

***National Aeronautics and Space Administration
Advisory Council***

Audit, Finance, and Analysis Committee

November 29, 2012

Members:

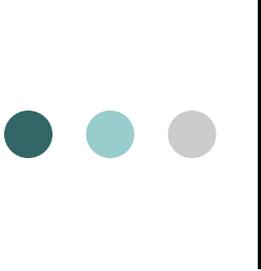
Mr. Robert Hanisee, Chairman

Hon. William Campbell

Hon. Michael Montelongo

Dr. Howard Stanislawski

Mr. Jeffrey Steinhoff



Audit, Finance & Analysis Committee

Abridged Agenda

Meeting November 26, 2012

Financial Statement Audit Results

Pamela Hanes, NASA DCFO (Finance)

Financial Management Initiatives

*Pamela Hanes, NASA DCFO (Finance)
Andrew Hunter, NASA DCFO
Agency Budget, Performance, and
Strategy*

Administrative Savings

*Lisa Ziehmman, Office of the Chief Financial
Officer, Budget Division*

NASA Agency Budget Status

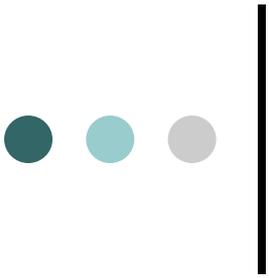
*Andrew Hunter, NASA DCFO
Agency Budget, Performance, and
Strategy*

*Financial System Initiative-
Raising the Level of Obligations*

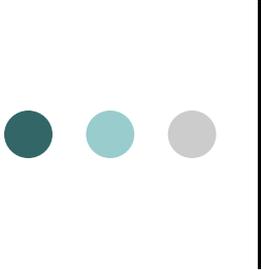
*Dorothy Swanson, Johnson Space Center,
Chief Financial Officer*

GAO High Risk List-NASA Status

*Tracy Osborne, Office of the Chief Financial
Officer, Strategic Investments Division*



Financial Statement Audit Results



FY 2012 Financial Statement Audit Results

Excerpt from Report of Independent Auditors (Price Waterhouse Coopers):

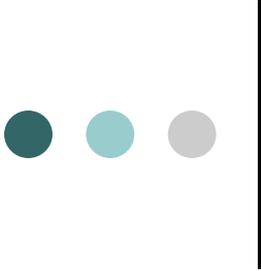
“In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of NASA at September 30, 2012 and September 30, 2011, and its consolidated net cost of operations and changes in net position, and the combined budgetary resources for the years then ended, in conformity with accounting principles generally accepted in the United States of America.”

Over a Decade of Financial Statement Audit Results

Fiscal Year		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Independent Auditor		PwC	PwC	PwC	E&Y	PwC	PwC						
Audit Opinion		D	C	D	D	D	D	D	D	D	Q	C	C
Internal Control Deficiency	PP&E	MW	SD	—	—								
	Environmental Liability Estimation	RC	—	—	RC	RC	—	—	—	SD	SD	SD	SD
	Federal Financial Management Improvement Act (FFMIA)	RC	RC	RC	RC	RC	—	—	—	SD	—	—	—
	Financial Information Technology	RC	RC	RC	—	—	—	—	—	—	—	SD	—
	Financial Statements Preparations Process & oversight	RC	MW	—	—	—	—						
	Fund Balance with Treasury	—	—	MW	MW	MW	—	—	—	—	—	—	—
	General Control Environment	—	—	—	MW	—	—	—	—	—	—	—	—

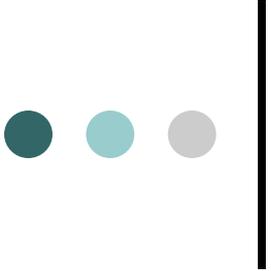
D=Disclaimer, C=Clean/Unqualified, Q=Qualified

MW=Material Weakness RC=Reportable Condition SD=Significant Deficiency



FY 2012 Audit Results

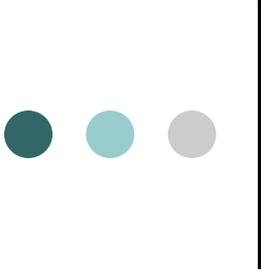
- Unqualified opinion on NASA's FY 2012 financial statements, with no material weakness
- FY 2011 Internal Control Significant Deficiencies:
 - SAP user access controls and monitoring
 - Environmental Liability Estimation Process
- FY 2012 Status of FY 2011 Significant Deficiencies:
 - SAP user access controls and monitoring remediated
 - Environmental Liability Estimation Process remains
- Prepared Agency Financial Report (AFR) in lieu of a Performance and Accountability Report (PAR)
 - All agencies will be required to prepare an AFR for FY 2013
- Improper Payment Program and Recapture Auditing identified no improper payments for FY 2012



Privileged User Access Controls and Monitoring of the SAP Environment

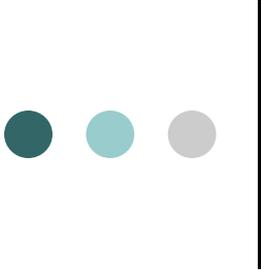
Prior Year Findings Contributing to Significant Deficiency	FY 2012 Status
Excessive use of SAP_ALL and SAP_NEW	Remediated
Lack of Restricted Access to Execute SQL Commands within SAP	Remediated
Lack of Restricted Access to Open Production for Direct Changes	Remediated
Lack of Restriction of Development and Debugging Abilities in Production	Partially Remediated*
Shared Accounts (Solaris and Oracle)	Partially Remediated*
Review of Audit Logs (Application and Oracle)	Partially Remediated*

*Remaining findings were not considered significant, individually nor in aggregate.



