

► For Audits of Architectural and Engineering (A/E) Consulting Firms



2024 Edition

UNIFORM AUDIT & ACCOUNTING GUIDE

AASHTO

Full document details: AASHTO UAAG-5-2024

American Association of State Highway and Transportation Officials



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American Association of State Highway and Transportation Officials

555 12th Street NW, Suite 1000
Washington, DC 20004
202-624-5800 phone/202-624-5806 fax
www.transportation.org

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ISBN: 978-1-56051-823-5

Publication Code: UAAG-5



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ACKNOWLEDGMENTS

Discussions among AASHTO members at the regional level and at annual AASHTO meetings led to the creation of the first edition of the *Uniform Audit & Accounting Guide*, as released in March 2001. The guide was designed to assist engineering consultants, independent CPAs, and state DOT auditors with the preparation, and/or auditing, of Statements of Direct Labor, Fringe Benefits, and General Overhead (indirect cost rate schedules).

Over the years, many people have contributed to the guide by providing input, conducting research, attending working sessions, facilitating meetings, editing, proofreading, and providing other support. The participants included representatives from state Departments of Transportation, the FHWA, the American Council of Engineering Companies (ACEC), public accounting firms, and AASHTO. Their knowledge, time, travel funding, and supplies were instrumental in the nationwide team effort that led to this 2024 edition of the guide.

Preface

ABOUT THIS GUIDE

This *Uniform Audit and Accounting Guide* was developed by the American Association of State Highway and Transportation Officials (AASHTO) Committee on Internal and External Audit with assistance from the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), and the American Council of Engineering Companies (ACEC). The AASHTO Committee on Internal and External Audit is comprised of the senior audit representative from each state’s transportation or highway department. This Guide was developed over several years and initially was approved by AASHTO at the organization’s 2001 annual meeting.

During 2007, the members of the then Audit Subcommittee approved the establishment of a Task Force to update the guide. The work of the Task Force resulted in a major update of the guide in 2010 (the 2010 Edition), which was further refined and updated in 2012 (the 2012 Edition). These revisions were necessary to ensure that the guide was consistent with current auditing standards and procedures, accounting principles, and Federal regulations. The 2010 and 2012 revisions also addressed questions and concerns expressed by various parties, including the FHWA, state DOT audit agencies, Architectural and Engineering design firms (hereinafter referred to as “A/E firms” or “engineering consultants”), and public accounting firms. These questions and concerns arose through current practice and, in part, through the findings and recommendations from an audit performed by the U.S. Department of Transportation’s Office of Inspector General (OIG).¹

This 2024 Edition of the guide incorporates several updates, refinements, and clarifications necessary to reflect changes in the statutory and regulatory framework applicable to A/E contracts that have occurred since the publication of the 2016 Edition. This 2024 guide should be used as a tool by state DOT auditors, A/E firms, and public accounting firms that perform audits of A/E firms. The techniques presented herein primarily focus on examination, auditing, and reporting procedures to be applied to costs that are incurred by A/E firms for engineering and design-related services performed on various Federal, state, and local transportation projects.

The techniques discussed in this Guide were designed to be applied to audits performed in connection with engineering consultants’ *Statements of Direct Labor, Fringe Benefits, and General Overhead* (hereinafter referred to as “indirect cost rate schedules”), as well as the related accounting systems, job-costing systems, and labor-charging systems that serve as the basis for the indirect cost rate schedules. However, this Guide is not intended to be a comprehensive auditing procedure manual, but is instead a guide to assist users in understanding terminology, policies, procedures and audit techniques, and sources for applicable Federal Regulations. This Guide provides only general guidance and is not meant to, and cannot, supersede either the Federal Acquisition Regulation (FAR) or any related laws or regulations.²

¹ See “Oversight of Design and Engineering Firms’ Indirect Costs Claimed on Federal-Aid Grants” (Report Number: ZA-2009-033), issued February 5, 2009.

² Use of this Guide is not required by Federal law or regulation. As recommended by the FHWA, most state DOTs have adopted risk assessment procedures to help determine engineering consultants’ compliance with FAR Part 31 and related laws and regulations. Consistency with this Guide may be a key factor in assessing risk, and departures from the procedures recommended herein, lacking adequate justification, may lead to additional scrutiny by a reviewing state DOT. Accordingly, engineering consultants are strongly encouraged to adopt the uniform reporting procedures illustrated herein, including, but not limited to, labor charging practices, cost accumulation and reporting processes, and the format and content of indirect cost schedules (including the recommended standard disclosures). Engineering consultants should contact their respective cognizant state DOTs for further details and clarifications regarding risk assessment and application of this Guide.

Users should be aware that the FAR Cost Principles change frequently; accordingly, please review the applicable FAR version in conjunction with this Guide. Likewise, illustrations and sample reports either included or referenced herein were derived from various sources and information current at the time the guide was published. Due to periodic changes in Generally Accepted Accounting Principles (GAAP), Generally Accepted Auditing Standards (GAAS), and Government Auditing Standards (GAGAS or the Yellow Book), users should refer to any applicable, more current guidance/standards and modify the audit procedures and sample reports accordingly to comply with all applicable standards.

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1

Chapter 1—Organization of this Guide and Defined Terms

1.1—ORGANIZATION OF THIS GUIDE

This *Uniform Auditing and Accounting Guide* is organized in chapters. Chapters are subdivided into sections, subsections, and paragraphs. For the sake of brevity, internal references to this Guide most commonly follow the short reference format as illustrated in the following examples:

Short Reference

Section 2.4
Section 3.2.D
Section 5.6.A.2
Section 5.4..a

Full Reference

Chapter 2, section 4
Chapter 3, section 2, subsection D
Chapter 5, section 6, subsection A, paragraph 2
Chapter 5, section 4, subsection F, paragraph 2, clause a

1.2—GENERAL TERMS

In this Guide, words not defined shall be given their plain meaning. The following defined words and terms are used throughout this Guide—

- AASHTO refers to the American Association of State Highway and Transportation Officials.
- Unless designated more specifically in any particular Section of this Guide, the terms “A/E firm,” “engineering consultant,” “consultant,” “contractor,” or “firm” refer to architectural and engineering design companies that perform work on government contracts.
- AICPA refers to the American Institute of Certified Public Accountants, the national, professional organization for all Certified Public Accountants.
- The terms “the CPA auditor,” or “the CPA” refer to independent CPA firms that perform audit engagements for A/E firms. The term “auditor” also refers to the State Transportation Agency auditor.
- The *Code of Federal Regulations* (CFR) is the codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the Federal Government. The CFR is divided into 50 titles that represent broad areas subject to Federal regulation. 48 CFR Chapter 12 sets forth the general guidelines used by state DOTs.
- The Cost Accounting Standards, or “CAS,” are issued by the Cost Accounting Standards Board (CASB), a section of the Office of Federal Procurement Policy within the U.S. Office of Management and Budget. The CASB has the exclusive authority to issue and amend cost accounting standards and interpretations designed to achieve uniformity and consistency in the cost accounting practices governing the measurement, assignment, and allocation of costs to contracts that involve Federal funds. The CAS are codified at 48 CFR Chapter 99. Certain CAS provisions

are incorporated into FAR Part 31 and therefore apply to most Federal-aid highway program (FAHP) projects, while other provisions apply only to large contracts.

- The *DCAA Contract Audit Manual* (CAM or DCAA Manual 7640.1) is an official publication of the Defense Contract Audit Agency (DCAA). The CAM prescribes auditing policies and procedures and furnishes guidance in auditing techniques for personnel engaged in performing audits in compliance with FAR Part 31 and related laws and regulations. The CAM is published semiannually by the DCAA.
- The *Federal Acquisition Regulation*, Part 31 (FAR). The FAR is codified at 48 CFR Part 31. The FAR is the primary regulation governing the acquisition of supplies and services with Federal funds. 48 CFR Part 31 sets the criteria for determining costs eligible for reimbursement on Federally-funded agreements and may be used to determine allowable costs for contracts funded solely by state funds.
- *FAR Audit* refers to a formal audit of the indirect cost rate schedule and associated notes, to obtain reasonable assurance that the schedule is presented in accordance with the Cost Principles of FAR Subpart 31.2. When performing FAR audits, auditors must apply the standards applicable to financial audits as contained in the Government Auditing Standards issued by the Comptroller General of the United States and, by reference, AICPA standards for audits of financial statements prepared in accordance with special purpose frameworks
- The *Federal Travel Regulation* (FTR) is contained in 41 CFR Chapters 300 through 304. The FTR implements policies for travel by Federal civilian employees and others authorized to travel at the Federal Government's expense. The FAR incorporates certain FTR provisions for use in determining the allowability of contract costs incurred by engineering consultants.
- GAAP refers to the *Generally Accepted Accounting Principles*, a widely accepted set of rules, conventions, standards, and procedures for reporting financial information, as established by the Financial Accounting Standards Board (FASB).
- *Generally Accepted Auditing Standards* (GAAS) are published by the American Institute of Certified Public Accountants (AICPA). GAAS apply to financial statement audits and contain guidance regarding auditors' professional qualifications, the quality of audit effort, and the characteristics of professional and meaningful audit reports. GAAS is codified under the Clarified Statements on Auditing Standards (AU-C).
- The *Government Auditing Standards*, also known as *Generally Accepted Government Auditing Standards* (GAGAS) or "Yellow Book" standards, are issued by the U.S. Government Accountability Office (GAO).³ GAGAS prescribe general procedures and professional standards that practitioners must apply when performing audits or attestation engagements of firms that conduct business with governmental entities. GAGAS standards also incorporate the *Generally Accepted Auditing Standards* specific to financial-related audits. GAGAS citations throughout reference the 2018 Revision.
- "Indirect cost rate schedule," or "ICR" refers to the primary document used by engineering consultants to present and compute FAR-compliant indirect cost rates (overhead rates) used for billings on government projects, and is the financial statement on which the CPA is opining. An indirect cost rate schedule is based on amounts obtained from the engineering consultant's general ledger (after the adjusting entries have been posted to the accounts), as well as from amounts in the engineering consultant's cost accounting system. This schedule must be in agreement with, or must be reconciled to, amounts from the engineering consultant's general ledger or post-closing trial balance. An indirect cost rate schedule also is commonly referred to as an "overhead schedule," "schedule of indirect costs" or "Statement of Direct Labor, Fringe Benefits, and General Overhead."

³ *Government Auditing Standards*, GAO-18-568G (Washington, DC: December 2018 Revision).

- “Management” refers to A/E firm owners, officers, and/or others responsible for the formulation and execution of the firm’s policies and procedures, including, but not limited to, internal controls, personnel policies, compensation policies, and labor-charging practices.
- “Overhead” or “indirect cost” refers to any cost that is not directly identified with a single final cost objective, but is identified with two or more final cost objectives or with at least one intermediate cost objective. Engineering consultants charge their indirect costs by applying an overhead rate to an allocation base (e.g., direct labor cost).
- “Overhead rate” or “indirect cost rate” refer to a factor/ratio computed by adding together all of a firm’s costs that cannot be associated with a single cost objective (e.g., general and administrative costs and fringe benefit costs), then dividing by a base value (usually direct labor cost) to determine a rate. This rate is applied to direct labor, as incurred on projects, to allow a firm to recover the appropriate share of indirect costs allowable per the terms of specific agreements. In this Guide, the terms “indirect cost rate” and “overhead rate” are used synonymously.
- “State DOT” or “DOT” refers to a state department of transportation or other state transportation agency.
- “Statements on Auditing Standards” or “SASs” are interpretations of U.S. *Generally Accepted Auditing Standards* as issued by the Auditing Standards Board (ASB), the senior technical committee of the AICPA designated to issue auditing, attestation, and quality control standards and guidance.

