Navy Investment Plans:

Plans versus Reality, and Implications for Market Opportunity

PREPARED FOR

NDIA / SLAAD

April 26, 2006

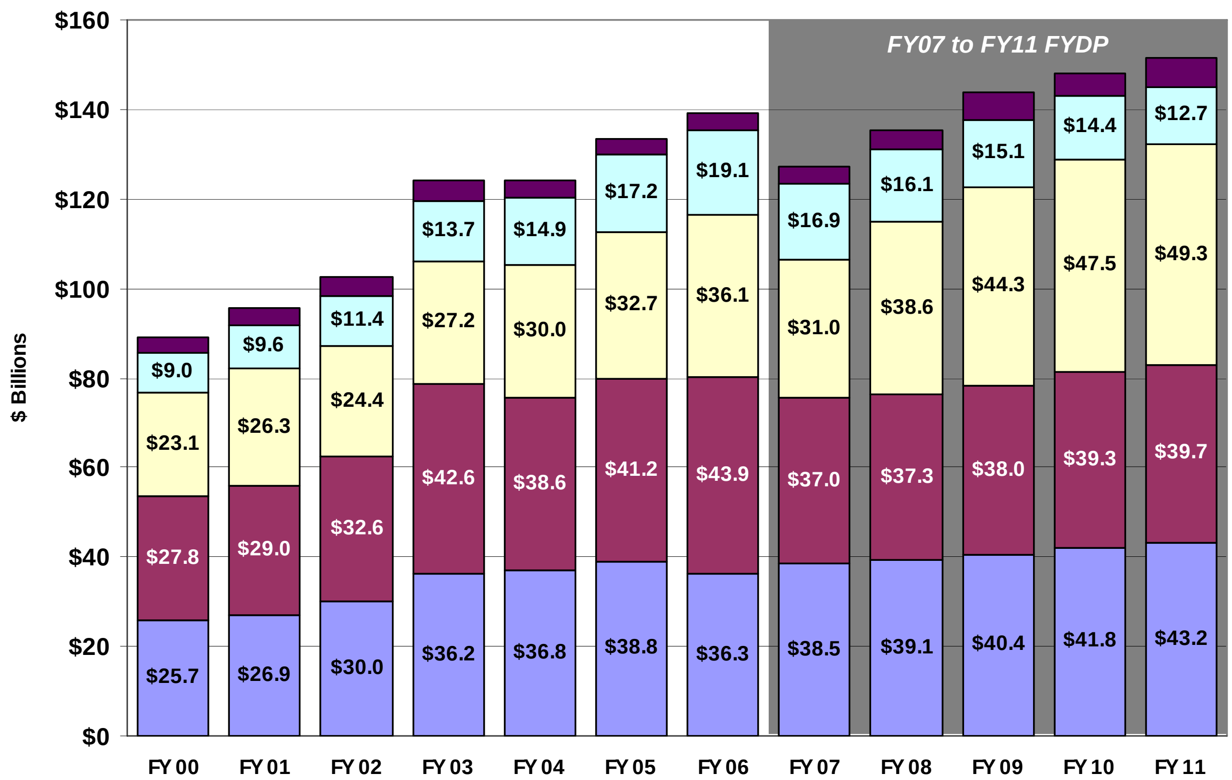
DFI INTERNATIONAL
CORPORATE SERVICES

Executive Summary

- **The budget plan put forward by the Navy – and the Department as a whole – is not likely to come to fruition as envisioned**
- **Costs for O&S and RDT&E will grow faster than the Services have planned for, putting rising pressure on the procurement account**
- **These pressures will prevent a wide range of acquisition programs from unfolding as the Navy and DoD desire**
  - **Slower transition to procurement for an array of systems**
  - **Reduced production rates for ships, aircraft, and other items**
- **While shifting budget conditions will put many programs of record in a difficult position, they may open up other areas of opportunity**

The Navy's budget plan assumes very strong growth in the procurement accounts, mainly by keeping a lid on growth in almost all other areas

