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National Council of Space Grant Directors' Spring Meeting
Michael Kincaid
Associate Administrator for Education
March 2, 2018
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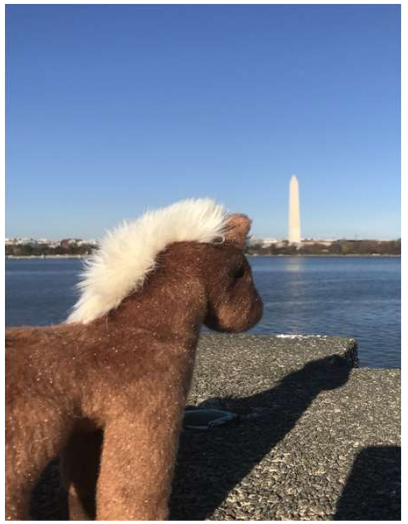

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HERE 1475 FT
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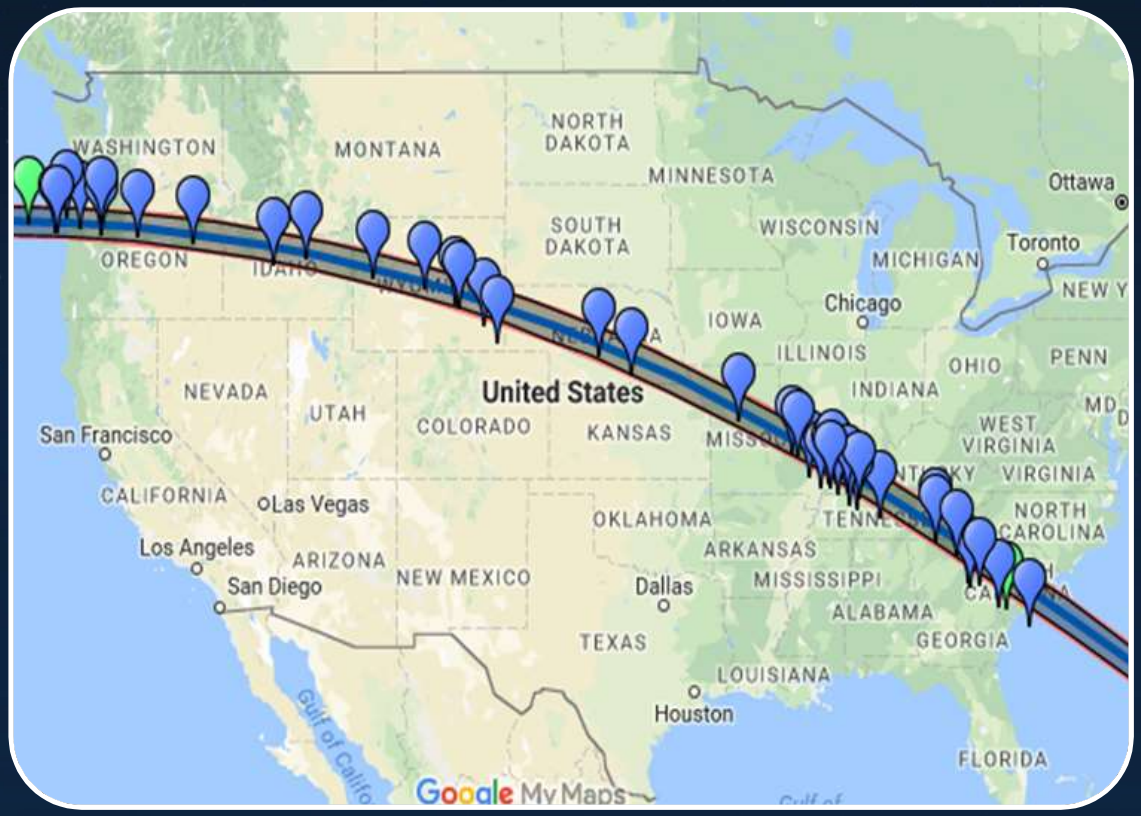
Eclipse Day Sites



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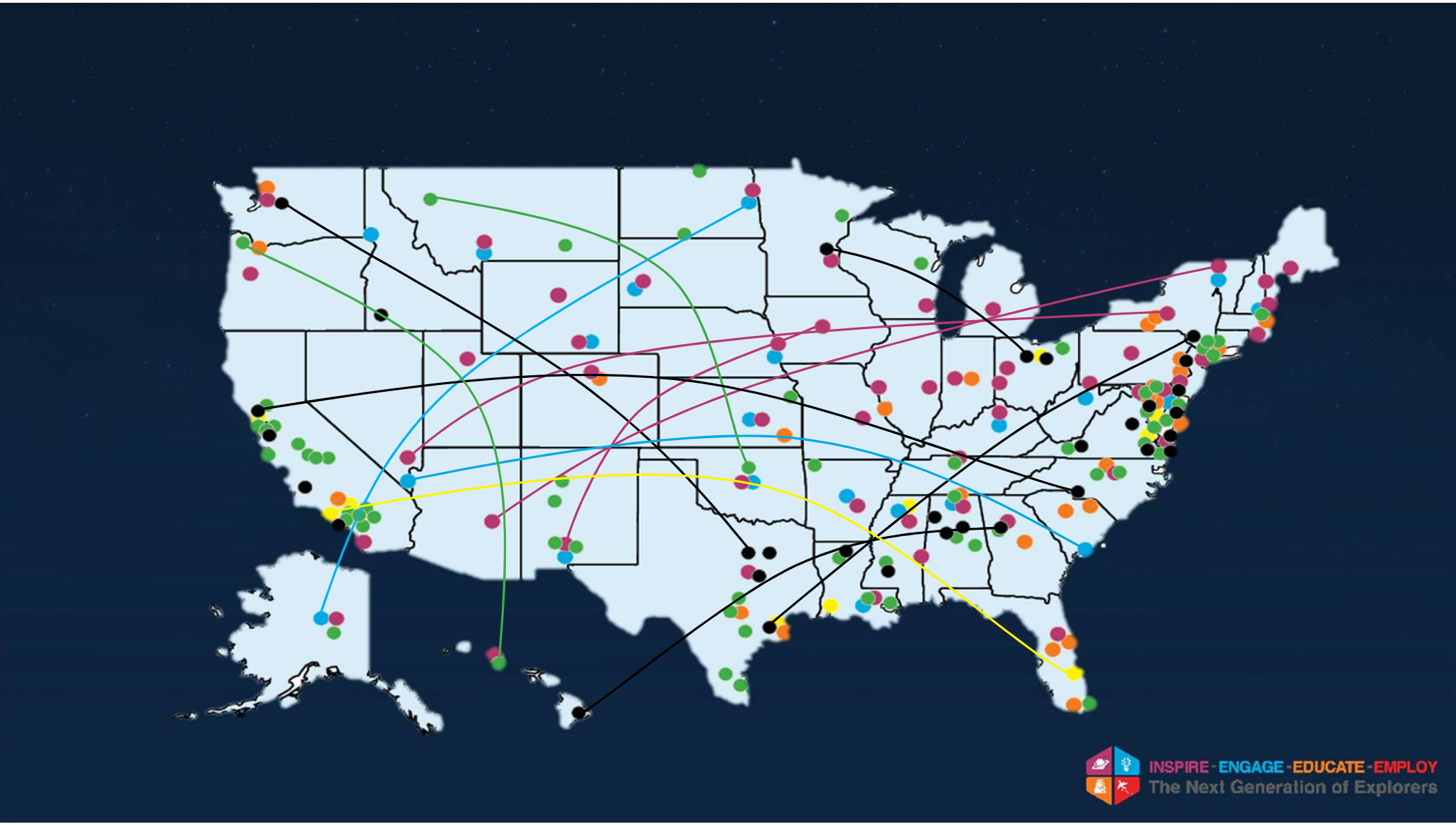
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Agency Vision of Education and Outreach

Vision

We immerse the public in NASA's work,
enhance STEM literacy, and
inspire the next generation to explore.