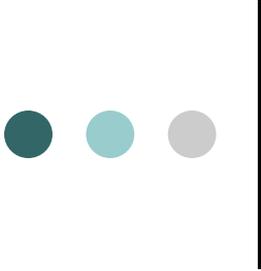
Environmental Liability Estimation Process

Prior Year Findings Contributing to Significant Deficiency	FY 2012 Recommendations
Improvements are needed to Environmental and Disposal Liabilities associated with Restoration Projects	Update or redesign the control activities or the monitoring controls used to ensure that the accuracy and completeness of the Restoration calculations at an appropriate level of detail
Improvements are needed to NASA's Environmental Liability Estimation Policy and Related Space Shuttle Analysis	Update the applicable environmental liability policy for Space Assets to include procedures to appropriately calculate the liability in accordance with the applicable accounting standards and to describe management's process to review this estimate.
Improvements are needed to NASA's Environmental Liability Estimation Policy and Related Analyses (Other PPE)	Develop and maintain documentation to support the methodologies and assumptions used to estimate the liability for PP&E assets.



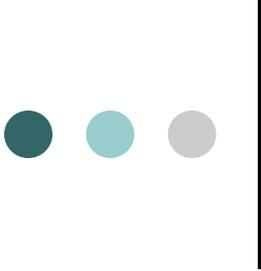
FY 2013 Planning

- Basic Game Plan
 - Review Management Letter Comments in Total
 - Identify Major Themes
 - For Each Theme, Establish Corrective Action Plan, Timeline, and Lead
 - Continue Weekly Internal Audit Status and Strategy Sessions Year Round
- Financial Audit Lessons Learned
 - Conduct Internal Session to Capture Challenges from FY 2012 Process
 - Hold Joint Session with OIG and Independent Auditors in early January 2013
- Annual Financial Report Lessons Learned
 - Conduct Internal Session in Early December 2012



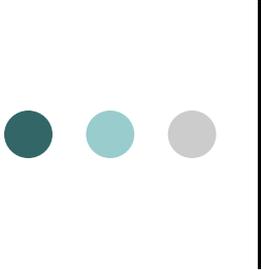
Environmental Liability Estimation Process

FY 2012 Recommendations	FY 2013 Strategy
<p>Update or redesign the control activities or the monitoring controls used to ensure that the accuracy and completeness of the Restoration calculations at an appropriate level of detail</p>	<p>Work with Environmental Management Division and Center personnel to document and optimize the controls associated with the current Joint Review process.</p>
<p>Update the applicable environmental liability policy for Space Assets to include procedures to appropriately calculate the liability in accordance with the applicable accounting standards and to describe management's process to review this estimate.</p>	<p>Shuttle Transition and Retirement will be completed in FY 2013. Efforts will focus on using the Non-Space PP&E Policy for all PP&E going forward. No separate Space PP&E Policy starting in FY 2013.</p>
<p>Develop and maintain documentation to support the methodologies and assumptions used to estimate the liability for PP&E assets.</p>	<p>Work with Environmental Management Division and Center personnel to further document estimation assumptions and methodologies. Ensure a sample selection that is representative of the total population for estimation purposes.</p>



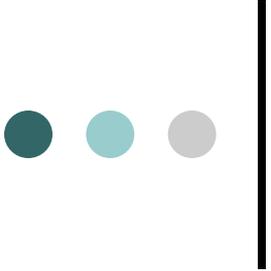
Environmental Liability Estimation Process – Asbestos

- Current Situation
 - Asbestos observed at all NASA Centers
 - Wide variation in information available at each Center
 - Only MSFC has developed an estimate for asbestos cleanup cost
 - KSC and GRC have developed databases to support asbestos tracking
 - Data from MSFC, KSC, and GRC indicate that 99.5% of asbestos is in properties constructed before 1981
- Asbestos Estimation
 - Process alternatives have been documented and evaluated
 - Meeting to review NASA's estimation approach with OIG and Independent Auditors planned for January 2013

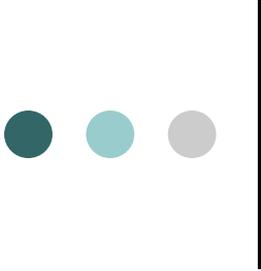


Environmental Liability Estimation Process

- Asbestos Estimation
 - Proposed approach
 - Record estimated cleanup costs from completed asbestos surveys (MSFC only)
 - Estimate cleanup cost for remaining non-surveyed properties based on extrapolation of average cleanup cost/sq ft of surveyed MSFC properties
 - Meeting to review NASA's estimation approach with OIG and Independent Auditors planned for January 2013



OCFO Initiatives 2012 - 13



Strategic Objectives

- Build the capabilities needed to deliver CFO value added products and services.
- Provide effective stewardship of NASA's resources by maintaining appropriate internal controls and balancing competing Agency needs/requirements.
- Provide a positive customer experience for internal and external stakeholders.

