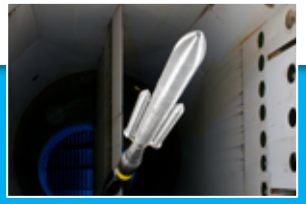
National Aeronautics and Space Administration

NASA

Office of

Small Business Programs (OSBP)

where small business makes a **big** difference



Glenn A. Delgado, Associate Administrator

THE STATE OF SMALL BUSINESS AT NASA

NASA Industry Forum
March 18, 2014

NASA Guest Network (WiFi)

- Username: 54177142
- Password: 70297297

NASA Industry Forum (NIF)

About the NIF:

- Opportunity to share center-level information that is of concern to both NASA as well as NASA's contractors.
- Comprised of contractor representatives from all NASA centers
- Includes representatives from both small and other than small businesses.

NASA Industry Forum (NIF)

- Members will not be requested or expected to:
  - Reach consensus decisions
  - Provide consensus advice or recommendations to the Agency
- Centers shall recommend vendors to the Office of Small Business Programs (OSBP)

NASA Industry Forum (NIF)

- Associate Administrator for OSBP shall invite representatives from Center recommendations.
- OSBP intends to rotate invitees periodically.
- NIF will meet no more than twice per year:
  - Approximately 1.5 days each meeting
  - To the extent possible, OSBP will schedule NIF meetings to tie in with other relevant events in the Washington, DC area.
  - NIF members (or their employers) are responsible for their own travel costs.

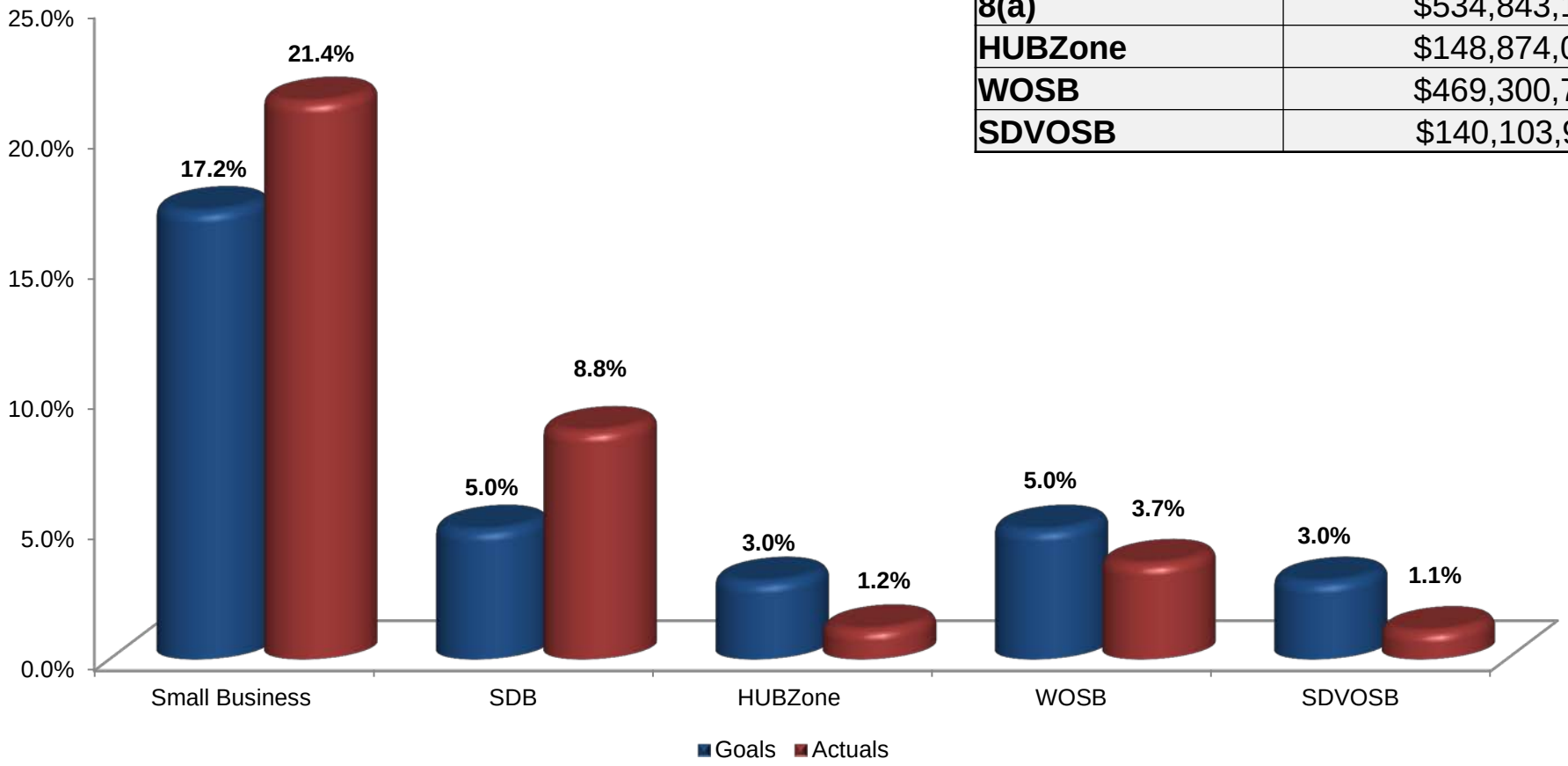
NASA Industry Forum (NIF)

- Meeting participation:
  - NIF members should be able to discuss their Center's business environment, and any related issues.
  - Purpose to educate OSBP as well as other Centers of matters of concern, and to discuss possible solutions or improvements.
  - NASA Senior Management or Mission Directorates may address the NIF to discuss the future missions of the Agency.
  - Participation is non-retributional and confidential to the council.

NASA Agency Final FY13
Prime Goals vs. Actual Percentages

Data generated November 4, 2013 from FPDS-NG

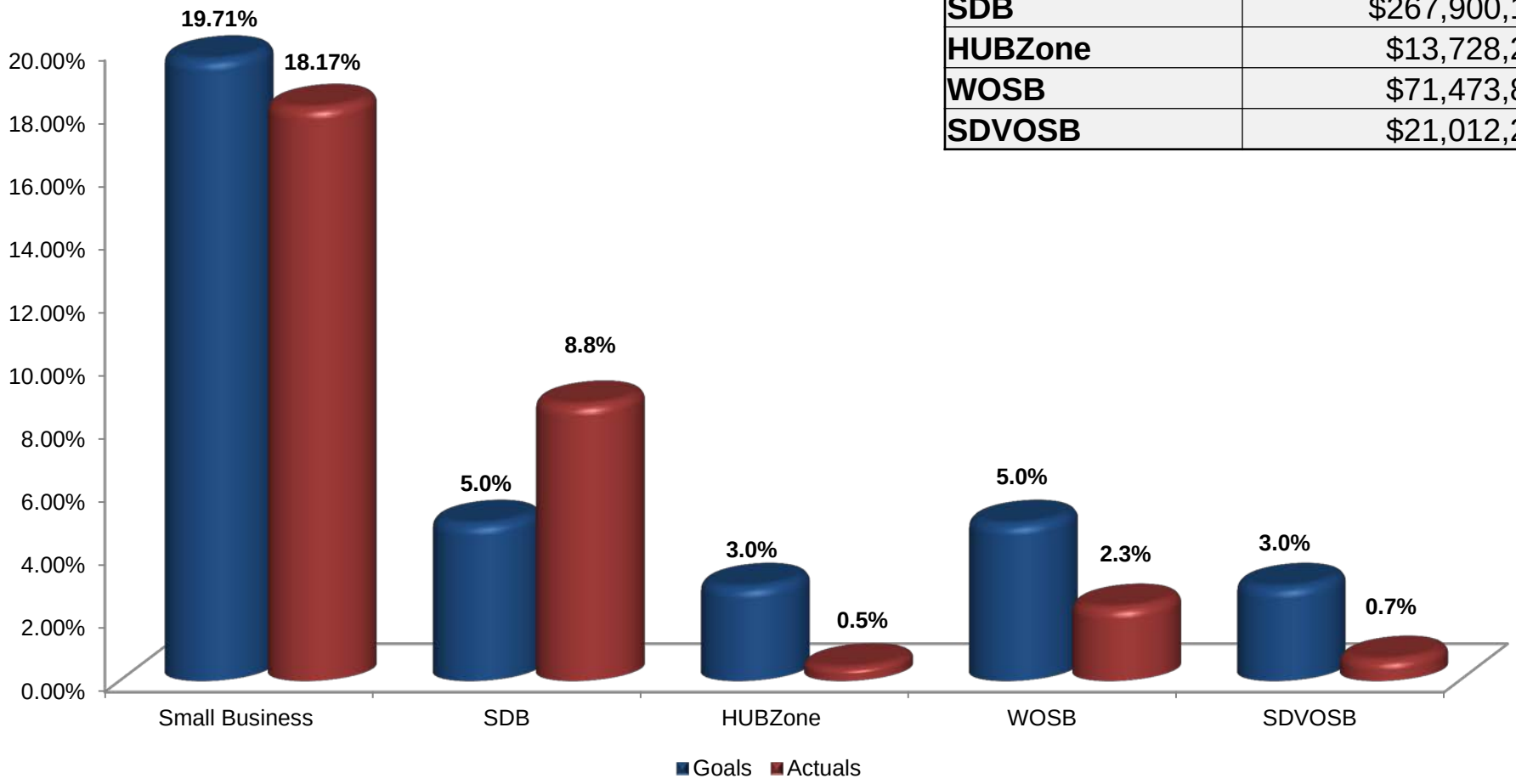
CATEGORY	DOLLARS
TOTAL DOLLARS	$12,732,212,886
SMALL BUSINESS	$2,723,797,037
SDB	$1,119,313,798
8(a)	$534,843,177
HUBZone	$148,874,086
WOSB	$469,300,703
SDVOSB	$140,103,911



NASA Agency January FY14
Prime Goals vs. Actual Percentages

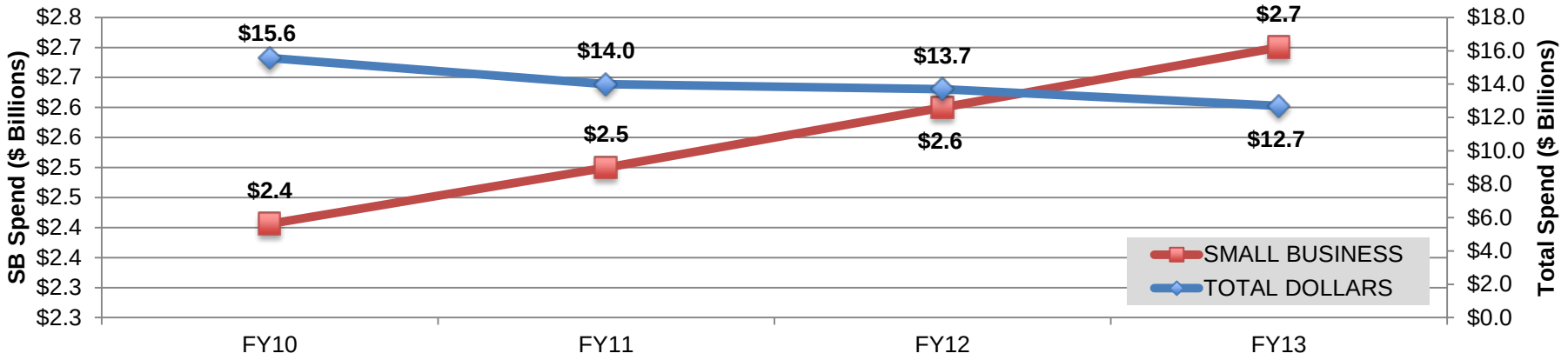
Data generated February 4, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$3,050,342,736
SMALL BUSINESS	$554,396,660
SDB	$267,900,122
HUBZone	$13,728,279
WOSB	$71,473,855
SDVOSB	$21,012,233



National Aeronautics and Space Administration (NASA)

Data from SBA Scorecards FY10-FY12
FY13 Data Estimated (Generated November 4, 2013 from FPDS-NG)



YEAR	GRADE
FY10	C
FY11	B
FY12	A
FY13	A

CATEGORY	FY10	FY11	FY12	FY13
TOTAL DOLLARS	$15.6B	$14.0B	$13.7B	$12.7B
SMALL BUSINESS	$2.4B	$2.5B	$2.6B	$2.7B
WOSB	$349.0M	$386.5M	$401.8M	$469.3M
SDB	$1.1B	$982.6M	$1.0B	$1.1B
SDVOSB	$238.0M	$178.4M	$138.8M	$140.1M
HUBZone	$139.0M	$106.9M	$93.1M	$148.9M

CATEGORY	FY10		FY11		FY12		FY13	
	GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL
SMALL BUSINESS	15.90%	15.46%	15.90%	17.82%	15.20%	19.00%	17.2%	21.4%
WOSB	5.00%	2.24%	5.00%	2.79%	5.00%	2.94%	5.00%	3.7%
SDB	5.00%	7.13%	5.00%	7.09%	5.00%	7.65%	5.00%	8.8%
SDVOSB	3.00%	1.53%	3.00%	1.29%	3.00%	1.02%	3.00%	1.1%
HUBZone	3.00%	0.89%	3.00%	0.77%	3.00%	0.68%	3.00%	1.2%

FY13 Top NASA NAICS Codes by Dollars

6 digit NAICS Code (Description)	Total Dollars
541712 (RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES (EXCEPT BIOTECHNOLOGY))	$4,296,102,078.80
336414 (GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING)	$2,490,229,732.81
541710 (RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES)	$1,248,696,415.40
541330 (ENGINEERING SERVICES)	$1,202,055,476.97
517919 (ALL OTHER TELECOMMUNICATIONS)	$690,530,284.12
561210 (FACILITIES SUPPORT SERVICES)	$549,894,009.73
481212 (NONSCHEDULED CHARTERED FREIGHT AIR TRANSPORTATION)	$438,069,205.64
541512 (COMPUTER SYSTEMS DESIGN SERVICES)	$388,023,232.54
236220 (COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION)	$196,857,109.32
541690 (OTHER SCIENTIFIC AND TECHNICAL CONSULTING SERVICES)	$146,980,088.48
541519 (OTHER COMPUTER RELATED SERVICES)	$135,194,090.49
541513 (COMPUTER FACILITIES MANAGEMENT SERVICES)	$132,835,698.36
517110 (WIRED TELECOMMUNICATIONS CARRIERS)	$126,825,910.90
561612 (SECURITY GUARDS AND PATROL SERVICES)	$98,351,004.22
541611 (ADMINISTRATIVE MANAGEMENT AND GENERAL MANAGEMENT CONSULTING SERVICES)	$91,217,540.97
561110 (OFFICE ADMINISTRATIVE SERVICES)	$84,619,086.83
236210 (INDUSTRIAL BUILDING CONSTRUCTION)	$65,551,359.81
336419 (OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING)	$53,759,206.18
237130 (POWER AND COMMUNICATION LINE AND RELATED STRUCTURES CONSTRUCTION)	$36,384,913.28
541511 (CUSTOM COMPUTER PROGRAMMING SERVICES)	$33,362,940.69
561720 (JANITORIAL SERVICES)	$28,592,754.37
238990 (ALL OTHER SPECIALTY TRADE CONTRACTORS)	$28,510,337.16
238120 (STRUCTURAL STEEL AND PRECAST CONCRETE CONTRACTORS)	$20,977,790.00
237110 (WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION)	$17,944,245.94
238910 (SITE PREPARATION CONTRACTORS)	$13,343,670.14

Fiscal Year 2014
NASA Small Business Industry Day Events

Date	Center	Location	Socioeconomic Category
March 6, 2014	Armstrong Flight Research Center	Los Angeles, CA	Women-Owned
June 10, 2014	Marshall Space Flight Center	Huntsville, AL	HUBZone
August 13, 2014	Langley Research Center	Hampton, VA	Service-Disabled Veteran-Owned

NASA Small Business Social Media

About OSBP Social Media:
OSBP social media sites that provide instant access to procurement opportunities, small business information, or small business community, outreach and matchmaking events

NASASmallBusiness

Facebook
Likes: 10,572
Weekly Total Reach: 432
People Talking About the OSBP Page: 72
http://www.facebook.com/NASASmallBusiness

@NASA_OSBP

Twitter
Followers: 773
http://twitter.com/NASA_OSBP

NASAOSBP

Blogger (Glenn Delgado's Blog)
Monthly Pageviews: 157
All time Pageviews: 2,998
http://nasaosbp.blogspot.com/

Contact OSBP

NASA Office of Small Business Programs

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Washington, DC 20546

Tel: (202) 358-2088

Fax: (202) 358-3261

E-mail: smallbusiness@nasa.gov

Web site: www.osbp.nasa.gov

NASA Vendor Database:
https://vendors.nvdb.nasa.gov

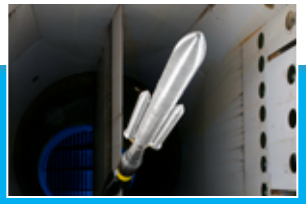
National Aeronautics and Space Administration

NASA

Office of

Small Business Programs (OSBP)

where small business makes a **big** difference



NASA Industry Forum Meeting Metrics Update

Glenn A. Delgado, Associate Administrator
March 19, 2014

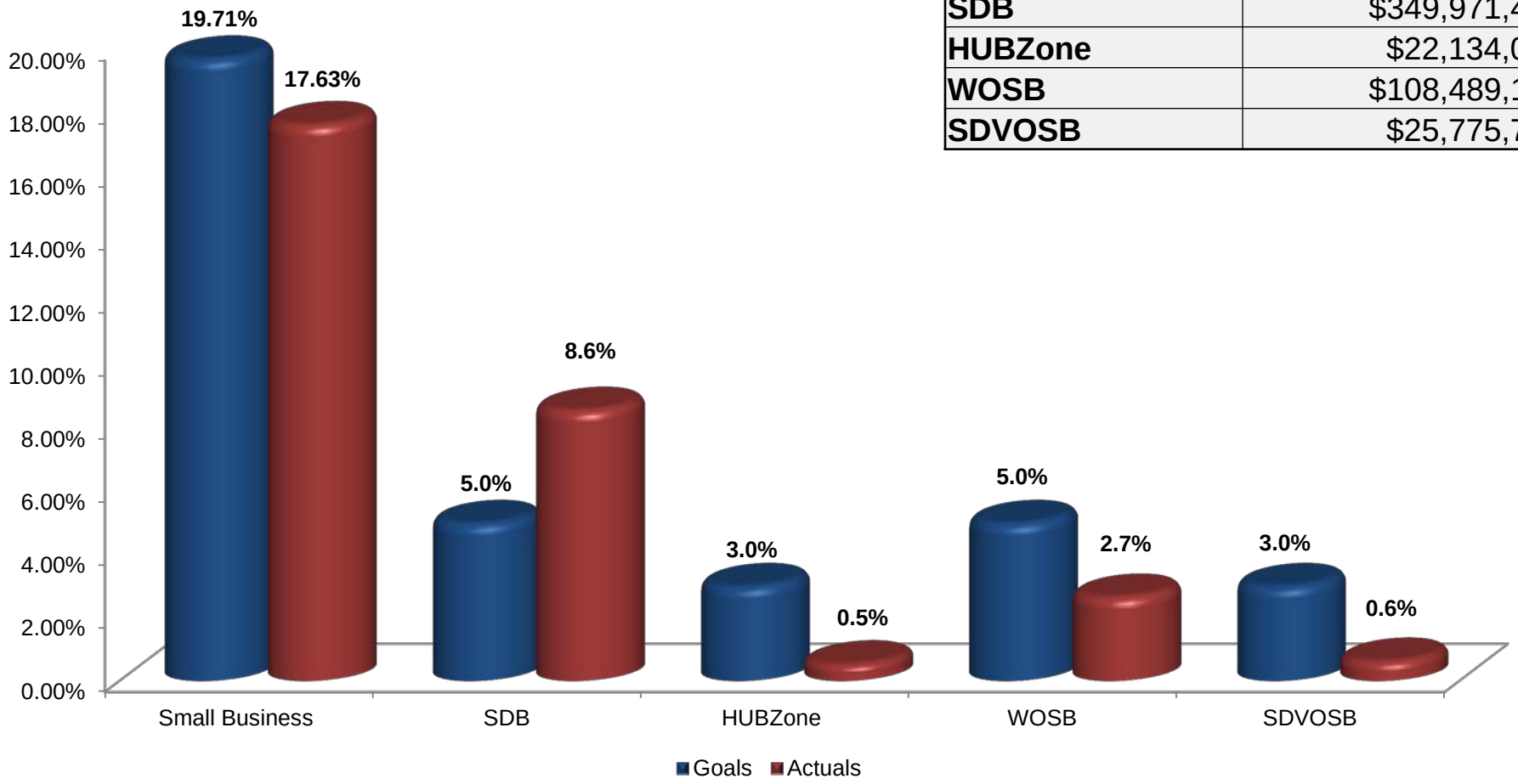
“Big 7” Small Business Comparison
As of February 18, 2014

	Agency	Goal	Actual as of	Total eligible $	SDB (Goal: 5%)	WOSB (Goal: 5%)	SDVOSB (Goal: 3%)	HUBZone (Goal: 3%)
BIG 7	DEPT OF DEFENSE (9700)	22.50%	21.09%	$228,949,192,879	7.79%	3.57%	2.64%	1.78%
	ENERGY, DEPARTMENT OF (8900)	7.00%	5.71%	$21,748,185,341	2.63%	1.48%	0.32%	0.41%
	HEALTH AND HUMAN SERVICES, DEPARTMENT OF (7500)	20.50%	23.62%	$19,427,096,974	10.02%	6.56%	1.10%	0.57%
	VETERANS AFFAIRS, DEPARTMENT OF (3600)	34.00%	36.21%	$18,284,975,939	7.92%	3.35%	19.38%	1.72%
	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (8000)	17.20%	21.65%	$12,733,636,452	8.81%	3.68%	1.10%	1.17%
	HOMELAND SECURITY, DEPARTMENT OF (7000)	32.00%	30.88%	$12,518,031,403	13.26%	7.04%	5.60%	3.34%
	GENERAL SERVICES ADMINISTRATION (4700)	30.00%	36.91%	$3,508,805,754	17.47%	7.75%	3.36%	2.53%

