Advance comments from Mar 7, 2022:

- 1) From: Mark Luther, Professor, University of South Florida College of Marine Science Can Infrastructure bill funds be used to expand/fund NOAA PORTS operations/maintenance?
- 2) From: Charlene Sylvester, Research Physical Scientist, USACE
 Hoping to learn that the data licensing will not hamper Federal coordination efforts.
- 3) From: Jason Sjolander, Product Development Manager Maritime, East View Geospatial Please make the NOAA Custom Chart tool export extents adhere/be able to accept the chart equivalent extents.
- 4) From: Houssem Sadki, TTSM, Hydrographic Data Manager and Survey Party Chief, Dakar (Improve) Webservices and APIs.
- 5) From: Evan Martzial, VP Business Development, Terradepth Make data more accessible to more people.
- 6) From: Bob Moshiri, Business Development Manager, Johnson Outdoors More near shore bathymetric surveys for safety of navigation and environment (recreational anglers driving direct to hotspots).
- 7) From: John Schneider, Marine Operations Supervisor, Marathon Petroleum Keep improving electronic charts for use with EDCIS systems.
- 8) From: Matt Holland, Sales Manager Americas, XOCEAN

 Does NOAA have targets to increase the use of USVs for data collection to improve safety and lower environmental impact?

Advance comments from Mar 9, 2022:

- 9) From: Paul Devine, Technical Sales Manager, Teledyne I am interested in how we can better facilitate the collection of oceanographic and hydrographic data on autonomous platforms.
- 10) From: Praveen Vamadevan, Proposal Manager, Fugro Fugro can provide reliable Geo-data effectively and to the highest standards, contributing to safe navigation & development.

Mar 9, 2022 Public Comments during the webinar:

11) From: Denis Hains, h2i.ca

COMMENT - Thank you for great opening remarks by Assistant Administrator for NOS-NOAA N.LeBoeuf; and RDML Evans. It is great to see that all Vessels class beside class B are all Charting & Surveying as Secondary Mission. And the same for Airborne and uncrewed platforms. This is a great plan.

QUESTION 1- for Randall TeBeest - Acknowledging that these recapitalization assets are first and foremost for the US priorities; to what extent are you open to share your plans and resources with neighbor countries where US share an international boundary with, including the Arctic and the Great Lakes?

QUESTION 2- What about Satellite-Based data platforms are they part of the plan or on a separate plan?

12) From: Denis Hains, h2i.ca

For the information of all the HSRP participants - Thank you to Lynne Mersfelder-Lewis, Dr. Qassim Abdullah, Ed Saade and Julie Thomas for a Note on HSRP published in the Vol. 26 of the International Hydrographic Review last November 2021. The note is at: https://ihr.iho.int/articles/a-commitment-to-engage-and-involve-stakeholders-the-experience-of-the-united-states-of-americas-hydrographic-services-review-panel-federal-advisory-committee/

13) From: Briana Sullivan, UNH CCOM

A question for Adm. Evans...with the focus on being data-centric (especially with the great progress being made with the s-100 products) it seems appropriate to restructure the nautical publications branch to follow suit. Are there any plans to restructure it? I'm talking specifically to convert book managers for the 9 books of the coast pilot into data managers for expertise in specific data layers that supplement the chart.

14) From: Jon Dasler, DEA

Exciting use of the color laser scan data on the Mississippi River. Great job!

15) From: Denis Hains

QUESTION to consider for the Public Comment period for Matt Wilson - By external data, do you mean including Crowdsourced Bathymetry and Trusted Crowdsourced Bathymetry Nodes? Is Data Licensing implemented to cover potential liabilities or for data quality assurance?

16) From: Guy Noll

Per my comments - https://www.go-fair.org/fair-principles and
https://livingatlas.arcgis.com/esri_ngda_datasets/#:~:text=Today%2C%20Esri%20is%20
https://www.go-fair.org/fair-principles and
https://www.go-fair.org/fair-principles and
<a href="mailto:making%20this%20Collection%20is%20geospatial,in%20ArcGIS%20Online%20called%20Cal

17) From: Starla Robinson

In addition to bathymetry, surveys often have ancillary image data of features and substrates. Is there any value in making those images more discoverable for the public? (I believe this is an issue of the cost of data storage and maintenance, but perhaps asking the question to the larger community could generate an opportunity.)

18) From: Michael Michalski

Per Dave Maune comment on needing to expand VDatum in Alaska. Currently the VDatum program is working to obtain additional water level datums and ties to the geodetics to be able to fill the data gaps to enhance and expand the grid transformations.

19) From: Starla Robinson

Comment for Deanne Hargrave and Kurt Schewhr - In regards to augmented reality and VR - I like to visit my hydrographic projects in VR Google Earth as I plan them. I imagine the value would apply to any planner - including wind farms. 3-D evaluation can really add to my understanding of an area.

