



Reviewing Alternative Methods to Inventory Contracted Services Within the Department of Defense

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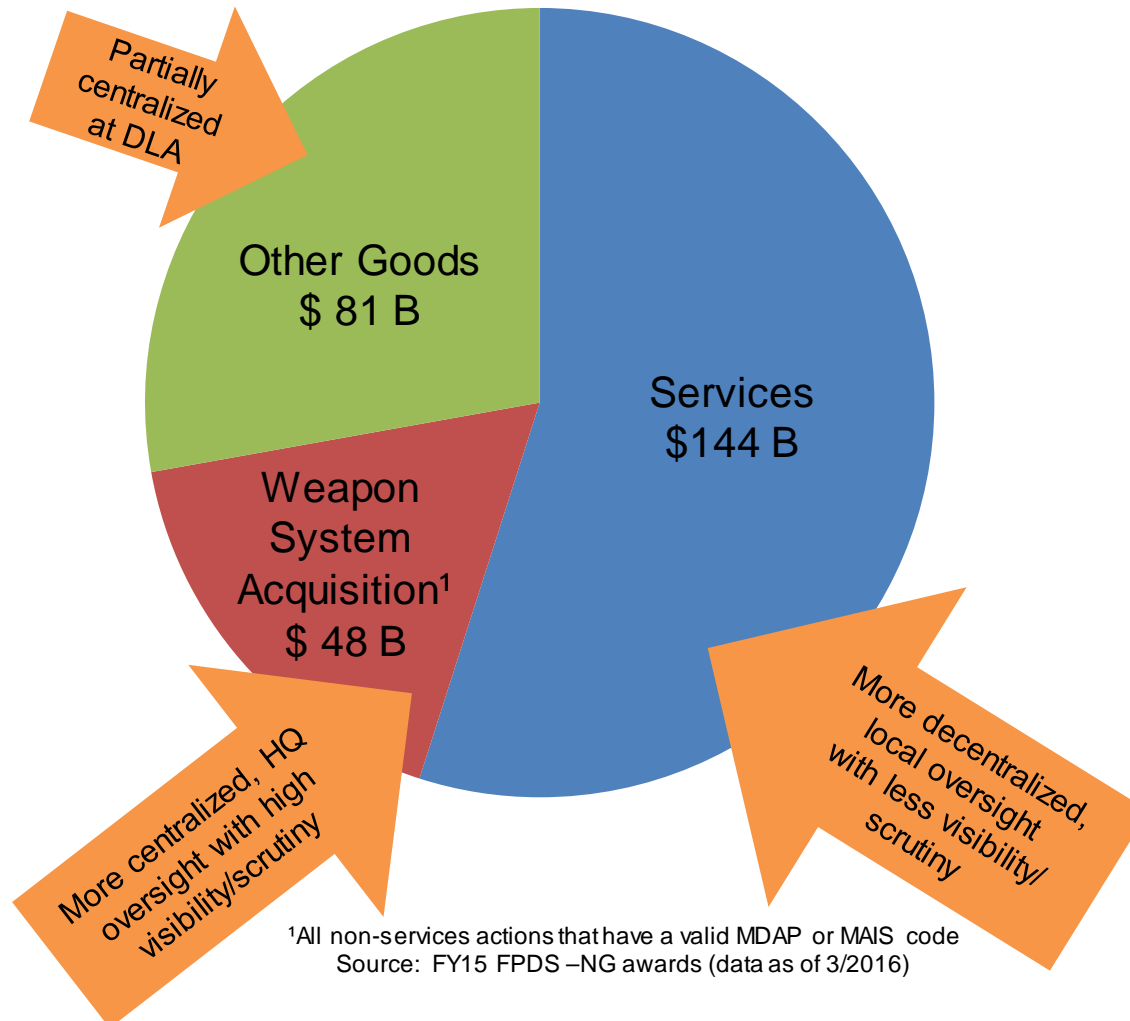
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DoD Spending on Services Is Over Half of All Its Spending

\$ 274 B DoD FY15 spend



Congressional Interest in Managing Services Contracts Began in 2001 with Procurement

2001 P.L. 107-107 Sec. 2330a - Required DoD collect and track procurement of services and establish management structure comparable to products

2002 NDAA SASC Report – Senate Armed Services Committee sought evidence of comprehensive DoD spend analysis, leveraged buying power, improved contractor performance, and rationalized supplier base to ensure service dollars are well spent

2008 - PL 110-81 Sec. 2330a – Required DoD to add information on contractor function, mission, and employees to ICS