NASA Agency February FY14
Prime Goals vs. Actual Percentages

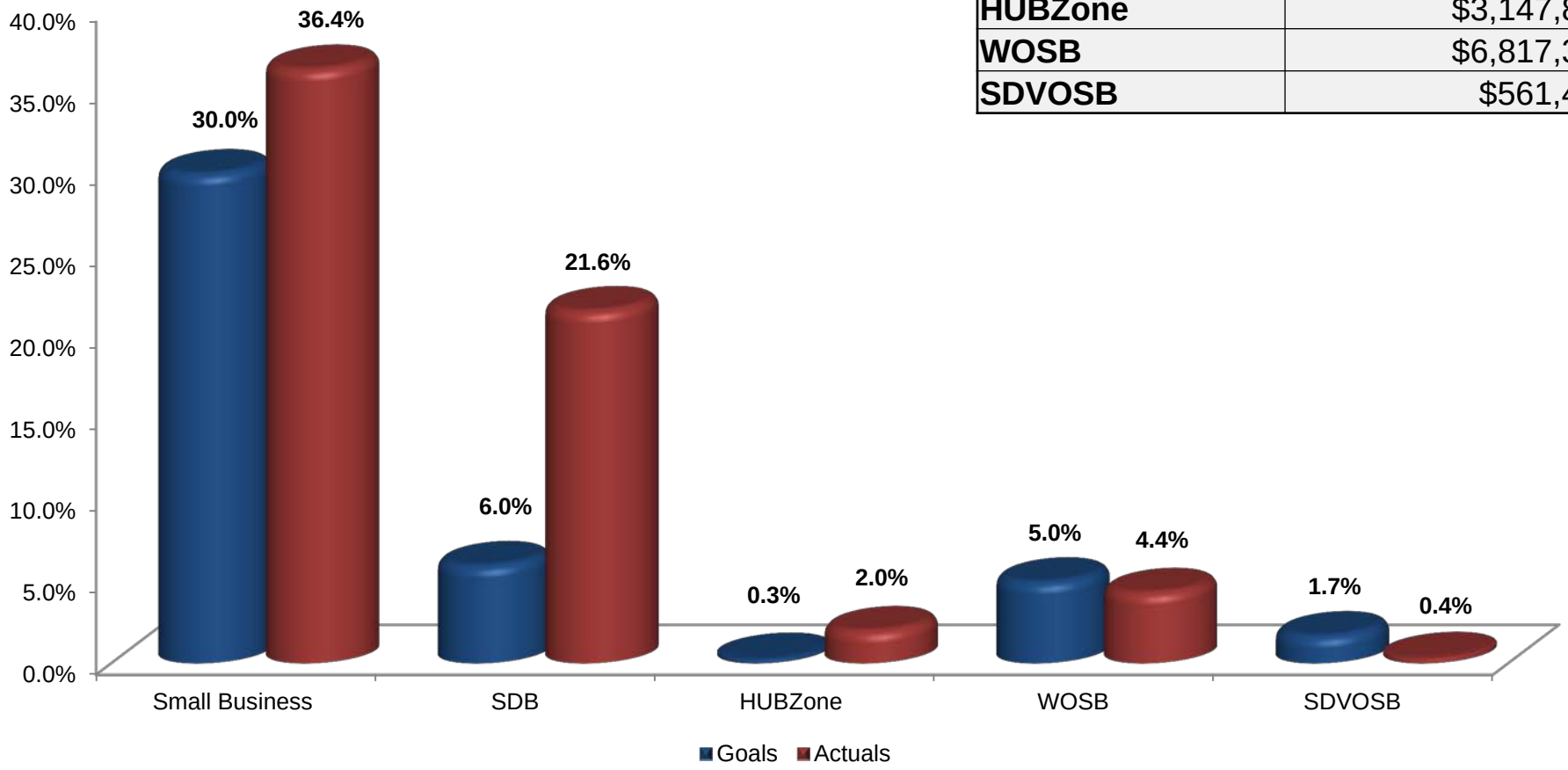
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$4,074,652,611
SMALL BUSINESS	$718,484,375
SDB	$349,971,495
HUBZone	$22,134,032
WOSB	$108,489,100
SDVOSB	$25,775,739



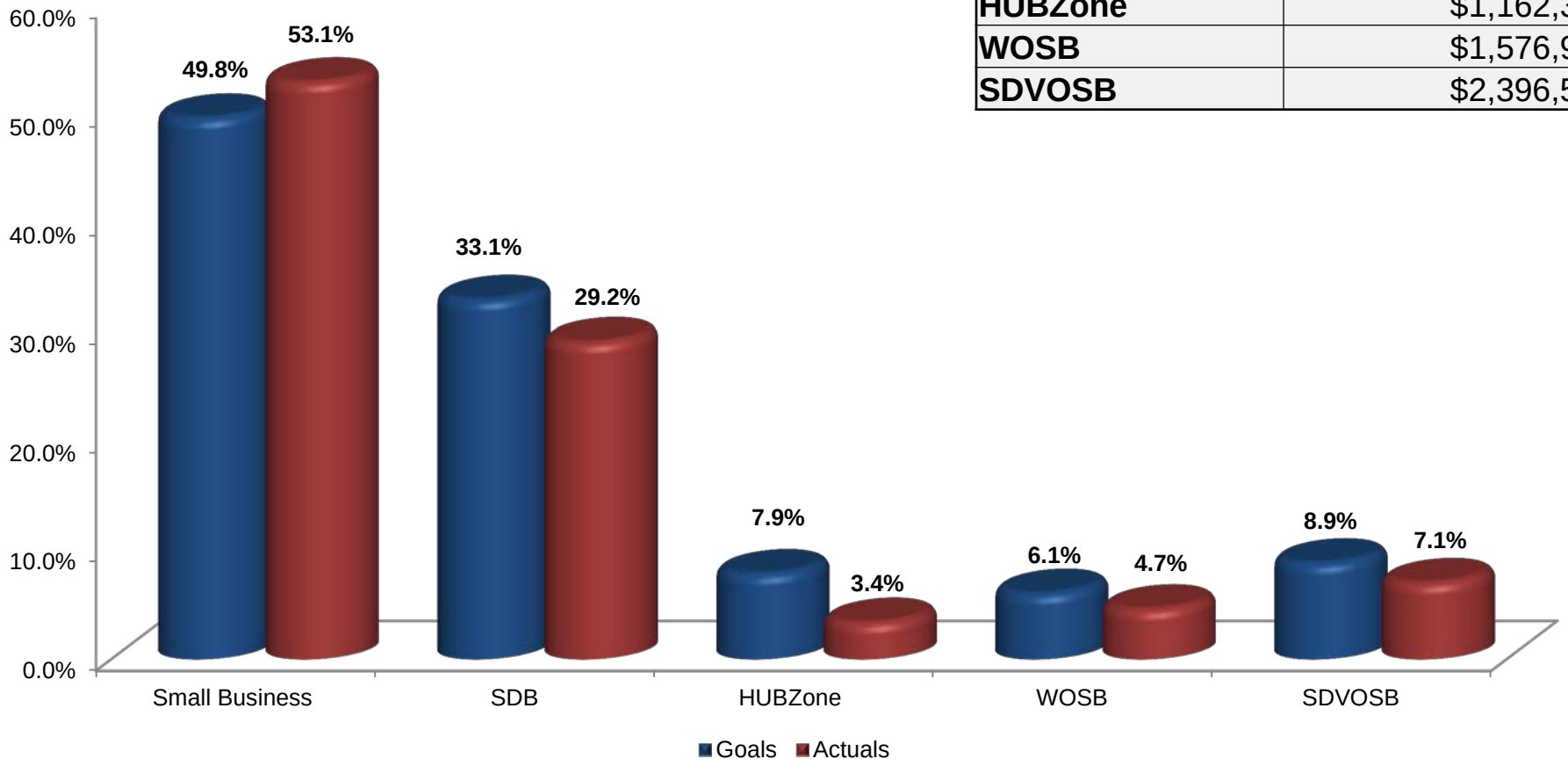
ARC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$156,593,563
SMALL BUSINESS	$57,019,344
SDB	$33,824,606
HUBZone	$3,147,891
WOSB	$6,817,360
SDVOSB	$561,486



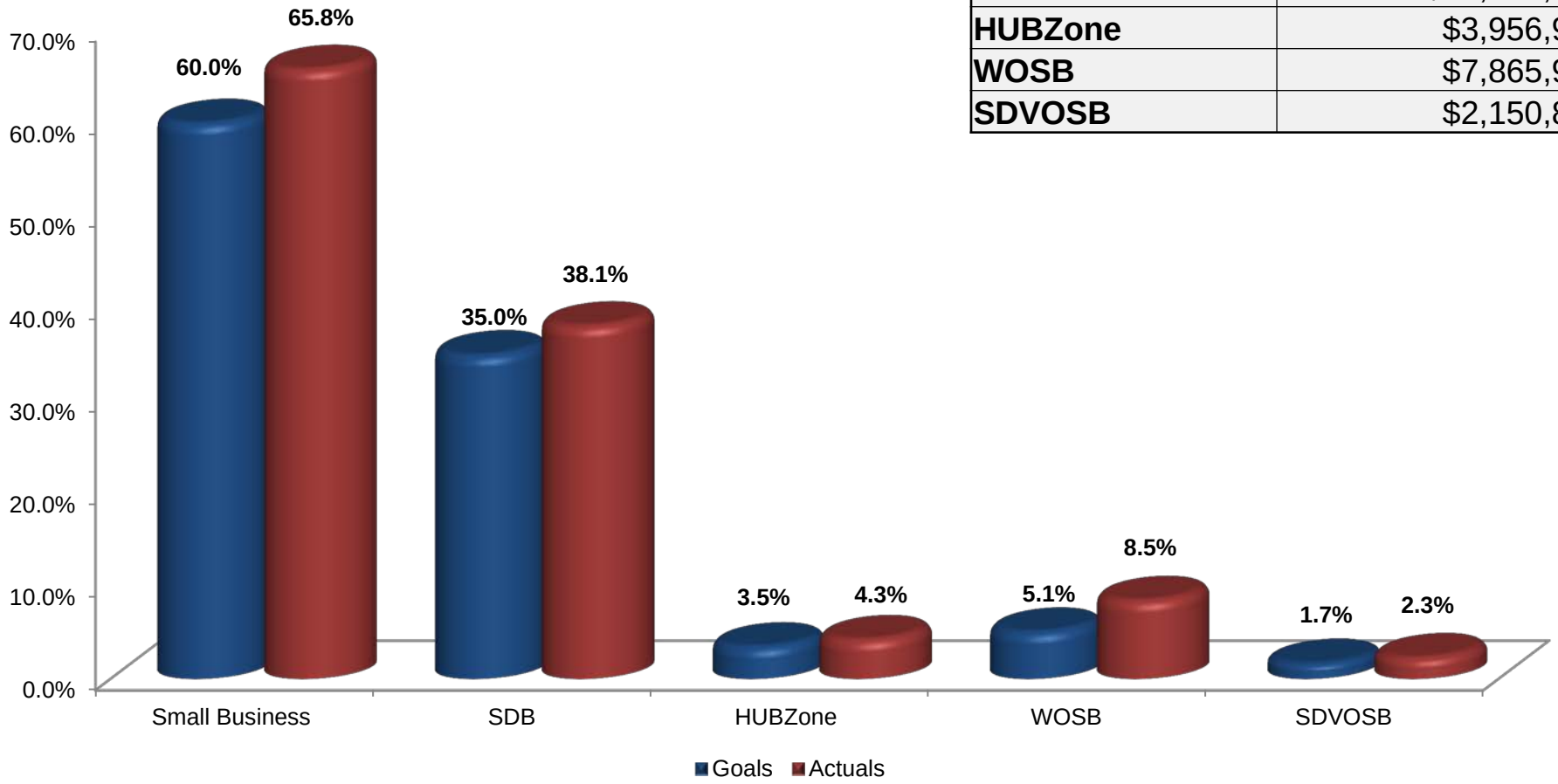
DFRC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$33,818,161
SMALL BUSINESS	$17,965,600
SDB	$9,883,604
HUBZone	$1,162,359
WOSB	$1,576,977
SDVOSB	$2,396,555



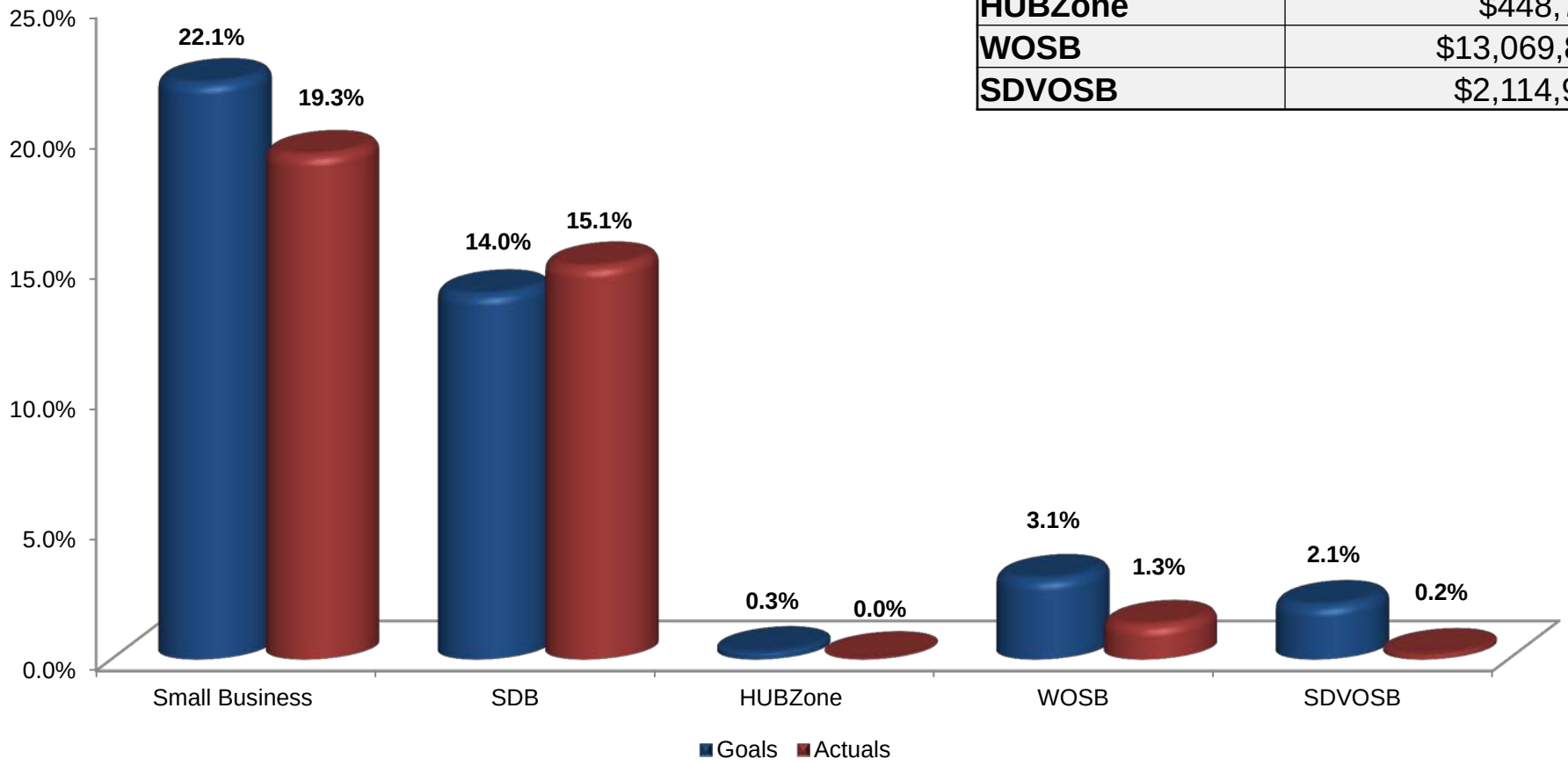
GRC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$92,428,533
SMALL BUSINESS	$60,854,049
SDB	$35,227,761
HUBZone	$3,956,905
WOSB	$7,865,913
SDVOSB	$2,150,838



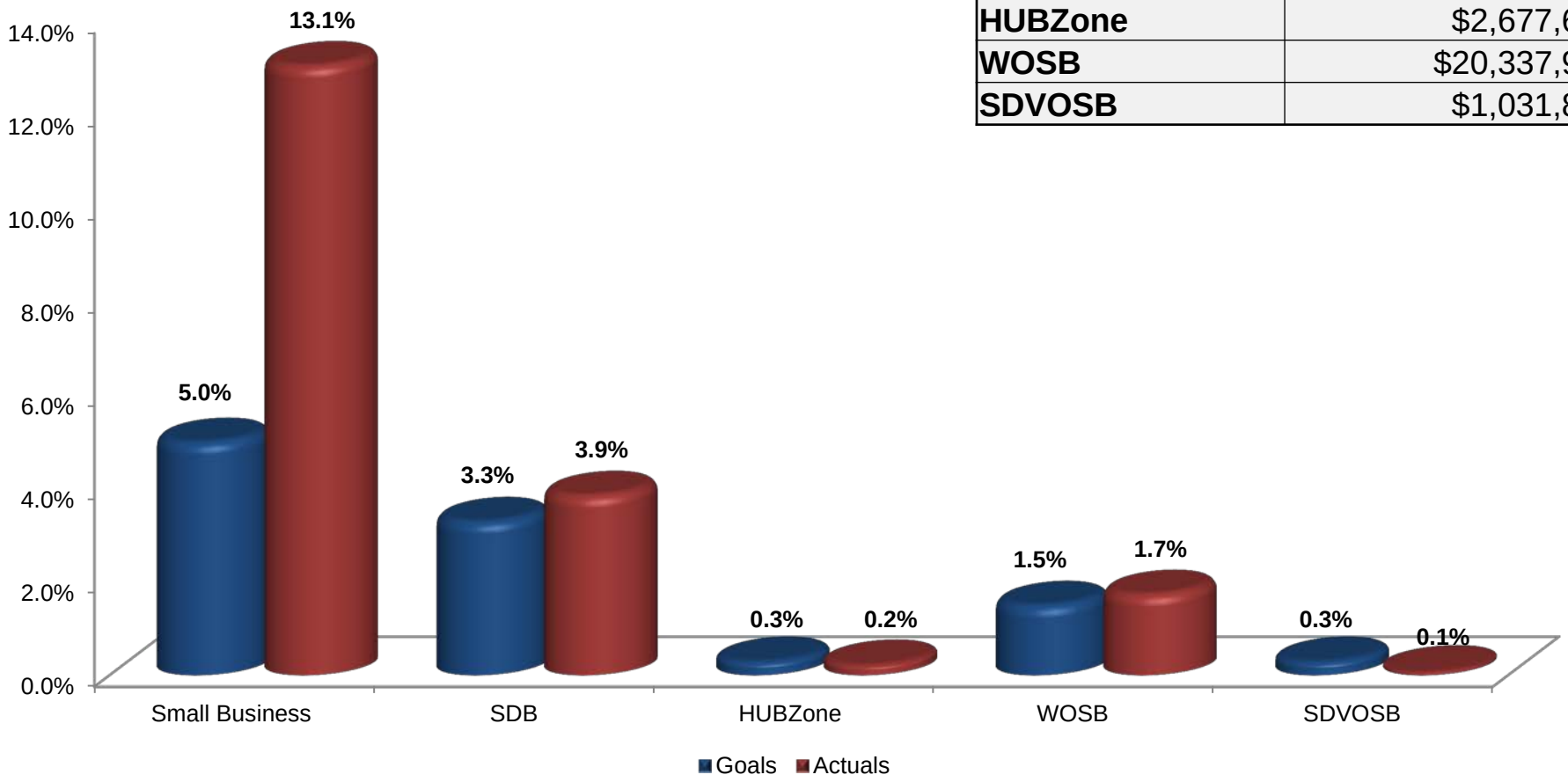
GSFC/HQ February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$974,988,803
SMALL BUSINESS	$188,583,887
SDB	$146,884,494
HUBZone	$448,736
WOSB	$13,069,811
SDVOSB	$2,114,925



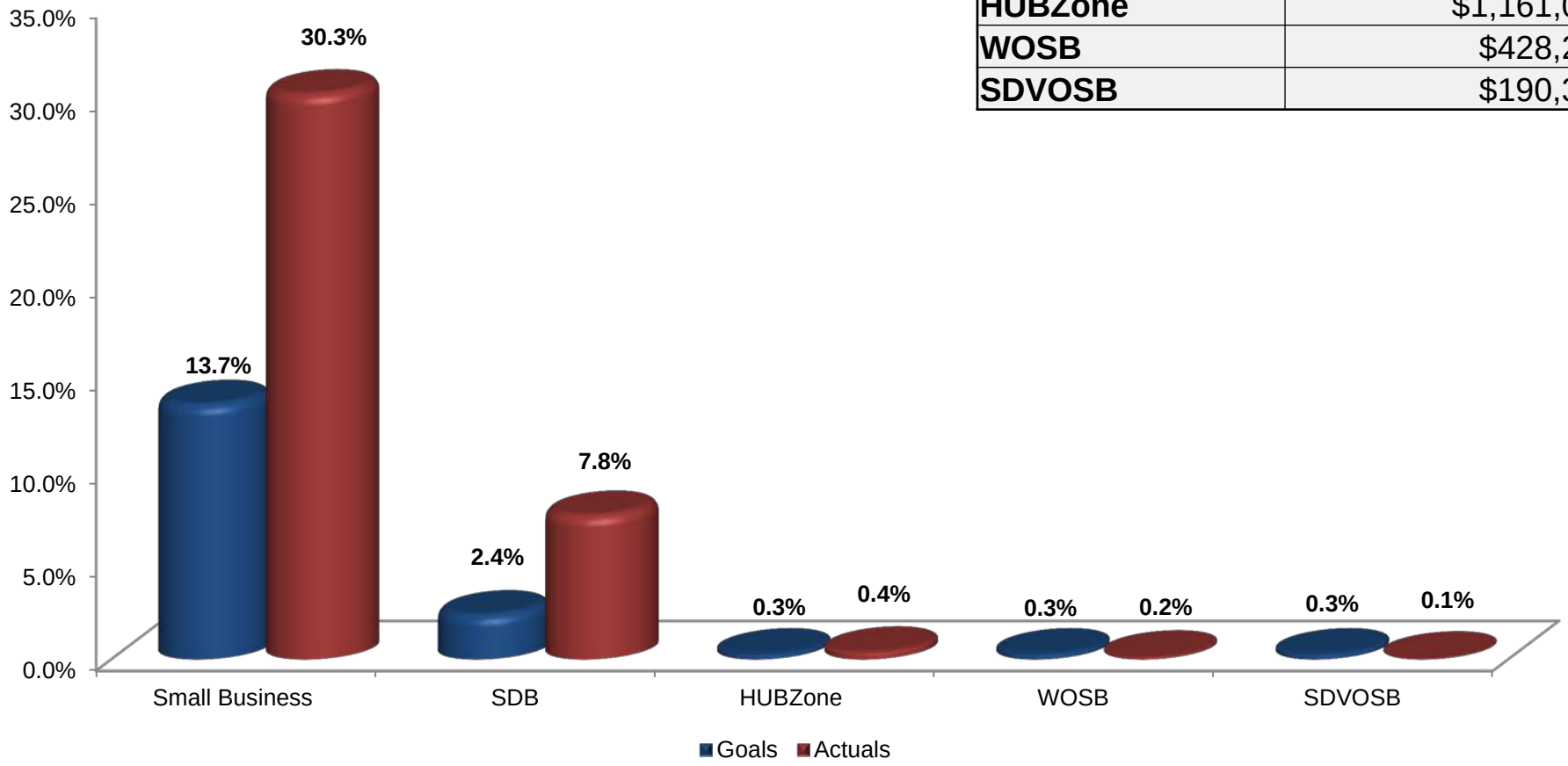
JSC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$1,169,809,079
SMALL BUSINESS	$152,842,845
SDB	$45,143,720
HUBZone	$2,677,622
WOSB	$20,337,997
SDVOSB	$1,031,837



