

Indirect Field Costs (IFC)

Key Points

- Indirect costs are defined.
- General and administrative (G&A) costs are described and the special situation associated with federally funded contracts is laid out.
- Overhead costs are distinguished from indirect field costs (IFC).
- Influences of contract type on IFC characterization and treatment are discussed.
- IFC are grouped and tabulated and those impacted by change in schedule highlighted.
- The challenge of indirect costs is to keep them current based on current business needs and inflation changes.

Introduction

This Executive Insight focuses on indirect field costs (IFC). It does so in the context of all possible indirect costs that a project may experience. Indirect field costs represent a significant contractor cost which must be accurately considered and reflected in the contractor's initial bid and any subsequent change proposals.

The terminology for similar costs varies across industry segments and even between firms in a given industry segment.

The cost accounting system used for Federal government projects must conform to U.S. Government Cost Accounting Standards¹ (CAS). This impacts the classification of indirect cost.

In order to provide perspective, the relationships between the costs of completing a construction project are laid out first. This provides a basis for understanding different types of indirect costs.

¹ CFR Title 48 Chapter 99; PART 9904 - COST ACCOUNTING STANDARDS

Direct and Indirect Costs

The American Association of Cost Engineers defines² direct and indirect costs as follows:

- Direct costs – in construction, the cost of installed equipment, material, labor, and supervision **directly** or immediately involved in the physical construction of the permanent facility.
- Indirect costs – costs not directly attributable to the completion of an activity that are allocated or spread across all activities on a predetermined basis.

Direct construction costs may be broadly grouped to include labor, materials, and equipment to complete a construction task. Sometimes general contractors break out subcontractor expense separately. Here equipment would include items such as:

- Process equipment, including any royalty.
- Control systems, including the cost of implementing software.
- Electrical distribution equipment, whether for general power, industrial power, or traction power in a transit system.

This is contrasted with equipment employed in the direct construction of the facility.

These three broad elements of cost—labor, materials, and equipment—are found in all construction enterprises. The purpose here is not to delve further into direct costs.

Indirect Costs

Indirect costs includes all costs associated with the delivery of the final project facility but which are not permanent parts of that facility. Indirect costs include:

- General and administrative (G&A) costs associated with the overall construction enterprise.
- Overhead costs associated with the direct labor, equipment, and materials that comprise the final facility. The sum of G&A and overhead are often referred to as indirect expenses.
- Indirect field costs (IFC), which are generally incurred at the project site to the extent they do not fall into one of the preceding categories. These are referred to as general conditions costs in the standard AIA contract (AIA A102; Article 7) and ConsensusDocs 500 contract (Article 8.2). They are also referred to as direct expenses. The American Association of Cost Engineers (AACE) defines “(field) indirects” as “costs which do not become a final part of the installation but which are required for the orderly completion of the installation and may include, but are not limited to, field administration, direct supervision, capital tools, startup costs, contractor’s fees, insurance, taxes, etc.”

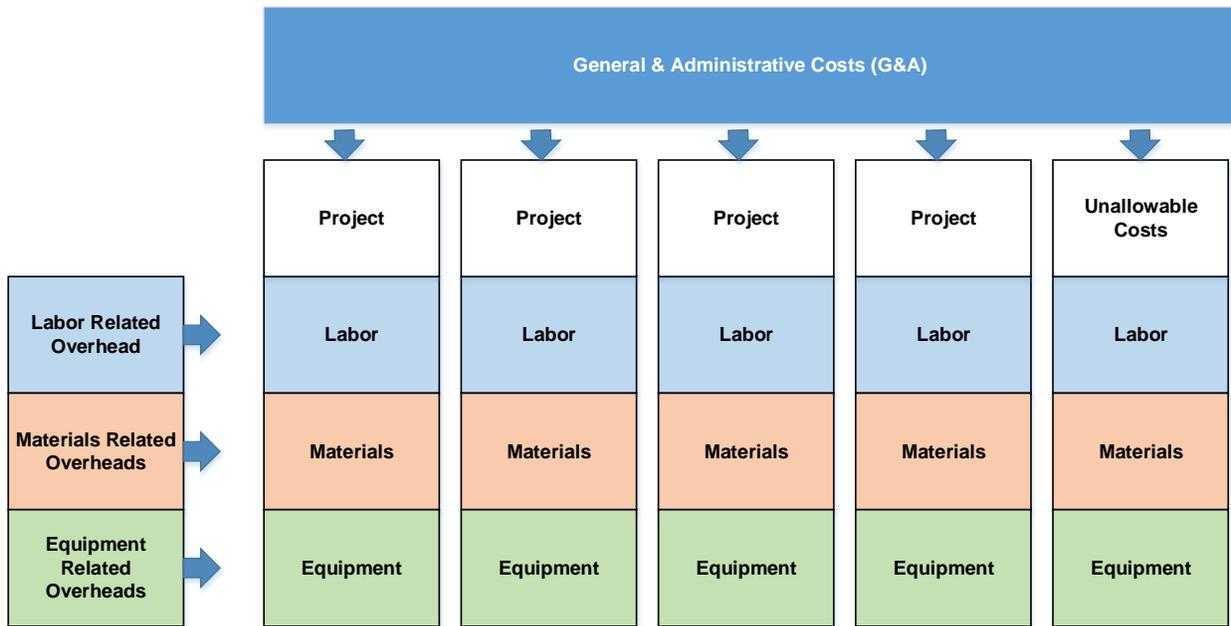
² 10S-90: Cost Engineering Terminology - AACE International

