

PORT AUTHORITY ADVISORY COMMITTEE



# TEXAS PORT MISSION PLAN: INVESTMENT STRATEGY

86<sup>TH</sup> LEGISLATIVE SESSION



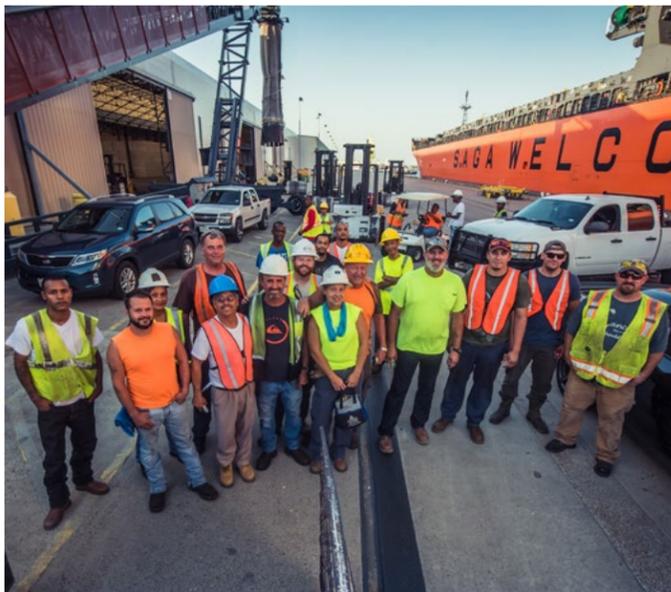
Project cargo at the Calhoun Port Authority.



Barge moving cargo near the Port of Harlingen.



Container terminal at Port Houston.



Workers from the International Longshoremen's Association at the Port of Port Arthur. Photo credit: David Block.

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## LETTER FROM THE CHAIRWOMAN

As chair of the Port Authority Advisory Committee (PAAC), I am pleased to present the 2020-2021 Texas Port Mission Plan: Investment Strategy. Texas is a port-driven state and relies on a strong port system to maintain its leading position as the nation's top exporter and importer by tonnage. In 2017, Texas ports moved nearly 525 million tons of cargo and nearly 1.9 million cruise passengers. According to the Texas Ports Association, in 2015 Texas ports provided more than \$368 billion in economic value to the state. The state's maritime system continues to be a critical gateway to international trade, which is vital to the Texas economy.

Our ports have seen some of the highest export revenue growth in the nation due to the increasing export of commodities like oil, gas, liquefied natural gas (LNG), and plastics. Four Texas ports were cited among the top ten fastest growing U.S. ports in terms of export revenue this past year. Export revenue should continue to grow as oil and gas production in Texas is forecasted to nearly triple by 2025. The growth in the energy sector combined with growing consumer demand worldwide indicates a strong upward trend in cargo to be handled at Texas ports for the foreseeable future. Keeping up with such growth is challenging when there is limited funding for modernizing our port system. These funding challenges can be seen at the local, state, and federal level. Five Texas ports have authorized federal channel improvement projects that are receiving insufficient federal funding, causing delays at a time when they should be a national priority.

Texas ports have invested heavily in upgrading their facilities. In the last five years, our ports have invested over \$1.3 billion into port facilities and have leveraged \$67.4 billion of private investments during this same timeframe. We have also seen great support for ports from their surrounding communities, with two separate voter-approved bond packages that will help repair failing port facilities and fund the local cost-share to deepen one of our ship channels.

All Texas ports, large and small, stand to benefit from investments in the Texas port system. This plan identifies over \$7.7 billion of planned projects in the port system. Ports themselves will invest over \$2.5 billion into their port facilities alone and over \$830 million to cover their local share of ship channel deepening and widening projects. We anticipate that this will leverage over \$63.3 billion of additional private investment in the next five years alone.

Presented in this Port Mission Plan: Investment Strategy, are high-value projects that will enhance port efficiency, improve the movement of freight through intermodal systems, create new jobs, and attract private investment. The PAAC approved this document and its state funding request of \$575 million, which is only a fraction of the \$7.7 billion of needed improvements in the port system. State funding for these strategic capital investments will help accelerate the implementation of these projects needed to support the growing Texas economy, currently the 10th largest economy in the world, for decades ahead.

We ask for your support for our ports, because investing in ports is investing in Texas.



**Phyllis Saathoff**  
Chairwoman  
Port Freeport  
Upper Coast Representative

## THE PORT AUTHORITY ADVISORY COMMITTEE (PAAC)

The Port Authority Advisory Committee (PAAC) develops the biennial Texas Port Mission Plan and Port Capital Program. These reports highlight the funding needs of the Texas port system. The PAAC is comprised of nine members. Under Chapter 55 of the Transportation Code, the Texas Transportation Commission appoints the seven members of the PAAC to represent the upper coast, lower coast, and Port Houston. The Lieutenant Governor and the Speaker of the House of Representatives each appoint an additional PAAC member.

### Mission

"Elevate port issues as a vital component of the Texas transportation system and advise the Texas Transportation Commission and Department on matters relating to maritime transportation."

