

Port of Houston Authority Bayport Cruise Terminal Transformation Into a Ro-Ro Terminal: A Business Success

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Abstract

Port of Houston Authority Bayport Cruise Terminal Transformation Into a Ro-Ro Terminal: A Business Success

Cruising out of the Port of Houston is almost as old as the port itself. The first regular passenger service was inaugurated in December 1922. Modern cruise business began in 1997 when Norwegian Cruise Line ("NCL") began service out of the Port of Houston Authority's Barbours Cut Terminal. The cruises proved so popular that as plans for a new container terminal at Bayport were developed, a larger cruise terminal was included. A successful bond election to finance construction of Bayport was held in 1999 and planning for the new facilities, including a new cruise terminal, went into full swing. Unexpectedly, NCL pulled its ship out in 2000 but returned in 2003, and ground was broken at Bayport in 2004. Suddenly NCL left again in 2007. After spending \$108 million (approximately a third each for the building, the dock and the utilities), the cruise terminal was ready in 2008 with no cruise lines to use it. After years of trying to generate business for the cruise terminal, Port Houston's management realized that continuing to do so would not yield favorable results.

This paper examines the Port of Houston's experience in the cruise business, and how the Port of Houston Authority turned its investment into a successful new business opportunity. It took a careful, step-by-step strategy based on creativity, flexibility, thorough research, intelligence gathering and solid marketing.

About the Author

Patrick Nwachokor serves as Senior Market Research Analyst for the Commercial Division at the Port Houston Authority ("Port Houston" or "Port Authority"). In this role, he directly oversees the market research area of Port Houston's marketing and external communications group.

Mr. Nwachokor's professional experience before joining the Port Authority in 2007 consists of various positions in the private sector. He oversaw operations while he served as the General Manager for the privately-owned company, DW Consulting Company, LLC. He also served as the Global Product Manager at Pennzoil—Shell Oil Products JV and ConocoPhillips JV—where he was responsible for global product management, international marketing, development of market entry strategies, new product development/launch, advertising, and new business development.

Prior to joining Pennzoil, he was a Physical & Quality Control Specialist at the ExxonMobil Baytown Refinery, where he evaluated petroleum products including lube oils, waxes, and hydrocarbon fluids as well as various blends and grades of specialties products.

He received a B.A. from Cheyney University of Pennsylvania and an MBA from Houston Baptist University. He sits on the board of Texas Southern University's Maritime Industry Advisory Academy and is also a member of the American Association of Port Authorities Maritime Economic Committee.

In addition, Mr. Nwachokor has been involved in numerous community charities and outreach programs.

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Introduction

The cruise business is often considered an_enticing addition to any port's business portfolio. It provides a connection to local consumers who are otherwise inconvenienced, sometimes by trucks transporting containers and other cargo, as well as by industrial environments that are perceived to be dirty and dangerous. Instead, a cruise homeport stimulates visions of exotic romantic locations.

However, the cruise industry is also fickle, as a cruise homeport is subject to the whims of the cruise ship companies. Increased competition for passengers creates slimmer profit margins. Despite sailing full, a cruise ship can easily be repositioned to more profitable locations, leaving ports high and dry.

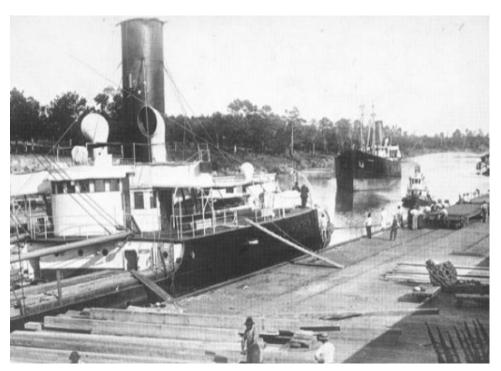
Port Houston was a homeport for cruise lines off and on for nearly 20 years. It has now moved on to lease its former cruise facility for a more traditional and much more profitable business line. This is the story of how that came about.

History of the Port of Houston

In 2014, the greater Port of Houston, consisting of the Port Authority plus over 150 privately-owned docks and facilities, celebrated 100 years as a deep-water port. It is one of the nation's most important economic assets. Although at first blush Houston might not seem a logical location for a deep-water port, enormous public support and perseverance drove it to attain that status, and the investment paid off handsomely for Houston, Harris County and Texas.

In 1836, four days after the Allen Brothers bought a league of land—7,214 acres southeast of the junction of Buffalo and White Oak Bayous, they enthusiastically announced their new town site in the pages of the *Telegraph and Texas Register,* christening it "Houston" after Sam Houston, who became president of the Republic of Texas. The two brothers were not altogether honest in their August 30, 1836 advertisement of the new community:

Vessels from New Orleans to New York can sail without obstacle to this place, and steamboats of the largest class can run down to Galveston Island in eight or 10 hours, in all season of the year. It is but a few hours' sail down the bay, where one might take an excursion of pleasure and enjoy the luxuries of fish, fowl, oysters and sea bathing. Galveston harbor being the only one in which vessels drawing a large draft can navigate must necessarily render the island the great naval and commercial depot of the country.¹ Why did the Allen Brothers brag so greatly about being able to "sail without obstacle to this place"? Throughout history, the destiny of mighty cities has hinged on



their access to water transportation. The new Houston, more than 50 miles from the Gulf of Mexico, needed to be able to trade with the rest of the country and the world by using water, the most economical means of transit.

