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## Lunch and Learn: Indirect Cost, Rates, and Distortion



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## Indirect Cost, Rates, and Distortion

Indirect Cost typically make up the preponderance of what the DoD pays their contractors. Using illustrated examples, this session will expose the costs being paid with the application of these apparently simple rates. These examples also illustrate that all rates are developed and applied on different bases that can vary by company. And that all these rates carry some distortion in allocation between services and/or programs.

Based on their total sales forecast for the coming year, the XYZ Company is expecting to incur \$69,375 in material and subcontracts, \$120,000 in engineering labor, and \$80,000 in manufacturing labor. The company's total expected indirect expense of \$350,255 consists of: \$8,325 in indirect material O/H expenses; \$117,600 in indirect engineering O/H expenses; \$168,000 in indirect manufacturing O/H expenses; and \$56,330 in general and administrative (G&A) expenses. Assume the company uses direct material and labor costs to allocate their respective overheads and a TCI base (total cost input - i.e. all direct cost plus all indirect overhead cost) to allocate G&A. [Direct Cost, Indirect Cost & Rates, Mfg. OH, G&A, TCI Base](#)

- Compute the XYZ Company plant-wide indirect rates.

$$\text{Rate (R)} = \frac{\text{Pool (P)}}{\text{Base (B)}}$$

	<u>Support Expense Pool</u>	<u>Allocation Base</u>	<u>Rate (Pool÷Base)</u>
Mat. O/H	\$ 8,325	\$ 69,375	<b>\$8,325÷\$69,375=.12=12% Mat O/H Rate</b>
Eng. O/H	\$117,600	\$120,000	<b>\$117,600÷\$120,000=.98=98% Eng O/H Rate</b>
Mfg. O/H	<u>\$168,000</u>	<u>\$ 80,000</u>	<b>\$168,000÷\$80,000=2.10=210% Mfg O/H Rate</b>
	\$ 293,925	\$ 269,375	Total Plant-wide direct cost
		<u>\$ 293,925</u>	Total Plant-wide indirect overhead cost
G & A	\$ 56,330	\$ 563,300	Total Plant-wide Cost Input Base (TCI)
			<b>\$56,330÷\$563,300=.10=10% G&amp;A Rate</b>

Assume XYZ company only has two (2) contracts. An experimental prototype R&D contract (A) is expected to require \$13,875 in direct material and subcontracts, \$96,000 in direct engineering direct labor and \$20,000 in direct manufacturing labor. A production contract (B) is expected to require \$55,500 in direct material and subcontracts, \$24,000 in direct engineering labor and \$60,000 in direct manufacturing labor.

- Compute the total contract cost (direct and indirect) for Contract A and Contract B.

	<u>Contract A R&amp;D Prototype</u>	<u>Contract B Production</u>	<u>Total Cost Allocated</u>
Material	\$13,875	\$55,500	
Mat O/H @ 12%	\$1,665	\$6,660 4X	\$8,325 ✓
Engineering Lbr	\$96,000	\$24,000	
Eng O/H @ 98%	\$94,080 4X	\$23,520	\$117,600 ✓
Manufacturing Lbr	\$20,000	\$60,000	
Mfg O/H @ 210%	<u>\$42,000</u>	<u>\$126,000</u> 3X	\$168,000 ✓
Sub-total Production	\$267,620	\$295,680	
G&A @ 10%	<u>\$26,762</u>	<u>\$29,568</u>	\$56,330 ✓
Total Cost	\$294,382	\$325,248	\$619,630 ✓

Now, let us assume XYZ company were to allocate G&A expense on a Value Added (VA) basis using only their cost to transform materials, and NOT the cost of the materials and subcontracts. (Computationally, subtract Material and Subcontract cost from the Total Cost Input, TCI, base.)

- **First we need to compute the new Plant-Wide G&A rate based on VA instead of TCI.** Then we need to apply those new rates on our contracts.

