item in financial statements.

[4] The FY2018 NDAA, Section 803, defines *numeric materiality standard* as "a dollar amount of misstatements, including omissions, contained in an incurred cost audit that would be material if the misstatements, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the Government made on the basis of the incurred cost audit."

Term	Definition
Significant Cost Element or Account	Represents a cost element or account that requires further evaluation and testing due to quantified materiality, qualitative characteristics, other risk factors, variability, or stated concerns of the contracting officer, and is applicable to any type of engagement performed. Significance is relevant in the planning and reporting phases of the audit.
Materiality	In general, misstatements, including omissions, are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence relevant decisions of intended users that are made based on the subject matter. Materiality is considered in the context of qualitative factors and, when applicable, quantitative factors. The relative importance of qualitative factors and quantitative factors when considering materiality in a particular engagement is a matter for the practitioner's professional judgment.[5]
Quantified Materiality	The numeric representation of materiality that is calculated based on the total audit subject matter. It is used in planning to identify significant cost elements. Quantified materiality is similar to planning materiality used in financial statement audits.
Adjusted Materiality	The amount or amounts set by the auditor at less than quantified materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the incurred cost proposal, taken as a whole. It also refers to the amount or amounts set by the auditor at less than the materiality level or levels for particular classes of transactions, account balances, or disclosures. Adjusted materiality is similar to performance materiality used in financial statement audits.
Quantitative Materiality Factors	Quantitative factors relate to the magnitude of misstatements or questioned costs relative to the reported amounts for those aspects of the subject matter, if any, which are expressed numerically or otherwise related to the numeric values.[6]
Qualitative Materiality Factors	Risk and qualitative materiality factors are understood in the context of the subject matter as relating to, or measured by, the quality of subject matter rather than its quantity. Qualitative materiality factors can include whether the misstatement affects compliance with laws or regulations, the result of an intentional act (i.e., fraud), and importance to the users of the information regardless of dollar amount.[7] For planning purposes, the auditor may design audit procedures to address risk of potential material noncompliance related to these qualitative factors. For reporting purposes, and after completion of fieldwork, the actual misstatements should be evaluated for significance based on these qualitative factors in addition to quantitative factors.
Nominal Reporting Amount	The nominal reporting amount is an amount at which any adjustment (misstatements or noncompliance) taken individually would be immaterial regardless of other factors. It is used during the reporting of results to determine the impact of certain qualitative amounts that are significant based on nature but so small in value they are still considered immaterial. Regardless, although not included in the audit report, these items are separately communicated to the contracting officer in a summary of misstatements. The nominal reporting amount is similar to the nominal amount used in financial statement audits.
Misstatement	When the contract costs that are billed, or reported, to the government do not comply with contract terms and federal regulations such as FAR and CAS. The primary source of misstatements for incurred cost audits is cost type (FAR 31.205), contract clauses, cost reasonableness, and cost allocation (FAR 31.201 to 31.204 or CAS if applicable). When a misstatement is identified, it is typically referred to as a noncompliance that can be measured as a dollar amount of questioned contract costs.

[5] Paragraph A15 of AT-C section 205
[6] Paragraph A19 of AT-C section 205
[7] Paragraph A18 of AT-C section 205

Engagement Materiality Framework

The Engagement Materiality Framework describes the process for calculating and using materiality throughout the audit process and is organized by phases of the audit, as follows:

Table 3. Engagement Materiality Framework

Audit Phase	Engagement Materiality Framework Step
Planning	1) Calculate quantified materiality
Planning	2) Identify significant cost elements
Planning	3) Identify significant accounts within significant cost elements 4) Consider the use of adjusted material in sampling and tolerable error 5) Determine the nature, timing, and extent of audit procedures on significant cost elements and accounts considering risk and materiality.
Fieldwork	6) Perform testing procedures and document results.
Conclusion and Reporting	7) Evaluate misstatements based on quantitative and qualitative materiality characteristics. 8) Report or communicate misstatements, in compliance with Government Auditing Standards.