Mission

We engage the nation in NASA's mission.

- Create **unique opportunities** for students and the public to **contribute** to NASA's work in exploration and discovery.
- Build a **diverse future STEM workforce** by engaging students in authentic **learning experiences** with NASA's people, content and facilities.
- Strengthen **public understanding** by enabling **powerful connections** to NASA's mission and work.

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Mission-Driven • Strategic Engagement

Work of the Agency

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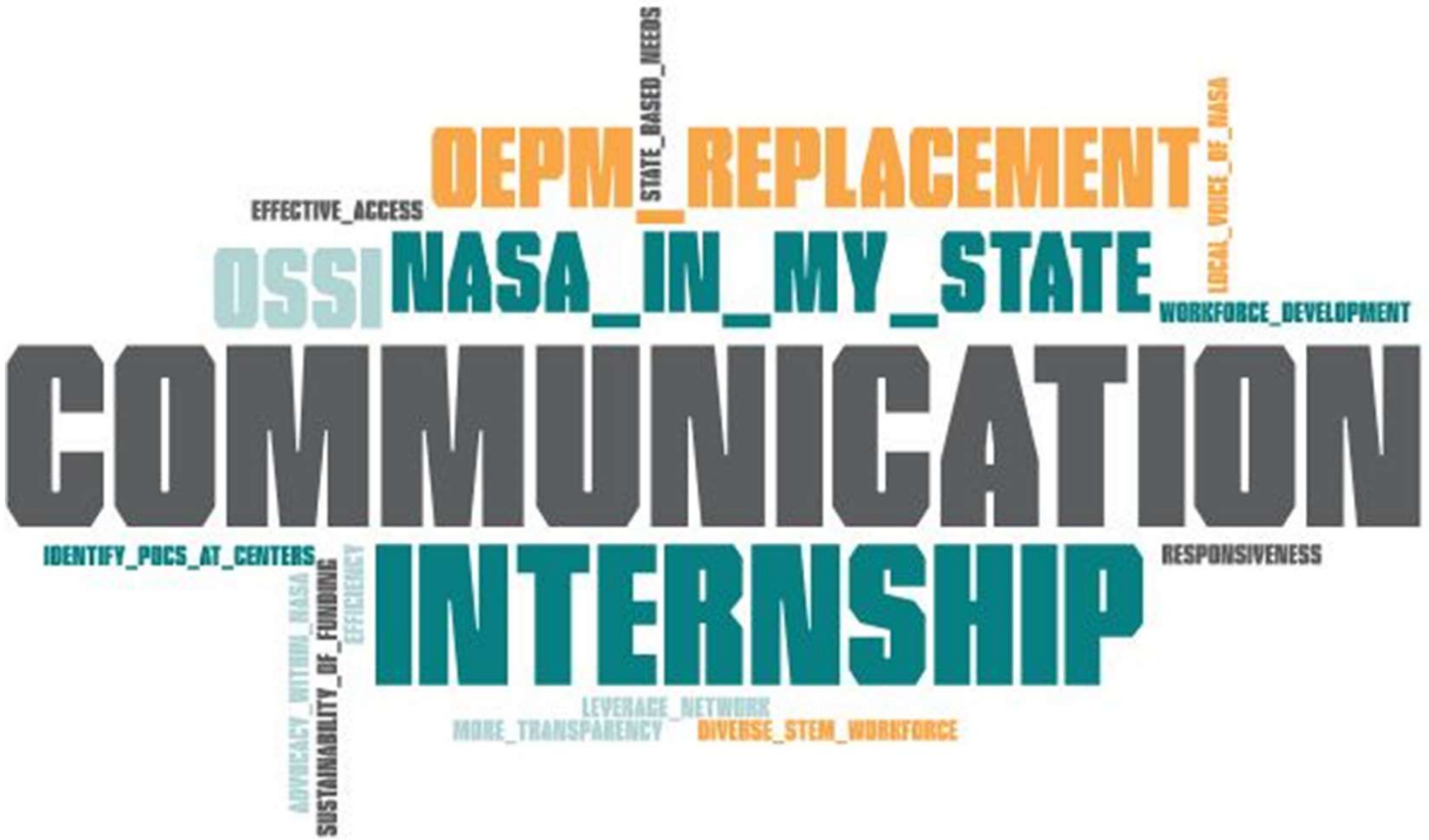
We heard you…



