



Port NOLA *FORWARD*

A Strategic Master Plan to Exceed the Needs of Tomorrow



**PORT
NOLA**
THE PORT OF
NEW ORLEANS

May 2018



*Brandy D. Christian
President and CEO,
Port of New Orleans and
New Orleans Public Belt
Railroad Corporation*

FROM THE PRESIDENT AND CEO

Together with the Board of Commissioners of the Port of New Orleans, I am pleased to share Port NOLA's bold vision to deliver significant, sustained economic benefit throughout our jurisdiction, which includes Jefferson, Orleans, and St. Bernard Parishes. This will be accomplished by providing necessary infrastructure and seamless logistics solutions that incorporate the industry's changing needs and exceed our customers' expectations.

This Strategic Master Plan challenges us to think more cohesively about growing our vital maritime and hospitality industries. It invites us to consider the supply chain as a whole and to harness all available multimodal assets, on and off Port property, along the Mississippi River and inland waterway system, on the Public Belt and six Class I rail network, and via access to interstate highways.

The plan presents a menu of strategies to optimize current assets and extend our reach across all business lines.

The crux of this plan—and a necessary ingredient for its success—is collaborative partnership with a wide range of stakeholders, broadly defined. Throughout the planning process, we invited the participation of our tenants, carriers, customers, Federal, State and local elected officials, economic development and civic leaders, and our neighbors, residents who rely on the Port for family-supporting jobs. We continue to embrace the power of the collective, strengthening existing relationships and building new ones as we work together toward a common goal of economic prosperity.

The Strategic Master Plan is adaptive to ensure we are able to fully capitalize on the potential of the region. It offers

clear, wide guidelines to capitalize on our gateway position rather than prescriptive land use mandates. In fact, while we were developing the plan, we acted on its promise and increased our multimodal strength with the acquisition of the New Orleans Public Belt. Access to six Class I railroads is a competitive advantage, now secured. This new alignment occurred during the planning process, after we had completed the market analysis and infrastructure evaluation, and has set the stage for our vision of building a multimodal gateway.

I would like to thank our Board of Commissioners for their leadership and steadfast support of this project, along with so many of our staff who dedicated themselves to developing a visionary yet actionable plan for the future.

Let's get started!

Brandy D. Christian





BOARD OF COMMISSIONERS



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Recognizing former Commissioners William T. Bergeron, Scott Cooper, Michael W. Kearney, and Gregory R. Rusovich for their contribution to this plan.



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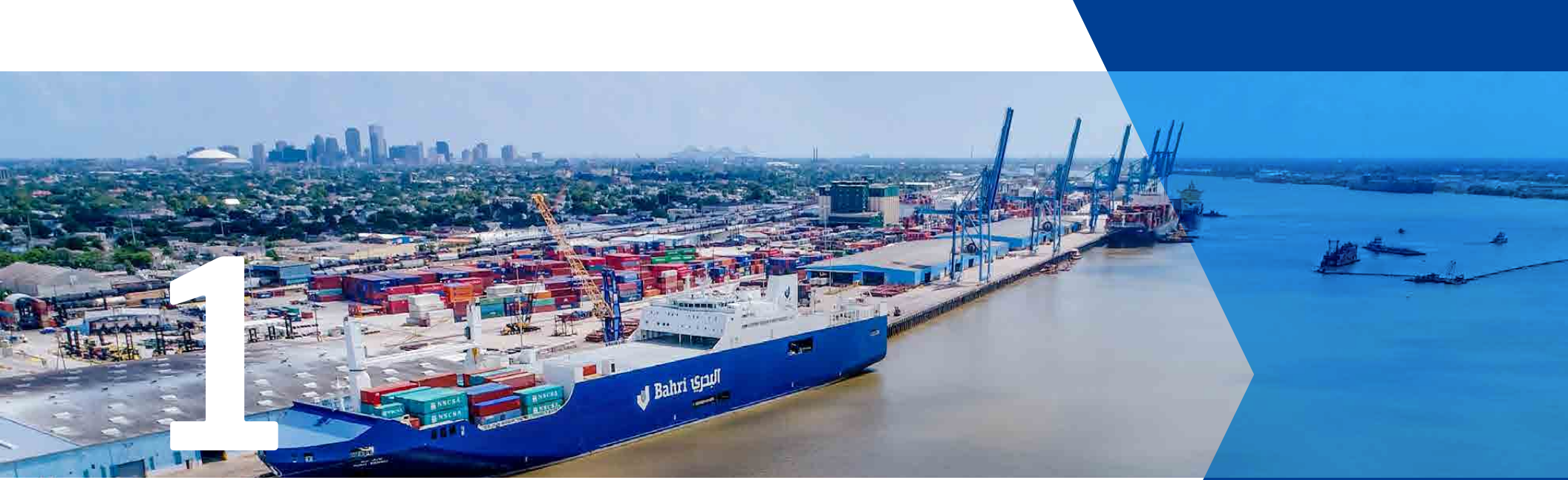
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Port of
New Orleans'
diverse yet
integrated
business
portfolio sets
the stage for
future success.



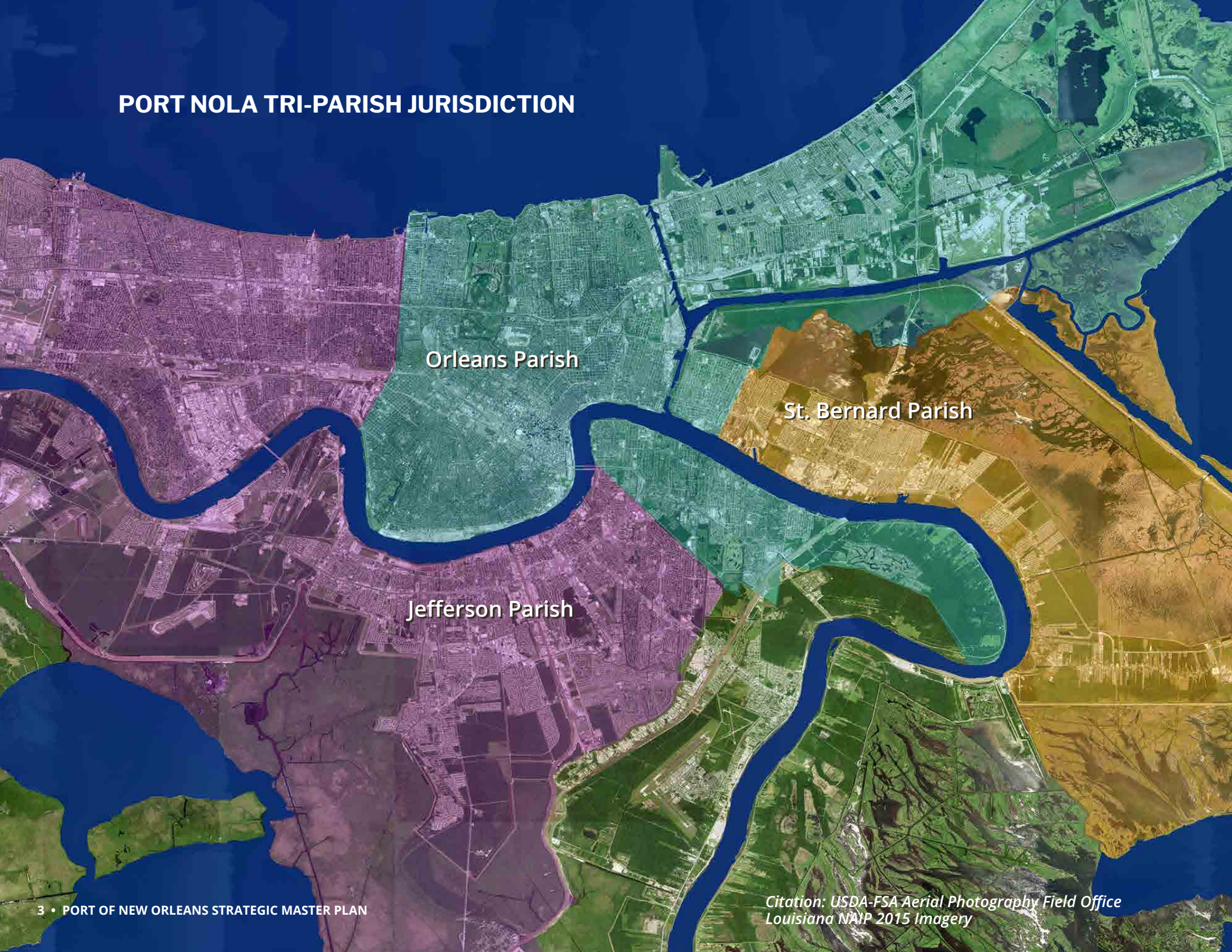
LAUNCHING *THE PLAN*

The Port of New Orleans has long benefited from its strategic location along the Mississippi River with businesses that include extensive cargo and vibrant cruise operations, and a large industrial real estate portfolio. These assets are further strengthened and diversified by the 2017 acquisition of a short line railroad.

A bold vision, timely investments, and integration of its four lines of business will help ensure the Port of New Orleans (Port NOLA) capitalizes on the opportunity to lead the region to greater and sustained prosperity.

This Strategic Master Plan (Master Plan) charts the course for Port NOLA's success for all business segments including cargo, cruise, real estate, and rail.

PORT NOLA TRI-PARISH JURISDICTION



Orleans Parish

St. Bernard Parish

Jefferson Parish

Our mission is to drive regional economic prosperity by maximizing the flow of international trade and commerce as a modern gateway.

*Citation: USDA-FSA Aerial Photography Field Office
Louisiana NAIP 2015 Imagery*

SERVING AS AN ECONOMIC CATALYST

Port NOLA is a public entity that serves as the maritime authority and landlord to over 60 maritime and industrial tenants. As property manager, Port NOLA's role is to plan, build, maintain, and support the infrastructure to grow jobs and economic opportunities related to trade and commerce. Together with our tenants, operators, and partners, Port NOLA's collective strength as an economic catalyst drives global trade and builds local prosperity.

As a self-sustaining political sub-division of the State of Louisiana, Port NOLA invites collaboration and pragmatic, strategic planning. The Port works diligently to collaborate with stakeholders and industry partners, within our tri-parish jurisdiction and beyond, for continued economic development. This Master Plan reflects our commitment to collaboration.



Growing Globally, Regionally, and Locally

Port NOLA is a vital link to the world for inland companies and consumers, proudly serving businesses throughout the state of Louisiana and beyond. The Port is committed to providing fair access to contracting opportunities and to increasing business relationships with qualified local and small business firms.



Roadmap for Growth and Development

This Strategic Master Plan:

- Incorporates an analysis of Port-owned facilities, current market conditions, future trends, and input from industry, government, and community partners.
- Provides a framework to capitalize on Port NOLA's competitive advantages and expand the Port gateway complex to insure economic benefits to the region, state, and country.

ECONOMIC CATALYST BY THE NUMBERS

One of the
Fastest Growing
container ports in the U.S.

6th
Largest cruise
port in the U.S.

**One
in
five**

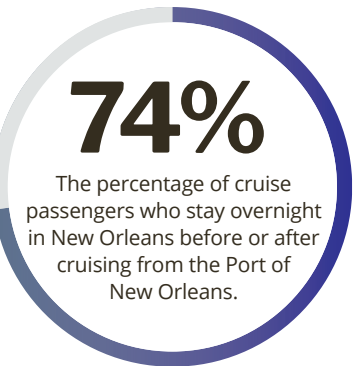
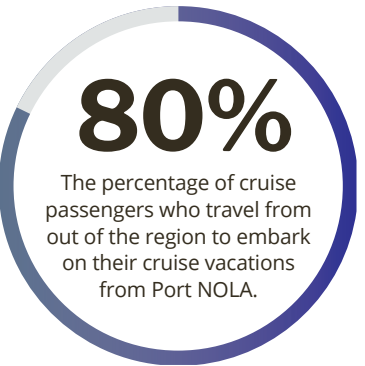
Jobs in Louisiana are generated by port-related industries.

\$63,000

The average salary of workers employed at businesses located on Port NOLA property.*

That's **37%**
higher than the
local average
salary.

*LSU E.J. Ourso College of Business



**\$54.5
million**

Hotel Revenue



**\$55
million**

State Tax



**\$66
million**

Local Tax



**Generated
Each Year**

\$2.2 million

Spent with women-owned businesses in fiscal years 2016 and 2017 by Port NOLA.

\$3.5 million

Spent with minority-owned businesses in fiscal years 2016 and 2017 by Port NOLA.

ALL SIGNS POINT TO GROWTH

Port NOLA is one of America's most diverse ports with regard to transportation modes and business lines. Business is booming in all sectors—the Port's recent strategic alignment to acquire the New Orleans Public Belt Railroad is just one of the latest examples of innovative Port growth.

Containerized cargo growth at Port NOLA has consistently increased in recent years, fueling the establishment of container-on-barge services, ancillary services, and industrial growth. The New Orleans Public Belt Railroad will enable continued growth on and off the container terminal, where logistics and trans-loading operations can benefit from additional cargo throughput.

With waterway access to inland markets via barge, a choice of expert terminal operators, and uncongested berths, Port NOLA continues to be an ideal hub for cost-effective handling of breakbulk cargo. Steel, metals, rubber, wood, paper, and project cargo are handled with expertise, and Port NOLA offers superior direct load/discharge to and from barge.

Port NOLA is also certified by the London Metals Exchange to handle and store non-ferrous metals traded on the Exchange and is designated as the second Foreign Trade Zone in the country.

In support of the Port's diverse cargo make-up, Port NOLA's Inner Harbor boasts more than 1,000 acres of industrial real estate. This and other properties across the Port's jurisdiction provide ample land and assets for industrial development. With access to extensive waterways and the New Orleans Public Belt Railroad, which connects to six Class I railroads, Port NOLA is an international logistics hub for distribution, warehousing, and manufacturing.



Port of New Orleans container volumes exceeded 500,000 annual TEUs three years in a row.

The Strategic Master Plan is a roadmap to exceeding market demands and remaining competitive within a constantly evolving global shipping market.

CRUISING AHEAD

Cruising from New Orleans continues to grow in popularity. Port NOLA has topped one million passenger moves for four consecutive years. Cruise lines are investing in newer and larger ships. Carnival Cruise Line repositioned the Carnival Triumph to the Erato Street Cruise Terminal in April 2016, resulting in a 34 percent increase in Carnival's year-round four- and five-day itineraries from New Orleans. Norwegian Cruise Line is replacing the Norwegian Pearl with the newer and larger Norwegian Breakaway in November 2018. Royal Caribbean International returns to Port NOLA in 2018, homeporting the Vision of the Seas. With easy access parking at the cruise terminals, Port NOLA is a prime choice as a drivable port, with 306,000 room nights per year, and is poised for growth in ocean and river cruising.

Yet with these growth opportunities come the challenges of how to meet—and beat—demands to remain competitive within a constantly evolving global shipping market. Ships are getting larger and competition ever more fierce. Recognizing these needs, and how vital Port NOLA is for local jobs and economic opportunities, Port NOLA is committed to creating a market-based and stakeholder-driven plan for the future.



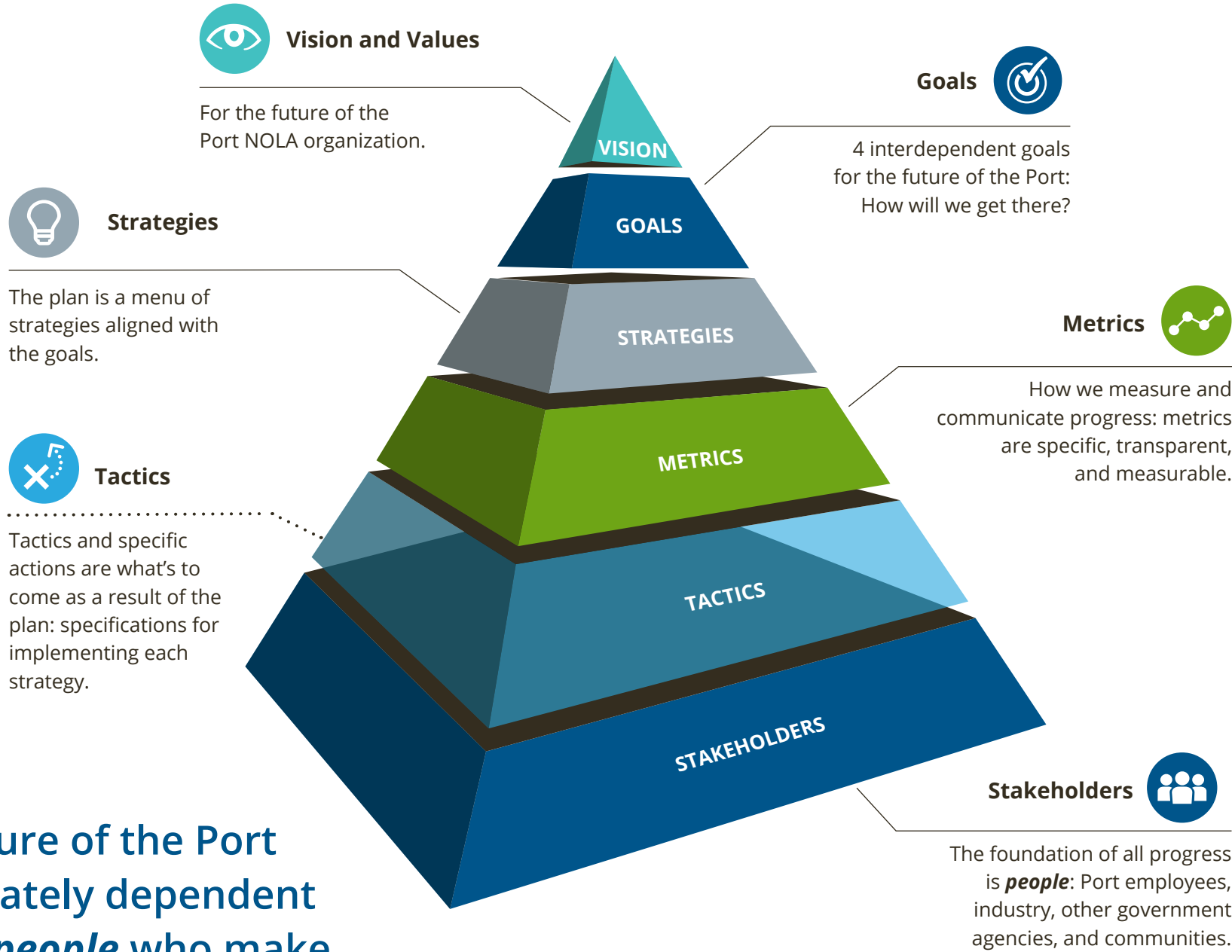


PLANNING FOR THE NEXT GENERATION

The Port NOLA Strategic Master Plan lays out a vision for the next 20 years with a roadmap of strategies for growth, including recommendations for capital investments, operational changes, policies, and strategic initiatives.