Total Cost Input (TCI) Base (all direct and indirect cost)	\$563,300	\$563,300
Less – Material and Subcontracts	(\$69,375)	(\$69,375)
- and, Material Overhead (?)	(\$8,325)	Part of VA
Value Added (VA) allocation Base	\$485,600	\$493,925
General and Administrative (G&A) expense Pool	\$56,330	\$56,330
New Plant-wide G&A Rate, VA Basis	11.6001%	11.4046%
Vs. Old Plant-wide G&A Rate, TCI Basis (for comparison)		10%

Will funding requirements for the contracts increase? Clearly the rates are going up, can't be good – right?

If you are the PM/BFM for the Prototype R&D Contract A? Of course! Or, maybe, maybe not?

If you are the PM/BFM for the Production Contract B? Of course! Or, maybe, maybe not?

- **Then we need to apply those new rates on our contracts.** (Recall our cost summary below.)

	Prototype Contract A	Production Contract B	
Material	\$13,875	\$55,500	\$69,375
Mat O/H @ 12%	\$1,665	\$6,660	
Engineering Lbr.	\$96,000	\$24,000	
Eng. O/H @ 98%	\$94,080	\$23,520	
Manufacturing Lbr.	\$20,000	\$60,000	
Mfg. O/H @ 210%	\$42,000	\$126,000	Total G&A Recovered
Sub-total Production	\$267,620	\$295,680	↓
G&A @ 10%	\$26,762	\$29,568	\$56,330
Sub-total Production	\$267,620	\$295,680	
G&A @ 11.4046%	\$30,521	\$33,721	\$64,242

So now it is just as easy as using the new G&A rate, right?

Hmm, applying the new rate, the same way, results in windfall of: \$7,912

- **We must apply rates on same basis used to develop them!** (With material excluded.)

	Prototype Contract A		Production Contract B	
Sub-total Production	\$267,620	\$267,620	\$295,680	\$295,680
Less – Material and Sub K.	(\$13,875)		(\$55,500)	
Value Added Base	\$253,745		\$240,180	
G&A @ 11.4046%	\$28,939	\$28,939	\$27,392	\$27,392
	\$282,684	\$550,252 Total?! Vs. \$619,630 TCI	\$267,572	
Add back – Mat & Sub K.	\$13,875	Δ = \$69,378 Mat & Sub K	\$55,500	
	\$296,559	\$296,559 v	\$323,072	\$323,072 v

## XYZ Summary Learning Points

- Regardless of method, all plant-wide direct and indirect cost should get recovered as they are necessary to conduct business.
  - Goal should be neither over-recovery or under-recovery.
  - To correctly apply a rate you need to know how it was developed.
- Equally important, if not more so, to knowing the rate (numeric) is knowing the base it is associated with (i.e. the base used to develop the rate to begin with).
  - Applying an 11.4% G&A rate without knowing it's basis is VA, instead of TCI, resulted in a \$7.9K contractor windfall.
  - Not enough to ask for a numeric rate percentage and not also obtain the base: world of difference between an 11.4% VA and an 11.4% TCI!
- Bases require precise definitions as to exactly what costs are included in the base, and what costs are not included in the base (e.g. do we also exclude material overhead as well as direct material) – regulations aren't always prescriptive.
- Adopting specific conventions into inflexible templates without understanding other methods may provide operational ease, but their inflexibility can be risky.

## XYZ Food for Thought

- If funding were an issue, which method (TCI or VA) would the Prototype Contract A program manager prefer?  
TCI
- If funding were an issue, which method (TCI or VA) would the Production Contract B program manager prefer?  
VA
- If the G&A cost accounts were examined and found to have very little, if anything, to do with the material/subcontracts activity (i.e. the principle G&A costs are for activities such as HR, fringe benefits, payroll, accounting, etc. more related to the labor activities of the company) . . .
  - using TCI would result in an inequitable distortion for which contract's program manager (Prototype Contract A, or Production Contract B)?

