

These are the minutes of the regular meeting of the Port Authority Advisory Committee (the Committee) held on October 2, 2018 in Freeport, Texas. The meeting was called to order at 1:05 p.m. by Chair Phyllis Saathoff with the following committee members present via teleconference:

Port Authority Advisory Committee:

| | |
|-------------------|---|
| John LaRue | Port of Corpus Christi |
| Roger Guenther | Houston Port Authority |
| Chris Fisher | Port of Beaumont |
| Eduardo Campirano | Port of Brownsville |
| Larry Kelley | Port of Port Arthur- Absent |
| Jennifer Stastny | Port of Victoria - Absent |
| Phyllis Saathoff | Chair, Port Freeport |
| Michael Plank | Lt. Governor Appointee- Absent |
| Alan Ritter | Speaker of the House Appointee- Absent |

A public notice of this meeting containing all items on the proposed agenda was filed in the Office of the Secretary of State at 8:32 a.m. September 21, 2018 as required by Government Code, Chapter 551, referred to as “The Open Meetings Act.”

ITEM 2. Introduction of committee members and TxDOT staff.

Phyllis Saathoff, Chair, asked committee members, TxDOT and guests to introduce themselves.

ITEM 3. Approval of the final 2020-2021 Texas Port Capital Program. (Action)

The Committee members were sent a final copy of the 2020-2021 Texas Port Capital Program document. See attached document. Phyllis Saathoff, Chair, Port Freeport asked the members for a motion to approve the final document. John LaRue, Port of Corpus Christi, made a motion to accept the final copy of the 2020-2021 Texas Port Capital Program and the motion was seconded by Eduardo Campirano, Port of Brownsville. The motion passed 5-0.

ITEM 4. Select next meeting date and location. (Action)

The next meeting date was tabled until after the first of the New Year.

ITEM 5. Public comment

No public comment was made.

ITEM 6. Adjourn. (Action)

Phyllis Saathoff, Chair, adjourned the meeting at 1:13 p.m.

APPROVED:



Phyllis Saathoff, Port Freeport, Chair
Port Authority Advisory Committee

PORT AUTHORITY ADVISORY COMMITTEE



2020-2021 TEXAS PORT CAPITAL PROGRAM

86TH LEGISLATIVE SESSION

2020-2021 Port Capital Program Projects by Rank

| Rank | Port | Project Name | Project Type | Cost* | Page |
|--------------------|------------------------|---|--------------|------------------------|------|
| 1 | Port Freeport | Freeport Harbor Channel Deepening and Widening | | \$295,000,000 | 17 |
| 2 | Port of Galveston | Pier 37 Repairs | | \$9,200,000 | 13 |
| 3 | Port of Beaumont | Main Street Terminal 1 | | \$79,000,000 | 6 |
| 4 | Port of Beaumont | Buford Rail Yard Interchange Track | | \$13,143,096 | 7 |
| 5 | Port of Corpus Christi | Corpus Christi Ship Channel Improvement Project | | \$327,000,000 | 22 |
| 6 | Port Freeport | Velasco Terminal | | \$250,000,000 | 18 |
| 7 | Port of Galveston | Refurbishment of Old Port Industrial Road | | \$2,725,000 | 11 |
| 8 | Port Freeport | Lower Stauffer Channel Dredging | | \$5,300,000 | 15 |
| 9 | Port Freeport | Parcel 14 Stabilization | | \$60,000,000 | 16 |
| 10 | Port of Brownsville | Brazos Island Harbor Ship Channel Deepening | | \$210,500,000 | 25 |
| 11 | Port of Port Arthur | Rail Reliever | | \$4,287,500 | 10 |
| 12 | Calhoun Port Authority | South Peninsula Development Phase I | | \$62,191,300 | 19 |
| 13 | Port of Port Arthur | Berth 6 Expansion | | \$55,000,000 | 8 |
| 14 | Port Freeport | Velasco Terminal Main Gate Study | | \$258,490 | 14 |
| 15 | Port of Corpus Christi | Harbor Island Deep Draft Crude Export Facility | | \$55,800,000 | 21 |
| 16 | Port of Port Arthur | Berth 5 Cargo Deck and Multimodal Transfer Area | | \$13,400,000 | 9 |
| 17 | Port of Victoria | VCND South Industrial Site Development | | \$16,450,000 | 20 |
| 18 | Port of Galveston | Fill Slips 38/39 | | \$24,950,000 | 12 |
| 19 | Port of Corpus Christi | La Quinta Channel Deepening Study | | \$3,000,000 | 24 |
| 20 | Port of Corpus Christi | Corpus Christi Ship Channel Deepening Study | | \$3,000,000 | 23 |
| GRAND TOTAL | | | | \$1,490,205,386 | |

*Costs based on the values provided by the individual Ports and Port Authority.

2020-2021 TEXAS PORT CAPITAL PROGRAM

86TH LEGISLATIVE SESSION

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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 Capital Program. 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



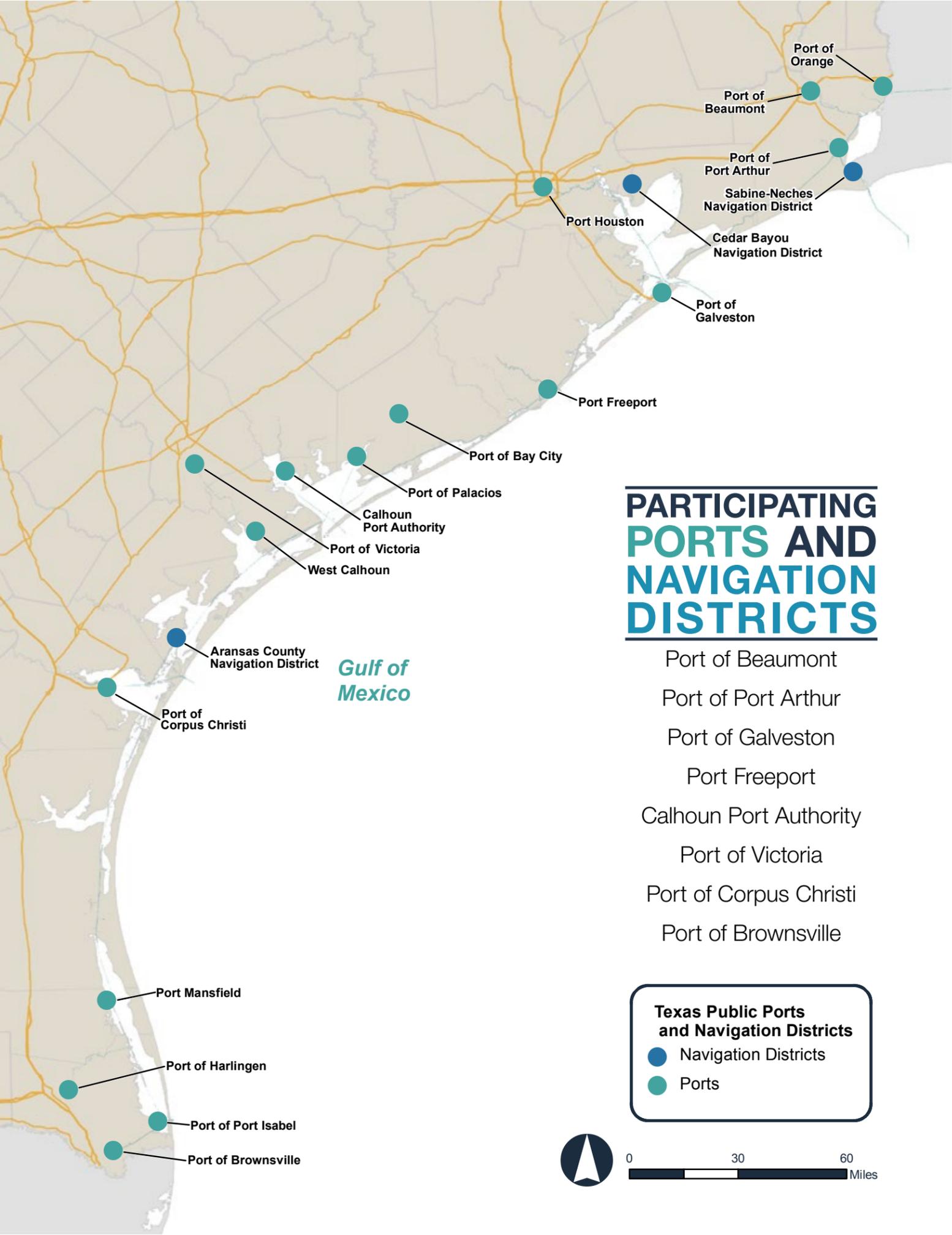
John LaRue
Port of Corpus Christi
Lower Coast Representative