1.3—OTHER DEFINED TERMS

Actual Costs

Amounts determined based on costs incurred. Actual costs are supported by original source documentation, such as invoices, receipts, and cancelled checks. Actual costs generally are not determined based on forecasts or historical averages.

Actual Cost Agreement

Costs reimbursed under an Actual Cost Agreement are limited to the specified criteria (actual allowable costs) described in the agreement. These limitations are based on the Cost Principles found in FAR Subpart 31.2 and may include additional restrictions mandated by the laws of specific state DOTs. Direct and indirect costs billed against Actual Cost Agreements must exclude all unallowable costs, including certain costs that may be fully or partially deductible for the purpose of computing income taxes (e.g., interest, entertainment, and bad debts).

Advance Agreement

Contract language that specifies the treatment of special or unusual costs. For example, the use of statistical sampling methods for identifying and segregating unallowable costs should be the subject of an advance agreement under the provisions of FAR 31.109 between the engineering consultant and the cognizant audit agency. The advance agreement should specify the basic characteristics of the sampling process. FAR 31.109 provides that advance agreements must be “in writing, executed by both the contracting parties, and incorporated into applicable current and future contracts. An advance agreement shall contain a statement of its applicability and duration.”

Agreement

A contract between a state DOT and an A/E firm. An Agreement is a binding, legal document that identifies the deliverable goods/services to be provided, under what conditions, and the method of reimbursement for such goods/services. An Agreement may include both Federal and state requirements that must be met by the state DOT and the engineering consultant. Agreements usually indicate start and finish dates, record retention requirements, and other pertinent information relative to the work to be performed.

All-Inclusive Hourly Rate Agreement

A contract using a provisional hourly billing rate based on a firm's estimated direct labor and overhead costs, plus a negotiated profit margin. Generally, provisional hourly rates are temporary and are adjusted during the audit process. Negotiated hourly rates may be used for the life of an agreement or instead may be adjusted periodically based on the provisions of the agreement.

Allocable Cost

FAR 31.201-4 provides that a cost is *allocable* to a government contract if the cost—

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

Allowable Cost

Depending on the nature of specific cost items, allowable costs may either be billed directly to contracts or included as overhead costs; however, FAR 31.201-2 provides that a cost is an *allowable* charge to a government contract only if the cost is—

- reasonable in amount,
- allocable to government contracts,
- compliant with generally accepted accounting principles and standards promulgated by the Cost Accounting Standards Board (when applicable),
- compliant with the terms of the contract, and
- not prohibited by any of the FAR Subpart 31.2 cost principles.

Audit

A formal examination, in accordance with professional standards, of accounting systems, incurred cost records, and other cost presentations to verify their reasonableness, allowability, and allocability for negotiating agreement fees and for determining allowable costs to be charged to government contracts. Audits include an evaluation of an engineering consultant's policies, procedures, controls, and actual performance. Audit objectives include the identification and evaluation of all activities that contribute to, or have an impact on, proposed or incurred costs related to government contracts.

Audit Resolution Process

The process that state DOTs and the auditee engage in to resolve audit findings. This process may include the negotiation of a settlement and/or may involve legal counsel and court procedures.

Audit Trail

A record of transactions in an accounting system that provides verification of the activity of the system. A complete audit trail allows auditors to trace transactions in a firm's accounting records from original source documents into subsidiary ledgers through the general ledger and into general-purpose financial statements and billings/invoices prepared and submitted by the engineering consultant.

Billing Rates (Hourly Labor Rates)

Generally refers to the hourly labor rates invoiced by an engineering consultant for work performed on an agreement. For a cost-plus-fixed-fee agreement (the most common type of agreement), billing rates are determined based on employees' actual payroll rates. By contrast, for an all-inclusive hourly rate agreement, billing rates are determined based on actual payroll rates with additional amounts included for overhead and net fee (profit).

Closely Held Corporation

A closely held corporation is a corporation which is owned by an individual or a small group of shareholders (e.g., the IRS considers a corporation to be closely held if, at any time during the last half of the tax year, the corporation had more than 50 percent of its outstanding stock owned directly or indirectly by, or for, five or fewer individuals). Shares of a closely held corporation are generally not traded in the securities market(s). Just as in typical corporations, shareholders of a closely held corporation owe each other an implied covenant of good faith and fair dealing.

Contracting Officer

A position title used in FAR Part 31 to identify a person with the authority to bind a state or Federal agency to a contract. Within state DOTs, contracting officers are the individuals who enter into, administer, and/or terminate contracts and make related determinations and findings. In state DOTs, auditors generally act at the request of, and on behalf of, contracting officers.

Corporation

A business structure where stock is issued and sold to shareholders. A corporation typically has a president, numerous vice presidents, a chief financial officer and/or treasurer, and a secretary. Corporate employees usually are paid based on an hourly wage rate or annual salary. The liability of individual stockholders (owners) is limited to their investments in the corporation's stock.

Depending on how a corporation is formed, it will be taxed under either Subchapter C or Subchapter S of Chapter 1 of the Internal Revenue Code. A C-Corporation is taxed on its income at the corporate level, and stockholders pay a second layer of tax on the dividends they receive from the corporation. By contrast, S-Corporations are not taxed at the corporate level; instead, the S-Corporation's income or losses are passed through to its shareholders, who then report the income or loss on their individual tax returns.

Cost Center

A non-revenue-producing element of a business organization. Cost centers are used to accumulate and segregate costs.

Cost Objective

An agreement/contract, function or organizational subdivision, or other work unit for which the costs of processes, products, jobs, or projects are accumulated and measured. An "intermediate cost objective" is a cost objective used to accumulate costs that are subsequently allocated to one or more indirect cost pools and/or final cost objectives.

Cognizant Audit

The audit upon which the cognizant agency relies to establish a cognizant approved rate, irrespective of the entity that performs the audit (state DOT or public accounting firm). Refer to Chapter 12.5 for further details regarding cognizant audits.

Cognizant Approved Rate

A cognizant approved rate is a rate that must be accepted by all contracting agencies. This concept was developed to assign primary responsibility for establishing approved indirect cost rates to a single entity (the "cognizant agency") and to avoid the duplication of audit work performed in accordance with GAGAS. Cognizant approved rates are established by either a cognizant audit or cognizant review, depending on the entity that performs the cognizant audit (cognizant agency or third-party public accounting firm).

Cognizant Review

Cognizant review is a defined process followed by a cognizant agency, generally upon request by a consultant, to review the audit report and related working papers of a third-party CPA and issue a cognizant letter of concurrence (creating a cognizant approved rate). A cognizant review is performed by the cognizant agency when an independent CPA performs an audit of a consultant's indirect cost rate schedule. The process is followed to avoid duplication of audit work performed in accordance with GAGAS. The *AASHTO Review Program for CPA Audits of Consulting Engineers' Indirect Cost Rates*

provides steps to evaluate whether an audit was performed in accordance with GAGAS (according to FHWA's Procurement, Management, and Administration of Engineering and Design Related Services—Questions and Answers, cognizant agencies should use this *AASHTO Review Program* to perform cognizant reviews). Cognizant reviews are not review attestations performed in accordance with GAGAS.

Common Control

This exists in related-party transactions when business is conducted at less than arm's length between businesses and/or persons that have a family or business relationship. Examples are transactions between family members, transactions between subsidiaries of the same parent company, or transactions between companies owned by the same person or persons. Common control exists when a related party has *effective control* over the operating and financial policies of the related entity. Effective control may exist even if the related party owns less than 50 percent of the related entity. (For further discussion, see Section 8.23.B and Section 11.2.G.1, Example 11-8.)

Cost-Plus-Fixed-Fee Agreement

An agreement in which all the cost factors, except the fixed fee, are based on the engineering consultant's actual allowable costs. The fixed fee is a specific, predetermined amount, as identified in the agreement.

Cost of Money (Facilities Capital Cost of Money (FCCM))

Although interest costs associated with the financing of capital are unallowable, some costs associated with the engineering consultant's investment in fixed assets are allowable. Specifically, Facilities Capital Cost of Money (FCCM) is an imputed cost determined by applying a charge rate to the engineering consultant's fixed assets used in contract performance. FCCM is not required to be recorded in the engineering consultant's formal accounting records; instead, FCCM is computed as a charge rate based on the following factors:

- The average annual net book value of the engineering consultant's investments in the fixed assets used for allowable business activities (in accordance with the cost principles of FAR Subpart 31.2),
- The prorated average Prompt Payment Act Interest Rate⁴ determined by the U.S. Secretary of the Treasury for the accounting period in question, and
- The engineering consultant's direct labor base used to determine overhead rates.

(See Section 8.6 for further discussion regarding FCCM.)

Cost Principles of FAR Subpart 31.2

These principles establish the framework for determining allowable and unallowable charges against Federal-aid highway program (FAHP) contracts. FAR Subpart 31.2 lists expressly unallowable costs and establishes criteria for determining the allocability and reasonableness of cost items.

Directly-Associated Cost

Refers to a cost generated solely as a result of the incurrence of another cost, and which would not have been incurred had the other cost not also been incurred (see FAR 31.001 and FAR 31.201-6(a)). If a cost is determined to be unallowable, then its directly-associated costs also must be disallowed.

Direct Cost

Any cost that is identified specifically with a particular final cost objective. Direct costs are not limited to items that are incorporated in the end product as material or labor. Costs identified specifically with a contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives.

Direct costs include labor, materials, and reimbursable expenses incurred specifically for an agreement. All direct labor costs allocable to design and engineering contracts (regardless of the contract type, e.g.,

⁴ Current Treasury rates are available at: www.fiscal.treasury.gov/fs-services/gov/pmt/promptPayment/rates.htm.

lump-sum versus actual cost) must be included in the direct labor base regardless of whether the costs are billable to a client.

Direct Labor

Direct labor costs generally are computed by multiplying all direct project labor hours by labor rates, as summarized for all employees within the applicable allocation unit. Labor rates are based on actual employee wages incurred.

Federal-Aid Highway Program (FAHP) Contracts

Refers to agreements for the acquisition of supplies and services that are partially or fully funded from Federal sources. “Government contracts” is a more encompassing term, as it includes FAHP contracts and all other contracts with governmental entities, including contracts that are fully funded by state or municipal governments.

Field Office

A field office is a facility that the engineering consultant specifically establishes, or has furnished to it, at or near the project site. The field office must be used exclusively for project purposes. The use of a field office allows for the computation of a field office overhead rate, which is designed to reimburse the engineering consultant for the fringe benefits of the field personnel and associated home office support. Field offices may exist in several forms. For example, an engineering consultant’s employees may work for a period of time in an on-site office maintained by a state DOT. Since the engineering consultant’s employees do not work out of their own offices and do not receive office support in their daily activities, the hours billed for these employees may not qualify for the engineering consultant’s full overhead rate. Instead, a field rate may need to be established to allocate a reasonable portion of the engineering consultant’s indirect costs to a field office.

Financial Statements

Financial statements are formal records that summarize a firm’s business activities. Financial statements usually are compiled on a quarterly and annual basis. In this Guide, the term “General Purpose Financial Statements” is used to refer to the basic financial statements, which include an Income Statement, Balance Sheet, and Statement of Cash Flows. This Guide also makes reference to an indirect cost rate schedule, which is a Special Purpose Financial Statement used to report specific financial information to governmental agencies such as state DOTs and the U.S. Department of Defense.