Production Contract B

### Engineering Supervisor – an exercise in allocation distortions

- One (1) engineering supervisor makes big bucks (\$300,000) supervising two (2) six (6) person teams, each one dedicated to their respective projects A and B.
- Each team works an equal number of hours that are directly charged to their respective projects A and B over the year (12,480 hours for each team project) – a total of 24,960 hours being managed by the supervisor over a year's time.
- The A team is much more senior than the B team with an average hourly rate of \$100/hour vs. an average rate of \$50/hour for the junior team; thus \$1,248,000 in direct engineering labor cost is charged to Project A, and \$624,000 is charged to B.
- How much of the engineering supervisor's salary would be allocated to each project A and B, should engineering overhead be allocated on the basis of . . .
  - Engineering Labor Hours:  $\frac{1/2 \text{ or } \$150,000}{}$  to A, and  $\frac{1/2 \text{ or } \$150,000}{}$  to B
  - Engineering Labor Dollars (\$):  $\frac{2/3 \text{ or } \$200,000}{}$  to A, and  $\frac{1/3 \text{ or } \$100,000}{}$  to B.
- Assuming the supervisor actually spends more time supervising the junior team, which methodology provides the greater distortion? Labor Dollars or Labor Hours? (circle one)

### Engineering Supervisor - \$300,000/yr.

	<u>Senior Team</u> <u>Project A</u>	<u>Junior Team</u> <u>Project B</u>	<u>Plant-wide</u> <u>Totals &amp; (Rates)</u>
Total Hours/Year	12,480	12,480	24,960 hrs.
Average Rate	\$100/hr.	\$50hr.	(\$12.02/hr.)
Direct Eng. Labor Charges	\$1,248,000	\$624,000	\$1,872,000 (16.03%)
<u>Supervisor Salary Charges</u>			
Allocation on Hrs.	<u>\$150,000</u>	<u>\$150,000</u>	\$300,000
Allocation on Lbr. \$	<u>\$200,000</u>	<u>\$100,000</u>	\$300,000

With disparate rates, more or less supervision gets allocated to the junior team.

contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred. They also include, but are not limited to, such factors as—

- (1) Vendor quotations;
- (2) Nonrecurring costs;
- (3) Information on changes in production methods and in production or purchasing volume;
- (4) Data supporting projections of business prospects and objectives and related operations costs;
- (5) Unit-cost trends such as those associated with labor efficiency;
- (6) Make-or-buy decisions;
- (7) Estimated resources to attain business goals; and
- (8) Information on management decisions that could have a significant bearing on costs.

“Cost realism” means that the costs in an offeror’s proposal—

- (1) Are realistic for the work to be performed;
- (2) Reflect a clear understanding of the requirements; and
- (3) Are consistent with the various elements of the offeror’s technical proposal.

“Cost sharing” means an explicit arrangement under which the contractor bears some of the burden of reasonable, allocable, and allowable contract cost.

“Customs territory of the United States” means the 50 States, the District of Columbia, and Puerto Rico.

“Data other than certified cost or pricing data” means pricing data, cost data, and judgmental information necessary for the contracting officer to determine a fair and reasonable price or to determine cost realism. Such data may include the identical types of data as certified cost or pricing data, consistent with [Table 15-2](#) of [15.408](#), but without the certification. The data may also include, for example, sales data and any information reasonably required to explain the offeror’s estimating process, including, but not limited to—

- (1) The judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data; and
- (2) The nature and amount of any contingencies included in the proposed price.

“Data Universal Numbering System (DUNS) number” means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B), to identify unique business entities, which is used as the identification number for Federal contractors.

“Data Universal Numbering System +4 (DUNS+4) number” means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional System for Award Management records for identifying alternative Electronic Funds

Transfer (EFT) accounts (see [subpart 32.11](#)) for the same concern.

“Day” means, unless otherwise specified, a calendar day.

“Debarment” means action taken by a debaring official under [9.406](#) to exclude a contractor from Government contracting and Government-approved subcontracting for a reasonable, specified period; a contractor that is excluded is “debarred.”

“Delivery order” means an order for supplies placed against an established contract or with Government sources.