Step 1: Calculate Quantified Materiality

Quantified materiality relates to the magnitude of misstatements relative to reported amounts for those aspects of the subject matter, if any, that are expressed numerically or otherwise related to numeric values. Use of quantified materiality is appropriate for audits of incurred cost because the total subject matter can be measured as a numeric value. Quantified materiality is used in the planning phase of the audit to identify significant cost elements and affects use of adjusted materiality during fieldwork (Engagement Materiality Framework Step 3). The process to calculate qualified materiality includes the following:

- ***Define Total Audit Subject Matter:*** The audit subject matter is expressed numerically, and for purposes of the materiality calculation, includes the total subject matter upon which an auditor will be expressing an opinion and providing assurance.

- ***Calculate Quantified Materiality:*** Quantified materiality is based on auditor judgment and is influenced by industry benchmarks, reasonableness, and the needs of the users of the information. It represents the amount, or percentage, of the Total Audit Subject Matter that can be misstated and influence the decisions of those who use the information.

Commercially accepted practices for determining quantitative materiality involve the application of percentages to elements of financial information. For example, a financial statement auditor may use 5 percent of net income, or 0.5 percent of net assets, as a benchmark for quantitative materiality. If net income is $1,000,000, then, in an auditor's judgement, misstatements of more than $50,000 (5 percent) individually, or in the aggregate, would likely influence the economic decisions of financial statement users. If net income is $100,000,000, then misstatements of more than $500,000 (5 percent) individually, or in the aggregate, would likely influence the economic decisions of financial statement users.

As the examples above show, commercially accepted materiality benchmarks tend to maintain their proportionality as financial values increase. This proportionality occurs because financial statement users need assurance that the financial statements fairly represent a company's financial position in accordance with GAAP. It is not necessarily the dollar value of misstatements that matters to financial statement users; rather, it is whether the financial statements fairly represent the company's performance within an acceptable margin of imperfection.

Recommended materiality thresholds are provided below that are consistent with industry norms and acceptable for use in incurred cost audits. The practical application of quantified materiality is not limited to these thresholds as auditor judgment with consideration of qualitative factors, risk, and variability have an impact.

The materiality thresholds recommended below adjust (by algebraic equation) downward as the amount of cost subject to audit increases. Because contract audits involve contractors' costs that may be reimbursed with public funds, applying a static benchmark could produce unacceptably large materiality thresholds. For example, 5 percent of $100,000 (or $5,000) is perceived much differently than that same percentage applied to $1,000,000,000 (or $50,000,000). In this instance, it would be more appropriate to use a threshold of 0.5 percent for $1,000,000,000 because the resulting materiality threshold of $5,000,000 is more aligned with the government's economic decision-making responsibility.

Recommended Materiality Thresholds for Incurred Cost Audits

Table 4. Incurred Cost Audit Proposals Subject Matter

Subject Matter Cost	$100K	$1M	$10M	$100M	$500M	$1B	> $1B
Materiality Amount	$5,000	$28,117	$158,686	$889,140	$2,973,018	$5,000,000	*Varies*
Materiality Percentage	5%	2.81%	1.58%	0.89%	0.59%	0.50%	0.50%

For Incurred Cost Proposal Audit Subject Matter from $1 to $1,000,000,000 use:

- Materiality Threshold = $5,000 x ((Total Subject Matter / $100,000) ^ .75)

For Incurred Cost Proposal Audit Subject Matter greater than $1,000,000,000 use:

- Materiality Threshold percentage of 0.50 percent

Quantified materiality does not change due to the type of engagement performed (e.g., examination or performance audit). Professional judgments about quantitative materiality are made in light of contract dollars subject to audit (i.e., engagement subject matter) and are not affected by the level of assurance. Materiality is based on the needs of those who use the information irrespective of the type of engagement performed.

The application of quantified materiality neither limits auditor judgment nor places restrictions on what an auditor can test based solely on dollar value. Rather, the quantified materiality amount is intended to create a consistent threshold that helps an auditor calibrate the nature, timing, and extent of audit procedures relative to the unique risks and qualitative considerations of each engagement. It is considered in the context of qualitative factors and, when applicable, quantitative factors. The relative importance of qualitative factors and quantitative factors when considering materiality in a particular engagement is a matter of the practitioner's professional judgment.[8]

The example below illustrates a basic quantified materiality calculation. The total subject matter represents all costs for flexibly priced contracts (i.e., engagement subject matter), whether direct or indirect, of $200,500. The total subject matter is then multiplied by the quantified materiality formula to compute the materiality amount used during the audit.

