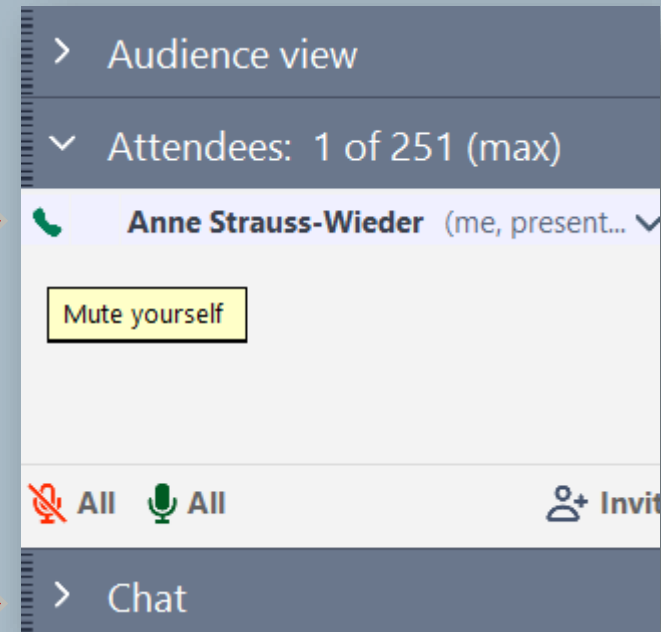


June 15 Freight Initiatives Committee Agenda

- Roll Call of Members
- Approval of Minutes
- Update on NJTPA Freight Division Activities
- Annual Port and Maritime Update
- Two-Minute Reports on Freight Activities from Committee Members
- Next Meeting: August 17, 2020
- Adjournment

Please mute yourself when not speaking



Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name and email, followed by either AICP or PE with your PE license number

NJTPA Freight Division Update

- Truck Drivers Survey
- Truck Parking
- COVID-19 and Supply Chain Discussions
- 2050 Freight Industry Level Forecasts Study
- Freight Concept Development Program

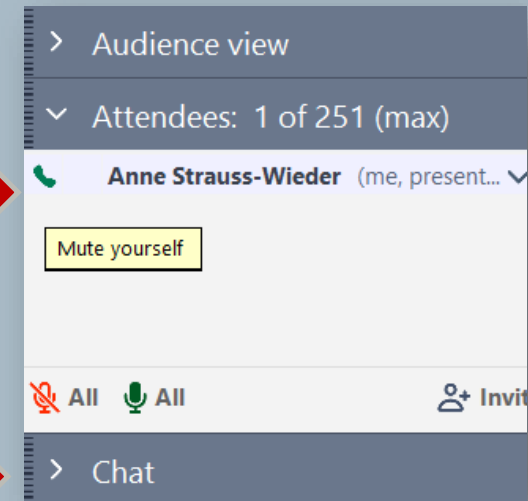
Learn more at www.njtpa.org/freight



June 15 Freight Initiatives Committee Presentations

- Port Update, Bethann Rooney, Port Authority of New York and New Jersey
- Council on Port Performance, John Nardi, New York Shipping Association
- Port Raritan, Genevieve Clifton, NJDOT

Please mute yourself when not speaking



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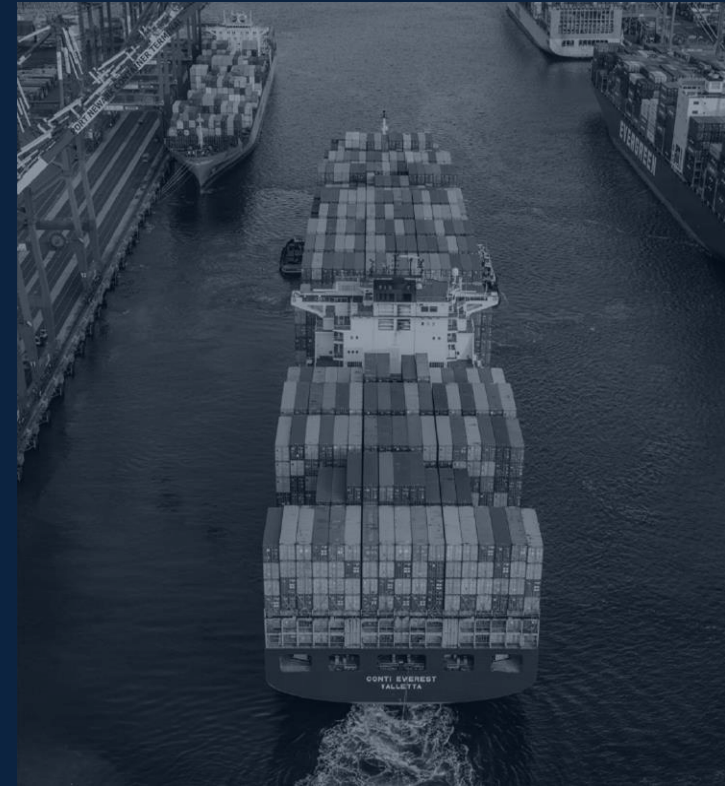
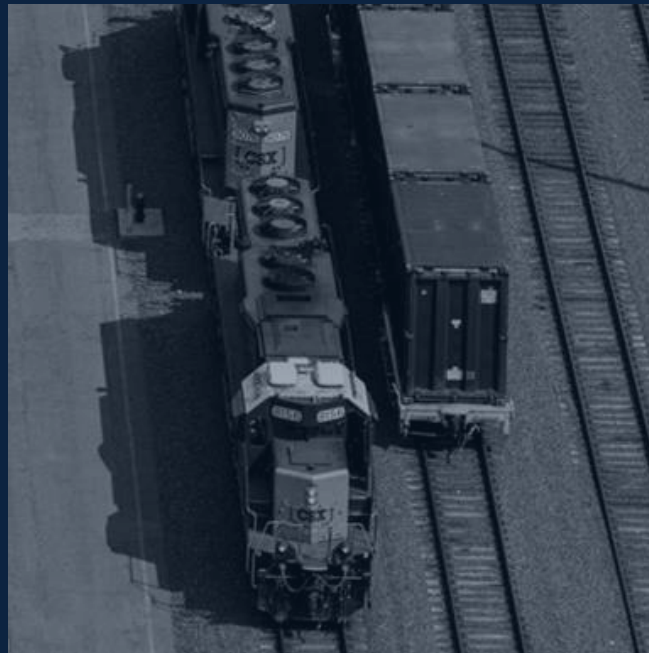


