



56th Meeting of the CGSIC



U.S. Nationwide Differential GPS
(NDGPS)



Discussion Topics



- System Overview
- Review of 2016 System Changes
- Coverage Graphics
- Future of U.S. DGPS
- Questions??



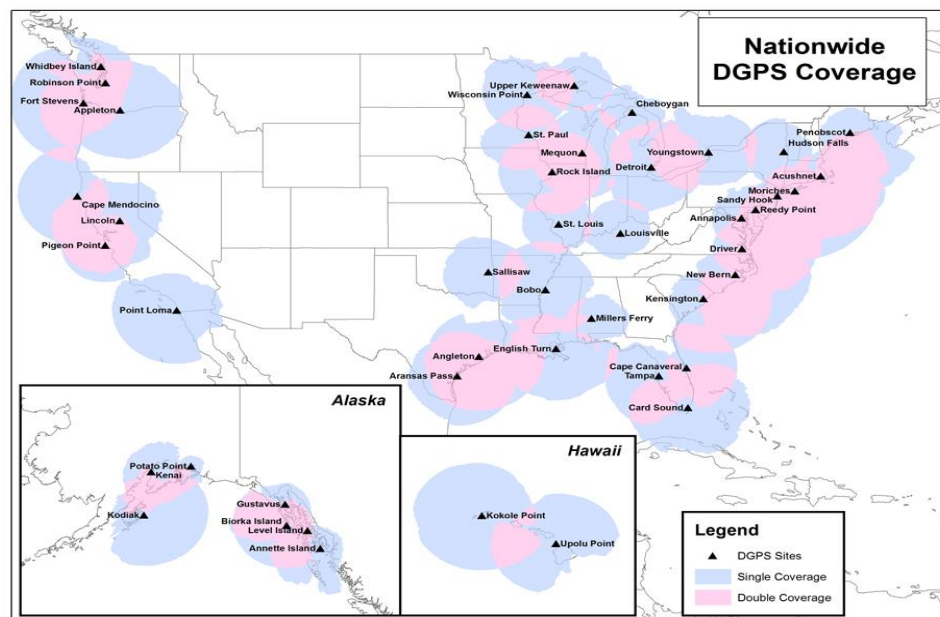


System Overview



System Description

- 46 Nationwide Remote Broadcast Sites throughout the United States and territories (39 USCG and 7 USACE)
 - System in operation since 1996
 - Better than 10 meter accuracy
 - Sites equipped with out-of-tolerance user alerting
 - 10 second integrity alarm to the user
 - Satisfies Harbor/Harbor Approach requirements
 - 99.7% availability requirement
 - 99.9% availability requirement for Vessel Traffic Service (VTS)



Operations

- Redundant equipment at sites
- Redundant control stations at NAVCEN

Stakeholders

- U.S. Army Corps of Engineers (USACE)
- Department of Transportation (DOT)
- National Oceanic & Atmospheric Administration (NOAA):
 - Continuously Operating Reference Stations (CORS) network



2016 NDGPS Changes



- Adjudicated comments from 2 Federal Register Notices
- Transitioned from 83 to 46 sites on Aug 4, 2016
 - Eliminated inland coverage
 - Maintained majority of maritime coverage; most of the sites maintained by USCG & USACE
- Shifted to single maritime coverage in most areas
- Will continue evaluating future DGPS need as other GPS augmentation systems mature