Finding (Audit Finding)

An audit finding may result from an engineering consultant’s deficiencies in internal control, fraud, illegal acts, the violation of contract or grant provisions, and/or abuse. When auditors identify deficiencies, they should plan and perform procedures to develop the elements of the findings that are relevant and necessary to achieve the audit objectives. In accordance with GAGAS, when documenting a finding, the auditor should include the condition, criteria, cause, effect, and a recommendation for correction. See GAGAS Chapters 4.10 to 4.14 for more details.

Fringe Benefits

Fringe benefits are allowances and services provided by the engineering consultant to its employees as compensation in addition to regular wages and salaries. Fringe benefits include, but are not limited to, the cost of vacations, sick leave, holidays, military leave, employee insurance, and supplemental unemployment benefit plans. Indirect cost rate schedules are often divided into two sections, fringe benefits and general overhead.

General and Administrative (G&A) Expenses

Costs of operating a company that are incurred by, or allocated to, a business unit and are not directly linked to the company’s products or services.

Indirect Labor

Indirect labor costs pertain to non-project time of general support staff and management/executive staff time and technical staff time on training and development, staff meetings, and/or similar activities (administrative, accounting/payroll, legal, marketing, human resources, computers/IT, bid & proposal).

The consultant should regularly monitor the time coded by senior managers and executives for unallowable activities such as advertising, mergers/acquisitions, etc.

Interim Audit

An audit conducted during the life of an agreement and designed to determine the actual allowable costs as of the audit date, including costs billed by the prime engineering consultant and any subconsultants. During an interim audit, auditors typically adjust the engineering consultant's billed costs (including direct labor, overhead, and other direct costs) to the allowable costs actually incurred. Interim audits generally involve the use of a standard audit program, although the procedures used may vary somewhat depending on the agency performing the audit.

Internal Controls

Include the plan of organization and the methods and procedures adopted by management to ensure that the firm's goals and objectives are met; that resources are used consistent with laws, regulations, and policies; that resources are safeguarded against waste, loss, and misuse; and that reliable data are obtained, maintained, and fairly disclosed in reports.

Limited Liability Companies (LLCs) and Limited Liability Partnerships (LLPs)

Business entities in which the members (owners) generally are liable only to the extent of their invested capital. LLCs and LLPs usually are taxed as partnerships (no taxation at the corporate level); although some LLCs elect to be taxed like C-Corporations (taxation applies at the corporate level, before the distribution of dividends).

Lump-Sum (Fixed-Price) Agreement

An agreement in which the method of payment for delivered goods and/or services is a fixed amount that includes salaries, overhead, and profit. Once the lump-sum amount is determined, the goods and/or services must be provided regardless of the engineering consultant's actual costs. No adjustments are permitted to compensate the engineering consultant for costs in excess of the contract's fixed amount unless there is a significant change in the scope of work that results in an approved change order.

National Compensation Matrix

A survey analysis tool that assists consultants in determining reasonableness of allowable total compensation amounts for individual executives using gross revenue levels. This tool is optional and in lieu of the procedures outlined in Section 7.5 for determining reasonableness of executive compensation. The Bipartisan Budget Act of 2013 established a cap on compensation for all employees. The National Compensation Matrix is updated annually.

Negotiated Hourly Rate Agreement

An agreement in which hourly billing rates (including labor, overhead, and net fee) are negotiated in advance and are listed for a period of one year or more.

Other Direct Costs (ODCs)

Consultants can allocate non-labor direct costs to cost objectives by charging for ODCs. Such costs can represent travel, vendor billings/costs for traffic control, rental of equipment from third-party vendors, or standard-rate charges for use of company-owned equipment or services (such as tests, etc.).

Overtime Compensation

Generally, this is compensation paid to employees who work more than 40 hours per week or 80 hours in a pay period. Overtime pay rates may be based on employees' normal hourly rates or may include "premium overtime" such as time and a half or double time. In accordance with the Fair Labor Standards Act (FLSA), premium overtime pay generally is required for hourly workers but is optional for certain salaried employees (exempt employees).

Partnership

A business with two or more co-owners, who may or may not have established salaries. Generally, partners are jointly responsible for the firm's debts and other liabilities, and this liability exposure is not limited to the partners' individual investments in the firm. When establishing hourly pay rates that may be billed to government contracts, partners may be treated the same as sole proprietors.

Post Audit (Project Close-Out Audit)

An audit done after an engineering consultant completes all scheduled work on a project. The scope of a post audit may include all costs billed to the project, including direct costs, overhead costs, and costs for subconsultants. Post audits generally involve the use of a standard audit program, although the procedures used may vary somewhat depending on the agency performing the audit.

Pre-Award Review

An examination conducted by, or on behalf of, a state DOT to verify financial information supplied by an engineering consultant. The examination may involve a desk review performed at the audit office and/or fieldwork at the engineering consultant's place of business. Upon completion, the audit results are provided to the state DOT contracting officer for use during contract negotiations.

Provisional Hourly Rate Agreement

An agreement in which hourly billing rates, including labor, overhead, and net fee, are negotiated in advance but are subject to adjustment after actual labor and overhead costs are determined through an audit.

Reasonable Cost

A cost is reasonable, if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business. See Section 4.3 for additional discussion.

Sole Proprietorship

A business with only one owner. Sole proprietors commonly do not have established salaries, but instead may rely on draws from the firm's profits to obtain payment for their services.

Source Documents

Original documents that support the costs recorded in an engineering consultant's accounting records, including general and subsidiary ledgers. Source documents include, but are not limited to: time sheets, payroll registers, invoices, hotel receipts, rental slips, gasoline tickets, cancelled checks, tax returns, insurance policies, and minutes of corporate meetings.

Special Purpose Financial Statements

Financial statements prepared in accordance with a special purpose framework, such as FAR Part 31. An indirect cost rate schedule is a special purpose financial statement prepared in accordance with FAR Part 31.

Task Assignment (Task Order) Agreement

An agreement that specifies a time period for performance, but does not include a complete description of all the work to be completed under the agreement. Tasks that require the engineering consultant's expertise are assigned as needed, and each task has its own maximum payable amount. The total amount paid on all the tasks may not exceed the total amount of the agreement.

Total-Hour Accounting System

A total-hour accounting system records all hours worked by all employees, regardless of whether the employees are exempt from overtime pay or whether all direct labor hours are billed to specific contracts. All engineering consultants that receive compensation under actual cost agreements must maintain a total-hour accounting system. See DCAAP 7641.90 Chapter 2-302.1(5) for details. DCAAP 7641.90 is available at <https://www.dcaa.mil/Guidance/CAM-Contract-Audit-Manual/>.

Unallowable (Cost)

An item of cost that is ineligible for cost reimbursement. Unallowable costs must not be billed to government contracts either directly or through the application of an overhead rate. When an unallowable cost is incurred, its directly-associated costs also are unallowable.

Uncompensated Overtime

FAR 52.237-10 defines *uncompensated* overtime as “hours worked without additional compensation in excess of an average of 40 hours per week by direct charge employees who are exempt from the Fair Labor Standards Act. Compensated personal absences such as holidays, vacations, and sick leave must be included in the normal work week for purposes of computing uncompensated overtime hours.”

2

Chapter 2—Adequacy of Accounting Records

Management must maintain accurate financial information and must submit timely financial reports to governmental agencies, including Federal agencies, state DOTs, and/or municipal entities. These financial reports include general-purpose financial statements, indirect cost rate schedules, and other schedules required to demonstrate an engineering consultant's compliance with Federal procurement regulations. In most cases, special schedules and disclosures must be submitted to state DOTs in addition to the annual general purpose financial statements prepared for stockholders, lending institutions, and management.

Note: In cases where a CPA performs an engagement to opine on the presentation of the engineering consultant's indirect cost rate schedule in accordance with the cost principles of FAR Subpart 31.2, management also must lead/facilitate communication between Federal and/or state DOT auditors to ensure government auditors have full access (i.e., access to electronic or physical copies of all working papers) to the CPA's work papers, where applicable.

2.1—INDIRECT COST RATE SCHEDULE

[References: FAR 31.201-4, 31.203(f); CAS 401, 402, 403, and 405; 23 U.S.C. 112(D) and 23 CFR 172.7(b)]

A. Generally

An indirect cost rate schedule is the primary document used to show the calculation of indirect cost rates. The schedule must be prepared based on actual costs recorded in the engineering consultant's general ledger (after adjusting entries have been posted to the accounts), as reconciled to the consultant's cost accounting system. Since an indirect cost rate generally is computed as the ratio of allowable indirect costs to total allocable direct labor costs, the indirect cost rate schedule must identify direct labor cost as a separate line item.

Note: The indirect cost rate schedule should clearly display the unallowable costs that have been removed from the various accounts (for sample indirect cost rate schedules, see Tables 5-4, 5-5, and 5-6 in Section 5.6.C.3.). If the schedule is presented "net of unallowable costs," then the details of the unallowable costs must be disclosed in the accompanying notes. Additionally, other relevant disclosures must be included in the indirect cost rate schedule, other financial statements, and any special schedules to provide adequate explanatory information about the financial data, organizational structure of the firm, and operating policies (see further discussion in Chapter 11).

The engineering consultant is responsible for presenting/proposing indirect cost rate(s), and the consultant may choose to compute separate rates to reflect various segments of business activity. This is permissible, but only if:

- the cost pools and/or segments are identified properly,
- costs are allocated consistently to the pools and/or segments,

- no costs are duplicated in rates computed for other pools or segments, and
- the rates are applied consistently for all projects, regardless of funding source, contract type, or customer (e.g., government versus commercial).

Additionally, engineering consultants are permitted to establish their own policies and procedures regarding home and field office accounting, provided that the policies and procedures are compliant with applicable cost principles. Per FAR 31.203(f): “Separate cost groupings for costs allocable to offsite locations may be necessary to permit equitable distribution of costs on the basis of the benefits accruing to the several cost objectives.” Once the engineering consultant develops a rate structure and cost allocation methodology in compliance with applicable Cost Accounting Standards, costs must be applied consistently and fairly to all contracts.

Note: The auditor should issue a singular audit report that reflects the engineering consultant’s rate structure and cost accounting practices. The auditor should not issue multiple audit reports reflecting adjustments based on various special state DOT requirements. Instead, state DOTs that have separate laws governing consultant reimbursements should work directly with the engineering consultant to handle any special adjustments required to the issued audit.

B. Facilities Capital Cost of Money (FCCM) and Other Items

Other items, such as the computation of Facilities Capital Cost of Money (FCCM), must be disclosed separately in the notes to the indirect cost rate schedule. Although FCCM generally is computed as a rate based on direct labor cost, FCCM should *not* be included as part of the overhead rate. FCCM is not required, but if it is proposed, the engineering consultant should show the detailed computation of the FCCM rate. (See Section 11.2 for further details regarding FCCM and other recommended minimum audit report disclosures.)

C. Disclosure of Field Office Rates

The indirect cost rate schedule or accompanying notes should show the calculation of the overhead rate. In some cases, multiple overhead rates will be shown, such as functional rates for segments of the business or rates for separate subsidiaries. When a company uses Field Office (onsite) rates in addition to Home Office (offsite) rates, costs and labor amounts for both rates should be displayed on the indirect cost rate schedule. The rate structure and allocation methodology should be clearly explained in the notes.

Engineering consultants are responsible for consistently estimating, accumulating, and reporting costs. Accordingly, all projects should be subject to the same accounting procedures and processes.

Note: Engineering consultants must account for costs appropriately and must maintain records, including supporting documentation, adequate to demonstrate that the costs claimed were incurred, were allocable to the contract, and complied with applicable FAR cost principles. Supporting documentation includes, but is not limited to, travel expense reports, hotel receipts, cancelled checks, time sheets, and usage logs.

