

# UNITED STATES SPACE PRIORITIES FRAMEWORK

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# Table of Contents

UNITED STATES SPACE PRIORITIES FRAMEWORK.....	3
U.S. Benefits from Space Activities .....	3
Space as a Source of American Innovation and Opportunity .....	3
Space as a Source of American Leadership and Strength.....	4
U.S. Space Policy Priorities .....	5
Maintaining a Robust and Responsible U.S. Space Enterprise.....	5
Preserving Space for Current and Future Generations.....	7
Conclusion .....	7



# UNITED STATES SPACE PRIORITIES FRAMEWORK

Space activities are essential to our way of life. They advance our understanding of the Earth, the universe, and humanity; enable U.S. national security; create good jobs and economic opportunity; enhance our health and well-being; and inspire us to pursue our dreams. Space capabilities provide critical data, products, and services that drive innovation in the United States and around the world. Access to and use of space is a vital national interest.

We are in a historic moment: space activities are rapidly accelerating, resulting in new opportunities in multiple sectors of society, as well as new challenges to U.S. space leadership, global space governance, the sustainability of the space environment, and safe and secure space operations. Burgeoning U.S. space activities are a source of American strength at home and abroad – from providing tangible economic and societal benefits to Americans to expanding our network of alliances and partnerships. The United States will bolster the health and vitality of our space sectors – civil, commercial, and national security – for the benefit of the American people and leverage that strength to lead the international community in preserving the benefits of space for future generations.

## U.S. Benefits from Space Activities

### Space as a Source of American Innovation and Opportunity

Space data, products, and services provide tangible benefits and economic opportunity to the American people. Space exploration and discovery engages and inspires the next generation of Americans.

**Space activities power our economy and our way of life.** Data, products, and services from space enable American businesses and create American jobs in sectors as varied as manufacturing, transportation, logistics, agriculture, finance, and communications. We rely upon satellites to improve our lives and our communities, such as by enabling global navigation; assisting with crop yield prediction, water management, and power grid monitoring; and facilitating global telecommunications for applications ranging from banking to education to telemedicine.

**Developing space technologies spurs innovation.** American companies lead the world in pushing the frontier of space technologies and space applications. New space goods and services create new industries and jobs, such as in clean energy technology and broadband access, providing increased opportunities for equitable economic growth and development in historically underserved or disadvantaged communities. Furthermore, space activities fuel cutting-edge research and technology development, yielding new discoveries that improve the quality of life for people on Earth.



**Space capabilities help us manage our resources; protect people, property, and the environment from extreme weather events; and address the climate crisis.** Satellites collect information to monitor our changing planet and to protect our lands, oceans, and atmosphere. Data collected from space helps us improve national preparedness and reduce the impacts of extreme weather, natural disasters, and climate change in a manner that better addresses the needs of vulnerable communities.

**Space inspires us.** Space exploration and scientific discovery attracts people from across America and around the world to engage in science, technology, engineering, and mathematics (STEM). Bold and ambitious space missions demonstrate that our best years are ahead of us and that we are innovators and creators.

## Space as a Source of American Leadership and Strength

The United States is the world leader in space. A robust space program enables us to expand our alliances and partnerships and underpins our military strength.

**Space achievements demonstrate American leadership.** U.S. human and robotic accomplishments in space unlock the mysteries of the universe and provide tangible measures of American technological capacity and our national ability to execute large-scale, complex projects. Our successes in space bolster our credibility and influence worldwide.

**Space activities broaden and deepen our international partnerships.** Our global network of alliances and partnerships is a strategic advantage of the United States. Worldwide interest in space offers the United States opportunities to expand this network while opening new avenues for U.S. leadership and collaboration with allies and partners.

**Space underpins our national security and ability to respond decisively to crises around the world.** Information collected from space informs national decision makers about evolving threats to U.S., allied, and partner interests. Space capabilities enable the U.S. military to protect and defend the U.S. homeland and to advance the national and collective security interests of the United States and its allies and partners. Space also enables the United States to respond to humanitarian crises more quickly and effectively.



# U.S. Space Policy Priorities

## Maintaining a Robust and Responsible U.S. Space Enterprise

Reaping the current and future benefits of space requires that the United States maintain a vibrant space enterprise across the civil, commercial, and national security sectors.

**The United States will maintain its leadership in space exploration and space science.** The United States will remain a global leader in science and engineering by pioneering space research and technology that propels exploration of the Moon, Mars, and beyond. U.S. human and robotic space exploration missions will land the first woman and person of color on the Moon, advance a robust cislunar ecosystem, continue to leverage human presence in low-Earth orbit to enable people to live and work safely in space, and prepare for future missions to Mars and beyond. Scientific missions will investigate the origins of our universe and enhance understanding of the Earth, the Sun, and our solar system. The United States will continue to conduct these missions in a manner that furthers decades-long cooperation with established spacefaring nations and engages emerging spacefaring nations in new partnerships. Additionally, the United States will continue to leverage civil space activities to foster new commercial space services such as human space transportation and space stations in low Earth orbit.

**The United States will advance the development and use of space-based Earth observation capabilities that support action on climate change.** The United States, through collaboration between the public, private, and philanthropic sectors, will accelerate the development and use of Earth observation to support climate change mitigation and adaptation. Open dissemination of Earth observation data will support both domestic and international efforts to address the climate crisis.

