Defense Acquisition University

USD (AT&L) Better Buying Power Initiative

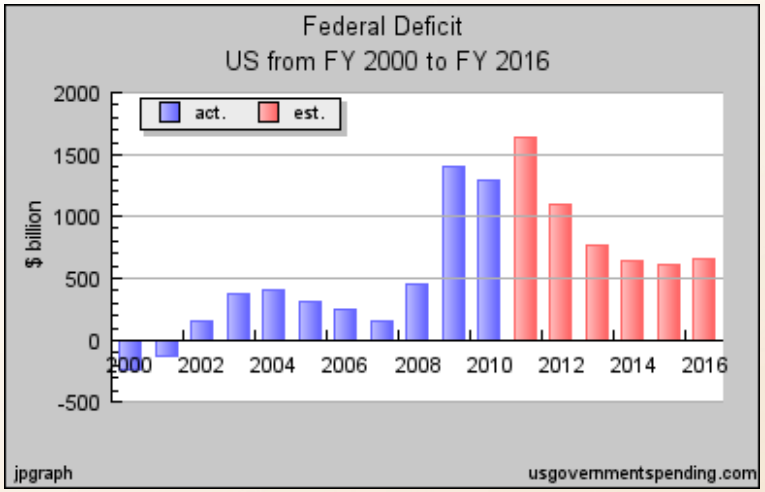
Target Affordability and Control Cost Growth; Drive Productivity Growth Through Will Cost / Should Cost Management

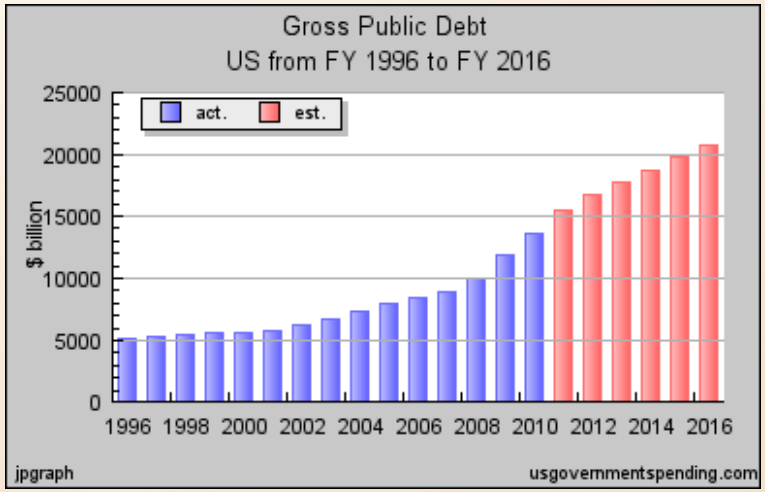
Better Buying Power Gateway: https://dap.dau.mil/leadership/Pages/bbp.aspx
Better Buying Power Community of Practice: https://acc.dau.mil/CommunityBrowser.aspx?id=432727

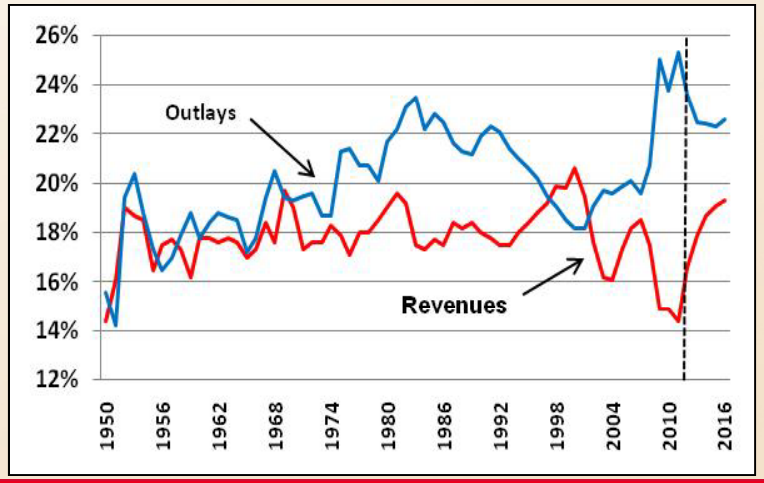
Outline

- Imperative to “Do More Without More”
- Will Cost vs Should Cost
- Should Cost – the Details
- Looking for savings…some suggestions
- Conclusion

Fiscal Trends





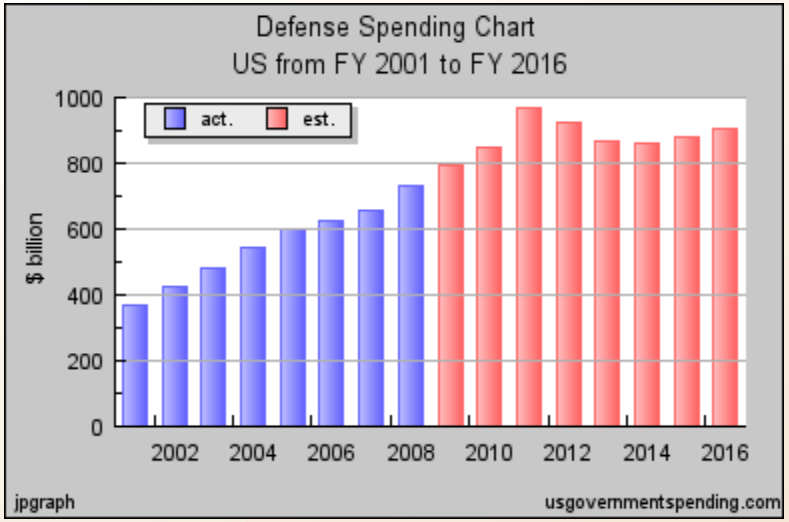


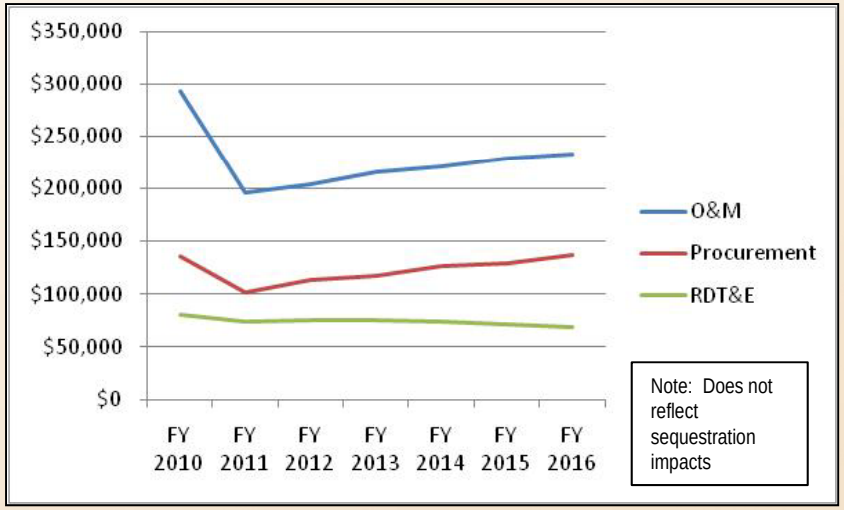
- Our structural fiscal trajectory is unsustainable
- Our large cyclical deficits are exacerbating debt levels and interest costs
- There are serious shortfalls in public investment in education, infrastructure, research and much else that is critical for longer-term competitiveness, growth, job creation and broad-based income increases in the US
- Everything must be on the table

"This department simply cannot risk continuing down the same path - where our investment priorities, bureaucratic habits and lax attitude towards costs are increasingly divorced from the real threats of today, the growing perils of tomorrow and the nation's grim financial outlook."

SecDef Robert Gates 6 Jan 2011

Fiscal Trends on Defense Spending





- The FY11 base defense budget was 1.1% less than FY10 base budget and 3.5% less than the President requested
- DoD's Cum base budget over the FY12 FYDP is $78B less (TY $) than planned in FY11 FYDP – a 2.6% reduction
- RDT&E funding is declining – by 2016 it will 25% than 2009

- The "Budget Control Act of 2011" called for $450 billion in cuts to defense spending over 10 years in 1st stage
- Stage 2 of the Act required The Congressional Super Committee (stage 2) to identify $1.2 trillion in federal budget savings by 2021. Failure to do so means DoD faces an additional ~$600B in cuts (stage 3) to its budget over the next 10 years

DoD may not have an opportunity to recapitalize its inventory of equipment for a decade or longer given the fiscal constraints the nation now faces. We must focus on cutting and controlling costs in order to get the systems we need and sustain the ones we have.

The Imperative

"We can no longer afford to spend as if deficits don't matter and waste is not our problem."

"To sustain necessary investment levels . . . we must significantly improve the effectiveness and efficiency of our business operations. Doing so will increase funding . . . For our mission functions from savings in overhead, support, and non-mission areas."

"We must therefore strive to achieve what economists call productivity growth: in simple terms, to DO MORE WITHOUT MORE . . . Drive productivity growth through Will Cost/Should Cost management.

