



**SOUTH  
CAROLINA  
PORTS**

BARBARA MELVIN, COO

SOUTH CAROLINA PORTS AUTHORITY UPDATE

2021



## MISSION OF THE PORT

South Carolina Ports Authority (SCPA) promotes, develops and facilitates waterborne commerce to meet the current and future needs of its customers, and for the economic benefit of the citizens and businesses of South Carolina. SCPA fulfills this mission by delivering cost competitive facilities and services, collaborating with customers and stakeholders, and sustaining its financial self-sufficiency.



# SOUTH CAROLINA PORTS

## VISION & VALUES

TO BE THE  
PREFERRED PORT  
OF THE TOP 10  
U.S. CONTAINER PORTS





# SOUTH CAROLINA PORTS AUTHORITY

## OVERVIEW

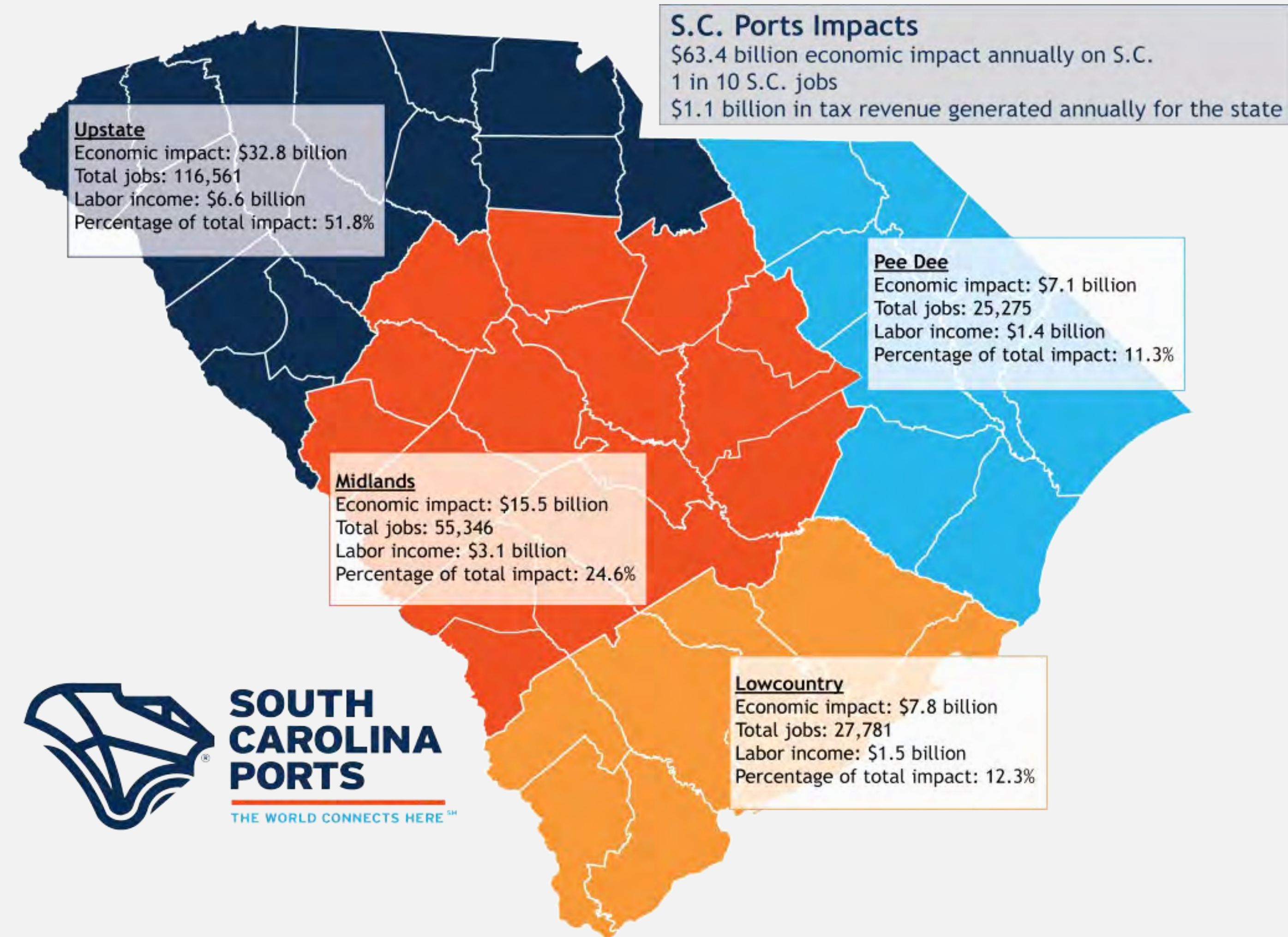


- **State owned and operated port**
- **Citizens of South Carolina are its shareholders**
- **Strong governance model:**
  - 11-person board, 9 appointed by governor, 2 ex-officio by Cabinet Office
  - Review and Oversight Commission of the SC Legislature = 5 Senate/5 House
- **Major economic driver for state of SC and Southeast Region**
- **A long cycle business requiring timely and costly infrastructure**
- **A competitive global business which is SC's face to the world**
- **Organized and managed based on sound business principles**