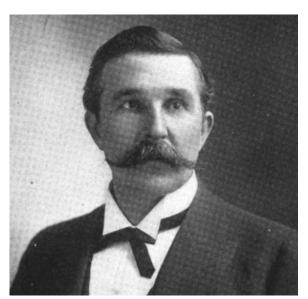
To convince skeptics that Buffalo Bayou was indeed navigable, the Allen brothers offered \$1,000 to the captain of the steamship *Laura M.* to carry supplies and settlers from Galveston to Houston. The ship passed a few tents and rough shelters without the captain realizing that they were already at the "prosperous" city of Houston.



This shallow draft port was sufficient in the early days of Houston. Larger loads were offloaded near Galveston onto barges for the long and winding

trip along Buffalo Bayou, proving more costly due to having to transfer the cargo onto larger ships at Galveston.

Congress sent funds for surveys and some dredging, but never enough. The waters from the Gulf of Mexico to Houston are very shallow. Galveston Bay is only nine feet deep, and Buffalo Bayou is shallower than that. Bayous and rivers flow into them bringing much sand and silt. Engineers recognized that any ship channel to Houston would require constant maintenance dredging to ensure safe passage by ships. Local Houston business leaders sent a steady stream of information to their representatives in Washington to prove the financial necessity for a ship channel. They pointed to the many international customers who depended on Texas cotton. But it was



not until the combination of Mother Nature's fury, plus the discovery of oil, and a young congressman's dedication that Houston's maritime destiny was fulfilled.

During the 1890s, U.S. Representative Tom Ball spent countless hours trying to convince his congressional colleagues to support a

deep-water port for Houston. Convincing his colleagues and securing the necessary funds proved very difficult until Mother Nature stepped in.



In September 1900, a devastating hurricane slammed into Galveston and created one of the worst disasters in American history. More than 8,000 residents lost their lives and much of the island city and

its businesses were swept away by the waves. Galveston's busy port was destroyed.

Ball's arguments for a protected port 52 miles upstream from Galveston's exposed position took on greater meaning. Congressional momentum gathered behind Houston's deep-water aspirations, and the channel's depth was increased to 18.5 feet. Galveston had attained a depth of 25 feet by 1890, and Houston needed to match that depth to keep pace with the changing needs of business. With the discovery of oil at nearby Spindletop in 1901 and crops such as rice beginning to rival the dominant export crop of cotton, Houston's channel needed the capacity to handle newer and larger vessels.

Congressman Ball proposed a revolutionary concept. He suggested that Houston share the cost with the federal government for dredging a deep-water channel to Houston. Congressional Rivers and Harbors Committee chairman D.S. Alexander and the other congressional committee members were amazed by the bold proposal from Houston. The congressmen voted unanimously to accept the idea, which became known as the Houston Plan, and remains the model for funding large federal infrastructure projects to this day.

The Harris County Houston Ship Channel Navigation District was thus formed in 1911, and a campaign was launched to persuade voters to approve \$1.250 million in tax bonds to pay for the District's share of the waterway. No campaign to date had ever been conducted more passionately, and the voters carried the measure by a majority of 16 to one. Despite voter enthusiasm, the bonds needed to be sold. Unlike today, such financial instruments were little known then by prospective buyers, and the banks and brokers weren't interested because of the small commissions they could earn.

Jesse H. Jones, fondly known as Mr. Houston, took it upon himself to ask each Houston bank to accept the bonds. In just 24 hours, he persuaded each bank to buy its share. It was one of the best investments Houston ever made.

Work on the deep channel commenced in 1912. The laborers took a keen interest in similar precedent-setting maritime projects of the time such as the Gulf Intracoastal Waterway, and the 51-mile long Panama Canal. On the morning of September 7, 1914, the dredge *Texas* signaled by whistle the completion of the channel.

A celebration to match this long-sought accomplishment followed. A downtown parade was held and 40 blocks were strung with a new invention – incandescent lights. A ceremony to open the channel was held Tuesday morning, November 10, 1914. Dignitaries gathered at the Turning Basin in great anticipation.

Thousands of people attended the ceremony, which was marked by a 21-gun salute. From his office in Washington, D.C., President Woodrow Wilson fired a cannon via remote control to officially mark the channel as open for operation.



The growth of Houston's port was phenomenal, and the faith of the city's citizens in this venture proved more than

worthwhile. In 1919, only 157 ships called at the Port of Houston, carrying 1,247,972 tons of cargo. In 1930, 2,108 ships carried 14,538,452 tons to Houston's docks. The port ranked third in foreign exports, and its customers included almost 80 shipping lines making regular calls.