Figure 1. Illustrative Basic Quantified Materiality Calculation

$8,425 = $5,000 x (($200,500/$100,000) ^.75)

The quantified materiality amount is $8,425, which is 4.2% of the total engagement subject matter ($8,425/$200,500).

Incurred Cost Submission:	Total
Direct Labor	$100,000
Direct Materials	$50,000
Other Direct Costs	$10,000
Overhead	$20,000
G&A Expense	$20,500
Total Subject Matter (a)	$200,500
Materiality Threshold (b)	4.2%
Materiality (c)	$8,425

Step 2: Identify Significant Cost Elements

A significant cost element is identified by quantified materiality, qualitative materiality characteristics, and other risk factors. The process for determining a significant cost element is as follows:

- ***Quantified Materiality:*** The auditor should identify all cost elements equal to or greater than quantified materiality as significant.
- ***Risk and Qualitative Factors:*** The auditor should consider risk and qualitative factors for all cost elements less than quantified materiality. Cost elements may still be considered significant and subject to testing procedures based on risk factors and qualitative characteristics such as a

[8] Statements on Standards for Attestation Engagements (SSAE) Number 18; AT-C 205.A15.

history of identified misstatements, nature of particular costs, and needs of the users of the audited information.

- ***Variability:*** The auditor may use judgment and incorporate variability, or unpredictability, in the selection of cost elements to test. For example, an auditor has elected to not test a cost element for the last 2 years due to an immaterial balance. In the current year, and to ensure variability and unpredictability in the testing approach, the auditor may select the cost element for testing. This prevents a pattern from forming and discourages the contractor from recording misstatements in cost elements that have a history of not being tested.

The following example compares the quantified materiality amount of $134,200 to the cost elements within the subject matter. The materiality amount was calculated by including the total subject matter of $8,036,024 in the materiality threshold equation. The associated materiality threshold percentage is 1.67 percent ($134,200/$8,036,024). In the example, an auditor would identify the cost elements of direct labor, direct materials, subcontracts, overhead, and general and administrative costs as significant based on quantified materiality.

Table 5. Comparison of Quantified Materiality to Cost Elements

Cost Element	Amount	> Materiality of $134,200
Direct Labor	$2,441,657	**YES**
Travel	$54,092	NO
Direct Materials	$188,716	**YES**
ODC	$11,175	NO
Subcontracts	$3,329,051	**YES**
Indirect Overhead	$1,138,408	**YES**
G&A (Value Added)	$872,925	**YES**
Total Subject Matter	$8,036,024	
Materiality Threshold	1.67%	
Materiality	**$134,200**	

A *YES* in the table above means that the cost element is significant and should be further evaluated at the account level, but it does not automatically mean the entire amount will be tested. An auditor is responsible for auditing significant costs elements based on materiality or other factors, but the nature, timing, and extent of audit procedures may vary based on auditor judgment.

The cost elements that are less than the quantified materiality amount may be tested due to qualitative materiality characteristics, other risk factors, or if, in an auditor's judgment, they may contain immaterial misstatements that could be material in the aggregate. The following examples illustrate an auditor's potential qualitative considerations relative to the travel cost element, which is less than the quantified materiality amount. In this example, the auditor did not identify qualitative or risk concerns for the ODC cost element, which is also less than the quantified materiality amount:

- The contractor's travel cost element has a history of misstatements, which have been investigated in the past, and is a stated concern of the contracting officer. If the user of the information (i.e. the contracting officer) considers a particular cost element to be significant based on qualitative facts and circumstances, then an auditor may evaluate it at the account level in the same manner as any other significant cost element.