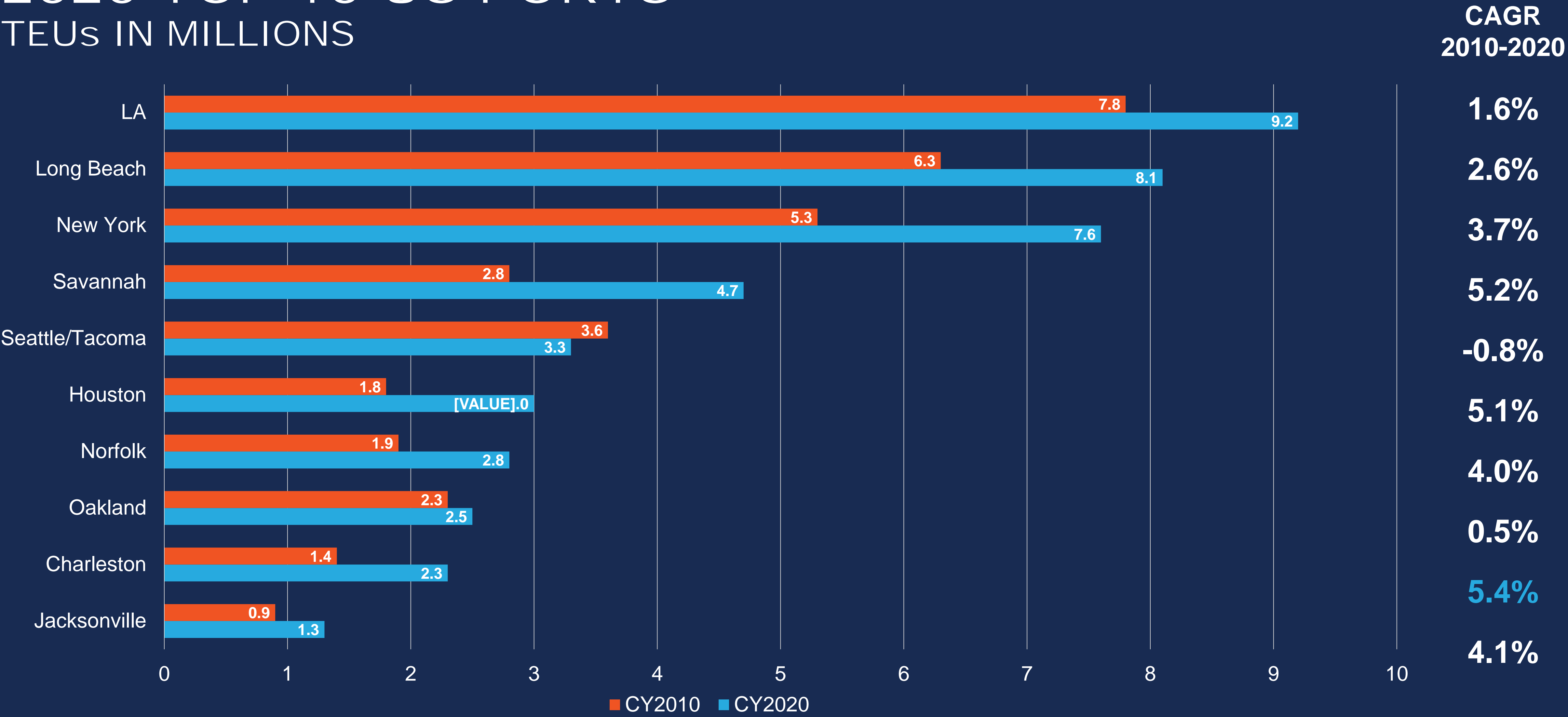
# SC PORTS HAS SIGNIFICANT IMPACT IN SOUTH CAROLINA

- Responsible for 1 in 10 direct and indirect jobs
- Accounts for \$63 billion in economic output
- Most global trade dependent state in the U.S.
- Port volume doubled through doubling of advanced manufacturing
- Ideally suited to play a larger role in retail and e-commerce distribution
- Average port-related wage 35% higher than state per capita income
- SC Ports strategic focus on increasing discretionary rail volumes contributes an additional \$12 billion in economic impact annually for the Southeast Region outside of SC — this increases SCPA's overall economic impact by 19%



# 2020 TOP 10 US PORTS

TEUs IN MILLIONS

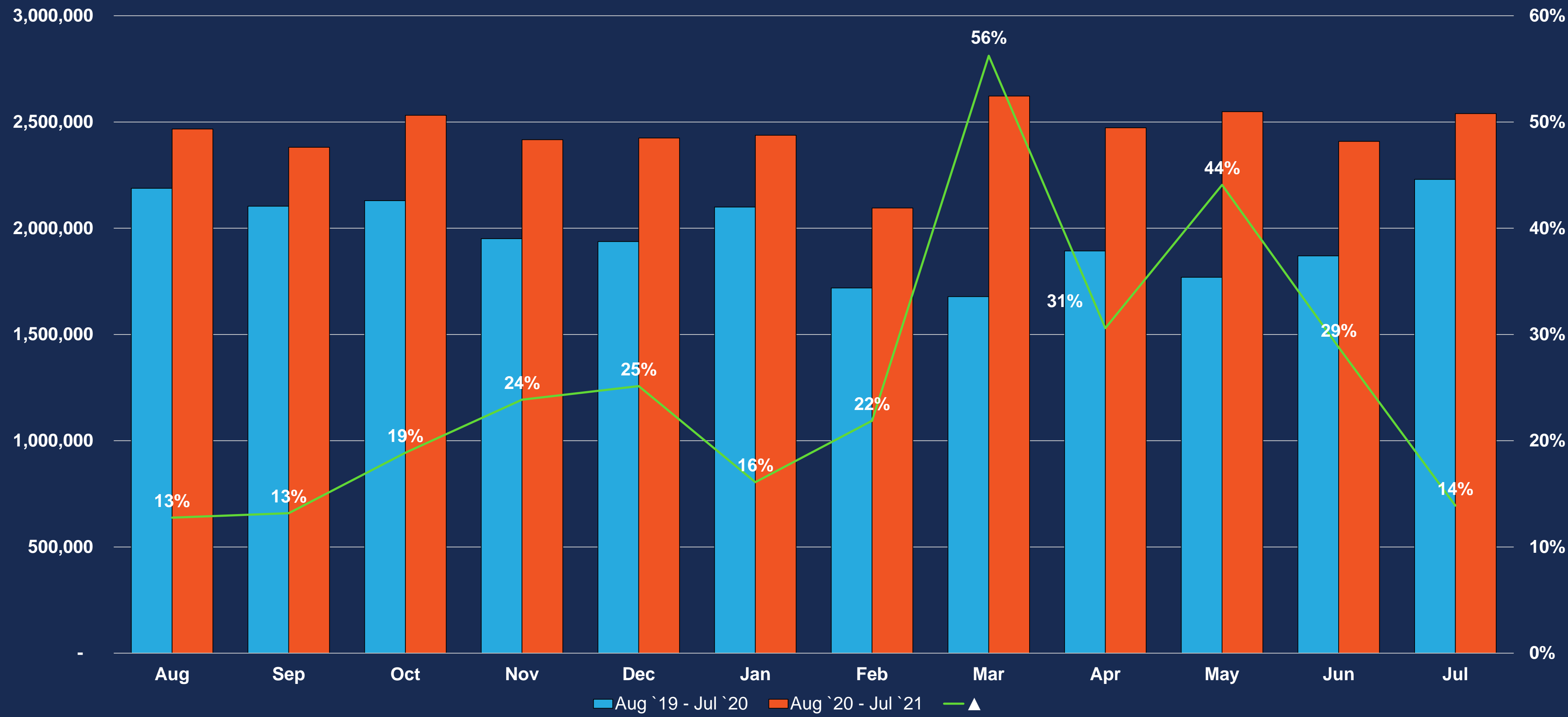


TOP 10 US PORTS HANDLE 80% OF US PORT VOLUME.

Source: AAPA & individual port websites  
2020 Jacksonville reflections FY Oct-Sept



# U.S. IMPORT VOLUME TEU



Source: JOC PIERS / IHS MARKIT



# INNUMERABLE CHALLENGES IN THE U.S. GLOBAL SUPPLY CHAIN



Overall slowdown in velocity

Shortage of 300 million square feet of distribution center capacity

Shortage of container truck drivers / wrong model

Port capacity is very rigid

Ships waiting at anchor at U.S. Ports

Record on terminal container inventories

No end in sight CY2021



# "JUST IN TIME" INFRASTRUCTURE

WANDO  
TERMINAL

LEATHERMAN  
TERMINAL

HARBOR  
DEEPENING

INLAND  
PORTS

NBIF /  
WANDO  
BARGE





# WANDO TERMINAL

## INFRASTRUCTURE IMPROVEMENTS



- Revitalized wharf, toe wall, and buildings
- 15 cranes at 155 feet / 47.2 meters of lift height
- Able to reach a 10<sup>th</sup> tier working over 9 high stacks on the CMA CGM Brazil
- 65 RTGs and 28 empty container handlers = reducing toplifters
- 40 truck gates
- Densifying stacks to reach 2.4 million TEU capacity
- Able to handle 3 x 14,000 TEU simultaneously



# HUGH K. LEATHERMAN TERMINAL

- First greenfield terminal in US since 2009
- Total investment in three phases of \$2 billion
- 5 cranes at 169 feet / 51.5 meters of lift height
- 25 hybrid RTGs from ZPMC
- Dedicated access road to / from I-26
- The gateway to a near dock Navy Base Intermodal Facility (NBIF)
- 2.4 million TEU of capacity at full build out





