

## **SUPPORTING DATA**

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**FUNDS DISTRIBUTION BY INSTALLATION**

**FUNDS BY MISSION BY NASA CENTER**

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Science	226.3	199.0	180.3	152.4	133.7	162.5	221.3
Aeronautics	131.7	128.1	127.3	129.0	129.4	124.9	121.3
Space Technology	71.4	81.2	107.1	99.3	96.0	95.7	95.9
Exploration	56.7	42.6	37.6	39.7	36.1	36.4	37.2
Space Operations	20.4	27.2	17.9	16.7	17.2	15.7	15.9
Education	5.7	1.2	1.0	1.0	1.0	1.0	1.0
Cross Agency Support	215.5	208.4	201.8	201.8	201.8	201.8	201.8
Const. & Env. Comp.	15.8	3.0	37.6	30.9	32.8	31.0	79.6
<b>ARC Total</b>	<b>743.5</b>	<b>690.6</b>	<b>710.6</b>	<b>670.8</b>	<b>648.0</b>	<b>668.9</b>	<b>773.9</b>
Science	80.4	74.8	70.6	50.6	71.2	58.2	58.3
Aeronautics	52.3	66.6	65.9	63.1	61.1	60.0	53.9
Space Technology	10.3	18.5	24.4	25.4	25.4	25.4	25.4
Exploration	8.5	5.4	5.5	5.7	5.9	6.0	6.2
Space Operations	4.5	3.3	0.9	0.0	0.0	0.1	0.1
Education	10.8	3.9	0.7	0.7	0.7	0.7	0.7
Cross Agency Support	69.0	66.1	65.9	65.9	65.9	65.9	65.9
Const. & Env. Comp.	26.9	22.2	22.3	30.1	33.4	29.3	31.3
<b>DFRC Total</b>	<b>262.7</b>	<b>260.8</b>	<b>256.1</b>	<b>241.6</b>	<b>263.7</b>	<b>245.7</b>	<b>241.8</b>
Science	44.1	47.2	33.8	21.3	21.7	18.6	18.5
Aeronautics	150.8	149.4	124.5	124.3	128.0	117.2	115.7
Space Technology	65.3	86.2	125.7	151.8	157.9	139.5	131.6
Exploration	75.1	47.6	48.6	52.3	46.3	48.1	50.1
Space Operations	60.7	59.0	54.4	56.4	55.8	55.8	56.1
Education	13.1	10.5	0.9	0.9	0.9	0.9	0.9
Cross Agency Support	221.3	217.9	209.4	209.4	209.4	209.4	209.4
Const. & Env. Comp.	35.4	23.5	61.0	51.8	41.1	60.4	40.2
<b>GRC Total</b>	<b>665.9</b>	<b>641.3</b>	<b>658.4</b>	<b>668.3</b>	<b>661.2</b>	<b>649.9</b>	<b>622.5</b>
Science	2,471.1	2,465.1	2,112.1	2,045.7	1,856.2	1,654.9	1,581.1
Aeronautics	0.7	0.1	0.0	0.0	0.0	0.0	0.0
Space Technology	58.4	77.7	70.7	81.0	85.4	68.8	41.4
Exploration	7.2	1.4	1.2	1.5	1.4	1.5	1.7
Space Operations	169.6	181.9	311.3	231.0	243.5	157.0	83.5
Education	61.5	1.8	1.3	1.3	1.3	1.3	1.3
Cross Agency Support	457.9	458.5	443.9	443.9	443.9	443.9	443.9
Const. & Env. Comp.	48.0	59.8	23.3	28.1	39.6	50.1	26.1
<b>GSFC Total</b>	<b>3,274.3</b>	<b>3,246.2</b>	<b>2,963.6</b>	<b>2,832.3</b>	<b>2,671.2</b>	<b>2,377.5</b>	<b>2,179.0</b>

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**FUNDS DISTRIBUTION BY INSTALLATION**

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Science	1,150.3	959.1	777.4	596.4	525.8	473.7	332.4
Aeronautics	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Space Technology	54.7	34.7	82.6	31.0	15.3	12.3	12.3
Exploration	13.9	7.6	8.6	4.8	0.3	0.3	0.3
Space Operations	166.8	173.6	171.8	188.7	189.9	188.3	184.4
Education	2.0	0.3	0.0	0.0	0.0	0.0	0.0
Cross Agency Support	22.4	16.5	18.8	18.8	18.8	18.8	18.8
Const. & Env. Comp.	16.5	40.4	31.1	14.7	44.7	14.7	46.7
<b>JPL Total</b>	<b>1,426.6</b>	<b>1,232.1</b>	<b>1,090.4</b>	<b>854.4</b>	<b>794.8</b>	<b>708.1</b>	<b>595.1</b>
Science	25.8	19.1	20.4	20.4	22.9	22.8	22.4
Aeronautics	0.1						
Space Technology	56.6	48.0	45.4	40.9	39.3	39.2	38.8
Exploration	1,649.4	1,306.9	1,166.9	1,165.9	1,157.4	1,161.0	1,157.5
Space Operations	3,669.4	3,104.5	2,817.6	3,015.0	3,020.3	3,059.6	3,081.3
Education	8.2	3.0	1.0	1.0	1.0	1.0	1.0
Cross Agency Support	416.9	387.4	363.2	363.2	363.2	363.2	363.2
Const. & Env. Comp.	78.9	41.5	48.5	38.4	62.2	45.4	50.4
<b>JSC Total</b>	<b>5,905.4</b>	<b>4,910.4</b>	<b>4,463.1</b>	<b>4,644.9</b>	<b>4,666.4</b>	<b>4,692.3</b>	<b>4,714.7</b>
Science	319.3	299.1	160.2	105.6	5.1	173.0	150.8
Space Technology	18.3	23.4	22.5	20.4	21.5	21.3	21.3
Exploration	546.9	708.3	1,219.8	1,273.8	1,265.8	1,265.4	1,034.0
Space Operations	452.9	307.6	217.2	198.2	198.2	200.1	202.4
Education	5.5	1.4	0.9	0.9	0.9	0.9	0.9
Cross Agency Support	372.7	390.1	367.7	367.7	367.7	367.7	367.7
Const. & Env. Comp.	50.9	94.9	148.0	69.2	40.1	48.6	35.6
<b>KSC Total</b>	<b>1,766.5</b>	<b>1,824.8</b>	<b>2,136.3</b>	<b>2,035.7</b>	<b>1,899.2</b>	<b>2,077.0</b>	<b>1,812.7</b>
Science	110.7	122.5	111.6	108.4	115.4	112.3	103.9
Aeronautics	183.6	194.2	203.8	204.0	202.8	165.1	165.5
Space Technology	54.8	65.0	85.8	98.9	98.4	101.0	106.0
Exploration	50.8	29.1	26.6	33.8	30.8	31.8	33.1
Space Operations	11.6	0.2	0.1	0.1	0.1	0.1	0.1
Education	11.8	4.2	1.2	1.2	1.2	1.2	1.2
Cross Agency Support	291.3	300.5	290.5	290.5	290.5	290.5	290.5
Const. & Env. Comp.	41.7	50.7	18.0	54.3	29.2	48.2	30.8
<b>LaRC Total</b>	<b>756.3</b>	<b>766.4</b>	<b>737.5</b>	<b>791.1</b>	<b>768.4</b>	<b>750.2</b>	<b>731.0</b>
Science	154.8	134.3	123.8	120.4	123.0	124.9	98.0
Aeronautics	0.7	0.1	0.0	0.0	0.0	0.0	0.0
Space Technology	49.9	69.0	85.4	99.8	105.0	132.9	153.1
Exploration	1,341.3	1,348.3	1,207.3	1,317.0	1,379.0	1,380.7	1,352.3
Space Operations	458.6	192.6	195.4	168.2	166.5	169.4	167.3
Education	2.6	2.1	0.9	0.9	0.9	0.9	0.9
Cross Agency Support	422.9	430.1	409.3	409.3	409.3	409.3	409.3
Const. & Env. Comp.	75.8	92.5	148.8	114.4	98.2	89.5	74.9
<b>MSFC Total</b>	<b>2,506.4</b>	<b>2,269.0</b>	<b>2,170.9</b>	<b>2,230.0</b>	<b>2,281.9</b>	<b>2,307.6</b>	<b>2,255.8</b>

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**FUNDS DISTRIBUTION BY INSTALLATION**

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Science	4.0	1.4	1.9	1.9	1.9	1.9	1.9
Space Technology	5.1	5.0	5.7	6.1	6.1	6.1	6.1
Exploration	40.3	48.1	17.8	18.1	19.8	20.2	20.6
Space Operations	33.1	31.6	33.1	31.6	31.2	31.1	31.0
Education	0.7	0.8	0.7	0.7	0.7	0.7	0.7
Cross Agency Support	55.7	56.8	54.8	54.8	54.8	54.8	54.8
Const. & Env. Comp.	22.9	35.4	38.2	12.6	22.6	26.0	26.9
<b>SSC Total</b>	<b>161.8</b>	<b>179.1</b>	<b>152.1</b>	<b>125.8</b>	<b>137.0</b>	<b>140.7</b>	<b>141.8</b>
Science	333.0	752.1	1,319.1	1,691.3	2,037.6	2,111.6	2,325.8
Aeronautics	13.6	31.0	30.0	31.1	30.2	84.2	95.0
Space Technology	11.8	65.2	43.7	44.4	48.8	56.8	67.1
Exploration	30.5	167.6	193.0	163.9	133.7	125.2	383.5
Space Operations	98.7	105.4	193.6	129.1	112.3	158.0	213.1
Education	23.7	107.0	91.5	91.5	91.5	91.5	91.5
Cross Agency Support	411.2	461.5	422.3	422.3	422.3	422.3	422.3
Const. & Env. Comp.	19.9	22.1	42.4	5.9	6.4	7.0	7.8
Inspector General	36.3	38.3	37.0	37.0	37.0	37.0	37.0
Prior Approp.		(1.0)					
<b>NASA HQ Total</b>	<b>978.6</b>	<b>1,749.2</b>	<b>2,372.4</b>	<b>2,616.5</b>	<b>2,919.7</b>	<b>3,093.5</b>	<b>3,643.0</b>
<b>NASA Total</b>	<b>18,448.0</b>	<b>17,770.0</b>	<b>17,711.4</b>	<b>17,711.4</b>	<b>17,711.4</b>	<b>17,711.4</b>	<b>17,711.4</b>

*Note: Funds will not be fully distributed to Centers until after future acquisition decisions are made. Thus, Center FY 2013 allocations should not be considered final or directly comparable to FY 2012 allocations.*

*The outyear budgets for SMD at Headquarters is larger than that at the Centers pending future mission selections. When missions are selected, funds distribution to Centers is adjusted.*

## SUPPORTING DATA

# CIVIL SERVICE FULL-TIME EQUIVALENT DISTRIBUTION

The workforce level proposed in the budget supports NASA's traditional investments in space exploration, aeronautics research, space technology development, science investigation, and sharing the results of Agency activities with the public and educators.

The Agency will apply its capabilities to the range of mission, research, and technology work while continuing to reshape and realign workforce skills to adjust to changing requirements. NASA anticipates offering buyouts in selected surplus skill areas, and is prepared to identify, recruit and retain employees who possess essential/critical skills and competencies. The workforce will continue to demonstrate the relevance of its work to society, apply itself to contemporary problems, lead or participate in emerging technology opportunities, and communicate the challenges and results of Agency programs and activities.

Average Agency full-time equivalent (FTE) levels are expected to decline by over 250 FTE from FY 2012 to FY 2013. This ceiling decline addresses workforce at several Centers affected by changes in the human spaceflight portfolio, is consistent with overall Agency budget reductions, and reflects the planned end of a temporary FTE increase in FY 2010 to FY 2011 that was granted to encourage early career hiring at Centers.