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



PARTICIPATING PORTS AND NAVIGATION DISTRICTS

- Port of Beaumont
- Port of Port Arthur
- Port of Galveston
- Port Freeport
- Calhoun Port Authority
- Port of Victoria
- Port of Corpus Christi
- Port of Brownsville

Texas Public Ports and Navigation Districts

- Navigation Districts
- Ports

INTRODUCTION

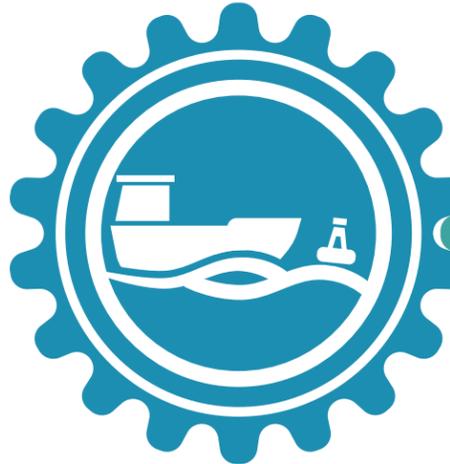
The 2020-2021 Texas Port Capital Program (PCP) is a key component of the Texas Port Mission Plan that is developed by the PAAC. The PCP takes a broad view of the needs of the Texas port system and considers port facilities, waterways and inland connections. Whereas waterways and inland connectivity needs 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 types of projects that are eligible to apply for inclusion in the PCP are shown below.

The PAAC voted to recommend a funding request of \$125 million to help fund the projects included in the 2020-2021 PCP. This is only a fraction of the total project cost, which is approximately \$1.5 billion. Funding the PCP will help accelerate the implementation of these projects so that Texas ports can remain competitive and continue to grow the state's economy. Ports are willing to provide at least a 25% project match.

The PCP is the only statewide maritime plan that addresses port facility needs.

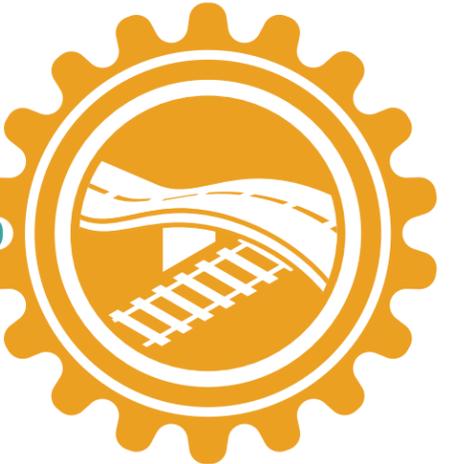
The PAAC voted to recommend a funding request of \$125 million to help fund the projects included in the 2020-2021 PCP. This is only a fraction of the total project cost, which is approximately \$1.5 billion.



Waterways
 Dredging
 Ship channels
 Turning basins
 Harbors



Port Facilities
 Wharves and docks
 Storage facilities
 Cruise terminals
 Mechanized equipment
 Land acquisition



Inland Connectivity
 Roadways
 Railroads

PORT CAPITAL PROGRAM DEVELOPMENT

Port Capital Program Eligibility

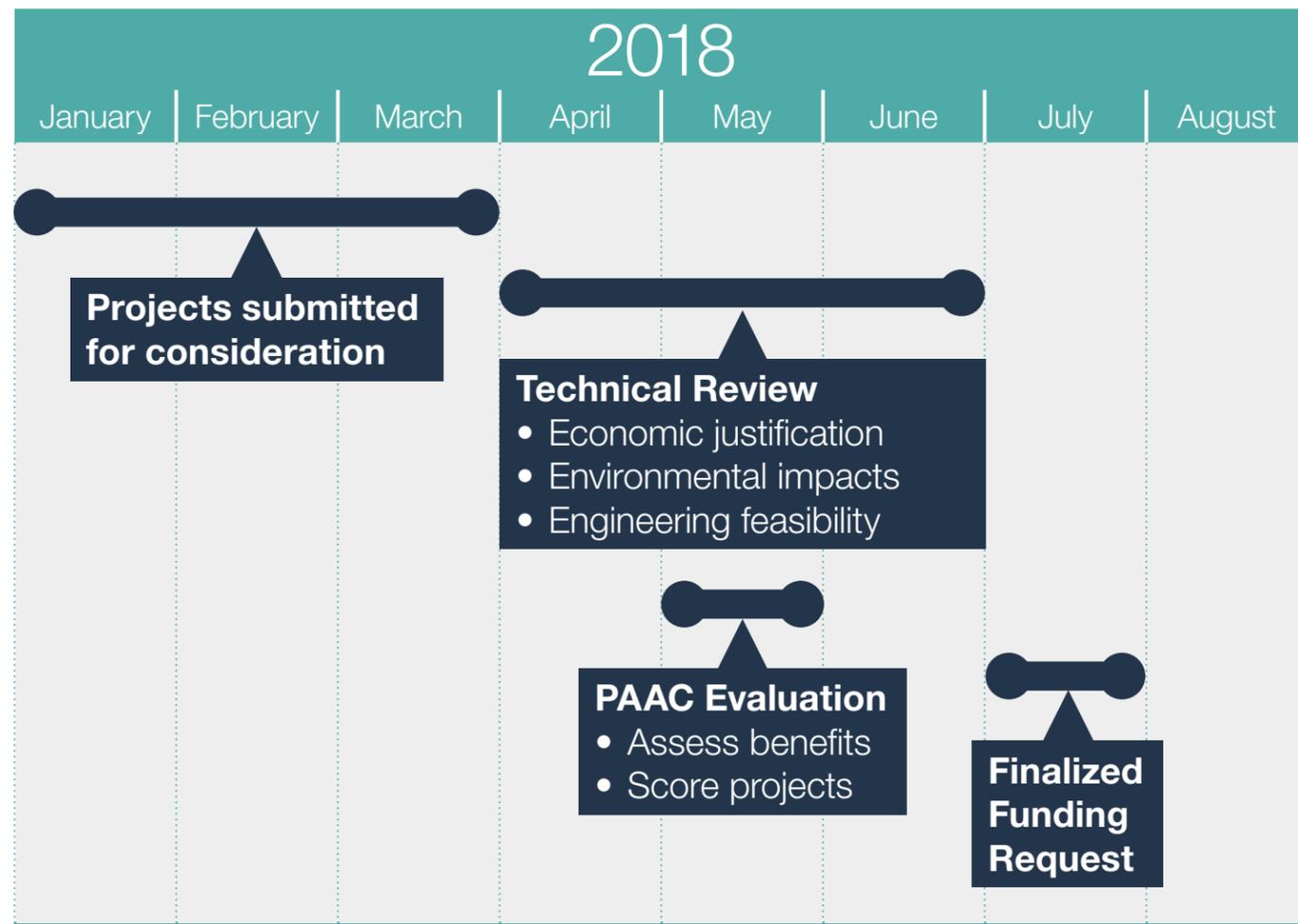
All Texas public ports and navigation districts may submit capital projects and studies that meet the eligibility requirements. The 20 public Texas ports and navigation districts were invited to submit proposed projects to be considered for the 2020-2021 Port Capital Program. Eight public ports or navigation districts elected to submit projects.