Navy Topline Budget by Account

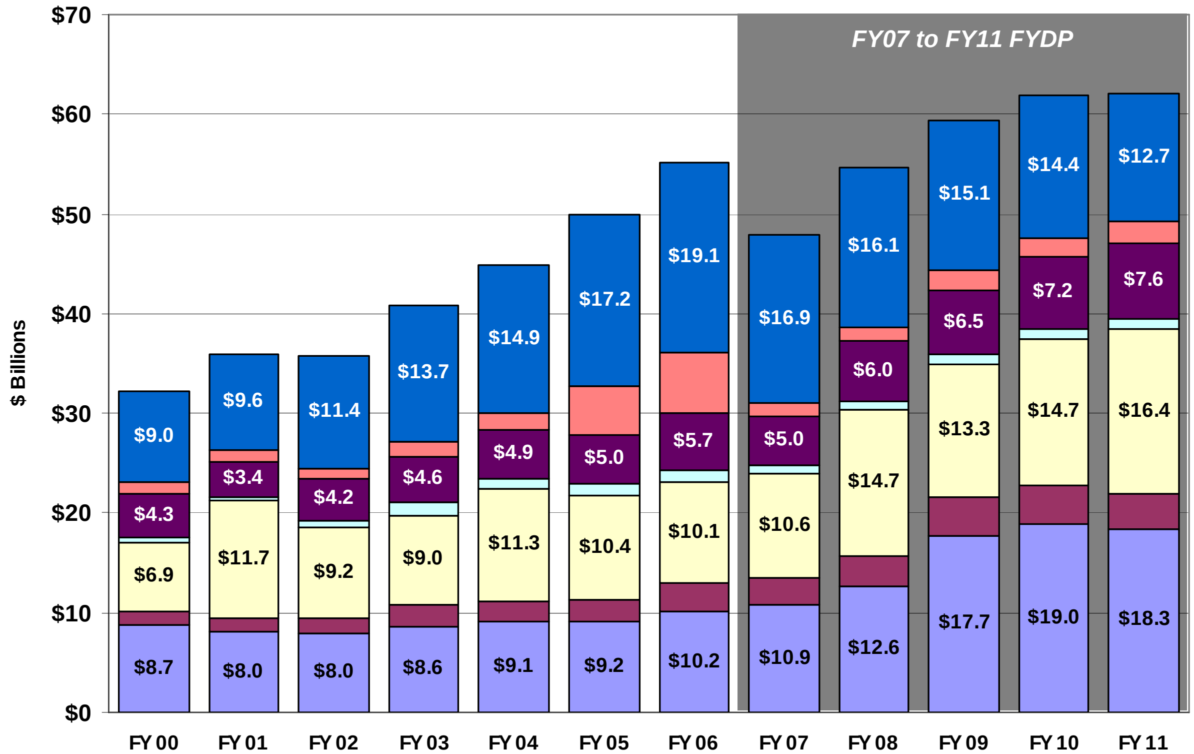


Compound Annual Growth Rate (%)	FY00-06	FY07-11
Other Accounts	1.8	14.7
RDT&E	13.3	-6.9
Procurement	7.7	12.3
MilPers	7.9	1.8
O&M	5.9	2.9

This plan assumes some very optimistic circumstances, which will largely fail to come about

The Navy and Marine Corps' investment accounts are anticipating this growth in procurement spending almost across the board

Navy Investment Budget by Account



Compound Annual Growth Rate (%)	FY00-06	FY07-11
Aircraft	2.6	13.9
Weapons	12.6	9.6
SCN	6.4	11.6
Ammo	14.6	8.2
Other	5.1	11.1
USMC	29.2	14.7
RDT&E	13.3	-6.9

This Navy's plan to move a wide array of programs into full procurement rest on these budget assumptions

The Navy's investment plan is characterized by an attempt to do two expensive things at once: Shift to new design systems, and buy them at high rates

Shift to a New Generation of Systems	Shift to High Rates of Production for New Systems
Upward pressure on RDT&E funding	Upward pressure on Procurement funding
• Littoral Combat Ship • DD(X) • CVN-21 • Joint Strike Fighter • Multi-mission Maritime Aircraft • EA-18G • UCAS-Navy • Mobile User Objective System • JTRS-AMF	• F/A-18E/F • MV-22 • MH-60R • MH-60S • Joint Strike Fighter • EA-18G • SSN-774 • Littoral Combat Ship • Expeditionary Fighting Vehicle

Achieving this will depend on the Navy's ability to quickly transition development programs to production, and avoid erosion in the procurement account

