

February 26, 2002



# Acquisition

## Major Defense Acquisition Programs Cost Growth (D-2002-054)

Department of Defense  
Office of the Inspector General

*Quality*

*Integrity*

*Accountability*

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<b>Abstract</b> The Government Performance and Results Act (GPRA) of 1993, Public Law 103-62, initiated program performance reform with a series of pilot projects by setting program goals, measuring program performance against those goals, and reporting publicly on progress achieved. This report is one in a series of reports on how DoD meets the GPRA goals and discusses the FY 2000 GPRA Performance Measure 2.4.1, Major Defense Acquisition Programs Cost Growth, on keeping the cost growth to 1 percent annually. Major defense acquisition programs (MDAPs) are designated by the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD [(AT&L)] as a major defense acquisition program, or are estimated by USD (AT&L) as a program that requires an eventual total expenditure of more than \$365 million in FY 2000 constant dollars for research, development, test, and evaluation or more than \$2.19 billion in FY 2000 constant dollars for procurement. Cost growth is the difference between the MDAP program costs in the current years budget and the previous years budget, divided by the program costs in the previous years budget.		
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### **Acronyms**

GPRA	Government Performance and Results Act
MDAP	Major Defense Acquisition Program
USD (AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
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February 26, 2002

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS

SUBJECT: Audit Report on Major Defense Acquisition Programs Cost Growth  
(Report No. D-2002-054)

We are providing this report for your information and use. No written response to this report was required, and none was received. Therefore, we are publishing this report in final form.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. John E. Meling at (703) 604-9091 (DSN 664-9091) (jmeling@dodig.osd.mil) or Mr. Michael E. Simpson at (703) 604-8972 (DSN 664-8972) (msimpson@dodig.osd.mil). See Appendix C for the report distribution. The audit team members are listed inside back cover.

A handwritten signature in black ink, appearing to read "Thomas F. Gimble".

Thomas F. Gimble  
Acting  
Deputy Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. D2002-054

February 26, 2002

(Project No. D2001AB-0066.001)

### Major Defense Acquisition Programs Cost Growth

#### Executive Summary

**Introduction.** The Government Performance and Results Act (GPRA) of 1993, Public Law 103-62, initiated program performance reform with a series of pilot projects by setting program goals, measuring program performance against those goals, and reporting publicly on progress achieved. This report is one in a series of reports on how DoD meets the GPRA goals and discusses the FY 2000 GPRA Performance Measure 2.4.1, Major Defense Acquisition Programs Cost Growth, on keeping the cost growth to 1 percent annually.

Major defense acquisition programs (MDAPs) are designated by the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD [(AT&L)]) as a major defense acquisition program, or are estimated by USD (AT&L) as a program that requires an eventual total expenditure of more than \$365 million in FY 2000 constant dollars for research, development, test, and evaluation or more than \$2.19 billion in FY 2000 constant dollars for procurement. Cost growth is the difference between the MDAP program costs in the current year's budget and the previous year's budget, divided by the program costs in the previous year's budget.

**Objectives.** Our objective was to evaluate the MDAP cost growth for tracking performance under GPRA, as indicated in the FY 2000 Annual Report of the Secretary of Defense. Specifically, we determined whether DoD met the GPRA performance goal established for MDAP cost growth.

**Results.** In FY 2000, cost growth for MDAPs exceeded the 1 percent goal established under the GPRA Performance Goal 2.4, Improve Acquisition. DoD accurately reported the 2.9 percent cost growth increase in the GPRA Performance Report for FY 2000.

**Management Comments.** We provided a draft of this report on December 18, 2001. No written response was required, and none was received. Therefore, we are publishing this report in final form.

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## Background

### **The Government Performance and Results Act of 1993 (Public Law 103-62).**

The Government Performance and Results Act (GPRA) seeks to improve Government-wide program effectiveness, accountability, and ultimately, public confidence by requiring agencies to identify measurable annual performance goals. DoD issued the GPRA Performance Report for FY 2000 in the 2001 Annual Report of the Secretary of Defense. The GPRA Performance Report summarizes the results that DoD achieved in executing the FY 2000 performance plan.

In 1998, the cost growth for major defense acquisition programs (MDAPs) was approved as a performance measurement under the GPRA Performance Goal 2.4, Improve Acquisition. Reasons for cost growth include technical risk and uncertainty inherent in complex development programs, schedule slippage, and overly optimistic cost estimations. The cost growth metric captures costs associated with schedule, engineering, estimating, support changes, and other program impacts; however, the cost growth metric does not measure costs related to inflation and changes in the quantities ordered. After removing inflation- and quantity-related costs, the remaining costs are attributed to changes within the program itself. See Appendix B for a definition of cost variance categories.

The goal of GPRA Performance Measure 2.4.1, MDAP Cost Growth, is to minimize the growth in costs of MDAPs to no more than 1 percent annually. The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD [AT&L]) determined the MDAP cost growth for FY 2000, based on a review of the cost growth for 72 programs that were in progress during FYs 1999 and 2000.

