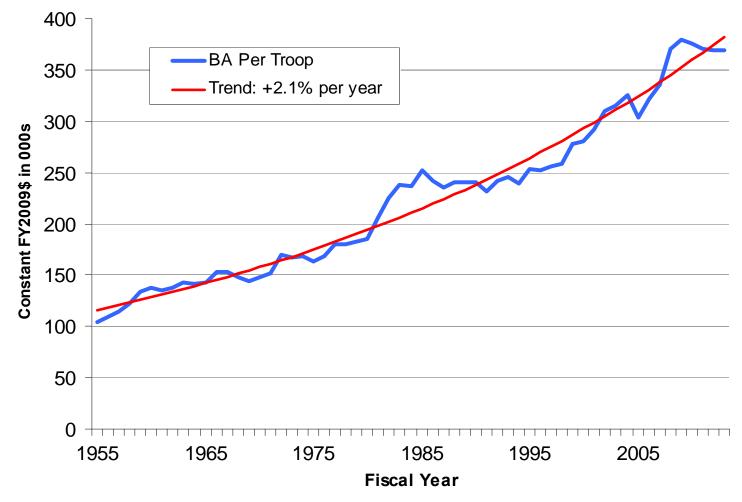


# Defense Sustainability: Selected Slides

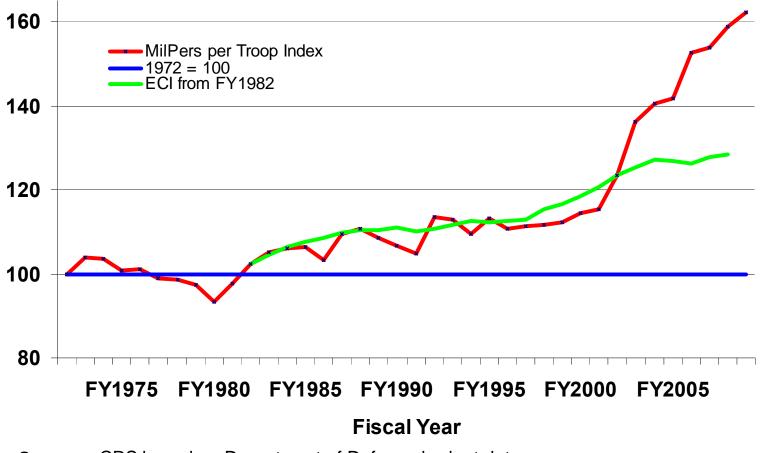
### Stephen Daggett Congressional Research Service February 2009

### DOD Budget Authority Per Troop FY1950-FY2013



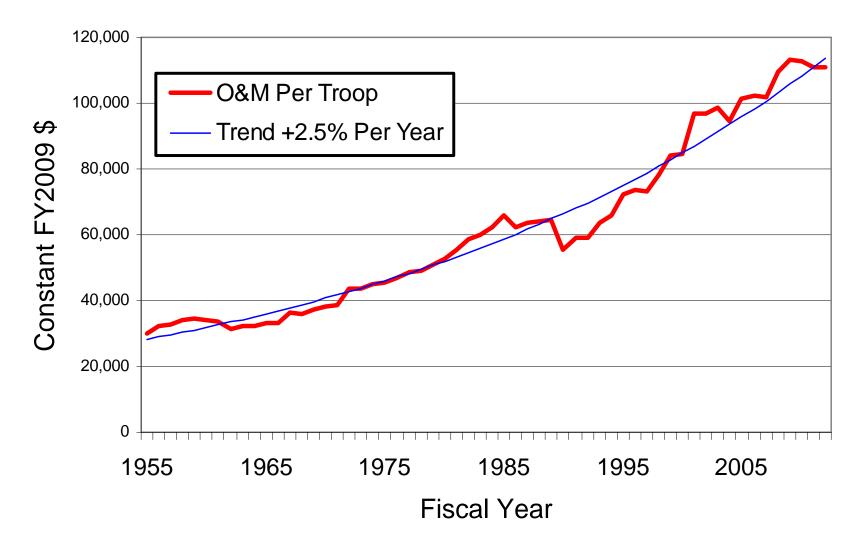
Excluding FY1990-91 Gulf War and FY2003-FY2009 GWOT supplemental appropriations.

### Military Personnel Pay and Benefits per Troop Indexed to FY1972 Using CPI



Source: CRS based on Department of Defense budget data.

