‘No one in in charge of critical GPS/PNT tech, White House action needed’ - Former DOT Leader

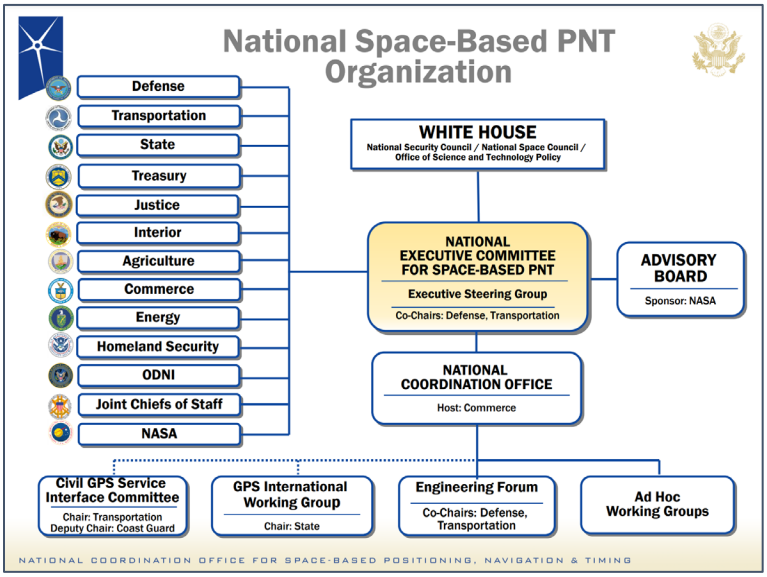
“Nobody is in charge” of a critical US technology infrastructure, according to a former number three official at the Department of Transportation (DOT).

As a result, senior leaders don’t attend meetings, there is a lack of clarity and direction, and policies harmful to the nation persist.

The Honorable Jeffery Shane served for over 16 years at DOT, more than six of which were as Undersecretary for Policy, the department’s third most senior official. His comments came at a recent two-day meeting of a presidential advisory board on positioning, navigation, and timing (PNT).

PNT services underpin virtually every technology including electrical grids, IT networks, cell phones, first responder systems, and all modes of transportation. The United States relies overwhelmingly on the Global Positioning System (GPS) for PNT. This dependency has been described by a current member of the National Security Council as “a single point of failure” for the nation.

A root cause of the leadership vacuum, according to Shane and his colleagues on the board, is the overly complex structure the government has established to deal with PNT issues.



Referring to a complicated chart showing players in federal PNT decisions he said, “The question that leaps out from that page is pretty clear, and it is “Who’s in charge?” In fact, if I were going to edit that page, I would simply put a question mark after the words “Organization Structure.””

“Nobody is in charge,” he concluded. “That, to us, seems like the most compelling fact of our GPS [and PNT] sector.”

Citing reports that the Deputy Secretaries of Defense and Transportation, nominally co-chairs of the executive governance committee for PNT, have not attended the committee’s semi-annual meetings for years, Shane said “the system seems to be running itself.”

That these senior leaders have not prioritized the meetings, nor the topic could well result from the executive committee's inability to do anything about the problems they see. Commenting after the meeting Shane said, "They have just enough authority to make recommendations to the White House. Sure, they can make things in their own departments happen, but many of the issues they deal with fall between the departmental cracks. A whole-of-government approach is needed. They just can't do that with semiannual meetings and suggestions."

Leadership of PNT issues in both the departments of Defense and Transportation have recently been the subject of scrutiny by the Government Accountability Office (GAO). It recently issued its fourth report in less than 19 months criticizing PNT management and leadership in the Department of Defense (DOD). A GAO report on GPS and the Department of Transportation has been underway for over a year.

Shane cited two issues, one procedural and one strategic, as indicative of the problems that have persisted for years in this leadership vacuum.

The procedural issue involved limits on the sale of technology that could make GPS receivers better able to resist interference. Referring to information available to the government on the topic he said, "It seems to me to be a very compelling presentation, if, in fact, you are worried about the resilience of our PNT system." Yet, the board and some government employees involved with the issue were unsure where the issue stood or what next steps were. "We've been talking about ITAR [International Traffic in Arms Regulations] restrictions for quite a while…We don't know… what's going on … we haven't been able to find a single point of contact."

Establishing a backup or complementary system for GPS has been a strategic national security issue for almost two decades. Shane said, "We had a presidential directive as far back as 2002 calling for a backup [for GPS]." Both the Bush and Obama administrations subsequently committed to establishing such a capability. Concerned that China and Russia have terrestrial complements for their GPS-like systems, Congress passed legislation in 2018 requiring at least a partial capability. The Trump opposed doing so, as had the Biden administrations.