- The contractor's travel cost element has no history of misstatements, and the contracting officer did not express any concerns in this area. However, the travel cost element was not tested in the prior 2 years. The auditor could test the travel cost element to ensure variability and unpredictability in the audit approach, regardless of whether the risk and qualitative characteristics indicate no testing may be appropriate.

The body of work necessary to support the opinion, or audit conclusions, is generally met with the testing of cost elements and accounts with values greater than materiality or adjusted materiality. The use of qualitative or other risk factors to identify significant cost elements should be based on actual, objective, and measurable facts and circumstances such as history of questioned costs, and needs of the users of the audited information. Absent these objective factors, the auditor is expected to adhere to materiality thresholds. The auditor should document the justification for deviating from the materiality thresholds. See Appendix A for unique considerations regarding indirect costs.

Step 3: Identify Significant Accounts

A significant account is identified by adjusted materiality (as explained below), qualitative materiality characteristics, and other risk factors. The process for identifying significant accounts is as follows:

(1) ***Adjusted materiality***: The auditor should identify all accounts equal to or greater than adjusted materiality as significant.

(2) ***Risk and Qualitative Factors***: The auditor should consider qualitative factors for all account balances less than adjusted materiality. Accounts may still be considered significant and subject to testing procedures based on risk and qualitative factors such as a history of misstatements, sensitivity, and needs of the users of the audited information.

(3) ***Variability***: The auditor should incorporate an element of variability in the selection of accounts to test. For example, an auditor elected not to test an account for the last 2 years due to an immaterial balance. In the current year, and to ensure variability and unpredictability of the testing approach, an auditor may select the account for testing. This prevents a pattern from forming and discourages the contractor from recording misstatements in accounts that have a history of not being tested.

An auditor will use *adjusted materiality* to identify significant accounts subject to audit evaluation. Quantified materiality represents the total amount the subject matter can be misstated without misleading the users of the information. Adjusted materiality is less than quantified materiality. Unless quantified materiality is adjusted at the account level, an auditor would have limited ability to identify immaterial misstatements that, in the aggregate, become material or are material by their nature even if immaterial in amount.

Adjusted materiality is used at a more discrete level in the books and records and is applied to accounts that make up the cost elements. For purposes of selecting accounts for audit testing, adjusted materiality can be stated as 20 percent to 80 percent of quantified materiality based on audit risk, the nature (or sensitivity) of transactions relative to specific cost allowability criteria, other substantive procedures performed (i.e., whether controls are tested), and the needs of the users of audited information.

The following are key concepts with the application of adjusted materiality:

- Adjusted materiality is applied to the accounts within significant cost elements.
- Once an account is selected, an auditor will test the transactions that sum to the account balance.
- Adjusted materiality is determined separately for each significant cost element.

See Appendix A for guidance on how to calculate adjusted materiality for indirect costs where the government's participation is less than 100 percent.

Adjusted materiality can be used as tolerable error (or tolerable misstatement) for the purpose of statistical sample selection (see the Step 4, Engagement Materiality Framework). The following table provides examples of justifications for degrees of adjustment to the quantified materiality for the purpose of calculating adjusted materiality:

Table 6. Justifications for Degrees of Adjustment to the Quantified Materiality

Percent Adjustment	Examples
(80%) Reduction in Quantified Materiality	▪ The cost element has a history of material misstatements in multiple accounts. ▪ The contractor is unwilling to correct prior-year material misstatements in subsequent proposals. ▪ The contractor is currently in litigation for historical costs in the same cost element and accounts. ▪ The contracting officer has significant concerns regarding the cost element that increase the sensitivity and importance.
(50%) Reduction in Quantified Materiality	▪ The cost element and multiple accounts have a history of material misstatements. ▪ Management is responsive with correcting misstatements in subsequent proposals. ▪ The contracting officer has concerns regarding the cost element that increase the sensitivity and importance.
(20%) Reduction in Quantified Materiality	▪ The cost element and accounts have limited to no instances of historical material misstatements on an aggregated basis. ▪ The reduction is to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds total quantified materiality.

