



VIRGINIA PORT AUTHORITY  
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## Introduction and Plan Purpose

The Port of Virginia is the fifth largest container port in the nation, moving more than 2.94 million TEUs of cargo for its customers through its terminals every year. The port is made up of up of four deep-water marine terminals, an upriver terminal and an inland intermodal terminal:

- Norfolk International Terminals (NIT)
- Newport News Marine Terminal (NNMT)
- Virginia International Gateway (VIG)
- Portsmouth Marine Terminal (PMT)
- Richmond Marine Terminal (RMT)
- Virginia Inland Port (VIP)

Virginia's 50-foot channels and unobstructed terminal access have enabled The Port of Virginia to safely and efficiently handle the largest vessels calling the US East Coast. In this "big ship era," the number of vessels calling on ports has decreased while the volumes they carry have increased significantly. In fact, the capacity of the largest vessels calling the port have increased nearly 70% since the last Master Plan was developed. As those volumes continue, the revenue generated from vessel calls is reinvested in the port's terminals through its Capital Investment Plan.

Virginia's road, rail, and marine highway systems provide multiple avenues to quickly and efficiently deliver cargo to its destination, making The Port of Virginia the ideal location for first and last port-of-calls for its customers. The continued improvement of these inland freight corridors to and from the port is essential to maintaining the Commonwealth's attractiveness as an ideal location to establish operations in distribution and advanced manufacturing.

The 2065 Master Plan integrates these growth opportunities into updated demand forecasts and aligns the port's capital improvement project schedules to ensure fiscal mindfulness and sustainability. The plan further provides a near and long-term strategy that ensures the delivery of needed infrastructure that is fiscally responsible, recognizes the value of regional transportation investments, and supports operational excellence through innovation. Successful execution of the 2065 Master Plan will stimulate commerce, facilitate growth and accrue economic benefits for port partners, the Commonwealth and the nation.

## Economic Benefits

This port is a gateway to world markets and an economic engine for Virginia.

The naturally-deep harbor, modern terminals, and world-class service attract big ships and millions of cargo containers filled with goods valued in the billions every year. The management and movement of

these containers and their contents are the drivers of jobs and business investment across Virginia. According to a FY18 economic impact study conducted by the Mason School of Business at the College of William & Mary, over 397,000 Virginia jobs – nearly ten percent of the state’s resident workforce – are linked to port activity at its six terminals.

With nearly two-thirds of the U.S. population located within two day’s drive of the port’s primary facilities, the port is in an ideal position to serve its partners in Virginia, North Carolina, Maryland, and West Virginia via truck. The port’s location also makes it a strategic gateway for Midwest manufacturing and population centers in Ohio, Indiana, Illinois, Tennessee, Kentucky and beyond served by on-dock rail from two Class I railroads.

To reach the widespread markets between its facilities and destinations around the country, The Port of Virginia values efficient highway and rail connections that are maintained and improved as cargo demand grows. The port appreciates its collaboration with the Virginia Department of Transportation (VDOT), the Department of Rail and Public Transportation (DRPT), the Transportation Planning Organization (TPO), the Hampton Roads Transportation Accountability Commission (HRTAC), and others to coordinate and prioritize their interests in efficient transportation corridors with state transportation plans and generate economic benefits to the state.

Locally, The Port of Virginia attracts distribution centers and manufacturers to nearby industrial park developments, including the Centerpoint development in Suffolk, VA, Shirley T. Holland industrial park in Isle of Wight County, VA, and the Mid-Atlantic Advanced Manufacturing Center in Greensville County, VA.

The Virginia Inland Port not only provides an outlet to cargo from the marine terminals, but acts as a catalyst for commerce in its community. Since its opening in 1989, 57 major companies have operations nearby. More than 10,000 jobs have been created, and over \$1.1 billion has been invested in the area.

The net effect is a diverse, vibrant, and resilient economy within the Commonwealth and increased opportunities for its citizens to prosper.

## **Existing Conditions**

Cargo moving through The Port of Virginia facilities is transported to and from markets around the globe, carrying the goods and supplies that manufacturers, businesses, retailers, and individual consumers use every day. This cargo is moved by way of:

- **6 Terminals**
- **1,592 acres**
- **currently Up to 50’ deep berths, dredging to 55’**
- **18,480 linear feet of berth**
- **64,605 linear feet of on-dock rail**

Norfolk’s deep water harbor– the deepest on the East Coast – shelters the world’s largest naval base; a robust shipbuilding and repair industry; a thriving export coal trade and the fifth largest containerized cargo complex in the United States.

