

June 2003

BUSINESS SYSTEMS MODERNIZATION

IRS Has Made Significant Progress in Improving Its Management Controls, but Risks Remain





Highlights of GAO-03-768, a report to congressional committees

Why GAO Did This Study

As required by law, the Internal Revenue Service (IRS), in November 2002 and March 2003, submitted to the congressional appropriations committees its initial and revised fiscal year 2003 expenditure plans, respectively, requesting about \$378 million for the Business Systems Modernization (BSM) program.

GAO reviewed the plans to (1) determine whether the plans were prepared in accordance with the law, (2) determine what progress IRS had made in implementing modernization management controls and capabilities, and (3) provide any other observations about the plans and IRS's BSM program.

What GAO Recommends

GAO recommends that the **Commissioner of Internal Revenue** direct the Chief Information Officer (CIO) to continue improvements in **IRS's modernization management** controls. GAO also recommends that the Commissioner direct the CIO to promptly update the enterprise transition strategy to conform to other changes in IRS's enterprise architecture and establish and implement a process for determining the type of task order to be awarded in acquiring modernized systems. The Commissioner agreed with GAO's findings and commented on actions to address the recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-03-768.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Robert F. Dacey at (202) 512-3317 or daceyr@gao.gov.

BUSINESS SYSTEMS MODERNIZATION

IRS Has Made Significant Progress in Improving Its Management Controls, but Risks Remain

What GAO Found

IRS's initial (November 2002) and revised (March 2003) fiscal year 2003 expenditure plans were prepared in accordance with the law. IRS made significant progress in improving its modernization management controls and capabilities and implementing GAO's recommendations. For example:

- IRS implemented 20 of 23 commitments and is implementing the remaining 3 commitments that address previously reported weaknesses and recommendations. Significant among these efforts were IRS's achievements in improving its software acquisition practices.
- IRS deployed 3 modernized systems that are currently providing benefits that (1) improve telecommunications infrastructure, including telephone call management, call routing, and customer self-service; (2) provide off-the-shelf software to IRS revenue agents to allow them to accurately compute complex corporate transactions; and (3) improve customer self-service by providing instant refund status information and instructions for resolving refund problems via the Internet.
- IRS also took steps to balance the scope and pace of the BSM program with the management capacity of IRS and its prime contractor. These steps included reassessing the portfolio of projects that IRS had planned to proceed with during the remainder of fiscal year 2002 and reducing the planned scope and pace of the BSM program for fiscal year 2003.

Although significant progress has been made, certain controls and capabilities for modernization have not yet been fully implemented, including human capital management and validation of cost and schedule estimates. Weaknesses in these controls and capabilities contributed, in part, to cost, schedule, and performance shortfalls in the BSM program. For example, in the revised fiscal year 2003 expenditure plan, IRS disclosed that 75 percent of program-level initiatives and acquisition project milestones had cost increases and/or schedule delays exceeding 10 percent of the estimated cost and duration specified in the fiscal year 2002 expenditure plan. Schedule delays affect the delivery of benefits. For example, (1) the opportunity for Form 1040EZ filers to enjoy faster refunds, as promised by the first release of the project that is to replace IRS's master files of taxpayer information, has been delayed for an additional 13 months and (2) schedule delays for the first release of the e-Services project will defer the provision of easy-to-use electronic products and services targeted at tax practitioners who inform, educate, and provide services to the taxpaying public.

Contents

Letter			1
		Recommendations for Executive Action	4
		Agency Comments	5
Appendixes			
	Appendix I:	Briefing Slides from the December 18, 2002, Briefing to the Senate and House Appropriations Subcommittee Staffs	7
	Appendix II:	Briefing Slides from the April 14, 2003, Briefing to the Senate and House Appropriations Subcommittee Staffs	70
	Appendix III:	Comments from the Internal Revenue Service	114
	Appendix IV:	GAO Contacts and Staff Acknowledgments	117
		GAO Contact	117
		Staff Acknowledgments	117

Abbreviations

BSM	Business Systems Modernization
CIO	Chief Information Officer
IRS	Internal Revenue Service
OMB	Office of Management and Budget
PRIME	PRIME Systems Integration Support contractor

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States General Accounting Office Washington, D.C. 20548

June 27, 2003

The Honorable Richard Shelby Chairman The Honorable Patty Murray Ranking Member Subcommittee on Transportation, Treasury and General Government Committee on Appropriations United States Senate

The Honorable Ernest J. Istook, Jr. Chairman The Honorable John W. Olver Ranking Minority Member Subcommittee on Transportation, Treasury and Independent Agencies Committee on Appropriations House of Representatives

As required by law, the Internal Revenue Service (IRS), in November 2002 and March 2003, submitted to the congressional appropriations committees its initial and revised fiscal year 2003 expenditure plans, respectively, requesting about \$378 million from its Business Systems Modernization (BSM) fund. Our objectives in reviewing the plans were to (1) determine whether the plans satisfied the conditions specified in the law,¹ (2) determine what progress IRS had made in implementing modernization management controls and capabilities, and (3) provide any other observations about the initial and revised plans and IRS's BSM program.

¹BSM funds are unavailable until IRS submits to congressional appropriations committees for approval a modernization expenditure plan that (1) meets the Office of Management and Budget's (OMB) capital planning and investment control review requirements; (2) complies with IRS's enterprise architecture; (3) conforms with IRS's enterprise life-cycle methodology; (4) is approved by IRS, the Department of the Treasury, and OMB; (5) is reviewed by GAO; and (6) complies with federal acquisition rules, requirements, guidelines, and systems acquisition management practices. See P.L. 108-7 (Feb. 20, 2003), and intervening continuing resolutions for fiscal year 2003 funding, and P.L. 107-67 (Nov. 12, 2001), for fiscal year 2002 funding.

On December 18, 2002, and April 14, 2003, we briefed your respective offices on the results of our reviews. This report transmits the materials used at those briefings and reiterates the recommendations that we made to the then–Acting Commissioner of Internal Revenue that we specified in our December 2002 briefing.² The full briefing materials, including our scope and methodology, are reprinted in appendixes I and II.

In summary, we made the following four major points in our December 2002 briefing on the results of our review of IRS's initial expenditure plan for fiscal year 2003:

- IRS's initial expenditure plan satisfied each of the six legislative conditions.
- IRS had made significant progress in improving its modernization management controls and capabilities and implementing our recommendations. For example, IRS had implemented 20 of 23 commitments and is in the process of implementing the remaining 3 commitments that address previously reported weaknesses and recommendations. Significant among these efforts was IRS's achievements in improving its software acquisition practices.
- IRS also had taken steps to balance the scope and pace of the BSM program with the management capacity of IRS and the PRIME Systems Integration Support contractor (PRIME). In accordance with our recommendation, IRS completed a reassessment of the fiscal year 2002 BSM program in May 2002 and took actions to better balance the system acquisition workload with the management capacity. Specifically, IRS (1) deferred the start of five new projects until fiscal years 2003 and 2004 to reduce IRS/PRIME resource demands, (2) reapplied a portion of these deferred financial resources toward PRIME management processes and support of the federally funded research and development center to accelerate correcting modernization management control weaknesses, and (3) increased its own efforts and executive focus on management process improvement.

²Since the time of our briefings, a new Commissioner of Internal Revenue has been confirmed.

• Although significant progress had been made, certain modernization management controls and capabilities—related to configuration management,³ enterprise transition strategy,⁴ human capital management, and cost and schedule estimate validation—had not yet been fully implemented. Weaknesses in these controls and capabilities increase the risk of cost, schedule, and performance shortfalls in the BSM program.

We also made the following five observations related to the BSM program and the initial fiscal year 2003 expenditure plan:

- The number of project milestones experiencing cost and schedule changes was increasing.
- BSM was entering a critical, high-risk phase as the scope and complexity of the program continued to grow.
- Opportunities for using performance-based contracts in acquiring modernized systems were increasing.
- IRS had improved the format of its expenditure plan.
- Internal IRS costs of the BSM program, paid from other IRS appropriations, were expected to increase, but were not tracked or known.

In our April 2003 briefing on the results of our review of IRS's revised fiscal year 2003 expenditure plan, we reported that IRS had deployed three modernized systems that provide benefits that (1) improve telecommunications infrastructure, including telephone call management, call routing, and customer self-service; (2) provide off-the-shelf software to IRS revenue agents to allow them to accurately compute complex corporate transactions; and (3) improve customer self-service by providing

³Configuration management is the means for ensuring the integrity and consistency of system modernization program and project products throughout their life cycles. Through effective configuration management, for example, integration among related projects and alignment between projects and the enterprise architecture can be achieved.

⁴An enterprise transition strategy describes how an organization will migrate from its current operating environment to its future operating environment.

instant refund status information and instructions for resolving refund problems via the Internet.

In addition, we made the following four major points in the April 2003 briefing:

• IRS's revised plan satisfied the conditions specified under the law.

•	IRS continued to take steps to balance the pace of the program with
	management capacity by reducing the planned scope of the BSM
	program for fiscal year 2003. Between November 2002 and March 2003,
	IRS deferred four new project releases, discontinued two ongoing
	project releases, absorbed one new release into an ongoing project
	release, and transferred one ongoing project to another appropriation.
	Moreover, IRS reduced the scope of BSM program-level initiatives and
	core infrastructure projects. As a result, IRS reduced the initial BSM
	funding request for fiscal year 2003 by about \$72 million.

•	Most initiatives/project milestones continued to experience cost
	increases and/or schedule delays. In the revised fiscal year 2003
	expenditure plan, IRS disclosed that 75 percent of program-level
	initiatives and acquisition project milestones had cost increases and/or
	schedule delays exceeding 10 percent of the estimated cost and duration
	specified in the fiscal year 2002 expenditure plan.

• Schedule delays affected the delivery of benefits. For example, (1) the opportunity for the first set of taxpayers (single, Form 1040EZ filers) to enjoy faster refunds, as promised by the first release of the project that is to replace IRS's master files of taxpayer information, has been delayed an additional 13 months; (2) schedule slippages for the first release of the e-Services project will delay the provision of easy-to-use electronic products and services targeted at tax practitioners that inform, educate, and provide services to the taxpaying public; and (3) remediation of material weaknesses may be delayed.

Recommendations for Executive Action

To improve IRS's modernization management controls and capabilities, we recommend that the Commissioner of Internal Revenue direct the Chief Information Officer (CIO) to complete actions to

• institutionalize configuration management procedures for the Business Systems Modernization Office;

	• implement plans for obtaining, developing, and retaining requisite human capital resources; and
	• implement effective procedures for validating contractor-developed cost and schedule estimates.
	In addition, we recommend that the Commissioner of Internal Revenue direct the CIO to
	• promptly update the enterprise transition strategy to conform to other changes in IRS's enterprise architecture and
	• establish and implement a process for determining the type of task order to be awarded in acquiring modernized systems.
Agency Comments	In providing written comments on a draft of this report, the Commissioner of Internal Revenue agreed with this report's findings and commented on the actions IRS is taking to implement our recommendations. The Commissioner's comments are reprinted in appendix III.
	We are sending copies of this report to the Chairmen and Ranking Minority Members of other Senate and House committees and subcommittees that have appropriations, authorization, and oversight responsibilities for the Internal Revenue Service. We are also sending copies to the Commissioner of Internal Revenue, the Secretary of the Treasury, the Chairman of the IRS Oversight Board, and the Director of the Office of Management and Budget. Copies are also available at no charge on the GAO Web site at http://www.gao.gov.

Should you or your offices have questions on matters discussed in this report, please contact me at (202) 512-3317. I can also be reached by E-mail at daceyr@gao.gov. Key contributors to this report are listed in appendix IV.

Robert 7 Dacey

Robert F. Dacey Director, Information Security Issues

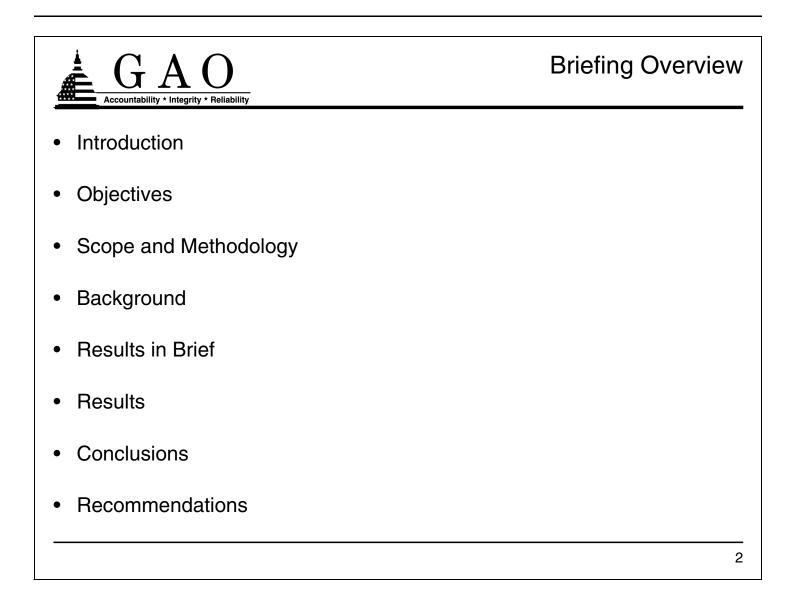


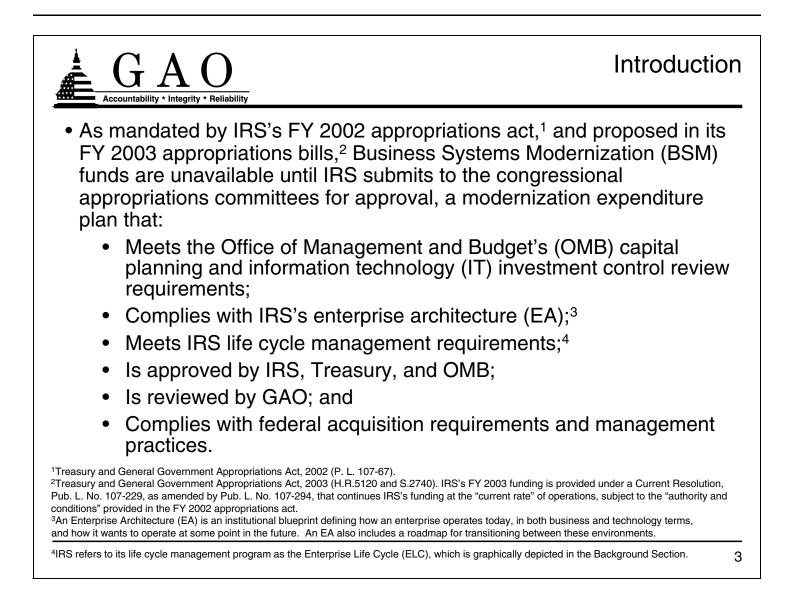
Results of Review of IRS's November 2002 Business Systems Modernization Expenditure Plan

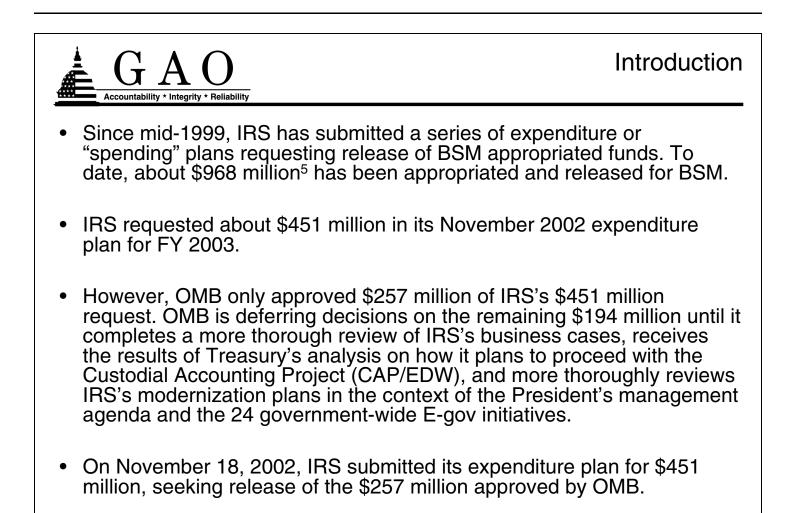
Briefing to the Staffs of the Senate Committee on Appropriations, Subcommittee on Treasury and General Government and the House Committee on Appropriations, Subcommittee on Treasury, Postal Service, and General Government

December 18, 2002

1

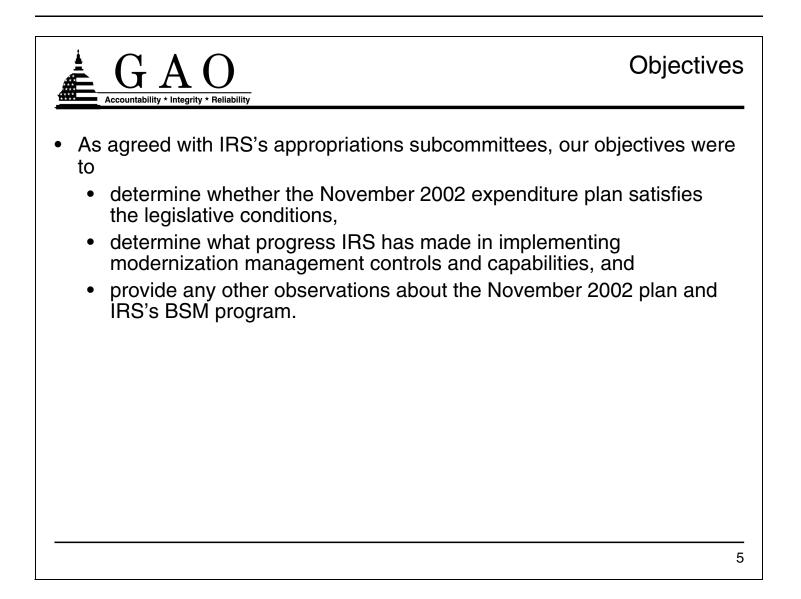


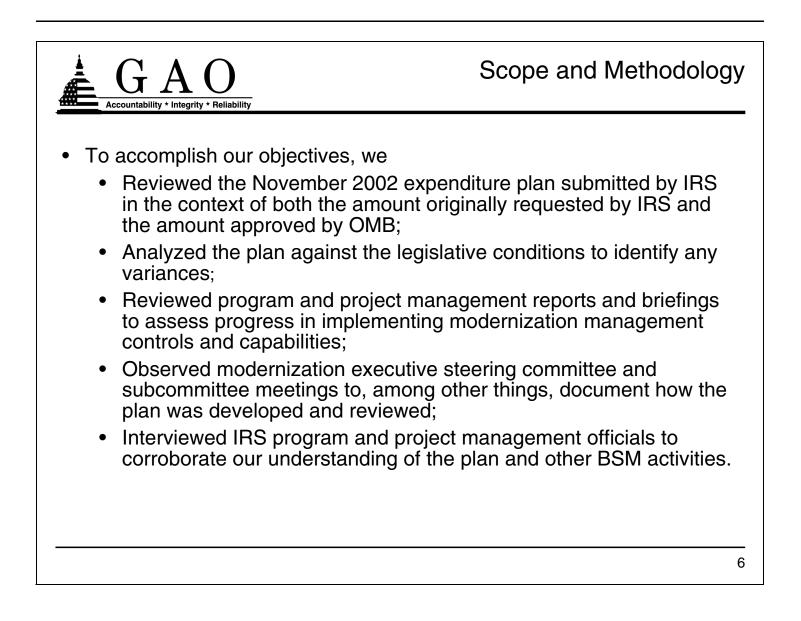


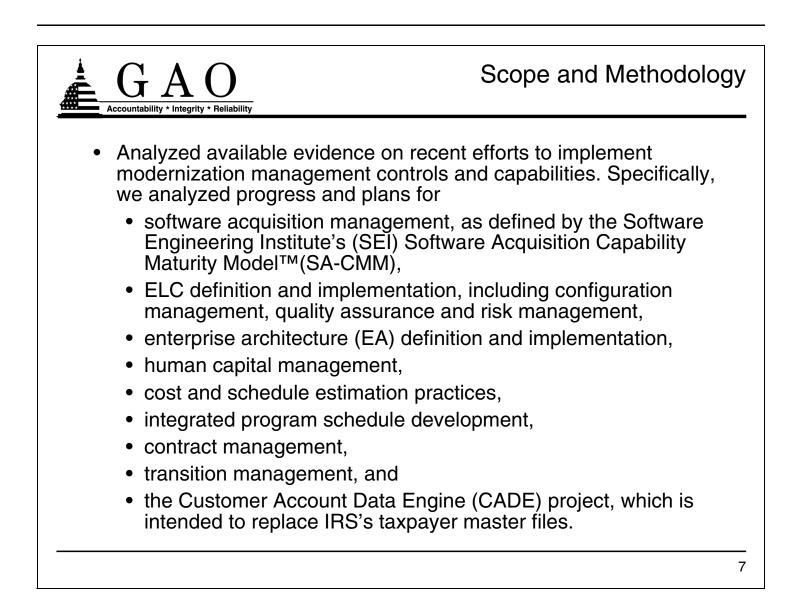


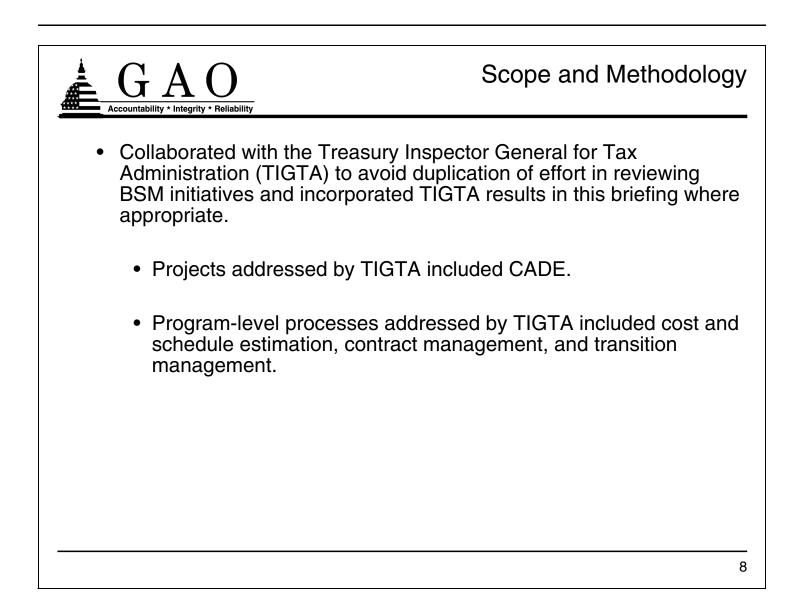
⁵This does not include the \$14 million from IRS's FY 2002 supplemental appropriation that has not yet been released.