“Depreciation” means a charge to current operations that distributes the cost of a tangible capital asset, less estimated residual value, over the estimated useful life of the asset in a systematic and logical manner. It does not involve a process of valuation. Useful life refers to the prospective period of economic usefulness in a particular contractor’s operations as distinguished from physical life; it is evidenced by the actual or estimated retirement and replacement practice of the contractor.

“Descriptive literature” means information provided by an offeror, such as cuts, illustrations, drawings, and brochures, that shows a product’s characteristics or construction of a product or explains its operation. The term includes only that information needed to evaluate the acceptability of the product and excludes other information for operating or maintaining the product.

“Design-to-cost” means a concept that establishes cost elements as management goals to achieve the best balance between life-cycle cost, acceptable performance, and schedule. Under this concept, cost is a design constraint during the design and development phases and a management discipline throughout the acquisition and operation of the system or equipment.

“Designated operational area” means a geographic area designated by the combatant commander or subordinate joint force commander for the conduct or support of specified military operations.

“Direct cost” means 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 acquisition” means a type of interagency acquisition where a requesting agency places an order directly against a servicing agency’s indefinite-delivery contract. The servicing agency manages the indefinite-delivery contract but does not participate in the placement or administration of an order.

“Disaster Response Registry” means a voluntary registry of contractors who are willing to perform debris removal, distribution of supplies, reconstruction, and other disaster or

been completed or when the contractor will not agree to a forward pricing rate agreement.

“Freight” means supplies, goods, and transportable property.

“Full and open competition,” when used with respect to a contract action, means that all responsible sources are permitted to compete.

“General and administrative (G&A) expense” means any management, financial, and other expense which is incurred by or allocated to a business unit and which is for the general management and administration of the business unit as a whole. G&A expense does not include those management expenses whose beneficial or causal relationship to cost objectives can be more directly measured by a base other than a cost input base representing the total activity of a business unit during a cost accounting period.

“Governmentwide acquisition contract (GWAC)” means a task-order or delivery-order contract for information technology established by one agency for Governmentwide use that is operated—

(1) By an executive agent designated by the Office of Management and Budget pursuant to [40 U.S.C. 11302\(e\)](#); or

(2) Under a delegation of procurement authority issued by the General Services Administration (GSA) prior to August 7, 1996, under authority granted GSA by former section [40 U.S.C. 759](#), repealed by Pub. L. 104-106. The Economy Act does not apply to orders under a Governmentwide acquisition contract.

“Governmentwide point of entry (GPE)” means the single point where Government business opportunities greater than \$25,000, including synopses of proposed contract actions, solicitations, and associated information, can be accessed electronically by the public. The GPE is located at <http://www.fedbizopps.gov>.

“Head of the agency” (see “agency head”).

“Head of the contracting activity” means the official who has overall responsibility for managing the contracting activity.

“Historically black college or university” means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2.

“HUBZone” means a historically underutilized business zone that is an area located within one or more qualified census tracts, qualified nonmetropolitan counties, lands within the external boundaries of an Indian reservation, qualified base closure areas, or redesignated areas, as defined in 13 CFR 126.103.

“HUBZone contract” means a contract awarded to a “HUBZone small business” concern through any of the following procurement methods:

(1) A sole source award to a HUBZone small business concern.

(2) Set-aside awards based on competition restricted to HUBZone small business concerns.

(3) Awards to HUBZone small business concerns through full and open competition after a price evaluation preference in favor of HUBZone small business concerns.

“HUBZone small business concern” means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration (13 CFR 126.103).

“Humanitarian or peacekeeping operation” means a military operation in support of the provision of humanitarian or foreign disaster assistance or in support of a peacekeeping operation under Chapter VI or VII of the Charter of the United Nations. The term does not include routine training, force rotation, or stationing ([10 U.S.C. 2302\(8\)](#) and [41 U.S.C. 153\(2\)](#)).

“In writing,” “writing,” or “written” means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

“Indirect cost” means any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective.

“Indirect cost rate” means the percentage or dollar factor that expresses the ratio of indirect expense incurred in a given period to direct labor cost, manufacturing cost, or another appropriate base for the same period (see also “final indirect cost rate”).