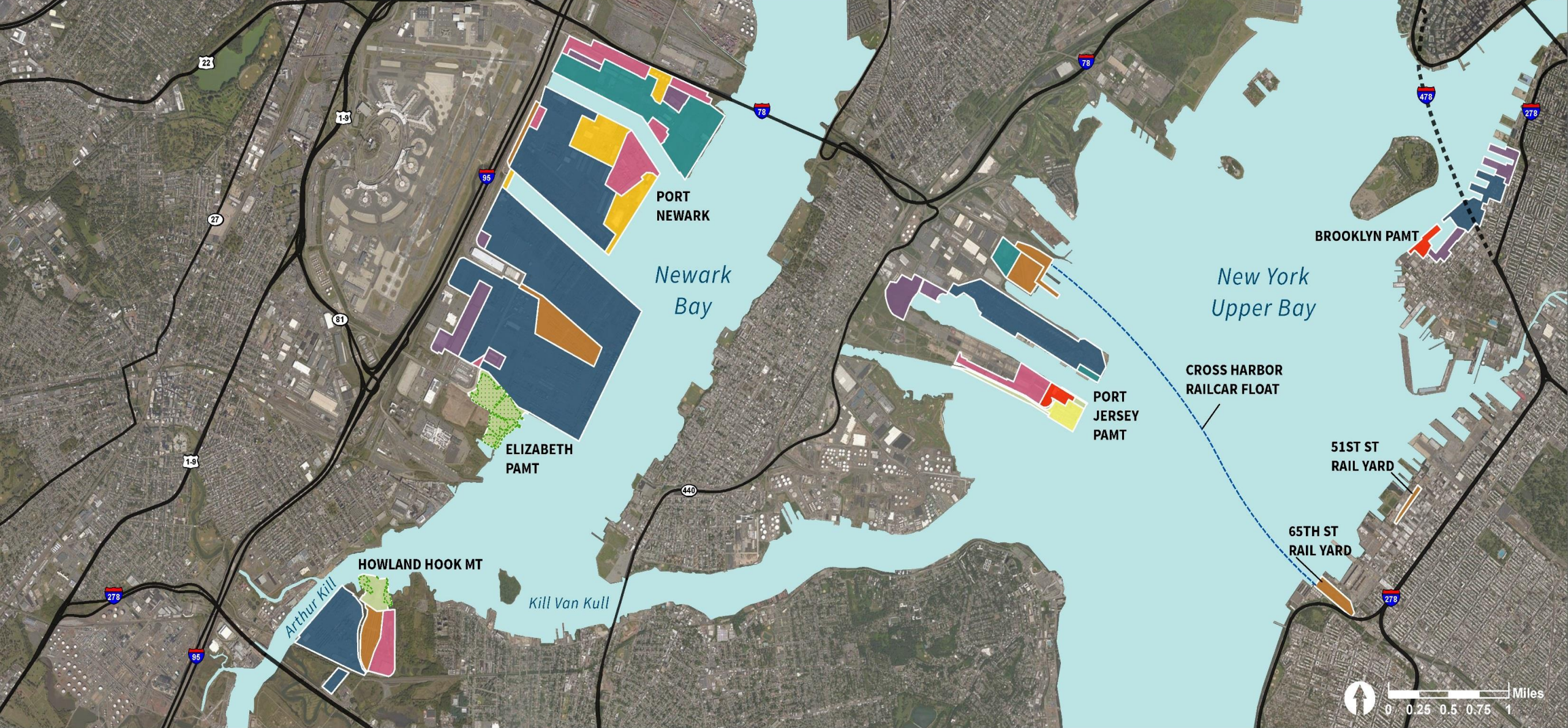


Port of New York
& New Jersey

State of the Port

June 15, 2020





Open for Business

- ALL PA Port facilities operational
- Port “essential” activity by NY & NJ
- Critical for economic recovery
- Supply chain collaboration