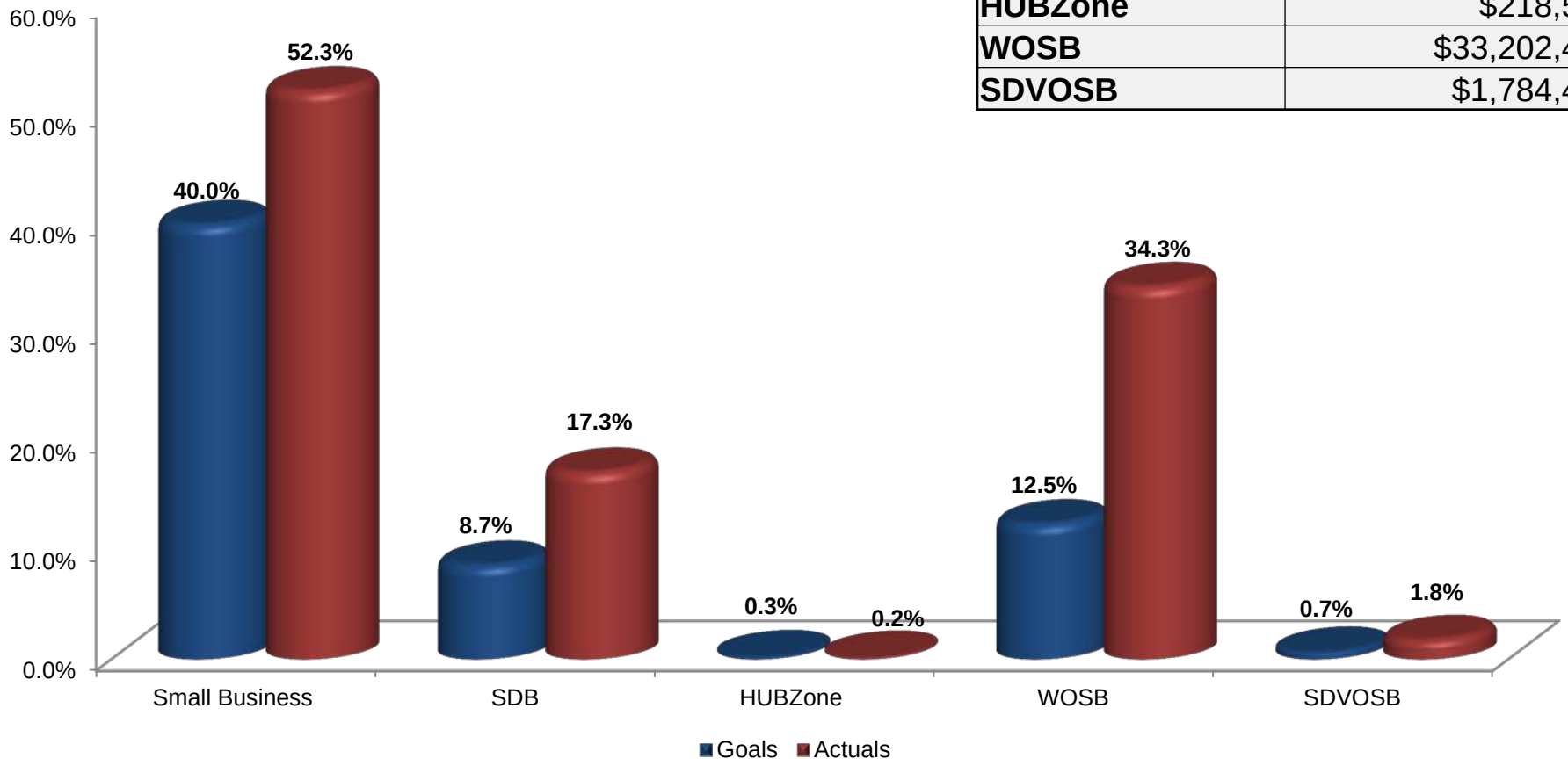
KSC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$279,440,523
SMALL BUSINESS	$84,798,395
SDB	$21,659,772
HUBZone	$1,161,058
WOSB	$428,286
SDVOSB	$190,373



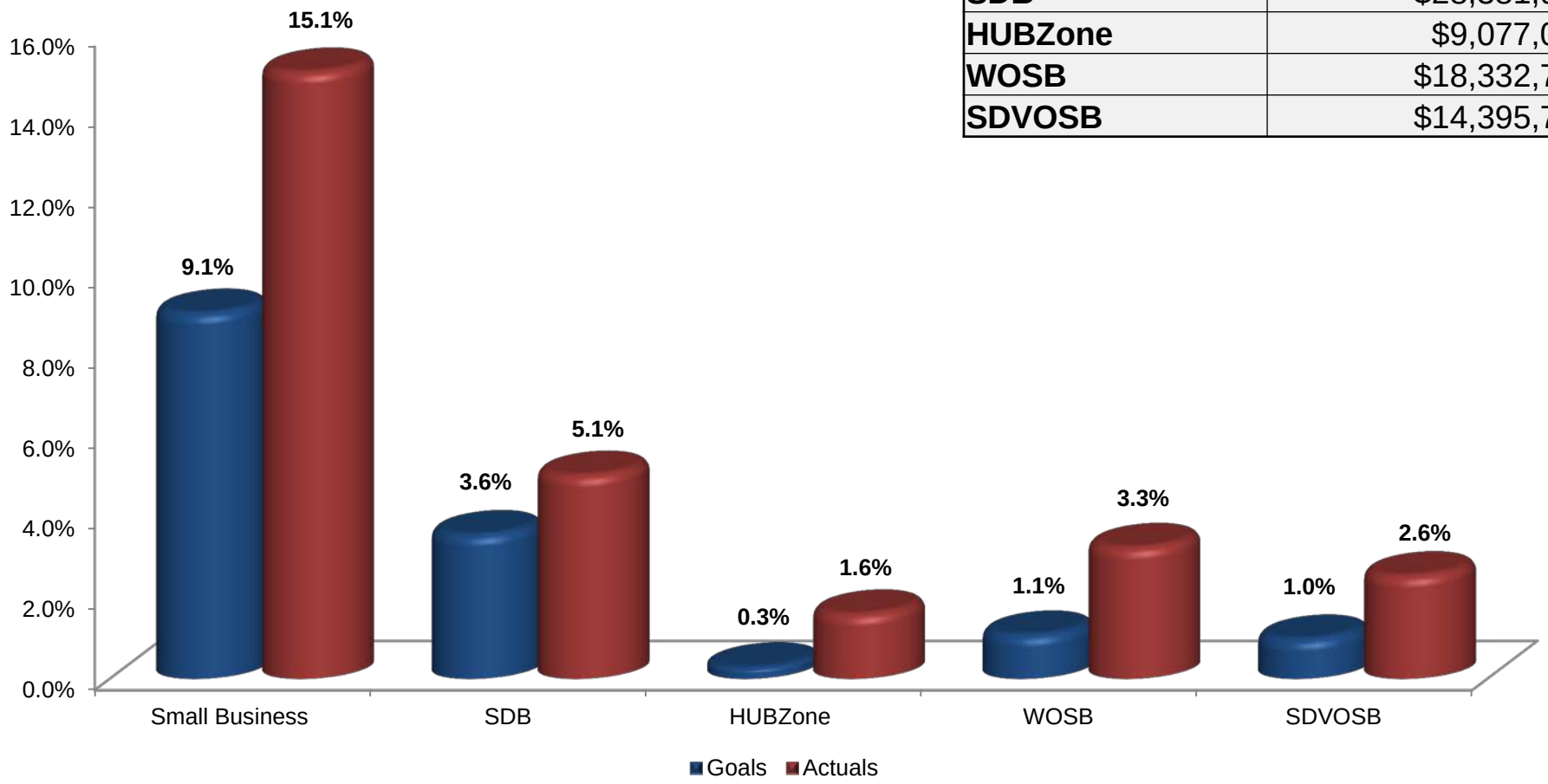
LaRC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$96,846,214
SMALL BUSINESS	$50,655,218
SDB	$16,710,665
HUBZone	$218,540
WOSB	$33,202,401
SDVOSB	$1,784,463



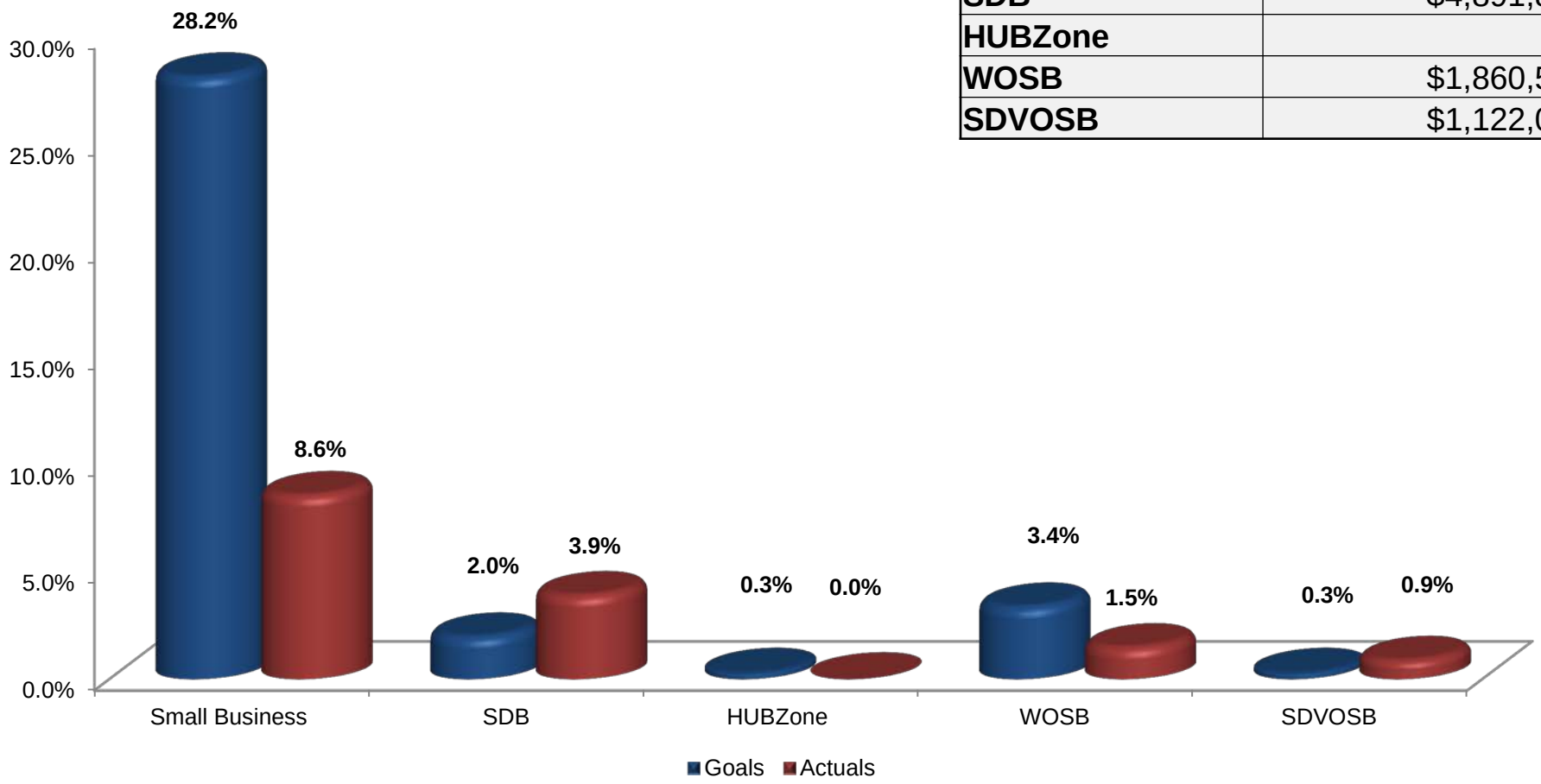
MSFC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$558,926,995
SMALL BUSINESS	$84,392,862
SDB	$28,381,955
HUBZone	$9,077,009
WOSB	$18,332,765
SDVOSB	$14,395,768



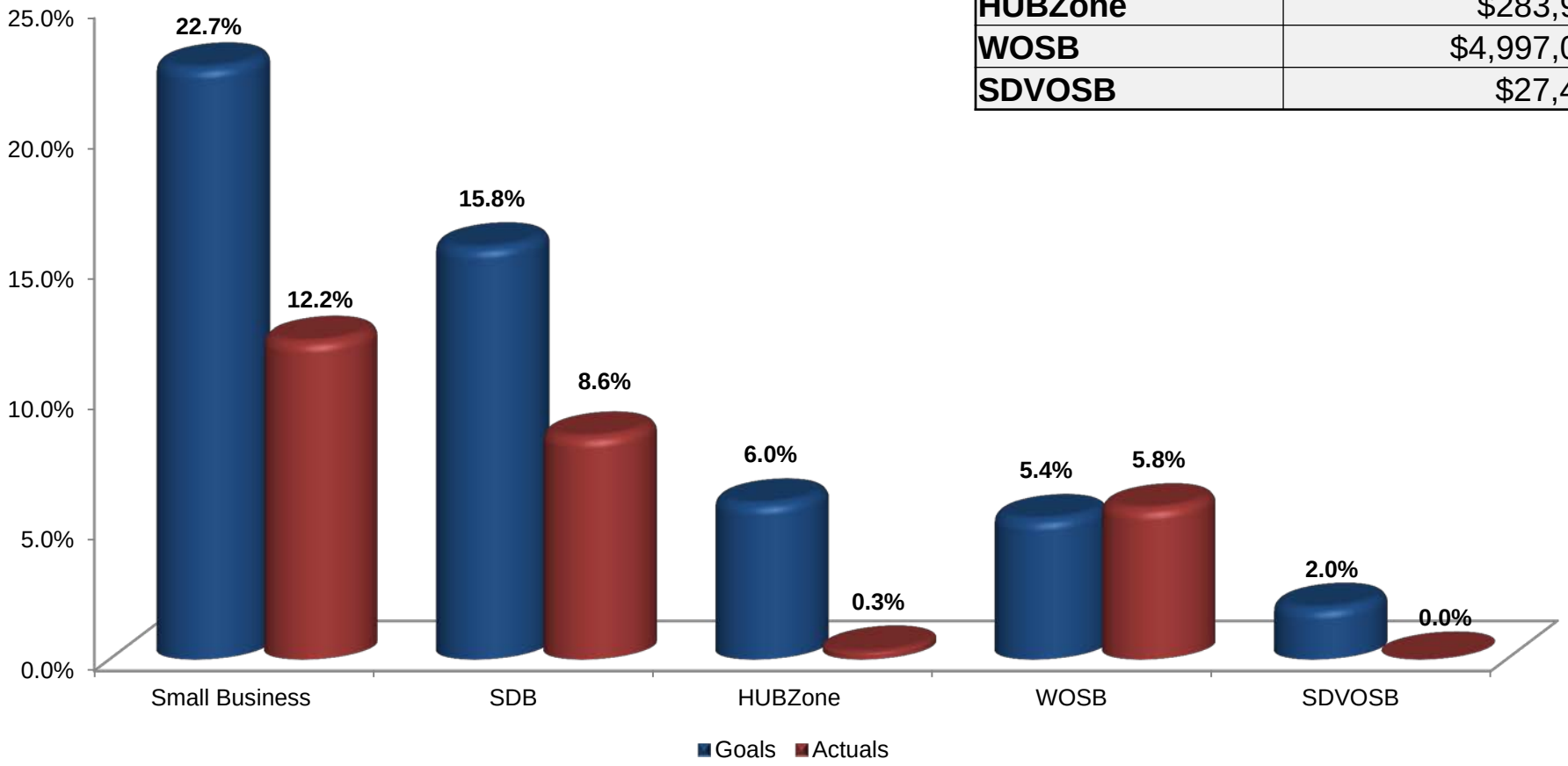
NSSC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$124,237,427
SMALL BUSINESS	$10,713,910
SDB	$4,891,869
HUBZone	$0
WOSB	$1,860,512
SDVOSB	$1,122,051



SSC February FY14
Prime Goals vs. Actual Percentages
Data generated March 3, 2014 from FPDS-NG

CATEGORY	DOLLARS
TOTAL DOLLARS	$85,943,527
SMALL BUSINESS	$10,498,380
SDB	$7,363,049
HUBZone	$283,912
WOSB	$4,997,078
SDVOSB	$27,445



NASA Small Business Initiatives

- Small Business Training
  - Developed six different courses to train NASA's acquisition, technical, and program personnel to better understand the benefits of the Small Business Program
  - Conducted 75 different classes with a total of 965 attendees since its inception in FY 2009

Course ID	Title
SBTAP	Small Business Training for the Acquisition Professional
SBMR	Small Business Market Research
SBTTP	Small Business Training for Technical Personnel
SBJV&T	Small Business Joint Venture & Teaming
SBTSE	Small Business Training for Senior Executives
SBTTC	Small Business Training for Technical Coordinators

National Defense Authorization Act of 2013

Transparency in sub-contracting:

- **Section 1651:** Prohibits a small business awarded a contract under one of the contracts. Exemption provided for similar situated subcontractors. (Status: SBA drafting proposed rule)
- **Section 1653:** Agencies directed to collect, report and periodically review data to ensure contractors meet subcontracting goals established in subcontracting plans. (Status: Office of General Counsel drafting proposed rule)
- **Section 1653:** Requires SBA to establish reporting mechanism that allows subcontractor to report fraudulent activity. (Status: Pending)

National Defense Authorization Act of 2013

Transparency in sub-contracting:

- **Section 1653:** SBA required to provide Congress a report setting forth agencies' subcontracting data-number in compliance or failing to file subcontracting plans. (Status: Subcontracting working group)

Size and Status Misrepresentation/Fraud/Suspension and Debarment:

- **Section 1692:** Small Business Procurement Advisory Council required to submit annual report to Congress reflecting comments on small business contracting goals, results of reviews of OSDBUs and best practices. (Status: Proposal to include as part of Success factors for FY 2014)

National Aeronautics and Space Administration

FISCAL YEAR 2015

BUDGET ESTIMATES

www.nasa.gov

Strategic Plan

Expand the frontiers of knowledge, capability, and opportunity in space

OUR MISSION
Drive advances in science, technology, aeronautics, and space exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth

Serve the American public and accomplish our Mission by effectively managing our people, technical capabilities, and infrastructure

Advance understanding of Earth and develop technologies to improve the quality of life on our home planet

2015 Budget Highlights

- Provides the necessary resources to advance the Nation's bipartisan space exploration plan and ensure that the United States remains the world's leader in space exploration and scientific discovery for years to come.
- Aligns NASA's activities to send humans to an asteroid by 2025 and Mars in the 2030s.
- Supports the Administration's commitment that NASA be a catalyst for the growth of a vibrant American commercial space industry.
- Builds on U.S. preeminence in science and technology, improves life on Earth and protects our home planet, while creating jobs and strengthening the American economy.
- Extends the life of the International Space Station (ISS) until at least 2024, which is essential to achieving the goals of sending humans to deep space destinations and returning benefits to humanity through research and technology development.

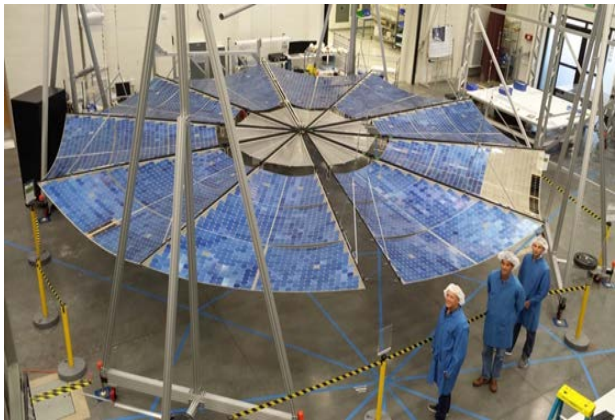
Highlights *(continued)*

- Acquires commercial cargo supply missions to the ISS with launches from our shores, and further advances NASA's initiative to return human spaceflight launches to the United States by 2017.

- Enables partnerships with American industry to develop new ways to reach space, creating jobs and enabling NASA to focus on new technologies that benefit all of our missions.

- Funds the Space Launch System and Orion space crew vehicle to take astronauts farther into the solar system than we have ever gone before.

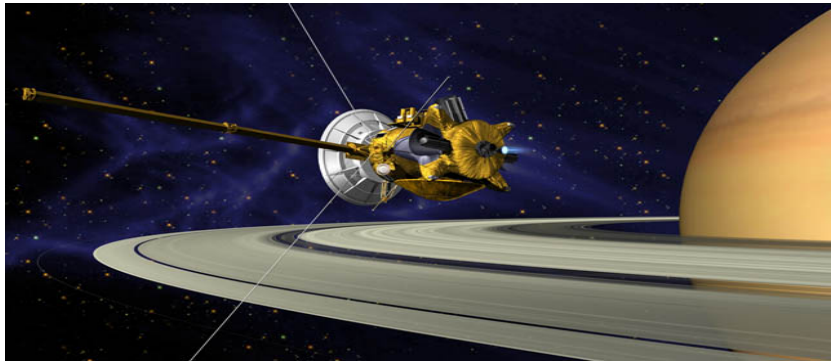
- Invests in transformative space technologies, such as high powered solar electric propulsion, advanced robotics, high speed communications and precise navigation that enable future NASA missions, and increase the Nation's capabilities in space.