“Ineligible” means excluded from Government contracting (and subcontracting, if appropriate) pursuant to statutory, Executive order, or regulatory authority other than this regulation ([48 CFR chapter 1](#)) and its implementing and supplementing regulations; for example, pursuant to—

(1) [40 U.S.C. chapter 31](#), subchapter IV, Wage Rate Requirements (Construction), and its related statutes and implementing regulations;

(2) [41 U.S.C. chapter 67](#), Service Contract Labor Standards;

(3) The Equal Employment Opportunity Acts and Executive orders;

(4) [41 U.S.C. chapter 65](#), Contracts for Material, Supplies, Articles, and Equipment Exceeding \$15,000;

(5) [41 U.S.C. chapter 83](#), Buy American; or

(6) The Environmental Protection Acts and Executive orders.

“Information security” means protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide—

(1) Integrity, which means guarding against improper information modification or destruction, and includes ensuring information nonrepudiation and authenticity;

Manufacturing Overhead Rate History and Projection					
	Account Title	Actual 2012	Actual 2013	Actual 2014	Projected 2015
Pool	<b>Salaries &amp; Wages</b>				
	Indirect Labor	\$1,338,330	\$1,236,259	\$1,395,245	\$1,443,095
	Additional Compensation	\$80,302	\$75,490	\$83,950	\$88,000
	Overtime Premium	\$13,214	\$15,744	\$11,296	\$14,500
	Sick Leave	\$65,575	\$64,717	\$67,742	\$72,130
	Holidays	\$79,164	\$82,041	\$83,006	\$86,080
	Suggestion Awards	\$310	\$450	\$423	\$500
	Vacations	\$140,272	\$130,223	\$147,891	\$153,300
	<b>Personnel Expenses</b>				
	Compensation Insurance	\$25,545	\$24,544	\$26,304	\$28,500
	SUTA/FUTA	50,135	\$46,762	\$52,692	\$51,500
	FICA/Medicare	\$70,493	\$65,990	\$73,907	\$77,850
	Group Insurance	\$153,755	\$143,670	\$161,401	\$169,130
	Travel Expense	\$11,393	\$9,636	\$12,725	\$13,900
	Dues & Subscriptions	\$175	\$175	\$175	\$175
	Recruiting & Hiring	\$897	\$431	\$574	\$250
	Employee Relocation	\$4,290	\$3,891	\$3,562	\$4,400
	Employee Pension Fund	Salaried \$25,174 Hourly \$62,321	\$25,062 \$58,132	\$26,350 \$65,497	\$28,500 \$68,700
	Training, Conferences, Tech Meetings	\$418	\$407	\$539	\$457
	Educational Loans & Scholarships	\$400	\$400	\$400	\$400
	General Operating	\$495,059	\$475,564	\$509,839	\$525,000
	Maintenance: Building	\$9,102	\$8,640	\$12,318	\$15,700
	Stationary, Printing, Office Supplies	\$23,052	\$21,530	\$24,125	\$25,500
	Material O/H on Supplies	\$56,566	\$49,305	\$62,071	\$62,500
	Maintenance: Office Equipment	\$9,063	6,673	\$10,875	\$12,000
	Rearranging	\$418	\$2,128	\$3,523	\$3,600
	Other	\$3,314	\$3,198	\$2,635	\$2,500
	Heat, Light, & Power	\$470,946	\$446,971	\$489,123	\$507,200
	Telephone	\$32,382	\$30,414	\$33,874	\$35,000
	<b>Fixed Charges</b>				
	Depreciation	\$187,118	\$178,625	\$175,641	\$181,850
	Equipment Rental	\$7,633	\$7,633	\$7,633	\$7,633
	<b>Total Pool</b>	<b>\$3,416,816</b>	<b>\$3,214,705</b>	<b>\$3,545,336</b>	<b>\$3,679,850</b>
	Base	<b>Manufacturing Direct Labor Cost</b>			
	Assembly Labor	\$934,444	\$898,780	\$950,432	\$999,700
	Fabrication Labor	\$233,071	\$225,950	\$253,999	\$258,100
	Inspection Labor	\$173,372	\$180,928	\$203,500	\$209,400
	<b>Total Base</b>	<b>\$1,340,887</b>	<b>\$1,305,658</b>	<b>\$1,407,931</b>	<b>\$1,467,200</b>
Rate	<b>Manufacturing Overhead Rate</b>	<b>254.8%</b>	<b>246.2%</b>	<b>251.8%</b>	<b>250.8%</b>

