PORT OF HOUSTON AUTHORITY

1914

2004 Annual Report

Celebrating 90 Years

OF SERVICE TO THE WORLD

1914

Contents

An Extraordinary Year

The Port of Houston's first annual report, filed in 1919, reveals that the port of the early 20th century faced many of the same situations as the port of the early 21st century. That year, the Port of Houston stated total revenue of $95,037. Subtracting expenses, the port's net income was $77,465. World War I had ended a year earlier, and the Houston Ship Channel had shoaled to a depth of 21 feet. In 1919, the depth was dredged to 23.5 feet. Also that year, the federal government approved a new project to further deepen the channel to 30 feet as well as widen it.

Safety and security along the channel were also important. The harbor police office had just been authorized by Houston City Council, and the first patrol boat began operating Sept. 5, 1919. The department wasn't exactly the type of police force we have today. These officers patrolled for 78 days, citing 58 regulation violations, spotting 65 cases of oil flowing into the channel and replacing wayward buoys.

The port director, B.C. Allin III, was a visionary. In 1919, he recommended that the city begin purchasing land and building docks to prepare for the anticipated boom in shipping along the Port of Houston. Allin was supported by port commissioners comprising Houston's strongest business leaders who had worked so hard to make a deep-water port dream a reality for Houston.


PORT OF HOUSTON AUTHORITY

Today, the Port of Houston Authority has benefited from their courageous leadership. We have some of the finest docks and container facilities in the world, we have an outstanding police force and we are nearing completion of the current dredging program. The adage is true — the more things change, the more they stay the same.

Of course, our financial resources are vastly greater than they were in 1919. For 2004, the Port of Houston Authority's hard work and diligent business planning were rewarded with increased operating revenue. Revenue in 2004 rose roughly $15 million, for an audited total of $134.9 million. That's an increase of 13 percent over the previous year.

It was an extraordinary year for the port authority because most terminals generated higher revenues. We are very proud of the commitment of port authority employees. Because of their hard work, we were able to outperform many previously set records.

The growth in operating revenue is consistent with increased tonnage. The Bayport Industrial Complex moved 6.4 million more tons than the previous year, according to the Bayport complex users. Excluding the Bayport Industrial Complex numbers, the total PHA tonnage of 26,349,817 tons represents a 9 percent increase over the previous year and sets a new record.

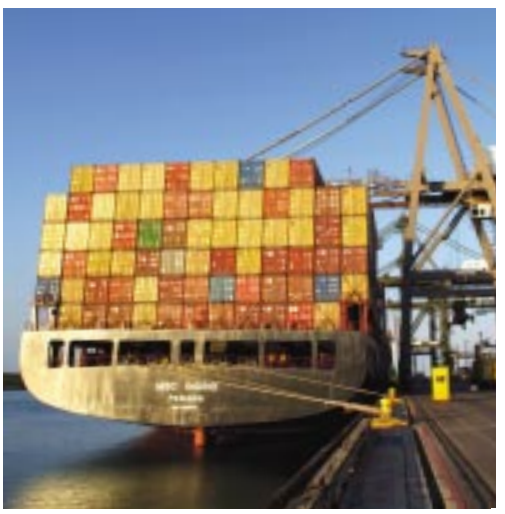
Charles Dillingham

B.C. Allin

1914

The development and destiny of the Port of Houston has been shaped by the foresight and actions of certain individuals over the past century. The first chairman of the port, Charles Dillingham, and the first director, Benjamin Casey Allin III, set in motion projects that revolutionized port terminal design, created the port's long-standing aggressive marketing and customer development strategy, and made the Port of Houston known throughout the world.

The number of 20-foot equivalent units (TEUs) rose almost 16 percent in 2004 and tonnage grew two million tons, for yet another record. TEU activity has been on the rise for the past four years. The PHA's ability to move more containers is attributable to the flexibility of the Barbours Cut Terminal, which has been operating beyond its capacity.



The increase in TEUs correlates with the increase in container tonnage. In 2004, the PHA handled nearly 14,000,000 tons of containerized cargo as compared to the previous year's 12,000,000. Container tonnage has increased year after year since 1992.

The Port of Houston has always been blessed with visionary leaders. Just as Allin had the foresight to begin building docks and adding rail lines, today's PHA leadership is building for the future by constructing the Bayport Container and Cruise Terminal. Bayport builds on the vision, taking us into this new century better prepared to meet our customers' demands and to deliver the goods to and from our community, the nation and the world.

In November 2004, we celebrated the 90th anniversary of the opening of the Houston Ship Channel. This annual report reflects on the port's early years and celebrates the many accomplishments of the past year. Thanks to our solid business planning, strong customer relations and superior geographic location, the Port of Houston Authority experienced an impressive record year in 2004.

In nearly all areas, port authority operations topped many records, including some which were set just one year earlier. We are very proud of the commitment of port authority employees. Because of their hard work, we were able to outperform many previous records.

