



# 2018 SUSTAINABILITY. ON A LARGER SCALE.

## SUSTAINING OUR ENVIRONMENT, OUR COMMUNITIES, AND OURSELVES

At The Port of Virginia, sustainability means following through on our commitment to take bold steps in advancing the health of our environment, our communities, our port, and our people – now, and into the future. It's a big and wide-ranging investment, to be sure. But it's one that positions us for continued success and continued improvement for years to come. 2018 saw great progress toward that end as we innovated, adapted, and worked to meet and exceed the expectations of our customers and our changing industry.

The Norfolk Harbor and Channels Deepening Project, our \$350 million “Wider, Deeper, Safer” initiative, received federal approval in 2018 to begin dredging and will position Virginia as home to the deepest and safest port on the U.S. East Coast. Our investment in people, equipment, technology, and innovation is paying dividends. Our waterways continue to thrive thanks in part to our habitat creation and oyster reef restorations. And we're increasing capacity while reducing emissions through ambitious infrastructure and equipment projects. From here, we can see the future — and it's full of exciting new opportunities.

## JOHN. F. REINHART, CEO, REFLECTS ON THE SUCCESSES OF 2018

In 2018, The Port of Virginia took mindful steps to ensure the sustainability of our organization – and our communities – while handling record-breaking volumes amidst two of the largest maritime construction projects in the history of the East Coast. Success isn't always measured in terms of cargo volume, however. The achievements we celebrated this year, including the delivery of the first of our 86 rail mounted gantry cranes, 4 ship to shore cranes, the unification of all of our terminals under a singular operating system, and our “Wider, Deeper, Safer” initiative getting federal approval to move forward, help ensure that the future for The Port of Virginia is as secure as it is ambitious.

Guided by our six core values, one of which being sustainability, we've stayed on course in executing our plan while maintaining our service levels. We have maintained our focus on moving more cargo, increasing our competitiveness, and building efficiency. We continue to develop a culture of performance at the port, and we are bringing ourselves closer each day to our goal of being the East Coast's leading global gateway for trade. We know and we own our responsibility to our port and our people, as well as to our communities and to our environment so that we sustain and advance their health and promise.

In fiscal year 2018, we celebrated our fifth consecutive year of profitability, once again handled record volumes, generated more than 5,000 jobs, and drove investment exceeding \$1.4 billion across the Commonwealth, all while making significant progress on our \$700 million capacity expansion project. We were honored to receive our 16th consecutive River Star Business Award from the Elizabeth River Project for environmental excellence, and we were proud to cut our emissions by more than 90% with 33 hybrid shuttle carriers, and remove 31,500 trucks and their emissions from our roadways.

We are the stewards of this great maritime asset, but its benefits flow to every Virginian: we are building a sustainable, economic engine for all of Virginia. This success is a collective effort, and as one, we are looking to the future and building the capacity for greatness.

Our successes, both large and small, would not have been achieved without the support of our board, labor partners, stakeholders, customers, our elected officials and our colleagues. There is still a lot of work ahead, but with your continued support, we are up to the task.



John F. Reinhart, CEO and Executive Director



# SUSTAINING

## OUR ENVIRONMENT



- Received our **16th** consecutive River Star Business Award from the Elizabeth River Project
- Induced over **480** truck owners, since 2006, to replace or retrofit their trucks to environmentally-friendly models
- Cut emissions by **90%** with 33 hybrid shuttle carriers
- Removed **31,500** trucks and their emissions from our roadways



## SUSTAINING OUR ENVIRONMENT

### Investments in protecting our environment pay off beautifully

We understand that taking good care of the resources entrusted to us isn't just a goal — it's an obligation. And it's one we take very seriously. Being good stewards for our environment means trying our level best to leave the places in which we operate better than we found them, and recognizing the environmental impact of everything we do. From the creation of new shoreside habitats, to transporting more cargo via barge, to multitiered efforts to reduce our emissions, to being recognized for the 16th year in a row as an Elizabeth River Project River Star Business award recipient, we're working hard to make a meaningful and measurable difference.

## OUR CERTIFICATIONS

### We're proud to meet and exceed industry standards — it's what leaders do

The Port of Virginia's Environmental Management System (EMS) continues its industry-leading commitment to improving efficiencies and preserving our environment in accordance with International Organization for Standardization (ISO) guidelines. In fact, in 2018 we completed the migration of our facilities to the newest standard. That means that, after being recognized as the first East Coast port to meet and exceed requirements for the ISO 14001 standard 11 years ago, our port now meets the most current ISO 14001:2015 standard. And unlike most U.S. ports, our ISO program covers everything within the fence lines at every one of our terminals.

We also work to closely tie our EMS in with our Quality Management System, which is certified to the ISO 9001:2015 standard. That enables us to foster collaboration and communication, streamline decision making and improve operational efficiencies. This past year we've also brought risk management and procurement under the ISO 14001 umbrella, working closely with the purchasing department on things like making certain the items we're buying are environmentally friendly whenever possible.

We embrace these guidelines as a roadmap for better utilizing our resources, reducing our waste, and improving performance, all while illustrating to our customers that we're committed to doing things the right way.

## ON OUR ROADS

### On our roads: The many ways we're driving emissions down

From the vehicles and machinery that load and unload more and more cargo from ever-growing container ships, to the vast array of trucks arriving and departing daily from our terminals as they fulfill their role as an integral part of America's supply chain, there are ample opportunities for environmental leadership and stewardship — a challenge we embrace enthusiastically.