The following example illustrates how to calculate adjusted materiality: Based on professional judgment, an auditor elects to reduce the quantified materiality by 20 percent (see Figure 2). If the adjusted materiality is reduced by 20 percent, the remainder represents 80% of the quantified materiality amount (100 percent - 80 percent = 20 percent reduction). The adjustment materiality is calculated by multiplying the quantified materiality of $1,025 by 80 percent (100 percent - 20 percent), for an adjusted materiality amount of $820.

Figure 2. Calculated Adjusted Materiality Illustration

Quantified Materiality	$1,025
Adjustment (less):	(20 percent)
Adjusted Materiality:	$820

Use of materiality to identify significant amounts becomes more relevant at the account level in the books and records, which make up cost elements. The higher the level aggregation of costs, the more likely that the cost will be selected.

The table below illustrates the practical application of materiality at lower levels of cost in the books or records, or at the account level. The quantified materiality is compared to the cost elements rather than the account level (as indicated by *N/A*), whereas adjusted materiality is compared at the account level (as indicated by *N/A* at the cost element level). Please note that, even if the direct material cost element is greater than quantified materiality, it may not be necessary to test each account in the cost element.

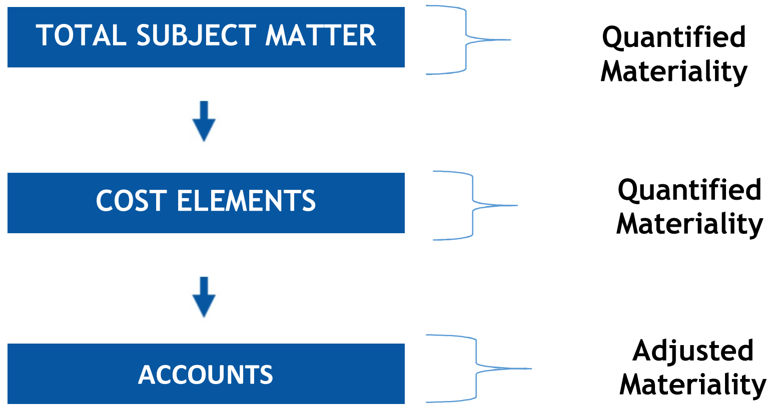
Application of adjusted materiality at the account level identifies three of the six accounts as being material and, thus, needing to be tested. The body of work necessary to support an audit is generally met when an auditor tests cost elements and accounts with values greater than quantified or adjusted materiality. Cost elements and accounts with balances below adjusted materiality (i.e., those with a *NO* response below) may still be subject to testing based on an auditor's judgment, risk factors, qualitative factors, or variability.

Table 7. Application of Materiality at Lower Levels of Cost

Category	Description	Amount	> Materiality $1,025	> Adjusted Materiality $820
Subcontracts	Cost Element	$750	NO	N/A
Direct Materials	Cost Element	$5,000	YES	N/A
Direct Materials Acct X1	Account	$850	N/A	**YES**
Direct Materials Acct X2	Account	$450	N/A	NO
Direct Materials Acct X3	Account	$980	N/A	**YES**
Direct Materials Acct X4	Account	$500	N/A	NO
Direct Materials Acct X5	Account	$350	N/A	NO
Direct Materials Acct X6	Account	$1,870	N/A	**YES**

Think of it as follows:

Figure 3. Application of Materiality at Lower Levels of Cost



An auditor may combine accounts of the same or substantially similar nature when applying adjusted materiality. For example, a contractor records engineering labor in separate general ledger accounts by project, but the combination of these accounts results in a homogenous amount that is subject to the same audit criteria. Although the contractor separated these like costs into separate accounts for operational or cost accounting purposes, an auditor may combine them for assessing adjusted materiality and testing purposes if that approach makes sense for the audit.

Step 4: Statistical Sampling and Consideration of Tolerable Error Based on Adjusted Materiality

An auditor may use adjusted materiality when determining the tolerable misstatement (or tolerable error) for statistical sample size determination.

An incurred cost audit cannot be completed *effectively and efficiently* by testing 100 percent of all transactions in the subject matter. For this reason, the auditing profession uses statistical sampling to test a representative portion of a transaction population that is sufficient to determine whether the total population is fairly stated.