Problem Statement

- Data from last 30 years shows 80% of programs overrun their initial 50/50 independent cost estimates. This coupled with the fiscal constraints the nation now faces means the DoD may not have an opportunity to recapitalize its inventory of equipment for a decade or longer. We must focus on cutting and controlling costs as ordered by the SecDef in order to get the systems we need and sustain the ones we have.
- Solution: Conduct Should Cost analysis; establish a culture of savings and constraint; and reduce program costs if reasonable efficiency and productivity enhancing efforts identified by the Should Cost analysis are implemented

Will Cost/Should Cost
Ashton B. Carter, SecDef Memo 14 Sep 10

MEMORANDOM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power; Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending

"TARGET AFFORDABILITY AND CONTROL COST GROWTH"

Drive productivity growth through Will Cost/Should Cost Management. During contract negotiations and program execution, our managers should be driving productivity improvement in their programs. "They should be scrutinizing every element of program cost, assessing whether each element can be reduced relative to the year before, challenging learning curves, dissecting overheads and indirect costs, and targeting cost reduction with profit incentive – in short, executing to what the program *should cost*."

"… I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks for value."

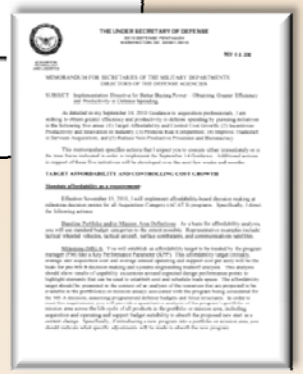
Will Cost/Should Cost
Ashton B. Carter, USD (AT&L)

Implementation Directive for Better Buying Power, 3 Nov 2010

Drive productivity growth through Will Cost/Should Cost management:

Effective November 15, 2010, you will establish "Should Cost" targets as management tools for all ACAT I programs as they are considered for major MS decisions. As described in my September 14, 2010, Guidance to the acquisition workforce, "Should Cost" targets will be developed using sound estimating techniques that are based on bottom-up assessments of what programs should cost, if reasonable efficiency and productivity enhancing efforts are undertaken. These costs will be used as a basis for contract negotiations and contract incentives and to track contractor and program executive officer/project manager performance. Program performance against "Should Cost" estimates will be reported to the Office of Acquisition Resources and Analysis through Acquisition Visibility Service Oriented Architecture (AV SoA).

By January 1, 2011, you will establish "Should Cost" estimates for ACAT II and III programs as they are considered for component MS decisions. You will use "Should Cost"-based management to track performance of ACAT II and III programs.



Should Cost targets are required for all ACAT I, II & III programs

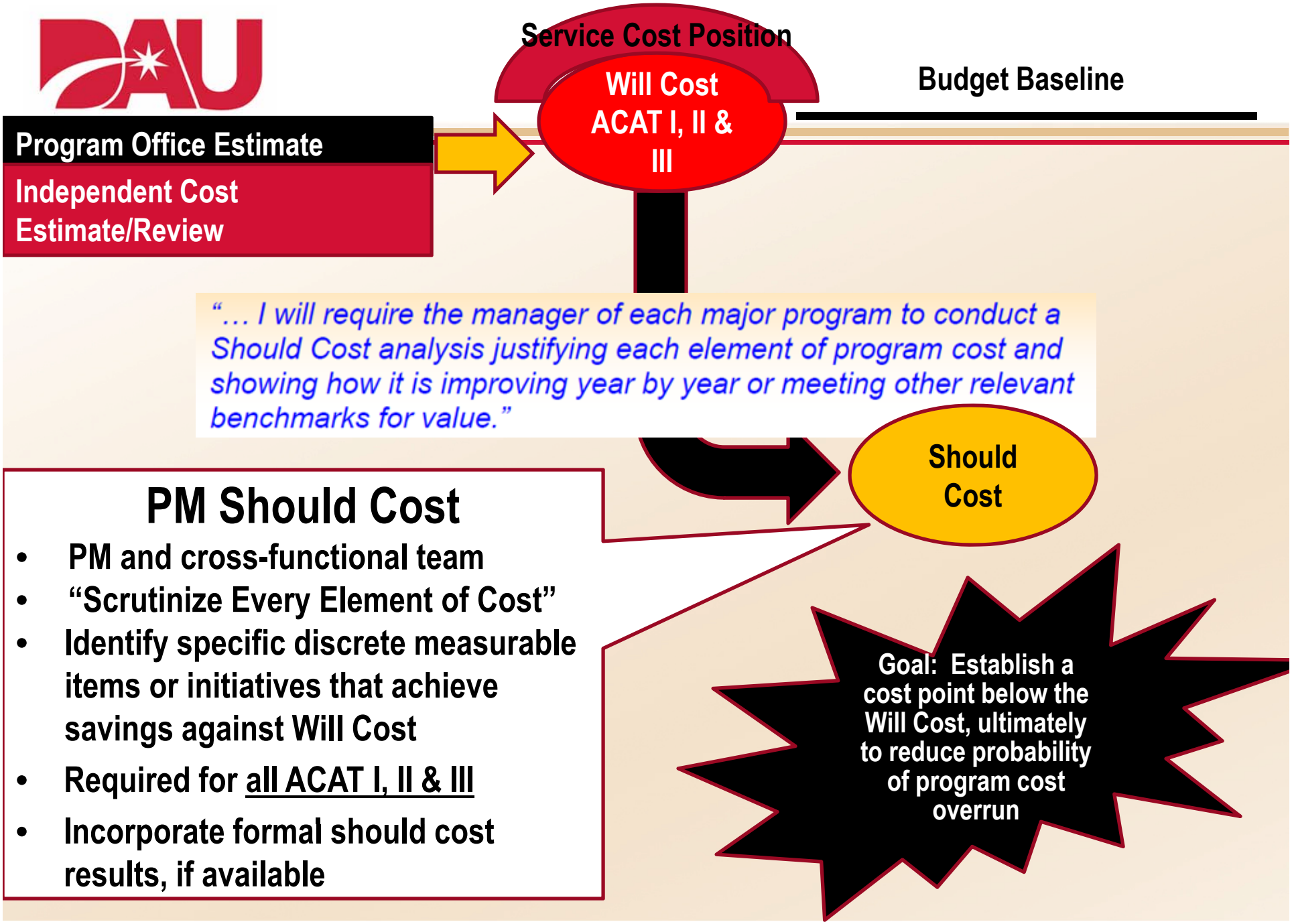
What does it all mean?

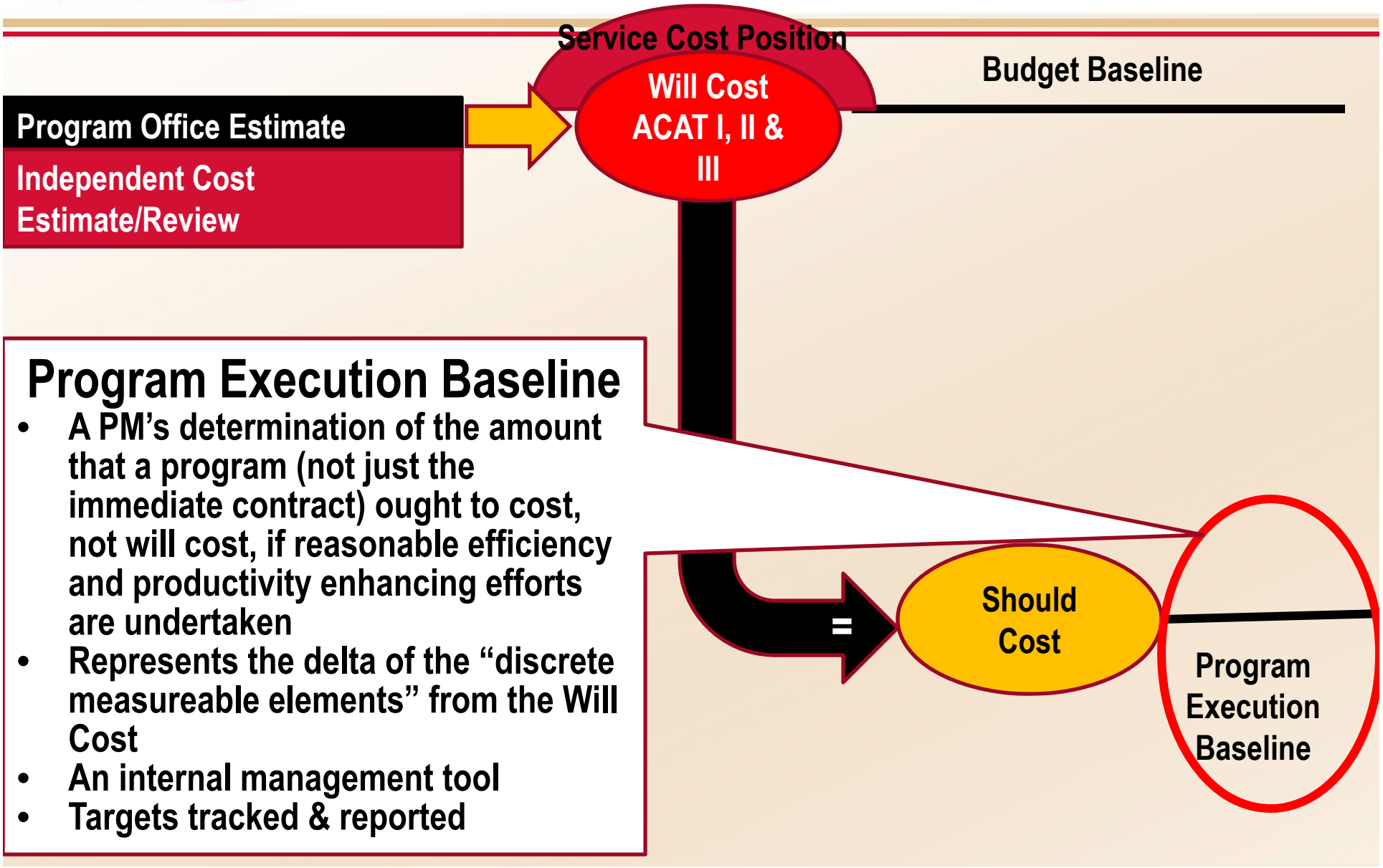
- Each Program Manager must establish a culture of savings and constraint
- It's about cost analysis, not cost estimating and the setting of cost targets
- Everyone on the PM's team must become a "Cost Warrior"
- Cost Warrior skills include understanding of the operations context, communication, a savings mindset, business acumen, courage and thick skin, analytical skills and a willingness to try new ideas*
- Each Program Office needs to look for options and alternatives that reduce costs
- Everyone needs to maximize the ROI for taxpayer dollars

