

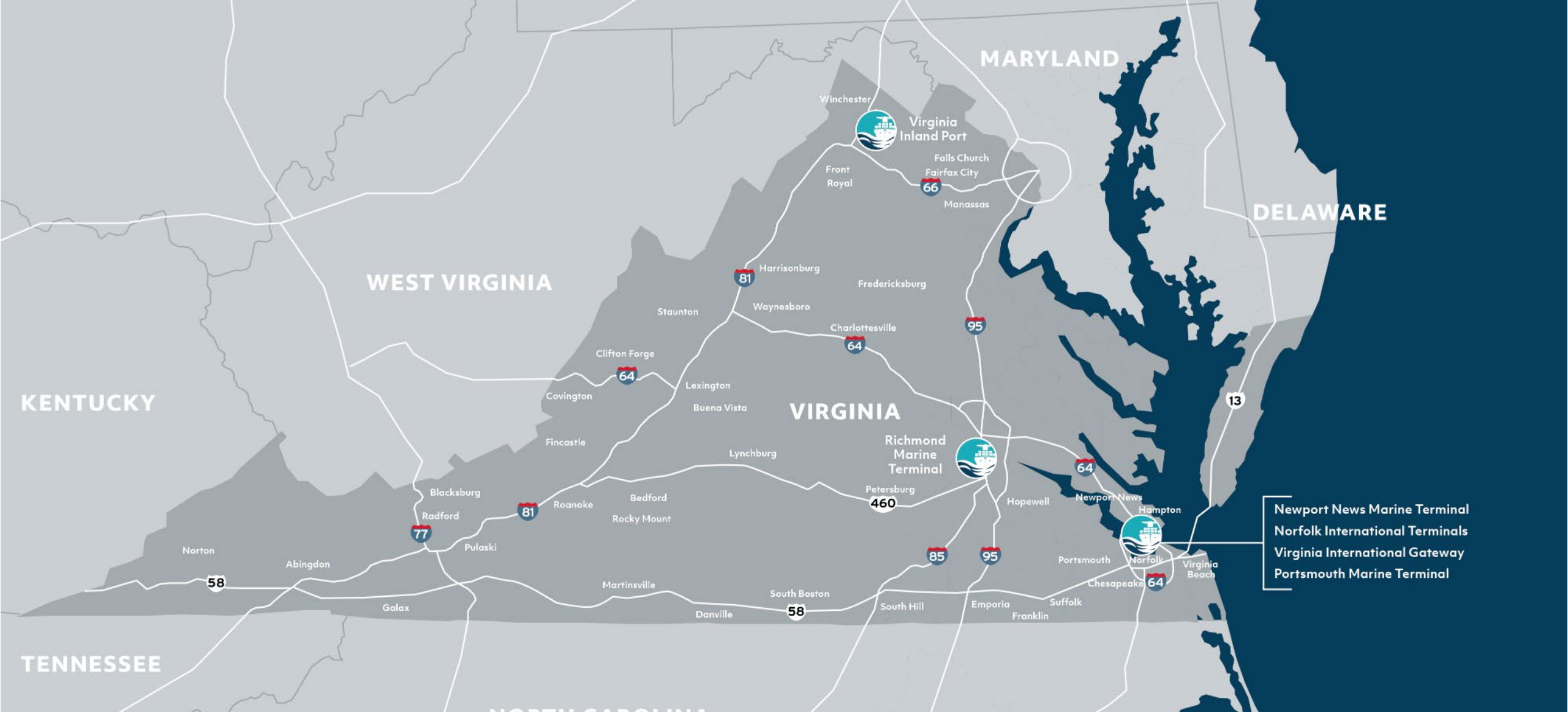


Norfolk Harbor Navigation Improvements

Beneficial Use of Dredged Material for
Beach Nourishment

