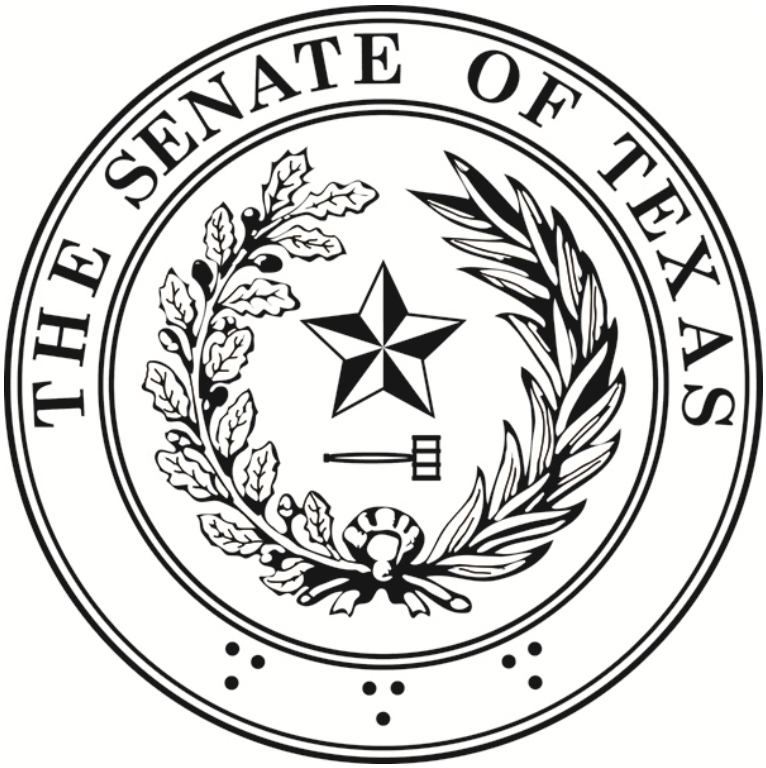
Senate Select Committee on Texas Ports

Interim Report to the 85th Legislature



November 2016

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Senate Select Committee on Texas Ports

November 18, 2016

Dear Members and Fellow Texans:

Enclosed is the interim report for the Senate Select Committee on Texas Ports, commissioned by Lt. Governor Patrick. I would like to thank him for his attention to these essential waypoints of the Texas economy and for the privilege of chairing the Committee. In the past months, my Senate colleagues and I have studied our state's port assets (both coastal and inland hubs) and paid particular attention to the economic impact of the Panama Canal expansion. We have arrived at a number of conclusions on the matter of what our state's economy must do to compete and grow.

Thanks to the tireless efforts of this committee and the enthusiastic support of port authorities across the state, we have a much clearer picture of the unique role Texas ports play in our state's economy. They are indispensable gateways to trade and economic growth which have fueled our state's rise to the top ranking among America's exporting states. That ranking is reflective of our ports' ability to handle more than 20 percent of our nation's total export tonnage. As improvements to the Panama Canal create a flow of larger vessels from distant trading partners, we must ensure Texas ports are equipped to sustain our economic leadership role.

As chairman, it has been my honor to work with a group of Senators who rolled up their sleeves and got down to business, turning a critical eye toward Texas ports, giving each unique location the attention it deserves. We have effectively substantiated the claim that Texas ports are among the best in the world with potential to become even more competitive. These insights and our vision for potential economic growth will drive advocacy efforts in upcoming legislative sessions.

Credit for this successful effort starts with Lt. Governor Patrick, continues through the hard work of committee members and expert witnesses and reaches my staff including Chase Frugé, Adrianne Evans, Tara Garcia and Merek Gamble.

Sincerely,

Brandon Creighton

Brandon Creighton
Texas State Senator, District 4

Senate Select Committee on Texas Ports

November 18, 2016

The Honorable Dan Patrick
Lieutenant Governor of Texas
Members of the Texas Senate
Texas State Capitol
Austin, Texas 78701

Dear Governor Patrick and Fellow Senators:

Thank you for the opportunity to study Texas ports and the opportunities they represent. The Senate Select Committee on Texas Ports of the Eighty-Fourth Legislature hereby submits its interim report including findings and recommendations for consideration by the Eighty-Fifth Legislature.

Respectfully submitted,

Senator Brandon Creighton, Chair

Senator José Menéndes, Vice- Chair

Senator Juan "Chuy" Hinojosa

Senator Lois W. Kolkhorst

Senator Eddie Lucio, Jr.

Senator Jane Nelson

Senator Larry Taylor

Committee Compositions and Proceedings

On February 8, 2016, Lieutenant Governor Dan Patrick created the Texas Senate Committee on Texas Ports to study Texas Ports. The Lieutenant Governor named Senator Brandon Creighton as Chairman, Senator Jose Menendez as Vice-Chairman. The full membership for the committee is as follows:

Senator Juan "Chuy" Hinojosa
Senator Lois Kolkhorst
Senator Eddie Lucio, Jr.
Senator Jane Nelson
Senator Larry Taylor

The committee held its first hearing on May 4, 2016 to gather information directly from leaders of Texas Ports, the Texas Department of Transportation and the Texas Transportation Institute.

In its final hearing on September 15, 2016, the committee heard testimony from industries served by Texas Ports.

Background and History

Maritime Ports

Ports can be classified by depth and the markets they serve: Comprehensive, Specialized and Niche. Comprehensive ports typically handle multiple types of cargo including but not limited to: autos, dry bulk, containers, liquid bulk, and military. Specialized ports normally have all the appropriate equipment to handle large volumes of one type of cargo. Niche ports provide nontraditional services or handle cargo that is very specific.

Table 1 lists our eleven deep water ports and their classification.[1]

TABLE 1 - TEXAS DEEP DRAFT COMMERCIAL PORTS:

Ports	Official Name	Classification	Channel Depth (ft.)	Channel Width (ft.)
Port of Orange	Orange County Navigation and Port District	Niche	30	200
Port of Beaumont	Port of Beaumont Navigation District of Jefferson County	Comprehensive	40	400
Port of Port Arthur	Port of Port Arthur Navigation District	Specialized	40	450
Port of Houston	Port of Houston Authority	Comprehensive	45	530
Port of Texas City	Texas City Terminal Railway Company	Specialized	40-45	1200
Port of Galveston	Board of Trustees of the Galveston Wharves	Comprehensive	45	1200
Port Freeport	Port Freeport	Comprehensive	45	400
Calhoun Port Authority	Calhoun Port Authority	Specialized	36	200
Port of Corpus Christi	Port of Corpus Christi Authority of Nueces County, Texas	Comprehensive	45	300
Port Isabel	Port Isabel-San Benito Navigation District	Niche	36	200
Port of Brownsville	Brownsville Navigation District	Specialized	42	250