**The United States will foster a policy and regulatory environment that enables a competitive and burgeoning U.S. commercial space sector.** U.S. commercial space activities are on the cutting edge of space technology, space applications, and space-enabled services. To facilitate the growth of U.S. industry and support the creation of American jobs, the United States will clarify government and private sector roles and responsibilities and support a timely and responsive regulatory environment. U.S. regulations must provide clarity and certainty for the authorization and continuing supervision of non-governmental space activities, including for novel activities such as on-orbit servicing, orbital debris removal, space-based manufacturing, commercial human spaceflight, and recovery and use of space resources. To create free and fair market competition internationally, the United States will work with allies and partners to update and harmonize space policies, regulations, export controls, and other measures that govern commercial activities worldwide. Additionally, the United States will work with allies and partners to combat foreign government non-market practices, protect critical U.S. technologies and intellectual property, and reduce reliance on strategic competitors for key space capabilities. Such efforts will be informed by economic data and research to better understand the space economy and will reflect the importance of the responsible and sustainable use of space.



**The United States will protect space-related critical infrastructure and strengthen the security of the U.S. space industrial base.** Space systems are an essential component of U.S. critical infrastructure – by directly providing important services and by enabling other critical infrastructure sectors and industries. The United States will enhance the security and resilience of space systems that provide or support U.S. critical infrastructure from malicious activities and natural hazards. In particular, the United States will work with the commercial space industry and other non-governmental space developers and operators to improve the cybersecurity of space systems, ensure efficient spectrum access, and strengthen the resilience of supply chains across the nation’s space industrial base. Furthermore, the United States will enhance the protection of terrestrial critical infrastructure from space weather events, which can disrupt services such as electric power, telecommunications, water supply, health care, and transportation.

**The United States will defend its national security interests from the growing scope and scale of space and counterspace threats.** Intensifying strategic competition presents a serious threat to U.S. national security interests, including in space. The military doctrines of competitor nations identify space as critical to modern warfare and view the use of counterspace capabilities as a means both to reduce U.S. military effectiveness and to win future wars. Confrontation or conflict, however, is not inevitable. To deter aggression against U.S., allied, and partner interests in a manner that contributes to strategic stability, the United States will accelerate its transition to a more resilient national security space posture and strengthen its ability to detect and attribute hostile acts in space. The United States also will take steps to protect its military forces from space-enabled threats. As part of bolstering space mission assurance, the United States will leverage new commercial space capabilities and services to meet national security requirements and will deepen the integration of U.S. national security space capabilities and activities with those of our allies and partners. The United States also will engage diplomatically with strategic competitors in order to enhance stability in outer space. Finally, U.S. national security space operations will continue to comply with applicable international law and demonstrate leadership in both the responsible use of space and stewardship of the space environment.

**The United States will invest in the next generation.** Investing in STEM education is critical to continuing U.S. leadership into the next generation and preparing the nation’s STEM workforce to fuel the economy of the future. Our STEM ecosystem of public and private organizations will leverage space programs to educate our children as part of improving the scientific literacy of Americans and increasing diversity, equity, accessibility, and inclusion in scientific and technological fields. The United States is a diverse and multicultural society, and its space activities and workforce must reflect this composition. Furthermore, space information will continue to be made more accessible, providing inspiration and access to the benefits of space to more people than ever before. This includes working with commercial space entities to leverage the growing space economy to support historically underserved and underrepresented communities so that the benefits of space can accrue to all Americans.



## Preserving Space for Current and Future Generations

As space activities evolve, the norms, rules, and principles that guide outer space activities also must evolve. The United States will lead in the responsible, peaceful, and sustainable exploration and use of outer space.

**The United States will lead in strengthening global governance of space activities.** The United States will engage the international community to uphold and strengthen a rules-based international order for space. The United States, working with commercial industry, allies, and partners, will promote the implementation of existing measures and lead in the development of new measures that contribute to the safety, stability, security, and long-term sustainability of space activities. The United States will demonstrate how space activities can be conducted in a responsible, peaceful, and sustainable manner.

**The United States will bolster space situational awareness sharing and space traffic coordination.** The United States will continue to share space situational awareness information and provide basic spaceflight safety services to all space operators. These services will be transferred to an open data platform, hosted by a U.S. civil agency, that leverages data and services provided from a variety of government, commercial, academic, and international sources. Working with industry and international partners, the United States will lead in the development and implementation of open, transparent, and credible international standards, policies, and practices that establish the foundation for global space traffic coordination.

**The United States will prioritize space sustainability and planetary protection.** The United States will work with other nations to minimize the impact of space activities on the outer space environment, including avoiding harmful contamination of other planetary bodies. The United States will increase efforts to mitigate, track, and remediate space debris. The United States will advance development and implementation of domestic and international best practices to mitigate the creation of space debris and will support efforts to evolve those practices to ensure continued safety of flight operations in the future. The United States also will continue to protect the Earth's biosphere by avoiding biological contamination by spacecraft returning to Earth. The United States will lead, in cooperation with commercial industry and international allies and partners, in efforts to enhance warning of and mitigation against potential near-Earth object impacts.

## Conclusion

Space activities benefit humanity. They power the global economy; underpin U.S., allied, and partner national security; improve the daily lives of Americans and people around the world; and inspire us to pursue our dreams. We are on the cusp of historic changes in access to and use of space – changes that have the potential to bring the benefits of space to more people and communities than ever before. The United States will harness the use of space to tackle the most pressing challenges at home and abroad, while leading the international community in preserving the benefits of space for current and future generations.