House Appropriations Committee

FY2014-FY2016 Capital Outlay Plan

January 22, 2014

Jeffrey D. Wassmer

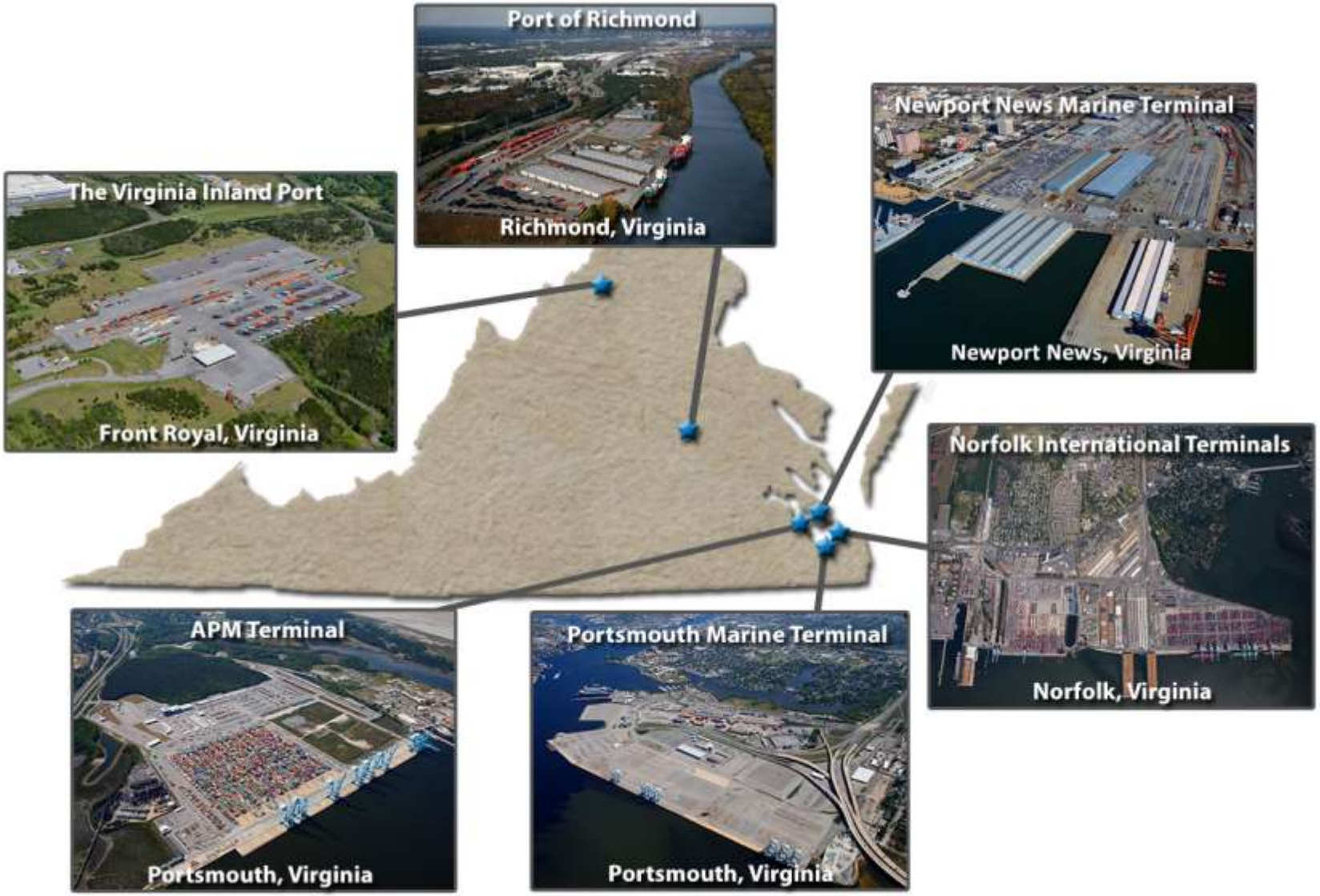
Chairman

Rodney W. Oliver

Interim Executive Director

Virginia Port Authority

Terminals Serve All of Virginia

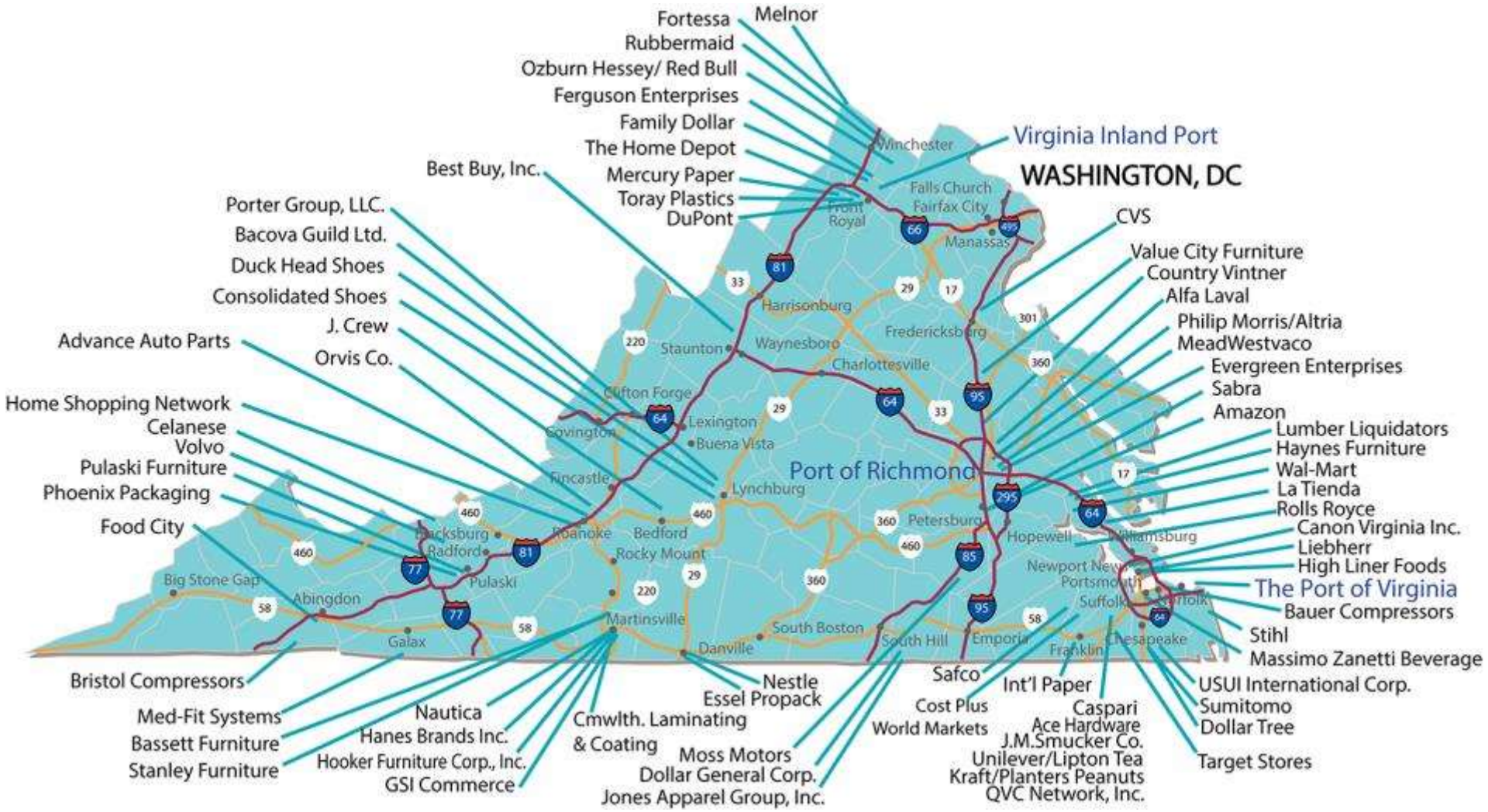


An Economic Engine for Virginia

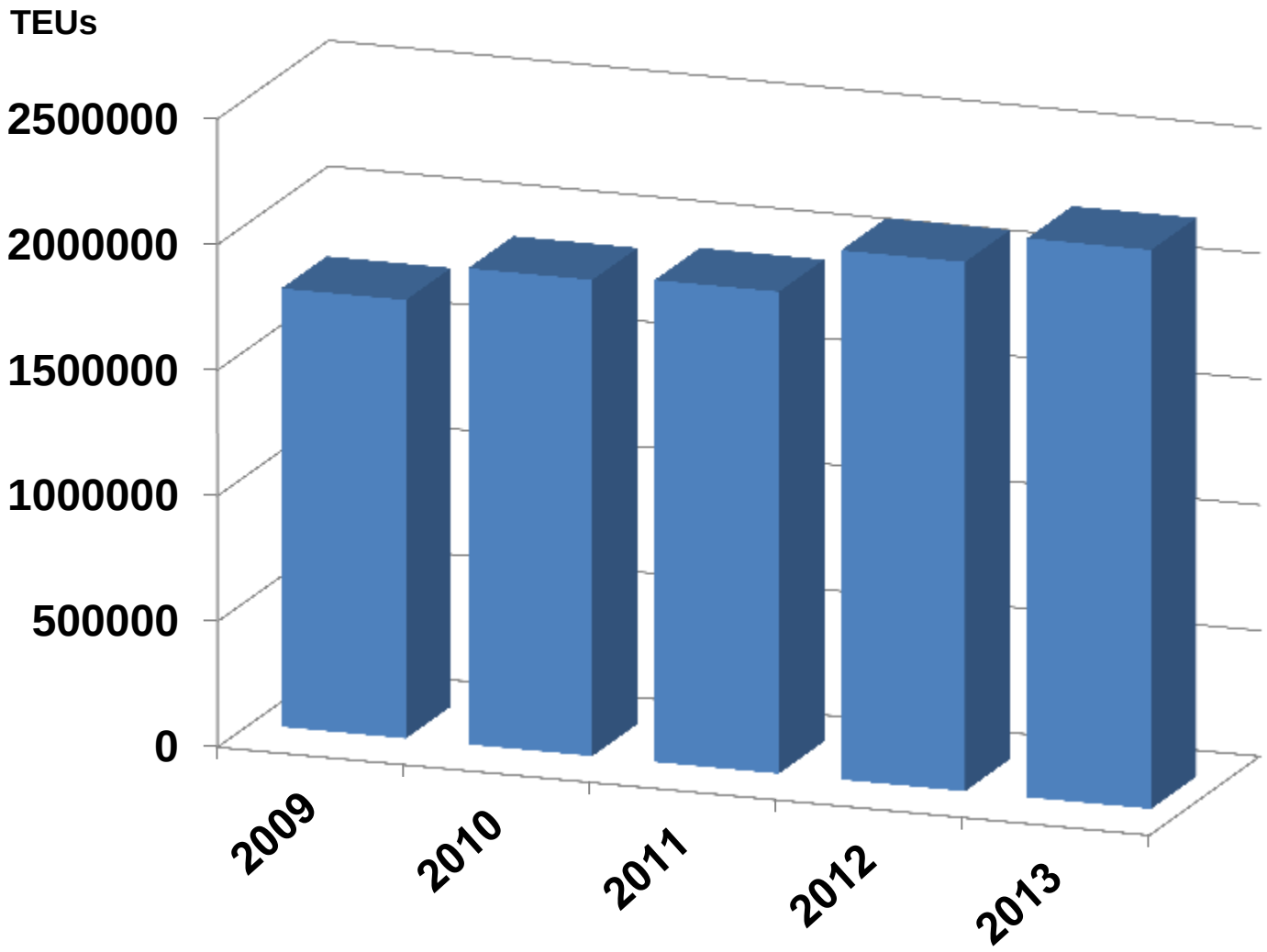
- Mission is to foster and stimulate commerce in Virginia through the Ports of the Commonwealth
- Port growth accrues jobs and revenue to VA
  - 343,000 port-related jobs statewide
  - $41 billion in business revenues
  - $1.2 billion in state and local taxes

Source: 2008 Economic Impact Study by William & Mary Mason School of Business

Distribution Center Network

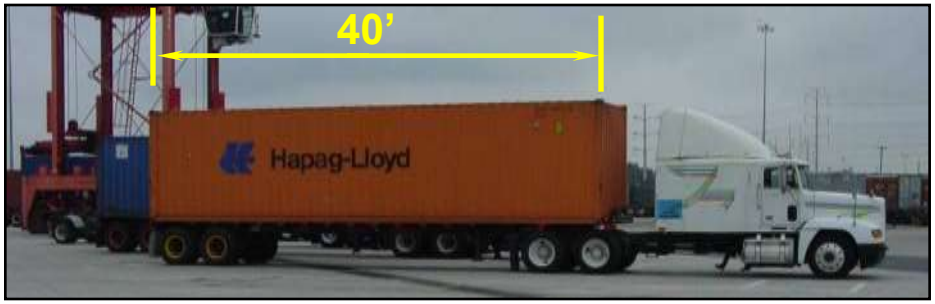


Cargo-Handling Growth



TEU – What Is It?

One 20’ container = 1 TEU



One 40’ container = 2 TEU

Typical over the road truck

- Port capacity and productivity is often measured in TEUs