This Master Plan describes how Port NOLA will grow to meet future demands by aligning our goals and strategies and providing metrics for measuring progress and defining success. Port NOLA has identified many needs, far beyond the Port’s resources alone. Following plan completion, Port NOLA will work with partners and stakeholders to implement the established strategies.

The future of the Port is ultimately dependent on the *people* who make things move.



VISION

Advancing global connections and infrastructure to exceed the needs of tomorrow.



Envisioning Bold Growth

Drawing from the strategic planning process, which includes our partners' and employees' input, Port NOLA's future is inspired by a **vision** and driven by **values**.

VALUES



Diversity

Whether by transportation mode, business line, or our people, our diversity is part of our DNA and enhances our value as an organization.



Collaboration

We pride ourselves in teamwork and partnership—internally and externally—and find innovation through collaboration.



Customer-orientation

Our work and successes are inextricably linked to our customers and stakeholders—responsiveness, efficiency, and transparency are vital.



Integrity

We are driven by integrity in our actions and our words—accountability, responsibility, and respect are principles we live and work by.



Adaptability

Change is the nature of our business; we need to be proactive and nimble, yet understand the importance of stability at the same time.



Aspiration

We continuously seek opportunities for growth and improvement, and we set ambitious goals and strive to make them a reality.

LEADING WITH AMBITIOUS GOALS

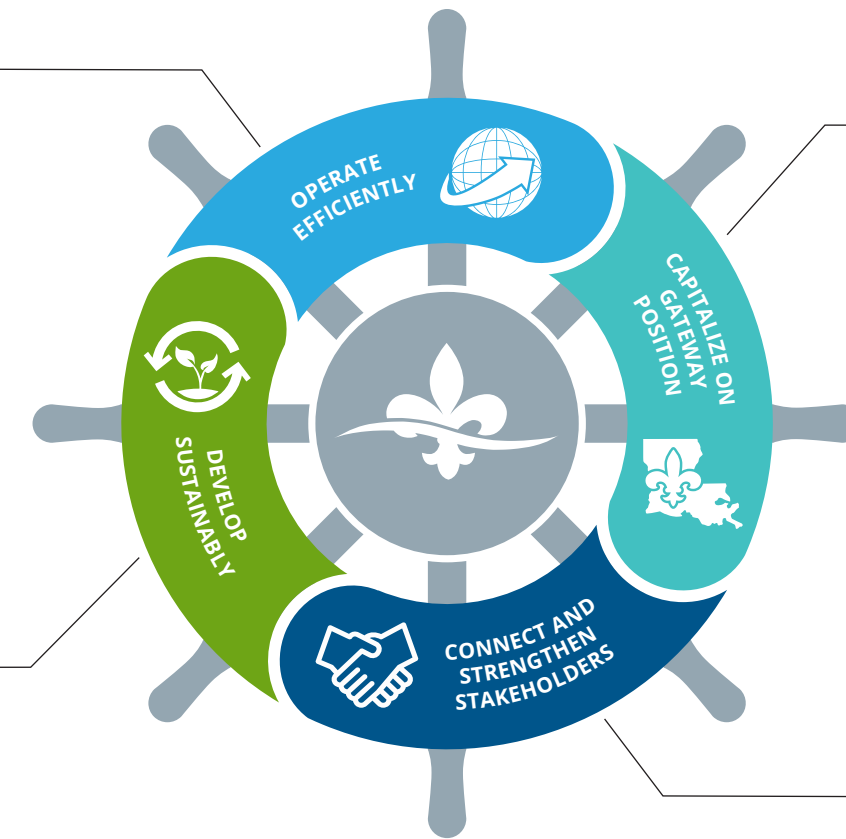
To implement this vision, maintain competitive advantages, and achieve our mission of maximizing commerce, Port NOLA constantly strives to achieve these four interdependent goals:

Operate Efficiently

Optimize the use of unsurpassed intermodal connectivity to efficiently move cargo to global and inland markets by supporting diverse business lines and land uses capable of adapting to constantly changing market trends.

Develop Sustainably

Together with our stakeholders and the community, make strategic investments in infrastructure to enable growth and development, ever striving for balance while enhancing the economy, society, and the environment.



Capitalize on Gateway Position

As the premier Gulf Coast gateway to Mid-America we are able to capture new markets, expand cargo capacity, and utilize waterfront industrial real estate while enhancing New Orleans as a vibrant experience for cruise and tourism.

Connect and Strengthen Stakeholders

The future of Port NOLA is ultimately dependent on the people who make things move: our intergovernmental partners, the cargo handling organizations, the truck drivers, and the people who work at Port NOLA every day. Our planning process and the recommended strategies directly reflect this emphasis.



Input from
over 500 individuals
informs this Strategic
Master Plan.



BRIDGING **COMMUNITY AND COMMERCE**

The Port NOLA Strategic Master Plan incorporates a balance of economic analysis, predictive forecasting, facility review, business development expertise, and stakeholder engagement. Our stakeholders are as diverse as our business—and, in addition to being educational and action-oriented, the planning process was carefully crafted to be inclusive of a variety of interests.



PLAN DEVELOPMENT

The Port NOLA Strategic Master Plan was developed through a two-phase process over approximately two years.

Phase 1


Phase 1 included a strategic, predictive analysis of the market, examining global, national, regional, state, and local conditions for cargo and cruise industry needs and projections. This phase also included a thorough review of existing Port assets and capacity, and an analysis of how they may be best utilized.

Phase 2

Phase 2 built on the results of Phase 1 to identify key strategies and facility expansions that will guide future development at Port NOLA. This includes alternative development scenarios, suitability analyses for new facilities and expansion, capital program development, and establishing performance indicators.



DOCK TALKS — LEARN ABOUT YOUR PORT!



Join us at one of these upcoming Dock Talks for ...

- » Port NOLA 101
- » Open House Q&A
- » Brief Survey

APRIL 10, 2017
10 a.m. - JEDCO Conference Center
 701A Churchill Parkway, Avondale, LA 70094
6:30 p.m. - Delgado Sidney-Collier Campus
 3727 Louisa St., New Orleans, LA 70126

April 11, 2017
10 a.m. - Port NOLA Auditorium
 1350 Port of New Orleans Place, New Orleans, LA 70130
6:30 p.m. - Rummel High School - Raider Room
 1901 Severn Ave., Metairie, LA 70001

We hope you can attend any one of these events to learn more about your Port – and if you can't make it, please take 10 minutes to get engaged and fill out a brief survey by [clicking here](#).

PORT NOLA MISSION
 Our mission is to be a proactive, customer-oriented, financially healthy service organization whose primary purpose is to **maximize the flow of foreign and domestic waterborne trade and commerce** with relevant markets by providing, directly or through third parties, highly productive facilities, equipment and support services to meet the specialized needs of shippers and ship operators.

The Port of New Orleans is planning for the future! Our goal with Dock Talks is to inform you about your Port and to better understand your interests so we can design ways to keep you informed and engaged.

What you'll learn...

- » Port NOLA facts and figures – what's going on at (and through) your Port.
- » Port NOLA is developing a Master Plan that will lay out a vision for the next 20 years and we expect to have a draft Master Plan for public review in the fall of 2017.
- » We also anticipate many more Port initiatives that will benefit from stakeholder and community engagement – and we want to hear from you!
- » The opportunities are great – the Port must prioritize critical infrastructure considering available resources.

What we want to learn from you...

- » What is most important to you about your Port?
- » How best can the Port facilitate interactions with you going forward and beyond the master plan?

Learn more at portno.com/masterplan or email us at masterplan@portno.com.

CONVENING AND CONNECTING PEOPLE TO PORT NOLA

The wide variety of stakeholders with an interest in Port NOLA's growth and operations extends far beyond our footprint and includes our tenants, the shipping industry, port operators, government agencies, community groups, educational institutions, and the neighborhoods we border.

Through a series of open houses, an online survey, video, social media, public boat tours, and industry and governmental focus groups, the Port was able to reach **over 500 individuals** for input into this Master Plan.

Dock Talks

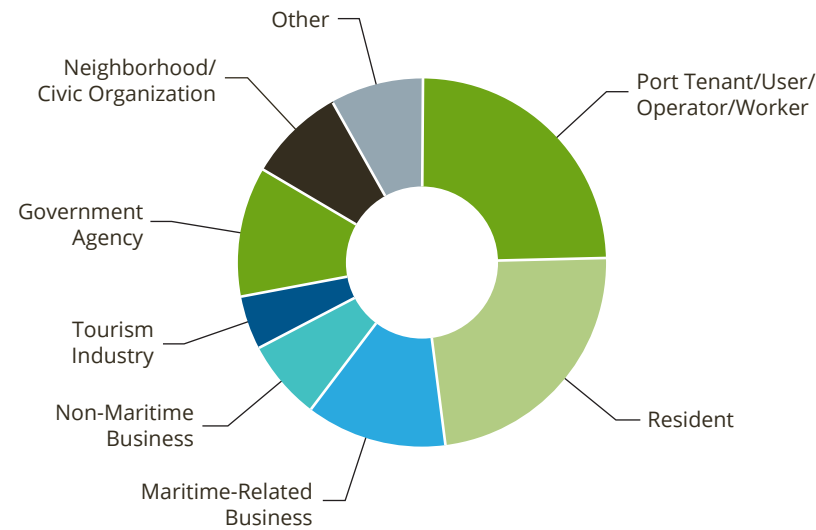
In April of 2017, Port NOLA hosted a series of educational open houses across its jurisdiction called Dock Talks to educate the public about the Port and to ask participants what matters most to them about the Port. The interactive format encouraged productive discussion and diverse participation.

Small Group Discussions

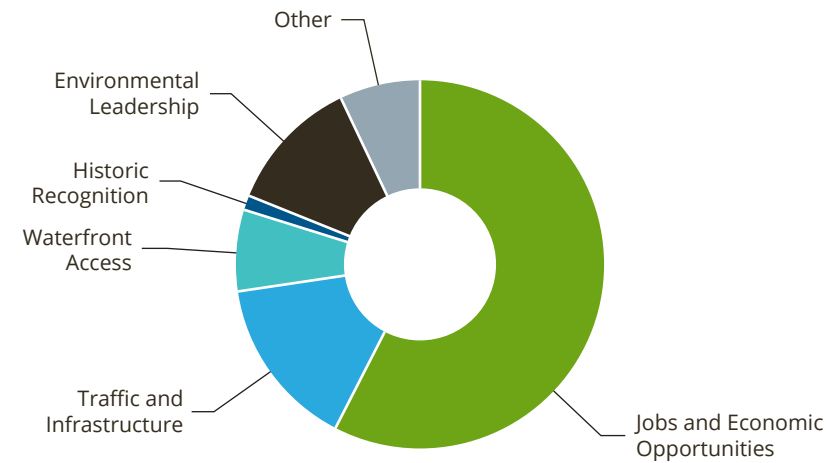
In addition to the Dock Talks, Port NOLA leadership conducted an extensive campaign of presentations, meetings, and focus group discussions throughout the process of developing this Master Plan. These discussions with a broad spectrum of organizations helped shape the planning process and address opportunities and challenges from multiple perspectives. These collaborative partnerships will continue to benefit the Port's efforts.



Stakeholders Represented



Priorities Identified



Survey

A brief online survey proved an effective method for mass data collection and community input for Port NOLA's planning efforts. With over 200 responses to the survey, this input represents a healthy mix of residential and industrial participants from across the region.

When asked what is most important about the Port, survey respondents directly aligned with our mission and vision for the future of the Port—more than two-thirds of respondents selected Jobs and Economic Opportunities, as well as Traffic and Infrastructure.

Survey responses were received from a wide range of organizations.

- 
- 504ward
 - A New Life 4 Us
 - Algiers Point Association
 - Bond Moroch
 - Buck Kreihs Marine Repair
 - Bywater Neighborhood Association
 - Carousel Medical Equipment, LLC
 - Charbonnet & Associates
 - Children's Hospital New Orleans
 - Costco
 - Dillard University Deep South Center for Environmental Justice
 - Dupuy Storage & Forwarding, LLC
 - Energy New Orleans
 - Gulf Harbor Shipping, LLC
 - Holy Cross Neighborhood Association
 - Kingswood Improvement District
 - Lake Pontchartrain Basin Foundation
 - Missionary Expeditors
 - New Orleans Chamber
 - New Orleans Terminals, LLC
 - New Orleans Business Alliance
 - Right Talent
 - Royal Caribbean International
 - SEACOR AMH/SCF MARINE, Inc.
 - Skyline Steel
 - Tulane Energy Institute
 - U.S. Customs & Border Protection
 - University of New Orleans
 - Transportation Institute
 - Veolia Water of North America
 - World Trade Center of New Orleans



Send your comments to the Port:
masterplan@portno.com

What some had to say in survey responses...

“

The Port should also consider links to educational institutions to **support workforce development** and to increase, as high as feasible, levels of Orleans residents' participation in Port economic opportunities and investments.

”

“

I think most people in the region have very little understanding or knowledge of the impact Port NOLA has on them, the total footprint of the Port and the **potential it has for significant economic growth for the region.**

”

“

The Port is why New Orleans has become the city it is today and was such an integral part of daily life throughout most of the city's history—it **would be fantastic to rebuild some of those neighborhood and daily connection opportunities** throughout the Port for better access and visibility.

”

“

I would love to see this information **shared with our city's youth.**

”

“

Please, continue to build a thriving, profit-making, cruise ship industry at the Port of New Orleans. I want more cruise ships, and their offices, to be “stationed” here. I believe this shipping industry is good for the city's economy (city taxes), its workers, and citizens. **I believe this type of industry can be very environmentally friendly, sustainable, and give the city great publicity**—and it can grow the city's local tourist economy! I like to think of the Port as being part of “environmental tourism”!

”



A CONTINUOUS LEARNING OPPORTUNITY

Involving our stakeholders and informing the public in the planning process was an initial, informative step for Port NOLA. While we learned that there is a need for more educational outreach, we also discovered that **public opinion and priorities are very much aligned with our mission and vision for growth.** Regular communication and educational opportunities about Port NOLA are in demand and will help the Port build even stronger relationships and partnerships; Port NOLA will continue to build on and learn from this experience for the future implementation of the Master Plan.



In 2017, Port NOLA shipped 36.5 million short tons of cargo, including 9.1 million short tons in breakbulk, and welcomed over 1.15 million cruise passengers.



3

UNDERSTANDING ***PORT NOLA TODAY***

An assessment of existing facilities and infrastructure is a necessary precursor to the development of an actionable plan that will allow Port NOLA, along with our customers and tenants, to operate efficiently, capitalize on geography and history, and develop sustainably over the short, medium, and, long term. In addition to cataloging Port NOLA's extensive asset portfolio and assessing potential for growth of its current footprint, this chapter also highlights key milestones in Port NOLA's history.

PORT NOLA THEN

Port NOLA's history dates back long before its incorporation as a public port authority in 1896. As a port city, New Orleans has been a center for international trade for 300 years since its founding by the French in 1718.

French colonials founded New Orleans as a headquarters for commercial land development.

1718

The Louisiana Legislature created the Board of Commissioners of the Port of New Orleans to administer public wharfs and regulate trade and traffic.

1896



1908

The City of New Orleans established the New Orleans Public Belt Railroad to serve the Port of New Orleans and provide equitable service and rates to rail users.

1940

18 new riverfront wharves were built, and the Public Grain Elevator began operation.

1976

Moonwalk opened along the French Quarter riverfront.

1984

World's Fair Expo improvements at Erato Street Wharf used for first cruise terminal.

1990

Louisiana World Exhibition's Canadian Plaza converted into the Julia Street Cruise Terminal for oceangoing cruise ships.

1996

Port NOLA purchased the Perry Street Wharf in Gretna, including 57 acres of land.

2004

Port NOLA opened the Napoleon Avenue Container Terminal Complex on the Mississippi River.

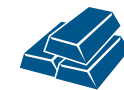


2005

Port NOLA reopened 12 days after Hurricane Katrina despite experiencing over \$300 million in damage.

1998

Port NOLA became a London Metals Exchange port and is now consistently in the top 3 nationwide.



