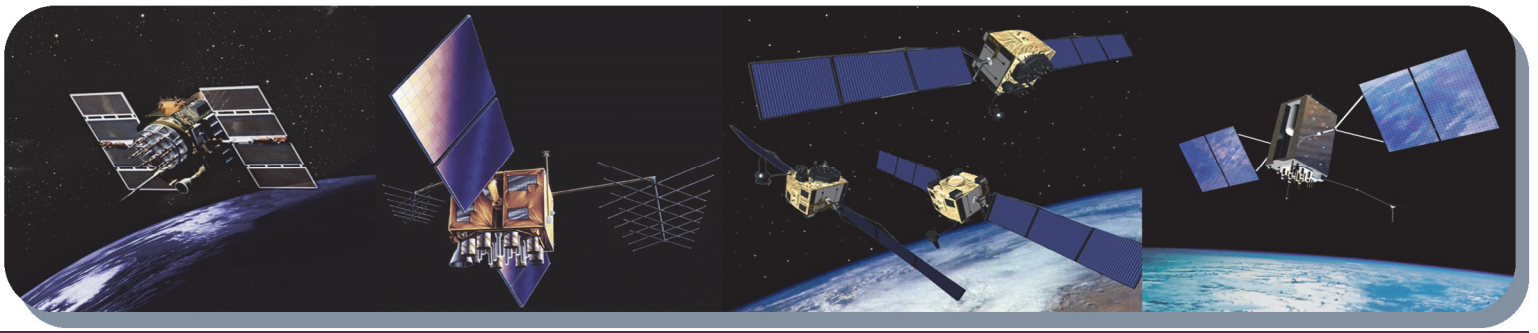
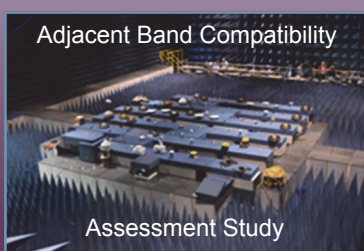
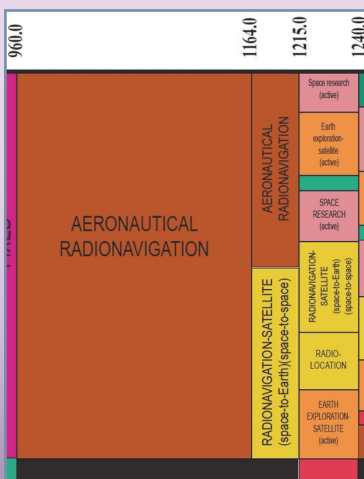
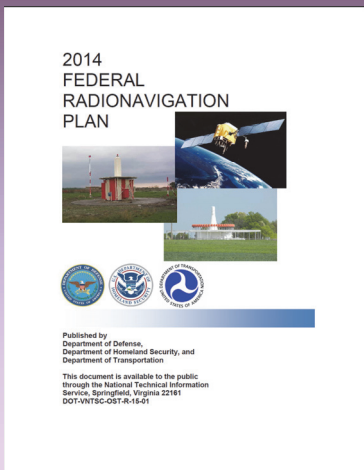




“Advancing PNT and Spectrum Policy and Research”



Office of Positioning, Navigation and Timing (PNT) and Spectrum Management Program Overview

Civil Global Positioning System (GPS)/PNT Leadership

- Coordinate the development of departmental positions on PNT and spectrum policy and protection from harmful radio frequency interference and operational degradation of capabilities
- Responsible for the development of requirements for civil applications from all United States Government civil Departments and Agencies.
- Represent the civil Departments and Agencies in the development, acquisition, management, and operations of GPS.
- Provide civil PNT systems analysis and coordination, including requirements development and architectural development.

Radionavigation Systems Policy, Planning, and Analysis

The Federal Radionavigation Plan (FRP) is the official source of positioning, navigation, and timing policy and planning for the Federal Government. The FRP is prepared jointly by the Departments of Defense (DoD), Homeland Security (DHS), and Transportation (DOT), with the assistance of other government agencies. The FRP reflects the policy and planning for present and future federally provided PNT systems, covering common-use PNT systems (i.e., systems used by both civil and military sectors).