### PORT AUTHORITY ADVISORY COMMITTEE MEMBERS



**Phyllis Saathoff**  
Chairwoman  
Port Freeport  
Upper Coast Representative



**Michael Plank**  
Lieutenant Governor  
Appointee



**Allan Ritter**  
Speaker of the House  
Appointee



**Roger Guenther**  
Port Houston  
Permanent Member



**Chris Fisher**  
Port of Beaumont  
Upper Coast Representative



**Larry Kelley**  
Port of Port Arthur  
Upper Coast Representative



**Eduardo A. Campirano**  
Port of Brownsville  
Lower Coast Representative



**John LaRue**  
Port of Corpus Christi  
Lower Coast Representative



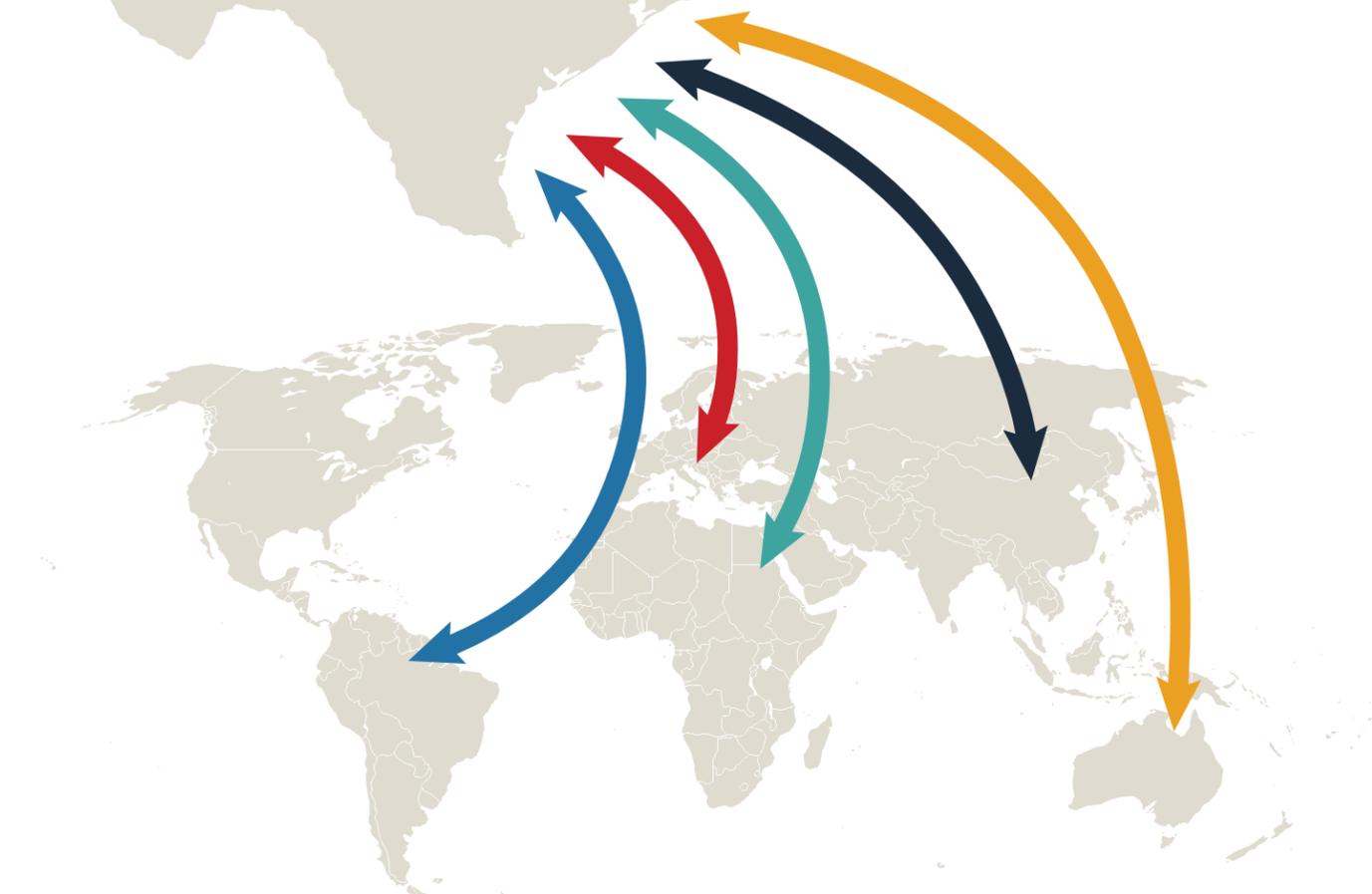
**Jennifer Stastny**  
Port of Victoria  
Lower Coast Representative

### Goals

- Identify high-priority and strategic port projects and make recommendations to the department for investment
- Incorporate maritime interests in TxDOT planning activities and documents
- Promote Texas ports for economic development opportunities
- Identify federal, state, or other funding opportunities for maritime investment

# TEXAS PORTS:

Globally Engaging Our Economy

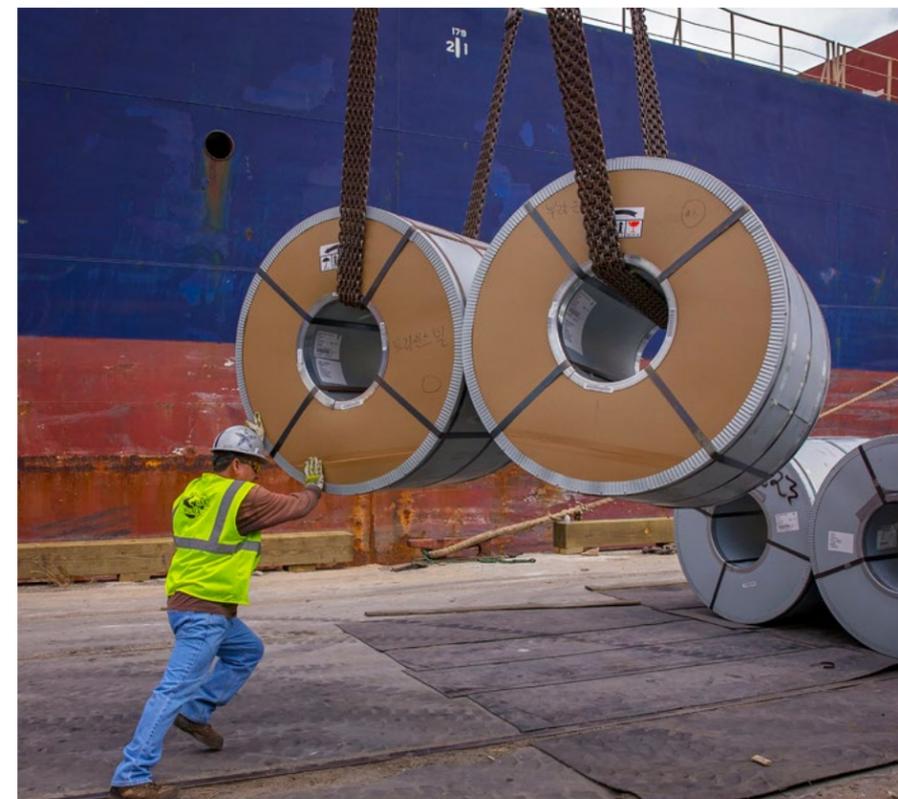


## Annual Trade by Region<sup>1</sup>:

<p>South &amp; Central America</p> <p><b>\$60.2 B</b></p> <p>Exports: \$37.6 B Imports: \$22.6 B</p>	<p>Europe</p> <p><b>\$46.5 B</b></p> <p>Exports: \$22.1 B Imports: \$24.4 B</p>	<p>Africa</p> <p><b>\$9.6 B</b></p> <p>Exports: \$6.1 B Imports: \$3.5 B</p>	<p>Asia</p> <p><b>\$94.4 B</b></p> <p>Exports: \$33.4 B Imports: \$61.0 B</p>	<p>Australia &amp; Oceania</p> <p><b>\$1.7 B</b></p> <p>Exports: \$1.3 B Imports: \$0.4 B</p>
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**\$247.6 billion in trade value overall annually\***  
 \$120.7 billion in exports and \$126.9 billion in imports

\*Values in dollars for annual combined waterborne import and export trade value for Texas averaged from 2013 to 2017.