Health and Safety

→ TOP PRIORITY

→ Enhanced protocols port-wide

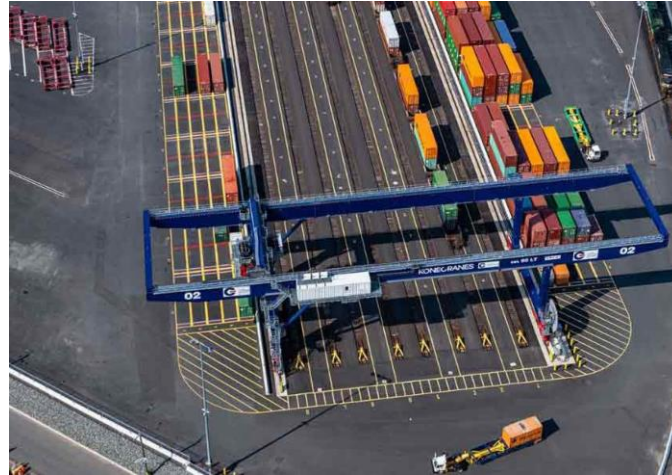
→ CDC guidelines and new procedures

→ Collective measures

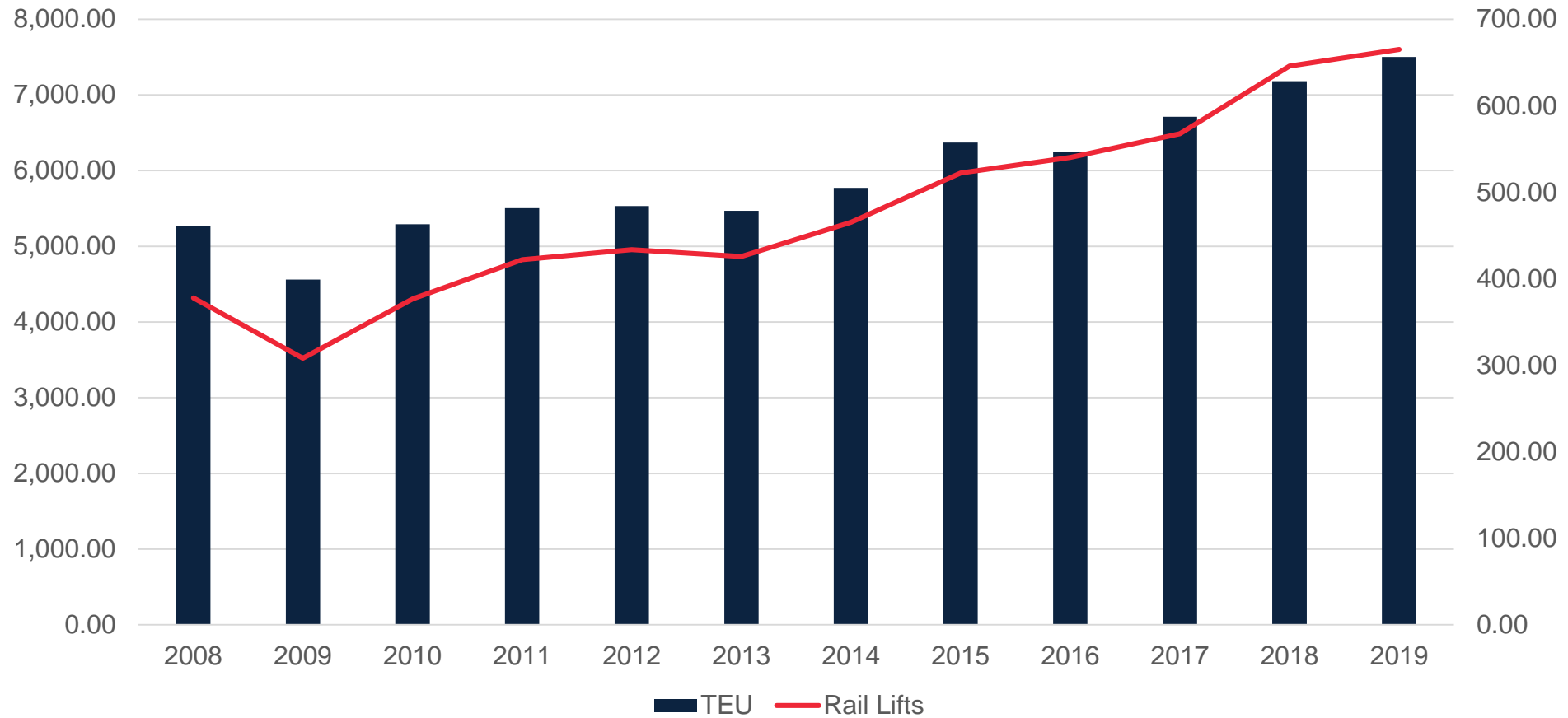


3 C's: Collaboration, Communication, Coordination

- Volumes
- Ocean Carriers
- Terminal Operators
- Harbor Trucking
- Intermodal
- Warehouse & DC's
- Government partners
- Others

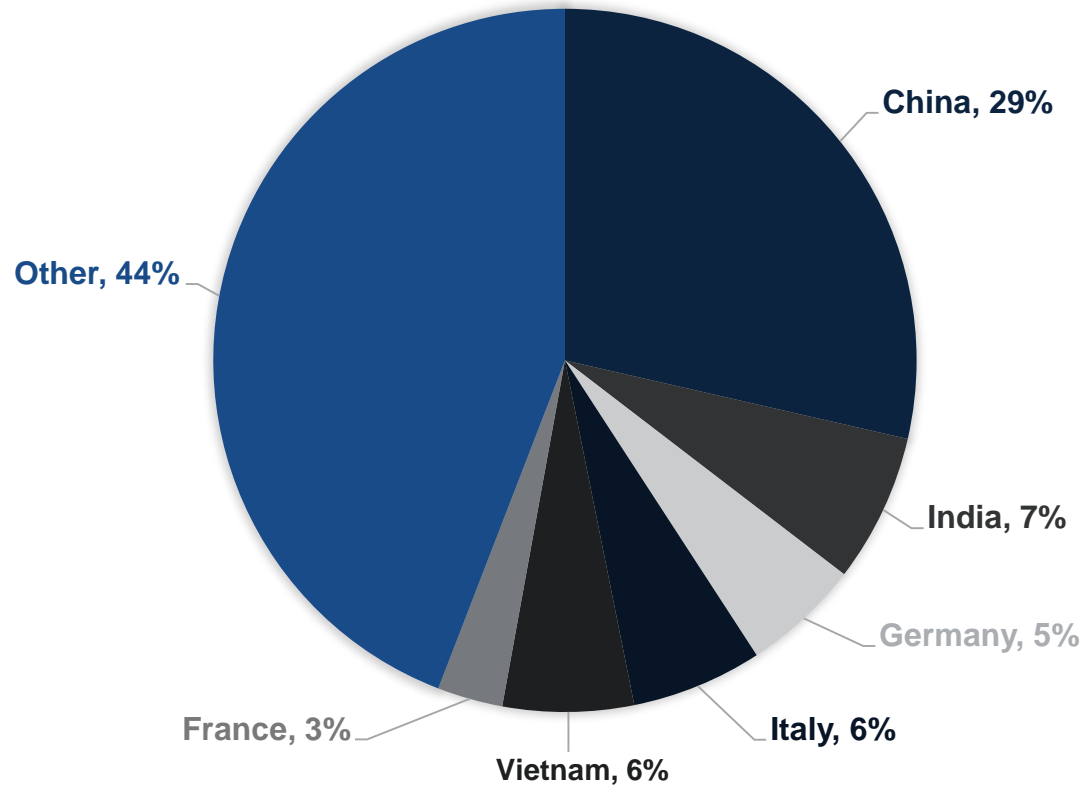


Container Throughput (in thousand units)