## CIVIL SERVICE FULL-TIME EQUIVALENT DISTRIBUTION BY CENTER

	Actual	Estimate		Notional			
	FY 2011 <sup>1</sup>	FY 2012 <sup>2</sup>	FY 2013 <sup>2</sup>	FY 2014 <sup>2</sup>	FY 2015 <sup>2</sup>	FY 2016 <sup>2</sup>	FY 2017 <sup>2</sup>
ARC	1,231.6	1,230.0	1,219.2	1,219.2	1,219.2	1,219.2	1,219.2
DFRC	556.6	555.0	551.2	551.2	551.2	551.2	551.2
GRC	1,655.3	1,652.0	1,627.5	1,619.9	1,619.9	1,619.9	1,619.9
GSFC	3,356.9	3,392.0	3,372.3	3,352.4	3,352.4	3,352.4	3,352.4
JSC	3,307.8	3,219.4	3,151.2	3,151.2	3,151.2	3,151.2	3,151.2
KSC	2,145.9	2,098.2	2,049.2	2,049.2	2,049.2	2,049.2	2,049.2
LaRC	1,934.3	1,928.0	1,911.2	1,911.2	1,911.2	1,911.2	1,911.2
MSFC	2,538.7	2,489.6	2,440.8	2,440.7	2,440.7	2,440.7	2,440.7
SSC	285.7	307.0	307.0	307.0	307.0	307.0	294.0
HQ	1,226.9	1,212.8	1,189.5	1,189.5	1,189.5	1,189.5	1,189.5
NSSC	132.4	145.0	145.0	145.0	145.0	145.0	145.0
<b>NASA Total</b>	<b>18,372.1</b>	<b>18,229.0</b>	<b>17,964.2</b>	<b>17,936.7</b>	<b>17,936.7</b>	<b>17,936.7</b>	<b>17,923.7</b>
OIG	206.0	213.0	213.0	213.0	213.0	213.0	213.0

<sup>1</sup> Includes 288 student FTE

<sup>2</sup> Includes 285 student FTE

SUPPORTING DATA

**CIVIL SERVICE FULL-TIME EQUIVALENT DISTRIBUTION**

**FY 2013 FTE DISTRIBUTION BY ACCOUNT BY CENTER**

NASA Full Time Equivalent (FTE) Workforce - FY 2013										
	Science	Aeronautics	Space Technology	Exploration	Space Operations	Education	Cross Agency Support	Reimbursable/Working Capital	NASA-Funded Total	Agency TOTAL
ARC	155.0	236.3	119.3	117.1	18.9	5.5	562.1	5.0	1,214.2	<b>1,219.2</b>
DFRC	98.5	166.7	26.5	16.1	3.1	5.2	220.1	15.0	536.2	<b>551.2</b>
GRC	84.9	373.6	138.2	246.5	147.6	7.0	627.1	3.0	1,624.9	<b>1,627.9</b>
GSFC	1,238.9	-	124.0	9.3	150.0	7.2	1,618.9	224.0	3,148.3	<b>3,372.3</b>
JSC	40.2	-	102.4	855.9	1,255.9	7.2	889.6	-	3,151.2	<b>3,151.2</b>
KSC	0.6	-	76.0	613.5	464.4	7.4	871.2	16.0	2,033.1	<b>2,049.1</b>
LaRC	213.5	533.8	164.0	153.7	0.5	8.0	837.7	-	1,911.2	<b>1,911.2</b>
MSFC	146.0	-	105.1	907.6	252.1	6.5	1,023.5	-	2,440.8	<b>2,440.8</b>
SSC	6.7	-	11.7	64.3	41.7	5.0	146.6	31.0	276.0	<b>307.0</b>
HQ	-	-	-	-	-	-	1,189.5	-	1,189.5	<b>1,189.5</b>
NSSC	-	-	-	-	-	-	-	145.0	0.0	<b>145.0</b>
<b>NASA Total</b>	<b>1,984.3</b>	<b>1,310.4</b>	<b>867.2</b>	<b>2,984.0</b>	<b>2,334.2</b>	<b>59.0</b>	<b>7,986.3</b>	<b>439.0</b>	<b>17,525.4</b>	<b>17,964.4</b>
OIG										213.0

## SUPPORTING DATA

# WORKING CAPITAL FUND

The NASA Working Capital Fund (WCF) was established to satisfy specific recurring needs for goods and services through use of a business-like buyer and seller approach under which NASA's WCF entities provide goods or services pursuant to contracts and agreements with their customers. The overarching aim of WCF is to promote economy, efficiency, and accountability with fully reimbursed rates by focusing on streaming operations, extending resources, measuring performance, and improving customer satisfaction.

NASA's WCF is comprised of three entities:

- NASA Shared Services Center (NSSC);
- Solutions for Enterprise-Wide Procurement (SEWP) Government-Wide Acquisition Contract; and
- Information Technology (IT) Infrastructure Integration Program (I3P).

## WORKING CAPITAL FUND BUDGET SUMMARY

(\$ in millions)	Actual	Estimate	
	FY 2011	FY 2012	FY 2013
NASA Shared Services Center (NSSC)	74.1	85.1	85.9
Solutions for Enterprise-Wide Procurement (SEWP)	10.0	11.0	11.5
IT Infrastructure Integration Program (I3P)	0.0	237.2	303.1
<b>Total Spending Authority</b>	<b>84.1</b>	<b>333.3</b>	<b>400.5</b>
Unobligated Brought Forward, Oct. 1	5.4	4.9	25.0
Recoveries of Prior Yr. Unpaid Obligations	0.7	1.8	1.9
Total Spending Authority (see above)	84.1	333.3	400.5
<b>Total Budgetary Resources</b>	<b>90.2</b>	<b>340.0</b>	<b>427.4</b>
NASA Shared Services Center (NSSC)	(74.9)	(85.8)	(88.7)
Solutions for Enterprise Wide Procurement (SEWP)	(10.5)	(10.0)	(10.8)
IT Infrastructure Integration Program (I3P)	0.0	(219.2)	(304.3)
<b>Total Obligations</b>	<b>(85.4)</b>	<b>(315.0)</b>	<b>(403.8)</b>
<b>NASA Unobligated Balance (end of year)*</b>	<b>4.8</b>	<b>25.0</b>	<b>23.6</b>

\*Unobligated balance end-of-year is budgetary resources less obligation

## NASA SHARED SERVICES CENTER (NSSC)

NSSC opened in March 2006 to provide centralized administrative processing services and customer contact center operations for support of human resources, procurement, financial management, Agency information technology (IT), and Agency business support services. NASA established NSSC, a function under the NASA Headquarters Mission Support Directorate, as a public/private partnership. NSSC has

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### **WORKING CAPITAL FUND**

awarded its major business management and IT services contract to Computer Sciences Corporation. Typical expenditures are related to civil service workforce, support contractor, other direct procurements, and Agency training purchases.

NSSC is located on the grounds of SSC and operates in a manner that provides for transparency and accountability of costs and services. NASA has reduced its administrative costs through centralized processing at NSSC. The work performed by NSSC frees Agency resources that can then be redirected to NASA's mission of space exploration, scientific discovery, and aeronautics research.

NSSC's revenue streams include funding from the NASA Centers, mission directorates, and various NASA mission support offices. During FY 2013, NSSC will continue to offer similar services as in FY 2012 with no significant new scope anticipated.

### **SOLUTIONS FOR ENTERPRISE-WIDE PROCUREMENT (SEWP)**

SEWP refers to operations related to the Government-Wide Acquisition Contract that was established under the authority of section 5112 of the Information Technology Management Reform Act (40 U.S.C. 1412(e)) enacted in 1996, under which NASA is designated by the Office of Management and Budget as a Federal government Executive Agent for SEWP contracts.

SEWP was established as a WCF entity to allow all Federal agencies use of a best value tool to purchase IT product solutions and services. Under this approach, the buying power of Federal Agencies is combined to acquire best value for IT products and services very efficiently. Typical acquisitions include a wide range of advanced technologies such as UNIX-Linux, and Windows-based desktops and servers, along with peripherals, network equipment, storage devices, security tools, software, and other IT products and product-based solutions.

SEWP promotes aggressive pricing using online tools to obtain multiple, competitive quotes from vendors. On average, SEWP quotes have a 15 percent savings for any Federal customer using SEWP contracts. In addition, SEWP offers a low surcharge to recover NASA's costs to operate the program with an average 0.36 percent fee as compared to the Government standard of 0.75 percent. SEWP revenue is generated solely from the surcharge fees on all transactions processed. For FY 2012, the Federal government is projected to save about \$4 million in service fees (based on the difference between General Service Administration and SEWP surcharge fees) and \$30 million in overall costs for IT product solutions and services using NASA SEWP contracts.

### **IT INFRASTRUCTURE INTEGRATION PROGRAM (I3P)**

WCF operations supporting I3P began in early FY 2012. WCF enables I3P to improve the efficiency and economy in which contract services and management are provided to support NASA's IT strategic initiatives and to increase visibility into NASA's IT budget and expenditures. Under I3P, NASA has consolidated 19 separately managed contracts into four centrally managed ones described as follows:

- The Enterprise Applications Service Technologies contract supports NASA Enterprise Applications Competency Center (NEACC) applications hosted by MSFC. The NEACC operates

## SUPPORTING DATA

### **WORKING CAPITAL FUND**

and maintains a broad spectrum of NASA's enterprise applications, with an emphasis on fully integrating business process expertise with application and technical knowledge. A small team of civil servants and support contractors sustain operations, implement new applications and capabilities, and provide business readiness support to the stakeholders and end-users.

- The NASA Integrated Communications Services contract provides wide and local area network, telecommunications, video, and data services hosted at MSFC.
- The Web Enterprise Service Technologies contract will provide public Web site hosting, Web content management and integration, and search services. Services are planned to be hosted by GSFC and ARC. However, this contract is not yet awarded.
- The Agency Consolidated End-User Services contract provides program management, provisioning and support of desktops, laptops cell phones, personal digital assistants, office automation software, and video conferencing. Services are hosted by NSSC.

I3P's consolidated contracting approach benefits NASA by providing cost saving opportunities such as the reduction in administrative burden involved with the business management of contracts and a significant reduction in procurement request transaction volume. Other I3P benefits include: the streamlining of budgeting, funding, and costing I3P services; achieving transparency through the provision of detailed customer monthly billings; and providing consolidated, consistent reporting of Agency-wide consumption of I3P-related goods and services.

I3P is unique in that revenue streams and expenditures are limited to contract costs for its four service contracts. Revenue streams include funding from the NASA Centers, NASA Mission Directorates, and various NASA mission support offices. In FY 2013, the I3P WCF will continue to offer similar services as in FY 2012, with no significant new scope anticipated. Note that FY 2013 amounts are higher than FY 2012 due to the initial phase-in period of Centers across the different I3P contracts at different times throughout FY 2012. FY 2013 is the first full year of operations for the I3P contracts, which is reflected in the FY 2013 anticipated funding level.

SUPPORTING DATA

**BUDGET BY OBJECT CLASS**

(\$ in millions)	Science	Aeronautics	Space Technology	Exploration	Space Operations	Education	Cross Agency Support	Construction, Environmental Compliance, and Remediation	Office of the Inspector General	NASA Total
Full-time permanent	224.0	141.0	102.0	335.0	267.0	5.0	880.0	0.0	24.0	1,978.0
Other than full-time permanent	24.0	11.0	5.0	15.0	10.0	0.0	40.0	0.0	0.0	105.0
Other personnel compensation	1.0	0.0	1.0	1.0	3.0	0.0	34.0	0.0	0.0	40.0
Special personal service payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Personnel compensation</b>	<b>249.0</b>	<b>152.0</b>	<b>108.0</b>	<b>351.0</b>	<b>280.0</b>	<b>5.0</b>	<b>954.0</b>	<b>0.0</b>	<b>24.0</b>	<b>2,123.0</b>
Civilian personnel benefits	68.0	41.0	30.0	97.0	77.0	3.0	248.0	0.0	8.4	572.4
Benefits to former personnel	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0
Travel & transport. of persons	17.0	6.0	4.0	9.0	15.0	1.0	23.0	0.0	1.0	76.0
Transport. of things	3.0	0.0	0.0	18.0	1,256.0	0.0	4.0	0.0	0.0	1,281.0
Rental payments to GSA	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	26.0
Rental payments to others	8.0	0.0	0.0	0.0	1.0	0.0	3.0	0.0	0.0	12.0
Communications, utilities & misc	3.0	5.0	0.0	6.0	10.0	0.0	68.0	0.0	0.0	92.0
Printing and reproduction	1.0	0.0	0.0	0.0	1.0	0.0	4.0	0.0	0.0	6.0
Advisory and assistance services	142.0	17.0	6.0	251.0	173.0	5.0	190.0	30.0	0.0	814.0
Other services	251.0	29.0	11.0	29.0	99.0	8.0	330.0	7.0	3.6	767.6
Other purchases of goods & services from Gov accounts	156.0	7.0	4.0	29.0	49.0	0.0	48.0	57.0	0.0	350.0
Operation and maint. of facilities	24.0	26.0	5.0	90.0	65.0	1.0	297.0	98.0	0.0	606.0
R and D contracts	3,309.0	193.0	495.0	2,868.0	1,761.0	6.0	155.0	77.0	0.0	8,864.0
Medical care	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0
Operation and maint. of equip.	68.0	16.0	3.0	63.0	162.0	1.0	414.0	11.0	0.0	738.0
Supplies and materials	22.0	13.0	4.0	16.0	38.0	1.0	18.0	2.0	0.0	114.0
Equipment	48.0	20.0	7.0	23.0	14.0	0.0	40.0	1.0	0.0	153.0
Land and structures	9.0	4.0	0.0	3.0	6.0	0.0	48.0	273.0	0.0	343.0
Grants, subsidies, and contrib.	536.0	23.0	20.0	80.0	9.0	71.0	23.0	0.0	0.0	762.0
<b>Other Object Classes</b>	<b>4,665.0</b>	<b>400.0</b>	<b>589.0</b>	<b>3,582.0</b>	<b>3,736.0</b>	<b>97.0</b>	<b>1,945.0</b>	<b>556.0</b>	<b>13.0</b>	<b>15,583.0</b>
<b>NASA Total, Direct</b>	<b>4,914.0</b>	<b>552.0</b>	<b>697.0</b>	<b>3,933.0</b>	<b>4,016.0</b>	<b>102.0</b>	<b>2,899.0</b>	<b>556.0</b>	<b>37.0</b>	<b>17,706*</b>