### The Port's Green Operator Program continues to trailblaze

In 2018, we made significant improvements to our Green Operator Program — the first voluntary truck replacement program among U.S. ports. Designed to help the environment while also helping our motor carrier partners' bottom lines, the program has so far induced over 480 truck owners to replace or retrofit their trucks to newer, more environmentally friendly models that give off 25% to 35% fewer harmful emissions. Since nearly two-thirds of our volume is carried on trucks, that reduction makes a big difference in our communities and across the Commonwealth. The changes to the program increase funding for the truck owners while stipulating that replacement trucks must be 2011 models or newer.

Like so many of the initiatives undertaken by our port, our Green Operator Program wasn't mandated by certification or permit requirements, or by state law regulating air pollution — it was done simply because it was the right thing to do.

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*There's a change in emission tiers, which reduces emissions for the communities around the terminals.*

SCOTT WHITEHURST, DIRECTOR OF  
ENVIRONMENTAL POLICY AND COMPLIANCE

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## **Now with 33 hybrid shuttle carriers, we're cutting emissions by 90%**

Shifting away from diesel-powered cargo handling equipment, The Port of Virginia purchased 33 new hybrid shuttle carriers in 2018. These units, bought with the help of a \$2 million dollar grant from the EPA, drastically reduce fuel consumption and emissions while enhancing efficiency and productivity. Considering that these upgrades pay for themselves through fuel cost savings alone in 3-5 years, the port has allocated additional grant money to purchase another 10 units next year.

## **New I-564 Connector is a win for commercial drivers and commuters alike**

The \$169 million, four-lane I-564 Intermodal Connector provides motor carriers with a dedicated, safe, and unimpeded road link between the interstate and the 26-lane North Gate at Norfolk International Terminals. In addition to dramatic improvements in efficiency for the Port and its trucking partners, it's meant less emissions, less wear and tear on our roadways, and less congestion on the streets of Norfolk.

## **ON OUR WATERWAYS**

### **Finding new ways to protect our waterways**

At The Port of Virginia, we do all we can to help preserve and protect what is undoubtedly one of the region's most vital resources — our waterways. We support the efforts of municipalities across Virginia to monitor and improve their health through our Waterway Maintenance Fund. Closer to home, at our facilities, we combine innovative engineering with resourceful habitat creation to remove pollutants from stormwater runoff, ensuring that the water flowing back into the Chesapeake Bay exceeds Virginia's water quality standards.

### **The return of the oysters — and other habitat creation and restoration successes**

Habitat creation and restoration throughout the region has been a priority for The Port of Virginia for decades. We're proud that the 11-acre Paradise Creek Nature Park in Portsmouth, which we helped create in 2012 by removing 300,000 cubic yards of dredge spoils to restore healthy tidal wetlands, continues to thrive. Now a flourishing habitat for diverse wildlife, it also serves as a living, hands-on learning environment for citizens across the region.

The port received its 16th consecutive River Star Business Award from the Elizabeth River Project in 2018, for helping build 4.5 acres of oyster reef near Norfolk International Terminals. And work continues on the development of a network of oyster reefs as a part of our Craney Island Eastern Expansion mitigation plan. With partners Christopher Newport University, the Virginia Department of Environmental Quality and the U.S. Army Corps of Engineers, we've constructed reefs at seven different locations throughout Hampton Roads. We're also collecting data that will help us assess the success of the reefs and make crucial decisions about future mitigation projects.

## More barge trips, less environmental impact

In 2018, the port celebrated the 10th anniversary of the Richmond Express barge service at the Richmond Marine Terminal. The service connects the terminal with The Port of Virginia's cargo terminals in Hampton Roads via the James River. The three-times-a-week barge service moved 31,500 containers in 2018, thereby removing 31,500 trucks and their emissions from our roadways, making for the barge's best year ever. Each trip reduces the port's environmental impact, transporting cargo safely, swiftly and sustainably.

4.5 ACRES

OF OYSTER REEF CREATED

31,500

TRUCKS REMOVED FROM  
HIGHWAY BY BARGE

## ON OUR DOCKS

### Building up our dock capabilities while bringing down pollution levels

In 2018, we began adding 86 rail-mounted gantry cranes to expanded container yards at Virginia International Gateway and Norfolk International Terminals — part of a \$700 million investment we're making in these facilities to increase capacity and productivity while reducing emissions. Replacing diesel-fueled cargo handling equipment, these electric, semi-automated machines are quieter, more environmentally friendly (they create no emissions!) and more efficient. That improved efficiency is a win-win for the port and the motor carriers. It reduces the amount of time that motor carriers spend idling at our facilities, significantly reducing the amount of emissions that they produce, and means they can make more turns (trips) per day — which means money in their pockets.

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*It increases our throughput. Increases our efficiency so the trucks are there for less time. Because we're using electric cranes, we use less diesel fuel. It's a win all around.*

MATT PLANTE, GENERAL MANAGER, TERMINAL  
SUPPORT AND ENGINEERING, VIRGINIA  
INTERNATIONAL TERMINALS, INC.

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## COMBATING SEA LEVEL RISE

### Sea level rise — a comprehensive response

Hampton Roads is the second most susceptible location on the East and Gulf Coasts to sea level rise – having risen 1.5 feet in the last 100 years and likely another 1.5 feet by 2050 – and poses an increasingly serious threat to our facilities and operations specifically, and to our region as a whole.

Through resiliency studies we commissioned, we have taken steps to protect our terminals from storm surge and extreme flooding, both now and into the future. Via in-depth assessments, and modeling and analysis, we've identified vulnerabilities and are working to shore up our current infrastructure, our ongoing projects and our future planning. For example, we've had every one of our stormwater retention ponds surveyed and measured to determine their health, and we're investing this year and next in restoring and, where necessary, expanding their capacity to minimize the effects of flooding. Combined with other concurrent studies that we're participating in with the City of Norfolk, the U.S. Navy, and the U.S. Army Corps of Engineers, we're not only formulating a perspective on sea level rise, we're executing on a proactive plan to combat it.

