

2065 MASTER PLAN

EXECUTIVE SUMMARY





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Deputy Secretary of Transportation, Commonwealth of Virginia

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STEWARDS OF TOMORROW

THE PORT OF VIRGINIA MISSION

Guided by our company values, The Port of Virginia will achieve our shared vision of operational excellence, fiscal responsibility and sustainable growth. Above all, we will remain responsible members of the communities we serve, a valuable resource to our customers, an excellent place to work, and an economic engine for the region.

THE PORT OF VIRGINIA

- Fosters and stimulates growth for Virginia's economy.
- Serves as the global gateway for the import and export of freight.
- Improves navigable waters within the Commonwealth of Virginia.
- Aids in the development of commerce for all of Virginia's maritime and inland ports.

VISION

- Excellence in operations
- Fiscal responsibility
- Delivering sustainable growth
- Living our values

VALUES

INNOVATION: We embrace change and the opportunity to create. We relentlessly pursue new ideas to improve business.

HELPFULNESS: From a hand with the little things to lending perspective, experience, and expertise, our actions large and small make a difference.

FORTITUDE: We will be decisive, follow through, and work as one.

ACCESSIBILITY: We let our customers and colleagues know we are there for them by act and deed.

MINDFULNESS: We lead with purpose, strive for continuous improvement, and take care of our stakeholders.

SUSTAINABILITY: We are responsible stewards of all resources entrusted to our care.



INTRODUCTION & PLAN PURPOSE

The Port of Virginia is the fifth largest container port in the nation, moving more than 2.3 million TEUs of cargo through its terminals every year. The port is made 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 allowed the number and size of the vessels calling at The Port of Virginia to increase significantly since the last Master Plan was developed. Those volumes will continue to grow as the revenue generated from vessel calls is reinvested in the port's terminals through its Capital Investment Plan.

The quality of the port's access to international trade is dependent upon its ability to efficiently transfer cargo between ocean-going vessels and inland freight corridors. 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. The continued improvement of these inland freight corridors to the port, combined with

available capacity at its terminals and efficient operations within the terminal gates, is essential to maintaining the Commonwealth's attractiveness as an ideal location to establish operations in distribution and manufacturing.

Opportunities are plentiful for the port to stimulate commerce, facilitate growth, and accrue economic benefits to Virginia by expanding its presence as one of the premier US gateways to international trade. The port will continue working tirelessly to support the advanced logistic networks that deliver goods to the nation's consumers and allow US manufacturers to successfully compete in the global marketplace.

The 2065 Master Plan integrates these growth opportunities into updated demand forecasts and aligns the port's capital improvement project schedules to enable the port to capture it. These projects include utilizing advanced equipment at NIT, expanding VIG, constructing the Craney Island Marine Terminal, investment at Richmond Marine Terminal to upgrade the equipment and facilities, and reinvesting in PMT and NNMT for non-containerized cargo services. The plan further provides a near and long-term strategy for the port that ensures the delivery of needed infrastructure that is fiscally responsible and sustainable, 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 to the Commonwealth and the nation.



ECONOMIC BENEFITS

The Port of Virginia is an economic engine for the Hampton Roads region and the Commonwealth of Virginia. According to an economic impact study conducted by the Mason School of Business at the College of William & Mary, 374,000 Virginia jobs – nearly ten percent of the state's resident workforce – are linked to port activity at its six terminals.*

**THOSE JOBS GENERATE APPROXIMATELY \$17.5 BILLION
IN ANNUAL COMPENSATION AND \$1.4 BILLION IN
STATE AND LOCAL TAXES.**

With nearly two-thirds of the U.S. population located within one day's drive of the port's primary facilities, the port is in an ideal position to provide access to its customers. The port primarily ships to customers in Virginia, North Carolina, Maryland, and West Virginia via truck, and to Midwest manufacturing and population centers in Ohio, Indiana, Illinois, Tennessee, Kentucky and beyond, via Norfolk Southern and CSX railway.

To reach the widespread markets between its facilities and destinations around the country, The Port of Virginia relies on efficient highway and rail connections that are maintained and improved as cargo demand grows. The port collaborates 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.

