### **National Geodetic Survey Update**

## National Spatial Reference System Modernization and Coastal Mapping Activities

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Hydrographic Services Review Panel Virtual Meeting April 28, 2020

# National Spatial Reference System (NSRS) Modernization Update

Operational, workforce, and other issues have arisen and compounded, causing NGS to re-evaluate whether a successful roll-out by 2022 is possible.

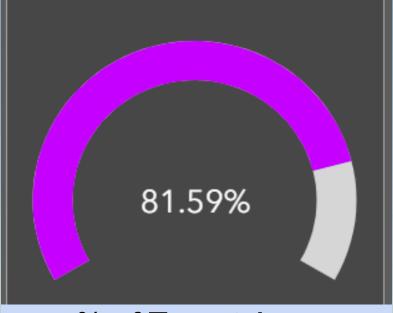
To get the latest news on NSRS modernization and track our progress, subscribe to NGS News or visit our "New Datums" web pages.

### **NSRS Modernization Significant Accomplishments**

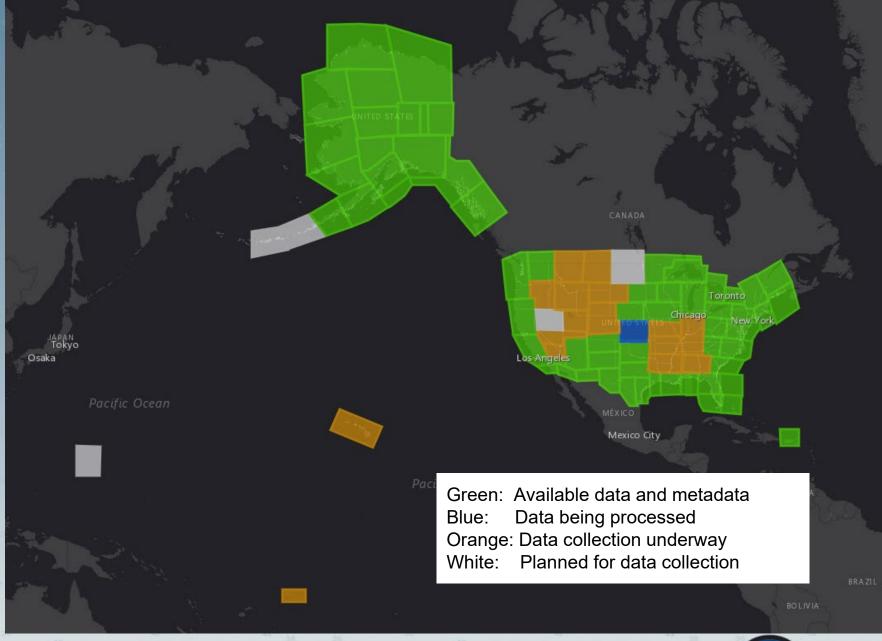
- Completed evaluation of Geoid Slope Validation Survey (GSVS) 2017
   1 cm differential geoid accuracy is achievable in coastal regions,
   2 cm in the Great Plains, and 3-5 cm in the Rocky Mountains
- Completed comprehensive review and re-prioritization of projects
- Integrated VERTCON 3.0 into NGS Coordinate Conversion and Transformation Tool (NCAT)