By the start of the Great Depression, 40 oil companies had located offices in Houston. The downtown skyline still reflects many of these great oil corporations. In 1908 the Texas Company (now Texaco) built a skyscraper at Rusk and San Jacinto. Humble Oil and Refining Co. (now ExxonMobil), and Gulf Oil Corp. (now a part of Shell Oil), moved to Houston in 1917. Sinclair Oil Co. built the first major refinery in 1918 — 700 acres along the Houston Ship Channel.

By 1925, the ship channel had been dredged to 30 feet to accommodate the 27-foot draft of oil tankers. By 1935, it reached 34 feet.

In 1947, the U.S. Army Corps of Engineers recommended that the channel be deepened to 36 feet. Along the Houston Ship Channel, petroleum companies took over the wartime industrial plants and began producing peacetime products. The synthetic rubber industry was the leading edge of the new petrochemical industry that soon flourished at the Port of Houston

During the 1950s, railroad improvements were made, and new wharves and transit sheds were built. In 1958, the U.S. Army Corps of Engineers recommend a depth of 40 feet.

The shipping container forever changed the shipping of goods throughout the world, and the Port of Houston played a modest role in making that happen.

As the story goes, the head of a trucking company, Malcolm McLean, sat waiting all day while the cargo was unloaded from his truck and onto a ship. McLean watched this time-consuming task and wished that his truck could simply be picked up and placed on the ship instead. The more he thought about it, the more it made sense.

McLean bought two oil tankers and transformed the trucks' trailers so that they could be stacked on his new ships. On April 26, 1956, the world's first container ship, the *Ideal X* carrying fifty-eight 35-foot containers and her normal liquid cargo, sailed from New York

to Houston, and the shipping industry was transformed. Today, the Port of Houston handles 68 percent of the containerized cargo in the U.S. Gulf.



In 1961, the Port of Houston became a deciding factor in the government's selection of Houston as NASA's new headquarters.

By 1969, the first container shipments from Houston went to Europe, and soon a new 16-acre container marshalling yard had to be built because so much containerized cargo was coming through Houston. The Port Authority gambled on the continued growth of the containerized cargo business. The Port Commission, as governing body of Port Houston, announced in August 1970 their intention to build a marine terminal at Barbours Cut that would handle only containerized cargo.



Covering more than 600 acres, with a 40-footdeep sea channel, a 1600-foot turning basin and 17,141 feet of berthing space, the new terminal's cost was projected at \$100 million. The first berth

in the container terminal at Barbours Cut that opened in 1977 was the only facility of its kind in the Gulf of Mexico, and transformed Port Houston into the largest container port on the U.S. Gulf Coast.

The final berth opened at Barbours Cut in 1990, and almost immediately, the Port Authority ran out of room due to the continuing rapid growth in the use of containers.

In 1999, Harris County voters authorized issuance of \$387 million in tax bonds for the first phase of a new \$1.2 billion container terminal at Bayport which would triple the Port Authority's container handling capacity. It would also include a new cruise terminal for the Port of Houston.

History of Cruising from the Port of Houston

Cruising out of the Port of Houston is almost as old as the port itself.

The first regular passenger service was inaugurated in December 1922. Several ships, including the *Schleswig Holstein*, the *Nord Schleswig* and the *Nord Friesland*, all of the Ozean Line, sailed from Houston to Hamburg, Breman and Vera Cruz on a monthly basis.

By August 1924, two new steamers were added to this fleet, the *Rio Bravo* and the *Rio Panuco*. They called on Vera Cruz and Southampton. The Compagnie Generale Trans-Atlantique, a French line, began providing direct passenger service between Houston and France in July 1924. The return voyage included Spain, the Canary Islands and Cuba.

In the late 1930s, the Morgan Line-Southern Pacific Railroad partnership moved freight and passengers by rail from the West Coast and then on to New York from Houston by coastal steamer.

By 1940, the *SS Algonquin* sailed every other Wednesday between Houston, Miami and New York. This vessel was owned by Clyde-Mallory Lines. Also during the 1940s, the Lykes Brothers Steamship Co., Inc. had regular passenger service to Cuba, Puerto

Rico, Panama Canal, and Columbia from the Port of Houston. Lykes' routes greatly expanded once World War II ended and their vessels returned from military use.

Aviation soon took over the task of moving passengers from one part of the United States to another part of the country or the world. This is when the modern cruise industry developed into a vacation industry, transporting passengers to foreign and tropical destinations while providing entertainment onboard throughout the voyage. The television series "The Love Boat" brought the image of fun, romance and excitement into homes throughout America. As consumer demand grew, so did the ships and the services provided. The number of amenities onboard grew along with the size of the ships.



Houston was a logical port for cruise lines: easy access for a large drive up market of 17 million customers within a 300-mile drive and also excellent transportation connections, especially for vacationers from the Western half of the U.S. who could avoid having to catch red eye flights to the east coast.

Houston's port was closer to transportation connections than Galveston's and the cruise industry took notice.