Project Eligibility

| Eligible Projects | Project Examples | Minimum Criteria |
|-------------------------|------------------------|--|
| Plans or Studies | • Planning Efforts | ✓ Meets Texas Transportation Ch. 55 eligibility |
| | • Feasibility Studies | ✓ Port will provide minimum 25% cost share |
| | • Project Development* | ✓ Project lettable by the end of FY 2021 |
| Capital Projects | • Port Facilities | ✓ Project could be completed by the end of FY 2024 |
| | • Inland Connectivity | ✓ Shows economic, environmental, and engineering feasibility |
| | • Waterways | ✓ Has proven project support |

*Up to 20% of design engineering

EVALUATION PROCESS



Evaluation Criteria

Applicants selected the two most pertinent benefit categories out of the five benefit categories listed below for each project submission to be scored on. This allowed small-scale projects that can only address some of the benefit categories to be compared equitably with larger, more complex projects. The maximum score achievable was 10 points for each benefit category, for a total of 20 points possible per project.

Project Benefits Assessed

| | |
|--|--|
| 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. |

The results of the full evaluation analysis are summarized in the chart below by cost and primary project types. The total cost of projects ranges from under \$300,000 to just under \$330 million.

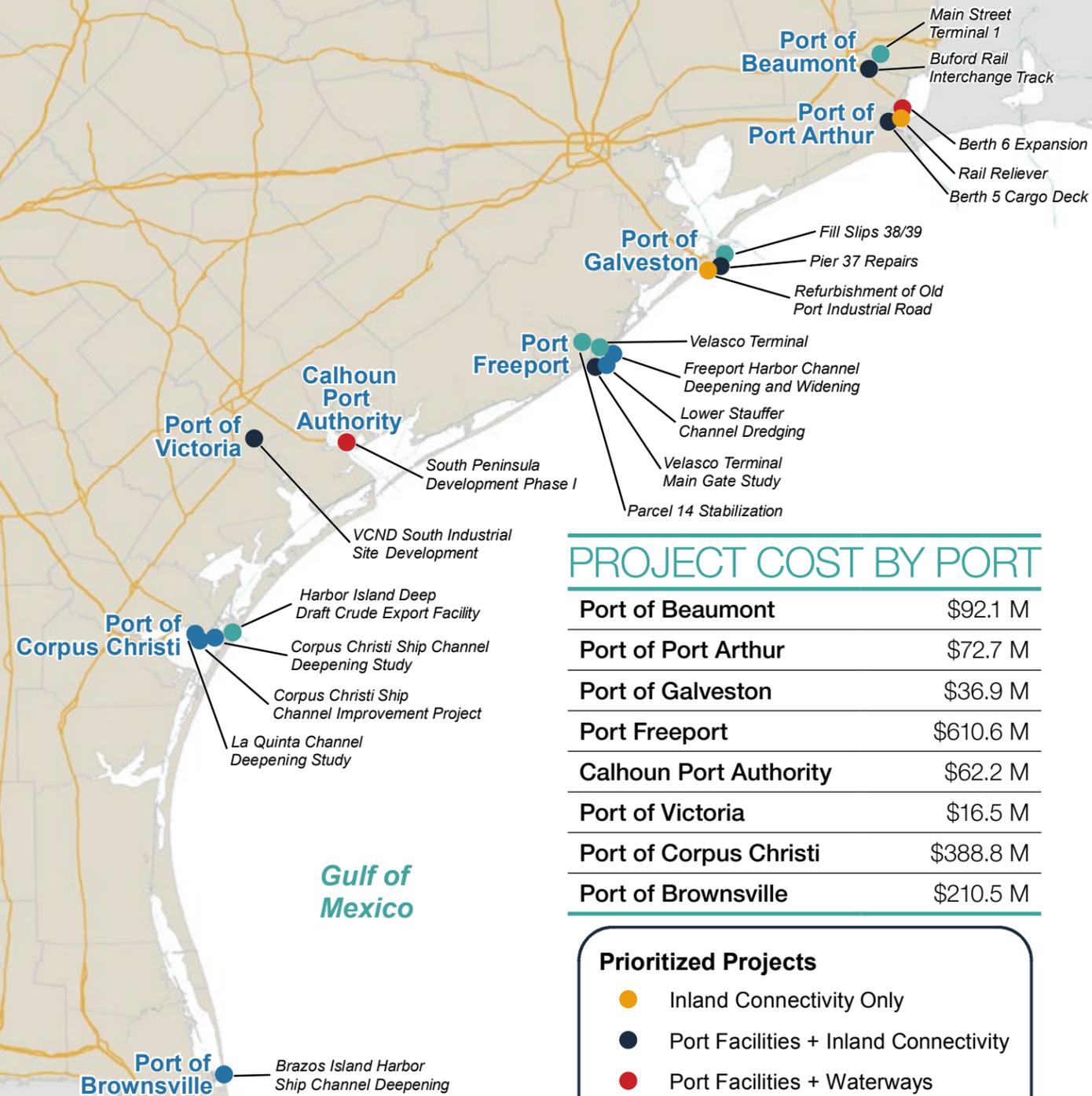
Results Summary

| Project Type(s) | Eligible Projects | Cost Range of Projects |
|---------------------------------------|-------------------|------------------------|
| Port Facilities Only | 5 | \$25 M to \$250 M |
| Inland Connectivity Only | 2 | \$3 M to \$4 M |
| Waterways Only | 6 | \$3 M to \$327 M |
| Port Facilities + Inland Connectivity | 5 | < \$1 M to \$17 M |
| Port Facilities + Waterways | 2 | \$55 M to \$62 M |

“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*

PRIORITIZED PROJECT PROFILES



PROJECT COST BY PORT

| | |
|------------------------|-----------|
| Port of Beaumont | \$92.1 M |
| Port of Port Arthur | \$72.7 M |
| Port of Galveston | \$36.9 M |
| Port Freeport | \$610.6 M |
| Calhoun Port Authority | \$62.2 M |
| Port of Victoria | \$16.5 M |
| Port of Corpus Christi | \$388.8 M |
| Port of Brownsville | \$210.5 M |

Prioritized Projects

- Inland Connectivity Only
- Port Facilities + Inland Connectivity
- Port Facilities + Waterways
- Port Facilities Only
- Waterways Only