James T. Edmonds
Port Commission Chairman

H. Thomas Kornegay
Executive Director

Since its earliest days, the Port of Houston has been a pioneering port. PHA's innovative approaches to shipping created an inland port, gave birth to containerization and established the first U.S. port to meet ISO 14001 standards. Today, PHA builds upon its history to plan the port of tomorrow while operating the port of today.

Pioneering Port


NO SMOK

HISTORIC OVERVIEW

When Houston was founded in 1836, its innovative civic leaders and supportive citizens dreamed of linking Houston to the sea and the rest of the world. They worked hard to convince Congress of the importance of their dream.

Longer than the Panama Canal, the 53-mile long Houston Ship Channel is an engineering marvel that was completed 90 years ago. Then just 25 feet deep, the Houston Ship Channel was christened on Nov. 10, 1914. President Woodrow Wilson pushed a pearl-topped button in Washington, D.C. that triggered a salutatory cannon firing on the banks of the Turning Basin to signal the opening of the channel.

In 2004, PHA commemorated the 90th anniversary of the port's opening by re-enacting the original ceremony. Harris County Judge Robert Eckels' daughter, Kirby, repeated the words that Mayor Ben Campbell's daughter, Sue, had proclaimed nine decades earlier.

If they were alive today to stand along the banks of the Houston Ship Channel, the Allen brothers, Tom Ball, Commodore Charles Morgan and the other luminous visionaries from Houston's history would be awestruck by the immense realization of their dream. Over a 90-year period, the Houston Ship Channel has become one of the nation's busiest waterways, providing a powerful regional and national economic engine, exquisite environmental resource, and vital trade link between the world and Houston, the fourth-largest city in the U.S.

1956

Containerization was born when the world's first container ship, M/V Ideal X, sailed with 58 truck trailers from New York/New Jersey and unloaded at the Port of Houston in April 1956.

Following in the footsteps of those early leaders, today's port commission skillfully navigates the PHA's economic growth and prosperity. In 2004, Chairman Jim Edmonds and Commissioner Janiece Longoria each were re-appointed to two-year terms as PHA commissioners.

Edmonds' initial appointment in June 2000 was a joint decision of the Houston City Council and the Harris County Commission. The president of Edmonds & Company, a business consulting firm, Edmonds was first appointed to the commission in October 1996, representing Harris County. He serves on the PHA's pension committee and also is a chairman of the board of commissioners for the Houston Pilots Association.

In October, attorney Janiece Longoria was re-appointed to a second term as port commissioner. In 2004, Longoria chaired the PHA Commission's International Business Task Force. She also served as a member of the commission's community relations and cruise task forces and continues to serve as a member of the board of commissioners for the Houston Pilots Association.

Solid business planning, strong customer relations and superior geographic location led the Port of Houston Authority to an impressive record year in 2004. In most areas, port authority operations topped the previous records, most of which were set just the previous year.

The PHA's operating revenue has been increasing year over year. Revenue in 2004 increased roughly $15 million for an audited total of $134.9 million. That represents an increase of 13 percent over the previous year.

The growth in operating revenue is consistent with increased tonnage. The Bayport Industrial Complex moved 6.4 million more tons than in the previous year, according to the Bayport complex users. Excluding the Bayport Industrial Complex numbers, the total PHA tonnage of 26,349,817 tons is up 9 percent from 2003 and is also a record figure. The number of container TEUs increased almost 16 percent in 2004. Tonnage increased by two million tons, for yet another record.

Left top: Kirby Eckels, daughter of Harris County Judge Robert Eckels, tossed rose pedals and re-christened the Houston Ship Channel on its 90th anniversary. PHA Chairman Jim Edmonds, left, and Executive Director Tom Kornegay look on.

Left center: At the original channel christening, guests received a medal commemorating the event.

Above: Boxed cargo fills a dock along the Turning Basin.

PHA also had a record setting year in cruise passenger totals. In 2004, 83,832 passengers enjoyed 52 sailings aboard the Norwegian Sea. These popular cruises outpaced passenger capacity for a total occupancy rate of 106 percent.

The PHA began the year with positive news regarding two legal battles. In January, a three-judge panel of the U.S. Fifth Circuit Court of Appeals ruled unanimously in the PHA's favor concerning relocation costs for pipelines that cross the Houston Ship Channel. At issue had been more than $100 million of costs to relocate scores of pipelines to accommodate the federally mandated channel widening and deepening. Several chemical and petroleum companies that own the pipelines had filed suit in 1998 to require the PHA to pay for the relocation of the pipelines.

Two years earlier, a district court summary judgment favored the pipeline owners. However, on Jan. 30, 2004, the Fifth Circuit vacated the district court's order and rendered judgment for the PHA, holding that the pipeline owners were solely responsible for relocation costs.