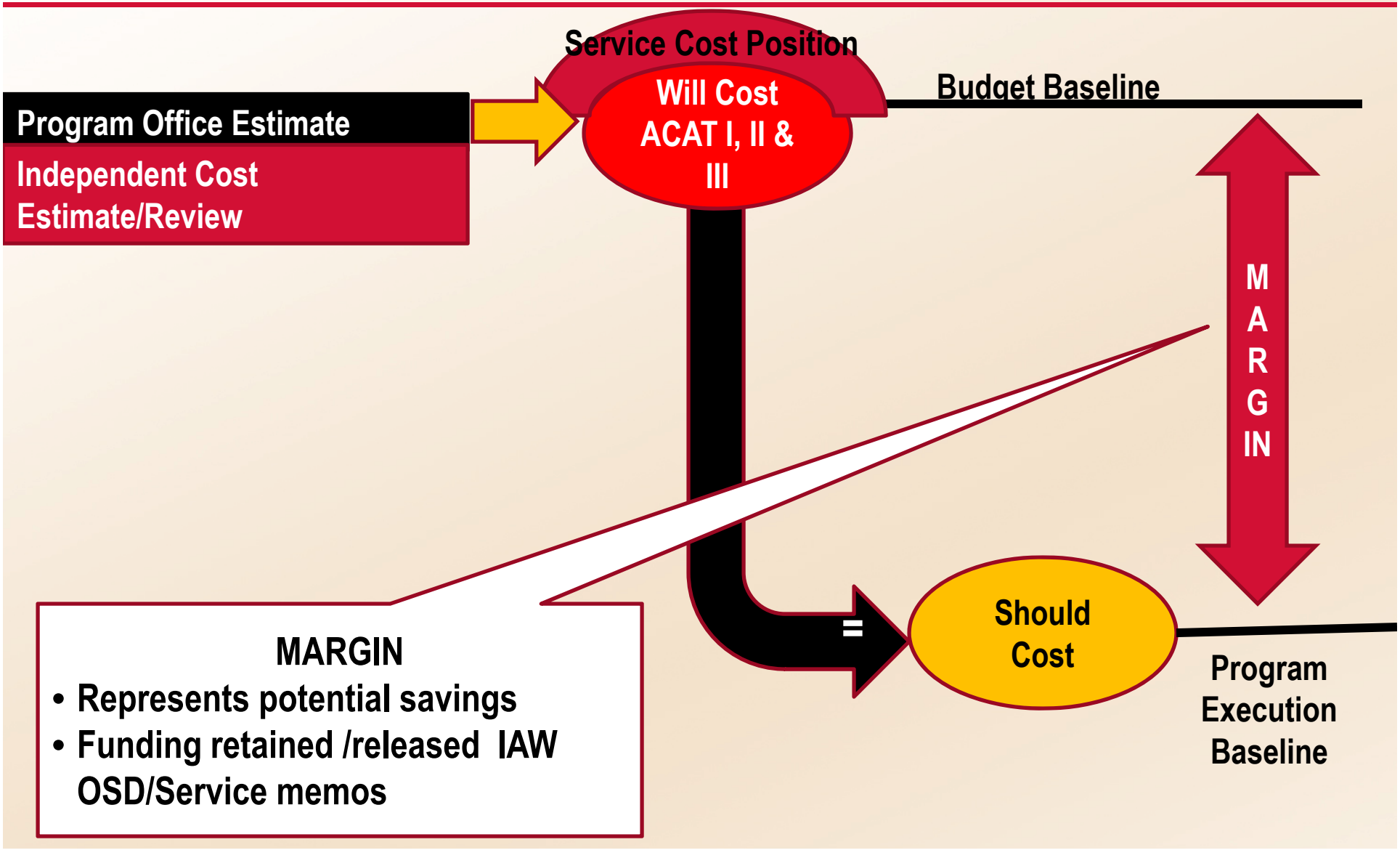
* Reference: Am. Society of Military Comptrollers, June 2011, Annual Survey

Will Cost

- Established following DoD and Service Memos, Instructions, Regulations, and Guides
- Represents official Service position for budgeting, programming & reporting
- Sets threshold for budgeting APB, SAR, Nunn-McCurdy
- Continually updated with current available information for budget process


Service Cost Position
Will Cost
ACAT I, II & III
Budget Baseline
Program Office Estimate
Independent Cost Estimate/Review
"… I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks for value."
Should Cost
PM Should Cost
• PM and cross-functional team
• "Scrutinize Every Element of Cost"
• Identify specific discrete measurable items or initiatives that achieve savings against Will Cost
• Required for all ACAT I, II & III
• Incorporate formal should cost results, if available
Goal: Establish a cost point below the Will Cost, ultimately to reduce probability of program cost overrun


Service Cost Position
Will Cost
ACAT I, II & III
Budget Baseline
Program Office Estimate
Independent Cost Estimate/Review
Program Execution Baseline
• A PM's determination of the amount that a program (not just the immediate contract) ought to cost, not will cost, if reasonable efficiency and productivity enhancing efforts are undertaken
• Represents the delta of the "discrete measureable elements" from the Will Cost
• An internal management tool
• Targets tracked & reported
=
Should Cost
Program Execution Baseline


Service Cost Position
Will Cost
ACAT I, II & III
Budget Baseline
Program Office Estimate
Independent Cost Estimate/Review
MARGIN
=
Should Cost
Program Execution Baseline
MARGIN
• Represents potential savings
• Funding retained /released IAW OSD/Service memos