## Objectives

Our objective was to evaluate the MDAP cost growth for tracking performance under GPRA, as indicated in the FY 2001 Annual Report of the Secretary of Defense. Specifically, we determined whether DoD met the GPRA performance goal established for the MDAP cost growth. Appendix A discusses the audit scope, methodology, as well as prior audit coverage.

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# Major Defense Acquisition Programs Cost Growth

In FY 2000, cost growth for MDAPs exceeded the 1 percent goal established under the GPRA Performance Goal 2.4, Improve Acquisition. The actual cost growth of 2.9 percent was attributed to cost changes associated with schedule, engineering, and estimating. DoD accurately reported the 2.9 percent cost growth increase in the GPRA Performance Report for FY 2000.

## Acquisition Performance Goal 2.4

A principal resource management objective of the Quadrennial Defense Review in 1997 was to understand and manage financial risk in the sweeping modernization plans of DoD. The Quadrennial Defense Review identified three historical sources of disruption to Defense modernization plans: the migration of acquisition funds to operating accounts, the accumulation of projected modernization procurement funding in the years beyond the Future Years Defense Plan, and the technical risk and program uncertainty inherent in complex, leading-edge development efforts that inevitably drive up costs and require offsetting reductions in other programs. The GPRA Performance Goal 2.4 includes three metrics--cost growth, cycle time, and weapons system testing--that represent the more significant initiatives DoD has undertaken to control funding migration, reduce or eliminate the accumulation of long-term procurement funding projections, and reduce technical risk during research and development.

DoD reporting was compared against criteria established for determining the MDAP cost growth performance. The goal was to keep the MDAP metric to an increase of 1 percent or less each year. MDAPs continuing from the previous year were included in this metric. Adjustments were also made for inflation and changes in quantities ordered. DoD reported an annual MDAP cost growth of minus .3 percent, plus 3.1 percent, and plus 2.9 percent in FYs 1998, 1999, and 2000, respectively.

## Cost Growth Database

The USD (AT&L) established a database to record DoD cost information for all MDAPs and to determine cost growth for the programs. Information was collected from Selected Acquisition Reports and transferred to the database where it became the basis for determining the MDAP cost growth for the 72 programs with Selected Acquisition Reports in FYs 1999 and 2000.

Based on the information in the data base, DoD reported that it did not meet its FY 2000 goal of keeping the MDAP cost growth to an increase of 1 percent or less each year. DoD computed an average MDAP cost growth increase of 2.9 percent for the 72 programs. DoD reported this information to the President and the Congress in Appendix I of the 2001 Annual Report, "Government Performance and Results Act, FY 2000 Performance Report," March 2001.

Program managers for the 72 MDAPs reported cost variances in the Selected Acquisition Reports in seven categories: economic, quantity, schedule, engineering, estimating, support, and other as defined in Appendix B. To determine the extent of MDAP cost growth<sup>1</sup> during FY 2000, we totaled the cost variances reported in the Selected Acquisition Reports by category. Excluding inflation- and quantity-related costs, the variances totaled a plus \$20.7 billion: \$12.7 billion in estimating changes, \$4.4 billion in engineering cost changes, and \$3.6 billion in schedule changes. The MDAP cost growth was the difference between the MDAP program costs in the current year's budget and the previous year's budget (\$20.7 billion), divided by the program costs for the previous year (\$705 billion). This calculation resulted in an MDAP cost growth increase of 2.9 percent from FY 1999 through FY 2000, the same percentage reported to the President and the Congress.

The cost information in the database agreed with cost information reported for Selected Acquisition Reports for FY 2000 except for 2 of the 72 programs. The difference in cost information between those two sources was \$31.7 million. The following table shows the differences noted for the two MDAPs.

**Program Cost Variances**  
(in millions)

<u>Program</u>	<u>Type of Change</u>	<u>Per SAR<sup>1</sup></u>	<u>Per database</u>	<u>Difference</u>
Army Crusader	Engineering	\$936.2	\$955.7	\$ < 19.5 >
Army Crusader	Estimating	< 16.6 >	< 1.8 >	< 14.8 >
ATIRCM/CMWS <sup>2</sup>	Support	2.6	0	2.6
<b>Total</b>		<b>\$922.2</b>	<b>\$953.9</b>	<b>\$ &lt; 31.7 &gt;</b>

<sup>1</sup> 1999 Selected Acquisition Report

<sup>2</sup> Advance Threat Infrared Countermeasures/Common Missile Warning System

The net cost difference of \$31.7 million was not enough to change the percent of the MDAP cost growth determined between FYs 1999 and 2000. The cost information in the USD (AT&L) database was corrected during the audit.

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<sup>1</sup> Cost growth = (program costs for current year – program costs for previous year)/program cost for previous year.