We also take a wider view as we seek to better understand the network and communities our port operates within, including the steps our external partners, organizations and municipalities are taking to manage sea level rise. We believe strongly in sharing information, helping these entities to address their own challenges with rising waters, and collaborating on innovative and creative ideas to combat this threat.

## DIGGING INTO OUR COMMITMENT

### Making area beaches wider and deeper, too

As a part of The Port of Virginia's ongoing Wider, Deeper, Safer project, our Beneficial Reuse of Sediment Planning initiative is finding innovative ways to repurpose the 30 million cubic yards of sediment being extracted from the Norfolk Harbor and Approaches. Port engineers plan to use the sandy portions of that material to replenish beaches in Norfolk and Virginia Beach, and are even working with merchants to produce renewable consumer products as well — something to celebrate for locals, tourists and ship captains alike.

## OUR AWARDS

### Continuing to be recognized, for recognizing our responsibility

The Port of Virginia, the reason we value environmental protection and conservation... the reason we invest in developing innovative programs and initiatives that protect and restore our waterways and other resources... is that it's the right thing to do. But being recognized and receiving awards for those efforts is a nice bonus. We're proud of our associates and partners for these achievements:

- For the 16th consecutive year, we received the River Star Business Award from the Elizabeth River Project, a local organization dedicated to restoring and preserving the health of the river and Norfolk Harbor, for working to build 4.5 acres of oyster reef near Norfolk International Terminals.
- The port was recognized by the Hampton Roads Sanitation District (HRSD) at the Platinum Level for our stewardship of the wastewater that leaves our facilities en route to their treatment plants.
- We're proud to be designated at the E4 level as an Extraordinary Environmental Enterprise member partner by Virginia's Department of Environment Quality in their Virginia Environmental Excellence Program (VEEP). E4 membership is their highest level of recognition and is presented to organizations that have committed to measures for continuous and sustainable environmental progress and community involvement.
- The port was honored by the American Association of Port Authorities for our comprehensive sustainability report outlining our vision for sustaining the our environment, our communities, our people, and our port; as well as for our sea level rise remediation/mitigation efforts undertaken in the Craney Island Mitigation Plan — an effort that aims to ultimately result in one of the largest river restoration projects in the country.
- We're also proud to have received the Certificate of Achievement for Excellence in Financial Reporting for the 12th consecutive year from the Government Finance Officers Association of the United States and Canada (GFOA).







# SUSTAINING OUR COMMUNITIES



- Generated **3,100** new jobs
- Invested approximately **\$700** million in expansion initiatives
- Provided up to **\$1 million** in funding for local municipalities
- Raised **\$30,000** for the United Way



## SUSTAINING OUR COMMUNITIES

Helping sustain our communities is an obligation we're proud to fulfill

We understand that we have a dramatic impact on, and therefore a serious obligation to, our communities, our customer base, our workforce, and our partners and stakeholders. A 2014 study conducted by The Mason School of Business at The College of William & Mary, determined that nearly 10% of Virginia's resident workforce is linked to or dependent on the activity taking place at our six terminals. We take every opportunity to make sure the impact we have is positive and multifaceted, whether we're striving to make a difference right here at home, or well beyond our gates. That's why we are really looking forward to seeing – and sharing – the results of a new economic impact study that is now underway and will be complete in 2020.

# \$88.4B



IN VIRGINIA ECONOMIC IMPACT

*Based on a 2014 economic impact study*



# 5,000 NEW JOBS



GENERATED BY PORT RELATED  
BUSINESSES IN 2018



## ECONOMIC DEVELOPMENT

### Impacting commerce, from the coast to the Capital

We're proud to play a significant role in attracting new business to Virginia by partnering with local economic development departments and state agencies responsible for attracting and growing business throughout Virginia. Our talented economic development team is happy to help tout the advantages of working with the port to help grow business. After all, the port's ever-expanding capacity as a gateway to and from the rest of the world is a major draw. In fiscal year 2018 alone, the port helped generate 3,100 new jobs and develop 1.9 million square feet of space with a total investment value of \$984 million throughout Virginia.

### The State of the Port affects the State

As one of the largest economic engines in Virginia and one of its most invested corporate citizens, we feel a responsibility to keep the public apprised of our triumphs, challenges and involvement in the community. For the 37th consecutive year, we presented our annual "State of the Port" address in which we outlined the financial health of our organization — a steady growth in cargo volume now exceeding 270,000 containers a month including increased production at the Virginia Inland Port, the Richmond Marine Terminal, and at Newport News Marine Terminal, and the investment of approximately \$700 million in expansion initiatives, with the largest container vessels coming to the East Coast continuing to call on us.

# 170%



## INCREASE

VEHICLES SERVED AT NEWPORT  
NEWS MARINE TERMINAL



## POV in RVA

The “port effect” of boosting commerce goes way beyond Hampton Roads. For example, business is booming along the James River waterfront outside the gates of the Richmond Marine Terminal. In 2018, the port’s growth helped lead an international development firm, Panattoni Development Co., to its decision to build a one-million-square-foot distribution center in the area. This “speculative” project has already landed its first major tenant, Brother International. Nearby, Hourigan Group, a Richmond-based real estate development and construction management company, has committed to developing Deepwater Industrial Park, a 1.5-million-square-foot development that will provide logistics space for port-related businesses and activities. Nothing sustains a community like a powerful economic engine that spurs substantial development, investment, job-creation and bolstered tax rolls in all directions.

When we signed a 40-year lease to operate the Richmond Marine Terminal through 2056, we signaled our strong commitment to the Richmond community. And we doubled down on that positive message by commissioning a study on the Commerce Road Corridor — the industrial area adjoining the terminal along the James River — to find ways to help the waterfront operate more efficiently, identify the best sites for future economic and port-related development, and suggest ways that the community could amplify the port’s stimulative effect with targeted investments. It’s a study in how to take a good thing, make it better, and spread the benefits as far and wide as possible.