Although statistical sampling techniques are outside the scope of the document, an important element of statistical sampling is *tolerable misstatement*. Tolerable misstatement represents the total amount of error an auditor is willing to accept in the statistical sample. When auditors use statistical sampling, they are incorporating materiality into the audit. See the AICPA Statistical Sampling guide for additional information.

There is an interrelationship between adjusted materiality, tolerable misstatement, and audit sampling. By using adjusted materiality (converted to a percentage of the transaction population value) as tolerable misstatement, statistical sample sizes will be commensurate with the size of the population in relation to the overall subject matter, audit risk, and materiality. The higher the tolerable misstatement, the lower the sample size.

In practice, an auditor will remove transactions greater than adjusted materiality from the population and test 100 percent of these amounts separately. The remainder of the transactions within the population would then be subject to the statistical sampling process. If the value of the remaining population (after removing transactions with values greater than adjusted materiality) is less than adjusted materiality, then an auditor may judge it immaterial and forego further statistical sampling. Generally, when the remaining population has an aggregate value greater than adjusted materiality, the transactions will be subjected to audit procedures. This process accounts for the aggregated nature of misstatements to the overall assessment of adjusted materiality.

Steps 5 and 6: Determine the Nature, Timing, and Extent of Audit Procedures; Perform Audit Procedures; Document Results

These steps represent the planning process and fieldwork related to the nature, timing, and extent of audit procedures based on the risk of material misstatement and the Audit Risk Model (inherent risk, control risk, and detection risk), if applicable. The concepts of quantified materiality and adjusted materiality should be considered, as set forth in this chapter, in this part of the audit process.

The auditor should document the basis for materiality and the method of determining materiality.

Step 7: Reporting Audit Results

An auditor can use quantified materiality as a guide for determining the existence of one or more material misstatements when forming an audit opinion, or audit conclusion, on the subject matter. An auditor will summarize all misstatements and compare them individually, and in the aggregate, to quantified materiality.

For example, in the instances of an attestation engagement if the aggregate amount of identified misstatements is less than quantified materiality, then an auditor may issue an unqualified opinion provided, however, that no *quantitatively immaterial* misstatements are *qualitatively material*. If the aggregate of all misstatements is greater than quantified materiality, or if one or more misstatements are qualitatively material, an auditor will issue a qualified or adverse opinion, as applicable. This same process can be used to evaluate scope limitations and disclaimer of opinion.

A few key points for attestation engagements include the following:

- If misstatements individually or in the aggregate exceed quantified materiality, they will result in a qualified opinion, but not necessarily an adverse opinion. An adverse opinion is appropriate if material misstatements are so pervasive that the subject matter, taken as a whole, is not reliable.

- The dollar value of some misstatements may be greater than the value of the underlying misstated transaction. For example, a misstated direct labor cost may draw allocable indirect costs. In this instance, an auditor should evaluate the fully-absorbed value of the misstatement relative to quantified materiality.

- The dollar value of some misstatements may be less than the value of the underlying misstated transaction. Indirect cost misstatements should be adjusted for participation percentages to normalize the amount to account for the proportion of the cost that is allocated to a contractor's work outside of the engagement subject matter. For example, an auditor identifies a $500,000 misstatement in an indirect cost pool with a government participation percentage of 20 percent.

The actual effect of the misstatement on the engagement subject matter (i.e., indirect costs allocated to the government contracts) is $100,000 ($500,000 * 20 percent). In this instance, an auditor should evaluate the value of the indirect cost misstatement, after adjustment for government participation, relative to quantified materiality.

- Although qualitative factors are discussed below, it is important to emphasize that some misstatements may be considered material and affect the audit opinion regardless of dollar value.

Quantified materiality is based on the presumption that misstatements, individually or in the aggregate, that exceed that amount would influence the judgment of a reasonable person using the audited financial information with knowledge of the uncorrected misstatements.

An auditor's assessment of materiality requires consideration of both quantitative and qualitative factors in the context of the *total mix* of information available to the users of the audited financial information. As a result, qualitative factors, such as the existence of expressly unallowable costs or evidence of irregularities, could be material facts within the *total mix* of information regardless of dollar value.