- TEU stands for “Twenty Foot Equivalent Unit”
- Originally, containers were 20’ long
- Today, most cargo is moved in 40’ containers

One 40 ft. Container

= 1,512 Cases @ $27.98/case = $42,306

= 84,000 Music CDs @ $11.99/ea = $1,007,160

= 4,500 pairs Prada Sandals @ $368.00/pair (mid-season sale) = $1,656,000

= 150 42” LED Smart TVs @ $799/ea = $119,850

Top Commodities

EXPORT	IMPORT
Paper & Paperboard, incl. waste	Auto Parts
Wood Pulp	Furniture
Logs and Lumber	Non Alcoholic Beverages
Soybeans & Products	Paper and Paperboard, incl. waste
Mixed Metal Scrap	Tobacco
Grocery Products	Woodenware
Pet and Animal Feeds	Rubber, Natural
Poultry	Metalware
Meat	Granite
Tobacco	Steel

CY2013 Balance: 54% Export 46% Import

Source: PIERS

Intermodal Gateway

Trucks 62%

Rail 34%

Barge 4%

Increased Rail Volume

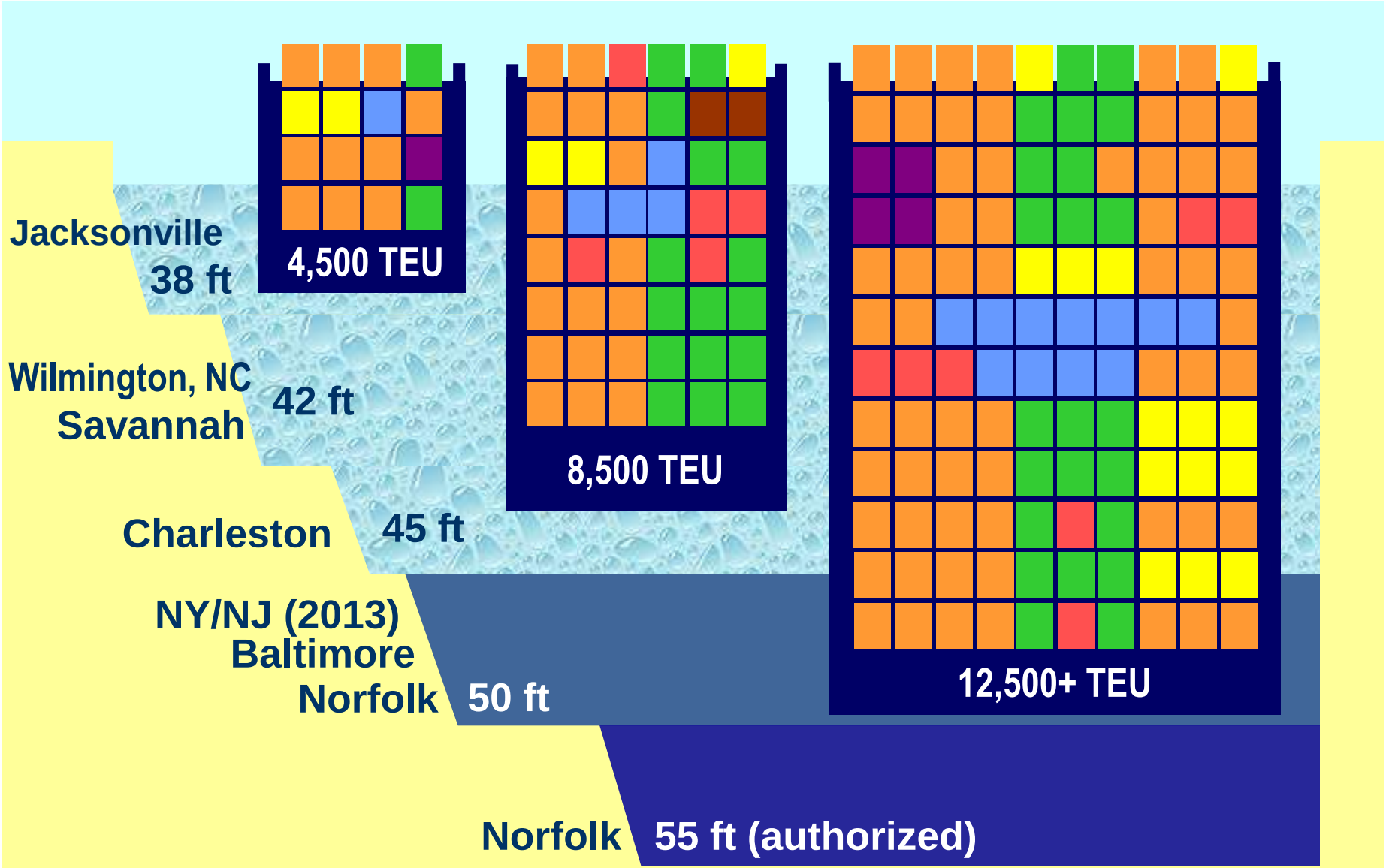
- Rail is the fastest-growing intermodal sector
- VPA is looking at ways to make moving cargo by rail even more efficient