2014

The City of New Orleans opened Crescent Park on former Port NOLA wharves.



2006

Port NOLA opened the Erato Street Cruise Terminal.



2013

Henry Clay Avenue Refrigerated Terminal storage facility was commissioned.



2008

Port NOLA 2020 Master Plan developed to ensure systematic coordination of Hurricane Katrina recovery projects.

2017

Port NOLA and New Orleans Public Belt Railroad become strategically aligned under Port NOLA.



2015

Port NOLA joined Green Marine.



2016

Mississippi River Intermodal Terminal at Milan Street Wharf opened.



PORT NOLA NOW: SHIPPING IS OUR PASSION

Port NOLA has a maritime servitude along the Mississippi River in its tri-parish jurisdiction, from Mississippi River mile marker 81 to 115, and has constructed various maritime facilities throughout. Also, Port NOLA owns industrial property making up a substantial portion of the waterfront land on the Inner Harbor.

Port NOLA generates operating revenue through rental of its facilities and land and other fees, but collects no taxes, further emphasizing the need for fiscal prudence and efficient use of assets. At cargo facilities, rent is typically based on the amount of cargo handled, often with a minimum annual guarantee. Additional revenue is generated through dockage fees, crane rental, harbor fees, passenger wharfage, and industrial land leases.

In addition to constructing facilities, Port NOLA provides water service for vessels, dredges to maintain appropriate drafts upwards of 45 feet at its berths, drives fender piles, maintains and operates four bridges, and provides its own security force through the Harbor Police Department and fire tug crew.

Port NOLA handles domestic and international commodities and products at its cargo terminals and passengers at its cruise terminals along its jurisdiction spanning more than 30 miles of Mississippi River waterfront and the Inner Harbor.

Louisiana is a central source of energy-related oil and gas mining/products and non-durable manufacturing (including petro-based products, chemicals, plastics, and foods). This economic base helps to identify Port NOLA's core markets.

Port NOLA's facilities include 40 berths, 20 million square feet of cargo-handling area, six ship-to-shore gantry cranes, more than 3.1 million square feet of covered storage area, and 1.7 million square feet of cruise terminal and parking facilities.

Port NOLA's container facilities are located at its upriver terminals at the Napoleon Avenue Container Terminal Complex, while breakbulk facilities are located upriver, downriver, and on the Inner Harbor. Cruise facilities are conveniently located in the historic core of the city's riverfront.



Finally, and with great significance for the long-term success of Port NOLA and its customers, the New Orleans Public Belt Railroad (NOPB) was acquired by the Port in a landmark realignment of assets with the City of New Orleans. This railroad connects Port NOLA facilities to six Class I railroads, making Port NOLA the only deepwater U.S. port with this advantage. The synergy of Port NOLA and NOPB greatly enhances the Port's ability to achieve its strategic growth objectives and ensures that NOPB can provide cost-effective, equitable, and reliable service to all users. This new, fourth line of business provides certainty to ocean carriers who need greater access to rail.

By leveraging intermodal rail connections to new markets like Dallas/Ft. Worth and Atlanta and existing connections to Memphis, Chicago, and Canada, the Port's ingress and egress will be expanded and highway congestion reduced.



Existing Port Land Uses

- | | | | |
|---|--------------------|---|------------------------|
|  | Container |  | Industrial Real Estate |
|  | Breakbulk |  | Rail |
|  | Cruise and Tourism |  | Other Infrastructure |



CONTAINER CARGO FACILITIES

The Napoleon Avenue Container Terminal Complex comprises Port NOLA's container handling facilities and is operated by New Orleans Terminal, LLC and Ports America Louisiana, LLC, each with its own container storage areas and a shared gate. The largest container carriers in the world provide service from New Orleans to every major trade lane across the globe.

- Container
- Industrial
- Rail
- Other Infrastructure

99.5

Miles Above Head of Passes, East Bank, Mississippi River

45

Feet of Draft

840K

TEUs Current Capacity

Nashville Terminal

Ports America Louisiana, LLC
Acreage 103
Depth 40-45 feet

Napoleon Terminal

New Orleans Terminal, LLC
Acreage 117
Depth 35-45 feet



3,700 feet of container berths



6,200 linear feet of track
2 electric rubber tire gantry cranes
Access to **6** Class I railroads



Highway Connection
Clarence Henry Truckway/
Tchoupitoulas Corridor



130 Acres for container stacking
1,000 psf live load
Ability to stack loaded containers
5-high

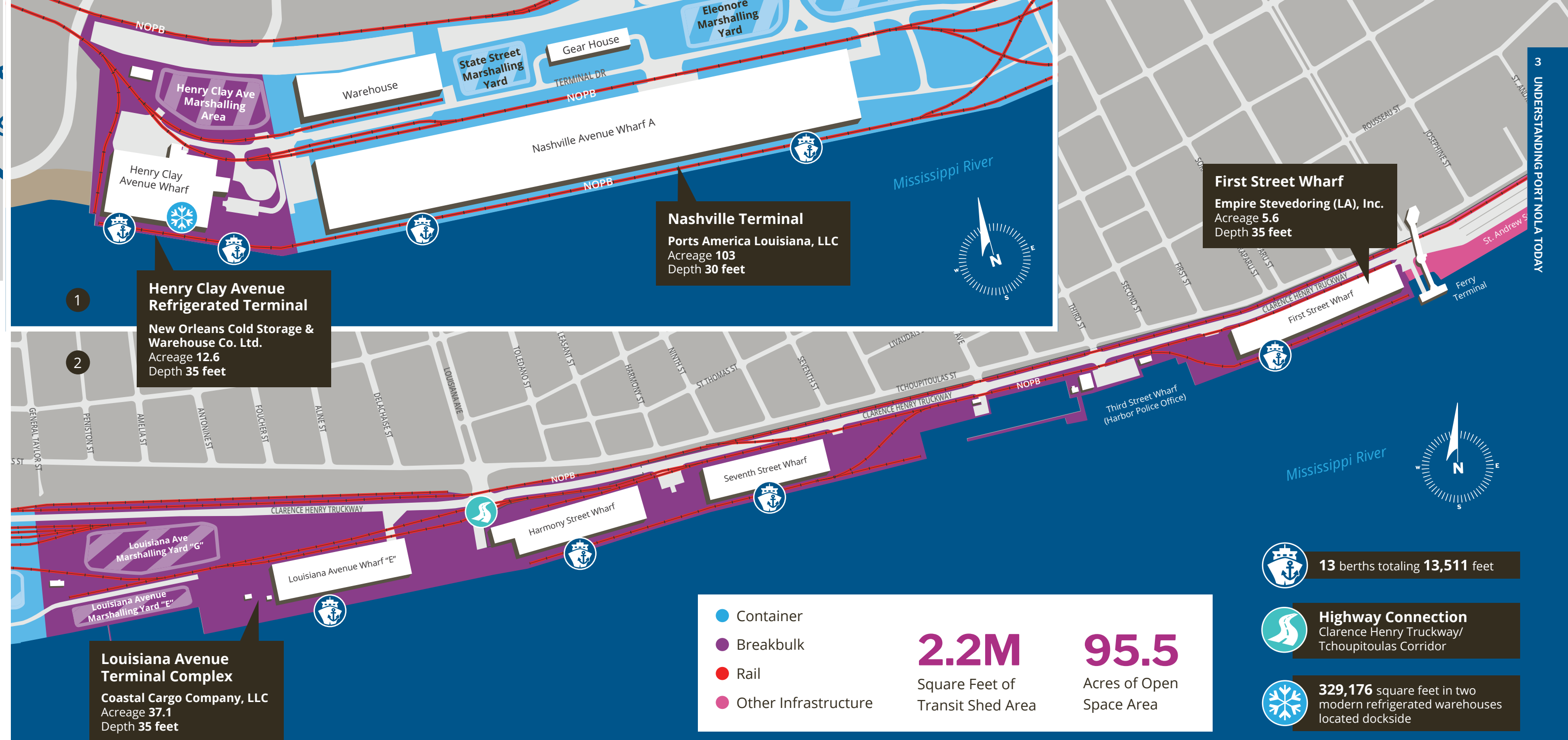


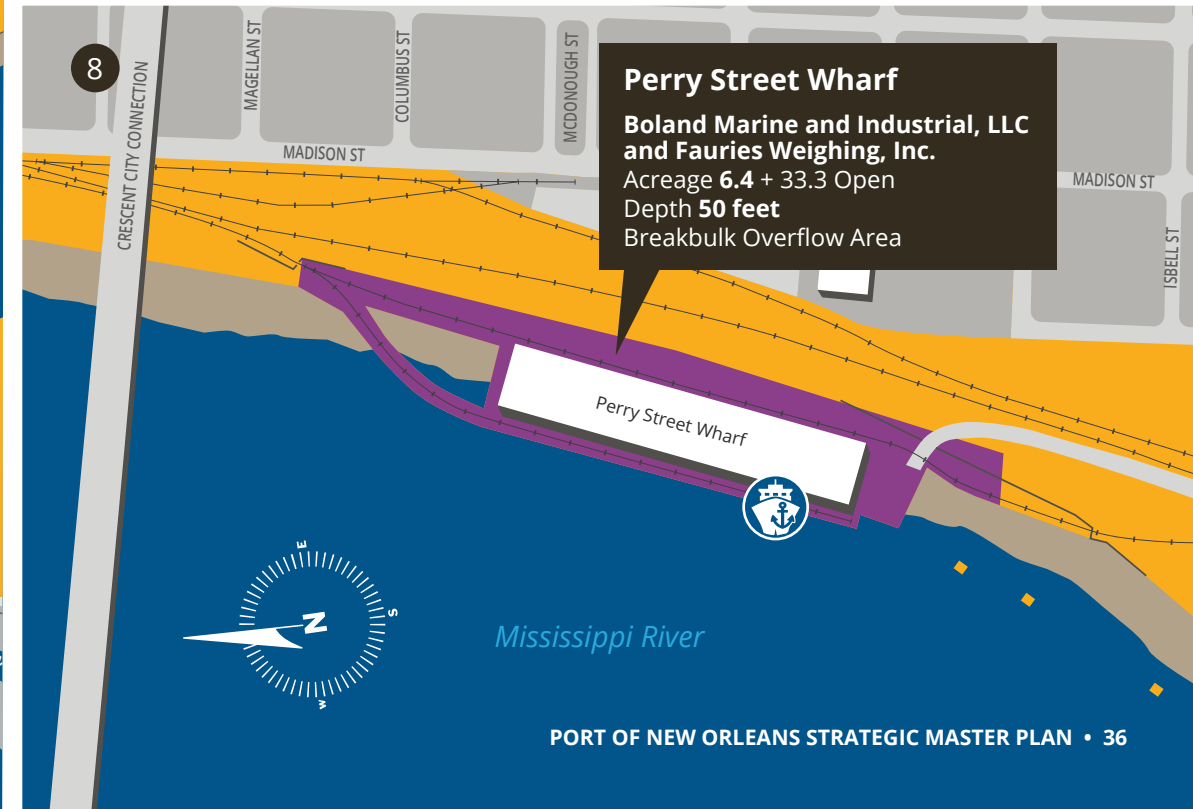
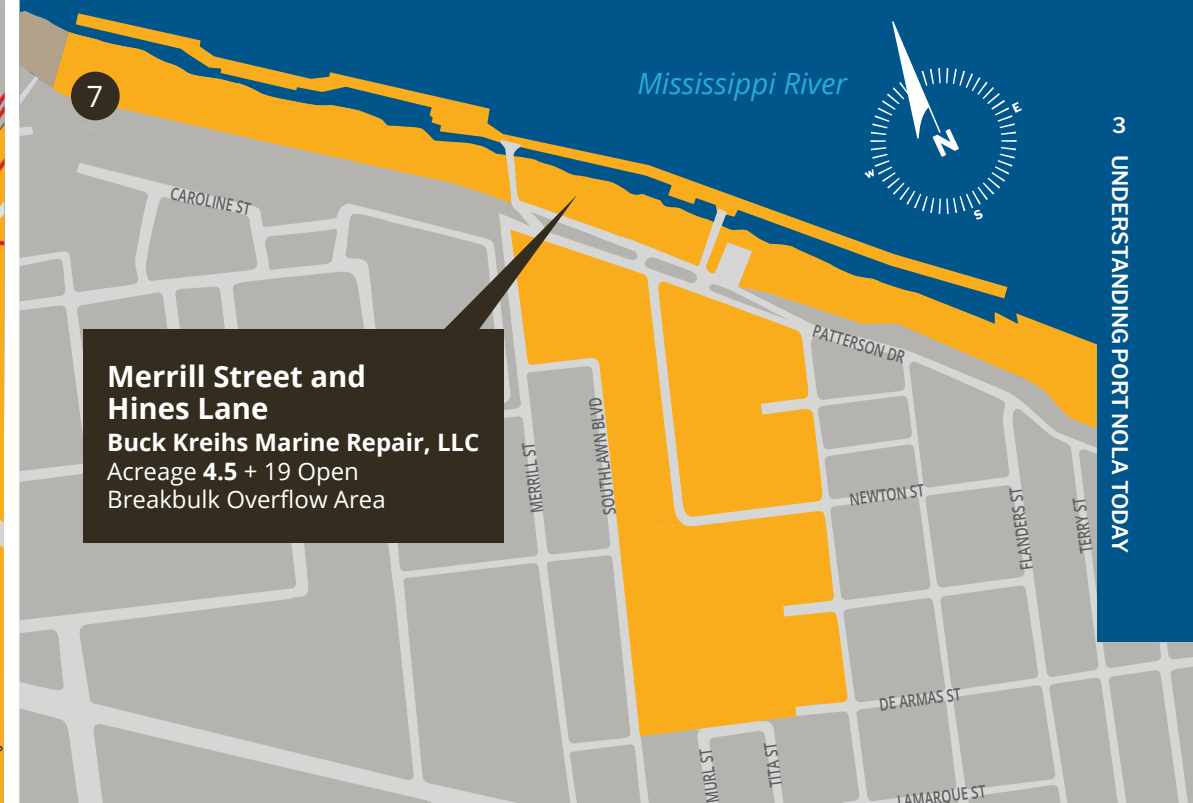
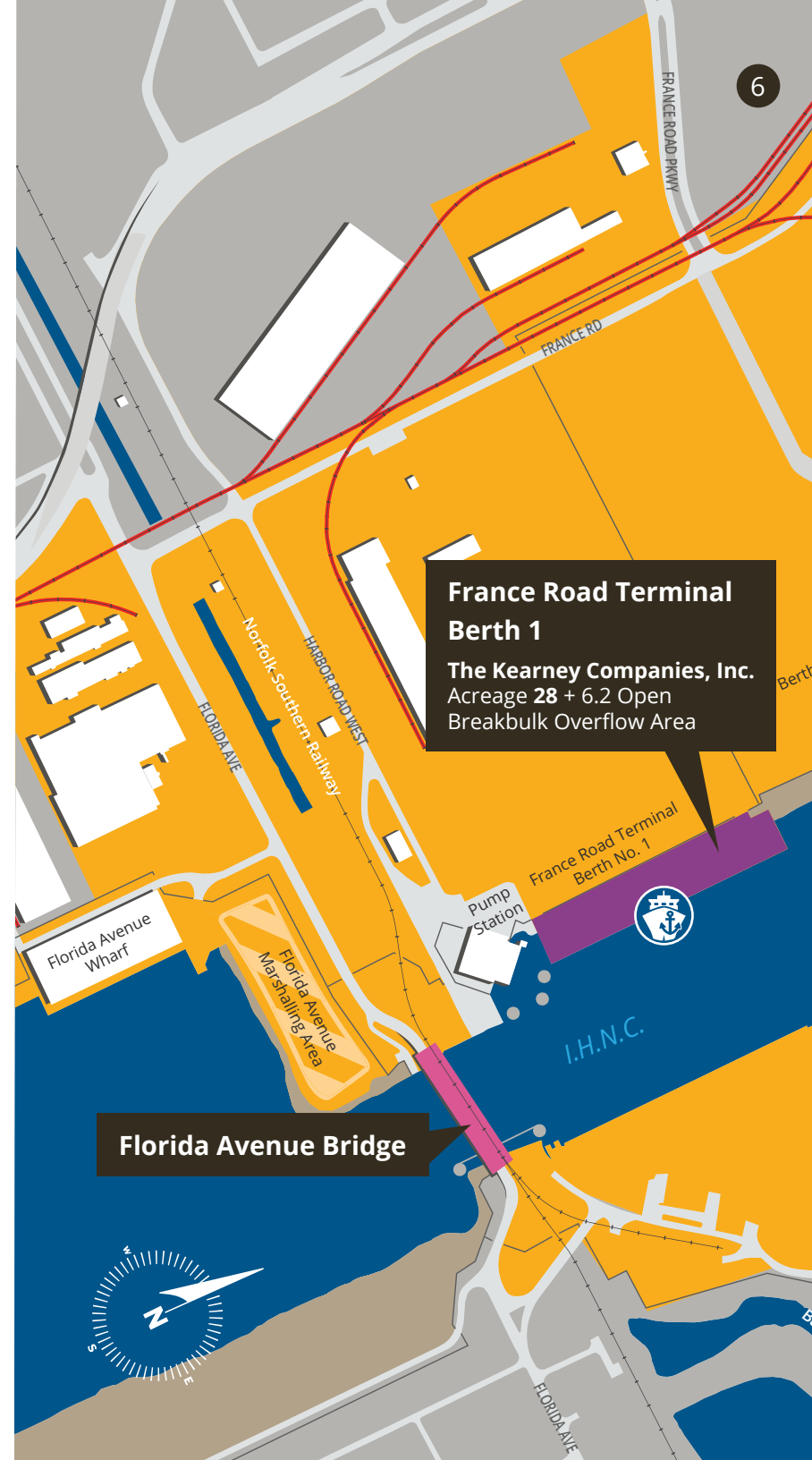
6 ship-to-shore cranes



BREKBUK CARGO FACILITIES

Breakbulk is part of the historic beginning of Port NOLA and we remain committed to being a leader in the U.S. breakbulk market because of our excellent waterway and rail connectivity. Non-containerized cargo primarily includes breakbulk with some bulk commodities handled by five terminal operators: Ports America Louisiana, LLC, Coastal Cargo Company, LLC, Empire Stevedoring (LA) Inc., Seaonus Stevedoring New Orleans, LLC, and New Orleans Cold Storage & Warehouse Co. Ltd. There are currently 24 ocean carriers that call at Port NOLA with breakbulk and bulk commodities. All of the terminals have capabilities to discharge and load directly from vessel to barge or rail car. Value-added services include unloading rail cars and transloading bulk commodities from barge for transfer in containers.