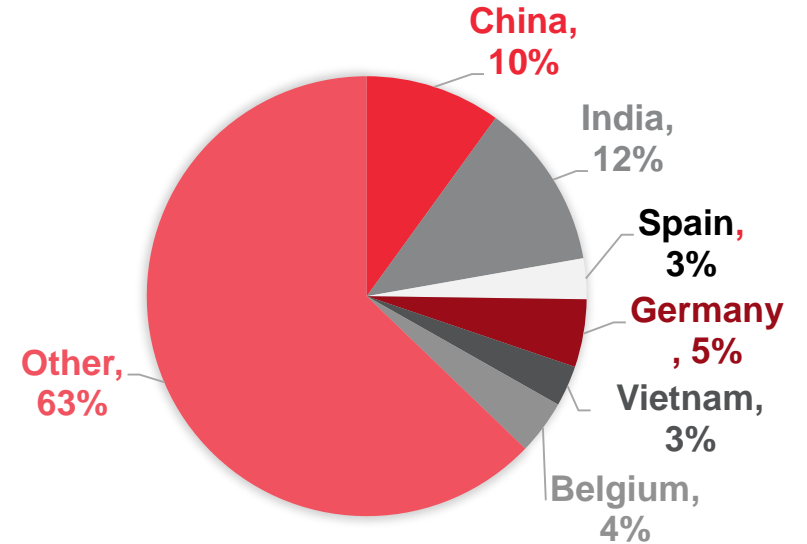


Top Trade Partners by Country

IMPORTS



EXPORTS

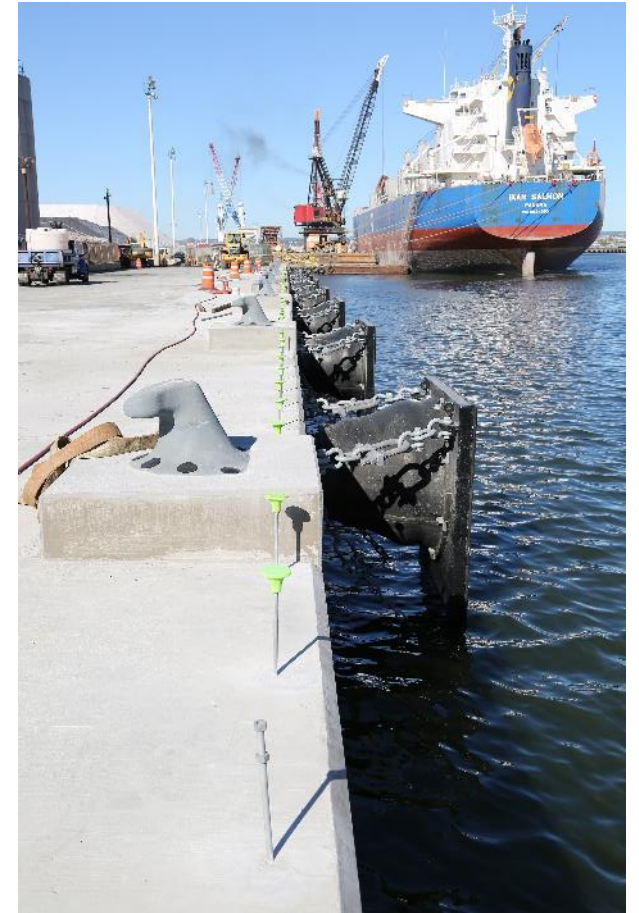
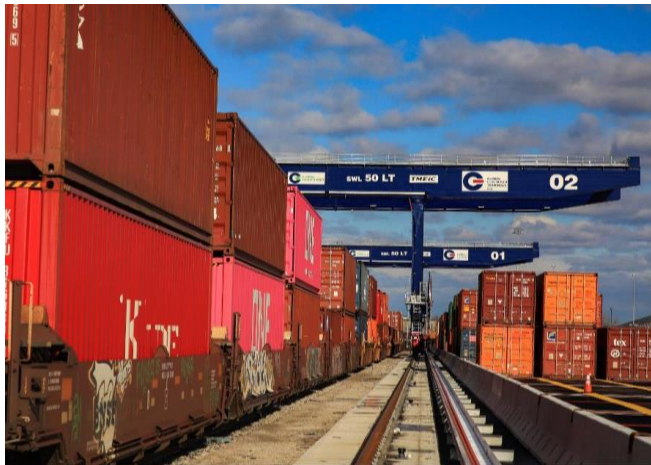