Norwegian Cruise Lines made Houston a home port in May 1997, with weekly departures on the *Norwegian Star* from a facility rapidly assembled within months by the Port Authority at the Barbours Cut Container Terminal. The 800-passenger ship sailed on what became a very popular, seven-day "Texaribbean" itinerary that included Cancun and Cozumel in Mexico, and Roatan in the Bay Islands of Honduras. Business was so brisk that on December 13, 1998, NCL's 1,518-guest *Norwegian Sea* replaced the *Star* for the weekly cruises.

The cruises remained popular, and the ships sailed full for three years. NCL then shifted the ship to a different home port. It was not because business was soft, but because NCL did not have enough ships.

In 2001, Royal Olympic Cruises brought its 836-passenger *Olympia Voyager*, one of the world's fastest ships at the time, to Houston. Unexpectedly, it shifted the ship in May 2002 despite initial promises of year-round voyages from Houston. The cruise line had been experiencing financial difficulties and finally collapsed in 2004. Royal Caribbean International announced it would bring the *Splendour of the Seas* to Houston in fall 2002 but the cruise line decided to go to Galveston instead.

NCL returned in 2003 and resumed its popular seven-day Texaribbean cruises using the *Norwegian Sea* during the winter season. Sailings all left at capacity. NCL's contract was for three years beginning in November 2003. The Port Authority expected the cruise business would continue to flourish. It had no reason to think otherwise at the time. In fact, NCL wanted Port Houston to expand its facilities so that NCL could increase its presence out of Houston. When the Port Authority received its federal permit to build Bayport in January 2004, plans were already complete for the containerized cargo facility to include a new cruise terminal. Ground was broken at Bayport on June 21, 2004.

The Bayport Cruise Terminal was designed to be a low profile, turquoise facility with an arched roof and emerald green glass throughout the structure to emulate the gentle waves of Galveston Bay. Modern and convenient, passenger access from parking and covered drop-off areas is immediately adjacent to the front of the terminal. With parking for up to 800 cars, the facility had everything a cruise terminal needed to succeed.



The 96,000 square-foot facility was designed for efficient passenger flow. The 12,500 square-foot embarkation lounge could hold up to 55 check-in stations and seating for 600. The 31,000 square-foot luggage lay down area leads to the 5,000 square-foot Customs and Border Patrol (CBP) area with 10 CBP booths. After check-in,



passengers moved to the second floor of the terminal to an elevated passenger gangway. The wide, unrestricted wharf allowed for quick loading of provisions aboard the ship.



The Bayport Cruise Terminal's proximity to restaurants and hotels and access to both Houston regional airports made it an ideal point of embarkation. The state-of-the-art facility combined visual appeal, passenger convenience, accessibility and innovative security systems. Restaurants, hotels and tourist destinations in nearby coastal communities were anxious to reap the rewards of increased tourism to the area that the cruise ships promised to bring. While construction of the new cruise terminal continued, so did cruises out of the Port of Houston. In 2004, the *Norwegian Sun* was temporarily deployed to Houston after Hurricane Katrina immobilized New Orleans. In 2005, NCL replaced the *Norwegian Sea* with the *Norwegian Dream*. Both ships sailed beyond capacity with 182,019 passengers on 53 voyages during the 2004-2005 season.

The new cruise terminal became operational in 2008, but NCL's three-year commitment was over and not renewed. Beautiful, sleek and modern, the cruise terminal sat empty except for six weeks after Hurricane Ike hit the Gulf Coast. Galveston's cruise terminal was damaged during the storm so the new Bayport cruise terminal temporarily hosted Carnival Cruise Lines' *Ecstasy* and *Conquest* ships. Despite a dedicated full-time Port Authority staff member who spent years trying to land a cruise line for Houston, the beautiful new facility had no commitment as homeport for a dedicated cruise line.

By 2011, with the cruise terminal still empty, some local news media and elected officials began to question why the facility was ever built. Costs for security, utilities, and repayment of the construction bond added up. The Texas Senate placed the Port Authority under Sunset Review to investigate activities by port management including its efforts in securing cruise business for the terminal. In its written response to the Texas Senate's question "What key obstacles impair your agency's ability to achieve its objectives?", the Port Authority responded:

"The Port Authority continues its long-term efforts to attract another cruise operator. Challenges impede the Port Authority's efforts to bring a cruise line to the Bayport Terminal, including possible issues related to the cruise industry and general market conditions. Beyond a cruise line, the Port Authority staff is also exploring alternative uses for the cruise terminal property, to produce sufficient revenues to offset the facility's operating costs."

A further question, "What are your agency's biggest opportunities for improvement in the future?", elicited this response about the Bayport Cruise Terminal:

"The Port Authority continues to work to fully optimize this asset. In addition to frequent outreach to all cruise lines, staff is exploring various alternative uses of the cruise terminal and the adjacent property."

In the final report dated July 2013, the Sunset Advisory Commission included a recommendation that expanded information about the cruise terminal be disclosed on the Port Authority's website.