2009 PL 111-84 – Required DoD to exclude R&D and military construction from inventory

2010 - HAC Report - House Appropriations Committee sought to strengthen oversight, end unnecessary no-bid and cost-plus contracts, maximize the use of competitive procurement processes, and clarify when outsourcing is/is not appropriate

2011 - 10 USC Sec 129a – Required OSD to “establish policies and procedures for determining the most appropriate/cost efficient mix of military [active and reserve], civilian, and contractor personnel” for DoD mission

2011 - PL 112-10 – Congress funded establishment of instances of the Army’s Contractor Manpower Reporting Application (CMRA) in the Navy and Air Force

2013 - P.L. 112-239 – DoD/DoS/ USAID collect total number of contractor support personnel, for future combat operations outside the U.S.

DoD ICS Efforts Focus on Collecting/Estimating Most Service Contractors' Direct Labor Hours

- Four versions of Contractor Manpower Reporting Application (CMRA) currently used to inform ICS submissions
- Army version is most developed
- DoD is moving toward a standard enterprise-wide CMRA (eCMRA)
- Contractors input their own data
- Multiple personnel enter, edit, and review data
- DoD views on utility of collecting direct labor hours vary

Organization	% of ICS \$s with contractor-reported full-time equivalents (FTEs) ²
Army ¹	100%
Navy	8%
Air Force	33%
34 other DoD components	15%
DoD-wide	38%

¹First DoD organization to implement CMRA

²Each Service, Defense Agency, Command, etc. develops its own ICS submission

Focus on direct labor hours incorrectly assumes:

- Most services contracts are labor contracting/staff augmentation
- Personnel are easily substitutable
- Contractors willingly, easily, and consistently report direct labor hours and direct non-labor cost data

ICS Data Do Not Currently Support Some Key DoD Stakeholders' Decision Making

Current ICS Data	User Needs	Closing Gaps
<ul style="list-style-type: none"> Retrospective Time-lagged 	Forward-looking data, with available input for: <ul style="list-style-type: none"> POM process Workforce planning Sourcing decisions 	Remedies may be available over the long-term
Largely raw data, no analysis	Analyzed data with trends/projections	
Direct labor hours <ul style="list-style-type: none"> 38% contractor reported 62% estimated 	Comparison of contractor and civilian FTEs to inform: <ul style="list-style-type: none"> Insourcing decisions Workforce planning 	
Contractor input not verified	Auditable, verifiable data	Less likely to improve over time
Covers very broad range of services contracting, but not all	Distinction in labor/staff augmentation contracting from other types of services contracting	

Different Types of Services Contracting Require Different Management

Manage
personnel

Manage
total
costs

Provided by	Labor contracting/ staff augmentation	Mixed contracting	Complete contracting
Host firm/buyer	<ul style="list-style-type: none"> • Some employees • Process and systems • Technology and equipment • Facilities • Management/supervision 	<p>Some or all of the following:</p> <ul style="list-style-type: none"> • Employees • Materials • Process and systems • Technology and equipment • Facilities • Management/supervision 	<ul style="list-style-type: none"> • Program management
Contractor	<ul style="list-style-type: none"> • Some employees 	<p>Some or all of the following:</p> <ul style="list-style-type: none"> • Employees • Materials • Process and systems • Technology and equipment • Facilities • Management/supervision 	<ul style="list-style-type: none"> • Employees • Materials • Process and systems • Technology and equipment • Facilities • Supervision

Government Civilians and Contractor Employees Need Not Be Equally Productive

- **Organizational cultures attract different kinds of labor with different behaviors**
- **Governance structures organize labor with other inputs and motivate labor in different ways**
- **Labor productivity depends on what other inputs—physical capital, information systems, production processes, etc.—are present**
- **Education, training and career management programs yield different levels and mixes of skills/aptitude**



Even *precise* counts of contractor direct labor hours cannot provide useful comparisons of what any given number of government or contractor employees can *produce*

High Variance in Dollars per FTE within PSCs Raises Questions About Army ICS Data Quality and Value

Top Product Service Codes (PSCs) by dollars in ICS	1,000 \$s per FTE				
	Min	Quartile 1	Median	Quartile 3	Max
SUPPORT- PROFESSIONAL: ENGINEERING/TECHNICAL	16	163	222	340	21,302
MEDICAL- GENERAL HEALTH CARE	25	76	139	267	3,968
SUPPORT- PROFESSIONAL: OTHER	9	102	166	249	68,322
IT AND TELECOM- OTHER IT AND TELECOMMUNICATIONS	5	149	260	453	11,293
MAINT/REPAIR/REBUILD OF EQUIPMENT- AIRCRAFT AND AIRFRAME STRUCTURAL COMPONENTS	77	87	109	195	408
SUPPORT- MANAGEMENT: LOGISTICS SUPPORT	25	76	134	222	80,035

What does such high variance mean for future workforce planning?

