





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

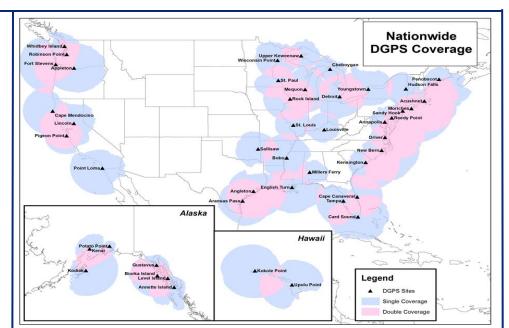


System Description

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

Operations

- Redundant equipment at sites
- Redundant control stations at NAVCEN



Stakeholders

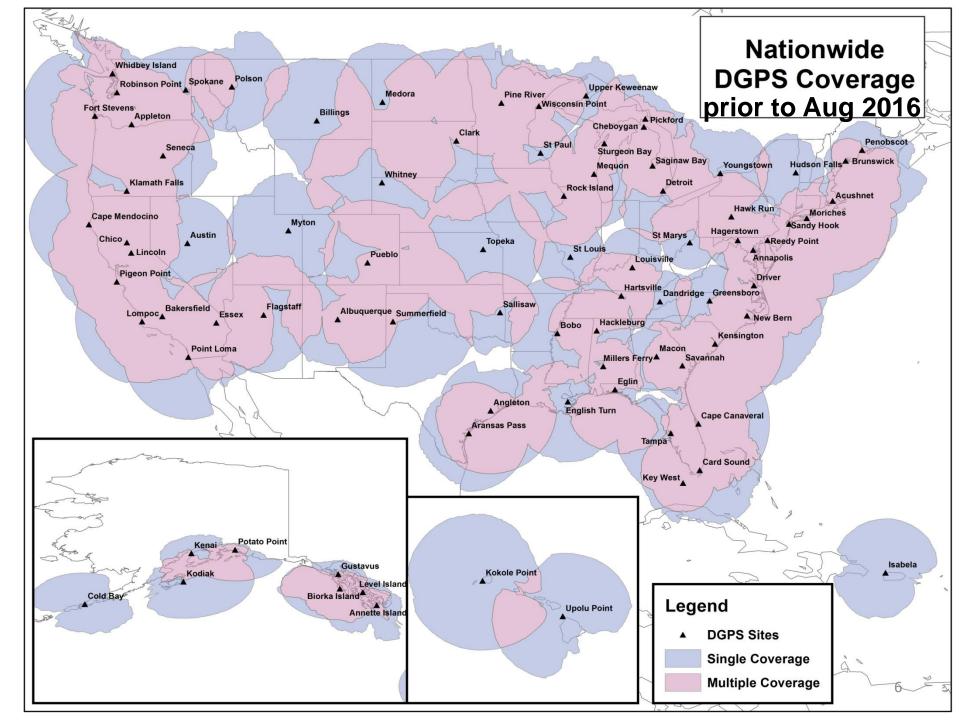
- U.S. Army Corps of Engineers (USACE)
- Department of Transportation (DOT)
- National Oceanic & Atmospheric Administration (NOAA):
 - \circ $\,$ Continuously Operating Reference Stations (CORS) network $\,$

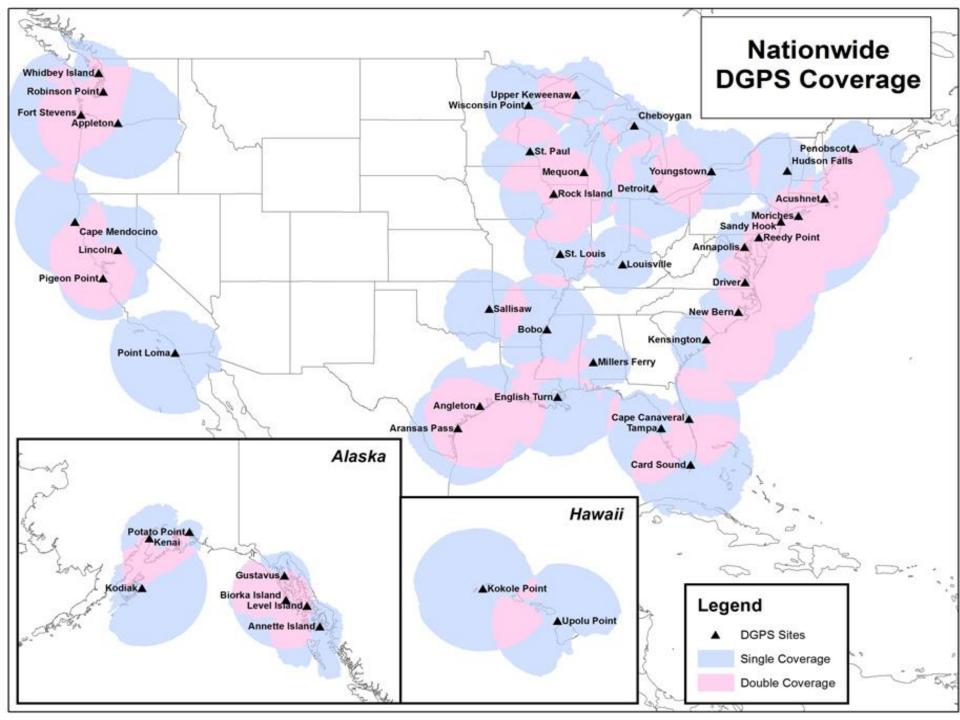


2016 NDGPS Changes



- 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







Next Steps



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