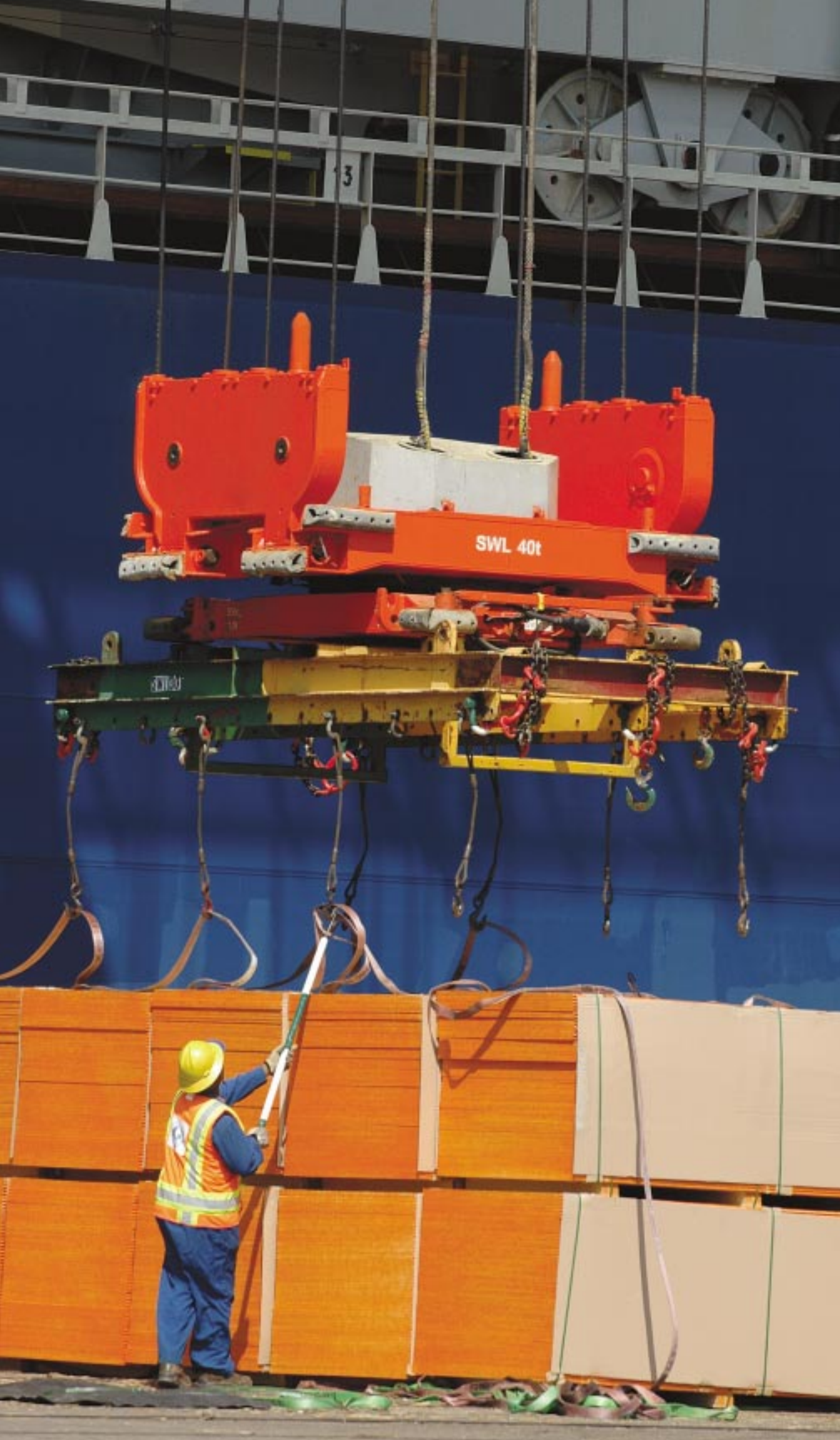
In May, the PHA received two favorable judgments, both of which paved the way for construction to begin at the Bayport Container and Cruise Terminal. First, U.S. District Court Judge Vanessa Gilmore granted motions filed by the U.S. Army Corps of Engineers and PHA, thereby dismissing the federal challenge. A few weeks later, 98th District Court Judge W. Jeanne Meurer likewise dismissed a lawsuit filed against the Texas Commission on Environmental Quality.

When the Houston Ship Channel opened in 1914, security was not a big concern. Today, however, security is a well-integrated initiative along the waterway. The cooperation of federal, state and local agencies is a true asset for the port. Continually building upon these strong relationships and keeping our elected officials apprised of security initiatives have helped the PHA receive $16.7 million in federal security grants.

Above: NCL's Norwegian Sea sails from Barbours Cut.

Below: At Barbours Cut, a yard truck transports a container through the radiation monitor as part of PHA's security measures.

Right: A dockworker unhooks the straps used to unload a palette of plywood.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In July, the PHA opened the $4.35 million Port Coordination Center, a state-of-the-art facility equipped with the most technologically advanced communications systems and data sharing devices to facilitate immediate and accurate communication exchange. It is the communications command center for the Port Coordination Team. This team consists of the PHA Police Department, the U.S. Coast Guard, the FBI, U.S. Customs and Border Protection Service, and numerous other local, state and federal law enforcement and regulatory agencies. This coalition will converge on the PCC during emergencies such as industrial accidents, natural disasters or terrorist threats.

U.S. Department of Homeland Security Secretary Tom Ridge visited the Port of Houston in July. After a helicopter tour of the port and meeting with members of the U.S. Coast Guard, Ridge praised local efforts to coordinate security enhancements.