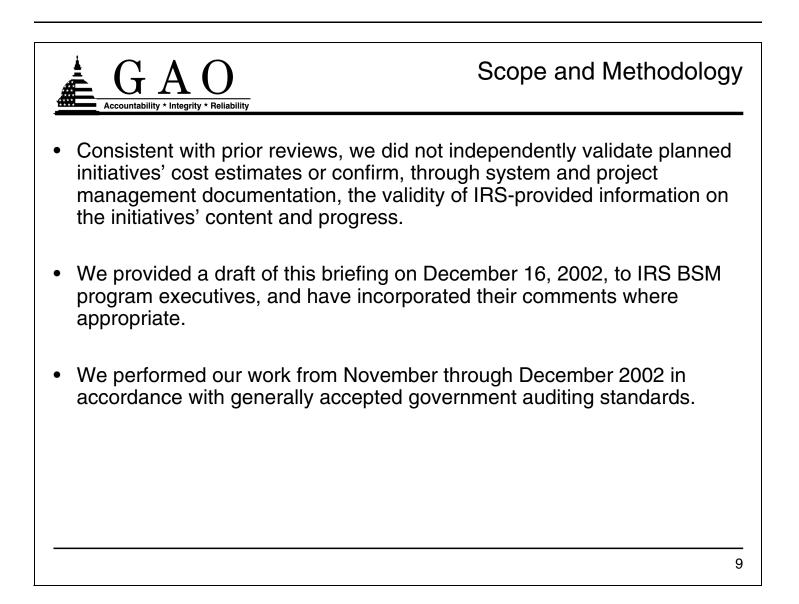
4

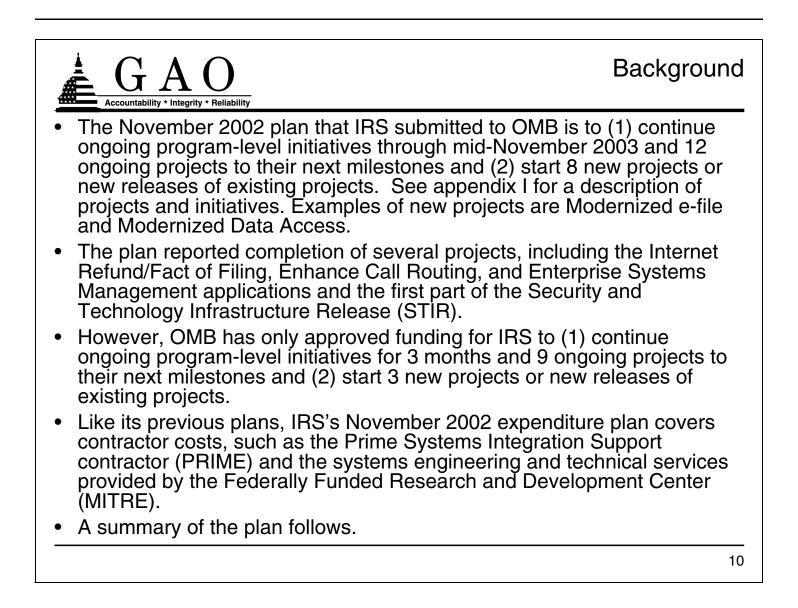




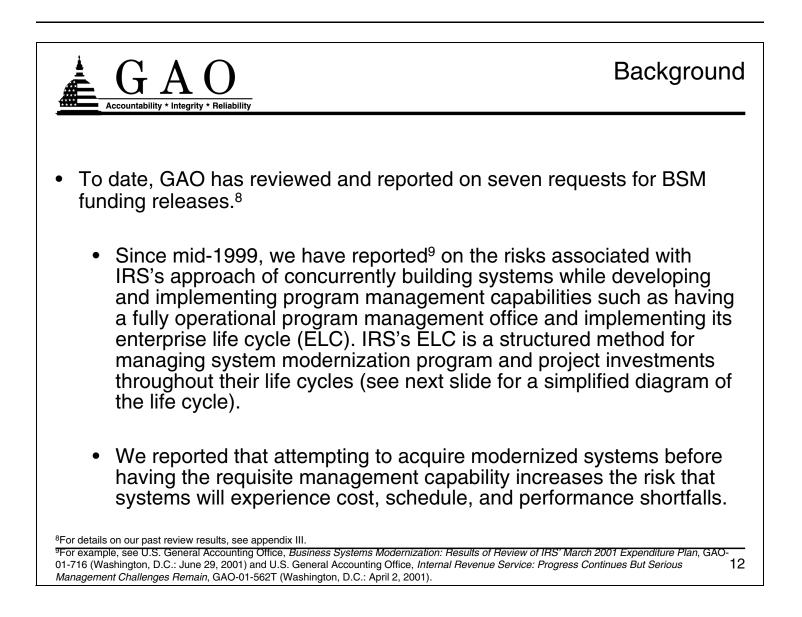


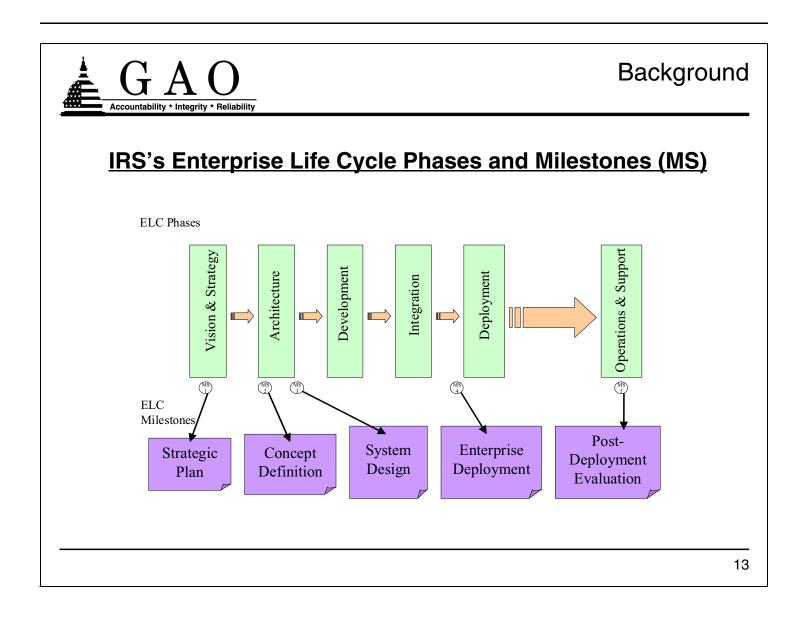


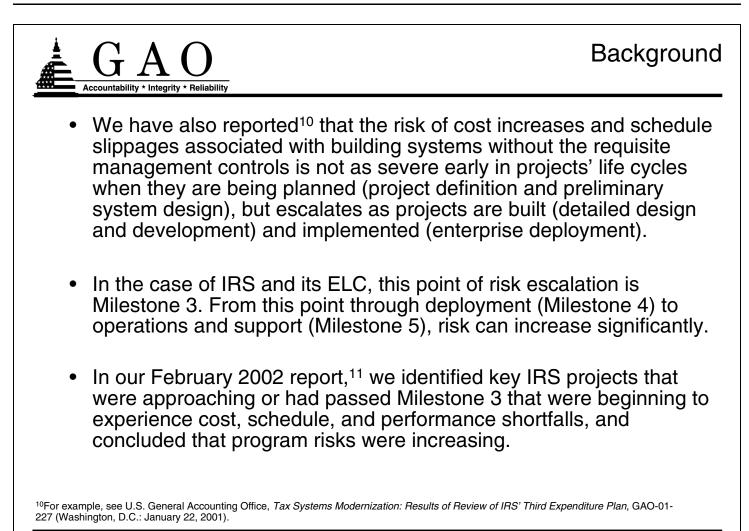




Accountability * Integrity * Reliability	_	ackgro		
Summary of IRS's November 2002 Expenditure Plan (\$000) ⁶				
Program-Level Initiatives	IRS Request	OMB Approved		
Architecture & Integration	\$43,577	Approved		
Business Integration	\$11,413			
Management Processes	\$13,828			
Federally Funded Research and Development Center (FFRDC) - MITRE	\$20,750			
Program Management Office	\$9,908			
Subtotal	\$99,476	\$25,000		
Projects ⁷				
Core Infrastructure Projects (e.g. Infrastructure Shared Services)	\$99,261	\$99,000		
Data Projects (e.g. Customer Account Data Engine, Integrated Financial Services) \$152,798	\$115,000		
Business Projects (e.g. e-Services, HR Connect)	<u>\$94,800</u>	<u>\$18,000</u>		
Subtotal	\$346,859	\$232,000		
Addition to Management Reserve*	\$4,342			
Total**	<u>\$450,677</u>	<u>\$257,000</u>		
* - Includes \$677 from Remaining FY2001 and FY2002 Appropriated Funds				
** - Includes \$14,000 from FY 2002 Supplemental Appropriation				
rce: IRS				





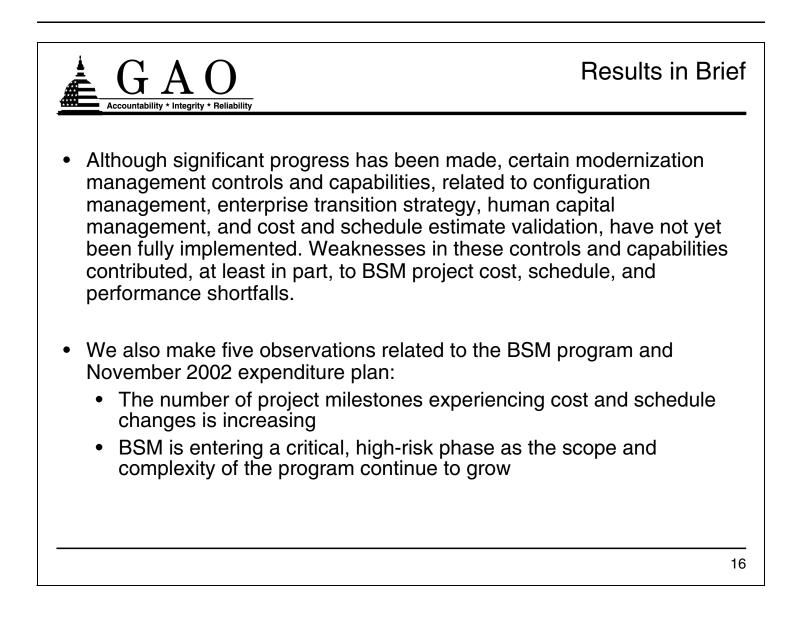


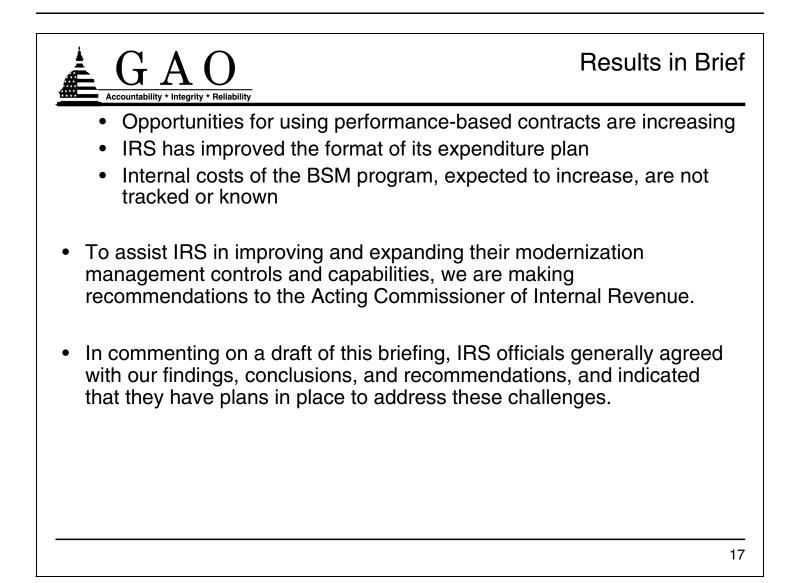
¹¹U.S. General Accounting Office, *Business Systems Modernization: IRS Needs to Better Balance Management Capacity with Systems Acquisition Workload*, GAO-02-356 (Washington, D.C.: Feb. 28, 2002).

14

🛓 G A O		Res	sults in Brie
Accountability * Integrity * Reliability			
 IRS's November 2002 plan satisfies ea 	ch of six	k legislative	conditions.
		C	
Legislative Conditions	Satisfies	Does Not Satisfy	
1. Meets OMB capital planning and investment control review	✓		
requirements. 2. Complies with IRS' enterprise architecture.			
3. Meets the requirements of IRS' life cycle program.	· · ·		
4. Approved by IRS, Treasury, and OMB.	 ✓		
5. Reviewed by GAO.	√		
 Complies with federal acquisition requirements and management practices.¹² 	✓		
IRS has made significant progress in im management controls and capabilities a recommendations. For example, IRS has commitments and is in the process of in three commitments that address previous recommendations. As part of these effor rated as SA-CMM Level 2. Further, IRS balance the pace of the FY 2002 BSM p	and imple as imple nplemer usly rep rts, IRS has tak	lementing ou emented 20 o nting the ren orted weakr was independent	ur of 23 naining nesses and endently better
capability.	U		0

Software Engineering Institute's software acquisition model. Our analysis of the plan focused on satisfaction of this model's tenets.





Accountability * Integrity * Reliability	Results
Objective 1: The November 2002 plan satisfies the condition proposed in IRS's FY 2003 appropriations bills.	ons
Legislative ConditionsExpenditure Plan Provisions1. Meets OMB capital planning and IT investment control review requirements.IRS's November 2002 expenditure plan provides for managing investments as part of a portfolio through its Investment Decision Management process. This includes conducting periodic portfolio reviews to assess changes in business priorities and project schedules.	
	18

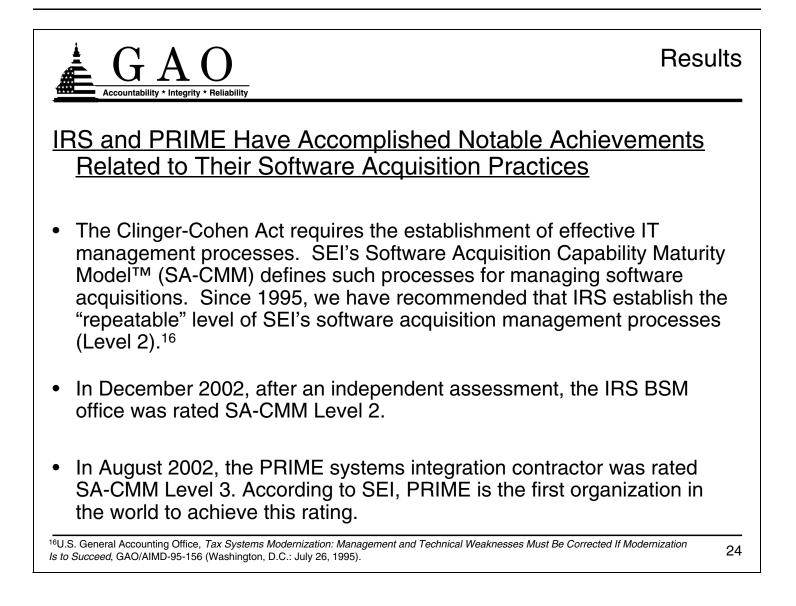
G	A O		Results
	Legislative Conditions 2. Complies with IRS's enterprise architecture (EA). 3. Meets the requirements of IRS's life cycle program.	 Expenditure Plan Provisions The November 2002 plan provides funds to continue definition and implementation of the enterprise architecture. For example, it provides for completing and issuing EA release 2.1 publishing updates to the EA performing EA compliance certification activities issuing the 2003 and 2004 release architectures operating the systems engineering office The plan provides funds for meeting the requirements in IRS's enterprise life cycle management program, which IRS refers to as ELC. For example, the plan calls for maintaining responsibility for coordinating, tracking, and integrating all program-wide costs, schedules, releases, issues, and risks maintaining the ELC 	
			19

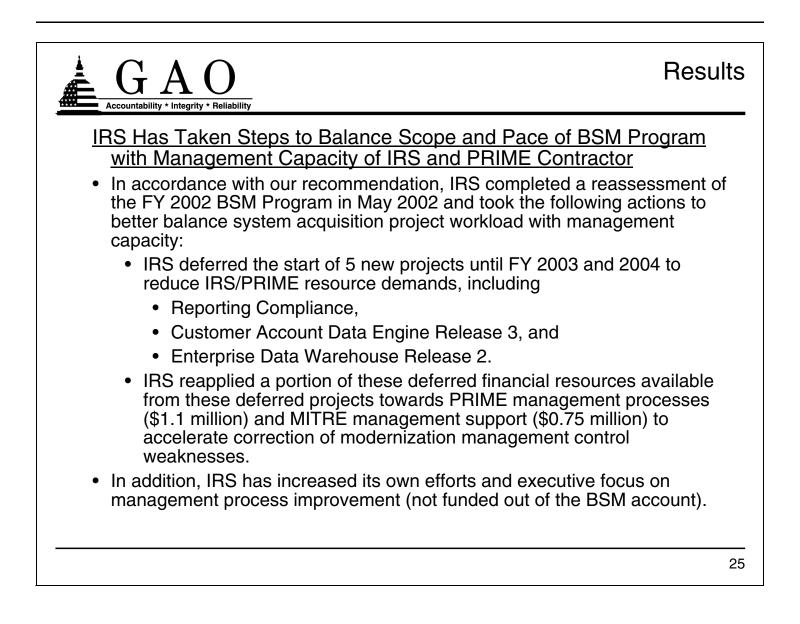
Accountabili	A O ty * Integrity * Reliability		Result
	Legislative Conditions	Expenditure Plan Provisions	
	4. Approved by IRS, Treasury, and OMB.	 IRS – October 8 and 10, 2002 Treasury – November 5, 2002 OMB – November 14, 2002 (partial approval)¹³ Submitted to IRS's appropriations subcommittees – November 18, 2002 	
	5. Reviewed by GAO.	• GAO – December 18, 2002 briefing to IRS's appropriations subcommittees	
	6. Complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal Government.	As part of the ELC, IRS has defined processes, roles, responsibilities, etc. for implementing Software Engineering Institute (SEI) Software Acquisition Capability Maturity Model [™] practices within the level 2 key process areas. ¹⁴ These practices are consistent with federal acquisition requirements and management practices, and the plan calls for implementation of the ELC on all projects. Also, all PRIME cost reimbursement task orders are subject to a final independent audit by the Defense Contract Audit Agency to ensure that costs incurred are commensurate with the physical completion of the contract.	
,	\$257 million of the \$451 million requ n Planning, Solicitation, Requiremen	ested by IRS. ts Development and Management, Project Management, Contract Track	ing

Accountability * Integrity * Reliability				Results
<u>Dbjective 2</u> : IRS has made mproving controls and ca not been fully implemented	apabilit			have
Since we reported on IRS's la progress in improving its mode addressing our recommendation of 23 commitments to address recommendations as the follow	ernizatio ions. For s previou wing illus	n controls example sly report	s and capabilities , it has implement ted weaknesses a	and Ited 20 and
IRS Commitments to Address Previously Reported Weaknesses and Recommendations	d Completed	In Progress	Revised IRS Commitments as November 2002 Plan	of
Software acquisition management				
 Complete internal SA CMM level 2 capability compliance assessment by June 2002 for CADE, STIR, and e-Services projects. 	~			
 Based on internal assessment, develop plan to correct identified weaknesses. 	√			
 Have an external evaluation performed by an independent assessor in December 2002 to ensu 	re 🗸			
compliance with SEI's SA CMM level 2 requirements.				