# NEW BIG SHIP ORDERS



NEW BIG SHIP ORDERS ARE PLENTIFUL FOR DELIVERY BY 2023

**18,000 - 24,000**  
53 SHIPS

**10,000 - 18,000**  
120 SHIPS

**7,500 - 10,000**  
0 SHIPS

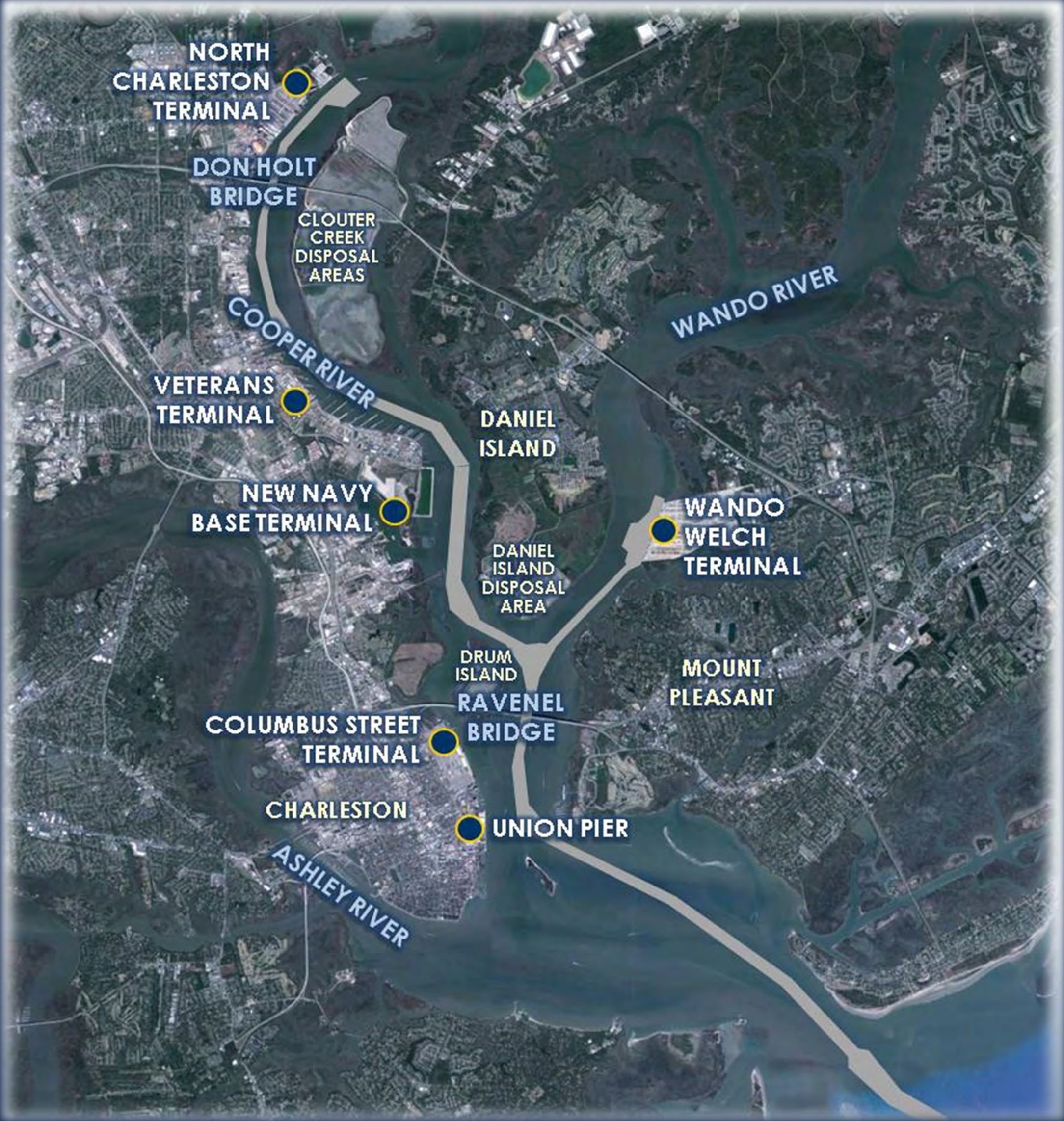
**3,000 or less**  
184 SHIPS



*Most of the 10,000 - 18,000 are 15,000 and above  
– validates our big ship investment thesis –*



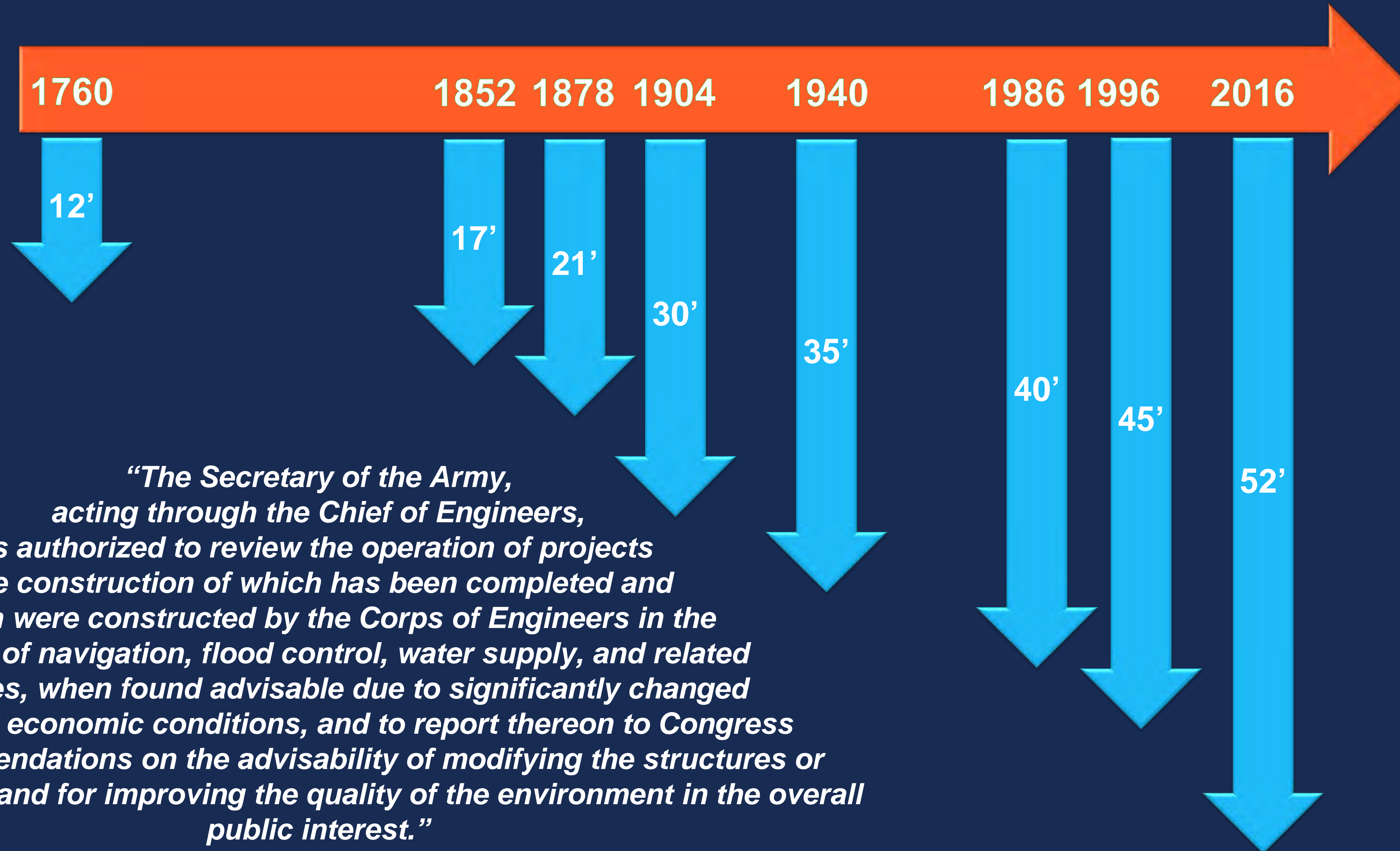
# CHARLESTON HARBOR OVERVIEW



Charleston Harbor Terminal	Container	Roll On Roll Off	Break Bulk
North Charleston	X	X	X
Veterans		X	X
Hugh Leatherman, Sr.	X		
Columbus Street		X	X
Union Pier		X	X
Wando Welch	X		



