

National Aeronautics and  
Space Administration



# MSFC Office of Procurement Presentation to Huntsville Aerospace Marketing Association (HAMA)

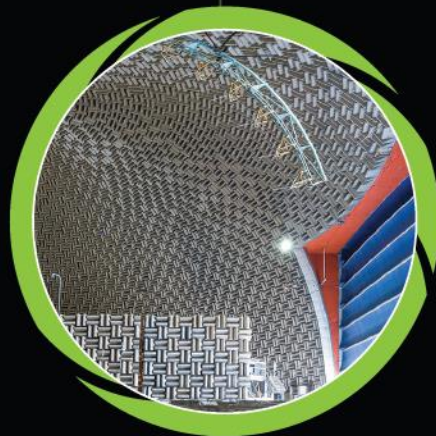
Jason Detko

MSFC Director, Office of Procurement

April 9, 2021

**EXPLORE**  
**PROCUREMENT**  
The cornerstone of NASA's current and future missions

[www.nasa.gov](http://www.nasa.gov)



# Marshall at a Glance



Marshall is an engine of opportunity for its community and beyond



**\$3.6 billion**  
budget in fiscal year 2020



**3<sup>rd</sup> largest**  
employer in the Huntsville -  
Madison county area



**> 6,000**  
employees at Marshall  
(2,100 civil service employees in  
fiscal year 2020)

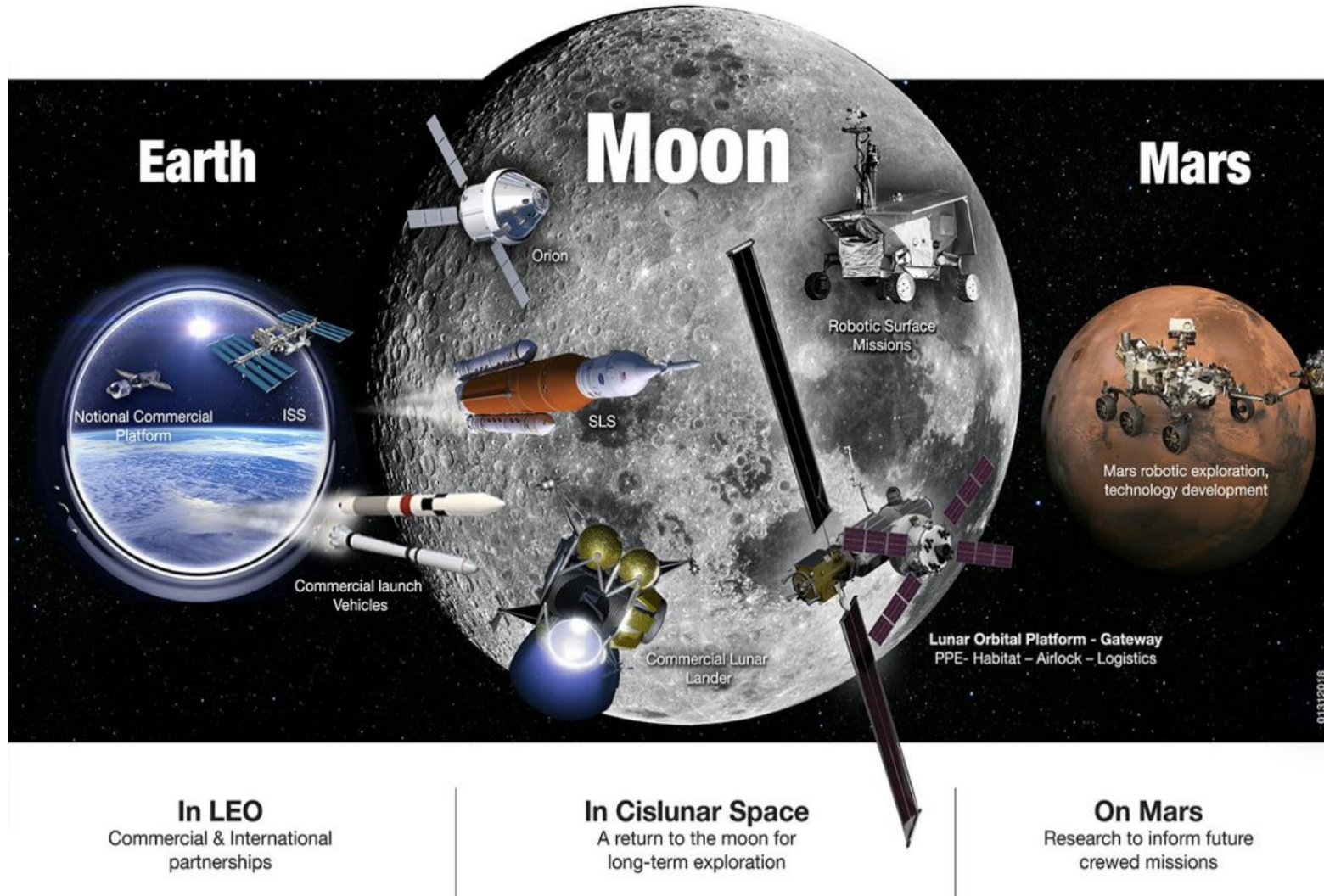


**4.6 million**  
square feet of space occupied  
in Huntsville



**MAF**  
2.2M square feet of  
manufacturing space at  
Michoud Assembly Facility  
in New Orleans

# Boots on Moon by 2024





# MSFC Key Center Capabilities and Services



## **Propulsion**

- Liquid Propulsion Technology and Development