Port of Orange: The shallowest on average port on the Sabine- Neches Waterway, Port of Orange is approximately 30 feet deep and 200 feet wide throughout. Classified as a niche port, it is focused on marine services for new construction or repair of tugboats, barges, offshore petroleum platforms and other maritime vessels. The port has 2,300 feet of docking space along four berths with an available 345,000 square feet of warehouse space. In 2014 Port of Orange handled 817,773 tons with annual economic impact of $41.3 million dollars.[2]

Port of Beaumont: Ranking 4th in national tonnage, 6th in foreign trade and 11th in domestic trade, the Port of Beaumont is a comprehensive port handling a variety of cargo including military equipment, forest products, steel, crude oil, aggregate, and bulk grain. With an operating depth of 40 feet across its 400 foot width, the Port of Beaumont accommodates approximately 400 vessel calls per year. The port is one of the state's three strategic ports in the National Ports Readiness Network thanks to the fact it not only handles the greatest amount of military cargo in the nation, but also is the number one commercial outload port. The Port of Beaumont is serviced by three Class One railroads with a rail to ship bulk transfer facility capable loading rate of 10,000 metric tons a day. A recently completed rail facility on the eastern bank of port is equipped with 650 feet of heavy duty wharf space and capacity for two 120 car unit trains to simultaneously transfer crude from rail to barges. When fully developed, the terminal will have the capacity to offload more than 210,000 barrels of crude oil a day. In 2014 the Port of Beaumont handled 87,283,716 (59,937,636 foreign and 34,346,080 domestic) tons of cargo, yielding an annual economic impact $122.2 million. Approximately 970 direct jobs and 730 induced jobs are credited to port activity.[3]

[1] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[2] Ibid
[3] Ibid

Port of Port Arthur: Ranked 20th in national tonnage, Port of Port Arthur is a specialized port handling a variety of forest products including pulp, liner board, dimensional lumber, plywood and wood pellets. As an export commodity, the port is the largest pellet export facility in the Western Gulf and one of the largest in the United States. The commodity has resulted $150 million in private investment and hundreds of jobs throughout East Texas. The port also handles a variety of breakbulk, liquids and project cargo. The port operating depth is 40 feet with a width of 450 feet accommodating 1,183 vessel calls a year. Port assets include 3,102 feet of dock, 48,159 square meters of shed storage, 68,795 square meters of paved open storage. The port rail system includes three wharf rail tracks (150 car capacity), two shed tracks (80 car capacity) and six storage yard tracks (140 car capacity). Port of Port Arthur is classified as one of states three strategic ports in the National Ports Readiness Network services military cargo in support of national defense and humanitarian relief efforts. In 2014, Port of Port Arthur handled 36,669,609 tons of cargo with an annual economic impact $128 million. It is estimated the port contributes 1,509 direct jobs and 1,132 induced jobs.[4]

Sabine Neches Navigation District: The Sabine Neches Navigation District is the non-federal sponsor of the Port of Orange, Port of Beaumont and Port of Port Arthur. Every year, more than 125 million tons of cargo is transported to energy, petrochemical and military users. That cargo includes natural gas, crude oil, gasoline, jet fuel, chemicals, steel, lumber, grain and many other products. Currently, more than $13 billion in economic benefits accrue to Jefferson County via the waterway, along more than 128,000 permanent jobs. Most jobs and businesses in Jefferson County are tied directly or indirectly to the operations of the waterway. The waterway's superlatives include:[5]

- Nation's 3rd largest waterway
- #1 bulk liquid cargo waterway in the nation
- #1 United States crude oil importer
- Projected to become the largest Liquefied Natural Gas exporter in the United States
- Refines a minimum of 13 percent of America's daily fuel consumption
- Stores 55 percent of the nation's strategic oil reserves
- Home of the nation's #1 commercial military outload port
- Refineries along the ship channel produce 60 percent of nation's commercial jet fuel and produce the majority of United States military jet fuel

Port of Houston: Ranked 2nd in national tonnage, 1st in foreign trade and 2nd in domestic trade, the Port of Houston is largest port in Texas. The port operating depth is 45 feet with a width of 530 feet accommodating 230,927 vessel calls a year. The Port of Houston includes 150 different entities along the upper 26 miles of the Houston Ship Channel. Private industry, including petrochemical manufacturing and refining, comprises the majority of port activity. In 2014, tonnage handled at Port of Houston was 239,311,317 (foreign tonnage: 165,543,723; domestic tonnage: 73,767,594; total container cargo: 2,130,544 TEUs (Twenty-foot Equivalent)) with an annual economic impact $264.9 billion. It is forecasted 56,113 direct jobs and 80,451 induced jobs are credited to port activity.[6]

The Port of Houston Authority serves as the federal government's local partner to help maintain the Houston Ship Channel. The Port of Houston Authority has developed nationally recognized terminals which includes operating seven public terminals that handle roughly 20 percent of the Port of Houston's

[4] Ibid
[5] Sabine Neches Navigation District, "The Waterway," (2016), http://www.navigationdistrict.org/about/the-waterway/
[6] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)

total cargo. The Authority operates the largest container terminals in the Gulf Coast, handing 95 percent of waterborne containers in Texas and 67 percent for the United States Gulf.[7]

Port of Texas City: Ranked 15th in national tonnage, the Port of Texas City is a privately-owned facility handling mostly rail transits of crude, refined petroleum products and petrochemicals. The port operating depth is 40-45 feet with a width of 1,200 feet, allowing it to accommodate roughly 29,000 loaded railcar transits a year. The port operates 31 miles of track including switching operation terminals within six miles of the main yard. In 2014, tonnage handled at Port of Texas City was 37,884,949 with an annual economic impact $919.5 million. It is projected 4,452 direct jobs and 4,293 induced jobs are credited to port activity.[8]

Port of Galveston: Ranked 52nd in national tonnage and the 4th busiest cruise port in the nation, the Port of Galveston is both a comprehensive port and the oldest commercial port in the state. Along with cruise activity, the port handles a variety of other cargo including wind power equipment, agriculture equipment, fertilizer, lumber and bulk grain. The Port of Galveston is the leading port on the Gulf of Mexico for roll-on roll-off vessels, which transport automobiles and other wheeled vehicles. Galveston is home year round for four cruise ships and is currently expanding one of its cruise terminals to accommodate larger cruise ships. Port officials guesstimate that it creates 12,878 jobs for Texas of which 3,042 are direct jobs. In 2015, 5.6 million tons of cargo and 1.67 million cruise passengers moved through the port.[9]