OCFO FY13 Key Initiatives

Sept. '12

Dec. '12

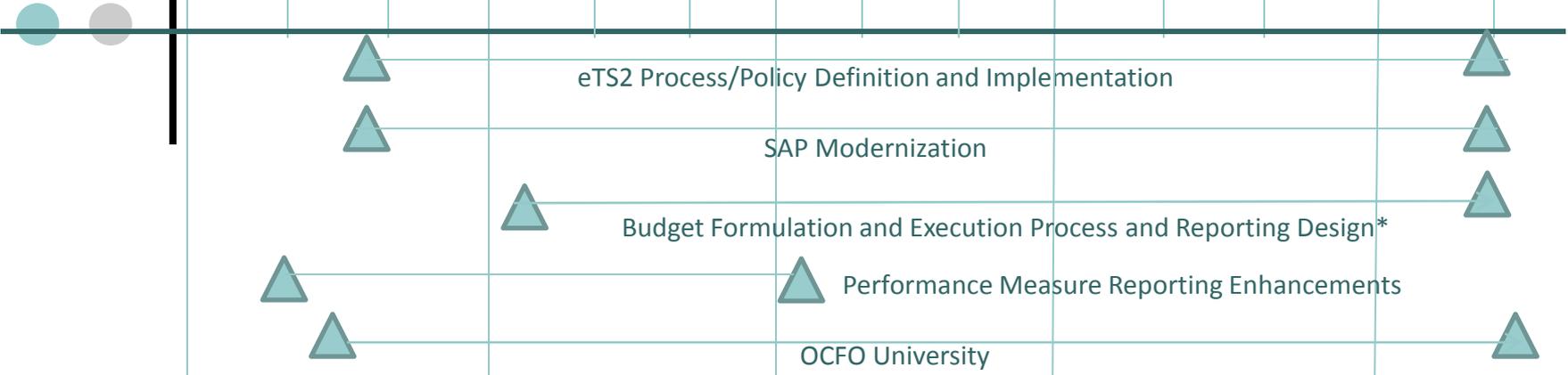
Mar. '13

June '13

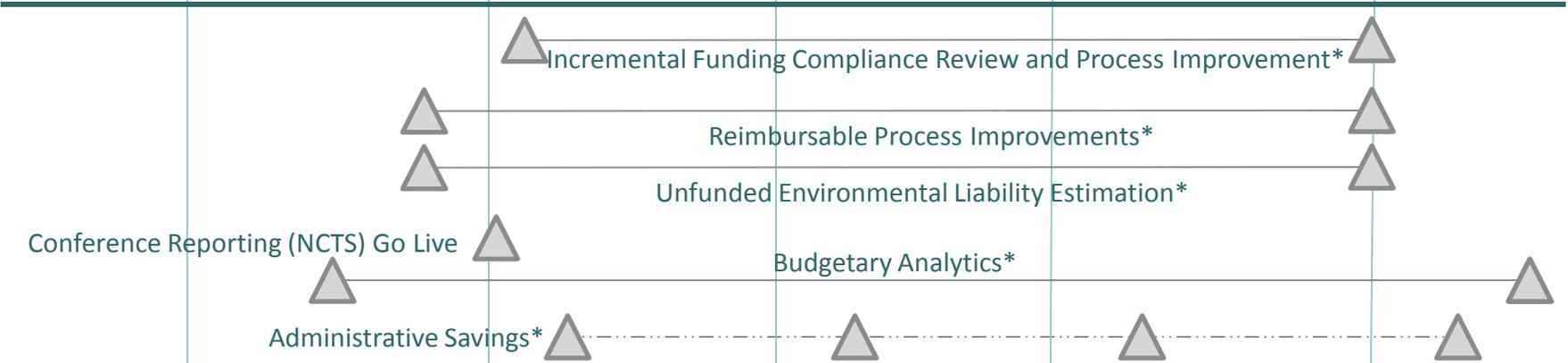
Sept. '13

Oct. '13

Enhancing Capabilities



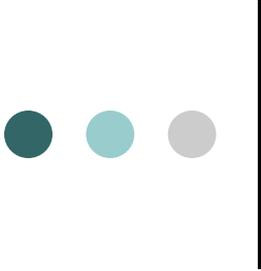
Financial Stewardship



Customer Experience

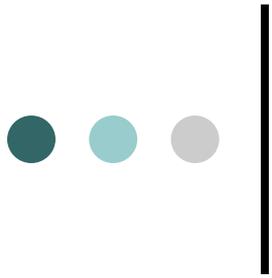


*CFO "Top 10" Alignment



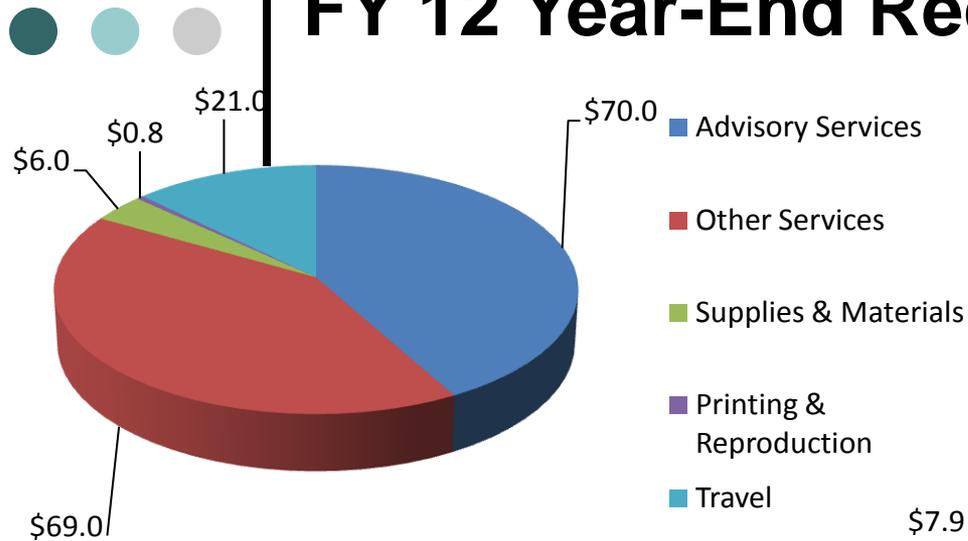
Integrated Product Team Planning

Initiative	Integrated Product/Process Team Lead
eTS2 Planning and Implementation	ARC and DFRC Co-Lead
SAP Modernization & Authorization Act Reports	LaRC and GRC Co-Lead
Raising the Level of Obligations	JSC Lead
CJ System Enhancements	Budget Division Lead
Budget Formulation System Enhancements	
Budget Execution System Enhancements	
Performance Measure Reporting Enhancements	SID Lead