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*The Richmond Marine Terminal and its success are representative of the kind of collaborative ingenuity necessary to expand the use of marine highways nationwide.*

MARK H. BUZBY, MARITIME ADMINISTRATOR

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## Welcoming and encouraging small and minority-owned businesses

In 2019, The Port of Virginia held its first conference for SWaM (Small, Women-owned, and Minority-owned) business enterprises. The goal was to expand and diversify opportunities by sharing information on the port's procurement procedures to help these groups better compete for contracts and establish working relationships with the port. Some of the port's prime vendors also had booths at the event, offering guidance not only on how to do business with the port, but how to pursue sub-contractor opportunities with them and other companies. The event filled up quickly and was a smash success.

The port has also taken steps to make the procurement process and requirements more SWaM business-friendly. This push to diversify opportunity will help these small businesses grow into larger, more capable businesses — which is good for the port, good for the economy, and good for jobs and tax growth. In short, it's good for the sustainability of the entire Commonwealth.

## Giving our partners the (tax) credit they deserve

To stimulate investment, economic activity and job creation, The Port of Virginia offers three different state tax credits. The first and most popular is the Port Volume Increase Tax Credit, available to customers who have a 5% year-over-year growth in cargo volume through the port. The second, the Barge and Rail Tax Credit, is for companies that move freight to inland markets using more environmentally friendly transport options. Finally, the International Trade Facility Tax Credit rewards companies for creating new jobs, expanding a facility or building a new one. The tax savings for these companies can be substantial — and so can the stimulative effect on the communities where they operate.

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*This program is a terrific one, that allows companies to utilize a tax credit tied to either new job creation based on an expansion or a new facility, or take a 2% rebate or tax credit off the capital investment tied to an expansion or a new location.*

CHRIS GULLICKSON, DIRECTOR OF  
ECONOMIC DEVELOPMENT

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## OUR GRANTS

### **Aiding our customers, our communities, and our commitments**

The Port of Virginia awards a number of companies and communities each year with grant dollars to help perpetuate business here in the Commonwealth. Through initiatives like our Aid to Local Ports Program and our Economic Infrastructure Grants, we're doing our part to help those doing theirs.

### **Investing in waterfronts across Virginia**

Each year, The Port of Virginia provides up to \$1 million in funding to local municipalities through programs that include our Waterways Maintenance Fund and our Aid to Local Ports program. This year, Newport News, Portsmouth, Accomack County, Northampton County, Chincoteague, Onancock, Smithfield and Wachapreague all took portions of the \$1 million Aid to Local Ports funding back to their communities. Their new waterfront projects — most of which would not happen without our support — will help generate jobs, tax revenue and regional economic benefits.

### **A grant program to help maritime companies — and the Virginia communities where they operate**

Every year our Economic Infrastructure Grant Program awards money to encourage investment, reinvestment and port-related job creation in Virginia. Since its inception in 2014, this grant has incentivized companies to produce 1,711 jobs across the Commonwealth with the potential to disperse grants to 45 additional companies that would bring 6,479 additional jobs over the next three years.

## GIVING BACK

### **By “giving back,” we all move forward**

At The Port of Virginia, we're happy to lend our time, talent, resources and grant funding to deserving groups and causes. The port's philanthropic focus is organized around four areas of giving and service: education and workforce development; awareness and stewardship of the Commonwealth's ports, harbors and navigable waterways; health and safety; and community enrichment. That's a large purview — and we're proud to have a large, positive impact.

1,000 LBS  
OF FOOD  
DONATED TO FOODBANKS



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*Their ability to coordinate the myriad of local partners in this vibrant port is vital to our shared goal of a safe, secure, and efficient maritime transportation system.*

CAPTAIN CHRISTOPHER KEANE,  
COMMANDING OFFICER, SECTOR HAMPTON  
ROADS, UNITED STATES COAST GUARD

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### When there's an emergency, MIRT becomes expertise in motion

The port has taken great strides in promoting safety and using standardized procedures and data to mitigate the potential for emergencies. But when things do happen, our Maritime Incident Response Team (MIRT) is there to provide immediate on-scene assistance and coordination. Fires, hazardous material spills, search and rescue, weather or security events — whatever the emergency, if it's on or near our shores or in our waters, MIRT has been there to help for nearly 30 years.

In addition to the U.S. Coast Guard, MIRT coordinates with local first responders from 16 jurisdictions along with government agencies at the state and federal levels. Through programs like its annual Marine Firefighting School and Search and Rescue Forum, attended by professionals from across the country and around the world, MIRT provides training on emergency response in a marine environment.

In 2018, MIRT began working closely with the U.S. Army Surface Deployment and Distribution Command (SDDC) to cement our status as one of the country's 16 strategic ports for deploying military personnel and equipment around the world.

By providing continuity in expert emergency response in and outside our terminals, MIRT offers sustainability in protecting our people, equipment, facilities and communities.



## **Partnering with ODU to develop a world-class maritime curriculum — and workforce**

Several years ago, Norfolk's Old Dominion University introduced the only Master's of Science in Maritime Trade degree in America, and one of only a handful in the world. The school's Maritime Institute includes port officials who helped develop the curriculum and now help keep it current in a rapidly evolving field. In fact, ODU's program now teaches students on the same NAVIS software used at the port and teams up with the port on internship and co-ops. It's a model of how a university and a business organization can work together to promote the economic foundation and sustainability of a community.