# CHARLESTON HARBOR DEEPENING LEGISLATIVE AUTHORITY & TIMELINE



– Section 216, Flood Control Act of 1970



# USACE CIVIL WORKS - SMART PLANNING

*“It is absolutely essential that the U.S. Army Corps of Engineers transform its study processes if it is to remain at the forefront of federal agencies the Nation turns to when seeking answers for water resources challenges. The current study processes too often leave our stakeholders and the Nation waiting for critical answers.”*

– Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works

- Started in **2012**
- **Modernize** and **streamline** the project planning process to produce Chief’s Reports faster and at lower cost
- Enhance the **budget development process** through a systems-oriented watershed approach and innovative financing
- Improve **methods of delivery** to produce and deliver critical products and services
- Evaluate the current and required portfolio of water resources projects through a smart **infrastructure strategy**



# CHARLESTON HARBOR “POST 45” DEEPENING PROJECT

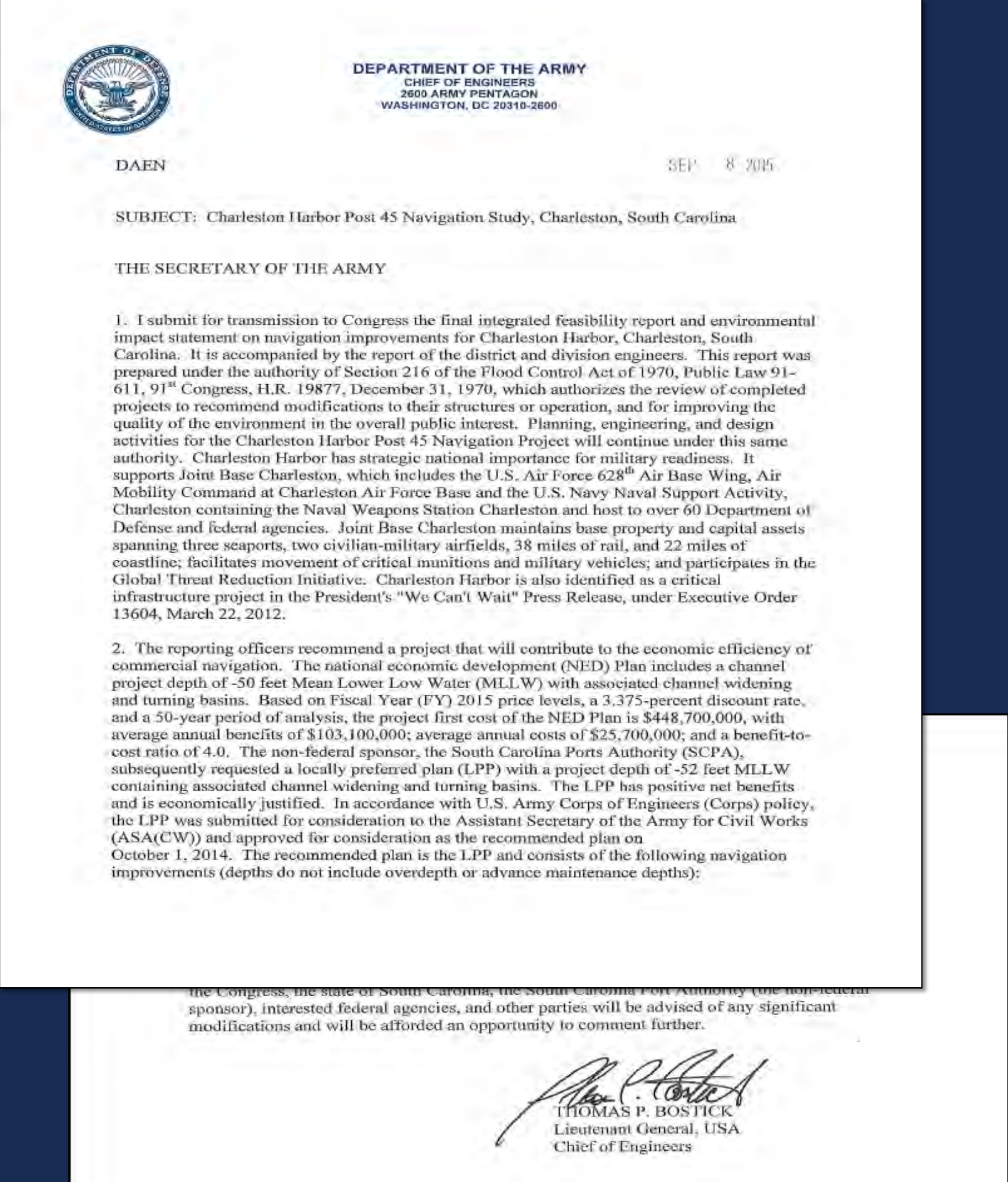
## First USACE project to execute the streamlined Civil Works process

- **Study Cost:** Reduced from an estimate of \$19M to \$11.75M
- **Study Schedule:** Reduced from 8 to 3 yrs
  - 2012 Presidential “We Can’t Wait” Project
- **Project Team Integration/Collaboration:**
  - USACE Charleston District
  - USACE South Atlantic Division,
  - HQ USACE
  - South Carolina Ports Authority
  - State support – Legislative and Agencies





# CHIEF'S REPORT SIGNED SEPTEMBER 2015





# CHARLESTON HARBOR DEEPENING

- Miles of Channel Dredged: Approx. 28 miles
- Dredged Material Removed: Approx. 41 Million Cubic Yards
- Benefit to Cost Ratio: 4.6
- Non-Fed SCPA / State of S.C. Funding: \$333.7 MM
- Federal Funding Appropriated: \$245.9 MM
- *Total Funding Available: \$ 579.7 MM*
- *Awarded Contract Costs to Date: \$ 542.2 MM*
- Contingency: \$28.2 MM
- Funding Over Projected Cost + Contingency: \$8.9 MM