"Members of local government have been working with the Department of Homeland Security since January to create a coordinated security plan for the entire area," Ridge said. "The Port of Houston and the Coast Guard are examples of the kind of cooperation between industry, local, state and federal government necessary to protect this vital piece of our nation's economy."

The Department of Homeland Security, state and local governments, and the private sector have invested billions to strengthen nationwide port security since Sept. 11, 2001. A comprehensive system of port security measures calls for cargo that originates in foreign countries to be screened before it is loaded onto a ship. Once a ship reaches U.S. waters, the U.S. Coast Guard boards the vessel for an inspection. Only after clearing this inspection is the ship allowed into a U.S. port. Additional security measures will continue to build upon this "layered systems" approach to port security.

Throughout its history, the Port of Houston has accomplished many "firsts." According to the *Port of Houston: A History* by Marilyn McAdams Sibley, the first direct shipment of cotton to Europe — 23,719 bales — left the Port of Houston in November 1919 on the *M/V Merry Mount.* The world's first container arrived at the Port of Houston aboard the *M/V Ideal X*. Loaded with 58 truck trailers, the vessel unloaded the first containers in April 1956.

And now, the Port of Houston will be home to the 21st century's most modern container terminal, the Bayport Container and Cruise Terminal. After receiving the federal permit as well as prevailing in state and federal court challenges, the PHA moved forward with the Bayport project. Purchase orders were issued in early June, and the groundbreaking ceremony was conducted later in the month.

Numerous local and state dignitaries spoke at the groundbreaking ceremony in addition to PHA Chairman Jim Edmonds and Executive Director Tom Kornegay. Saluting Bayport were U.S. Rep. Kevin Brady; Texas Secretary of State Geoffrey Connor; Harris County Commissioner Sylvia Garcia; Houston City Councilwoman Carol Alvarado; Walt Niemand of West Gulf Maritime Association and Clyde Fitzgerald of the International Longshoremen's Association.

By year's end, the port authority awarded four construction contracts and the wharf crane contract, totaling $142 million. In addition, the port authority initiated its wetland creation and enhancement project at the Memorial Tract, cleared and prepared more than 290 acres of ground at Bayport for pending construction and accelerated the design for construction of the permanent terminal gate and improvements to Port Road.

During its first nine decades, the Port of Houston proved to be a prosperous and invaluable asset to Houston by helping the city's economy and business opportunities grow. The PHA operates the port of today while planning the port of tomorrow, and in 2004, PHA achieved great progress in building Bayport.

Left top: PHA Chairman Edmonds speaks with U.S. Homeland Security Secretary Tom Ridge during the July 2004 press conference at the Port of Houston Authority.

Left bottom: The Vessel Traffic System of the U.S. Coast Guard monitors 740 vessels daily, and about 250,000 annually, on their way to and from the Port of Houston.

Above: PHA commissioners turn the first shovel of dirt at the groundbreaking ceremony for the Bayport Container and Cruise Terminal.

In 2004, the PHA proved once again to be an innovator of technology. In designing Bayport, PHA took a new approach and looked for ways to construct the facility and at the same time protect Galveston Bay.

Building Bayport

AT THE FOREFRONT

From the birth of containerization through the opening and operation of the Fentress Bracewell Barbours Cut Container and Cruise Terminal, the Port of Houston Authority has always been at the forefront of maritime technology.

In 2004, the PHA proved once again to be an innovator of technology. In designing Bayport, PHA took a new approach and looked for ways to construct the facility and at the same time protect Galveston Bay. PHA port commissioners awarded the construction bid to Zachry Construction, which submitted the lowest proposal in the amount of $36,937,583. The company stated its commitment to meet and exceed the PHA's requirements of promoting environmental quality, small business sub-contractor participation and community outreach on the Bayport container yard project.

In building Bayport, PHA and Zachry are implementing aggressive plans to minimize construction noise on site, including use of specialized, pneumatic equipment and other techniques. The Bayport contractors are very sensitive to noise generated by its equipment and operation. Certain operations have been performed at the center of the site and behind tree lines to help reduce noise. All equipment is operated with fully functioning mufflers and engine covers. Many backup alarms are set to the quietest sound level permissible by OSHA standards. Equipment is being operated in circular paths as much as possible to avoid backing up and triggering the sounds. Always conscious of being a good neighbor, PHA monitors sound levels to ensure the site stays as quiet as possible.

1945

After World War II, development of the petrochemical industry along the Houston Ship Channel accelerated and transformed the Port of Houston into the nation's largest petrochemical production complex and one of the largest in the world.

Additionally, design plans call for use of drilled shafts for the container yard instead of pile driven supports to reduce noise. To further minimize impacts to local residents and roadways, Zachry also limits the amount of construction work performed after 6 p.m.

Hundreds of thousands of tons of aggregate arrive by barge to reduce the number of trucks and the volume of emissions in the area. Concrete is mixed on site to eliminate the need to further reduce truck traffic on the roadway, as well. The construction site has an extensive storm water pollution prevention plan that uses best management practices recommended by Harris County and the Corps of Engineers. Those measures include perimeter silt fencing, numerous storm water sediment basins throughout the site, grass plantings on disturbed ground and turbidity curtains in the channel around dredging areas.

