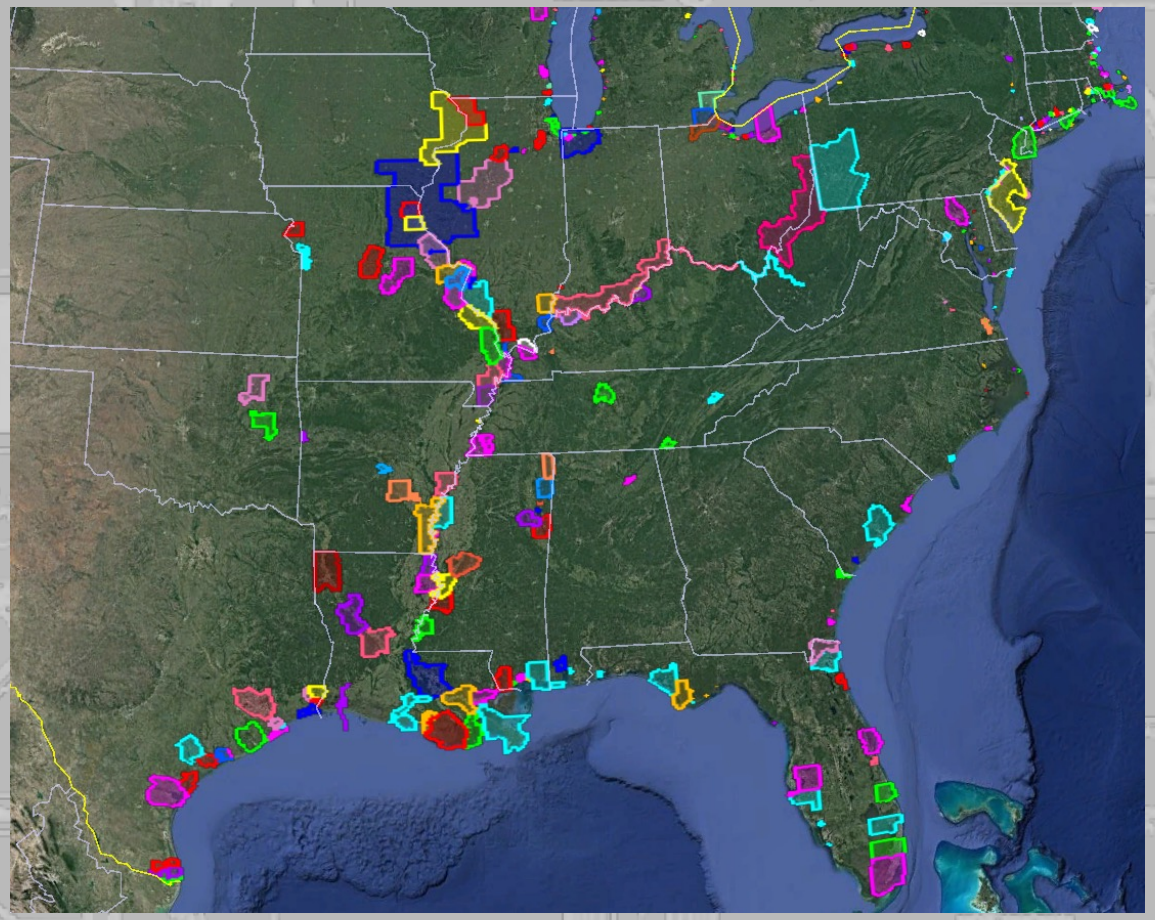
STATISTICAL PORT BOUNDARY PROJECT

Amy Tujague – Project Manager

Waterborne Commerce Statistics Center
Navigation and Civil Works Decision Support Center
Institute for Water Resources
Date: 02 December 2021



US Army Corps of Engineers®

PROJECT DESCRIPTION

Waterborne Commerce Statistics Center (WCSC) is currently reviewing and updating, where necessary, its statistical port boundaries, in conjunction with the U.S. Department of Transportation's Bureau of Transportation Statistics and Maritime Administration, to:

1) improve interoperability of data for geographic analysis
2) ensure port polygons and statistics reflect legislation or municipal limits – *per Engineer Regulation 1130-2-520*
3) reflect feedback from each port.

This effort will support the *Geospatial Data Act* of 2018 and the *Foundations for Evidence-Based Policymaking Act* of 2019, specifically title II—the *OPEN Government Data Act*. P.L. 115-254, P.L. 115-435.