# CHARLESTON HARBOR DEEPENING POST 45 TIMELINE

## MOVING AHEAD!





# ENTRANCE CHANNEL CONSTRUCTION

## CONTRACT 1

**DREDGE TYPE:** Hopper

**PLACEMENT:** ODMDS

**TOTAL LENGTH:** 9.84 Miles

**QUANTITY:** > 6,000,000 cy

**DEPTH:** authorized 54 feet

**CONTRACT VALUE:** \$47.2 Million

**AWARD:** September 2017 (GLD&D)

**AWARD AMOUNT:** \$47 M

**DREDGE COMPLETE:** March 2022

## CONTRACT 2

**DREDGE TYPE:** Various

**PLACEMENT:** ODMDS

**TOTAL LENGTH:** 9.84 Miles

**QUANTITY:** > 13,400,000 cy

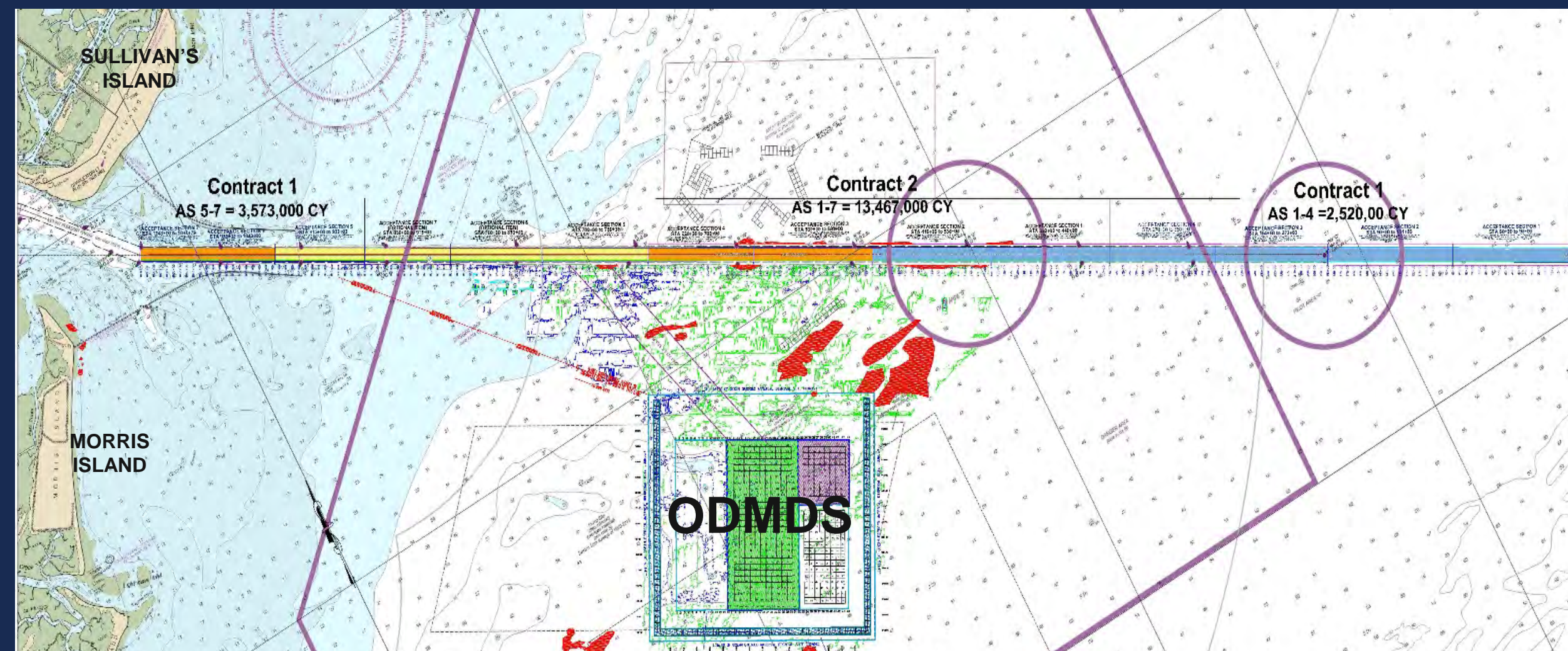