Highlights *(continued)*

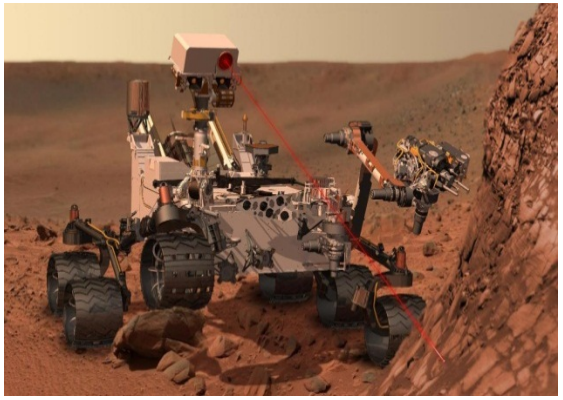
- Advances NASA's first-ever mission to identify, capture and redirect an asteroid. This initiative represents an unprecedented technological feat -- raising the bar for human exploration and discovery, while helping protect our home planet and bringing us closer to a human mission to one of these mysterious objects and building deep space capabilities needed for future missions to Mars.

- Continues to build on our nation's record of breathtaking and compelling scientific discoveries and achievements in space, with science missions that will reach far into our solar system, reveal unknown aspects of our universe and provide critical knowledge about our home planet.

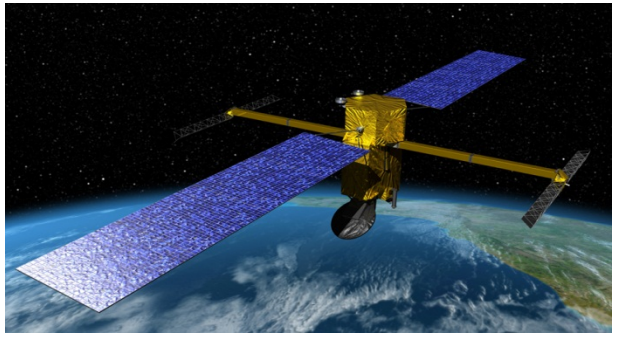


Highlights *(continued)*

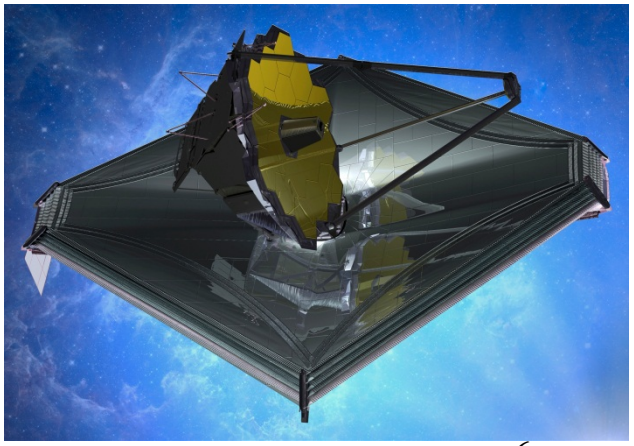
- Continues NASA's global leadership in planetary exploration, with funding for missions to Mars, a potential mission to Europa, missions already heading toward destinations such as Jupiter and Pluto, and missions operating throughout the solar system.



- Sustains NASA's vital role in understanding the Earth's systems and climate and the dynamics between our planet and the Sun. By the end of FY 2015, NASA will have launched an unprecedented five Earth science missions to find answers to critical challenges facing our planet today and in the future, including climate change, sea level rise, freshwater resources and extreme weather events.

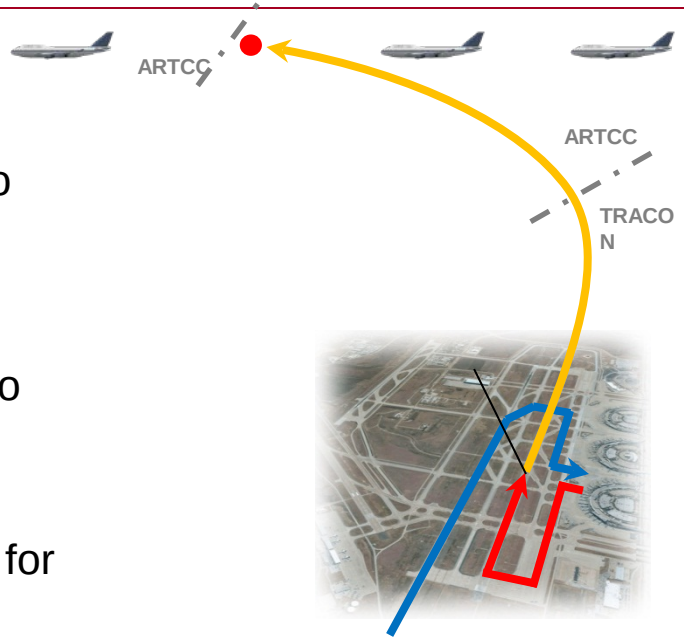


- Makes steady progress toward our next Great Observatory as we develop and conduct critical tests on the James Webb Space Telescope. Its planned launch in 2018 will again revolutionize our understanding of the universe.



Highlights *(continued)*

- Aligns Aeronautics research to focus on newly defined strategic thrust areas that address a growing demand for mobility, severe challenges to sustainability of energy and the environment, and technology advances in information, communications, and automation technologies. Continues to develop methods and technologies to support implementation of Next Gen.

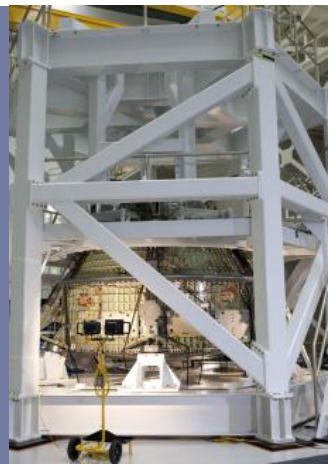


- Creates new jobs right here on Earth – especially for the next generation of American scientists and engineers – by supporting cutting edge aeronautics and space technology innovations, education, research and development that will help fuel the nation's economy for years to come.

- Builds on efforts proposed in the 2014 Science, Technology, Engineering, and Mathematics (STEM) Education budget. Continues to reduce fragmentation and supports a more cohesive infrastructure for delivering STEM education and leveraging existing resources to improve the reach of agency assets.

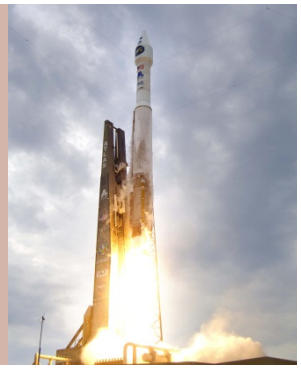
Anticipated Accomplishments in FY 2015

SLS/Orion: Complete analysis of Orion's Test Flight (EFT-1) & design reviews

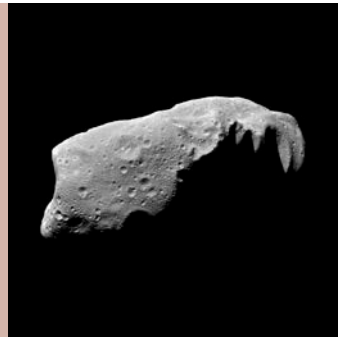


ISS: Increase utilization with science & technology payload hardware to 70 percent.

Launch 16 science and ISS cargo missions



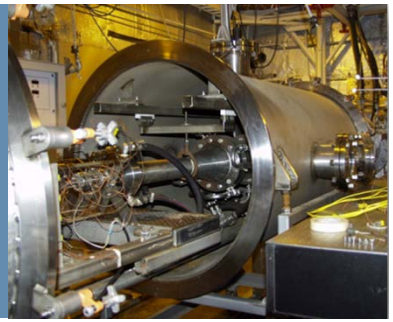
Asteroid Redirect Mission: Hold Concept Review



Commercial Crew Program: Complete first phase of certification efforts with partners.

COMMERCIAL CREW PROGRAM

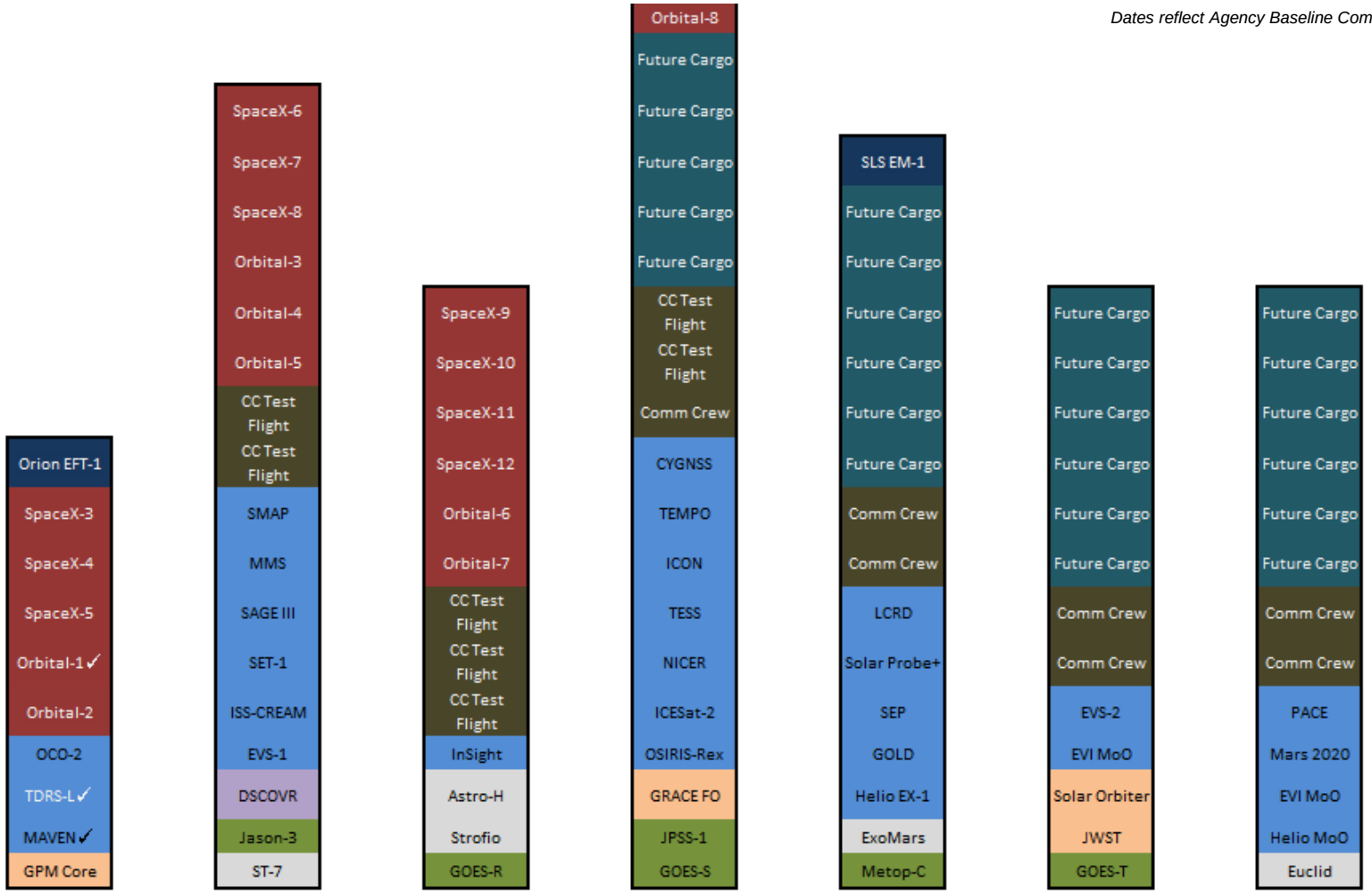
Space Tech: Transform technology with several major in-space demos



JWST: Deliver primary mirror backplane and backplane support to the Goddard Space Flight Center.

NASA Mission Launches
(Fiscal Years 2014 – 2020)

NASA Mission on US ELV
Joint NASA-Int'l Partner Mission
Commercial Crew Mission
✓ Mission successfully launched
Reimbursable Mission for NOAA
Int'l Mission with NASA contribution
Commercial Resupply Services Mission
* TDRS-M launch services and date to be determined
Joint NASA-NOAA-USAF Mission
Exploration Systems Development Mission
Future Commercial Resupply Mission
HEO missions in white text, SMD/STMD missions in black text
International launches not shown
Commercial flights notional
Dates reflect Agency Baseline Commitments



Space Technology Delivers

EDSN (Edison Demonstration of Smallsat Networks): NASA Ames demonstrates a small spacecraft swarm (8 cubesats) operating as a network for distributed science observations.
Launch: 2014

Green Propellant Infusion Mission: With Ball Aerospace Aerojet, develops and demonstrates a higher performing propellant alternative to the highly corrosive and toxic hydrazine.
Launch: FY 2015

CPOD (Cubesat Proximity Operations Demonstration): Tyvak, LLC Proximity operations & docking demo with two 3U cubesats.
Launch: 2015

OCSD (Optical Communications and Sensor Demonstration): With Aerospace Corp, demonstrates space-to- ground laser communications, low-cost navigation sensors, and proximity operations with two 1.5U cubesats.
Launch: 2015

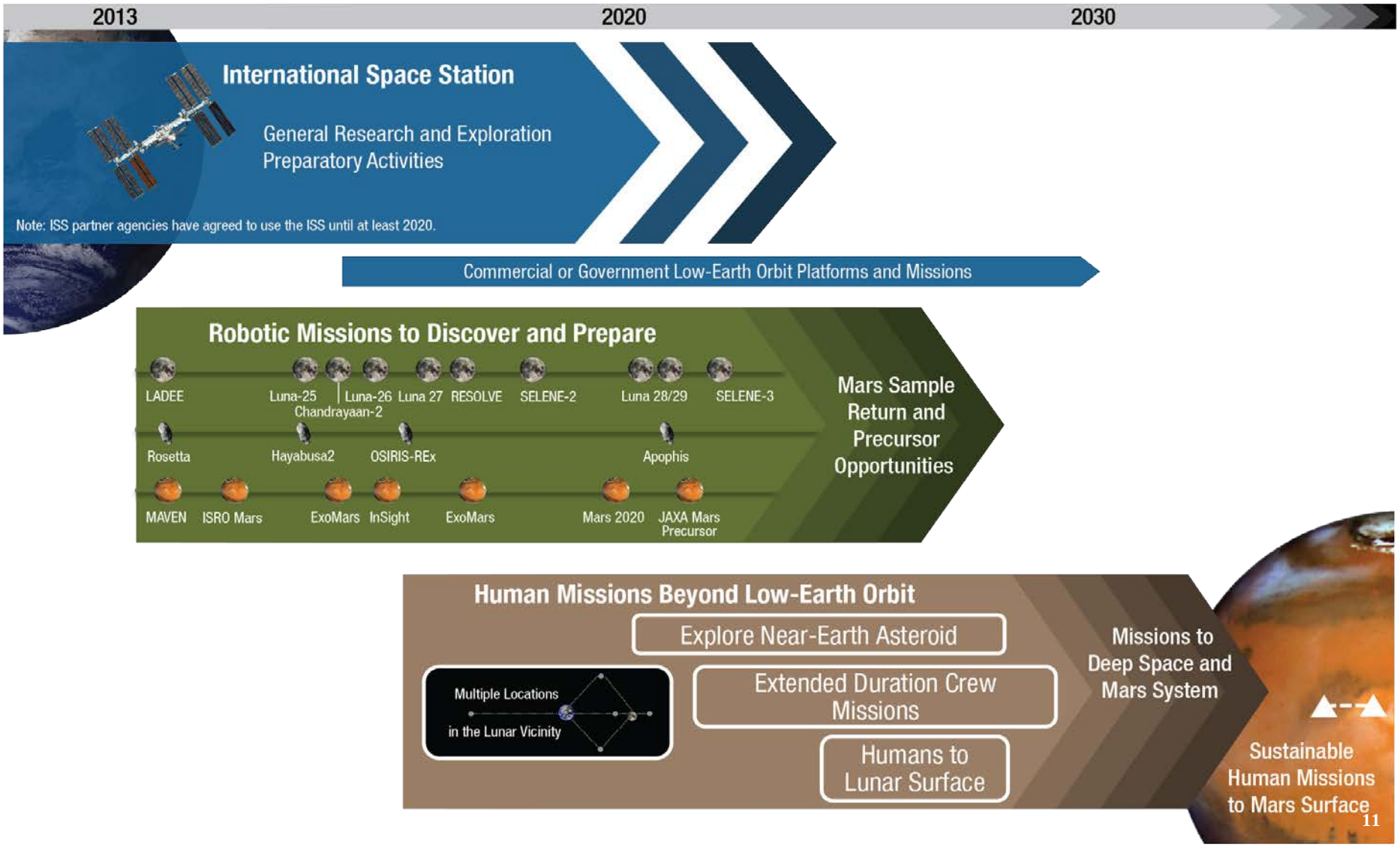
ISARA (Integrated Solar Array and Reflectarray Antenna): JPL and Pumpkin, Inc. demonstrating increased bandwidth for Ka-band radio communications by using the back of a deployed solar array as a radio antenna reflector.
Launch: 2015

Sunjammer Solar Sail: With an area 7 times larger than ever flown in space; enables propellant free propulsion and next generation space weather systems. L' Garde, Inc.
Launch: Late 2015

Deep Space Atomic Clock: JPL is developing this tiny atomic clock that is 10-times more accurate than today' s ground –based navigation systems, enabling precise in-space navigation.
Launch: FY 2015

Human Exploration and Operations

Global Exploration Roadmap



FY14-FY15 Agency Priority Goals

- By September 30, 2015, NASA will complete the Space Launch System, Orion, and Exploration Ground Systems Critical Design Reviews (CDRs), allowing the programs to continue to progress toward Exploration Mission (EM)-1 and EM-2 missions.

- By September 30, 2015, NASA will increase the utilization of the International Space Station internal and external research facility sites with science and technology payload hardware to 70 percent.

- By September 30, 2015, the Commercial Crew Program will complete the first phase of certification efforts with Commercial Crew Transportation partners, and will make measurable progress toward the second certification phase with industry partners while maintaining competition.

- By October 2018, NASA will launch the James Webb Space Telescope, the premier space-based observatory. To enable this launch date, NASA will complete the James Webb Space Telescope primary mirror backplane and backplane support structures and deliver them to the Goddard Space Flight Center for integration with the mirror segments by September 30, 2015.

FY14-15 Cross-Agency Priority Goals

Goal	Type	Participation*
Cybersecurity	Mission	
Climate Change (Federal Actions)	Mission	NASA is identified as a major contributing agency
Insider Threat and Security Clearance	Mission	
Job-Creating investment	Mission	
Infrastructure Permitting Modernization	Mission	
STEM Education	Mission	NASA is identified as a major contributing agency
Service Members and Veterans Mental Health	Mission	
Effectiveness: Customer Service	Management	
Effectiveness: Smarter IT Delivery	Management	
Efficiency: Strategic Sourcing	Management	
Efficiency: Shared Services	Management	
Efficiency: Benchmark and Improve Mission-Support Operations	Management	
Economic Growth: Open Data	Management	
Economic Growth: Lab-To-Market	Management	NASA is identified as a major contributing agency
People and Culture	Management	

***OMB released the FY14-15 CAP goals on Monday, March 10, 2014. As more information is available, OCFO will work with the Mission Directorates to determine NASA's contribution to each of the new CAP goals.**

13

FY 2015 Budget Request

	FY 2013 Op Plan*	FY 2014 Enacted**	FY2015	Notional FY2016	Notional FY2017	Notional FY2018	Notional FY2019
Science	4,781.6	5,151.2	4,972.0	5,021.7	5,071.9	5,122.6	5,173.9
Earth Science	1,659.2	1,826.0	1,770.3	1,815.5	1,837.6	1,861.9	1,886.3
Planetary Science	1,274.6	1,345.0	1,280.3	1,304.9	1,337.1	1,355.7	1,374.1
Astrophysics	617.0	668.0	607.3	633.7	651.2	696.8	993.0
James Webb Space Telescope	627.6	658.2	645.4	620.0	569.4	534.9	305.0
Heliophysics	603.2	654.0	668.9	647.6	676.6	673.3	675.5
Aeronautics	529.5	566.0	551.1	556.6	562.2	567.8	573.5
Space Technology	614.5	576.0	705.5	712.6	719.7	726.9	734.2
Exploration	3,705.5	4,113.2	3,976.0	4,079.9	4,061.2	4,119.5	3,673.4
Exploration Systems Development	2,883.8	3,115.2	2,784.4	2,863.3	2,917.7	2,993.9	3,106.6
Commercial Spaceflight	525.0	696.0	848.3	872.3	791.7	730.9	172.0
Exploration Research and Development	296.7	302.0	343.4	344.3	351.8	394.7	394.7
Space Operations	3,724.9	3,778.0	3,905.4	3,951.9	4,051.0	4,073.8	4,601.8
Space Shuttle	38.8		0.0	0.0	0.0	0.0	0.0
International Space Station	2,775.9		3,050.8	3,126.5	3,266.9	3,290.3	3,818.6
Space and Flight Support (SFS)	910.2		854.6	825.4	784.1	783.5	783.2
Education	116.3	116.6	88.9	89.8	90.7	91.6	92.6
Cross Agency Support	2,711.0	2,793.0	2,778.6	2,806.4	2,834.4	2,862.8	2,891.4
Center Management and Operations	1,991.6		2,038.8	2,059.2	2,079.7	2,100.5	2,121.6
Agency Management and Operations	719.4		739.8	747.2	754.7	762.3	769.8
Construction & Envrmtl Compl Restoration	646.6	515.0	446.1	379.0	382.7	386.6	390.4
Construction of Facilities	589.5		370.6	302.7	305.7	308.7	311.8
Environmental Compliance and Restoration	57.0		75.5	76.3	77.0	77.8	78.6
Inspector General	35.3	37.5	37.0	37.4	37.7	38.1	38.5
Grand Total	**16,865.2**	**17,646.5**	**17,460.6**	**17,635.3**	**17,811.5**	**17,989.7**	**18,169.7**

As reflected in the August 2013 Operating Plan, FY 2013 includes rescissions per P.L.113-6 Division G, Section 3001(b)(1)(B) and Division G, Section 3004(c)(1) and reductions due to sequestration per BBEDCA Section 215A.