\*Total estimated obligations

## SUPPORTING DATA

# STATUS OF UNOBLIGATED FUNDS

The table below displays actual and estimated unobligated balances of direct discretionary budget authority in each NASA appropriation account at the end of each fiscal year. Data is presented on a non-comparable basis (i.e., based solely on an appropriation account's activity or projected activity, with no adjustment to the FY 2011 or FY 2012 amounts to make them comparable to the budget structure underlying the FY 2013 request).

## UNOBLIGATED FUNDS SUMMARY BY APPROPRIATIONS ACCOUNT

(\$ in millions)	Unobligated Balance (Budget Authority)		
	Actual	Estimate	
	9/30/2011	9/30/2012	9/30/2013
Science	77.0	75.0	72.0
Aeronautics	12.0	11.0	11.0
Space Technology	--	11.0	13.0
Exploration	186.0	71.0	71.0
Space Operations	88.0	97.0	94.0
Education	28.0	7.0	5.0
Cross Agency Support	3.0	19.0	18.0
Construction & Environmental Compliance and Restoration	109.0	108.0	171.0
Science, Exploration and Aeronautics	--	3.0	--
Office of the Inspector General	1.0	--	--
<b>NASA Total</b>	<b>502.0</b>	<b>392.0</b>	<b>442.0</b>

*Note: The end of FY 2013 unobligated balance is based on historical performance of the account. The \$171.0 million Construction and Environmental Compliance and Restoration account figure is starkly than the previous numbers due to a sharp increase in FY 2013 appropriation and estimated carryover of prior year funds.*

## SUPPORTING DATA

# REIMBURSABLE ESTIMATES

Reimbursable agreements are agreements where the NASA costs associated with the undertaking are borne by the non-NASA partner. NASA undertakes reimbursable agreements when it has equipment, facilities, and services that it can make available to others in a manner that does not interfere with NASA mission requirements. As most reimbursable requests to NASA do not occur until the year of execution, the FY 2012 to 2013 estimates are based on an annual survey of Centers' anticipated reimbursable agreements.

## REIMBURSABLE ESTIMATES BY APPROPRIATIONS ACCOUNT

(\$ in millions)	Actual	Estimate	
	FY 2011	FY 2012	FY 2013
Cross-Agency Support	1,891.2	2,200.0	2,300.0
Office of the Inspector General	0.7	1.2	1.2
<b>NASA Total</b>	<b>1,891.9</b>	<b>2,201.2</b>	<b>2,301.2</b>

## SUPPORTING DATA

# ENHANCED USE LEASING

In 2003, NASA Congress authorized NASA to demonstrate leasing authority and collections at two Centers. In 2007 and in 2008, Congress amended that authority such that NASA may enter into leasing arrangements at all Centers after December 2008. After deducting the costs of administering the leases, Centers are then permitted to retain 65 percent of net receipt revenue, and the balance is made available agency-wide for NASA. These funds are in addition to annual appropriations. To ensure annual oversight and review, the 2010 Consolidated Appropriations Act, P.L. 111-117 contains a provision that requires NASA to submit an estimate of gross receipts and collections and proposed use of all funds collected in the annual budget justification submission to Congress. There are no civil servants funded from Enhanced Use Leasing (EUL) income. The table below depicts the estimated FY 2013 EUL expenses and revenues. The amounts identified under Capital Asset Account Expenditures may be adjusted between projects listed based on actual contract award.

## SUMMARY OF FY 2013 EUL ACTIVITY

(in \$ thousands)	ARC	KSC	SSC	Agency	Total
Base Rent	5,443.6	41.0	35.6		5,520.2
Institutional Support Income	1,802.9	133.9	3.0		1,939.8
<b>Total Rent Income</b>	<b>7,246.5</b>	<b>174.9</b>	<b>38.6</b>	<b>0.0</b>	<b>7,460.0</b>
Institutional Support Costs	(1,802.9)	(133.9)	(3.0)		(1,939.8)
Lease Management and Administration	(768.0)				(768.0)
Tenant Building Maintenance and Repair	(960.5)				(960.5)
<b>Total Cost Associated with Leases</b>	<b>(3,531.4)</b>	<b>(133.9)</b>	<b>(3.0)</b>	<b>0.0</b>	<b>(3,668.3)</b>
<b>Net Revenue from Lease Activity</b>	<b>3,715.1</b>	<b>41.0</b>	<b>35.6</b>	<b>0.0</b>	<b>3,791.7</b>
<b>Beginning Balance, Capital Asset Account</b>	<b>694.4</b>			<b>1,279.5</b>	<b>1,973.9</b>
<b>Net Revenue from Lease Activity Retained at Center</b>	<b>2,414.8</b>	<b>26.7</b>	<b>23.1</b>	<b>1,327.1</b>	<b>3,791.7</b>
<b>Total Available, Capital Asset Account</b>	<b>3,109.2</b>	<b>26.7</b>	<b>23.1</b>	<b>2,606.6</b>	<b>5,765.6</b>
Planned Maintenance, Various Buildings	1,714.0	26.7	23.1		1,763.8
Replace Roofs on Various Buildings (ARC)	1,395.2				1,395.2
Energy and Sustainability Upgrades, Various Buildings (Various Centers)				2,606.6	2,606.6
Unobligated Carry over to Complete Prior Year Projects					
<b>Capital Asset Account Expenditures</b>	<b>3,109.2</b>	<b>26.7</b>	<b>23.1</b>	<b>2,606.6</b>	<b>5,765.6</b>
<b>Capital Asset Account Ending Balance</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Additional Reimbursable Demand Services Requested by Lessees (including overhead)	2,748.1				2,748.1
Cost to Fulfill Reimbursable Demand Services (including overhead)	(2,748.1)				(2,748.1)
<b>Net Activity due to Reimb. Demand and Services</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>In Kind Activity</b>	<b>0.0</b>	<b>162.0</b>	<b>0.0</b>	<b>0.0</b>	<b>162.0</b>

## SUPPORTING DATA

# ENHANCED USE LEASING

## DEFINITIONS

### **Base Rent**

Revenue collected from tenant for rent of land or buildings.

### **Institutional Support Costs**

Cost for institutional shared services such as fire, security, first responder, communications, common grounds, road, and infrastructure maintenance, and routine administrative support and management oversight (i.e., environmental).

### **Total Rental Income**

Total gross proceeds from EUL activities for expenses due to renting NASA property.

### **In-Kind**

Consideration accepted in lieu of rent payment. (Only applies to selected leases signed prior to January 1, 2009.)

### **Reimbursable Demand Services**

Services such as janitorial, communications, and maintenance that solely benefit the tenant and provided for their convenience. There is no net income received by NASA, as these payments may only cover the costs of NASA and its vendors providing these services.

### **Overhead**

General and administrative costs associated with management of the specified demand services.

## SUPPORTING DATA

# BUDGET FOR MICROGRAVITY SCIENCES

## BUDGET FOR INTERNATIONAL SPACE STATION RESEARCH

The HEOMD supports research to take advantage of the unique environment of reduced gravity on ISS in two broad categories, Exploration ISS Research and Non-Exploration ISS Research.

## BUDGET SUMMARY

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Exploration ISS Research	69.0	23.0	22.0	20.0	20.0	19.0	18.0
Non- Exploration ISS Research	173.0	210.0	217.0	212.0	217.0	222.0	226.0
<b>NASA Total</b>	<b>242.0</b>	<b>233.0</b>	<b>239.0</b>	<b>233.0</b>	<b>237.0</b>	<b>241.0</b>	<b>244.0</b>
% of Non-Exploration to Total	72.0%	90.0%	91.0%	91.0%	92.0%	92.0%	93.0%

*The amounts included for FY 2011 reflect actual, FY 2012 thru FY 2017 are reflective of the PPBE 13 OMB President's Budget Request.*

## NON-PROFIT ORGANIZATION

Having launched the U.S. and international partner elements, and established six-person crew capability, the ISS program focus is now primarily on research. During FY 2012, NASA awarded a cooperative agreement to the Center for the Advancement of Science in Space (CASIS), an independent non-profit organization with responsibility to further develop national uses of ISS. CASIS will oversee all research involving organizations other than NASA, and transfer current NASA biological and physical research to CASIS in future years. Space Operations oversight of existing research projects will be phased out and CASIS will co-select/manage new peer-reviewed projects. As on-going work within the NASA research project offices is completed in future years, extension/renewal decisions should be made by CASIS.

Through the management partnership, research opportunities will be expanded to conduct research in life sciences, material sciences, biotechnologies, condensed matter physics and thermal sciences (e.g., fluid mechanics, thermodynamics, heat transfer, and combustion). NASA will continue to support research to meet NASA requirements for exploration including astronaut health and serve as a test bed for the development and demonstration of technology for future space exploration missions.

## EXPLORATION ISS RESEARCH

Exploration ISS Research supports the Agency's need for improved knowledge about working and living in space to enable future long-duration human exploration missions.

The Human Research Program will provide research results that reduce risks to crew health and performance that stem from prolonged exposure to reduced gravity, space radiation, and isolation during exploration missions. Risk mitigation will be achieved by conducting ISS research in human health

## SUPPORTING DATA

# **BUDGET FOR MICROGRAVITY SCIENCES**

countermeasures, space human factors and habitability, behavioral health and performance, and exploration medicine, tools, and technologies.

ISS Research will investigate the underlying gravity-dependent phenomena in the following areas: fire prevention, detection, and suppression; boiling; multiphase flow of fluids; and capillary driven flow. These applied research investigations will provide needed data that is useful in the future design of the following space technology areas: life support systems; propellant storage; power generation; thermal control; and advanced environmental monitoring and control. Funding for the Multi-User System Support (MUSS), which supports Exploration ISS Research, is included in the table above. The MUSS function is responsible for all payload physical, analytical and operations integration activities; projecting available utilization resources and accommodations; tactical planning; and execution of the day-to-day ISS integrated research plan for all payloads, including NASA, international partners, and non-NASA users.

## **NON-EXPLORATION ISS RESEARCH**

NASA allocates at least 15 percent of the funds budgeted for ISS research to ground-based, free-flyer, and ISS life and physical science research that is not directly related to supporting the human space exploration program, in accordance with Section 204 of the NASA Authorization Act of 2005. The purpose is to ensure the capacity to support ground-based research leading to space-based basic and applied scientific research in a variety of disciplines with potential direct national benefits and applications that can be advanced significantly from the uniqueness of microgravity and the space environment. Additionally, this allocation allows basic ISS research in fields including, physiological research, basic fluid physics, combustion science, cellular biotechnology, low-temperature physics, cellular research, materials science, and plant research to be carried out to the maximum extent practicable. This research helps to sustain existing U.S. scientific expertise and capability in microgravity research.