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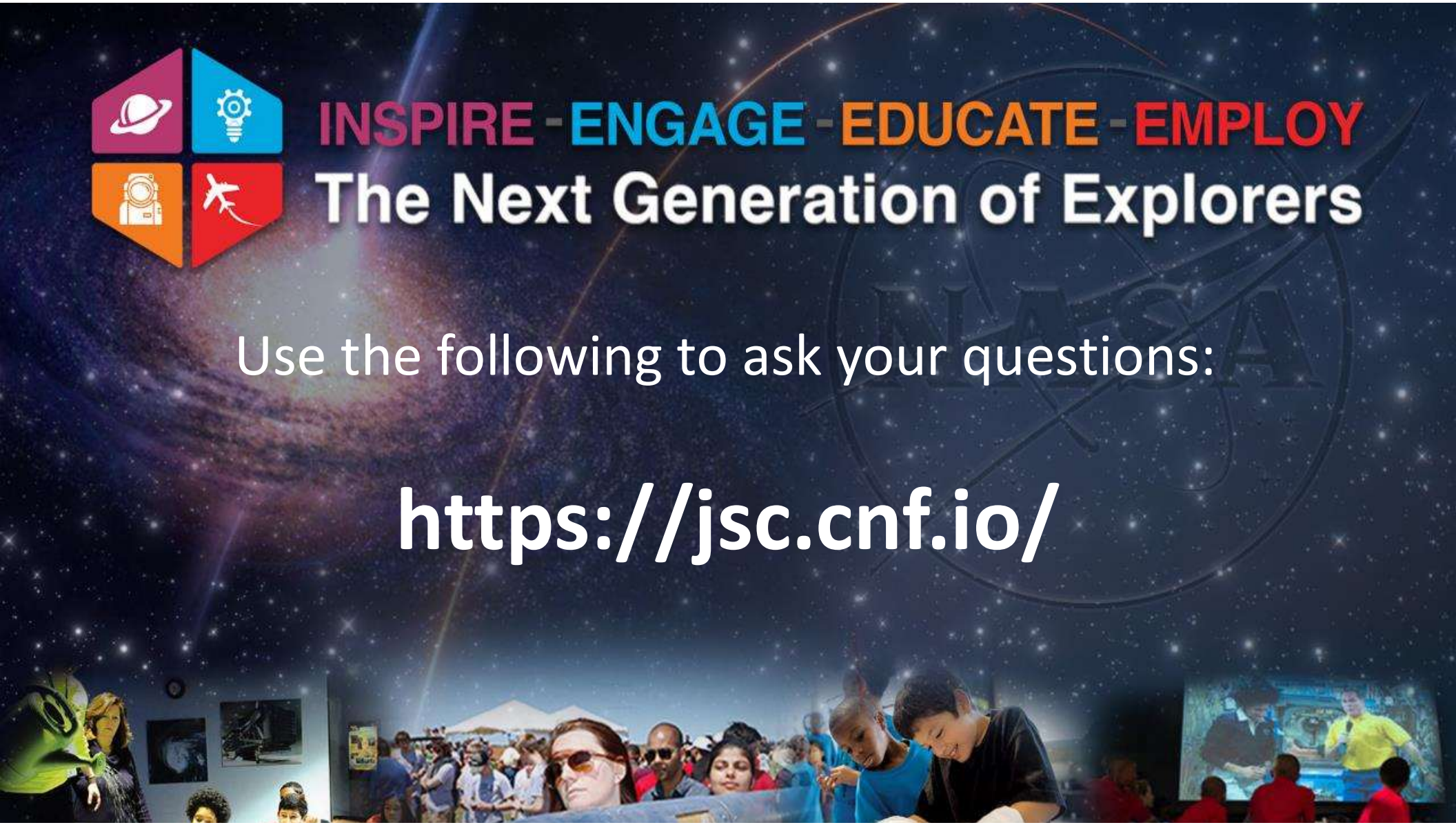
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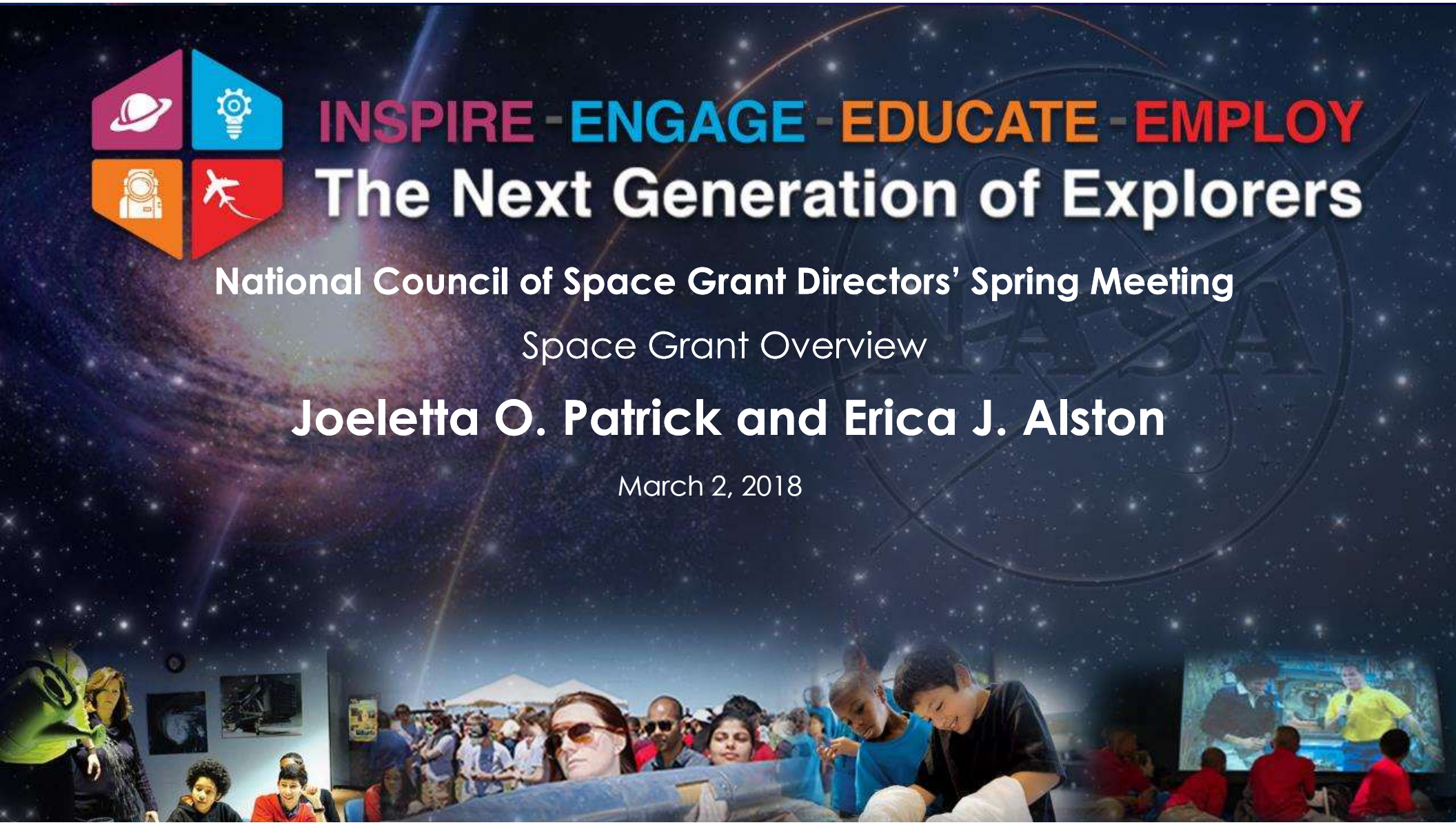

National Council of Space Grant Directors' Spring Meeting

Space Grant Overview

Joeletta O. Patrick and Erica J. Alston

March 2, 2018

Outline

Space Grant Overview

Joeletta, Erica, Q&A

NASA Technology and Innovation

Douglas Terrier, NASA Chief Technologist (Acting)

Programmatic Update

Erica, Frank, Mike C., Sonya, Q&A

Flip Session Preview

Rick, Diane

Partnerships with MUREP

Alicia

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Aerospace Research & Career Development Staff

Space Grant:

Ms. Joeletta Patrick – Program Manager (Acting)

Dr. Erica J. Alston – Programmatic Support (Acting)

Mr. Michael Cherry – Program Analyst

Dr. Sonya L. Greene – Sr. Program Analyst

Dr. Frank McDonald – Sr. Program Analyst

Experimental Program to Stimulate Competitive Research (EPSCoR):

Mr. Jeppie Compton – Program Manager (KSC)

Ms. Crystal Bassett – Program Coordinator (KSC)

ARCD Budget Analyst:

Ms. Kim Butler

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NASA Center Representatives

In Attendance:

Alicia Baturoni Cortez - JSC

Clarence Bostic – LaRC

Mark D. Kankam – GRC

Mitchell Krell – SSC

Raquel Marshall – GSFC

Theresa Martinez – KSC

Misti Moore – JSC

Marc Reagan – JSC

Willie Williams – JSC

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Who is Joeletta Patrick?

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BSA Implementation Update

- BSA recommendations include making the entire Office of Education portfolio more responsive to Mission Directorates
- BSA also recommends that more tactical work be sent to the Centers that will allow HQ to focus upon strategic planning and initiatives
- Further implementation will occur for the remainder of FY18 and FY19

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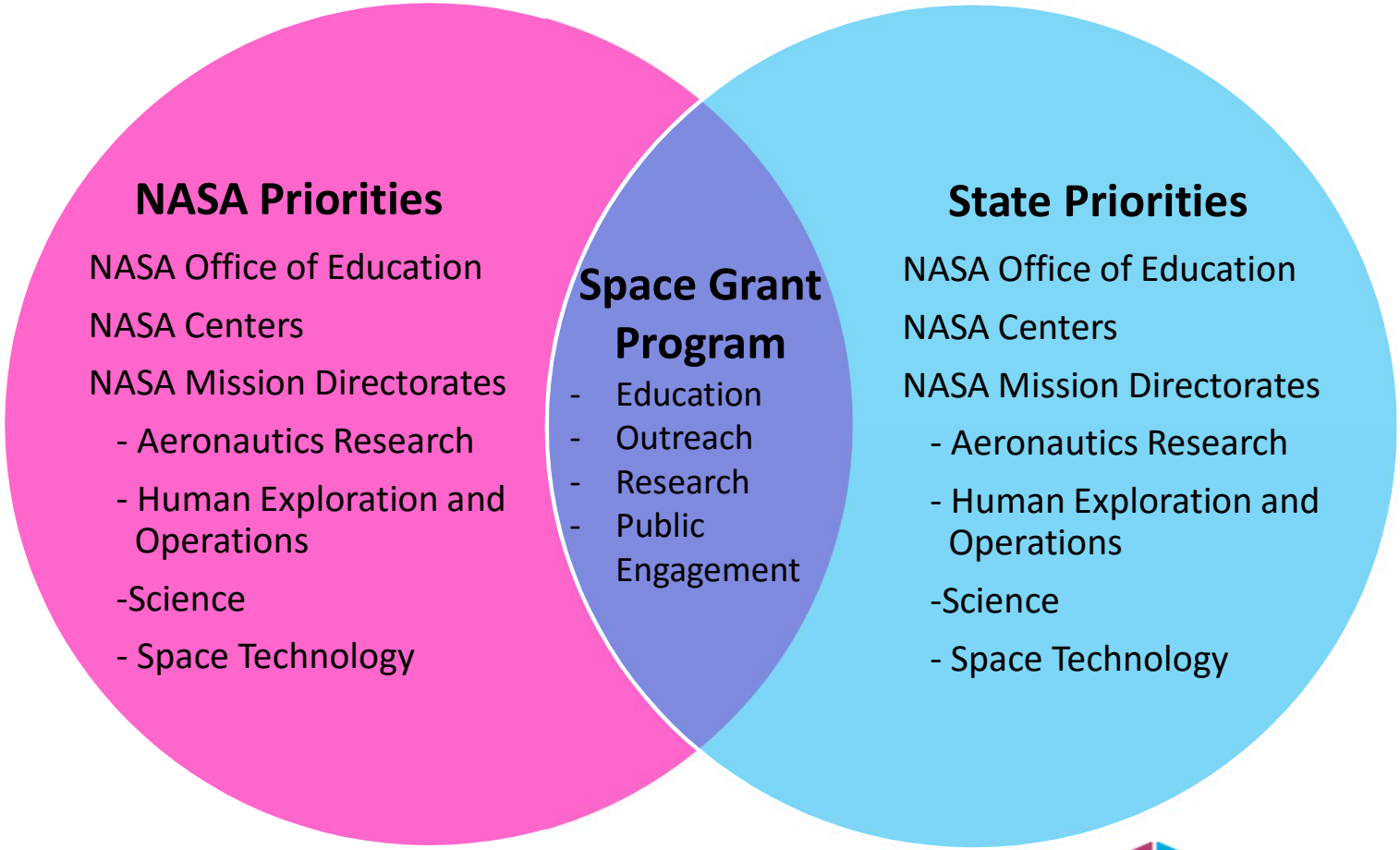
Our Objectives