FY 2014 reflects funding amounts specified in P.L. 113-76, Consolidated Appropriations Act, 2014, including amounts noted in the Explanatory Statement. Where amounts were not specified, no amount is shown in the budget table.

Note: Funds associated with out-year estimates for programmatic construction remain in programmatic accounts.

Major Program Changes

- Science –
  - Funds Planetary Science at a higher level than the FY 2014 PB, enabling a Discovery AO, steady funding for R&A, support for most operating missions, and pre-formulation studies for a potential Europa mission
  - Funds pre-formulation studies for a potential WFIRST/AFTA mission
  - Funds the GLOBE program, and an additional $15 million for other STEM education activities
  - Greatly reduces funding for the SOFIA project as it plans to be put into storage
  - Proposes the OCO-3 for funding through the OGSI
- Aeronautics – Aligns Aeronautics research to focus on newly defined strategic thrust areas
- Space Technology – Accelerates development of a Solar Electric Propulsion demonstration effort; reduces funding for new awards for many competitive programs
- Exploration - Transfers asteroid capture system content from AES in Exploration to ISS In-Space Robotic Servicing in Space Operations
- Space Operations – International Space Station (ISS) extended to at least 2024.
- Education – Consolidates many STEM efforts within the Agency to support the Administration's STEM reorganization
- CECR – Transfers programmatic CoF, revises phasing for institutional CoF.

Considerations

- **Out-year Funding Assumptions.** In this time of national fiscal austerity, NASA has accepted the challenge to manage to a modest inflation adjusted out-year top-line budget. Funding lines beyond FY 2015 should be considered notional.
- **Campaign to Promote Efficient and Effective Spending.** This budget continues NASA's efforts to improve operational efficiency and maintains reduced spending for service contracting, travel, supplies and materials, printing and reproduction, and IT services.
- **Aligning the NASA Workforce.**
  - ✓ Aligns human capital with the priority requirements of the Agency
  - ✓ Minor reduction in FTE consistent with budget limitations
- **Presentation in full-cost,** where all project costs are allocated to the project, including labor funding for the Agency's civil service workforce.

Opportunity, Growth, and Security Initiative

- While the President's Budget adheres to the BBA's discretionary funding levels for 2015, it is not sufficient to expand opportunity to all Americans or to drive the growth our economy needs.
- The BBA replaced half the sequestration cut for 2014 but just one-fifth of the scheduled cut in the discretionary funding level for 2015. As a result, taking into account unavoidable growth in other Federal programs and other factors, the BBA non-defense discretionary funding levels for 2015 are below the levels Congress provided in the bipartisan Consolidated Appropriations Act of 2014.
- For that reason, the Federal Budget also includes a separate, fully paid for $56 billion Opportunity, Growth, and Security Initiative.
- NASA's share of that Initiative is $885M and is designed to show how additional discretionary investments in 2015 can further enable the NASA mission while spurring economic progress, promoting opportunity, and strengthening national security.

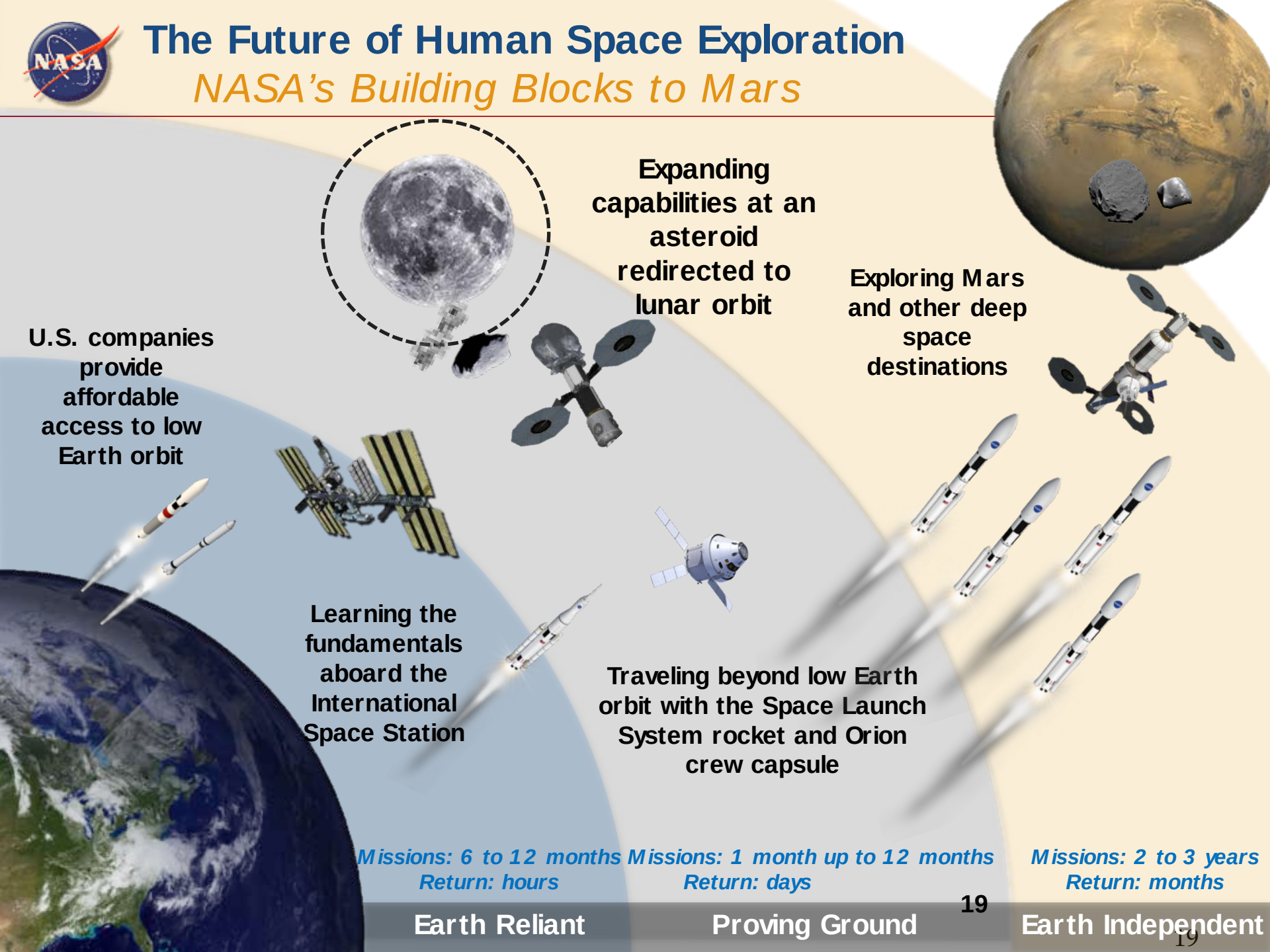
Budget Authority (in $ millions)	FY2015
Grand Total	$885.5
Aeronautics	$43.9
Space Technology	$100.0
Exploration	$350.0
Space Operations	$100.6
Education	$10.0
Construction of Facilities and Environmental Compliance Restoration	$93.7

Opportunity, Growth, and Security Initiative Detail

Account	Program/Project	Funding
Science		**$187.3M**
	Orbiting Carbon Observatory (OCO)-3	29.3
	Pre-Aerosols, Carbon and Ecosystems (PACE)	50
	Planetary Science -extended mission funding	35
	Radioisotope Power Systems	15
	Research and Analysis	20
	Wide-Field Infrared Survey Telescope (WFIRST)/ Astrophysics Focused Telescope Assets (AFTA)	20
	Earth Science (restoration of Quickscat funding, Solar Radiation & Climate Experiment (SORCE), the President's Climate Action Plan, Big Earth Data Initiative)	18
Aeronautics		**$43.9M**
	Altitude Airspace/Unmanned Aerial Systems Research	6
	Computational Fluid Dynamics Analysis Capabilities	24
	Flight Testing Advancements	6
	Vertical Lift	7.9
Space Technology		**100M**
	Closed Loop Life Support system: ISS Utilization	21
	Composite Structural Technologies	18
	Robotics Challenge	10
	Advanced Manufaturing	7
	Small Spacecraft Technology Demonstrations	10
	In-Space Assembled & Manufactured Structures	6
	NASA Innovative Advanced Technologies	6
	HIAD - Antares	18
	Lander and Ascent Vehicle Composites	4
Exploration		**350M**
	Commercial Crew	250
	Space Launch System/Orion	100
Space Operations		**100.6M**
	International Space Station (ISS) Cargo Flights	100.6
Education		**10M**
	STEM Education and Accountability Projects	10
CECR		**93.7M**
	LaRC Measurement Sciences Lab	93.7
TOTAL		**$885.5M**

The Future of Human Space Exploration

NASA's Building Blocks to Mars



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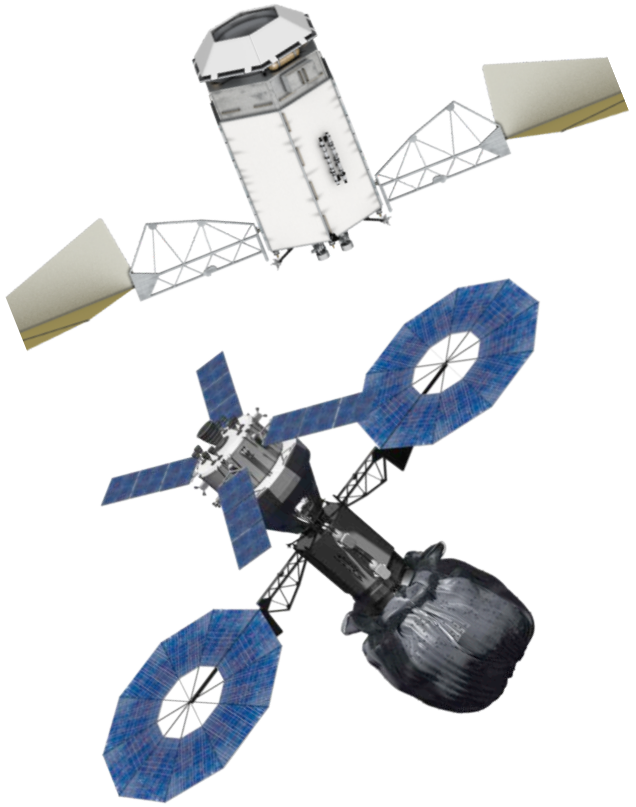
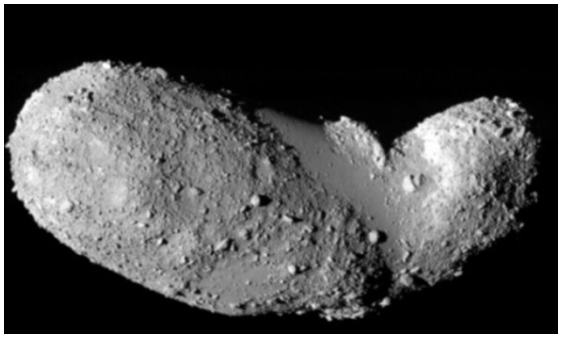
Asteroid Mission/Initiative

NASA's Asteroid Redirect Mission will enable human rendezvous with an asteroid before 2025 and prepare for missions to Mars. NASA is committed to pursuing an affordable and feasible mission. This mission will leverage and align existing activities:

- Asteroid observing efforts to identify and characterize asteroids (in Science);
- Demonstration of high power long life solar electric propulsion (in Space Technology);
- Development of SLS rocket and Orion vehicle for human space flight beyond low Earth orbit (in Exploration Systems); and
- Development of new technologies for exploration in deep space (in ISS and Exploration R&D).



The Budget provides $133M for early development of the asteroid mission, including advancing solar electric propulsion and capture systems, and conduct of the Mission Concept Review in which the mission architecture will be established.



Questions?

Acronyms

- AES: Advanced Exploration Systems
- CCDev: Commercial Crew Development
- CCP: Commercial Crew Program
- CRS: Cargo Resupply Services
- CYGNSS: Cyclone Global Navigation Satellite System
- DSCOVR: Deep Space Climate Observatory
- ECR: Environmental Compliance and Restoration
- EGS: Exploration Ground Systems
- EFT: Exploration Flight Test
- ELV: Expendable Launch Vehicle
- EM: Exploration Mission
- EPSCoR: Experimental Program to Stimulate Competitive Research
- ESA: European Space Agency
- ESD: Exploration Systems Development
- EVA: Extravehicular Activity
- EVI: Earth Venture Instrument
- EVS: Earth Venture Sub-Orbital solicitation
- FTE: Full Time Equivalent
- GLOBE: Global Learning and Observations to Benefit the Environment
- GOES: Geostationary Operational Environmental Satellite
- GOLD: Global Scale Observations of the Limb and Disk
- GPM: Global Precipitation Mission
- GRACE: Gravity Recovery and Climate Experiment
- HRP: Human Research Program
- ICESat: Ice Cloud and Land Elevation Satellite
- ICON: Ionospheric Connection Explorer
- IRIS: Interface Region Imaging Spectrograph
- ISS: International Space Station
- JASD: Joint Agency Satellite Division
- JPSS: Joint Polar Satellite System
- JWST: James Webb Space Telescope
- JUNO: Jupiter Uranus Neptune Outreach
- LADEE: Lunar Atmosphere Dust Environment Explorer
- LDCM: Landsat Data Continuity Mission
- LWS: Living With a Star
- LSP: Launch Services Program
- MAVEN: Mars Atmosphere and Volatile Evolution
- MMS: Magnetospheric Multiscale Mission
- MoO: Missions-of-Opportunity
- MSL: Mars Science Laboratory
- MPCV: Multi-Purpose Crew Vehicle
- MUREP: Minority University research and Education Program
- NOAA: National Oceanographic and Atmospheric Administration
- NICER: Neutron Star Interior Composition Explorer
- NPP: NPOESS Preparatory Project
- OCO: Orbiting Carbon Observatory
- OSIRIS-Rex: Origins Spectral Interpretation Resource Identification Security Regolith Explorer
- POES: Polar Operational Environmental Satellite
- R&D: Research & Development
- SAGE: Stratospheric Aerosol and Gas Experiment
- SET: Space Environment Testbeds
- SFS: Space and Flight Support
- SLS: Space Launch System
- SMAP: Soil Moisture Active-Passive Mission
- SOFIA: Stratospheric Observatory for Infrared Astronomy
- ST: Space Technology
- STEM: Science, Technology, Engineering and Mathematics
- SWOT: Surface Water and Ocean Topography
- TCTE: Total Solar Irradiance Calibration Transfer Experiment
- TDRS: Tracking and Data Relay Satellite
- TEMPO: Tropospheric Emissions Monitoring of Pollution
- TESS: Transiting Exoplanet Survey satellite
- WFIRST: Wide Field Infra Red Survey telescope (AFTA: Astrophysics Focused Telescope Assets)

National Aeronautics and Space Administration

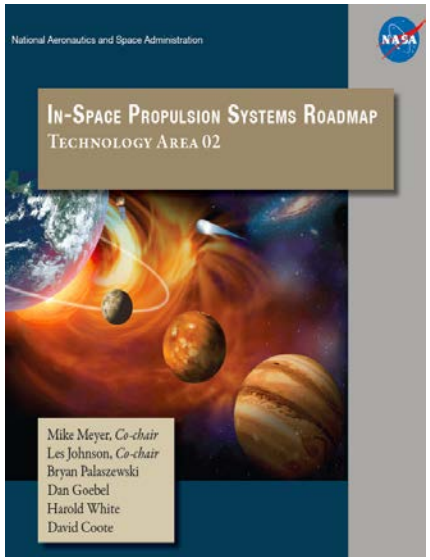
Small Business Innovation Research
Small Business Technology TRansfer

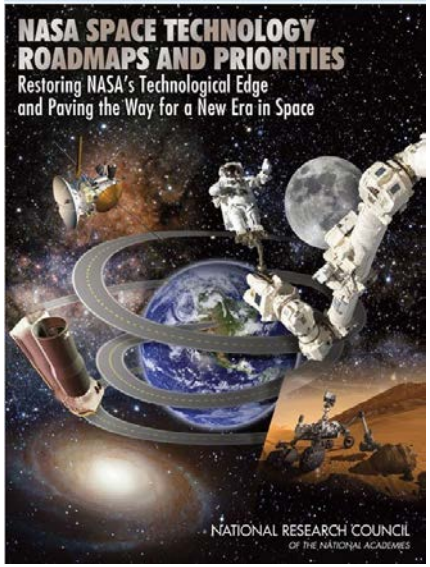
Richard B. Leshner, PhD
NASA SBIR/STTR Program Executive
March 18, 2014

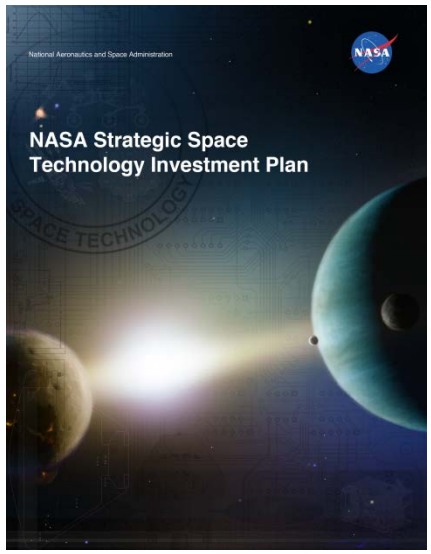
NASA Small Business Industry Council

Quick Overview

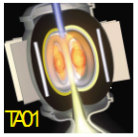
- 14 Space Technology Roadmaps
  - Developed by NASA in 2010
  - Reviewed by NRC 2010/2011
  - http://www.nasa.gov/offices/oct/home/roadmaps/#.UyfPmndtz56
  - Currently being “updated” – process run by the Office of the Chief Technologist







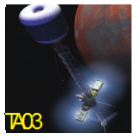
Space Technology Technical Areas

TA01 

• LAUNCH PROPULSION SYSTEMS

TA02 

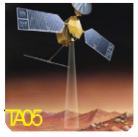
• IN-SPACE PROPULSION TECHNOLOGIES

TA03 

• SPACE POWER & ENERGY STORAGE

TA04 

• ROBOTICS, TELE-ROBOTICS & AUTONOMOUS SYSTEMS

TA05 

• COMMUNICATION & NAVIGATION

TA06 

• HUMAN HEALTH, LIFE SUPPORT & HABITATION SYSTEMS

TA07 

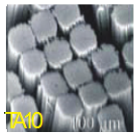
• HUMAN EXPLORATION DESTINATION SYSTEMS

TA08 

• SCIENCE INSTRUMENTS, OBSERVATORIES & SENSOR SYSTEMS

TA09 

• ENTRY, DESCENT & LANDING SYSTEMS

TA10 

• NANOTECHNOLOGY

TA11 

• MODELING, SIMULATION, INFORMATION TECHNOLOGY & PROCESSING

TA12 

• MATERIALS, STRUCTURES, MECHANICAL SYSTEMS & MANUFACTURING

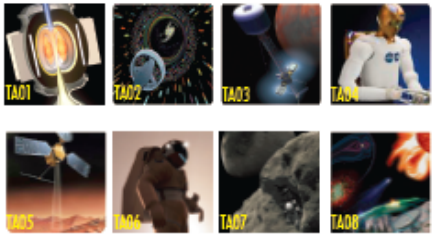
TA13 

• GROUND & LAUNCH SYSTEMS PROCESSING

TA14 

• THERMAL MANAGEMENT SYSTEMS

Space Technology Technical Areas



TA01 • LAUNCH PROPULSION SYSTEMS

Solid Rocket Propulsion Systems
- Propellants
- Case Materials
- Nozzle Systems
- Hybrid Rocket Propulsion Systems
- Fundamental Solid Propulsion Technologies

Liquid Rocket Propulsion Systems
- LH_2/LOX Based
- RP/LOX Based
- CH_4/LOX Based
- Detonation Wave Engines (Closed Cycle)
- Propellants
- Fundamental Liquid Propulsion Technologies

Air Breathing Propulsion Systems
- TBCC
- RBCC
- Detonation Wave Engines (Open Cycle)
- Turbine Based Jet Engines (Flyback Boosters)
- Ramjet/Scramjet Engines (Accelerators)
- Deeply-cooled Air Cycles
- Air Collection & Enrichment System
- Fundamental Air Breathing Propulsion Technologies

Ancillary Propulsion Systems
- Auxiliary Control Systems
- Main Propulsion Systems (Excluding Engines)
- Launch Abort Systems
- Thrust Vector Control Systems
- Health Management & Sensors
- Pyro & Separation Systems
- Fundamental Ancillary Propulsion Technologies

Unconventional / Other Propulsion Systems
- Ground Launch Assist
- Air Launch / Drop Systems
- Space Tether Assist
- Beamed Energy / Energy Addition
- Nuclear
- High Energy Density Materials/Propellants

TA02 • IN-SPACE PROPULSION TECHNOLOGIES

Chemical Propulsion
- Liquid Storable
- Liquid Cryogenic
- Gels
- Solid
- Hybrid
- Cold Gas/Warm Gas
- Micro-propulsion

Non-Chemical Propulsion
- Electric Propulsion
- Solar Sail Propulsion
- Thermal Propulsion
- Tether Propulsion

Advanced (TRL <3) Propulsion Technologies
- Beamed Energy Propulsion
- Electric Sail Propulsion
- Fusion Propulsion
- High Energy Density Materials
- Antimatter Propulsion
- Advanced Fission
- Breakthrough Propulsion

Supporting Technologies
- Propellant Storage & Transfer

TA03 • SPACE POWER & ENERGY STORAGE

Power Generation
- Energy Harvesting
- Chemical (Fuel Cells, Heat Engines)
- Solar (Photo-Voltaic & Thermal)
- Radioisotope
- Fission
- Fusion

Energy Storage
- Batteries
- Flywheels
- Regenerative Fuel Cells

Power Management & Distribution
- PDIR
- Management & Control
- Distribution & Transmission
- Wireless Power Transmission
- Conversion & Regulation

Cross Cutting Technology
- Analytical Tools
- Green Energy Impact
- Multi-functional Structures
- Alternative Fuels

TA04 • ROBOTICS, TELE-ROBOTICS & AUTONOMOUS SYSTEMS

Sensing & Perception
- 3-D Perception
- Relative Position & Velocity Estimation
- Terrain Mapping, Classification & Characterization
- Natural & Man-made Object Recognition
- Sensor Fusion for Sampling & Manipulation
- Onboard Science Data Analysis

Mobility
- Extreme Terrain Mobility
- Below-Surface Mobility
- Above-Surface Mobility
- Small Body/Microgravity Mobility