Worker handling cargo at the Port of Brownsville.

“As the nation’s top exporting state, Texas plays a key role in ensuring American products reach markets across the globe, and international trade and the movement of goods are crucial to the Texas economy. Texas’ seaports play a critical role in maintaining our state’s economic strength, and keeping those ports competitive will be an important part of Texas’ growth in the coming decades.”

Glenn Hegar  
 Texas Comptroller of Public Accounts

## PURPOSE

Texas ports are critical to the economic growth of Texas. In 2017, Texas ranked second nationwide for total waterborne tonnage handled and first nationwide for total foreign waterborne tonnage of imports and exports.<sup>2</sup> Ten of the state’s ports rank among the top 100 U.S. ports in total tonnage<sup>2</sup> and four Texas ports were among the top ten fastest growing U.S. ports in terms of export revenue.<sup>3</sup> Trade through the State of Texas is a significant contributor in making Texas the world’s 10th largest economy when comparing Texas GDP to national GDPs.<sup>4,5</sup> Whether urban or rural, coastal or inland, all Texans benefit from the port system.

Despite the strong position of the maritime industry in Texas, the single greatest challenge common to all Texas ports is the need for additional funding for capital improvements. Each Texas port is unique and has its own infrastructure challenges and funding needs. The Port Authority Advisory Committee (PAAC) puts forward the 2020-2021 Texas Port Mission Plan (PMP) as the maritime mission plan required in Chapter 55 of the Texas Transportation Code. The PMP includes four reports:

- Texas Port Mission Plan: Investment Strategy
- Port Capital Program (PCP)
- Ship Channel Improvement Report
- Port Connectivity Report

Collectively, the PMP highlights the importance of investing in the port system in order to benefit the state and meet the growth potential of global trade opportunities.

## STATEWIDE IMPACT

### Texas Ports in 2017:

- Moved nearly 525 million tons of cargo, including nearly 368 million tons of international cargo, and nearly 157 million tons of domestic cargo<sup>2</sup>
- Handled over 2.1 million containers<sup>6</sup>
- Served nearly 1.9 million cruise passengers<sup>7</sup>

### Texas Ports in 2015:

- Generated over \$6.9 billion of state and local tax revenues<sup>8</sup>
- Supported 1.6 million jobs in the state including 116,175 direct jobs from port activity<sup>8</sup>



The Port of Port Isabel services the offshore oil and gas industry.

## PORT INVESTMENT IS A STATEWIDE GROWTH STRATEGY

In order to maintain Texas' position as a maritime trade leader and remain competitive in the future, the focus must be on critical capital investments that enhance and expand the Texas port system such as improved ship channels, multimodal connections, and replacement of outdated and failing port facilities. This will require support from all levels of government including the State of Texas.

### Capital Investment

The Texas port system relies on partnerships and funding from the ports, private partners, and all levels of government. Ports are typically responsible for funding facility improvements and partner with the federal government to fund ship channel projects. Even as a maritime leader, the Texas port system still faces funding shortfalls. For example, the congressional authorization and appropriation process for ship channel improvement projects can take decades, which has contributed to the nearly \$96 billion backlog of federal water resource projects nationwide.<sup>9</sup> In the midst of such funding challenges, ports and their partners increasingly have to look for alternative means of funding projects such as public-private partnerships.

**The congressional authorization and appropriation process for ship channel improvement projects can take decades, which has contributed to the nearly \$96 billion backlog of federal water resource projects nationwide.<sup>9</sup>**

Capital investments in and around Texas ports have recently included:

- Public ports estimated that they invested over \$1.3 billion between 2013 and 2017 and anticipate another \$2.5 billion of planned facility investments. These estimates do not include the local share of ship channel projects.
- Roughly \$67.4 billion in investments between 2013 and 2017 made by private industry with an anticipated \$63.3 billion of planned investments between 2018 and 2022.
- \$60 million in legislative appropriations for port access projects in the last two biennium.

### Resiliency

Resiliency of the Texas maritime system is often overlooked until emergencies and disasters occur. Natural disasters can cause ports and waterways to shut down for days or even weeks. Shut-downs not only disrupt the flow of materials into and out of Texas and the country, but also cost billions of dollars to the ports and related industries. Investing in port infrastructure, multimodal connections, and ship channels can improve the ability for the port system to both withstand and recover from a disaster.

Hurricane Harvey affected nearly every major port in Texas. It is estimated that Harvey<sup>10</sup>:

- Caused an estimated \$17.4 billion in economic impacts due to port closures and associated industry impacts.
- Caused nearly \$250 million in infrastructure impacts through damage to port facilities and channel shoaling.
- Cost \$1 to \$2 million per rerouted vessel.



Events like Hurricane Harvey further weakened aging port infrastructure such as these grain docks at the Port of Beaumont.

## DID YOU KNOW?

4 Texas ports were among the top 10 fastest growing U.S. ports in terms of export revenue in 2017.<sup>3</sup>

### #1. Port Houston (\$6.16 billion in growth)

- Gasoline grew 27.05%
- Liquefied Natural Gas (LNG), etc. grew 47.73%
- Plastics grew 2.68%

### #2. Port of Corpus Christi (\$4.69 billion in growth)

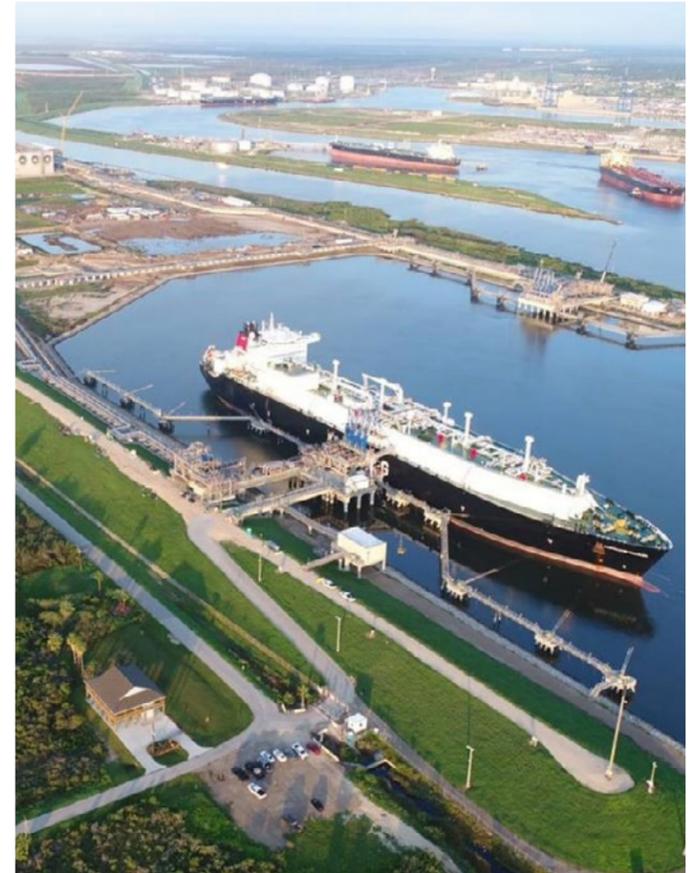
- Gasoline grew 9.05%
- Oil grew 355.48%
- Halogenated derivatives of hydrocarbons grew 24.35%