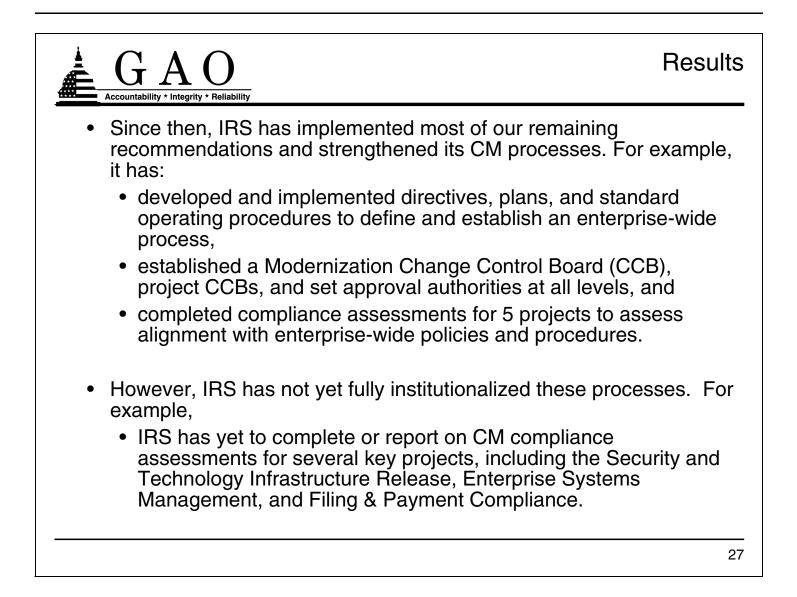
IRS Commitments to Address Previously Reported Weaknesses and Recommendations	Completed	In Progress	Revised IRS Commitments as of November 2002 Plan
ELC definition and implementation (Configuration			
Management, Quality Assurance, Risk Management)			
Configuration Management:			
 Fully define BSMO standard configuration 	~		
management procedures by early 2002.		,	
 Fully institutionalize BSMO standard configuration 		√ (Caa an 00 00)	To be completed by September
management procedures by early 2002.	✓	(See pp. 26-28)	2003.
 Identify configuration items for current production environment impacted by 2002 modernization 	×		
project releases by March 2002.			
 Establish a centralized CM repository by early 	✓		
2002.			
 Define and implement a program-wide 	✓		
configuration status account reporting mechanism			
by March 2002.			
Quality Assurance:			
 Increase level of IRS oversight, scrutiny, and 	~		
quality assurance of PRIME activities.			
Risk Management:			
Include all known risks in inventory by Feb. 2002.	✓ ✓		
Track and update risk plans and their disposition. Enterprise explications (EA) definition and	~		
Enterprise architecture (EA) definition and implementation			
Approve EA 2.0.	✓		
 Ensure ongoing projects are aligned with EA in 	· ·		
accordance with compliance certification process			
by late-December 2001.			

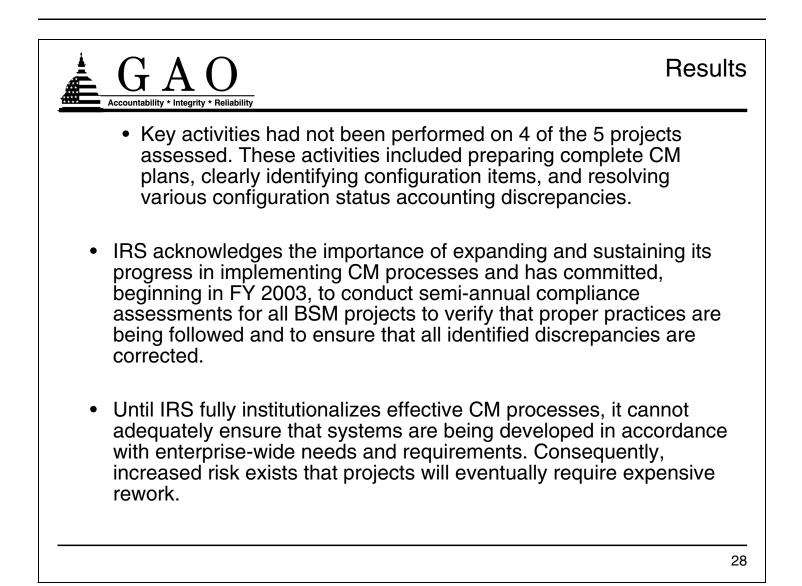
IRS Commitments to Address Previously Reported Weaknesses and Recommendations	Completed	In Progress	Revised IRS Commitments as of November 2002 Plan
Human Capital Management			
 Assess knowledge and skills needed to effectively perform IT. 	✓		
 Inventory the knowledge and skills of current IT staff. 	~		
 Identify gaps between requirements and current staffing. 	\checkmark		
 Develop and implement plans to fill the gaps. 		√ (See pp. 31-33)	
Cost and Schedule Estimation practices			
Direct PRIME to select an estimating method.	✓		
 Ensure PRIME develops a plan for implementing the method by mid-January 2002. 	√		
 Ensure PRIME begins implementation of the plan by the end of February 2002. 	✓		
 Develop and implement an approach to oversee PRIME estimation practices by February 2002. 		✓ (See pp. 34-36)	To be completed by mid- 2003.
Integrated Program Schedule Development			
 Finalize the Integrated Master Schedule for Release 2002 by late-December 2001. 	✓		

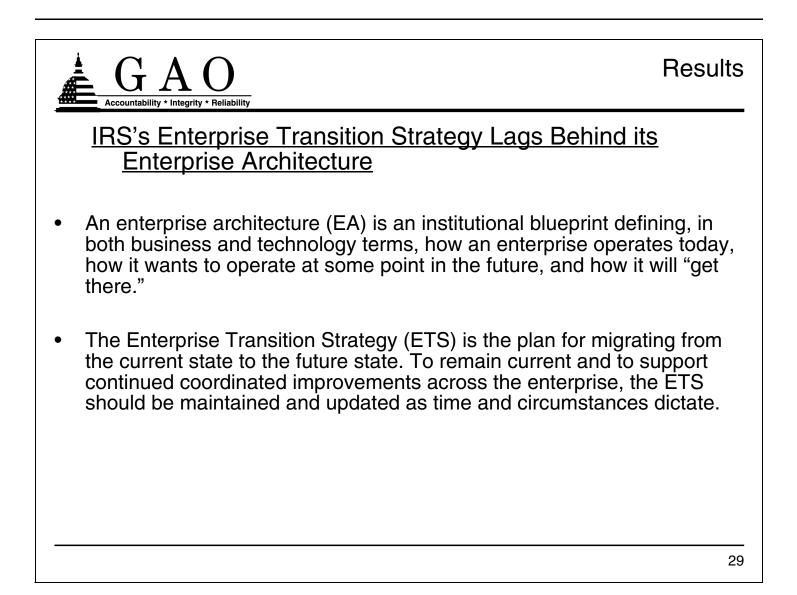


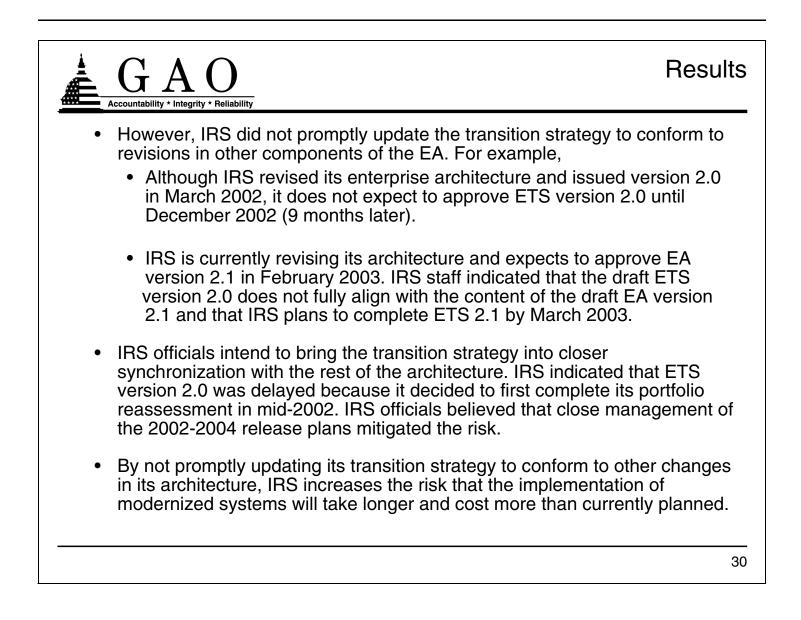


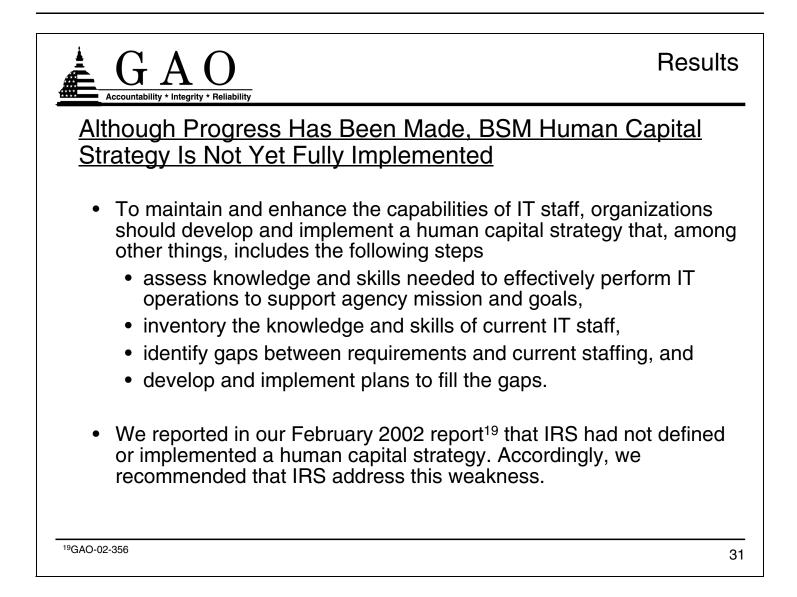
GAO Accountability * Integrity * Reliability	Results
Enterprise-wide Configuration Management Proces Have Been Established, But Are Not Yet Fully Institutionalized	<u>ses</u>
 Effective configuration management (CM) is an essential consuring the integrity and consistency of system modernization program and project products throughout their life cycles. 	
 In June 2001, we reported¹⁷ that BSM CM was ineffective. Accordingly, we made recommendations to address this we 	eakness.
 In February 2002, we reported¹⁸ that IRS had made importance progress in addressing our recommendations, but did not y effective processes. 	
¹⁷ GAO-01-716 ¹⁸ GAO-02-356	26

