



Building a 21st Century Policy Framework ... to Enable a Space Migration Future

Congress can take action to position the United States as the leader of a bold future in outer space – with humans living, working, and thriving beyond Earth. The following issues are important to address in the near-, mid-, and long-term to ensure a safe and sustainable trajectory of human expansion and development into the cosmos.

Near-Term: Creating Predictable Regulations and Securing Spectrum:

To continue to develop and grow, the nascent commercial space industry will benefit from stable, predictable, and supportive regulations.

- Government oversight – the “authorization and continuing supervision” – of private space activities is required by the Outer Space Treaty. A debate today centers on an oversight “gap” for novel space activities, and whether authority should be granted to the Department of Commerce or the Federal Aviation Administration.
- Radio spectrum is a limited and shared resource critical to commercial satellite operators. Section 701 of H.R. 3565, the Spectrum Auction Reauthorization Act of 2023, includes a provision extending the Federal Communications Commission’s (FCC) auction authority to include the X-Band – which is critically relied upon by leading commercial remote sensing providers. The text of this section does not acknowledge the existing primary nonfederal allocation for the Earth Exploration Satellite Service in the band. Industry, its partners, and its customers would be threatened if the wireless radio frequency spectrum they rely upon were allocated for terrestrial mobile use.

Recommendations:

- Ensure that whatever “authorization and continuing supervision” regime is instituted is transparent, minimally burdensome on the space industry, and is designed to facilitate – not inhibit – the development of new markets and activities in space.
- Create a “carve out” that protects the X-Band spectrum used by commercial satellite operators in any future FCC auction.

Mid-Term: Our Future in “Low-Earth-Orbit” – Commercial LEO Destinations:

The International Space Station is set to be retired in the coming decade. Rather than build a replacement itself, NASA plans to turn over low Earth orbit (LEO) to the commercial sector – and is funding the development of commercial space stations through the Commercial LEO Destinations (CLD) initiative. These stations will be *critical* for future space research, the development of in-space markets, and as staging points exploration and expansion deeper into space.

Recommendation:

- Support NASA’s Commercial LEO Destinations initiative through robust authorization language and appropriations, providing it enough mid-term resources to foster a competitive low Earth orbit market while preventing a post-ISS space station “gap.”

Long-Term: Invest in a Cislunar Economy while Preserving Lunar Heritage Sites:

The second half of the 21st Century will see the growth of a Cislunar economy (beyond Geostationary orbit). It is a matter of global security that the U.S. and its allies be the leader in responsibly developing economic potential of this region beyond Earth. This will require a major commitment that must begin now. In addition, as civil and commercial activity on the lunar surface multiplies in the coming years, heritage sites should be protected for future generations.

Recommendation:

- Commit to investing in critical cislunar infrastructure that will enable the emergence of a responsible and sustainable civilian-led eco-system, and support those activities will direct funding and other financial incentives.
- Codify best practices, guidelines, and principles for protecting lunar heritage in NASA’s upcoming lunar missions and in regulations and oversight of commercial lunar activities.

About the Beyond Earth Institute (beyondearth.org): The “Beyond Earth Institute” (BE) has a simple yet powerful vision: a vibrant future in space with communities of people living and working beyond Earth for the benefit of humankind. BE educates policymakers in the U.S. and abroad on steps necessary to achieve this vision.