The next sections will look at each of these before taking a deeper dive into indirect field costs. One additional special category of indirect costs becomes important in government accounting, namely so-called unallowable costs.

General & Administrative (G&A) Costs

G&A costs are those incurred for managing **the entire business**. They are costs occurring at the corporate level. Separate tracking of these costs is important on federal contracts as well as other federally-funded contracts where provisions flow down. The discipline of federal cost accounting helps construction enterprises understand the sources of their costs and then make various keep versus outsource decisions.

G&A costs would apply to all activities of the firm, including costs that would otherwise be unallowable for cost recovery under federal cost accounting standards. An appropriate cost base must be selected and, in many instances, this is total cost. The distribution of these costs to a project may vary with contract form (discussed later). The following figure illustrates the allocation of G&A costs to projects.



Overhead Costs

Overhead costs represent costs that are applied across multiple elements of the business and which may be more directly able to be allocated to cost objectives other than the entirety of costs included in the operation of the business enterprise. Three potential overhead cost pools are shown in the preceding figure related to labor, materials, and equipment overheads. More granular definition of cost pools is possible. Enterprises not engaged in government contracting may collapse these separate overhead costs into G&A.

It is important to understand the value adding activity G&A costs support.

Examples of components of each of these overhead pools include:

- Labor — staff managing recruitment, benefits, payroll of project-based personnel.
- Materials — staff managing centralized supply chain activities; centralized, multi-project warehouses; aggregate yards; concrete plants.
- Equipment — maintenance, repair, and replacement of company owned construction equipment used on a multi-project basis to the extent not otherwise included in a reimbursable equipment rate.