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 Greenville 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, 40 major companies have operations nearby. More than 8,000 jobs have been created, and nearly \$750 million has been invested in the area.

**THESE PORT CUSTOMERS BENEFIT COMMUNITIES
BY CREATING LOCAL JOBS, SPURRING ECONOMIC
ACTIVITY, AND INCREASING TAX REVENUES
THAT SUPPORT THE REGION.**

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

** Study based on The Port of Virginia's Fiscal Year 2013 results.*



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
UP TO 50' DEEP BERTHS
18,900 LINEAR FEET OF BERTH
173,595 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.

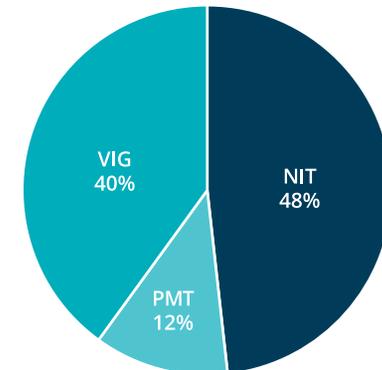
The port offers 50-foot inbound and outbound channels, and is the only East Coast port with Congressional authorization to dredge to 55 feet. In an era where container ships are carrying 10 - 14,000+ 20-foot equivalent units per voyage, deep water and the absence of overhead restrictions give The Port of Virginia a significant competitive advantage.

Nearly 30 international shipping lines offer direct, dedicated service to and from Virginia, with connections to 200+ countries 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. The railroad service is augmented by vital short line rail partners including the Norfolk & Portsmouth Belt Line and the Commonwealth Railway. 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 CAPACITY





EXISTING CONDITIONS

TERMINAL	DESCRIPTION
<p>Norfolk International Terminals (NIT)</p>	<p>567-acre container terminal with six 50' deep berths and 14 Super Post Panamax ship-to-shore cranes. Current operations rely primarily on straddle carriers. Also includes an on-dock rail yard with 18,000 feet of working track.</p>
<p>Virginia International Gateway (VIG)</p>	<p>231-acre container terminal with three 50' deep berths and 8 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 13,200 feet of working track.</p>
<p>Portsmouth Marine Terminal (PMT)</p>	<p>285-acre mixed use terminal with two 43' deep berths and 6 Post Panamax ship-to-shore cranes currently allocated to container operations. Primarily an over-the-road truck terminal with infrequent intermodal rail operations.</p>
<p>Newport News Marine Terminal (NNMT)</p>	<p>165-acre general cargo terminal supporting Ro/Ro, break-bulk, and warehouse operations.</p>
<p>Virginia Inland Port (VIP)</p>	<p>161-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.</p>
<p>Richmond Marine Terminal (RMT)</p>	<p>121-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.</p>



FUTURE OUTLOOK

Opportunities and challenges for The Port of Virginia abound in the years ahead. 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. These trends are changing how The Port of Virginia experiences demand, both in terms of patterns in volume and customer expectations.

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. Successful ports will be those that are fully integrated with the connecting inland transportation network and that offer the lowest cost, highest reliability, and best responsiveness in meeting customers' ever-changing needs.

The 2065 Master Plan guides the port in maximizing its valuable waterside real estate 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.

LONG-TERM CAPACITY VS. DEMAND OUTLOOK





STRATEGY: NEAR-TERM

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

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

- Beginning to transition NIT container handling operations to advanced equipment that reduces operating costs and environmental impacts while increasing throughput capacity.
- Expanding VIG to increase throughput capacity and optimize rail operations and capacity.
- Bolstering interim 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 construction of the Craney Island Eastward Expansion that is the foundation of the future Craney Island Marine Terminal.
- Partnering with the USACE on the studies necessary to deepen Hampton Roads' navigation channels for larger vessels.
- Advocating for critical rail and highway improvements that the market needs to efficiently access Port of Virginia terminals.



STRATEGY: LONG-TERM

Within five years, The Port of Virginia will be well-positioned to keep pace with anticipated cargo growth through the continued modernization of NIT container operations, including the redevelopment of obsolete infrastructure that will maximize the use of terminal property for increased throughput. The port will also continue to benefit from the extension of the VIG lease to 50 years, in order to justify the expense of expanding the terminal and doubling its capacity.

