

TRB Spring Marine Board Meeting NOAA Update

May 24, 2018

Post Rent Post Support

- A new <u>Physical</u>
 Oceanographic Real-<u>Time System (PORTS®)</u>
 installation was dedicated in Miami last month
- Comprised of three offshore buoy-mounted <u>current</u> <u>meters</u> that will enhance navigation safety for the Miami seaport.



The Coastal Mapping Program

A congressional mandate to conduct remote sensing surveys of coastal regions of the United States and its possessions for demarcating the nation's legal coastline.

Goals:

- Provide the Nation With Accurate, Consistent, Up-to-Date National Shoreline
- Acquire Nearshore Elevation Data

Sources:

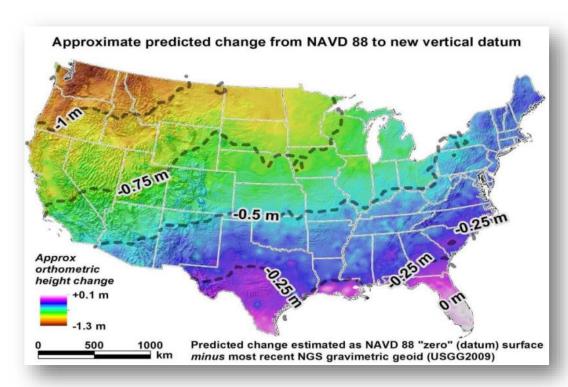
- Lidar
- Digital Cameras
- High Resolution Satellites



The Coastal Mapping Program

How will the new datums affect the US?

- The new geometric datum will change latitude, longitude, and ellipsoid height by between 1 and 2 meters.
- The new vertical (geopotential) datum will change heights on average 50 centimeters (20"), with a 1-meter (39") tilt towards the Pacific Northwest.



Precision Navigation

The ability of a vessel to safely and efficiently navigate and operate in close proximity to the seafloor, narrow channels, and other hazards.



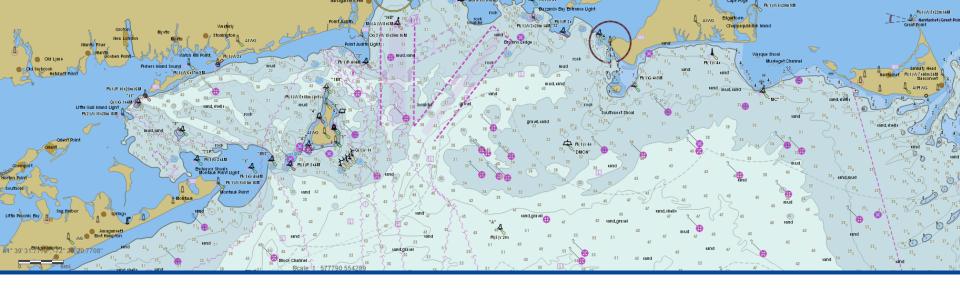
Precision Navigation

- Enable 24x7 Port Operations
- Increase the efficient flow of marine commerce
- Increase the safety of that maritime commerce
 - Decrease collisions
 - Decrease groundings
 - Decrease allisions (collisions with bridges/other fixed objects)
- Protect the environment from the damaging effects of marine catastrophes.
- Improve community resilience

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Clearance
Soundings
Nearshore
facilities
Levels Dynamic Tidal
Ships foreCast benc
Ships foreCast benc
Offshore gap Water Air Swell
density wind Depth visibility Draft
Weather Sensors
Shore realtine Radar
Waves Underkeel Near
precipitation Digital
features
Shoreline
Currents
Contours
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Budget Information

- \$40 million appropriated through a supplemental for mapping, charting, and geodesy services for expenses related to the consequences of Hurricanes Harvey, Irma, and Maria.
- Funded activities include, for the impacted area:
 - Hydrographic and shoreline data collection
 - Vdatum modeling
 - Chart rescheming (e.g., building larger scale charts) and updates
 - Development of coastal digital elevation models (DEMs)
- Funded operations will begin this summer (2018) and continue through 2022.



Questions?

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