2020-2021 Port Capital Program Project Summary

| Port | Project Type | Project Name | Score | Rank | Cost* | Page |
|------------------------|--------------|---|-------|------|------------------------|------|
| Port of Beaumont | | Main Street Terminal 1 | 15.4 | 3 | \$79,000,000 | 6 |
| | | Buford Rail Yard Interchange Track | 15.1 | 4 | \$13,143,096 | 7 |
| Port of Port Arthur | | Berth 6 Expansion | 13.4 | 13 | \$55,000,000 | 8 |
| | | Berth 5 Cargo Deck and Multimodal Transfer Area | 12.3 | 16 | \$13,400,000 | 9 |
| | | Rail Reliever | 14.0 | 11 | \$4,287,500 | 10 |
| Port of Galveston | | Refurbishment of Old Port Industrial Road | 14.9 | 7 | \$2,725,000 | 11 |
| | | Fill Slips 38/39 | 11.9 | 18 | \$24,950,000 | 12 |
| | | Pier 37 Repairs | 16.1 | 2 | \$9,200,000 | 13 |
| | | Velasco Terminal Main Gate Study | 13.4 | 14 | \$258,490 | 14 |
| | | Lower Stauffer Channel Dredging | 14.6 | 8 | \$5,300,000 | 15 |
| Port Freeport | | Parcel 14 Stabilization | 14.1 | 9 | \$60,000,000 | 16 |
| | | Freeport Harbor Channel Deepening and Widening | 16.7 | 1 | \$295,000,000 | 17 |
| Calhoun Port Authority | | Velasco Terminal | 15.0 | 6 | \$250,000,000 | 18 |
| | | South Peninsula Development Phase I | 13.9 | 12 | \$62,191,300 | 19 |
| Port of Victoria | | VCND South Industrial Site Development | 12.1 | 17 | \$16,450,000 | 20 |
| Port of Corpus Christi | | Harbor Island Deep Draft Crude Export Facility | 13.0 | 15 | \$55,800,000 | 21 |
| | | Corpus Christi Ship Channel Improvement Project | 15.1 | 5 | \$327,000,000 | 22 |
| | | Corpus Christi Ship Channel Deepening Study | 10.1 | 20 | \$3,000,000 | 23 |
| | | La Quinta Channel Deepening Study | 11.7 | 19 | \$3,000,000 | 24 |
| Port of Brownsville | | Brazos Island Harbor Ship Channel Deepening | 14.1 | 10 | \$210,500,000 | 25 |
| GRAND TOTAL | | | | | \$1,490,205,386 | |

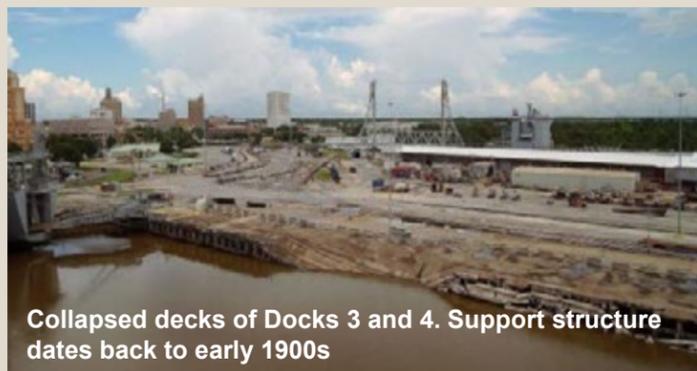
*Costs based on the values provided by the individual Ports and Port Authority.



| Project Details | |
|---|---|
| Port Facility | Port of Beaumont |
| County | Jefferson |
| Project Status | Near Shovel Ready |
| Project Category |  |
| Project Description | |
| <p>This project will remove and replace collapsed wharf structures at the Port of Beaumont. Docks 2, 3 and 4 were built in the 1950s on supporting infrastructure dating back to the early 1900s. The new wharf structures will support dock loads appropriate for modern operations.</p> | |

| Funding & Support | |
|---|--------------|
|  Total Cost | \$79,000,000 |
| Need for Funding | |
| <p>For a project of this scale, state funding is needed to remain competitive. Due to the Sabine-Neches Waterway (SNWW) federally-approved channel deepening, the startup of two large liquefied natural gas export terminals, and \$70 billion in capital investment on the SNWW related to industrial construction and pipeline expansions in the area, the need for increased freight handling capabilities at the Port of Beaumont will be amplified.</p> | |
| Project Support | |
| <ul style="list-style-type: none"> Port of Beaumont Board of Commissioners City, County & Chamber of Commerce Local, State & Federal Representatives Metropolitan Planning Organization U.S. Army 84200 Transportation Battalion Longshoremen's Association Regional Economic Development Initiative | |

| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Increase port capacity by 25% Generate 3,152 direct, indirect, induced and related user jobs based on a 2015 economic impact study Annual \$450 million increase in economic activity Docks would support movement of: <ul style="list-style-type: none"> Military cargo for #1 strategic outload port in the world General cargo for #5 port in nation by tonnage | |
| Operational Impact | |
| <ul style="list-style-type: none"> Increase military/general cargo docks from three to four Improve the flow of cargo into the port and eliminate bottlenecks Support the anticipated expansion of the Sabine-Neches Waterway Eliminate truck trips from other ports to Port of Beaumont <ul style="list-style-type: none"> Avoid 420 trips by 2020 and 2,100 trips by 2068 | |



| Project Details | |
|---|---|
| Port Facility | Port of Beaumont |
| County | Jefferson |
| Project Status | In Design |
| Project Category |   |
| Project Description | |
| <p>This project will add over 16,000 feet of new rail track and realign and upgrade over 4,200 feet of existing rail track. It will upgrade existing road crossings, improve security fencing and lighting, and improve drainage.</p> | |

| Funding & Support | |
|--|--------------|
|  Total Cost | \$13,143,096 |
| Need for Funding | |
| <p>State funding is needed to plan this project as a continuation of the 2014 Port of Beaumont Master Plan to alleviate inter-city vehicular traffic congestion, by performing unit train switching within the port, and maximizing current rail capacity. Specifically, this project addresses the current rail capacity limitation of single-direction unit train handling at the Port of Beaumont terminal by alleviating "spot on arrival" constraints for rail lines.</p> | |
| Project Support | |
| <ul style="list-style-type: none"> Port of Beaumont Board of Commissioners Local, State & Federal Representatives County and City officials BNSF, UP, and KCS railroads Port stakeholders at large | |



| Project Benefits | | | |
|--|-----------|-----------|--------------|
| Economic Benefits | | | |
| | PV* at 7% | PV* at 3% | Undiscounted |
| Construction and Eng. Costs | (\$13.2M) | (\$13.2M) | (\$13.2M) |
| NPV of Benefits | \$19.2M | \$39.7M | \$72.0M |
| B-C Ratio | 1.45 | 3.00 | 5.46 |
| <p>*PV = Present value, NPV = Net present value; B-C = Benefit-cost</p> | | | |
| <ul style="list-style-type: none"> Project supports movement of diverse cargo like: <ul style="list-style-type: none"> Bulk and break bulk like grain, agriculture goods, paper products, aggregate, and rock Project cargo like wind energy components Rolling stock, iron & steel and military equipment | | | |
| Operational Impact | | | |
| <ul style="list-style-type: none"> Relieves constraint of current single unit-train rail track caused by dramatic 586% increase in rail cargo Alleviates rail congestion in area and will attract new rail intensive business 100% increase in rail interchange capacity | | | |
| Other Benefits | | | |
| <ul style="list-style-type: none"> Reduce inter-city congestion and improve safety on public highways as more cargo can be transported by rail rather than trucks Improve neighborhood congestion and public safety by allowing unit train switches to occur inside the port Alleviate rail waiting times and shipping delays Reduce noise pollution in the Beaumont metropolitan area Reduce exhaust gas emissions from idling vehicles and trains | | | |