CRUISE SHIP FACILITIES

Port NOLA reinforces one of the state’s major economic engines and cruise and tourism contribute to Port NOLA’s diversity. Through strategic investments, effective marketing, proximity to a vibrant downtown, airport, and large drive-in market, among other factors, Port NOLA is now the sixth-largest cruise port in the country. Oceangoing vessels are currently accommodated at two existing facilities, and with recent cruise line commitments, the facilities are fast approaching full capacity. Riverine cruise berths and terminal space are also nearing capacity, as demand grows. As modern, oceangoing cruise ships exceed 170-foot air draft, future terminal development will need to be located at a deep-draft wharf that is downriver of the Crescent City Connection Bridge. Riverine cruise ships should be located with easy access to the city’s historic tourist core.

Ocean Cruising

Carnival Cruise Line is the largest operator from Port NOLA—making 130 homeport turns in 2017. Other Carnival brands will add nine additional port-of-call turns this year. Norwegian Cruise Line, the second-largest brand from Port NOLA, operates the Norwegian Pearl with 23 homeport turns. In 2018, Royal Caribbean will bring Vision of the Seas with 13 homeport turns.

Riverine Cruising

Port NOLA is one of the top riverine ports in the United States. Poydras and Thalia Street Wharves welcome the American Queen Steamboat Co. and American Cruise Lines vessels at their berths. Our five homeported riverine vessels, currently scheduled to turn 91 calls in 2018, will account for 3-5% of the total cruise passengers traveling to and from New Orleans. Viking River Cruises is anticipated to commence operations from Port NOLA starting in 2020.

Dream
HOMEPORTED VESSEL
7-night cruises @ **Erato Terminal** Every Sunday

3,646
PASSENGERS

NORWEGIAN
CRUISE LINE®

Triumph
HOMEPORTED VESSEL
4- and 5-night cruises @ **Erato Terminal** Every other Monday, Thursday, and Saturday

2,754
PASSENGERS

Pearl*
HOMEPORTED VESSEL
7-night cruises @ **Julia Terminal** Every Sunday; seasonally

2,394
PASSENGERS

Vision of the Seas
HOMEPORTED VESSEL
Returning in winter 2018 @ **Julia Terminal** Every Saturday

2,514
PASSENGERS

BOARDING PASS TO

Cruise NOLA

*4,000 Passenger Breakaway will replace Pearl when Norwegian returns for the 2018-2019 season

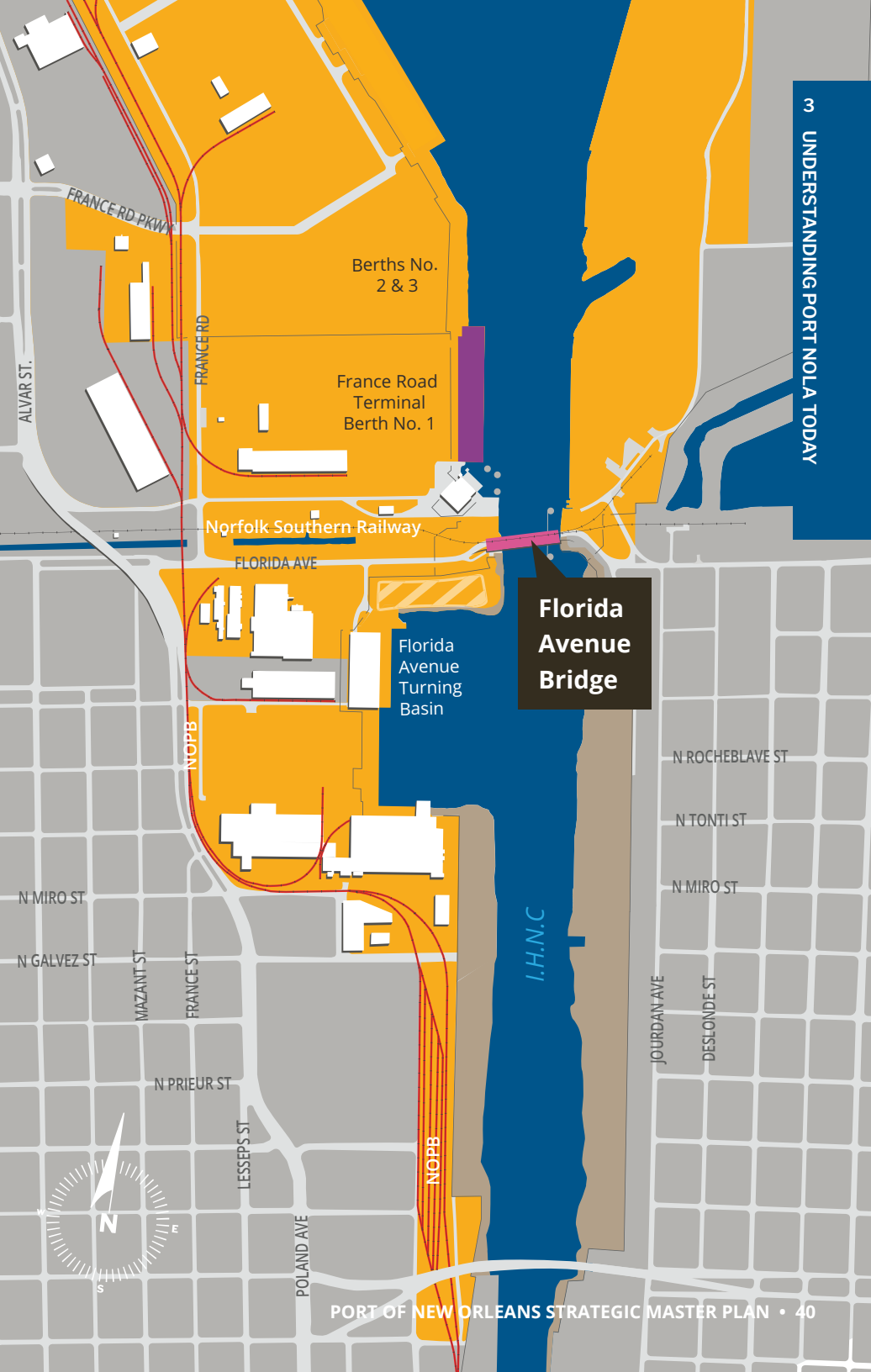
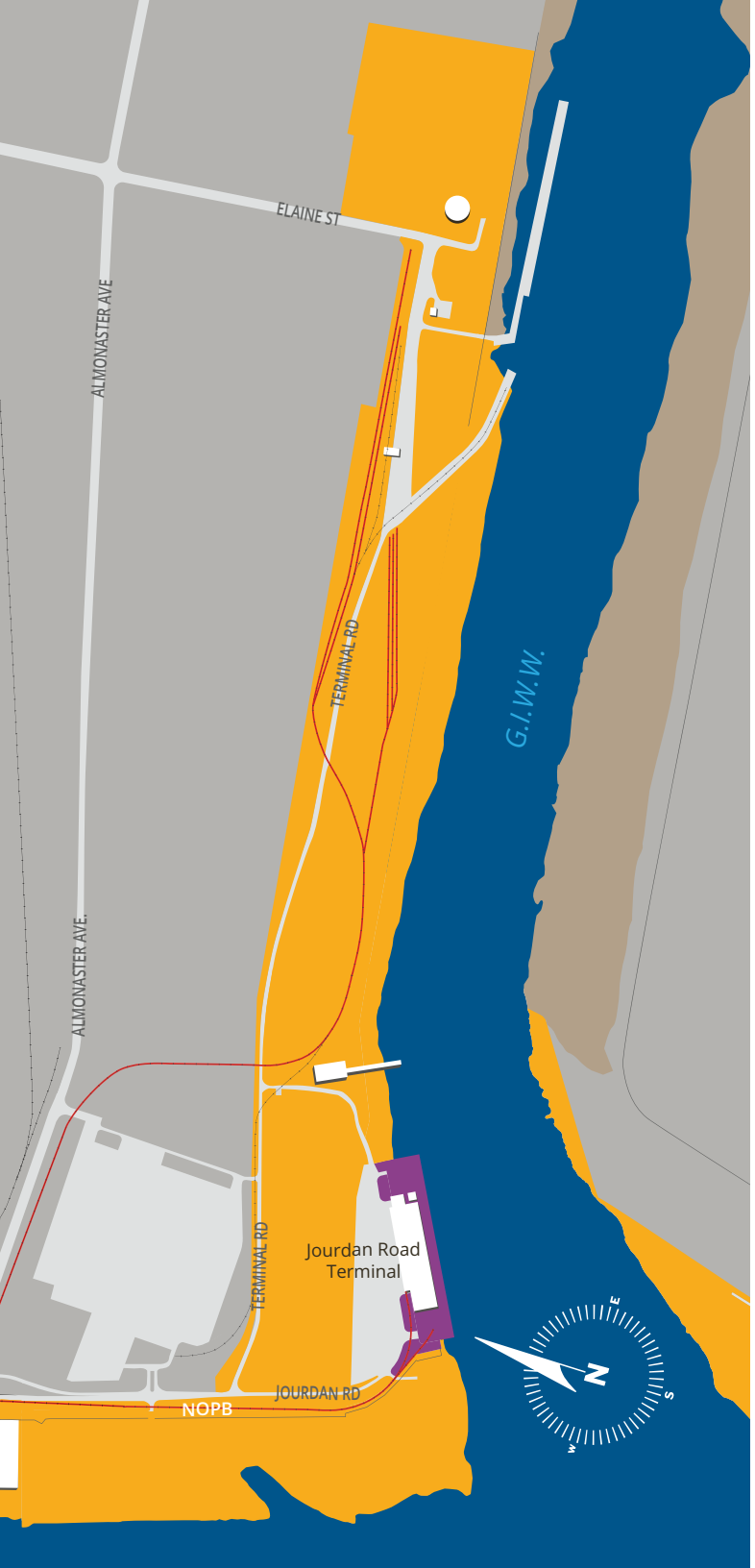
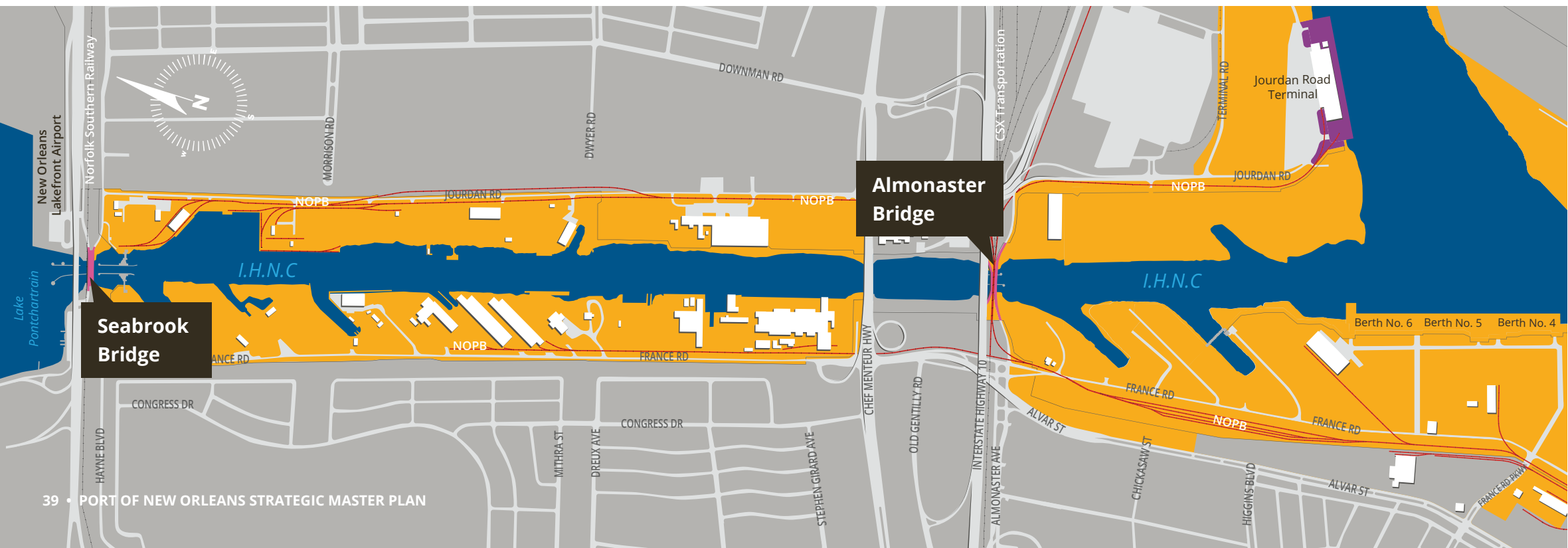


INDUSTRIAL PROPERTIES

Port NOLA’s industrial properties portfolio is a vital part of the supply chain for various products moving through the Port and is a rare real estate opportunity within the United States. Tenant businesses include shipbuilding and repair; warehousing and distribution; truck and container depots; materials handling; steel distribution; refrigerated warehousing; manufacturing; packaging; transloading to either rail, barge, or truck; bulk transloading, sorting, and packaging; and other value-added activities. There are currently 33 industrial tenants throughout the Port’s jurisdiction, and most are located on the Inner Harbor.

The Inner Harbor consists of over 1,000 acres flanking the Inner Harbor Navigation Canal (IHNC) and Gulf Intracoastal Waterway (GIWW). Some additional industrial real estate exists on the east and west banks of the Mississippi River as well. The Inner Harbor is located within 2.5 miles of Interstate 10, within 5 miles of Lakefront Airport, and 7 miles from New Orleans Central Business District. The majority of properties are served by NOPB with access to six Class I railroads.

- Breakbulk
- Industrial
- Rail
- Other Infrastructure





FOREIGN-TRADE ZONE AND LONDON METALS EXCHANGE

The New Orleans Foreign-Trade Zone (FTZ) and London Metals Exchange (LME) play significant roles in the growth and development of Port NOLA and related economic opportunities.

The Port administers the New Orleans FTZ, which allows shippers to import, store, exhibit, assemble, or manufacture goods without being subject to U.S. Customs entry procedures and duties. The New Orleans FTZ has more individual warehouses and sites under its umbrella than any other U.S. port-administered FTZ.

Since becoming an LME-designated port in 1998, New Orleans has become the second-largest LME depository in the country. There are 600 warehouses in the New Orleans metropolitan area that are certified by the LME to handle and store non-ferrous metals and steel billets traded on the exchange, representing 10% of the world’s supply in 2014 (Source: NOLA.com).

INFRASTRUCTURE

Port NOLA owns, operates, and maintains a significant collection of equipment and infrastructure. Due to the age of many of these assets, substantial capital is spent on them each year, and with the exception of the container cranes, these assets do not generate revenue. Therefore, they must be carefully considered in the long-term plan for Port NOLA’s future.

In addition to the equipment, cranes, and bridges listed, Port NOLA owns and maintains over 18 miles of roadways (the Clarence Henry Truckway; France, Jourdan, and Terminal Roads; and France Road Parkway); railroad tracks; and many more miles of water, sewer, and drainage infrastructure throughout the Port’s jurisdiction.

Port-Owned and Operated Vessels
Cutterhead dredge and ancillary vessels and equipment
Barge-mounted fender pile driver
100-foot fire tug
34-foot inspection vessel
Various police and support vessels



St. Claude

BUILT 1919

Strauss Heel Trunnion Bascule Bridge



Florida

BUILT 2005

Vertical Lift Bridge



Almonaster

BUILT 1919

Strauss Heel Trunnion Bascule Bridge



Seabrook

BUILT 1919

Strauss Heel Trunnion Bascule Bridge



eRTGs

(2) KONE

BUILT 2016

CAPACITY 60-LT



Ship-to-Shore Cranes

(2) Paceco/ Sade Vigesa

BUILT 1996 GAUGE 50-FT

(2) IMPSA

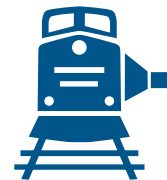
BUILT 2001 GAUGE 50-FT

(2) Doosan

BUILT 2011 GAUGE 100-FT

NEW ORLEANS PUBLIC BELT RAILROAD

The New Orleans Public Belt Railroad (NOPB) is a Class III switching railroad that was owned by the City of New Orleans (City) from 1908 until its acquisition by Port NOLA in February 2018. The primary mission of NOPB is to serve Port NOLA and local industries. NOPB is a critical freight infrastructure link that connects Port NOLA with six Class I railroads and helps expedite local and intermediate freight through the strategic New Orleans rail gateway. It provides diversified rail services on its line through switching, storage, track maintenance, and car and locomotive repair services. Revenue generated by the NOPB is internalized within NOPB and is used to fund maintenance costs, capital investments, labor, administrative costs, and other railway functions.