Contracting officers may disallow all or part of any costs that lack adequate support. Additionally, when an engineering consultant uses accounting practices that are not consistent with FAR or CAS requirements, costs resulting from such practices must be disallowed to the extent that these costs exceed the amount that would have resulted from the proper application of the FAR and CAS.

D. Accounting Period: Application of Submitted Indirect Cost Rates

In accordance with 23 U.S.C. 112(D) & 23 CFR 172.7(b), indirect cost rates generally are applicable for a one-year period, and engineering consultants are required to update their indirect cost rates annually. However, once an indirect cost rate has been established for a contract, the rate may be extended beyond a one-year period, provided that all the contracting parties agree to the extension. This is only permissible on a contract-by-contract basis, and agreement to the extension of the one-year applicable period must not be a condition of contract award. (See Section 4.7 for further discussion regarding the base period for allocating indirect costs.)

2.2—UNALLOWABLE COSTS

A. Generally

FAR 31.201-6 and CAS 405-40 require unallowable costs and any directly-associated costs to be identified and excluded from billings, claims, or proposals for government contracts. In addition, unallowable costs must participate in indirect cost allocations just as if the unallowable costs were allowable. That is, all activities that benefit from the indirect cost, including unallowable activities, must receive an appropriate allocation of indirect costs.

Note: Section 8.30 (Table 8-1) includes a list of common unallowable costs.

B. Directly-Associated Costs

FAR 31.001 defines a *directly-associated cost* as “any cost which is generated solely as a result of the incurrence of another cost, and which would not have been incurred had the other cost not been incurred.” Engineering consultants must maintain adequate records to identify unallowable costs, including directly-associated costs. Furthermore, CAS 405-40(e) states:

All unallowable costs. . .shall be subject to the same cost accounting principles governing cost allocability as allowable costs. In circumstances where these unallowable costs normally would be part of a regular indirect-cost allocation base or bases, they shall remain in such base or bases. Where a directly associated cost is part of a category of costs normally included in an indirect-cost pool that will be allocated over a base containing the unallowable cost with which it is associated, such a directly associated cost shall be retained in the indirect-cost pool and be allocated through the regular allocation process.

For directly-associated costs other than those described above in CAS 405, the directly-associated costs, if material in amount, must be purged from the indirect cost pool.

FAR 31.201-6(e)(2) provides that, when material in amount, salary expenses for the time employees participate in activities that generate unallowable costs should be treated as directly-associated costs. However, time spent by an employee outside the normal working hours should not be considered, unless the employee engaged in those company activities so frequently outside the normal working hours that it would indicate that the activities were a part of the employee’s regular duties.

2.3—FINANCIAL STATEMENTS

Financial statements will vary depending on the company ownership, type of business organization, and firm size. Publicly-traded companies generally will have audited financial statements that include a CPA’s opinion. Other entities also may have audited financial statements to serve the needs of lending institutions, owners, and government agencies.

Many smaller A/E firms have financial statements that are *compiled* by, but not audited by, an accounting firm. In many cases, the accounting firm also will assist in preparing the indirect cost rate schedule and associated notes or disclosures. In other cases, an engineering consultant’s internal accounting department and management personnel will prepare the financial statements, including associated notes or disclosures. However, in all cases, the financial statements should include associated notes or disclosures and representations from management that the amounts are timely, accurate, and are prepared in compliance with regulations that apply to the specific circumstances.

2.4—MANAGEMENT REPRESENTATIONS

When performing overhead engagements of A/E firms, it is important for auditors to obtain written representations from management personnel. Specific representations will vary depending on the circumstances, including the scope of the engagement and the availability of other information, such as audited financial statements. However, when performing any type of overhead engagement, auditors typically should require the following management representations:

- The financial information is accurate.
- The financial information is complete.
- The information complies with government regulations (e.g., FAR Part 31, the Internal Revenue Code, and the Federal Travel Regulation).
- Estimates are based on sound financial data and consistent assumptions.
- All actual indirect cost rates submitted to any governmental entity have been disclosed.

Note: Examples of management representation letters are included in Appendix E.

In some contract audit environments, a management-certified cost proposal may be the starting point for an audit. The cost proposal also may serve as management's representation that the submitted costs are allowable in accordance with FAR Part 31 and other related laws and regulations. The auditor should consider obtaining additional representations, as necessary, for matters that arise during the course of the engagement.

Some states require annual submissions of financial, procedural, and other company information as well as indirect cost rate schedules. Additionally, some states require annual CPA audits of submitted cost information, including an indirect cost rate schedule.

Under the provisions of the *Sarbanes-Oxley Act* (SOX), publicly-traded companies must submit annual reports that include management representations of their firms' internal control structure. SOX also requires an independent CPA's opinion on internal controls.

2.5—MANAGEMENT AND CPA'S ROLES AND RESPONSIBILITIES

A. Management Responsibilities

Management bears the sole responsibility for identifying, segregating, and removing unallowable costs from all billings to government contracts. This requirement applies to direct costs, indirect costs, and any cost proposals that are submitted for government contracts. In establishing a sufficient internal control system, the engineering consultant must train accounting staff, including payables clerks and staff members responsible for preparing project billings, in the FAR Subpart 31.2 cost principles so that unallowable cost items can be identified, segregated, and disallowed as transactions occur.

In conjunction with management's responsibility to certify⁵ that the indirect cost rate schedule includes only allowable costs in accordance with FAR Part 31, in preparation for an independent audit of the schedule, the engineering consultant should perform its own analysis of the high-risk accounts or line items and make appropriate adjustments to the indirect cost rate schedule. As management bears the

⁵ FHWA Order 4470.1A establishes the FHWA's policy for contractor certification of the costs used to establish indirect cost rates in accordance with the applicable cost principles contained in FAR Part 31 for engineering and design-related service contracts funded with Federal-aid highway program (FAHP) funding and administered by state DOTs, local public agencies, and other grantees and subgrantees. See Appendix F or <https://www.fhwa.dot.gov/legisregs/directives/orders/44701a.cfm>. Most state DOTs have adopted policies consistent with Order 4470.1A; accordingly, engineering consultants generally are required to submit a compliance statement (certification) annually to each state DOT.

ultimate responsibility for identifying, segregating, and removing unallowable costs, management should perform a preliminary review to assess whether internal controls are working effectively and whether all unallowable costs have been removed from the final, submitted indirect cost rate.

Note: Management should prepare narratives describing the internal controls reviewed, and any associated schedules showing the results of the preliminary review, and these documents should be shared with the independent auditor and/or state DOT auditor. Likewise, documents related to the testing of labor or direct costs also should be shared.

B. The CPA Auditor's Responsibilities

1. Generally

Some state DOTs require CPA audits to be conducted on all indirect cost rate schedules that are prepared and submitted by engineering consultants. These audits may either be conducted by the same CPA that performs other accounting work for the engineering consultant (e.g., audits of general-purpose financial statements or tax compliance work) or by a separate CPA. If the same CPA that performs the indirect cost rate audit also performs other services for the consultant, the CPA must adhere to independence requirements and apply the conceptual framework approach to independence outlined in GAGAS 3.27. However, regardless of the CPA's overall business relationship with the engineering consultant, the overhead engagement must be performed in accordance with certain minimum standards, which are discussed in detail in the sample CPA Workpaper Review Program included in Appendix A.

Note: Although Appendix A should be consulted for detailed requirements, the following discussion is a general summary of the CPA auditor's responsibilities.

The CPA auditor is responsible for performing an audit in accordance with Government Auditing Standards (GAGAS) to obtain reasonable assurance that the indirect cost rate schedule is presented in accordance with FAR Part 31 and applicable Cost Accounting Standards. Accordingly, before opining on, or attesting to, the presentation of the indirect cost rate, the CPA must perform adequate procedures appropriate to the specific type of engagement. The engineering consultant and CPA must execute an engagement letter that clearly specifies the type of engagement to be performed and the roles of each party.

The CPA auditor is responsible for—

- Issuing an independent opinion on the fair presentation of the indirect cost rate schedule in accordance with FAR Part 31.
- Issuing a report describing the extent of the auditor's testing of the engineering consultant's internal controls and the results of such testing.

Additionally, although the CPA may be involved in some aspects of the overhead rate computation, the CPA's testing must be performed independently to verify that the engineering consultant's internal controls are properly designed and are operating effectively; accordingly, the CPA must *not* function as a component of the internal control system. As described previously in Section 2.5.A, the engineering consultant should identify, segregate, and disallow unallowable costs as transactions occur. Management must not rely on the CPA's end-of-year audit testing as the sole method for detecting unallowable costs.

Note: Before accepting FAR audit engagements, CPAs must determine if they have the required specialized knowledge to complete the engagement (see Statement on Auditing Standards No. 105). In cases where a CPA's primary area of expertise does not include the A/E industry and the FAR Subpart 31.2 cost principles, said CPA should engage the services of a qualified specialist to consult with, conduct training, and/or review audit programs and audit reports. CPAs should document their qualifications to perform the audit, identify any specialists used in the engagement and must maintain adequate evidence of their professional registration status and results of peer reviews.

2. The CPA's Responsibilities for Detection of Fraud and Noncompliance

The CPA must notify the appropriate state DOTs of any findings such as those discussed below:

- **GAGAS 6.39.** Auditors should report on internal control and compliance with provisions of laws, regulations, contracts, or grant agreements regardless of whether they identify internal control deficiencies or instances of noncompliance.
- **GAGAS 6.53.** Auditors should report identified or suspected noncompliance with provisions of laws, regulations, contracts, and grant agreements and instances of fraud directly to parties outside the audited entity in the following two circumstances:
 - (a) When audited entity management fails to satisfy legal or regulatory requirements to report such information to external parties specified in law or regulation, auditors should first communicate the failure to report such information to those charged with governance. If the audited entity still does not report this information to the specified external parties as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the information directly to the specified external parties.
 - (b) When audited entity management fails to take timely and appropriate steps to respond to fraud or noncompliance provisions of laws, regulations, contracts, and grant agreements that (1) is likely to have a material effect on the subject matter, and (2) involves funding received directly or indirectly from a government agency, auditor should first report management's failure to take timely and appropriate steps to those charged with governance. If the audited entity still does not take timely and appropriate steps as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the audited entity's failure to take timely and appropriate steps directly to the funding agency.
- **GAGAS 6.54.** Auditors should comply with the requirements in paragraph 6.53 even if they have resigned or been dismissed from the auditor prior to its completion.
- **GAGAS 6.55.** Auditors should obtain sufficient, appropriate evidence, such as confirmation from outside parties, to corroborate representations by management of the audited entity that it has reported audit findings in accordance with provisions of laws, regulations, or funding agreements. When auditors are unable to do so, they should report such information directly as discussed in paragraphs 6.53 and 6.54.

C. Selection of CPA Firm as Overhead Auditor

There are many factors involved in selecting a CPA to perform an overhead audit. The CPA must follow GAGAS, which includes AICPA professional standards and must obtain sufficient, appropriate audit evidence to support the opinion that the indirect cost rate schedule is fairly presented in accordance with the FAR 31.2 Cost Principles. The following list, although not comprehensive, provides some factors for consideration. The CPA should:

- Meet all GAGAS requirements, including independence requirements and adequate continuing professional education (CPE) in governmental auditing.
- Have received favorable peer review reports.
- Be well versed in GAGAS (including AICPA professional standards), the provisions of FAR Part 31 (including the FAR Subpart 31.2 cost principles), Cost Accounting Standards, related laws and regulations (e.g., the Internal Revenue Code, the Federal Travel Regulation, and 23 U.S.C. 112), and the guidelines and recommendations set forth in this Guide.
- Have adequate experience in applying GAGAS applicable to financial statement audits.
- Have a working knowledge of the A/E industry, including common operating practices, trends, and risk factors.
- Be well versed in job-cost accounting practices and systems used by A/E firms.