### #3. Port of Beaumont (\$3.16 billion in growth)

- Oil grew 309.61%
- Gasoline grew 21.58%

### #10. Port Freeport (\$1.48 billion in growth)

- LNG, etc. totaled \$1.21 billion
- Oil grew 285.15%
- Sodium/potassium hydroxide/peroxide grew 49.15%



Freeport LNG has invested approximately \$14 billion to develop LNG facilities at Port Freeport which will produce approximately 2.2 billion cubic feet of gas per day.



The Orange County Terminal is a public-private partnership between the Port of Beaumont and Jefferson Energy Companies. At full build-out, the capital investment of Jefferson Energy Companies will be approximately \$1 billion.



Ro/Ro operations at the Port of Galveston.

## TYPES OF PORT FACILITIES

Ports vary greatly from one to the next, in large part based on their types of commercial activity. Each port has specific equipment and infrastructure needs in order to operate effectively. The following eight port typologies have been adapted from the U.S. Maritime Administration's port typology framework and are presented to summarize these ranging services provided by ports along the Texas coast.

**Break bulk** ports require large cranes or other equipment to move products like steel, lumber, wind turbines, and over-sized project equipment and materials. In addition to having port equipment for moving cargo, they frequently require large areas for laydown yards or warehousing. Port Houston is the national leader in handling break bulk cargo.

**Bulk ports** are those which use equipment such as cranes or elevators to handle loose commodities such as aggregate materials for construction or agricultural products such as grains. The Port of Harlingen exports 100% of the sugar produced in the Rio Grande Valley and imports most of the fertilizer used by South Texas farmers.

**Container ports** typically require specialized large-scale cranes to efficiently move containerized cargo. Similarly, vessels transporting container cargo are among the largest that call on Texas ports, requiring significant channel depths to avoid light loading. Both Port Freeport and Port Houston have Post-Panamax sized container cranes, with Port Houston standing as the sixth largest container port in the U.S. and the largest container port on the U.S. Gulf Coast.<sup>6</sup>

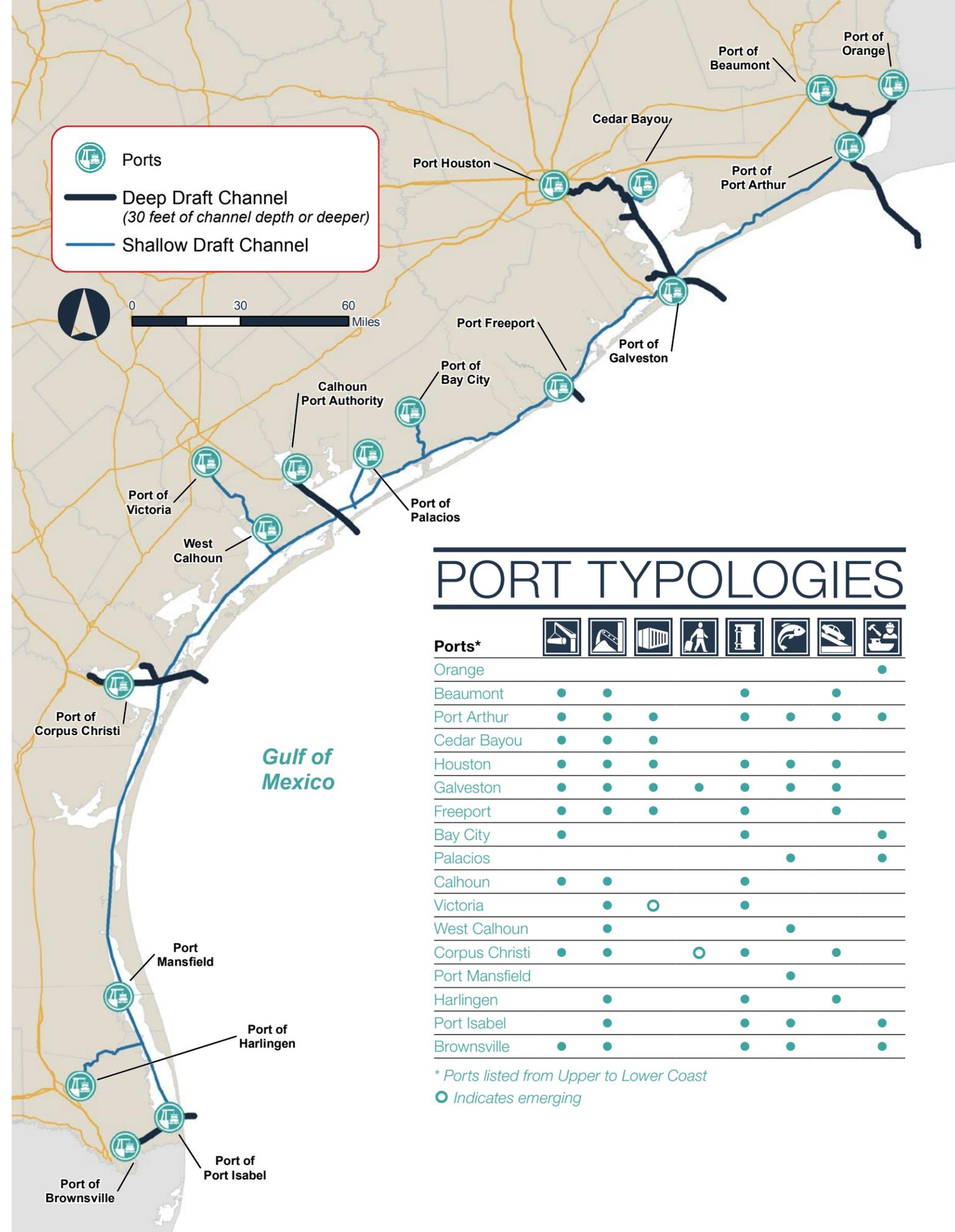
**Cruise terminals** provide for the recreational travel of passengers via ship and require separate access from the other secured port operating facilities. The Port of Galveston is the only cruise port in Texas and is the 4th busiest cruise port in the U.S.,<sup>11</sup> providing access for vacationing to the Gulf Coast of Mexico and the Caribbean.

