

Statement for the Record
Mariam Sorond, CEO and Board Chair of NextNav Inc.
U.S. House Energy and Commerce Subcommittee on Communications & Technology
June 4, 2026

Chairman Hudson, Ranking Member Matsui, Chairman Guthrie, Ranking Member Pallone, and distinguished members of the House Energy and Commerce Subcommittee on Communications and Technology:

Thank you for the opportunity to discuss positioning, navigation, and timing (PNT) capabilities in the United States. My name is Mariam Sorond, and I serve as CEO and Board Chair of NextNav Inc. I am an engineer who has spent nearly three decades working on wireless technologies, and also have had the privilege of serving on the Federal Communications Commission's Technological Advisory Council and on the National Telecommunications and Information Administration's Commerce Spectrum Management Advisory Committee.

I am grateful for the Subcommittee's attention to PNT capabilities and resiliency. NextNav has been dedicated since its founding nearly two decades ago to the advancement of PNT resiliency, which is a vital national security, economic, and public safety imperative. NextNav has built the kind of industry partnerships that this Committee should expect of a national security partner. We are a member of the Open PNT Industry Alliance, an industry coalition working to strengthen economic and national security by accelerating the deployment of backup PNT capabilities for critical infrastructure.

PNT is the invisible but essential backbone upon which much of modern life depends. Positioning tells you where you are. Navigation tells you how to get where you are going. And timing provides a precise common clock that lets independent systems agree on when something happened, or must happen, down to the billionth of a second.

When you send a wire transfer through the bank, PNT helps prevent fraud. When the electric grid holds through a heat wave and your air conditioning keeps running, PNT is the invisible metronome keeping the power plants in sync. When a 911 call routes to the nearest dispatcher, PNT locates the caller. When a tractor trailer, an ambulance, or a family on a road trip moves through this country, PNT guides them along their routes.

Individual Americans rely on PNT every day—as does our national security, economy, and public safety.

Today, nearly all PNT services depend on a single, well-known source: GPS satellites. GPS is one of the great American achievements of the last half century—a national treasure we built and shared with the world, and one that we must continue to protect and invest in.

But it is important to acknowledge that GPS has its limitations and vulnerabilities, particularly because it is currently without a backup, making it a single point of failure. GPS signals come from satellites orbiting thousands of miles above us in space. Those signals can be obstructed or weakened by physical barriers like ceilings, walls, or even dense tree canopies, limiting the availability of positioning or timing data in indoor locations. Tall buildings, particularly in dense downtown areas, can create “canyons” that reflect or outright block signals and reduce accuracy. Natural weather events in space—such as solar flares or coronal mass ejections—can also impede GPS and other satellite signals. And in the coming years, increased government and commercial activity in space could cause disruptions that impact satellites.

One GPS disruption—whether caused by a system anomaly or failure, a piece of space debris damaging a satellite, or an attack from one of America’s adversaries—will have cascading consequences across our most essential critical infrastructure sectors, from cellular networks and the power grid to banking, aviation, and agriculture.

The financial impact alone would be enormous. According to a 2019 report from the National Institute of Standards and Technology (NIST), a GPS outage would cost the U.S. economy over \$1 billion per day. A 30-day outage during planting season could cost over \$45 billion.

We face a critical question: What happens if GPS is degraded, jammed, spoofed, or attacked in the United States?

That scenario is neither hypothetical nor hyperbole. We have seen thousands of cases of jamming and spoofing of GPS systems in geopolitical hotspots around the world and here in the United States. In 2022, a jamming incident of unknown origin shut down a runway at Dallas Fort Worth International Airport—one of the busiest airports in this country and the world—and affected 40 miles of airspace for nearly two days. That same year, an unauthorized transmitter interfered with GPS at the Denver International Airport, affecting both aircraft and air traffic control. And these disruptions are not confined to any one corner of the country. GPS interference has been reported near major airports, along critical transportation corridors, and in communities across the country—very likely including in many of your own districts and states.

The incidents in Dallas and Denver underscore the major issues that can arise when GPS is disrupted at just a single airport. If an adversarial actor were to jam GPS signals at all U.S. airports simultaneously, the impact would be catastrophic—and incredibly dangerous.

Other countries have recognized the grave risks that come with relying on a single, space-based PNT system. China has multiple systems to complement its satellite-based PNT network, BeiDou. Russia has also built a ground-based backup. Unfortunately, the United States has not done the same, and we are now in a position of needing to catch up to our allies and our adversaries alike.

However, we have an opportunity to accomplish that.

PNT resilience is a bipartisan concern. Every presidential administration this century and members of Congress on both sides of the aisle have recognized this critical national imperative.

That is where NextNav comes in. Our mission is simple: We believe the United States needs a layered PNT architecture with multiple ground-based and space-based systems working together, so that no single failure can take the country offline.

This effort is personal to me. My family came to the United States when I was two years old, and helping solve this challenge is a meaningful way for me to give back to the country that took us in and has given us so much.

NextNav is an American company that has spent two decades building the future of geolocation. We have developed a ground-based, 5G-powered PNT solution that can serve as both a backup and complement to GPS. Not only do we offer the redundancy our PNT architecture needs, ground-based systems like ours help solve for some of GPS's inherent shortcomings—for example, by offering improved accuracy indoors or in urban areas with tall buildings.

NextNav's commercial Pinnacle vertical-location service operates in more than 4,400 U.S. cities and covers more than 90% of commercial buildings in the United States that stand taller than three stories. First responders use our service to help locate 911 callers who are inside high-rises and other places where Z-axis location is critical—situations where seconds save lives. NextNav is the only commercial vertical-location provider serving all three national wireless carriers and FirstNet (through AT&T)—the federally authorized network for first responders, which has called Z-axis a “key capability.” We hold more than 150 patents and are the largest license holder in the only band the FCC has designated for ground-based positioning.

NextNav is proud to have developed a commercially viable ground-based complement and backup to GPS that can be deployed in the near term, on existing 5G infrastructure, and at no cost to taxpayers. We are particularly proud that our technologies enhance public safety where they are deployed. Because our solution is based on 5G—which already reaches the population centers where people live and work—it will be within reach of the vast majority of Americans.

We are not trying to replace GPS, which reaches across the globe and will remain an essential service. We also believe that many systems working together are stronger—and safer—than one. No single company or actor can fortify PNT in the United States on its own, and we welcome other technologies into the layered PNT architecture America needs. I look forward to hearing from my fellow panelists about their work.

The United States needs a robust, widescale ground-based PNT option to complement and back up GPS, to support critical infrastructure needs, and to ensure that public safety can access robust, reliable 3D positioning data. NextNav is poised to meet those needs to enhance our national and economic security.

Congress also has a vital role to play with respect to oversight, setting national priorities, and in ensuring that America builds a PNT architecture that can withstand jamming and spoofing attacks, solar weather disruptions, and other threats. I appreciate this Subcommittee's focus on this critical issue and the opportunity to discuss NextNav's contributions with you. I look forward to our conversation.