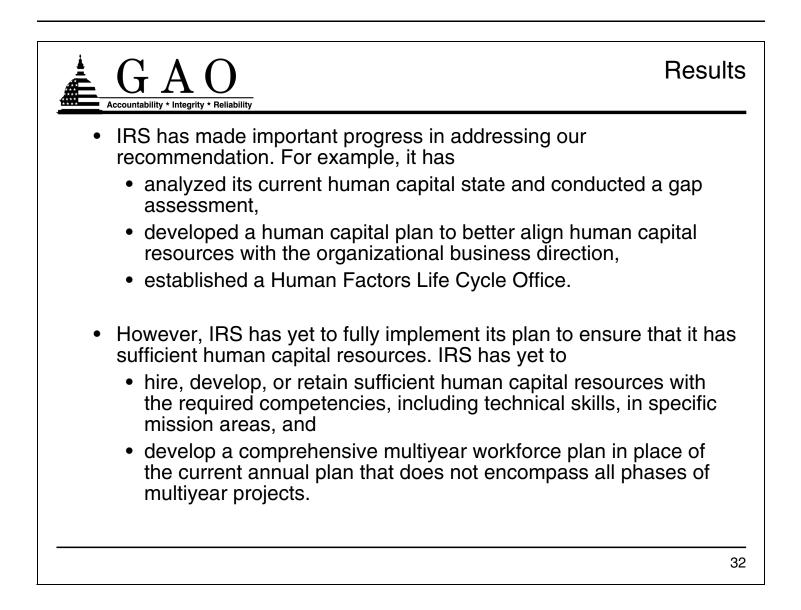


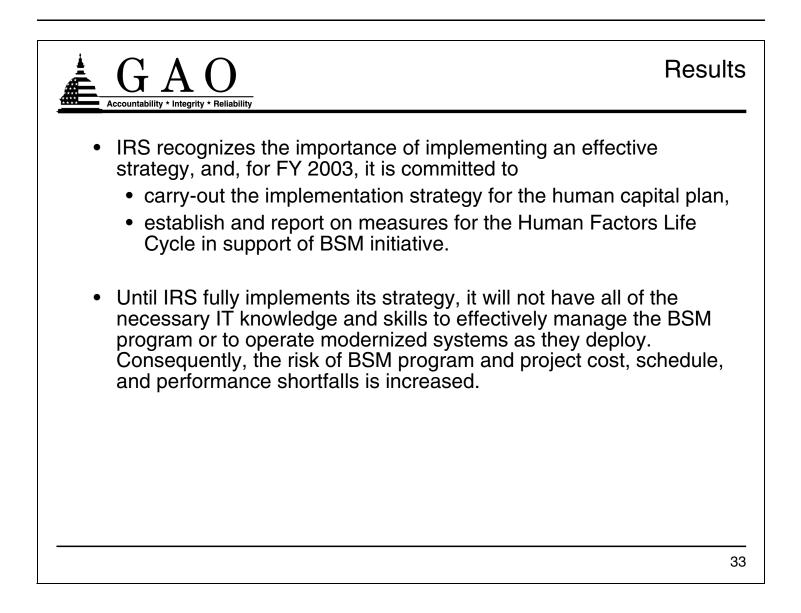


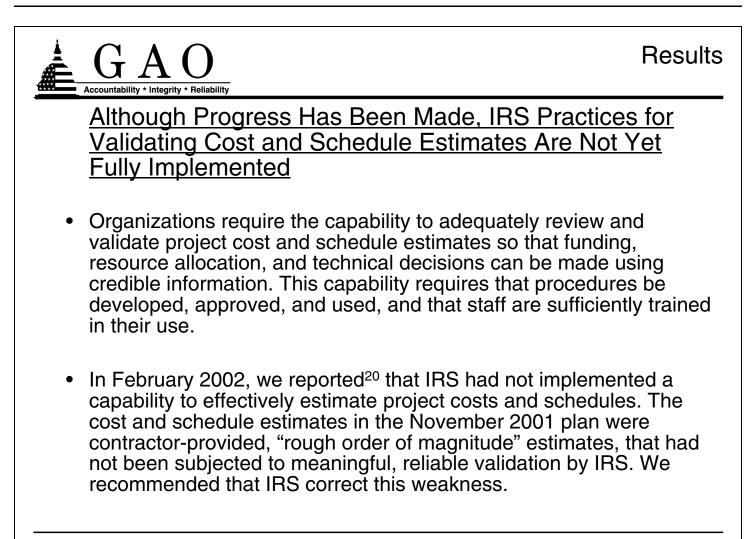






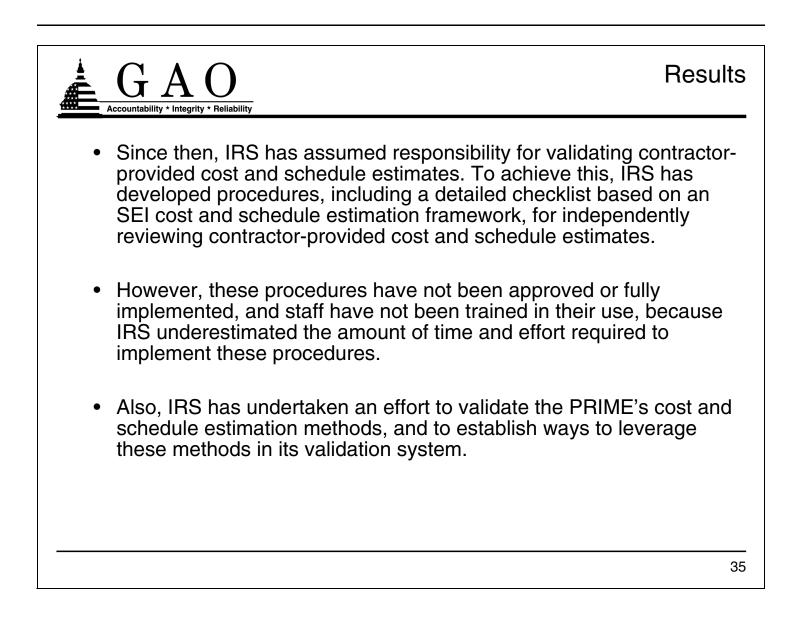


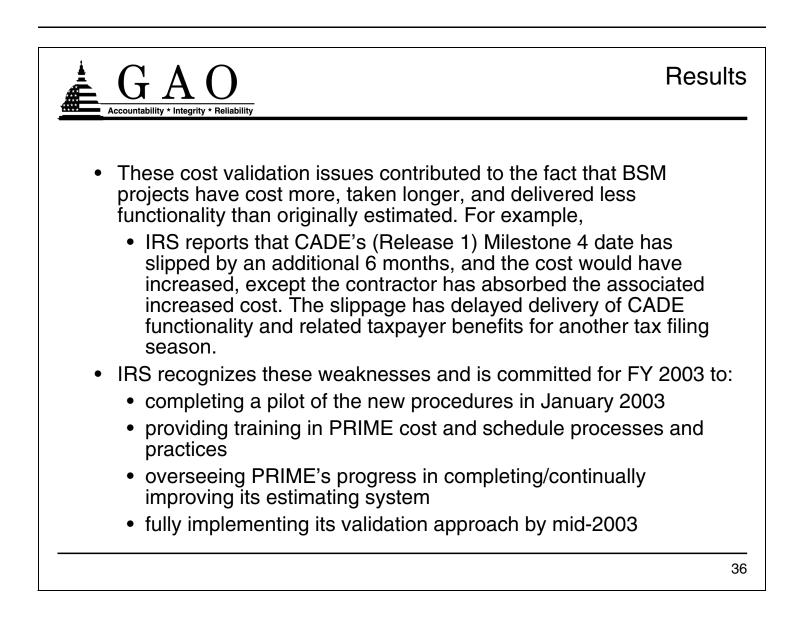


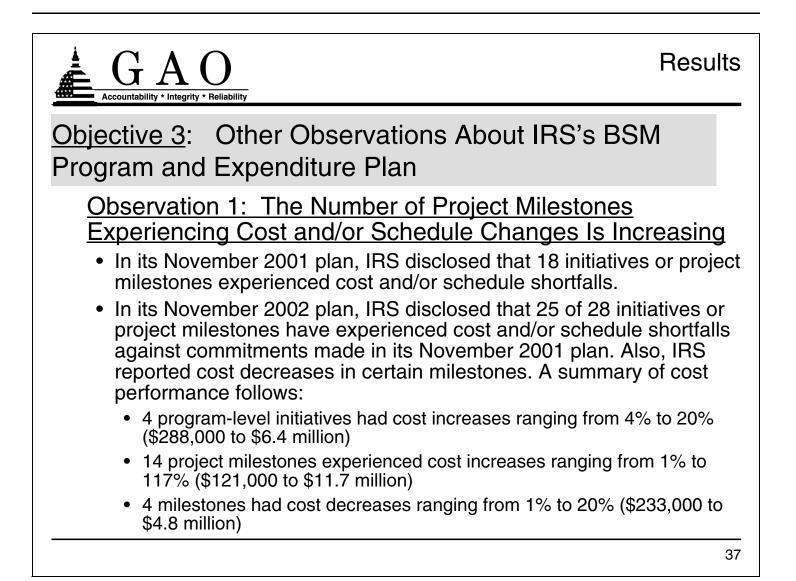


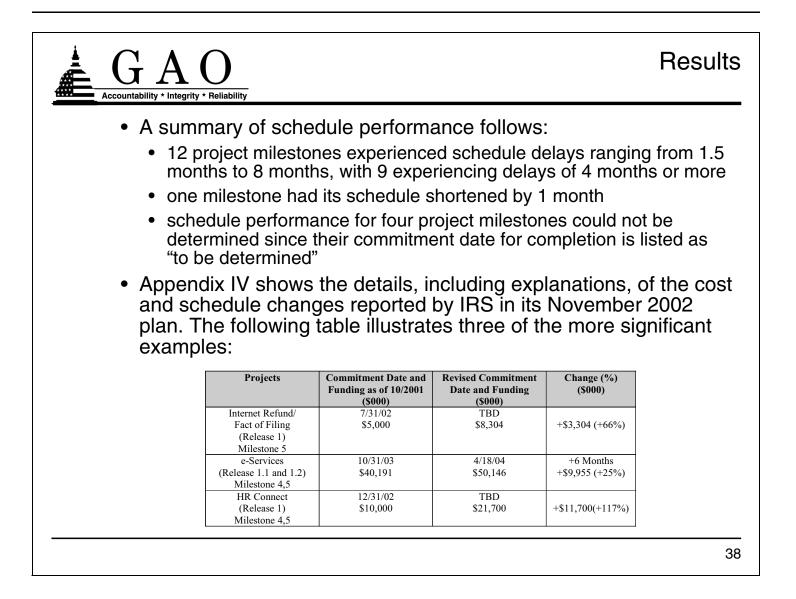
²⁰GAO-02-356

34

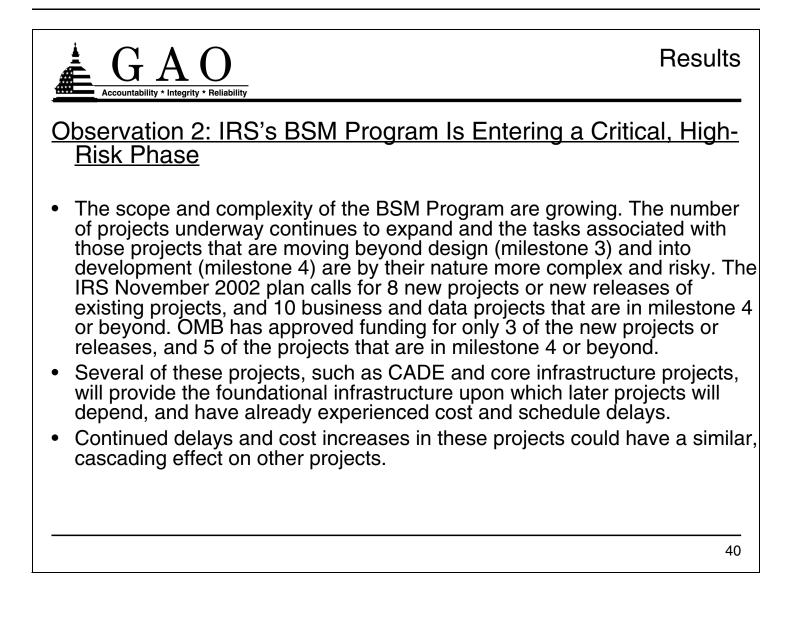


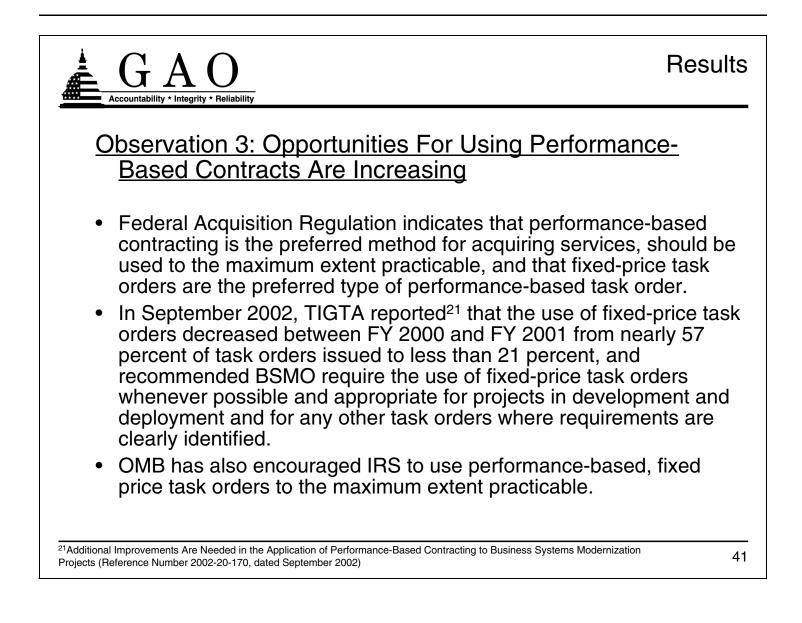


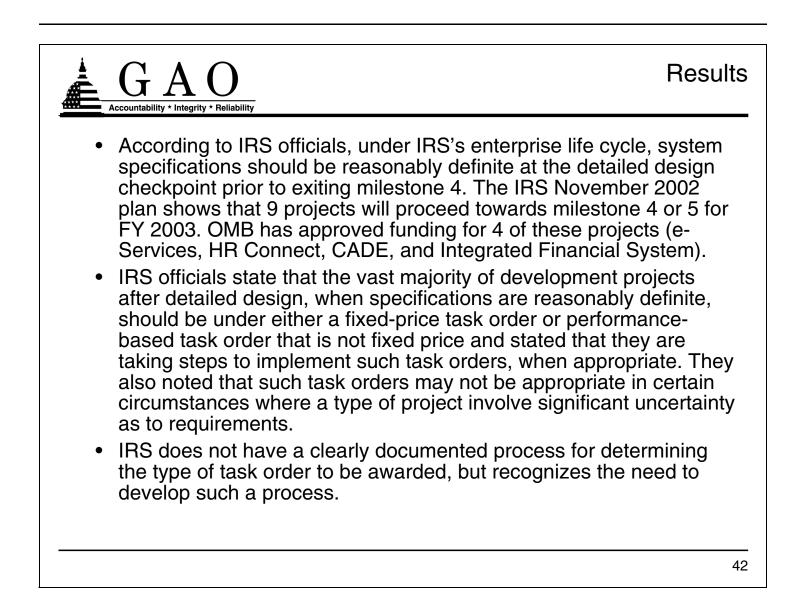


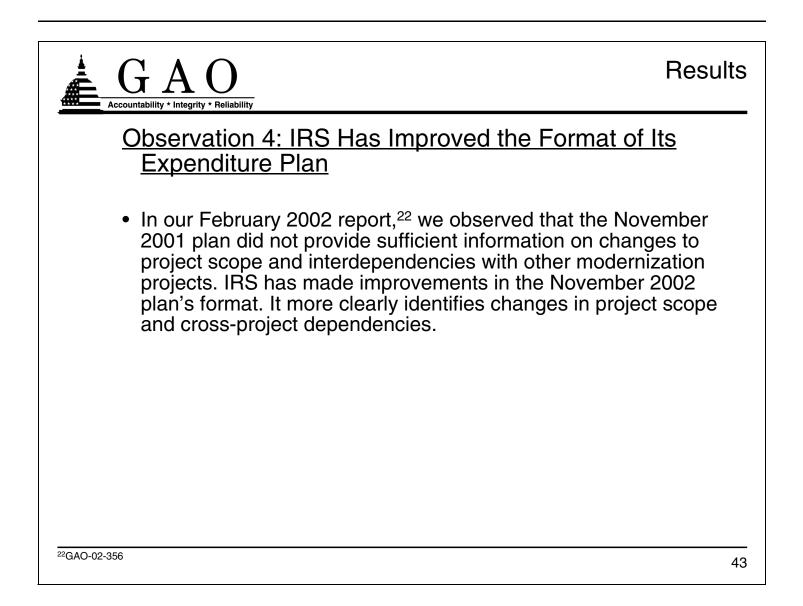


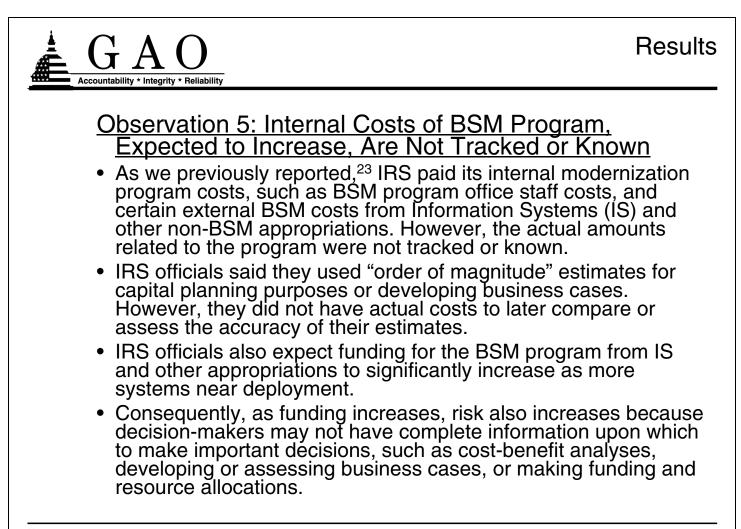
G A O Accountability * Integrity * Reliability	ults
 IRS has provided a detailed explanation for each cost or schedule change in its plan. Subsequent to the submission of its November 2002 plan to its appropriations subcommittees, IRS reported an additional \$15-18 million cost increase for Release 1 of the Integrated Financial Systems project (milestones 4 and 5). Among the reasons given to IRS for the cost increase are Additional testing resources and tools Development environment build-out to support training and testing Increased requirements, Security enhancements to ensure EA compliance, Additional training for approximately 8000 users, and Prior estimate was made before IFS vendor was selected, a license fees were known and design was done. 	ру
	39



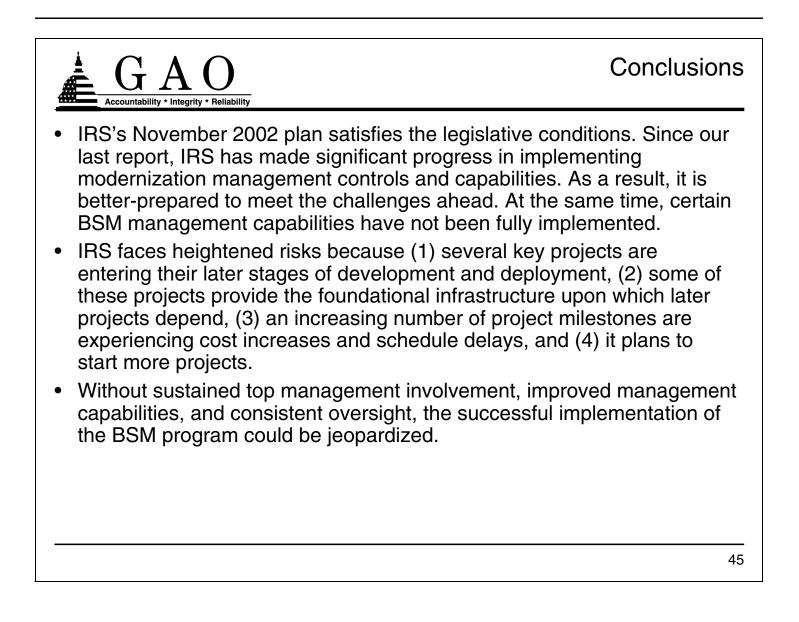


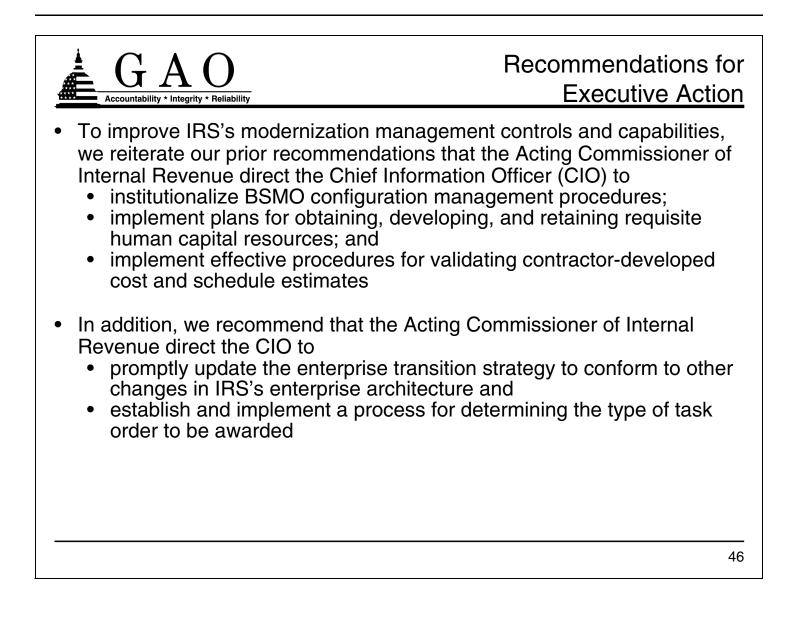


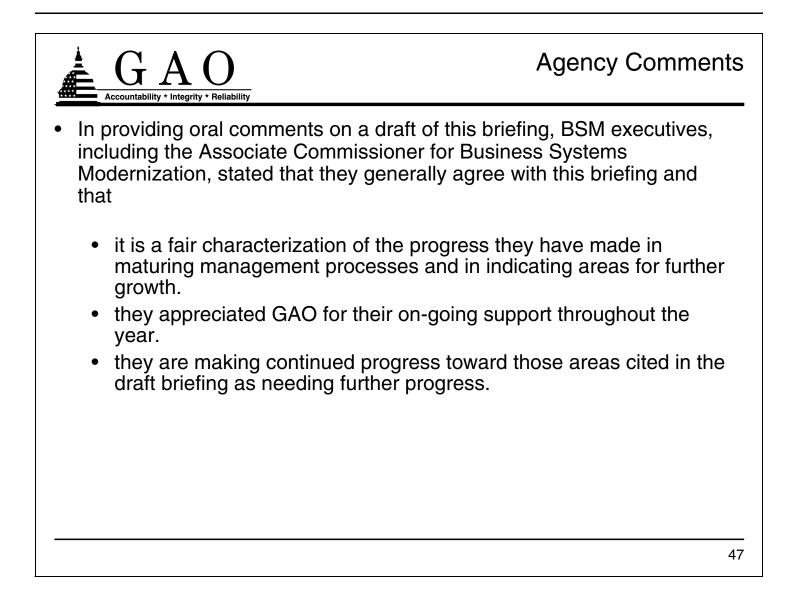




²³U.S. General Accounting Office, Internal Revenue Service: Results of Review of IRS Spending for Business Systems Modernization, GAO-01-920 (Washington, D.C.: August 17, 2001)







Accountability * Integrity * Reliability	Appendiz BSM Program-Level Initiatives/Proje
Description of BSM Pro	gram-Level Initiatives and Projects
Proposed Modernization Initiatives	Description
Program-Level Initiatives:	
Architecture & Integration	Ensures that systems solutions meet IRS business needs and that the projects are effectively integrated.
Business Integration	Ensures that IRS BSM program is aligned with the business units' reengineering efforts and that business transformation plans are developed and maintained to support a seamless "transition to support".
Management Processes	Provides sustaining support for program-level management processes, including quality assurance, process improvement, training, program control, and ELC maintenance and enhancements.
FFRDC - MITRE	Provides program management and systems engineering support to BSMO.
Program Management Office	Provides overall program management for IRS-PRIME Partnership activities and deliverables, and is responsible for coordinating, tracking, and integrating all program-wide costs, schedules, and performance measures.
Core Infrastructure Projects:	
Development Integration & Testing Environment	Provides oversight for laboratory environments which support development, and testing: (1) Virtual Development Environment – development environment and standardized set of tools; (2) Enterprise Integration Testing Environment – integration testing environment for all projects.
Infrastructure Shared Services	Provides foundational enabling infrastructure (infrastructure technology components and strategic infrastructure services for all data and business projects: (1) Enterprise Systems Management – develops and executes a strategy to provide network and systems management to improve IT infrastructure availability and performance; (2) Security and Technology Infrastructure Release – provides infrastructure for secure telephony and electronic interaction among employees, tax practitioners, and taxpayers.

Accountability * Integrity * Reliability	BSM Program-Level Initiatives/Project
Data Projects:	
Customer Account Data Engine	Builds the modernized database foundation to replace the existing master file processing systems.
Integrated Financial Services	Implements an integrated financial management system using a commercial off-the-shelf enterprise resource planning product.
Custodial Accounting Project / Enterprise Data Warehouse	Provides integrated, reliable tax operations and internal management information to support evolving decision analytics, performance measurement, and management information needs.
Modernized Data Access	Provides a single integrated approach and software for accessing current processing environment (legacy) data across the organization, and builds key infrastructure components that all modernization projects can share.
Information Returns Processing	Provides modernized information returns repository to link third party data directly to customer accounts to efficiently handle customer service and compliance inquiries and demands.
Business Projects:	<u> </u>
Customer Communications 2001	Improves communications infrastructure, including telephone call management, call routing, and customer self-service applications.
Internet Refund / Fact of Filing	Improves customer self-service by providing instant refund status information and instructions for resolving refund problems to taxpayers with Internet access.
Customer Account Management	Delivers an enterprise solution to support access to tax account data, contact management, case management, outbound correspondence management, and workflow management.
Customer Contact Modernization	Provides initial building blocks to transition IRS from current call center environment to new customer contact center.
e-Services	Creates a web portal and value-adding e-Services to promote the goal of conducting most of the IRS's transactions with taxpayers and tax practitioners electronically.
Filing & Payment Compliance	Provides support for detecting, scoring, and working cases in the area of non-filer (filing compliance) and delinquency (payment compliance) cases.
HR Connect	Delivers an enterprise solution to allow IRS employees to access and manage their human resources information online.
Modernized e-file	Provides a single standard for filing electronic tax returns.

Detailed Summary of 1110 3 Novembe		Accountability * Integrity * Reliability Detailed Summary of IRS's November 2002 Expenditure Plan (\$000)				
Proposed Modernization Initiatives	Release ¹	•	Milestone Date	Amount Requested	OME	
Program Level Initiatives ³						
Architecture & Integration		FY	Nov. 03	\$43,577		
Business Integration		FY	Nov. 03	\$11,413		
Management Processes		FY	Nov. 03	\$13,828		
FFRDC - MITRE		FY	Nov. 03	\$20,750		
Program Management Office		FY	Nov. 03	\$9,908		
Subtotal - Prog. Mgmt. and Arch.				\$99,476	\$25,	
Core Infrastructure Projects ³						
Development Integration & Testing Environment		infrastructure	Nov. 03	\$13,961		
Infrastructure Shared Services		infrastructure	Nov. 03	\$85.300		
Subtotal - Core Infrastructure Projects				\$99,261	\$99,	
Data Projects						
Customer Account Data Engine	R1	5	June 03	\$4,851		
Customer Account Data Engine	R1	6	Dec. 03	\$3,638		
Customer Account Data Engine	R2	infrastructure	TBD	\$6,924		
Customer Account Data Engine	R3	3	Dec. 03	\$15,289		
Customer Account Data Engine	R3	infrastructure	Dec. 03	\$581		
Customer Account Data Engine	R4	3	Aug. 04	<u>\$6,756</u>		
Subtotal - CADE				\$38,039	\$38.	

²Milestones correspond to phases within IRS's Enterprise Life Cycle, which is graphically depicted in the Background Section. ³Program Level Initiatives and Core Infrastructure Projects are funded on a fiscal year (FY) basis rather than by milestone.

Accountability * Integrity * Reliability Integrity * Reliability IIRS Expenditure PI					
ailed Summary of IRS's November 2002 Expenditure Plan (\$000)					
Proposed Modernization Initiatives	Release	Milestone ²	Milestone Date	Amount Requested	OMB Approved
Data Projects (Cont.)					
Integrated Financial Services	R1	4	Sept. 03	\$67,227	
Integrated Financial Services	R1	5	March 04	\$6,828	
Integrated Financial Services	R2	2,3a	TBD	<u>\$2,500</u>	
Subtotal - IFS				\$76,555	\$77,000
Custodial Accounting Project /Enterprise Data Warehouse	R1, B1	4,5	May 03	\$4,850	
Custodial Accounting Project / Enterprise Data Warehouse	R1, B1.1	4,5	Sept. 03	\$13,613	
Modernized Data Access	R1	infrastructure	Nov. 03	\$16,741	
Information Returns Processing	R1	1	TBD	<u>\$3,000</u>	
Subtotal - Data Projects				\$152,798	\$115,000
Business Projects					
Customer Account Management	R1	4	Oct 04	\$20,949	
Customer Contact Modernization	R1	2	TBD	\$2,500	
e-Services	R1.1/1.2	5	April 04	\$5,846	\$6,000
Filing & Payment Compliance	R1	4	April 04	\$26,159	
HR Connect	R1	4,5	TBD	\$11,500	\$12,000
Modernized e-file		4	Nov. 03	<u>\$27,846</u>	
Subtotal - Business Projects				\$94,800	\$18,000
Addition to Management Reserve				\$4,342	
Total Business Systems Modernization Program				<u>\$450,677</u>	\$257,000

G A O Accountability * Integrity * Reliability	Appendix II Results of Past GAO Review
Spending Plan 1 st Spending Plan (May 1999) (\$35 million request)	Results of GAO Review • The plan satisfied the legislative conditions for the use of ITIA funds and was consistent with our open recommendations. • The plan was an appropriate first step, but the key to success would be
(400 minior request)	 Future plans should specify progress against prior plan commitments, and the next plan should clarify IRS/contractor roles and responsibilities. (See <i>Tax Systems Modernization: Results of Review of IRS' Initial Expenditure Plan</i>, GAO/AIMD/GGD-99-206, June 15, 1999)
1 st Interim Spending Plan (Dec 1999) (\$33 million request)	 The plan raised concerns about projects that were scheduled to begin detailed design and software development before, among other things, the enteprise architecture was completed and the ELC was defined and implemented. IRS should expedite completion of the architecture and implementation of the ELC. Future plans should explain how IRS plans to manage the risk of performing detailed design or development work if the architecture is not sufficiently completed or the ELC is not sufficiently implemented.

