

# Nationwide Differential GPS (NDGPS) Program Update

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## 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
- US 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)~~





## Planned Site Closure/Reduction of Caretaker Sites

- ACOE Declared Omaha NDGPS Site Excess in CY12
  - Omaha signal terminated May 15, 2013
  - Omaha site users have been redirected to:
    - Clarke, 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
  - Full funding received; execution in progress
- 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
  - Hiring action completed early CY13
  - Support DOT Engineering needs for NDGPS program management and DOT Spectrum management

## Analysis - Future NDGPS Investment Decisions

- Identify and assess alternatives
  - Technical assessments of impacts of alternatives
  - Cost assessments of alternatives/use cases
    - Requires site-by-site assessment as well as systemic
    - Need to include costs for various scenarios:
      - Continuation/partial continuation/phased continuation
      - Partial/staged decommissioning – by site/use cases
      - Transfer to other parties
      - Hybrid alternatives
    - Ongoing O&M; environmental assessment and remediation; deconstruction; cost/benefit assessments
- Decision timeline: NET Summer 2014
  - FRN: Support FY16 budget request (implement NET FY16)
    - Existing O&M budgets (USCG and DOT) cannot support deconstruction and site remediation, especially if continuing service
  - Support planning/decision processes within USCG and USDOT



## Continuing Responsibilities

- Uninterrupted NDGPS service to users as currently provided
  - Routine operations and maintenance of 85 NDGPS sites (49 USCG/Maritime, 29 DOT/Inland sites, 7 ACOE).
  - Watchstanding, troubleshooting, systems support engineering, systems analysis and reporting
- Public/user community information/involvement in decision processes and Next Steps
- Continuation of DOT site recapitalization
  - Full funding received and work in progress
  - Sets long-term low-cost O&M baseline, 15 year service life
  - Sets a single “plug and play” configuration across USCG and DOT sites for reduced outyear O&M costs
  - Enables all possible alternatives/use cases for decision





## For more info, see the following presentations

- **Status and Future of the NDGPS Program**
  - U.S. States and Local Government Session
  - Surveying, Mapping, and Geosciences Session

# Questions?

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