

Three astronaut silhouettes are shown against a white background. The left silhouette is blue and contains cutouts of a rocket launch, a lunar landscape with a rover, and a blue planet. The middle silhouette is black and contains cutouts of a starry sky, a lunar surface with a rover, and a blue planet. The right silhouette is red and contains cutouts of a starry sky, a lunar landscape with a rover, and a red planet. A dark blue horizontal bar is overlaid across the center of the silhouettes, containing the title text.

# Priorities for the Foundational Exploration Segment

# Architecture Segments



## Human Lunar Return

Initial capabilities, systems, and operations necessary to re-establish human presence and initial utilization on and around the Moon.



## Foundational Exploration

Expansion of lunar capabilities, systems, and operations supporting complex orbital and surface missions to conduct utilization and Mars forward precursor missions.



## Sustained Lunar Evolution

Enabling capabilities, systems, and operations to support regional and global utilization, economic opportunity, and a steady cadence of human presence on and around the Moon.



## Humans to Mars

Initial capabilities, systems, and operations necessary to establish human presence and initial utilization on Mars and continued exploration.

Future Segments

# Priorities for Foundational Exploration



**Mission Duration**



**Surface Crew Size & Duration**



**Science and Utilization**



**Mobility**



**Logistics**



**CPNT Architecture**

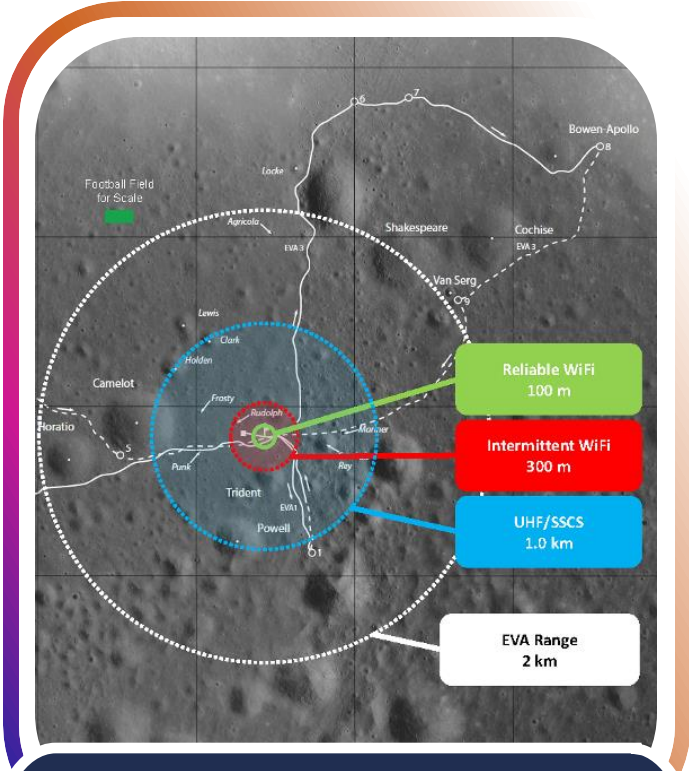
*Communications, Position, Navigation, and Timing*