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New Solicitation Update

- Proposed Programmatic Changes - TBD
- Multi-year vs. single year?
- Will Guam and Virgin Islands be eligible to propose?
- Will Consortia be allowed to propose to change their designation status?
- Things to consider…

Communication

- Planning monthly outreach webinars to keep people abreast of HQ happenings
  - The Space Grant IPA will help drive topics of discussion and create strategy to disseminate communications
- Continue to use focus groups to help answer critical questions

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IPA Status

- We are excited to announce the Space Grant IPAs

Susie Johnson
Idaho Space Grant

Colleen Fava
Louisiana Space Grant

Pending negotiations with respective institutions

Space Grant Evaluation Update

- Contractor has been selected
- Working with procurement to get contract task in place by mid-March
- Will be reaching out to a subset of Space Grant as a part of the program evaluation
- Will be using outputs of evaluation to help drive changes in the next solicitation

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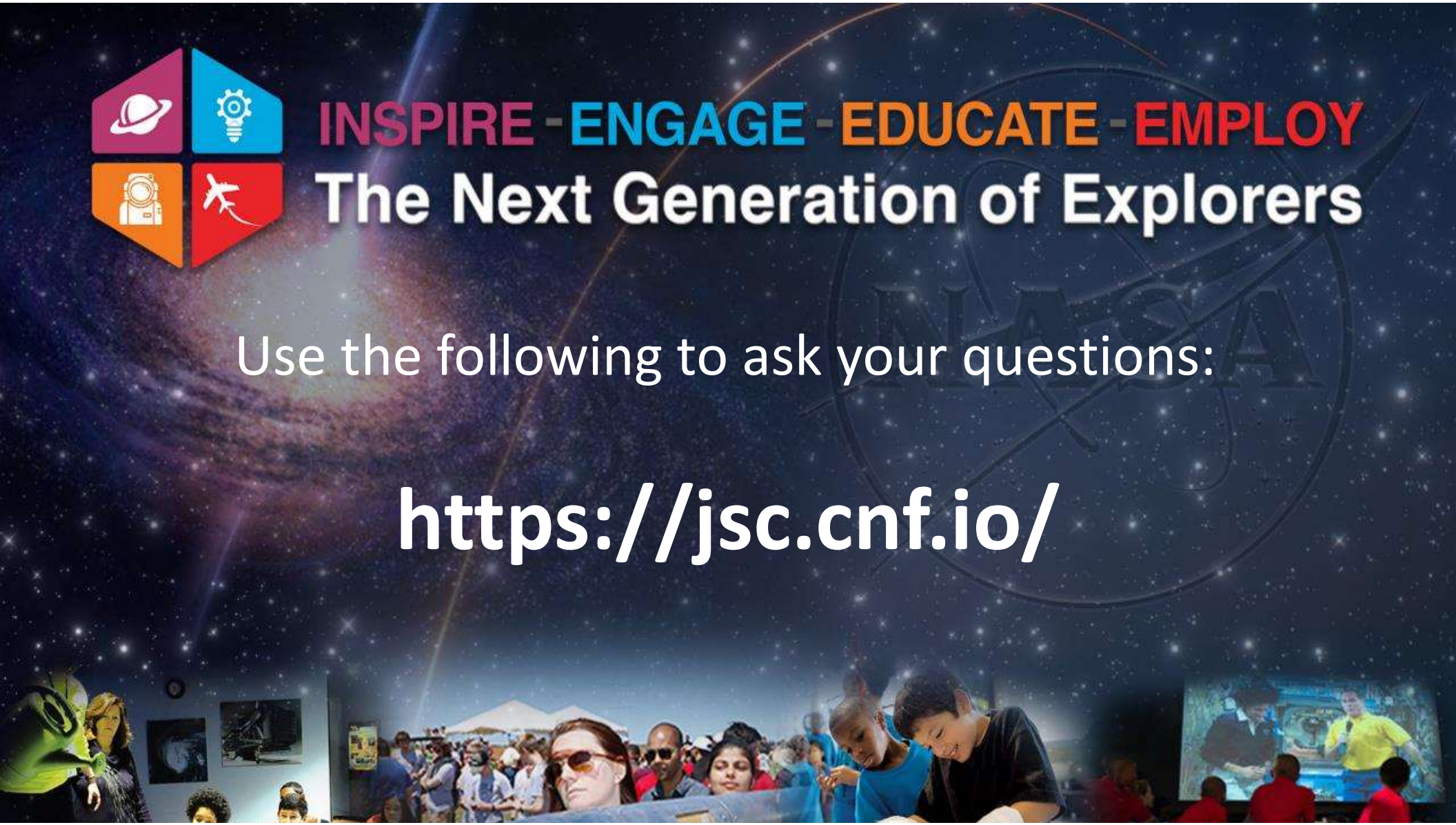
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National Council of Space Grant Directors' Spring Meeting

Douglas Terrier
NASA Chief Technologist (Acting)

March 2, 2018

National Council of Space Grant Directors' Spring Meeting

Programmatic Update

Erica J. Alston, Sonya L. Greene, Mike Cherry and Frank McDonald

March 2, 2018

4th Year Extension

- No draw down balance restriction to receive 4th-Year funding
- Update: Over 80% of grants are deemed compliant and ready for funding
- Funding process: Multiple factors influence timing of awards including: available funding (constraints due to CR funding), compliance of 4th year proposals and period of performance
- 34% of April awards have been pushed to the NSSC
- Looking to fund the remaining awards by end of March

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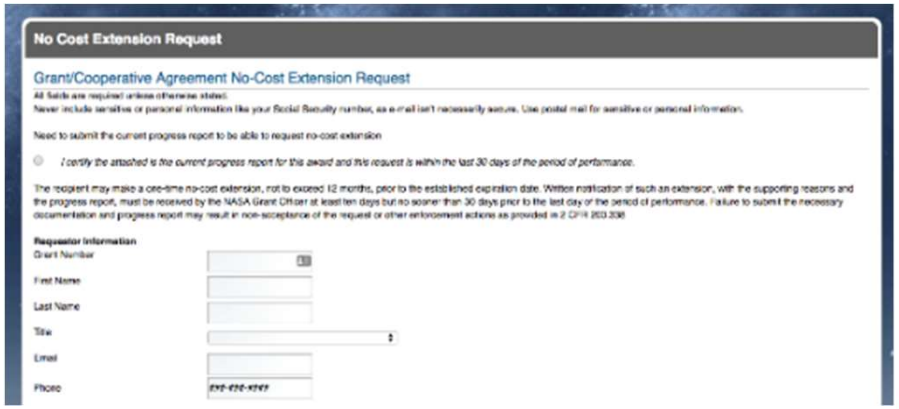
4th Year Extension