### Department of Defense Operation & Maintenance \$ per Troop: FY1955-FY2013





# Recapitalization Rates: 1985 vs. 2008

	1985	2008	Δ
Tactical Fighters	338	56	-282
Bombers	34	0	
Other Fixed Wing	211	153	-58
Rotary Wing	354	373	+19
Missiles	87,113	13,471	-73,642
Tracked Combat Vehicles	2,414	1,258	-1,156
Tactical Vehicles	56,551	32,276	-24,275
Satellites (Unclassified)	10	1	-9
Ships	23	7	-16











But today's investment spending does not buy the same level of force modernization

#### GAO Comparison of Cost Growth in Major Defense Acquisition Programs, FY2000, FY2005, FY2007

	FY 2000	FY 2005	FY 2007
	Portfolio	Portfolio	Portfolio
Portfolio size			
Number of programs	75	91	95
Total planned commitments	\$790 Billion	\$1.5 Trillion	\$1.6 Trillion
Commitments outstanding	\$380 Billion	\$887 Billion	\$858 Billion
Portfolio performance			
Change to total RDT&E costs from first estimate	27 percent	33 percent	40 percent
Change in total acquisition cost from first estimate	6 percent	18 percent	26 percent
Estimated total acquisition cost growth	\$42 Billion	\$202 Billion	\$295 Billion
Share of programs with 25 percent or more increase in program acquisition unit cost	37 percent	44 percent	44 percent
Average schedule delay in delivering initial capabilities	16 months	17 months	21 months

Source: GAO analysis of DOD data.

#### United States Government Accountability Office

**Source:** U.S. Government Accountability Office, *Defense Acquisitions: Assessments of Selected Weapon Programs*, GAO-08-467SP, March 31, 2008.



FOUO Working Papers Security Environment: 4 Challenges

Higher

POLICY

#### Irregular

Unconventional methods adopted and employed by non-state and state actors to counter stronger state opponents. (erode our power)

VULNERABILITY Lower

Traditional

emerging concepts like "unrestricted warfare")

(e.g., terrorism, insurgency, civil war, and

States employing legacy and advanced military capabilities and recognizable military forces, in long-established, wellknown forms of military competition and conflict. (challenge our power)

(e.g., conventional air, sea, land forces, and nuclear forces of established nuclear powers) Catastrophic

Acquisition, possession, and possible employment of WMD or methods producing WMD-like effects against vulnerable, high-profile targets by terrorists and roque states. (paralyze our power)

(e.g., homeland missile attack, proliferation from a state to a non-state actor, devastating WMD attack on ally)

#### Disruptive

International competitors developing and possessing breakthrough technological capabilities intended to supplant U.S. advantages in particular operational domains. (marginalize our power)

(e.g., sensors, information, bio or cyber war, ultra miniaturization, space, directed-energy, etc)



#### Capabilities-based planning should apportion risk across challenges

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Hiaher

### Why Personnel Cost More: Increases in Military Pay and Benefits Since 1999

- 6 years of "Employment Cost Index" + ½ % pay raises (ending in 2006), ECI in FY2007, ECI + ½% in FY2008;
- 4 rounds of "pay table reform," the latest in 2007;
- Increased housing allowances to eliminate differences between on-base and off-base housing costs;
- "TRICARE for Life" for 65 and older military retirees;
- "Concurrent receipt" of retired pay and disability benefits for retirees with a VA disability rating of 50% or greater;
- Repeal of the 1986 "Redux" retirement program which gave lower pensions to those recruited after that time;
- Repeal of the offset of Survivor Benefit Plan (SBP) payments for receipt of Social Security after age 62.

### Why O&M Costs Continue to Climb

- Civilian personnel pay and benefits most civilians paid in O&M
- Health care cost growth major issue for DOD
- Quality of life/environmental cleanup and compliance, etc
- Costs of recruitment and training
- Costs of operating and maintaining modern weapons

### Generational Cost Growth in Major Weapons Programs

- "In the year 2054, the entire defense budget will purchase just one aircraft. This aircraft will have to be shared by the Air Force and Navy 3-1/2 days each per week except for leap year, when it will be made available to the Marines for the extra day."
  - Norman Augustine, Augustine's Laws, 1<sup>st</sup> edition, 1982, 6<sup>th</sup> edition, 1997.