Accountability * Integrity * Reliability	Appendix I Results of Past GAO Review
Spending Plan	Results of GAO Review
2 nd Spending Plan (Mar 2000) (\$176 million request)	 IRS met relatively few commitments in its \$35 million first ITIA spending planeven though the Service later received an additional \$33 million and nearly 5 months of extra time to accomplish the goals set forth in the first plan. The plan satisfied the legislative conditions for the use of ITIA funds, and wa generally consistent with recommendations contained in our earlier reports. The key to success would be whether IRS effectively implements the plan. Until IRS completes its initiated actions to redirect and restructure its modernization effort, it would continue to lack key modernization and technical controls. (See <i>Tax Systems Modernization: Results of Review of IR. March 7, 2000, Expenditure Plan,</i> GAO/AIMD-00-175, May 24, 2000)
2 nd Interim Spending Plan (Aug 2000) (\$33 million request)	 IRS had not adhered to the approved and funded March 7, 2000, spending pla On selected initiatives, IRS had not met cost and schedule commitments madin its March 7, 2000 spending plan. Most modernization initiatives had nevertheless made important progress since March 2000. IRS fully addressed two of its modernization management capability weaknesses, and it was making progress in addressing others. One project, Custodial Accounting Project (CAP), had been approved for product development without sufficient definition and without a compelling business case. Further investment in CAP should be limited until IRS demonstrates sufficient business value and reports to the House and Senate committees on risk mitigation. Another project, Security and Technology Infrastructure Release (STIR), was being preliminarily designed without sufficient requirements definition and economic justification. The STIR project should be directed to complete a security risk assessment as soon as possible, and ensure that STIR requirements and the proposed design solution are economically justified through a business case. (See <i>Tax Systems Modernization: Results of Review of IRS' August 2000 Interim Spending Plan</i>, GAO-01-91, November 8, 2000)

GAO	Appendix Results of Past GAO Review	
Spending Plan 3rd Spending Plan (Oct 2000) (\$200 million request)	 Results of GAO Review IRS's plan satisfied the legislative conditions for the use of ITIA funds, and was making important progress towards satisfying the congressional direction on two projects - CAP and STIR. IRS was making important progress in establishing effective modernization management capability, but important and challenging work remained. Until IRS completed its initiated actions to fully implement its system life cycle methodology and business systems modernization office, and resolve issues concerning the completeness and accuracy of enterprise architecture, it continued to lack key modernization and technical controls. Five modernization initiatives experienced schedule delays and/or cost increases. However, the third plan did not address whether projects' prior commitments for delivery of promised systems capabilities (requirements) and benefit/business value were being met. IRS used contractor-provided "rough order-of-magnitude" estimates in preparing the third expenditure plan. IRS planned to validate the third plan's estimates as part of its process to negotiate and definitize contract task orders. Previously, this process resulted in finalized contract costs below the estimates, totaling \$9 million. (See <i>Tax Systems Modernization: Results of Review of IRS' Third Expenditure Plan</i>, GAO-01-227, January 22, 2001) 	
		54

Spending PlanResults of GAO Review4th Spending Plan (March 2001) (\$128 million request)• IRS's plan satisfied the conditions specified in the appropriations acts.• IRS continued to make important progress in implementing modernization management capacity is still not where it should be, given (1) the number of systems acquisition projects that the March 2001 plan identifies as underway and planned and (2) the fact that several of the ongoing projects are entering critical stages in their life cycles. For example, IRS did not have a sufficiently defined version of the enterprise architecture to guide and constrain projects, and employing rigorous configuration management practices.• Due to missing management capacity, key IRS projects were beginning to experience cost, schedule, and performance shortfalls against the commitments the agency made in its third expenditure plan. For example, deployment of the Customer Communications 2001 project was three months behind schedule, and promised system capabilities and associated benefits had been deferred. Also, a critical infrastructure project, STIR, was reported to be 1.5 months late in trying to complete the phase. Thus, the project was actually almost five months late.• IRS officials recognized the need to address its modernization management capacity before key ongoing projects was the dorn had initiated steps to address these weaknesses. In particular the Commissioner had decided to slow ongoing and new projects, giving priority to putting in place missing management capacity. We believed this decision was prudent and appropriate and made recommendations to ensure IRS followed through on this decision. (See Business Systems Modernization: Results of Review of IRS' March 2001 Expenditure Plan, GAO-01-716, June 29, 2001)	GAO Accountability * Integrity * Reliability	Appendix III: Results of Past GAO Reviews
 (\$128 million request) IRS continued to make important progress in implementing modernization management controls and capabilities. Nevertheless, IRS's modernization management capacity is still not where it should be, given (1) the number of systems acquisition projects that the March 2001 plan identifies as underway and planned and (2) the fact that several of the ongoing projects are entering critical stages in their life cycles. For example, IRS did not have a sufficiently defined version of the enterprise architecture to guide and constrain projects, and employing rigorous configuration management practices. Due to missing management capacity, key IRS projects were beginning to experience cost, schedule, and performance shortfalls against the commitments the agency made in its third expenditure plan. For example, deployment of the Customer Communications 2001 project was three months behind schedule, and promised system capabilities and associated benefits had been deferred. Also, a critical infrastructure project, STIR, was reported to be 1.5 months late in trying to complete its preliminary design phase (Milestone 3); and the agency was still working to finalize 6 of 19 work products needed to complete the phase. Thus, the project was actually almost five months late. IRS officials recognized the need to address its modernization management capacity before key ongoing projects moved into critical life-cycle phases, and before additional projects these weaknesses. In particular the Commissioner had decided to slow ongoing and new projects, giving priority to putting in place missing management capacity. We believed this decision was prudent and appropriate and made recommendations to ensure IRS followed through on this decision. (See <i>Business Systems Modernization: Results of Review of</i> 		
		 IRS continued to make important progress in implementing modernization management controls and capabilities. Nevertheless, IRS's modernization management capacity is still not where it should be, given (1) the number of systems acquisition projects that the March 2001 plan identifies as underway and planned and (2) the fact that several of the ongoing projects are entering critical stages in their life cycles. For example, IRS did not have a sufficiently defined version of the enterprise architecture to guide and constrain projects, and employing rigorous configuration management practices. Due to missing management capacity, key IRS projects were beginning to experience cost, schedule, and performance shortfalls against the commitments the agency made in its third expenditure plan. For example, deployment of the Customer Communications 2001 project was three months behind schedule, and promised system capabilities and associated benefits had been deferred. Also, a critical infrastructure project, STIR, was reported to be 1.5 months late in trying to complete its preliminary design phase (Milestone 3); and the agency was still working to finalize 6 of 19 work products needed to complete the phase. Thus, the project was actually almost five months late. IRS officials recognized the need to address its modernization management capacity before key ongoing projects moved into critical life-cycle phases, and before additional projects were started. Accordingly, IRS planned or had initiated steps to address these weaknesses. In particular the Commissioner had decided to slow ongoing and new projects, giving priority to putting in place missing management capacity. We believed this decision was prudent and appropriate and made recommendations to ensure IRS followed through on this decision. (See <i>Business Systems Modernization: Results of Review of</i>

Accountability * Integrity * Reliability	Appendi Results of Past GAO Revi	
Spending Plan	Results of GAO Review	
5th Spending Plan (Nov 2001) (\$391 million request)	 IRS's plan satisfied the conditions specified in the appropriations acts. IRS continued to make important progress in implementing modernization management controls and capabilities. Nevertheless, IRS's modernization management capacity is still not where it needs to be, given (1) the number of systems acquisition projects that the November 2001 plan identifies as being underway, (2) the fact that several of these ongoing projects have already entered the critical building stage of their life cycles (milestone 3) and are to begin deployment (milestone 4) during this year, and (3) IRS's plan to begin additional projects. Examples of modernization management controls and capabilities that are not yet fully implemented include software acquisition management, configuration management, quality assurance, risk management, enterprise architecture implementation, human capital management, integrated program scheduling, and cost and schedule estimating. The increased risk of IRS's proceeding without these controls and capabilities had contributed to actual project cost, schedule, and performance shortfalls. For example, deployment of the CADE Release 1 project was 6 months behind, and its cost had increased by \$5 million. IRS acknowledged the need to strengthen its modernization management controls, and recognized that these controls become more critical as the size and complexity of the BSM program continues to increase. It also had actions underway to fully implement these controls and, until then, planned to compensate for their inmaturity by applying experienced human capital. Reliance on a combination of existing immature processes and individual expertise and heroic efforts was a short-term solution to a long-term need. We made recommendations to assist IRS in striking a proper balance between the need to quickly introduce modernized systems yet prudently manage the risks inherent in such an undertaking. (See U.S. General Accounting Office, <i>Business Systems Modernizit</i>	
		56

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%) (\$000)	IRS Explanation of Change
Customer Communications 2001 Milestone 4,5	10/31/01 \$45,174	02/26/02 \$44,796	+4 months -\$378 (-1%)	A performance award dispute (settled in February 2002) delayed Milestone 5. The IRS paid the PRIME contractor \$500K less in performance awards than the maximum allowed under the task order. Some of this extra funding was used to cover higher than expected transition to support costs.
Internet Refund/ Fact of Filing (Release 1) Milestone 3	9/30/01 \$10,696	9/28/01 \$10,817	+\$121 (+1%)	Actual costs came in \$121K higher than estimated.
Internet Refund/ Fact of Filing (Release 1) Milestone 4	3/31/02 \$5,000	TBD \$6,792	+\$1, 792 (+36%)	Additional hardware requirements (\$250k). Additional testing, transition to support needs, increased requirements, and MS4 cost overrun increase (\$1.465M). Additional FY02 requirements for help desk (\$50,000). Additional support from ESM project for performance measurement \$27,000.
Internet Refund/ Fact of Filing (Release 1) Milestone 5	7/31/02 \$5,000	TBD \$8,304	+\$3,304 (+66%)	Maintenance through the remainder of the fiscal year and enhancements for FY03 filing season (\$2.304M). Additional cost due to extension of MS5 from 07/31/02 to 09/30/02 (\$1.0M).

Accountability * Integrity * Reliability Integrity * Reliability					
Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%) (\$000)	IRS Explanation of Change	
e-Services (Release 1.1 and 1.2) Milestone 4,5	10/31/03 \$40,191	4/18/04 \$50,146	+6 Months +\$9,955 (+25%)	The delays occurred because infrastructure was not completed to meet the e-Services date. Did not resolve technical issues timely. Also schedule delays and cost increases because of move of Gaithersburg Computing Center environment to the Martinsburg and the Tennessee Computing Centers. Unplanned infrastructure hardware (\$4.255M). Additional STIR Integration (\$4.200M). Increased product assurance testing costs \$1.5M.	
Customer Account Management (Release 1) Milestone 2	3/31/02 \$13,100	8/30/02 \$13,300	+5 months +\$200 (+2%)	New business requirements required update to future concept of operations, and to identify and prioritize their business process re-engineering opportunities before proceeding to MS3. Proposal for MS3 cost overrun due to changes in business requirements.	
Customer Account Management (Release 1) Milestone 3b	10/31/02 \$24,494	6/30/03 \$19,694	+8 months -\$4,800 (-20%)	New business requirements required update to future concept of operations, and to identify and prioritize their business process re-engineering opportunities before proceeding to MS3. Decrease due to movement of work to MS3a and ITABS.	
Filing and Payment Compliance (Release 1) Milestone 2,3	1/31/03 \$17,117	12/31/02 \$18,117	-1 month +\$1,000 (+6%)	\$1.0M variance to include unplanned transition to support in MS2,3 activities per new BSM program guidelines.	

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%) (\$000)	IRS Explanation of Change
HR Connect (Release 1) Milestone 4,5	12/31/02 \$10,000	TBD \$21,700	+\$11,700(+117%)	CBS ESC approval to exit MS3 was delayed until February 2002. Given Treasury's 8-9 month estimate to complete development work, this delayed the start of MS5. Deployment schedule for remainder of IRS will be determined following prototype deployment. Adjustment to previous estimate (\$200k). FY 2003 cost is \$11.5M.
Customer Account Data Engine (CADE) Release 1 Milestone 4	6/30/02 \$45,338	12/31/02 \$45,338	+6 months	Deployment delayed due to contractor delays in staffing the project, failure to acquire a business rules engine, underestimating the technical complexity of a few key software components, and late attention to critical project elements.
Customer Account Data Engine (CADE) Release 1 Milestone 5	12/31/02 \$5,795	6/30/03 \$4,851	+6 months -\$944 (-16%)	FY 2002 funding for MS5 (\$5.795M) was returned to management reserve because schedule delays moved MS5 to FY 2003. The net MS5 decrease (\$.994M) is due to revised estimates to do the same work.
Customer Account Data Engine (CADE) Release 2 Milestone 4	12/31/02 \$38,400	TBD \$46,324	+\$7,924 (+21%)	In the process of replanning Release 2 due to delays in Release 1. Begin and end dates will be determined when the task order is definitized in November. Planning for future functionality due to CAM/CADE sequencing (\$1.0M). FY03 infrastructure costs (\$6.924M)

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%) (\$000)	IRS Explanation of Change
Customer Account Data Engine (CADE) Release 3 Milestone 3	6/30/03 \$9,779	12/31/03 \$15,870	+6 months +\$6,091 (+62%)	Deferred to FY03 to align with CAM and CADE Release 2 capabilities, which impact Release 3 scope, schedule, and costs.
Custodial Accounting Project/Enterprise Data Warehouse (CAP/EDW) Release EDW R1 B1 Milestone 4,5	3/31/03 \$51,430	5/15/03 \$62,924	+1.5 months +\$11,494 (+22%)	Delay due to temporary reassignment of IMF programmer resources to support tax filing season changes. Variance (\$6.664M FY 2002 and \$4.850M FY 2003) due to integration with STIR components, revenue interface with IFS, CAP-CADE interface, schedule delays, changes to IMF extract, MCC operational support, development of changes to the CAP/CADE interface, and requirements associated with mid-year IMF changes and CAP/IFS interface.
Integrated Financial Services/Core Financial Services (IFS/CFS) Release 1 Milestone 4A/3B	11/30/02 \$17,250	11/30/02 \$23,000	+\$5,750 (+33%)	Completed the deliverables originally scheduled for MS2,3. However, certain deliverables needed to exit Milestone 3 under Milestone Exit criteria were not planned using the COTS path through the ELC until MS4A. Extended Milestone 3 by establishing Milestone 3B so we could produce the deliverables needed to obtain Enterprise Architecture Certification and other design work and exit Milestone 3. The net MS4A/3B variance, \$5.750M (-\$17.250 + \$23.000) is due to revised estimates to complete the work and the ISS DCC communications infrastructure buildout for IFS.

	Accountability * Integrity * Reliability			
IRS Explanation of Change	Change (%) (\$000)	Revised Commitment Date and Funding (\$000)	Commitment Date and Funding as of 10/2001 (\$000)	Program/ Project Management Initiative
Started 3 months early to provide support to FY 2003 Release. Cost increase due to realignment of projects' schedules, increased software maintenance, decision to buy rathe than lease equipment, and addition of Modernized e-file requirements. The majority of the cost overrun is as a result of OMB A-11 requirements to purchase HW/SW instead of leasing it as originally planned. Purchasing the equipment in FY 2002 saves money in the out years.	+\$9,099 (+23%)	11/30/02 \$48,846	11/30/02 \$39,747	Infrastructure Shared Services FY 2002
Slip in Enterprise Integration and Test Environment (EITE) Ready For Use (RFU) date caused a slip in the MS4 exit date. Late identification, ordering, and receipt of equipment caused the slip in EITE.	+3 months	1/31/02 \$31,287	10/30/01 \$31,287	Security and Technology Infrastructure Releases (STIR) Milestone 4
Start date slipped 3 months due to slippage in milestone 4 exit date. End date slipped because STIR was split into two releases to accommodate projects' schedules. Sub-release 1 supports IR/FoF; Release 2 supports e-Services. Cost change due to realignment of projects' schedules, increased software maintenance, additional security requirements, and OMB A-11 requirement to purchase rather than lease equipment (+\$11.340M), and application of FY 2001 infrastructure funds to FY 2002.	+6 months +\$11,549 (+26%)	11/30/02 \$55,522	5/31/02 \$43,973	Security and Technology Infrastructure Releases (STIR) FY 2002

Program/ Project	Commitment Date and	Revised Commitment	Change (%)	IRS
Management Initiative	Funding as of 10/2001 (\$000)	Date and Funding (\$000)	(\$000)	Explanation of Change
Enterprise Systems Management (ESM) Milestone 4	12/19/01 \$9,184	2/19/02 \$9,184	+2 months	60-day extension of MS4 exit to realign the schedule with STIR and EITE RFU, re- evaluate the system requirements document relative to the evolving needs of the modernized projects, specifically IR/FoF, evaluate the current ITS organization's ability to support the existing ESM release plan.
Enterprise Systems Management (ESM) FY 2002	7/31/02 \$11,323	11/30/02 \$11,090	+4 months -\$233 (-2%)	Start date slipped 3 months due to slippage in milestone 4 exit date. End date slipped to coincide with ESM PMAR release 1.3 to support IR/FoF. Cost decrease due to revised period of performance, enhancements in Web Hosting facilities, and Security Test & Evaluation overrun.
Development Integration and Test Environment (DITE) FY 2002	11/15/02 \$12,916	11/15/02 \$17,194	+\$4,278 (+33%)	Increased support for Help Desk, Data Modeling, Rational Tools, Customer Guide, and increase in maintenance costs. Cost of relocating projects from GCC to MCC. Cost to move Z900 from GCC to TCC for Disaster Recovery.
Program Management FY 2002	11/10/02 \$7,918	11/10/02 \$8,206	+\$288 (+4%)	Savings realized as a result of negotiation of the fee position and reaching agreement on the price for the full period of performance. New requirements requests received so late in the fiscal year are, in some cases, only achievable by extra costs, such as having contractors.

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%) (\$000)	IRS Explanation of Change
Architecture and Integration FY 2002	11/10/02 \$32,539	11/10/02 \$38,948	+\$6,409 (+20%)	Cost increase (\$6.409M) transferred from Business Integration to cover the cost of Release Management.
Management Processes FY 2002	11/10/02 \$10,082	11/10/02 \$11,190	+\$1,108 (+11%)	Cost increase (\$1.108M) needed to fund the PRIME's SA CMM activities to prepare for and conduct the SA CMM Level 3 assessment.
FFRDC – MITRE FY 2002	11/10/02 \$18,070	11/10/02 \$18,820	+\$750 (+4%)	Additional work identified to support Program Management (acquisition management), Management Processes (process improvement, ELC, risk management) and Architecture & Engineering (data management).

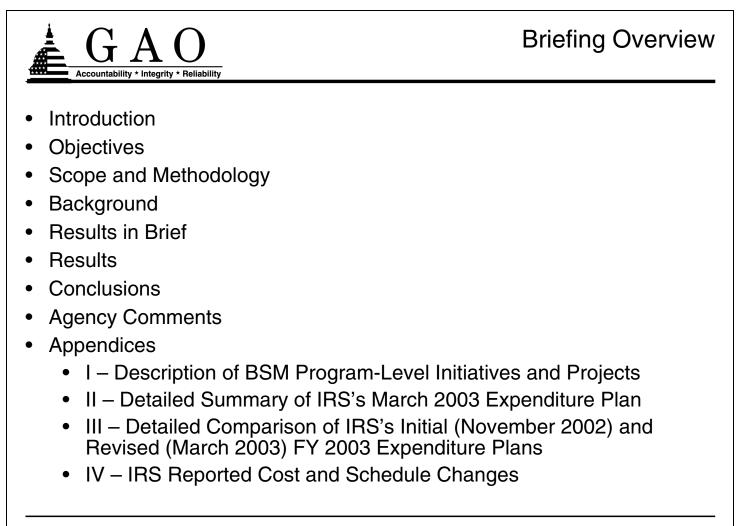


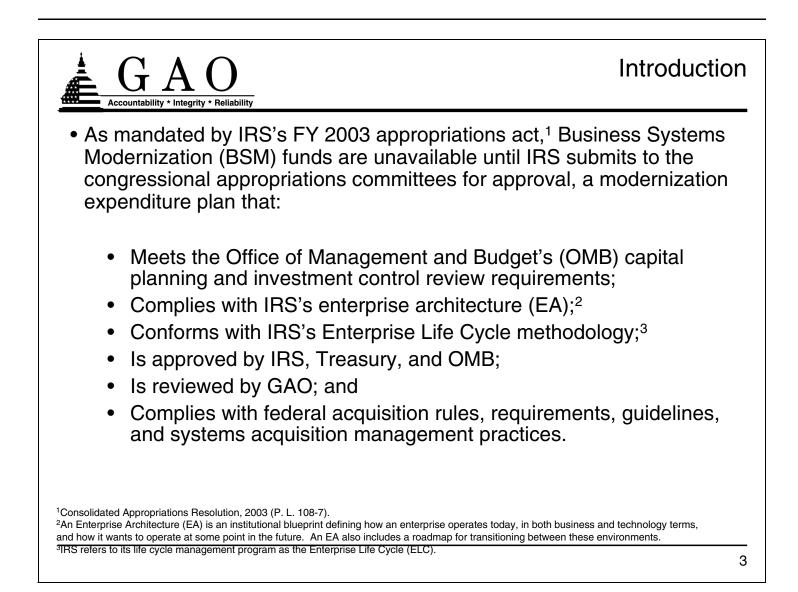
Results of Review of IRS's Revised Fiscal Year 2003 Business Systems Modernization Expenditure Plan

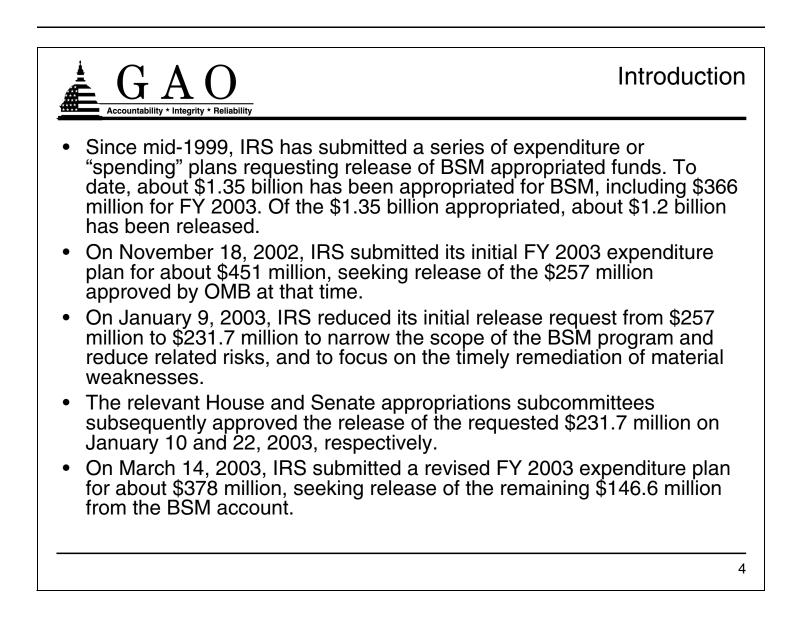
Briefing to the Staffs of the Senate Committee on Appropriations, Subcommittee on Transportation, Treasury and General Government and the House Committee on Appropriations, Subcommittee on Transportation, Treasury, and Independent Agencies