Port of Freeport: Ranked 31st in national tonnage and 26th in foreign trade, the Port of Freeport is a comprehensive port handling such cargos as chemicals, clothing, crude, food, Liquefied Natural Gas (LNG), paper goods, automobiles and resins. The port operating depth is 45 feet with 70 feet of berth available and a width of 400 feet accommodating 800 vessel calls, 135,000 units of truck traffic and 50,000 railcar transits a year. Serviced by one Class One Railroad, the port has 186 acres of developed land and approximately 7000 acres of undeveloped land. The 18 operating births work in conjunction with several new post-Panamax cranes. The Freeport LNG import/export terminal has been approved and is under construction. The Freeport Harbor Channel has received authorization through the Water Resources Reform & Development Act 2014 (WRRDA) to be deepened to 55 feet and the port also has plans to expand its container terminal. In 2014, tonnage handled at Port of Freeport was 22,883,000 with an annual economic impact $46.2 billion. It is speculated 16,400 direct jobs and 16,400 induced jobs are credited to port activity.[10]

Calhoun Port Authority: Ranked 48th nationally in tonnage handled, Calhoun Port Authority is a specialized port handling chemicals, fertilizers, petroleum products and bauxite. The port operating depth is 36 feet with a width of 200 feet accommodating 243 ship and 790 barge calls, 500 units of truck traffic and 1000 railcar transits a year. Port assets include three liquid cargo docks, one dry bulk dock, one general cargo dock for project cargo, heavy equipment capabilities for roll-on roll-off vessels, 25,000 square feet of dockside warehouse and transit shed, and a barge dock with an out-loading conveyor. The Calhoun Port Authority is located approximately 40 miles from the Eagle Ford Shale. Currently two midstream oil and condensate terminals are under construction to enable the export of crude oil and provide a supply to United States refiners.[11] In 2014, tonnage handled at Port Calhoun Authority was 11,257,626 (7,943,624

[7]Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Roger Guenther, Executive Director Port of Houston Authority.)
[8]Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[9] Ibid
[10] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[11] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Charles Hausmann, Port Director, Calhoun Port Authority.)

foreign and 3,323,002 domestic) with an annual economic impact $7 billion. It is estimated 5,300 direct jobs and 4,590 induced jobs are credited to port activity.[12]

Port Corpus Christi: Ranked 6th in national tonnage, 9th in foreign trade, and 8th domestic trade, the Port of Corpus Christi is a comprehensive port handling crude oil, petrochemicals, petroleum coke and grain. The port operating depth is 45 feet with a width of 300 feet accommodating 7600 vessel calls and 18,803 railcar transits a year. Port assets include 620,000 square feet of covered storage, more than 125 acres of open storage, 12 public oil docks, 295,000 square feet of covered dockside storage and direct vessel to rail discharge capabilities. The La Quinta Terminal alone sits on 1,100 acres and has a new state of the art multi-purpose dock and container facility with 180 acres of container storage. When complete, the New Harbor Bridge will provide 205 feet of clearance for larger vessels, greatly enhancing access to the port. A LNG export terminal is currently under construction on the La Quinta Channel. After the United States recently lifted the ban on exporting crude oil, the first exports of Texas crude oil left through the Port of Corpus Christi on December 31, 2015. In 2015, tonnage handled at Port of Corpus Christi was 103,478,088 with an annual economic impact $13.1 billion. It is forecasted 13,746 direct jobs and 15,607 induced jobs are credited to port activity.[13]

Port Isabel: The Port Isabel - San Benito Navigation District is classified as a niche port handling pipe for offshore oil and gas, sand and aggregate. The port operating depth is 36 feet with a width of 200 feet accommodating 100 vessel calls and 500 units of truck traffic a year. Port assets include 726 acres of waterfront land, 45 acres of open storage, 1,150 feet of deep-water docks, and 2,100 feet of deep-water frontage available. The port owns five total docks including two cargo docks, two oil docks, and one roll-on roll-off dock. In 2014, tonnage handled at Port Isabel was 50,000 with an annual economic impact of $85.6 million. It is projected that 605 direct jobs and 343 induced jobs are credited to port activity.[14]

Port Brownsville: Ranked 67th in national tonnage, the Port of Brownsville Navigation District is classified as a specialized port handling steel products, iron ore, petroleum products, lubricants, limestone, asphalt, aluminum and minerals. The port operating depth is 42 feet with a width of 250 feet accommodating 1,140 vessel calls, 36,557 units of truck traffic, and 36,082 railcar transits a year. Port assets include approximately 40,000 acres of land available for development, 20 docks (15 cargo and 5 liquid), 635,000 square feet of covered storage, and over 3 million square feet of open storage. The Port of Brownsville hosts a shipyard specializing in constructing and refurbishing offshore drilling rigs. The port is also the nation's leader in ship recycling. In August 2015, Brownsville opened its state-of-the-art cargo dock, funded in part through a $12 million TIGER grant through the United States Department of Transportation. In 2015, tonnage handled at the Port of Brownsville was 7,149,036 with an annual economic impact of $2 billion. Conservative estimates credit some 11,230 direct and induced jobs to port activity.[15]

Strategic Ports: The United States Maritime Administration has designated the Port of Beaumont, Port of Port Arthur, and the Port of Corpus Christi as strategic ports in its National Port Readiness Network, which supports deployment of United States military forces during defense emergencies. The Port of Beaumont handles military equipment shipped to and from Fort Hood and the Red River Army Depot and is recognized as the world's busiest military port.[16]

[12] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[13] Ibid
[14] Ibid
[15] Ibid
[16] Ibid

Table 2 lists our six shallow water ports and their classification.[17]

TABLE 2 - TEXAS SHALLOW-DRAFT COMMERCIAL PORTS:

Port/ Navigation District	Official Name	Classification	Channel Depth (ft.)
Cedar Bayou	Cedar Bayou Navigation District, Chambers-Liberty Counties Navigation District	Niche	11
Port of Bay City	Port of Bay City Authority of Matagorda County, Texas	Niche	12
Port of Palacios	Matagorda County Navigation District No. 1	Niche	12
Port of Victoria	Victoria County Navigation District	Specialized	12
Port of West Calhoun	West Side Calhoun County Navigation District	Niche	12
Port of Harlingen	Port of Harlingen Authority	Niche	12

Port of Bay City: The Port of Bay City Authority of Matagorda County is classified as a niche port, operating at a depth of 12 feet with a width of 200 feet. Port assets include approximately 300 acres of land available for industrial development, a terminal in a turning basin, a metal terminal shed, a liquid cargo dock with valves and pipeline connections. There are plans and a permit in place to develop additional land adjacent to the Gulf Intercostal Waterway into a barge terminal, currently priced at $25 million to complete. The port handles 2,014,623 of tonnage a year.[18]

Port of Palacios: The Port of Palacios, or Matagorda County Navigation District No. 1, is classified as a niche port, primarily handling shrimping, fishing and the manufacturing and fabrication of tugboats and barges. The port operating depth is 12 feet with a width of 400 feet. Port assets include four turning basins with 13,000 linear feet of dock, two recreational marinas, and over 800 acres of developable land. The Port of Palacios provides an annual economic impact of $41.2 million. It is speculated that port activity has created 541 direct jobs and 43 induced jobs.[19]