The port offers 50-foot inbound and outbound channels to its customers, and has begun its deepening and widening project that will take the channels 55' deep and 1400' wide – creating safe and efficient two-way passage for the largest container vessels calling the US East Coast.

Nearly 30 international shipping lines offer direct, dedicated service to and from Virginia, with direct connections to more than 80 ports around the world. In an average week, more than 40 international container, breakbulk and roll-on/roll-off vessels are serviced at the port's marine terminals.

Two Class I railroads, Norfolk Southern and CSX, serve the port via on-dock intermodal container transfer facilities at Virginia International Gateway and Norfolk International Terminals. Virginia's intermodal rail connections allow the port to reach customers in the Ohio Valley and the upper Midwest with scheduled daily service. The Virginia Inland Port facility helps to quickly move containerized cargo from the marine terminals to its location 220 miles inland, and closer to port customer's distribution centers.

## **Existing Conditions**

### **Terminals**

#### Norfolk International Terminals (NIT)

567-acre container terminal with six 50' deep berths and 14 Super Post Panamax ship-to-shore cranes. Current operations rely on hybrid shuttle carriers. Also includes an on-dock rail yard with 18,000 feet of working track.

#### Virginia International Gateway (VIG)

291-acre container terminal with four 50' deep berths and 12 Super Post Panamax ship-to-shore cranes. Container operations make use of semi-automated rail-mounted stacking cranes, with waterside transfers to vessels via shuttle carriers. Also includes an on-dock rail yard with 19,840 feet of working track.

#### Portsmouth Marine Terminal (PMT)

285-acre mixed use terminal with four 43' deep berths and 6 Post Panamax ship-to-shore cranes currently allocated to container operations. Primarily an over-the-road truck terminal with intermodal rail operation capabilities.

#### Newport News Marine Terminal (NNMT)

165-acre general cargo terminal supporting Ro/Ro, break-bulk, and warehouse operations.

#### Virginia Inland Port (VIP)

159-acre intermodal container transfer facility in Front Royal (approx. 60 miles west of Washington D.C.) with container rail service to/from NIT and VIG.

#### Richmond Marine Terminal (RMT)

81-acre general cargo terminal on the James River that supports a container barge service to NIT, PMT and VIG, as well as bulk agriculture exports, transloading, warehouse, and break-bulk operations. Also includes on-dock rail service.

## **Future Outlook**

The 2065 Master Plan guides the port in maximizing its valuable waterside real estate for its stakeholders and in developing the associated infrastructure needed to accommodate the modern cargo vessels that call on its facilities, both in the near-and-long term.

Growing populations and the continued globalization of manufacturing will drive increased cargo demand through marine terminals beyond what the existing facilities and supporting transportation networks can currently accommodate.

The pursuit of greater economies of scale, supported by canal expansions and the deepening of harbor channels, continues to move ocean carriers to larger vessels and fewer port calls. Supply chains are growing increasingly sophisticated as businesses seek to minimize inventory costs while maximizing flexibility to deliver products and supplies when and where they are needed.

Recent public and private investment in port and transportation infrastructure is spurring further competition between ports for cargo and the accompanying development of nearby manufacturing and distribution centers with access to international trade routes.

### **Strategy: Near-Term**

Over the next five years, The Virginia Port Authority will continue to make significant investments to increase the capacity and efficiency at its terminals to support long-term sustainable growth for its customers and partners.

#### **Key elements of the port's near-term strategy include:**

- Completing transition of NIT container handling operations to advanced equipment that reduces operating costs and environmental impacts while increasing throughput capacity.
- Continuing to bolster interim NIT operations to mitigate terminal construction activities and anticipated terminal congestion.
- Continuing to promote the use of VIP, RMT and the Greensboro rail ramp as inland access points to The Port of Virginia.
- Continuing development of the Craney Island Eastward Expansion that is the foundation of the future Craney Island Marine Terminal.
- Continuing the dredging of Hampton Roads' navigation channels to 55' for larger vessels.
- Purchasing equipment in support of the James River Expansion Project which will assist RMT to provide more efficient barge service to current and potential customers.
- Advocating for critical rail and highway improvements that our port partners need to efficiently access The Port of Virginia's terminals.

