CRIA Research and Innovative Technology Administration

Nationwide Differential GPS (NDGPS) Program Update

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Timothy A. Klein Senior Policy Advisor/RITA NDGPS Coordinator <u>NDGPS@dot.gov</u>

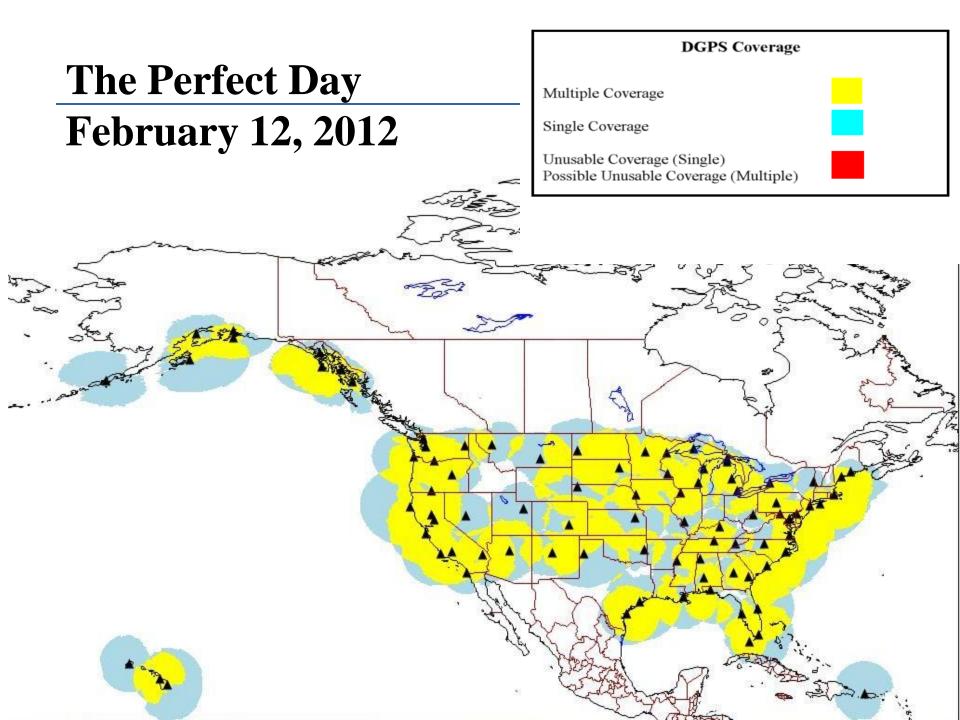
NDGPS Operating Partners

- United States Coast Guard
 - DGPS systems engineering, operations and maintenance
 - Aids to Navigation (maritime)
 - No USCG carriage requirement
- Army Corps of Engineers
 - Dredging and underkeel clearance
 - Underwater survey
- U.S. Department of Transportation
 - Surface transportation applications
 - Safety systems
 - Survey and construction (AMC)
 - Asset and fleet management
 - Structures monitoring
 - Roadside/ROW management
 - Transit bus and rail location and separation
 - St. Lawrence Seaway (with Canada)

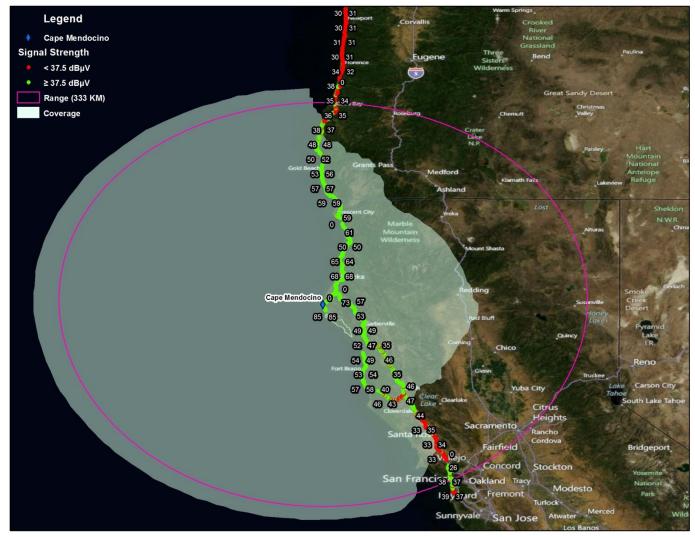








Operational Assessments (OA)





ION/GNSS Papers

- USCG NDGPS Accuracy and Spatial Decorrelation Assessment
 - Session D6b, Maritime Navigation & Applications (Alternate)
 - G.W. Johnson, Alion Science & Technology
 - P.F. Swaszek, University of Rhode Island
 - A.B. Cleveland, USCG C3CEN
- Ranging/Timing Using the NDGPS Signal
 - Session F6b, Alternatives to GNSS: Wide Area (Alternate)
 - P.F. Swaszek, University of Rhode Island
 - G.W. Johnson, Alion Science & Technology
 - R.J. Hartnett, U.S. Coast Guard Academy
 - A.B. Cleveland, USCG C3CEN



Planned Site Closure/Reduction of Caretaker Sites

- ACOE Has Declared Omaha NDGPS Site Excess
 - Intend to decommission Omaha site by end of CY12
 - Omaha site users should redirect to:
 - Clark, SD (DOT)
 - Topeka, KS (DOT)
 - Rock Island, IL (ACOE)
- DOT "Caretaker" Sites (GWEN) Being Removed from Property Rolls
 - No new NDGPS construction planned; no budget support
 - Presidential Memorandum—
 Disposing of Unneeded Federal Real Estate
 - Reducing maintenance and lease costs
 - 19 locations
 - 4 without infrastructure already released
 - 15 with infrastructure under environmental review



DOT NDGPS Program Status

- Inland (DOT) Tower Recapitalization
 - Upgrade reference stations/integrity monitors/antenna
 - Install IP-based operations system
 - Upgrade transmitters
 - Set long-term O&M baseline, 15 year service life
 - Set a single "plug and play" configuration across all NDGPS sites
 - Funding received; engineering/planning underway
- Relative Budget Consistency
 - Strong support for an O&M "floor"
 - USCG Billets (FY2016 commitment current)
 - Aided by several cost control measures
- NDGPS Program Manager/Spectrum Manager Hire
 - One FTE in DOT budget
 - Hiring action hoped for before end of CY12
 - Support DOT engineering needs for NDGPS program management and DOT spectrum management