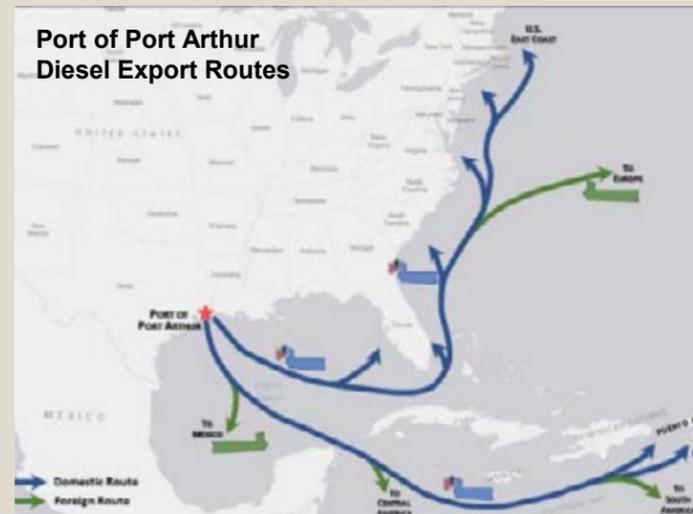


| Project Details | |
|---|---|
| Port Facility | Port of Port Arthur |
| County | Jefferson |
| Project Status | In Design |
| Project Category |   |
| Project Description | |
| This project will extend the southwest limit of the Berth 5 wharf by 1,000 feet to create Berth 6. The project will also include dredging to a 45-foot depth. | |

| Funding & Support | |
|--|--------------|
|  Total Cost | \$55,000,000 |
| Need for Funding | |
| This project adds capacity and increases berth capability to address vessels associated with a deeper channel and a wider Panama Canal. The expansion supports continued port growth, as several emerging markets, including liquid energy and bulk cargo, support the need. The present dock/building configuration limits certain opportunities. | |
| Project Support | |
| <ul style="list-style-type: none"> Board of Trustees of Port of Port Arthur City, County & Chamber of Commerce State & Federal Representatives Industries and port stakeholders at large | |



| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Project supports an estimated 150-200 construction jobs and 200+ permanent jobs Benefit-cost ratio of 1.19 \$13.5 million over 20 years from improving wood pellet/chip throughput and inland transportation costs at this terminal \$7.2 million estimated over 20 years from improving ship loading efficiency \$27.6 million estimated in economic competitiveness benefits over 20 years by increasing throughput of distillate/diesel vessels and reducing associated transportation costs Project supports movement of: <ul style="list-style-type: none"> Liquid bulk like new diesel & distillate export Bulk cargo such as wood pellets from east Texas Project cargo like refinery components | |
| Operational Benefits | |
| <ul style="list-style-type: none"> Improving ship loader reduces total vessel loading time and generates economic benefit for current facility users Increased volume allows upgraded facility to handle 47 additional liquid bulk vessels in the first year of operation, nearly double current volume Lower risk of vessel collision Improves safety conditions for Port personnel | |



| Project Details | |
|---|---|
| Port Facility | Port of Port Arthur |
| County | Jefferson |
| Project Status | Near Shovel Ready |
| Project Category |   |
| Project Description | |
| This project will construct a cargo deck extension to the existing general cargo facility. An elevated dock will be constructed to connect to the new berth and will allow for the transfer of bulk, breakbulk, and project cargo. The improved area will provide multimodal access to the berth and improve cargo movement in a safe manner. | |

| Funding & Support | |
|--|--------------|
|  Total Cost | \$13,400,000 |
| Need for Funding | |
| The dock deck addition is a necessary completion project to increase port utilization of added berth. Additionally, the deck expansion will accommodate an existing ship loading system to increase bulk handling efficiency. | |
| Project Support | |
| <ul style="list-style-type: none"> Board of Trustees of Port of Port Arthur City, County & Chamber of Commerce State & Federal Representatives Industries and port stakeholders at large | |

| Project Benefits | |
|---|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Supports an estimated 150-200 construction jobs and 200+ permanent jobs. Expansion supports continued port growth. The present dock and building configuration limits certain opportunities. Support movement of project cargo, bulk cargo, and multimodal cargo, including: <ul style="list-style-type: none"> Wood pellets and forest products Liquid energy | |
| Operational Benefits | |
| <ul style="list-style-type: none"> Reduces traffic congestion, decreases slewing, and increases safety Facilitates movement of on-dock rail, as well as marine berth and truck access | |



Project Details

| | |
|------------------|---|
| Port Facility | Port of Galveston |
| County | Galveston |
| Project Status | Design Not Complete |
| Project Category |  |

Project Description

This project will remove deteriorated wharves and fill in the area between two piers to create 5.7 acres of additional area for cargo storage. Repurposing this underutilized slip area will support the growing breakbulk and roll-on/roll-off cargo operations as well as the expansion plans for multiple tenants.

Funding & Support

| | |
|--|--------------|
|  Total Cost | \$24,950,000 |
|--|--------------|

Need for Funding

State funding is needed to help the Port meet both current and future cargo demands for clients. There is insufficient room in the west end of the Port to handle all of the cargo operations and as a result, existing customers must reduce cargo dwell time or store cargo off port facilities. The lack of available uplands means that the Port is unable to accommodate new business and limit the Port's ability to remain competitive.

Project Support

- Board of Trustees of the Galveston Wharves
- City of Galveston
- Stakeholders within Port complex

Project Benefits

Economic Benefits

- Create an additional 5.7 acres of usable space for staging additional cargo
- Generate over \$21 million in revenue for the Port from ground rent, dockage, and wharfage
- Create 35 permanent jobs over a 10-year period
- Generate 132 direct and indirect construction jobs with a payroll of \$4.6 million
- Enable the Port to expand operations and have the potential to construct a vehicle processing center in the future

Operational Impact

- Increase Port's cargo storage capacity by removing damaged and dilapidated infrastructure
- Expands upland storage capacity for major commodities delivered:
 - Breakbulk cargo like refrigerated fruit and vegetables
 - Wind energy and project cargo
 - Auto vehicles



View from pier looking south. This area will be filled once the bulkhead is installed



Existing bulkhead showing state of deterioration. Fill material (old bricks and concrete) is visible through holes

Project Details

| | |
|------------------|---|
| Port Facility | Port of Galveston |
| County | Galveston |
| Project Status | Design Not Started |
| Project Category |   |

Project Description

This project funds the engineering, design, and construction work to rehabilitate Pier 37, a key marine terminal that is the only dock in the Galveston-Houston-Texas City port complex for the loading and unloading of explosive cargo. In addition to repairing the damaged pier elements, the project will also refurbish the on-dock rail.

Funding & Support

| | |
|---|-------------|
|  Total Cost | \$9,200,000 |
|---|-------------|

Need for Funding

State funding is needed to help the Port improve the efficiency and safety of current hazardous cargo handling procedures. By Coast Guard regulations, ships with explosive cargo, must have that cargo unloaded and stored ashore before other cargo transfer operations can take place. These ships call first at Pier 37 to unload the explosive cargo before continuing on to docks in Galveston, Houston, or Texas City.

Repairing damaged portions of the pier will remove hazards during the unloading process and improvements. The project will enable explosive cargo to be loaded directly from ship to rail, improving safety and reducing double-handling of cargo.