Source: Army FY2014 ICS data as of 3/7/2014 at http://www.acq.osd.mil/dpap/cpic/cp/acquisition_of_services_policy.html

FY2016 NDAA Conference Report Urged Consideration of Existing IT Alternatives to eCMRA for ICS Reporting

- **Federal Procurement Data System – Next Generation (FPDS-NG) supports analysis of *all* DoD spending over *time* by**
 - Product Service Code (PSC)
 - North American Industry Classification System (NAICS)
 - Type of contract
 - Type of solicitation
 - Budget categories
- **President’s budget with FPDS-NG enables spending projections**
- **We developed three alternative FTE metrics that use existing data**
 - Contract Amount per Civilian Labor
 - Contract Amount per Contractor Labor
 - Employees by Contract Portion of Revenue

Our Three Alternative Metrics Are Low-cost, Auditable Estimates of Contractor Labor

1. Contract Amount per Civilian Labor

- Uses civilian wages to estimate the change in the number of civilians if function were insourced
- Does not describe reallocations across contractors

2. Contract Amount per Contractor Labor

- Uses county-industry average of private sector earnings to describe change in number of contractors if function were relocated
- Does not inform insourcing

3. Employees by Contract Portion of Revenue

- Uses ratio of revenue to contract value to simulate change in number of contractors if function were reallocated to another contractor with similar indirect costs and individual productivity
- Does not inform insourcing

They estimate the number of contractors based on contract value to determine the relative importance of contracted/non-contracted labor across functions

Our Proposed Metrics Use Existing Data And Can Assess Past and Future Trends

	Current metrics		Proposed Alternative Metrics		
	Reported FTEs	Estimated FTEs	1. Contract amount per civilian labor	2. Contract amount per contractor labor	3. Employees by contract portion of revenue
Sources of information	<ul style="list-style-type: none"> • Contractor reports 	<ul style="list-style-type: none"> • Past contractor reports • FPDS-NG 	<ul style="list-style-type: none"> • FPDS-NG • General Fund Enterprise Business System 	<ul style="list-style-type: none"> • FPDS-NG • Bureau of Labor Statistics 	<ul style="list-style-type: none"> • FPDS-NG • System for Award Management
Required information	<ul style="list-style-type: none"> • Observed direct labor hours (DLH) 	<ul style="list-style-type: none"> • Contract \$\$; • Contract factor (CF) 	<ul style="list-style-type: none"> • Contract \$\$; • Weighted average partially-burdened annual civilian earnings (CE) 	<ul style="list-style-type: none"> • Contract \$\$; • County, state and NAICS industry average of private sector earnings (PSE) 	<ul style="list-style-type: none"> • Contract \$\$; • Average annual revenue (R); • Average number of employees (E)
Calculation of FTEs =	DLH/2088	(contract \$\$*CF)/2088	contract \$\$/CE	contract \$\$/PSE	(contract \$\$/R)*E

Both Current and Alternative Metrics Are Inappropriate for Many Uses

- **Planning Workforce Capabilities**
 - None provide insight to the skills or productivity of the current federal/contractor workforce or future needs
- **Budget Projections**
 - All conflate labor and non-labor costs so they cannot separately inform labor and non-labor budget projections
- **Insourcing/Outsourcing Decision**
 - OMB A-76 → all costs including indirect costs must be considered in the sourcing decision
- **Contractor Selection**
 - DoD Instruction 1100.22 → contractors cannot be selected using ICS data
- **Actual Number of Contractors in Theater(s)**
 - ICS does not record the total number of full/part-time contractor employees → it records direct labor hours used to estimate FTEs

All the metrics can assist in projecting the scale of the workforce

Recommendations

- Tailor ICS requirements to different categories of service contracts. For:

Labor contracting/staff augmentation:

Use multiple alternative metrics to estimate FTEs

Mixed and complete contracting:

Measure total cost and performance

Operational support:

Focus reporting requirement on number, not FTE, of deployed staff working in theater

- Institutionalize development and reporting of DoD-wide services spend analyses, trends, forecasts, and FTE reporting/estimation
- Periodically perform sourcing analyses of selected commercial services to determine if civilians or contractors deliver lowest total costs and required performance

Questions?

www.rand.org

Report:

http://www.rand.org/pubs/research_reports/RR1704.html

