

NOAA leveraging world leading, US based technologies and innovations for mapping and safe navigation

The big question is the role of the Corps of Engineers. If NOAA are planning on using CoE data to improve navigational safety, it absolutely follows that all of the CoE districts must provide products to a single national standard, that there needs to be a QC process, and that there needs to be an efficient distribution process. Doing so would probably require legislation

It might be more cost-effective to hire local contractors to survey the 30 most important ports once a year using a USV or Port Authority vessel.

Prioritization of work – for example mapping EEZ vs clearing backlog

There doesn't appear to be any mention of cybersecurity. The federal government is constantly putting out notices about the importance of building up the nation's cybersecurity protections and toolbox. Since NOAA OCS is the “business” of dissemination of digital electronic information that it would make sense to identify the development and implementation of effective cybersecurity measures as a goal for its 5-year plan.

Related, Page 4, Goal 1. The introductory summary talks about developing an "integrated cloud-based dissemination system." Developing IT infrastructure to support "cloud-based computing" is also listed as a goal in 3.4.1. Given the cybersecurity and resiliency concerns with cloud-based data sources, are we sure that this is the best or most appropriate method for a government entity to disseminate critical safety information? Maybe we should have some discussion about this in NOLA.

Page 4, Goal 1. The introductory summary talks about a complete redesign of the current NOS chart suite. Is that the same thing as the "second-generation electronic navigational chart (ENC) suite" in 1.1 and the "planned end-state ENC suite" in 1.1.1? Maybe more consistent terminology would be clearer? Also, is the release of 50% of nation's ENC suite in the new redesigned version by 2024 overly optimistic?

Page 4, Goal 2: Map U.S. waters to modern standards: 2.1.1 I would add the US Army Corps of Engineers to the list of agencies that provide ocean mapping. Certainly through JACBTCX, the Corps has funded mapping. We have also received direct funding to Scripps for mapping from the Corps.

Page 5, Goal 2. In 2.3, it's a little disconcerting to see that there is currently a 50-year backlog in correcting the 10,000 chart discrepancies. That said, most are relatively insignificant and of little risk to safe navigation, and there is a pretty system for prioritizing discrepancies. Is reducing the backlog to 10 years an overly modest as a goal? How many of the discrepancies require a re-survey and how many can be corrected through "cartographic analysis" as mentioned in 2.3? For the latter, would the corrections be picked up anyway in the planned chart "redesign" process? With regard to navigation safety, should correcting current chart discrepancies should be a more immediate concern than mapping new areas of the EEZ?

## General Edits

### **Page 1**

Seems like the sentences in the 2nd to last paragraph starting "Coast Survey leads a coalition of U.S. federal...." and ending "geospatial, and technical expertise" should go up above in the first paragraph after "...by responding to maritime emergencies".

If we are going with the convention that "data" are plural, then 4th paragraph, typo:

"Ensuring the data acquired for navigation serve the broadest..."

The last sentence of the 2nd to the last paragraph would have to be changed a bit...but I think overall the page would flow better.

### **Page 2**

UNIQUE VALUE PROPOSITION (page 2):

Same thing if data is plural: "4.....Our extensive data are a unique..."

### **Page 3**

"Mission" statement doesn't read very well. Suggest that the "s" in "keeps" and "protects" be deleted.

"Vision" statement doesn't read very well. In addition, it's not clear what "waters safer" would mean. Suggest that the sentence be amended to read "The nation's economy is stronger, vessel navigation is safer, and coasts are more resilient."

### **Page 4**

It might be worthwhile simply to delete "cloud-based" from the introductory summary and just use "integrated dissemination system" as in 1.3.1.

### **Page 5**

Goal 2. The references to "double the rate" and "increase coverage from 42% to 52%" in 2.1 and "increasing the rate of mapping to 2% of all U.S. waters annually" in 2.1.1 are a little confusing. Suggest replacing "double" in 2.1 with "increase".

Goal 2. For the proposed allocation of survey efforts listed in the shaded box at the bottom of the page, would it be useful to indicate the current allocations for comparison purposes?