## **Seeking out ways to serve our communities**

The Port of Virginia's Volunteer Council is comprised of employees from across the organization who spearhead volunteering efforts in support of worthy community events and causes. The Volunteer Council embodies our commitment to social stewardship by continuously looking for ways to engage in activities and establish relationships with like-minded groups to help improve the lives of others within our communities. It's not just our obligation but our honor to do what we can to make a difference.

Embracing causes ranging from food disparity to environmental preservation to childhood homelessness, the Volunteer Council organized events in 2018 with nonprofits and charitable organizations throughout the year.

## **Helping Girls Geek Out**

The port teamed up with Norfolk Southern Corp. to present Girls Geek Out, a five-day summer camp for seventh, eighth and ninth-grade girls exploring science, technology, engineering and math (STEM) skills, and the many opportunities they represent. The program also included a variety of activities to help build confidence, leadership team-building and technology skills. We hope to welcome these young women to our workforce in the not-too-distant future.

## Doing more is our calling


Port of Virginia employees pride themselves on participating in charitable efforts and community-oriented events throughout our communities. This year, we were proud to lend a hand in support of the 2018 ForKids School Supply Drive, collecting hundreds of items like backpacks, notebooks, flash drives for local school-aged children in Hampton Roads. We raised \$30,000 for the United Way. Port employees also donated over 1,000 pounds of food, prepared 800 meals, and volunteered over 50 hours of time at our local Food Bank. And nearly 60 port employee and partner volunteers removed over 5,000 pounds of trash and debris from shorelines in Norfolk and Portsmouth during Chesapeake Bay Foundation's Clean the Bay Day, an annual event that the port has been involved with since it began 30 years ago. We like to exhibit leadership in everything we do, and social responsibility is no exception.

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*Starting early and allowing those students to have an understanding of who we are and what we do is important to our longterm success.*

SHAUNE THOMAS, SENIOR MANAGER,  
TALENT MANAGEMENT

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5,000  
LBS OF DEBRIS  
REMOVED FROM THE CHESAPEAKE BAY





# SUSTAINING

## OUR PEOPLE



- Received **84.9%** Video Safety Audit compliance across all terminals
- Installed cameras in **55** straddle carriers and **34** shuttle trucks
- Helped **32** port employees to further their education with tuition reimbursement



## SUSTAINING OUR PEOPLE

### A culture of safety, growth and success

The Port of Virginia is blessed with one of the world's great natural harbors. We've invested millions in equipment and technology that give us an edge over our peers. Still — we understand that our people are truly our greatest asset. We believe strongly in the importance of attracting new colleagues, listening to and keeping our current colleagues engaged, and ensuring that everyone goes home safely at the end of the day.

## STRESSING SAFETY

### An all-out focus on safety

Here at the port, we understand the potential for risk in our industry. That's why we pull out all the stops when it comes to promoting a safe working environment — from creating a robust set of safety protocols, to providing carefully developed safety orientation and ongoing training, to striving for nothing less than 100% compliance.

One such program is our Terminal Safety Infraction Policy, which helps everyone from port workers to contractors to vendors do the right thing — every time. Requiring compliance with 35 fundamental health, safety and environmental rules across all of our facilities, it curbs unsafe behavior, rewards those following our safety standards, and provides corrective feedback to those who need it. Ceremonies, letters of recognition, and tokens of gratitude from our leadership reward compliance and signal that we're serious about safety.

In addition, our 5:1 Program empowers our managers and supervisors to “catch someone doing something right” by positively recognizing team members and equipment operators five times for each one time an operator is decertified or retrained for an infraction.

In 2018, we again made significant progress in two key metrics — the Lost Work Day Rate and the Total Recordable Injury Rate. These results are especially gratifying to the Health and Safety Team and everyone at the port because they translate into fewer workplace injuries and a healthier workforce. We also expanded the indicators in which we assess the safety of the port as well via our Video Safety Audit..

### Changing our view on safety

The biggest undertaking in ensuring the safety of our port in 2018 came by way of the launch of our Video Safety Audit across all of our terminals. The system enables us to review adherence to safety protocols daily, rewarding those following them and re-engaging those who aren't. This year, we're pleased to report an 84.9% compliance with the exhaustive 2,900 line items we measure. And with 42 colleagues trained and acting as additional auditors assisting the Health and Safety Team, we're alleviating the burden once placed on just a few colleagues. This maximizes efficiency, and most of all, makes everyone within our fence lines safer.

### Upgraded equipment with a focus on compliance

Throughout our facilities, scores of cameras constantly monitor the activities on and off the terminal and in and around our vehicles and equipment so we can regularly perform video audits to ascertain risks, measure compliance with safety procedures, and provide continuous feedback to reward compliance and correct non-compliance. We're expanding our remote video surveillance capability by installing cameras in the cabs of cargo handling equipment to eliminate distracted operation, a major cause of accidents. Cameras are now in 55 straddle carriers and 34 shuttle trucks, and they will soon be installed in 34 ship-to-shore cranes.



*This past year, we actually achieved a rate of 84.99% compliance with the 2,900 line items that we measure across all terminals.*

*The importance of the video safety audit is being able to measure not only the risks that are out there on the terminal, but the compliance with our internal procedures on all facilities.*

RONALD BABSKI, VICE PRESIDENT,  
HEALTH AND SAFETY



## **Making sure the leadership “walks the walk” on safety**

At The Port of Virginia, we understand the importance of instilling our safety protocols from the top down. Both our Executive Safety Leadership program and our Supervisor Safety Leadership program — required whether the job is based on the docks or at a desk — ensure not only that our leaders know the port’s safety protocols, but also that they are able to clearly communicate the benefits of our policies to promote “buy-in” from the workforce. These programs, along with our 510-question Comprehensive Proficiency Test, educate and empower management to lead by example when it comes to safety within our gates.