- If an appropriated budget is passed, then all awards should be made on time
- There remain a number of states that will need to address additional concerns before recommendation to the Space Grant Program Manager for funding
- We will contact those Consortia early next week with additional information on next steps to ensure timely award of funding

4th Year Extension

- NCE guidance
  - Information gathering stages to determine overall impact
  - More guidance forthcoming
  - NCEs can only be requested NET 30 days from the end of your current period of performance (POP).
- https://www.nssc.nasa.gov/nocostextension



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NIF Process

- Sent communication to the community on 2/8/18 that briefly outlined the process for NIF placements within OSSI
- Held webinar on 2/14/18 & 2/15/18 which was led by Darla Kimbro where she walked through the process of:
  - Requesting OSSI access
  - Identification of funding options (No, Maybe, Yes)
  - Reporting capabilities

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NIF Process

- Sent list of NIF POCs at every Center to the community – to ensure that the community has the right contacts at each Center
- Provided a copy of the presentation used during the webinars
  - Currently being shared via Google Drive
  - If interested in obtaining the presentation, please see me during the meeting, or request access via Google Drive

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Student Placement

- The process identified on the previous charts works across NASA – though we recognize that many of you have developed relationships with specific Centers over the years
- Students who have funding associated with them have a higher change of being selected by a mentor

Feedback on updated NIF system

- New system is in works and being tested
- Additional information about the system will be given later by Lynnette Madison
- Developers want to get Space Grant community feedback
  - The webinars from February provided some great recommendations
  - **Look for details next week about a focus group to provide requirements for the new system**

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Approximate Schedule

Summer 2018 Session	
Complete applications due	3/16/18
Student offers made	3/30/18
Summer session dates	6/4/18 – 8/10/18

Fall 2018 Session	
Fall session open for applicants	3/17/18
Complete applications due	5/31/18
Student offers mad	6/29/18
Fall session dates	8/27/18 – 12/14/18

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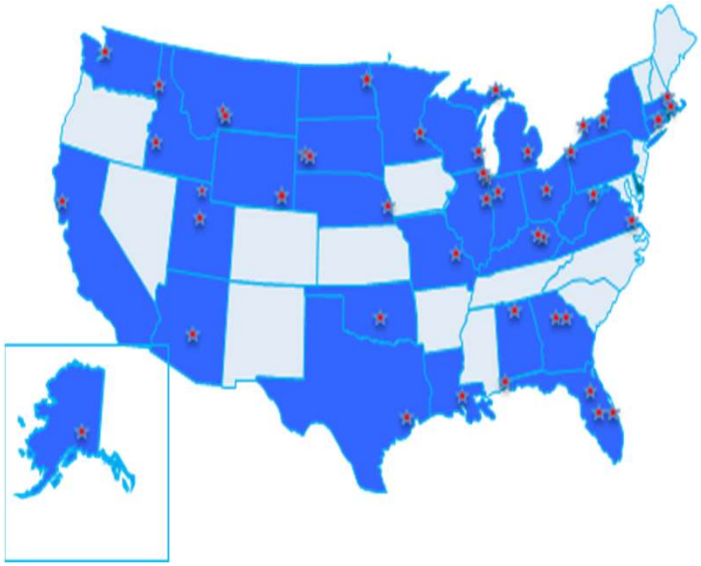
USIP Update

Undergraduate Student Instrument Project (USIP)

Undergraduate student teams are engaged in hands-on experiences in developing and flying science or technology experiments that are aligned to every NASA Mission Directorates.

- **39 Space Grant projects include the following platforms:**
  - **2** Unmanned Air Systems (UAS)
  - **5** Hosted Balloon Instruments
  - **4** Hand-launched Balloon Instruments
  - **20** CubeSats
  - **4** **s**mall Reusable Launch Vehicles (sRLV)
  - **4** Sounding Rockets
- **Annual Performance Document**



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USIP Update

Sounding Rocket

- 4 teams during integration and testing at Wallops for March 22nd
  - "Arc-Ignition Green Thruster", Stephen Whitmore, UT
  - "Retractable Boom" Scott Tarry, NE
  - "KRUPS," Suzanne Smith, KY
  - Florida Institute of Technology "Polyamide Wire Repair" (SMD-funded)

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USIP Update

COTEL, Balloons
Greg Guzik, LA

Video

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USIP Update

TATER TOTS, Balloons
Joseph Law, ID

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Improve Solder Joints Formed in Microgravity
Majid Jaridi, WV

Video Credit: Zero Gravity Corporation

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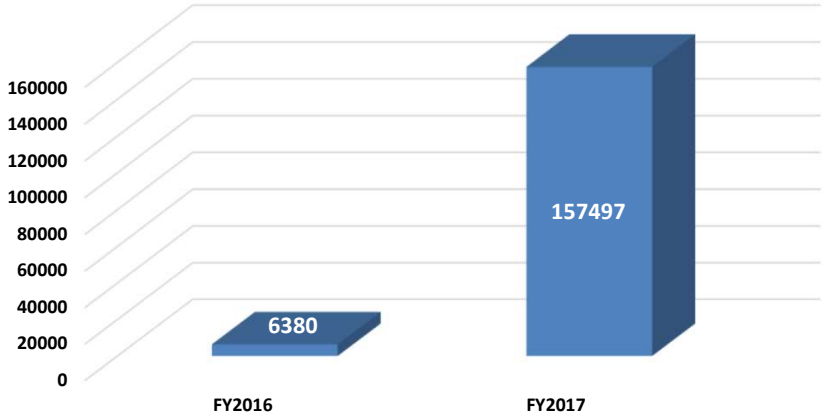
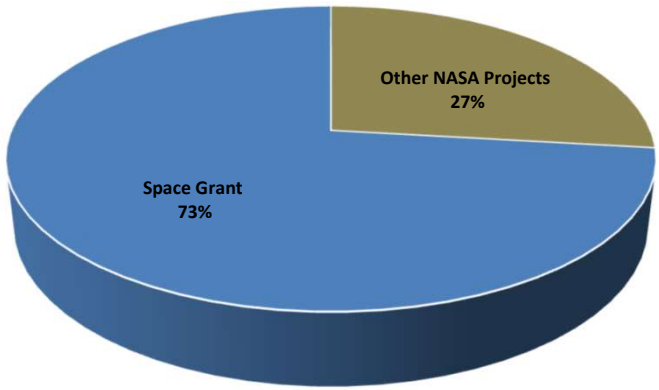
OEPM/Reporting

- FY2017 February Reporting
  - Results are being analyzed
  - Responses from 51/52 consortia
  - 18/51 Data sets were submitted without errors

Space Grant Direct Awardees



FY2016 Office of Education Direct Student Awards



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OEPM/Reporting

- New Reporting Timeline
  - FY2017 OEPM data tentatively due June 30, 2018
  - FY2018 OEPM data tentatively due January 31, 2019

- 4th Year APD/Closeout Report
  - Year-4 APD will serve as Closeout Report for the 2015-2018 Training Grant/Fourth Year Extension. Will be due 90 days after period of performance.