October 11, 2023

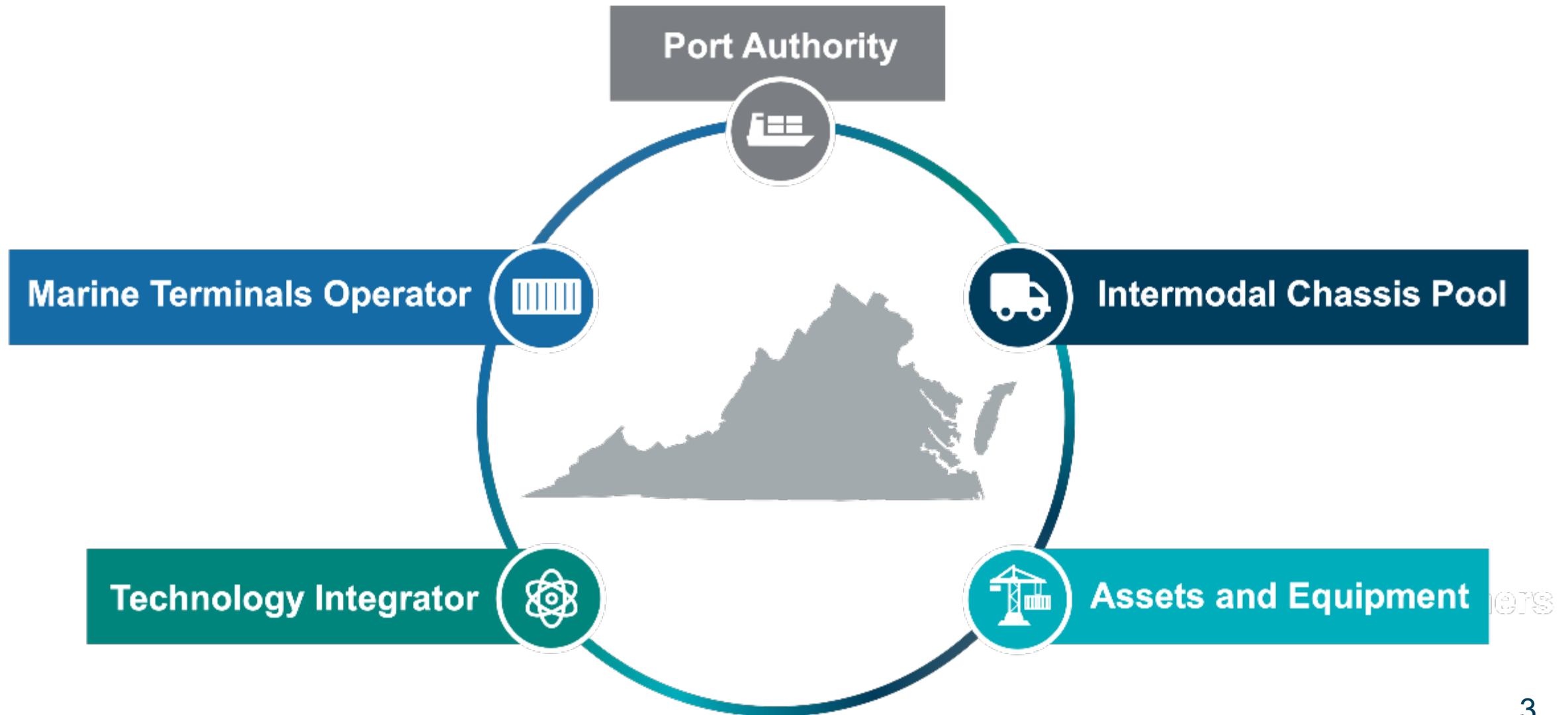




6 Terminals. Unlimited Possibilities



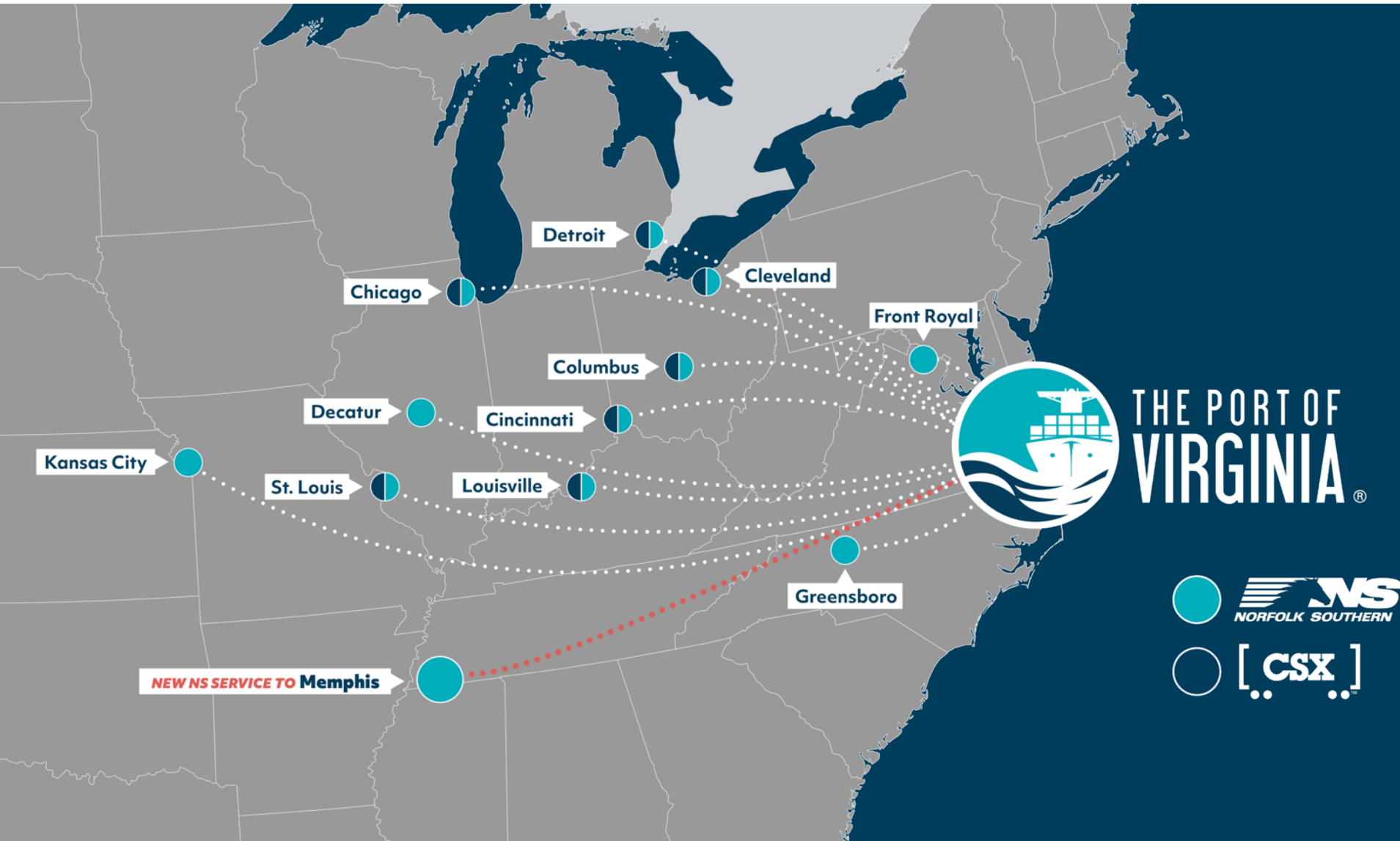
The “Virginia Model”



Speed to Market



Expansive Rail Connectivity



Global Connectivity Trade Lanes



National Economic Impact (FY21)