## **EMPOWERING OUR PERSONNEL**

### **Providing pathways to success and fulfilment**

Of course, nothing is more vital to the port’s sustainability than the men and women who report to our terminals and support our facilities every day. That’s why we take great care to foster an environment and culture of empowerment. We want to give each employee the power to achieve their personal and professional goals, and to provide opportunities to effect real change and progress within our operations.

We also value keeping our employees informed with all the happenings and milestones being achieved at the port through mechanisms including Open Channels, our internal newsletter, digital monitors placed throughout all of our facilities, and our All Colleagues Meetings.

### **Fostering connections between colleagues**

A number of policies and programs we’ve instituted help us become more productive by way of helping us remain accountable to ourselves and to each other. Our 360° review process puts an emphasis on self-evaluation, managerial feedback and peer review. The port’s annual Colleague Engagement Survey solicits opinions and ideas for improving things from every team member. And our Colleague Recognition Program spotlights and rewards employees who exemplify our values in everything they do.

### **Identifying the capacity for greatness**

Great leadership doesn’t materialize out of nowhere. That’s why our leadership development programs — designed to identify potential and groom our leaders of the future — are so important. These programs are preparing colleagues from every level of the organization to take the reins through a combination of leadership training and institutional knowledge transfer.

We’re not just working on succession plans for key team members as they approach retirement. Rather, we’re fusing their experience with the energy of a new generation to cultivate new leaders that put our future in good hands.

1 IN 6



INTERNS EARN FULL-TIME  
PORT POSITIONS



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*Every quarter, we recognize a Stewardship Captain. This person is someone who has lived our values and they are recognized by their peers and leaders throughout the organization.*

SHAUNE THOMAS, SENIOR MANAGER,  
TALENT MANAGEMENT

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### Nurturing interest and talent through our summer internship program

The maritime industry offers a wide range of opportunity, which is reflected in our summer internship program. We select college and graduate students from disciplines that include contract specialists, real estate, government affairs, human resources, legal affairs, operations, sales and marketing, risk management — and sustainability. Since the program began four years ago, an average of one of every six interns earn full-time positions with us, a testament to the program’s success in bringing in a new generation of engaged colleagues.

## INCENTIVES

### Our healthy benefits package goes well beyond health care

To attract and retain the best people, we have to offer benefits that go beyond standard health care and paid time off. To that end, we offer health and wellness incentives that reward employees and their spouses financially for healthy activities, preventive screenings and care, and an on-site clinic. These features enable and encourage our colleagues to take care of what’s most important — their health and wellness.

Additional programs that expand our benefits beyond health care include our Tuition Reimbursement Program. In 2018, the program helped 32 port employees to further their education by providing up to \$5,000 in tuition reimbursement per employee per year.

1 IN 3



PORT EMPLOYEES PARTICIPATED  
IN CONTINUING EDUCATION







# SUSTAINING OUR PORT



- Increased Cargo Volumes by **2.4%** from FY2017
- Grew our Data Analytics Team to **10** employees
- Unified **six** terminals under the best-in-class Navis N4 terminal operating system

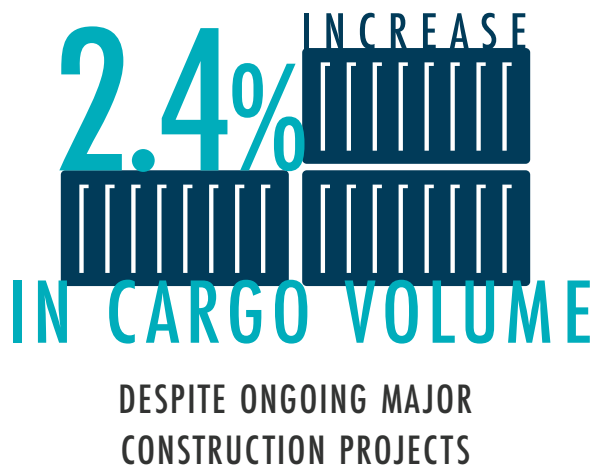


## SUSTAINING OUR PORT

### A record year in the midst of record expansion

By the standard measures, 2018 was another successful year for The Port of Virginia with cargo volumes increasing by 2.4% from FY2017, and remaining profitable for the fifth year in a row.

These benchmarks were achieved by the men and women of the port despite the challenges of operating while two gargantuan construction projects were simultaneously underway at our two largest container terminals. This \$700 million infrastructure and equipment project promises to completely transform the way we do business, and are only now beginning to bear fruit as they come online one stage at a time.



Meanwhile, our Wider, Deeper, Safer initiative achieved several important milestones in 2018. The effort to make our channel the deepest, safest and most suited for ultra-large container vessels on the East Coast is now progressing full speed ahead.

In 2018, we took great strides in building for the future and bringing it more clearly into focus. From productivity to process to safety, we're striving for — and achieving — excellence.

## COMMERCIAL WORKING GROUP

### Working together works wonders

With big organizations, it can be difficult to get everyone on the same page. Our Commercial Working Group brings stakeholders from several major divisions — including Operations, Sales, Innovation, Finance, Legal and Administrative Services — to the table for weekly meetings. Together this group can make quick, efficient and data-driven decisions that impact key areas of our business. It's a low-tech approach that yields big results.

## DATA-DRIVEN SOLUTIONS

### Matching institutional knowledge with empirical evidence

Our reliance on data to forecast and fortify our decision making process continues to grow. With data impacting calls on everything from construction projects and resilience, to capital prioritization on investments, to which grants we pursue, we're shaping our future by the numbers.