**DEPTH:** authorized 54 feet

**CONTRACT VALUE:** \$213.3 Million

**AWARD:** October 2017 (GLD&D)

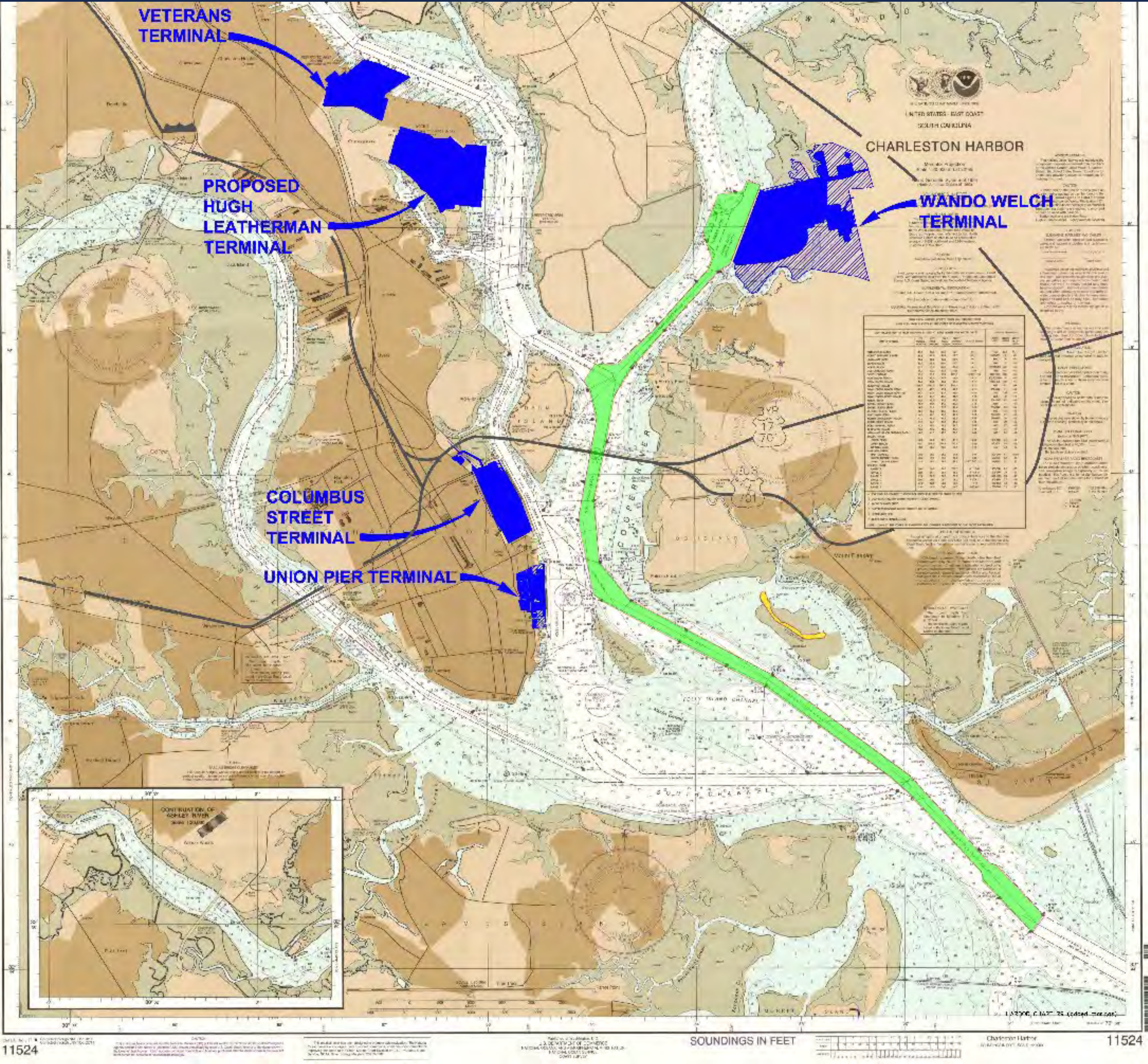
**AWARD AMOUNT:** \$278 M

**DREDGE COMPLETE:** December 2021





# LOWER HARBOR CONSTRUCTION



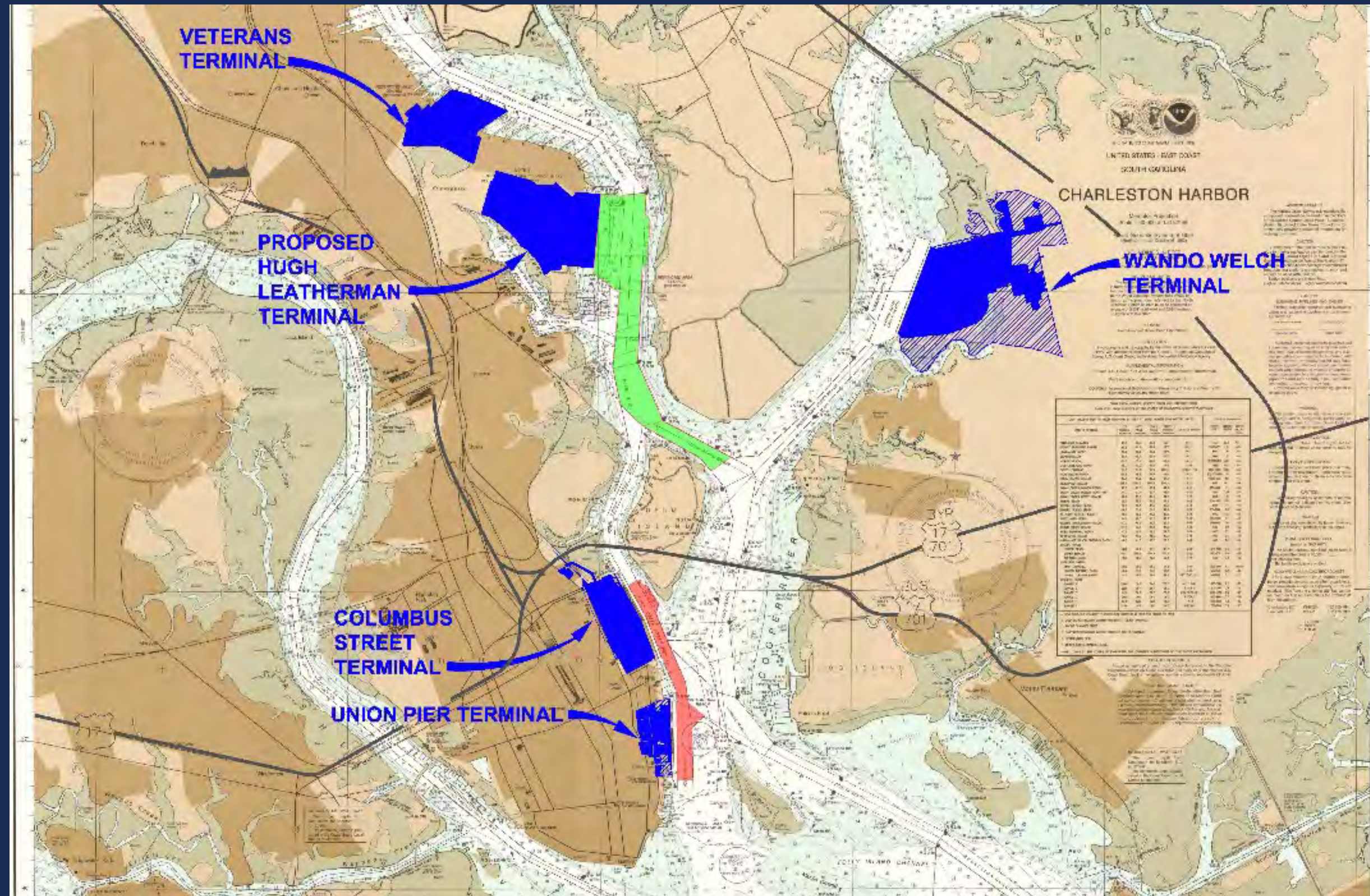
## CONTRACT 3

**DREDGE TYPE:** Clamshell  
**PLACEMENT:** ODMDs  
**TOTAL LENGTH:** 9.57 Miles  
**QUANTITY:** 11,200,000 cy  
**DEPTH:** authorized 52 feet  
**CONTRAT VALUE:** \$124.5 Million  
**AWARD:** August 2019  
**DREDGE COMPLETE:** July 2022