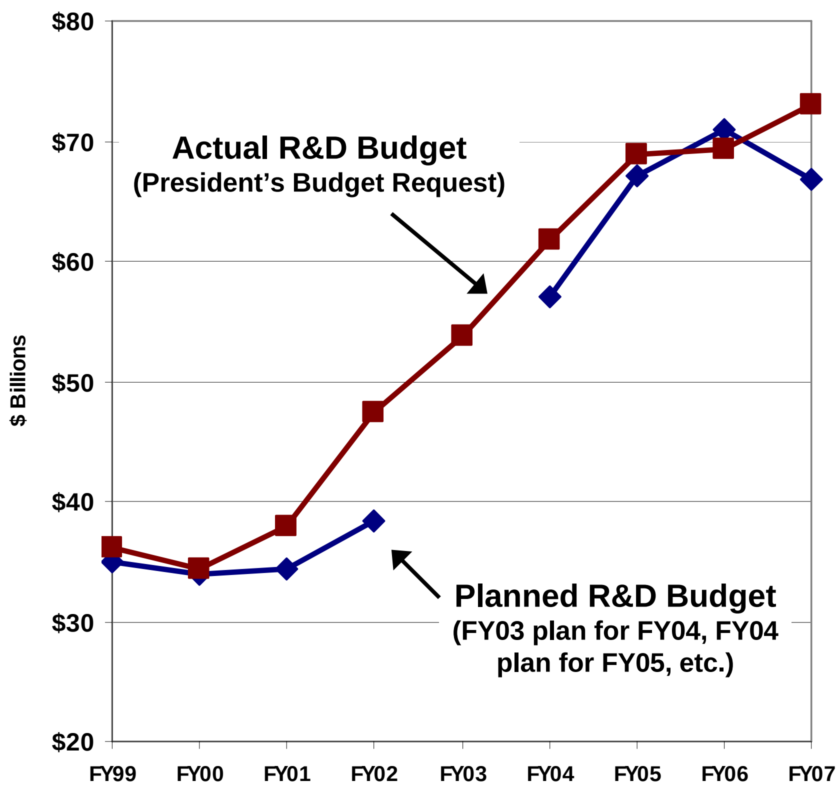
For a series of related reasons, however, the Navy will be unable to achieve its budget plans

Critical Budget Trends

Complexity of System Development Programs	• RDT&E programs are requiring more time and money to reach maturity than the Navy forecasts
Growing Operations and Support Costs	• O&M and Military Personnel costs regularly exceed the Navy's forecasts
Downward Pressure on the Topline	• Growth in the DoD topline budget is slowing, placing increased pressure on all activities

DoD as a whole is finding that it is requiring more money to mature a wide variety of complex RDT&E programs than initially envisioned