Incremental Funding Next Steps	Budget Division and Quality Assurance Lead
Reimbursable Policy/Process Improvements	TBD
UEL Process Refinements (Including Asbestos)	Financial Management and Quality Assurance Lead



Promoting Efficient Spending

Promoting Efficient Spending FY 12 Year-End Recap



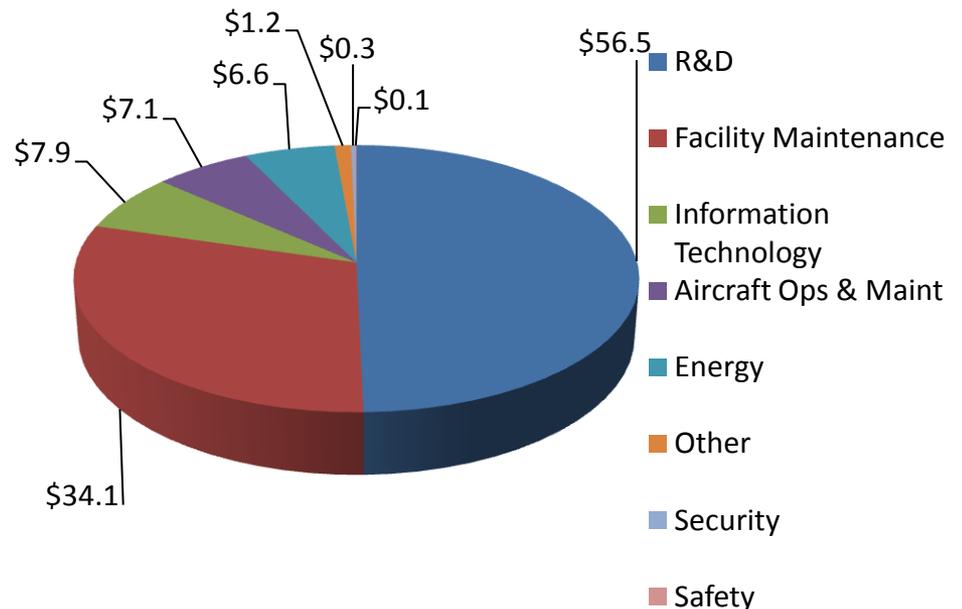
(\$m)	Actual Savings	Target Savings
Advisory Services*	\$70.0	\$67.8***
Other Services*	\$69.0	
Supplies & Materials*	\$6.0	\$14.5
Printing & Reproduction*	\$0.8	\$0.7
Travel**	\$21.0	\$17.0
	\$166.8	\$100.0

*Actual data provided via Center reporting.

**Actual data provided from BW.

***Advisory & Other Services combined in Agency plan.

How/Where were savings re-invested?



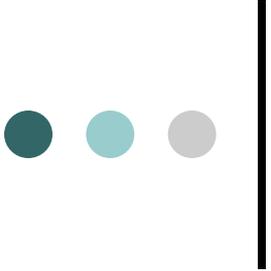
~\$114m of ~\$167m savings were re-invested in critical Agency programmatic and institutional needs/requirements.