23.5 Million
Tons of cargo moved



88.8 Billion
In U.S. labor income



340.5 Billion
In U.S. spending



1,294,368
Jobs

\$1.4B Gateway Investment Program



\$18M
RMT/VIP
Expansion

\$650M
NNIT
Optimization

\$83M
NIT
CRY Expansion

\$450M
Channel
Deepening/Widening

\$220M
PMT
Offshore Wind

55' Channel Deepening and Widening

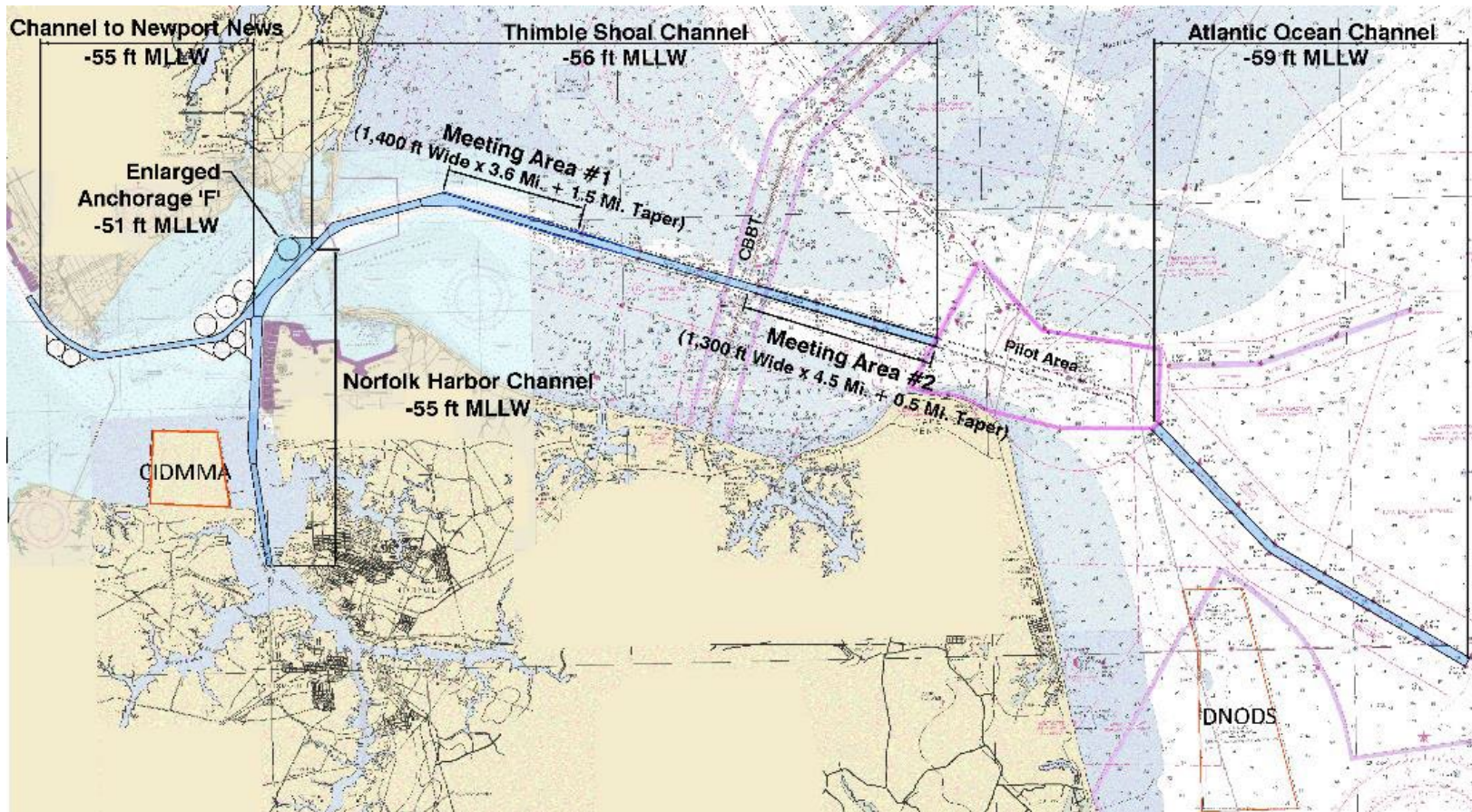


Vessel Delays



- One ultra-large container vessel at a time in channel – one-way traffic
- Large Navy or ultra-large ships close channel to all other traffic
- Daily event
- Vessels queue for their turn or wait at dock