Greater Access to Consumers



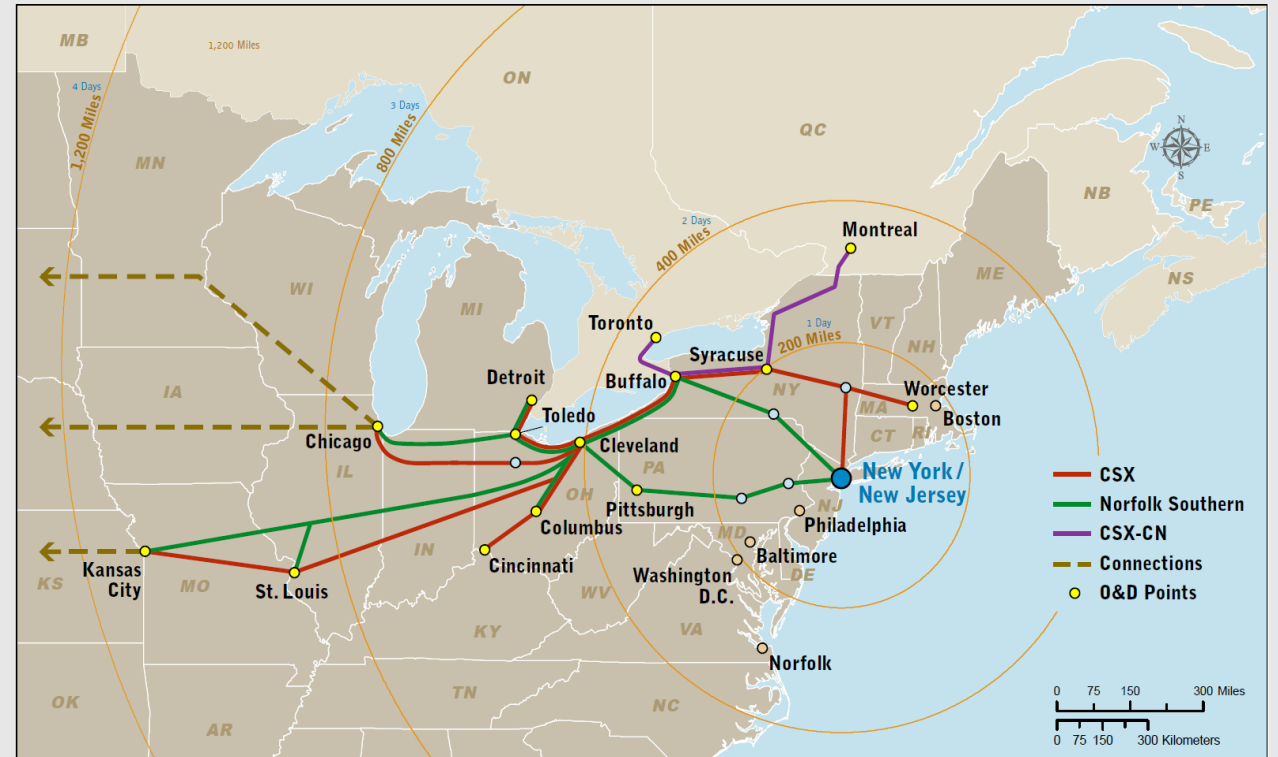
Key Port Authority Capital Investments

- Port Street Corridor Improvement Project
- Off Port Rail Improvements
- Wharf Replacement Program



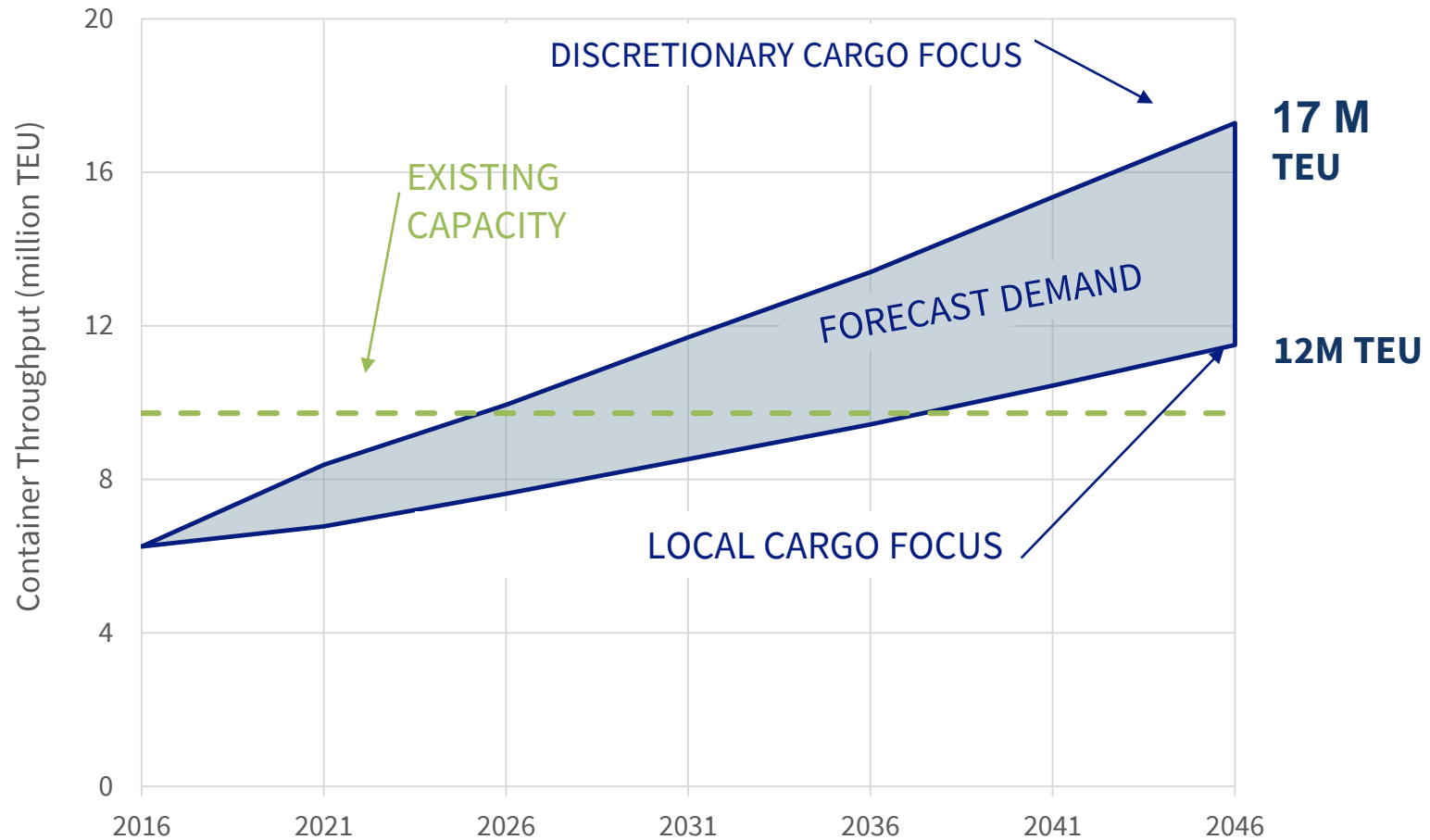
Intermodal Rail Capabilities

- Four on-dock ExpressRail facilities serving all six marine terminals.
 - ExpressRail Port Jersey completed in 2019.
- Two Class I railroads
 - CSX and Norfolk Southern.
- 1.5 million lift capacity
- 37 working tracks comprised of 72,000 linear feet port wide.



Planning for the Future

- Port Master Plan
- Navigation Improvements
- Marine Highway
- Discretionary Markets
- Environmental Initiatives
- Collaboration
- Workforce Development
- Business Diversity




Why the Port of New York and New Jersey?