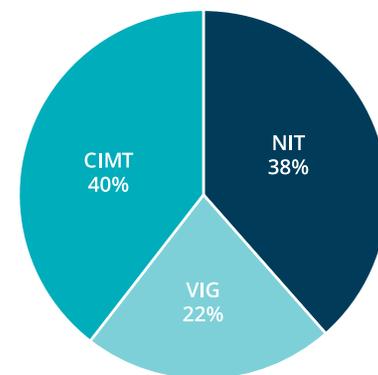
Strategic long-term investments will be made to continue construction of the Craney Island Eastward Expansion so that the expansion cell will be filled with land by the time a new marine terminal is needed to handle increased cargo capacity.

In addition, the port will focus on diversifying its portfolio of cargo by attracting and retaining high-value non-containerized cargo and services by reinvesting in Portsmouth Marine Terminal, Newport News Marine Terminal, and the Richmond Marine Terminal.

The port will continue to work closely 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.

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.

2065 MASTER PLAN CAPACITY





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 50-year planning horizon of the 2065 Master Plan, significant capital will also be put towards rehabilitating and maintaining existing port facilities.

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, and each project has been cost-estimated with contingency added.

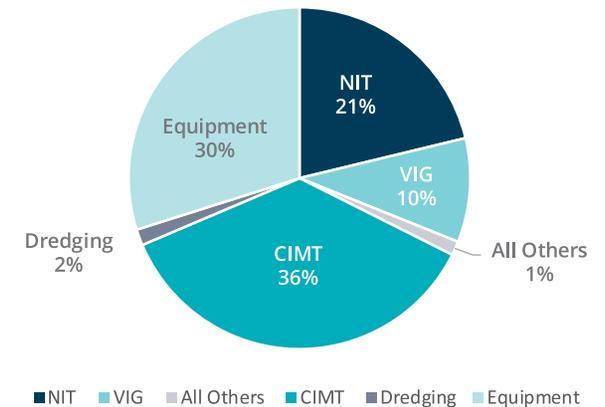
An annual allocation has also been included in the forecast to replace aging terminal infrastructure.

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.

2065 MASTER PLAN CIP ALLOCATIONS

(\$3.14B PRESENT VALUE FOR FUTURE CAPITAL EXPENDITURES, ADJUSTED FOR INFLATION)





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.

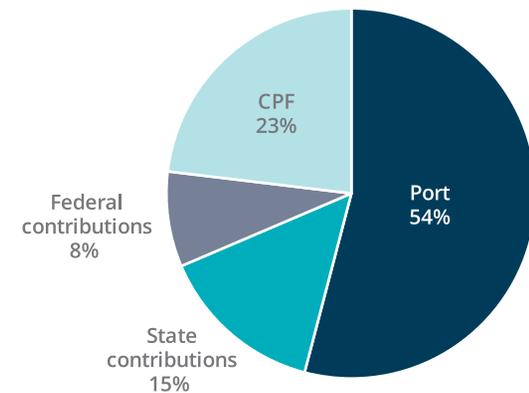
Under the assumptions used in the financial forecast model, the CIP can be executed on a schedule that provides unconstrained growth capacity through 2065 while maintaining annual positive cash flow and required debt service coverage requirements.

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 COMBINATION OF STATE AND FEDERAL FUNDING** will be available for dredging Norfolk Harbor and Channels to 55-feet.

VIG'S OWNER WILL FUND THE VIG PHASE II EXPANSION AS A CONDITION OF THE RENEGOTIATED LEASE.

2065 MASTER PLAN CIP FUNDING SOURCES





CONCLUSION

The Port of Virginia's success in capturing the tremendous opportunities created by the globalization of trade relies on leveraging Virginia's natural advantages, infrastructure investments, and private business ventures. Its success depends on embracing the need 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.

2065 MASTER PLAN

EXECUTIVE SUMMARY



STEWARDS OF TOMORROW

The Port of Virginia focuses on what matters most to our customers, our people, and our region. Every day we deliver superior service, safe transport, and continuous improvement. It's why we get up in the morning, and why The Port of Virginia will keep moving forward.

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