Project Support

- Board of Trustees of the Galveston Wharves
- City of Galveston
- Stakeholders within Port complex

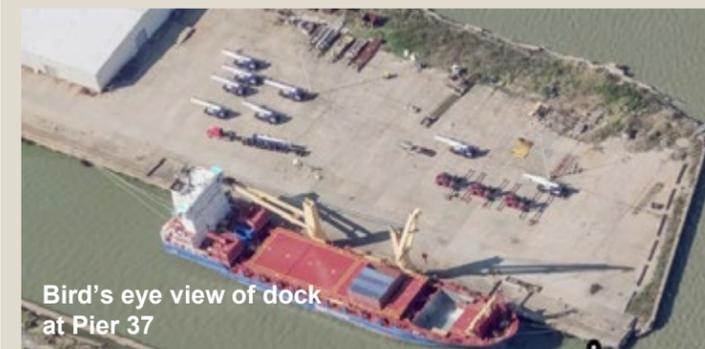
Project Benefits

Operational Impact

- Increases amount of cargo leaving by rail and decreases truck usage, which will relieve highway congestion along IH-45
- Increases operational efficiency by eliminating double-handling of cargo
- Major commodities impacted by this project are:
 - Explosive cargo at only terminal in Galveston-Houston-Texas City regional port system certified to carry it
 - Rolling stock and machinery, such as cars and construction equipment
 - General cargo

Safety Benefits

- Operations made safer by repairing structures supporting the damaged deck and eliminating unloading hazards
- Repaired bulkhead will provide better support for vehicles driving on to and off of the pier
- Repaired rail will allow explosives to be moved either by truck or rail, as appropriate
- Enables explosive cargo to be loaded directly from ship to rail, requiring less overall handling



Bird's eye view of dock at Pier 37

| Project Details | |
|---|---|
| Port Facility | Port Freeport |
| County | Brazoria |
| Project Status | Ready To Procure |
| Project Category |   |
| Project Description | |
| <p>Port Freeport is continuing to expand its new container terminal in phases, which necessitates the construction of a new gate. This study will help the Port determine the size and technology needed to be deployed at the gate. The main entrance will be approximately 8-12 lanes wide and will be designed to accommodate inspections of cargo and equipment, include proper signage and turnout lanes, and facilitate truck movement in to and out of the port.</p> | |

| Funding & Support | |
|--|-----------|
|  Total Cost | \$258,490 |
| Need for Funding | |
| <p>State funding is requested to complete the study. The Port aims to use this study to find answers for some key questions, including: how many lanes the port needs, what type of traffic flow issues can be expected, and what type of technology should be deployed.</p> | |
| Project Support | |
| <ul style="list-style-type: none"> Port Freeport Commission | |



| Project Benefits | |
|---|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> As the main gate to Velasco Terminal is part of the overall project itself, it shares a portion of the overall annual economic impact of the terminal. The project will provide the following benefits based on 780,000 Twenty-foot Equivalent Unit (TEU) movement. <ul style="list-style-type: none"> Jobs \$4,492 Personal Income (1000) \$271,782 Business Revenue (1000) \$202,539 Local Purchases (1000) \$187,520 State & Local Taxes (1000) \$24,460 | |
| Operational Impact | |
| <ul style="list-style-type: none"> With 90,000+ TEUs current movement, a proper entrance and location of multi-lane road in and out of the terminal will be critical for future 1.5M TEUs activity projections | |



| Project Details | |
|--|---|
| Port Facility | Port Freeport |
| County | Brazoria |
| Project Status | Final Design Completed |
| Project Category |  |
| Project Description | |
| <p>This project will expand the channel approach at Berth 7 to accommodate container ships and other large vessels. It will also create a wider turning basin so that ships may safely pass while a vessel is at Berth 6. This will allow full use of Berth 6 and 7 and eliminate vessel waiting time due to berth congestion.</p> | |

| Funding & Support | | |
|---|-------------|--|
|  Total Cost | \$5,300,000 | |
| Need for Funding | | |
| <p>State funding is needed for expansion of the channel approach to Berth 7. This will allow vessels to safely navigate from the Freeport Harbor Channel to the berths within the channel. Channel dredging will allow larger vessels to navigate the channel and will improve safety by allowing easier navigation around berths within the channel.</p> | | |
| Project Support | | |
| <ul style="list-style-type: none"> Port Freeport Commission Included in Port Freeport 5-year capital plan U.S. Army Corps of Engineers approved | | |



| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Benefit-cost ratio of up to 4.8 in the Lower Reach and up to 6.1 in the Higher Reach Project would support movement of: <ul style="list-style-type: none"> Containerized goods such as fresh fruit and plastic resin up to eventual 1.5M-2M TEUs Crude oil Offshore service vessels | |
| Operational Impact | |
| <ul style="list-style-type: none"> Reduced vessel waiting times due to berth congestion Increased vessel safety (at berth or in transit) by allowing vessel traffic to easily pass Berths 6, 7, and 8 | |



| Project Details | |
|---|---|
| Port Facility | Port Freeport |
| County | Brazoria |
| Project Status | In Final Design |
| Project Category |  |
| Project Description | |
| This project will construct a fully operational multi-modal facility with 200 acres of parking for cars, trucks, and construction machinery. The project will also establish a warehouse for resin packaging and cross-dock operations. | |

| Funding & Support | |
|--|--------------|
|  Total Cost | \$60,000,000 |
| Need for Funding | |
| Major growth pending in manifest rail moves and roll-on/roll-off (Ro/Ro) cargo of all types necessitates construction of a multi-modal facility to accommodate this growth in phases. Currently 21,000 feet of track are already under construction at Parcel 4. | |
| Project Support | |
| <ul style="list-style-type: none"> Port Freeport Commission Energy and petrochemical industry | |



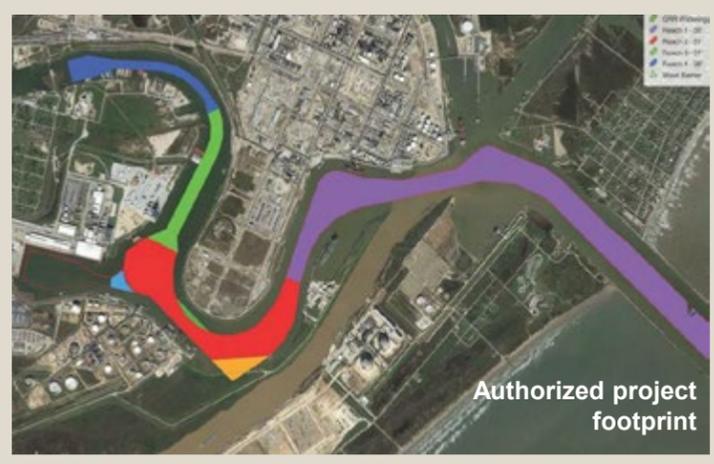
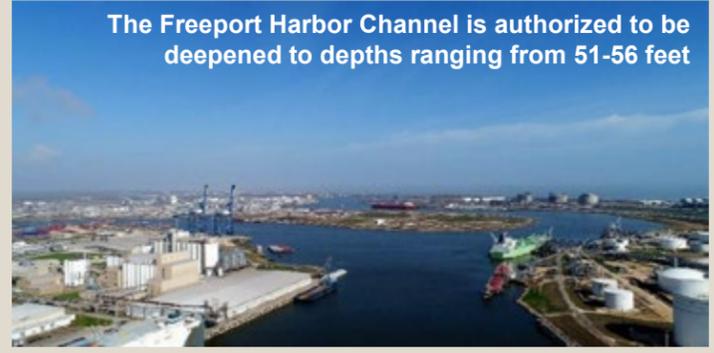
| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Economic Impact Statement calculates \$180 million in economic benefits Additional 80 acres for Ro/Ro cargo expected to support 120 new jobs producing an annual payroll of approximately \$3.75 million per year Facility will have capacity to process 72,000 vehicle equivalent units/year, generating more than \$2 million annually in fees, local purchases, and taxes | |
| Operational Impact | |
| <ul style="list-style-type: none"> Stabilization of Parcel 14 would help the Port manage the growth of its Ro/Ro, plastics and heavy machinery businesses by providing storage and operational capacity for rail operations and loading and unloading of auto, resin and manifest unit trains. Project would support future multimodal movement of: <ul style="list-style-type: none"> Ro/Ro cargo, like autos and construction equipment Project and heavy lift cargo, like cranes Conventional breakbulk and containers Plastic resin | |