**Energy ports** allow for the import and export of liquid bulk such as petroleum products, chemicals, and liquefied natural gas. These port facilities often include large storage tanks and pipeline connections for product handling. Vessels calling on energy ports often require greater depths. The Sabine-Neches Waterway is the leading bulk liquid cargo waterway in the nation and is projected to be the largest LNG exporter in the country.

**Fishing ports** provide dockside access for fleets of commercial fishermen who catch finfish, shrimp, oysters, and crabs. Three Texas ports are among the top thirty largest commercial fishing ports in the country including the Port of Palacios, the Port of Galveston, and the combined Ports of Brownsville and Port Isabel.

**Ro/Ro (roll on/roll off)**, ports process vehicles and other equipment that can be moved on and off vessels by using large ramps to connect with dock facilities. Ports that process vehicles will often have facilities for additional port-installed auto manufacturer options such as wheels, suspension, or other interchangeable parts. Ro/Ro ports in Texas play a critical part in supporting the movement of military cargo at the Port of Beaumont and Port of Port Arthur.

**Other** commercial activities are carried out at ports that don't fall into the above port typologies. Some of these activities include vessel and barge repair and construction, layberthing, ship recycling, and support of offshore oil and gas.







The Port of Palacios is one of the largest shrimping ports in the state.

## HOW THE PORT SYSTEM WORKS

Texas ports are strategic shipping hubs that house complex operating networks for handling the cargo and commodities that fuel and furnish the nation. There are three major components that are essential to each port's day-to-day activities: waterways, port facilities, and inland connectivity. Each one of these parts represents an indispensable piece of the supply chain and a critical area for strategic investment. All three combine to form the Texas port system and all of these parts intersect at the port.

Every industry served by ports relies on all three parts of the port system. All goods moving through Texas for export rely on trucks, trains, and pipelines to get to the port where they are then typically stored in a warehouse or laydown area. Goods are then transferred onto the vessels by using cranes or other equipment. Once loaded, vessels leave the port using waterways. A bottleneck in any one of the three parts of the port system can have a ripple effect and negatively impact other parts of the port system supply chain. If, for example, a ship channel is not deep enough, vessels may need to carry less cargo or be re-routed to another port with sufficient draft, even if the port facilities and landside connections are in working order. The port system's success requires thoughtful coordination and investment across all three areas.

**Domestic and international waterborne trade, the energy industry, seafood and commercial fishing markets, and cruising and tourism revenues all depend on the state of the Texas ports.**



The port system supports the movement of military cargo at the Port of Beaumont.

## Waterways

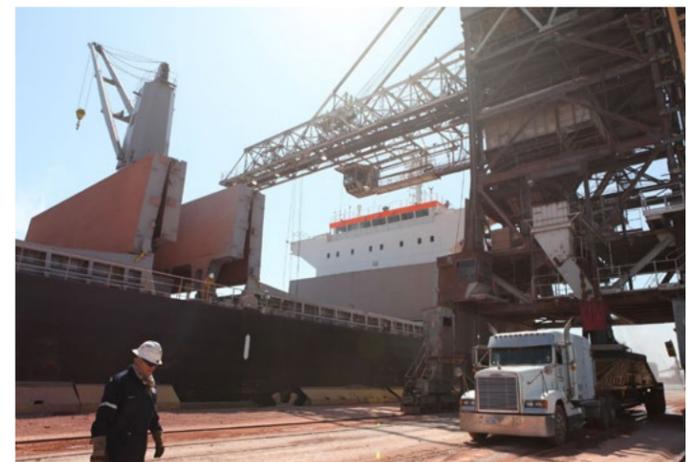
Any vessel entering or leaving a Texas seaport relies on well-maintained navigable waterways also known as ship channels. These waterways are the critical thoroughfares of trade, serving as marine "highways" that allow for the movement of goods and people in and out of ports. Deep draft channels allow for the movement of large vessels while shallow draft channels support smaller vessels and barge activity. The width, depth, and navigability of a waterway that serves a port directly affects the kinds of vessels and markets a port can serve. It is important to maintain Texas waterways so that vessels can continue to move in and out of ports safely and efficiently. Furthermore, some ports require deeper and wider channels so that they are equipped to receive the next generation of larger vessels.



The Houston Ship Channel is 52 miles long and is the busiest waterway in the United States.

## Port Facilities

The port facilities are the backbone of a port's operations. The port infrastructure and equipment is used by workers to help move goods and people between vessels and other modes of transportation. Port facilities can be developed by the port, by a private tenant, or as a shared responsibility through a public-private partnership. Typical port facilities include wharves and docks, mechanized equipment, storage facilities, port gates, and anything else that is needed to support the port's commercial activity. Ports not only have to maintain their facilities, they must also plan for future facility expansions and upgraded infrastructure. When port facilities are outdated or overburdened, the port can become a bottleneck that hinders the flow of cargo in and out of the state.



Bulk Dock #1 at the Port of Corpus Christi can load commodities directly to rail or trucks from a vessel.

## Inland Connectivity

Texas markets are connected to Texas ports through inland connections such as roadways, railways, and pipelines. Many of the trucks and trains that cross Texas are tied to the commercial activity that takes place around Texas ports, making inland connectivity the most visible part of the Texas port system to most Texans. These connections support Texas export supply chains and also bring in goods from across the world to our doorsteps. Ports rely on a strong network of inland connections that can help move goods to and from the port in a safe, quick, and reliable manner.



Trucks entering the Port of Brownsville.

# PCP BENEFIT CATEGORIES

The PAAC evaluated and scored PCP projects using the following five benefit categories:

## ECONOMIC IMPACT

The proposed project results in an economic benefit to the state in terms of job creation, new business development, or retention of existing business.

## OPERATIONAL IMPACT

The proposed project demonstrates a significant operational benefit in terms of cargo movement, reduction in vehicle wait times, improved access, or other efficiency factors.

## ENHANCES CONNECTIVITY

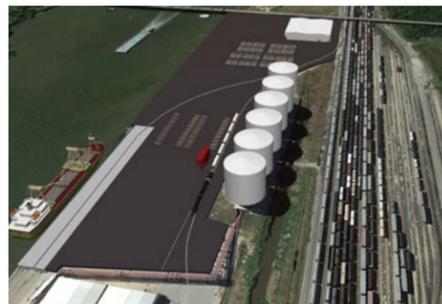
The proposed project enhances connectivity to the state's multimodal transportation system.

## IMPROVES SAFE AND SECURE OPERATIONS

The proposed project improves safe port operations or supports port security and resiliency.