PM Should Cost ≠ Formal Should Cost

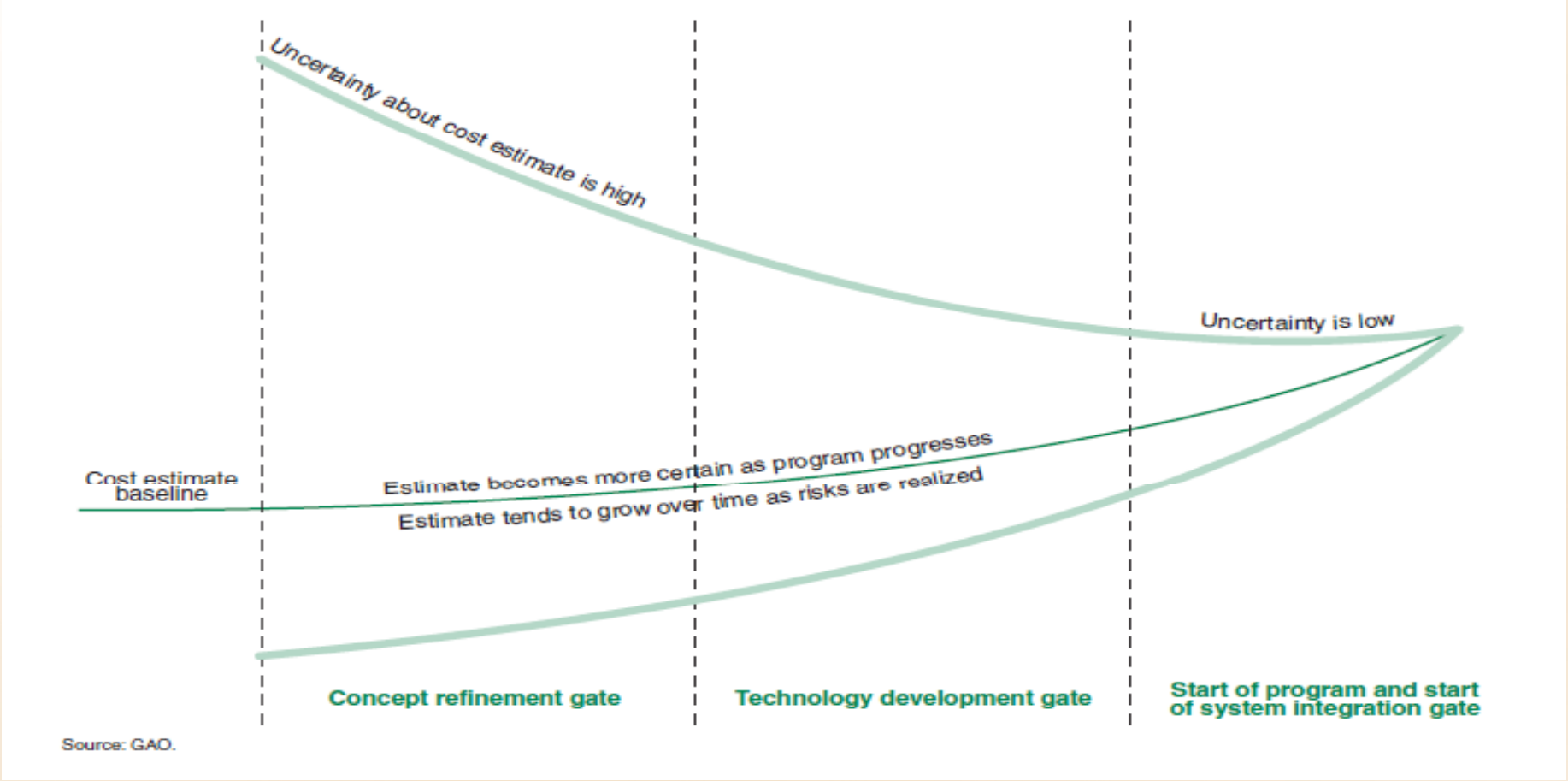
- Formal Should Cost described in FAR 15.407-4 & DFARS 215-407-4
- Decision to conduct part of acquisition planning
- Accomplished on high dollar programs under specific circumstances
- Involves a lot of people and a lot of time
- Two types of contract-level should-cost reviews - may be performed together or independently.
    1. Program should-cost review (NOT same as PM Should Cost)
    2. Overhead should-cost review
- Goals: 1) To bring about short and long range improvements in the efficiency and economy of the contractor's operations, and 2) to develop a negotiation objective that will support the contracting officer's efforts in negotiating a fair and reasonable price
- Considers all activities in a contractor's plant and is not directed at one program or product

AF EELV Formal Should Cost took 79 Gov't personnel, 12 Contractor personnel; 4 months; 69 site visits and resulted in 84 CRIs

PM Should Cost ROE

- Straight reductions by a specified percentage or dollar value against the will-cost estimate are NOT valid should-cost estimates
  - Example: Design-to-Cost
- Most items outside the control of the program office and inconsistent with the current program of record are outside excursions and NOT appropriate for the should-cost estimate.
  - Example: economic production rates
- Anything requiring significant investment for completion and an increase to the budget is outside the scope of the should-cost estimate and should be shown separately for consideration
  - Example: Capital investments used to reduce program costs in the out years

Cost Estimating "Cone of Uncertainty"



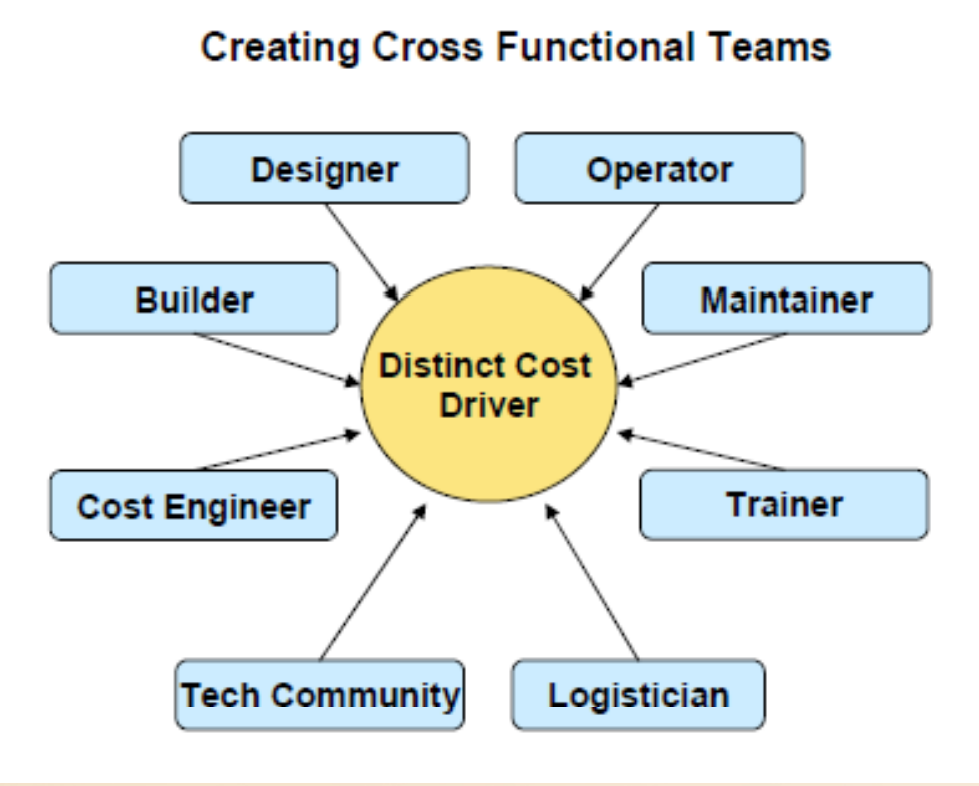
Opportunities to reduce costs exist in every phase, but your largest saving opportunities occur during the design of the system.

Developing PM Should Cost Targets

- **Various approaches, but of these three are recommended:**
  1. **Will-cost estimate as the base and apply discrete, measurable items and/or specific initiatives for savings against that base**
  2. **Bottoms-up approach (different methods from will-cost estimate) *without* a detailed FAR/DFARS contract (formal) should-cost review and includes actionable content to achieve cost below the will-cost estimate**
  3. **Bottoms-up approach (different methods from will-cost estimate) *with* a detailed FAR/DFARS contract (formal) should-cost review and include actionable content to achieve cost below the will-cost estimate**

Developing Should Cost Targets (Con't)

- **PMs should consider:**
  - **Seeking assistance from outside organizations (e.g., the Service's Cost Analysis Agency, DCMA, SAE) as they develop should-cost estimate**
  - **Close collaboration with appropriate center level functional organizations**
  - **Will-cost estimate excursions from the non-advocate organization and all previously defined should-cost estimates**



Categorization of Should Cost Reduction Initiatives (CRI)

- By Time line
  - Near-term (within the program manager's tenure)
  - Long-term initiatives
- By Control
  - Program driven - within program manager's control
  - Service Driven - within the services control
  - Externally Driven - outside service control

For MDAPs – PMs must provide, for each program phase/category/subprogram a list of the developed (or envisioned) should-cost initiatives with a brief description of each…templates available

Where Should I Look for Cost Reduction Opportunities?

- Scrutinize each ingredient of program cost and justify it
  - Categorize by Appropriations, WBS, or Life Cycle
  - Accomplish Pareto Analysis
  - Focus on few that drive most cost
  - What reasonable measures might be taken to reduce it?
- Accomplish a Pareto Analysis on the direct costs and material costs and focus on the few that drive overall cost
  - ~ 66% of a large defense contractors' revenue is spent on subcontractors
  - Identify opportunities to breakout GFE vs prime contractor provided items
  - Promote supply chain management to encourage competition at lower tiers

Remember the WILL COST addresses research and development, procurement and investment, operations and support, and disposal costs – You should as well while conducting your PM SHOULD COST

Where Should I Look for Cost Reduction Opportunities?

- Identify an alternative technology/material that can potentially reduce development or LCC (IR&D/Lab, etc.) for a program
  - Ensure the prime product contract includes the development of this technology/material at the right time
- Reduce Overhead Expenses - Reconstruct the program (Government and Contractor) team to be more streamlined and efficient.
- Can the system designs be simplified while still providing the required capabilities? [Most likely will provide most cost savings across the life cycle]

Where Should I Look for Cost Reduction Opportunities?