RDT&E Funding Growth



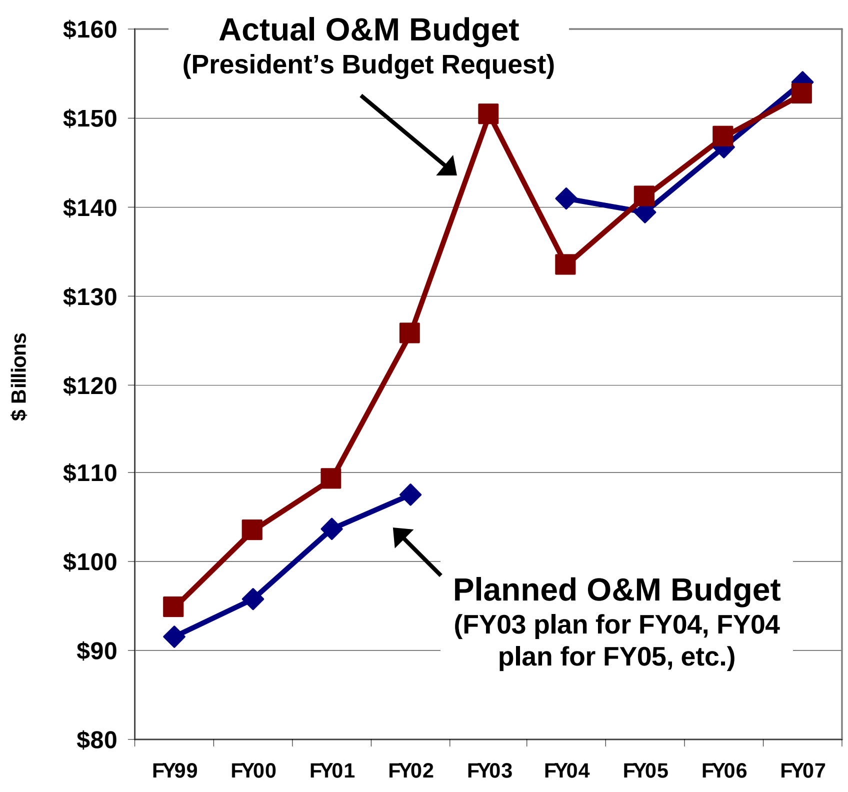
Critical Issues

- **Highly complex system design and development efforts consuming more of the budget than planned**
  - **Struggles to accurately forecast development costs, even with shift to CAIG estimates**
  - **Numerous Nunn-McCurdy breaches**
  - **Rising Congressional skepticism on numerous high-risk R&D programs**

Programs are taking longer to transition to procurement, and the need to sustain higher RDT&E spending is putting pressure on existing procurement programs

Similarly, DoD's operating costs – even apart from those incurred in *OIF* and *OEF* – consistently end up being higher than the Department expects

O&M Funding Growth



Critical Issues

- Faster O&M growth than the Services commonly budget for
- Costs driven by many factors, making cost control difficult
  - Facilities
  - Health Care
  - Fuel
  - Equipment Maintenance
- Use of supplementals can cover some gaps, but not all
- Force cuts in Navy and Air Force will yield some savings, but degree is unclear

The procurement account commonly ends up as the primary billpayer for marginal growth in O&M costs

As funding constraints rise, the Navy will make programmatic trades that leave legacy systems comprising a greater portion of the force far longer than planned

Programmatic Outcomes

Significant Cuts to Development Programs

Technology challenges will result in slower R&D schedules for many high-profile programs

Potential candidates include:

- CG(X) cruiser
- Aerial Common Sensor replacement program
- Broad Area Maritime Surveillance UAV
- Navy UCAS
- JTRS radios (all variants)
- Kinetic Energy Intercept
- Mobile User Objective System
- Joint Strike Fighter

Alternative Plans in Many Capability Areas

Funding limits and program delays will force DoD to rely on capability solutions that are less advanced than desired:

- **Networking:** Adaptations of current comms systems will serve as the basis of DoD tactical networking well into the next decade
- **ISR:** Legacy systems will stay in service longer than planned (EP-3, Pioneer, etc.)
- **C2 Systems:** Slower shift to full-up Joint C2 architecture, and adaptation of legacy systems to new forms of functionality

Lower Procurement Rates for Numerous Programs

Funding limits and overall force structure cuts will lead to lower production rates for many systems

- F-35 Joint Strike Fighter
- EA-18G EW aircraft
- MV-22 tiltrotor
- MH-60 maritime helicopters
- P-8A maritime patrol aircraft
- E-2D AEW aircraft
- SSN-774 submarine
- DD(X) destroyer
- Littoral Combat Ship
- Expeditionary Fighting Vehicle

Despite this gradual and chronic revamping of the modernization program, the coming decade will also feature continued areas of opportunity

Overall Areas of Opportunity

Legacy System Improvement	Support Services	Low-Cost Alternatives	Emerging Capability Needs

Legacy platforms:
• Capability upgrade and expansion, especially:
  • Network capability
  • Survivability from non-traditional threats
• Service life extension, O&S reduction
Legacy C4I systems:
• Adaptation to evolving network and interoperability standards
	Chronic growth in O&M will sustain interest in outsourcing of many functions, even those close to the "core"
	• Logistics, maintenance, supply chain management
	• IT integration and services
	• M&S, operations analysis, and analytical support
	• Technical, engineering, program support
	• Training
	• Security
		Alternative, lower-cost means of serving capability objectives will be increasingly attractive
		• Low-cost system alternatives
		• Alternative solutions to underlying capability objectives
			As DoD diverts some funding from more traditional programs, increased resources will be available for requirements that address new threats or exploit technology opportunities
			• Intel analysis, exploitation, and data fusion
			• CBRN detection
			• Secure wireless communications
			• Hard and deeply buried target defeat
			• Riverine forces