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NASA Express Membership Campaign

- February 26th – March 16th

nasa.gov/education/express

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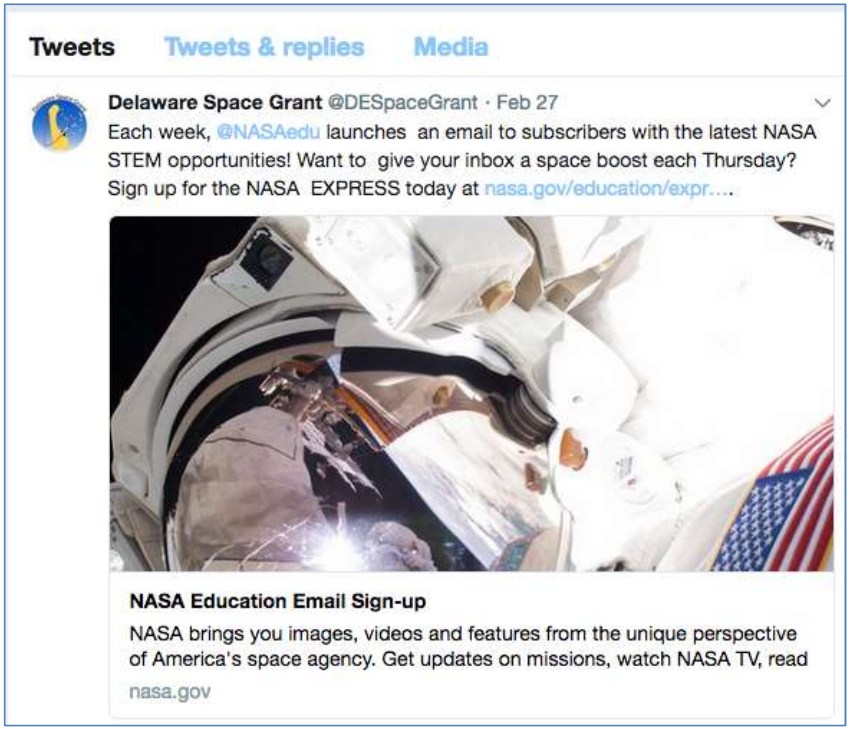
NASA Express Membership Campaign

- February 26th – March 16th



nasa.gov/education/express

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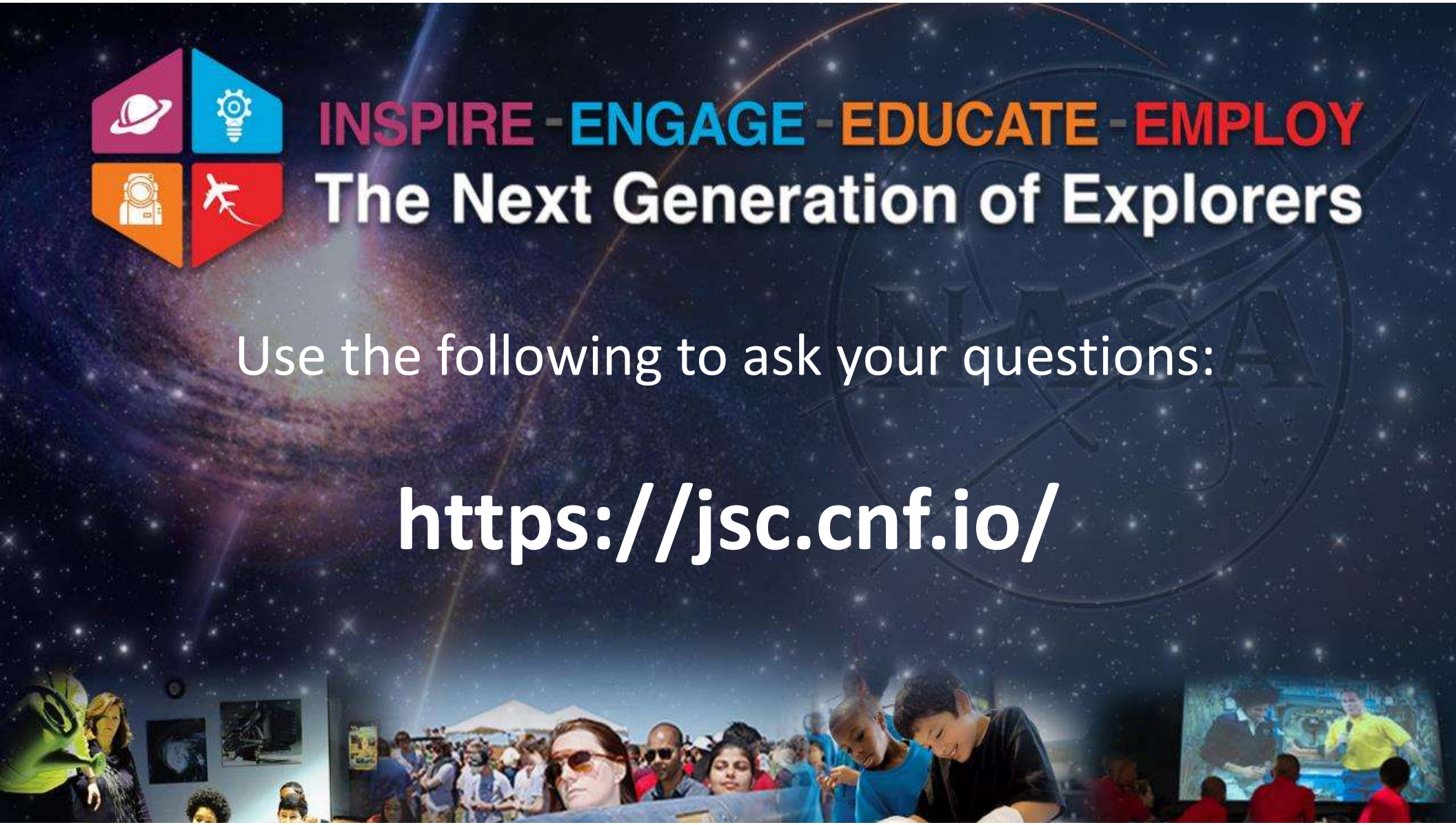
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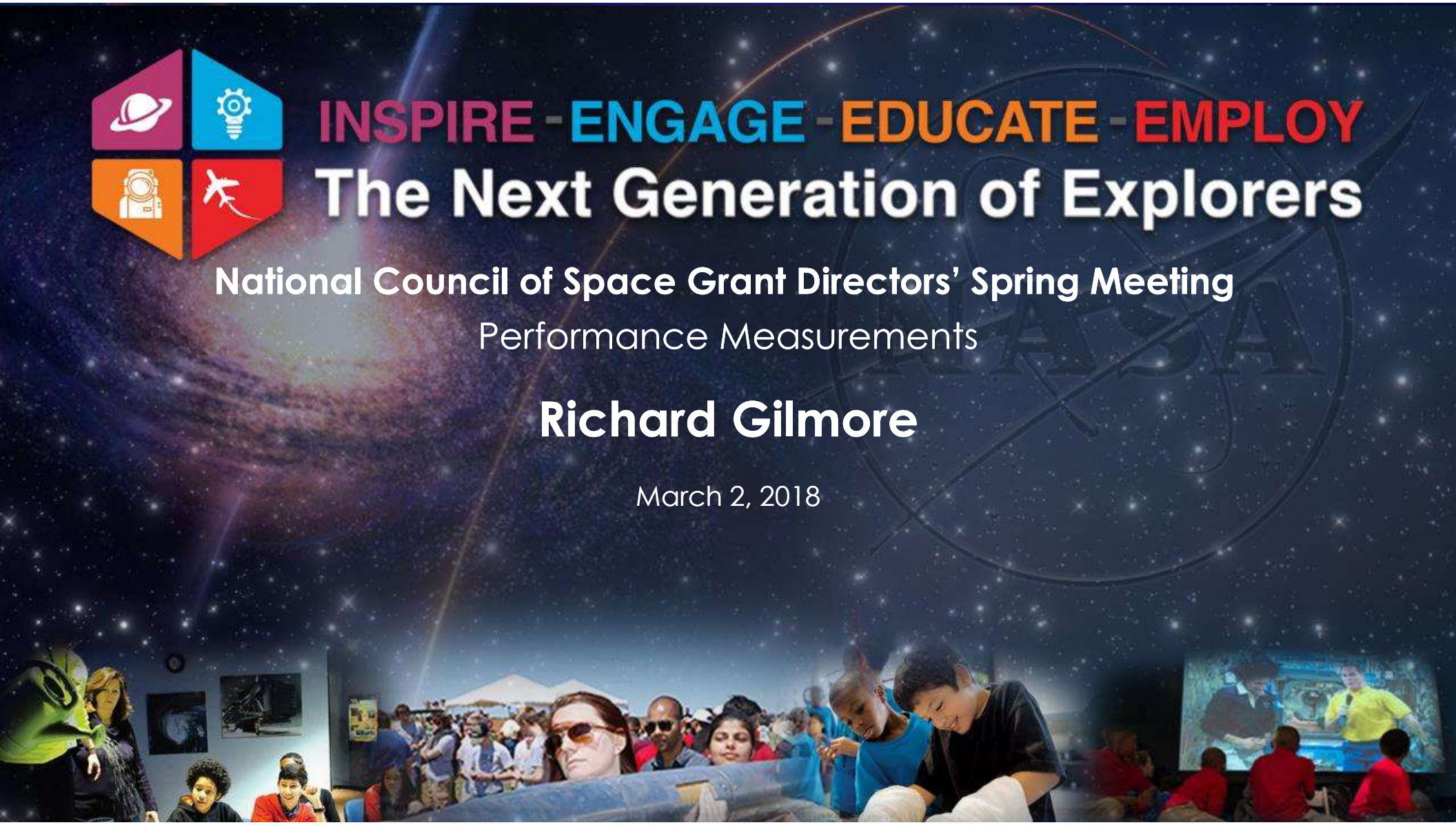