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*The new system will take us from a completely antiquated accounting system, and a lot of manual Excel work, to almost total automation. It reduces human error. It will reduce time. It's going to change everything.*

LAURA LANGTON, CPA, SENIOR  
FINANCIAL ANALYST

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## **One of our most powerful new tools will be used for crunching numbers**

The Port of Virginia currently operates using two financial systems. In order to get meaningful data for reports and analysis, information from both systems must be merged together using time-consuming and error-prone manual methods. But the financial experts at the port have been working hard throughout 2018 to rectify this situation. This spring, a powerful, comprehensive new financial system will go live that will take us from near antiquation to almost total automation, saving vast amounts of time while increasing accuracy and expanding financial reporting capabilities. The benefits of this new system will touch every department, including the experts preparing financial reports, the stakeholders relying on the information, and the decision-makers who will have more data points and more time to decide on courses of action as they plan for a sustainable future for the port.

## **Adding numbers to our Data Analytics Team**

While many ports don't have a single data analyst on staff, our Data Analytics Team has grown this year to 10. The insights we gain from the numbers help us shift from being reactive to proactive on many levels. The team compiles dozens of basic metrics every day, and when a data point takes a dip or a leap, they ask why. They also use data and trendlines to create forecasting tools — for example, to help the terminals anticipate periods of high activity and take steps to handle the rush. In addition to the Operations Department, the port's other divisions and critical cross-divisional groups including the Capital Prioritization Committee have all come to depend on the Data Analytics Team to inform and support the way they do business, and their planning for a sustainable future.

## **Stronger reporting makes for a stronger port**

In the coming year, the team will continue to focus on building out a new, centralized database warehouse, which allows for quicker and easier access and sharing of compiled data across all departments. The faster meaningful insights can be gleaned from the amassed data, the more our port can benefit from the power of being a data-driven organization. Now our Analytics Team spends 80% less time trying to identify and validate this data and its sources, making our reporting more efficient, integrated, digestible and actionable.

Examples of reports that are making a difference throughout the organization include our “Daily Measure” Reports that enable our leadership team to start their day apprised of the key metrics important to our success; a weekly operations “Flash Report” that paints a clear picture of the port's short-term performance; and our annual Schedule of Rates (SOR) report that provides all non-contract customers with our pricing.

## **Our Annual Financial Report is an annual award-winner**

For the 12th year in a row, The Port of Virginia's state-mandated Comprehensive Annual Financial Report, or CAFR, has been recognized with a Certificate of Achievement for Excellence in Financial Reporting. The Port's Financial Reporting department takes great pride in this achievement not only because the CAFR is mandated by the state, but also because this document is used by key port leaders and stakeholders who depend on its accuracy to make decisions that affect the sustainability of the port for the long term.

## Why capital prioritization is a top priority

Our Capital Prioritization Committee is the starting point for all potential big-ticket spending and grant seeking. The team assesses all of the wants, needs and “nice-to-haves” from across the port and ranks them by urgency, cost, duration, difficulty and more so we can allocate funds effectively. Once a project is given the go-ahead, its planning and production is driven and managed by a steering committee tasked with keeping it on schedule, on budget and on vision.

## Getting our funding wishes “granted”

Under the direction of our full-time grant manager — we’re one of the few ports that has one — we’ve transformed our processes to more precisely target grants that are aligned with our current endeavors, capital needs and strategic direction. With input from the Operations, Sustainability, Maintenance and Strategic Planning departments, our approach is more proactive, ensuring that we’re going after funding that will sustain our trajectory. Meanwhile having a dedicated team to handle grant applications, awarding and reporting requirements frees up personnel from other departments to focus on their own duties and responsibilities.

Grant highlights for 2018 include a \$2 million plus grant for the Richmond Marine Terminal to build an off-hours drop lot that will improve access for our motor carriers, and to provide gate enhancements and upgraded technology that will get drivers in and out of the facility more quickly. For the Virginia Inland Port, funding from two different sources has been secured to upgrade our rail tracks on the terminal, and to address traffic and safety concerns for the community outside the gates. From the Marine Highway Program to the Federal Highway Administration, from the Diesel Emissions Reduction Act to the Department of Transportation’s ITS program — grants like these promote sustainability for the port by allowing us fund worthy projects while directing our own capital toward other projects.

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*These grants are done in such a fashion that it's a mindful approach. The jobs are actually created before the incentives are actually awarded.*

CHRIS GULLICKSON, DIRECTOR OF  
ECONOMIC DEVELOPMENT

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## TEEMING WITH TECHNOLOGY

### Advancing the mission with advanced technologies

Keeping up with a constantly changing industry like ours can be quite a challenge from a technological standpoint. It's imperative that we remain on the leading edge with the technology we use to operate and administer our everyday activities in order to meet and exceed the growing demands of our customer base.

From remote control cranes whose drivers are safely seated in an office, to the latest terminal operating system, to our revamped truck reservation system, to a geographic information system (GIS) that provides technicians in the field or emergency responders with accurate location and condition data, we never stop pushing ourselves to push the boundaries.

### World-class performance requires a best-in-class terminal operating system

In 2018, we successfully unified six terminals under the best-in-class Navis N4 terminal operating system, enhancing both our operational efficiency and safety standards. Replacing a proprietary system we previously had in place, the N4 system allows the port to collect and analyze data from every aspect of the operation to further improve and increase efficiency.

### Getting productivity rolling with our new Truck Reservation System

Our new Truck Reservation System at Norfolk International Terminals and Virginia International Gateway went fully live in 2018. Developed by the port's IT and operations team, the system produces less idle-time, faster turn times and improved productivity for motor carriers. Since implementation, turn times — the total time it takes for a truck to get in and out of our facility — have been reduced by nearly 20% at Norfolk International Terminals and 32% at Virginia International Gateway, and both facilities regularly experience turn times well under the 60-minute industry standard. From better regulating volume at the gates to strategically (instead of randomly) placing containers for more efficient pickup, the process runs more smoothly and efficiently, which allows drivers to be more productive. That improves the sustainability outlook for the trucking community locally and regionally. In addition, the system is also a powerful planning tool for cargo owners, providing a wealth of information and resources, including the ability to track container availability, when their cargo has been discharged, and more.