### **GRAV-D Update**

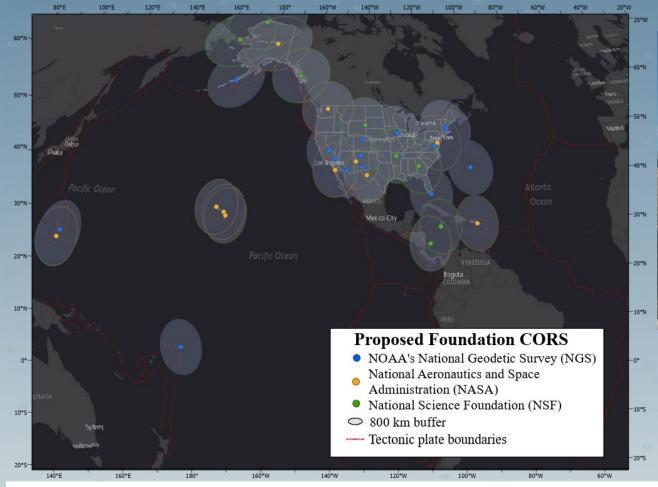
#### FY20 GPRA Goal is 87%



% of Target Area Collected as of March 10, 2020



### The NOAA Foundation CORS Network (NFCN)





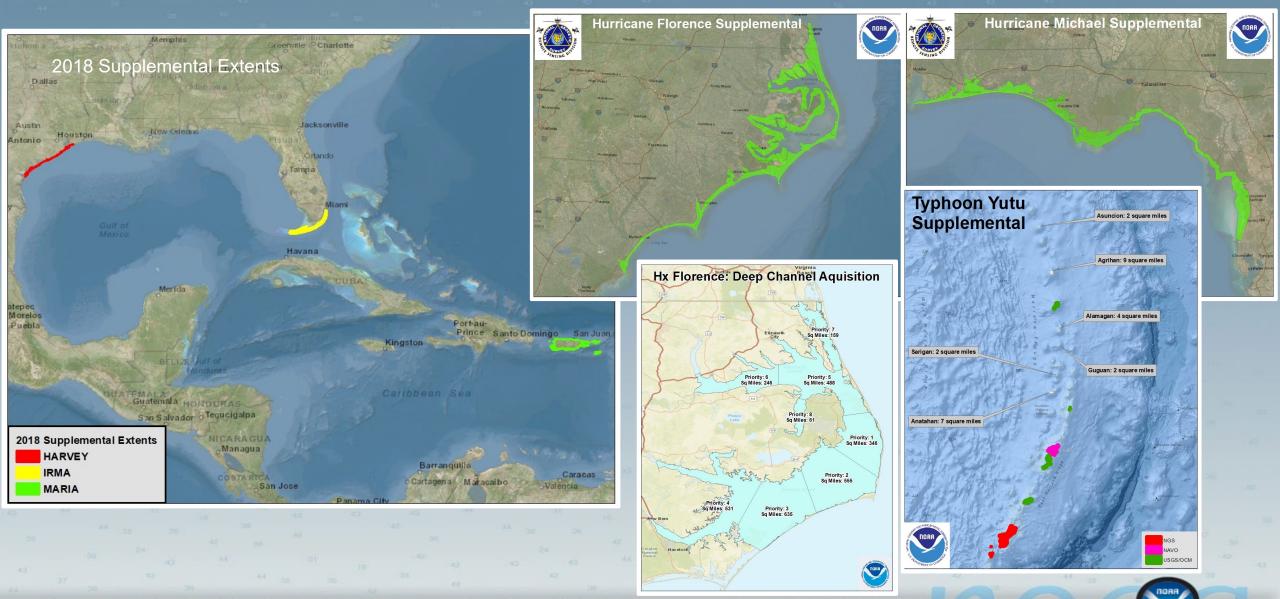
Station Distribution: 26 in North America 4 in the Pacific, 3 in the Caribbean 3 in the Marianas

A set of federally-operated, high quality, highly reliable stations with the longevity to guarantee citizens' access to official National Spatial Reference System (NSRS) positions and support international positioning consistency efforts.

#### Ongoing Phases of Foundation CORS

- 1. Incorporate partner stations
  Existing NASA and NSF stations
  brought into the NFCN [NASA
  Agreement signed 12/18/2019.
  Discussions ongoing with NSF.]
- 2. Upgrade existing NGS CORSs
  Upgrades include fully-GNSS
  ("All in Sky") capable equipment,
  RINEX3 support, and
  submission to IGS.
- 3. Construct ~9 new stations
  These NGS-owned stations will
  be co-located at sites with
  existing space geodetic
  techniques

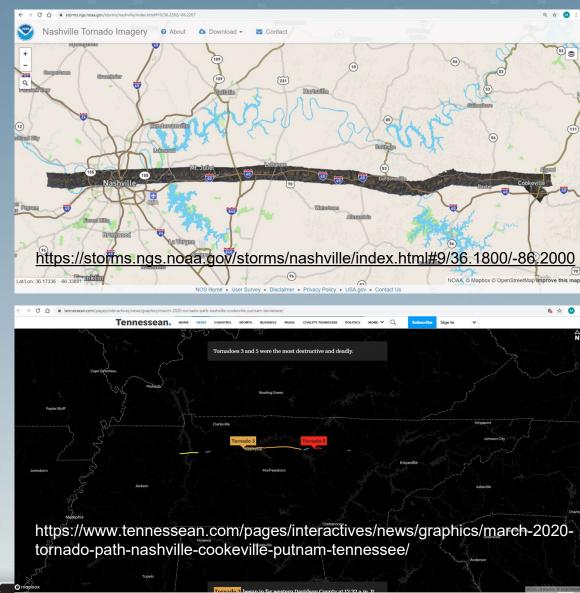
### Coastal Mapping: Hurricane Supplemental



### **Emergency Response - Tennessee Tornadoes**



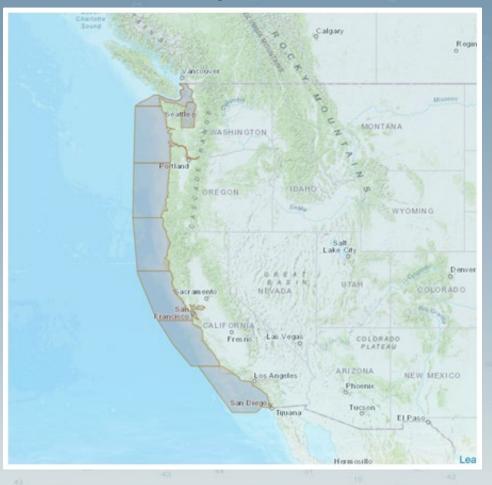




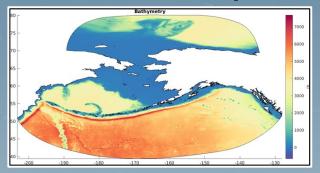
HYDROGRAPHIC SERVICE

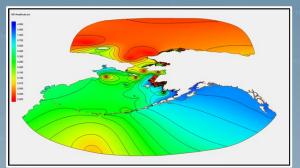
### **VDatum Update**

### West Coast Regional Model Update:



#### **AK Exploratory Model Run**







### Strategic Human Resources Plan (SHRP)

- Companion document to the NGS Strategic Plan 2019-2023
- The SHRP includes:
  - Strategic direction
  - Current workforce/future Workforce
  - Gap analysis
  - Succession planning and career development
  - Workforce strategies (goals/objectives)
  - Implementation, monitoring, evaluation