The following table sets forth examples of qualitative considerations unique to incurred costs audits that may result in quantitatively immaterial misstatements being considered material and, in turn, affect the audit opinion or audit conclusion. The information below is intended to be illustrative of relevant qualitative factors, rather than exhaustive.

Table 8. Examples of Qualitative Considerations Unique to Incurred Costs Audits

Qualitative Factor	Explanation
Expressly Unallowable Indirect Costs	According to FAR 52.242-3, the inclusion of expressly unallowable indirect costs, when identified, explicitly contradicts the contract terms and subjects the contractor to penalties. The pervasive existence of this form of misstatement creates a higher level of sensitivity and risk when reporting audit results. The determination of a material misstatement is at the auditor's judgment, but generally these misstatements should be evaluated for materiality with less emphasis on the quantified materiality.
Specific Contract Terms	The audit criteria applicable to audits of incurred costs represent contract terms that incorporate specific elements of the FAR, CAS, and so forth. In addition to these regulations, certain contracts may have unique clauses, such as cost limitations on certain activities and the disallowance of certain types of costs such as overtime. Because these unique clauses establish the specific desires of a particular government customer, quantitatively immaterial but pervasive misstatements in this regard may be viewed as material to that customer.

Other relevant qualitative factors may relate to the audit subject matter and the needs of the acquisition community. For example, a contractor may have significant restructuring costs, purchase accounting for an acquisition, overseas operations, or other issues that have qualitative considerations that differ from the ones identified above but are just as relevant. The nominal reporting amount can be considered for reporting misstatements due to qualitative factors.

Step 8: Report or Communicate Misstatements

The auditor should report or communicate, as appropriate, both material and immaterial misstatements to the contracting officer in accordance with Government Auditing Standards (FY 2018 Yellow Book, paragraphs 7.46 and 9.38):

> *When auditors detect instances of noncompliance with provisions of laws, regulations, contracts, and grant agreements that do not warrant the attention of those charged with governance, the auditors' determination of whether and how to communicate such instances to audited entity officials is a matter of professional judgment.*

For incurred cost audits, the need for communicating immaterial information is important because it can result in the transfer of funds between the contractor and government. For example, $5,000 of questioned direct cost not only may impact the audit opinion or conclusion, but also represents an amount that may be recovered by the government. These amounts should be communicated to the contracting officer to facilitate appropriate disposition.

APPENDIX A: CONSIDERATION OF MATERIALITY AND INDIRECT COSTS

Indirect costs are allocated to contracts by using indirect cost rates, which represent a pool of indirect costs divided by a cost base of a contractor's direct and/or indirect activities. Indirect costs are, by definition, costs that cannot be directly allocated to contracts. A contractor's final indirect cost rate proposal (i.e., incurred cost proposal) contains several schedules that identify these pools and bases.

Participation Percent: Because indirect costs are not directly charged to contracts, they are allocated over a base of costs representing business activities that may include a mix of commercial and competitively award fixed price work, as well as flexibly-priced government contracts. Therefore, the indirect costs allocated to flexibly priced government contracts may be less than the total amount of the respective indirect cost pool(s). The participation percentage for each final indirect cost pool reflects the proportion of flexibly-priced government contract activity within the allocation base to the total of all activity in the allocation base. For example, if a general and administrative (G&A) cost base is $1,000,000 and the cost of activity on flexibly priced government contracts is $100,000 of the base, then the participation percent is 10 percent ($100,000/$1,000,000). This affects the audit approach for indirect costs because adjusted materiality should take into account the participation percent.

See the FAR and CAS for additional information on indirect costs and rates.

The following steps should be followed by an auditor when calculating adjusted materiality for indirect costs:

- The auditor will calculate quantified materiality and determine whether the indirect cost elements are significant.
- From the perspective of quantified materiality, the significance of indirect costs is based on the contribution of those costs to the total subject matter.
- If the specific indirect cost element is immaterial, then the auditor may perform limited procedures.