INSTITUTE FOR WATER RESOURCES

1

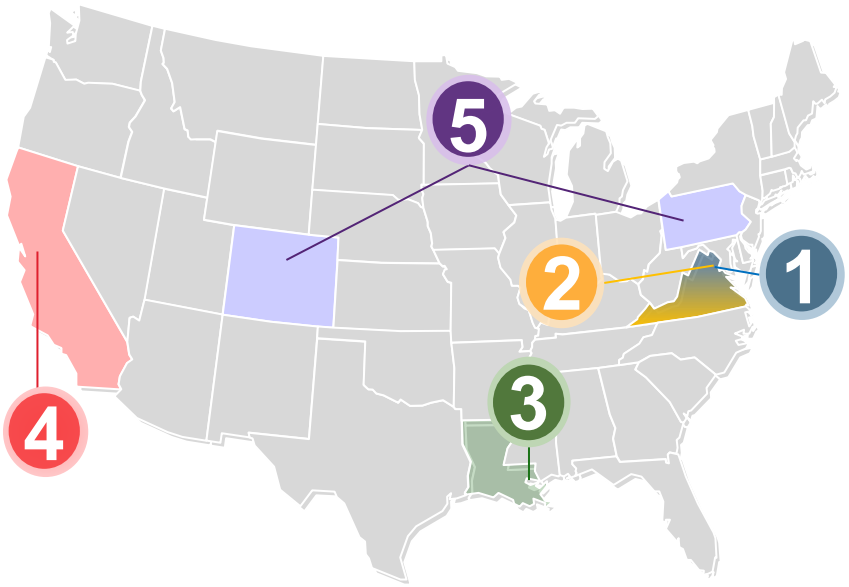
Institute for Water Resources National Capital Region (IWR-NCR)
Alexandria, VA

- Forward-looking analysis, methodologies, and tools
- Analyses of emerging water resources trends and issues
- Develops training
- Fosters partnerships
- National data management
- Offices in 5 locations

2

Navigation & Civil Works Decision Support Center (NDC)
Alexandria, VA

- Direct data support to navigation, hydropower, recreation, homeland security, and emergency and readiness functions
- Manages Civil Works Business Intelligence (CWBI)
- Responsible for Federal water transportation statistical programs
- Manages infrastructure utilization and performance information
- Collects and disseminates data across:
  - Lock Performance Monitoring System
  - Dredging Information System
  - Notices to Navigation Interests
- Oversees the Waterborne Commerce Statistics Center (WCSC)



3

Waterborne Commerce Statistics Center (WCSC)
New Orleans, LA

- Collects, processes, compiles, and publishes waterborne commerce statistical data
- Documents and publishes:
  - Commercial port infrastructure served by federal channels
  - U.S. vessels available for operation in waterborne commerce as well as their principal trades and zones of operations.

4

Hydrologic Engineering Center (HEC)
Davis, CA

- Supports water resources management
- Increases technical capability in hydrologic engineering and water resources planning
- Develops software systems and analysis procedures used worldwide
- Trains software users