Access

- Access to 46.3 million consumers within a 4-hour drive
- 1 billion square feet of warehouse and distribution space within 50 miles
- 41 weekly ocean carrier services
- 75% first port of call



Capabilities

- 7.5 million TEUs handled in 2019
- 29,000 feet of berths for container business
- Over 75 STS cranes, 1,200 units of additional CHE and almost 5,500 reefer plugs
- Handle 18,000 TEU vessels
- Handle nine 14,000 TEU vessels at once



Capacity

- 6 Marine terminal operators
- Port-wide intermodal ExpressRail system
- 1.5 million annual rail lift capacity
- Truck fleet of 9,000 frequent callers
- Port Master Plan



Investment

- \$3 billion from MTOs over a 15-year period
- Berth improvements
- Raised Bayonne Bridge
- Harbor Deepening
- Roadway enhancements
- Technology initiatives

Thank you

The Port Authority of NY & NJ
Port Department

Bethann Rooney
Deputy Director
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(212) 435-4215



www.panynj.gov
www.portnynj.com



John Nardi

President

New York Shipping Association

COVID-19

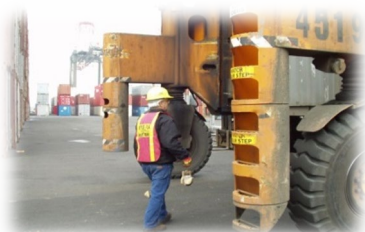
1 - Council on Port Performance

2 - NY&NJ Port Operations Labor Challenges & Solutions

3 – Gov. Murphy’s Economic Restart & Recovery Council - Transportation

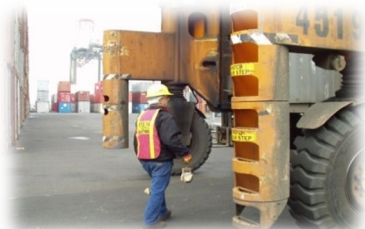
Council on Port Performance Update

- Prior to Covid-19 The Council continued to meet on quarterly basis
 - Focus & Priorities - Labor Updates, Volume Review, Rail Network Optimization, Supply Chain Analysis, Workforce Development, Joint Marketing & Publications
 - 2020 focus was to be:
 - Workforce Development
 - Rail Network Optimization
 - Marketing and Supply Chain Analysis
 - Since Covid-19
 - Bi-Weekly Conference calls where each stakeholder representing their segment of the supply chain discussed their challenges & solutions
 - Workforce attrition, anticipated supply chain backlogs, warehouse space, volume projections, chassis supply, regulatory changes, health and safety....



COVID-19 Port of NY&NJ Labor Challenges & Solutions

- Create a Safe Working Environment & Reduce Anxiety
 - Worked very closely with ILA Leadership – Positive, practical discussions
 - Spared no expense for PPE and Sanitizing work areas and machines
 - Created joint guidelines to stop the spread of Covid-19 Virus in the workplace
 - Created shift-work to limit the number of people working in close-proximity
 - Changed cargo handling processes
 - Reduce person to person interaction as much as possible.
 - Reduced the sharing of machinery to lower the risk of exposure
 - Non-contact temperature checking for over 3,000 employees daily for 3 shifts
 - Those with a temperature of over 100.3 were sent home to self-monitor



COVID-19 Port of NY&NJ Labor Challenges & Solutions

- Create a Safe Working Environment & Reduce Anxiety
 - Early-on developed a confidential employer-maintained, employee Covid-19 related tracking system. Identified positive cases and those in “close contact” as well as other scenarios
 - Monitored “back to work” progress so a return to work was not premature
 - Interpreted for the employees the various (and constantly changing) state and federal benefit legislation
 - Developed a compensation plan for those employees positive with Covid-19
 - Of 3,500 workers – 365 impacted in one way or another
 - 2 Fatalities, 61 Positive cases, 150 Quarantines, 154 with other scenarios



Governor Murphy's Economic Restart & Recovery Council - Transportation

Looking for Models to Emulate for Restarting the Economy

- The Port Never Shut Down

In addition to the previously noted measures, communication in our Port is in my opinion:

- Our Best Practice
- Standing volunteer committees and communication channels such as:
 - Council on Port Performance
 - The Area Maritime Security Committee, Chaired by the U.S Coast Guard.
 - Weekly Port Authority, Labor, Management, Terminal Operator, Chassis Provider, Trucker and Railroad conference calls.
 - Marine Transportation System Recovery Unit conference calls - U.S Coast Guard
 - Weekly Personal Protective Equipment supply & status report conference calls.



DRAFT

Port Raritan Marine Highway Concept

NJTPA Freight Initiatives Committee



New Jersey Department of
Transportation, June 2020

Port Raritan – High Level History and Overview

- The Port Raritan site is a regional transportation jewel
- NJTPA, NJDOT and regional planners have had interest in the site for 15 years or more
- Generally, two things have changed; maybe three:
 - USDOT/MARAD has re-energized their support for marine highway services – both programmatically and grant support
 - Landside transportation challenges, costs and distribution opportunities have changed
 - Pick a Crisis – Transportation and logistics redundancy has become mainstream



About the Project Site

- Port Raritan site is a unique opportunity to establish marine highway services
 - Located within a 2,350-acre master planned complex known as Raritan Center Business Park®
 - 5 million sf developed leased space, approximately 350 tenants, and over 120,000 linear feet of active freight rail track
 - Direct frontage on the Raritan River (a designated Federal channel)
 - Historic 2000-foot wharf ready for rehabilitation
 - Active marine cargo handling (construction materials)
 - Outstanding access to the NJ Turnpike and other truck routes
 - Shortline Rail access near dock and to warehouse facilities
 - Raritan Central

Planning to Date

- Part of New Jersey Marine Highway Platform Study (2012)
- Included in MARAD East Coast Marine Highway Initiative (2013)
- Included in NAMHA study



Study Process

- Builds on New Jersey Marine Highway Platform, “M-95” Market Study & NJTPA Waterborne Opportunities study
- Consistent with - but independent of – the North American Marine Highway Alliance study
 - NAMHA study addresses multistate coastal networks and many different origin-destination “hub” terminals
 - Port Raritan study focused on a single hub and its logical partner terminals, and emphasized local (NJ-NJ and NJ-NYC) services
 - Help regional shippers address the pressing issue of local access
 - Mitigate truck impacts on local highway networks
 - Utilizing regional port infrastructure – existing and already planned