- Assign direct supervisory staff to the engagement, who have prior experience performing overhead audits in compliance with FAR Part 31.
- Have experience performing FAR audits and have knowledge of government procurement with regard to various types of contracts and contract payments terms affecting the development and/or application of an allowable overhead rate.
- Recognize that the indirect cost rate schedule is a special purpose financial statement and be willing to provide a standards-compliant audit report for an audit of a special purpose financial statement.
- Design and execute an audit program that meets the AICPA's professional standards and addresses the testing recommendations described in the sample CPA Workpaper Review Program provided in Appendix A of this Guide. (A CPA might conclude that certain testing recommendations are not applicable for a particular audit. In such cases, the CPA's conclusion should be supported by the CPA's planning, risk assessment, and other relevant documentation.)

Note: The following documents provide additional useful information regarding the procurement of professional audit services:

- Selecting an External Auditor: Guide for Making a Sound Decision (*Mid-America Intergovernmental Audit Forum, May 2007*).
- How to Avoid a Substandard Audit: Suggestions for Procuring an Audit (*National Intergovernmental Audit Forum, May 1988*).
- Procuring Audit Services in Government: A Practical Guide to Making the Right Decision. *AGA CPAG (Corporate Partner Advisory Group) Research Series, Report No. 19, February 2009*.

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3

Chapter 3—Standards for Audits

3.1—BACKGROUND

[References: 23 U.S.C. Section 112(b)(2)(C), 48 CFR Part 31]

Most state DOTs award contracts for engineering and related services using Qualifications-Based Selection (QBS) procedures. Under QBS, engineering consultant selections are based solely on elements of qualification, without consideration of price; accordingly, engineering consultants do not submit bids or priced proposals to be used as a basis for selection. Once a state DOT has made a selection based on the engineering consultant's qualifications, contract prices are negotiated based on the engineering consultant's estimated costs, which should be based on actual costs incurred in prior periods. These prices must be reasonable for the work to be performed.

23 U.S.C. Section 112(b)(2)(C) requires contracts for engineering services to be performed and audited in compliance with the costs principles contained in Part 31 of the Federal Acquisition Regulation (FAR). Because state DOTs construct highway improvements using both state and Federal funds, most state DOTs use rules for selection and pricing of state-funded engineering consultant contracts that incorporate, or are similar to, Federal rules.

***Note:** The timing and types of audits performed to meet Federal requirements may vary between contracts, depending on state DOT procedures and other circumstances. Audits are performed to obtain reasonable assurance that consultant contract pricing is based on actual costs incurred, in compliance with FAR Part 31 and specific contract provisions.*

3.2—GOVERNMENT AUDITING STANDARDS (“YELLOW BOOK” OR GAGAS STANDARDS)

Several regulatory bodies may influence the types of procedures that will apply to planning the audit, performing audit testing, and reporting on the results. A description of applicable auditing standards follows.

GAGAS are issued by the U.S. Government Accountability Office (GAO). GAGAS apply to audits of government entities as well as audits of Federal-aid funds paid to engineering consultants, non-profit organizations, and other non-governmental organizations.

GAGAS may be used in conjunction with professional standards issued by other authoritative bodies. For example, the AICPA has issued professional standards that apply to financial audits and attestation engagements performed by CPAs. GAGAS incorporate the AICPA's field work and reporting standards and, unless specifically excluded, also incorporate the related statements on auditing standards for financial audits. GAGAS incorporate the AICPA's general standard criteria, and the field work and reporting standards and the related statements on the standards for attestation engagements, unless specifically excluded.

***Note:** GAGAS also prescribe requirements in addition to those provided by the AICPA; accordingly, auditors may need to apply additional standards, depending on the purpose and requirements of the audit engagement.*

3.3—OPINION ON INTERNAL CONTROL

[Reference: Sarbanes-Oxley Act of 2002]

The Sarbanes-Oxley Act of 2002 was major legislation that affected publicly-traded companies. It established the Public Company Accounting Oversight Board (PCAOB), which has the authority to set auditing standards for registered public accounting firms involved with publicly-traded companies. One key provision is the requirement that annual reports must include an internal control report from management, along with an attestation report from the firm's auditor. These standards, and the internal control reports, may provide assurances when determining the adequacy of controls for publicly-traded consulting firms.

4

Chapter 4—Cost Principles

4.1—OVERVIEW OF FEDERAL ACQUISITION REGULATION, PART 31

DOTs rely on FAR Part 31 for guidance when negotiating costs and reviewing project proposals with engineering consultants. The FAR contains cost principles and procedures for pricing contracts, subcontracts, and modifications to contracts.

The following is a general discussion of applicable cost principles described in FAR Part 31. This discussion is a brief summary only and is not intended to be a complete rendition of all cost principles contained in the FAR.

The provisions apply to commercial organizations; educational institutions; state, local and Federally-recognized Indian tribal governments; and nonprofit organizations. FAR 31.105, dealing with construction and architect-engineering contracts, states that the allowability of costs shall be determined in accordance with FAR Subpart 31.2. Accordingly, the following discussion focuses on Subpart 31.2—Contracts with Commercial Organizations.

The total cost of a contract includes all costs properly allocable to the contract under the specific contract provisions. The allowable costs to the government are all costs that are reasonable, allocable, and are not prohibited by FAR Part 31.

In some cases, a contracting state DOT may enter into an advance agreement with an engineering consultant to clarify the allocability and allowability of special or unusual costs. FAR 31.109 provides further clarification of advance agreements, including examples of costs for which advance agreements may be important.

In the absence of any advance agreements, the auditor should determine the allowability of costs. To determine the allowability, the auditor should consider the following:

1. Any limitations set forth in Subpart 31.2 of the FAR;
2. Allocability;
3. Cost Accounting Standards (CAS) promulgated by the Cost Accounting Standards Board (CASB) if applicable; otherwise, generally accepted accounting principles and practices appropriate to the particular circumstances;
4. Terms of the contract; and
5. Reasonableness.

4.2—STATE AND LOCAL COST PRINCIPLES

Although FHWA regulations require state DOTs to accept indirect cost rates compliant with FAR Part 31 and to accept cognizant approved indirect cost rate schedules presented in accordance with FAR Part 31, those regulations are not applicable to contracts *that do not involve Federal funding*. Accordingly, for

contracts with no Federal funding, some state DOTs and local agencies define allowable costs more restrictively than FAR Part 31. For example, costs restricted by state and local policies sometimes include:

- Travel costs,
- Selling costs,
- Compensation costs in excess of locally-established ceilings, and/or
- Limits on incentive compensation.

Additionally, some state DOTs and local agencies prescribe certain cost accounting methodologies that vary from methodologies normally applied by an engineering consultant and used for Federally-funded contracts.

For example, cost accounting methodologies prescribed by contracting agencies sometimes include:

- Restatement of multi-tiered indirect cost rate structures to a single rate based on direct labor.
- Allocation of overtime premium as a direct project cost, even though the engineering consultant normally allocates all overtime premium to projects as an indirect cost.
- Allocation of overtime premium as an indirect cost even though the engineering consultant normally allocates all overtime premium to projects as a direct cost.
- Restrictions on the use of effective rates for distribution of labor costs.
- Allocation of certain direct costs such as computers, copies, or expendable supplies as indirect costs, even though the engineering consultant normally allocates these items to projects as direct costs based on usage.
- Restatement of separate field and home office indirect cost rates as a combined company-wide rate.

When an engineering consultant presents FAR-compliant indirect cost rates and alternate rates based on state or local requirements, the indirect cost rate schedule should present the indirect cost rate in accordance with FAR Part 31, representing cost accounting practices consistently followed by the engineering consultant on Federally-funded contracts. When a consultant presents rates that are adjusted for state and local cost restrictions and/or alternative cost accounting methods, those adjustments and rates should be disclosed through notes to the FAR-compliant indirect cost rate schedule.

***Note:** When a state DOT performs an audit or workpaper review based on state cost principles or cost accounting requirements that vary from FAR Part 31 and/or the firm's normal cost accounting practices, the state DOT should not identify the audited rates as cognizant, as the rates are not based on FAR Part 31 cost principles or allocation methods prescribed for Federally-funded contracts.*

4.3—ALLOWABILITY, INCLUDING REASONABLENESS

[References: FAR 31.201-2 & FAR 31.201-3]

A. Generally

Cost elements must be reviewed for reasonableness in accordance with FAR 31.201-2 and 31.201-3. Reasonableness concerns may arise in any number of cost categories, including indirect labor and fringe benefits, among others. For example, the amount of indirect labor in the indirect cost pool in relation to direct labor may cause concerns regarding a firm's efficiency and the extent to which the government should reimburse costs through the overhead rate. Additionally, certain categories of fringe benefits also may generate reasonableness concerns, especially in the case of privately-held firms with compensation cost structures not subject to the constraints of stockholders' oversight.

Note: The following section discusses the reasonableness of general cost items. See Chapter 7 for specifics regarding determining the reasonableness of compensation costs.

B. Requirements of FAR 31.201-2 and FAR 31.201-3

FAR 31.201-2, Determining Allowability, provides the following (emphasis added):

- (a) A cost is allowable only when the cost complies with all of the following requirements:
 - (1) Reasonableness.
 - (2) Allocability.
 - (3) Standards promulgated by the CAS Board, if applicable; otherwise, generally accepted accounting principles and practices appropriate to the circumstances.
 - (4) Terms of the contract.
 - (5) Any limitations set forth in [FAR 31.201].

FAR 31.201-3, Determining Reasonableness, provides the framework for addressing the reasonableness of costs (emphasis added):

- (a) A cost is reasonable if, in its nature and amounts, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business. Reasonableness of specific costs should be examined with particular care in connection with firms or their separate divisions that may not be subject to effective competitive restraints. No presumption of reasonableness shall be attached to the incurrence of costs by a contractor. *If an initial review of the facts results in a challenge of a specific cost by the contracting officer or the contracting officer's representative, the burden of proof shall be upon the contractor to establish that such cost is reasonable.*
- (b) What is reasonable depends upon a variety of considerations and circumstances, including—
 - (1) Whether it is the type of cost generally recognized as *ordinary* and necessary for the conduct of the contractor's business or the contract performance;
 - (2) Generally accepted sound business practices, arm's length bargaining, and Federal and state laws and regulations;
 - (3) The contractor's responsibilities to the government, other customers, the owners of business, employees, and the public at large; and
 - (4) Any significant deviations from the contractor's established practices.

C. Methodologies for Applying FAR 31.201-3

While the tests, standards, and other considerations referenced in FAR 31.201-3 entail varying degrees of subjectivity and professional judgment, it is strongly recommended, as a best practice, that primary emphasis be placed on quantitative analysis in addressing the reasonableness of costs. Specifically, ordinary costs are amounts that are common, usual, and otherwise characteristic of the industry segment. When analyzing cost elements for reasonableness, engineering consultants and auditors are strongly recommended to use the concept of *ordinary cost* as a starting point, as discussed below.

1. Using Quantitative Analysis to Determine Ordinary Cost

The starting point in the analysis of reasonableness of a specific cost element is the establishment of an ordinary level of cost as a baseline for the analysis. The methodology for establishing this baseline may vary depending on the circumstances.