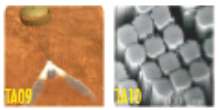
Manipulation
- Robot Arms
- Dexterous Manipulators
- Modeling of Contact Dynamics
- Mobile Manipulation
- Collaborative Manipulation
- Robotic Drilling & Sample Processing

Human-Systems Integration
- Multi-Modal Human-Systems Interaction
- Supervisory Control
- Robot-to-Suit Interfaces
- Intent Recognition & Reaction
- Distributed Collaboration
- Common Human-Systems Interfaces
- Safety, Trust, & Interfacing of Robotic/Human Proximity Operations

Autonomy
- Vehicle Systems Management & PDIR
- Dynamic Planning & Sequencing Tools
- Autonomous Guidance & Control
- Multi-Agent Coordination
- Adjustable Autonomy
- Terrain Relative Navigation
- Path & Motion Planning with Uncertainty

Auton. Rendezvous & Docking
- Relative Navigation Sensors (long-, mid-, near-range)
- Guidance Algorithms
- Docking & Capture Mechanisms/ Interfaces
- Mission/System Managers for Autonomy/Automation

RTA Systems Engineering
- Modularity/Commonality
- Verification & Validation of Complex Adaptive Systems
- Onboard Computing



TA05 • COMMUNICATION & NAVIGATION

Optical Comm. & Navigation
- Detector Development
- Large Apertures
- Lasers
- Acquisition & Tracking
- Atmospheric Mitigation

Radio Frequency Communications
- Spectrum Efficient Technologies
- Power Efficient Technologies
- Propagation
- Flight & Ground Systems
- Earth Launch & Reentry Comm.
- Antennas

Internetworking
- Disruptive Tolerant Networking
- Adaptive Network Topology
- Information Assurance
- Integrated Network Management

Position, Navigation, and Timing
- Timekeeping & Time Distribution
- Onboard Auto-Navigation & Maneuver
- Sensors & Vision Processing Systems
- Relative & Proximity Navigation
- Auto Precision Formation Flying
- Auto Approach & Landing

Integrated Technologies
- Radio Systems
- Ultra Wideband
- Cognitive Networks
- Science from the Comm. System
- Hybrid Optical Comm. & Nav. Sensors
- RF/Optical Hybrid Technology

Revolutionary Concepts
- X-Ray Navigation
- X-Ray Communications
- Neutrino-Based Navigation & Tracking
- Quantum Key Distribution
- Quantum Communications
- SQIF Microwave Amplifier
- Reconfigurable Large Apertures Using Nanosat Constellations

TA06 • HUMAN HEALTH, LIFE SUPPORT & HABITATION SYSTEMS

Environmental Control & Life Support Systems & Habitation Sys.
- Air Revitalization
- Water Recovery & Management
- Waste Management
- Habitation

Extravehicular Activity Systems
- Pressure Garment
- Portable Life Support System
- Power, Avionics & Software

Human Health & Performance
- Medical Diagnosis / Prognosis
- Long-Duration Health
- Behavioral Health
- Human Factors

Environmental Monitoring, Safety & Emergency Response
- Sensors: Air, Water, Microbial, etc.
- Fire: Detection, Suppression, Recovery
- Protective Clothing / Breathing
- Remediation

Radiation
- Risk Assessment Modeling
- Radiation Mitigation
- Protection Systems
- Radiation prediction
- Monitoring Technology

TA07 • HUMAN EXPLORATION DESTINATION SYSTEMS

In-Situ Resource Utilization
- Destination Reconnaissance, Prospecting, & Mapping
- Resource Acquisition
- Consumables Production
- Manufacturing Products & Infrastructure Emplacement

Sustainability & Supportability
- Autonomous Logistics Management
- Maintenance Systems
- Repair Systems
- Food Production, Processing, & Preservation

"Advanced" Human Mobility Systems
- EVA Mobility
- Surface Mobility
- Off-Surface Mobility

"Advanced" Habitat Systems
- Integrated Habitat Systems
- Habitat Evolution
- "Smart" Habitats
- Artificial Gravity

Mission Operations & Safety
- Crew Training
- Planetary Safety
- Integrated Flight Operations Systems
- Integrated Risk Assessment Tools

Cross-Cutting Systems
- Construction & Assembly
- Particulate Contamination Prevention & Mitigation

TA08 • SCIENCE INSTRUMENTS, OBSERVATORIES & SENSOR SYSTEMS

Remote Sensing Instruments / Sensors
- Detectors & Focal Planes
- Electronics
- Optical Components
- Microwave / Radio
- Lasers
- Cryogenic / Thermal

Observatories
- Mirror Systems
- Structures & Antennas
- Distributed Aperture

In-Situ Instruments / Sensor
- Particles: Charged & Neutral
- Fields & Waves
- In-Situ

TA09 • ENTRY, DESCENT & LANDING SYSTEMS

Aeroassist & Atmospheric Entry
- Rigid Thermal Protection Systems
- Flexible Thermal Protection Systems
- Rigid Hypersonic Decelerators
- Deployable Hypersonic Decelerators

Descent
- Attached Deployable Decelerators
- Trailing Deployable Decelerators
- Supersonic Retropropulsion

Landing
- Touchdown Systems
- Egress & Deployment Systems
- Propulsion Systems
- Small Body Systems

Vehicle Systems Technology
- Separation Systems
- System Integration and Analyses
- Atmosphere & surface characterization
- Modeling and Simulation
- Instrumentation and Health Monitoring
- GN&C Sensors and Systems

TA10 • NANOTECHNOLOGY

Engineered Materials & Structures
- Lightweight Structures
- Damage Tolerant Systems
- Coatings
- Adhesives
- Thermal Protection & Control

Energy Generation & Storage
- Energy Storage
- Energy Generation

Propulsion
- Propellants
- Propulsion Components
- In-Space Propulsion

Sensors, Electronics & Devices
- Sensors & Actuators
- Nanoelectronics
- Miniature Instruments

TA11 • MODELING, SIMULATION, INFORMATION TECHNOLOGY & PROCESSING

Computing
- Flight Computing
- Ground Computing

Modeling
- Software Modeling & Model-Checking
- Integrated Hardware & Software Modeling
- Human-System Performance Modeling
- Science Modeling
- Frameworks, Languages, Tools & Standards

Simulation
- Distributed Simulation
- Integrated System Lifecycle Simulation
- Simulation-Based Systems Engineering
- Simulation-Based Training & Decision Support Systems

Information Processing
- Science, Engineering & Mission Data Lifecycle
- Intelligent Data Understanding
- Semantic Technologies
- Collaborative Science & Engineering
- Advanced Mission Systems

TA12 • MATERIALS, STRUCTURES, MECHANICAL SYSTEMS & MANUFACTURING

Materials
- Lightweight Structure
- Computational Design
- Flexible Material Systems
- Environment
- Special Materials

Structures
- Lightweight Concepts
- Design & Certification Methods
- Reliability & Sustainment
- Test Tools & Methods
- Innovative, Multifunctional Concepts

Mechanical Systems
- Deployables, Docking and Interfaces
- Mechanism Life Extension Systems
- Electro-mechanical, Mechanical & Micromechanisms
- Design & Analysis Tools and Methods
- Reliability / Life Assessment / Health Monitoring
- Certification Methods

Manufacturing
- Manufacturing Processes
- Intelligent Integrated Manufacturing and Cyber Physical Systems
- Electronics & Optics Manufacturing Process
- Sustainable Manufacturing

Cross-Cutting
- Nondestructive Evaluation
- Model-Based Certification & Sustainment Methods
- Loads and Environments

TA13 • GROUND & LAUNCH SYSTEMS PROCESSING

Technologies to Optimize the Operational Life-Cycle
- Storage, Distribution & Conservation of Fluids
- Automated Alignment, Coupling, & Assembly Systems
- Autonomous Command & Control for Ground and Integrated Vehicle / Ground Systems

Environmental and Green Technologies
- Corrosion Prevention, Detection, & Mitigation
- Environmental Remediation & Site Restoration
- Preservation of Natural Ecosystems
- Alternate Energy Prototypes

Technologies to Increase Reliability and Mission Availability
- Advanced Launch Technologies
- Environment-Hardened Materials and Structures
- Inspection, Anomaly Detection & Identification
- Fault Isolation and Diagnostics
- Prognostics Technologies
- Repair, Mitigation, and Recovery Technologies
- Communications, Networking, Timing & Telemetry

Technologies to Improve Mission Safety/Mission Risk
- Range Tracking, Surveillance & Flight Safety Technologies
- Landing & Recovery Systems & Components
- Weather Prediction and Mitigation
- Robotics / Teleorobotics
- Safety Systems

TA14 • THERMAL MANAGEMENT SYSTEMS

Cryogenic Systems
- Passive Thermal Control
- Active Thermal Control
- Integration & Modeling

Thermal Control Systems
- Heat Acquisition
- Heat Transfer
- Heat Rejection & Energy Storage

Thermal Protection Systems
- Entry / Ascent TPS
- Plume Shielding (Convective & Radiative)
- Sensor Systems & Measurement Technologies

Space Technology Roadmaps **STR • TABS**

TECHNOLOGY AREA BREAKDOWN STRUCTURE

What are the Space Technology Programs?

NASA Innovative and Advanced Concepts (NIAC) – "Study innovative, technically credible, advanced concepts that could one day 'Change the Possible' in aerospace"

Space Technology Research Grants and Fellowships –Graduate student research fellowships and grants to academia, NASA field centers and not-for-profit R&D laboratories

Center Innovation Fund (CIF) – stimulate innovation within the NASA Centers support emerging technologies and creative initiatives - NASA scientists and engineers lead projects, partnerships with other agencies, academia and private industry are encouraged.

Small Business Innovative Research (SBIR)/Small Business Technology Transfer (STTR)

Small Spacecraft Technology Program - Accelerate the development of small spacecraft capabilities for NASA, commercial, and other space sector users.

Flight Opportunities - Create multiple paths through which innovative technologies may be matured from concept to flight by facilitating low-cost access to suborbital environments

Game Changing Development (GCD) – Develop technologies that produce "dramatic" impacts for NASA's Space Exploration and Science Missions; a balanced approach of guided technology development efforts and competitively selected efforts

Technology Demonstration Missions (TDM) - Seeks to mature laboratory-proven technologies to flight-ready status; system-level technology solutions are given the opportunity to operate in the actual space environment

SBIR/STTR

SBIR & STTR

- Topics/Subtopics developed to support the needs of NASA's other Mission Directorates – Science, Human Exploration & Operations, Aeronautics Research
- Topics/Subtopics developed to support mid- to long-term technology development needs identified in NASA's "Space Technology Roadmaps" or the National Aeronautics R&D Plan

NASA Centers Play Critical Role

- All SBIR/STTR projects are managed at one of NASA's 10 Centers – home to NASA's development projects, research facilities, and Subject Matter Experts

Total Selections - Select 2012 SBIR Phase II	HEOMD 45	SMD 44	ARMD 19	Total 108
1.0.0 Launch Propulsion Systems	HEOMD 3	SMD 0	ARMD 0	Total 3
2.0.0 In-Space Propulsion Technologies	HEOMD 8	SMD 3	ARMD 0	Total 11
3.0.0 Space Power and Energy Storage	HEOMD 3	SMD 4	ARMD 0	Total 7
4.0.0 Robotics, Telerobotics and Autonomous Systems	HEOMD 2	SMD 6	ARMD 2	Total 10
5.0.0 Communication and Navigation	HEOMD 4	SMD 0	ARMD 2	Total 6
6.0.0 Human Health, Life Support and Habitation Systems	HEOMD 7	SMD 0	ARMD 0	Total 7
7.0.0 Human Exploration Destination Systems	HEOMD 4	SMD 0	ARMD 0	Total 4
8.0.0 Science Instruments, Observatories & Sensor Systems	HEOMD 1	SMD 26	ARMD 2	Total 29
9.0.0 Entry, Descent and Landing Systems	HEOMD 3	SMD 0	ARMD 0	Total 3
11.0.0 Modeling, Simulation, Information Technology and Processing	HEOMD 3	SMD 4	ARMD 1	Total 8
12.0.0 Materials, Structures, Mechanical Systems and Manufacturing	HEOMD 4	SMD 0	ARMD 1	Total 5
13.0.0 Ground and Launch Systems Processing	HEOMD 1	SMD 0	ARMD 0	Total 1
14.0.0 Thermal Management Systems	HEOMD 2	SMD 1	ARMD 0	Total 3
Aeronautics Unmapped	HEOMD 0	SMD 0	ARMD 11	Total 11

Space Technology Research Grants

213 Grants, 75 Schools across 37 States

Goal:
Engage academia to accelerate the development of low TRL, high-risk/high-payoff technologies to support future space science and exploration needs of NASA, other government agencies, and the commercial space sector; reinvigorate the pipeline of low TRL technologies.

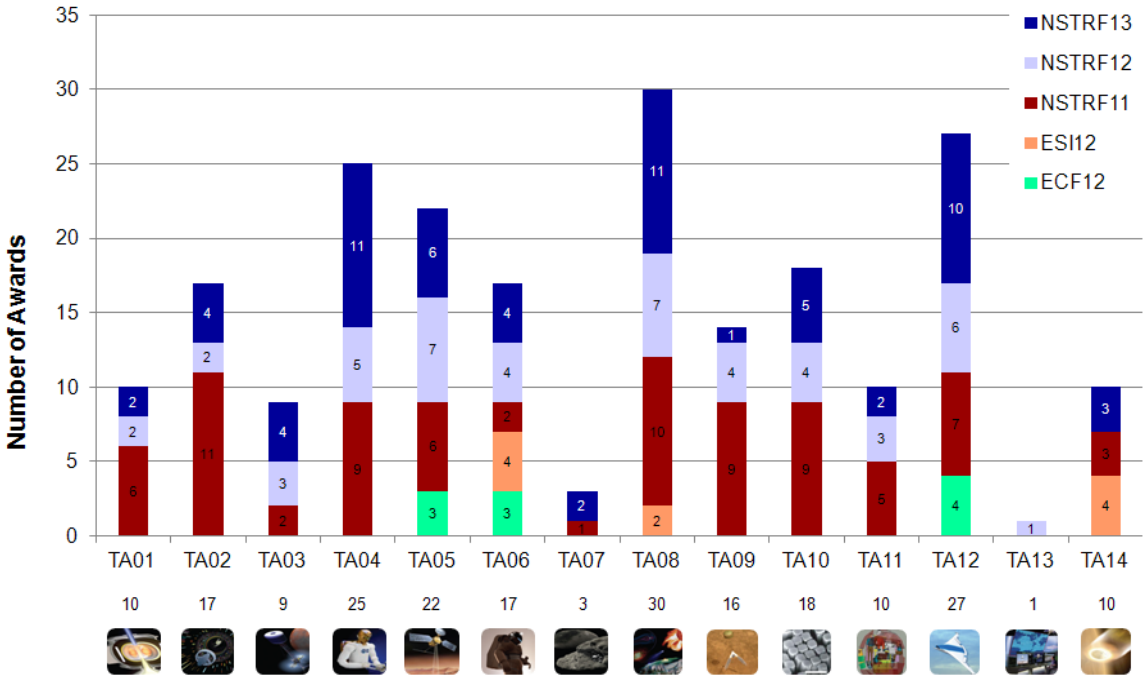
Scope:
Early stage technologies tied to Space Technology Area Roadmaps; Specific areas and audiences are determined on a by-solicitation basis. Unique, disruptive or transformational, space technologies.

Supports:
Annual competitive solicitations targeting high-priority technology areas with awards ranging from $68k to $250k per year.

Engage Academia: tap into the talent base, challenging the spectrum of academic researchers, from graduate students to senior faculty members, to examine the theoretical feasibility of ideas and approaches that are critical to making science, space travel, and exploration more effective, affordable, and sustainable.

Example: Brandon Smith from University of Michigan, is collaborating with NASA Glenn in researching and developing a more accurate modeling capability for Hall thruster discharge channel erosion at high discharge voltages.

Total Awards/Selections by Technology Area



FY 2014 Plans:

Annual solicitations

- NASA Space Technology Research Fellowships (NSTRF) solicitation (grant awards up to 4 years in duration and $68K/year)
- Early Career Faculty (ECF) NASA Research Announcement (grant awards up to 3 years in duration and $200K/year)
- Early Stage Innovations (ESI) NASA Research Announcement (grant awards up to 2 years in duration and $250K/year)
- NASA Research Announcements to participate in DOE and DOD Manufacturing Institutes (grant awards up to 2 years in duration and $250K/year)

NIAC Scope, Awards, & Culture

- NIAC supports early studies of visionary aerospace concepts, which must be:
  - Aerospace architecture, mission, or system concepts
  - Exciting, Unexplored, Credible
- NIAC awards support 2 phases of study
  - Phase I: up to $100K, 9 months for concept definition and initial analysis in a mission context
  - Phase II: up to $500K, 2 years for further development of most promising Phase I concepts, comparative mission analysis, pathways forward

2011 – 2012 NIAC FELLOWS

58 Proposals Selected & Funded (2011-2012 Ph I & Ph II)
(1,389 Total Submitted)

22 = NASA Funded Studies
36 = NON-NASA Funded Studies

24 = GOV'T Funded Studies
34 = NON- GOV'T Funded Studies

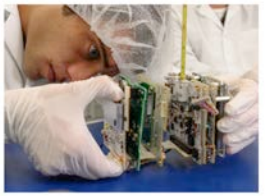
2011 Ph I = 30
2012 Ph I = 28
Ph II = 10

SMALL SPACECRAFT TECHNOLOGY PROGRAM

Affordable, Rapid & Transformative Development & Demonstration

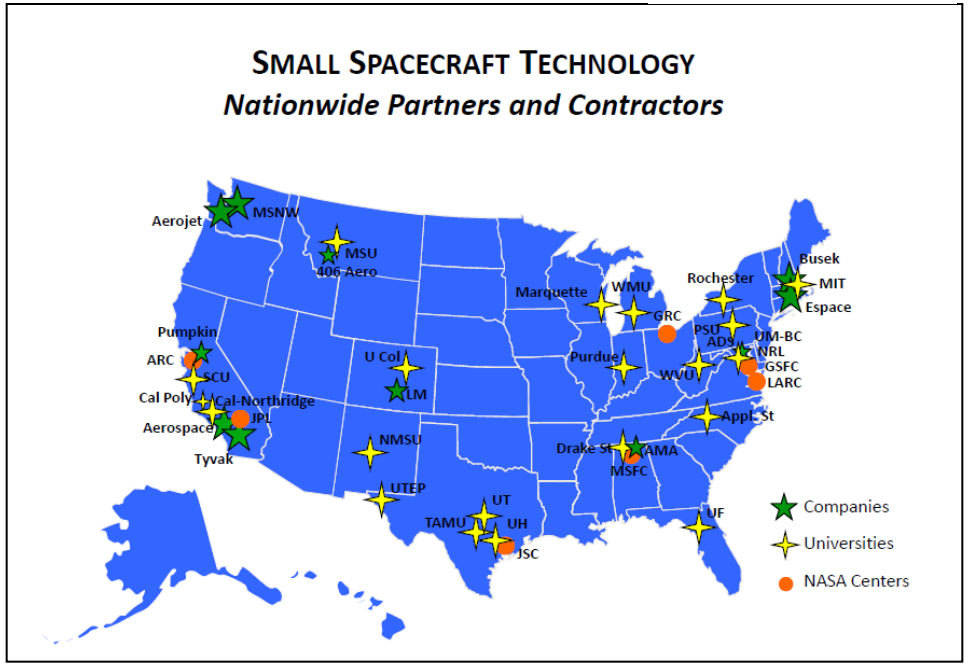
Focused Technology Development

- Smallsat Technology Partnerships – Cooperative agreements with US universities to develop and demonstrate new technologies and capabilities in collaboration with NASA engineers.
  - 13 projects involving 17 universities and partners at seven NASA Centers
- Small Spacecraft Propulsion Development – five projects with private industry and universities
- New SBIR topic on Small Spacecraft Technology in 2013



Flight Demonstrations

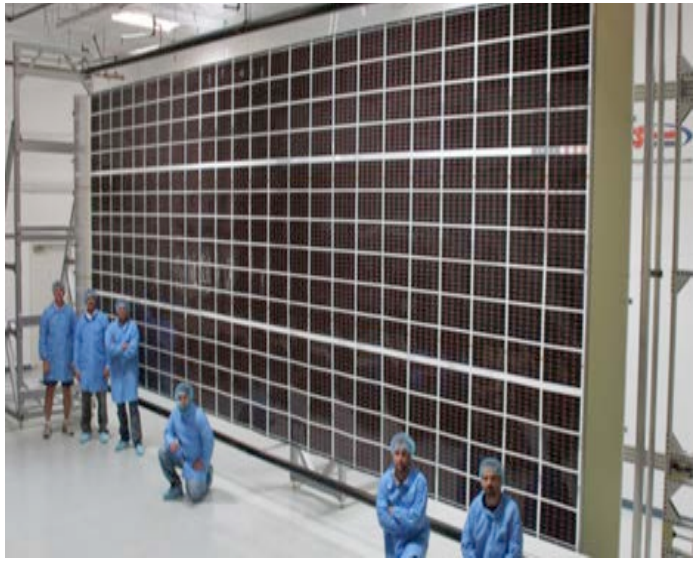
- Four spacecraft launched in 2013
- Four missions in development



Game Changing Development (GCD)

Goals:

- To identify and rapidly mature innovative/high impact capabilities and technologies that may lead to entirely new approaches for the Agency's future space missions.
- The program will investigate novel ideas and approaches that have the potential to revolutionize future space missions.



Lightweight Materials & Advanced Manufacturing (LMAM)

Advanced Entry, Descent, & Landing (AEDL)

Revolutionary Robotics & Autonomous Systems (RRAS)

Future Propulsion & Energy Systems (FPES)

Affordable Destination Systems & Instruments (ADSI)

HEOMD / STMD Programmatic Synergy

Exploration Technology Development (ETD) work resides in two Space Technology Programs:

- Game Changing Development (GCD)
- Technology Demonstration Missions (TDM)

ETD Focus:

- Crosscutting, pioneering technology development
- Not systems level development or integration
- TRL 7 or below
- Primary Infusion into HEOMD; may also benefit SMD, OGAs and the Aerospace Enterprise

Advanced Exploration Systems (AES) Program within HEOMD manages system-level integration work and prototype / design development for future exploration architecture elements.