- Propulsion Industrial Base Sustainment
- Solid Propulsion Technology and Development
- Propulsion Testing
- Advanced Propulsion Technology and Development

## **Materials and Manufacturing**

- Materials Diagnostics and Fracture/Failure Analysis
- Materials Technology and Development
- Additive Manufacturing
- Large-Scale Manufacturing

## **Space Systems**

- Payload Systems
- Mission Operations
- Life Support Systems Design and Development
- Environmental Test
- Space Weather and Natural Environments

## **Scientific Research**

- Earth Science
- Planetary Science
- Heliophysics
- High-Energy Astrophysics
- Optical Systems

## **Space Transportation Systems**

- Advanced Concepts and Systems Analysis
- Structural System Design and Analysis
- Structural Testing
- Thermal and Fluid Systems
- Avionics and Electrical Systems
- Guidance, Navigation, and Control
- Flight Software

# NASA Office of Procurement (OP) Vision

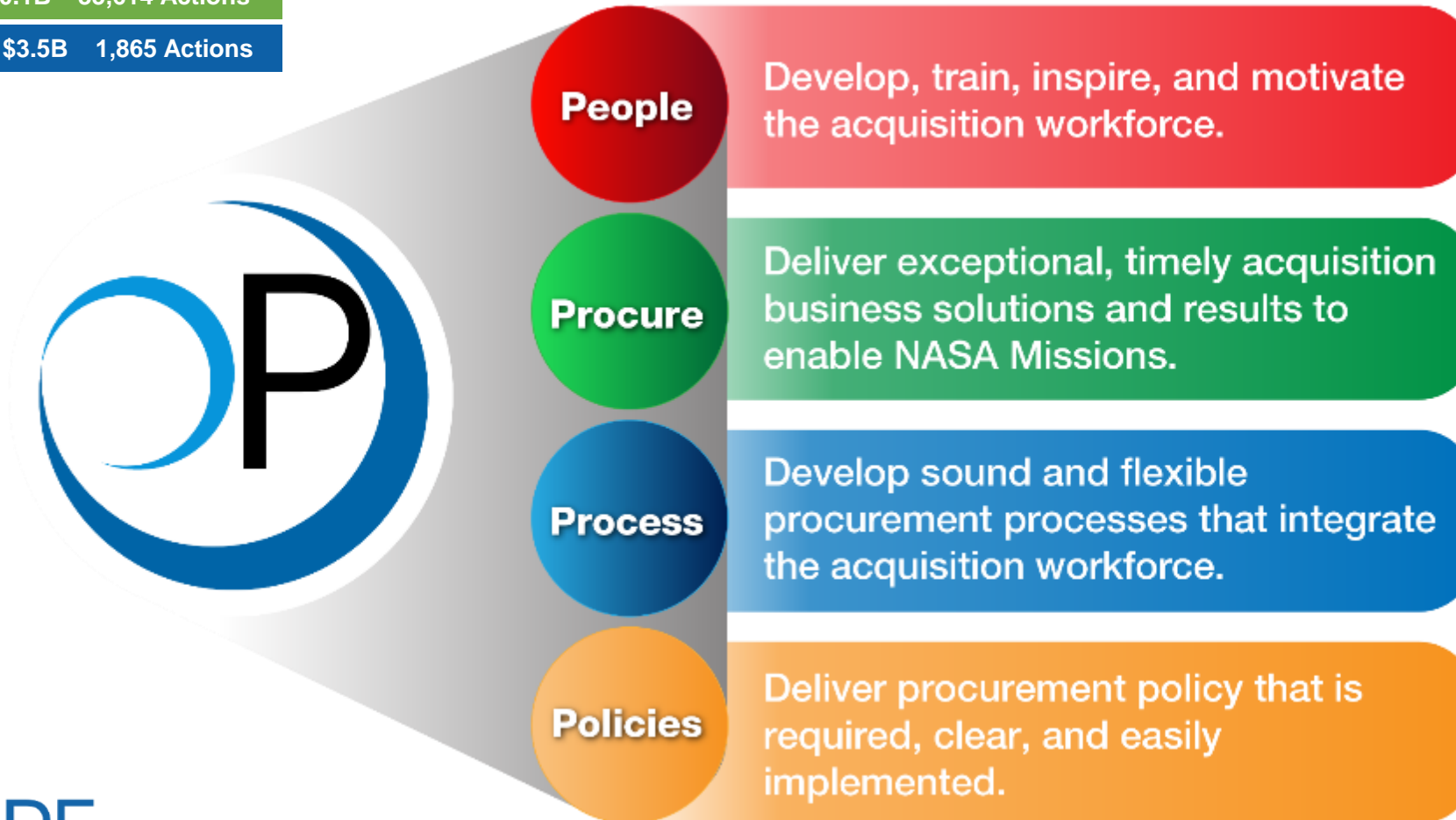
*Acquisition Excellence in an Evolving Environment*