- Consider commonality. Is there an opportunity to standardize components on the primary platform as well as other platforms? (portfolio management)
- Examine and question the ground rules and assumptions used to develop the Independent Cost Estimate. Can any of these be changed?
  - MYP (EOQ)
  - Learning curve reduction
  - Reduced change orders
  - O/H rate reduction

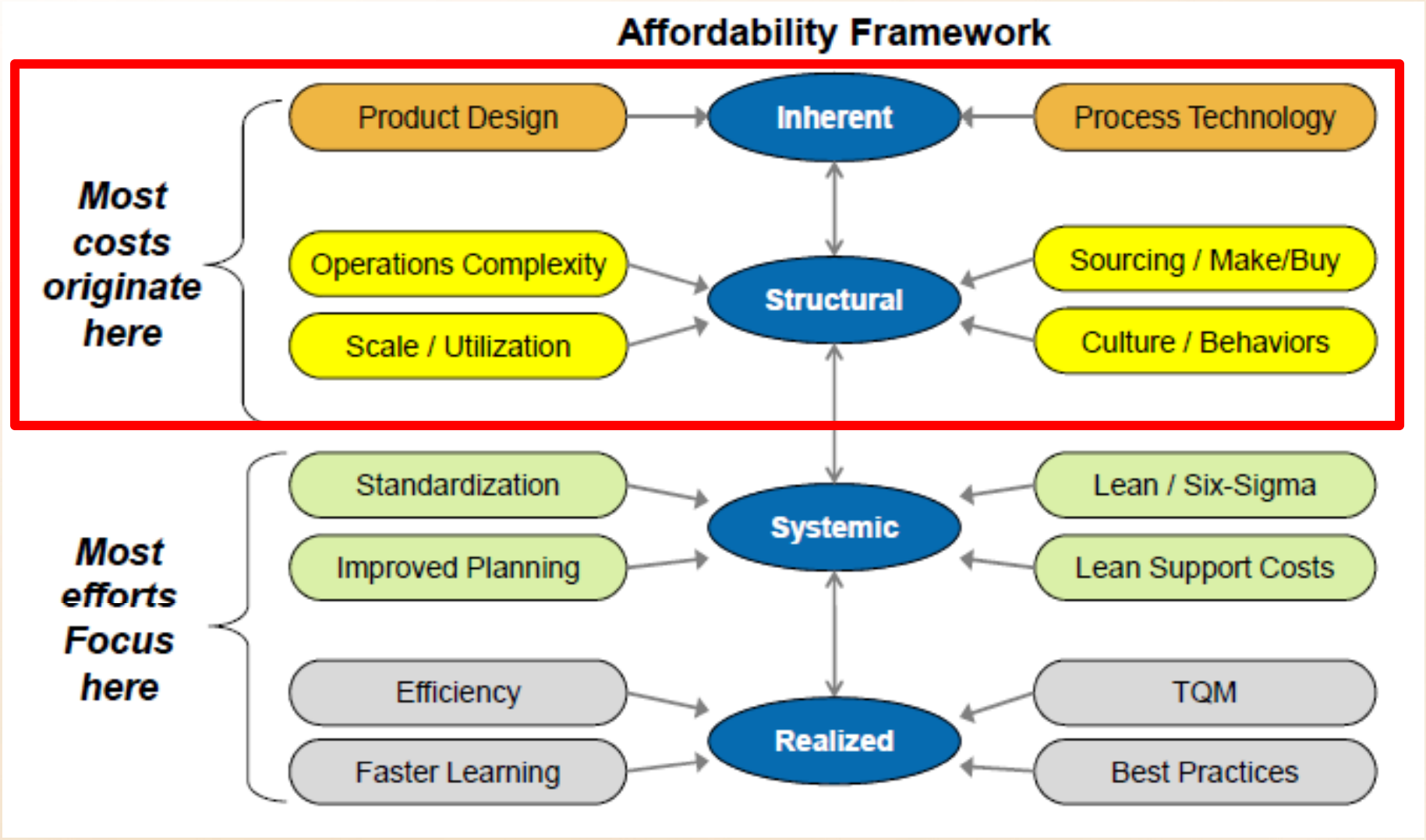
Where Should I Look for Cost Reduction Opportunities?

- **Test Area**
  - Take advantage of integrated D&OT to reduce overall cost of testing
  - Integrate M&S
  - Ensure full use of National test facilities & ranges

Where Should I Look for Cost Reduction Opportunities?

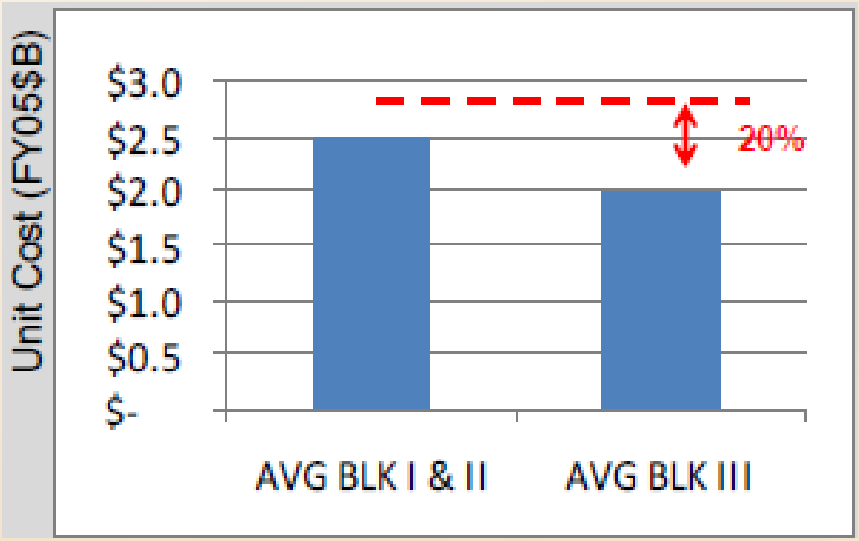
- **Focus Areas**
  - System specs
  - Design for affordability
  - Build strategy
  - Contracting strategy
  - Schedule reduction
  - Next generation integrated Product Development Environment
- **Value Engineering**

Greatest leverage is in tackling inherent and structural costs



Source: Booz & Company from Aviation Week Affordability Conference, 5/17/2011

Virginia Class Submarine



Example Acquisition Cost Initiatives

- Fewer modules during construction
- Replace sonar sphere with LAB array
- Fewer, more mission-flexible launch tubes
- Greater component commonality
- Simplified lube oil fill transfer and purification
- Reverse osmosis redesign Direct Seawater Feed & Brine Discharge System

Waivers, Reporting, Margin Release Authorities

- Waiver process described in each service's should cost guidance
  - Considerations: Cost vs benefits; Program phase; Contract type; Remaining Costs on Program
- Margin Funds Release Authority & reasons for release described in each services' should cost guidance
- Reporting requirements described in OSD and service should cost guidance
  - Should Cost templates for DABs posted Dec 2011

NAVAIR Suggested Should Cost Tools & Techniques

Critical Elements	Development 10%	Production 46%	O&S 44%
REQUIREMENTS MANAGEMENT	• Detailed Requirements Definition – SOW – Technical Baseline – ETAB	• CRI's • ECP Control • PPCC • Commonality Issues	• Inventory Planning • Reliability / Availability • Basing Plan • Service Life • Operational Tempo / Environ • Mission Personnel
ACQUISITION STRATEGY	• Competition • Contract Strategy • Funding Status	• Multiyear • GFE / CFE	• Sustainment Strategy Analysis • Life Cycle Sustainment Plan
UNDERSTANDING OF ALL COSTS	• Labor & Material – Fixed & Variable – Rates • Support Program	• Learning Curve • EOQ • Support Philosophy • Quality	• Baselining • Accelerated Cost Driver Insight
SCHEDULE MANAGEMENT	• Aggressive Management – IMS – SRA	• IMS • Delivery Schedules	• Service Life Analysis
RISK & OPPORTUNITY	• Uncertainty Analysis – Risk Management	• Uncertainty Analysis – Risk Management	• Uncertainty Analysis • Sustainment Strategy BCAs • Cost Reduction Initiatives

Tools/Methods/Processes to Support PM Should Cost Analysis

- Design for Affordability (DFA)
- Design for Manufacturing & Assembly (DFMA)
- Target Costing
- Activity Based Costing/Management (ABC/ABM)
- Quality Functional Deployment (QFD)
- Value Engineering (VE)
- Cost Risk Analysis
- Risk Management
- Earned Value Management (EVM)

Resources

- DAU Continuous Learning Modules
  - CLB024 Cost Risk Analysis (www.dau.mil)
  - CLB007 Cost Analysis (www.dau.mil)
  - CLE001 Value Engineering (www.dau.mil)
  - CLM016 Cost Estimating (www.dau.mil)
  - CLM021 Introduction to R-TOC (www.dau.mil)
- DAU Courses
  - CON 235 – Advanced Contract Pricing Course (www.dau.mil)
  - BCF 206 – Cost/Risk Analysis Course (www.dau.mil)
  - CLB 024 – Cost Risk Analysis Introduction CLM (www.dau.mil)
- GAO Cost Estimating and Assessment Guide March 2009, GAO-09-3SP (www.gao.gov)

Closing Thoughts

- Meeting should cost targets will require defining and measuring meaningful metrics
- An unavoidable consequence of setting aggressive, realistic cost objectives is an increase in risk
- Essential: ACTIVE risk management & EVM

Conclusion

- We must focus on cutting and controlling costs in order to get the systems we need and sustain the ones we have
- All ACAT I, II, & III PMs are required to develop and track Should Cost Targets
- All acquisition personnel need to become cost warriors and focus on achieving cost reductions
- Each service has provided should cost guidance which covers requirement to do should cost, waivers, reporting and how margins will be managed.

Questions?

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Backup Charts

Better Buying Power Gateway: https://dap.dau.mil/leadership/Pages/bbp.aspx
Better Buying Power Community of Practice: https://acc.dau.mil/CommunityBrowser.aspx?id=432727

"Do More Without More"

"…I am **seeking to restore affordability and productivity** through initiatives in the following five areas: (1) Targeting Affordability and Controlling Cost Growth; (2) Incentivizing Productivity and Innovation in Industry; (3) Promoting Real Competition; (4) Improving Tradecraft in Services Acquisition, and; (5) Reducing Non-Productive Processes and Bureaucracy."