26 miles of main track, 9 at Huey P. Long Bridge, 40 at terminals and yards.

- New Orleans Public Belt Railroad (NOPB)
- NOPB Property Area
- Burlington Northern Santa Fe/Union Pacific Railroad (BNSF/UP)
- CN
- CSX Transportation (CSX)
- Norfolk Southern Railway (NS)
- New Orleans and Gulf Coast Railway (NOGC)
- Kansas City Southern Railway (KCS)
- Union Pacific Railroad (UP)
- Union Passenger Terminal (UPT)
- Amtrak (AMT)

A landmark plan that transferred ownership of the NOPB to Port NOLA was announced in 2017 to stimulate economic growth of the Port and local industries. The move gives the Port even greater competitive advantage in international trade which will be an economic boon for the region.

An important element of the plan required Port NOLA to transfer the Governor Nicholls Street and Esplanade Avenue Wharves along the Mississippi River to the City, providing continuous public access to the riverfront from Crescent Park to Spanish Plaza along a spectacular 3-mile stretch. This improved public access comes several years after the opening of Crescent Park and Woldenberg Park that connects our community and visitors to our riverfront.





BUILDING ON OUR STRENGTHS

Port NOLA's extensive and varied assets enable a diverse, sustainable business portfolio flexible to the market ebbs and flows. These assets require careful assessment of development alternatives to grow sustainably through 2040 and beyond. We will begin to assess future alternatives by examining market trends and forecasting the future in the next chapter.



Port NOLA is an economic catalyst for our state, region, and tri-parish jurisdiction.



4

FORECASTING *THE MARKET*

Predicting market growth to be able to capitalize on new opportunities is a complex undertaking that involves understanding global economics and predicting trade patterns. Port NOLA's plan for the future of its publicly owned facilities incorporates economic and market analysis on a local and global scale. This plan does not address analysis for privately owned facilities or their operations. Data in this chapter is based on market analysis completed in 2016.

The goal is to exceed stakeholders' expectations. Investment in marine terminals and other infrastructure is capital intensive. Therefore, facility investment must reflect the future demands of the market.

COMMODITIES BY THE NUMBERS



CARGO: CURRENT MARKET CONDITIONS

Key Commodities

Increasingly, cargo owners and shipping lines select ports for their location, cargo handling capabilities, and other ancillary logistics benefits. This can include value-added services such as coffee processing (available at Port NOLA), distribution center facilities, or automobile or other manufacturing/assembly plants. These require marine transportation to move imported raw materials and finished goods to and from international markets.

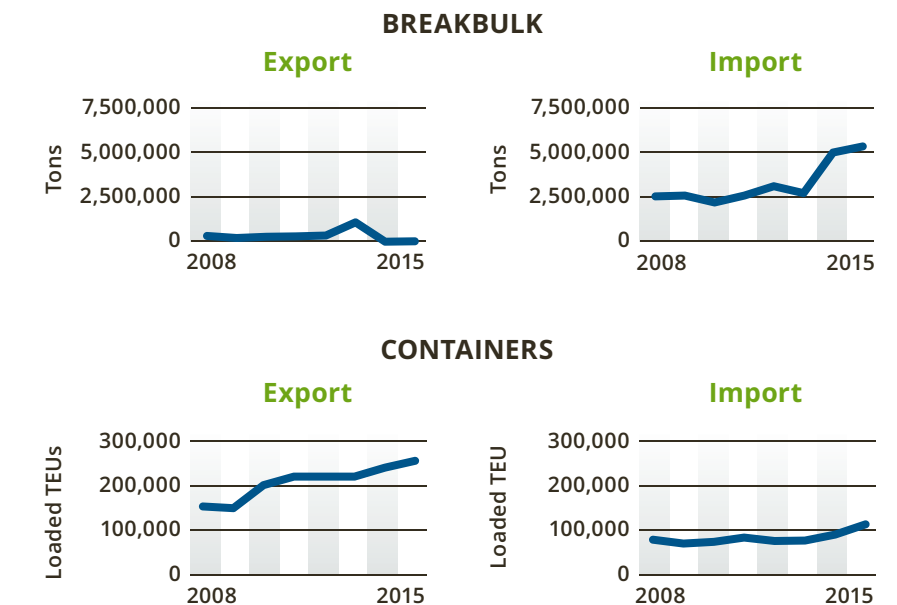
By working with local and regional stakeholders to serve new manufacturing industries in the region and ensuring logistics and value-added capabilities that cater to shippers' needs, Port NOLA serves as an economic catalyst for growth.

Over the past several years, Port NOLA has seen increases in container imports and exports as well as breakbulk imports. These trends are driven by key commodities.

Port NOLA serves as an import hub for coffee, natural rubber, and steel. As a designated LME location, Port NOLA provides warehousing services for metals traded on the LME. This breakbulk cargo is sensitive to global economic trends and trade policies.

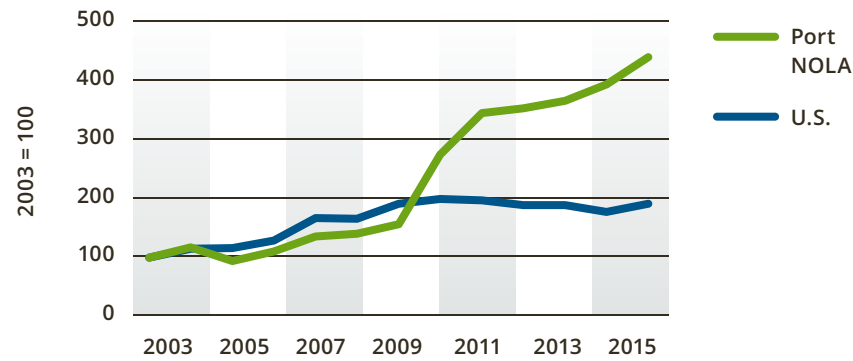
The boom in Louisiana's chemical industry has greatly fueled the Port's export growth in moving plastic resin.

Recent Export and Import Trends at Port NOLA



Port NOLA's container business is consistently growing with the increase in containerization of breakbulk and bulk exports.

Port NOLA's Plastic Resin Exports vs. U.S. (Indexed)

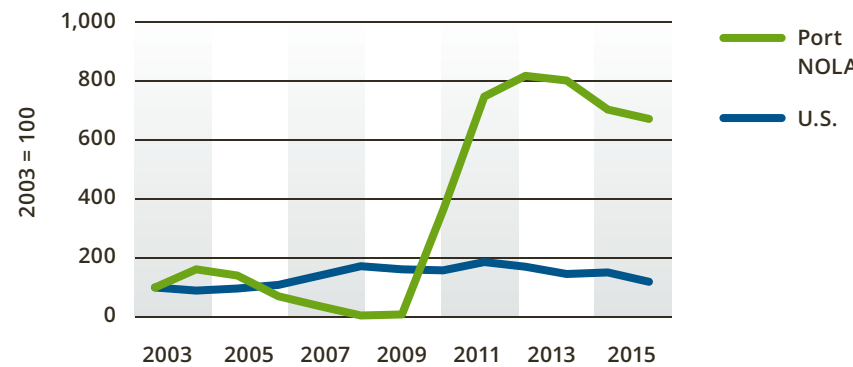


Port NOLA's export volumes are supported on two fronts: participation in the large-volume Asia and European trade lanes, and a growing share in emerging markets including South/Central America and Africa. Resin remains a strong export commodity with a positive growth outlook significantly outperforming the nation.

The increase in containerization of breakbulk and bulk contributes to the growth in Port NOLA's container business. Annual growth of U.S. poultry exports averages 3.9% and totals roughly 13.5 million tons. Port NOLA's containerized exports of frozen poultry have risen 50-fold in the past six years. Asia remains the largest export market for U.S. poultry, however, this region has lost a significant amount of share of the total. European-bound volumes dropped in 2015.

Other markets, including South/Central America and Africa are becoming more important trade destinations. Port NOLA also handles regular shipments of export frozen poultry to Cuba as part of the U.S. AID and Humanitarian Assistance Program.

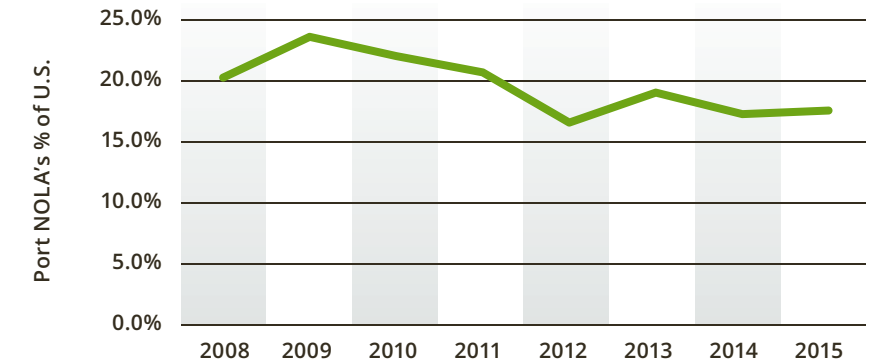
Port NOLA's Containerized Poultry Exports vs. U.S. (Indexed)



The U.S. currently imports roughly 1.5 million tons of coffee. Containerized coffee import tonnage through Port NOLA has trended near 250,000 tons annually. This equates to roughly 17.5% of the total U.S. market, underscoring Port NOLA's role as a leading import hub for coffee. Import volumes have been growing by an average of 1.6% annually over the past decade. Demand for coffee is generally considered to be inelastic, meaning that as price fluctuates demand remains relatively constant.

Traditionally, roughly 70% of imported coffee volume originates in Latin America/Caribbean. Asia (including Vietnam, Indonesia, and Thailand) has accounted for the second-largest source. Port NOLA remains one of the Intercontinental Exchange's licensed coffee storage warehouse locations. Proximity to Latin America/Caribbean also adds support to the positive outlook for future import volumes through Port NOLA.

Port NOLA's Share of U.S. Coffee Imports





CONTAINER MARKET TRENDS

With an annual throughput of 526,703 TEUs in 2017, Port NOLA has significantly increased trade to new, high-growth markets such as Africa and the Middle East, with exports to Africa showing a 7% increase between 2008 and 2015. Containerized resin exports show the highest potential for volume growth, with refrigerated poultry and agricultural-related products also offering significant growth opportunities. Industry experts predict that between 2017 and 2020, the Gulf region will produce 400,000 new TEUs of resin as a result of new and expanded plastic resin plants in Louisiana and Texas. In a very conservative analysis, if Port NOLA handles one third of this growth, container volumes would grow by 25% over the next few years.

Port NOLA can improve the market access conditions through investment in infrastructure and facilities.

Trade Routes

Container trade with Latin America and Europe is dominant, but diversity is building through emerging Asian, African, and Middle Eastern markets. Since 2008, Latin America has undergone a period of significant export growth led by demand for natural resources imported in Asia. In 2017, CMA CGM launched new direct weekly services to Asia and to South America from Port NOLA's Napoleon Avenue Container Terminal. Europe remains the single largest of all trade routes.

Strong global demand for industrial and food products support the growth outlook for exported goods through Port NOLA. These factors include:

- Exposure to developing Asia/Middle East, Africa, and South/Central America markets underscores potential growth opportunities of exports from Port NOLA.
- Ability to serve the developed European market further supports export containerized cargo potential.
- Demand for imported produce should follow a long-term growth curve and presents an opportunity to attract new refrigerated imports.

CONTAINERIZED CARGO VOLUME FORECASTS

Cargo forecasting includes a view of the global and regional macroeconomic environments as well as various market access scenarios. The containerized cargo volume projection supports facility investment decision making.

When macro economic scenarios allow, Port NOLA can improve the market access conditions through investment in infrastructure and facilities.



Louisiana could move the dial by attracting more freight-based industry.

Port NOLA can also liaise with other local, regional, and state agencies to support the growth of the local economy by attracting local and regional manufacturing and distribution that would use the Port to export products and grow import volumes.

Three market scenarios were simulated. The base case projects 710,000 TEUs annually by 2030 whereas the upside case projects 865,000 TEUs annually. The downside scenario simulation indicates a volume of about 650,000 TEUs annually by 2030.

Considering the anticipated growth rates generated through this rigorous economic analysis and forecasting, Port NOLA's container future is strong. By 2030, the Port expects to add between 190,000 and 345,000 annual TEUs to container throughput. Napoleon Avenue Container Terminal can serve 1.5 million TEUs annually with investment.

But this will bring the Port close to exceeding the capacity of the existing container terminal footprint and will trigger the need for optimization now and expansion in the future.

Importantly, the need for expansion is driven not only by volume growth, but also space for added-value activities and vessel size. Container ships are getting larger and larger which places pressure on ports to keep pace with being able to accommodate bigger ships.

Three Market Scenarios



Upside Case

Stronger than projected economy, specifically in Asia and Europe. The market access assumed a recovery of the loss of imports due to the departure of Chiquita, the addition of an Asian container service* and a large importer account.

Update: Asia container service was added in February 2017.

865,000 TEUs Annually (2030)



Base Case

Simulate current environment (Status Quo), that of the present economy and also of the current market access that includes current vessel sizes and strings, current fuel prices, macro and regional economies.

710,000 TEUs Annually (2030)

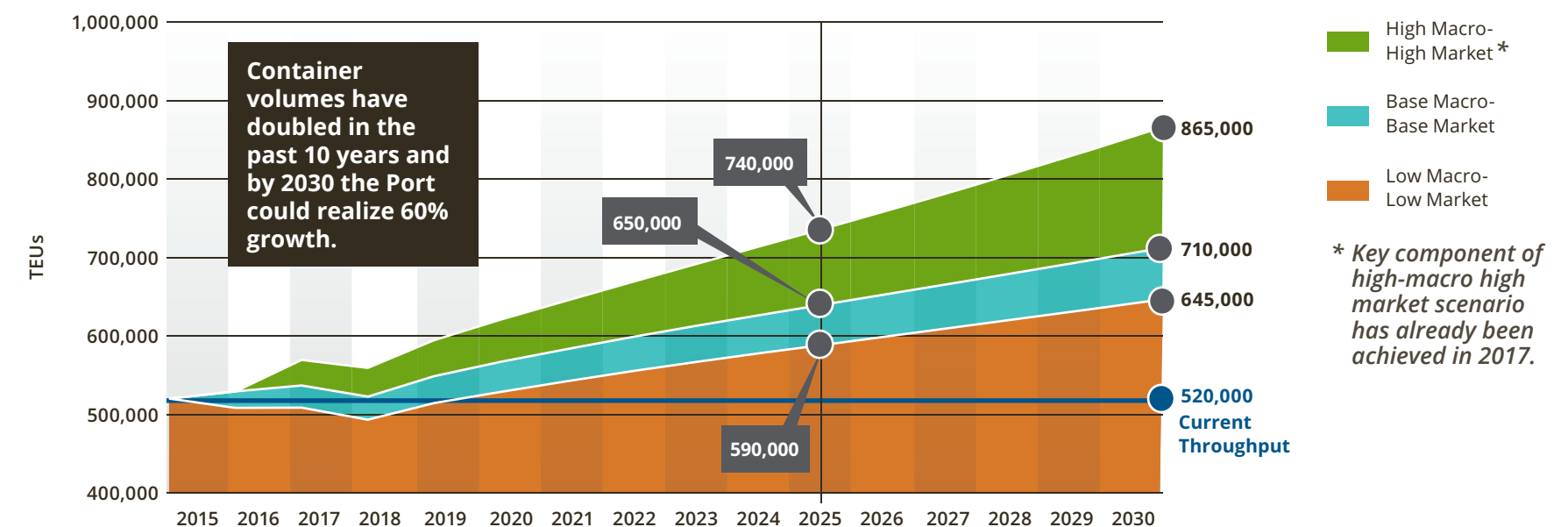


Downside Case

Weaker economy, specifically a slower recovery in Latin America and Africa.

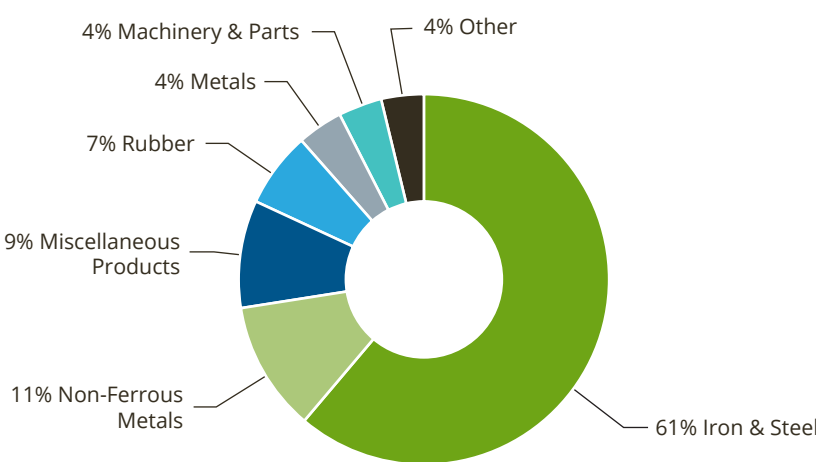
645,000 TEUs Annually (2030)

Container Volume Forecasts Through 2030





Port NOLA's Breakbulk Commodities



BREAKBULK MARKET TRENDS

In 2017, Port NOLA handled 2.9 million tons of breakbulk cargo and the market analysis shows potential growth to 4.5 million tons by 2030. Market analysis indicates that Port NOLA will remain a premier breakbulk port due to its location on the Mississippi River. It is also important to note that project cargo, which cannot be containerized, comprises a significant portion of business at Port NOLA.