Explore and Execute Innovative, Effective, and Efficient Acquisition Business Solutions to Optimize Capabilities and Operations that enable NASA's mission.

FY20 OP Obligations \$20.1B 35,614 Actions

FY20 MSFC Obligations \$3.5B 1,865 Actions

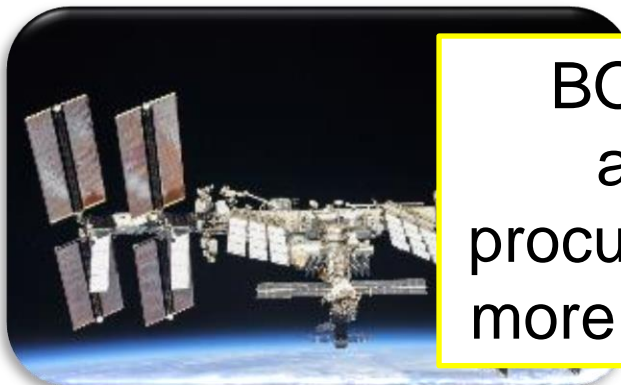
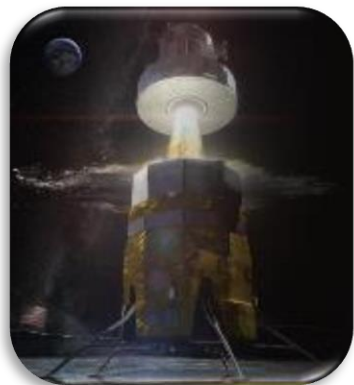


# MSFC Office of Procurement Portfolio

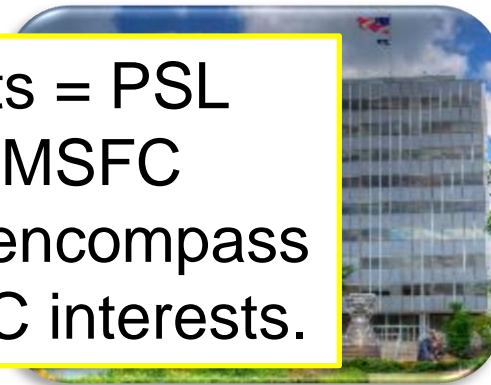


- **Space Launch System (SLS)**
  - Core Stage
  - Boosters
  - Launch Vehicle Stage Adapter
  - Engines (RS25 & RL10)
  - Exploration Upper Stage
  - Universal Stage Adapter
  - Interim Cryogenic Propulsion Stage
- **Human Landing System (HLS)**
- **Safety and Mission Assurance**
- **Center Operations Support Services**
  - Facilities
  - **Logistics Support (Agency Wide)**
  - Construction and Environmental
  - Protective Services
  - Admin Support
  - **Financial Support Services (Regional)**
  - Human Resources
- **ISS Payload and Operations Support**
- **Strategic Analysis and Communications**
- **Science and Technology**
  - Science Research and Projects
  - Exploration Technologies
  - Planetary Missions (Dragonfly, Solar Cruiser, etc.)
  - **Technology Transfer (Agency Wide)**
- **Engineering Support**
  - **Program Planning and Control (Regional)**
  - Spacecraft and Vehicles Systems
  - Propulsion and Test Laboratories
- **Human Exploration Development and Ops**

MSFC OP Mission - Explore and Execute Innovative, Effective, and Efficient Acquisition Business Solutions to Optimize Capabilities and Operations that enable MSFC and NASA's missions