Unique Advantages for Growth

- 50 foot channels
- Inexpensive dredging
- No air draft restrictions
- Short transit time to ocean channel
- Suez-class cranes
- Automated terminals
- Dual-rail access
- Inland transportation
- Expansion plans underway

The MSC Chicago set a deep draft record for East Coast ports at the Port of Virginia when it required 49 feet of water while fully loaded

Channel Depth Advantage



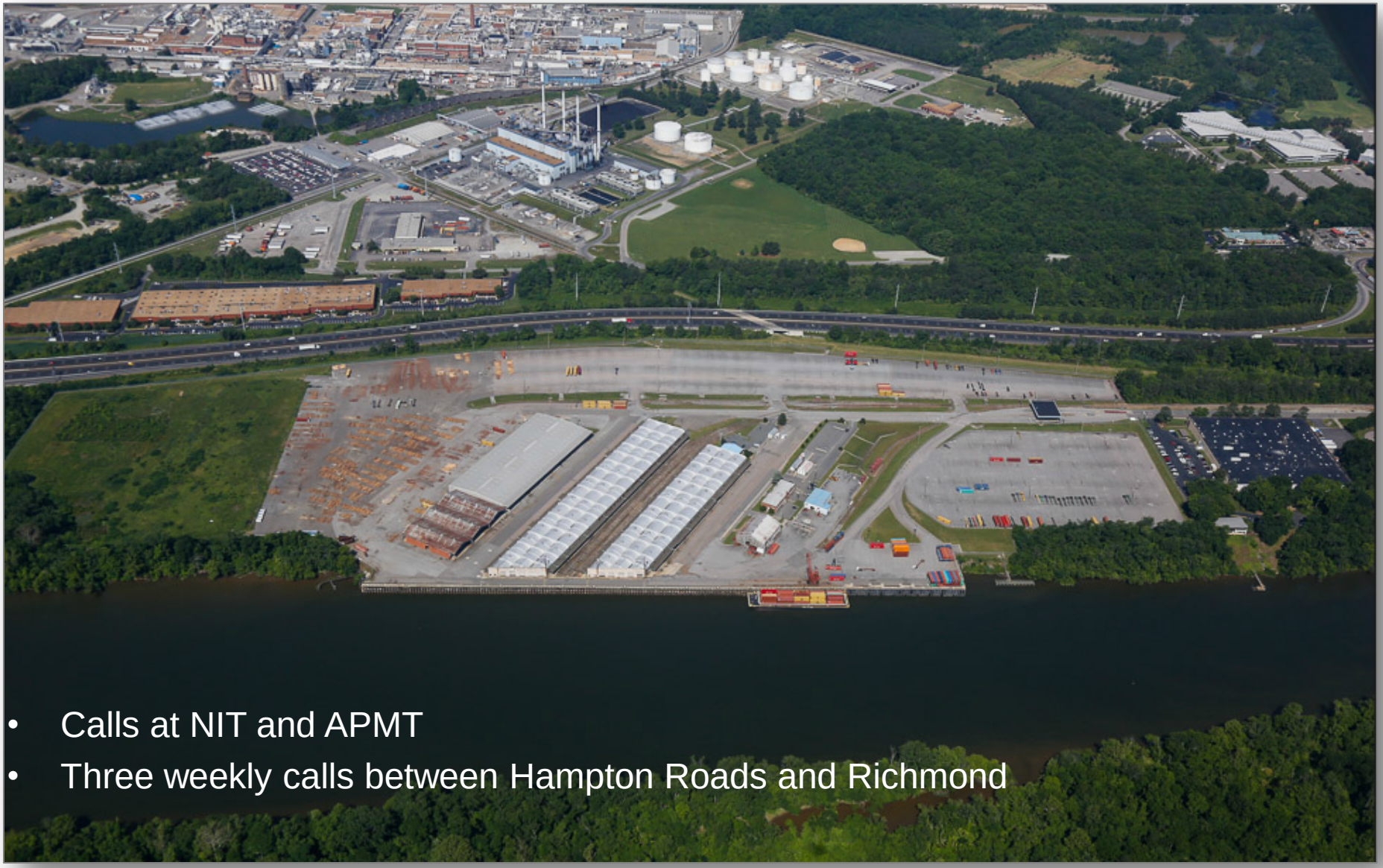
Based on ***fully loaded*** vessel

Portsmouth Marine Terminal

Land Area: 285 acres (land and pier only) Direct rail service with CSX; also Norfolk Southern via Norfolk and Portsmouth Belt Line. Shipside rail service is available