Promoting Efficient Spending

FY 13 Targets

- Savings targets = \$200M (cumulative FY12 + FY13)
 - Advisory & other services (\$137.2M), printing & reproduction (\$.8M), supplies & materials (\$17M), IT devices (\$25M), travel (\$20M)
 - Savings implemented in FY12 expected to continue into FY13
- Travel allocations by MD (reimbursable travel added for FY13):

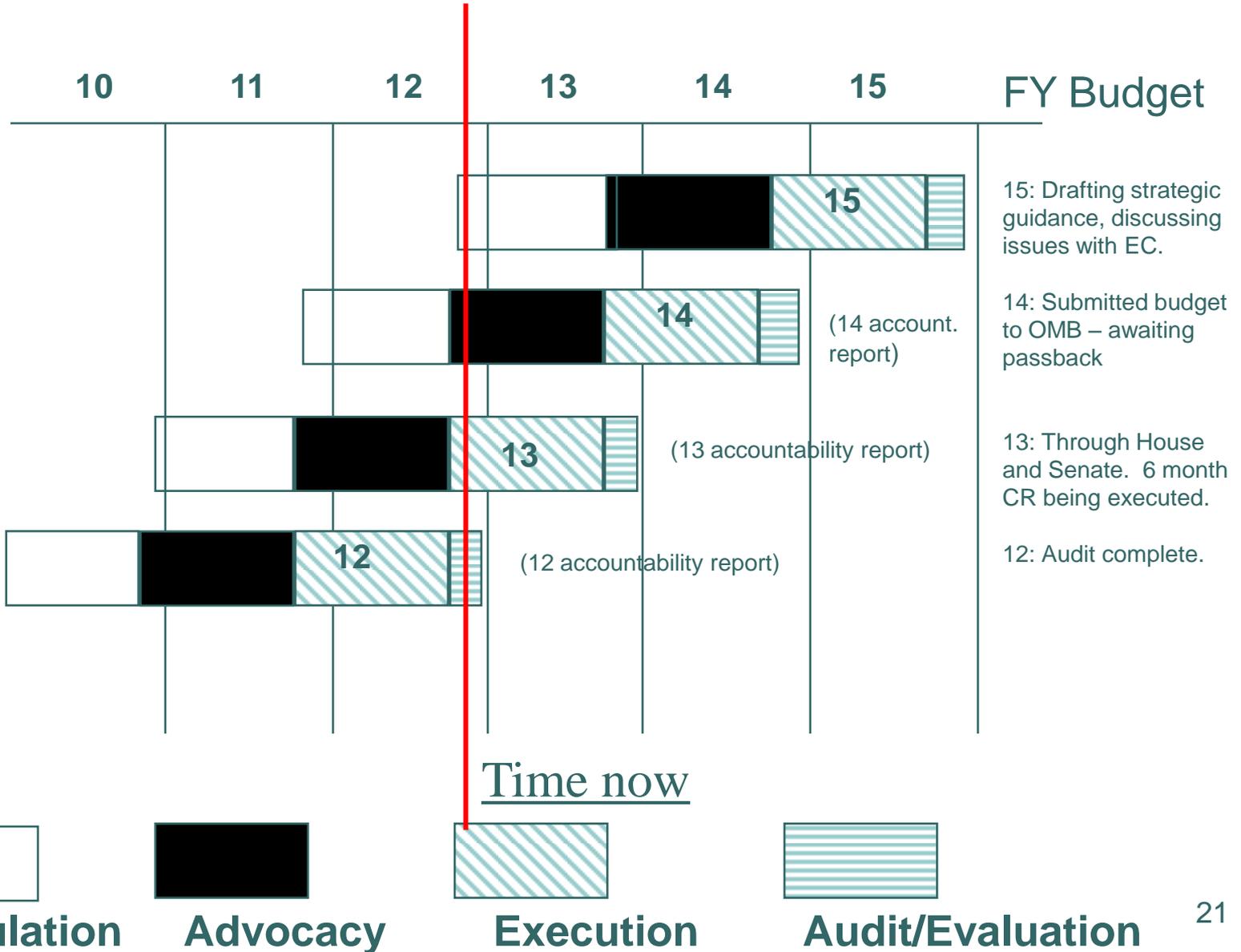
(\$m)	FY 2013 Allocation		
	Direct	Reimbursable	Total
Science	17.89	2.51	20.40
Aeronautics	5.28	1.09	6.37
Space Tech	4.59	n/a	4.59
Exploration	12.86	0.35	13.21
Space Ops	10.56	1.58	12.14
Education	0.7	n/a	0.70
Cross-Agency Support	22.4	0.47	22.87
Totals	74.28	6.00	80.28

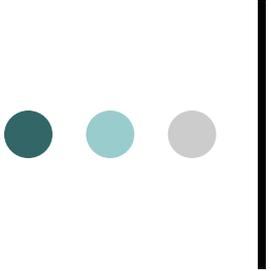


NASA Agency Budget Status

Budget Cycles In Play...

Calendar yr





Budget Outlook

- The outlook for **FY 2013** is still murky; the Administration and the Congress are in the midst of negotiating the FY13 budget and out-year path.
 - However, we can take some direction from the House and Senate bills, which largely reflect FY 2012 enacted appropriations.
- In the near-term, we face the fiscal cliff and potential debt limit breach.
- The immediate effect on NASA could be a sequester, or the impacts of the bill to avert one, but a sequester is still very unlikely. CR plan underway takes into account some of that risk.
- Long-term, NASA's spending will likely be constrained, which means – as always – that we must be especially good stewards of our funding.