Breakbulk commodities at Port NOLA are import driven. Key commodities are iron, steel, rubber, and non-ferrous metals. While breakbulk cargo declined between 2015 and 2016, the forecast projects a growth during the short term planning horizon to 2025. By 2025, it is forecasted that breakbulk cargo may return to the 2015 level.

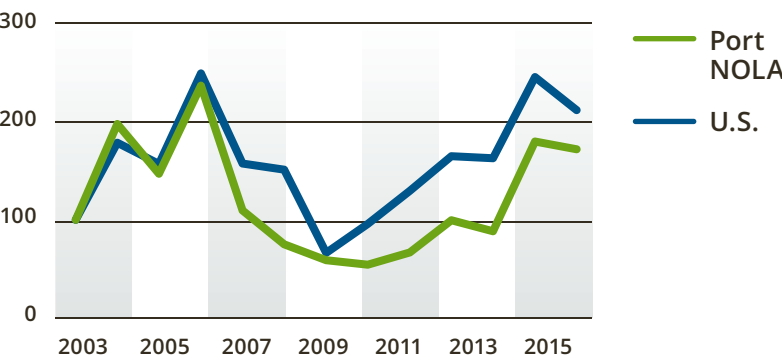
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Port NOLA operators have specialized expertise in handling breakbulk and project cargo, and the need for breakbulk facilities will continue. Breakbulk provides more direct employment in terms of cargo handling, especially discharging breakbulk cargo from ships to barges.

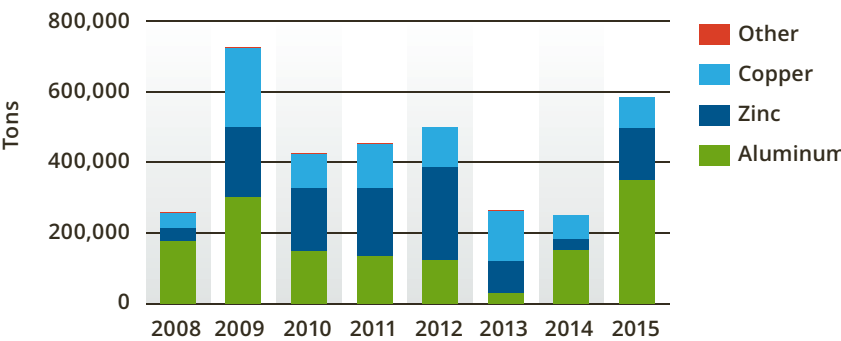
U.S. imports of iron and steel products largely remain breakbulk shipments. Imports from Asia are the largest volumes at Port NOLA and represent 20% of the national volume. European and South/Central American volumes account for smaller volumes at the Port. Given the Port's overall share of the U.S. market, it is not surprising that growth has more or less trended with the national total.

Imports of non-ferrous metals include shipments of base forms and products made from aluminum, copper, lead, zinc, and nickel. Total maritime import tonnage into the U.S. has been averaging annual growth of 2.4%. Following the 2008/2009 recession, the coinciding slowdown in China, and ramped-up production of base metals globally, import volume into the U.S. began to grow, supported by increased demand for aluminum used in auto production and imports of non-ferrous metals. Asia has replaced Europe and South/Central America as the largest source-origin and now accounts for roughly 45% of total volume.

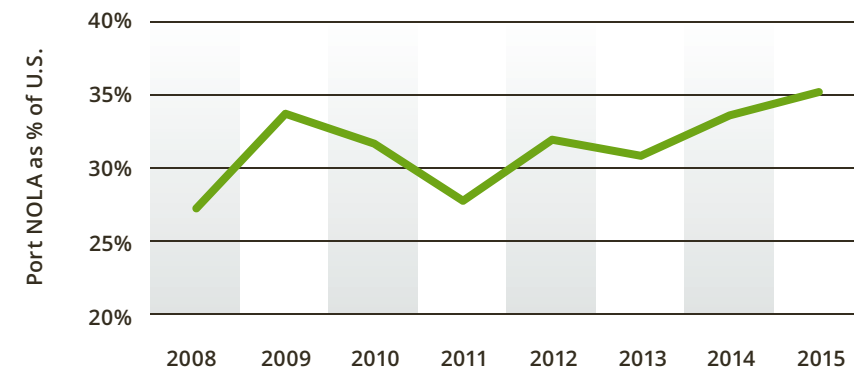
Port NOLA's Breakbulk Iron and Steel Imports Growth vs. U.S. (Indexed)



Port NOLA's Non-Ferrous Metal Imports



Port NOLA's Share of U.S. Natural Rubber Imports

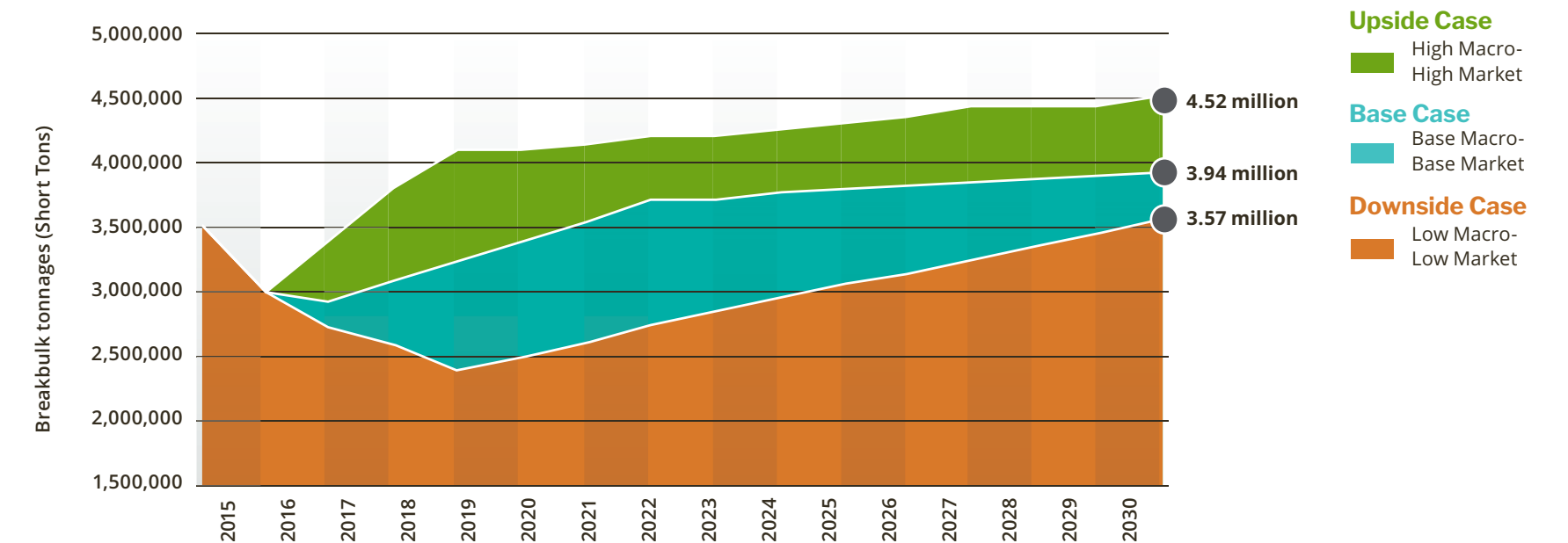


Given the Port's status with the LME and proximity/connectivity to auto manufacturers in the Midwest, it would be expected that Port NOLA continue to actively serve these volumes. Port NOLA has traditionally handled an average of 12.5% of these non-ferrous metal imports. There is also potential for additional metals business beyond LME.

U.S. imports of natural rubber have trended near one million tons per year over the past decade, with flat growth. During this period there has been a significant shift away from breakbulk cargo in favor of containerized shipments with 85% of total import tonnage now containerized (*Source: U.S. Census Bureau*). Port NOLA has traditionally accounted for roughly 33% of the nation's total imports of natural rubber, virtually all of it breakbulk. The vast majority of imported natural rubber comes from Southeast Asia.

Market forecasts indicate a potential 1 million-ton or greater breakbulk increase by 2030 depending on the global economy and local market access improvements.

Breakbulk Volume Forecasts Through 2030





CRUISE MARKET OUTLOOK

In 1970, 500,000 North Americans embarked on a conventional cruise; by 2010, this had increased to 18.4 million passengers. Once small and localized, the cruise industry has grown into a sophisticated, multi-billion-dollar global enterprise with a wide assortment of products available to vacation consumers. Between 2008 and 2014, cruise travel outpaced general leisure travel in the U.S. by 22%. Increasing contributions are made by European (26%) and Australasian (15%) passengers, growing the global total to its present-day record levels of 23.2 million passengers.

Port NOLA and the region’s economy are poised to benefit from continued growth in the cruise industry, given its homeport advantage for cruises in the four-, five-, and seven-day itineraries. The Port appeals to cruise lines for the large drive-in market with **40 million people within an 8-hour drive of New Orleans**, convenient airport with increasing number of direct flights, Amtrak rail access, and nearby hotels, restaurants, and tourist attractions.

That said, growth in the cruise business only becomes a realistic opportunity if Port NOLA has appropriate facilities available to serve demand. The Julia and Erato Street Terminals currently have capacity to accommodate short-term projected passenger growth, though a threshold of 1.4 million passengers per year will trigger the need for passenger capacity at an additional location.

The Poland Avenue Wharf, which currently handles overflow cargo and cruise port of calls, has long been identified as well-suited for that purpose, given its deep water draft, location downriver of the Crescent City Connection Bridge, and proximity to the French Market area. However, before construction decisions are made, Port NOLA will conduct a robust business assessment of multiple sites, on both sides of the Mississippi River, on and off Port-owned property, and include traffic considerations, infrastructure needs, construction costs, and significant input from our cruise partners.

If the Poland Avenue Wharf remains the preferred site after analysis, all appropriate input from the community will be considered. Though organic passenger growth is likely to trigger the need for an additional cruise terminal between 2021 and 2027, this timeline could be accelerated with the commitment of an additional cruise line or a joint venture opportunity.



Primary Cruise Sectors

- **Eastern Caribbean.** Predominantly South Florida to the Leeward Islands, with longer eastern cruises embarking from San Juan and Barbados to the Windward Islands.
- **Western Caribbean.** South Florida and Gulf Coast to the Yucatan Peninsula, Central America, and Cayman Islands.
- **Southern Caribbean.** Panama, San Juan, and Barbados to Colombia, the Leeward Antilles, and Windward Islands.

Market Research

With positive industry fundamentals in place and nearly \$44.2 billion in new vessel inventory scheduled for delivery over the next five years, the industry is poised for continued expansion. Both the Caribbean region overall and Port NOLA will remain beneficiaries of this positive growth cycle.

For the Caribbean, ship deployment levels are forecasted to expand by 75% for the study review period 2015-2030 with all regions (eastern, western, and southern) expected to see improvement. Proximity to North American consumers, expanding cruise port and destination infrastructure, and other features keep the Caribbean as a front-runner for cruise activity and deployment. The eventual expansion of cruises to Cuba, continued investment by cruise lines in private destinations, and growing numbers of European cruise operators and guests, all add to the region’s positive outlook.

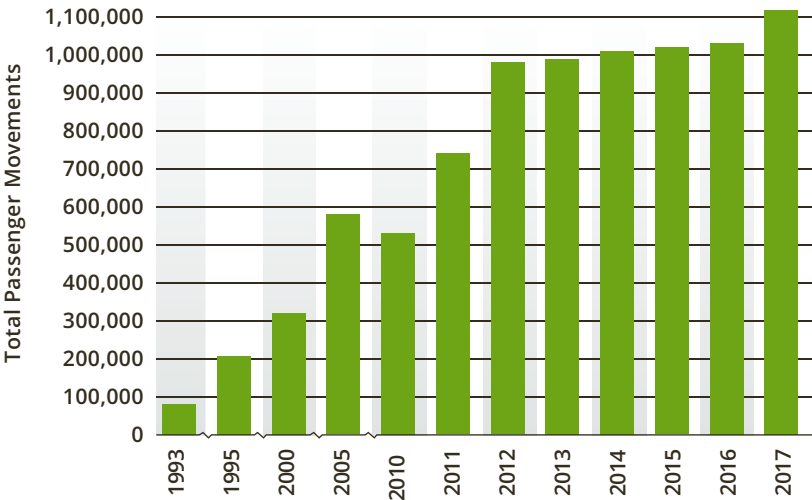
The Eastern Caribbean is the largest overall destination from Port NOLA in terms of total deployment capacities and passenger levels. Three of the top 10 cruise ports in the world—Nassau, St. Thomas, and St. Maarten—are located in this region.

Ocean Cruise Lines

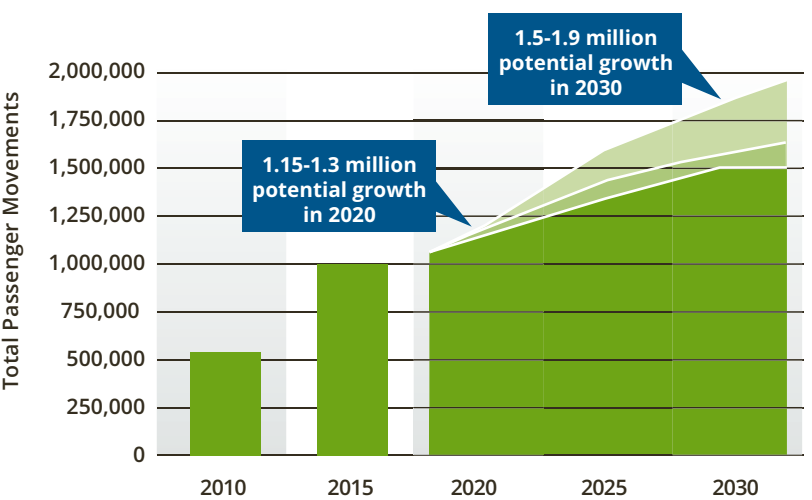
Passenger levels are primarily driven by homeport activities by ocean-going vessels. Port NOLA experienced significant growth in cruise passengers between 1993 and 2017. Average growth in passengers between 2010 and 2017 was 4.9% per annum. Cruise ship calls expanded from 65 calls in 1993 to 229 in 2017. The combined projection for Port NOLA presently anticipates ocean-going cruise passenger growth will expand to between 1.15 and 1.3 million in 2020, and to between 1.5 to 1.9 million by 2030, as shown on these graphs, dependent on alternative scenarios for ship deployment.

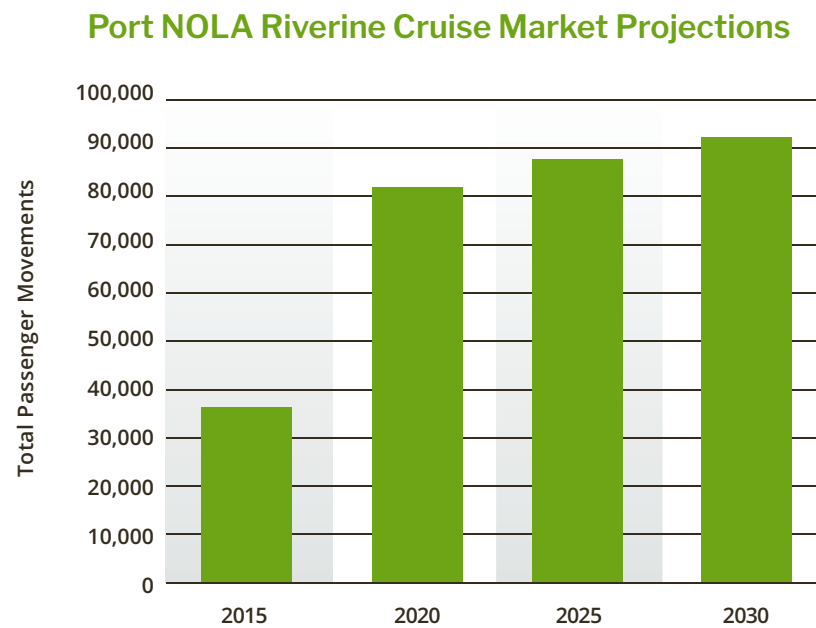
In early 2017, Royal Caribbean International announced its return to New Orleans with a seasonal home-based cruise ship in late 2018. The 915-foot Vision of the Seas (2,514 passengers) will sail seven-night itineraries to culture-rich destinations across the Bahamas and Yucatan Peninsula from Port NOLA’s Julia Street Cruise Terminal. Norwegian Cruise Line announced it will be replacing the Pearl with the larger Breakaway in late 2018. In addition to these homeported ships, the number of ships calling on the Port for single-day or overnight stops on their itineraries is also growing.

Port NOLA Cruise Passenger Growth



Port NOLA Cruise Market Projections





Riverine Cruise Lines

Port NOLA is one of the top riverine cruise ports in the United States. Poydras and Thalia Street Wharves welcome the American Queen Steamboat Co. and American Cruise Lines vessels at their berths. Our five homeported riverine vessels are currently scheduled to turn 91 calls in 2018 and will account for 3% to 5% of the total cruise passengers traveling to and from New Orleans. The projected tripling of riverine cruising is significant for the land use planning of the Port. Additional berthing sites will be required with appropriate utilities and access infrastructure. Potential business costs will need to be balanced by a sustainable business model to support this investment.