"…the efficiencies…can make a significant contribution to achieving the **$100 billion redirection of defense budget dollars from unproductive to more productive purposes**."

"To put it bluntly: we have a continuing responsibility to procure the critical goods and services our forces need in the years ahead, but we will not have ever-increasing budgets to pay for them. **We must therefore strive to…DO MORE WITHOUT MORE**."

Remarks from Undersecretary ATL Ashton Carter Sept 14, 2010 Memo "Better Buying Power"

Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

We must reassess our business practices to manage defense dollars in a more efficient manner

Should Cost Policy and Background

- **USD (AT&L) Memos:**
  - 14 Sep 2010: "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending"
  - 3 Nov 2010: "Implementation Directive for Better Buying Power - Obtaining Greater Efficiency and Productivity in Defense Spending"
  - 22 Apr 2011: "Implementation of Will-Cost and Should-Cost Management"
  - 24 Aug 2011: "Should Cost and Affordability"
  - 12 Dec 2011 (ARA memo) – Should-Cost Templates
- **USD AT&L and USD/FM Joint Memo 22 Apr 2011: "Joint Memorandum on Savings Related to 'Should Cost'"**
- **Service Memos**
  - Army: SAAL-ZR 10 Jun 2011: "Army Implementation of USD(AT&L) Affordability Initiatives"
  - Air Force: SAF/FM & SAF/AQ 15 Jun 2011: "Implementation of Will-Cost and Should-Cost Management"
  - Navy: ASD (RDA) 19 Jul 2011: "Implementation of Should-Cost Management"

SHOULD-COST TEMPLATE
12 December 2011

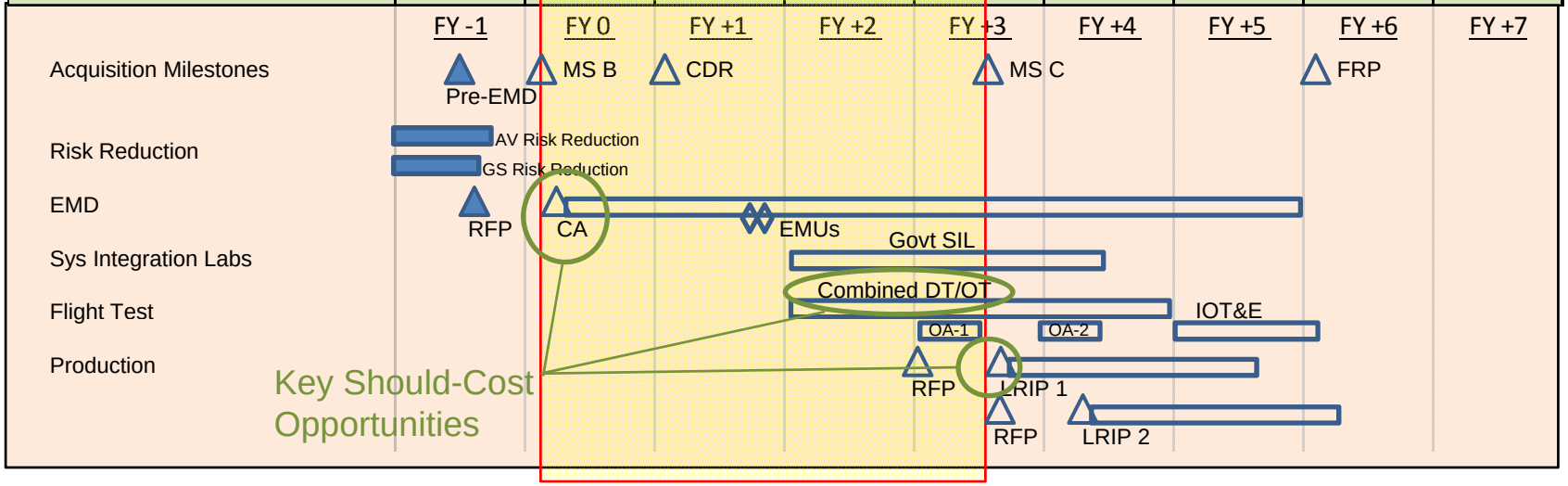
Should Cost Presentation Template

- *The Program's "should cost" is the set of program's initiatives or opportunities to reduce costs below the Independent Cost Estimate (ICE) level. It is primarily the basis for a negotiating position and result for pending contracts that will be below the ICE, but it also includes measures taken to reduce cost beyond near term contract actions.*
- *See AT&L guidance memos on developing should-cost positions (https://portal.acq.osd.mil/portal/server.pt?open=17&objID=106417&mode=2&cached=true) :*
  - "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending," September 14, 2010
  - "Implementation Directive for Better Buying Power – Obtaining Greater Efficiency and Productivity in Defense Spending," November 3, 2010
  - "Implementation of Will-Cost and Should-Cost Management," April 22, 2011
  - "Should-Cost and Affordability," August 24, 2011
- *The following charts provide a notional guide for presenting a summary of a program's "should cost" plans and estimates for various program activities; see slide notes pages for key points and tailor format as appropriate to suit the particular initiatives of program.*

Program Should-Cost Summary Example

Highlight phase being entered

$M	Prior	FY 0	FY +1	FY +2	FY +3	FY +4	FY +5	To Comp	Total
Total Acq Will Cost (ICE)	**200.0**	**45.0**	**50.0**	**62.0**	**85.0**	**70.0**	**57.0**	**110.0**	679.0
EMD Costs (ICE)		40.0	25.0	15.0	15.0	10.0			105.0
EMD Should-Cost Estimates		32.0	20.0	12.8	13.0	9.0			86.8
Production Costs (ICE)			20.0	32.0	55.0	55.0	42.0	70.0	274.0
Production Should-Cost Est.			20.0	30.0	50.0	45.0	32.0	50.0	227.0
Ops & Support Costs (ICE)				10.0	10.0	10.0	10.0	30.0	70.0
Ops & Support Should-Cost Est.				10.0	10.0	5.0	5.0	15.0	45.0
Other Costs (ICE)	200.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	240.0
Other Should Cost Estimates		4.0	4.0	4.0	4.0	4.0	4.0	8.0	32.0
Total Should Cost Estimate	**200.0**	**36.0**	**44.0**	**56.8**	**77.0**	**63.0**	**41.0**	**73.0**	**590.8**
Net Should Cost Savings		**9.0**	**6.0**	**5.2**	**8.0**	**17.0**	**16.0**	**37.0**	**98.2**
Actuals/New Estimate	**200.0**	**36.0**	**44.0**	**56.8**	**77.0**	**63.0**	**41.0**	**73.0**	**590.8**



Program Should-Cost Summary Example

Should Cost Initiatives:

- ❑ **EMD**
  - **Initiative 1:** Short description and basis for Should-Cost Estimate savings
  - **Initiative 2:** Short description and basis for Should-Cost Estimate savings
  - **Initiative 3:** Short description and basis for Should-Cost Estimate savings
- ❑ **Production & Deployment (notional)**
  - **Initiative 1**
  - **Initiative 2**
- ❑ **Operations and Support (notional)**
  - **Initiative 1**
- ❑ **Other**
  - **Initiative 1**

EMD Should-Cost Estimate Example

One slide for each major S-C initiative in EMD phase

$M	FY 0	FY +1	FY +2	FY +3	Total All Years
Total Acq Will Cost (ICE for program	45.0	50.0	62.0	85.0	679.0
Will Cost (ICE)	40.0	25.0	15.0	15.0	105.0
Should Cost	32.0	20.0	12.8	13.0	86.8
Delta as % of Total Will Cost	18%	10%	4%	2%	3%
Actual Costs / New Estimates	33.0	21.0	TBD	TBD	TBD

Initiative Name:

- **Short Narrative Description of Basis for Should Cost Estimates: (List reasons should cost estimate is below will cost, with dollar impact)**
  -
  -
- **Adjustments and Impacts to Spend Plan**
  -
  -
- **Contract Implications**
  - Incentive/fee structure, timing of evaluations & savings realized
  -
- **Risks**
  - List risks to achieving these savings
  -

Key Events/Schedule (Plan):

- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -

Progress Update/Results:

- **Key events accomplished / not accomplished / reason**
  -
  -
  -
  -

Production Should-Cost Estimate Example

One slide for each major S-C initiative in Production phase

$M	FY 0	FY +1	FY +2	FY +3	Total All Years
Total Acq Will Cost (ICE for program	45.0	50.0	62.0	85.0	679.0
Will Cost (ICE)	0.0	20.0	32.0	55.0	274.0
Should Cost	0.0	20.0	30.0	50.0	227.0
Delta as % of Total Will Cost	0%	0%	3%	6%	7%
Actual Costs / New Estimates	TBD	TBD	TBD	TBD	TBD

Initiative Name:

- **Short Narrative Description of Basis for Should Cost Estimates: (List reasons should cost estimate is below will cost, with dollar impact)**
  -
  -
- **Adjustments and Impacts to Spend Plan**
  -
  -
- **Contract Implications**
  - Incentive/fee structure, timing of evaluations & savings realized
  -
- **Risks**
  - List risks to achieving these savings
  -