The pursuit of the cruise business continued in earnest, and the Port Authority announced on November 15, 2012 that not just one, but two cruise lines were initiating service from Bayport. Princess Cruises brought the *Caribbean Princess* for the 2013-2014 cruise season for 27 departures, while Norwegian Cruise Lines said it would return for the 2014-2015 season for 75 calls over three years with the *Norwegian Jewel*.



The Port Authority negotiated incentives for this cruise business, considering that this might be mostly a break-even venture, although the promise of economics benefits to the local community seemed attractive. According to a Martin Associates study in 2013 for Port Houston, a single cruise line would generate an annual economic impact of \$50 million including local purchases of \$3.6 million. A total of 222 jobs would be affected, including the creation of almost 100 new jobs. An estimated \$941,000 annually in state and local taxes would be generated.

Princess and Norwegian received subsidies of \$685,000 and \$6 million, respectively, for providing service out of Houston. If Norwegian extended its stay two more years, it would receive \$2 million more in incentives. Neither cruise line would pay rent or

docking fees to use the facility. They also received \$80,000 per departure in marketing support. The terminal was also used for alternative purposes to generate revenue.

The Port Authority continued to seek alternative business options along with seeking cruise business. Local businesses adjacent to the cruise terminal reported business growth and job creation.

Passengers flocked to these cruise opportunities. In 2013, 26,904 passengers passed through the Bayport cruise terminal. By 2014, the number grew to 107,672. In 2015, it peaked at 125,856 passengers.

Despite the generous incentives, neither cruise line returned for the 2016-17 season. Both lines redeployed their ships to Florida. Monty Mathisen, managing editor of *Cruise Industry News*, reported Norwegian's decision to drop Houston for 2016-17. He told the *Houston Chronicle* that it was likely that Bayport was not profitable enough. "It's no secret, they're going to put the ships where they can make the most money, and I guess Houston's not fitting in to that picture."²

When asked by the *Houston Chronicle*, Princess Cruises spokesman Brian O'Connor said, "We move our ships around all the time, and Asia has become kind of a new emerging market for the cruise industry. Asia, as well as Australia." To serve the growing Australian market, Princess moved the *Emerald Princess* there from Florida and then shifted the *Caribbean Princess* to Fort Lauderdale. "It made more sense for

us to have our Caribbean business concentrated in one port," O'Connor said. "When you look at us having a need to move one of our ships to Australia, the review of our economics sort of starts over. I wouldn't say we found any downsides (to Houston)."³ The Port Authority realized that its cruise business was over when the two cruise lines announced that they would not be returning to Houston after April 2016. The Port Commission voted on July 25, 2016 to sell the terminal's passenger gangway.

The Limitations of the Cruise Industry

The Port of Houston did seem like a logical choice for a cruise homeport. It was accessible to a large market as Houston is the nation's fourth largest city. Once the cruise business arrived, it had no trouble filling its ships with eager passengers. Being much more industrialized, Houston's port may not have been the most scenic destination for some folks. In addition, with competition from the port of Galveston, Houston may not have been as profitable for the cruise lines as some other homeports. Even with Port Houston's incentives to NCL and Princess, the economic development benefits to be reaped by all parties appeared untenable.

Houston is not alone in spending to accommodate cruise business. News reports in 2012 called Mobile, Alabama's cruise terminal a failure. Carnival Cruise Line decided to use Mobile as a homeport for its smaller cruise ship *Holiday*. After spending \$20 million to build a cruise terminal, business was so good that Carnival brought in a larger ship, *Elation*. But just like Houston, Mobile's business was not enough and Carnival moved its ship to New Orleans in 2011. Mobile started scrambling to make annual bond payments of \$1.86 million, but had little revenue to use other than tax dollars. The bond won't be paid off until 2030. After five years and an additional investment of \$4.1 million for security upgrades, parking deck repairs, improved drainage, signage and exterior lighting, Carnival returned to Mobile with a 13-month agreement, according to <u>AL.com</u>.⁴ Time will tell if the investment pays off.

Other ports have also had to make adjustments. The <u>Vancouver Observer</u>⁵ reported that the city of Vancouver, after considerable spending, found itself no longer a homeport for cruises to Alaska. Instead, the business moved to a renovated cruise terminal in Seattle where the business grew from no ships in 1999 to an all-time high of 223 in 2010. Vancouver went from 254 ships in 2008 to 228 in 2015.