National Council of Space Grant Directors' Spring Meeting

Performance Measurements

Richard Gilmore

March 2, 2018

Overview of Performance Measures Flip Meeting Discussion Session

Goal:

- To get Space Grant Consortia input and recommendations on performance measures defining success at the state-level and program-level for Fiscal Year 2019 and beyond

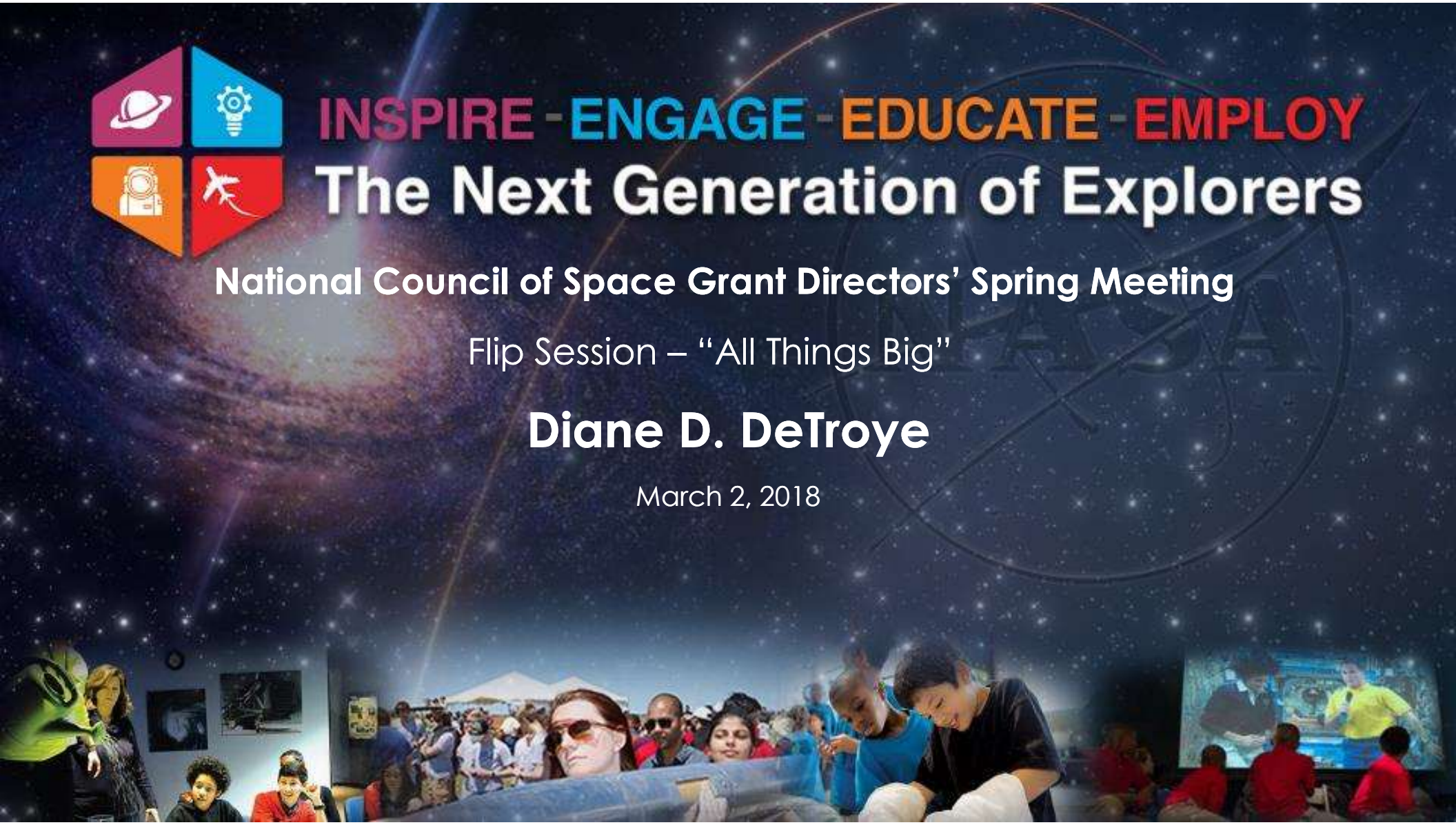
Key Questions:

- What performance measures do you believe would demonstrate success at the state-level (i.e., what are the success criteria/metrics)?
- What performance measures do you believe would demonstrate success at the national program-level (i.e., what are the success criteria/metrics)?

NOTE: We plan to conduct a follow-up Focus Group Discussion with Space Grant Consortium representatives regarding performance measures input and recommendations collected during the flip meeting

NASA External and Internal Performance Measures Development Process

STEP ONE	STEP TWO	STEP THREE
Review Past Performance	Benchmark Other Federal Agencies, Literature Review, & Stakeholder Discussions	Finalized Candidate Performance Measures
A brief history of NASA's Office of Education performance measures, data collection processes and tools, and performance results • FY 2014 – FY 2017 Performance Goals, Annual Performance Indicators, Results • Strategic Object Annual Reviews (SOAR) • OMB and BSA guidance and recommendations: Concerns, need for change/reformed measures, processes, and tools	**Summary of guidance from literature and practice (BSA priorities, literature review, benchmarking, internal and external stakeholder discussions)** • BSA priorities • Literature review findings • Benchmarking findings • **Internal stakeholder discussions** • **Space Grant Consortia Focus Groups/Flip Meeting** • Expert Review Panel - External stakeholder discussions	**Recommended External and Internal Performance Measures, Data Collection Sources, Processes, and Tools to Capture and Report Performance Data** • Recommended external and internal performance measures • Data collection sources • Data collection processes • Data collection tools • Assessing and analyzing performance data (including ERP procedure and scorecards) • Reporting performance data



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Flip Session – "All Things Big"

Diane D. DeTroye

March 2, 2018

Mission-Driven • Strategic Engagement

Work of the Agency

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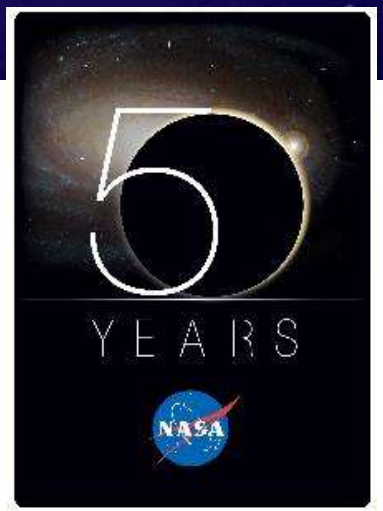
Communications Level 1 Activities – FY2018-2019