# DANIEL ISLAND REACH CONSTRUCTION



## CONTRACT 4

**DREDGE TYPE:** Pipeline

**PLACEMENT:** Upland

**TOTAL LENGTH:** 2.5 Miles

**QUANTITY:** > 6,500,000 cy

**DEPTH:** authorized 52 feet

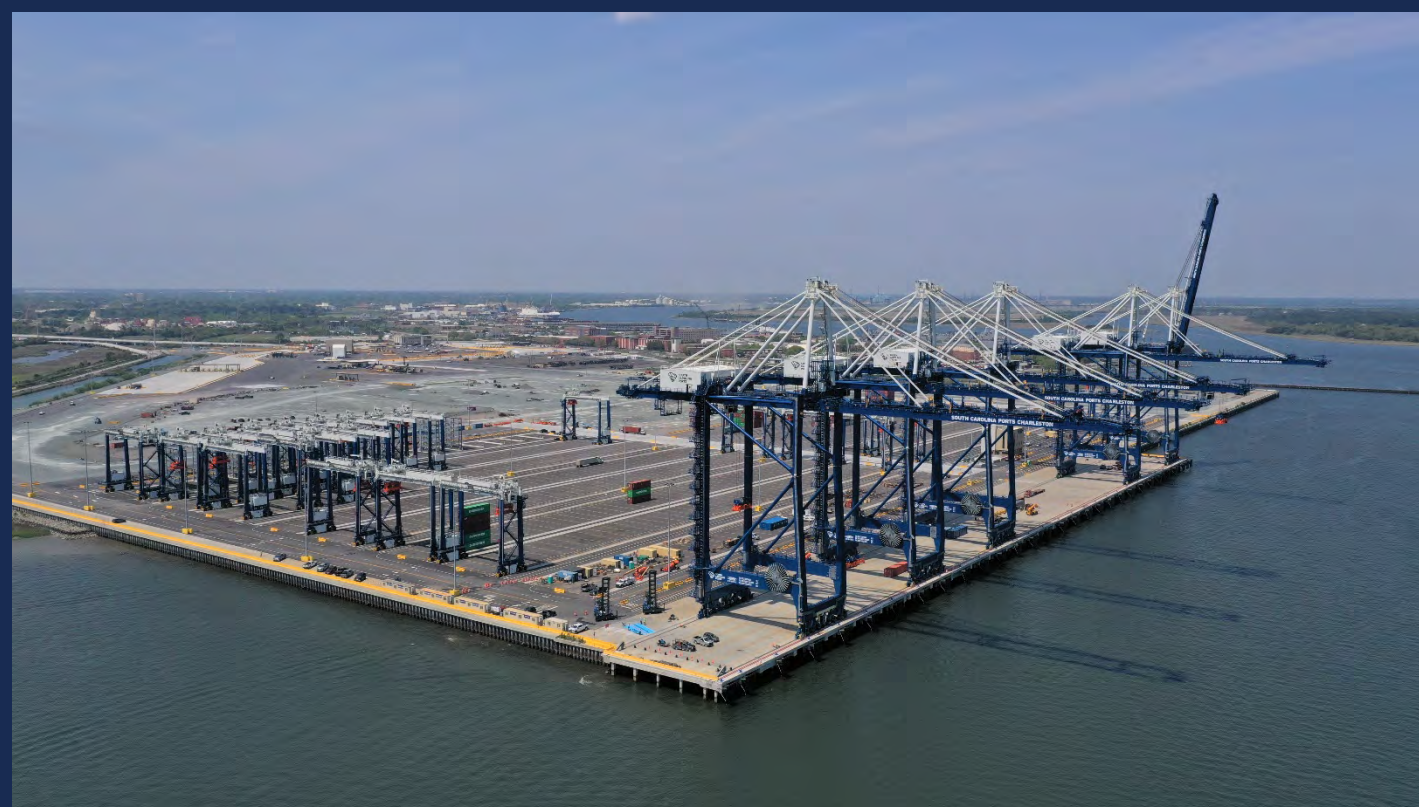
**CONTRACT VALUE:** \$52.9 Million

**AWARD:** September 2020

**DREDGE COMPLETE:** December 2021

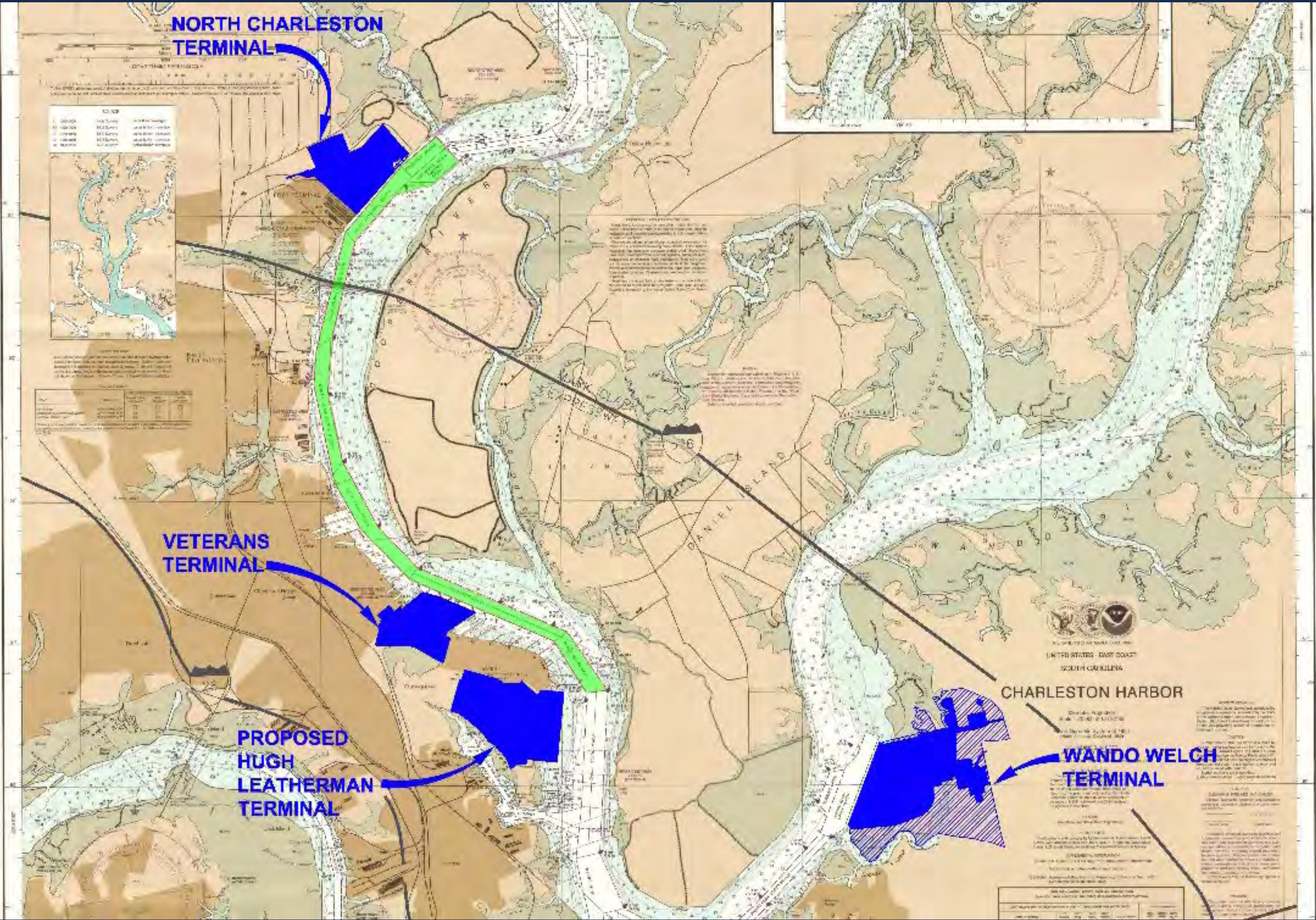
## UNIQUE CHALLENGES

- Interim Milestone: Complete Access Channel to Fed Channel Depth and Berth by March 31, 2020
- Coordination with multiple crane deliveries during this timeframe.
- Area of Concern - UXO