In 2016 the U.S. cruise market saw 55,000 riverine passengers. Port NOLA has one third of this market share.

VESSEL OPERATORS 2017-2018 SEASON



Ocean-Going Cruise Lines

Carnival Cruise Line	Dream (50 Homeport) Elation (20 Homeport) Triumph (58 Homeport, 2018)
Norwegian Cruise Line	Pearl (23 Homeport)
Crystal Cruises	Crystal Serenity (2 Homeport)
Azamara Cruises	Quest (1 Port-of-Call)
Aida	Aidavita (1 Port-of-Call)
P&O Cruises	Oriana (1 Port-of-Call) Oceania (1 Port-of-Call)
Hapag Lloyd	Europa (2 Port-of-Call)
Celebrity	Celebrity Equinox (3 Port-of-Call)
Fred Olsen	Balmoral (2 Port-of-Call)



Riverine Cruise Lines

American Queen Steamboat Co.	American Queen (19 Homeport) American Duchess (28 Homeport)
American Cruise Lines	America (19 Homeport) American Song (13 Homeport) Queen of the Mississippi (15 Homeport)



NEW AND IMPROVED OCEAN CRUISE OPERATIONS FOR 2018-2019 SEASON



- Royal Caribbean International introducing the Vision of the Seas with 2,514 passengers making 13 homeport calls
- Norwegian Cruise Line to transition in the Breakaway adding approximately 7% to total throughput capacity
- Crystal Cruises to bring the Symphony for 3 full turns
- P&O Cruises to add Ventura with one Port-of-Call
- Celebrity to bring Summit, Equinox, and Reflection for one Port-of-Call each
- Phoenix to bring the Artania for one Port-of-Call

INDUSTRIAL MARKET TRENDS

Port NOLA's industrial properties on the Inner Harbor and Mississippi River are a vital part of the supply chain for various commodities. These facilities provide services such as storage, cargo re-handling to either rail or truck, bulk transloading, sorting, packaging, and other value-added activities that allow the Port to serve the diverse industries in the region. Value-added services on existing Port NOLA industrial properties could result in increased market competitiveness and cargo volume growth.

There are essentially two industrial real estate markets in metropolitan New Orleans: one servicing more traditional, non-water-dependent industrial users and the other servicing industrial users that are related to cargo handling, processing, maritime, and other water-dependent activities. Port NOLA controls a large portion of the waterfront industrial footprint in the Metropolitan New Orleans area. The regional industrial market remained strong in 2016, with occupancy around 90%. Occupancy within the Port's industrial warehouse market is good, typically averaging over 90%. The market forecast indicates that water- and rail-served properties such as those on the Inner Harbor will continue to be in demand. Back up land at the wharves on the Mississippi River is limited in Orleans Parish, therefore what limited lands are available in Port NOLA's Industrial Properties Portfolio (IPP) in those locations will remain in demand.



Revenues from industrial real estate have doubled in the past decade.

Port NOLA's IPP is made up of more than 1,000 acres. That equates to 70 lease sites and 49 active industrial leases with 33 tenants. The IPP is a substantial real estate portfolio. The IPP has the potential to be a major strategic asset for Port NOLA's future growth and a major competitive advantage. To achieve this Port NOLA will need to define the role of the IPP within its operational and financial goals and objectives and follow through with the strategic plan laid out in the next chapter.

Opportunities for growth exist in St. Bernard and Jefferson Parishes. Jefferson Parish has been actively partnering with Port NOLA to locate facilities there. The Jefferson Parish Task Force, a coalition of maritime and business leaders, was established in 2017 and is working to develop new opportunities for port-related businesses within Jefferson Parish.

Members of the Jefferson Parish Task Force tour Port NOLA with staff (left to right): Jamie Giorgio Palmer, Lee Giorgio, Ronnie Mains, Chris Bonura, Capt. Nick Columbo, Bill Giordano, Natalie Newton, Capt. Jake Stahl, Michael Bardy, Christie Coats, and Jacob Crist.

Rail's Role in Market Capture

As a neutral public carrier, NOPB plays an important role in expediting local and intermediate freight through the strategic New Orleans rail gateway. Yet Port NOLA's current percentage of cargo moved by rail in recent years of up to 10% leaves much room for growth and expansion of rail freight movement.

Port NOLA and NOPB are working through the details of integrating the two public entities and their operations and assets. Port NOLA and NOPB will create a unified capital plan and a business model of five-year projects with cohesive new NOPB operations, capital projects,

and capitalization plans into a detailed, "bottom-up" financial model. The move gives the Port greater competitive advantage in international trade which will be an economic boon for the city.

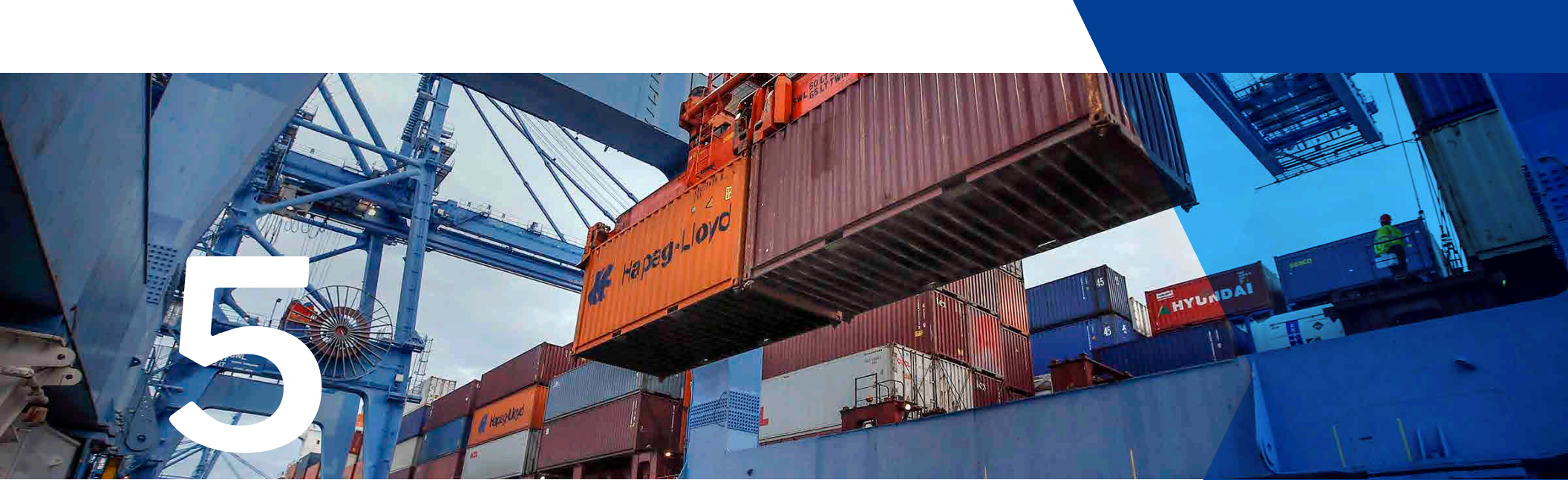
Strategies have been developed to take better advantage of the Port's valuable connections to Class I railroads and all other modes of cargo transportation. The NOPB will continue to effectively serve Port NOLA and can proceed with plans to invest and grow.





LOOKING FORWARD

The demand for cargo facilities, cruise capacity, and efficient infrastructure systems is only projected to grow. To remain competitive in an economy of fewer public resources, Port NOLA needs to strategically plan for this projected growth and leverage stakeholder investment.



ENVISIONING **BOLD GROWTH**

Port NOLA is taking a market-driven approach to meet the evolving needs of the maritime and hospitality industries with a new paradigm of regional freight-based economic development.

This Strategic Master Plan is intended to assure Port NOLA stays ahead of projected growth of existing commodities, cruise trends, and real estate holdings by embracing new opportunities with existing and new partners, fully integrating our diverse lines of business throughout the jurisdiction, and investing strategically in infrastructure.

We are building on our historic founding as an urban port with an urban railroad on the most advantageous trading ground in middle America.



STRATEGIC GOALS AND OBJECTIVES

Port NOLA's goals and objectives are strategic and comprehensive, as well as internally relevant, and externally focused—they will guide our implementation of the Strategic Master Plan in the near and long-term. These goals and objectives were informed and enriched by port workers, industry, tenants, government agencies, and community organizations. They demonstrate the power of collaboration and shared aspirations for the future.



Operate Efficiently

- Focus on our diverse customer base with services and infrastructure that exceed needs and expectations.
- Develop a long-term systematic infrastructure management program.
- Build a geographic information system to manage operational and locational data Port-wide.
- Create a Board leasing policy that encourages maintenance and investment, and standardizes permitting and reporting.



Capitalize on Gateway Position

- Partner with LED, GNO, Inc., and local governments to attract and expand freight-based businesses.
- Increase intermodal solutions.
- Advocate for coordinated dredging and infrastructure build-out in and along the Lower Mississippi River.
- Actively explore non-traditional Port revenue opportunities to increase profitability.



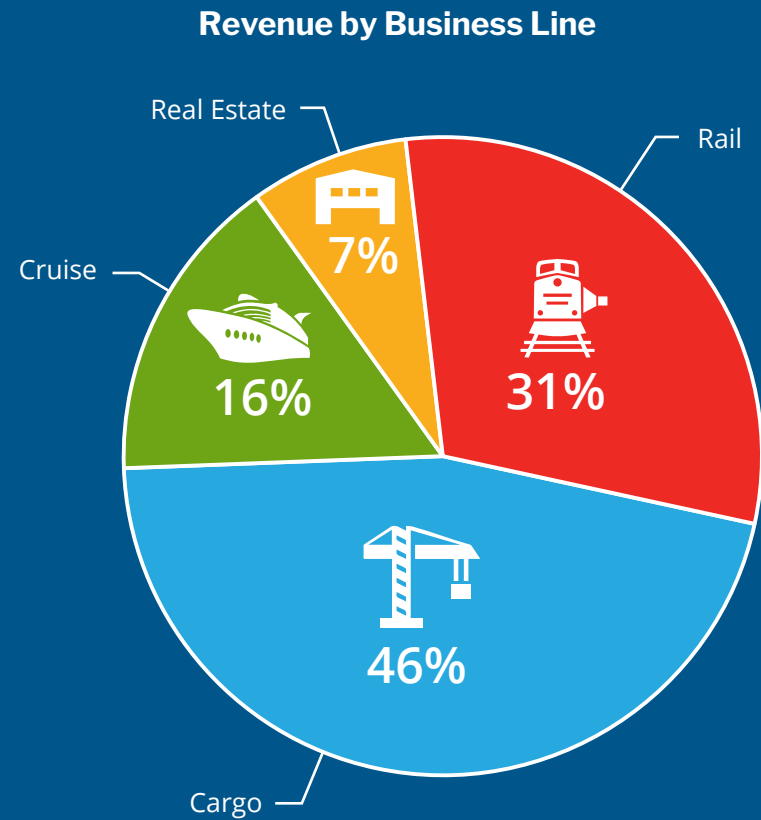
Connect and Strengthen Stakeholders

- Attract and invest in a high-performing, diverse workforce and promote the hiring of local employees.
- Create and sustain a Maritime Workforce Development Program with local industry and education partners.
- Develop a Good Neighbor Program in accordance with Green Marine certification standards and local best practices.
- Upgrade wayfinding and educational signage throughout Port and public access areas.



Develop Sustainably

- Work with logistics industry partners to build a safe, secure, efficient, and sustainable supply chain.
- Implement design and construction practices for a modern gateway: embrace emerging technologies that promote efficiency, resiliency, and adaptability.
- Continue to improve collective environmental performance of Port operators through the Green Marine certification framework.
- Support expanded local transportation options through public transit on water, roads, and rail.
- Regularly review and update the Port NOLA Strategic Master Plan with all partners to empower collaborative implementation of transportation and logistics solutions.



With the addition of the New Orleans Public Belt Railroad Corporation, we have enhanced our diversity and grown the entire revenue pie.

OUR DIVERSE BUSINESS MIX

Port NOLA's diverse business lines contribute to two key industries in the State:

Maritime Industry

The addition of rail to Port NOLA's lines of business increases our diversity and solidifies our competitive advantage with greater control of the logistics chain. Harnessing industrial real estate assets to support maritime related, value-added activity further drives economic impact.

Hospitality Industry

Port NOLA's appeal as a homeport for both ocean-going and riverine cruises continues to grow. Passenger activity before and after cruises has a positive impact on air and rail travel, hotels, restaurants, and area attractions.

THE FRAMEWORK FOR GROWTH

Port NOLA's vision for **regional freight-based economic development** encompasses the supply chain as a whole and relies on all sectors to drive freight-based business expansion to fuel the regional economy. In recognizing the need for efficient infrastructure, a supply chain-ready workforce, and capital investment from all sectors, Port NOLA and a broad range of stakeholders can collaborate to collectively drive the region's economic growth.

Responsive and seamless supply chain solutions that incorporate ocean, rail, barge, truck, transloading, and more, require an iterative cycle of regional growth and development both on and off Port property.

Port NOLA's **regional freight-based economic development** framework relies on five key ingredients to drive economic growth and prosperity.





LOGISTICS CLUSTER CONCEPT

As the most intermodal port in the U.S., Port NOLA has the opportunity to capitalize on the synergy created by multiple modes of transportation collocated with industry and logistics hubs, or clusters. Driving the development of logistics clusters that include value-added services such as advanced manufacturing, assembly, processing, logistics, and other freight-based services will grow the regional freight-based economy. These logistics clusters can share expertise and know-how, expand maritime-related activity, and drive local job growth. Given market trends with carrier consolidation, bigger ships, and demands for just-in-time shipping, the need for more decentralized distribution and fulfillment centers is expected to grow, especially within the Gulf states.

Logistics clusters are a prime opportunity for the region, and part of the Port’s action plan.



PORT NOLA'S ROLE

Port NOLA's direct role in a regional freight-based economy is to build and maintain the efficient and sustainable infrastructure needed to compete globally, and to support the local freight systems. To do this, we must:

- Strengthen the intermodal gateway;
- Optimize our existing assets; and
- Extend our reach across all business lines.

STRENGTHEN THE INTERMODAL GATEWAY

Performing as an intermodal gateway distinguishes Port NOLA and enables seamless freight movement. Together, NOPB and Port NOLA, one of only three deepwater ports that operates a short line railroad, are well-positioned to establish and grow the intermodal gateway with six Class I railroad connections and new "manifest intermodal" services.

Logistics clusters support intermodal and intermodal supports logistics clusters. Increasing container-on-barge services and utilizing inland port and other "remote yard" opportunities such as intermodal container transfer facilities (ICTF) both enhances our flexibility to meet shipping demand and reduces our community impacts and congestion.

By building up the Port and the Railroad together with regional and local freight, the region becomes more than a pass-through or local freight depot and lives up to its historic founding as an urban port with an urban railroad on the most advantageous trading ground in middle America.



**OPTIMIZE OUR
EXISTING ASSETS**

Integrating Port NOLA's diverse business lines maximizes synergies, delivers sustainable growth opportunities, and optimizes the use of limited and precious resources. Harnessing cargo, rail, and real estate assets where synergies exist, and further connecting cruise with hospitality assets contributes to the region's economic stability.

**CONTAINER CARGO GROWTH
AT NAPOLEON AVENUE**
*Proposed buildout for larger
vessel capabilities at Napoleon
Avenue Container Terminal.*



OPTIMIZE OUR EXISTING ASSETS

Containerized Cargo

Short-term strategies are already underway to accommodate containerized cargo growth by optimizing the Napoleon Avenue Container Terminal. The proposed upgrade of deep-draft container berths requires extended crane rail and additional 100-foot gauge container cranes. Other container terminal improvements include gate enhancements and marshalling yard rehabilitation to improve load capacity. Port NOLA is also exploring the use of existing off-terminal real estate throughout its jurisdiction for intermodal container transfer facilities, as well as increasing container-on-barge services to meet growing demand and prevent congestion as volume grows.

Breakbulk Cargo

Port NOLA is a natural port for breakbulk cargo shipping, and we are already investing in the maintenance and load-bearing capacity of our historic wharves. Breakbulk cargo will continue to be a vital component of the region's economy, mandating that the Port retain use of various wharves for overflow cargo during times of high demand. While the Port's cumulative space to handle this type of cargo is sufficient, enhancements for many of the existing breakbulk terminals are timely and would be made

possible with the investment of partners and Port tenants. Port NOLA will be modernizing leasing policies to incentivize capital investment and to be competitive in the Gulf market.

Cruise and Tourism

With passenger movements surpassing the 1.15 million mark in 2017, cruise ship passengers are a significant driver for the state and regional economy. Market pressure to move more passengers more efficiently calls for optimization of passenger and parking flow at the Port's existing cruise ship terminals to increase fluidity and minimize congestion in high-traffic tourism areas. In addition to optimizing the existing terminal operations, the Port will continue to work with economic development partners and the hospitality industry to increase local spending by cruise passengers and diversify our cruise line offerings.

Industrial Real Estate

The Port's unique assets of abundant shallow-draft marine and rail accessible industrial real estate provide an opportunity to target new freight-based businesses. Port NOLA must build and maintain the infrastructure to attract market rate tenants that provide value-added services to increase cargo throughput. This includes standardizing utilities, roadway improvements, rebranding as an industrial park, and developing a systematic approach to real estate marketing. Prioritizing opportunities for underutilized and vacant properties and removing development barriers through stakeholder engagement for economic revitalization of the Inner Harbor is underway and will support the optimization of these assets and further local job creation.