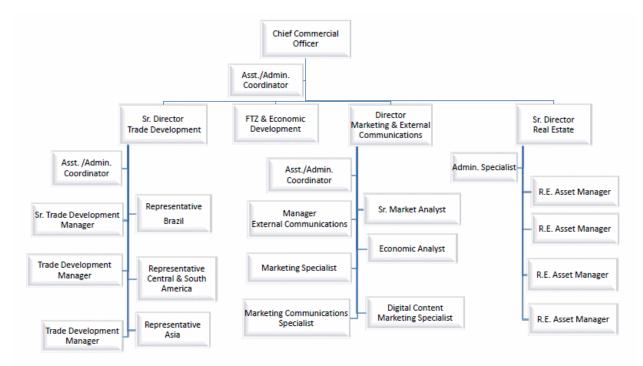
Vancouver has salvaged the situation by relying on cruise ship visits due to the U.S. Passenger Vessel Services Act of 1886. According to *Business Vancouver*, this law "requires foreign-flagged cruise ships that leave a U.S. port to touch a foreign port outside of North America before arriving at a second U.S. port. Passengers on ships that sail to a second U.S. port must stay on the ship until they return to the sailing's departure port."⁶ That's fine if you are sailing from Seattle to Alaska and stop in Canada along the way. However, if your cruise is from Seattle to Hawaii, then the cruise ship must first sail to Canada and then to Hawaii. That adds time and money. Instead, passengers can leave from Vancouver and sail directly to Hawaii, leaving them more time in Hawaii and less time getting there.

Other communities have declined to pay the price to increase their cruise business. Some 75% of Key West voters resoundingly rejected a referendum to study the feasibility of dredging and widening their channel to accommodate larger cruise ships. Opponents argued that the cost and impact on the environment was too high for the revenue that might be generated by larger cruise ships, according to a November 21, 2013 ABC News report.⁷ While south Florida ports continue to see robust cruise business, other ports are subject to the whims of the cruise industry with ships staying for a season and then abruptly moving to a different homeport. In addition, the economic development aspects may never materialize for communities. Cruise ships are self-contained vacations for one price. Some passengers never disembark, much less spend money for a meal when the meal onboard the ship is free with the cost of the voyage. For avid cruisers, the joy is often experiencing the ship, not the destination or the ports of call along the way. For Houston, the solution was to get out of the cruise business altogether.

How the Bayport Cruise Terminal Became a Ro-Ro Facility Instead

Although the Port Authority had been looking for alternative uses for the cruise terminal during its hunt for new cruise business, the process took on new meaning when Princess and NCL determined in late 2015 that neither would return to Houston after April 2016.

The Trade Development group within the Commercial Division was assigned the task of evaluating what could be done with the property and what business could be attracted there without investing any further in its infrastructure. The property consisted of a 96,000 square-foot building with one 1000-foot berth, 36 paved acres, and nearly 100 acres at full build out.



Trade Development Division Organizational Chart

The Trade Development group has always been well-staffed with seasoned professionals. Utilizing a careful, step-by-step strategy based on thorough research, intelligence gathering and solid marketing, the fate of the cruise terminal soon changed. The first step was a brainstorming session to determine a potential new business list for the facility. Possibilities that the facility could not support were eliminated immediately. For example, using the facility as a container terminal was not an option due to the lack of cranes and no discernible use for the terminal building. Heavy lift was out as the berth had not been constructed to meet the requirements of such cargo. Automobile and roll on/roll off (RO/RO) companies appeared as the best option to begin pursuing. Volkswagen and other auto companies have been port users for decades so the needs of such a tenant could easily be met. The next step was intelligence gathering to evaluate the merits of pursuing this line of business.

As the Senior Market Analyst, I developed a report on the prominent breakbulk and automotive carriers, shippers and consignees moving cargo via all U.S. ports, utilizing PIERS data to construct a historical trade report. PIERS data reflects raw import bills of lading for all waterborne cargo on vessels that enter and exit ports in the U.S. as filed by U.S. Customs and Border Protection ("CBP"). Our department routinely uses PIERS data to support our port planning, economic research, and marketing functions. It is also the basis of our quarterly market share reporting. The PIERS data is used to analyze market share trends by port, commodity, shipping line, country of origin, and company. It also shows us overall trends in the maritime industry. These analyses assist the Trade Development department in determining potential target customers and

cargo departure flows to other U.S. ports.

Automotive Market Share via ALL USPORTS Unit of Measure: Units Total Source: Piers - JOC