General & Administrative Expense Rate History and Projection						
Account Title		Actual 2012	Actual 2013	Actual 2014	Projected 2015	
Pool	<b>Salaries &amp; Wages</b>					
	Indirect Labor	\$1,407,100	\$1,426,042	\$1,458,724	\$1,460,500	
	Additional Compensation	\$125,431	\$120,410	\$152,691	\$155,000	
	Overtime Premium	\$4,883	-0-	\$5,069	\$5,000	
	Sick Leave	\$34,875	\$33,262	\$32,937	\$32,500	
	Holidays	\$49,962	\$49,260	\$50,013	\$49,500	
	Suggestion Awards	\$240	\$402	\$225	\$250	
	Vacations	\$80,637	\$79,260	\$81,398	\$82,525	
	<b>Personnel Expenses</b>					
	Compensation Insurance	\$1,025	\$902	\$1,103	\$1,200	
	SUTA/FUTA	\$22,465	\$21,526	\$23,591	\$23,600	
	FICA	\$31,419	\$28,620	\$31,519	\$32,000	
	Group Insurance	\$29,008	\$28,942	\$29,226	\$29,300	
	Travel Expense	\$62,513	\$70,001	\$64,987	\$67,000	
	Dues & Subscriptions	\$2,375	\$2,210	\$2,119	\$2,500	
	Recruiting	\$1,378	\$902	\$1,075	\$1,250	
	Employee Relocation	\$566	\$2,125	\$1,974	\$1,500	
	Employee Pension Fund	Salaried Hourly	\$33,097 \$17,632	\$31,625 \$15,260	\$34,123 \$17,956	\$35,000 \$18,500
	Training, Conferences, Tech Meetings	\$7,003	\$8,102	\$7,536	\$7,500	
	Courtesy Meal Expense	\$6,238	\$6,124	\$5,436	\$7,000	
	Educational Loans & Scholarships	\$1,392	\$624	\$1,525	\$1,500	
	<b>Supplies</b>					
	Operating	\$2,010	\$1,862	\$1,724	\$2,000	
	Maintenance - Building	\$411	\$4,262	\$856	\$750	
	Stationary, Printing, Office Supplies	\$32,515	\$27,640	\$33,209	\$33,500	
	Postage	\$1,651	\$2,316	\$2,056	\$2,100	
	Material O/H on Supplies	\$1,732	\$1,710	\$1,634	\$1,980	
	Maintenance - Equipment	\$938	\$950	\$983	\$1,000	
	Other	\$15,829	\$18,216	\$16,982	\$17,500	
	<b>Public Utilities</b>					
	Telephone	\$59,105	\$63,142	\$61,372	\$65,000	
	Heat, Light, & Power	\$237,512	\$211,403	\$241,298	\$245,000	
	<b>Miscellaneous Income &amp; Expense</b>					
	Legal & Auditing	\$16,714	\$18,260	\$10,945	\$15,000	
	Professional Services	\$21,197	\$24,000	\$23,791	\$22,500	
	Patent Expense	\$18,466	\$17,620	\$9,084	\$10,000	
	Public Relations	\$12,155	\$14,670	\$14,172	\$15,000	
	<b>Interdivisional Transfers</b>					
	At Cost	(\$48,243)	-0-	-0-	-0-	
	<b>Corporate Expense</b>					
	Headquarters	\$1,556,956	\$1,467,024	\$1,673,824	\$1,700,000	
	<b>Fixed Charges</b>					
	Insurance Property	\$9,820	\$9,926	\$10,930	\$11,000	
	Insurance Inventories	\$4,024	\$4,862	\$4,543	\$4,500	
	Franchise Tax	\$268,495	\$260,126	\$246,624	\$265,000	
Rent - Equip	\$1,426	\$1,426	\$1,426	\$1,426		
<b>Total Pool</b>	<b>\$4,131,952</b>	<b>\$4,075,014</b>	<b>\$4,358,680</b>	<b>\$4,426,381</b>		