Newport News Marine Terminal

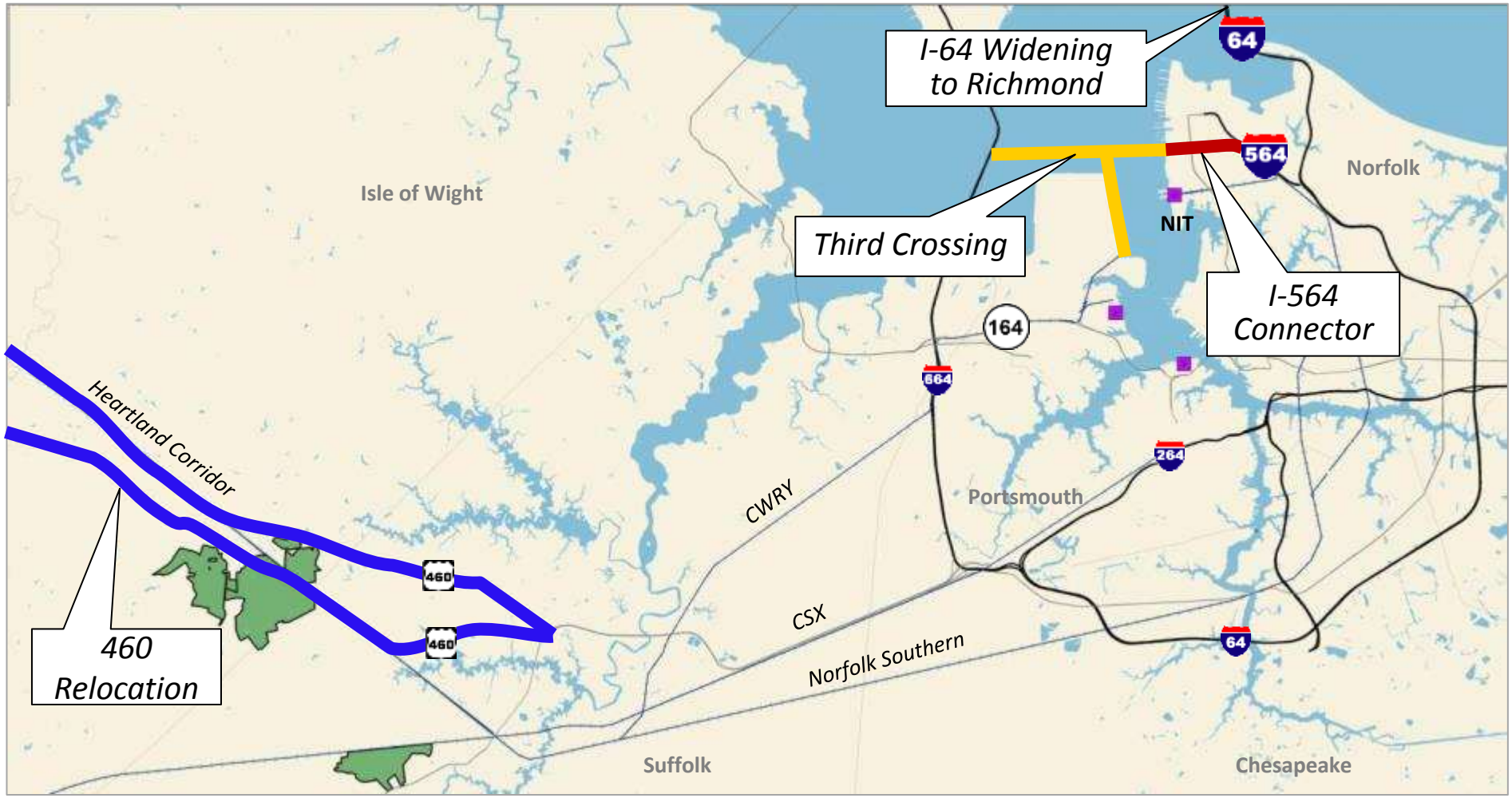
Port of Richmond and James River Barge



- Calls at NIT and APMT
- Three weekly calls between Hampton Roads and Richmond

Future Plans & Initiatives

Regional Transportation Projects



Budget Requests

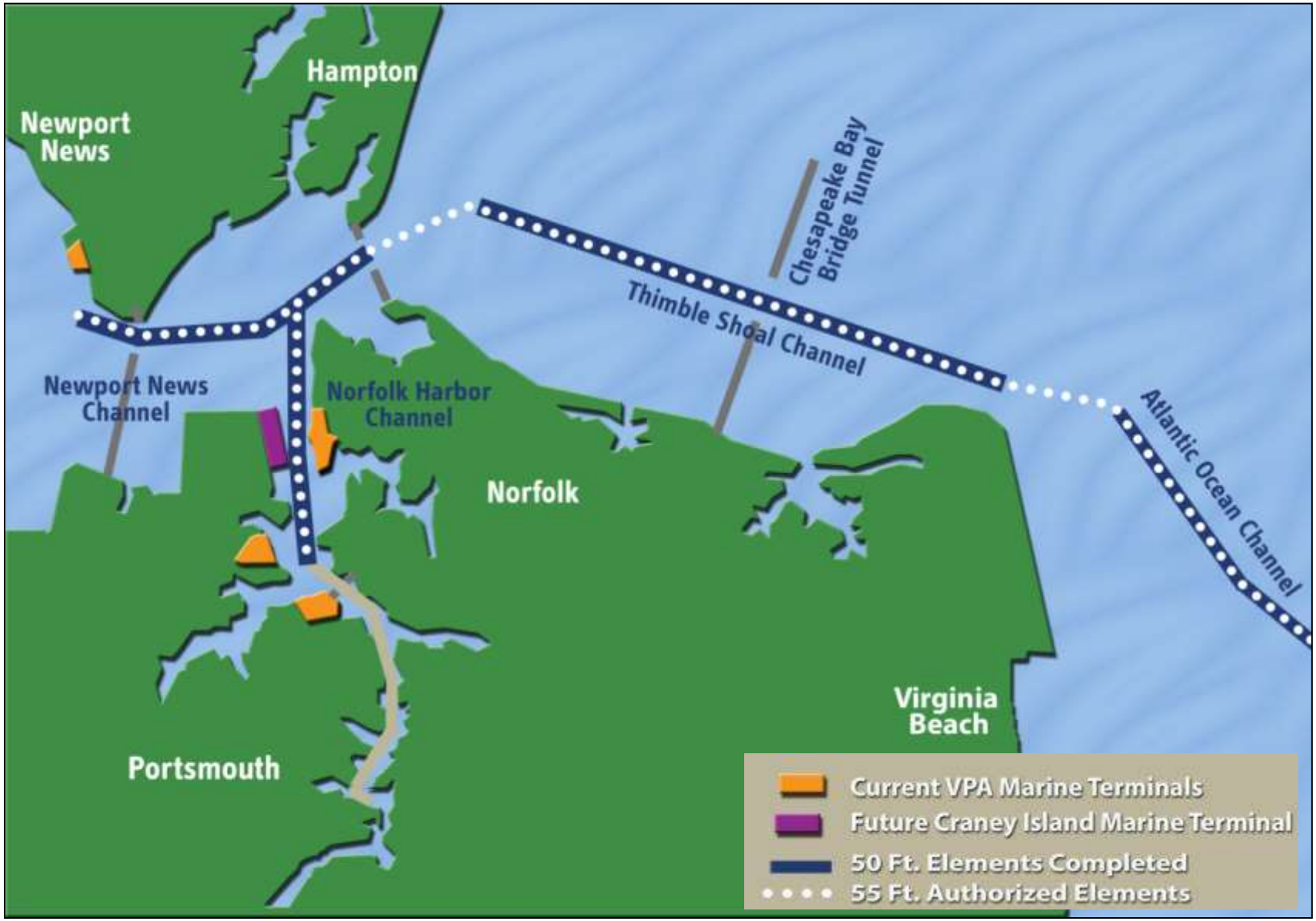
- $10 million in General fund appropriation
  - $6 million for feasibility study and preliminary engineering and design work to dredge Norfolk Harbor from 50ft to 55ft
  - $1.5 million for feasibility study to dredge the Southern Branch of the Elizabeth River from 40 ft to 45 ft
  - $2.5 million to close out the 50 ft channel dredging project

Budget Requests (cont.)

- $105.5 million special fund (terminal revenue) bond issue for NIT expansion
  - Authorized in 2013 Acts of Assembly
  - Language clarifications needed only

- $37 million in special fund (terminal revenue) appropriation to acquire additional container handling equipment

55 foot Channel

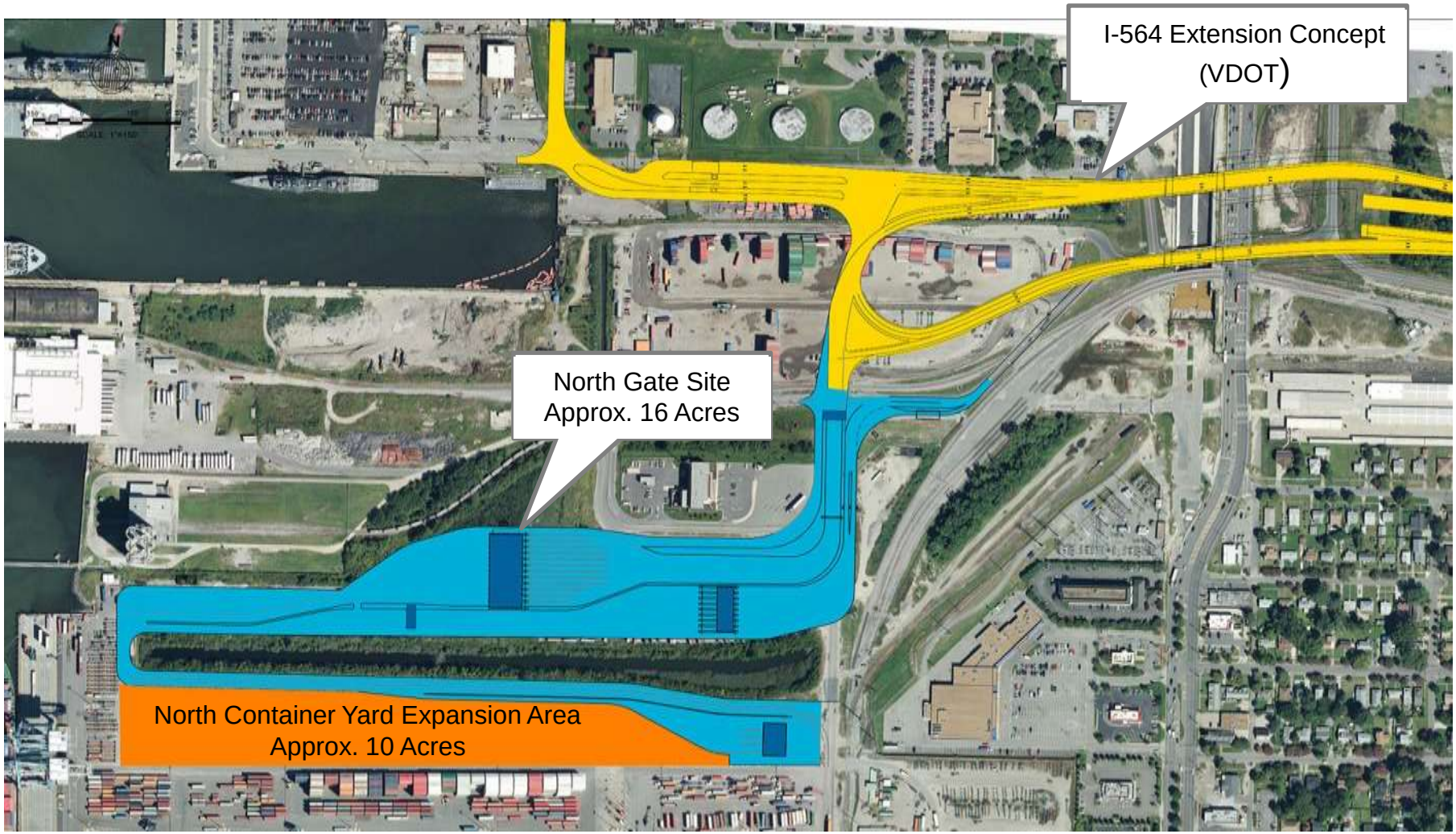


Modernized Infrastructure - NIT

- North Gate Complex and Container Yard Expansion
- Container Handling Equipment (CHE) Replacement Plan to include:
  - Decreased footprint
  - Increased Efficiency per Container