About a MARAD Route Designation Application

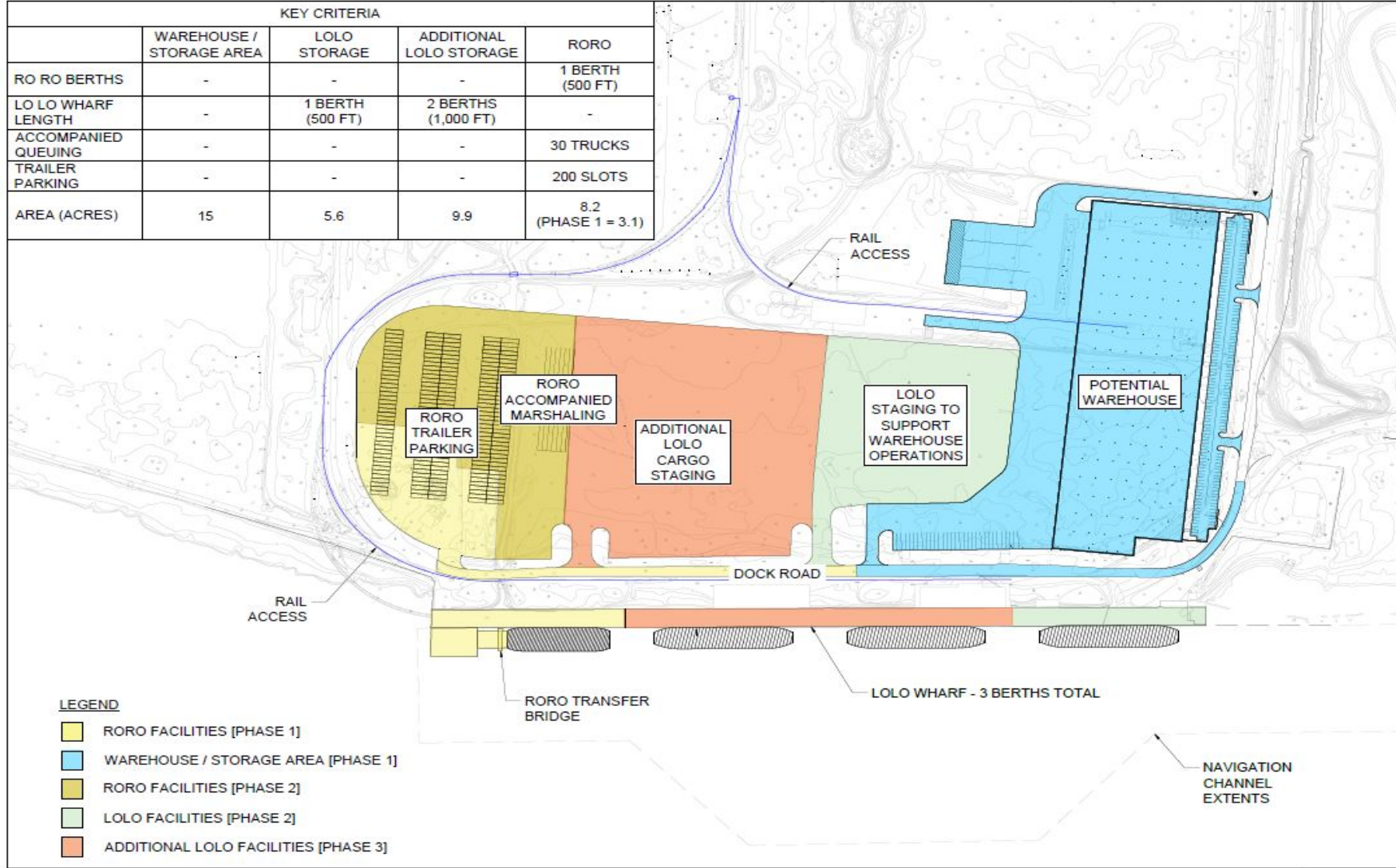
- Application for Marine Highway Project Designation to the USDOT Maritime Administration
 - In association and cooperation with the FBC and partners
 - Allows future application for MARAD funding
- Excellent fit to eligibility criteria
 - Promotes new marine highway services that will utilize US-documented vessels
 - Mitigates landside congestion by eliminating more than 7 million truck vehicle miles of travel per year on the region's road network
 - Facilitates short-sea shipping of approved cargo types on the already-designated "M-95" route
 - Promotes regional growth with reliable, lower-cost transportation options
 - May also support NJ wind energy initiatives

About the Project Concept

- The proposed project will:
 - Reconstruct the historic 2000-foot wharf and develop supporting upland improvements for truck access, rail access, and open/covered storage at the Federal Business Centers (FBC) property in Edison and Woodbridge NJ, adjoining the Raritan River federal navigation channel
 - Establish, in phases, four co-located independent-utility marine highway transportation services between multiple ready and near-ready sites in New Jersey and New York City



Development Concept



- Four berths supporting upland areas:
 - Ro-ro
 - Truck ferry
 - Wind
 - Warehouse/ Open Storage
 - Add'l Lo-Lo
- Three phases based on current land readiness

The Project's M-95 Service Network



- Multiple partner terminals in NYC for Ro-Ro, Truck Ferry, Lo-Lo services
 - Red Hook (active multi-cargo marine terminal)
 - South Brooklyn Marine Terminal (reactivation underway)
 - 65th Street Yard (rail float terminal)
 - Hunts Point (under development for Marine Highway cargo service)
 - Newtown Creek (many freight properties with existing/historic docks)
 - Manhattan Westside (three potentially available sites)
- Part of Wind Energy network
 - Fabrication of wind energy components
 - Lo-Lo barge to deep water assembly point

Service Types

- #1: Ro-Ro barge for wheeled containers and dry vans
 - Shippers would arrange for one truck to drop cargo at the Port Raritan Terminal and another truck to pick it up at an East of Hudson terminal, and the river crossing between the terminals would be accomplished by barge
 - Two anchor tenants identified (Arizona Beverages plus Confidential User) and potential for many others at or near FBC
- #2: Ferry for trucks with drivers
 - For more time-sensitive freight, a ferry service would operate as a floating bridge for the 'last mile' between Northern New Jersey and NYC, carrying truck and driver
 - Interest by ro-ro and last-mile carriers, anchor not yet committed