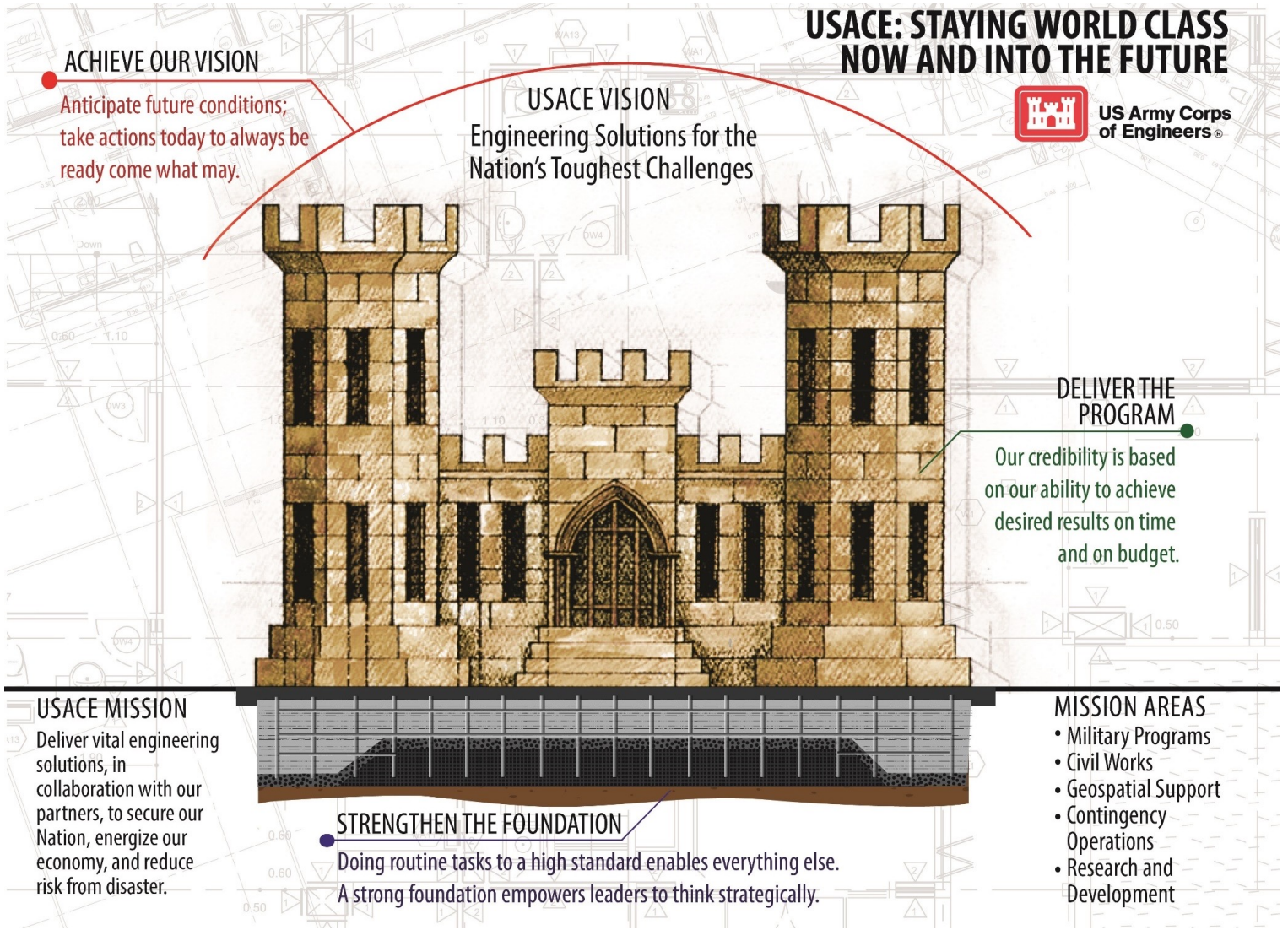
5

Risk Management Center (RMC)
Golden, CO;
Pittsburgh, PA

- Independent advisor to leadership
- Assesses USACE dam and levee systems' risk
- Develops dam and levee safety policies, methods, and tools
- Supports consistent risk assessment processes

WHY ARE WE DOING THIS?

1. Revolutionize Civil Works
2. Data Modernization (per the Open Data Act)
3. Gain analysis/reporting efficiencies
4. Further integrate navigation business line with other USACE programs



ENGINEER PAMPHLET 1130-2-520

- The Waterborne Commerce Statistics Center mission is to collect, process, distribute, and archive vessel trip and cargo data. These statistics are used to analyze the feasibility of new projects and to set priorities for new investment, and for the operation, rehabilitation and maintenance of existing projects.

- Performance of this work is in accordance with the Rivers and Harbors Appropriation Act of 1922.

- EP 1130-2-520 defines a port area as:

  1) **Port limits defined by legislative enactments of state, county, or city governments.**

  2) **The corporate limits of a municipality.**

MOVING FROM THE PAST TO THE FUTURE

Early 1990s – WCSC started identifying the top 150 ports of the United States by tonnage. The majority of these "ports" were deep draft corps projects. Ports statistics were developed via labeling of docks with codes with which the docks were associated.

1996 – EP 1130-2-250 Section 5-10d states:

Any change to the definition of a port area or the establishment of a new port area must meet one of the following criteria:

(1) Port limits defined by legislative enactments of state, county, or city governments.
(2) The corporate limits of a municipality

2019 – Navigation and Civil Works Decision Support Center initiates review of all ports to ensure they are geographically defined as described in the ER, along with modernizing the system to support geographic information system analyses. Ports statistics will now be developed using geospatial analyses and queries, moving from traditional labeling of docks with port codes.