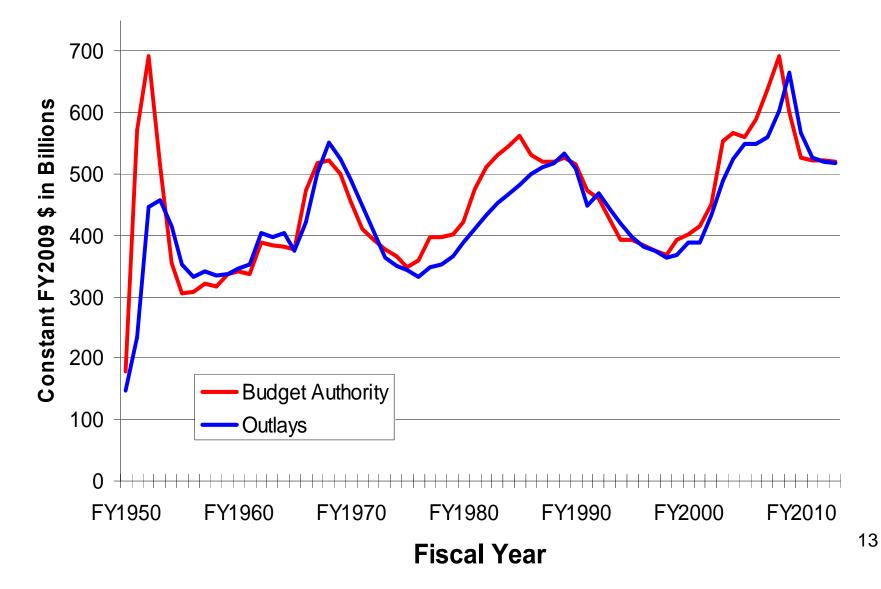
## Why Do Weapons Costs Climb?

- Pressures to "transform"
  - Effort to exploit rapidly advancing technology
  - Result pursuit of immature technologies
- Requirements expand due, in part, to
  - Smaller numbers
  - Plus uncertain strategic requirements
- Tight budgets increase incentives to underestimate costs – "buying in"

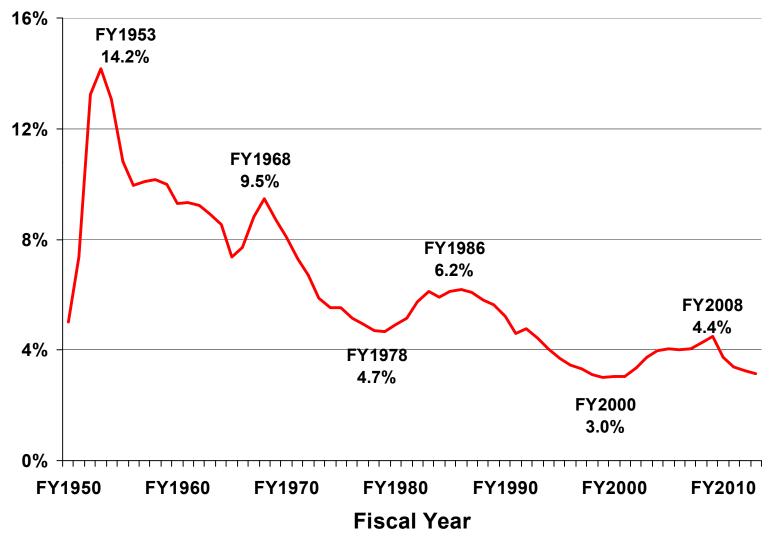
### Lessons of War: Additional Requirements

- Army "minor procurement" perennially underfunded no longer acceptable
- Force protection
- Communications (every Marine in Anbar to have a radio)
- Transportation (trucks, helicopters)
- National Guard combat units to be equipped as part of rotation base

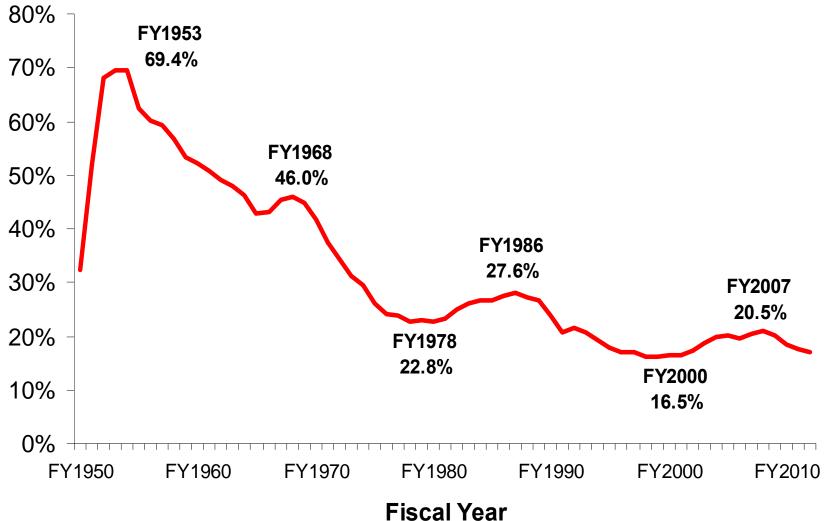
### National Defense Budget Authority and Outlays, FY1950-FY2013



### National Defense Outlays % GDP FY1950-FY2013



### National Defense Outlays % Federal Outlays, FY1950-FY2013



### Federal Outlays by Category as % GDP FY1962-FY2012