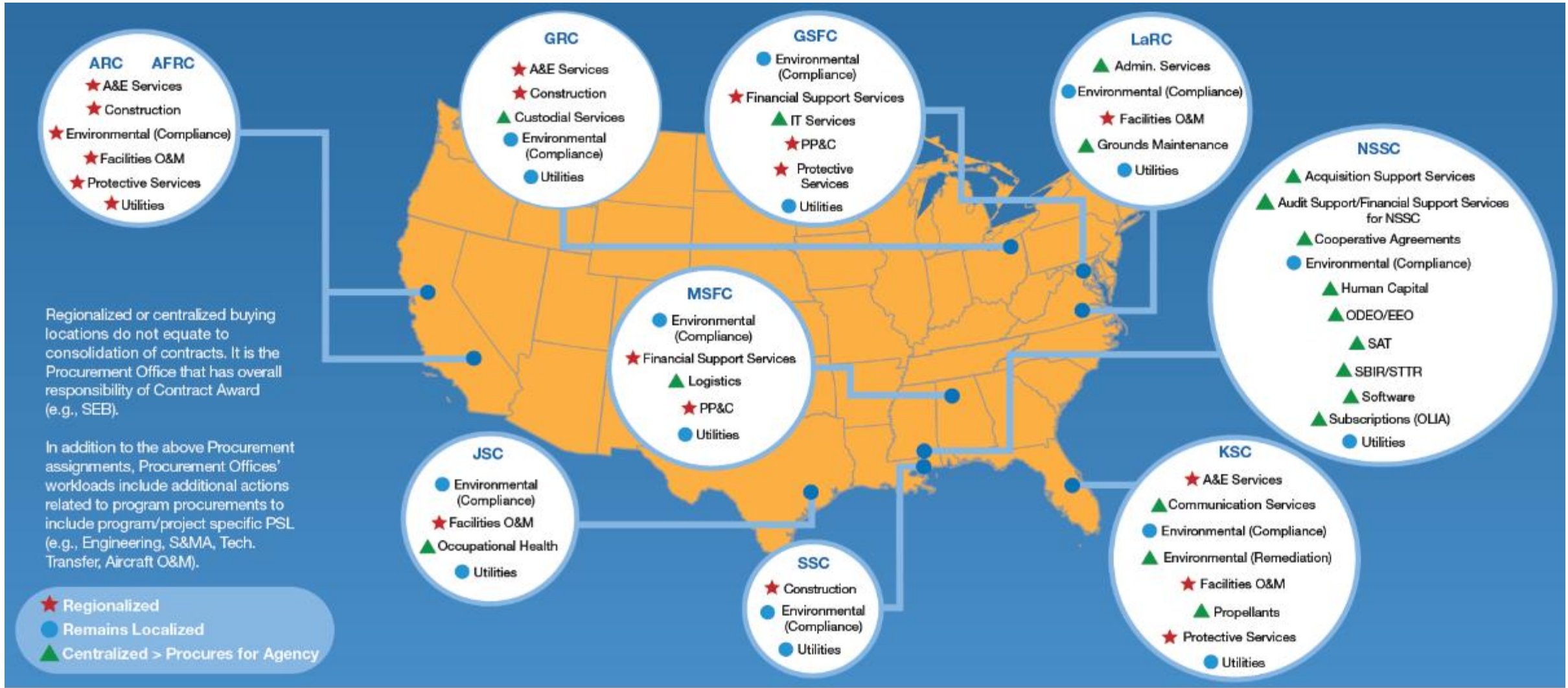


BOLD RED bullets = PSL assignments to MSFC procurement which encompass more than just MSFC interests.








# Procurement Assignments



# Product Service Line (PSL) Support / Services Procured by Other Centers



 Human Capital NSSC Q3 – FY22	 Propellants NSSC Q1 – FY23***
 ODEO NSSC Q4 – FY21*	 Strategic Comm KSC Q2 – FY23
 Admin Services LaRC - TBD**	 Protective Svs KSC Q3 – FY22
 Custodial Services GRC Q2 – FY23	 IT Services IT Offices - Varies
 Env Remediation KSC Q4 – FY21*	 Occupational Health JSC - TBD - COVID

All Dates subject to change



# Office of Procurement FY14 – FY21 Contract Spend



FISCAL YEAR	ACTIONS	DOLLARS
<b>21</b>	<b>911</b>	<b>\$2,244,555,986</b>
20	1,865	\$3,531,844,266
19	1,824	\$2,614,130,834
18	1,623	\$2,499,819,336
17	1,510	\$2,261,282,498
16	1,853	\$2,113,277,822
15	2,198	\$1,841,913,017
14	2,261	\$1,777,123,322