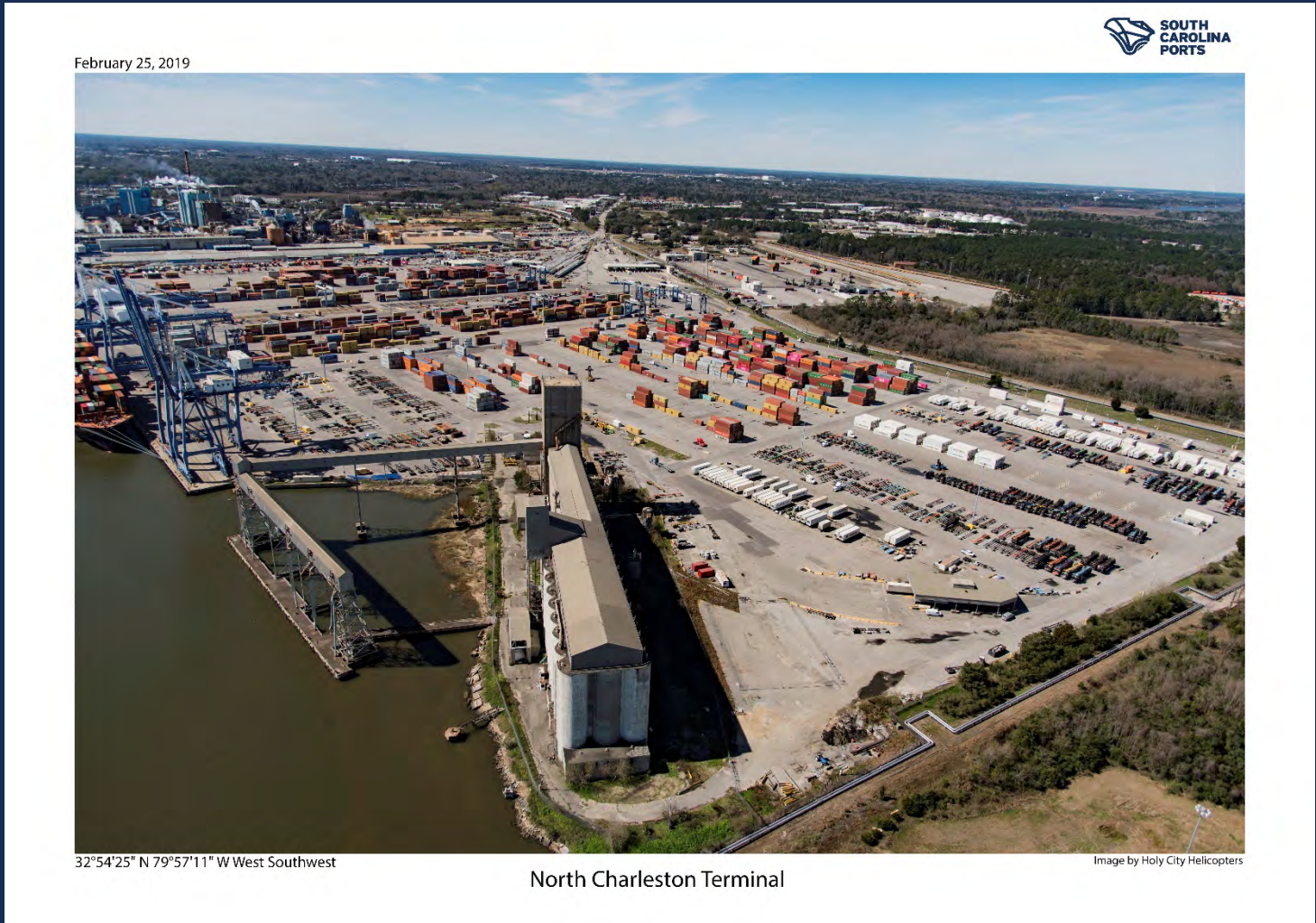


# UPPER HARBOR CONSTRUCTION



## CONTRACT 5

- DREDGE TYPE:** Pipeline
- PLACEMENT:** Upland
- TOTAL LENGTH:** 5.84 Miles
- QUANTITY:** > 4,200,000 cy
- DEPTH:** authorized 48 feet
- AWARD:** December 2019
- COMMENCE DREDGING:** February 2020
- DREDGE COMPLETE:** September/October 2022





# SMART MITIGATION & MONITORING

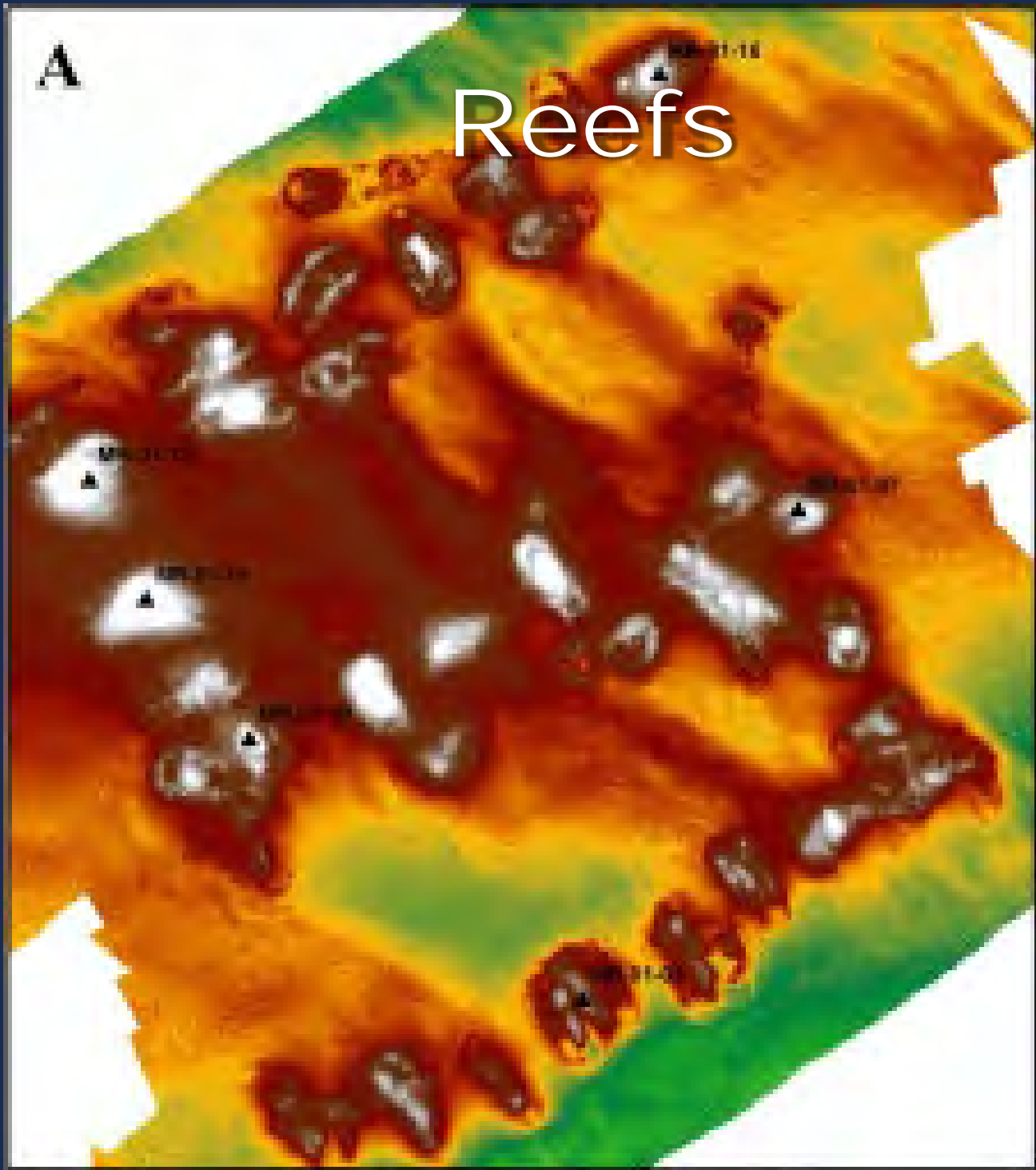


CRAB BANK

- Wetland preservation / restoration
- Landscape scale conservation
- Hardbottom habitat creation using limestone rock from Entrance Channel
- Monitoring
- Beneficial use of dredged material - Restoration of Crab Bank Seabird Sanctuary using sand from nearby channel



WETLANDS



Type of Monitoring	Timeframe
Water quality (DO and salinity)	9yrs
Wetland vegetation	9yrs
Hardbottom habitat recovery	5yrs
Shoreline impact assessment validation	5yrs



# PARTNERS / STAKEHOLDERS



...and many others!



# WHAT DID WE DO DIFFERENTLY IN HARBOR DEEPENING?

- Design vessels
- Did not design a Cadillac
- First 3x3x3 for deep draft navigation
- Challenged status quo
- Had all of our local share in the bank before approval
- Mitigated litigation risks by coordinating with environmentalists
- Engaged Congressional Delegation – first US Senator to attend a Chief's Report
- Petitioned the Obama Administration 'We Can't Wait Initiative'
- We engaged Administration to begin talking about ports and tied one of his priorities, growing exports, to the importance of deeper water, 100 loaded containers for every additional foot of depth
- Had a willing Corps district to push the envelope and think outside of the box





# CHALLENGE TO INDUSTRY



- Great responsibility delivering large scale navigation improvement projects
- Projects often funded with Federal/State public money
- Ensuring equipment fleet is modernized and sufficient to meet nationwide demands
- Sparing use of protests







**SOUTH  
CAROLINA  
PORTS**

THE WORLD CONNECTS HERE

THANK YOU