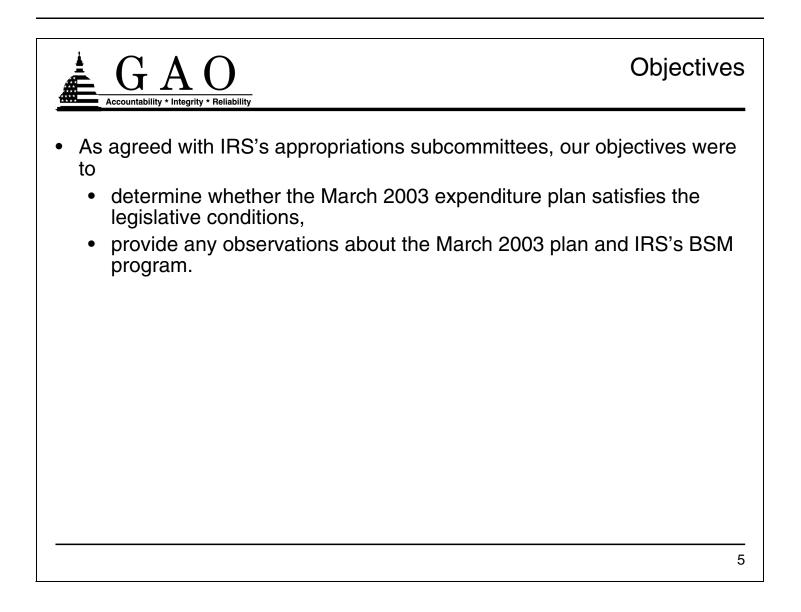
April 14, 2003

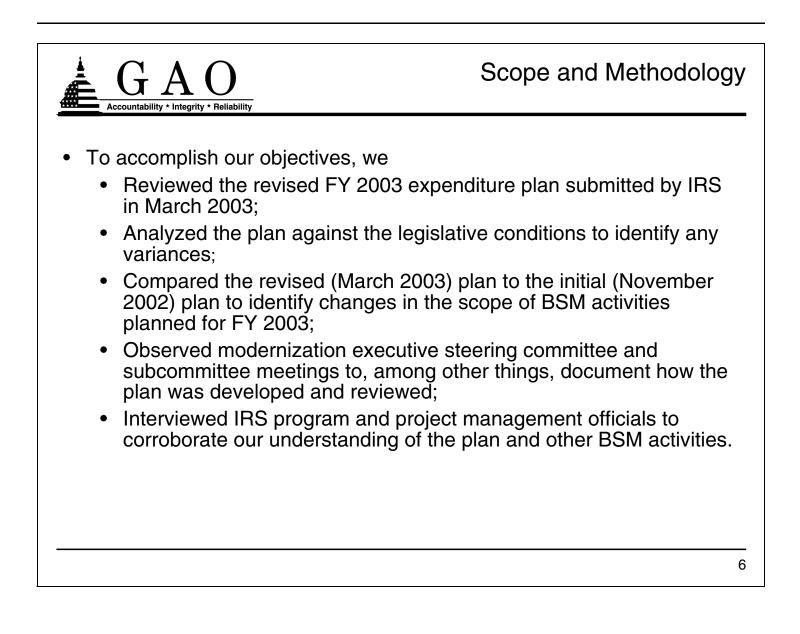
GAO-03-768 IRS's Fiscal Year 2003 Expenditure Plan

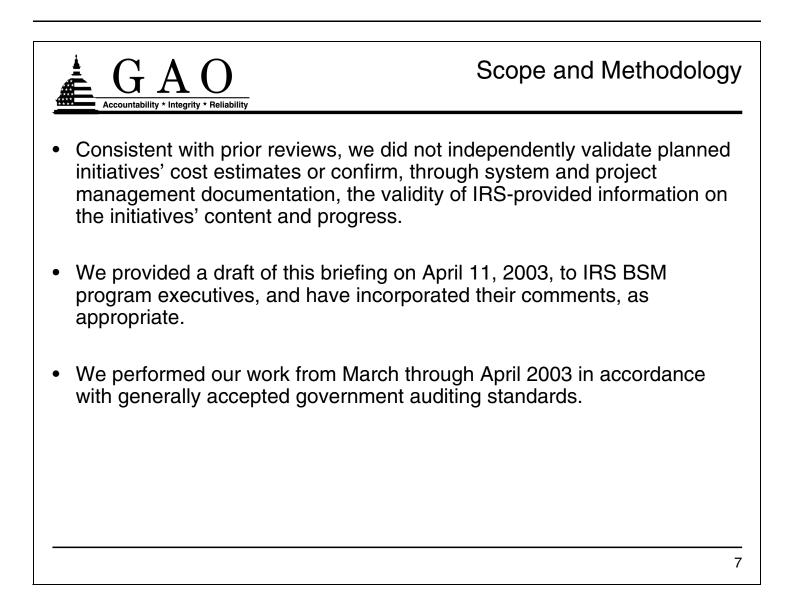


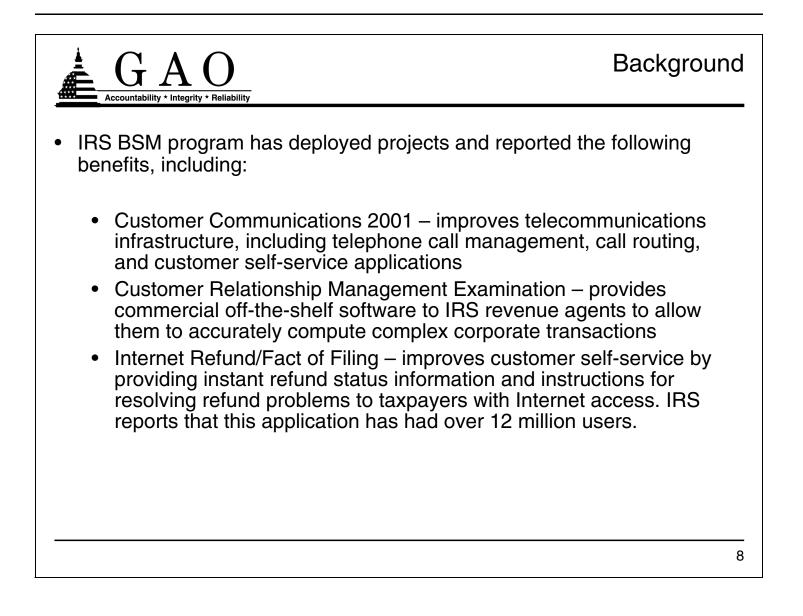


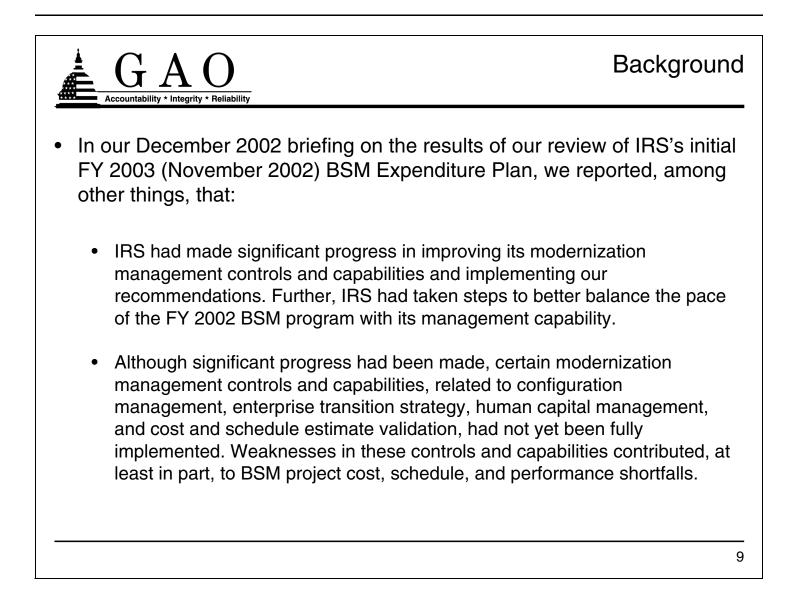


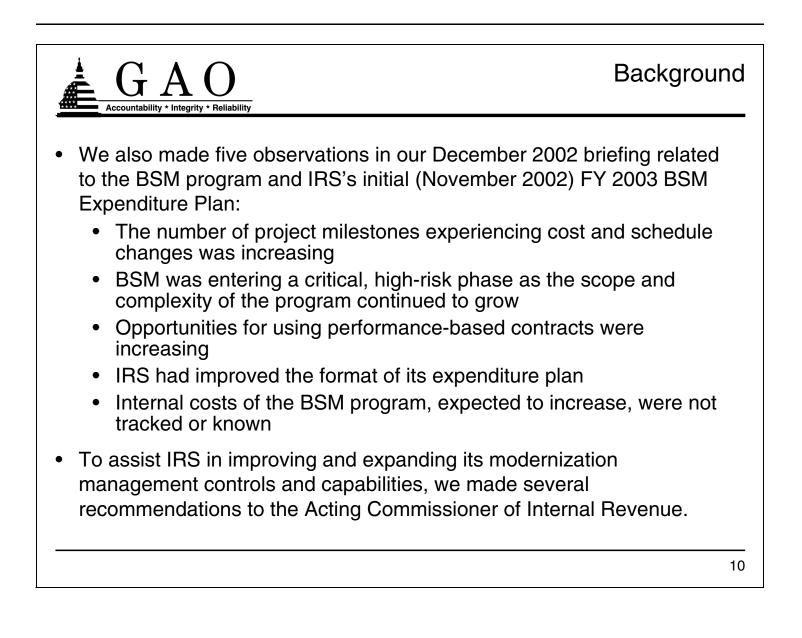


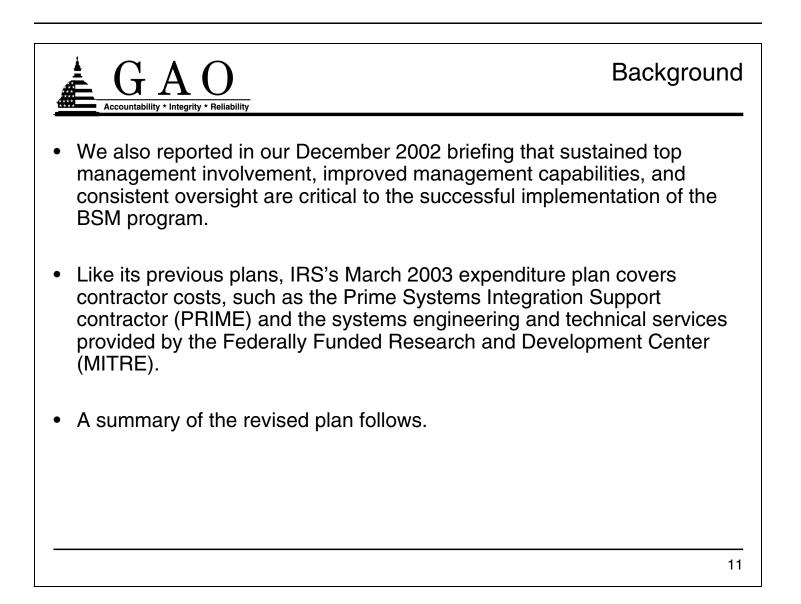






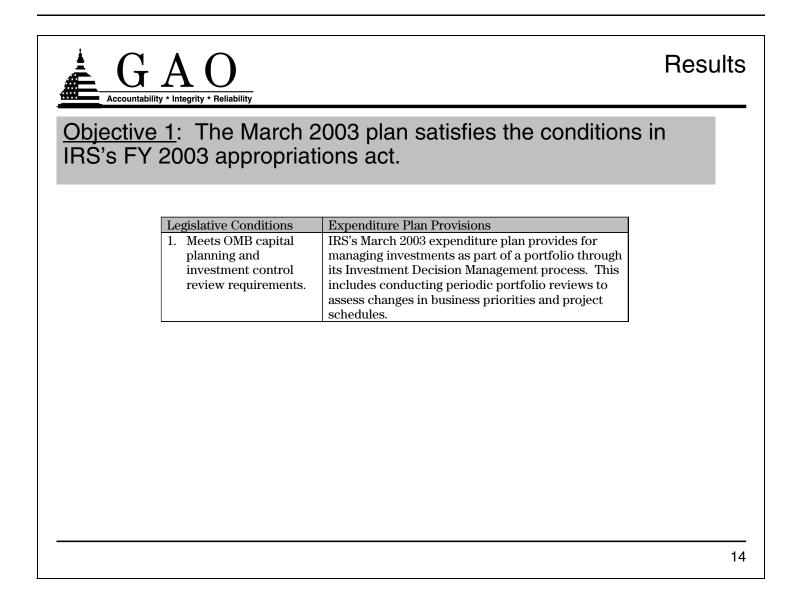






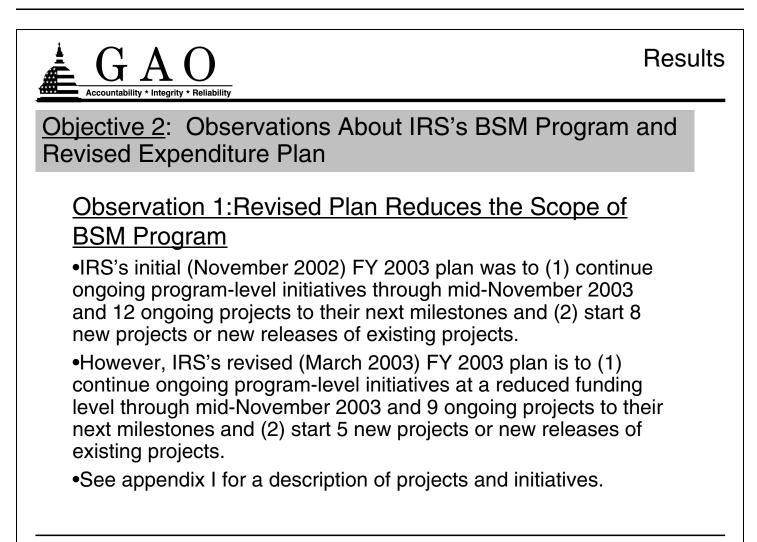
Summary of IRS's March 2003 Expenditure	Plan (\$000) ⁴
Architecture & Integration Business Integration	\$34,000 \$8,000
Management Processes	\$8,000
Federally Funded Research and Development Center (FFRDC) - MITRE	\$16,688
Program Management	\$10,000
Subtotal	\$80,164
Projects⁵	
Core Infrastructure Projects (e.g. Infrastructure Shared Services)	\$89,261
Data Projects (e.g. Customer Account Data Engine, Integrated Financial Systems)	\$168,251
Business Projects (e.g. e-Services, Modernized e-file)	<u>\$59,342</u>
Subtotal	\$316,854
FY 2003 Management Reserve Request*	\$11,120
FY 2002 Management Reserve Carryover	(\$10,146)
FY 2002 CAM MS3b Unused Funds	<u>(\$19,694)</u>
Total	\$378,298
* - Includes \$677 from Remaining FY2001 and FY2002 Appropriated Funds.	

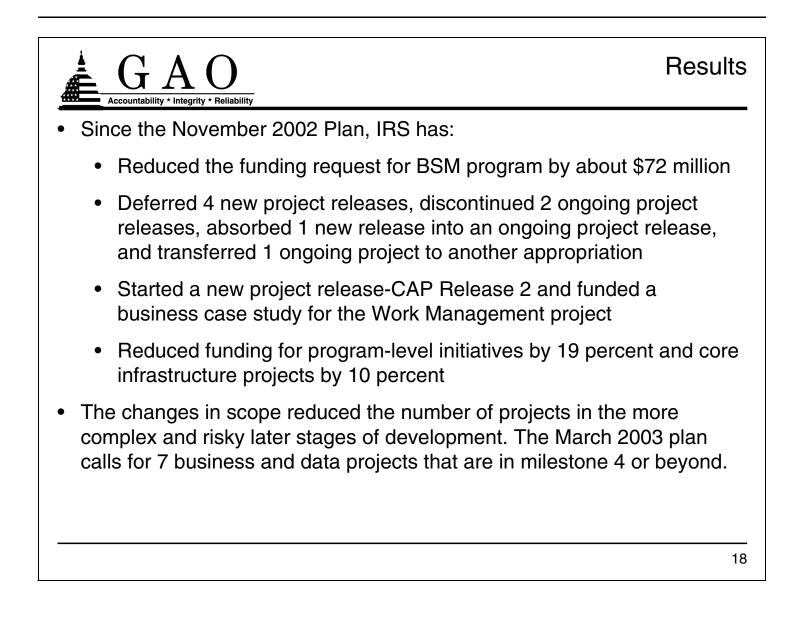
Accountai	- A O bility * Integrity * Reliability		R	esults in Brief
• IRS's I	March 2003 plan satisfies each of	six leg	gislative co	nditions.
	Legislative Conditions	Satisfies	Does Not Satisfy	
	1. Meets OMB capital planning and investment control review	✓		1
	requirements. 2. Complies with IRS' enterprise architecture.	✓		4
	 Complex with IRS's Enterprise Life Cycle methodology 	✓ ✓		4
	 4. Approved by IRS, Treasury, and OMB. 	▼ ✓		_
	5. Reviewed by GAO.	▼ ✓		-
	 Complies with federal acquisition rules, requirements, guidelines, 	•		_
	and systems acquisition management practices. ⁶	•		
 Slov Sho experi 	vised March 2003 expenditure pla ws the pace of BSM program ows that most initiatives/project mi ience cost increases and/or scheo nonstrates the impact of schedule its	ileston dule de	elays	
for BSI ⁶ These acquisition re	menting on a draft of this briefing M generally agreed with it and pro- equirements and practices are intended to establish acquisition main g Institute's software acquisition model. Our analysis of the plan for		other comr	n as those defined in the

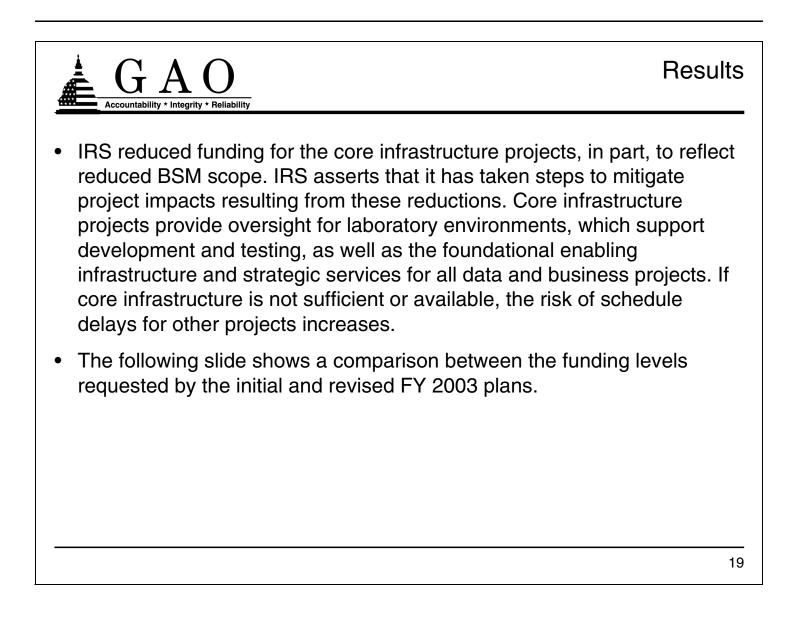


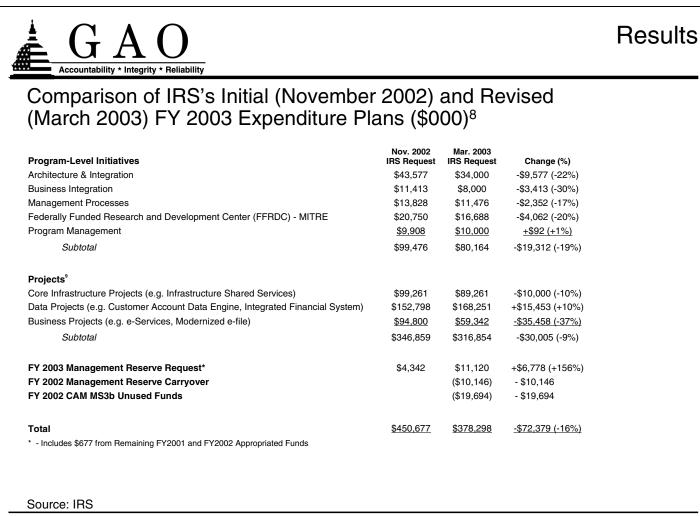
G	A O		Results
	Legislative Conditions 2. Complies with IRS's enterprise architecture (EA). 3. Conforms with IRS's Enterprise Life Cycle methodology.	 Expenditure Plan Provisions The March 2003 plan provides funds to continue definition and implementation of the enterprise architecture. For example, it provides for completing and issuing EA release 2.1 publishing updates to the EA performing EA compliance certification activities issuing the 2003 and 2004 release architectures operating the systems engineering office The plan provides funds for meeting the requirements in IRS's enterprise life cycle management program, which IRS's refers to as ELC. For example, the plan calls for maintaining responsibility for coordinating, tracking, and integrating all program-wide costs, schedules, releases, issues, and risks maintaining the ELC 	
			15

Legisl	lative Conditions	Expenditure Plan Provisions	
	pproved by IRS, reasury, and OMB.	 IRS – January 15, 2003 Treasury – January 16, 2003 OMB – February 25, 2003 Submitted to IRS's appropriations 	
5. Re	eviewed by GAO.	 Submitted to fits's appropriators subcommittees – March 14, 2003 GAO – April 14, 2003 briefing to IRS's appropriations subcommittees 	
aco rec gu sys ma of	omplies with the equisition rules, quirements, tidelines, and stems acquisition anagement practices the federal overnment.	As part of the ELC, IRS has defined processes, roles, responsibilities, etc. for implementing Software Engineering Institute (SEI) Software Acquisition Capability Maturity Model [™] practices within the level 2 key process areas. ⁷ These practices are consistent with federal acquisition requirements and management practices, and the plan calls for implementation of the ELC on all projects. Also, all PRIME cost reimbursement task orders are subject to a final independent audit by the Defense Contract Audit Agency to ensure that costs incurred are commensurate with the physical completion of the contract.	