Campaign	Activity	Date(s)
Earth	60 Years of America in Space	January 2018
ISS	Commercial Crew Test Launches - SpaceX DM1 (2/18), Boeing OFT (6/18), SpaceX DM2 (6/18), Boeing CFT (8/18)	February – August 2018
ISS	Commercial Crew launch	November 2018
ISS	Commercial Crew launch	December 2018
Mars	InSight Landing on Mars	November 26, 2018
Mars	Green Run Engine test at Stennis Space Center	March 2019
SSAB	James Webb Space Telescope Launch	Spring 2019
SSAB	New Horizons KBO Flyby	January 1, 2019
Tech	NextSTEP habitat prototypes delivery to NASA	October 2018
Anniversary	NASA 60th anniversary	October 1, 2018
Anniversary	Apollo 11 50th anniversary	July 20, 2019

Apollo 50th Anniversary



- **Bookends**
  - Oct. 11, 2018, Apollo 7 launch anniversary
  - Dec. 19, 2022, Apollo 17 splashdown anniversary
- **Agency-level emphasis**
  - December 2018, Apollo 8 anniversary
  - July 20, 2019, Apollo 11 landing anniversary
- **Approach**
  - Emphasize forward-looking aspects of our work to return humans to the vicinity of the Moon to prepare for a journey to Mars
  - Leverage resources and capabilities of NASA's friends to recount Apollo history

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TEAM II (Museum solicitation) NRA Themes/Priorities

- **Human Exploration Beyond Low-Earth Orbit**
  - developing an innovative and sustainable program of space exploration with commercial and international partners that will enable human expansion across the Solar System
  - returning humans to the Moon for long-term exploration and utilization, to be followed by human missions to Mars and other destinations

- **Small Steps to Giant Leaps: Looking to the Future of NASA Innovation and Discovery**
  - Springboard from the upcoming anniversaries to focus ways that NASA is breaking ground for the future
  - NASA's new Strategic Plan to expand human knowledge through new scientific discoveries and to develop revolutionary space technologies

2018-2022 NASA Strategic Plan Framework

Theme	Strategic Goal	Strategic Objective
Discover	Expand Human Knowledge Through New Scientific Discoveries	1.1 Understand the Sun, Earth, Solar System, and Universe 1.2 Understand Responses of Physical and Biological Systems to Spaceflight
Explore	Extend Continuous Human Presence Deeper into Space and to the Moon for Sustainable Long-Term Exploration and Utilization	2.1 Lay the Foundation for America to Maintain a Constant Human Presence in Low-Earth Orbit Enabled by a Commercial Market 2.2 Conduct Human Exploration in Deep Space, Including to the Surface of the Moon
Develop	Address National Challenges and Catalyze Economic Growth	3.1 Develop and Transfer Revolutionary Space Technologies to Enable Exploration Capabilities for NASA and the Nation 3.2 Transform Aviation Through Revolutionary Technology Research, Development and Transfer **3.3 Inspire and Engage the Public in Aeronautics, Space, and Science**
Enable	Optimize Capabilities and Operations	4.1 Engage in Partnership Strategies 4.2 Enable Space Access and Services 4.3 Assure Safety and Mission Success 4.4 Manage Human Capital 4.5 Ensure Enterprise Participation 4.6 Sustain Infrastructure Capabilities and Operations

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Working Together – "All Things Big"

Building off of the successful example of the Eclipse Ballooning Project……

- **FINDING SYNERGIES:** Where could Space Grant investments and activities intersect with and contribute to the achievement of NASA's priorities?
  - What collaborative efforts could be considered?
  - How could Space Grant contribute to a broader framework of NASA STEM Engagement?
  - ***What steps should the Office of STEM Engagement take***?

- **LEVERGING Key Events**
  - What upcoming/future milestones/events/anniversaries are a "best fit" for Space Grant engagement/involvement/participation?
  - How do we ensure that we don't miss an opportunity to plan and execute something great?

What would live at the intersection of your state needs/interests and NASA's mission and direction?

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National Council of Space Grant Directors' Spring Meeting

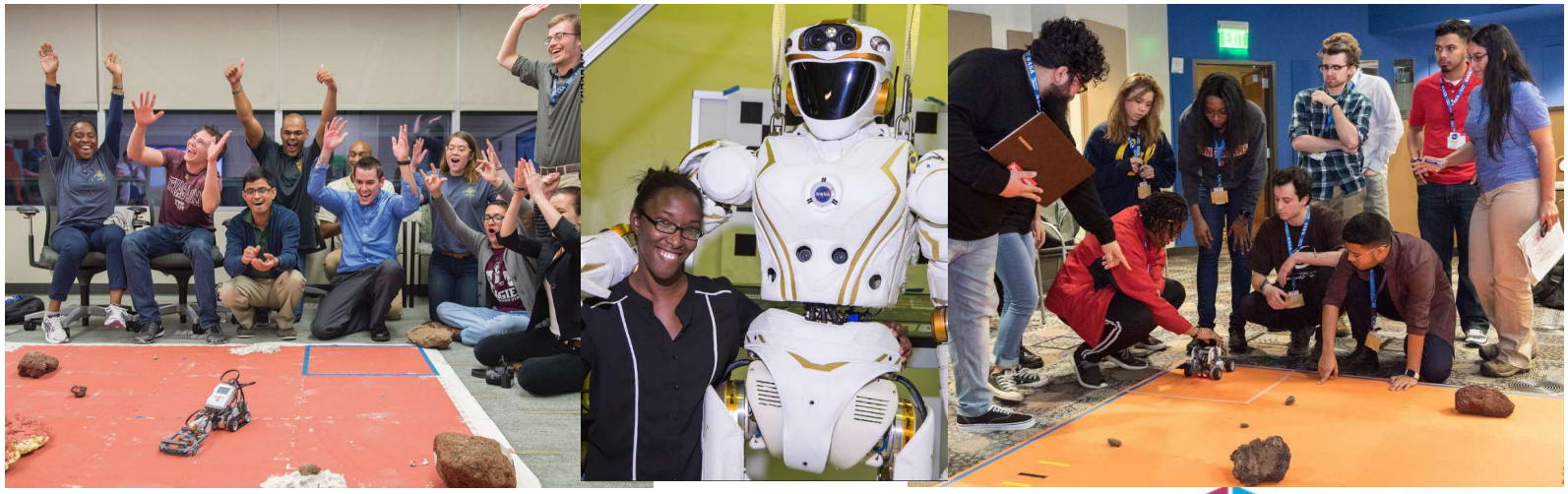
NASA Community College Aerospace Scholars (NCAS)

Alicia Baturoni Cortez

March 2, 2018

Purpose

NASA Community College Aerospace Scholars (NCAS) is an agency wide, MUREP-funded activity that engages community college students in NASA's mission and encourages them to finish a 2-year degree or transfer to a 4-year university to pursue a STEM field or career.



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Implementation

- Students learn about NASA missions and research in a 5-week non-credit online learning experience complete with quizzes, lectures, and a final project.
- The highest scoring students are invited to travel to one of ten NASA field centers for a four day engineering design workshop.
- Students experience NASA's unique facilities, projects, and diverse workforce and learn what it is like to work as a STEM professional in the aerospace industry.

Upcoming Milestones

http://ncas.aerospacescholars.org

Fall 2018	
Application Opens	Wednesday, March 28, 2018
Application Closes	Monday, June 4, 2018
Online Session	June-July 2018
Onsite Student Selections	August 2018
Onsite Workshops	September/October 2018

Alicia Baturoni Cortez, Activity Manager
alicia.baturoni@nasa.gov

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