Agency Budget Highlights

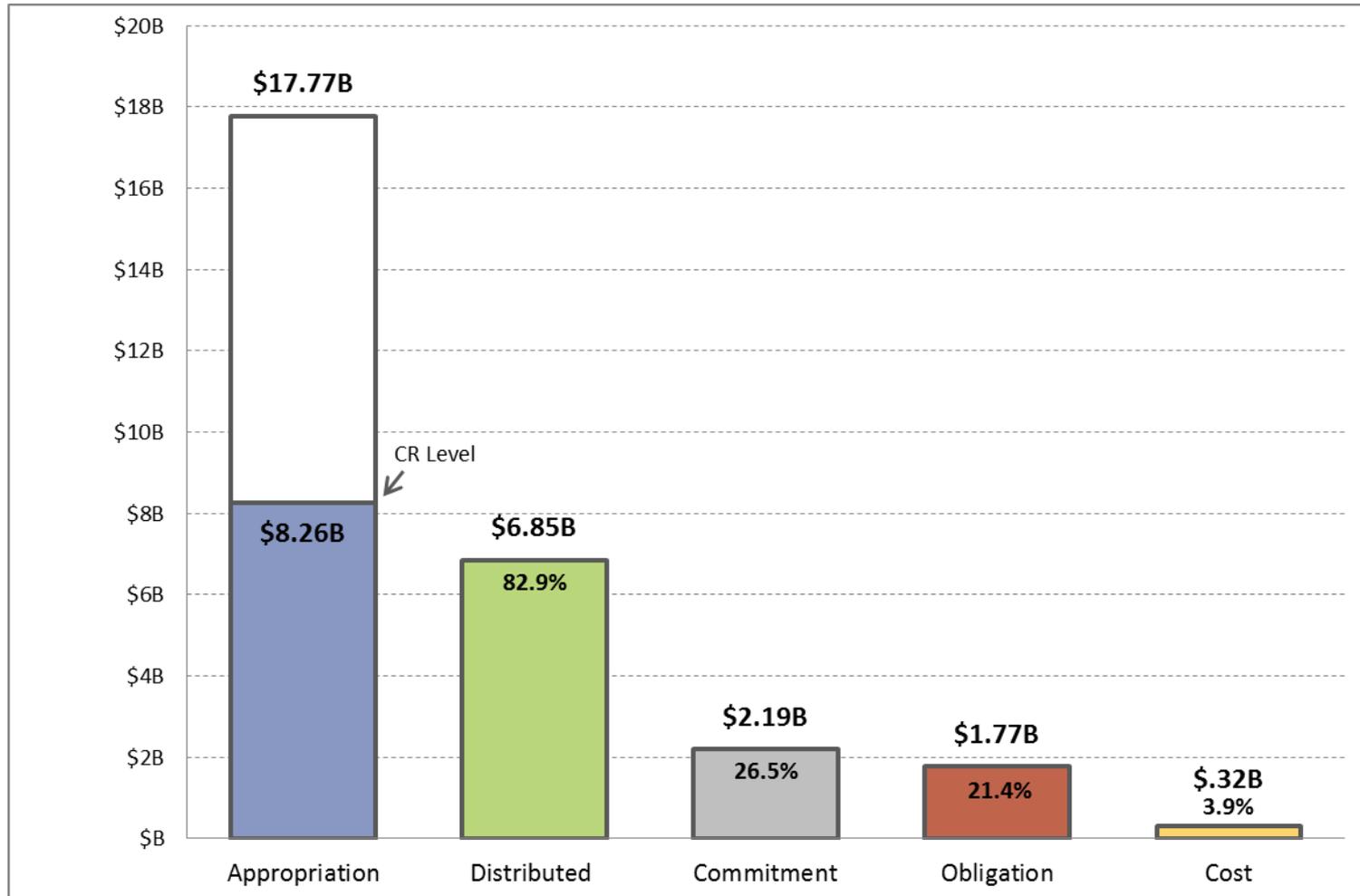
	FY 13 Execution	FY 13 Actions
	A CR operating plan was drafted as required by the CR. HEOMD proposing two transfers.	Sent to Congress on Nov. 5.
	Phasing plan development is continuing on schedule. The first draft of Center plans will be available in PMT on Nov. 15. RMOs will complete review by Nov. 29	OCFO is compiling required changes for Center's second plan submission.
	The MSD/Office of Strategic Infrastructure is working with the Centers to formulate requirements for the Administration's storm recovery supplemental appropriations bill.	OMB is reviewing the Agency's proposals submitted on Nov. 14.
	OCFO estimates of PY 2012 unobligated balances as of the end of the first quarter of FY 2013 are higher than acceptable levels.	Missions should take necessary action to decrease balances and avoid rescissions and cuts to the FY 2013 budget request.