Automated Gate - North NIT

- I–564 Interstate Exchange
- Direct Interstate access for container outflow
- Mitigates Hampton Blvd congestion issues



Change Mode of Operation

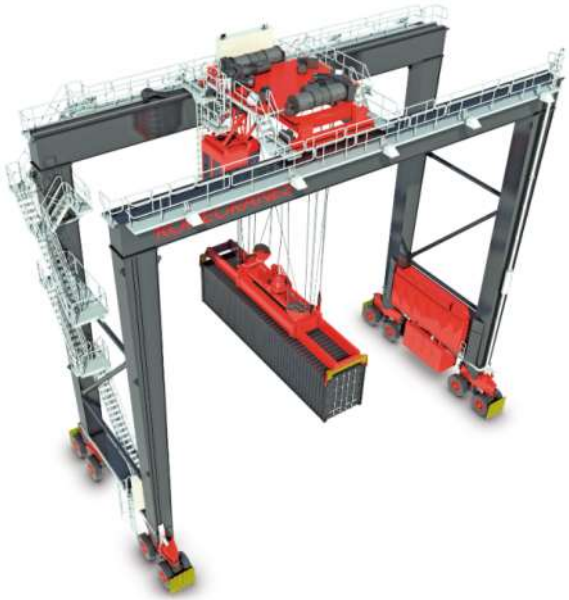
- **Rubber Tire Gantry (RTG) Operations**
  - Increases efficiency
  - Increases throughput

- **Most Economical Entry into RTG ops**
  - Introduction in parallel to Toploader (T/L)
  - Timing of RTG Introduction

- **Additional Rail Equipment Included**

Rubber Tire Gantry (RTG)

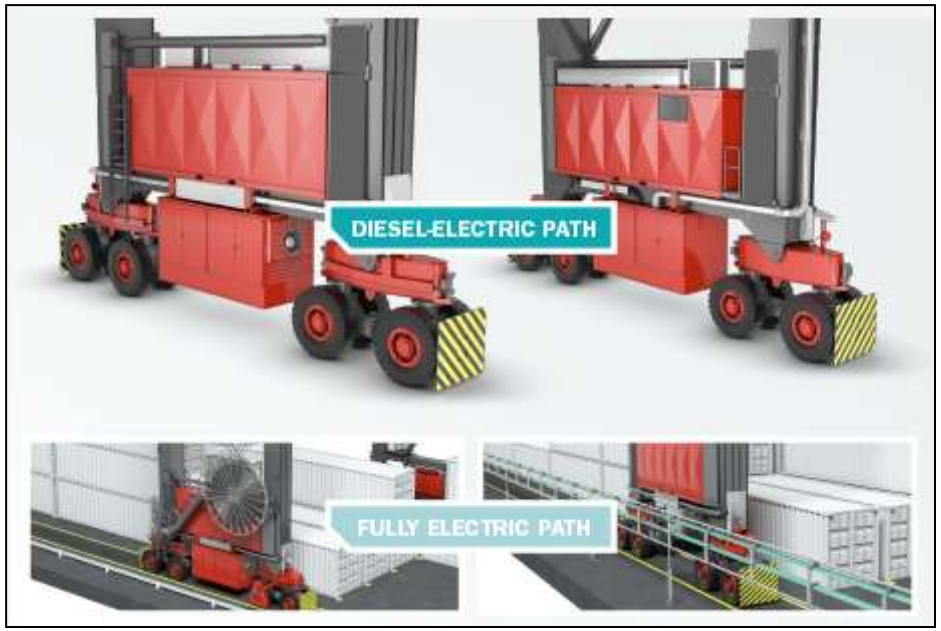
- **Power Options**
  - Required Infrastructure
  - Full Electric
  - Hybrid
  - Fuel Saver – Diesel Electric
  - Diesel