Port of Victoria: Ranked 70th in national tonnage, The Victoria County Navigation District is a specialized port primarily handling crude oil, condensate, chemicals, agricultural products and frac sand. The port operating depth is 12 feet with a width of 125 feet accommodating 5,711 vessel calls a year. Port assets include a new industrial park with multi-modal access, new fleeting area, and a new lighting system that allows for 24-hour cargo operation. In 2015, tonnage handled at the Port of Victoria was 6,986,985 with an annual economic impact of $6.6 billion. It is estimated that 21,000 direct and induced jobs are credited to port activity.[20]

Port of West Calhoun: The West Side Calhoun County Navigation District, or the Port of West Calhoun, is a niche port operating at a depth of 12 feet. The port contains berths for both for commercial seafood productions and oil and gas exploration. The waterway is used for industrial products including petroleum coke and chemicals.[21]

Port of Harlingen: The Port of Harlingen Authority is a niche port, primarily handling liquid fertilizer, sand, aggregates, gasoline, diesel, ethanol, raw sugar, cotton, sorghum and corn. The port operating depth is 12 feet with a width of 125 feet, annually accommodating 218 vessel calls, 939 units of truck traffic, and 161 railcar transits. Port assets include 650 feet of dry/liquid cargo wharf and 100 feet of dry bulk wharf, five smaller docks, and over 150 acres of open storage. In 2015, tonnage handled at the Port of Harlingen was 900,000 with an annual economic impact of $19.3 million. It is forecasted that 40 directs jobs and 44 induced jobs are credited to port activity.[22]

[17] Ibid
[18] Ibid
[19] Ibid
[20] Ibid
[21] Ibid
[22] Ibid

Table 3 lists ports that do not handle cargo.[23]

TABLE 3 - TEXAS FISHING AND RECREATIONAL PORTS:

Port/Navigation District	Official Name
Port of Sabine Pass	Sabine Pass Port Authority
Anahuac	Chambers-Liberty Counties Navigation District
Rockport / Fulton / Cove	Aransas County Navigation District No. 1
Port of Port Mansfield	Willacy County Navigation District

Navigation Districts are often political subdivisions of the state and are not directly affiliated with any specific port. Table 4 list remaining navigation districts.[24]

TABLE 4 - OTHER NAVIGATION DISTRICTS:

Navigation District	Function
Sabine-Neches Navigation District	Non-federal sponsor for the Sabine-Neches Waterway
Cypress Valley Navigation District	Recreation and conservation
Galveston County Navigation District No. 1	Owns and operates the Pelican Island Bridge
Jackson County Navigation District	Manages pipeline easements across Lavaca and Navidad Rivers
San Patricio County Navigation District	Marina

Inland Ports

Defined as centers of trade activity on inland rivers, lakes and waterways, inland ports have existed for over 250 years in the United States. This definition changed subtly in the late-1980s when developers started promoting the beneficial impacts of abandoned military bases and airports. Interest was stimulated in the mid-1990s not only in air cargo but also by rail service from Southern Californian ports handling Asian trade through Los Angeles and Long Beach deep water terminals. Texas inland ports are likely to develop at locations where value can be added to traded products, where there is a significant density of trade trucks on nearby highway trade corridor segments, and where good access exists to major Texas gateways, such as traditional ports of entry on the Texas border, major sea ports, or airports. Dallas/Fort Worth and San Antonio present such locations.[25]

Fort Worth Alliance Airport: The development of inland ports grew significantly when Hillwood Corporation started operating its 18,000 acres Fort Worth campus (Alliance Texas) and landed the first Texas intermodal terminal on the BNSF trans-con route. The BNSF Railway terminal currently occupies around 367 acres on the property. The Alliance Texas development also includes a number of corporate campuses, office complexes, shopping, entertainment venues, residential housing, schools, and churches.[26]

Multimodal Access

Alliance Texas provides access to three modes of transport: rail, air, and truck. Alliance Texas is located on IH 35W with direct access to SH 114 and SH 170 and in close proximity to IH 20, IH 30, and IH 40—major trade corridors in Texas. On the western border of Alliance Texas, BNSF operates an intermodal rail yard where containers can be loaded, unloaded, or transferred between rail and truck**.** The facility conducts approximately 650,000 lifts per year, and it is projected that this number will increase to 1 million as the market grows. Union Pacific's tracks run along the far eastern border of Alliance Texas's near Roanoke.

Fort Worth Alliance Airport—a dedicated freight airport—is near the center of the park. The airport has two runways: 8,200 and 9,600 feet in length. The airport has 3.5 million square feet of cargo-handling

[23] Ibid
[24] Ibid
[25] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (testimony of Mike Berry, Hillwood Properties.)
[26] Ibid

ramp/tarmac surface space. On-site Customs and Border Protection offices reduce clearing times for international flights.[27]

Economic Benefits
More than 425 companies reside at Alliance Texas, and more than 44,000 workers are employed there. The economic impact of Alliance Texas in the North Texas region has been estimated at more than $59 billion.[28]

Port San Antonio: Port San Antonio is located approximately six miles southwest of downtown San Antonio at the site of the former Kelly Air Force Base, which fell prey to the Base Realignment and Closure Commission in the 1990s. Port San Antonio is a private—although publicly supported—economic redevelopment/reuse project. The overall redevelopment is a broad-based project that includes air and rail freight components and transit-oriented housing development.[29]

Multimodal Access
Port San Antonio provides access to three modes of transport: rail, air, and truck. US 90 runs east-west just north of the airport. IH 35, IH 10, and IH 37 are in close proximity to the inland port. IH 35 provides north-south freight access and IH 10 to the northeast makes east-west connectivity available. IH 37 is also in close proximity to Port San Antonio and links the inland port to the Port of Corpus Christi. Port San Antonio's East Kelly Railport is 350-acre facility on the eastern side of the development. San Antonio Central Railroad provides switching services to Union Pacific Railroad and BNSF Railway in Port San Antonio. The Railport can accommodate 20,000 railcars per year. Kelly Field is a joint-use civilian/military runway. The runway is owned and operated by the United States Air Force at Lackland Air Force Base. The Kelly Field runway is 11,500 feet long and can accommodate large and heavy aircraft. Port San Antonio recently invested in an 89,600-square-foot air cargo terminal capable of accommodating up to four Boeing 747s.[30]

Economic Benefits
Approximately 12,700 workers are directly employed at Port San Antonio in the aerospace, Air Force, logistics, government support, and other industries such as educational services and equipment repair. Between 1997 and 2012, more than $476 million has been invested in Port San Antonio to result in more than 13 million square feet of warehouse, distribution, office and related facilities. In 1995, the annual economic benefits of Kelly Air Force Base to the region were estimated at $2.5 billion. In 2010, the economic benefits of Port San Antonio were reported to be more than $4.2 billion per year.[31]