	FY 14 Planning	FY 14 Actions
	CJ Product 1 inputs were due from RMOs on Nov. 14.	OCFO will review and lock down Product 1 on Nov. 27.
	Awaiting Passback.	

Status of PY 2013 Funds (Agency-Wide)

As of end of October 2013

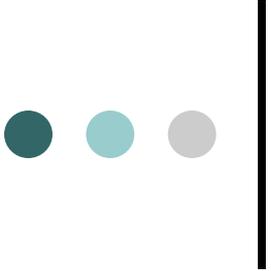
NASA is performing well against its CR funding. 83% of the funding is distributed to Centers and more than 1/6 of the funding has been committed and obligated.



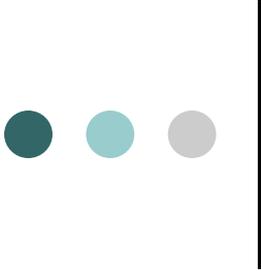
Possible Sequester: Overall Effect on NASA

- The sequester would be applied as in this table.
- Mostly, the sequester is applied at the account level. However, if there are subaccount appropriations for FY 2012, the sequester would generally apply at that level.

	<u>FY 2012</u>	<u>Under Sequester</u>	<u>Diff</u>
Science	\$5,085	\$4,688	-397
Aeronautics	\$569	\$525	-44
Space Technology	\$575	\$530	-45
Exploration	\$3,767	\$3,473	-294
Space Launch System	\$1,860	\$1,715	-145
Multi-Purpose Crew Vehicle	\$1,200	\$1,106	-94
Commercial Spaceflight	\$406	\$374	-32
Exploration Research and Development	\$302	\$278	-24
Space Operations	\$4,222	\$3,893	-329
Education	\$136	\$125	-11
NASA Space Grant	\$39	\$36	-3
EPSCoR	\$17	\$16	-1
STEM Education and Accountability	\$80	\$73	-7
Cross-Agency Support	\$2,994	\$2,760	-234
Construction & Env Compliance & Remediation	\$385	\$355	-30
Inspector General	\$38	\$35	-3
NASA FY 2013	\$17,771	\$16,385	-1,386



NASA Status on GAO High Risk List

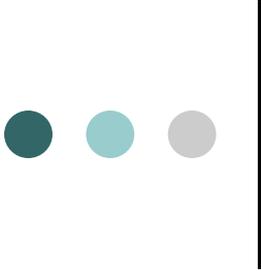


GAO High Risk Series

- NASA has been on the GAO High Risk List since 1990

Excerpts from updated report dated February 2011:

- *“GAO has designated NASA’s acquisition management as high risk in view of persistent cost growth and schedule slippage in the majority of its major projects.”*
- *“GAO’s work has focused on identifying a number of causal factors, including antiquated financial management systems for cost estimating, and underestimating risks associated with development of its major systems.”*
- *“GAO’s work continues to find that NASA has difficulty meeting cost, schedule and performance goals for many of its projects. For example, GAO reported in 2010 that 10 major NASA projects have experienced cost growth averaging almost \$121.1 million, or 18.7 percent and a 15-month schedule delay.”*



GAO High Risk Series

Report excerpts continued:

- *“NASA has taken steps to improve its acquisition management and continues to work to address systemic weaknesses by adopting practices that been on the GAO High Risk List since 1990...NASA has made some progress on the management and oversight of its major projects to improve overall acquisition outcomes, including...*
 - *Revising its acquisition and engineering policy in 2007 to incorporate elements of a knowledge based approach*
 - *Enhanced cost estimating methodologies and, as of 2009, ensuring that independent analyses are used to provide decision makers with an objective representation of likely project cost and schedule results*
 - *Implemented a management review process in 2006 to enable it to more effectively monitor a project’s performance, including cost, schedule, and cross-cutting technical and non-technical issues.*
 - *As of 2009, NASA has certified all major program and project managers to ensure they possess the necessary competencies, training, and experience.”*

Before Assigning High-Risk GAO Considers the Effectiveness of Planned or Ongoing Corrective Actions

- Whether the agency has demonstrated its commitment to resolving the problem
- The extent of an agency's progress to strengthen controls to address the problem
- Whether the remaining corrective action plans are appropriate
- Whether effective solutions will be substantially completed near term, meaning a high-level of certainty corrective action will be completed within the 2-year term of the Congress
- Whether the solutions will resolve the root cause of the problem

Source: GAO-01-159SP

GAO's Criteria for Determining Governmentwide High Risks

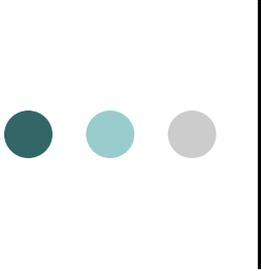
- Be evident at multiple agencies
- Affect a significant portion of the government's total budget or other resources
- Stem from a deficiency that should be monitored and addressed through individual agency actions as well as through OMB initiatives, legislative action, and/or congressional oversight