## OTHER BENEFITS

The proposed project provides additional secondary benefits in terms of environmental sustainability, air quality, quality of life, or other significant factors.



Rendering of Berth 6 at the Port of Port Arthur.



## Port Capital Program

The 2020-2021 Texas Port Capital Program (PCP) is a key component of the Texas Port Mission Plan that is developed by the PAAC. The PCP takes a broad view of the needs of the Texas port system and considers port facilities, waterways, and inland connections. Whereas waterways and inland connectivity needs are assessed in separate reports included in the Texas Port Mission Plan, the PCP is the only statewide maritime plan that addresses port facility needs.

The PAAC elevates matters related to maritime transportation to the Texas Transportation Commission and recommends strategic capital projects and studies to be considered for funding under the PCP. To do this, the PAAC conducts a biennial assessment of port capital improvement project needs and studies throughout Texas. Committee members evaluate projects that have been submitted by ports and navigation districts for their strategic importance to the port, the larger port system, and the state of Texas.

The 2020-2021 PCP includes 17 capital projects and three studies at eight different ports whose total project cost is nearly \$1.5 billion. The PCP project list includes the cost of three authorized ship channel improvement projects, which are also reflected in the Ship Channel Improvement Report and are eligible for the Ship Channel Improvement Revolving Fund. All ports are willing to provide a minimum cost share of 25% for each project and study. The PCP has not received previous funding from the State.

## PCP Projects

Port	Project Name	Cost (\$M)*
Port of Beaumont	Main Street Terminal 1	\$79.0
	Buford Rail Yard Interchange Track	\$13.1
Port of Port Arthur	Berth 6 Expansion	\$55.0
	Berth 5 Cargo Deck and Multimodal Transfer Area	\$13.4
	Rail Reliever	\$4.3
Port of Galveston	Fill Slip 38/39	\$25.0
	Pier 37 Repairs	\$9.2
	Refurbishment of Old Port Industrial Road	\$2.7
	Lower Stauffer Channel Dredging	\$5.3
Port Freeport	Parcel 14 Stabilization	\$60.0
	Velasco Terminal Main Gate Study	\$0.3
	Velasco Terminal	\$250.0
	Freeport Harbor Channel Deepening and Widening	\$295.0
Calhoun Port Authority	South Peninsula Development Phase I	\$62.2
Port of Victoria	VCND South Industrial Site Development	\$16.5
	Harbor Island Deep Draft Crude Export Facility	\$55.8
Port of Corpus Christi	La Quinta Channel Deepening Study	\$3.0
	Corpus Christi Ship Channel 75 Feet Deepening Study	\$3.0
	Corpus Christi Ship Channel Improvement Project	\$327.0
Port of Brownsville	Brazos Island Harbor Ship Channel Deepening	\$210.5

\* Costs provided by individual ports.



Sabine-Neches Waterway at the Port of Port Arthur is authorized to be deepened to 48 feet.



Brazos Island Harbor Ship Channel authorized to be deepened to 52 feet.



## Ship Channel Improvement Report

The Ship Channel Improvement Report identifies and summarizes congressionally authorized ship channel improvement projects and feasibility studies across the state. Federal ship channels are the responsibility of the U.S. Army Corps of Engineers but ports and navigation districts act as "non-federal sponsors" and are responsible for funding a portion of the project cost. Ship channel improvement projects are investments that are costly and time-sensitive. Delays in funding and implementing navigation projects can lead to missed opportunities for attracting tenants, increases in overall project costs, and loss of returns on the overall investment.

The 85th Texas Legislature passed Senate Bill (SB) 28, establishing the Ship Channel Improvement Revolving Fund (SCIRF) and Loan Program. This creates a program to help finance the modernization of ship channels. By providing financing through the SCIRF, Texas has the ability to move forward on navigation projects in spite of limited federal appropriations and invest in the port system, enhance the state's economy, and be repaid through the loan process.

## Ship Channel Improvement Projects

Channel	Cost (\$M)*
Sabine-Neches Waterway	\$1,277.5
Cedar Bayou Navigation Channel	\$52.8
Freeport Harbor Channel	\$295.0
Corpus Christi Ship Channel	\$327.0
Brazos Island Harbor Channel	\$210.5

\* Costs provided by ports/navigation districts for the development of the SCIRF LAR in 2018.



## Port Connectivity Report

The Port Connectivity Report assesses the current state of landside connectivity at 14 of the public ports in Texas, focusing on roadway connections between port gates and major freight corridors. Transportation conditions and needs are unique to each port. These can include issues as diverse as incompatible surrounding land uses, modal incompatibility and conflicts, operational inefficiencies, and insufficient facility design for the needs of freight operators. In combination, these issues lead to inefficiencies for multimodal freight movement. This report evaluates the existing conditions of landside port access, identifies problems and areas of concern, and proposes potential solutions to address those issues.



Freeport Harbor Channel authorized to be deepened to depths ranging from 51-56 feet.

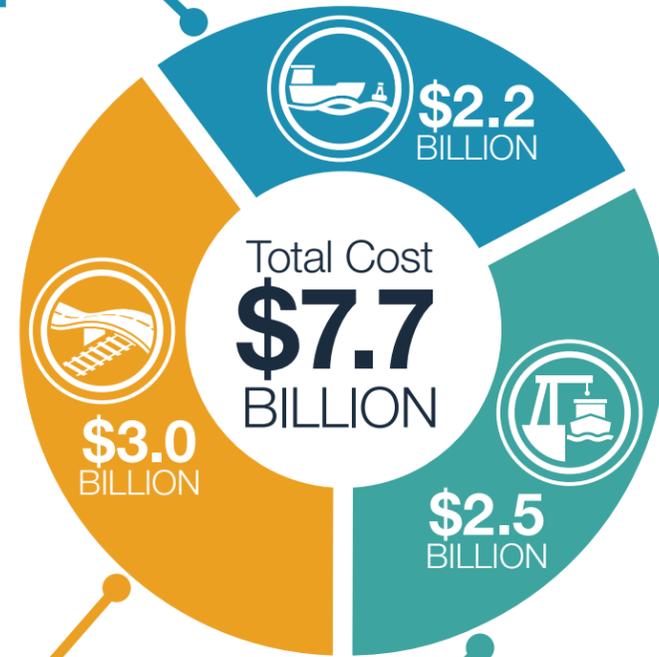


A truck drives along the Joe Fulton International Trade Corridor at the Port of Corpus Christi. Photo Credit: TxDOT.