(a) Ratio Analysis. The methodology may include the use of ratios, for example, the use of mean or median values as a percentage of either direct labor or net revenues by type of engineering services, size of firm, and location, among other parameters. When this methodology is used, the ratios and other comparative statistics may be derived from nationally-published, independent industry surveys.

(b) Analysis of Trend/Historical Data. The methodology for establishing baseline costs also may include the use of trend analysis and/or analysis of historical cost data. When trend analysis is used, consideration should be given to both the trend within the firm in question as well as the industry overall. Additionally,

a combination of both survey and trend analysis, as well as other empirically-based methodologies, may be used.

(c) Analysis of Variances. Once baselines for specific cost elements are established, variances in excess of benchmark thresholds, if determined to be material based on professional judgment, should be identified, analyzed, and addressed by the engineering consultant and/or in the auditor's workpapers within the context of a multi-factor analysis, in accordance with the considerations outlined by FAR 31.201-3 and other related regulations. If costs with material variances are determined to be reasonable, then the basis for acceptance of the variances in the context of FAR 31.201-3 should be explicitly identified in the audit workpapers, so that the cognizant agency or other reviewer is made fully aware of the facts underlying this determination.

2. Determining Reasonableness: Common Cost Categories

Cost categories of frequent concern with respect to reasonableness include, but are not limited to, executive compensation (see Chapter 7), indirect labor, vehicle costs, travel costs, occupancy costs, pension costs, and the various elements of fringe benefits.

4.4—ALLOCABILITY

[Reference: FAR 31.201-4]

A cost is *allocable* if it is assignable/chargeable to one or more cost objectives or cost centers on the basis of either the relative benefits received or some other equitable relationship. A cost must be allocated in some reasonable proportion to the benefits derived. A cost is allocable to a government contract if it:

1. Is incurred specifically for the contract (direct cost);
2. Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received (direct and indirect cost); or
3. Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown (indirect cost only).

4.5—UNALLOWABLE COSTS

[References FAR 31.201-6, CAS 405 (48 CFR 9904.405)]

Costs that are expressly or mutually agreed to be unallowable, including directly-associated costs, must be identified and excluded from any billing, claim, or proposal applicable to a government contract. A directly-associated cost is any cost which is generated solely as a result of incurring another cost, and which would not have been incurred had the other cost not been incurred. When an unallowable cost is incurred, its directly-associated costs are also unallowable. The practices to account for and present unallowable costs are described in CAS 405 (48 CFR 9904.405), *Accounting for Unallowable Costs*.

4.6—DIRECT AND INDIRECT COSTS

[References: FAR 31.202, FAR 31.203]

In evaluating an engineering consultant's overhead, auditors should consider direct as well as indirect costs. A direct cost is any cost that can be identified specifically with a particular contract or project. Costs identified specifically with a contract or project are direct costs and must be allocated/charged directly to the contract or project. All costs specifically identified with a project are direct costs of that project and may not be allocated to another project, either directly or indirectly. Finally, a cost may not be charged as direct and also be included in an indirect cost pool.

Note: For reasons of practicality, any small dollar direct cost may be treated as an indirect cost if the accounting treatment is consistently applied to all projects and produces substantially the same results as treating the cost as a direct cost. However, any related variances and credits also should be treated as indirect costs.

Indirect costs should be accumulated by logical cost groupings with due consideration of the reasons for incurring such costs. Commonly, manufacturing overhead, selling expenses, and general and administrative (G&A) expenses are separately grouped. The engineering consultant must record indirect costs in accordance with GAAP and must consistently allocate these costs to intermediate or final cost objectives, as appropriate.

4.7—APPLICABILITY OF COST ACCOUNTING STANDARDS

Contracts may be subject to the Cost Accounting Standards (CAS) promulgated by the Cost Accounting Standards Board (CASB), an independent board that reports to the U.S. Office of Management and Budget's Office of Federal Procurement Policy. Certain CAS provisions are incorporated into FAR Part 31 and apply to most FAHP projects reimbursed under actual-cost agreements, while other provisions apply only to large contracts. Engineering consultants that are subject to full CAS coverage for Federal contracts also should use full CAS-based cost accounting practices for state DOT contracts.

Note: For details regarding CAS Program Requirements, see FAR Subpart 30.2.

4.8—ALLOCATION BASES FOR INDIRECT COSTS

[Reference: FAR 31.203(c)]

Generally. Allocation bases are used to distribute/allocate overhead costs to intermediate or final cost objectives. An allocation base common to all cost objectives or projects should be selected for the allocation of indirect costs. Although most engineering consultants use direct labor as the sole base for developing overhead rates, some engineering consultants have rate structures that are more complex and use multiple allocation bases to allocate costs. A typical example follows:

EXAMPLE 4-1. COMMON ALLOCATION BASES

Cost Pool	Allocation Base
Employee Fringe Benefits	Direct Labor
Overhead Expenses	Direct Labor and Fringe Benefits
General & Administrative Expenses	Total Cost Input (*)

(*) When using the Total Cost Input allocation base, the base includes direct labor, indirect labor, fringe benefits, general overhead, unallowable costs, materials, and costs for subconsultants.

Rate Structures and Cost Allocation Methods. Once an engineering consultant establishes an appropriate base for distributing indirect costs, the base should not be fragmented by removing individual elements. Rate structures and cost allocation methods must be applied consistently to all contracting entities, including state DOTs. As an example, a consultant with a single, company-wide cognizant approved rate should not establish and apply a segment rate for a contracting entity when the costs included in the segment rate also are included in the company-wide rate. *Likewise, direct costs must be consistently allocated and applied to all benefited objectives/projects, regardless of specific contract provisions.*

EXAMPLE 4-2.

Sample Company maintains CADD usage logs and allocates computer costs directly to projects, but one of Sample's customers does not allow computer costs to be billed as direct charges. Sample must consistently allocate CADD costs directly to the project, even though the costs are not billable to the customer.

Base Period for Allocating Indirect Costs. As provided in FAR 31.203(g)(2), “. . . the base period for allocating indirect costs shall be the contractor's fiscal year used for financial reporting purposes in accordance with generally accepted accounting principles. The fiscal year will normally be 12 months, but a different period may be appropriate (e.g., when a change in fiscal year occurs due to a business

combination or other circumstances).” When a contract is performed over an extended period, as many base periods shall be used as are required to encompass the total period of contract performance. In certain instances, an agreed-upon provisional rate may be established for use over the duration of the contract.

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Chapter 5—Cost Accounting

5.1—ALLOCATION BASES, GENERALLY

As discussed in Chapter 4, allocation bases are used to assign/allocate certain overhead or other indirect costs to final cost objectives (projects). There are various allocation bases commonly used in cost accounting systems for allocating indirect costs; however, for engineering contracts administered by state DOTs, *direct labor cost* is the base most frequently used. Whatever base is used for cost allocation, it should be *consistent* for all contracts.

Some of the common allocation bases are discussed below:

A. Direct Labor Cost

Direct labor cost is the allocation base most commonly used to assign indirect costs to contracts. Direct labor costs generally are computed by multiplying all direct project labor hours by labor rates, as summarized for all employees within the applicable allocation unit. Labor rates are based on actual employee wages incurred, and indirect costs are allocated to projects by multiplying the indirect cost rate by the direct labor cost incurred to complete the projects.

B. Direct Labor Hours

Indirect costs also may be allocated based on direct labor *hours*, instead of *cost*. When using this method, indirect costs are allocated to projects by multiplying the indirect cost rate by the direct labor hours incurred to complete the projects.

C. Total Labor Hours (Total Hours Worked)

This method is similar to the Direct Labor Hours allocation base, except that the base includes all hours incurred for direct and indirect activities. Use of this base assumes that costs incurred benefit both direct and indirect objectives and should be allocated to the appropriate cost objective receiving a benefit, as determined by the proportional number of hours assigned to that cost objective.

D. Total Cost Input

This base frequently is used to allocate General and Administrative (G&A) costs. The base consists of direct labor, fringe benefits, overhead costs, associated non-salary direct expenses (including other costs sometimes referred to as “internal direct expenses”) and subcontract costs.

E. Total Cost Value Added

This base is similar to the Total Cost Input base. However, the Total Cost Value Added base excludes materials (used primarily in production only) and subcontract costs, as distortion in allocations may occur due to a disproportionate amount of subcontract costs or materials in the pool.

F. Consumption/Usage

This method allocates costs to direct or indirect activities on a common unit, usually time or quantity used. For instance, an internal cost pool such as one for computer-aided drafting and design equipment

(CADD) costs can be allocated specifically as a direct cost to a project or as an indirect cost based on the number of hours actually incurred.

5.2—ACCOUNTING FOR UNALLOWABLE COSTS IN ALLOCATION BASES

[References: FAR 31.201-6, CAS 405-40(e)]

FAR 31.201-6 expressly requires engineering consultants to comply with CAS 405 to account for unallowable costs. CAS 405-40(e) provides that all unallowable costs “shall be subject to the same cost accounting principles governing cost allocability as allowable costs.”

CAS 405-40(e) further specifies that:

In circumstances where these unallowable costs normally would be part of a regular indirect-cost allocation base or bases, they shall remain in such base or bases. Where a directly associated cost is part of a category of costs normally included in an indirect-cost pool that will be allocated over a base containing the unallowable cost with which it is associated, such a directly associated cost shall be retained in the indirect-cost pool and be allocated through the regular allocation process.

Note: Allocation bases contain allowable and unallowable costs, but indirect cost pools must be purged of unallowable costs. Additionally, regardless of whether state DOTs contractually limit the amount of direct labor that may be reimbursed on a contract, the engineering consultant’s direct labor base must remain as allocated per the consultant’s job cost system, and the direct labor base should not be adjusted for unallowable costs. A direct labor base should not be reduced for any excess compensation adjustments, but should have allocated to it the allowable overhead in accordance with FAR 31.203(d), which provides that:

“Once an appropriate base for allocating indirect costs has been accepted, the contractor shall not fragment the base by removing individual elements. All items properly includable in an indirect cost base shall bear a pro rata share of indirect costs irrespective of their acceptance as government contract costs. For example, when a cost input base is used for the allocation of G&A costs, the contractor shall include in the base all items that would properly be part of the cost input base, whether allowable or unallowable, and these items shall bear their pro rata share of G&A costs.”

EXAMPLE 5 - 1 .

Sample Design Firm incurred \$2.5 million in direct labor, of which \$500,000 was not billable to contracts. The total \$2.5 million must remain in the direct labor base, which will then be used to allocate the allowable indirect costs.

5.3—COST CENTERS

Cost centers are established to accumulate and segregate costs associated with a single purpose. The costs are then assigned to cost objectives (projects) based on unit charges/consumption rates. For example, engineering consultants frequently compute unit charges for cost categories such as CADD, in-house printing, computers, and company vehicles. When establishing a cost center, the goal should be to estimate a unit charge that will minimize variances resulting from over- or under-applied costs.

Although some accounting systems will attempt to adjust unit charge rates throughout the year as actual costs become known, it is more common for the cost variances to be handled as an adjustment to the overhead cost pool, which is where the costs would have been allocated if they had not been directed to the cost center. However, if the over- or under-allocation is significant, then it may be necessary to adjust the contract/project charges.