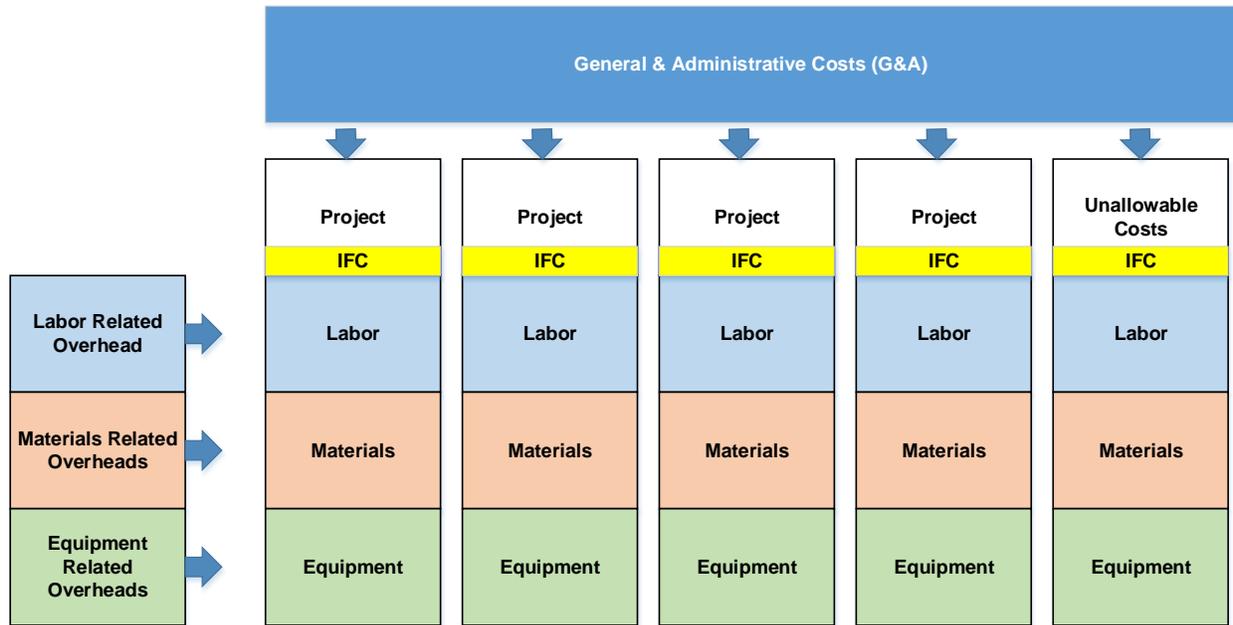
These costs would be allocated to projects in a federal cost accounting regime in proportion to the project's use of the respective cost objective. Each of these cost pools would be subject to closer examination to determine the appropriate cost objective and cost base in instances such as those associated with very large subcontracts, government- or owner-furnished materials, and major purchasing pass-throughs.

Indirect Field Costs (IFC)

Indirect field costs (IFC) are the costs other than direct field costs (DFC) that do not become a permanent part of the project but are required for the completion of the work. Also referred to as general conditions costs, they are items that will not form part of the actual product once the project has been finalized. The items included under the general conditions are all of those tools, resources, and equipment needed to build a project but that are not directly related to the physical construction activities. They are real contractor expenses and compensation is necessary. The indirect field costs include but are not limited to field office administration, direct management and supervision, temporary facilities, construction equipment and small tools, start-up costs, insurances, and taxes.

Indirect field costs may include **fixed and variable components**. Therefore, understanding the relative nature of IFC is critically important in making decisions to price work (estimate), accelerate a project, appropriately price changes, and understand the impacts of delayed completion.

As a component of project costs, IFC would attract the G&A and overhead costs previously described.



Influence of Contract Type

Cost-plus contracts reimburse a contractor the direct costs plus a fee, usually with a guaranteed maximum price (GMP). Drawbacks include cost of administration, gray areas that become subject of disputes, and completion audits often linked to release of final retainage amounts. Fully costing the various elements of the project with appropriate overhead allocations and, if appropriate, G&A is essential. Often G&A is included as part of the fee.

Hybrid cost-plus contracts (lump-sum general conditions alternative) where contractor’s overhead costs (G&A; overhead; indirect field costs) are estimated, negotiated, and billed as a lump sum. This “rate” is then applied to periodic billings and change orders. Various hybrid contracts may include only a subset of the contractor’s overhead in the lump sum calculation, with the components applicable to multiple contracts (G&A; overhead) included in the contractor’s fee.

Fixed price or lump sum contracts consider the totality of costs the contractor is likely to experience in execution of the project. It is, therefore, essential for the contractor to have a complete understanding and estimate for all expenses needed to deliver the work. These include all indirect costs including G&A, overheads, and IFC.

The tabulation that follows is intended to serve as guide in ensuring a complete understanding and accounting for indirect field costs. ***Bold-highlighted italics*** items represent indirect costs that grow with extended project schedules arising from any cause.

