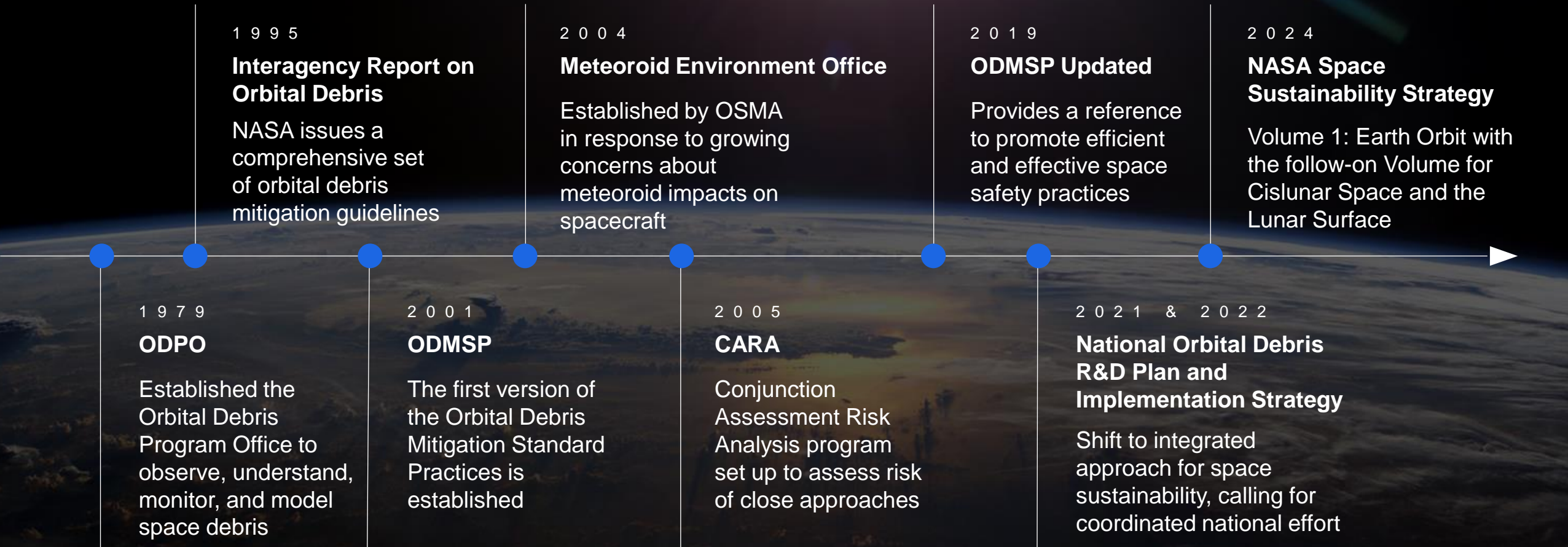


# RESPONSIBLE EXPLORATION

PRESERVING THE COSMOS FOR TOMORROW

# Historical Context



NASA Defines Space Sustainability as:

The ability to **maintain the conduct of space activities** indefinitely into the future in a manner that is safe peaceful, and responsible to meet the needs of the present generation while preserving the outer space environment for future activities and limiting harm to terrestrial life.

## Challenges:

1

Develop a Framework for Assessing Space Sustainability

2

Prioritize the Ways to Minimize Uncertainties About Orbital Debris and Operations

3

Lower Barriers Through Developing and Transferring Technology

4

Update or Develop Policies that Provide Incentives to Support Space Sustainability

5

Continue and Improve Coordination and Collaboration Outside of NASA

6

Improve NASA-internal Organization



# NASA'S SPACE SUSTAINABILITY STRATEGY

VOLUME 1: EARTH ORBIT



# NASA'S SPACE SUSTAINABILITY STRATEGY

VOLUME 1: EARTH ORBIT

## DIRECTOR OF SPACE SUSTAINABILITY

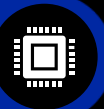
A SINGLE, SHARED  
FRAMEWORK



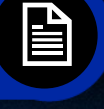
IDENTIFY AND MINIMIZE  
CRITICAL UNCERTAINTIES



NEW TECHNOLOGY  
DEVELOPMENT



UPDATED POLICY NEEDS



COORDINATING A  
MULTILATERAL RESPONSE



# NASA is seeking input on Lunar Surface and Cislunar Space Sustainability

Space Sustainability is:

- The ability to **maintain the conduct of space activities** indefinitely into the future in a manner that is safe peaceful, and responsible to meet the needs of the present generation while preserving the outer space environment for future activities and limiting harm to terrestrial life.

Space Sustainability is not:

- Funding stability of programs
- Building a cislunar economy

**What are the major challenges, and potential technology or policy solutions, associated with:**

- Keeping missions alive long enough to complete their mission and post-mission phases?
- Ensuring that missions don't interfere with each other?
- Ensuring that the operating environment is sustainably used so that future missions can operate?

Please provide any thoughts or feedback via email to:  
[thomas.j.colvin@nasa.gov](mailto:thomas.j.colvin@nasa.gov) or [travis.f.blake@nasa.gov](mailto:travis.f.blake@nasa.gov)



# EXPLORING THE SECRETS OF THE UNIVERSE FOR THE BENEFIT OF ALL