As of 1 April 2021

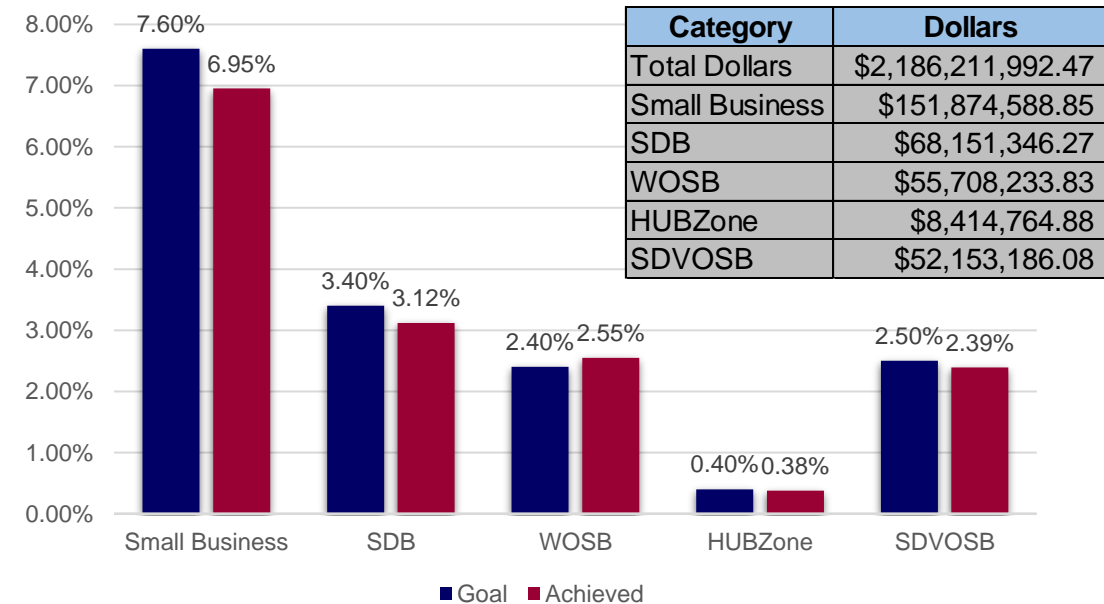
Delivering on Mission Priorities  
\$3.5+ Billion & 1,865 Actions in FY20