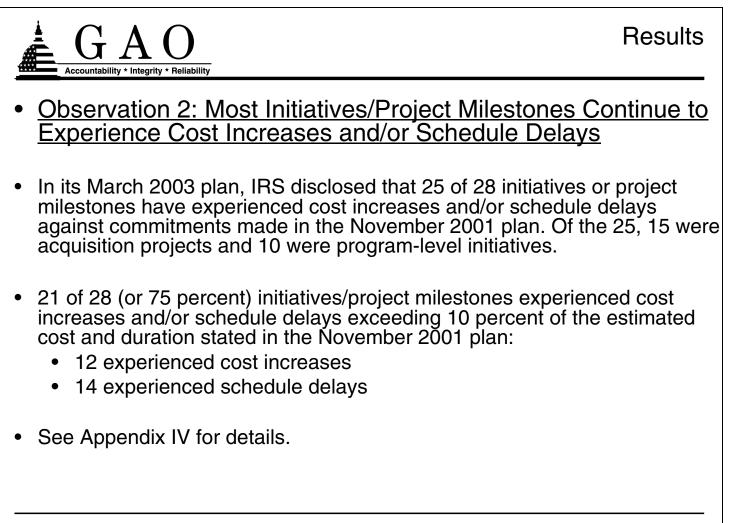


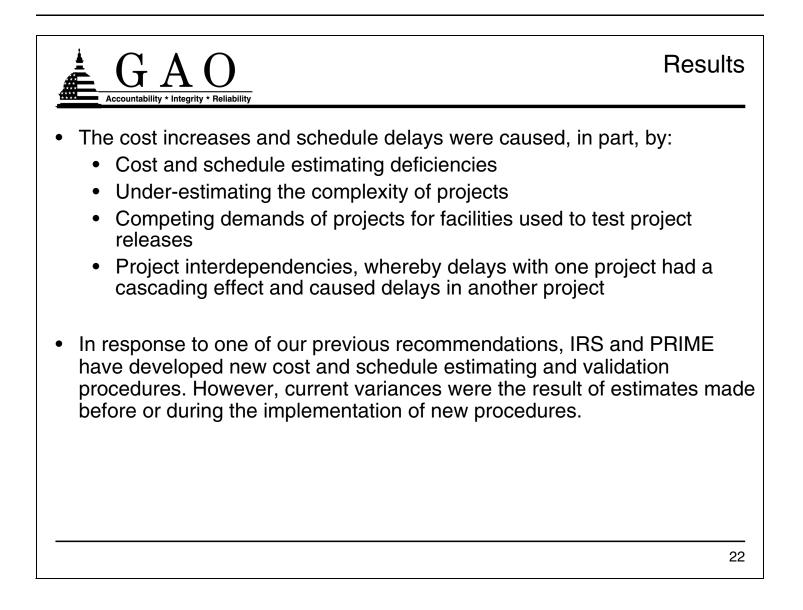


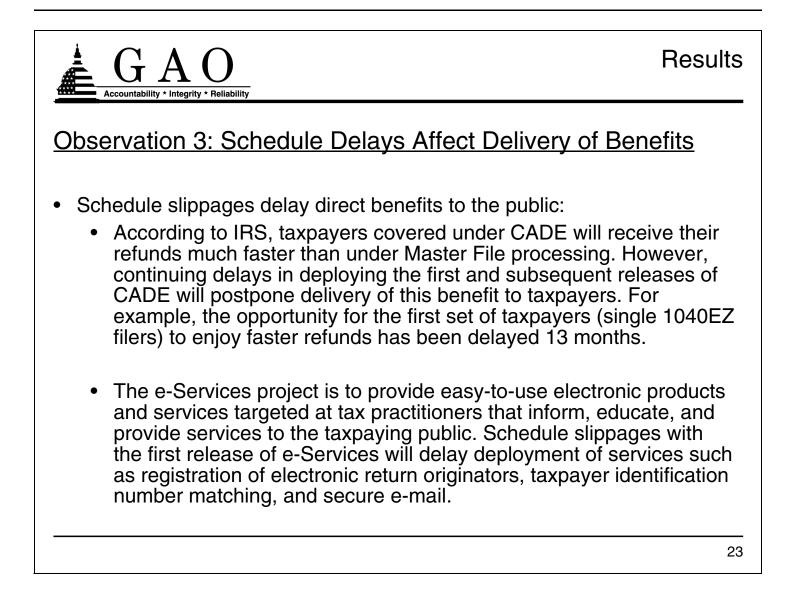


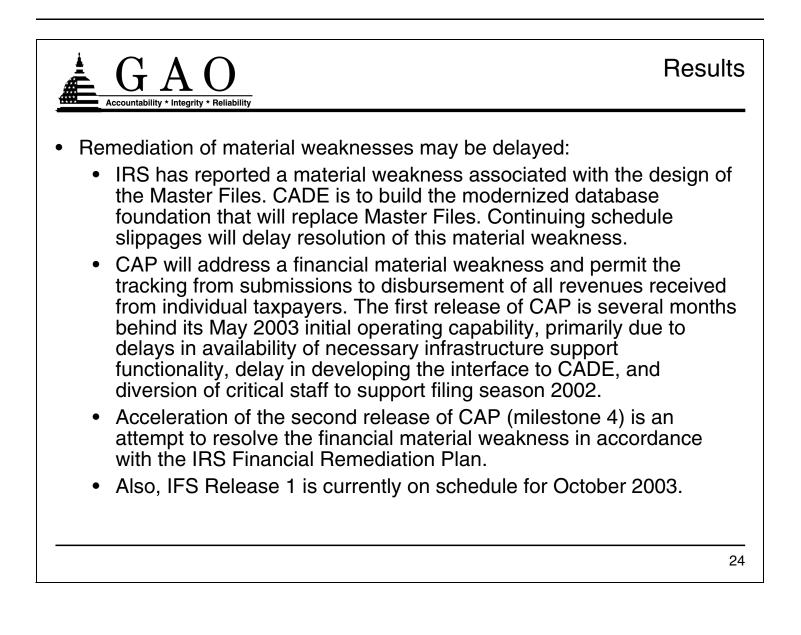


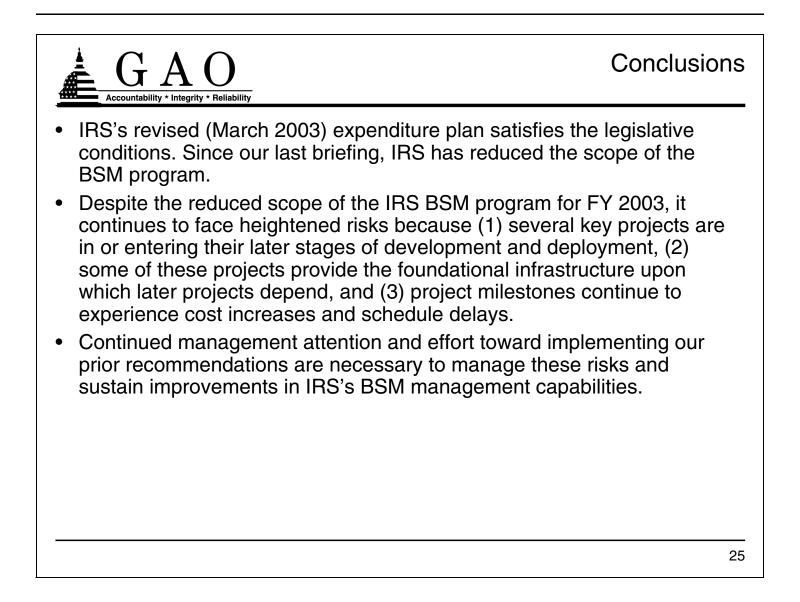
⁸See appendix III for a more detailed comparison of IRS's initial and revised FY 2003 expenditure plans.
⁹The 3 categories under this heading include several separate projects.

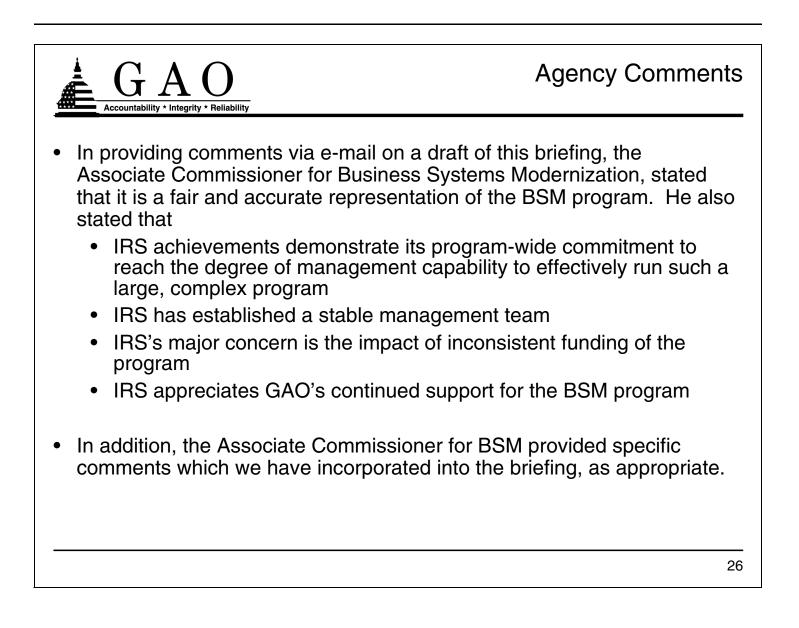












Accountability * Integrity * Reliability	BSM Program-Level Initiatives/Pro
Description of BSM Pr	ogram-Level Initiatives and Projects
Proposed Modernization Initiatives	Description
Program-Level Initiatives:	
Architecture & Integration	Ensures that systems solutions meet IRS business needs and that the projects are effectively integrated.
Business Integration	Ensures that IRS BSM program is aligned with the business units' reengineering efforts and that business transformation plans are developed and maintained to support a seamless "transition to support".
Management Processes	Provides sustaining support for program-level management processes, including quality assurance, process improvement, training, program control, and ELC maintenance and enhancements.
FFRDC - MITRE	Provides program management and systems engineering support to BSMO.
Program Management	Provides overall program management for IRS-PRIME Partnership activities and deliverables, and is responsible for coordinating, tracking, and integrating all program-wide costs, schedules, and performance measures.
Core Infrastructure Projects:	
Development Integration & Testing Environment (DITE)	Provides oversight for laboratory environments which support development, and testing: (1) Virtual Development Environment – development environment and standardized set of tools; (2) Enterprise Integration Testing Environment – integration testing environment for all projects.
Infrastructure Shared Services (ISS)	Provides foundational enabling infrastructure (infrastructure technology components and strategic infrastructure services for all data and business projects: (1) Enterprise Systems Management (ESM) – develops and executes a strategy to provide network and systems management to improve IT infrastructure availability and performance; (2) Security and Technology Infrastructure Release (STIR) – provides infrastructure for secure telephony and electronic interaction among employees, tax practitioners, and taxpayers.

Accountability * Integrity * Reliability	Append BSM Program-Level Initiatives/Pro
Description of BSM Pro	gram-Level Initiatives and Projects (Cont.)
Proposed Modernization Initiatives	Description
Data Projects:	
Customer Account Data Engine (CADE)	Builds the modernized database foundation to replace the existing master file processing systems.
Integrated Financial Systems (IFS)	Inplements an integrated financial management system using a commercial off-the-shelf enterprise resource planning product.
Custodial Accounting Project / Enterprise Data Warehouse (CAP/EDW)	Provides integrated, reliable tax operations and internal management information to support evolving decision analytics, performance measurement, and management information needs.
Modernized Data Access (MDA)	Provides a single integrated approach and software for accessing current processing environment (legacy) data across the organization, and builds key infrastructure components that all modernization projects can share.
Information Returns Processing (IRP)	Provides modernized information returns repository to link third party data directly to customer accounts to efficiently handle customer service and compliance inquiries and demands.
Business Projects:	
Customer Communications 2001	Improves communications infrastructure, including telephone call management, call routing, and customer self-service applications.
Internet Refund / Fact of Filing (IR/FoF)	Improves customer self-service by providing instant refund status information and instructions for resolving refund problems to taxpayers with Internet access.
Customer Account Management (CAM)	Delivers an enterprise solution to support access to tax account data, contact management, case management, outbound correspondence management, and workflow management.
Customer Contact Modernization (CCM)	Provides initial building blocks to transition IRS from current call center environment to new customer contact center.
e-Services	Creates a web portal and value-adding e-Services to promote the goal of conducting most of the IRS's transactions with taxpayers and tax practitioners electronically.
Filing & Payment Compliance (F&PC)	Provides support for detecting, scoring, and working cases in the area of non-filer (filing compliance) and delinquency (payment compliance) cases.
HR Connect	Delivers an enterprise solution to allow IRS employees to access and manage their human resources information online.
Modernized e-file	Provides a single standard for filing electronic tax returns.
Work Management	Selects and integrates software applications to improve IRS's ability to manage and allocate staffing resources and track workload more effectively.

Accountability * Integrity * Reliability			IRS	Exper	diture P
Detailed Summary of IRS's March 2	2003	Expend			
Proposed Modernization Initiatives	Release ^a	Milestone ^b	Milestone Date	Amount Requested	
Program-Level Initiatives [°]	ĺ				
Architecture & Integration		FY	Nov. 03	\$34,000	
Business Integration		FY	Nov. 03	\$8,000	
Management Processes		FY	Nov. 03	\$11,476	
FFRDC - MITRE		FY	Nov. 03	\$16,688	
Program Management		FY	Nov. 03	\$10,000	
Subtotal - Program-Level Initiatives				\$80,164	
Core Infrastructure Projects [°]					
Development Integration & Testing Environment		infrastructure	Nov. 03	\$13,961	
Infrastructure Shared Services		infrastructure		\$75.300	
Subtotal - Core Infrastructure Projects				\$89,261	
Data Projects					
Customer Account Data Engine (CADE)	R1	5	Dec. 03	\$4,889	
Customer Account Data Engine (CADE)	R2	4	TBD	\$6,924	
Customer Account Data Engine (CADE)	R3	3	Jun. 04	<u>\$15,870</u>	
Subtotal - CADE				\$27,683	
Integrated Financial Systems (IFS)	R1	Зc	Feb. 03	\$29,700	
Integrated Financial Systems (IFS)	R1	4	Sep. 03	\$53,655	
Integrated Financial Systems (IFS)	R1	5	Mar. 04	\$10,700	
Integrated Financial Systems (IFS)	R2	2,3a	TBD	<u>\$2,500</u>	
Subtotal - IFS				\$96,555	
Custodial Accounting Project / Enterprise Data Warehouse (CAP/EDW) R1	4,5	Feb. 04	\$29,013	
Custodial Accounting Project / Enterprise Data Warehouse (CAP/EDW) R2	4	Dec. 03	<u>\$15,000</u>	
Subtotal - CAP				\$44,013	
Subtotal - Data Projects				\$168,251	
Source: IRS					

Accountability * Integrity * Reliability Detailed Summary of IRS's March 200	3 Exp			Appen <u>penditure</u> (\$000) (C
Proposed Modernization Initiatives	Release	Milestone	Milestone Date	Amount Requested
Business Projects				
e-Services	R1 & R2	4,5	Sep. 04	\$18,846
Modernized e-file	R1	4	Nov. 03	\$39,846
Work Management ^d		FY	Jun. 03	\$650
Subtotal - Business Projects				\$59,342
FY 2003 Management Reserve Request*				\$11,120
FY 2002 Management Reserve Carryover				(\$10,146)
FY 2002 CAM MS3b Unused Funds				(\$19,694)
Total FY 2003 Release Request				<u>\$378,298</u>
FY 2003 Partial Release of Funds				\$231,700
Remaining Unreleased Request				\$146.598

 $^{\ast}\,$ - Includes \$677 from Remaining FY 2001 and FY 2002 Appropriated Funds

Source: IRS

^dThe Work Management project is being funded on a level of effort or fiscal year (FY) basis rather than by milestone for FY 2003.

	Nov. 02 Milestone	Milestone	Schedule Variance	Nov. 02 Amount	Amount		IRS Explanation of Changes
	Date	Date	variance	Requested			
Program Level Initiatives							
Architecture & Integration	Nov. 03	Nov. 03	-	\$43,577	\$34,000	-\$9,577 (-22%)	Target funding level based on reduced budget/fewer projects.
Business Integration	Nov. 03	Nov. 03	-	\$11,413	\$8,000	-\$3,413 (-30%)	Target funding level based on reduced budget/fewer projects.
Management Processes	Nov. 03	Nov. 03	-	\$13,828	\$11,476		Target funding level based on reduced budget/fewer projects.
FRDC - MITRE	Nov. 03	Nov. 03	-	\$20,750	\$16,688		Target funding level based on reduced budget/fewer projects.
Program Management	Nov. 03	Nov. 03	-	<u>\$9,908</u>	<u>\$10,000</u>		Refined estimate of required funding for FY 2003 initiatives.
Subtotal - Program-Level Initiatives	:			\$99,476	\$80,164	-19,312 (-19%)	
Core Infrastructure Projects							
DITE	Nov. 03	Nov. 03	-	\$13,961	\$13,961	-	
nfrastructure Shared Services	Nov. 03	Nov. 03	-	\$85,300	\$75,300	-\$10,000 (-12%)	Target funding level based on reduced budget/fewer projects.
Subtotal - Core Infrastructure Projects				\$99,261	\$89,261	-\$10,000 (-10%)	
Data Projects							
CADE R1, Milestone 5	Jun. 03	Dec. 03	+ 6 months	\$4,851	\$4,889	+\$38 (+1%)	Refined funding estimate to support FY 2003 initiatives. (See Note 1)
CADE R1, Milestone 6	Dec. 03	-	-	\$3,638	\$0	-\$3,638 (-100%)	Policy change. Milestone 6 will be funded by ISY Appropriation.
CADE R2, Milestone 4	TBD	TBD	-	\$6,924	\$6,924	-	
CADE R3, Milestone 3	Dec. 03	Jun. 04	+ 6 months	\$15,289	\$15,870		Schedule delayed due to CADE R1 delays. Incorporated infrastructure costs
CADE R3, Infrastructure	Dec. 03	-	-	\$581	\$0		Infrastructure costs combined with CADE R3 Milestone 3 costs above.
CADE R4, Milestone 3	Aug. 04	TBD	-	\$6,756	<u>\$0</u>		Deferred due to CADE program slippage.
Subtotal - CADE				\$38.039	\$27.683	-\$10,356 (-27%)	

G A Accountability ★ Integrity	No. 10 King ten	itv			IRS	S Exper	Appendix III nditure Plan Comparisor
	Tionabi	,					
Detailed Compariso	on of	IRS's	s Initia	al (No	vemt	per 2002) a	and Revised (March 2003) FY
2003 Expenditure P	lane	(\$000		nt)		,	
	ialis	(φυυί) (00	····.)			
Proposed Modernization Initiatives	Nov. 02	Mar. 03	Schedule	Nov. 02	Mar. 03	Cost Variance (%)	IRS Explanation of Changes
roposed modernization initiatives		Milestone		Amount	Amount		INS Explanation of changes
	Date	Date	Vananoe	Requested			
Data Projects (Cont.)				1			
FS R1. Milestone 3c	-	Feb. 03	-	\$0	\$29,700	+\$29,700 (+100%)	(See Note 2)
FS R1. Milestone 4	Sep. 03	Sep. 03	-	\$67.227	\$53,655	-\$13,572 (-20%)	
FS R1. Milestone 5	Mar. 04	Mar. 04	-	\$6,828			
FS R2. Milestone 2/3a	TBD	TBD	-	\$2,500	\$2,500		(
Subtotal - IFS				\$76.555			
CAP/EDW R1B1, Milestone 4/5	May 03	-	-	\$4,850	\$0	-\$4.850 (-100%)	Incorporated into CAP R1 Milestone 4/5 project below.
CAP/EDW R1B1.1. Milestone 4/5	Sep. 03	-	-	\$13.613	\$0		Incorporated into CAP R1 Milestone 4/5 project below.
CAP R1, Milestone 4/5	-	Feb. 04	+ 9 months	4 - 7			
CAP R2. Milestone 4	-	Dec. 03	-	\$0			
Subtotal - CAP				\$18,463		1	(,
MDA R1. Infrastructure	Nov. 03	TBD	-	\$16,741	\$0		Deferred pending funding.
IRP R1, Milestone 1	TBD	-	-	\$3.000	\$0	-\$3.000 (-100%)	Deferred pending funding.
Subtotal - Data Projects				\$152,798	\$168,251		
Business Projects							
CAM R1, Milestone 4	Oct. 04	TBD	-	\$20,949	\$0		Deferred pending funding.
CCM R1, Milestone 2	TBD	-	-	\$2,500	\$0		Deferred pending funding.
e-Services R1 & R2, Milestone 4/5	Apr. 04		+ 5 months	\$5,846			
F&PC R1, Milestone 4	Apr. 04	TBD	-	\$26,159	\$0		Deferred pending funding.
HR Connect R1, Milestone 4/5	TBD	-	-	\$11,500	\$0		Decision made to fund HR Connect from ISY Appropriation.
Modernized e-File R1, Milestone 4	Nov. 03	Nov. 03	-	\$27,846			
Work Management	-	Jun. 03	-	\$0	\$650		Follow-on to FY 2002 study to develop implementation strategy/business cas
Subtotal - Business Projects				\$94,800	\$59,342	-\$35,458 (-37%)	
FY 2003 Management Reserve Request				\$4.342	\$11.120	+\$6 778 (+156%)	Increase to management reserve based on OMB guidance.
FY 2002 Management Reserve Carryover				\$0	-10.146		Management Reserve remaining at end of FY 2002 to carryover to FY 2003
FY 2002 CAM MS3b Unused Funds				\$0	-19,694		CAM project discontinued in FY 03. FY 2002 funds go to management reserv
					1		
Total FY 2003 Release Request				\$450,677	\$378,298	-\$72,379 (-16%)	

Source: IRS



Appendix III: IRS Expenditure Plan Comparison

Detailed Comparison of IRS's Initial (November 2002) and Revised (March 2003) FY 2003 Expenditure Plans (\$000) (Cont.)