Gulf Intracoastal Waterway

The Gulf Intracoastal Waterway (GIWW) stretches 1,100 miles along the Gulf of Mexico from Brownsville, Texas to St. Marks, Florida. Texas Department of Transportation (TxDOT) was designated as the non-federal sponsor of the GIWW in the 1975 Texas Coastal Waterway Act. In 1983, Texas and the federal government signed a sponsorship resolution detailing the non-federal sponsor's duties, which have been defined in Chapter 51 of Texas Transportation Code. TxDOT primarily assists the United States Army Corps of Engineers (USACE) in the acquisition of land, easements and rights-of-way for the disposal of dredged material. The GIWW is federally authorized to be 125 feet wide and 12 feet deep. Marine transportation along the GIWW provides a safer and more efficient alternative to roadways based upon ton-

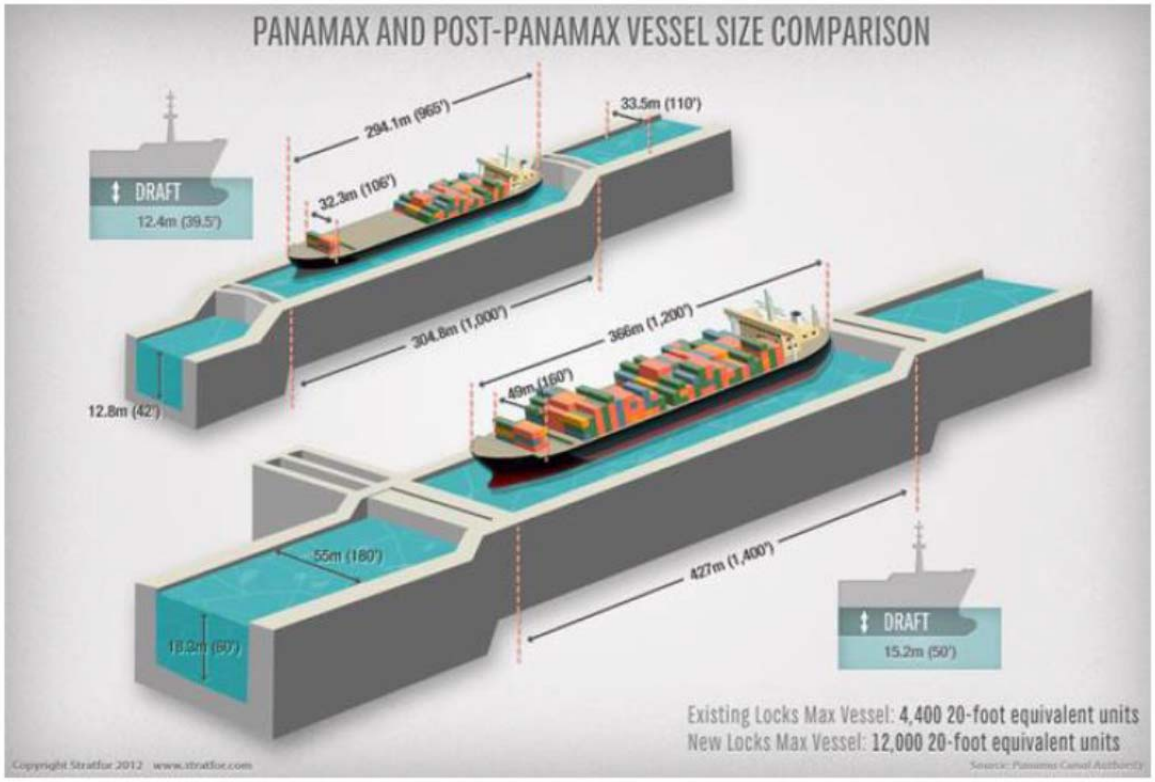
[27] Texas Department of Transportation, Texas Freight Advisory Committee, "Inland Ports: Economic Generators in Texas?" (August 22, 2013) https://ftp.dot.state.tx.us/pub/txdot-info/freight/meetings/082213-inland-port-white-paper.pdf
[28] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (testimony of Mike Berry, Hillwood Properties.)
[29] Texas Department of Transportation, Texas Freight Advisory Committee, "Inland Ports: Economic Generators in Texas?" (August 22, 2013) https://ftp.dot.state.tx.us/pub/txdot-info/freight/meetings/082213-inland-port-white-paper.pdf
[30] Ibid
[31] Ibid

miles of cargo transported. One liquid cargo barge can transport the same amount of freight as 46 rail cars and 144 trucks.[32] Accidents along the GIWW are infrequent and generally occur at intersections with ship channels where traffic increases and barges and their towboats must cross shipping lanes. Some stakeholders claim the GIWW lacks sufficient federal funding for the necessary dredging. Periodic maintenance dredging, at least with currently available funding, has not been sufficient to maintain the authorized depth of the waterway. Shoaling, the accumulation of sand or sediment in the waterway, occurs with increasing frequency in certain areas, generally due to weather, leading to inconsistent depths along the length of the GIWW. The size of individual barges and towboats, the volume of traffic, shortage of mooring areas and the cost of dredging have all steadily increased over the life of the GIWW, exacerbating the challenges faced by waterway operators.[33]

Panama Canal

The Panama Canal underwent a major expansion project that opened June 26, 2016. The expansion has increased the maximum size of ships able to pass through it as well as the overall volume of freight transported via the canal. The expansion project involved constructing two new sets of locks, one on the Pacific Ocean and one on the Atlantic Ocean side of the canal. The project also included the deepening of the navigable waterway to match the depth of the new locks.

The old locks can handle ships up to 106 feet wide, 965 feet long, and 39.5 feet of draft. Now expanded, the Panama Canal will be able to accommodate vessels up to 180 feet wide, 1,400 feet long, and 60 feet of draft. Panama Canal expansion allows container ships with nearly triple the current capacity, as well as a new generation of LNG and bulk carriers, to transit the canal. For a container ship, capacity will increase from 4,400 TEUs containers to 13,000 TEUs.[34]



[32] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[33] Texas Department of Transportation, 2016-2017 Legislative Appropriations Request.
[34] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)

Port Authority Advisory Committee

Under Chapter 55 of the Texas Transportation Code, the Texas Transportation Commission appoints members to the Port Authority Advisory Committee (PAAC). The committee provides a forum for the exchange of information between the Transportation Commission, TxDOT and committee members representing the port industry in Texas and others who have an interest in ports. The committee's advice and recommendations provide the commission and the department with a broad perspective regarding ports and transportation-related matters to be considered in formulating department policies concerning the Texas port system.