The cornerstone of NASA's current and future missions

COMPETITION		
FISCAL YEAR	LOCATION	% DOLLARS
21	NASA	64.47%
	MSFC	64.88%
20	NASA	68.9%
	MSFC	58.3%

As of 1 April 2021

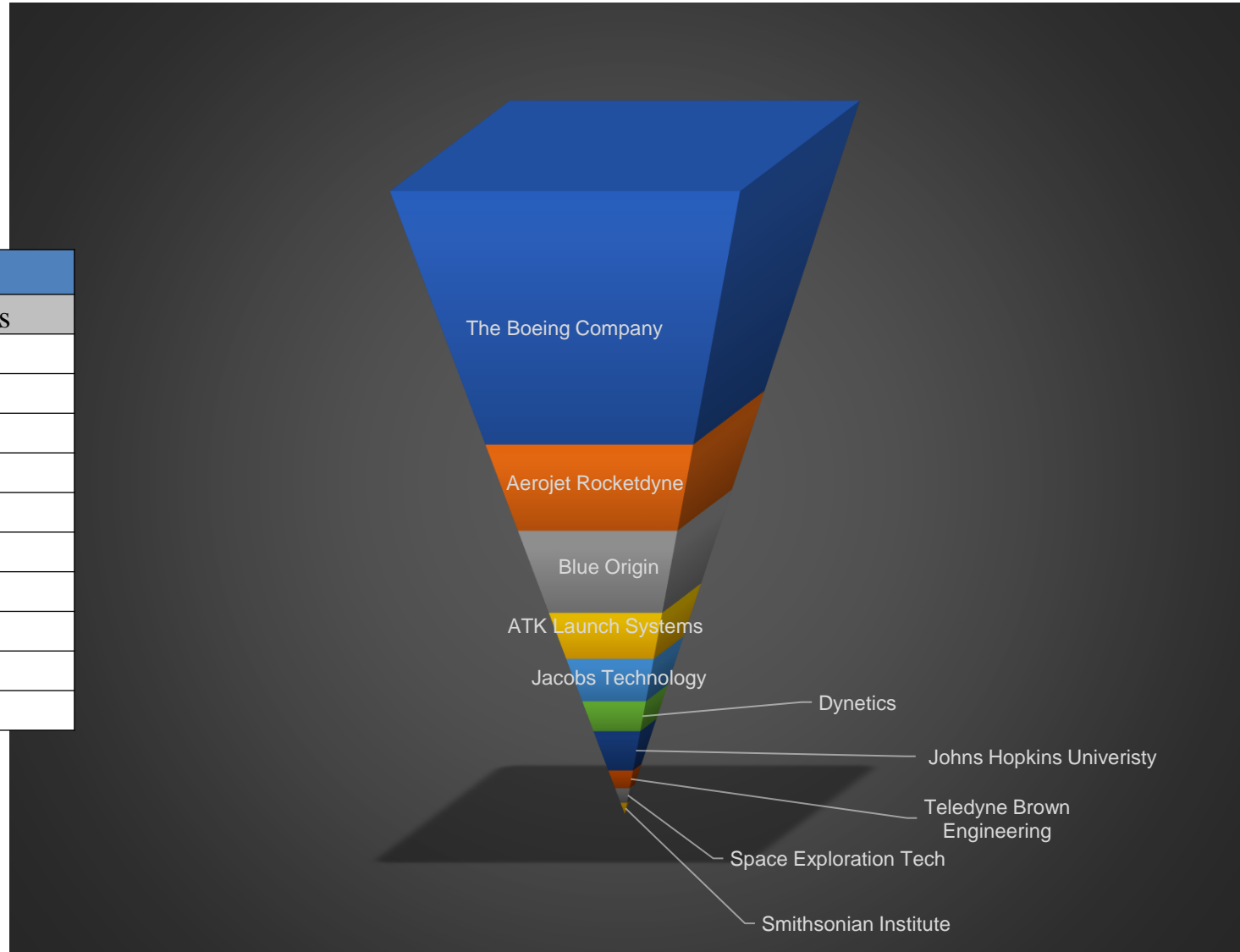


As of 1 April 2021

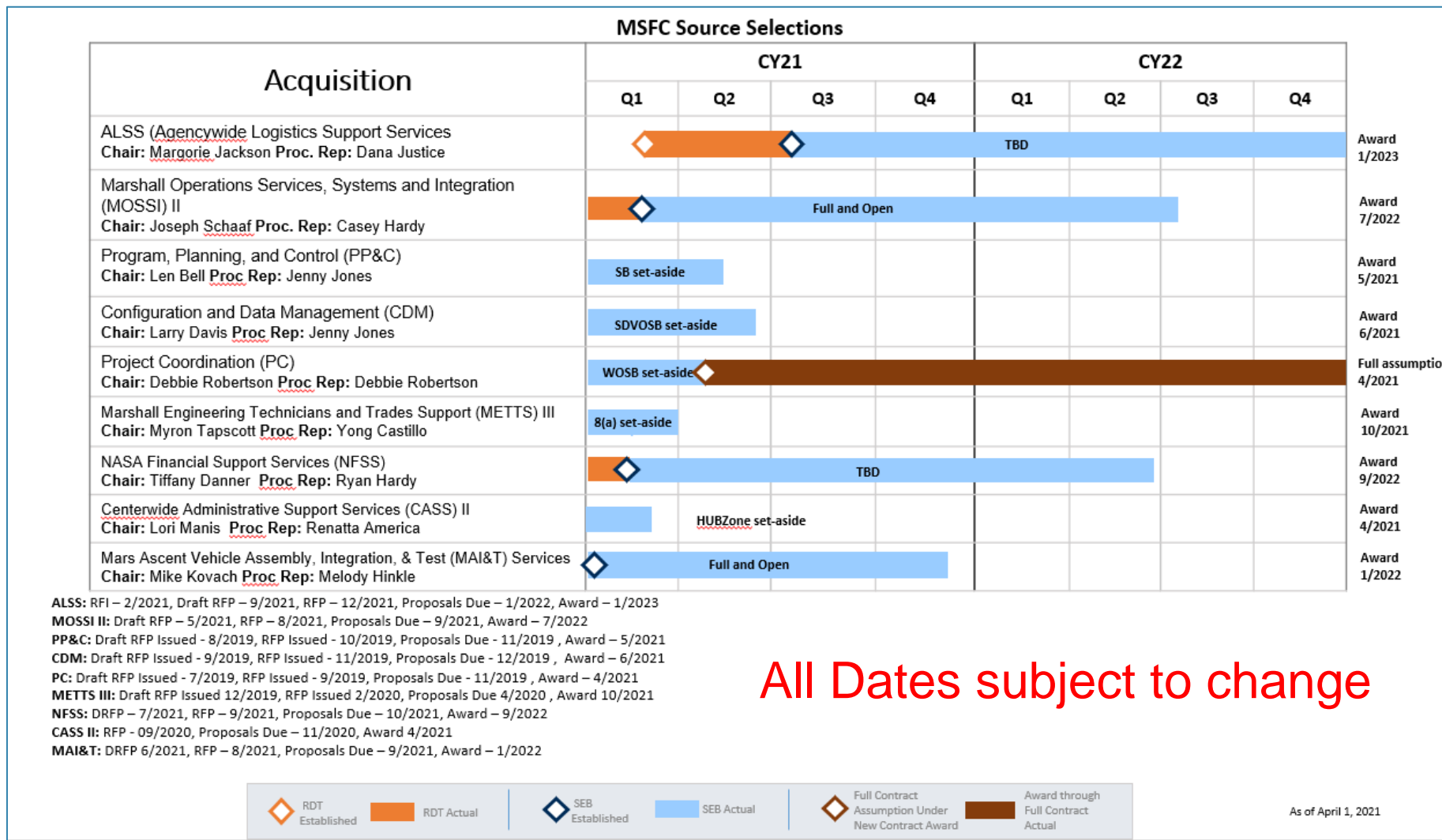
# Office of Procurement Top 10 Vendors By Obligation FY21 YTD