These are just a few examples of the ways in which Bayport's construction is environmentally friendly.

Left: Zachry Construction and small business subcontractor D'Ambra Steel workers form reinforcement cages in preparation of placing concrete at the Bayport construction site.

Above: Construction workers prepare concrete forms for the new wharf at Bayport.

Bayport's development has a strong emphasis on small business participation. For instance, prime contractors have committed more than $55 million in sub-contracts to 18 small business sub-contractors. Additionally, the PHA employed 19 small businesses as prime or sub-consultants for Bayport design and construction management tasks.

Bayport is expected to create 39,000 jobs and contribute $1.6 billion to the Texas economy through wages and tax revenues over the next several years. It is a fact that when the port grows, Houston and Texas grow. These impressive numbers mean a lot to the local and state economy. In his presentation during the Bayport groundbreaking, U.S. Rep. Kevin Brady hailed Bayport as a factor in strengthening trade.

"One of my top priorities in Congress is strengthening trade between the United States and Central America, and Bayport will be an integral part of that process," Brady said. "With Bayport operational, I expect that our ability to both export and import goods to and from Central American countries will increase our trading opportunities, bringing more business to Americans and the Port of Houston."

Harris County Commissioner Sylvia Garcia echoed Brady's sentiments, saying that as the local economy grows and creates new jobs, infrastructural developments such as Bayport are needed to accommodate our nation's consumers. "As a society, we all want the creature comforts of nice cars, clothing, food, materials for our homes and electronics—and the port delivers these goods in the millions of containers that cross our docks each year. We are a growing market with increasing consumer demands. Naturally, the Port of Houston must grow to meet those requirements, and Bayport is the answer."

Above: Houston imported nearly 86,000 tons of sugar and honey valued at $5.5 million from Central American countries in 2004.

Right: The past and the present blend beautifully as a tugboat passes a petrochemical storage tanks and the San Jacinto Monument reaches toward the sky.

Bayport's influence on the job market impressed Houston Mayor Pro Tem and City Councilmember Carol Alvarado. "Bayport means a lot to my constituents," she said. "This new terminal will bring financial security to many hard-working men and women. Bayport will mean that jobs will be available for today's young people who are still in school."

Seaport jobs include positions with railroads and trucking companies moving cargo to and from the port authority's marine terminals and private terminals. These jobs also include the members of the International Longshoremen's Association and non-ILA dockworkers, steamship agents, freight forwarders, ship chandlers, warehouse operators, bankers, lawyers, terminal operators and stevedores. "Clearly, Bayport will offer such a variety of jobs to meet almost any professional goals," Alvarado said.

Completion of the first phase of Bayport — including 1,660 feet of the ultimate 7,000-foot wharf and approximately 65 acres of the ultimate 1,043-acre facility — is targeted for summer 2006. Bayport ultimately will also feature three cruise ship berths to accommodate the growing fleets of sleek, modern and luxurious passenger vessels.

Construction began after a series of legal battles. In 2003, the city of Shoreacres and other local municipalities and organizations filed a lawsuit opposing PHA's construction at Bayport. The suit contended that the delineation of jurisdictional wetlands as outlined by the U.S. Army Corps of Engineers was improper. The suit did not name the port authority; however, PHA filed a motion to intervene on behalf of the Corps.

The opposition pursued their legal options through both state and federal courts. In May 2004, U.S. District Court Judge Vanessa Gilmore denied the plaintiffs' motions, thereby dismissing the challenge to Bayport's permit. In state court two weeks later, 98th District Judge W. Jeanne Meurer also dismissed the state lawsuit. The court pointed out that the U.S. Army Corps of Engineers received the Texas Commission on Environmental Quality's certification before issuing its permit.

One month later, PHA broke ground at Bayport. PHA's goal is to be the best environmental steward in the region, which is why, on opening day, Bayport will be ISO 14001 compliant. This new facility will be a jewel to the economy, the environment and the community. It will meet ISO 14001 standards because PHA is planning and constructing this terminal to be a stellar example of environmental stewardship now and in the future.

Bayport has been designed to be the most environmentally-friendly container terminal in the world. PHA is accomplishing this monumental goal through extensive mitigation and an environmental management system. PHA places great importance on protecting the environment of Galveston Bay and the Houston Ship Channel, and that's why Bayport exceeds governmental standards and raises the bar for all future environmental protection — protecting the bay, the community and all of Texas.

Left: Longshoremen secure steel cables to prepare a Turning Basin dock for unloading heavy cargo.

Above: Seagulls scatter as barges remove dirt during Bayport's construction.

PHA leads the nation in environmental stewardship by empowering employees to seek out innovative methods to recycle, reduce and reuse waste. The port has developed award-winning programs that balance the needs of global trade and commerce with local environmental protection. PHA raises the bar for all future environmental protection — protecting our bay, our community and all of Texas.