Table 1 – Indirect Field Costs

Field Administration

Field office supplies and expenses

1. Office supplies - ***field based computers, software, networks, servers, storage and offsite backup services including cloud services; BIM model related hardware and software expenses***; copying and reprographics; 3D printing equipment and supplies; ***project and construction “toolkits;” office furniture; timekeeping services and systems; blueprint machines***
2. ***Communication supplies and services - telephones including onsite and offsite cellular services; courier and other express delivery services; postage***
3. ***Progress recording (photo, video, other) - jobsite progress photos, videos and aerial drone photography***

Construction services

4. ***Janitorial - general site cleanup; dumpster service; janitorial services***
5. ***Site related services – warehouse and tool room labor; survey; messengers; bus drivers; other drivers; site security; bottled water/potable water***
6. ***HSE – safety + first aid services; medical staff on-site; disinfection services; safety equipment and supplies’ personal protective equipment (PPE); air quality and chemical monitors; hazmat suits; safety orientation and periodic training; safety awards***
7. ***Personnel testing and screening – chemical and biological screening of staff; security clearances; welder certification testing***
8. ***Craft training***
9. ***Environmental control – waste removal and disposal; storm water runoff impoundment and treatment, as required; environmental supplies, permits, licenses***
10. ***Testing and inspection – concrete testing; compaction testing; non-destructive examination; X-ray testing; third party inspections services***

Direct Supervision

Field staff labor, benefits and burdens – permanent and nonexempt field staff including premium time; travel, relocation, housing costs; premium, hardship, and completion payments; staff processing, recruitment, relocation, separation costs; employee supervision costs; FICA; FUI/SUI; Medicare; workers compensation; staff benefits; burdens; overtime; personnel expenses; site adders; incentives

Capital Tools

Construction equipment – equipment rental; heavy haul & rigging; miscellaneous equipment; freight, insurance; sales and use taxes; repairs, periodic servicing, maintenance; major repairs; scaffolding

Small tools and consumables – small tools; welding supplies and gases; other consumables

Start-Up Costs

Pre-development fee

Mobilization; demobilization

- Installation and removal of temporary facilities

Temporary Facilities (*Rented or Leased*)

- 1. Temporary buildings and offices – trailers; toilets; holding tanks; shops (pipe, carpenter, other) and associated tables and equipment; storage trailers; gate houses; temporary property rental; change houses; first aid and medical offices; wash trailers; break rooms and buildings; temporary warehouses; training rooms; tool sheds; signage; ramps and steps; associated miscellaneous equipment with each***
- 2. Construction camps in remote locations – camp facilities including housing, mess, common areas, religious services; camp utilities and roads***
- 3. Weather protection – wind breaks; shelters; awnings, tarps and covers; welding booths; building heat and cooling.***
- 4. Construction utilities – temporary power, power distribution, lighting; potable water; wash water; sewage and sewage treatment (if required); gas (natural, propane)***
- 5. Utility services cost of offsite utility services; fuel***
6. Temporary roads, parking, fences – **temporary fences**; drainage ditches; construction roads and parking; haul roads; repair and maintenance of temporary roads; laydown yards; office trailer park; snow removal; temporary railroads; temporary aviation facilities (runway; helipad; hanger, fueling)

Contractor's Labor Cost

Field staff overhead allocation – payroll taxes; payroll insurance

Craft benefits and burdens - craft FICA; workmen's comp; federal unemployment insurance, state unemployment insurance, social security, Medicare; comprehensive general liability and auto related insurance; craft fringe benefits; pension contributions; craft training; craft travel and subsistence; craft recruitment and processing costs and service charges; craft premium time and shift differentials

Insurance, Bonds, Permit Costs, Law Enforcement

Insurance - Builders risk insurance; liability insurances; insurances related to existing operating facility; insurance related to hot start-up

Bonds – performance and payment bonds; subcontractor bonds

Permit costs – state, county, city permits; environmental permits; right of way easements; utility relocation applications

Law enforcement – policing services; traffic management services

Taxes

Sales tax on indirects

Work Stoppages

Safety stand down

Non-Billable Expenses (absorbed in fee)

Summary – The Indirect Challenge

Indirect costs are often loaded into the company's estimating system and then forgotten. No one ensures they are updated for inflation or otherwise adjusted to reflect what the business can expect to pay for these items. Bids are under-estimated even if all the categories of indirects have been included.

The growth in indirect field costs, and indirect costs more broadly (G&A; overheads), needs to be recognized and accounted for when evaluating change proposals, disruption, and extensions of time. Time is not free and indirect field costs are a combination of fixed project costs, quantity-affected costs, and time-related costs.

About the Author

Bob Prieto was elected to the National Academy of Construction in 2011. He is a senior executive who is effective in shaping and executing business strategy and a recognized leader within the infrastructure, engineering, and construction industries.

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