The Transportation Commission appoints seven members to the committee with staggered three-year terms unless removed sooner at the discretion of the commission. The commission appoints one member from the Port of Houston Authority of Harris County, three members from ports located on the upper Texas coast and three members from ports located on the lower Texas coast.[35]

Port Capital Program

One of the PAAC's main objectives is developing the Port Capital Program's annual report highlighting port projects and port needs submitted by the Texas public ports. The 2017-2018 Port Capital Program report will be available for the 85th Legislature.[36]

Members

Eduardo A. Campirano Port Director Port of Brownsville Lower Coast Representative	**John LaRue** Executive Director Port of Corpus Christi Lower Coast Representative
Mike Mierzwa Port Director Port of Galveston Upper Coast Representative	**Chris Fisher** Port Director Port of Beaumont Upper Coast Representative
Roger Guenther Executive Director Port of Houston Permanent Member	**Jennifer Stastny** Executive Director Port of Victoria Lower Coast Representative
Larry Kelley Deputy Port Director Port of Port Arthur Upper Coast Representative	

[35] Chapter 55 Transportation Code

[36] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)

Texas Ports Industry

Texas Ports serve a diverse industry providing access to domestic and international freight. Texas ranks second in the nation for waterborne commerce, moving more than 506 million tons of cargo in 2014. Texas ports also receive more than one-quarter of the total foreign tonnage handled in the United States.

According to a study prepared for the Texas Ports Association (TPA) documenting the economic impacts of the Texas ports and maritime industry, seaport activity had a total economic value of $287.1 billion and generated more than $6.5 billion in local and state tax revenue in 2011.[37] More than 112,100 jobs were directly generated by port activity. Texas ports and waterways connect the Gulf of Mexico, one of the world's most important oil and gas production and refining regions, to statewide, national, and international markets.

TPA is currently in the process of updating the study on the economic impact of the individual ports. Meanwhile, TxDOT is contracting with Texas Transportation Institute to produce a comprehensive statewide economic analysis of the Texas maritime system. The final report is expected to be completed in January 2017. This study will include the development of an economic investment model that will estimate the economic impacts and the return on new investment for port facilities within the Texas maritime system.

There are many Texas industries that rely on ports. Agricultural products and livestock from Texas farms and ranches are exported to foreign countries through Texas ports. The petrochemical industry relies on ports to export and import the products it makes and needs. Many industries move equipment and machinery through Texas ports, including industrial and agricultural equipment and wind turbine components. Domestically-manufactured automobiles are exported through Texas ports, and many foreign vehicles are imported and distributed to dealers all over the country after arriving at Texas ports. Gulf Coast seafood is transported inland to consumers after being caught and processed at Texas ports. Finally, vacationers embark on cruise vacations from Texas ports.[38]

Liquefied Natural Gas

The United States historically has not produced enough natural gas to be in a position to export. However, that changed in the mid to late 2000's with the shale plays and the increased amount of production across the country, including the Eagle Ford and Barnett in Texas. The United States and Texas now have a supply of natural gas that can be exported without causing a significant price increase for domestic consumers. This shift of natural gas production has afforded Texas a unique opportunity to take the lead in global energy supply by providing a safe and secure supply of natural gas to the world, while creating economic prosperity at the same time.

In February of this year, history was made when the first cargo of Liquefied Natural Gas (LNG) was exported from the continental United States from Cheniere's Sabine Pass Terminal on the Texas-Louisiana border. This is the first large scale export facility in the lower 48 states and is currently the only one in operation.

By the committees hearing on September 15th 2016, 20 cargos of United States LNG have been exported from Sabine Pass, including four through the newly expanded locks at the Panama Canal. They have been shipped across the globe to a variety of countries including Chile, Argentina, Brazil, Spain, Portugal, UAE, Kuwait, India and China.

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[37] Texas Ports Association, 2011 Economic Impacts of State of Texas Ports and Maritime Industry. https://www.texasports.org/

[38] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Port Association.)

There are currently five facilities that are fully permitted and under construction in Texas, Louisiana and Maryland, with several others awaiting approval from the Federal Energy Regulatory Commission (FERC).[39]

LNG Export Terminal Projects in Texas[40]

Under Construction

- Freeport LNG — Freeport, TX
- Corpus Christi Liquefaction — Corpus Christi, TX

Filed FERC Application

- Golden Pass LNG — Port Arthur, TX
- Texas LNG — Brownsville, TX
- Rio Grande LNG — Brownsville, TX
- Annova LNG — Brownsville, TX

FERC Pre-filing Stage

- Port Arthur LNG — Port Arthur, TX

Economic Impact of LNG Exports in Texas[41]

LNG might adequately be described as "the next big thing" in the Texas economy. Studies have found that expanding LNG markets will generate as much as $86 billion in net benefits to the United Sates economy and reduce America's trade deficit by up to $60 billion.

According to a recent study by ICF International:

- LNG exports will help create 155,000 jobs in Texas by 2035
- LNG exports will generate $31.4 billion in income in the State of Texas by 2035
- Texas was ranked #1 for each of those statistics

Corpus Christi Liquefaction Project Estimates:

- Direct Jobs
  - Peak 4,000 construction jobs
  - 430 permanent jobs at terminal
- Indirect & Induced Jobs
  - Construction activities will support on average 18,000 Texas jobs per year over seven years
  - ~3,600 jobs per year in the Coastal Bend region supported from ongoing facility operations
  - Help support approximately 50,000 Texas jobs when considering the natural gas development needed to meet the facility's demand
- Economic Impacts
  - $2.7 billion to South Texas GDP and $1.8 Billion in wages to regional workers during construction
  - Over $5 billion annual economic impact to the state once operational, when factoring in the natural gas development needed to meet the facility's demand
  - Reduce the United States trade deficit by up to $15.8 billion per year

[39] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Matt Barr.)
[40] *http://www.ferc.gov/industries/gas/indus-act/lng/lng-proposed-export.pdf*
[41] *Data derived from The Perryman Group, "The Anticipated Impact of Cheniere's Proposed Corpus Christi Liquefaction Facility on Business Activity in Corpus Christi, Texas, and the US: 2015 Update," June 2015.*

Impact of Panama Canal Expansion on LNG Exports

The Panama Canal expansion is expected to help boost exports of natural gas from the Gulf Coast to markets across the globe, specifically emerging markets in Asia. The newly expanded navigation channels and locks are estimated to allow the canal to accommodate 90 percent of the world's LNG tankers, as opposed to before the expansion, when the Canal could only handle smaller tankers that accounted for just 6 percent of the global LNG fleet. The Energy Information Administration (EIA) estimates that the traffic increase from tankers carrying United States natural gas through the canal could exceed 550 vessels annually by 2021 - or one to two vessels per day.[42] The Panama Canal expansion decreases the shipping distance from the Gulf Coast to Asia from 16,000 miles to approximately 9,000 miles. This equates to a 10-14 day difference in travel time, depending on route and destination. The travel time from the United States Gulf Coast to Japan is now approximately 20 days, compared to the 34 days when ships had to travel around Africa's Cape of Good Hope or 31 days through the Suez Canal. There have been reports that state the cost savings for a typical round trip voyage to Asia could be near one-third.[43] Additionally, the wider canal will shorten United States LNG shipments to South America, where several of the first shipments from Sabine Pass have already landed. Before the expansion was complete, Chile received cargos in 23 days, as opposed to 12-13 days for more recent cargos that traveled through the Canal.[44]