Rail

Immediate opportunities exist to improve efficiency across every part of the NOPB operation and administration through several projects, such as: fully automating mainline and yard switches, removing constraints at the Almonaster Bridge, optimizing the locomotive fleet, establishing optimal operational standards on overhead traffic volume and train length, reforming procurement, improving cost accounting, and more.

Corporate Strategies

Port NOLA and NOPB are collaborating on corporate strategies to enhance organizational efficacy such as: prioritizing worker safety and security, modernizing asset management systems, standardizing leasing and permitting policies, and fully developing a geographic information system (GIS). These short-term strategies are further supported by the exploration of sustainable, non-traditional revenue opportunities to fund critical infrastructure projects.



**EXTEND OUR REACH ACROSS
ALL BUSINESS LINES**

Planning ahead for the long-term future of Port NOLA includes seeking new market opportunities, acquiring property where necessary to remain competitive, and partnering with other agencies and businesses to help grow the region’s freight-based economy throughout the Port’s tri-parish jurisdiction.

**RIVERINE CRUISES AT
ROBIN STREET WHARF**
*Concept for partnering with
property owners and surrounding
interests to collaboratively plan
for riverine cruising and other
waterfront redevelopment.*





EXTEND OUR REACH ACROSS ALL BUSINESS LINES

Containerized Cargo

In addition to the optimization of existing facilities, there is a clear market-based need for additional container terminal development to accommodate the projected cargo demand and ship sizes. Port NOLA must look beyond its current footprint to meet these future needs in order to remain globally competitive and retain jobs and supply chain-dependent businesses.

Breakbulk Cargo

Collaborate with parish partners on strategic opportunities for growing breakbulk and other non-containerized cargo such as roll-on, roll-off cargo, heavy lift or project cargo, and automobile-related business. This growth could be Port-supported within Jefferson, Orleans, and St. Bernard Parishes.

Cruise and Tourism

Port NOLA is on course to outgrow its existing cruise ship terminals and will ultimately need to develop a third cruise terminal to accommodate the projected growth. The projection for Port NOLA ocean cruising anticipates cruise passenger growth will expand to 1.5 to 1.9 million

by 2030. A number of potential sites for this development are being evaluated both on existing Port property and off, where feasible.

Riverine cruising is also expected to grow exponentially and will necessitate additional berthing space in close proximity to walkable tourism areas. Potential sites including the Robin and Orange Street Wharves as well as sites throughout Jefferson, St. Bernard, and Orleans Parishes are being explored for future river cruise uses.

Industrial Real Estate

Partner with economic development entities to develop an inventory of available property throughout the region for value-added industries (manufacturing, fabrication, distribution, etc.) and logistics cluster development.

Rail

Many opportunities exist to extend local NOPB service through partnership with the Class I local rail operations and with new construction (to Avondale and along Almonaster Road). Port NOLA and NOPB will also jointly work to grow local business and implement a storage strategy, seeking opportunities to minimize blockages and at-grade crossings using decentralized locations and technology.

Corporate Strategies

Extending our reach as an agency comprises of taking a proactive role with governmental, community, and industrial partners. This includes advocating for

coordinated dredging and infrastructure. It also includes working with our partners to establish maritime workforce development programs to directly benefit the region.

Port NOLA and NOPB are working collaboratively to reset relations with key partners and our neighboring communities. As part of our Green Marine certification process, Port NOLA is committed to developing a Good Neighbor Program to engage surrounding communities and minimize community impacts. We are also committed to facilitating environmental improvements through the Green Marine framework.



Port NOLA is Green Marine Certified. This program is third-party audited and encourages continuous improvement in environmental and community impact management.



GATEWAY ACTION PLAN

The Port NOLA Gateway Action Plan is more than a list of projects—it lays out a vision for collaboration, beyond the Port and Rail. Our action plan, though organized by business line, is synergistic and draws on the combined effort and resources of Port NOLA, regional, state, and federal partners, and private sector investors. With a cohesive, united effort, this plan drives a regional freight-based economy.

Containerized Cargo

- Increase Napoleon Avenue Container Terminal Complex capacity to 1.5 million TEUs by upgrading to larger cranes and maximizing space in the existing yards.
- Partner with terminal operators to increase efficiency of terminal support services, such as maintenance and repair operations, chassis pools, and reefer plug utilization.
- Continue investments in improved gate efficiency and multimodal connections, and promote cooperation among all parties that move containerized goods through terminals at the Port.
- Partner with state and regional entities to enhance “last mile” truck access along the Tchoupitoulas Corridor to Felicity Street Access Gate.

Breakbulk Cargo

- Adopt leasing best practices to increase terminal operators’ competitiveness in the marketplace.
- Increase breakbulk capacity by improving load limits at currently leased facilities and adding overflow facilities to accommodate cargo surges.
- Coordinate with partners to plan for capacity enhancements at First Street Terminal, Alabo Street Terminal, and the Louisiana Avenue Terminal Complex.

Industrial Real Estate

- Use existing Inner Harbor real estate to expand service as a rail and barge logistics hub.
- Invest in Inner Harbor infrastructure, roadways, utilities, and landscape enhancements to create an Industrial Park that attracts market-rate tenants who provide value-added services.
- Revitalize and redevelop underutilized Inner Harbor properties with assistance from federal, state, and regional partners (PIER Plan).

Rail

- Leverage New Orleans Public Belt Railroad to improve reach to inland freight-based industries.
- Partner with Class I railroads to improve Gateway automation, fluidity, and services.
- Invest in efficiency and environmental improvements, including upgrading the locomotive fleet to reduce emissions.
- Optimize Cotton Warehouse Yard for intermodal and rail shuttle services for national freight.

Cruise and Tourism

- Increase terminal capacities to accommodate larger ships, and maximize passenger and parking capacity.
- Expand economic development partnerships to continue integration of cruise and tourism business along the waterfront and boost local spending by cruise passengers.





INTEGRATE AND REINFORCE ACROSS ALL SECTORS

While presented by business line for planning purposes, the strategies and actions needed to achieve the Port’s bold vision require integration—both internally across business lines and externally with our many diverse partners in industry, government, and the community. Now, more than ever, our core businesses can reinforce and be reinforced by each other and through integration with the community.

In addition to the Port’s direct role in building and maintaining vital freight infrastructure, we also play a critical role as a catalyst for integrated economic and workforce development across the three parishes and the region. Port NOLA has always been an economic engine—our vision for the future is to connect that engine to entities in all sectors of the region and strengthen the overall economy through this integration.

STAYING AGILE IN A DYNAMIC INDUSTRY

This vision presents a new, holistic focus for the region aimed at seamlessly integrated logistics solutions. It is intended to serve as a framework for future decision making, collaboration, community engagement, and focused advocacy.

Not every item presented here will be built or acted upon—future actions will depend on market demand and resources. And yet, in whatever we plan and build—whether infrastructure, financial structures, or new partnerships and organizations—we must maintain flexibility, mandate efficiency, and design for resiliency. Port NOLA’s commitment to sustainable development and being a good neighbor will continue to guide the future path, balancing economic and efficiency needs.



LEVERAGING RESOURCES FOR IMPLEMENTATION

Many recent successful projects such as the Mississippi River Intermodal Terminal and Clarence Henry Truckway improvements have helped grow cargo and cruise capacity to meet market demand. In the last five years, Port NOLA has invested over \$141 million in facilities and infrastructure—a significant investment compared with years before.

Innovative Financing

Port NOLA will continue to seek grant funds and private sector investments to purchase cranes, build wharves, develop cruise terminals, and address other critical infrastructure needs. These projects may take the shape of public-private partnerships, utilize alternative financing models, and leverage unique real estate assets to achieve the potential growth forecasted in the market.

Addressing Near-Term Capital Needs

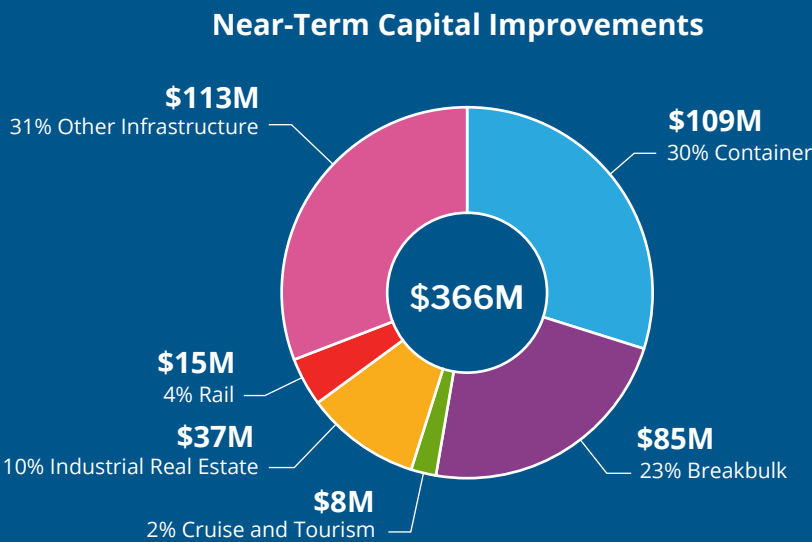
Looking ahead, near-term capital investment needs within the next four to five years total approximately \$366 million. Near-term investments in cargo, cruise, and industrial property projects will enhance efficiency, expand port capacity, and address maintenance needs of existing Port facilities, wharves, and bridges. Achieving this scale of capital investment must include aggressive pursuit of external funding through state and federal grants, public-private partnerships, and joint ventures.

Taking a Long View of Growth

Long-term capital improvement projects considered for the next 10 to 20 years will require an even greater degree of agility and flexibility—our markets are dynamic and our responsiveness must be equally adaptive. Some projects, such as infrastructure improvements and bridge replacements, are essential for Port operations, partner obligations, and public safety. While other expansion projects will need to be driven by market demands and public and private financial support, such as the development of logistics clusters, additional container and cruise terminal developments, and inland port or ICTF infrastructure.

NEAR-TERM CAPITAL PROJECT HIGHLIGHTS

Many of the anticipated near-term projects highlighted below are project-ready and supported by customers and the community, though implementation will require investment by governmental and industry partners.



Other Infrastructure

- Almonaster Bridge replacement
- Poland Avenue Wharf substructure repair
- Other bridge and wharf repairs
- Utility upgrades and repairs



Breakbulk

- First Street Terminal enhancements
- Harmony and Seventh Street Terminal enhancements
- Jourdan Road Wharf substructure repair



Industrial Real Estate

- Inner Harbor security and signage improvements
- France, Jourdan, and Terminal Roads improvements/rebuilding
- Underutilized property improvements



Container

- Extend 100 ft. gauge crane rail
- New 100 ft. gauge container cranes
- Marshalling yard paving
- Downriver Terminal site selection and planning



Cruise and Tourism

- Erato and Julia Terminal and parking improvements
- New ocean cruise terminal site selection and planning
- New riverine cruise facility and access planning



Rail

- Switch automation
- Yard improvements
- Locomotive upgrades and emission improvements
- ICTF site selection and planning



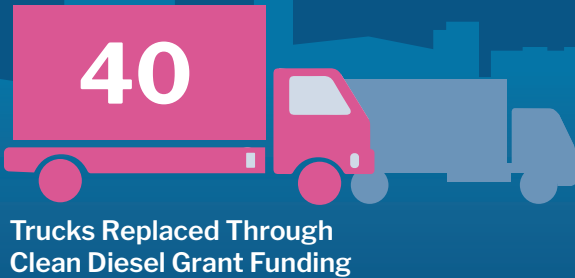
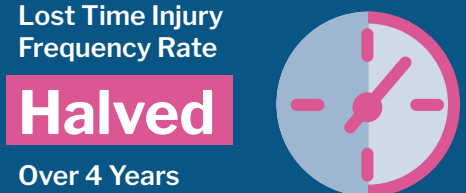
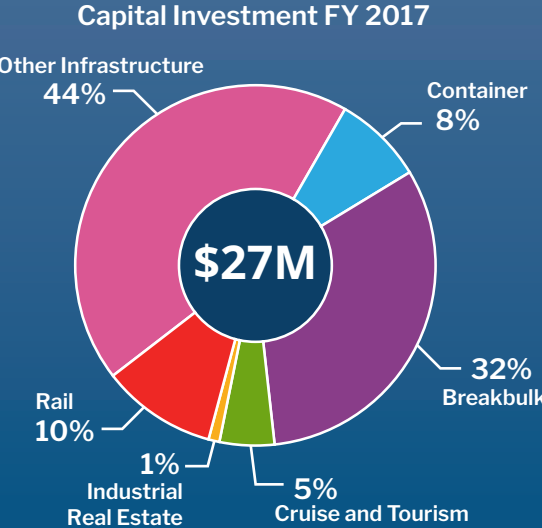
MEASURING PROGRESS AND ADAPTING THE ROADMAP

The maritime industry is dynamic and demands a vigorous and adaptive plan. Port NOLA will review this Strategic Master Plan annually for progress, measuring against quantifiable and relevant metrics and updating the plan as needed. Stakeholder engagement will remain a priority.

Port NOLA will publish an annual report card, beginning with the Fiscal Year 2017 Port NOLA Forward Scorecard, to highlight trends and significant developments along our shared path toward the future.

PORT NOLA *FORWARD* 2017 SCORECARD

CORPORATE STRATEGY



BREAKBULK

2,961,026

Breakbulk Tons

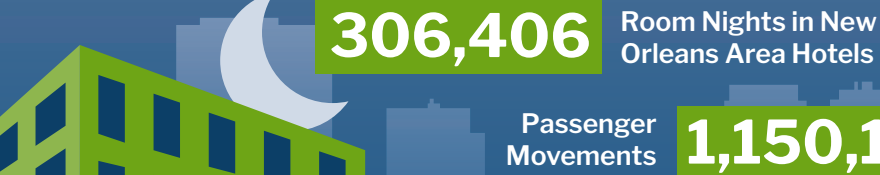
CONTAINER

526,703

TEUs

Ship Calls **926**

CRUISE AND TOURISM

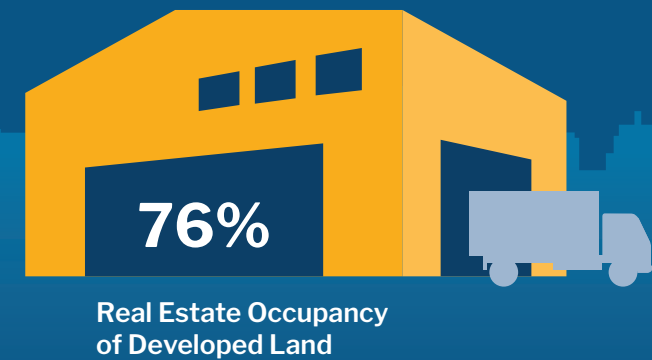


Passenger Movements **1,150,172**

\$54.5M

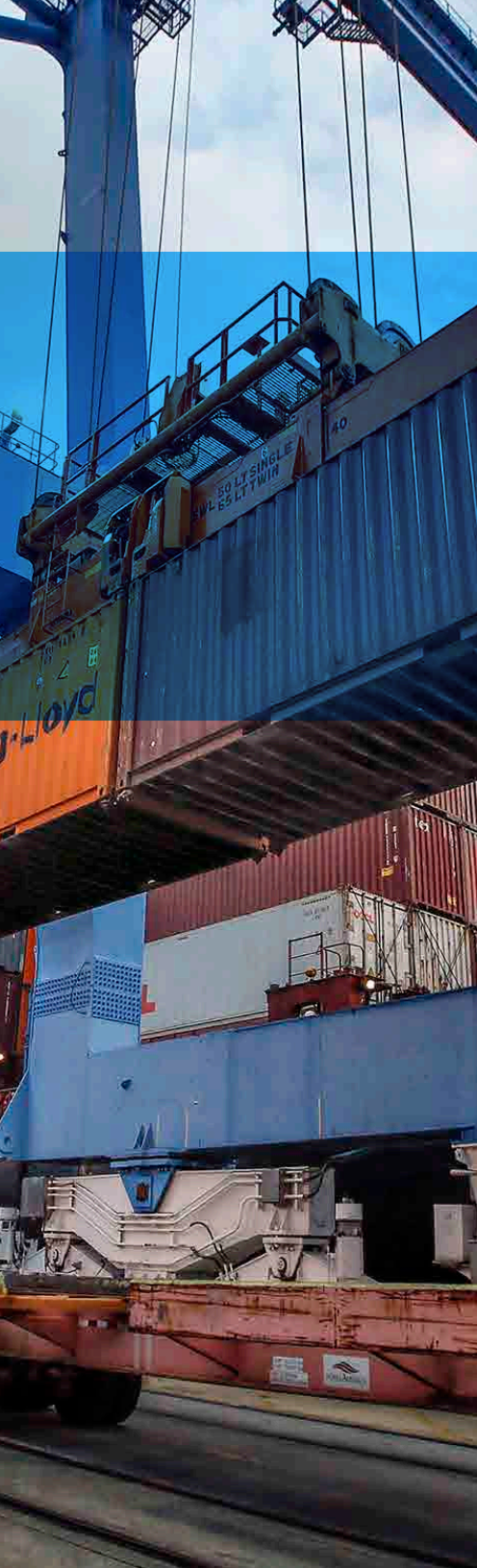
Room Night Expenditures

INDUSTRIAL REAL ESTATE



RAIL





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