The Non-Exploration ISS Research line in the above table also includes the Alpha Magnetic Spectrometer, and costs for MUSS support. These two activities support non-exploration ISS research and have been included in the microgravity budget justification for prior years. The Alpha Magnetic Spectrometer is a particle physics and astrophysics experiment that looks for dark matter, anti-matter, and strange matter.

## SUPPORTING DATA

# BUDGET FOR SAFETY OVERSIGHT

The following table provides the safety and mission assurance budget estimates. This includes the Agency-wide safety oversight functions as well as the estimated project specific safety, reliability, maintainability, and quality assurance elements embedded within individual projects.

## BUDGET SUMMARY FOR SAFETY OVERSIGHT

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Safety and Mission Assurance	48.1	49.4	47.8	47.8	47.8	47.8	47.8
Institutional Operational Safety	29.0	30.7	30.7	30.7	30.7	30.7	30.6
Technical Authority/S&MA Spt.	51.0	50.7	52.3	52.3	52.3	52.6	53.4
<b>Agency-wide Safety Oversight</b>	<b>128.1</b>	<b>130.8</b>	<b>130.8</b>	<b>130.8</b>	<b>130.8</b>	<b>131.1</b>	<b>131.8</b>
<b>Program Specific</b>	<b>295.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>
<b>NASA Total, Safety</b>	<b>423.1</b>	<b>430.8</b>	<b>430.8</b>	<b>430.8</b>	<b>430.8</b>	<b>431.1</b>	<b>431.8</b>

## DEFINITIONS

### Agency-Wide Safety Oversight

Agency level programs and activities that support the overarching NASA Safety and Mission Success program.

### Safety and Mission Assurance

The Safety and Mission Assurance (S&MA) program administers and refines the pertinent policies, procedural requirements, and technical safety standards. The program participate in forums that provide advice to the Administrator, mission directorates, program managers, and Center directors who are ultimately accountable for the safety and mission success of all NASA programs, projects, and operations. Specific program responsibility include, among other activities, managing NASA's Orbital Debris program, NASA's Electronic Parts program, and the NASA Safety Center.

### Institutional Operational Safety

NASA's institutional operational safety program is driven by the Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations 1960, OSHA Standards, NASA Procedural Requirements (NPR) 8715.1, NASA Safety and Health Handbook Occupational Safety and Health Programs, NPR 8715.3, and NASA's general safety program requirements. The program includes construction safety, mishap prevention program including reporting and investigations, safety training, safety awareness, the voluntary protection program, safety metrics and trend analysis, contractor insight/oversight, support to safety boards and committees, support to emergency preparedness and fire safety program, aviation safety, explosives and propellants safety, nuclear safety requirements, radiation safety protection, confined space entry, fall protection, lifting devices, pressure vessel safety, hazard

## SUPPORTING DATA

# **BUDGET FOR SAFETY OVERSIGHT**

reporting and abatement systems, cryogenic safety, electrical safety requirements (lock out/tag out), facility systems safety, risk management, institutional safety policy development, visitor and public safety, and institutional safety engineering. The institutional operational safety program requires significant Federal, state, and local coordination.

### **S&MA Technical Authority and S&MA Support**

The S&MA technical authority program includes travel and labor only for all S&MA supervisors, branch chiefs or above, and designated deputies. In addition, where the principal job function of a non-supervisory S&MA person consists of rendering authoritative decisions on S&MA requirements matters relating to the design or operation of a program or project, that person's salary is included. These positions often are the lead S&MA manager positions for large programs where the decision making process is nearly a full time demand. This category does not include salary for those whose work only occasionally falls as an authority task. This includes travel funds in direct support of these individuals.

S&MA is mission support, including administrative support, which cannot be directly charged to a program. This budget includes policy development across the programs, range safety, payload safety (ground processing), independent assessments, metrology and calibration (for Center), reliability and maintainability policy, Center-wide S&MA program integration and analysis, business and administrative support to S&MA directorates, and quality assurance for facilities and ground support hardware.

### **Program Specific**

Project specific safety and mission assurance costs are included in individual project budgets. These costs include the technical and management efforts of directing and controlling the safety and mission assurance elements of the project. This incorporates the design, development, review, and verification of practices and procedures and mission success criteria intended to assure that the delivered spacecraft, ground systems, mission operations, and payload(s) meet performance requirements and function for their intended lifetimes. This element excludes mission and product assurance efforts directed at partners and subcontractors other than a review/oversight function, and the direct costs of environmental testing. These estimates are based on last year's S&MA data call.

## SUPPORTING DATA

# PHYSICIANS' COMPARABILITY ALLOWANCE (PCA)

The Physicians' Comparability Program permits agencies to provide allowances to certain Federal physicians who enter into service agreements with their agencies to address recruitment and retention problems. Physicians' comparability allowances (PCAs) are critical to NASA's ability to retain flight surgeons and physicians, as well as support NASA's goal of maintaining a stable, high quality physician workforce. NASA's physicians are required to acquire and maintain specialized experience vital to supporting the Agency's missions on the ISS. JSC, NASA's primary user of PCAs is located in Houston, Texas and competes with some of the best medical facilities in the country. The following report summarizes NASA's use of this authority.

## PCA DATA SUMMARY

		Actual	Estimate	
		FY 2011	FY 2012	FY 2013
Number of Physicians Receiving PCAs		27.0	25.0	23.0
Number of Physicians with One-Year PCA Agreements		27.0	25.0	23.0
Number of Physicians with Multi-Year PCA Agreements				
Average Annual PCA Physician Pay (without PCA payment)		156,341.0	156,545.0	156,746.0
Average Annual PCA Payment		20,438.0	20,634.0	20,515.0
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position -JSC	25.0	23.0	21.0
	Category II Research Position			
	Category III Occupational Health			
	Category IV A Disability Evaluation			
	Category IV B Health and Medical Admin- KSC	2.0	2.0	2.0

*\*FY 2013 data will be approved during the FY 2014 budget cycle*

## MAXIMUM ANNUAL PCA AMOUNT PAID TO EACH CATEGORY OF PHYSICIAN

The allowance amount authorized will be the minimum amount necessary to address the recruitment or retention problem and will be determined by considering the factors listed in 5 CFR 595.105(a). Allowance amounts may not exceed:

- \$14,000 per annum if the employee has served as a government physician for 24 months or less;
- \$24,000 per annum if the employee has served as a government physician for 24 to 48 months; or
- \$30,000 per annum if the employee has served as a government physician for more than 48 months.

## RECRUITMENT AND RETENTION ISSUES

### Category 1 Clinical Positions

There are a number of recruitment and retention challenges at JSC:

- The Houston area has world-renowned medical facilities with considerably higher physician salaries than NASA is able to offer at JSC.

## SUPPORTING DATA

# **PHYSICIANS' COMPARABILITY ALLOWANCE (PCA)**

- Time and effort to train a new physician to fully support a mission is approximately two years.
- JSC's pre-PCA attrition rate was nine percent, with many terminating employment with less than three years of service.

Therefore, NASA's current needs for clinical resources continue to be re-evaluated in this post-Shuttle era:

- Anticipating a reduced need for clinical resources, the Space Medicine Division made an active decision not to replace four civil service and seven contractor physician losses.
- Active astronauts who retire from NASA convert to the Lifetime Surveillance of Astronaut Health program, which is managed by the JSC physician staff. Therefore, although the active astronaut numbers are decreasing, the patient population in the program increases.
- Although NASA has had several clinical personnel reductions over the past year or so, the Agency has been able to absorb those losses and continue to provide clinical services in large part due to PCA.

### **Category IV-B Health and Medical Administration**

NASA currently has two physicians receiving PCA at KSC, and the PCA has been an effective retention tool.

## **HOW PCA ALLEVIATES RECRUITMENT AND RETENTION PROBLEMS**

PCA has been very effective at NASA. The attrition rate at JSC for FY 2009 was zero; FY 2010 was three percent; and FY 2011 was seven percent (two losses with one loss due to death). JSC had limited hiring capability with no additional hires in FY 2010 or FY 2011. JSC's concentration has been on retaining our current physicians which has been successful as evidenced by the low attrition rates.

KSC has not experienced recruitment or retention issues due to the existence of PCA. The Center is looking to retain the current PCA allowance for FY 2012 and decreasing it in FY 2013 which negatively impacts the net income of KSC physicians.

## **ADDITIONAL INFORMATION**

With decreasing funds expected in FY 2012 and beyond, retaining essential civil service clinical resources will become increasingly critical to maintaining core competencies and fulfilling mission objectives.

SUPPORTING DATA

**BUDGET FOR STEM EDUCATION**

The U.S. government recognizes that Federal agencies have a valuable role in science, technology, engineering, and mathematics (STEM) education. NASA investments in STEM education inspire student achievement in these fields, help educators develop skills, and share NASA’s missions with the public. Through real-world training at NASA’s facilities and interactions with the Agency’s scientists, engineers, and technicians, NASA is helping to build a qualified workforce both for its future missions and a strong national economy.

**NASA STEM EDUCATION INVENTORY FUNDING, BY ACCOUNT**

(in \$ millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Total</b>	<b>157.4</b>	<b>148.2</b>	<b>117.3</b>	<b>117.3</b>	<b>117.3</b>	<b>117.3</b>	<b>117.3</b>
<b>Science</b>	<b>27.6</b>	<b>23.5</b>	<b>21.0</b>	<b>21.0</b>	<b>21.0</b>	<b>21.0</b>	<b>21.0</b>
<b>Aeronautics Research</b>	<b>2.1</b>	<b>2.7</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>
<b>Space Technology</b>	<b>7.0</b>	<b>12.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>
<b>Exploration</b>	<b>1.7</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
<b>Space Operations</b>	<b>0.8</b>						
<b>Education</b>	<b>97.3</b>	<b>89.9</b>	<b>73.0</b>	<b>73.0</b>	<b>73.0</b>	<b>73.0</b>	<b>73.0</b>
Aerospace Rsch and Career Dev.	45.5	40	24	24	24	24	24
<i>NASA Space Grant</i>	<i>45.5</i>	<i>40.0</i>	<i>24.0</i>	<i>24.0</i>	<i>24.0</i>	<i>24.0</i>	<i>24.0</i>
STEM Education and Accountability	51.8	49.9	49.0	49.0	49.0	49.0	49.0
<i>MUREP</i>	<i>28.5</i>	<i>30.0</i>	<i>30.0</i>	<i>30.0</i>	<i>30.0</i>	<i>30.0</i>	<i>30.0</i>
<i>STEM Ed. and Accountability Proj.</i>	<i>23.3</i>	<i>19.9</i>	<i>19.0</i>	<i>19.0</i>	<i>19.0</i>	<i>19.0</i>	<i>19.0</i>
<b>Cross Agency Support</b>	<b>20.9</b>	<b>17.3</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>

## SUPPORTING DATA

# BUDGET FOR PUBLIC RELATIONS

The NASA budget for Public Affairs is funded within Cross-Agency Support under Center Management and Operations and Agency Management and Operations. All the Installations listed below, except for Headquarters, are in the Center Management and Operations account and the Headquarters budget is in the Agency Management and Operations account.

These budgets include dissemination of information to the news media and the general public concerning NASA programs. Content includes support for public affairs/public relations, Center newsletters, internal communications, guest operations (including bus transportation), public inquiries, NASA TV, the <http://www.nasa.gov> portal, and other multimedia support.

## NASA PAO BUDGET SUMMARY, BY CENTER

(\$ in millions)	Actual	Estimate		Notional			
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
ARC	2.6	2.8	2.8	2.8	2.8	2.8	2.8
DFRC	1.7	1.5	1.7	1.0	1.0	1.1	1.1
GRC	2.8	2.9	3.1	3.1	3.1	3.1	3.1
GSRC	5.0	4.9	5.1	5.1	5.1	5.1	5.1
HQ	10.1	9.6	9.1	9.1	9.1	9.1	9.1
JSC	7.5	7.2	7.2	7.5	7.5	7.6	7.9
KSC	5.8	5.2	5.4	5.7	6.0	6.3	6.7
LaRC	3.1	3.3	3.4	3.4	3.4	3.4	3.4
MSFC	5.1	4.5	4.6	4.7	4.8	5.0	5.1
SSC	2.0	2.0	1.9	1.9	2.0	1.8	1.8
<b>NASA Total</b>	<b>45.8</b>	<b>44.0</b>	<b>44.2</b>	<b>44.3</b>	<b>44.9</b>	<b>45.3</b>	<b>46.1</b>

## SUPPORTING DATA

### CONSULTING SERVICES

NASA uses paid experts and consultants to provide advice and expertise beyond that which is available from its in-house civil service workforce. Management controls ensure that there is ample justification for consulting services before these services are obtained. Much of the Agency's expert and consultant support is for the NASA Advisory Council and the Aerospace Safety Advisory Panel. NASA uses experts and consultants to provide expertise on the selection of experiments for future space missions. The use of these experts and consultants provides the Agency with an independent view that assures the selection of experiments likely to have the greatest scientific merit. Other individuals provide independent views of technical and functional problems in order to provide senior management with the widest possible range of information to support making major decisions.