"Now we have a Federal Radionavigation Plan that says a single backup doesn't make any sense," said Shane. "Is it reasonable to think the private sector is capable of protecting itself if GPS is actually taken down? I don't know, but it doesn't seem like there is a tremendous amount of clarity about that."

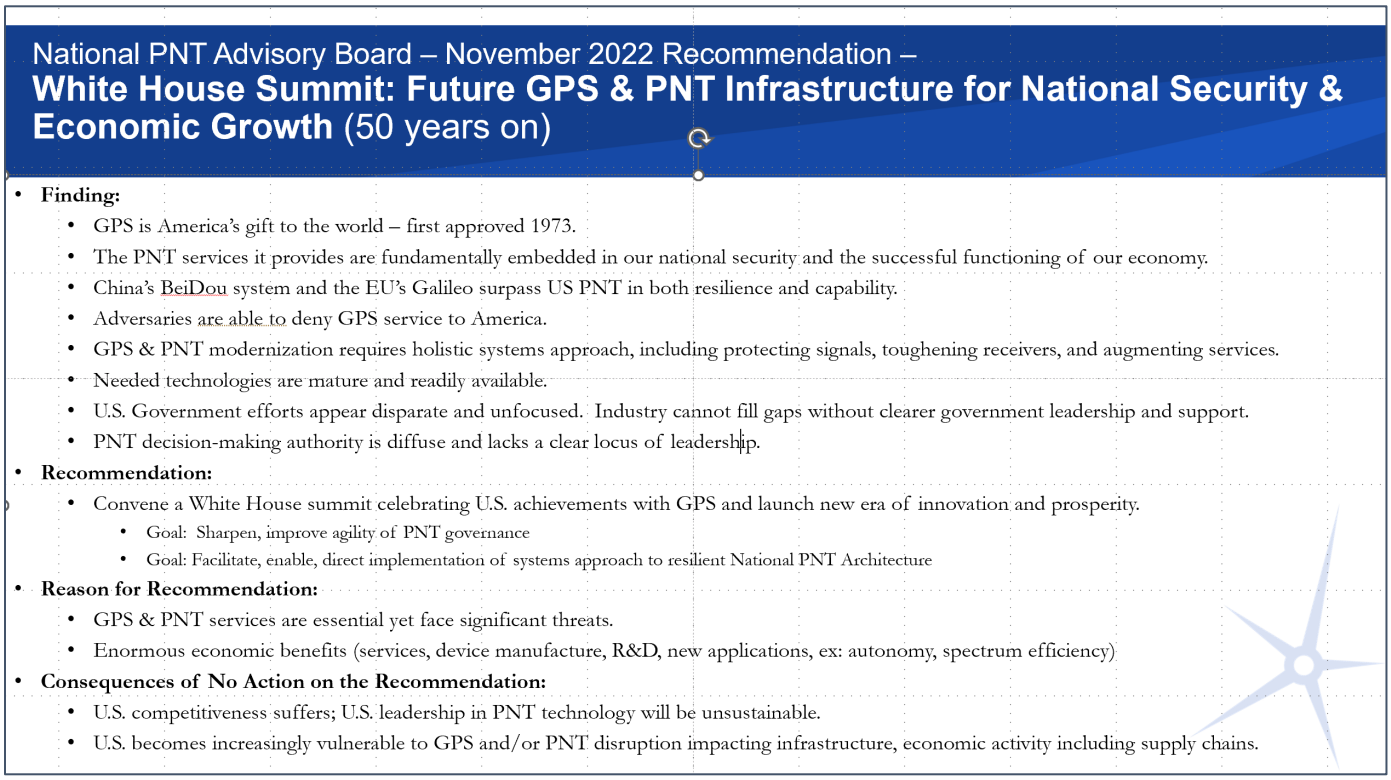
Other concerns raised at the advisory board meeting about federal PNT leadership included that:

- Government messaging greatly underestimates the importance of GPS to the economy
- The US has little capability to detect and locate signals interfering with GPS
- The public is not warned during extended accidental or malicious GPS disruption events
- Disruption of PNT data should be considered a cybersecurity issue

- Chinese and European GPS-like systems offer high accuracy services. Despite it appearing to be a something that could be done fairly simply by via the internet, the U.S. has not moved in that direction.

The board adopted one or more recommendations to government on each of these, as well as one to lift restrictions on the sale of antennas that could greatly improve GPS receiver performance.

It also recommended the underlying governance issue be addressed at a White House summit next year.



Such an event would celebrate the 50th anniversary of the GPS program and address "Future GPS & PNT Infrastructure for National Security & Economic Growth."

Summing up the nation's challenges with GPS and PNT Shane said, "These are things that just shouldn't be happening. And we within this subcommittee attribute a lot of that to the fact that we don't have anybody clearly, decisively, conspicuously, in charge of PNT."