IRS Explanation of Changes:

<u>Note 1</u>: Deployment was delayed due to contractor delays in staffing the project, failure to acquire a business rules engine, underestimating the technical complexity of a few key software components, and late attention to critical project elements. Additional slippage was due to mandatory relocation of development site to satisfy security certification concerns.

<u>Note 2</u>: Infrastructure hardware and software procurements and labor to conduct IFS preliminary development activities originally planned to begin in Milestone 4 have been moved forward into a new Milestone 3c segment. This allows the project to continue to move forward on schedule for an October 1, 2003, "go live" while incomplete Milestone 3 activities are being satisfied. The net budget increase of \$20 million for Milestones 3c, 4, and 5 reflects a revised estimate of actual labor costs and an increase in infrastructure costs.

<u>Note 3</u>: CAP/EDW R1B1 and R1B1.1 have been combined and renamed CAP R1 as a result of a major CAP replan effort. Delays in obtaining the Infrastructure Shared Services (ISS) schedule, and other additional activities impacting the schedule, necessitated the major schedule replan. This ultimately resulted in a 9 month delay (from May 2003 to Feb. 2004) in the scheduled completion of Milestone 5. The revised total CAP R1 cost (\$29,013) consists of CAP EDW R1B1 (\$4,850), CAP EDW R1B1.1 (\$13,613), and a cost increase of \$10,550. The cost increase was due in large part to the schedule delays discussed above.



Appendix III: IRS Expenditure Plan Comparison

Detailed Comparison of IRS's Initial (November 2002) and Revised (March 2003) FY 2003 Expenditure Plans (\$000) (Cont.)

IRS Explanation of Changes (cont.):

<u>Note 4</u>: CAP R2 Milestone 4 was moved up from FY 2004 to FY 2003, in an attempt to resolve the custodial accounting material weakness as soon as possible and comply with the current remediation plan dates.

<u>Note 5</u>: Schedule delays occurred due to late completion of infrastructure, competing demand for testing resources, and additional scope of new e-Services R2. E-Services R2 will provide Modernized e-file participants access to the e-services registration and application process, tax year updates, and an enhanced Transcript Delivery System. Cost increases were due to delays in and enhancements to E-Services subreleases R1.1 and R1.2, as well as the additional scope of R2.

<u>Note 6</u>: Prior to being funded by BSM, Modernized e-File was made up of two Tier B projects. Many of the management and infrastructure estimates for these former Tier B projects were either inaccurate or did not reflect the additional capacity of integrating with the modernized environment. The revised cost includes increases for PRIME integration and infrastructure support, and changes to the customer database.

Accountability * Integrit		IRS Rep	orted Cos	st / Schedule Char
Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Customer Communications 2001 Milestone 4,5	10/31/01 \$45,174	02/26/02 \$44,796	+4 months (+22%) -\$378 (-1%)	CC01 went live on 07/27/01. However, a performance award dispute (settled in February 2002) delayed Milestone 5. The IRS paid the PRIME contractor \$500K less in performance awards than the maximum allowed under the Task Order. Some of thi extra funding was used to cover higher than expected Transition to Support costs.
Internet Refund/ Fact of Filing (Release 1) Milestone 3	9/30/01 \$10,696	9/28/01 \$10,957	+\$261 (+2%)	Actual costs came in \$261K higher than estimated to complete MS4,5 proposal.
Internet Refund/ Fact of Filing (Release 1) Milestone 4	3/31/02 \$5,000	11/7/02 \$13,193	+7 months(+117%) +\$8,193 (+164%)	Definitization of this Task Order occurred after submission of the October 2001 Expenditure Plan. Final negotiations placed the MS 4 exit date at 05/03/02. However, the PRIME contractor experienced difficulties due to significant delays in completing release level system integration and testing (RSIT) and meeting performanc requirements. MS 4 completion was delayed until the PRIME demonstrated resolution of performance problems and corrected outstanding items in the Defects Report (DR). Additional costs include \$1.465M due to Product Assurance need for contractors to perform testing, identified transition to support needs, increased RIS costs, and MS cost overrun, \$2.304M to cover maintenanc through the end of the fiscal year and enhancements for FY03 filing season, and \$4.683M required to extend MS4 to 11/7/02

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Internet Refund/ Fact of Filing (Release 1) Milestone 5	7/31/02 \$5,000	3/12/03 \$3,049	+7 months (+175%) -\$1,951 (-39%)	The PRIME contractor experienced difficulties due to delays in completing release level system integration and testing (RSIT) and in meeting performance requirements. Milestone 5 exit moved to 3/12/03 at the request of the Business owner so that the application can be monitored during the 2003 Filing Season. IRS planned to spend \$2.304M in MS 5 to cover maintenance through the remainder of the fiscal year and enhancements for FY03 filing season. However, those funds were used in MS 4 because of the delay in exiting that Milestone. The IRS estimated the non M&E MS 5 worl would cost \$6M (the original \$5M estimated plus an additional \$1.0M to extend MS 5 from 07/31/02 to 09/30/02. However, due to the late exit of MS 4, MS 5 did not begin until111/8/02. The cost of all MS 5 activities through 3/12/03 is now estimated at \$3.049M.

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
e-Services (Release 1.1 and 1.2) Milestone 4,5	10/31/03 \$40,191	9/30/04 \$68,992	+11 Months (+41%) +\$28,801 (+72%)	The delays occurred because infrastructures were not completed to meet the e-Services date for PSIT. IR/FoF did not exit test environment on schedule, delaying e- Services. Also schedule delays and cost increases because of move of Gaithersburg Computing Center environment to the Martinsburg and the Tennessee Computing Centers. FY 2002 cost increases for unplanned infrastructure hardware (\$4,255M), additional STIR Integration (\$4.200M), and increased product assurance testing (\$1,500M). Additional costs include continued support of PRIME ISS contractors to e-services, non-prime costs for MCC support in FY 2003, and ITS and Business training for knowledge transfer needed for transitioning e-services.
Customer Account Management (Release 1) Milestone 2	3/31/02 \$13,100	8/30/02 \$13,300	+5 months (+56%) +\$200 (+2%)	New business requirements required update to future concept of operations, and to identify and prioritize their business process re-engineering opportunities before proceeding to MS3. Proposal for MS3 cost overrun (\$200K) due to changes in business requirements.

Appendix st / Schedule Chan	orted Cos	IRS Repo		GA Accountability * Integrit
IRS Explanation of Change	Change (%)	Revised Commitment Date and Funding (\$000)	Commitment Date and Funding as of 10/2001 (\$000)	Program/ Project Management Initiative
\$1.0M variance to include unplanned transition to support in MS2,3 activities per new BSM program guidelines.	-1 month (-6%) +\$1,000 (+6%)	12/31/02 \$18,117	1/31/03 \$17,117	Filing and Payment Compliance (Release 1) Milestone 2,3
The initial FY 2002 amount for MS4 and 5 was based on available funds instead of usable segment cost. This was done to cover Treasury's anticipated activity in FY 2002 and not the entire MS4 and MS5 cost (i.e., MS5 work was never planned to be completed in FY 2002). The project is now broken into MS4 and MS5 usable segments. The estimate for MS4 is \$10.2M and is compared with the original plan amount of \$10M. The BSM account will no longer fund MS5 work.	+\$200(+2%)	12/31/02 \$10,200	12/31/02 \$10,000	HR Connect (Release 1) Milestone 4,5
Deployment delayed due to contractor delays in staffing the project, failure to acquire a business rules engine, underestimating the technical complexity of a few key software components, late attention to critical project elements, and re- location of the development site to satisfy security certification concerns.	+13 months (+108%)	7/13/03 \$45,338	6/30/02 \$45,338	Customer Account Data Engine (CADE) Release 1 Milestone 4
FY 2002 funding for MS5 (\$5.795M) was returned to management reserve because schedule delays moved MS5 to FY 2003. The net MS5 decrease (\$.906M) is due to revised estimates to do the same work.	+12 months (+200%) -\$906 (-16%)	12/31/03 \$4,889	12/31/02 \$5,795	Customer Account Data Engine (CADE) Release 1 Milestone 5

Source: IRS and GAO Analysis

38

Customer Account Data 12/31/02 TBD In the process of replanning Release Engine (CADE) \$38,400 \$46,324 +\$7,924 (+21%) In the process of replanning Release Release 2 \$46,324 +\$7,924 (+21%) increases are for planning for future	Program/ Project anagement Initiative	Commitment Date and Funding as of 10/2001	Revised Commitment Date and Funding	Change (%)	IRS Explanation of Change
sequencing (\$1.0M) and FY03 infras costs (\$6.924M).	Engine (CADE) Release 2		\$46,324	+\$7,924 (+21%)	functionality due to CAM/CADE sequencing (\$1.0M) and FY03 infrastructu costs (\$6.924M).
Engine (CADE) Release 3\$9,779\$15,870(+100%) +\$6,091 (+62%)requirements. Deferred to FY03 to a with CADE Release 2 capabilities, w	Engine (CADE) Release 3			(+100%)	Focus redirected to build foundation for requirements. Deferred to FY03 to align with CADE Release 2 capabilities, which impact Release 3 scope, schedule, and cost

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Custodial Accounting Project (CAP) Release 1 Milestone 4,5	3/31/03 \$51,430	2/16/04 \$87,087	+11 months (+39%) +\$35,657 (+69%)	The first schedule variance resulted from temporary reassignment of IMF programmer resources to support 2002 tax filing season changes, thus delaying MS5 from 03/31/03 to 05/15/03. The next major change in the CAP schedule delayed M5 from 5/15/03 to 11/3/03. A delay in obtaining the ISS schedule, and other additional activities impacting the schedule, necessitated the major schedule replan. As a result, 11/3/03 transition to Production Environment was redesignated as Initial Operational Capability (IOC) and established MS5 as 2/16/04. FY 2002 variance (\$6.664M) due to integration with STIR components, revenue interface with IFS, CAP-CADE interface, schedule delays, mid-year IMF changes. FY03 request of \$29,013 is comprised of CY03 format changes, ISS/STIR and other schedule delays, IFS/PACER modernized interface development, ISS hardware and software to upgrade processing capacity, implementation of modernized standards to CAP in-process development.

Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Enterprise Data Warehouse (EDW) Milestone 2,3	5/31/02 \$6,700	12/19/02 \$6,950	+7 months (+78%) +\$250 (+4%)	Requirements expanded to include additional data sets for analysis and additional time needed to establish Business User priorities. Upon completion and formal exit of MS3 work for EDW, the IRS decided to rescope EDW to focus on the original CAP requirements. Meeting these original requirements will provide a resolution to material weaknesses that currently exist in Custodial Accounting.
Integrated Financial System/Core Financial System (IFS/CFS) Release 1 Milestone 4A/3B	11/30/02 \$17,250	11/30/02 \$23,000	+\$5,750 (+33%)	Completed the deliverables originally scheduled for MS2,3. However, certain deliverables needed to exit Milestone 3 under Milestone Exit criteria were not planned using the COTS path through the ELC. Extended Milestone 3 by establishing Milestone 3B to produce the deliverables needed to obtain Enterprise Architecture Certification and other design work and exit Milestone 3. The net MS4A/3B variance, \$5.750M (-\$17.250 + \$23.000) is due to revised estimates to complete the work and the ISS DCC communications infrastructure buildout for IFS.

Accountability * Integrit	y * Reliability			st / Schedule Char
Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Infrastructure Shared Services FY 2002	11/30/02 \$39,747	11/30/02 \$48,846	+\$9,099 (+23%)	Started 3 months early to provide support to FY 2003 Release. Cost increase due to realignment of projects' schedules, increased software maintenance, decision to buy rather than lease equipment, and addition of Modernized e-file requirements. The majority of the cost overrun is as a result of OMB A-11 requirements to purchase HW/SW instead of leasing it as originally planned. Purchasing the equipment in FY 2002 saves money in the out years.
Security and Technology Infrastructure Releases (STIR) Milestone 4	10/30/01 \$31,287	1/31/02 \$31,287	+3 months (+25%)	Slip in Enterprise Integration and Test Environment (EITE) Ready For Use (RFU) date caused a slip in the MS4 exit date. Late identification, ordering, and receipt of equipment caused the slip in EITE.
Security and Technology Infrastructure Releases (STIR) FY 2002	5/31/02 \$43,973	11/30/02 \$56,041	+6 months (+86%) +\$12,068 (+27%)	Start date slipped 3 months due to MS4 exit delay. End date slipped because STIR was split into two releases to accommodate projects' schedules. Sub-release 1 supports IR/FoF; Release 2 supports e-Services, which will be completed under ISS. Cost change due to realignment of projects' schedules, increased software maintenance, additional security requirements, and OMB A-11 requirement to purchase rather than lease equipment (+\$11.340M), and application of FY 2001 infrastructure funds to FY 2002.

Source: IRS and GAO Analysis

42

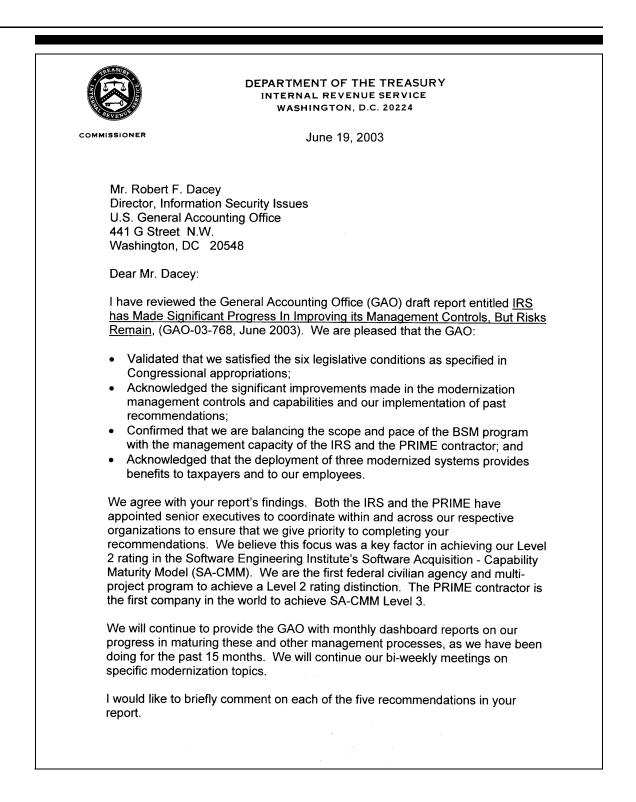
Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Enterprise Systems Management (ESM) Milestone 4	12/19/01 \$9,184	2/19/02 \$9,184	+2 months (+40%)	60-day extension of MS4 exit to realign the schedule with STIR and EITE RFU, re- evaluate the system requirements document for the evolving needs of the modernized projects, specifically IR/FoF, evaluate the current ITS organization's ability to support the existing ESM release plan.
Enterprise Systems Management (ESM) FY 2002	7/31/02 \$11,323	1/31/03 \$11,090	+6 months (+75%) -\$233 (-2%)	Start date slipped 3 months due to slippage in milestone 4 exit date. End date slipped to coincide with ESM PMAR release 1.3 to support IR/FoF. Cost decrease due to revised period of performance, enhancements in Web Hosting facilities, and Security Test & Evaluation overrun.
Development Integration and Test Environment (DITE) FY 2002	11/15/02 \$12,916	11/15/02 \$17,194	+\$4,278 (+33%)	Increased support for Help Desk, Data Modeling, Rational Tools, Customer Guide, and increase in maintenance costs. Cost of relocating projects from GCC to MCC. Cost to move Z900 from GCC to TCC for Disaster Recovery.

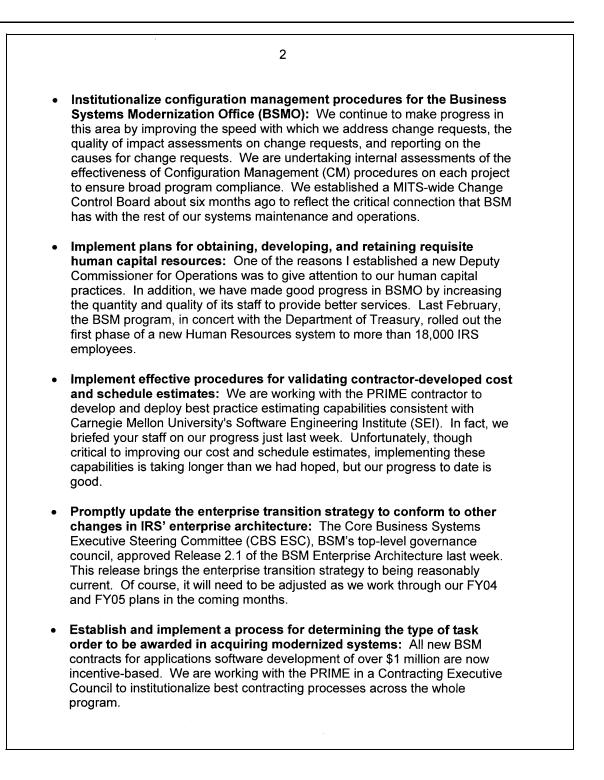
Program/ Project Management Initiative	Commitment Date and Funding as of 10/2001 (\$000)	Revised Commitment Date and Funding (\$000)	Change (%)	IRS Explanation of Change
Program Management FY 2002	11/10/02 \$7,918	11/9/02 \$9,260	+\$1,342 (+17%)	Savings (\$14K) were realized as a result of negotiation of the fee position and reaching agreement on the price for the full period of performance and refined cost estimates. Cos increases (\$1.026M) are to fund the Executive Support Council. Unplanned requests for information services (RIS) are estimated at \$330K.
Architecture and Integration FY 2002	11/10/02 \$32,539	11/10/02 \$38,910	+\$6,371 (+20%)	Cost increase (\$6.409M) transferred from Business Integration to cover the cost of Release Management. Cost decrease (\$38K to complete Case for Action and Project Management Plan transferred to Customer Contact Engineering Study.
Management Processes FY 2002	11/10/02 \$10,082	11/9/02 \$11,190	+\$1,108 (+11%)	Cost increase (\$1,108,000) needed to fund the PRIME's SA-CMM activities to prepare for and conduct the SA-CMM Level 3 assessment.
FFRDC – MITRE FY 2002	11/10/02 \$18,070	11/10/02 \$18,820	+\$750 (+4%)	Additional work identified to support Program Management (acquisition management), Management Processes (process improvement, ELC, risk management) and Architecture & Engineering (data management).

Source: IRS and GAO Analysis

44

Comments from the Internal Revenue Service





3 We appreciate your continued support, and the valuable assistance and guidance from your staff. If you have any questions, or if you would like to discuss this response in more detail, please contact Fred Forman, Associate Commissioner for Business Systems Modernization, at (202) 622-3378. Sincerely, Much W. From Mark W. Everson

GAO Contacts and Staff Acknowledgments

GAO Contact	Gregory C. Wilshusen (202) 512-6244
Staff	In addition to the individual named above, other key contributors were
Acknowledgments	Bernard R. Anderson, Timothy D. Hopkins, and Chetna Lal.

GAO's Mission	The General Accounting Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full- text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.
	Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to e-mail alerts" under the "Order GAO Products" heading.
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:
	U.S. General Accounting Office 441 G Street NW, Room LM Washington, D.C. 20548
	To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061
To Report Fraud, Waste, and Abuse in Federal Programs	Contact: Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Public Affairs	Jeff Nelligan, Managing Director, <u>NelliganJ@gao.gov</u> (202) 512-4800 U.S. General Accounting Office, 441 G Street NW, Room 7149 Washington, D.C. 20548



United States General Accounting Office Washington, D.C. 20548-0001

Official Business Penalty for Private Use \$300

Address Service Requested

Presorted Standard Postage & Fees Paid GAO Permit No. GI00