Enhancing Environment

LEADING THE NATION

In the late 19th century, as the lower portion of Buffalo Bayou was transformed into the Houston Ship Channel, America was experiencing a period of spectacular technological advancements. This industrial revolution fueled economic growth and delivered material benefits to many Americans. Yet these industrial advances created ecological effects that Americans were just beginning to understand and confront.

Houston's early industrial developers didn't concentrate on ecology as they went about business. The port's first director, B.C. Allin III, fought for clean water in 1920, and Houston City Council passed an ordinance supporting his plan. Oil magnate Joseph Stephen Cullinan disagreed with Allin and demanded his ouster. Although Allin remained with the port for many years, environmental concerns sometimes lagged.

Today, the PHA leads the nation in environmental stewardship. PHA empowers employees to look for innovative methods for recycling, reducing and reusing waste. PHA firmly believes that once people understand the impacts of their actions, they then become stronger environmental advocates. In 2004, PHA's Environmental Affairs Department continued to lead the charge through its Environmental Management System and compliance programs.

The PHA has implemented steps to ensure that noise, dust and emission levels remain as low as possible during construction of the Bayport Container and Cruise Terminal. PHA continues to search for and test new technology to reduce construction noise.

1990

In 1990, the Beneficial Uses Group (BUG) was formed to develop environmentally innovative and beneficial ways dredge material from the Houston Ship Channel could be put to an environmentally friendly use. A 250-acre demonstration marsh was built, which surpassed anything ever attempted in marsh restoration.

To prevent any impact to water quality in Galveston Bay during construction, sedimentation basins and passive treatment facilities were constructed to intercept sediment runoff. During dredging operations, turbidity curtains are successfully preventing sediment impact to the Bayport Ship Channel and Galveston Bay.

To protect and enhance the environment, PHA awarded a contract for the Memorial Tract mitigation project in October. The primary components of the mitigation project for Memorial Tract are creation of more than 74 acres of wetlands and additional wetland enhancement, coastal prairie enhancement and wetland/upland habitat protection under a permanent conservation easement.

Additionally, PHA completed negotiations with the Legacy Land Trust and Harris County on 456 acres of forested upland, scrub shrub forest, forested wetlands, inter-tidal fresh water emergent wetland, coastal prairie, tidal mudflats, and open water habitats on our Banana Bend property. In December, the Banana Bend Nature Preserve was placed under a conservation easement held by Legacy Land Trust.

Above: New plant life at the Memorial Tract acreage.

The conservation easement has three important purposes: (1) conservation of an important migratory stopover and wintering area for migratory waterfowl, shorebirds and songbirds, (2) protection of forested riparian area from development encroachment and (3) protection of floodway and the 100-year floodplain of the San Jacinto River within the property from development so as to retain optimum floodwater retention capacity of property.

"The Banana Bend Nature Preserve was Legacy Land Trust's 14th conservation easement," said Jennifer Lorenz, executive director of the Legacy Land Trust. "The property, with its numerous ecosystems, is a great example of how 'preservation mitigation' is a wonderful choice for mitigation needs. Legacy Land Trust is thrilled that the PHA chose such an amazingly diverse property which provides habitat to some 247 plant and animal species."

In yet another conservation easement program, PHA acquired 500 acres of contiguous coastal prairie that is part of the much larger Warren Ranch. This tract of land lies within the Cypress Creek watershed and San Jacinto River Drainage Basin. The Warren Ranch is one of the largest remaining pieces of contiguous property in agricultural use on the Katy Prairie. It provides a haven for a diversity of plants and animals, including neotropical migrants, many varieties of ducks, snow geese, Canada and Ross' geese, bald eagles, coyotes, wood storks, American white pelicans, herons, egrets, cormorants, anhingas, and numerous hawks, quails, songbirds, jackrabbits and deer.

The Katy Prairie Conservancy will hold the title to the property and will execute a conservation easement with the Legacy Land Trust. An agreement between the Katy Prairie Conservancy and the PHA is being negotiated. PHA anticipated the property can be acquired and conservation easements imposed in March 2005.

Air quality in the Houston/Galveston area continues to be a top priority for the PHA. Environmental technicians and engineers continue to develop and improve methods and technologies to reduce emissions and enhance the efficient performance of our operations. PHA is located within an EPA-designated "non-attainment area" of the Houston/Galveston area — an eight-county region — for one-hour and eight-hour ozone standards.

With the designation of eight-hour non-attainment, the area will need to demonstrate attainment by 2010. In 2004, the PHA continued to contribute its efforts in reducing NOx emissions from its operations at Barbours Cut Container Terminal by 25 percent through the use of diesel emulsions and new, clean engine equipment purchases.

The PHA Environmental Affairs Department conducted demonstrations for a fuel additive and a fuel enhancement device. PHA expanded use of PuriNOx in the remaining fleet of yard tractors and yard cranes, for a total of 56 pieces of cargo handling equipment. PHA also continues to evaluate emission-reducing technologies for cargo-handling equipment, yard tractors and yard cranes.