| Project Details | |
|---|---|
| Port Facility | Port Freeport |
| County | Brazoria |
| Project Status | In Design |
| Project Category |  |
| Project Description | |
| Congress authorized this project in the Water Resources Reform and Development Act of 2014 (WRRDA 2014) to widen the main channel and deepen it from the 45-foot existing channel depth up to 55 feet. This will accommodate Post-Panamax container vessels and Post-Panamax tankers. | |

| Funding & Support | | |
|---|--------------------|---------------|
|  | Total Cost | \$295,000,000 |
| | Federal Cost Share | \$165,000,000 |
| | Local Cost Share | \$130,000,000 |
| Need for Funding | | |
| In May 2018, voters in the Port Freeport Navigation District approved a \$130 million bond package to support the Freeport Harbor Channel Project. State funding is needed to achieve the approximately 56% matching federal funds requirement for timely completion of the Freeport Harbor Channel project. The additional depth will allow larger vessels to navigate the channel, leading to an increase in cargo volume entering the port. Thousands of direct and indirect jobs and millions of dollars in additional revenue will be created in the area as a result of the finished channel expansion. | | |
| Project Support | | |
| <ul style="list-style-type: none"> Port Freeport Commission U.S. Army Corps of Engineers approved \$130 million general obligation bond package authorized by taxpayers in May 2018 70% of tax base is comprised of industrial/commercial businesses | | |

| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> Benefit-cost ratio of 1.53 \$13.9 million net benefits through transportation cost reduction Could add 15,000-30,000 distribution and industrial jobs within the SH 36A corridor, with 2/3 of these in Freeport \$800 million increase in annual income and sales tax revenues Major commodities impacted by this project are: <ul style="list-style-type: none"> Crude oil, petroleum, and chemical products Containerized goods like consumer products Offshore service and exploration vessel | |
| Operational Impact | |
| <ul style="list-style-type: none"> Will accommodate larger Panamax class vessels Improved safety for all vessels at berth or in transit Accommodates larger vessels and supports more efficient vessel movements. | |



| Project Details | |
|---|--------------------|
| Port Facility | Port Freeport |
| County | Brazoria |
| Project Status | Construction Ready |
| Project Category | |
| Project Description | |
| <p>This project will construct the expansion of the Velasco Terminal to support container and roll-on/roll-off (Ro/Ro) cargo. This project includes the construction of three berths which will add 1,600 feet of berth and a roll-on/roll-off ramp at the port facilities. The terminal will be equipped with five new cranes. Additionally, the project will stabilize the remaining nearby staging area.</p> | |

| Funding & Support | |
|--|---------------|
| Total Cost | \$250,000,000 |
| Need for Funding | |
| <p>Port Freeport is the second largest container handling port in Texas. State funding would support the construction of the Velasco Terminal project, which is being built in phases. The Port will construct berths 8, 9 and 10 to provide additional container and Ro/Ro dock space. Also, the port aims to purchase five state-of-the-art Post-Panamax container cranes and stabilize all backlands.</p> | |
| Project Support | |
| <ul style="list-style-type: none"> • Port Freeport Commission • Energy industry and area petrochemical resin producers • Included in 5-year capital plan | |



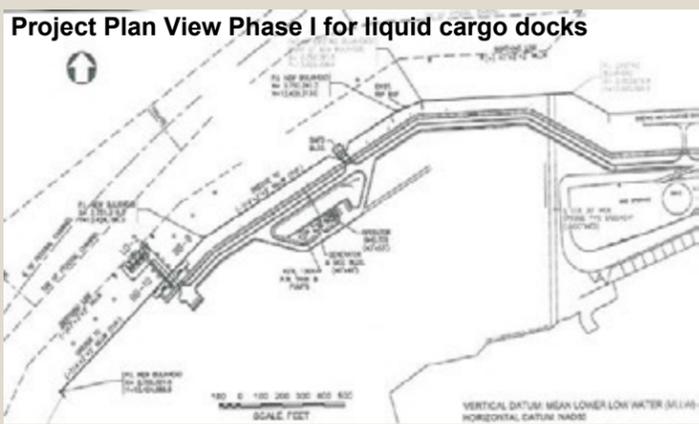
| Project Benefits | |
|---|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> • At full buildout, Velasco Terminal could create 3,182 direct jobs, 2,340 induced jobs and 3,462 indirect jobs • Total personal income would increase by \$544M • Local business revenue would increase by \$405M • Local purchases would increase by \$375M • State and local taxes would generate additional \$424M | |
| Operational Benefits | |
| <ul style="list-style-type: none"> • Provides opportunity for the Port to expand into Panamax vessel operations • Improves Port's overall throughput capability • Project would support movement of: <ul style="list-style-type: none"> - Containerized goods such as fresh fruit and plastic resin up to eventual 1.5M-2M TEUs - Project cargo and breakbulk operations - Heavy lift and containers | |



| Project Details | |
|--|------------------------|
| Port Facility | Calhoun Port Authority |
| County | Calhoun |
| Project Status | Final Design Completed |
| Project Category | |
| Project Description | |
| <p>This project will construct one deep-water berth and two barge berths to support the movement of liquid cargo. The project will also include onshore infrastructure including necessary access roads. This is Phase 1 of a larger project that includes three deep-water berths and six barge berths.</p> | |

| Funding & Support | |
|---|--------------|
| Total Cost | \$62,191,300 |
| Need for Funding | |
| <p>State funding is needed to support the growing demand from existing and new tenants for additional brown water and deep-water facilities for the import and export of petrochemical products and crude oil. The construction includes construction of one deep-water berth (liquid cargo ship dock) and two barge berths (liquid cargo barge docks) along with onshore infrastructure.</p> | |
| Project Support | |
| <ul style="list-style-type: none"> • Calhoun Port Authority Board of Commissioners • The project is being coordinated with current and future industries, tenants, and stakeholders. This project is gaining support from industries quickly. | |

| Project Benefits | |
|---|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> • Creates 50 full time permanent jobs at the Port and locally • Adds to the already \$12.3 billion dollar impact of the port to the State of Texas • Allows local industry to move more product used in manufacturing of plastic and crude oil exports | |
| Operational Impact | |
| <ul style="list-style-type: none"> • Improved cargo movement capabilities • Reduction in vehicle wait times • Improved access • Will reduce truck transport of crude oil on public highways • Docks would support movement of: <ul style="list-style-type: none"> - Crude oil and natural gas condensate - Liquid petrochemical products including those used in plastics manufacturing | |





| Project Details | |
|--|----------------------------------|
| Port Facility | Port of Corpus Christi Authority |
| County | Nueces |
| Project Status | Construction Ready |
| Project Category | |
| Project Description | |
| Congress authorized this project in the Water Resources Reform and Development Act of 2014 (WRRDA 2014) to widen the main channel and deepen it from the 47-foot existing channel depth up to 54 feet. The project will extend from Gulf of Mexico to the Viola Turning Basin. The project will also include widening the channel to 530 feet and include barge shelves for the safe passage of shallow-draft vessels. | |

| Funding | |
|--------------------|---------------|
| Total Cost | \$327,000,000 |
| Federal Cost Share | \$225,000,000 |
| Local Cost Share | \$102,000,000 |

Need for Funding

In September 2017, through the Project Partnership Agreement with the U.S. Army Corps of Engineers (USACE), the Port of Corpus Christi Authority (PCCA) approved accelerating funding of \$32 million to USACE to expedite initial construction.