Some firms do not create cost centers; instead, they estimate the cost of providing certain services by computing unit rates based on certain elements from general ledger accounts (e.g., automobile depreciation from a depreciation account). Once established, these unit charges are offset to overhead as “credit backs” or cost recoveries for allocated direct costs as they are incurred on projects. This type of costing is less precise and should not be used if the unit charges being accumulated are significant to the

firm's overall operation. If handled on a direct-cost basis, the direct cost rates must be supported and audited. The burden is on the engineering consultant to prove the direct cost rates and that direct costs were properly removed from the indirect cost pool. The overhead audit should include disclosure notes regarding the audited direct cost rates and a listing of cost categories that the engineering consultant charges direct. See Chapter 10 for testing guidance and Chapter 11 for disclosure guidance.

Note: Firms that do create costs centers generally capture costs either by business activity (functional cost centers) or based on the firm's organizational structure, as discussed below.

A. Functional Cost Centers

This method segregates costs unique to a business activity, typically for purposes of direct costing.

B. Subsidiaries, Affiliates, Divisions, and Geographic Locations

Another method of accumulating and segregating costs is focused on the corporate structure. Some examples of cost centers used for accumulating costs are groupings of regional offices, specific subsidiaries, affiliates, divisions, or field offices.

5.4—ALLOCATED COSTS

A. Generally

Indirect costs should be accumulated by logical (homogeneous) cost groupings (pools), with due consideration of the reasons for incurring such costs, allocated to cost objectives in reasonable proportion to the beneficial and causal relationship of the pool costs to final cost objective (see FAR 31.203(c)). The auditor should make a thorough study of the indirect cost activity, including activity bases used for allocation and the cost allocated, to determine whether the activity base chosen by the engineering consultant is appropriate for cost allocation and results in a reasonable measure of the activity. The base should:

- be a reasonable measure of the activity;
- be measurable without undue expense, and, except for G&A expense; and
- should fluctuate concurrently with the activity that generates the costs.

When an engineering consultant's activities are decentralized, the use of separate indirect cost rates for each geographic location will normally produce more equitable allocation of indirect costs than the use of composite or company-wide rates. Overhead rates determined for offsite/field activities should be based on eliminating from the overhead pool those types of indirect costs that do not benefit offsite activities. For example, occupancy costs may be eliminated from offsite pools because the engineering consultant uses government facilities.

B. Fringe Benefits

Fringe benefits include costs for employee perquisites and costs associated with the employer's portion of payroll taxes and employment benefits. Such costs generally include, but are not limited to, payroll taxes, pension plan contributions, paid time off, medical insurance costs, life insurance, and certain employee welfare expenses.

C. Overhead

Overhead costs are costs that may benefit, or are associated with, two or more business activities, but are not specifically allocated to an activity for reasons of practicality. Overhead differs from general and administrative costs (see discussion below) because overhead can be associated with a business unit, based on relative benefit. Some examples of overhead costs include rent, depreciation, employee recruitment and training, and general or professional insurance policy costs.

D. General and Administrative (G&A)

G&A expenses generally comprise all costs associated with business operations that cannot be specifically identified with a smaller unit of business activities. For example, certain management or administration costs that are incurred for an entire business unit may be considered G&A, but other

accounting or legal costs benefiting a segment of the business may be considered part of the overhead pool of that specific business segment.

E. Internally-Allocated Costs (Company-Owned Assets)

1. Computer/CADD Costs

Generally, this cost center includes costs such as equipment depreciation or rental; software (including license costs); employee training costs on new software; equipment maintenance; cost of special facilities or locations; and systems development labor or support costs.

2. Fleet or Company Vehicles

For the most part, these are costs associated with company vehicles such as cars, survey trucks, and vans that may be used for a direct or indirect cost objective. Costs in this center may include depreciation, lease costs, maintenance, insurance, and operation costs such as fuel.

3. Equipment

Costs accumulated to this center are similar to both computer and company vehicle pools. Company equipment can be a wide variety of items from small to large that are used in various activities. Some examples include nuclear density meters, GPS equipment, and traffic counting machines.

4. Printing/Copying/Plan Reproduction

Costs in this center are generally associated with reproduction from a single page copied to multiple prints of large specialized drawings or blue prints. In most cases, this cost center includes equipment, labor, ink or toner, and paper supplies.

No final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose in like circumstances have been included in any indirect cost pool to be allocated to that or any other final cost objective.

Note: The "Like-Cost" Issue.

FAR 31.202(a) provides that "[n]o final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose in like circumstances have been included in any indirect cost pool to be allocated to that or any other final cost objective."

Like-cost categories should be allocated consistently in the accounting system. As an example, employee personal vehicle mileage must be allocated to similar cost objectives in the same manner as company vehicle mileage. One category of like costs may not be allocated directly to contracts while the related like cost category are recovered as part of the indirect cost rate.⁶

F. Internal Labor Costs

1. Direct Labor

Labor costs are usually the most significant costs incurred by design and engineering firms in the performance of government contracts. Incurred labor costs form the basis for estimating labor for future contracts. Therefore, it is imperative that engineering consultants establish and maintain a proper, accurate system of internal control over the labor-charging function.

Unlike other items of cost, labor is not supported by external documentation or physical evidence to provide an independent check or balance. The key link in any sound labor charging system is the individual employee. It is critical to labor charging internal control systems that management fully indoctrinate employees on their independent responsibility for accurately recording time charges. This is the single most important feature management can emphasize in recognizing its responsibility to owners, creditors, and customers to guard against fraud, waste, and significant errors in the labor charging functions.

⁶ Note: Other common *like-cost* categories include computers and telephones.

An adequate labor accounting system, manual or electronic, will create an audit trail whenever an employee creates a timesheet entry. A system that allows an audit trail to be destroyed is inadequate because the integrity of the system can be easily compromised. Access to timesheets should be controlled and preprinted, if possible, with the employee's name, number, and fiscal week. An inadequate system would allow employees to erase prior entries without recording the adjustment. Employees should initial all time sheet changes and adjustments should be maintained as part of the audit trail.

The engineering consultant should have procedures to ensure that labor hours are accurately recorded and that any corrections to timekeeping records are documented, including appropriate authorizations and approvals. When evaluating the engineering consultant's timekeeping procedures, the auditor should consider whether the procedures are adequate to maintain the integrity of the timekeeping system.

The engineering consultant should have policies and procedures for training employees to ensure that all employees are aware of the importance of proper time charging.

Note: See Chapter 6 for further discussion of labor-charging system requirements.

2. Uncompensated Overtime for Salaried Employees

Engineering consultants may not be required to pay overtime to salaried employees for hours worked in excess of 40 hours per week. Any unpaid hours worked by salaried employees in excess of the normal 40 hours per week are commonly called "uncompensated overtime."

To ensure the proper allocation/distribution of labor costs, the engineering consultant must establish procedures requiring the consistent recording and accounting for hours worked, whether paid or unpaid. This is necessary because labor rates and labor overhead costs can be affected by total hours worked, not just paid hours worked. These procedures also must ensure consistency of labor-cost allocations as used in the indirect cost calculation, job-cost accounting system, cost estimates for proposals, and invoicing on actual-cost contracts.

Per DCAA CAM Section 6-410.3.d:

If it is determined that Government contracts are being over charged by a material amount due to an inequitable allocation of costs because the contractor does not record all time worked, the contractor should be cited as being in noncompliance with FAR 31.201-4 and CAS 418. Any material excess allocation of costs to Government contracts should be questioned or disapproved as applicable. Materiality is the governing factor when determining whether non-compliances should be cited and whether a contractor should be required to implement a total-hour accounting system.

For engineering consultants with *material*^(†) amounts of uncompensated overtime labor, it is necessary to account for the uncompensated overtime properly to minimize the risk that government projects will absorb disproportionate amounts of direct labor costs. Accordingly, the engineering consultant must evaluate and document the effect of uncompensated overtime.

^(†) **Note:** Although the materiality determination is dependent on a variety of factors, there may be instances where uncompensated overtime exists, but clearly does not have an effect on the indirect cost rate. For example, in the case of an employee who works overtime and only works on administrative activities, the employee's entire salary is recorded as indirect labor, regardless of the amount of any uncompensated overtime.

The consultant may use one of the following methods to distribute labor for salaried employees:

2.1. Effective Rate Method

Using this method, effective hourly pay rates are computed weekly, based on actual time charges. (Effective hourly rates also could be computed per payroll period or on a monthly basis; the concept is the same). This requires the firm to divide each employee's total salary by their respective hours worked for the period, which results in variable wage rates being allocated to cost objectives (direct and indirect). For example, if Employee Smith is paid \$1,400 per week and works 40 hours per week,

then Smith's effective hourly wage rate is \$35. By contrast, if Smith actually works 55 hours in Week 1 and 50 hours in Week 2, then his effective wage rates are \$25.45 and \$28, respectively.

2.2. Salary Variance Method

Under this method, labor costs are allocated at standard hourly rates for every hour worked and overhead is reduced for the appropriate portion of labor costs generated by uncompensated overtime hours. Standard rates are computed as the total salary cost to be paid divided by the estimated number of hours that a salaried employee is expected to work. Under the salary variance method, the direct labor base used to calculate the indirect cost rate must equal the direct cost of labor in projects at standard rates. Any variance (difference) between the amount of labor distributed at standard rates and actual labor expenses (paid) must be applied (usually as a credit) to indirect labor.

Typically, the application of the variance to indirect costs is recorded each pay period as part of the engineering consultant's labor accounting process. For illustration purposes, the following example assumes an annual adjustment. In this example, if Employee Smith earns \$72,800 and is expected to work 2,080 hours a year, then his standard hourly wage rate is \$35. If Smith actually works 2,150 hours during the year, then the total labor distributed at standard rates would be \$75,250 (\$2,450 more than Smith was actually paid). The \$2,450 variance is applied to indirect labor.

Many firms calculate standard rates based on a standard work week of 40 hours. To minimize the amount of the variance and improve the accuracy of cost accounting, firms that expect salaried employees to work more than a 40-hour week may base standard rates on a more realistic estimate of hours worked rather than an arbitrary value such as 40 hours a week or 2,080 hours a year.

A labor distribution using the salary variance method is illustrated below in Table 5-1.

Table 5-1. Salary Variance Method

Employee	Direct Hours	Indirect Hours	Hours Worked	Annual Salary	Standard Hourly Rate	Direct Labor	Indirect Labor	Labor Variance	Total Labor
Smith	1,800	350	2,150	\$72,800	\$35	\$63,000	\$12,250	\$(2,450)	\$72,800
Ending Direct Labor:		\$63,000							
Ending Indirect Labor:		\$9,800	(\$12,250-\$2,450)						

a. Issues Arising from Inconsistent Methods of Labor Distribution Under the Effective Rate Method

When the labor distribution method used to calculate the indirect cost rate is based on effective rates, billings and estimates on government contracts also should be based on effective rates.

Engineering consultants often prepare cost estimates and invoices at standard rates. If an A/E firm distributes labor for its indirect cost rate calculation using effective rates but develops cost proposals and invoices at standard rates, this creates the potential for overbilling, as the standard labor rate billed on a contract normally would exceed the effective labor rate used to calculate the base for the indirect cost rate. In situations where government contracts are billed and estimated at standard rates when the labor costs are distributed using effective rates for the indirect cost rate calculation, an adjustment is warranted and required.

When effective rates are used to calculate the indirect cost rate and prepare invoices on contracts, the engineering consultant also must prepare its estimates using labor rates that reflect all the hours that salaried employees are expected to work. This may be done for salaried employees by developing standard hours for estimating that are based on historical hours worked by salaried employees. Use of effective rates for estimating is especially critical for lump-sum and specific-rate-of-compensation contracts.