#### NASA CONSULTING SERVICES BUDGET SUMMARY

(Costs in \$ millions)	Actual	Estimate	
	FY 2011	FY 2012	FY 2013
Number of Paid Experts and Consultants	31.0	31.0	31.0
Annual FTE Usages	5.0	5.0	5.0
Salaries	0.2	0.2	0.2
Total Salary and Benefits Costs	0.3	0.3	0.3
Travel Costs	0.2	0.2	0.2
<b>NASA Total Costs</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>

Note: A broader definition of consulting services could include the total object class "Advising and Assistance Services" as shown in the Supporting Data Budget by Object Class section of this volume.

(Costs in \$ millions)	Actual	Estimate	
	FY 2011	FY 2012	FY 2013
Advisory and Assistance Services	880.0	855.0	814.0
<b>NASA Total Costs</b>	<b>880.0</b>	<b>855.0</b>	<b>814.0</b>

#### DEFINITIONS

##### Consultant

A person who can provide valuable and pertinent advice generally drawn from a high degree of broad administrative, professional, or technical knowledge or experience. When an agency requires public advisory participation, a consultant also may be a person who is affected by a particular program and can provide useful views from personal experience.

## SUPPORTING DATA

# **CONSULTING SERVICES**

### **Expert**

A person who is specially qualified by education and experience to perform difficult and challenging tasks in a particular field beyond the usual range of achievement of competent persons in that field. An expert is regarded by other persons in the field as an authority or practitioner of unusual competence and skill in a professional, scientific, technical, or other activity.

*These definitions are located under 5 CFR 304.102. The appointments are made under 5 U.S.C. 3109, and the use of this authority is reported annually to Office of Personnel Management (OPM).*

SUPPORTING DATA

**E-GOV INITIATIVES AND BENEFITS**

**E-GOVERNMENT FUNDING CONTRIBUTIONS AND SERVICE FEES BY INITIATIVE**

<b>Initiative</b>	<b>2013 Contributions (Includes in Kind) (in \$)</b>	<b>2013 Service Fees* (in \$)</b>
E-Rulemaking		10,000
Grants.gov	155,066	
E-Training		1,500,000
Recruitment One-Stop		121,150
EHRI		391,602
E-Payroll		4,219,800
E-Travel		2,050,726
Integrated Acquisition Environment		1,729,154
IAE-Loans and Grants		89,973
Financial Management LoB	75,000	
Human Resources Management LoB	65,217	
Geospatial LoB	15,000	
Budget Formulation and Execution LoB	105,000	
<b>NASA Total</b>	<b>415,283</b>	<b>10,531,486</b>

\* Service fees are estimates as provided by the E-Government initiative managing partners

NASA’s FY 2013 Exhibit 300 IT business cases will be posted, after submission of the President’s Budget to Congress, on the IT Dashboard, located at <http://it.usaspending.gov/>.

The E-Government initiatives serve the U.S. public, businesses, and Federal employees by delivering high quality services more efficiently at a lower price. Instead of expensive “stove-piped” operations, agencies work together to develop common solutions that achieve mission requirements at reduced cost, thereby making resources available for higher priority needs. Benefits realized through the use of these initiatives for NASA in FY 2013 are as follows:

**E-RULEMAKING (MANAGING PARTNER EPA) FY 2013 BENEFITS**

NASA’s benefits for the E-Rulemaking initiative are largely focused on public benefits by providing one-stop access to NASA and other Federal agency information on rulemakings and non-rulemaking activities on <http://Regulations.gov>.

In addition to the process benefits the E-Rulemaking solution offers, it is estimated to provide cost avoidance benefits over traditional baseline paper processes to a level of \$30 million over five years. The electronic docket solution selected by E-Rulemaking governance bodies is a centralized architecture that is configurable for each participating entity allowing role-based access to develop workflow and collaboration processes to manage their content. This centrally managed solution is estimated to save a range of \$106 to \$129 million over five years as compared to other alternatives that seek the same benefits but are based on decentralized architectures. These figures were calculated in the summer of 2007 by an independent economist hired by the E-Rulemaking Program to develop a Cost-Benefit Model.

## SUPPORTING DATA

### **E-GOV INITIATIVES AND BENEFITS**

NASA benefits through its participation and reliance on the Federal Docket Management System (FDMS) and <http://Regulations.gov>. NASA reaps substantial benefits by improving the transparency of its rulemaking actions while increasing public participation in the regulatory process. Direct budget cost savings and cost avoidance result from NASA's transition to FDMS and Regulations.gov, enabling the agency to discontinue efforts to develop, deploy and operate specific individual online docket and public comment systems. Over a five-year period, NASA is estimated to save over \$700,000 over alternative options that would provide similar services.

### **GRANTS.GOV (MANAGING PARTNER HHS) FY 2013 BENEFITS**

The <http://Grants.gov> Initiative benefits NASA and its grant programs by providing a single location with broader exposure to publish grant (funding) opportunities and application packages, making the process easier for applicants to apply to multiple agencies. All 26 major Federal grant making agencies posted 100 percent of their synopses for discretionary funding opportunity announcements on Grants.gov.

In addition, Grants.gov provides a single site for the grantee community to apply for grants using a standard set of forms, processes and systems giving greater access and ability to apply for Federal funding. Through the use of Grants.gov NASA is able to reduce operating costs associated with online posting and application of grants. Additionally, the Agency is able to improve operational effectiveness through the use of Grants.gov by increasing data accuracy and reducing processing cycle times.

### **E-TRAINING (MANAGING PARTNER OPM) FY 2013 BENEFITS**

The E-Training initiative provides access to premier electronic training systems and tools that support the training and development of the Federal workforce. The initiative advanced the accomplishment of agency missions through simplified and one-stop access to E-Training products and services. The availability of an electronic training environment enhances the ability of the Federal government and NASA to attract, retain, manage, and educate the highly skilled professionals needed for a flexible and high-performing government workforce.

The E-Training initiative benefits NASA by reducing redundancies and achieving economies of scale in the purchase and/or development of e-learning content and in the purchase of learning technology infrastructure. In 2006, NASA streamlined three online training systems into one centralized, learning management system: SATERN, a "one-stop" approach offering Web-based training and career development resources. This centralized approach allows NASA to reduce and leverage training costs through the elimination of unique systems and standardization of training processes.

Through SATERN, employees can view required training, launch online content, view training history, and self-register for approved courses and conferences. In addition, the system allows NASA officials to identify groups and individuals who have not met basic training requirements and ensure accountability for mission critical and federally mandated training and development. SATERN also offers employees access to career planning tools, individual development plans, and competency management assistance. Currently, SATERN offers learners access to more than 2,000 online courses and 10,000 online books and training videos. SATERN can be accessed at any time from work or home.

## **E-GOV INITIATIVES AND BENEFITS**

### **RECRUITMENT ONE-STOP (MANAGING PARTNER OPM) FY 2013 BENEFITS**

USAJOBS Simplifies the Federal Job Search Process for Job Seekers and Agencies. The <http://USAJOBS.gov> Web site provides a place where citizens can easily search for employment opportunities throughout the Federal Government. USAJOBS.gov is a fully operational, state-of-the-art recruitment system that simplifies the Federal job search process for both job seekers and agencies. Through USAJOBS.gov, users have access to:

- A centralized repository for all competitive service job vacancies;
- A resumé repository used by agencies to identify critical skills;
- A standardized online recruitment tool and services;
- A standard application Process; and
- Intuitive job searches including e-mail notifications for jobs of interest.

Integration with Recruitment One-Stop (ROS) allows NASA to better attract individuals who can accomplish the Agency's mission. The USAJOBS.gov interface allows job seekers to view and apply for all NASA employment opportunities, as well as those from other Federal agencies. On average, USAJOBS.gov has over 400,000 visitors per day (the online portal serviced over 21 million applications during FY 2010) and over 500,000 resumes are created monthly.

In 2005, NASA adopted the USAJOBS.gov resumé as the basic application document for all NASA positions, except for astronaut positions. The Agency believes that implementation of ROS has resulted in significant intangible benefits in terms of providing better vacancy information to applicants. The numerous intangible benefits ROS provides to NASA and other agencies include:

- Decreased hiring time for managers;
- An integrated solution to agency applicant assessment systems;
- A cost effective marketing and recruitment tool;
- Realized cost savings over commercial job posting boards;
- Reduced delays associated with filling critical Agency vacancies; and
- Enhanced competition with the private sector for the best and brightest talent for Federal service.

### **ENTERPRISE HR INTEGRATION (MANAGING PARTNER OPM) FY 2013 BENEFITS**

The Enterprise Human Resources Integration (EHRI) program supports the strategic management of human capital by providing agency customers with access to timely and accurate Federal workforce data. In support of this objective, EHRI has the following goals: Streamline and automate the exchange of Federal employee HR information government wide; Provide comprehensive knowledge management and workforce analysis, forecasting, and reporting across the Executive Branch; Maximize cost savings captured through automation; and Enhance retirement processing throughout the Executive Branch.

A key initiative of EHRI is the electronic Official Personnel Folder (eOPF), a Web-based application capable of storing, processing, and displaying the OPFs of all current, separated, and retired Federal employees. When fully implemented, eOPF will cover the entire Executive Branch, as well as other Federal and local governments, with a total user population of more than 1.9 million. The system will replace the existing manual process by automating the Federal government's HR processes and thereby

## SUPPORTING DATA

### **E-GOV INITIATIVES AND BENEFITS**

creating a streamlined Federal HR system for all Federal employees. The initiative is achieving cost savings that are recognized on a per-folder basis. The total cost avoidance per folder is estimated at \$55.56.

Specific EHRI/eOPF benefits to NASA include improved convenience in searching, better security and safety to electronic files, more economical, streamlined business processes, and the ability to have a central repository of OPF records for the Agency. During FY 2010, NASA also deployed the eOPF capability of electronic transfer of eOPFs between agencies. Specific NASA employee benefits include secure online access to OPFs, automatic notification when documents are added, exchange of retirement and HR data across agencies and systems, and the elimination of duplicate and repetitive personnel data in personnel folders. NASA completed its implementation to eOPF in March 2008, and transitioned personnel actions processing to NSSC.

### **E-PAYROLL (MANAGING PARTNER OPM) FY 2013 BENEFITS**

The E-Payroll Initiative standardizes and consolidates Federal government-wide civilian payroll services and processes by simplifying and standardizing HR/payroll policies and procedures and better integrating payroll, HR, and finance functions. Prior to beginning the initiative, 26 Federal agencies provided payroll services. Four providers were selected to furnish payroll services for the Executive Branch. In 2004, the Department of Interior began serving as NASA's payroll provider, using their system, the Federal Personnel and Payroll System (FPPS), to process NASA's HR and Payroll transactions and supply all key delivery aspects of its payroll operation functions. The E-Payroll initiative benefits NASA by permitting the Agency to focus on its Mission-related activities, rather than on administrative payroll functions. Payroll processing costs are reduced through economies of scale and avoiding the cost of duplicative capital system modernization activities. The initiative also promotes standardization of business processes and practices and unified service delivery.

### **E-TRAVEL (MANAGING PARTNER GSA) FY 2013 BENEFITS**

The E-Government Travel Service (ETS) is a government-wide Web-based service that provides standardized travel management practices to consolidate Federal travel, minimize cost and produce customer satisfaction. From travel planning and authorization to the review and approval of post-travel reimbursement, this end-to-end service streamlines travel management and will enable the government to capture real-time visibility into the buying choices of travelers and assist agencies in optimizing their travel budgets while saving taxpayers money.

