



CCIA SPACE & SPECTRUM POLICY CENTER

Low Earth Orbit (LEO) Broadband Access

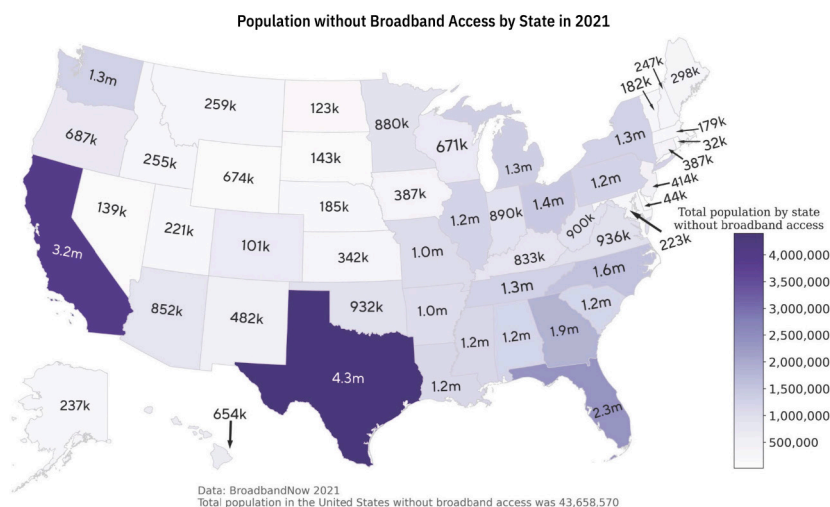
The Computer & Communications Industry Association (CCIA) remains committed to supporting the competitive provisioning of broadband services on a technologically neutral basis. Satellite-based transmission services have a vital role to play in ensuring that the United States has ubiquitous, robust, resilient, and accessible broadband connectivity. CCIA's newly-formed Space & Spectrum Policy Center aims to expand and strengthen our advocacy on these crucial issues.

Why LEO Broadband?

LEO broadband has the potential to increase accessibility, reduce latency, and increase speed of high-speed connectivity. It has the potential to reach the 43.7 million Americans in urban, remote, and difficult-to-access areas who are currently without broadband. According to CCIA's [Research Center](#), expanding LEO broadband coverage could increase U.S. GDP by over \$29 billion annually.

Robust LEO broadband connectivity enables the delivery of solutions to critical, timely challenges in an effective and reliable manner. For instance, LEO broadband can provide vital emergency connectivity to both rural and urban communities during natural disasters. In 2023 alone, the U.S. faced 28 separate billion-dollar weather events, leading to the displacement of 1.2-1.7% of the population. LEO satellites' capability to deliver emergency communications in these crucial times can facilitate rapid relief for those who need it most.

43.7 million Americans Lack Broadband Access, Including Millions of Rural Americans Living in States with Mostly Urban Populations



Access to Satellite Spectrum

Authorizing Spectrum to Meet Demand: Over the last two decades, the space satellite industry has rapidly expanded to meet ever-increasing demand. In 2024, 77% of the 2,873 space launches were communications satellites. CCIA estimates the total addressable market in the U.S. for LEO broadband is between \$20.8 and \$62.9 billion per year.

To reach this potential and for the U.S. to maintain a global competitive advantage in satellite communications, more spectrum must be made available across the low, middle, and high spectrum bands.

International Collaboration: Spectrum allocation is an international process in which the U.S. has maintained decades-long leadership. With 80% of the 2027 World Radiocommunication Conference (WRC 27) focused on Space, the U.S. must remain engaged as a leader in the International Telecommunications Union (ITU) and future WRCs. National and international coordination will be required as companies work to provide global broadband access through LEO satellites.

The U.S. must continue sustained investment and leadership in the ITU and WRC 27. Without it, other countries will fill the void, threatening America's national and economic security interests.

Industry and Regulation

Modernizing the Regulatory Framework: In 2023, the Federal Communications Commission (FCC) took a major step toward promoting competition and innovation in the satellite communications market by establishing the Space Bureau. The FCC continued its efforts in 2024 by adopting the *Space Innovation Order* ([FCC 24-84](#)) to enable collaboration between satellite and terrestrial service providers. This order aims to supplement terrestrial coverage with space-based services and reallocate certain terrestrial spectrum bands for satellite use. These efforts are steps toward meeting the growing demand for connectivity and ensuring that consumers have access to reliable broadband services.

The Federal Aviation Administration (FAA) also plays a critical role in the satellite industry by regulating launch and reentry activities. Though the FAA has taken steps to streamline its licensing process, the backlog of launch licenses and the complexity of the regulatory framework continue to pose challenges beyond LEO satellites to the entire space industry.

To unlock the full potential of the satellite industry, the U.S. must streamline interagency coordination to enable timely authorizations and efficient spectrum allocations.

Space Safety & Sustainability: Space safety and sustainability are key priorities for LEO companies. They are crucial to safeguarding American access and use of space and maximizing the benefits of space technologies and services for all of humanity. As the number of launches increases, responsible practices — such as deorbiting, collision avoidance, and safe disposal — should be at the forefront of LEO companies' work and design.

LEO operators are actively engaged in operator-to-operator coordination and have developed a number of best practices, including the American Institute of Aeronautics and Astronautics' "[Satellite Orbital Safety Best Practices](#)." Companies, particularly those with large LEO constellations, are prioritizing safe and timely disposal of satellites, effective satellite maneuverability, and sharing orbital locations and maneuverability plans with other satellite operators. CCIA's Space & Spectrum Policy Center looks forward to working with policymakers and stakeholders to ensure these practices are adopted around the globe.