# Lunar Infrastructure



Surface Power



Surface CPNT



Orbital Elements

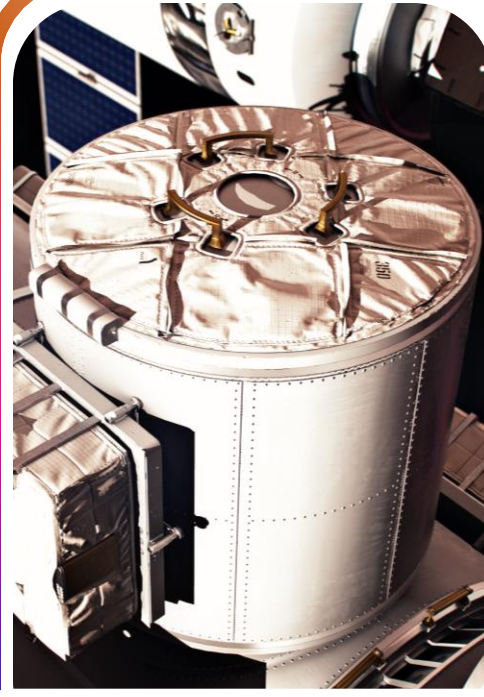
# Technical Advancements



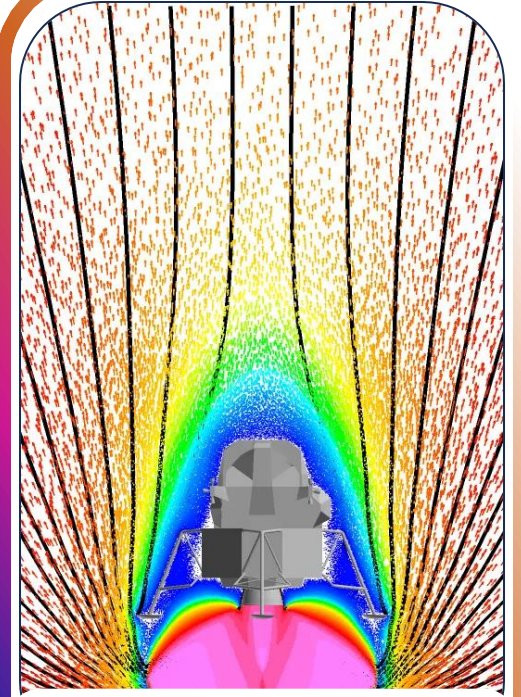
**Conditioned Sample  
Return**



**Increase Down-Mass  
to Surface**



**Maintaining Asset Health  
During Uncrewed Periods**

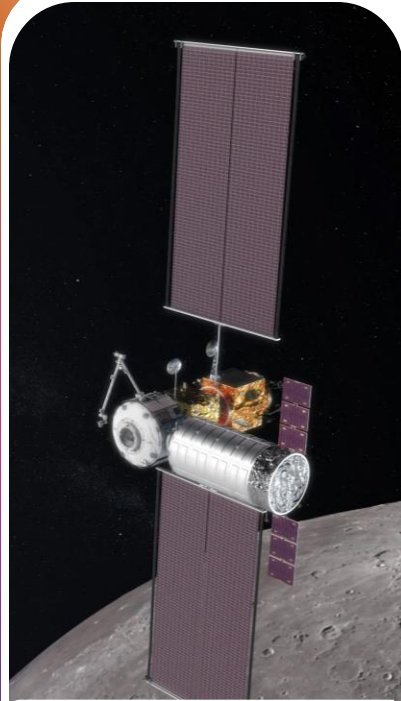


**Dust (Regolith)  
Mitigation**

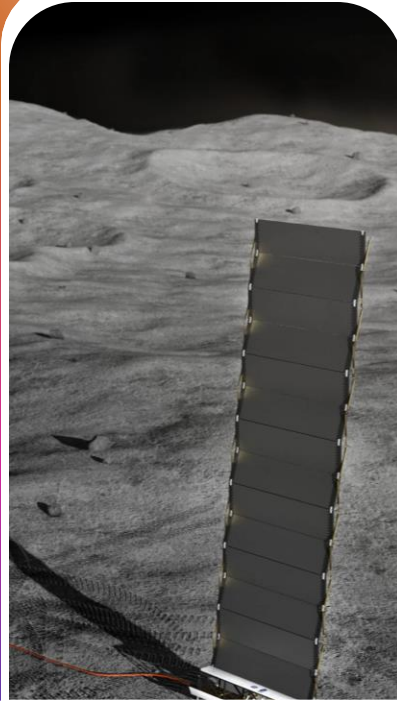
# Technical Advancements



**Logistics Services**



**Cargo Return Services**



**Surface Power Services**



**Data Services**



**Cooperative Extensibility**

# Key Questions



- What gaps are of interest?
- What challenges do you see going into the Foundational Exploration segment?
- What emerging technologies should get more attention?