Chemical Industry

According to the Texas Chemistry Council, the chemical industry has more than $100 billion in physical assets in the state, paying over $1.5 billion annually in state and local taxes and over $20 billion in federal income taxes. Chemical companies provide over 75,000 direct jobs and over 400,000 indirect jobs to Texans across the state. Texas is the largest chemical producing state, exporting over $47 billion annually which makes the chemical industry the #1 non-energy export in Texas. In light of the recent downturn of the oil market in our state, the chemical industry has continued to see substantial growth due to the Texas shale economy providing for low-cost natural gas feedstock which is the key raw material for thousands of chemical products that improve the quality of life for billions of people around the world. Over the last 5-6 years, there have been 84 new chemical industry projects announced in Texas, totaling over $45 billion in new investment, which are expected to be completed by the year 2020. These new projects alone will create more than 150,000 new jobs for Texans and generate $1.8 billion in state tax revenue.[45]

[42] *http://www.usatoday.com/story/money/columnist/2016/07/03/new-panama-canal-big-boon-lng-exports/86471838/*

[43] *http://www.eia.gov/todayinenergy/detail.cfm?id=26892*

[44] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Matt Barr.)

[45] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Scott Stewart, Texas Chemical Council.)

Issues and Findings

Challenges for Texas Ports

Texas ports are critical engines for both the Texas and national economy, offering a mix of significant needs and opportunities for improvement. Fully leveraging the potential of Texas ports will require a concerted effort toward maintaining, improving and developing new port infrastructure, including channels, harbors, turning basins, terminals and landside access. Together they will drive the economic competitiveness of Texas ports.

Like Texans themselves, each Texas port is unique. Each has its own infrastructure challenges, each contemplated in the context of funding. While some ports have the ability to fund infrastructure developments, many Texas ports, particularly the smaller ports, have difficulty in this area. Channel improvements also have significant positive economic impacts on port regions. However, the federal authorization process can prove burdensome for some ports.

Harbor Maintenance Tax is a federal user fee imposed on shippers, based on the value of goods shipped through United State ports. The revenue collected is deposited in the Harbor Maintenance Trust Fund (HMTF) to provide funding for maintaining ship channels. Revenues are about $1.6 billion each year. Historically, much of the revenue collected is not appropriated for harbor maintenance; instead, Texas ports have received less than 25 percent of the revenue collected in the state. Spending from the HMTF account must be considered through the Congressional budget cycle which includes funding levels proposed through the President's Budget and ultimately Congressional appropriations.[46]

Channel Improvement[47]

Channel projects are a federal responsibility, but they require a non-federal sponsor to pay part of the cost of the project (usually in the 35–50 percent range). Typically, a state agency or port authority arranges for the non-federal portion, although in the case where two or more ports share a waterway, a separate non-federal sponsoring entity may be established as the coordinator (e.g., the Sabine-Neches Navigation District which coordinates on behalf of Beaumont, Orange, and Port Arthur). Such projects are usually very costly and require a lengthy permitting process.

There are 17 congressionally authorized channel projects in the 11 states, 8 of which are actually being constructed at this time. Five of the 17 currently authorized channel projects are in Texas. Four of the five projects are in a holding pattern awaiting appropriations from the United State Congress. The Port of Houston decided to pay 100 percent of the cost of their project. The four projects on hold are estimated to cost just under $2 billion, of which at least $800 million must be borne by non-federal interests. The projects are: the Sabine-Neches Waterway, Freeport ship channel, Brownsville ship channel, and Corpus Christi ship channel.

A navigation district is expected to provide the required non-federal share in each case. Florida has six projects. The state contributed $24 million to Port Canaveral and $112 million to the Port of Miami. The other four require local entities to pay the non-federal share. In Georgia, the state government has committed to paying the entire non-federal share of $266 million for the Port of Savannah project. South Carolina has set aside $300 million for the Charleston project, although the General Assembly will have to authorize any expenditures from the fund. North Carolina will pay $3.7 million for a small project at

[46] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[47] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Transportation Institute.)

Wilmington. It appears that Pennsylvania will pay all or most of the $117 million non-federal share for the deepening of the Delaware River. In Massachusetts, the state included $65 million (roughly 2/3) of the non-federal share for the Port of Boston in a $2.2 billion environmental bond bill.

To recap, 7 of the 17 projects are receiving state funding to cover all or a large portion of the non-federal share, while 10 are expected to be funded at the local level; five of the 10 are in Texas, four are in Florida, and one is in Mississippi.

Table 1 summarizes the cost of each project, the direct state contribution to the project (apart from the port authority's contribution), and the source of the funds.

Table 1. Summary of Active Ship Channel Projects

State	Channel Improvement Project	Estimated Total Cost (Millions)	State Contribution (Millions)	Source of State Funds
Texas	Sabine-Neches Waterway	$1,114	0	N/A
	Brownsville Ship Channel	$251	0	N/A
	Corpus Christi Ship Channel	$353	0	N/A
	Freeport Ship Channel	$239	0	N/A
	Port of Houston Ship Channel	$80	0	N/A
Mississippi	Bayou Casotte Channel Widening (Pascagoula)	$40	0	N/A
Florida	Tampa Ship Channel Widening	$36	0	N/A
	Jacksonville Ship Channel	$601		N/A
	Jacksonville Mile Point	$37	0	N/A
	Port Everglades Ship Channel	$320	0	N/A
	Port Canaveral	$41	$24	Strategic Port Investment Initiative
	Port of Miami	$206	$112	Florida Department of Transportation budget
Georgia	Savannah Harbor Expansion	$706	$266	Bonds
South Carolina	Charleston Harbor Deepening	$510	$300	General revenues
North Carolina	Cape Fear River Widening and Realignment	$15	$4	
Pennsylvania	Delaware River Deepening	$334	$15	General revenues
Massachusetts	Boston Harbor Deepening	$311	$65	Environmental Bond Program

Ongoing Direct and Indirect Funding[48]

Four states provide little or no ongoing direct support (Texas, Georgia, South Carolina, and North Carolina). Among the states that do provide direct funding, there is a wide range of funding levels.

[48] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Transportation Institute.)

Table 2 summarizes the mechanisms the various states use.