- **Throughput Increase per Acre**

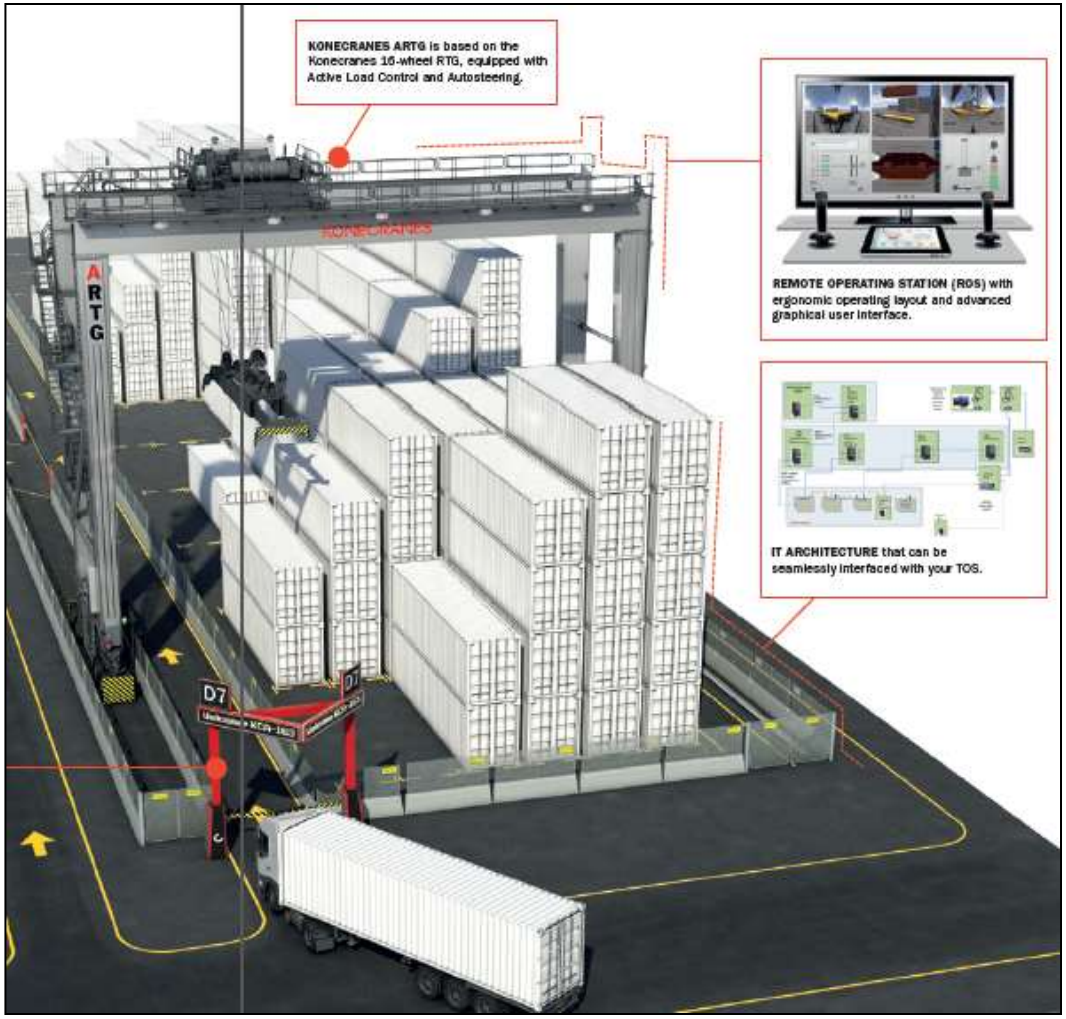
RTG Infrastructure Requirements

- Diesel
- Diesel – Electric
- Electric



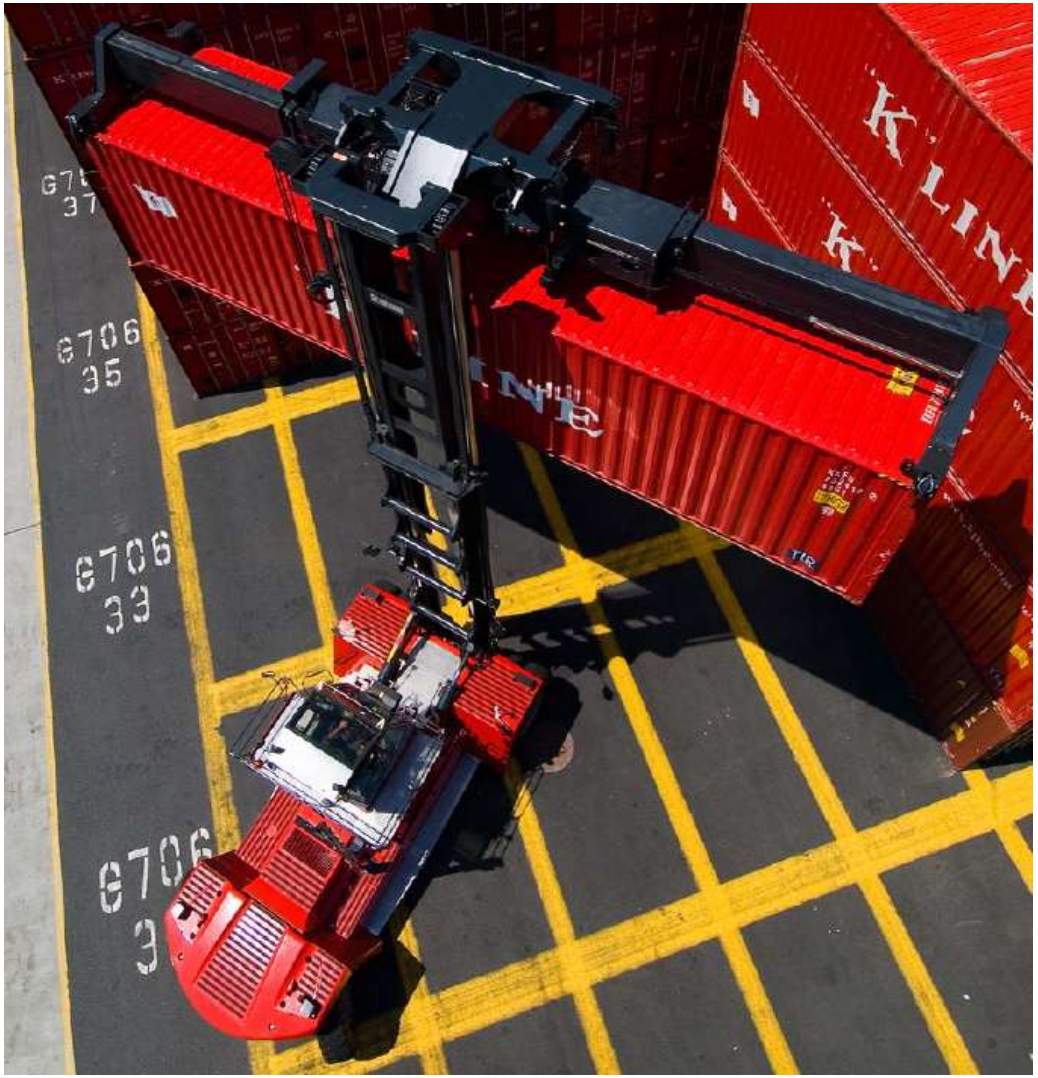
Automated Rubber Tire Gantry

- ARTG – Automated RTG (Hybrid)
- Fully Electric Power Supply



Top Loader

- Traditional Equipment Handler
- Fuel and Power Options

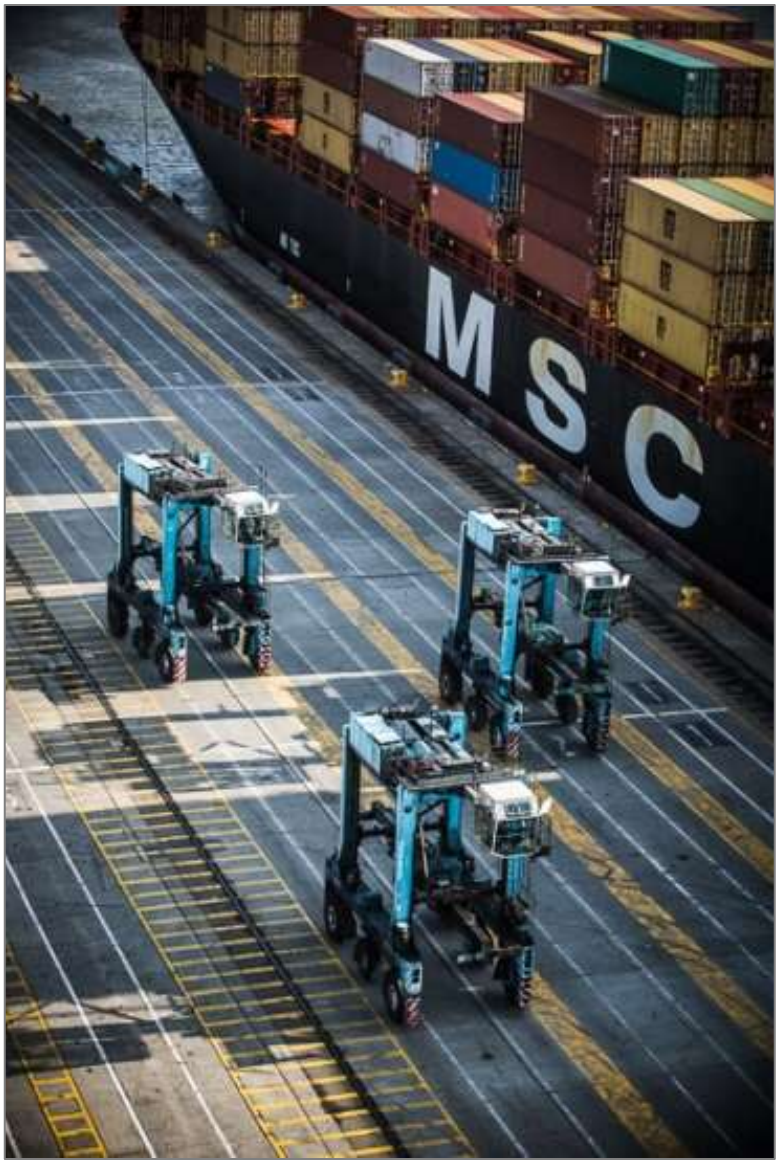


Yard Tractor (UTR)