Mar 10, 2022 Public Comments:

- 1) From: Joyce Miller
 - 1. In the Public Private Partnerships draft, could the Panel provide some specific examples or recommendations for PPP? Either specific partnerships that might be beneficial or mechanisms to facilitate PPP?
 - 2. Does the NSRS update paper accurately reflect the time frame in which the updates will occur? It was originally 2022, but Juliana Blackwell's presentation indicated much later than that.
- From: Andrew McGowan, Regional Geospatial Coordinator, Lynker NOAA OCM Publicly shared, processed BAG's or other end product surfaces in one location for all NOAA and NOAA Grantee survey work.
- From: Alberto Costa Neves, Hydrographic Science Program Coordinator, University of Southern Mississippi Continue engaging with the broad stakeholders as you currently do.
- 4) From: Joyce Miller Suggestion: Supply Chain would be a very timely topic in Hawaii, which has a 2-week food supply on island if its ports were impacted by a tsunami or hurricane.
- 5) From: Denis Hains
 GENERAL COMMENT: I like the term «Blue Topo», however I would suggest
 considering to use the term «hydrospatial». Hydrospatial includes the Blue Topo as it is

all about the Blue of our Blue Planet and its contiguous zones.... It does «not» replace hydrography it is about ocean spatio temporal mapping, exploration and characterization of the blue... including coastal and flooding zones. For more info - visit and read the info of the Hydrospatial StoryMap at: https://arcg.is/19fiab

6) From: Paul Devine

What about vessel "squat" in opposing currents - predictions?

7) From: Jon Dasler

Nice presentation by Sean Duffy. To clarify, The MuST system is being designed by The University of Washington Applied Physics Lab through a Department of Defense grant to image buried ordnance. David Evans and Associates, Inc. is providing operational support and consultation. The image of the aircraft was a 3-D image with portions of the aircraft below the seafloor.

8) From: Jon Dasler

Nice presentations by Julia, Sean, Chris, Duffy, Jeff and Captain Amos.

To the point on bridge inconsistencies:

Based on some recent experiences, it is my understanding that many US bridges with critical clearances have published heights that may be inaccurate, unverified, relative to outdated datums, or based on original design drawings. Pilots are facing a number of issues regarding bridge heights on the Columbia and Mississippi rivers. On the Columbia there is a push for cruise ships to procure services from the shipyard in Portland that sports the largest floating dry dock on the west coast. In addition, MSC is intending to send larger container ships to Portland. These transits require pre transit measurement of air draft, laser scanning of the bridge for accurate air draft over a given span width (not a point measurement) and tide coordinated passages to clear bridges on the Columbia River. Pilots are requiring real-time monitoring when clearance is forecast at less than 10-feet. There are also issues with broken links in the line of authority of official bridge heights when there is not a precise survey by the owner where owners are responsible for providing clearance but there are no set guidelines. Recent discussions with a department of transportation on bridge clearance issues included the statement that they would not fund a survey but if done by a professional survey firm they would accept the survey and submit it to the USCG, that could then submit it to NOAA for charting.

Questions to Admiral Evans:

Has NOAA considered a national effort to survey bridge clearances in areas charted by NOAA so charts can be updated with accurate clearance heights?

Is there an on-going effort started by Admiral Smith and Admiral Brennan to harmonize river gradient datums and the interface with MLLW between USACE and NOAA? It is

still an issue on the Mississippi and Columbia rivers.

To Julia Powel or Admiral Evans:

Has NOAA evaluated new methods in addition to or in concert with S-100 to portray bridge clearances in a more detailed manner on ENCs, rather than publishing a single height per bridge or bridge span?

9) From: Andrew MacInnes, am@moonbeamsail.com

- Q. Does NOAA incorporate macroeconomic factors and global trade in the US economy when considering shipping and navigational investments? For example, many ports talk about the growing size of ships visiting. NOAA should consider for example:
- (1) Oil imports, auto imports from Europe, and container trade with Asia/China may not increase at the same rate as they have over the past thirty years,
- (2) Some cities and metropolitan areas are no longer suited to be logistics centers for various reasons. Concentrating large incoming ships into several ports may make economic sense providing scale to some ports while allowing others to be repurposed. Not every port city needs to modify its entire local infrastructure (collectively, nautical ports, local roads and highways, rail, and airports) to accommodate the world's largest ships (e.g., New York/New Jersey).

How can NOAA encourage the relocation of maritime assets around the country?

10) From: Denis Hains

GENERAL COMMENT - VDatums - If it is not already in place, it is suggested to consider having a formal multidisciplinary team of professionals including: coastal zone managers; environmentalists; coastal engineers; power lines engineers; hydrologists; hydrographers and other professionals in US and in neighboring countries; led by geodesists or facilitator, to address the needs and requirements for an Integrated vertical datums separation and Epoch model to the reference ellipsoid in the hydrospatial Domain. All this in communication with all stakeholders such as: Marine Pilots and Insurance companies.

11) From: Jon Dasler

Admiral Evans: Is NOAA pursuing any National Infrastructure funding for bridges to support air gap sensor installation and accurate bridge surveys? Another option may be the Richard Brennan cooperative funding with State transportation departments.

12) From: Jon Dasler

The discrepancies in datums between USACE and NOAA is still a problem. That was not a question.

13) From: Ashley Chappell, IOCM, OCS NOS/NOAA Re the Public-Private Partnership (PPP) paper, can Dave Maune speak to how USGS and contractors negotiated spec pricing?

14) From: Chrissy Hayes In the PPP issue paper, please also include Hawaii as well (as Alaska)!

15) From: Alberto Costa Neves

I am very glad to see the support from HSRP members to paper chart, an all times relevant tool for sailors. I believe the message of ending paper chart has been badly expressed. It is important to leave the door open for industry and interested sailors to still be able to obtain/produce a paper chart, based on the most updated database.

16) From: Pamela Chelgren-Koterba

I heartily endorse the other speakers comments about NOAA assisting POD Vendors with (~3) templates to use that will satisfy the issues that Ann/Anne raised.

17) From: Andrew MacInnes

Professional maritime is in decline. The future is recreational boaters in small vessels. Paper charts with better near-shore details will encourage people to enjoy the waterways.