# PLANNED PORT SYSTEM INVESTMENT

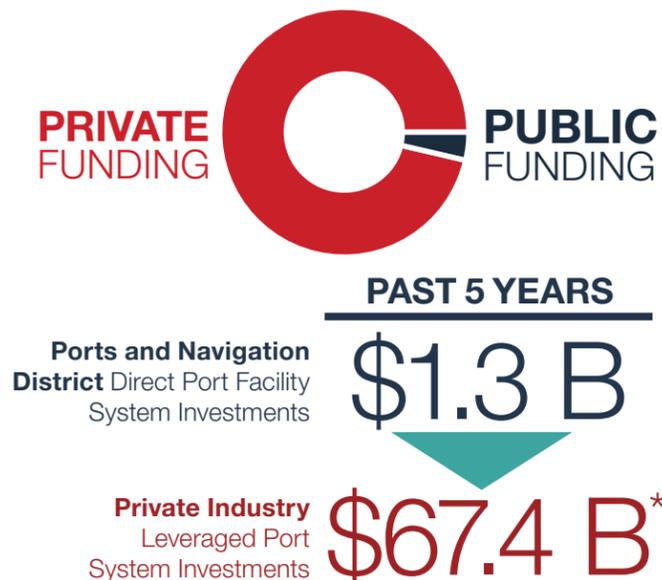
Total cost for all five authorized ship channel improvement projects.\*

# TEXAS PORT FUNDING NEEDS



Unfunded inland connectivity projects that serve ports that are included in the Texas Mobility Freight Plan 2017<sup>12</sup> and the Port Connectivity Report.<sup>13</sup>

Planned facilities investments for public ports between 2018 and 2022.\*



# PLANNED PORT INVESTMENT

Texas ports and navigation districts need to secure **\$7.7 B** of **direct port system investments** through local, state, and federal funds over the next 5 years to capture and maximize future **private port system investments**.

\*Costs provided by the ports and navigation districts.

# FUNDING REQUESTED FOR THE PORT SYSTEM

Texas ports require continual enhancements and expansion to attract private investment for new industrial facilities. The funding requested represents a fraction of the biennial need, but is critical to give these projects the traction that will accelerate their implementation. The Texas Transportation Commission voted to include both of these PAAC funding request recommendations in TxDOT's Legislative Appropriations Request.

## 2020-2021 Port Capital Program (PCP)



The Port Capital Program is a prioritized list of projects that includes port facilities, waterways, and inland connections. The PAAC voted to recommend a funding request of \$125 million to help fund the projects included in the 2020-2021 PCP. If funded, these projects will support improved logistics, increased capacity, and enhanced safety to keep Texas ports competitive.

Funding Requested: \$125 Million

## Ship Channel Improvement Revolving Fund (SCIRF)



Funding the SCIRF will help provide financing for eligible navigation projects that modernize waterways and allow for increased growth of waterborne commerce. There are five projects in Texas that are eligible to draw on the fund should it be capitalized. The PAAC voted to recommend a funding request in the amount of \$450 million to cover the estimated drawdown for the eligible projects in Fiscal Years 2020-2021.

Funding Requested: \$450 Million

**Total Funding Requested: \$575 Million**



Funding the PCP would help replace outdated and failing port facilities such as collapsed Docks 3 and 4 at the Port of Beaumont.

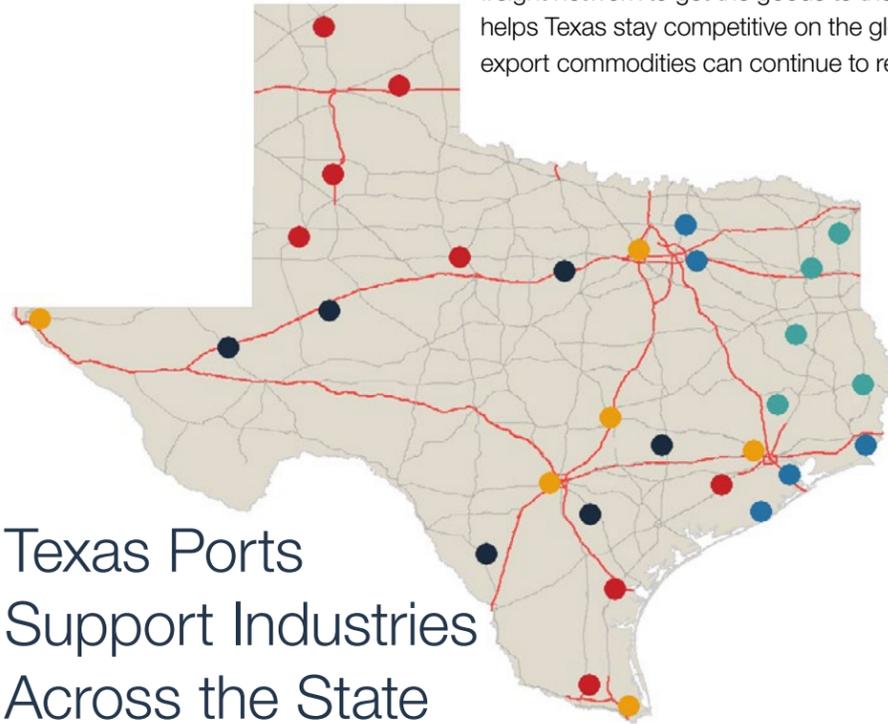


The Corpus Christi Ship Channel has received \$95 M of federal appropriations for the \$225 M federal share. Delays in project implementation have led to a cost increase from \$188 M to \$327 M.