The Human Research Program (HRP) undertakes technology development and basic research in related areas, e.g. radiation mitigation

Thrust Areas Moving Forward

- Solar Electric Propulsion
- Space Optical Communications
- Advanced Life Support and In-Situ Utilization
- Mars Entry Descent and Landing
- Space Robotic Systems
- Lightweight Space Structures
- Deep Space Navigation
- Space Observatory Systems

SBIR/STTR – Beyond Phase II

Phase II-Enhancement (II-E)

Phase II-E	Minimum non-SBIR/STTR Funding Required for Eligibility for Matching in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$25,000	$25,000	6-12 Months
	Maximum non-SBIR/STTR Funding to be Matched by SBIR/STTR Program in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$125,000	$125,000	6-12 Months

Phase II-eXpanded (II-X)

Phase II-X	Minimum Funding Required from non-SBIR/STTR NASA Source for Eligibility for Matching in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$75,000	$150,000	12-24 Months
	Maximum Funding Amount from non-SBIR/STTR NASA Source to be Matched in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$250,000	$500,000	12-24 Months

National Aeronautics and Space Administration

Office of the Administrator
Washington, DC 20546-0001

February 8, 2013

TO: Officials in Charge of Headquarters Offices
Directors, NASA Centers

FROM: Administrator

SUBJECT: Reducing Transaction Costs in NASA Procurements

The NASA Office of Procurement recently issued the attached memo to NASA Center Procurement Offices emphasizing the importance of reducing procurement transaction costs through efficient contracting practices. In excess of 80 percent of NASA's budget goes through the procurement process. With a constrained budget and a challenging mission to perform, this initiative must be an Agency priority. We need your leadership and support to ensure we make every dollar count.

I endorse this initiative and ask that each of you work with the Office of Procurement and Center Procurement Offices to identify and implement opportunities to be more efficient at acquiring the products and services we need to perform our mission.

By April 1, 2013, I also request that each Center Procurement Office provide the Office of Procurement any identified contracting practice efficiencies or policy or process recommendations that will reduce procurement transaction costs. Headquarters Officials in Charge may also provide their own recommendations to the Office of Procurement regarding this initiative.

Provide your responses and address any questions to Mr. Ron Poussard at 202-358-0445.

Charles F. Bolden, Jr.

Enclosure

As Bill says in his memo - these are challenging areas to change ... but I'm confident we can make changes needed if you'll provide your strongest personal support.

National Aeronautics and Space Administration

Headquarters
Washington, DC 20546-0001

November 13, 2012

Reply to Attn of:

TO: NASA Center Procurement Officers

FROM: Assistant Administrator for Procurement

SUBJECT: Reducing Transaction Costs in NASA Procurements

As we continue to face challenges in meeting NASA's mission with constrained budgets and shortages in personnel it is important and necessary that we aggressively pursue efficiencies throughout the lifecycle of the procurement process. Our ability to identify and implement opportunities to reduce costs during acquisition planning, pre-award and post-award activities can have a direct and positive benefit to NASA ensuring the efficient use of NASA and industry resources to meet mission needs.

As you know we have already begun identifying ways to strengthen our ability to negotiate contract costs through our Cost/Price Analysis Improvement Project. We have also strengthened training on conducting effective technical evaluations in support of negotiation processes. But there are many other opportunities.

An area where inefficiencies can drive higher costs is the use of full tradeoff source selections where simpler procedures can achieve the same result with fewer resources. Overly complex source selection evaluation criteria can cause Source Evaluation Boards to spend far too much time evaluating areas that are not meaningful discriminators between proposals. These situations also drive higher company bid and proposal costs when responding to NASA solicitations further increasing government costs. Other inefficiencies include the use of single award task order contracts that require multiple task order solicitations and proposals instead of using a core statement of work; the use of award fee provisions that require significant administration and may not effectively provide incentives for contractors to be efficient; incremental funding actions and subsequent de-obligation actions that consume resources and preclude taking advantage of the efficiencies inherent in fully funded or phased contracts; individual commodity or license purchases that can be more efficiently acquired through a more strategic approach to market research and procurement; and finally, information technology tools and applications that drive inefficient processes rather than facilitate efficiency.

These are only a handful of opportunities we need to explore. I realize that these are challenging areas to change, but the fact that the underlying processes drive up costs to the

Government is undisputed. In many cases the return on our investment may never be clearly understood or realized. However, with over 80% of NASA's annual budget dependent on the procurement process, we must make every effort to ensure NASA can do more with the resources it has while maintaining the integrity of the procurement process and ensuring sound stewardship of the taxpayer's dollar. To that end, I ask that you work with your Center procurement, mission and other functional personnel to identify procurement efficiencies like those mentioned above. I expect you will implement initiatives within your authority and let us know of any regulatory or statutory obstacles that need to be addressed.

Please work with Ron Poussard and the HQ Office of Procurement Contract Management Division staff as you identify initiatives and obstacles. We will compile initiatives, assist with implementation as needed and address required policy and process changes.

Thank you for your Center's continued hard work and dedication meeting NASA's mission with efficient and effective contracting.

William P. McNally

AFRC Contractor Council

Leigh Ann Szymczak, Arcata Associates

Contractor Council Chairperson

Charter

- The purpose of the NASA-Armstrong Contractor Council is to serve as a single point of contact to promote frequent and efficient communication between NASA-Armstrong management and on-site contractors. The Council's monthly meetings serve as a forum for sharing information, identifying common problems, and brainstorming solutions.

Council Structure

- Council Chairperson
- Secretary
- Government Representatives
- Program/Site Managers representing 12 companies

Operational Structure

- Monthly Meetings
- Suggested Topics of Interest by Council Members
- Requests by Center Organizations for New Initiatives
- Typically 30 Minute Meetings
- Minutes taken and posted on SharePoint

Benefits

- Easy Communication with Contract Management
- Used for Special/Emergency Communication
- All Contracts Receiving Same Information from Procurement Office

Challenges

- Improve Participation
- Topics
- Campaigning the Value Added

NASA INDUSTRY FORUM

AMES CONTRACTOR COUNCIL PRESENTATION

MARCH 19, 2014

ACC MISSION AND PHILOSOPHY

The Ames Contractor Council (ACC) is Ames Research Center's industry council. The ACC strives to improve the productivity and enhance the quality of Contractors' services and products for the overall success of the Ames Research Center. The ACC focuses on maintaining open lines of communication between Ames Center Management and Contractor site managers and representatives.

We strive to benefit the general Ames and surrounding local communities by providing financial resources in support of education, outreach, and the overall NASA mission.

EFFECTIVENESS

- Opportunity for contractor collaboration
- Disseminate information
- Raise awareness
- Assist with orientation of new primes
- Source of Contractor resources
- Interface with Center management and personnel

MEMBERSHIP

- Membership is open to site managers (or their delegates) for on-site support service contracts at NASA Ames Research Center and NASA Research Park Partners (one voting member per contract)
- Comprised of approximately 25 small and 15 large prime and subcontract businesses

COUNCIL STRUCTURE

- Non-profit (501)(c)(4) organization complete with corporate by-laws
- Structure:
  - Board of Directors (four directors)
  - Officers:
    - President
    - Vice-President
    - Secretary
    - Treasurer
  - Committees
  - NASA Liaison (non-voting member)
    - Interface between NASA Headquarters, Ames Research Center, other NASA centers and the Contractor Council

Ames Contractor Council
NASA AMES RESEARCH CENTER

FREQUENCY OF MEETINGS

- We meet the first Wednesday of each month
- Our meetings are an excellent forum to raise issues that affect the contractor community
- All monthly meetings include:
  - A briefing from Center Management (i.e. NASA Liaison)
  - Guest presentations from Center managers and specialists, including:
    - Ames SBO Specialist
    - Procurement Officer
  - Grant applicant request presentations
  - Brief committee reports

COMMITTEES

- Calendar
- Contractor Awards
- Golf Tournament
- Imagination Foundation
- Marketing Communications
- Partners in Excellence
- Public Policy
- Safety Outreach
- Small Business

BEST PRACTICES

- Monthly meetings provide convenient, central place to share information quickly, reach out to all contractors on site on issues central to contracting community and give an avenue for contractors to develop and foster strong and lasting work relationship Ames Management and with each other
- The ACC conducts several annual and special events to raise awareness of the organization's value to the Ames Community:
  - Fundraising activities include:
    - ACC Annual Golf Tournament
    - Ames Annual Calendar
  - Recognition activities include:
    - Partners in Excellence: Annual Networking Event for Contractors and Senior NASA Management
    - Contractor Excellence Awards: Annual recognition of outstanding Contractor contributions (Length of Service, Individual and Team Excellence)
    - Contractor Safety Awards: Recognizing Contractor employees for safe performance on NASA Ames projects and programs

BEST PRACTICES (CONT'D)

- Imagination Foundation Grants ($26k+ to date):
  - Contributions to Ames events including improvements to Ames Exploration Center sound system
  - NASA Teacher Summer Camp
  - Palo Alto High School Special Education
  - NASA Teacher Institute
  - Ames Space Settlement Design Contest
  - San Jose State University Tours at Ames
  - National Coalition of 100 Black Women, Silicon Valley
  - International Space University Opening Ceremonies
  - AIAA Galileo Scholarship

ACC SMALL BUSINESS COMMITTEE

- Charter:
  - Utilize the personal leadership of the Board to foster small business workforce planning, development, and retention issues at NASA Ames and propose solutions consistent with the NASA Office of Small Business Programs (OSBP).
  - Review and evaluate small business and equal opportunity programs at NASA Ames.
  - Collaborate on and implement small business and diversity initiatives and leverage organizational resources.
- SB Committee Members:
  - Chair: Greg Hite, AECOM
  - Co-chair: Jasmine Ali, Bay Systems Consulting, Inc.
- Meeting Frequency:
  - Quarterly
- Activities to Date:
  - Updated ACC contractor listing
  - Organized small business industry days
  - Conducted training in areas of ISR, SBIR, Mentor-Protégé, and HBCU
  - Advertised upcoming local SB events, conferences, seminars

Ames Contractor Council
NASA AMES RESEARCH CENTER

SMALL BUSINESS OUTREACH

- Ames Small Business Industry Days:
  - Three (3) separate small business industry days were organized by the Ames Small Business to assist both small businesses with finding new opportunities and large businesses with meeting their goals, while at the same time seeking to represent, protect, and grow the interests of small business at Ames Research Center.
  - Events held at Ames to date include:
    - February 27, 2012: Woman-Owned Small Business Joint Counseling Initiative Session
    - August 16, 2012: HUBZone and Veteran-Owned Small Business Industry Day
    - February 5, 2013: Woman-Owned Small Business Industry Day

Ames Contractor Council
NASA AMES RESEARCH CENTER

SMALL BUSINESS INDUSTRY DAY DETAILS

- Industry Day organizational efforts included:
  - Event advertising through small business organizations (e.g. NorCal 8(a), SBA, FedBizOps, etc.)
  - Preparing flyers, agendas, presenter guidelines, matchmaking schedules, reviewing presentations,
  - Center-wide announcements of event
  - Reviewing capabilities statements
  - Coordinating with guest speakers and matchmakers
- Industry Day activities included:
  - Company introductions and success story presentations
  - Guest speakers from Ames Management, SBA and NASA OSBP
  - CO, SEWP and NVDB procurement presentations
  - Company and organization booths
  - One-on-one matchmaking with large businesses and NASA Center small business specialists, COs and CORs

Questions?

NASA Industry Forum

March 18-19, 2014

NASA GRC Center Industry Council Briefing

ZIN Technologies

SAIC®

GRC Industry Council

- Represented by various large and small businesses
  - Glenn Contractors Management Committee represented by GRC senior Mgt and 18 Small Businesses, 8 Large Business and 2 Non-Profits
  - Linxx Global Solutions (Small Business)
  - Vantage Partners, LLC (a Joint Venture between Vantage Systems Inc. and SGT of Maryland) (SB led)
  - Universities Space Research Association (USRA) (nonprofit)
  - Science Applications International Corporation (SAIC) (large business)
- NIF meeting representatives ZIN Technologies and SAIC
  - Carlos M. Grodsinsky, Ph.D. (ZIN Technologies)
  - Stephen A. Voels, Ph.D. (SAIC)

Council Structure and Operational Functions

- Industry council is made up of representatives from small, large and nonprofit organizations that support NASA GRC operations through prime support service and completion contracts
- Diverse organizational representation supports a breadth of business interests and capabilities supporting the NASA GRC mission and objectives

<u>Council operational functions</u>

  - Representation at GRC Contractor's Management Committee (GCMC) meetings (held every 4 months)
  - Insight and Input to center management on contractor issues, lessons learned and areas for improvement

Best Practices

- Balance Strategic, Operational and Tactical engagement of industry representation
  - Strategic – identify center goals and objectives, and strategic plans in relation to contract/contractor support
  - Operational – Partnerships, Product Lines/Core Capabilities to support strategic goals
  - Tactical – contract forecast, gap assessments and programs
- Agenda against strategic, operational and tactical plans – Tactical items covered at all meetings, operational as required, strategic aligned to multi-year plans
- Published minutes
- Formal quarterly meetings

Plans, Issues and Concerns

- Assign action items/reporting for GCMC-council in relation to strategic, operational and tactical objectives and goals
- GRC Contractor's Management Committee is inclusive of all center operations, some contractors support is not relevant to other members, discuss specific items with subset of representation
- Establish GCMC-council briefing during meetings addressing alignment to center Strategic, Operational and Tactical items
  - Formalize two way dialogue
  - Establishes direct tie with center and council items within working meetings
- Plans to establish an Industry Working group through virtual group tools (plan to develop a Linkedin GRC working group)
  - Group will provide specific insight and broader concerns to the IC to brief all participants and center management (2nd Quarter 2014)

NASA Industry Forum

NASA Center Industry Council for Goddard Space Flight Center

March 18-19, 2014

NASA Industry Forum
NASA Center Industry Council
Goddard Space Flight Center

Goddard Industry Council (IC) Representatives:

Shuby Ambardekar, Honeywell Technology Solutions, Inc.
Daryl Carrington, a.i. solutions
Cindy Edgerton, Edge Space Systems, Inc.
Mike Fatig, Vantage Systems, Inc.

Briefing Outline:

Overview of Small Business Interaction with GSFC
What Works for Small Businesses at GSFC
Concerns of Small Businesses at GSFC

Goddard Industry Council:
Small Business Interaction with GSFC

Goddard Contractors Association

At the Goddard Space Flight Center, the primary industry organization for interaction with Center Management is the Goddard Contractors Association (GCA).

Purpose

GCA serves as a medium for the exchange of information between members of NASA Goddard Space Flight Center (GSFC) management and the GSFC contractor community.

www.goddard-contractors-association.org

Goddard Industry Council: Small Business Interaction with GSFC

GCA Structure/Organization

- Members: Industry members are GSFC contractors having at least one contract or one first tier subcontract with GSFC. Voting members have ≥ $25M in contracts with GSFC, Corresponding members have < $25M in contracts with GSFC. Bylaws may be amended to change Voting Membership to those with ≥ $1M in contracts with GSFC
- GCA Board: Elected officers are President, Vice-President, Secretary, Programs Chair. Elections held each summer for the one year terms. Typically, only Programs Chair elected, others succeed to next office.
- GSFC Facilitator: A Facilitator is appointed by the Center Director as principal liaison to GCA for assisting in meeting arrangements and communications with Center Management.
- GSFC Center Director and his/her deputy or designee are the NASA Members of the GCA.
- Proposing a Small Business Committee; there is no Industry-GSFC organization focused solely on Small Business.

Goddard Industry Council: Small Business Interaction with GSFC

GCA Operations

GCA meets monthly on-site at Goddard for approximately 2 hours.

- GSFC Center Director or his deputy typically provides a Center update and invites Q's & A's. In past year, format varied by providing topics of interest to industry to GSFC Mgmt for discussion during the meetings. These include: working together on technology development with limited money while protecting IP; Class D missions; government shutdown.
- Recent speakers: Peter Hughes, CTO; Bryan Geurts, GSFC Patent Law; Tom McCarthy, Earth Sci Projects; Mike McGrath, GSFC Procurement; and Directors of Engineering, Science, IT, Flight Projects Directorates.
- GCA invites GSFC Procurement to attend GCA meetings frequently; typically Procurement personnel attend 2-4 times per year either as program speaker or to address a particular issue such as government shutdown or acquisition forecasts.

Goddard Industry Council: Small Business Interaction with GSFC

GCA Operations, cont'd

The GCA has had a few "out of the box" meetings

- Organization typically visits Wallops Flight Facility every 1.5 to 2 years.
- While most speakers from GSFC, GCA has had HQ visitors such as: Bill McNally, Assistant Administrator for Procurement, Glenn Delgado, AA for OSBP; Seth Statler, AA Legislative & Intergovernmental Affairs; Matt Mountain, Space Telescope Science Institute.
- Industry members met with Senator Mikulski staffer in December to discuss budgets. No NASA personnel attended and the meeting was held at a local company facility.

Goddard Industry Council: Small Business At GSFC

What Works for Small Business at GSFC?

- Goddard has been a leader in supporting small business (SB) growth in engineering and science, aiding the evolution of premier technical SBs. GSFC has had a Small Business Focus
  - Significant, high-value engineering and science services contracts for small business, >$1.5B (does not include other SB contracts).
  - Small businesses are involved in a broad range of technologies and technical disciplines: optics, detectors, cryogenics, mechanical/electrical/thermal/materials/contamination/systems engineering, lasers, flight software, science data processing, etc.
  - GSFC Small Business Specialist: Ann Haase
  - Center Management through Branch Heads, including Procurement, are receptive to exchanges on needs and services information – open doors.

Goddard Industry Council:

Questions?

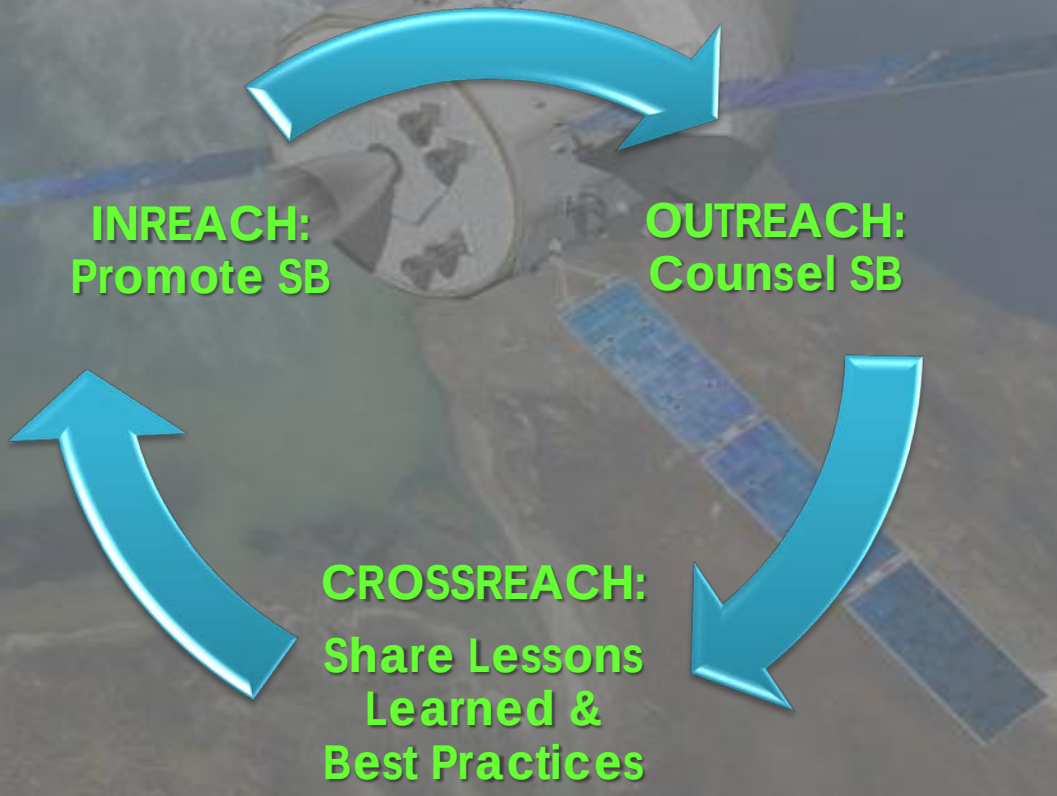
GSFC Industry and Government Leaders, Meeting in Late 2013

JSC Prime Contractor SBLO Roundtable

Michelle Butzke, Co-Chair
Lockheed Martin

Our Mission:

- Counsel and advise SB
- Promote utilization of SB to our companies
- Share best practices & lessons learned to help each other grow to be better advocates for SB



Our Business Rhythm

- Meets 1st Tuesday of every month, non-badge location
- ½ day Commitment (8 a.m. – 12:30 p.m.)
- Co-chaired by Prime Contractor lead (Elected annually)
- Begin day with Joint Counseling
- After Joint Counseling we meet
  - Go through outreach event calendar
    - Who will be where? Make sure JSC/NASA programs have coverage. Divide and conquer!
  - JSC Update from Chuck Williams or Kelly Rubio
  - Round-the-room discussion with each Prime
    - Possible opportunities for SB
    - SB Discoveries
    - Lessons learned or knowledge sought

Joint Counseling Sessions

- 9-14 Primes at each session:
  - LM (2 reps), Boeing (reps), USA, ATK, Jacobs, UTAS, Oceaneering, SGT, SAIC, Wyle, TechTrans Intl', Orbital, SpaceX, DynCorp
- NASA, SBA, Prime Contractor representation
- SB is pre-screened before arrival
  - Maximize those in relative NAICS codes
  - Maximize those in hard to reach categories
- No more than 3 representatives from the company
- Co-chair passes out any SB material and/or business cards to save time and distraction

Joint Counseling (cont.)

- SB presents for 10 minutes
  - No electronic presentations
  - Prescreened before appointment
- Roundtable members "counsel" afterward
  - Ask questions
  - Offer feedback, guidance
- SB leaves with packet of information
  - Doing business with NASA
  - Roundtable POC email addresses
  - Feedback Survey
- 5 minute break between suppliers
  - Primes discuss capability, opportunity, feasibility

2013 Highlights

- Expanded to include Commercial Space program exposure for SB (SpaceX, Orbital)
- Supported multiple, local Outreach events such as WBEA, Houston Greater Procurement Connection (GPC), Houston Minority Small Business Council (HMSBC), NCMA Small Business Conference
- JSC WOSB/HUBZone Industry Day
  - Personal invitations sent to HUBZone companies with preferred NAICS codes.
  - 70 SB attended
    - 32 WOSB
    - 25 HUBZone
    - 13 WOSB/HUBZone

Our Amazing Ally

- JCS is privileged to have SBA representation at all of our Joint Counseling and Outreach events
- Valerie Coleman is the U. S. Small Business Administration's Procurement Center Representative for this region and she is located at Johnson Space Center
- Valerie screens each small business' SAM and Dynamic Small Business Search profile to ensure it is complete **before** they attend a joint counseling. If not complete, she sends them an e-mail to explain how they need to correct deficiencies, omissions, etc.