- Green Terminal Tractor
  - Hydrogen
  - Plug-In Hybrid

Shuttle

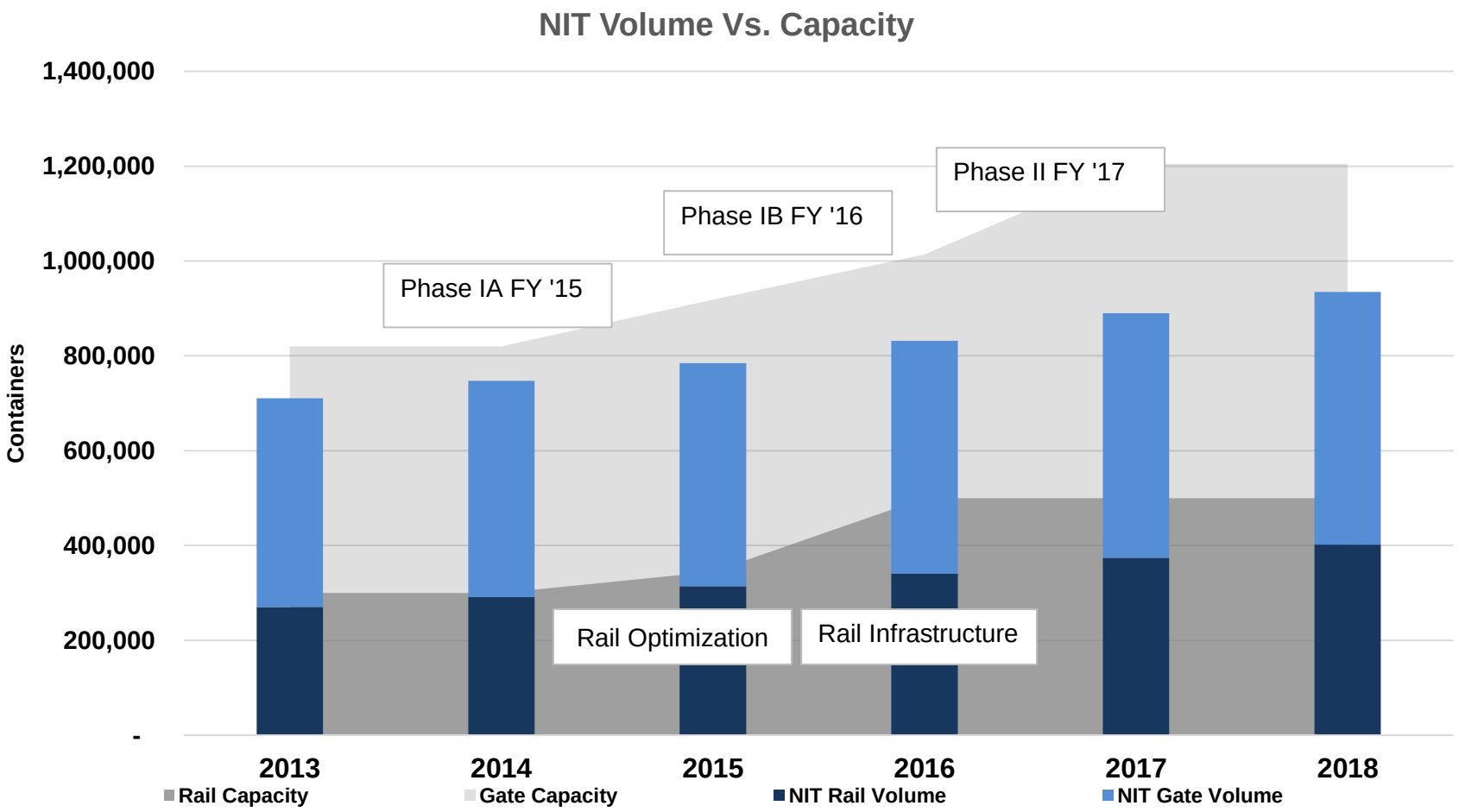
- APM shuttle truck



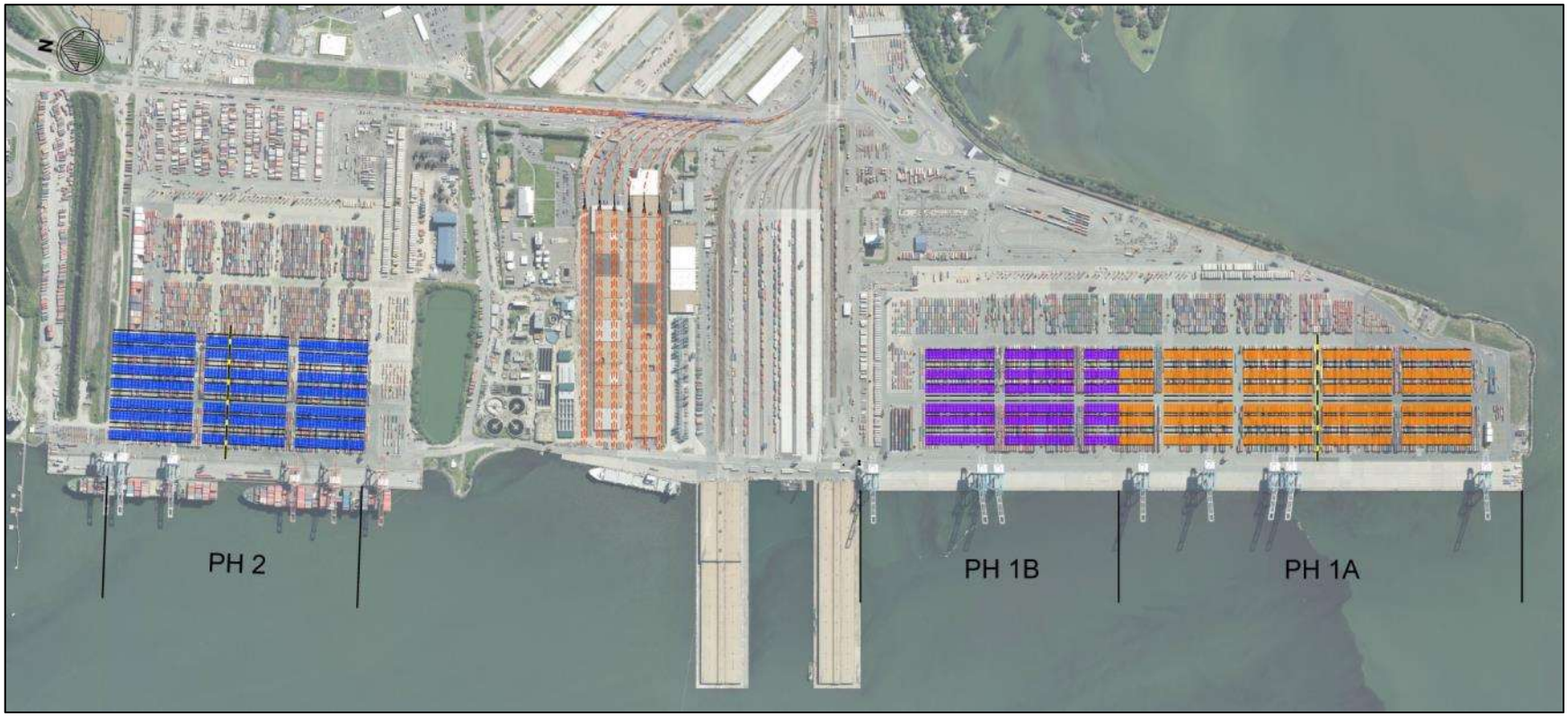
Investment Breakdown

	Phase 1 (60%)		Phase 2 (40%)	
000's	2015	2016	2017	2018
Infrastructure	3,177	17,978		-
Infrastructure Gate	-	31,953	-	-
RTG	33,340	28,589	17,651	18,163
Top Loader	4,939	4,235	2,615	2,691
UTR	4,733	2,541	1,307	1,345
Shuttle	6,630	-	-	-
Total Capital Expenditure	52,819	85,295	21,573	22,199
Phase Total		138,114		43,772