Table 2. Summary of Direct Assistance Mechanisms

State	Program	Source of Funds
Alabama	Constitutional Amendments 666 and 796	Oil and gas capital payments and state general obligation bonds
Florida	Florida Seaport Transportation and Economic Development Program	General revenues
	Strategic Port Investment Initiative	State Transportation Trust Fund
	Florida Ports Financing Commission	Revenue bonds
	Seaport Investment Program	State Transportation Trust Fund
	State Infrastructure Bank	Federal with state-matched funds; bond proceeds; general revenues
	Strategic Intermodal System Program	Not yet defined
Georgia	None	
Louisiana	Port Construction and Development Priority Program	Appropriations to Transportation Trust Fund
	Capital Outlay Plan	State general obligation bonds
Massachusetts	Seaport Advisory Council	Environmental bond funds
	Rivers and Harbors Grant Program	General revenues
Mississippi	Port Revitalization Revolving Loan Program	State general obligation and limited obligation bonds
	Marine Transportation Capital Improvement Program Fund	General revenues
North Carolina	None	
Pennsylvania	Direct appropriations	General revenues
	Pennsylvania Intermodal Cargo Growth Incentive Program	Multimodal Transportation Fund
South Carolina	None	
Texas	Port Access Account Fund	General revenues (no money appropriated to date)
Virginia	Commonwealth Port Fund	Transportation Trust Fund

Texas: Currently, there is no state funding mechanism for Texas ports. In 2001, the Texas Legislature amended the Transportation Code to create Chapter 55—Funding of Port Security, Projects, and Studies. The chapter created the Port Access Account Fund, which was intended to be the vehicle by which the state could invest in port infrastructure. However, to date there have been no appropriations to the account. During the 83rd Texas Legislature, SB 971 made ports eligible to use Transportation Reinvestment Zones (TRZs) as a funding tool. Four port authority TRZs have been created—three in Jefferson County and one in Cameron County. They are all inactive at this time.[49]

The 84th Legislature included Rider 48 in the General Appropriations Act, which authorized using up to $20 million from the Texas Mobility Fund (TMF) for the 2016-2017 biennium to provide for port capital improvement projects selected by the PAAC and approved by the commission. This rider marked the first time that funding for ports was included in the state budget. However, Rider 48 included a signing message from Governor Greg Abbott that recognized the value of our Texas ports to the Texas economy but cited concerns regarding the constitutionality of using TMF for port capital projects. TxDOT worked with the

[49] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Transportation Institute.)

ports to ensure that the projects selected for the Rider 48 money were publicly accessible roadways that enhanced port connectivity.[50]

Florida: Florida has 15 public sea ports. The state's main financing program is the Florida Seaport Transport and Economic Development Program (FSTED), which resides within the Florida Department of Transportation. It was originally set up to be an annual $8 million seaport grant program for financing port transportation projects on a 50/50 matching basis. It has now grown to $25 million annually. Additionally, the Strategic Port Investment Program (SPIP) has a $35 million annual floor for bigger port projects such as dredging, bringing the total annual amount to $60 million. In the last legislative session an additional $93 million was appropriated for specific port projects. According to press releases from the governor's office, Florida has pumped almost $800 million into port projects since 2011.[51]

Louisiana: The Louisiana public ports system is comprised of 39 public authorities with wide-ranging charters. Within this group, there are six deep-draft ports handling domestic and international freight movements. There are 20 shallow-draft ports (inland and coastal) and 13 emerging ports enabled by legislation that are not developed or operational. The 2014 Regular Session of the Louisiana Legislature established an Office of Multimodal Commerce and created a Commissioner of Multimodal Commerce.

Port Construction and Development Priority Program
The main funding mechanism for direct support is the Port Construction and Development Priority Program. The purpose of the port program is to ensure that adequate landside facilities are available to meet a definite market need. The funding for the program is the Transportation Trust Fund, which was approved as a constitutional amendment in January 1990. Feasibility studies are required to the Louisiana Department of Transportation and Development (LaDOTD) for proposed projects and the projects must be prioritized. LaDOTD furnishes the House and Senate Committees on Transportation, Highways, and Public Works a prioritized list of projects. Approved projects may receive up to $15 million over three years. The ports are responsible for engineering costs and 10 percent of construction costs. Additionally, projects must have a rate of return on the state's investment of at least 2.375 and a benefit-cost ratio greater than 1.0. To date, $544,804,467 has been allocated, which has allowed funding of 171 projects, of which 162 have been completed or have been substantially completed.

LaDOTD Capital Outlay Plan
The Capital Outlay Plan is a bond program that provides a source of funding for public improvement–type projects not eligible for funding through any of the dedicated funding programs. The funds are provided through the sale of state general obligation bonds and can be used for acquiring lands, buildings, equipment, or other properties, or for the preservation or development of permanent improvements. Seven port projects have received funding of almost $46 million under this program.

Tax Credits
Louisiana created a Port of Louisiana Tax Credits Program in 2011, but as of 2015 no businesses had received a tax credit under the program.[52]

Other States: Other states have direct funding programs that are not as aggressive as Florida's or Louisiana's. They include Alabama, Massachusetts, Mississippi, Pennsylvania, and Virginia.[53]

[50] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Department of Transportation.)
[51] Economic Impact Study: Hearing before Senate Select Committee on Texas Ports, 2016 Leg., 84th Interim (Tex. 2016) (written testimony of Texas Transportation Institute.)
[52] Ibid
[53] Ibid

Recommendations

After studying Texas ports and those in neighboring states, we discovered a set of similarities between operations and aspirations. Every state handles its port infrastructure needs in different ways. Florida and Louisiana seem to offer the most comprehensive models for appropriating state funds to ports on an ongoing basis.

Texas ports are responsible for over 30 percent of the Texas gross domestic product and are integral to the Texas manufacturing and energy miracle that sustained the Texas economy through the depths of the economic downturn. However, Texas ports and manufacturing face an unprecedented competitive threat as ports in neighboring states are beating Texas in the race to improve their depth and infrastructure to meet the opportunities created by the new, deeper Panama Canal. Texas cannot afford to fall behind.

With uncertainty of the business climate and labor availability in competing states, we need to insure that Texas continues to be the obvious place for the world maritime business.

One might argue that each port's geographic location makes it a stand-alone governmental entity, but we must recognize that their waterways make Texas accessible to the world. To take advantage of the Panama Canal expansion, Texas waterways must be dug deeper.

Channel projects occur only once in every few decades. However, they are extremely expensive. Generally, Texas navigation districts are currently expected to pay the non-federal share without state assistance. While other State's have fewer ports and often support their ports with direct appropriations to fuel their economic engine, Texas ports are entirely self-supporting. Even with the unprecedented need for billions of dollars of infrastructure investment, Texas ports have indicated they are prepared to meet the challenge and only seek the ability to access favorable loans from the state for channel improvements.

The Senate Select Committee on Texas Ports believes that this is a session to create the parameters of a fund which will provide loans similar to the Texas Mobility Fund for port infrastructure. Given that the major infrastructure plans for Texas ports will likely not commence before 2019, it is possible to set up the structure of the fund in 2017 and determine actual funding in a future legislative session.