Key Events/Schedule (Plan):

- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -

Progress Update/Results:

- **Key events accomplished / not accomplished / reason**
  -
  -
  -

Ops & Support Should-Cost Estimate Example

One slide for each major S-C initiative in Sustainment phase

$M	FY 0	FY +1	FY +2	FY +3	Total All Years
Total Acq Will Cost (ICE for program	45.0	50.0	62.0	85.0	679.0
Will Cost (ICE)	0.0	0.0	10.0	10.0	70.0
Should Cost	0.0	0.0	10.0	10.0	45.0
Delta as % of Total Will Cost	0%	0%	0%	0%	4%
Actual Costs / New Estimates	TBD	TBD	TBD	TBD	TBD

Initiative Name :

- **Short Narrative Description of Basis for Should Cost Estimates: (List reasons should cost estimate is below will cost, with dollar impact)**
  -
  -
- **Adjustments and Impacts to Spend Plan**
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- **Contract Implications**
  - Incentive/fee structure, timing of evaluations & savings realized
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  - Short description
  -
- **Event and Target Date**
  - Short description
  -
- **Event and Target Date**
  - Short description
  -

Progress Update/Results:

- **Key events accomplished / not accomplished / reason**
  -
  -
  -

Other Cost Savings Initiatives

(List other steps the program is taking to reduce total government will cost, with dollar impact)

What about CAIV?

- Launched in 1995
- Methodology used to acquire and operate affordable DoD systems by setting aggressive, achievable Life Cycle Cost (LCC) objectives and managing achievement of these objectives by trading off performance and schedule, as necessary.

OR

- CAIV is about assessing cost, schedule and performance relationships, establishing aggressive target costs then identifying cost reduction opportunities and tradeoffs to meet aggressive targets to reduce life cycle costs

What about R-TOC?

- Definition modified several times since 1998
- TOC is a DOMAIN comprised of the costs to research, develop, acquire, own, operate, and dispose of defense systems, other equipment, and real property; the costs to recruit, retain, separate, and otherwise support military and civilian personnel; and all other costs of the business operations of the DoD
- R-TOC is a program – a set of processes to reduce overall domain costs

What about Design-to-Cost?

- Design to Cost (DTC) AKA design to price, cost to produce, and design to cost to produce
- The DTC concept requires the establishment of a unit production cost the Government can afford to pay for the quantities needed. The unit production cost is the a primary design parameter equal in importance to system performance parameters. The concept requires that cost be emphasized continuously in trade off decisions and that the contractor demonstrate his abilities to achieve the cost target before award of the production contract.
- Use of the concept requires attention to four key elements: 1) system cost targets; 2) system performance goals; 3) production plans; and 4) feedback mechanisms

Margin Funds

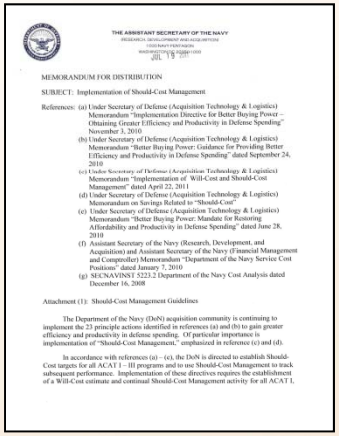
- Margin Funds = Will Cost – Should Cost
- Margin Funds Release Authority & reasons for release described in each services' should cost guidance
  - Funding above should cost target required by program returned to program
  - Realized savings can be reallocated by Release Authority based on statutory, DoD, and Services' policies
    - Example: On FFP the Negotiated Price – Contract Price = Realized Savings (can be reallocated after sufficient confidence has been established that contract performance will result in realized savings)

Waivers

- Process described in each service's should cost guidance
- Considerations
  - Cost vs benefits
  - Program phase
  - Contract type
    - Programs with FFP – open reopen if there is a clear benefit to do so
  - Total cost remaining on program

PMs of USA Quick Reaction Capability Projects/Programs are NOT required to accomplish a Should Cost

Service Specifics



THE ASSISTANT SECRETARY OF THE NAVY

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Implementation of Should-Cost Management

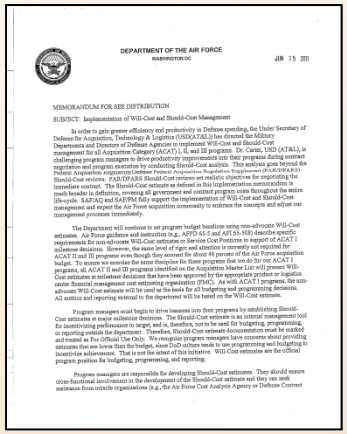
References: (a) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Implementation Directive for Better Buying Power – Obtaining Greater Efficiency and Productivity in Defense Spending" November 3, 2010
(b) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Better Buying Power: Guidance for Providing Better Efficiency and Productivity in Defense Spending" dated September 24, 2010
(c) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Implementation of Will-Cost and Should-Cost Management" dated April 22, 2011
(d) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum on Savings Related to "Should-Cost"
(e) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending" dated June 28, 2010
(f) Assistant Secretary of the Navy (Research, Development, and Acquisition) and Assistant Secretary of the Navy (Financial Management and Comptroller) Memorandum "Department of the Navy Service Cost Positions" dated January 7, 2010
(g) SECNAVINST 5223.2 Department of the Navy Cost Analysis dated December 16, 2008

Attachment (1): Should-Cost Management Guidelines

The Department of the Navy (DoN) acquisition community is continuing to implement the 23 principle actions identified in references (a) and (b) to gain greater efficiency and productivity in defense spending. Of particular importance is implementation of "Should-Cost Management," emphasized in reference (c) and (d).

In accordance with references (a) – (c), the DoN is directed to establish Should-Cost targets for all ACAT I - III programs and to use Should-Cost Management to track subsequent performance. Implementation of these directives requires the establishment of a Will-Cost estimate and continual Should-Cost Management activity for all ACAT I.

USN Should Cost Guidance
Jul 19 2011



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Implementation of Will-Cost and Should-Cost Management

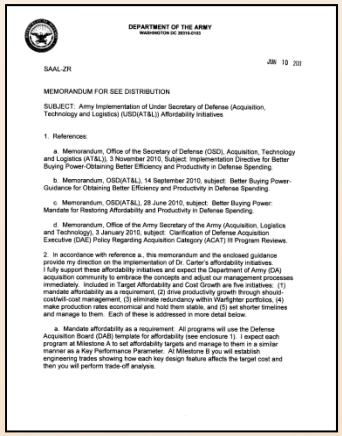
In order to gain greater efficiency and productivity in Defense spending, the Under Secretary of Defense for Acquisition, Technology & Logistics (USD(AT&L)) has directed the Military Departments and Directors of Defense Agencies to implement Will-Cost and Should-Cost management for All Acquisition Category (ACAT) I, II, and III programs. Dr. Carter, USD (AT&L), is challenging program managers to drive productivity improvements into their programs during contract negotiation and program execution by conducting Should-Cost analysis. This analysis goes beyond the Federal Acquisition Regulation/Defense Federal Acquisition Regulation Supplement (FAR/DFARS) Should-Cost reviews. FAR/DFARS Should-Cost reviews set realistic objectives for negotiating the immediate contract. The Should-Cost estimate as defined in this implementation memorandum is much broader in definition, covering all government and contract program costs throughout the entire life-cycle. SAF/AQ and SAF/FM fully support the implementation of Will-Cost and Should-Cost management and expect the Air Force acquisition community to embrace the concepts and adjust our management processes immediately.

The Department will continue to set program budget baselines using non-advocate Will-Cost estimates. Air Force guidance and instruction (e.g., AFPD 65-5 and AFI 65-508) describe specific requirements for non-advocate Will-Cost estimates or Service Cost Positions in support of ACAT I milestone decisions. However, the same level of rigor and attention is currently not required for ACAT II and III programs even though they account for about 48 percent of the Air Force acquisition budget. To ensure we exercise the same discipline for these programs that we do for our ACAT I programs, all ACAT II and III programs identified on the Acquisition Master List will present Will-Cost estimates at milestone decisions that have been approved by the appropriate product or logistics center financial management cost estimating organization (FMC). As with ACAT I programs, the non-advocate Will-Cost estimate will be used as the basis for all budgeting and programming decisions. All metrics and reporting external to the department will be based on the Will-Cost estimate.

Program managers must begin to drive lessons into their programs by establishing Should-Cost estimates at major milestone decisions. The Should-Cost estimate is an internal management tool for incentivizing performance to target, and is, therefore, not to be used for budgeting, programming, or reporting outside the department. Therefore, Should-Cost estimate documentation must be marked and treated as For Official Use Only. We recognize program managers have concerns about providing estimates that are lower than the budget, since DoD culture tends to use programming and budgeting to incentivize achievement. That is not the intent of this initiative. Will-Cost estimates are the official program position for budgeting, programming, and reporting.