Top 10 Vendors by Obligations	
Vendor Name	FY21 Obligations
The Boeing Company	\$ 776,229,111
Aerojet Rocketdyne	\$ 263,958,240
Blue Origin	\$ 251,561,948
ATK Launch Systems	\$ 141,000,000
Jacobs Technology	\$ 129,898,771
Johns Hopkins Univeristy	\$ 120,204,377
Dynetics	\$ 91,757,952
Teledyne Brown Engineering	\$ 54,451,762
Space Exploration Tech	\$ 44,832,713
Smithsonian Institute	\$ 35,475,430



# MSFC Office of Procurement Current PDTs/SEBs





# MSFC 36-Month Acquisition Forecast



TITLE	INCUMBENT	CONTRACT	Draft RFP RELEASE	RFP Release
Mars Ascent Vehicle Assembly, Integration, and Test (MAI&T) Services	NEW	TBD	June 2021	August 2021
NASA Financial Support Services (NFSS)	Multiple	Multiple Center Contracts	July 2021	September 2021
Specialized Real-Time Data Analysis and System Development for Advanced Propulsion Systems	Optical Sciences Corporation	80MSFC20D0009	April 2021	May 2021
Facilities Engineering Design and Inspection Services (FEDIS II)	Accura Rosser	NNM17AA04C	FAR 36.6 Synopsis expected April 2021	October 2021
Marshall Operations Services, Systems and Integration (MOSSI II)	Colsa Teledyne Brown	NNM17AA12C NNM13AA29C	May 2021	August 2021
Agency Logistics Support Services (ALSS)	Multiple	Multiple Center Contracts	September 2021	December 2021

**All Dates subject to change**

<https://doingbusiness.msfc.nasa.gov/apt/external>

# MSFC 36-Month Acquisition Forecast



TITLE	INCUMBENT	CONTRACT	Draft RFP RELEASE	RFP Release
Center Operations Building Automation (COBA)	Lintech Global, Inc.	80MSFC20D0007	November 2022	January 2023
IDIQ Minor Construction	Multiple	Multiple	January 2023	March 2023
Architect-Engineer (A/E) Services Environmental Engineering Services	CH2M Hill, Inc.	80MSFC19D0021	July 2023	September 2023
Occupational Health Services (OHS)	Inomedic Health Applications, Inc.	80MSFC19D0022	July 2023	September 2023

**All Dates subject to change**

<https://doingbusiness.msfc.nasa.gov/apt/external>

# MSFC OP Key Challenges and Initiatives



## People

- Recruitment and Retention
- Right talent Working the Right Projects
- Utilize Matrixed Teams and Nationalized Workforce to Drive Efficiencies
- Career and Leadership Development
- Reinforcing Respectful Relationships (R3)
- Succession Planning

## Speed

- Delegate Decision Making to the Lowest Acceptable Level
- Leverage The Commercial Marketplace
- Streamline Source Selection Process
- Embrace Category Management
- Eliminate Unnecessary Policies, Steps and Processes
- Empower, Encourage, and Reward Creative Thought

## Systems

- Eliminate Unnecessary Data Entry
- Capture Critical Information
- Single Entry Across Platforms
- Input Data at the Right Level
- Apply Technology to Eradicate Lower Level Tasks
- Standardize Tools and Templates

## Compliance

- Data Driven Decision Making
- Uphold Public Trust Through Transparency and Integrity
- Well Researched and Executed Acquisition Strategies
- Continual Self Evaluation
- Capture and Utilize Lessons Learned
- Confidence Through Competence