PROJECT TEAM

Project Sponsors
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PM
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Alexandra Schafer (NDC)*
Matt Chambers (BTS)

Technical Experts (Dock Reconciliation)
Bob Ray (NDC)*
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*Lead

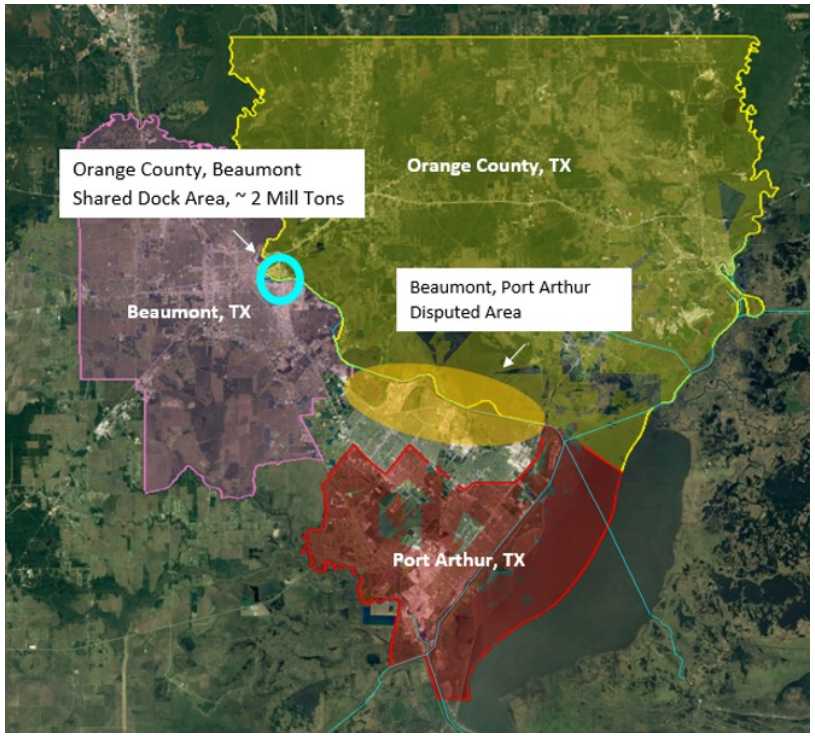
EVOLUTION OF A PORT AREA – SAN JUAN, PR

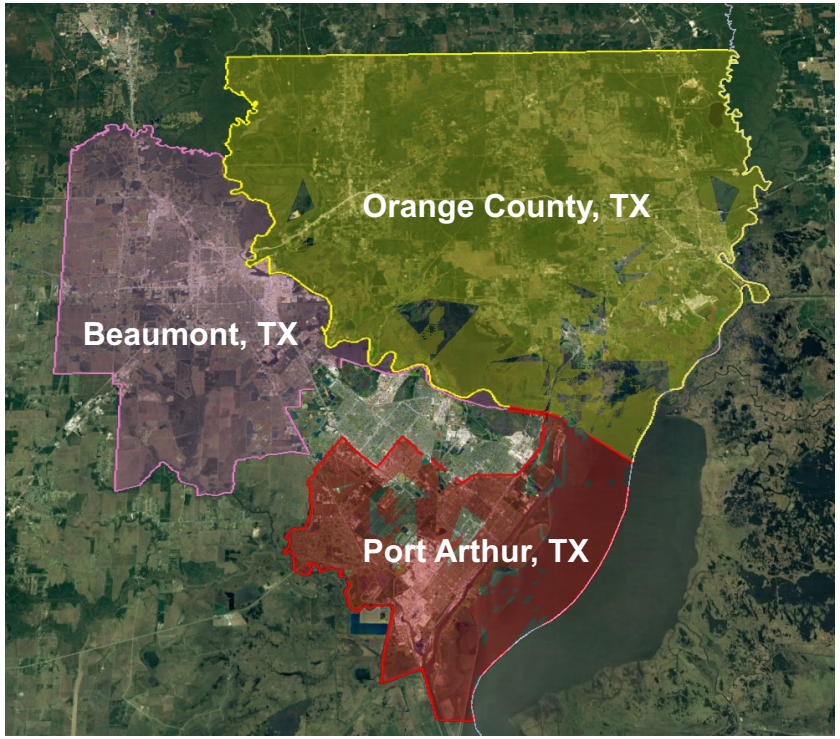
- Previously the geographical limits port of San Juan, PR was the Corps project of San Juan Harbor
- Legislation defines this port as the Municipal limits of San Juan
- Corps project remains the same, however, some docks are now credited correctly to the port of Guaynabo, PR