The benefits of the ETS include:

- Increased cost savings associated with overall reduction in Travel Management Center transaction service fees;
- Improved strategic source pricing through cross-government purchasing agreements;
- Improved business process functionality as a result of streamlined travel policies and processes;
- Enhanced security and privacy controls for the protection of government and personal data; and
- Improved agency oversight and audit capabilities.

## SUPPORTING DATA

### **E-GOV INITIATIVES AND BENEFITS**

Since ETS is a fully integrated, end-to-end travel solution, program cost avoidance is realized by a reduction of traveler and manager time for planning, arranging, authorizing, approving and post-travel reimbursement processing. Travelers also benefit from ETS' increased efficiency in the end-to-end electronic solution as their reimbursements are expedited. Additional initiative savings are realized from the elimination of costly paper-based systems, the decommissioning of legacy travel systems and the reduction of agency overhead by consolidating the number of travel contracts.

NASA completed migration of its travel services to HP Enterprise Services (formerly Electronic Data Systems Corporation (EDS)), one of the three designated E-Travel service providers, in mid-2009. Completing this migration has allowed NASA to provide more efficient and effective travel management services. Potential benefits include cost savings associated with cross-government purchasing agreements and improved functionality through streamlined travel policies and processes, strict security and privacy controls, and enhanced Agency oversight and audit capabilities. NASA employees are also benefitting through more efficient travel planning, authorization, and reimbursement processes. Prior to ETS, the estimated overall government-wide on-line adoption rate for travel reservations was approximately 6 percent. To date, the on-line booking engine adoption rate is over 64 percent resulting in dramatic cost savings as a result of lowering travel agent service fees.

### **INTEGRATED ACQUISITION ENVIRONMENT (MANAGING PARTNER GSA) FY 2013 BENEFITS**

The Integrated Acquisition Environment (IAE) initiative is designed to streamline the process of reporting on subcontracting plans and provide agencies with access to analytical data on subcontracting performance. Use of the IAE common services allows agencies to focus on agency-specific needs such as strategy, operations, and management while leveraging shared services for common functions. Furthermore, use of a government-wide business focused service environment reduces funding and resources for technical services and support for acquisition systems originally housed by individual agencies.

IAE facilitates and supports cost-effective acquisition of goods and services by agencies. The IAE initiative provides common acquisition functions and shared services that benefit all agencies, such as the maintenance of information about business-partner organizations (e.g., banking, certifications, business types, capabilities, and performance). IAE provides benefits to the government and business-partner organizations by improving cross-agency coordination that helps to improve the government's buying power, while providing business partners maximum visibility and transparency into the process. IAE provides various services, tools and capabilities that can be leveraged by the acquisition community, including buyers, sellers, and the public, to conduct business across the Federal government space.

Government buyers can:

- Search for commercial and government sources;
- Post synopses and solicitations;
- Securely post sensitive solicitation documents;
- Access reports on vendors' performance;
- Retrieve vendor data validated by the Small Business Administration and the Internal Revenue Service;

## SUPPORTING DATA

### **E-GOV INITIATIVES AND BENEFITS**

- Identify excluded parties; and
- Report contract awards.

Business suppliers can:

- Search business opportunities by product, service, agency, or location;
- Receive e-mail notification of solicitations based on specific criteria;
- Register to do business with the Federal government;
- Enter representations and certifications one time;
- Revalidate registration data annually; and
- Report subcontracting accomplishments.

The U.S. public can:

- Retrieve data on contract awards;
- Track Federal spending;
- Search to find registered businesses; and
- Monitor business opportunities.

Through adoption of the tools and services provided by IAE, NASA improves its ability to make informed and efficient purchasing decisions and allows it to replace manual processes. If NASA were not allowed to use the IAE systems, they would need to build and maintain separate systems to record vendor and contract information, and to post procurement opportunities. Agency purchasing officials would not have access to databases of important information from other agencies on vendor performance and could not use systems to replace paper-based and labor-intensive work efforts.

### **INTEGRATED ACQUISITION ENVIRONMENT – LOANS & GRANTS FY 2013 BENEFITS**

All agencies participating in the posting and/or awarding of Contracts and Grants & Loans are required by the Federal Funding Accountability and Transparency Act (FFATA) of 2006 as well as the American Recovery and Reinvestment Act of 2009 reporting requirements to disclose award information on a publicly accessible Web site. FFATA requires OMB to lead the development of a single, searchable Web site through which the public can readily access information about grants and contracts provided by Federal government agencies. More information on the development of this website can be found at <http://www.federalspending.gov>.

Based on the recommendations of the Transparency Act Taskforce, the website leverages functionality provided by IAE initiative to provide Data Universal Numbering System (DUNS) numbers as the unique identifier. An existing IAE Dun and Bradstreet (D&B) transaction-based contract for the contract community was expanded to provide government-wide D&B services for the Grants & Loans community. These services include parent linkage, help desk support, world database lookup, business validation and linkage monitoring, matching services, as well as the use of DUNS numbers. The enterprise D&B contract provides substantial savings to the participating agencies over their previous agency transaction-based D&B contracts.

## SUPPORTING DATA

# E-GOV INITIATIVES AND BENEFITS

On December 14, 2007, OMB launched <http://www.USASpending.gov> to meet FFATA statutory requirements, ahead of schedule. Since that launch, OMB has and will continue to work with agencies to improve the quality, timeliness, and accuracy of their data submissions and has released a series of enhancements to the site. USASpending.gov complements other websites providing the public Federal program performance information (e.g., <http://USA.gov>, <http://Results.gov>, and <http://ExpectMore.gov>).

USASpending.gov provides:

- The name of the entity receiving the award;
- The amount of the award;
- Information on the award, including transaction type, funding agency;
- The location of the entity receiving the award; and
- A unique identifier of the entity receiving the award.

In addition to routine enhancements to improve usability and maintainability, USASpending.gov is focused on supporting implementation of sub-contract and sub-grant awards reporting.

All agencies participating in the posting and/or awarding of Contracts and Grants & Loans are required by the FFATA and the American Recovery and Reinvestment Act of 2009 reporting requirements to disclose award information on a publicly accessible Web site. Cross-government cooperation with OMB's Integrated Acquisition Environment initiative allows agencies and contributing bureaus to meet the requirements of FFATA by assigning a unique identifier, determining corporate hierarchy, and validating and cleaning up incorrect or incomplete data.

The FY 2013 funding requirements as it relates to the IAE – Loans and Grants funding line supports FFATA for the relationship with D&B and DUNS support services. In addition to provision of DUNS numbers, D&B is now providing business and linkage data seamlessly, and the business arrangement supports the quality of data by real-time updates. NASA and other agencies will leverage the linkages to corporate organizational rollups based on parental and subsidiary relationships.

## LINE OF BUSINESS

### **Financial Management LoB (Managing Partners Department of Energy and Department of Labor) FY 2013 Benefits**

The Financial Management Line of Business (FM LoB) leverages shared service solutions that improve the quality of Federal financial data and decrease known inefficiencies—and costs—that are typical of redundant financial management systems. FM LoB's Shared Services Providers offer participating agencies the economies of scale and expertise in IT and financial reporting not always available within a single agency. An emphasis is being placed on greater standardization, transparency, and business process improvements as opposed to solely technology improvements.

The FM LoB initiative uses standard business practices and meets federal accounting standards for financial reporting. This level of standardization across all Federal agencies would provide executive decision makers with accurate information from which to assess program performance and risks, evaluate costs, and improve stewardship across the Federal government.

## SUPPORTING DATA

# **E-GOV INITIATIVES AND BENEFITS**

Current Administration policy requires agencies to conduct a competition among Federal and Commercial Shared Services Providers before attempting to modernize financial systems. Commercial Shared Services Providers have not yet been designated to support the same range of services provided by Federal Shared Services Providers. NASA may be interested in offering its services as a financial management Shared Services Provider, depending on future commercial option, policy developments, and further analysis.

### **Human Resources Management LoB (Managing Partner OPM) FY 2013 Benefits**

The HR LoB vision is to create government-wide, modern, cost-effective, standardized, and interoperable HR solutions to provide common core functionality to support the strategic management of human resources through the establishment of Shared Service Centers. Driven from a business perspective, the solutions will address distinct business improvements enhancing the government's performance of HR and payroll services in support of agency missions delivering services to citizens. The HR LoB concept of operations calls for agencies to receive core services from an HR LoB provider. These core services are defined as personnel action processing, compensation management (payroll), and benefits management. Leveraging shared services solutions will allow the HR LoB to significantly improve HR and payroll service delivery, save taxpayer dollars, and reduce administrative burdens.

NASA works in partnership with one of the approved service providers, the Department of Interior's National Business Center (NBC). Through this partnership, NASA shares and receives "best-in-class" HR solutions. NBC delivers developed solutions to their customer agencies, enabling improved efficiencies and system integrations at a fraction of the cost and delivery time than similar solutions could have been produced by NBC. NASA achieves the benefits of best-in-class HR solutions through implementation and integration of NBC- and NASA-developed HR solutions. NASA's participation in HR LoB allows the Agency to participate in the implementation of modern HR solutions and benefit from best practices and government-wide strategic HR management.

### **Geospatial LoB (Managing Partner DOL) FY 2013 Benefits**

The Geospatial LoB will better serve agencies' missions and the Nation's interests by developing a more strategic, coordinated, and leveraged approach to producing, maintaining, and using geospatial data and services across the Federal government. Specific goals of the Geospatial LoB include establishing a collaborative governance mechanism, coordinating a government-wide planning and investment strategy and optimizing and standardizing geospatial data and services.

Contributing agencies and bureaus will receive value from the development of the Geospatial LoB primarily through improved business performance and cost savings. Enhanced governance processes, improved business planning and investment strategies, and optimization and standardization of geospatial business data and services will produce the following results:

- Collaborative management of geospatial investments will be made more adaptable, proactive and inclusive;
- Enterprise business needs and agency core mission requirements will be identified, planned, budgeted, and exploited in a geospatial context;
- Long-term costs of geo-information delivery and access will be reduced while minimizing duplicative development efforts;

## SUPPORTING DATA

### **E-GOV INITIATIVES AND BENEFITS**

- Effective, yet less costly commercial off the shelf systems and contractual business support operations will replace legacy geospatial applications; and
- Business processes will be optimized and knowledge management capabilities will exist for locating geospatial data and obtaining services.

As a science agency, the work of NASA's science and mission professionals is inherently different from duties and functions performed by operational agencies. These differences lead NASA to organize and manage data to best facilitate science activities rather than a central focus of data dissemination. Scientific inquiry often leads scientist to use different schemas for analyzing data and information produced from remote sensing data (e.g., a common grid or projection). NASA will continue to apply the elements of FGDC standards where these are appropriate. In FY 2008, NASA signed an Memorandum of Understanding with the Department of Labor to continue its active participation in the Geospatial LoB.

#### **Budget Formulation & Execution LOB (Managing Partner Education) FY 2013 Benefits**

The Budget Formulation and Execution LoB (BFE LoB) provides benefits to NASA and other partner agencies by encouraging best practices crossing all aspects of Federal budgeting—from budget formulation and execution to performance to human capital needs. To benefit all agencies, BFE LoB continues to support the idea of shared service budget systems. The Agency has not chosen to move to a new budget system; however, NASA is looking into some of the BFE LoB components, such as MAX Collect and Analytics to compliment its current budgeting tools.

BFE LoB's "MAX Federal Community," a secure government-only collaborative Web site, provides significant benefits for collaboration across and within agencies, as well as knowledge management. The Community site is commonly used for sharing information, collaboratively drafting documents (including the direct-editing of documents posted on the site), supporting workgroups, submitting central reports, and much more. NASA currently has well over 1500 users that are registered and eligible to take advantage of the MAX Federal Community.

## **COMPARABILITY ADJUSTMENT TABLES**

### **EXPLANATION OF COMPARABILITY TABLES**

As requested by Congress in House Report 112-284, the FY 2011 actual and FY 2012 estimates have been adjusted to display their budgets in a presentation that is “comparable” to the content of items proposed in the FY 2013 budget. This presentation allows direct comparability of yearly budget data associated with an investment, regardless of the account (or theme, program, etc.) in which it was, or is currently being, executed.

The following pages provide detailed crosswalks of non-comparable FY 2011 actual and FY 2012 estimates to their comparable amounts. The following guidelines will assist in interpreting the tables.