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## **Conclusion**

DoD reported that it did not meet its FY 2000 goal of 1 percent cost the growth and that costs rose 2.9 percent. DoD accurately reported this cost information from cost variance information reported in the Selected Acquisition Reports for FY 2000.

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## Appendix A. Audit Process

### Scope

We evaluated the MDAP cost growth goal of the GPRA. Specifically, we reviewed Performance Measure 2.4.1, MDAP Cost Growth, one of three metrics for Acquisition Performance Goal 2.4, Improve Acquisition. We reviewed cost information in Selected Acquisition Reports for FYs 1999 and 2000. We did not verify the accuracy of the cost information reported by the MDAP program managers in the Selected Acquisition Reports. We interviewed and obtained documentation from the Office of the USD (AT&L).

**Audit Type, Dates and Standards.** We performed this program audit from January through November 2001 in accordance with generally accepted government auditing standards.

**Use of Computer-Processed Data.** We did verify computer-processed data to perform this audit.

**Contacts During the Audit.** We visited or contacted individuals within DoD and the Analytical Sciences Corporation, Arlington, Virginia.

**General Accounting Office High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the DoD weapons system acquisition high-risk area.

**Review of Management Controls.** We did not review the management control program for the GPRA Performance Measure 2.4.1, MDAP Cost Growth. We limited our review of controls to the reliability of data taken from the Selected Acquisition Reports and recorded in the USD (AT&L) cost growth database. We determined that those controls were adequate.

### Methodology

We obtained a copy of the GPRA Performance Measure 2.4.1, MDAP Cost Growth database that included 72 programs and related cost variance data. We reviewed the Selected Acquisition Report information for FY 2000 to extract cost variance data from section 13, Cost Variance Analysis. We examined the Selected Acquisition Report variance categories and excluded any amount relating to economic and quantity changes. The change explanation section describes changes in current cost estimates since the previous Selected Acquisition Report input information for FY 1999. We totaled dollar amounts (then-year dollars) for the remaining cost variance categories of schedule, engineering, estimating, support, and other. The sum of the calculations is

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called the adjusted dollar change. The total cost variance for the 72 programs was divided by the total program cost estimate for FY 1999 to derive the annual cost growth of 2.9 percent.

## **Prior Coverage**

### **General Accounting Office**

The General Accounting Office has conducted multiple reviews related to GPRA. Unrestricted General Accounting Office reports can be accessed over the Internet at <http://www.gao.gov>.

### **Inspector General, DoD**

Inspector General, DoD, Report No. D-2001-128, "Government Performance and Results Act Goals: Surge Sealift and Forces Supported by Land- and Sea-Based Pre-Positioning," May 23, 2001

Inspector General, DoD, Report No. D-2001-080, "Government Performance and Results Act Goals: Disposal of Excess Real Property," March 15, 2001

Inspector General, DoD, Report No. D-2001-045, "Government Performance and Results Act Goals: Tank Miles," February 7, 2001

Inspector General, DoD, Report No. D-2001-033, "Government Performance and Results Act: Unfunded Depot Maintenance Requirements," January 12, 2001

Inspector General, DoD, Report No. D-2001-021, "Government Performance and Results Act Reporting on Defense Working Capital Funds Net Operating Results," January 10, 2001

Inspector General, DoD, Report No. D-2000-136, "Reporting of Performance Measures in the DoD Agency-Wide Financial Statements," May 31, 2000

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## **Appendix B. Definitions of Cost Variance Categories in Selected Acquisition Reports**

The following cost variance categories are recorded in the Selected Acquisition Report:

- Economic change. A change due only to price level changes in the economy (inflation).
- Quantity change. A change in the number of units of an end item of equipment.
- Schedule change. A change in a procurement or delivery schedule, completion date, or intermediate milestone for development or production.
- Engineering change. An alteration in the physical or functional characteristics of a system or item delivered, to be delivered, or under development after establishment of such characteristics.
- Estimating change. A change in program cost to correct an error in the baseline cost estimate, refinement of a prior current estimate, or change in program or cost estimating assumptions and techniques in quantity, engineering, or schedule variance categories.
- Support change. Generally includes all cost changes associated with training and training equipment, peculiar support equipment, data, operational site activation, initial spares, and repair parts.
- Other. A change in program cost due to natural disasters, work stoppage, and similarly unforeseeable events not covered in other variance categories.

The economic and quantity change categories are excluded when calculating the data point for the MDAP cost growth to adjust for inflation and change in quantities ordered. The adjustment is made in an effort to arrive at a more accurate annual cost growth.

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## **Appendix C. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics  
Under Secretary of Defense (Comptroller)  
    Deputy Chief Financial Officer  
    Deputy Comptroller (Program/Budget)  
Director for Acquisition Initiatives

### **Department of the Army**

Auditor General, Department of the Army

### **Department of the Navy**

Naval Inspector General  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Non-Defense Federal Organization**

Office of Management and Budget

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## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform

House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform

House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

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## **Audit Team Members**

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector General, DoD, who contributed to the report are listed below.

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