EVOLUTION OF A PORT AREA – SOUTH JERSEY PORT CORPORATION

- Newly discovered legislation found that the port of South Jersey Port Corporation encompassed three previously ranked ports.
- Trenton, NJ had a Corps project in the area, but was not a specific deep draft project. No legislation for a port was discovered and municipality included zero tonnages. Removed as a port from the system.
- Paulsboro, NJ was a deep draft project. No legislation for the port, however, significant tonnage as a city. Remains to be published port defined as municipality as no port legislation was discovered, however, will no longer be ranked. Corps project will remain the same.
- Camden-Gloucester, NJ is a Corps project and will continue to be published as a Corps project. Will no longer be considered a port and therefore will no longer be ranked. No legislation or municipal definition was found.
- South Jersey Port Corporation will now be ranked.

EVOLUTION OF A PORT AREA – BEAUMONT, ORANGE COUNTY, AND PORT ARTHUR, TX





- Original legislation left large area, traditionally credited to Beaumont, disputed as to which port should or could receive credit for tonnages. New legislation passed put disputed areas into ports that the state of Texas agreed should receive the credit.
- Beaumont, approximately 30% loss in tonnage. Orange County, approximately 160% increase in tonnage. Port Arthur, approximately 20% increase in tonnage.

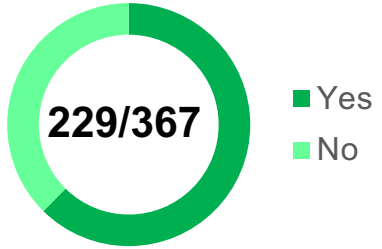
PROJECT STATUS

Purpose: To utilize a Geographic Information System (GIS) to prepare a USACE enterprise-wide statistical port boundary polygon feature class per Engineering Regulation 1130-2-520 and organized in SDSFIE 4.0.2 format.

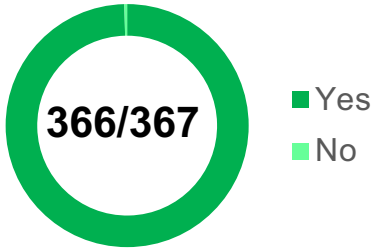
Primary Partners:

- USACE Navigation Data Center
- USACE Waterborne Commerce Statistics Center
- USACE Planning Center of Expertise for Inland Navigation
- DOT Maritime Administration
- DOT Bureau of Transportation Statistics

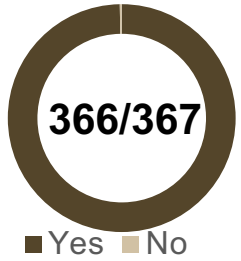
Ports Complete:



Boundaries Reviewed and Prepared



Outreach Complete



Docks Reconciled

- Remaining ports are due to be published for the 2021 data release.
- Scope of project has been reduced to remove ports with zero tonnage and cannot be published. These remain as a possible phase 2 of the project.

BENEFITS TO NAVIGATION INFRASTRUCTURE DATA

- **Dock reconciliation phase shows all docks that do not have a lat/long, all docks that were previously in the port but are no longer located spatially in port, and all docks spatially located in the port but were not previously in the port.**
  - **More than 2000 docks have been researched and fixed with appropriate updated information**
  - **Outreach has allowed more communication with ports regarding location of docks, names of docks, etc.**
  - **Hundred of docks with no previous lat/long have been updated to include appropriate geospatial information.**

- **Transparency to all stakeholders is clear as to the exact geographical limits of a port and all associated docks. This information can be seen in Google Earth and other Geographical Information Systems.**

RESOURCES TO HELP

Port crosswalk available describing differences between legislatively defined port and previous port limits

KML, Shapefile and GeoJSON files can be downloaded in the Port Statistical data set located at:

https://geospatial-usace.opendata.arcgis.com/

THANK YOU!!

QUESTIONS?