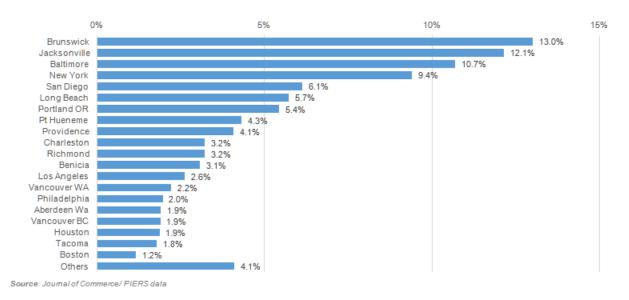
USPORT	2011	2012	2013	2014	2015	2016	2016 Percent
Sum	3,958,498	4,764,440	5,462,293	4,189,370	3,996,606	4,142,633	100.0%
BRUNSWICK	432,238	556,531	481,214	419,237	300,424	538,665	13.0%
JACKSONVILLE	489,192	616,640	940,583	526,015	533,146	502,760	12.1%
BALTIMORE	553,078	659,634	595,892	593,306	490,224	442,611	10.7%
NEW YORK	454,679	497,545	489,764	414,429	394,759	389,717	9.4%
SAN DIEGO	185,192	241,067	244,472	218,408	220,947	254,135	6.1%
LONG BEACH	136,703	238,550	218,917	241,917	260,424	237,373	5.7%
PORTLAND OR	170,779	236,160	264,682	228,172	241,365	225,152	5.4%
PT HUENEME	174,070	239,879	210,150	153,786	193,275	178,934	4.3%
PROVIDENCE	146,553	170,559	166,273	173,781	198,946	168,755	4.1%
CHARLESTON	188,770	164,986	182,065	210,662	169,853	133,587	3.2%
RICHMOND	34,358	47,769	84,070	89,546	103,990	133,504	3.2%
BENICIA	42,451	61,513	97,768	115,776	109,061	127,389	3.1%
LOS ANGELES	194,167	210,722	191,657	125,127	119,348	108,878	2.6%
VANCOUVER WA	45,686	38,925	53,207	80,312	85,761	92,083	2.2%
PHILADELPHIA	112,926	127,057	91,408	54,396	57,472	81,441	2.0%
ABERDEEN WA	37,490	57,381	82,718	98,278	64,329	78,754	1.9%
VANCOUVER BC	73,862	80,744	72,777	95,731	98,756	78,430	1.9%
HOUSTON	89,408	109,329	84,890	67,748	86,109	77,448	1.9%
ТАСОМА	135,007	141,470	116,106	70,593	64,966	74,124	1.8%
BOSTON	57,143	34,973	37,073	47,507	50,604	48,098	1.2%
Others	204,746	233,006	756,607	164,643	152,847	170,795	4.1%

All US Ports Automotive Units				Port of Houston Automotive Units			
	Export	Import	TOTAL	Automotive onits	Export	Import	TOTAL
2010	1,030,731	2,804.004	3,834,735	2010	26,433	7,770	84,203
2011	1,190,844	2,767,654	3,958,498	2011	22.816	6,592	89,408
2012	1,267,302	3,497,138	4,764,440	2012	19,168	90,161	109,329
2013	2,127,727	3,334,566	5,462,293	2013	10,595	74,295	84,890
2014	1,174,202	3,015,168	4,189,370	2014	6,683	61,065	67,748
2015	819,684	3,176,922	3,996,606	2015	4,210	81,899	86,109
2016	859,916	3,282,717	4,142,633	2016	3,366	74,082	77,448
Source: PIERS - JOC		•		Source: PIERS - JOC			

The PIERS data showed that automotive units remained a healthy market. Operations staff reported that RO/RO had reached capacity at both the Turning Basin and Barbours Cut terminals. The next step was to review what others were reporting on automotive industry trends and import/export markets.

Automotive Market Share via All USPORTs: Total

Percent of Units Total based on 2016 Data



<u>BBVA's Auto Industry Outlook of June 16, 2014</u> was solidly optimistic about future auto sales. It stated that sales had returned to pre-recession levels and economic indicators such as employment growth and low interest rates pointed to continued market growth.⁸

BBVA Research Forecasts						
Average	2012	2013	2014	2015	2016	
Auto Sales (millions units)	14.5	15.6	16.3	16.6	17.2	
GDP Growth (% change)	2.8	1.9	2.5	2.5	2.8	
Unemployment Rate (% average)	8.1	7.4	6.5	5.9	5.6	

In 2012, <u>Automotive Logistics</u> reported that vehicle handling was a market that was rebounding after the two flat years to the point that capacity was becoming an issue for some ports. Business had been soft due to problems in Asia, including the massive earthquake in Japan and catastrophic flooding in Thailand, that disrupted automotive and parts manufacturing.⁹

Of special interest to Port Houston was the number of automobile factories being built in Mexico. <u>Automotive News</u> noted that VW announced plans in 2012 to build an Audi plant in Puebla, making it Audi's first factory outside of Europe for the export market.¹⁰ The facility opened in September 2016. Chrysler, Ford, GM, Mazda, Honda, Nissan, and Toyota already had factories there in addition to Volkswagen. KIA announced plans in 2014 to build in Mexico as well. BMW's new plant in Mexico should be operational by 2019, according to <u>Automotive News</u>.¹¹ Mercedes and Infiniti's new joint venture factory should begin manufacturing this year as reported by <u>Carscoops</u>.¹²

Automotive Logistics pointed out the willingness of manufacturers and processors to relocate due to space, service and cost at other ports.¹³ The Port of Houston has long been a business friendly port with very stable labor relations, lower costs and superb transportation access and connections. The cruise facility also offers a large open building that could suit the needs for auto processing and accessories installation. I shared my findings with my colleagues and we all agreed that RO/RO was the line of business to pursue. The next step was develop a list of potential customers. Our goal was to have a tenant that could support our initiative and a value added proposition that provides a revenue benefit to our operation.