General & Administrative Expense Rate History and Projection (cont)					
Account Title		Actual 2012	Actual 2013	Actual 2014	Projected 2015
Base	Total Cost Input				
	Engineering O/H Expense	\$1,025,345	\$952,614	\$1,153,612	\$1,023,500
	Engineering Direct Labor	\$1,385,765	\$1,446,420	\$1,579,595	\$1,582,300
	Manufacturing O/H Expense	\$3,416,816	\$3,214,705	\$3,545,336	\$3,679,850
	Manufacturing Direct Labor	\$1,340,887	\$1,305,658	\$1,407,931	\$1,467,200
	Materials O/H Expense	\$1,234,456	\$1,205,621	\$1,296,179	\$1,361,000
	Direct Materials	\$13,056,987	\$13,042,160	\$13,484,836	\$14,145,921
	Total Base	\$21,460,256	\$21,167,178	\$22,467,489	\$23,259,771
Rate	G&A Rate	19.25%	19.25%	19.4%	19.0%

### Summary of Types of Indirect Cost Pools and Bases Typically Used to Allocate Them

Allocation Bases	Types of Indirect Cost Pools					
	Manufacturing	Engineering	Field Service	Material	General & Administrative	Secondary Pools
Total Cost Input <sup>1</sup>					●	
Value-Added Cost Input <sup>2</sup>					●	
Direct Labor Dollars <sup>3</sup>	●	●	●		●	
Direct Labor Hours <sup>3</sup>	●	●	●		●	
Machine Hours	●					
Units of Product <sup>4</sup>	●					
# of Purchase Orders				●		
Direct Material Cost				●		
Total Payroll Dollars						●
Head Count						●
Square Footage						●

<sup>1</sup> Also referred to as the "Cost of Goods Manufactured" or "Production Cost" during the accounting period. It typically includes all costs except general and administrative expenses.

<sup>2</sup> Also referred to as "Conversion Cost." It is the sum of direct labor costs, other direct costs, and associated indirect costs.

<sup>3</sup> When used to allocate General & Administrative cost, either Direct Labor Dollars or Direct Labor Hours are acceptable alternatives known as a Single Element allocation base.

<sup>4</sup> "Units of Product" refers to units of final product produced. It is only an acceptable base when final products are relatively homogenous and represent a reasonable measure of benefits from the appropriate pool.



## Indirect Cost, Rates, and Distortion

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- This was an abbreviated treatment of a vast topic using just two (2) of many illustrated examples developed at DAU Midwest Kettering.
- A more complete treatment including all the illustrated examples and cases (there are many more), that also provides the regulatory authorities, can be provided in a 1.0-1.5 day workshop.
- Just contact Bob or Chris at:  
[robert.williams@dau.mil](mailto:robert.williams@dau.mil), 937-781-1057  
[christopher.merkel@dau.mil](mailto:christopher.merkel@dau.mil), 937-781-4029



## A 1.0-1.5 Day Rates Workshop for you.

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- Are you overestimating your program cost by using overly-simplistic trend analysis of rates, direct and indirect?
- Do you have a realistic expectation of how high or low your rates should be, and whether or how much total cost will be affected?
- Do you have an objective method for evaluating how low a contractor's rates can go before being considered "unrealistic" in competitive acquisition environments?
- Do you have a way to objectively evaluate program funding impacts in the face of uncertain budgetary times for defense contractors?
- Do you know how to mitigate the risk of rate fluctuations in uncertain times using various contract provisions depending on differing acquisition environments?