Source: GAO-01-159SP

GAO's Criteria for Removing High-Risk Designations

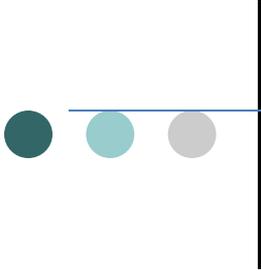
- A demonstrated strong commitment and top leadership support
- The capacity (people and other resources) to resolve the high risk
- A corrective action plan that:
 - Defines the root causes
 - Identifies effective solutions
 - Provides for substantially completing corrective measures near term, including but not limited to, steps necessary to implement solutions GAO had recommended
- A program instituted to monitor and independently validate the effectiveness and sustainability of corrective measures
- The ability to demonstrate progress in having implemented corrective measures

Source: GAO-01-159SP



Agency Outlook

- NASA has invested a significant amount of time developing robust processes and procedures that ensure a strategic approach to acquisition planning and management. The agency stays committed to the initiatives established its High Risk Corrective Action Plan in 2007:
 - NASA has strengthened program and project management;
 - Elevated acquisition decisions to NASA's highest levels;
 - Instituted targeted actions and significant enhancements to project management training;
 - Established more rigorous cost estimation practices;
 - Entirely revamped enterprise architecture for the Agency's acquisition systems; and
 - Revised procurement practices and systems



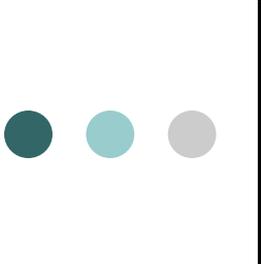
Overview: 2011 High Risk Comments – What GAO Found

NASA has taken steps to improve its acquisition management and continues to work to address systemic weaknesses. NASA has made some progress on the management and oversight of its major projects to improve overall acquisition outcomes, including the following:

- Revising its acquisition and engineering policies in 2007 to incorporate elements of a knowledge-based approach and continuing to refine the policies to provide better information for decision makers
- Enhancing cost-estimating methodologies and as of 2009 ensuring that independent analyses are used to provide decision makers with objective representation of likely project cost and schedule results
- Implementing a management review process in 2006 to enable it to more effectively monitor a project's performance, including cost, schedule, and cross-cutting technical and nontechnical issues
- Updating and increasing the availability of program and project management learning and development activities. Importantly, as of Oct 2009, NASA has certified all major program and project managers to ensure they possess the necessary competencies, training, and experience pursuant to OMB's guidance
- Although not part of its improvement plan, NASA continues to utilize earned value management to assess contract performance

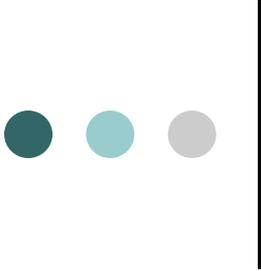
Overview: 2011 High Risk Comments – What GAO Found (con't)

- One remaining initiative, aimed at improving contractor cost performance monitoring, is still in progress
- NASA is completing work aimed at identifying the root causes of its acquisition issues
- ***It may take several years before it is apparent whether the initiatives will significantly improve NASA'S acquisition performance***



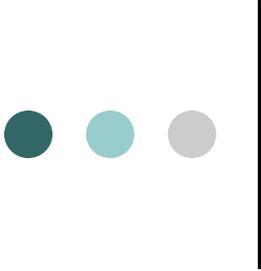
NASA's Corrective Action Plan Status Report

Initiative	Title	Status
A	Program/Project Requirements and Implementation Practices	Operational
B	Agency Strategic Acquisition Approach	Operational
C	Contractor Cost Performance Monitoring	In Progress
D	Project Management Training and Development	Operational
E	Improve Life-Cycle Cost/Schedule Management Processes	Operational
F	IEMP Process Improvement	Operational
G	Procurement Processes and Policies	Operational



NASA Status on GAO High Risk List- Committee Observations

- NASA needs to define the measure of success
- Categories that can cause cost growth and schedule slippage
 - Cost estimating and project management
 - Changes in scope, changes in schedule
 - Risk factors, unknowns, and uncertainties inherent in technologically complex projects-development projects
 - Increased use of foreign partners with poor records of cost and schedule control
- Not all of the above categories are within NASA's control
- GAO reviews on a 2 year cycle
- Next update is due February 2013



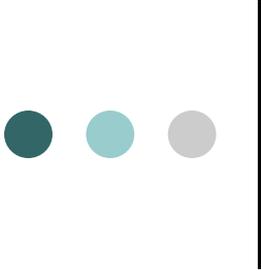
NASA Status on GAO High Risk List- Committee Observations

- How important is it for NASA to get off the GAO High Risk List?
 - Acquisition management is decentralized
 - Can't do everything: constraints on time and resources

Changes in GAO's High-Risk List 1990 - 2011

	<u>#</u>
• Original high-risk list in 1990	14
• High-risk areas added since 1990	38
• High-risk areas removed since 1990	21
• High-risk areas consolidated since 1990	2
• High-risk list in 2011	30

Source: GAO-11-278



Audit, Finance, and Analysis Committee

No specific recommendations at this time.

Work Plan for Upcoming Meetings:

- Future of financial reporting
 - Open Government
 - Financial Transparency
 - The Data Act
- IT Devices: Policies regarding access, security, and social media
- NASA Shared Services Center (NSSC) Update
- Earned Value Management (EVM) Review and Update