The example below includes direct and indirect cost elements with a total subject matter amount of $8,219,400. The subject matter amount is the summation of all costs direct and indirect. Quantified materiality is calculated using the total subject matter and the materiality formula in this chapter, which results in a benchmark of $136,490, or 1.66 percent of the subject matter ($136,490/$8,219,400). An auditor will compare the quantified materiality to the cost elements and determine whether they are significant. Using this approach, the cost elements of direct labor, subcontracts, overhead indirect costs, and G&A costs are considered quantitatively material. Note, an auditor may still consider certain quantitatively immaterial cost elements to be material based on their professional judgment concerning risk and qualitative factors.

Figure 5. Example with Indirect Costs

Incurred Cost Proposal		> Materiality $136,490 (YES/NO)
Direct Costs:		
Direct Labor	$ 5,000,000	**YES**
Direct Materials	$ 100,000	NO
Other Direct Costs	$ 80,000	NO
Subcontracts	$ 1,000,000	**YES**
Indirect Costs:		
Overhead	$ 1,112,400	**YES**
General and Administrative	$ 927,000	**YES**
Total Subject Matter:	$ 8,219,400	
Materiality Threshold:	**$ 136,490**	

For the calculation of adjusted materiality, an auditor should revise quantified materiality for the indirect costs 'participation percent' to identify significant accounts. The table below compares the costs allocated to flexibly priced government contracts (i.e., subject matter) to the total costs in the pool, which, when divided together, yields the participation percent.

Table 10. Comparison of Costs Allocated to Flexibly Priced Government Contracts

Indirect Costs:	Total Subject Matter	Total Cost in Pool	Participation Rate
Overhead	$1,112,400	$11,124,000	10%
General and Administrative	$927,000	$11,587,500	8%

Based on the above calculation the government participation percent for overhead costs is 10 percent and G&A costs is 8 percent. An auditor may now revise the quantified materiality for the participation percent. This aligns the materiality for the engagement to the total cost in the pools. Because the government participates in these pools, 10 percent and 8 percent, respectively, misstatements (individually or in the aggregate) in the overhead and G&A pools would have to exceed $1,364,898 and $1,706,122, respectively, to yield a $136,490 misstatement on flexibly priced government contracts.

Table 11. Revised Materiality Calculations

Indirect Costs:	Participation Percent	Materiality	Revised Materiality
Overhead	10%	$136,490	$1,364,898
General and Administrative	8%	$136,490	$1,706,122

The revised materiality amount for the overhead cost is calculated by dividing the quantified materiality of $136,490 by 10 percent. The revised materiality amount for general and administrative cost is calculated by dividing the quantified materiality of $136,490 by 8 percent.

- Calculate adjusted materiality using the revised quantified materiality (see above) and in the same manner as Step 3 of the Engagement Materiality Framework. The adjusted materiality will be used for the identification of significant accounts that comprise the indirect cost rate pool.

The following example uses a reduction of 20 percent to calculate adjusted materiality.

Table 12. Materiality Adjusted by 20 Percent

Indirect Costs:	Revised Materiality	Adjustment	Adjusted Materiality
Overhead	$ 1,364,898	20%	$ 1,091,918
General and Administrative	$ 1,706,122	20%	$ 1,364,898

- Based on adjusted materiality, determine which accounts are quantitatively material. Evaluate the accounts for factors such as risk, qualitative factors, and variability. Determine the nature, timing, and extent of testing.

The following example compares the adjusted materiality amount of $1,091,918 to accounts in the overhead cost pool. This illustration lists only three accounts of many. Based on adjusted materiality, only the labor account is considered significant. The process for the general and administrative accounts is the same as the overhead accounts.

Table 13. Comparison of Adjusted Materiality to Accounts in Overhead Cost Pool

Overhead Pool Accounts		Amount	> Adjusted Materiality (YES/NO)
6001	Labor	$ 3,000,000	**YES**
6002	Operating Supplies	$ 900,000	NO
6003	Computer & Data Process Supply	$ 100,000	NO
XXXX	……….	……….	……….
		$ 11,124,000	

Auditors are responsible for determining the nature, timing, and extent of audit procedures for the labor account. Note, auditors may consider accounts less than adjusted materiality to be significant based on their professional judgment of risk and qualitative factors.