Left: Mickey Merrit of the Texas Forest Service examines the largest river birch tree in Harris County located in the Banana Bend Nature Preserve.

Above: Cargo-handling equipment, such as this yard crane and yard truck, operate on PuriNOx, which is one of PHA's environmental methods to improve and reduce truck emissions at PHA facilities.

In 2004, the Texas Commission on Environmental Quality discontinued grant funding for the incremental costs associated with qualifying fuels (e.g. diesel emulsions). Believing firmly in the environmental benefits of PuriNOx, PHA began fully funding the air quality program and successfully applied for grant funds from the EPA Voluntary Diesel Retrofit Program to demonstrate the use of diesel emulsions and diesel oxidation catalysts combined as a system on cargo-handling equipment. At the end of the year, the EPA approved the application for $150,000.

Another high-profile environmental program is the restoration of Goat Island. The PHA and former Baytown Mayor Pete Alfaro hosted a restoration celebration at the Baytown Nature Center in May. The 200-acre Goat Island is located in Crystal Bay, one-quarter mile from the nature center.

"Baytown is truly blessed with this environmental milestone," Alfaro said. "We celebrate a restoration that complements the nature center."

PHA commissioners Steve Phelps, Jimmy Burke and Cheryl Thompson-Draper attended the ceremony. Many local elected officials also attended the celebration including, state Rep. Wayne Smith, Harris County Commissioner Sylvia Garcia, U.S. Army Corps of Engineers Col. Leonard Waterworth, former PHA commissioner Robert Gillette and Beneficial Uses Group Chairman Dick Gorini.

Goat Island was originally formed when the segment of land that connected the region to the high ground of Baytown subsided. The island was then used as pastureland for goats — hence, the name Goat Island. The project required nearly 300,000 tons of limestone rock to build containment dikes for Goat Island. These structures contain the dredged material and provide protection from ship and tug wakes as well as wind-generated waves.

Restoring and protecting the environmental assets in the Houston Ship Channel will remain a PHA priority for many years. Environmental compliance, pollution prevention and continual environmental improvement are key factors in the PHA's environmental compliance policy and led to the creation of the EMS. In fact, the EMS has been so successful that the Port Police Department is developing a Security Management System (SMS) based on the ISO 14001 standard as a tool for meeting federal maritime regulatory requirements. The SMS is a two-year pilot project for select U.S. ports; it is sponsored by the U.S. Environmental Protection Agency and the American Association of Port Authorities.

Right: PHA was instrumental in restoring Baytown's Goat Island located in Crystal Bay.

In 2004, PHA sought out and received federal security grants and opened the Port Coordination Center. Also, PHA is now the first port to create a Security Management System, which is based on the Maritime Transportation Security Act and uses the ISO 14001 standard as a base. PHA maximizes our return on security infrastructure investment and better protects our port — and therefore protects the region and its citizens.

Strengthening Security


POLICE

IMPLEMENTING NEW SYSTEMS

In the early days of shipping, piracy was the main security risk facing sea vessel captains and crews. In fact, the "gentleman pirate" Jean Lafitte left Louisiana in 1817 and set up a stronghold in Galveston until the U.S. Navy ordered him to leave four years later. Today, ports must take protective measures against more insidious threats.

New security measures being implemented at ports across the United States involve fortifying physical infrastructure, verifying the security of individual vessels before they approach docks and selectively restricting access to port areas.

To date, PHA has been awarded a total of $16.7 million in federal port security grants. These grants are awarded as reimbursements to PHA for expenditures on port security-related equipment and services. PHA is using these funds to enhance the security infrastructure.

In 2004, PHA received $1.528 million of the $49 million allocation in Round 4 federal port security grants. The funds are being used to install controlled entry through the main gates to the port's Turning Basin. Plans call for upgrading the main gate to incorporate access control systems that process credentialed vehicles and individuals requiring entry onto port authority property. They also include installing security fencing, automated gates, access control systems, camera surveillance systems, a guard station and related devices.

1990

During the Gulf War in 1990–91, the Port of Houston was the third-largest load center for the U.S. military and ranked second in the nation in the number of ships handled.

Previous grant allocations provided funding for closed-circuit television cameras, gate access controls, fencing and high-tech communication and monitoring devices. In December 2003, Houston and Harris County awarded PHA $1.1 million under the Urban Area Security Initiative grant for HAZMAT equipment and inter-operability communications links with the U.S. Coast Guard, the Houston Police Department, Transtar and Harris County.

The $4.35 million state-of-the-art Port Coordination Center opened in July. About half of the total cost was funded through federal security grants. The PCC was built over two years with assistance from state Sen. Juan Hinojosa and the late state Rep. Joe E. Moreno who sponsored the design/build legislation that made the construction project possible. The PCC is equipped with some of the most technologically advanced communications systems and data sharing equipment in the maritime industry and law enforcement sectors to facilitate immediate and accurate communication exchange.

Modeled after the mission control and emergency operations centers located at NASA's Johnson Space Center, the PCC is the integrated communications center for the Port Coordination Team. This coalition comprising members of local, county, state and federal law enforcement agencies who protect the port and the surrounding ship channel communities, all converge on the PCC during emergencies such as industrial accidents, natural disasters or terrorist threats.