### **Strategy: Long-Term**

Within five years, The Port of Virginia will be well-positioned to keep pace with anticipated cargo growth through the completion of NIT in 2020, including the redevelopment of obsolete infrastructure that will maximize the use of terminal property for increased throughput.

Strategic long-term investments will be made to continue development of the Craney Island Eastward Expansion so that the expansion cell will be filled with land by the time a new marine terminal is needed to handle increased cargo capacity.

In addition, the port will continue to diversify its cargo portfolio by attracting and retaining high-value non-containerized cargo and services with reinvestments in Portsmouth Marine Terminal, Newport News Marine Terminal, and the Richmond Marine Terminal.

The port values its close work with other state and local agencies, as well as private stakeholders such as the railroads, to help plan improvements to inland transportation corridors that connect its terminals to customers and stakeholders.

As these port, state, and private investments are realized, the improved access will be leveraged by the port's economic development and commercial teams to promote greater industrial development and market share gain for the benefit of the Commonwealth's citizens.

### **Capital Investment Plan**

The projects scheduled in the Capital Investment Plan (CIP) will expand port capacity by constructing new facilities and increasing utilization and efficiency of existing facilities. Over the 45-year planning horizon of the 2065 Master Plan, significant capital will also be put towards enhancing existing port facilities for its stakeholders.

The fleet of container handling equipment likewise represents an ongoing and significant capital investment to ensure that it keeps pace with day-to-day operational demands and advances in technology.

The base case CIP is tested against the financial forecast and capital available from known and planned sources. Each project has been cost-estimated with contingency added.

An annual allocation has also been included in the forecast to replace aging terminal equipment and infrastructure for the benefit of our colleagues and customers.

The CIP has been aligned to the forecasted financial results. It can be funded from a combination of current income, financing through debt issuances, and federal and state funding sources.

Funding the CIP uses a tiered approach and prioritizes uses of funds and results in the anticipated allocation of funding, as shown in the adjacent chart.

### **Funding**

Funding for the CIP considers increased revenue generation from the forecasted growth, retirement of existing debt, issuance of new debt, and likely state and federal funding sources.

Under the assumptions used in the financial forecast model, the CIP can be executed on a schedule that provides unconstrained growth capacity through 2065 while maintaining annual positive cash flow and required debt service coverage requirements.

### **The CIP is funded by the following:**

- **TERMINAL REVENUES** generated from charges for handling containerized cargo, handling and storage charges for non-containerized cargo, and fees associated with chassis and empty container management.
- **COMMONWEALTH PORT FUND** is a scheduled allocation of state funding to the Virginia Port Authority for investment in port-related infrastructure.
- **STATE AND REGIONAL FUNDS** may be available for specific port-related projects such as the first phase of redevelopment at NIT and road and rail projects that connect to Craney Island.
- **FEDERAL FUNDS** are authorized to fund 50% of the Craney Island Eastward Expansion dike and mitigation construction on an ongoing basis.
- **A COMBINATON OF STATE AND FEDERAL FUNDING** will be available for dredging Norfolk Harbor and Channels to 55-feet.

### **Conclusion**

The Port of Virginia's success in capturing the opportunities created by the globalization of trade relies on leveraging Virginia's natural advantages, infrastructure investments, and private business ventures. The port will continue to collaborate with its partners, customers and legislature for continual improvement and adapting to evolving world trade trends such as bigger ships and fewer port calls.

### **The strategy presented in the 2065 Master Plan:**

- Provides the capital investments needed to support the unconstrained growth projections.
- Defines a continuous program to improve level of service and operational efficiencies.
- Positions the port to act on new opportunities and conditions.
- Aligns port improvements with statewide investments in transportation corridors to provide cost-competitive access to international trade.

Execution of this strategy supports the Commonwealth's continued success in attracting diverse businesses that seek efficient access to growing markets via international trade lanes and inland freight corridors. These ventures go on to spur further growth in local businesses and create more jobs, economic activity, and opportunities for a prosperous Commonwealth.