# BEYOND THE TEXAS COAST

## Texas is a Port-Driven State

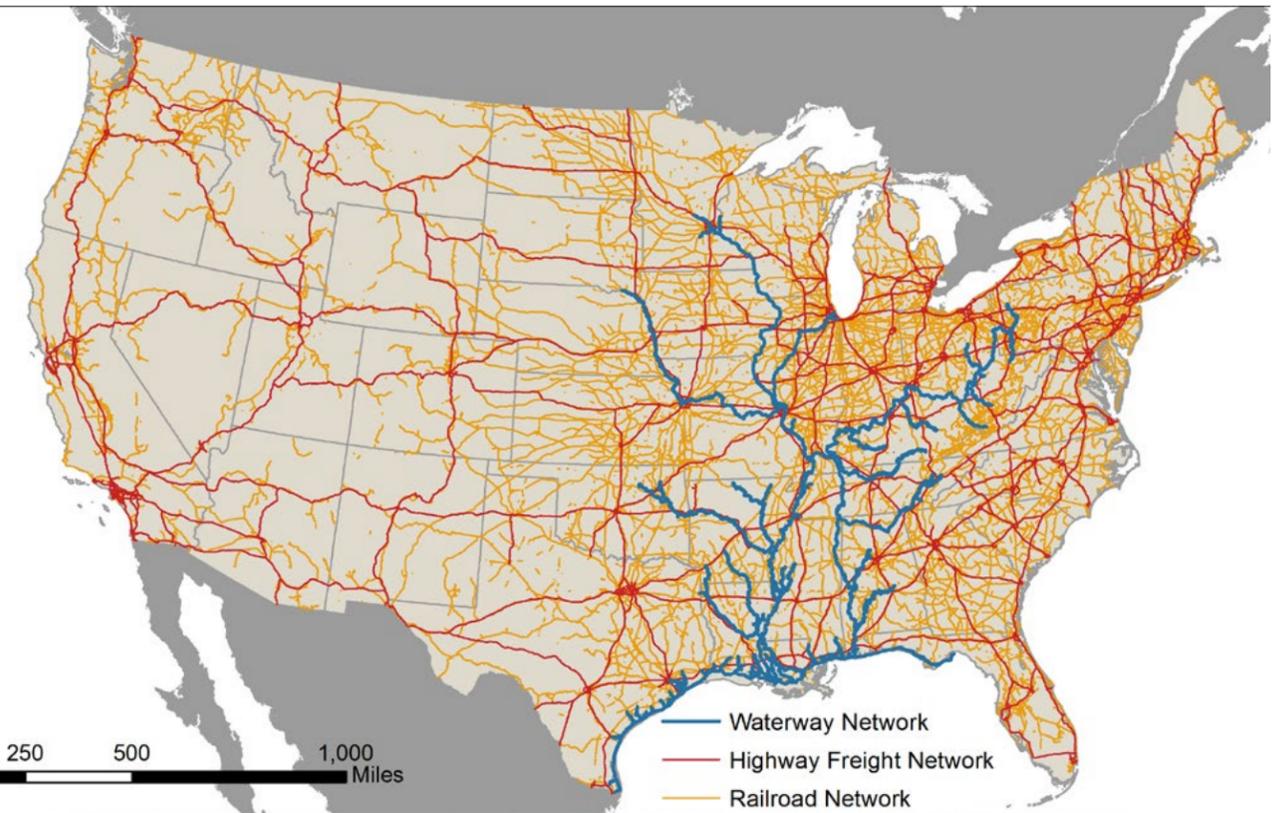
The Texas economy is largely driven by commodity supply chains that move goods to and from the state. Inland markets across the state rely on a strong multimodal freight network to get the goods to the ports for export. Enhancing our port system helps Texas stay competitive on the global market by ensuring that our inland export commodities can continue to reach their destinations worldwide.



Port Houston handled more tons of exports and imports than any other U.S. port in 2016.

## Texas Ports Support Industries Across the State

<b>Timber Products</b> <sup>14</sup>	Texas Forest	Primary Processing Mill	Export Distribution Center	Texas Port
<b>Plastic Resins</b> <sup>15</sup>	Petro Chemical Plant	Plastic Converter	Bagger Facility	Texas Port
<b>Vehicle Parts</b> <sup>16</sup>	Tier 1 Supplier	Parts Distribution Center	Texas Port	
<b>Cotton</b> <sup>17</sup>	Cotton Farm	Cotton Gin	Local Warehouse	Texas Port
<b>Liquefied Natural Gas</b> <sup>18</sup>	Well	Gas Processing & Liquefaction Plant	LNG Storage Tank	Texas Port



## Connecting with the Nation

The deep and shallow draft channels that allow for barge transit are a critical part of the national freight network. Barge transport is a highly fuel-efficient means to transport bulk and liquid cargo that also reduces truck congestion on roadways. The Texas portion of the Gulf Intracoastal Waterway (GIWW) connects all Texas ports to each other and to a robust network of Gulf Coast and inland waterways.



The Victoria Barge Canal is a 35 mile long waterway that connects the Port of Victoria to the Gulf Intracoastal Waterway.

# DID YOU KNOW?

**An average of 80 million short tons per year were transported along the Texas portion of the GIWW between 2014 and 2016.**<sup>19</sup>



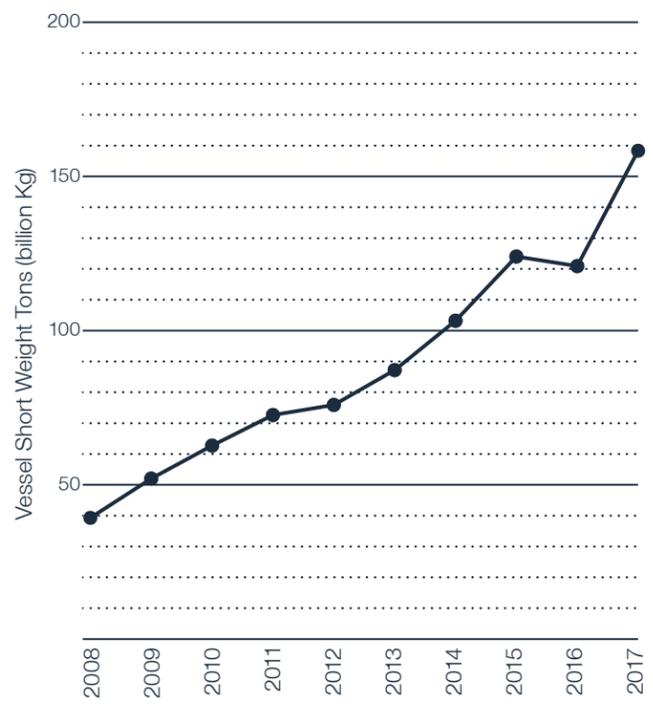
**TOP TEN IMPORT COMMODITIES<sup>1</sup>**

1. Oil and Gas
2. Machinery
3. Electric Machinery
4. Articles of Iron or Steel
5. Vehicles
6. Organic Chemicals
7. Furniture
8. Plastics
9. Iron and Steel
10. Apparel

**TOP TEN EXPORT COMMODITIES<sup>1</sup>**

1. Oil and Gas
2. Organic Chemicals
3. Machinery
4. Plastics
5. Chemical Products
6. Vehicles
7. Electric Machinery
8. Articles of Iron or Steel
9. Cereals
10. Cotton

**VESSEL EXPORT OF OIL & GAS<sup>1</sup>**



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*Photos shown are provided by the port unless otherwise indicated.*

**Updates and Corrections**

- December 10, 2018:
- Page 2: Changed "navigation improvements" to "federal water resource projects."
  - Page 5: Updated Cedar Bayou Port Typology information.
  - Page 13: Updated Corpus Christi Ship Channel photo caption.
  - Page 17: Updated URL for Reference 2.



*Front Cover: Port of Brownsville.  
Back Cover: Port of Victoria.*