JSC Small Business Council

- Co-chaired by an SB lead, similar to Prime Contractor Roundtable
- Developed ~5 years ago to understand "the other perspective" and offer strategic counseling to select, local SB
- SB participants counsel and influence other SB, broadening our outreach initiatives
- The learning is two-way; JSC Specialists learn of issues/concerns SB not otherwise observed
- This council is diverse, consisting of small businesses represented by the following categories:
    - WOSB, 8(a), HUBZone, SDVOSB, SDB, MBE and SB

Promoting the JSC Sessions

- FAQ Flyer
- Primes & NASA use
- Flip side has tips to SB for pitching to potential customers

NASA Johnson Space Center Small Business Joint Counseling

FAQ's

1. **What is Joint Counseling?** Joint Counseling is a matchmaking opportunity where a Small Business (SB) can market itself to representatives from NASA, its Prime Contractors, and the SBA – known collectively as the NASA Prime Contractor Small Business Liaison Officer (SBLO) Roundtable.
2. **How long is a Joint Counseling session?** A session lasts 20 minutes. The SB is expected to present its capabilities for the first 10-15 minutes. The remaining time is used to facilitate Q&A between the SB and the Roundtable.
3. **When and where is Joint Counseling?** Joint Counseling sessions are typically held the 1st Tuesday of the month at Johnson Space Center in Houston, Texas.
4. **How do I sign up?** Small businesses interested in participating should contact the JSC Industry Assistance office at ---------@nasa.gov to schedule an appointment.
5. **Can I bring someone else with me?** Yes. However, due to the limited time we will have together, we ask that you bring no more than 2 others with you. It is strongly recommended that the owner of the business attend the session.
6. **Who is my audience?** JSC SB Specialists, the SBA's regional representative, and SBLOs from Prime Contractors such as ATK, Boeing, Jacobs, Lockheed Martin, Orbital Sciences, Raytheon, SGT, SpaceX, United Technologies, Wyle and others.
7. **Can I show a computer presentation or video?** No. Keep in mind that the intent of the Joint Counseling session is to facilitate an interactive dialogue to learn more about your company and how we might work together in the future.
8. **Can I bring hand outs and marketing material?** Bring your company brochure and any information you want us to have that you feel best showcases your company's capabilities and products. Some things to consider:
    a. If you bring print outs of your presentation, please do not read it to us verbatim. We can read it later. Use your short time with us to highlight the most important messages and elaborate on them with personal comments.
    b. Do not bring any gifts of value; we are not able to accept them.
    c. Save money and trees – limit your hand out material and bring only what you feel is most beneficial during the face to face, or what can't be sent to us electronically. We will ask you to email us your presentation and capabilities packet afterward. (This allows us to easily advocate your company to others!)
9. **How long will it take to get a contract?** There really is no way to predict this. Contracts are created from requirements, requirements are created from a need. If a requirement for your capability or product arises, you may receive a request for quote. As a general rule, we tell companies that it can take 18-24 months to secure their first contract with a government agency or Prime Contractor. Not surprisingly, the best practices to use to achieve this are persistence, professionalism and patience.


JSC Prime Contractor
SBLO Roundtable
Thank You

KEGMAN JACOBS Wichita Tribal Enterprises, LLC
A Native American Owned Company

Proven Leaders Proudly Serving our Nation

Kennedy Space Center

Susan Glasgow,
President and Chief Executive Officer
Kegman Inc.

NASA/ KSC Representatives

KEGMAN

- Woman Owned Small Business (WOSB - 8m)
- Economically Disadvantaged WOSB (EDWOSB)
- Veteran Owned Small Business—VA Verified

Susie Glasgow, President/CEO
PRIME CONTRACT: Doppler Radar Wind Profiler (DRWP)

Wichita Tribal Enterprises, LLC
A Native American Owned Company

- Small Business Administration (SBA) 8a certified
- Small Disadvantaged Business (SDB)

Tara Miller, KISS III Program Manager
PRIME CONTRACT: KSC Institutional Support Services (KISS) III

JACOBS™

- Large Business

Peter Montgomery, Director of Commercialization
PRIME CONTRACT: Test and Operations Support Contract (TOSC)

NASA/KSC Prime Contractor Board

- Purpose: Foster development, operation, clarification, implementation and improvement of the Small Business Utilization Programs at John F. Kennedy Space Center, NASA
- Organization: Consists of two standing committees
  - **Executive Committee:** Comprised of NASA-KSC government managers and nominated prime contractor managers who meet semi-annually or as necessary to review actions and recommendations of the Working Committee
    - Purpose: Establish policy, direction and strategies
    - Review and evaluate recommendations of the Working Committee
  - **Working Committee:** Individuals appointed by Executive Committee which meets monthly
    - Purpose: Identify appropriate action items, develop potential solutions/approaches
    - Present recommendations to Executive Committee

NASA/KSC Best Practices:

- Prime Contractors Board
  - Executive Committee
  - Working Committee
  - Outreach Activities
    - Industry Days
    - Joint Counseling
- Central Industry Assistance Office (CIAO) – KSC Small Business Office
  - NASA/KSC Industry Day
  - NASA/KSC Expo
  - Veterans Conference
  - Brevard Small Business Assistance Council (BSBAC)

NASA/KSC Prime Contractor Board Areas for Improvement/Recommendations

- Frequency of Executive Board Meeting
  - Meet as required in Charter (semi-annually) or as necessary
  - Dissolve Executive Board and formally move responsibility to Working Group
- Getting businesses & contractors to participate in Joint Counseling (23 Members and only 10 to 12 Active)
  - Improve consistency in members on the Working Group Board
  - Encourage participations through contractual requirement

NASA/KSC Prime Contractor Board Areas for Improvement/Recommendations (cont.)

- Feedback from the Small Business participants
  - Determine effectiveness of sessions
  - Follow-up with small businesses at least semi-annually
    - What were the benefits, did it generate business
    - What could we do better to help
- Feedback from the Prime Contractor contributors
  - Determine effectiveness of sessions, i.e., does outreach and/or JC sessions help them meet their Small Business Goals, or in the case of SB primes, assist them in teaming or other benefits?
  - Awards made by Prime Contractor contributors to SB met at outreach events and sessions

KEGMAN JACOBS Wichita Tribal Enterprises, LLC
A Native American Owned Company

QUESTIONS?

Introduction on

NASA Langley Research Center (LaRC) Contractors Steering Council (LCSC)

March 19, 2014

Presented
at
NASA Industry Forum (NIF)
by
Min Kim, Genex Systems
and
Doug Cook, Jacobs Technology, Inc.

History

- Established in January 1989
- Informal forum for communication and networking to build and enhance partnership bond between LaRC leadership and local contractors
- Composed of on- and near-site LaRC contractors and LaRC leadership representatives.

Structure

- Two Co-Chairs
  - LaRC Co-Chair, appointed by LaRC leadership
  - Contractor Co-Chair, elected by members
- Deputy Co-Chair (contractor), optional
- LaRC Small Business Office - supports LaRC Co-Chair
- Members are composed of active LaRC contractors and LaRC leadership representative
  - The LCSC currently has 47 companies

Operational Functions

- Two Co-Chairs meet on a monthly basis to coordinate monthly meeting agenda
- Two Co-Chairs share responsibilities of inviting and coordinating speakers
- The LCSC meeting is once a month, i.e., on the 3rd Thursday
  - The LCSC if off July and August

Effectiveness

- Effective Information Exchange and Education
  - LaRC employees share their activities with contractors, and also educate contractors on critical issues and programs
    - What is happening at NASA
    - What is happening at Langley Research Center
    - What is happening with their projects/programs
  - Contractors present their companies capabilities and activities
  - Open to outside the LaRC, e.g., surrounding cities, other department and agencies, and key local programs/projects
- Social and Networking Opportunity
  - Contractors network with LaRC leadership
  - Contractors network with other contractors
  - Contractors network with surrounding city officials

Interface with LaRC Personnel

- Speakers cover a wide-range of LaRC personnel
  - The LaRC Center Director is invited once a year
  - Other senior level personnel are invited to inform the local contractors of the center activities
  - Technical and other personnel (e.g., Branch Heads, Team Leads, or workers) are invited to inform their activities and projects
- Contractors actively interface with the speakers during and after presentation for networking

What works?

- Effective communication
  - LaRC leadership and contractors exchange key information
  - Internal and external issues are being communicated
- Vibrant networking environment
  - Local contractors actively participate in networking opportunities with the LaRC leadership, surrounding city officials, and other contractors

Best Practices

- Open and informal professional environment for information exchange and networking
- Open to the NASA LaRC community as well as outside communities, such as
  - surrounding cities
  - other departments (e.g., Army, Air Force, and FAA)
  - local programs as well as organizations (e.g., VA Air & Space Center, VA Space Grant Consortium, VA Aerospace Business Associates)

Issues and Concerns

- Contractors do not ask tough questions on critical issues
  - Not at a fault of LaRC leadership
  - Mostly for the political reasons, contractors are hesitant to face the speakers with difficult questions

MSFC Prime Contractors Supplier Council (MPCSC)
&
Small Business Executive Leadership Team (SBELT)

NASA Industry Forum
NASA Headquarters
March 19, 2014

Ron Belz
Donna Coleman
Vicky Harper-Hall
Debbie King
Jenifer Scoffield

Marshall Prime Contractor Supplier Council (MPCSC) est. 2002

- **MPCSC Vision Statement**

Create an environment to promote and nurture an effective exchange of best practices and lessons learned among MSFC prime contractors which will strengthen their support to aerospace research and development and related activities, heighten awareness of the NASA socioeconomic programs/objectives, and develop a foundation for effective exchange of information through the MSFC prime contractor community.

MPCSC Structure

- **2 year commitment** (elects the person not the company)
  - Chairperson, Vice chair, Secretary, and Events Coordinator
- 2 Off-site meetings per year hosted by a Prime Contractor
  - 1 ½ day meeting schedule (plus ½ day host tour or a match making event
  - NASA updates include legislative changes, SB Program Best Practices, Current issues, Vendor sharing, Team building, Training, and Lessons Learned
  - All members responsible for the Agenda
  - Everyone expected to contribute
  - Honest and open discussions
- Monthly Meetings – 2 hours (at a primes facility)
- Joint Counseling Initiative
- Work Closely with Small Business Executive Leadership Team

MPCSC Lessons Learned

- An open, communicative NASA SBS creates a “win-win” for NASA and primes
- Prime Contractor Council members/companies are “Competi-mates”
- All members contribute to the knowledge of others
- SBLOs (SB POCs) reside in the GMs office, BD, or Procurement
- Mentoring an SB is challenging
- HBCU/MI’s are focused on academia and most need help in subcontracting
- Off site meetings allow a “working and playing hard” environment that builds camaraderie and provides a learning and growing experience

Marshall Small Business Executive Leadership Team(SBELT) est. 200x

Vision Statement

- To inspire local and regional Small Businesses to play a vital role in the future of space exploration, and specifically develop services, technologies, and manufacturing in support of the Marshall Space Flight Center mission.

SBELT Structure

- **2 year commitment (elects the person not the company) Chairperson, Vice Chair, Secretary, and Events**
- **1 Off-site per year**
  - 1 ½ day meeting schedule
  - Emphasis on value to the SB - NASA Update; legislative changes, tours to learn more about other government entities and industries
- **Monthly Meetings – 1.5 hours**
  - Rotate among membership to learn more about each company
  - Guest Speakers
- **Marshall Small Business Alliance (MSBA) Meeting– 2 per year**
  - ½ day meeting
  - Feb 2014 meeting over 400 attendees both large and SB
- **Work Closely with MPCSC on outreach events**

SBELT Lessons Learned

- **Owner Ship and Partnership**
  - It is our responsibility to support SB interest
  - We partner with
    - MSFC SB Office - David Brock
    - MSFC SBS Specialist
    - MPCSC
- **As SB's we are small but in partnership we can accomplish much**

MPCSS & SBELT = TEAM

Together

we

Educate

Advocate

Mentor

STENNIS BUSINESS CONSORTIUM

JOHN C. STENNIS SPACE CENTER

MISSISSIPPI ENTERPRISE FOR TECHNOLOGY
STENNIS SPACE CENTER

NASA INDUSTRY FORUM

OFFICE OF SMALL BUSINESS PROGRAMS

March 18, 2014

Washington D.C.

Stennis Business Consortium

Mission

Provide a mechanism for federal and state agencies, local institutions, and businesses to exchange information on:

- Small business goals
- Needed and emerging technologies
- Upcoming procurement requirements and opportunities
- Issues dealing with existing procurement regulations

Specific information is exchanged via industry days and quarterly forums and based on funding cycles, forecasts of small business needs, and inquiries from small businesses.

Ample opportunity for NETWORKING!

Stennis Business Consortium

Basic Facts

- Established: August 2010
  - By NASA, Mississippi Enterprise for Technology (MSET), and the Louisiana Technology Transfer Office
  - Followed a prior NASA effort, the Stennis Small Business Forum

- Facilitator/Coordinator: MSET
  - Natural facilitator among agencies, contractors, and small businesses
  - SBC partially funded by the Mississippi Development Authority

- Quarterly Forums held: **11**; Average attendance: ~ **113**
  - Last forum: Feb. 25, 2014 | Next forum: May 29, 2014
  - Primary Audience: Small Businesses, Subcontractors, and Suppliers

- Stennis Industry Days held: **3**; Average Attendance: ~ **275**
  - 2010, 2011, 2013
  - Next Stennis Industry Day: early 2015

Stennis Business Consortium

- Grown from Best Practices: Patterned after the Stennis Small Business Forum, programs at the Marshall Space Flight Center and Department of Defense bases with a focus on information exchange

- Coordinating Committee: Consists of MSET staff and small business/procurement representatives from Stennis federal agencies and large prime contractors
  - Meets between the quarterly forums and focuses on content
  - Assists each other with difficulties in meeting goals and finding solutions to problems common for all agencies

- Quarterly Meetings
  - Federal Agencies and Large Contractors – present business opportunities and procurement forecasts
  - New Agencies and Large Businesses – present information about doing business with small companies
  - Small Business Resource Partners – non-profits and other organizations present the programs and services available to businesses (SBA, PTAC, SCORE, etc.)
  - Training and Academic Programs – provide new program information applicable to audience

Stennis Business Consortium

- Stennis Industry Day(s)
  - Larger forum held every 1 to 2 years to showcase all agencies
  - Speakers selected to highlight those with small business goals/opportunities
  - Exhibit booths for businesses to showcase their capabilities (sold out each year!)
  - Matchmaking
  - SBC Team-member Achievement Recognition (STAR) Awards in four categories to promote participation

- SBC Meet & Greets
  - Periodic events to encourage agencies and prime contractors to learn more about small business capabilities
  - Example: Meet & Greet with Agencies and Prime Contractors
  - Example: Meet & Greet with NASA Stennis MACC and A&E awardees

SBC Meet & Greet – NASA MACC & A&E Awardees

Multiple-award Construction Contract and Architect/Engineering Contract

ADVON Corporation – MACC, SDVO
American Contractor and Technology – MACC, Small Business
Birmingham Industrial Construction – MACC, SDVO
CDM-CH2M Hill – A/E Services, Large Business
DNP – MACC, Small Business
Harry Pepper – MACC, Large Business
Healtheon – MACC, HUBZone
McClain Contracting – MACC, 8(a) Small Business
MOWA Development – MACC, 8(a) Small Business
S&B Infrastructure – A/E Services, Large Business
Sauer Inc – MACC, Large Business
Southeast Cherokee Construction – MACC, HUBZone

Continental Construction – test stands for Rolls-Royce, Small Business
Holliday Construction – separate NASA contract, Small Business

Stennis Business Consortium

- Jacobs Technology Inc. – FOSC Group
  - Third Thursday Sessions: Small business vendors have the opportunity to present their capabilities – 3 one-hour sessions per month
    - Need more involvement from Stennis primes and agencies as well as technical personnel
- SDVO and HUBZone forum
- A2 Research
  - NASA Laboratory tours for small businesses

✓ *Award-winning prime contractors drive all businesses to improve and increases competitiveness.*

Stennis Space Center – Unique Federal City

Department of Defense
- Commander, Naval Meteorology & Oceanography Command
- Naval Oceanographic Office
- Naval Research Laboratory
- Naval Small Craft Instruction and Technical Training School
- Navy Special Boat Team 22
- Navy Human Resources Service Center Southeast

Department of Commerce
- NOAA, NWS, National Data Buoy Center
- NOAA National Marine Fisheries Service
- NOAA National Coastal Data Development Center

Environmental Protection Agency
- Environmental Chemistry Laboratory
- Gulf of Mexico Program

Department of Interior
- U.S. Geological Survey, Hydrologic Instrumentation Facility

Department of Energy
- Strategic Petroleum Reserve

State of Mississippi
- **Mississippi Enterprise for Technology**
- **Mississippi Technology Transfer Center**
- **Center of Excellence for Geospatial Technologies**

State of Louisiana
- Louisiana Technology Transfer Office, Louisiana Business & Technology Center/LSU

Center for Higher Learning
- Mississippi State University
- University of Southern Mississippi
- University of Mississippi
- University of New Orleans
- Pearl River Community College

Mississippi State University
- Northern Gulf Institute

University of Southern Mississippi - College of Science and Technology
- Dept. of Marine Science

Major NASA Contractors
- Aerojet Rocketdyne
- **Jacobs Technology Inc.**
- **A2 Research**
- ASRC Research and Technology Solutions (ARTS)
- Lockheed Martin
- ISS Action
- Science Applications International Corporation
- Science Systems and Applications Inc.

Commercial Companies
- Aerojet Rocketdyne
- Lockheed Martin IS & GS Defense Systems
- Rolls-Royce
- SpaceX

Additional Entities
- 35 MSET companies
- Major Navy and NOAA contractors and subcontractors
- Growing number of companies in Area 9

Stennis Business Consortium

Additional Participants – Federal & Local Agencies

Army Ammunition Plant

Department of Homeland Security

General Services Administration

Government Printing Office

Gulfport-Biloxi International Airport

Hancock County Port & Harbor Commission

NASA Shared Services Center

Naval Supply Command

Space and Naval Warfare Systems Center Atlantic (New Orleans)

Stennis Business Consortium

Additional Participants – Prime Contractors

ACT Inc.
Alpha Data Corporation
Applied Geo Technologies
Booz Allen Hamilton
Brandan Enterprises
Computer Sciences Corporation
General Dynamics IT
Geocent
Hewlett-Packard
Ingalls Shipbuilding
Northrop Grumman
NVision Solutions
Paragon Systems
Patriot Technologies
QinetiQ North America
ReDe Inc.
Saitech
Skylla Engineering
Southeast Cherokee Construction
Textron Marine and Land Systems

SBC – Business Resource Partners

Department of Veteran Affairs, State of Louisiana, Office of Governor
Gulf Coast Intellectual Property Association
Gulf Coast Government Contractors Association
Hancock County Chamber of Commerce
Hancock County Port and Harbor Commission
Innovation Center – Business 101 & Export Bootcamp
Innovate Mississippi
Louisiana Business and Technology Center
Louisiana Economic Development
Louisiana Procurement Technical Assistance Center
Louisiana Technology Council
Louisiana Technology Transfer Office
Louisiana Workforce Commission
LSU Executive Education
Magnolia Business Alliance

SBC – Business Resource Partners

Mississippi Department of Employment Security
Mississippi Development Authority – Existing Industry & Workforce Development
Mississippi Development Authority – Minority & Women-owned Business Program
Mississippi Enterprise for Technology
Mississippi Export Assistance Center
Mississippi Federal and State Technology Phase 0 SBIR Support
Mississippi Manufacturing Extension Partnership
Mississippi Minority Enterprise Center
Mississippi Polymer Institute – prototyping capability
Mississippi Technology Transfer Office
Service Corps of Retired Executives
Small Business Administration
South Mississippi Contract Procurement Center (PTAC)
South Mississippi Planning and Development District – subcontractor loans
Women's Business Enterprise Council

FACTS –

- ✓Created in 1994 by the State of Mississippi, NASA, and the State's institutions of higher learning
- ✓ 501c(3), private, non-profit corporation
- ✓Located at Stennis inside the State-built Mississippi Technology Transfer Center
- ✓Responsible for the operations of the Mississippi Technology Transfer Office

MISSION

MSET facilitates regional economic development by leveraging the resources of Stennis Space Center, the State, and the region to foster business opportunities among public and private entities.

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MSET Relationship with NASA Stennis Space Center

- Reimbursable Space Act Agreement
- Host-Tenant Agreement
- Use Permit
- Bailment Agreement
- Agreements in process with Departments of Defense and Commerce agencies that are also resident agencies of Stennis Space Center
- Authorized to operate a technology transfer program, business incubator and accelerator, small business programs, and perform other economic development functions on behalf of the State

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MSET Client Programs

- Client Categories
  - Small Business Incubator Companies (Stennis facility)
  - Corporate Residents (Stennis facility)
  - Affiliate Companies
  - Minority and Women Owned Contractors (statewide)
  - Event Participants and others

- Primary focus on fledgling and small businesses
- Additional focus on large businesses with local presence
- Match Stennis needs to business capabilities

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MSET Services for Businesses

Custom Events

- Stennis Business Consortium forums and meet & greets
- Stennis Industry Days
- NASA Day in Mobile (AL) – 2013
- NASA Day in Jackson (MS) – August 2014
- "How to do Business at Stennis" seminars locally and statewide
- Roundtables – features Congressional reps, mentor network, etc.
- Roundtable – featuring SBA Office of Advocacy's Chief Counsel
- Lunch and Learn Monthly Presentations
- Thematic Showcases (Technology, Minority Business, etc.)
- Venture and Angel Capital Forums
- Invention and New Product Fair – coming soon!
- Quarterly Technology Transfer Presentations – coming soon!
- Marine Technology Economic Development forum – coming soon!

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MSET Services for Businesses

- Stennis Business Development Assessments
- Coaching – focused on working with government agencies
- Teaming Assistance Program
- Proposal Compliance Support/Contract Start-up Assistance
- Introductions to Small Business Specialists
- Mentorship Program
- Marketing/PR
- Resource Partner Network to support traditional business needs
- NASA Laboratory Services, Multimedia Services
- Facility Management
- SBIR/STTR/research assistance
- Technology Transfer
- State incentive packages
- University relationships
- Workforce training assistance

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