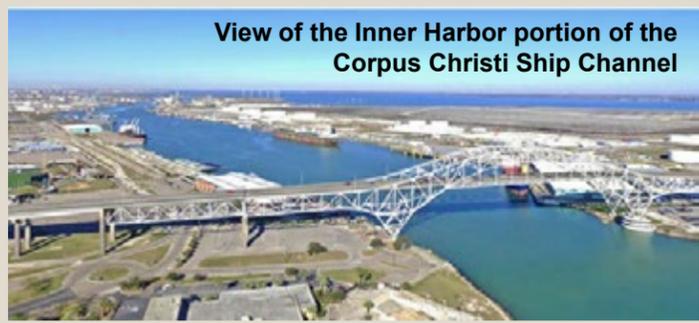
In March 2018, the Port Commission approved a Plan of Finance specifically to support this project. PCCA has developed a robust and aggressive capital improvement program to build new infrastructure to meet these growing demands and to accelerate the deepening and widening of its ship channel.

This channel improvement project is the port's top priority.

Project Support

- Port of Corpus Christi Commission
- Congressional authorization through WRRDA 2014
- U.S. Army Corps of Engineers
- City of Corpus Christi
- Stakeholders within port complex

| Project Benefits | |
|---|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> • Increases goods value exports by nearly \$35 billion annually, reducing the national trade deficit • Increases export of oil and gas, supporting U.S. trading partners and bolstering domestic energy production <ul style="list-style-type: none"> - PCCA exported +\$6 billion of crude oil in 2017 • Provides over \$100 million in annual transportation cost savings, not including crude oil exports • Supports future \$18 billion liquefied natural gas (LNG) liquefaction facility with capacity of 22 million tons annually | |
| Operational Impact | |
| <ul style="list-style-type: none"> • Accommodates deeper draft vessels and allows 2-way traffic without channel closure, which will create an operational advantage and provide for a more secure port through less standby traffic • Deeper/wider channel supports movement of: <ul style="list-style-type: none"> - Petroleum products and crude oil (esp. exports from Permian and Eagle Ford shale production) - Bulk grain including sorghum and corn - Goods for port ranked 4th in U.S. in total tonnage | |



| Project Details | |
|---|--|
| Port Facility | Port of Corpus Christi Authority |
| County | Nueces |
| Project Status | Study Authorization and Agreement Needed |
| Project Category | |
| Project Description | |
| This navigation feasibility study will evaluate the deepening of the Corpus Christi Ship Channel (CCSC) to a maximum depth to support 99% of the world's vessel fleet from the authorized 54-foot depth from the Gulf of Mexico to the La Quinta Junction. This would allow for the accommodation of Very Large Crude Carriers (VLCC) for crude oil export. | |

| Funding | |
|------------|-------------|
| Total Cost | \$3,000,000 |

Need for Funding

The Port of Corpus Christi Authority (PCCA) is the largest crude export port and the 4th largest port in total tonnage in the U.S. The 2015 lifting of the U.S. crude export ban, along with new pipelines from the Permian Basin to the PCCA, will require a deeper and wider ship channel to accommodate safe passage of larger vessels. The greater depth would increase the benefits offered by the 54-foot deepening of the CCSC.

Project Support

- Port of Corpus Christi Commission

| Project Benefits | |
|--|--|
| Economic Benefits | |
| <ul style="list-style-type: none"> • Reduction of transportation costs by allowing larger vessels to carry crude oil fully loaded at berth, avoiding lightering costs at sea • Incentivizes more midstream producers to export crude product out of the port • Benefits Texas crude producers and associated industries (upstream, pipeline, terminal operators, vessels) | |
| Operational Impact | |
| <ul style="list-style-type: none"> • Increases efficiency of transporting goods, as tonnage has increased by 21% with existing customers, and by up to 153% in the Ingleside region • Reduces congestion that would come with increased tonnage growth | |





Project Details

| | |
|------------------|--|
| Port Facility | Port of Corpus Christi Authority |
| County | Nueces |
| Project Status | Study Authorized, Needs Feasibility Cost Share Agreement |
| Project Category | |

Project Description

The 2016 Water Infrastructure Improvements for the Nation (WIIN) Act study for the Corpus Christi Ship Channel includes the La Quinta Channel, a segment of the Corpus Christi Ship Channel system. The study will evaluate the feasibility of deepening the La Quinta Channel to 54 feet to match the authorized depth of the main Corpus Christi Ship Channel.

Funding

| | |
|------------|-------------|
| Total Cost | \$3,000,000 |
|------------|-------------|

Need for Funding

With existing customers, such as Cheniere and Voestalpine, traffic at the La Quinta Channel has increased. By the end of 2017, cargo tonnage has increased by more than 21%. Funding of the La Quinta Channel Deepening Feasibility Study will allow the Port and U.S. companies to significantly increase export capacity and solidify Texas and our nation as a world energy leader.

Project Support

- Port of Corpus Christi Commission
- U.S. Army Corps of Engineers
- City of Corpus Christi
- Stakeholders within port complex

Project Benefits

Economic Benefits

- Reduce transportation costs by allowing fewer, more deeply loaded ships to carry the same projected cargo through La Quinta Channel
- Reduce operating costs for several La Quinta facilities that have experienced significant increases in tonnage, which will boost economic gains in the associated supply-customer chain

Operational Impact

- The resultant project will allow deeper drafting vessels, increases efficiency of transporting goods, reduces vessel calls needed to deliver the same cargo, and reduces congestion that could come with future growth in tonnage
- Deeper channel will support movement of:
 - General and dry bulk cargo like polyethylene and iron ore, iron ore pellets, and hot briquetted iron for steel mills
 - Liquid natural gas exports
 - Larger offshore drilling rigs



View of the La Quinta Ship Channel



1st US crude oil export departing on the Theo T via the Corpus Christi Ship Channel

Project Details

| | |
|------------------|---------------------|
| Port Facility | Port of Brownsville |
| County | Cameron |
| Project Status | In Final Design |
| Project Category | |

Project Description

Congress authorized this project in the Water Infrastructure Improvements for the Nation Act of 2016 (WRDA 2016). This project will deepen 16 miles of the Brazos Island Harbor Ship Channel from its previously authorized depth of 42 feet up to 52 feet. Over 65 million cubic yards of dredged material are expected to be placed in disposal sites and placement areas.

Funding

| | |
|--------------------|---------------|
| Total Cost | \$210,500,000 |
| Federal Cost Share | \$121,000,000 |
| Local Cost Share | \$89,500,000 |

Need for Funding

The Port has experienced strong growth with tonnage on Brazos Island Harbor, nearly doubling from 5,907,000 short tons in 2011 to 10,600,000 short tons in 2017 (a 79% increase from 2011 and a 546% increase from 1990). Foreign imports have been the primary driver, including petroleum, iron, and steel products. There is also a need for deeper transport related to offshore rigs operating in the Gulf of Mexico and servicing in the port. State funding is needed for the channel expansion.

Project Support

- Brownsville Navigation District Commission
- Congressional authorization under WRDA 2016
- Broad community and regional support

Project Benefits

Economic Benefits

- Benefit-cost ratio of 6.4 to 1
- Total average annual benefits of \$20,539,000
- Reduced transportation costs for petroleum product tankers, dry bulk, and iron and steel bulk carriers

Operational Impact

- Increased cargo movement
- Reduced transit times
- Enhances operational safety by allowing deeper, more fully loaded vessels to carry cargo and reduce the number of vessels in transit
- Reduced risk of grounding
- Deeper channel supports movement of:
 - Petroleum products and crude oil
 - Dry bulk material like limestone and sand
 - Fabricated metal, iron ore, iron, and steel
 - Large semi submersible oil rigs – this port and Pascagoula have only dry docks in US for jack-up and semi-submersible rig service



Bird's eye view of channel at Liquid Cargo Dock



Break bulk cargo at Docks 15 and 16



*Front Cover: Port Freeport.
Back Cover: Port of Beaumont.*