**Nationwide
DGPS Coverage
prior to Aug 2016**

Legend

- ▲ DGPS Sites
- Single Coverage
- Multiple Coverage

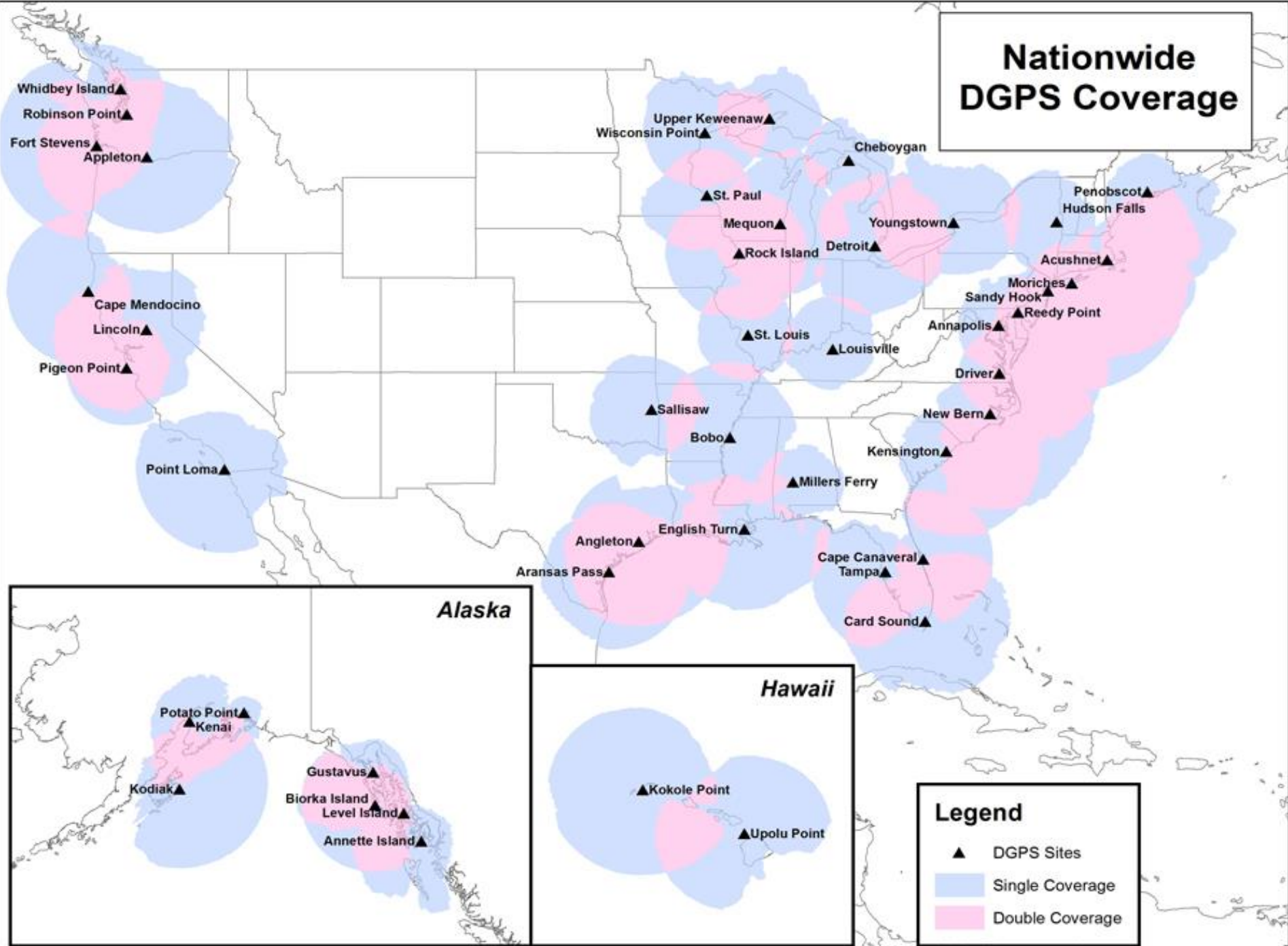
Map showing nationwide DGPS coverage prior to August 2016. The map displays numerous DGPS sites marked with black triangles across the United States. Coverage areas are shaded in light blue for single coverage and light pink for multiple coverage. The map includes insets for Alaska and Hawaii.

Legend

- ▲ DGPS Sites
- Single Coverage
- Multiple Coverage

- ▲ DGPS Sites
- Single Coverage
- Multiple Coverage

Nationwide DGPS Coverage





Next Steps



-
- Assess CPNT application of DGPS infrastructure
 - Decommission/divest 28 DOT sites
 - Decommission/divest 9 maritime sites
 - Evaluate future reductions and alternatives