Service Types (continued)

- #3: Lo-Lo barge for offshore wind-energy turbine components
 - New Jersey is actively advancing offshore wind development
 - Requires network of ports for component fabrication (shallow draft, large parcel, rail and truck access) and final assembly (deep draft, no vertical obstruction)
 - Port Raritan ideally suited for “small” fabrication or O&M
- #4: Lo-Lo barge for diverse unitized cargo types with on-site open/covered storage and transloading
 - Palletized (food and beverage products, construction materials, etc.) and other unitized (steel/concrete/wood shapes and forms, large electronics and machinery, etc.) moving across the Hudson
 - Upland site to serve anchor user(s)

Vessel Profiles

Service	Vessel	Dimensions/Capacity	Operating Speed and Service Time
Ro-Ro	Single-ended deck barge with towboat; available from numerous contractors	70' x 260-300' 30 units	8 knots
Truck Ferry	Dual-ended self-powered truck ferry with driver/passenger accommodations (similar to Staten Island Ferry, Bridgeport-Port Jefferson Ferry, etc.); further research needed to identify the specific vessel for this service	70' x 300-350' 25 units	16 knots
Lo-Lo, Wind Energy	Deck barge modified for specialized cargo with towboat; available from numerous contractors	Up to 120' x 400' Components for 3 turbines	4 knots
Lo-Lo, Other	Deck barge with towboat; available from numerous contractors	70' x 300' 2000 short tons avg.	8 knots

Service Profiles

Service and O-D Pair	Moves Needed to Accommodate Demand	Frequency and Headway Assumptions	Number of Vessels Needed in Service to Maintain Schedule
Ro-Ro	2 RT / day to start 6 RT / day at maturity	2 x daily, 8 hours apart 6 x daily, 4 hours apart	1 barge / tow 3 barges / tows
Truck Ferry	2 RT / day to start 3 RT / day at maturity	2 x daily, 4 hours apart 3 x daily, 5 hours apart	1 vessel 1 vessel
Lo-Lo Wind	2 RT / month shipped	2 per month	1 barge / tow
Lo-Lo Other	3 RT / week to start 5 RT/ week at maturity	1 x every other day 1 x per day	1 barge / tow 1 barge / tow

Service Cost Profiles

Cost Model Component	Ro –Ro	Truck Ferry	Lo – Lo (Wind)	Lo- Lo (Other)
Total Marine Highway Cost	\$35.0 M	\$14.2 M	\$1.1 M	\$15.0 M
Units Moved per Year	112,320 truck EQ, loads plus empties	47,000 truck EQ, loads plus empties	Components for 72 Wind Turbines	23,500 loaded truck EQ
Total Cost per Unit Move via Marine Highway	\$311	\$302	\$15,908	\$637
Comparable Cost per Unit via Truck	\$375	\$375	\$20,000	\$750
Savings per Unit Move via Marine Highway	\$64	\$73	\$4,092	\$113
% Savings via Marine Highway	17%	20%	20%	15%

Public Benefit Profiles

Benefit Type	Transportation Effects	Monetized Benefits (2019\$, 7% Discounting)
Safety	407 truck crashes avoided	\$17,393,655 Value of avoided crashes
State of Good Repair	218 million truck VMT avoided	\$8,469,394 Value of avoided pavement damage
Environmental Projection	(84) metric tons PM avoided 533 metric tons NOx avoided 76 metric tons VOC avoided	(\$11,953,249) Value of avoided emissions with conventional vessel engines; clean engines would be positive benefit
Economic Competitiveness		\$94,291,748 (truck operating benefit, BCA eligible) \$114,492,405 (total shipper savings including diversion)
Total Public Benefits		\$108,201,548 (BCA eligible)

Partnership Structure

■ Public

- NJDOT and NYCEDC (application, terminal development, planning)
- NJTPA and Middlesex County (planning, application support)
- NJDEP (regulatory)
- PANYNJ and other NAMHA partners (coordination)
- MARAD and Federal partners (planning, funding, implementation)

■ Private

- FBC (owner and leaseholder)
- Anchor tenants (Arizona, confidential user, others TBD)
- Terminal operator (under lease)
- Vessel operator(s) (by contract)
- Rail services (Raritan Central RR)

Project Timeline and Next Steps

	2019		2020				2021				2022				2023			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1																		
Environmental Permitting	█		█															
RORO Staging Area (3.1 acres) - Paving and Access							█											
Dock Road Improvements							█											
RORO Wharf Construction							█											
Potential Warehouse and Associated Infrastructure							█				█							
Phase 2																		
Environmental Permitting	█		█				█											
RORO Staging Area (5.1 acres) - Paving and Access											█							
LOLO Staging Area - Paving and Access											█							
LOLO Wharf Construction											█							
Rail Extension to the Wharf											█							
Phase 3																		
Environmental Permitting	█		█				█				█							
Additional LOLO Wharf and Staging Area													█		█			
LOLO Wharf Construction													█		█			

- Application submitted (soon)
- Designation expected Nov. 2020
- MARAD, RFAP and other grant applications
- Engagement with partners on planning, funding and development



NJDOT Marine Highway Team



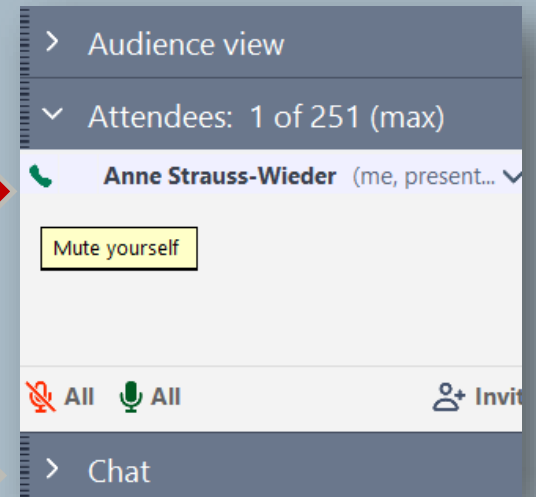
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- Next Virtual Meeting: **August 17, 2020**
 - Analyzing & Visualizing Key Supply Chains
- Adjournment

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Thank you. Stay healthy and safe.