Program managers are responsible for developing Should-Cost estimates. They should ensure cross-functional involvement in the development of the Should-Cost estimate and they can seek assistance from outside organizations (e.g., the Air Force Cost Analysis Agency or Defense Contract

USAF Should Cost Guidance
Jun 15 2011



DEPARTMENT OF THE ARMY
WASHINGTON DC

SAAL-ZR

JUN 10 2011

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Army Implementation of Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) Affordability Initiatives

1. References:

a. Memorandum, Office of the Secretary of Defense (OSD), Acquisition, Technology and Logistics (AT&L)), 3 November 2010, Subject: Implementation Directive for Better Buying Power-Obtaining Better Efficiency and Productivity in Defense Spending.

b. Memorandum, OSD(AT&L), 14 September 2010, subject: Better Buying Power-Guidance for Obtaining Better Efficiency and Productivity in Defense Spending.

c. Memorandum, OSD(AT&L), 28 June 2010, subject: Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending.

d. Memorandum, Office of the Army Secretary of the Army (Acquisition, Logistics and Technology), 3 January 2010, subject: Clarification of Defense Acquisition Executive (DAE) Policy Regarding Acquisition Category (ACAT) III Program Reviews.

2. In accordance with reference a., this memorandum and the enclosed guidance provide my direction on the implementation of Dr. Carter's affordability initiatives. I fully support these affordability initiatives and expect the Department of Army (DA) acquisition community to embrace the concepts and adjust our management processes immediately. Included in Target Affordability and Cost Growth are five initiatives: (1) mandate affordability as a requirement, (2) drive productivity growth through should-cost/will-cost management, (3) eliminate redundancy within Warfighter portfolios, (4) make production rates economical and hold them stable, and (5) set shorter timelines and manage to them. Each of these is addressed in more detail below.

a. Mandate affordability as a requirement. All programs will use the Defense Acquisition Board (DAB) template for affordability (see enclosure 1). I expect each program at Milestone A to set affordability targets and manage to them in a similar manner as a Key Performance Parameter. At Milestone B you will establish engineering trades showing how each key design feature affects the target cost and then you will perform trade-off analysis.

USA Should Cost Guidance
Jun 10 2011

	USN	USAF	USA
Waiver Approval	**ACAT ID & IAM = AT&L** **ACAT IC & IAC = ASN (RD&A)** **ACAT II & III = MDA or PEO**	**ACAT ID & IAM = AT&L** **ACAT IC & IAC = SAF/AQ & SAF/FM** **ACAT II = PEO/DAO & Product/Log Ctr FM** **ACAT III = PEO/DAO & Product/Log Ctr FM**	**ASA(ALT)**
Reporting	**DASHBOARD** **Acquisition Visibility SOA**	**SMART**	**Acquisition Visibility SOA**
Margin Funds Decision Release*	**ACAT I = ASN (RD&A)** **ACAT II = MDA** **ACAT III = PEO**	**SAF/AQ & SAF/FM**	**ACAT I, Special Interest, Select ACAT = AS(ALT)** **ACAT II = PEO** **ACAT III = PEO**

* Applies to Pilot Programs Only Until Successful Conclusion

When Required? -- Air Force

Event	Will-Cost estimates (Initial / Update)	Program Should-Cost estimates (Initial / Update)	Indirect/Direct Contract Cost Reviews
MS A	Initial	Initial	N/A
Yearly Updates	Update	Update	N/A
MS B	Update (Initial setting of Budget Baseline for Nunn-McCurdy metrics)	Update (Sets Internal Program Execution Baseline)	Initial to Support Contract Actions (Optional)
Yearly Updates	Update	Update	Optional
MS C Decision / LRIP 1 Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-cost Review and DFARS 215.407-4 Should-cost
Yearly Updates	Update	Update	Optional
FRP (FDDR) Decision / Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-cost Review and DFARS 215.407-4 Should-cost review.
Yearly Updates	Update	Update	Optional

In addition, consider for the following program events:

- Critical Design Review
- First LRIP award out of option contracts
- Interim Contractor Support and Contractor Logistic Support first contract awards
- Organic Logistics Infrastructure (e.g., depot stand-up, DLA, ALC)

When Required? -- Navy

Event	Will-Cost (Initial /	Program Should-Cost (Initial / Update)	Indirect/Direct Contract Cost Reviews (FAR/DFAR)
MS A	Initial	Initial	N/A
Yearly Updates	Update	Update	N/A
MS B	Update (Initial setting of Budget	Update (Sets Internal Program Execution Baseline)	Initial to Support Contract Actions (Optional)
Yearly Updates	Update	Update	Optional
MS C Decision / LRIP 1 Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-cost Review and DFARS 215.407-4 Should-cost
Yearly Updates	Update	Update	Optional

In addition, consider for the following program events:

- FRP (FDDR) Decision/Contract Award
- Critical Design Review
- First LRIP award out of option contracts
- Interim Contractor Support and Contractor Logistic Support first contract awards
- Organic Logistics Infrastructure

When Required? -- Army

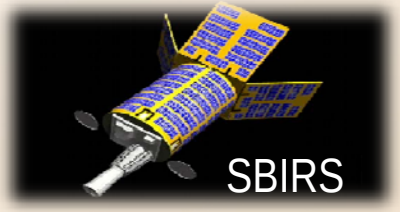
Event	Will-Cost estimates (Initial / Update)	Program Should-Cost estimates (Initial / Update)	Indirect/Direct Contract Cost Reviews
MS A	Initial	Initial	N/A
Yearly Updates	At PMs discretion	Update	N/A
MS B	Update (Initial setting of Budget Baseline for Nunn-McCurdy metrics)	Update (Sets Internal Program Execution Baseline)	Initial to Support Contract Actions (Optional)
Yearly Updates	At PMs discretion	Update	Optional
MS C Decision / LRIP 1 Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-cost Review and DFARS 215.407-4 Should-cost
Yearly Updates	At PMs discretion	Update	Optional
FRP (FDDR) Decision / Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-cost Review and DFARS 215.407-4 Should-cost review.
Yearly Updates	At PMs discretion	Update	Optional

In addition, consider for the following program events:

- Critical Design Review
- First LRIP award out of option contracts
- Interim Contractor Support and Contractor Logistic Support first contract awards
- Organic Logistics Infrastructure

Service Pilots

USAF



USN

USA

Possible Carter Quotes to Use in Slides

- "Will cost is what lies behind the cost estimates done by our cost estimators. They are credible and accurate cost estimates. They tell you what something is going to cost if we keep doing things the way we're doing it. This is what it will cost. And I look at those estimates and say, no. It's not going to happen with that cost estimate. So we have to ask ourselves what should it cost and is there some way we can drive cost down so that this activity or this program can survive." Dr. Ashton B. Carter in speech entitle "Doing More Without More: Obtaining Efficiency and Productivity in Defense" given at the Center for New American Security on 22 Feb 2011.

- "During contract negotiation and program execution, our managers should be driving productivity improvement in their programs. They should be scrutinizing every element of program cost, assessing whether each element can be reduced relative to the year before, challenging learning curves, dissecting overheads and indirect costs, and targeting cost reduction with profit incentive. In short, executing to what the program should cost." Ashton Carter

Possible Carter Quotes to Use in Slides

- "I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks/or value." Ashton Carter
- "The metric of success for Should Cost management leading to annual productivity increases is annual savings of a few percent from all of our ongoing contracted activities as they execute to a lower figure than budgeted. Industry can succeed in this environment because we will tie better performance to higher profit, and because affordable programs will not face cancellation." Ashton Carter

Documents to Review

- Analysis of Alternatives (AoA)
- Cost Analysis Requirements Description (CARD)
- Life-Cycle Cost Estimate (LCCE)
- Economic Analysis (EA)
- Component Cost Analysis (CCA)
- Independent Cost Estimate (ICE)
- Contractor's Proposal

Will Cost vs. Should Cost

Will Cost: Establish Budget

"Reasonable Extrapolation"

- Will Cost = Service Cost Position = Independent Cost Estimate
- Required for all ACAT I, II & III
- Established following DoD and Service Memos, Instructions, Regulations, and Guides
- Represents official Service position for budgeting, programming & reporting
- Sets threshold for budgeting APB, SAR, Nunn-McCurdy
- Continually updated with current available information for budget process

Should Cost: Drive Productivity

"Scrutinize Every Element of Cost"

- A PM's determination of the amount that a program (not just the immediate contract) ought to cost, not will cost, if reasonable efficiency and productivity enhancing efforts are undertaken
- Required for all ACAT I, II & III
- PM and cross-functional team identify specific discrete measurable items or initiatives that achieve savings against Will Cost
- Incorporate formal should cost results, if available
- Represents PM baseline for program execution
- An internal management tool
- Targets tracked & reported

Bottoms – Up Estimate Without Formal Should Cost Data

- Labor, data & time intensive
- Examination of each element of the WBS required
- For each contract supporting the program review
  - Direct Material
  - Direct Labor
  - Indirect Costs (Overhead, G&A)
  - Other Direct Costs
- Consider using a Pareto Analysis and focusing on those few items driving the most cost
- Other Items to review
  - Government related costs

Remember …. It is about controlling, and reducing, if possible ALL costs of your program – not just those associated with the Prime Contractor.

One Approach – (NAVSEA Draft Example)