Overall Project



Overall

~29.9 MCY Total

~4.6 MCY Beneficial Use

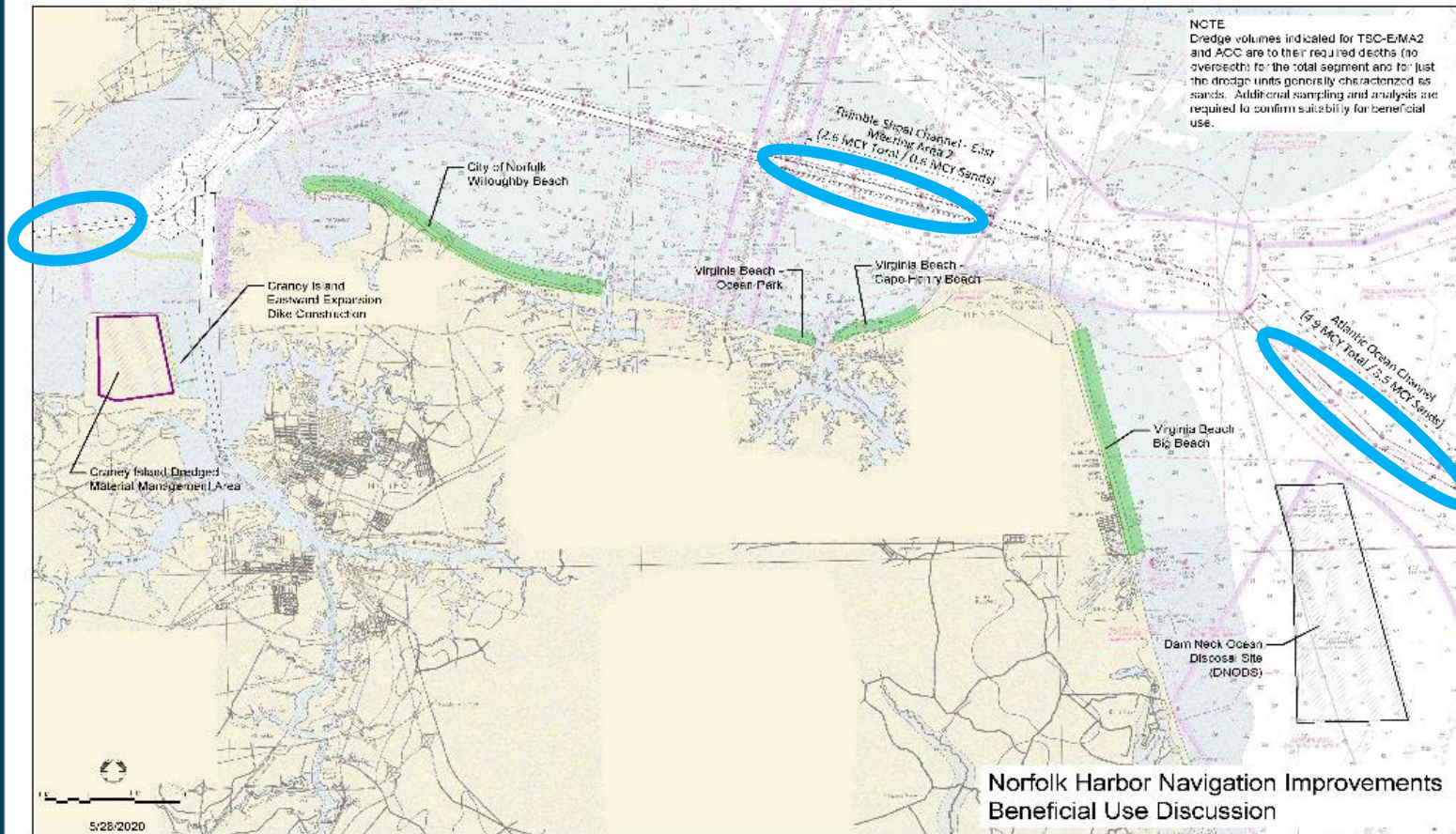
To Date

~47% Complete

~14.2 MCY Dredged

~1.5 MCY Beneficial Use

Beneficial Use in the Region



Demand for Sand

- Beach Nourishment
- CIDMMA Dikes

Sources

- Thimble Shoal East
- Newport News Channel
- Atlantic Ocean Channel

Why Beneficial Reuse



- Section 103 Concurrence Requirement
- Financially beneficial to localities
- Extends life of disposal sites

Challenges to Beneficial Use



- Project timing
- Impacts to navigation project schedule
- Different project priorities

- TSC-E/MA2 was first contract of deepening program with suitable material for beneficial use
- The port initiated outreach to cities to explore opportunity
- Established MOUs to integrate beach nourishment into project
- Early identification of opportunities allowed time to design, permit, and fund projects

TSC-E/MA2 Project (Thimble Shoal Channel East of CBBT)



- Widened 1,000-ft channel to 1,300-ft
- Deepened 51-ft channel to 56-ft
- Supports deeper draft vessels and two-way traffic
- Generated ~2.6 MCY of material
- ~0.67 MCY used for beaches

- Included in the port's bid documents as bid options that could be individually executed
- Mob/Demob + Incremental Unit Costs
- Provided opportunity for cities to decline the work
- The port provided construction oversight and contract administration

City of Virginia Beach – Ocean Park Beach



- 400,000 CYs of sands placed on ~1.2 miles of eroded public beachfront
- 4th of July accommodations



City of Norfolk – Ocean View Beach



- 264,500 CYs of sand placed on ~1.5 miles of eroded public beachfront





- Offshore placement –
Section 103 Concurrence
- Joint Permit Application
 - Federal Consistency Certification
 - Dept. of Wildlife Resources TOYR at OVB
 - Jurisdiction review (source change for OPB)
- DWR approval for summer placement

Construction Coordination



- Manage schedules to minimize public impact, beach events
- Continuous communication for schedule updates and responsiveness to citizen concerns

Construction Coordination

- 3 concurrent projects within Thimble Shoal Channel
- Multiple dredges to balance operations (7 active plants)



- Cost savings to both the navigation project and beach nourishment projects
- Helped shape USACE model for subsequent beneficial use projects



Thank You



THE PORT OF
VIRGINIA®