The plan was to continue intelligence gathering to determine potential customers by contacting:

- Auto manufacturers such as BMW, Tesla Motor, Ford, Chrysler/Fiat, GM, Honda, Toyota, Subaru, Kia, Hyundai, VW, Mazda, Mitsubishi, Mercedes Benz, Nissan, Volvo, and others;
- Auto processors such as Autoport, Porsche, Auto Warehousing, Turning Basin Service Processors, Importers, Global Autoport, and others;
- RO/RO carriers such as NYK RORO, Hoegh Ugland Auto Liners (HUAL), Kline, Wallenius Wilhelmen Lines, Mitsui O.S.K. Lines, Ltd. (MOL), and others.

The Trade Development managers, whose responsibilities are divided geographically, created lists by region and started working the telephones. They presented the viability of the facility, its condition and characteristics, and how it could be used for auto processing. Some liked the idea. Others had already made commitments. As in all sales, it took an average of six to seven phone calls and lots of emails to sell the idea. In the end, six potential tenants were interested enough to come to the port and see for themselves.

The presentations to these six potential tenants were extensive and covered the Port Authority's organizational structure, port history, city and state economic overview, port's economic impact, security and environmental compliance, facility overview, trade and market share, intermodal network, distribution strength, real estate, and financial investments. This was followed up with a tour of the port.



The process moved very quickly and at the June 2016 Port Commission meeting, the Port Commissioners approved negotiation and execution of a lease with APS Stevedoring's' sister company, Tacoma, Washington-

based Auto Warehousing Co. ("AWC"), for a lease at the Bayport Cruise Terminal. In a <u>July 29, 2016 Automotive Logistics article</u>, Mark Berg, AWC's director of sales and marketing, commented on how auto volume surges were creating issues in keeping up with demand. "Whether it is back-to-back vessel arrivals with large volumes or the lack of car haulers or the right railcars, volume surges create the need for overflow yards, off-site storage and other alterations to established processes," said Berg.¹⁴

At the July 2016 meeting, the Port Commissioners issued APS Stevedoring a stevedore license so its employees can load and unload cars from ships at the port. It was also at that meeting that the Port Commissioners authorized the sale of the cruise terminal's gangway system.

By November 2016, <u>Automotive Logistics</u> reported on the five-year lease of the cruise terminal to AWC to import vehicles, provide after-market upgrades and deliver them to dealerships. The article pointed out that "The growth of the North American vehicle industry has put port and terminal infrastructure to the test. Not only have car sales



across the US, Canada and Mexico reached record levels, but so too has vehicle assembly – rising to 17.5m light vehicles last year and forecast to reach almost 20m by 2022, according to PwC Autofacts."¹⁵

The first shipment of vehicles arrived November 30th when Grimaldi Line's *M/V Grande Sierra Leone* delivered 428 FIAT® 500X automobiles to the terminal. The "operation went seamlessly" through "collaborative coordination of staff,

customers, and labor" who "all helped make this first call a success," according to Port Authority executive director Roger Guenther.

The terminal is expected to import 36,000 vehicles over the next three years with two vessel deliveries per month. Auto Warehousing expects to create about 150 jobs by the time the site it is fully operational. Additional jobs will include longshoremen and truckers, handling Chrysler, Fiat, Alfa Romeo, and Jeep Renegade vehicles.

Lessons Learned

Just mention the word "cruise" and your imagination is filled with exotic locations and relaxing vacations. When cruise companies come knocking at the door of ports, port commissioners and the public are generally eager to listen. Optimistic economic development numbers can often seal a costly deal for ports like Houston.

The cruise business has been a hard lesson for Houston. The Port Authority's stated mission is "To move the world and drive regional prosperity." Since inception in 1911, Port Houston's governing body has taken seriously its legislative mandate to facilitate commerce and navigable waterways, in order to promote job growth and economic development to benefit the region, the state and the nation.

The decision regarding the building of the new Bayport cruise terminal was not done in a vacuum, and the Port Commission held extensive discussions, mostly in executive session, regarding the competitive environment and opportunities for growth. The cruise business held out the hope of continued economic development as there had been successful sailings for many years from the previous cruise terminal. Unfortunately, not all of the decisions made over the years have produced satisfactory results, but the important thing is that we learn the lessons from past actions. Finally accepting that we needed to change course on the terminal's use was necessary. A gigantic industrial complex occupies the upper half of the 52-mile long Houston Ship Channel. This economic engine has driven Houston's and the surrounding region's economic destiny for more than 100 years. As the song goes, "Dance with the one that brought you." For a time, it seemed proper to continue to accommodate the cruise lines, but once the Port Authority gave up on marketing cruise as a viable business line option altogether, we were fortunate to land a valuable new tenant without having to expend additional resources or funds on the facility.

The results are a testament to following a strategic plan of action to find a tenant for the former cruise terminal. Brainstorming by a team of professionals recognized RO/RO as a viable option given the 800-space parking lot at the terminal. Further research showed a growing market for auto processing. Working the phones to gather research developed possibilities. On-site presentations sealed the deal.

Ports are straightforward entities, and providing the facilities for moving waterborne cargo is usually the way ports make money and ensure sustainability.

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