NIT Volume and Capacity



NIT Investment Plan



THE PORT OF
VIRGINIA

Booms Down

Jobs Up

Port Proud

Returning Value to Our Shareholders

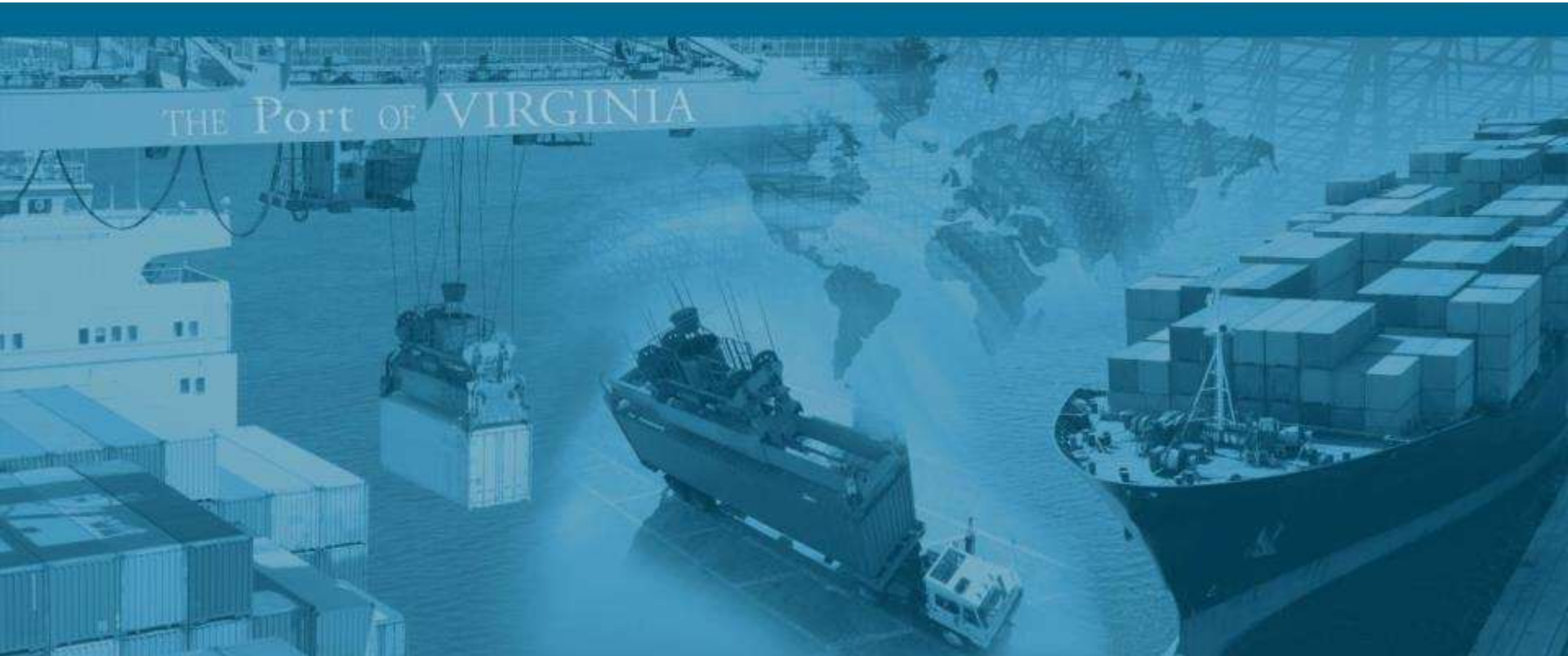
CONCLUSION

- ✓ Excellence in Operations
- ✓ Fiscal Responsibility
- ✓ Growth

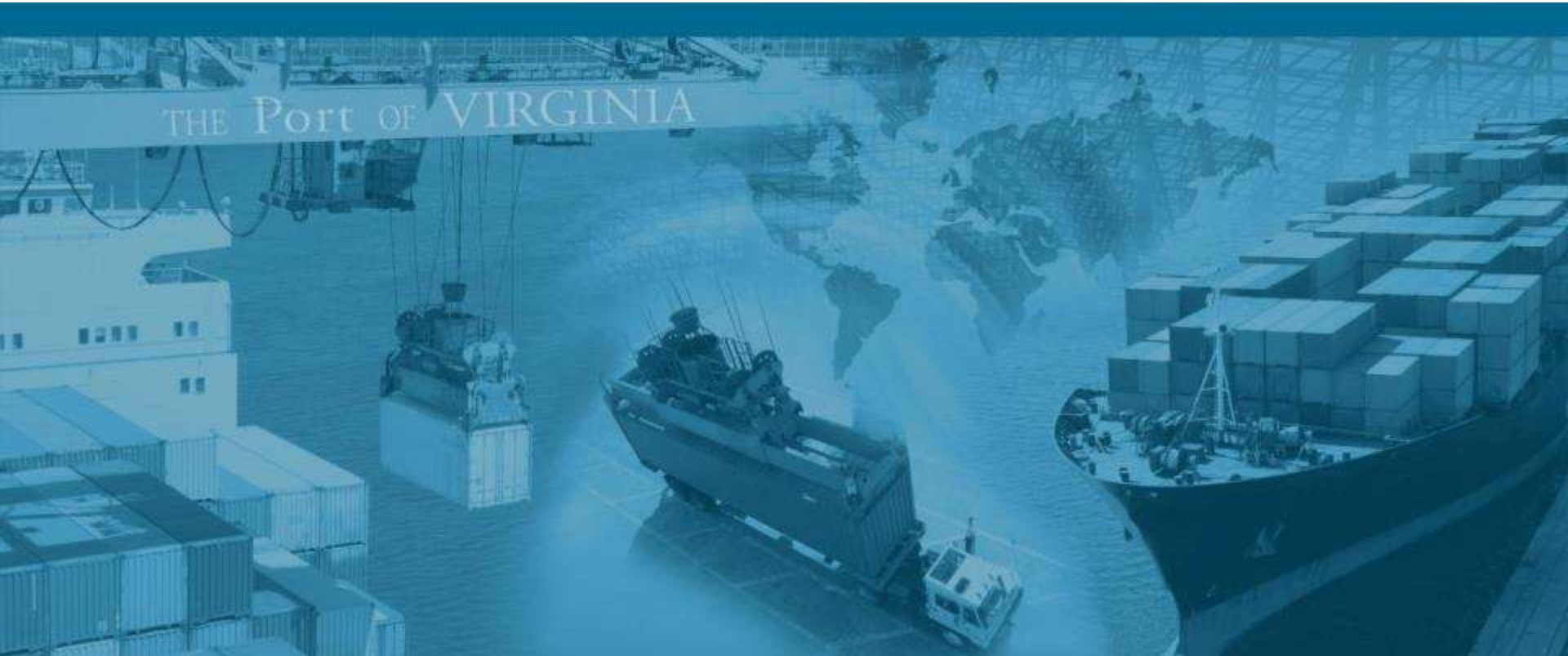
Value to Our Commonwealth

THE PORT OF VIRGINIA

Thank You



Appendix – Additional Information

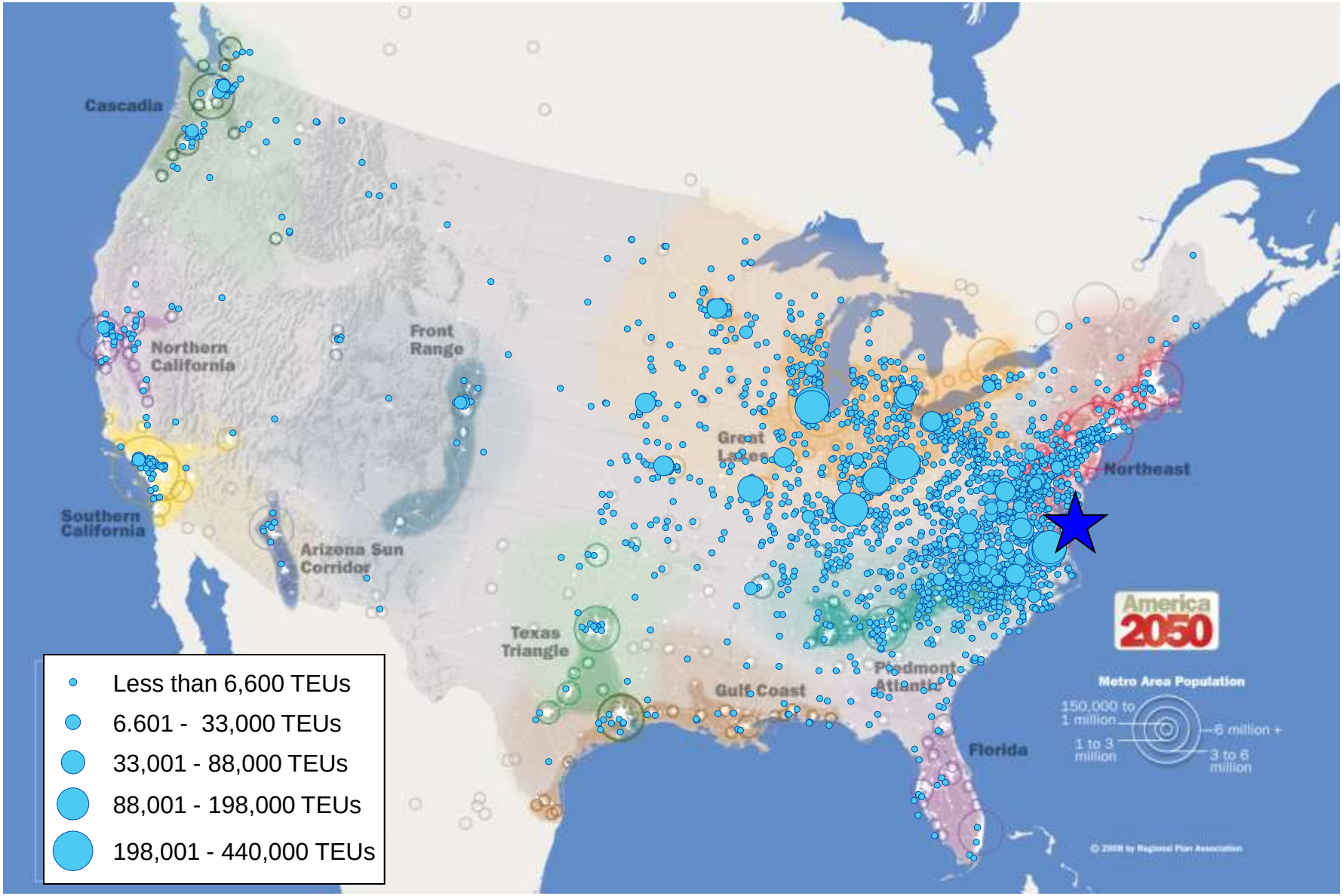


Top Trading Partners

EXPORT	IMPORT
China	China
Germany	Germany
India	India
Belgium	Brazil
Netherlands	Italy
Brazil	Spain
United Kingdom	Vietnam
Japan	Netherlands
Saudi Arabia	Belgium
Indonesia	Indonesia

Source: PIERS

Accessible Mid-Atlantic Location



New route is double-stack and eliminates more than 230 miles

Opened September 2010

Norfolk Southern Greensboro Rail Service

- Greater access to N.C. markets
- Six-day-a-week rail service
- Faster and more frequent truck turns
- Lowest environmental impact compared to moving cargo via other Southeast ports

CSX
CSX National Gateway
CSXT Double-Stack Routes
Other CSXT Routes
Terminals
Interchange
BOSTON
WORCESTER
SYRACUSE
SPRINGFIELD
BUFFALO
DETROIT
NEW YORK / NEW JERSEY
CLEVELAND
CHICAGO
CHAMBERSBURG
PHILADELPHIA
BALTIMORE
COLUMBUS
INDIANAPOLIS
CINCINNATI
NORFOLK / PORTSMOUTH
EAST ST. LOUIS
KANSAS CITY
EVANSVILLE
CHARLOTTE
NASHVILLE
WILMINGTON
MEMPHIS
ATLANTA
FAIRBURN
CHARLESTON
SAVANNAH
JACKSONVILLE
MOBILE
NEW ORLEANS
ORLANDO
TAMPA

APM Terminals

Craney Island Eastward Expansion

Artist Rendering at Full Build-out