Looking ahead, the port was awarded a matching grant from the Department of Transportation to develop the next version of this system. It's in the planning stages now, and we look forward to providing even better, more efficient services to motor carriers in the near future — and more leaps in operational efficiency for the port.

### Visualizing powerful 3D modeling capabilities

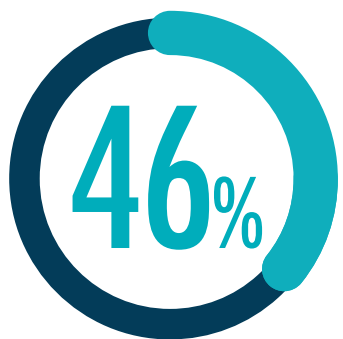
Throughout 2018, the port continued to work on adding geographical information system (GIS) capabilities to its toolbox. Once implemented, the system will offer powerful mapping and modeling capabilities. For example, it could enable a technician in the field with a smartphone or other mobile device to “see” critical infrastructure such as stormwater pipes or electrical wiring at a worksite or other location, modeled in realtime in 3D. It could also track a spill on the terminal and project its likely progress to inform the best strategy for deploying a clean-up crew. The future is almost here, and it will include GIS.

## PROPELLING OUR PROCESSES

### Maintaining operational excellence is a never-ending process

At The Port of Virginia, we're proud of our efforts to operate in compliance with most current ISO 9001:2015 standard. But we don't stop there. We also use other process methodologies like LEAN, The Baldrige Framework and Six Sigma to create a business model that's measurable and sustainable.

In 2018 we continued to improve upon key processes that keep our organization productive and sustainable, including the way we prioritize projects, how we hire and promote, how we use grant monies, and how we face threats like sea level rise and cyber attacks. And driving consistency through our quality management systems and training encourages all-in adoption from our staff.



## MORE CAPACITY

SAME NORFOLK INTERNATIONAL  
TERMINAL FOOTPRINT





## PREPARING FOR A BIG FUTURE

### **The future of shipping is ultra-large, so we're growing our capabilities to match**

For years, globe-traversing cargo vessels have continued to get bigger and bigger — and that's a trend that's not going to end anytime soon. The growing number of ultra-large container vessels calling our port tells the story. Being able to attract and accommodate them is critical to the port's future viability, which is what's driving our infrastructure and equipment upgrades. Our strategic location in the middle of the Eastern Seaboard and our deep channels have always given us an edge over our competition. Now, with many of our infrastructure improvements being completed and our initiative to take our channels deeper and wider going full-speed ahead, we're strengthening our port's position as the premier East Coast global gateway.

### **Projecting big things**

During 2018, we continued taking great strides toward the completion of essential expansion projects at Virginia International Gateway and Norfolk International Terminals — our two primary container terminals — totalling more than \$700 million.

At Virginia International Gateway, our \$320 million project is nearly complete. By June of 2019, we will have nearly doubled the terminal's annual capacity by adding 26 new rail-mounted gantry cranes (RMGs), 13 more container stacks, four new ship-to-shore cranes (the largest in the Western Hemisphere!), and four additional lanes of truck traffic at our gate to service the ultra-large container vessels now arriving at our docks. Additionally, we will have doubled our capacity and ability to handle rail and refrigerated cargo.

Across the river at Norfolk International Terminals, we completed the I-564 Intermodal Connector, which removes more than 700 trucks a day from Norfolk's secondary streets. July saw the delivery of the first RMGs, which are the centerpieces of the \$375 million capacity expansion project now underway. There will be 60 RMGs delivered over the next 18 months. This reconfigured cargo operation at the facility's South Yard will enable us to move cargo more safely, swiftly, quietly, cleanly and sustainably than ever before.

## **Wider, Deeper, Safer — channeling a big, bold future for The Port of Virginia**

The future has arrived, heralded along the waterfront by routine calls of ultra-large container vessels. And with the President's approval of our Wider, Deeper, Safer project to transform the Norfolk Harbor, we're well on our way to becoming the deepest port on the U.S. East Coast, and will soon be able to service two way traffic of the largest container vessels in the world with ease. The \$20 million preconstruction engineering and design effort will take 18 months, followed by a \$330 million dredging phase beginning in early 2020, with a targeted completion date in early 2025.

Widening and deepening the commercial channels leading to and from the Norfolk Harbor to safely accommodate two-way vessel traffic is critical to ensuring that The Port of Virginia remains sustainable. Taking our channels and approaches to a depth of 55 feet while also widening our channel to 1,400 feet will allow for two-way traffic by the world's largest container vessels as well as provide our neighbor, the US Navy's largest base, the ability to move assets freely along one of the most diverse waterways in America.

We're excited to be revolutionizing the way we operate to sustain our environment, our communities, our people and our port. We're now on track to become the deepest and safest harbor on the U.S. East Coast — and that's just the beginning. You can bet that The Port of Virginia has big plans for what comes next.

## **THE FINAL WORD**

When we think of sustainability, we don't just focus on ways to make our operations "more green." We believe sustainability means excelling in the areas of healthy and safe operations, environmental stewardship and social responsibility. As you have seen throughout this report, we are fiercely committed to seeking new and better ways we can serve as an economic engine for generations to come.

We will continue to lead by example by continually improving our efforts and reaching our goals. We are also thankful for and appreciative of the relationships we've cultivated with our city, state and federal government partners, as their support and guidance have helped us reach our goals – and set new and more aspirational ones.

Sustainability starts with our people. It takes innovation, creativity and a drive for continual improvement, but we cannot do it alone. It will take all of our efforts. We invite you to join us and become Stewards of Tomorrow.