- The gray title box in the upper left hand corner indicates the fiscal year in which budget and accounts are being addressed.
- The budget structure running on top of the table is the FY 2013 structure that is used in the rest of this volume. The layers in the structure from the top down are for the account, theme, program, and reporting attribute. Note that when theme, program or reporting attribute titles are identical they are combined to simplify the display. The amounts displayed under this budget structure “block” are comparable (adjusted) amounts for the reporting attribute you see in the tables in the rest of this volume.
- The budget structure running on the left side of the table is that fiscal year’s operating plan budget structure. Note that when titles are identical they were often combined to simplify the display. The amounts to the right of the structure are the unadjusted amounts from the fiscal year’s operating plan with the proposed allocation of the Public Law 112-55 rescission displayed separately for FY 2012.
- The amounts in the matrix are the adjustments to the unadjusted amounts used to derive the comparable budget presentation you see in the tables in the rest of this volume.
- No table for the Construction and Environmental Compliance and Restoration account was prepared because there are no adjustments related to that account.



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FY 2013 REQUEST BUDGET STRUCTURE

SCIENCE -- \$4,919.7

ASTROPHYSICS \$631.1											JAMES WEBB SPACE TELESCOPE 476.8	HELIOPHYSICS \$639.2											
ASTROPHYSICS RESEARCH \$146.9			COSMIC ORIGINS \$229.1			PHYSICS OF THE COSMOS \$108.7	EXOPLANET EXPLORATION \$46.4	ASTROPHYSICS EXPLORER \$100.0				HELIOPHYSICS RESEARCH \$160.8				LIVING WITH A STAR \$218.4			SOLAR TERRESTRIAL PROBES \$168.3		HELIOPHYSICS EXPLORER PROGRAM \$91.7		NEW MILLENNIUM 0.1
Astrophysics Research & Analysis	Balloon Project	Other Missions & Data Analysis	Hubble Space Telescope	Stratospheric Observatory for Infrared Astronomy	Other Missions & Data Analysis	Other Missions & Data Analysis	Other Missions & Data Analysis	Nuclear Spectroscopic Telescope Array (NuStar)	Gravity & Extreme Magnetism	Other Missions & Data Analysis		Heliophysics Research & Analysis	Sounding Rockets	Research Range	Other Missions & Data Analysis	Radiation Belt Storm Probes	Solar Probe Plus	Solar Orbiter Collaboration	Other Missions & Data Analysis	Magnetospheric Multiscale (MMS)	Other Missions & Data Analysis	IRIS	
59.6	26.8	60.5	91.7	79.9	57.6	108.7	46.4	36.1	23.0	41.0	34.0	45.9	19.5	61.4	146.1	13.9	8.3	50.2	150.8	17.4	63.5	28.1	

FY 2011 COMPARABILITY ADJUSTMENTS  
for the Science Account

Budget Authority  
(\$ millions)

SCIENCE 4,919.7

ASTROPHYSICS 1,107.9

Astrophysics Research..... 146.9  
Cosmic Origins..... 705.9  
Physics of the Cosmos..... 108.7  
Exoplanet Exploration..... 46.4  
Astrophysics Explorer..... 100.0

HELIOPHYSICS 639.3

Heliophysics Research..... 160.8  
Living with a Star..... 218.4  
Solar Terrestrial Probes..... 168.3  
Heliophysics Explorer Program..... 91.7  
New Millenium..... 0.1

(See previous page for Earth Science and Planetary Science)

59.6	26.8	60.5	-----																														
-----			91.7	79.9	57.6	-----																											
-----						108.7	-----																										
-----							46.4	-----																									
-----								36.1	23.0	-----																							
-----											34.0	45.9	19.5	61.4	-----																		
-----															146.1	13.9	8.3	50.2	-----														
-----																			150.8	17.4	-----												
-----																					63.5	28.1	-----										
-----																							0.1	-----									

FY 2011 OPERATING PLAN BUDGET STRUCTURE

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FY 2011 COMPARABILITY ADJUSTMENTS  
for:  
Aeronautics & Education  
Accounts

Budget Authority  
(\$ millions)

FY 2013 REQUEST BUDGET STRUCTURE

AERONAUTICS -- \$533.5						EDUCATION -- \$145.4			
AERONAUTICS \$533.5						EDUCATION \$145.4			
Aviation Safety	Airspace Systems	Fundamental Aeronautics	Aeronautics Test Program	Integrated Systems Research	Aeronautics Management	NASA Space Grant	EPSCOR	Minority University Research Program	STEM Education & Accountability Projects
67.3	87.2	206.3	76.4	75.9	20.4	45.5	24.9	28.5	46.5

FY 2011 OPERATING PLAN BUDGET STRUCTURE

<b>AERONAUTICS</b>	<b>533.5</b>
AERONAUTICS	533.5
Aviation Safety.....	67.3
Airspace Systems.....	87.2
Fundamental Aeronautics.....	221.4
Aeronautics Test Program.....	76.4
Integrated Systems Research.....	81.2
<b>EDUCATION</b>	<b>145.4</b>
EDUCATION	145.4
Higher Education STEM Education.....	110.4
Informal STEM Education.....	0.9
K-12 STEM Education.....	34.1

67.3	87.2	206.3	76.4	75.9	20.4	45.5	24.9	28.5	46.5
67.3									
	87.2								
		206.3			15.1				
			76.4						
				75.9	5.3				
						45.5	24.9	28.5	11.5
									0.9
									34.1

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FY 2012 COMPARABILITY ADJUSTMENTS  
for the Science Account

Budget Authority  
(\$ millions)

FY 2013 REQUEST BUDGET STRUCTURE

SCIENCE -- \$5,073.7																														
EARTH SCIENCE \$1,760.5												PLANETARY SCIENCE \$1,501.4																		
EARTH SCIENCE RESEARCH \$440.1		EARTH SYSTEMATIC MISSIONS \$881.0					EARTH SYSTEM SCIENCE PATHFINDER \$188.3			EARTH SCIENCE MULTI-MISSION OPERATIONS	EARTH SCIENCE TECHNOLOGY	APPLIED SCIENCES	PLANETARY SCIENCE RESEARCH \$174.1				LUNAR QUEST PROGRAM \$140.0			DISCOVERY	NEW FRONTIERS \$160.7		MARS EXPLORATION \$587.0		OUTER PLANETS \$122.1	TECHNOLOGY \$144.9				
Earth Science Research & Analysis	Computing & Management	Global Precipitation Measurement	LANDSAT Data Community Mission	Ice, Cloud & Land Elevation Satellite (ICESat-II)	Soil Moisture Active & Passive	Other Missions & Data Analysis	OCO-2	Venture Class Missions	Other Missions & Data Analysis				Planetary Science Research & Analysis	Other Missions & Data Analysis	Education & Directorate Management	Near Earth Object Observations	Lunar Science	Lunar Atmosphere & Dust Environment Explorer	Surface Science Lander Technology		Other Missions & Data Analysis	Origins Spectral Interpretation Resource	Other Missions & Data Analysis	MAVEN			Other Missions & Data Analysis			
Op. Plan	Resc.	Total	332.3	107.7	92.9	159.3	120.5	176.3	332.0	98.4	53.6	36.3	163.4	51.2	36.4	122.3	4.0	20.4	27.4	66.7	70.4	2.8	172.6	110.3	50.5	245.7	341.4	122.1	144.9	
<b>SCIENCE</b>	<b>5,079.0</b>	<b>(5.3)</b>	<b>5,073.7</b>																											
<b>EARTH SCIENCE</b>	<b>1,765.7</b>	<b>(5.2)</b>	<b>1,760.5</b>																											
Earth Science Research	440.1		440.1																											
Earth Science Research and Analysis.....	332.3		332.3	332.3																										
Computing and Management.....	107.7		107.7		107.7																									
<b>Earth Systematic Missions</b>	<b>882.1</b>	<b>(1.1)</b>	<b>881.0</b>																											
Global Precipitation Measurement (GPM).....	92.9		92.9			92.9																								
Glory Mission.....	0.0		0.0																											
Landsat Data Continuity Mission (LDCM).....	159.3		159.3				159.3																							
NPOESS Preparatory Project (NPP).....	8.7		8.7					8.7																						
Ice, Cloud & Land Elev. Sat. (ICESat-II).....	120.5		120.5					120.5																						
Soil Moisture Active & Passive (SMAP).....	176.3		176.3					176.3																						
Other Missions and Data Analysis.....	324.4	(1.1)	323.3						323.3																					
<b>Earth System Science Pathfinder</b>	<b>192.5</b>	<b>(4.1)</b>	<b>188.4</b>																											
Aquarius.....	4.2	(4.1)	0.1								0.1																			
OCO-2.....	98.4		98.4					98.4																						
Other Missions and Data Analysis.....	36.2		36.2						36.2																					
Venture Class Missions.....	53.6		53.6						53.6																					
<b>Earth Science Multi-Mission Operations</b>	<b>163.4</b>		<b>163.4</b>										163.4																	
Earth Science Multi-Mission Operations.....	163.4		163.4										163.4																	
<b>Earth Science Technology</b>	<b>51.2</b>		<b>51.2</b>											51.2																
Earth Science Technology.....	51.2		51.2											51.2																
<b>Applied Sciences</b>	<b>36.4</b>		<b>36.4</b>												36.4															
Pathways.....	36.4		36.4												36.4															
<b>PLANETARY SCIENCE</b>	<b>1,501.4</b>	<b>(0.0)</b>	<b>1,501.4</b>																											
<b>Planetary Science Research</b>	<b>174.1</b>		<b>174.1</b>																											
Planetary Science Research and Analysis.....	122.3		122.3													122.3														
Education and Directorate Management.....	4.0		4.0									4.0																		
Near Earth Object Observations.....	20.4		20.4														20.4													
Other Missions and Data Analysis.....	27.4		27.4															27.4												
<b>Lunar Quest Program</b>	<b>140.0</b>	<b>(0.0)</b>	<b>140.0</b>																											
Lunar Science.....	66.8	(0.0)	66.8													66.7														
Lunar Atmosphere and Dust Environment Explorer	70.4		70.4																											
International Lunar Network.....	2.8		2.8																					2.8						
<b>Discovery</b>	<b>172.6</b>		<b>172.6</b>																											
GRAIL.....	29.8		29.8																											
Other Missions and Data Analysis.....	142.8		142.8																						142.8					
<b>New Frontiers</b>	<b>160.7</b>		<b>160.7</b>																											
Juno.....	31.4		31.4																											
Other Missions and Data Analysis.....	129.4		129.4																											
<b>Mars Exploration</b>	<b>587.0</b>		<b>587.0</b>																											
2009 Mars Science Lab.....	174.0		174.0																											174.0
MAVEN.....	245.7		245.7																											245.7
Other Missions and Data Analysis.....	167.4		167.4																											167.4
<b>Outer Planets</b>	<b>122.1</b>		<b>122.1</b>																											122.1
Technology	144.9		144.9																											144.9

(See next page for Astrophysics, JWST, and Heliophysics)

FY 2012 OPERATING PLAN BUDGET STRUCTURE

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FY 2012 COMPARABILITY ADJUSTMENTS  
for the Science Account

Budget Authority  
(\$ millions)

FY 2013 REQUEST BUDGET STRUCTURE

SCIENCE -- \$5,073.7																										
ASTROPHYSICS \$672.7												JAMES WEBB SPACE TELESCOPE	HELIOPHYSICS \$620.6													
ASTROPHYSICS RESEARCH \$164.1			COSMIC ORIGINS 237.3			PHYSICS OF THE COSMOS \$108.7		EXOPLANET EXPLORATION \$46.4		ASTROPHYSICS EXPLORER \$112.2				HELIOPHYSICS RESEARCH \$175.2				LIVING WITH A STAR \$196.3			SOLAR TERRESTRIAL PROBES \$188.8		HELIOPHYSICS EXPLORER PROGRAM \$60.2		NEW MILLENNIUM	
Astrophysics Research & Analysis	Balloon Project	Other Missions & Data Analysis	Hubble Space Telescope	Stratospheric Observatory for Infrared Astronomy	Other Missions & Data Analysis	Other Missions & Data Analysis	Other Missions & Data Analysis	Nuclear Spectroscopic Telescope Array (NuStar)	Gravity & Extreme Magnetism	Other Missions & Data Analysis	Heliophysics Research & Analysis		Sounding Rockets	Research Range	Other Missions & Data Analysis	Radiation Belt Storm Probes	Solar Probe Plus	Solar Orbiter Collaboration	Other Missions & Data Analysis	Magnetospheric Multiscale (MMS)	Other Missions & Data Analysis	IRIS	Other Missions & Data Analysis			
64.6	31.6	67.9	95.7	84.2	57.4	108.3	50.8	11.8	63.2	37.2	518.6	32.9	52.4	20.1	69.9	86.1	49.5	21.3	39.3	170.3	18.5	39.1	21.1	0.0		