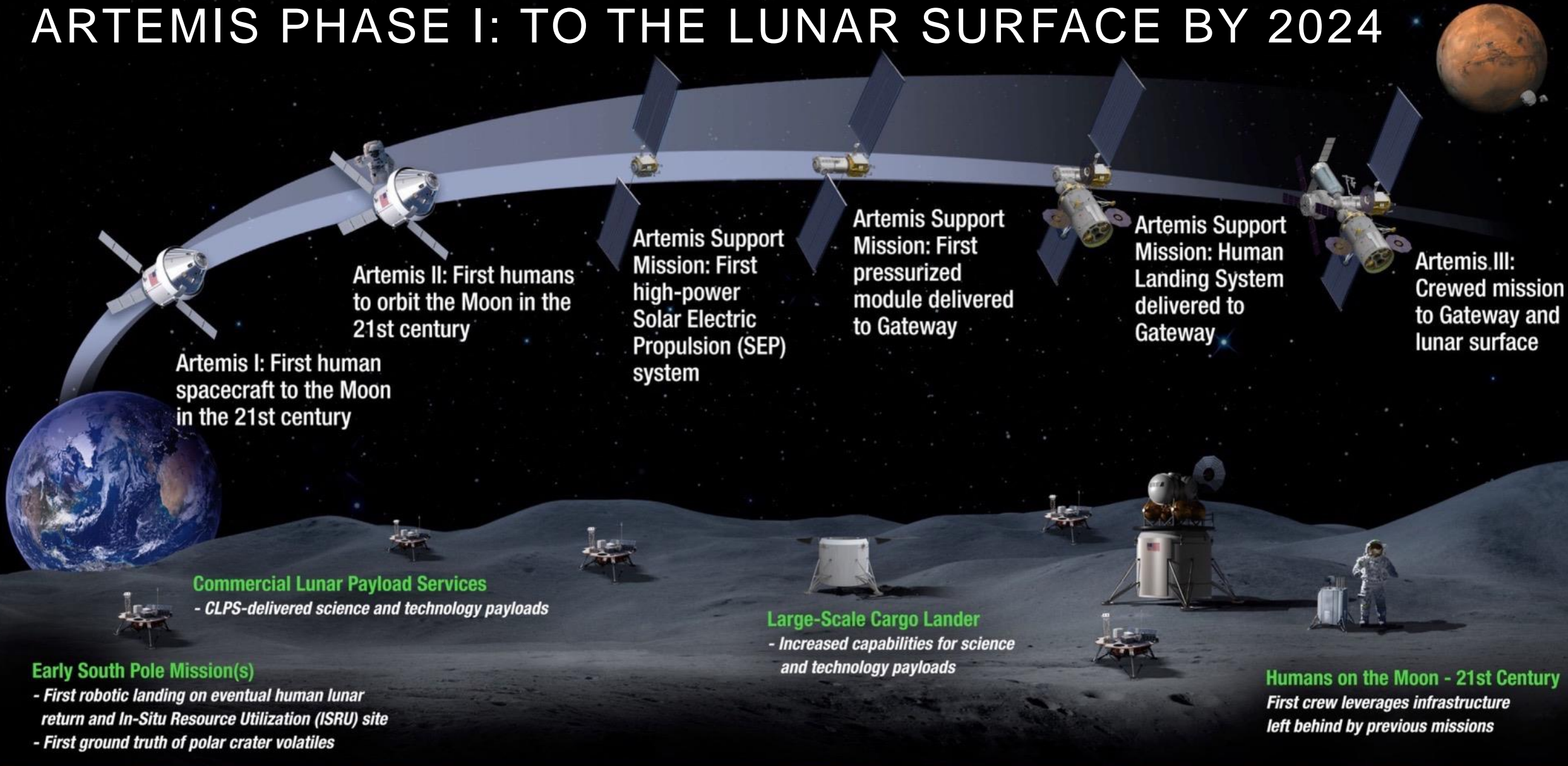
## Partnerships

- Communication!!
- Transparent Mission Focused Execution
- Open Platform for Office Calls and Access to MSFC Procurement
- Clear and Concise Requirements Informed through RFIs and Draft RFPs
- Obtain Fully Compliant and Awardable Proposals
- Strive for Win-Win Solutions
- Encourage and Incentivize Innovation
- Open Avenues for Collaboration to Achieve True Partnering





# ARTEMIS PHASE I: TO THE LUNAR SURFACE BY 2024



Artemis I: First human spacecraft to the Moon in the 21st century

Artemis II: First humans to orbit the Moon in the 21st century

Artemis Support Mission: First high-power Solar Electric Propulsion (SEP) system

Artemis Support Mission: First pressurized module delivered to Gateway

Artemis Support Mission: Human Landing System delivered to Gateway

Artemis III: Crewed mission to Gateway and lunar surface

**Commercial Lunar Payload Services**  
- CLPS-delivered science and technology payloads

**Early South Pole Mission(s)**  
- First robotic landing on eventual human lunar return and In-Situ Resource Utilization (ISRU) site  
- First ground truth of polar crater volatiles

**Large-Scale Cargo Lander**  
- Increased capabilities for science and technology payloads

**Humans on the Moon - 21st Century**  
First crew leverages infrastructure left behind by previous missions

## LUNAR SOUTH POLE TARGET SITE

2020

2024