It is important to analyze the effect of the potential overbilling on the engineering consultant's government contracts. In some cases, for example, where employees working on government contracts

are paid for all hours worked or where such employees do not incur uncompensated overtime, the use of the Effective Rate Method may not result in overbilling. However, it should be noted that, in cases where a consultant asserts that an inconsistent labor distribution or incomplete accounting for uncompensated overtime has no effect on government contracts the burden of proof is upon the engineering consultant.

When an inconsistent labor distribution exists, there are approaches that can be taken to prevent overbilling on contracts:

1. An adjustment to the direct and indirect labor amounts in the indirect cost rate calculation can be made so that the direct labor amount reflects labor priced at the standard rate method used to bill and estimate direct labor costs. Both the direct and indirect labor costs must be adjusted so that total labor in the distribution equals actual labor expense. Adjusting direct labor without making a balancing adjustment to indirect labor cost would be inconsistent with FAR 31.201-1 (Composition of total cost). Making this adjustment essentially converts the labor distribution to the Salary Variance Method described above.
2. An adjustment could be made by re-pricing invoiced direct labor on a job-by-job basis using effective labor rates. For actual cost contracts, the engineering consultant would issue revised invoices to the government. For lump-sum or specific-rate-of-compensation contracts estimated based on standard rates, the engineering consultant may be required to notify the government that contract estimates were developed based on inaccurate pricing data and may have to re-price those contracts using estimates based on effective rates.

Note: If the engineering consultant chooses to continue using an effective rate distribution method to calculate its indirect cost rate that is not consistent with the company's invoicing and estimating practices, in future periods, the company must modify its procedures for estimating and invoicing costs to eliminate the potential for overstatement of costs in total. In some cases, the circumstances would result in the firm's auditor reporting the issue as an internal control deficiency that may or may not be a material weakness.

b. When Clients Require Different Cost Accounting Methods for Labor

Some state and local contracting officers require engineering consultants to price labor on contracts using a method that is not consistent with the method the firm uses to calculate its indirect cost rate. For example, some contracting agencies require all firms to price labor for salaried employees using a standard rate based on 40 hours a week even if a firm normally uses effective rates.

In cases where a firm normally calculates its indirect cost rate using effective rates, but is required by a contracting agency/state DOT to invoice and estimate costs at standard rates on certain contracts due to state-specific requirements, the contracting agency also could require disclosure of an alternative indirect cost rate as noted previously in Section 4.2.

When this condition occurs, the consultant firm must establish procedures to ensure indirect cost rates are calculated and applied to contracts consistent with the method of calculating labor rates for salaried employees based on the requirements of the contracting agency. Unless the contracting agency has specified a required method, the consultant should prepare estimates and invoices using the method used for its FAR-compliant indirect cost rate.

The following methods of accounting for uncompensated overtime are **unacceptable**:

- Distribute labor costs only to those cost objectives worked on during the first 8 hours of the day or the first 40 hours of the week.
- Allow employees to select the cost objectives to be charged when more than 8 hours per day or 40 hours per week are worked, or the A/E firm has an informal policy as to how employees are to select the objectives to be charged.

3. Overtime Premium

Engineering consultants must maintain records that properly classify overtime premium⁷ amounts as direct or indirect costs. Additionally, engineering consultants must establish overtime policies that are applied consistently and result in equitable cost allocations.

There are several alternative methods that may be used to allocate the cost of overtime premium to final cost objectives. These include the following:

- Overtime premium may be allocated exclusively as an indirect cost and distributed to all projects as part of the indirect cost rate(s).
- Overtime premium may be allocated as a direct project cost or an indirect cost, based on the activity that caused the overtime hours to be incurred. The engineering consultant must have established criteria to determine where to assign overtime premium when employees earning overtime premium work on multiple final cost objectives during a week (see Example 5-2).
- As an alternative, some firms build the anticipated cost of overtime premium into established standard charge rates for non-exempt employees. In this situation, the standard charge rate is based on an estimate of each employee's total regular and overtime wages earned divided by the estimated total hours in pay status. Variances between the standard rates and actual rates are allocated through the indirect cost pool in a manner similar to variances for salaried employees who are charged at standard rates.

Note: When overtime premium is allocated as a direct project cost, there are various acceptable practices for allocating indirect costs to overtime premium. For example, some engineering consultants include overtime premium costs in the direct labor base and allocate indirect costs to overtime premium costs. Other consultants exclude overtime premium costs from the direct labor base and do not apply the firm's indirect cost rate to overtime premium costs.

Overarching Concept: Consultants must treat overtime premium costs consistently for all contracts, regardless of the customer (government versus commercial) or type of contract (e.g., lump sum versus actual cost) involved. Accordingly, overtime premium costs must be allocated consistently, regardless of whether the costs are billable.

EXAMPLE 5-2. OVERTIME PREMIUM

Sample Design Firm has eight total active projects, including three lump-sum contracts and five cost-plus fixed-fee contracts. Only two of the cost-plus, fixed-fee contracts allow overtime premium to be billed as a direct cost. Sample Firm's policy is to allocate project-related overtime premium directly to projects; accordingly, the overtime premium must be allocated to all eight projects consistently, regardless of whether the premium costs are billable.

Note: Some state DOTs and/or local agencies may have specific policies regarding allocation of overtime premium, including whether to include overtime premium in the bases used to allocate indirect costs. When a consultant is required by a state or local agency to deviate from a consistently-applied, FAR-compliant methodology, and must calculate and present different indirect cost rates to meet the state or local requirements, alternate rates should be disclosed in notes to the indirect cost rate schedule.

⁷ "Overtime premium" is the difference between an employee's standard hourly wage rate and the special hourly wage rate paid for hours worked in excess of 40 per week. For example, an employee whose standard hourly rate is \$10 for the first 40 hours worked per week and \$15 per hour for hours worked in excess of 40 has overtime premium of \$5 for each hour worked in excess of 40. In cases where overtime is project related, the straight-time rate paid for overtime hours worked must be included in the direct labor base, while the premium amount is subject to additional considerations (see discussion above).

4. Other Considerations Regarding Internal Labor Costs

- **Approvals and Authorizations.** The engineering consultant should have procedures to ensure that labor hours are recorded accurately and that any corrections to timekeeping records are documented, including appropriate authorizations and approvals.
- **Reconciliation of Labor System to Payroll and General Ledger.** The engineering consultant should have procedures requiring that the total direct and total indirect labor costs reflected in labor distribution summaries (job cost) agree with the total labor charges as entered in the timekeeping, payroll systems, and general ledger. This reconciliation ensures the labor charges to contracts represent actual paid or accrued costs and that such costs are appropriately recorded in the accounting records.
- **Reconciliation of General Ledger and Indirect Cost Rate Schedule to Payroll Tax Returns (IRS Form 941s).** The engineering consultant should have procedures requiring that the total labor costs recorded in the general ledger, and included on the indirect cost rate schedule, reconcile to the payroll data submitted to the Internal Revenue Service.
- **Labor Costs Directly Associated with Unallowable Activities.** The engineering consultant should have procedures requiring that direct and indirect labor costs directly associated with unallowable costs are identified and segregated.

5. Potential Areas of Risk Regarding Internal Labor

- **Overrun Contracts.** When contract costs have exceeded or are projected to exceed the maximum contract value, the excess costs must *not* be diverted to other cost objectives such as indirect labor, overhead accounts, or other contracts.
- **Significant Changes in Direct/Indirect Labor Accounts.** Trend analyses may reveal instances where charges to direct or indirect labor accounts have increased significantly. Two common ratios often used for trend analysis are the *Productivity Ratio or Utilization Ratio* (direct labor/total salaries) and the *Multiplier Ratio* (net fee revenue/direct labor). A review should be performed to determine the nature of any significant changes from prior years.
- **Reorganization/Reclassification of Employees.** The organizational structure of the engineering consultant should be analyzed to determine if the potential exists for the inconsistent treatment of similar labor. For example, a program manager should not charge direct on cost-type contracts and indirect on fixed-price/commercial contracts.
- **Adjusting Journal Entries/Exception Reports (Labor Transfers).** Adequate rationale and supporting documentation should be available for all significant labor transfers.
- **Budgetary Control.** Engineering consultants may operate management systems that require strict adherence to budgetary controls. If the system is inflexible, then labor charges may tend to follow the identical route of the budgeted amounts. Rigid budgetary control systems can result in predetermined labor charges.
- **Mix of Contracts.** Engineering consultants must identify and allocate costs consistently in the accounting system, regardless of contract type. For firms that use combinations of lump-sum contracts and cost-reimbursement contracts, there is a significant risk that direct labor and other direct costs may not be allocated to the correct cost objective, resulting in the understatement of direct labor and overstatement of indirect labor or incorrect direct project charging.

Note: For further discussion, see Chapter 9—General Audit Considerations.

6. Sole Proprietors' and Partners' Salaries

The compensation of owners or partners must be allocated as direct labor when they are personally engaged in performing tasks on contracts. If sole proprietors or partners do not receive a salary, then their compensation must be determined by advance agreements or negotiation.

G. Contract Labor/Purchased Labor

[Reference: CAS 418]

In some cases, engineering consultants contract for services provided by outside engineers, technicians, and similar staff rather than hiring these individuals as employees. These individuals commonly are referred to as “contract labor” or “purchased labor.” The accounting treatment varies, depending on the circumstances under which the purchased labor costs are incurred.

Two acceptable methods of accounting for this labor are:

1. Allocated as a direct cost to projects, or
2. Treated as other labor (direct or indirect as appropriate).

CAS 418 requires pooled costs to be allocated to cost objectives in reasonable proportion to the causal or beneficial relationship of the pooled costs to cost objectives. Contract labor must share in an allocation of indirect expenses where such a relationship exists and the allocation method is consistent with the engineering consultant’s disclosed accounting practices. A separate allocation base for purchased labor may be necessary to allocate significant costs to contract labor, such as supervision and occupancy costs, or to eliminate other costs, such as fringe benefits, that do not benefit purchased labor.

5.5—OTHER DIRECT COSTS—OUTSIDE VENDORS/EMPLOYEE EXPENSE REPORTS

Other Direct Costs (ODCs) typically include items such as subcontractors, travel, and outside printing. ODCs also may include internally-allocated costs based on charge-out rates developed by the firm, such as charges for company vehicle mileage, copying, and company-owned equipment or company-performed services such as testing (see earlier discussion in Section 5.4.E).

Note: *To be treated as a direct cost, the item must have been required for, and used exclusively on, a specific job. The “but-for” principle should apply. “But for this job, the cost would not have been incurred.” All similar costs must also be treated as direct costs and excluded from indirect costs.*

The audit procedures for ODCs involve determining if unallowable costs were handled correctly. Per CAS 405-40 (Fundamental Requirement): “All unallowable costs shall be subject to the same cost accounting principles governing cost allocability as allowable costs. If a direct cost is unallowable, then it must remain allocated as a direct cost and may not be included in any indirect cost pool.”

5.6—FIELD OFFICE RATES

[Reference: FAR 31.203(f)]

A. Generally

Certain contracts require work in field locations; accordingly, engineering consultants are not always able to perform contracted services from their established home- or branch offices. Field offices include, for example, project trailers located at project sites, and/or offices or other facilities provided by state DOTs for an extended period of time. In these cases, the life of a field office generally is determined by the duration of the project.

Per FAR 31.203(f): “Separate cost groupings for costs allocable to offsite locations may be necessary to permit equitable distribution of costs on the basis of the benefits accruing to the several cost objectives.” Accordingly, for projects where the engineering consultant’s employees do not work out of their own offices and do not receive office support in their daily activities, it may be appropriate to establish a field rate to reflect more accurately the overhead costs allocable to field labor. The purpose of the field rate is to pay the engineering consultant for the fringe benefits, home office management, and administrative