(Earth Science and Planetary Science on previous page)

	Op. Plan	Resc.	Total
<b>SCIENCE</b>	<b>5,079.0</b>	<b>(5.3)</b>	<b>5,073.7</b>
<b>ASTROPHYSICS</b>	<b>672.7</b>		<b>672.7</b>
<b>Astrophysics Research</b>	<b>164.1</b>		<b>164.1</b>
Astrophysics Research and Analysis.....	64.6		64.6
Balloon Project.....	31.6		31.6
Other Missions and Data Analysis.....	67.9		67.9
<b>Cosmic Origins</b>	<b>237.3</b>		<b>237.3</b>
Hubble Space Telescope (HST).....	95.7		95.7
Strato. Observ. for Infrared Astron. (SOFIA)	84.2		84.2
Other Missions and Data Analysis.....	57.4		57.4
<b>Physics of the Cosmos</b>	<b>108.3</b>		<b>108.3</b>
<b>Exoplanet Exploration</b>	<b>50.8</b>		<b>50.8</b>
<b>Astrophysics Explorer</b>	<b>112.2</b>		<b>112.2</b>
Nuclear Spect. Telescope Array (NuStar)....	11.8		11.8
Gravity and Extreme Magnetism (GEM).....	63.2		63.2
Other Missions and Data Analysis.....	37.2		37.2
<b>JAMES WEBB SPACE TELESCOPE</b>	<b>518.6</b>		<b>518.6</b>
James Webb Space Telescope	518.6		518.6
<b>HELIOPHYSICS</b>	<b>620.6</b>	<b>(0.0)</b>	<b>620.6</b>
<b>Heliophysics Research</b>	<b>175.2</b>		<b>175.2</b>
Heliophysics Research and Analysis.....	32.9		32.9
Sounding Rockets.....	52.4	(0.0)	52.4
Research Range.....	20.1		20.1
Other Missions and Data Analysis.....	69.9		69.9
<b>Living with a Star</b>	<b>196.3</b>		<b>196.3</b>
Radiation Belt Storm Probes (RBSP).....	86.1		86.1
Solar Probe Plus.....	49.5		49.5
Other Missions and Data Analysis.....	60.6		60.6
<b>Solar Terrestrial Probes</b>	<b>188.8</b>		<b>188.8</b>
Magnetospheric Multiscale (MMS)	170.3		170.3
Other Missions and Data Analysis	18.5		18.5
<b>Heliophysics Explorer Program</b>	<b>60.2</b>		<b>60.2</b>
IRIS.....	39.1		39.1
Other Missions and Data Analysis.....	21.1		21.1

FY 2012 OPERATING PLAN BUDGET STRUCTURE

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FY 2012 COMPARABILITY ADJUSTMENTS  
for:  
Aeronautics & Education  
Accounts

Budget Authority  
(\$ millions)

FY 2013 REQUEST BUDGET STRUCTURE

AERONAUTICS -- \$569.4						EDUCATION -- \$136.2			
AERONAUTICS \$569.4						AEROSPACE RESEARCH & CAREER DEVELOPMENT \$56.2		STEM EDUCATION & ACCOUNTABILITY \$80.0	
Aviation Safety	Airspace Systems	Fundamental Aeronautics	Aeronautics Test Program	Integrated Systems Research	Aeronautics Management	NASA Space Grant	EPSCOR	Minority University Research Program	STEM Education & Accountability Projects

	Op. Plan	Resc.	Total	80.1	92.7	186.3	79.4	104.2	26.7	38.9	17.3	30.0	50.0
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FY 2012 OPERATING PLAN BUDGET STRUCTURE

<b>AERONAUTICS</b>	<b>569.9</b>	<b>(0.5)</b>	<b>569.4</b>
AERONAUTICS	569.9	(0.5)	569.4
Aviation Safety.....	80.1		80.1
Airspace Systems.....	92.7		92.7
Fundamental Aeronautics.....	186.3		186.3
Aeronautics Test Program.....	79.4		79.4
Integrated Systems Research.....	104.2		104.2
Aeronautics Strategy and Management.....	27.2	(0.5)	26.7
<b>EDUCATION</b>	<b>138.4</b>	<b>(2.4)</b>	<b>136.2</b>
AEROSPACE RESEARCH & CAREER DEVEL.	58.4	(2.4)	56.2
NASA Space Grant.....	40.0	(1.2)	38.9
EPSCOR.....	18.4	(1.2)	17.3
STEM EDUCATION & ACCOUNTABILITY	80.0	0.0	80.0
Minority University Research & Ed. Program.....	30.0		30.0
STEM Education & Accountability.....	50.0		50.0

80.1	92.7	186.3	79.4	104.2	26.7	38.9	17.3	30.0	50.0
80.1	92.7	186.3	79.4	104.2	26.7	38.9	17.3	30.0	50.0

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**FY 2012 COMPARABILITY ADJUSTMENTS**  
for:  
Exploration,  
Space Operations,  
Space Technology,  
&  
Cross Agency Support  
Accounts  
  
Budget Authority  
(\$ millions)

**FY 2013 REQUEST BUDGET STRUCTURE**

EXPLORATION -- \$3,712.8										SPACE OPERATIONS -- \$4,187.0										SPACE TECHNOLOGY - \$573.7				CROSS AGENCY SUPPORT -- \$2,993.9															
EXPLORATION SYSTEMS DEVELOPMENT \$ 3,007.1					COM. SPACE	EXPLORATION R&D - \$ 299.7					SPACE SHUTTLE \$556.2					INTERNATIONAL SPACE STATION (ISS) \$2,829.9					SPACE & FLIGHT SUPPORT \$800.9					SPACE TECHNOLOGY \$573.7				CENTER MANAGEMENT OPERATIONS \$2,204.1					AGENCY MANAGEMENT OPERATIONS \$789.8				
Multi-Purpose Crew Vehicle \$1,200.0	SPACE LAUNCH SYSTEM \$1,502.6		EXPLORATION GROUND SYSTEMS		COMMERCIAL CREW	HUMAN RESEARCH PROGRAM	ADVANCED EXPLORATION SYSTEMS			SPOC Pension Liability	Program Integration	Flight & Ground Ops.	Flight Hardware	ISS Systems O&M	ISS Research	ISS Crew & Cargo Transport.	21ST CENTURY SPACE LAUNCH COMPLEX	Space Communications Networks	Space Communications Support	TDRS Replenishment	HUMAN SPACEFLIGHT OPERATIONS	LAUNCH SERVICES	ROCKET PROPULSION TESTING	SBRIR & STTR	PARTNERSHIPS DEVELOPMENT & STRATEGIC INTEGRATION	CROSS CUTTING SPACE TECHNOLOGY DEVELOPMENT	EXPLORATION TECHNOLOGY DEVELOPMENT	Center Institutional Capabilities	Center Programmatic Capabilities	Agency Management & Operations \$403.2	Safety & Mission Assurance	Chief Engineer	Chief Health & Medical Officer	Independent Verification & Validation	IT Management	Applications	Infrastructure	Strategic Capabilities Assets Program #2.3	
1,142.9	57.1	1,456.1	46.4	304.5	406.0	157.7	142.0	0.0	470.0	19.4	40.0	26.8	1,418.7	225.5	1,185.7	123.5	364.2	66.0	15.2	107.3	81.0	43.6	166.7	29.5	187.7	189.9	1,703.4	500.7	403.2	49.4	105.2	4.5	39.1	14.6	67.8	76.6	29.3		

FY 2012 OPERATING PLAN BUDGET STRUCTURE

<b>EXPLORATION</b>	<b>3,724.3</b>	<b>(3.7)</b>	<b>3,720.5</b>
<b>HUMAN EXPLORATION CAPABILITIES</b>	<b>3,007.5</b>	<b>0.0</b>	<b>3,007.0</b>
Multi-Purpose Crew Vehicle.....	1,200.0	0.0	1,200.0
Crew Vehicle Development.....	1,142.9		1,142.9
MPCV Program Integration & Support.....	57.1		57.1
Space Launch System.....	1,807.5	(0.4)	1,807.0
Launch Vehicle Development.....	1,456.5	(0.4)	1,456.1
SLS Program Integration & Support.....	46.4		46.4
Ground Systems Development & Operations.....	304.5		304.5
<b>COMMERCIAL SPACE FLIGHT</b>	<b>406.0</b>	<b>0.0</b>	<b>406.0</b>
Commercial Crew	406.0		406.0
<b>EXPLORATION RESEARCH &amp; DEVELOPMENT</b>	<b>310.8</b>	<b>(3.3)</b>	<b>307.5</b>
Human Research Program	157.7		157.7
Advanced Exploration Systems	153.1	(3.3)	149.8
<b>SPACE OPERATIONS</b>	<b>4,207.2</b>	<b>(11.7)</b>	<b>4,195.5</b>
<b>SPACE SHUTTLE</b>	<b>559.3</b>	<b>(3.1)</b>	<b>556.2</b>
Space Shuttle Program	559.3	(3.1)	556.2
SPOC Pension Liability.....	470.0		470.0
Program Integration.....	22.5	(3.1)	19.4
Flight & Ground Operations.....	40.0		40.0
Flight Hardware.....	26.8		26.8
<b>INTERNATIONAL SPACE STATION (ISS)</b>	<b>2,829.9</b>	<b>0.0</b>	<b>2,829.9</b>
International Space Station Program	2,829.9	0.0	2,829.9
ISS Systems Operations & Maintenance.....	1,418.7		1,418.7
ISS Research.....	225.5		225.5
ISS Crew & Cargo Transportation.....	1,185.7		1,185.7
<b>SPACE &amp; FLIGHT SUPPORT</b>	<b>818.0</b>	<b>(7.3)</b>	<b>810.7</b>
21st Century Space Launch Complex	130.0	(6.5)	123.5
Space Communications & Navigation	446.0	(0.5)	445.5
Space Communications Networks.....	364.4	(0.2)	364.2
Space Communications Support.....	66.3	(0.3)	66.0
TDRS Replenishment.....	15.2		15.2
Human Spaceflight Operations	107.6	(0.3)	107.3
Launch Services	81.0		81.0
Rocket Propulsion Test	43.6		43.6
Space Technology	9.8	(1.3)	8.5
<b>SPACE TECHNOLOGY</b>	<b>548.5</b>	<b>0.0</b>	<b>548.5</b>
<b>SPACE TECHNOLOGY</b>	<b>548.5</b>	<b>0.0</b>	<b>548.5</b>
SBRIR & STTR	160.5		160.5
Partnerships Devel. & Strategic Integration	26.4		26.4
Crosscutting Space Tech. Development	181.6		181.6
Exploration Technology Development	180.0		180.0
<b>CROSS AGENCY SUPPORT</b>	<b>3,002.9</b>	<b>(0.1)</b>	<b>3,002.9</b>
<b>CENTER MANAGEMENT &amp; OPERATIONS</b>	<b>2,204.1</b>	<b>0.0</b>	<b>2,204.1</b>
Center Management & Operations	2,204.1		2,204.1
Center Institutional Capabilities.....	1,703.4		1,703.4
Center Programmatic Capabilities.....	500.7		500.7
<b>AGENCY MANAGEMENT &amp; OPERATIONS</b>	<b>798.8</b>	<b>(0.1)</b>	<b>798.8</b>
Agency Management	403.3	(0.1)	403.2
Safety & Mission Success	198.2		198.2
Safety and Mission Assurance.....	49.4		49.4
Chief Engineer.....	105.2		105.2
Chief Health and Medical Officer.....	4.5		4.5
Independent Verification and Validation.....	39.1		39.1
Agency IT Services	159.1		159.1
IT Management.....	14.6		14.6
Applications.....	67.8		67.8
Infrastructure.....	76.6		76.6
Innovative Partnerships Program	8.9		8.9
Strategic Capabilities Assets	29.3		29.3

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