Spectrum Policy, Planning, and Analysis

The Office of the Secretary of Transportation coordinates spectrum policy, among DOT modal administrations, and interacts with other Federal Agencies, including the National Telecommunications and Information Administration (NTIA) and Federal Communications Commission (FCC) to support national spectrum policy. Day-to-day responsibility for spectrum management is handled by the Federal Aviation Administration (FAA) for aviation and space transportation issues and by OST-R for cross-modal transportation issues such as positioning, navigation, and timing, as well as surface transportation.

For more information visit <https://www.transportation.gov/positioning-navigation-and-timing-pnt-spectrum-management>

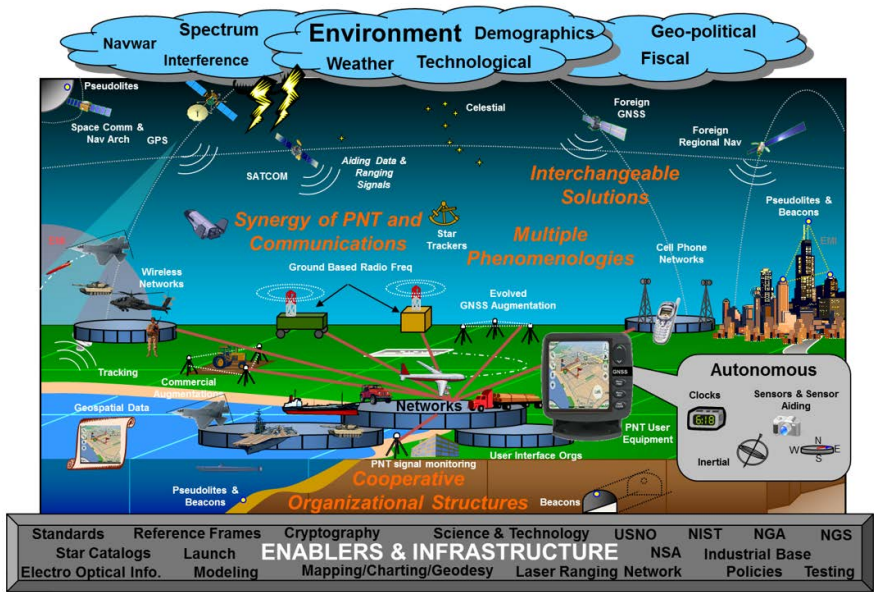


U.S. Department of Transportation
Office of the Assistant Secretary
for Research and Technology

National PNT Architecture

The National PNT Architecture identifies recommendations to be implemented by 2025 to overcome PNT capability gaps, predominantly resulting from the limitations of GPS. Given increased reliance on GPS, particularly for critical infrastructure applications, civil agencies need to be aware of vulnerabilities to GPS. There are increasing occurrences of unintentional and intentional interference to GPS, including the potential for spoofing of the signal. DOT can leverage work conducted by DoD in the research and development of new PNT capabilities and explore technology transfer to civil applications.

National PNT Architecture



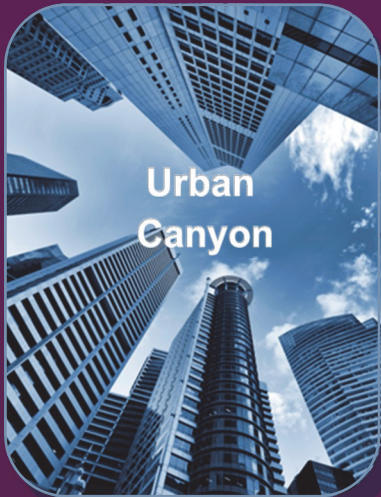
Civil GPS Service Interface Committee (CGSIC)

The Civil Global Positioning System Service Interface Committee (CGSIC) is the recognized worldwide forum for effective interaction between all civil GPS users and the U.S. GPS authorities. It was established and chartered to identify civil GPS user needs (e.g. navigation, timing, and positioning) and exchange information concerning GPS with the civil user community in support of DOT's civil GPS leadership role. OST-R chairs the CGSIC and the U.S. Coast Guard Navigation Center (NAVCEN) serves as Deputy Chair and Secretariat of the CGSIC.

GPS Adjacent Band Compatibility Assessment Study

The goal of the GPS Adjacent Band Compatibility Assessment Study is to evaluate the adjacent radio frequency band power levels that can be tolerated by GPS and Global Navigation Satellite System (GNSS) receivers and to advance the Department's understanding of the extent to which such power levels impact devices used for transportation safety and other civil GPS/GNSS applications.

PNT Capability Gaps



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