Left: PHA personnel inspect a container after arrival at PHA's docks.

Above: The Port Coordination Center opened in 2004, creating a communications hub for all security personnel within PHA and our security partners.

To further protect against threats, the international maritime industry has implemented safety mandates. For example, the International Maritime Organization established the International Ship and Port Facility Security Code, a comprehensive, mandatory security regime for international shipping and port operations.

According to these global regulations, all ships and ports had to submit security plans by the end of 2003. Domestically, the U.S. Coast Guard reviewed the plans and made recommendations for improvements, where necessary. By July 1, all ships and ports had to be in compliance with their plans. Today, ships and port facilities must monitor and control access, monitor the activities of people and cargo and ensure that security communications are readily available.

"All industries along the ship channel fell into the program in very short order and did an outstanding job of creating and implementing their security plans," said U.S. Coast Guard Capt. Richard M. Kaser, commanding officer and captain of the port. "Since Sept. 11, 2001, we have added layer upon layer of security, and we are very excited about the results."

The ISPS Code relies upon four types of security – operational, physical improvements, electronic devices and information technology. No security plan is complete without combining all four of these aspects. PHA submitted its security plan to the Coast Guard in late December 2003.

"The port areas have never been more ready to handle any threat than they are today," Kaser said. "The plans we have in place give specific directions as to what people need to do. Not many infrastructures in the United States are quite as prepared and have plans with as much detail as the maritime industry does. I am very comfortable that we are significantly prepared."

Just as the PHA was the first port to create and implement an environmental management system, PHA is now also the first port to create a security management system based on the Maritime Transportation Security Act and using the ISO standards as a tool. This program is currently being implemented at the Barbours Cut Container and Cruise Terminal.

To better manage security risks, the Port Police Department has adopted the management system process, developing the SMS as a means to ensure regulatory compliance. The SMS has a continual improvement cycle of assessing security risks and vulnerabilities, assuring security controls and communication channels are maintained, and evaluating and modifying the program for its effectiveness. Overall, this program will assist the PHA in times of increased security, and will improve the efficiency of police/security operations for both internal and external stakeholders. In essence, PHA can now maximize return on security infrastructure investment and better protect the port — and therefore protect the region and its citizens.

According to the U.S. Department of Homeland Security, more than 80 percent of world trade travels by sea. By taking a layered, cooperative and balanced approach to strengthening the international maritime system, ports not only further secure the country, but they also protect U.S. economic interests and the global economy.

Left: The U.S. Coast Guard unveiled new guns and security boats in the summer of 2004.

Above: Ken Concepcion of DHS's Office of Domestic Preparedness (left) and HPD Chief of Police Harold Hurtt (grey suit) tour the PCC.

In the early days, cotton was king at the Port of Houston. Today, petroleum and petroleum products dominate the port's leading trade commodities. But there is a new bumper crop crossing the docks — green coffee beans. Import cargo to the PHA arrives from a diverse list of countries including Mexico, Russia, Italy, Angola, China, Egypt and Romania.

Energizing Economy

GROWING TRADE

In the late 1800s, steam vessels such as the Neptune and the Bayou City carried cotton from Houston's docks to awaiting ships in Galveston Bay. Cotton remained big business for Houston until the discovery of oil at Spindletop. Seemingly overnight, refineries sprang up along the Houston Ship Channel, and Houston transformed from a top cotton shipping hub to the center of today's global energy market.

Today, petroleum and petroleum products are still the Houston port's leading trade commodities. Additionally, cargo arrives at Houston docks from nations all over the world, and the diverse list of countries includes Mexico, Russia, Italy, Angola, China, Egypt and Romania.

During 2004, steamship lines became increasingly interested in the Barbours Cut and Bayport facilities. The Trade Development Division conducted numerous international trade missions to meet with top executives from all major steamship lines and terminal operators. Additionally, Trade Development scheduled numerous high level meetings with major U.S.-based retailers and distribution center operators.

The increase in steamship line contacts can be attributed to the growing trade between Houston and East Asia, which nearly doubled in 2004 as compared to 2003. The Journal of Commerce's PIERS data indicates a total of 41,584 import TEUs for 2003 compared to 75,828 import TEUs for 2004. The interest in Houston shown by the large distribution centers and retailers has influenced the steamship lines to increase their services in Houston, which has contributed to this increase.

1943

Synthetic rubber was mass produced for the first time in 1943 by two new Houston area plants and shipped for use in World War II through the Port of Houston.

In March, SeaBridge Projects began a new monthly service from the U.S. Gulf to the East Asian cities of Busan, Shanghai, Qingdao, Dalian, Hong Kong, Bangkok and Singapore as well as a separate service to the east coast of South America. In June, Caytrans Project Services started a new service from the U.S. Gulf to Colombia. The Anne Boye sails every 14 days from Care Terminal and calls at Santa Marta, Barranquilla and Cartagena.

In August, NYK Logistics and Megacarriers began the Central America Caribbean feeder service with the arrival of the Pampero at Barbours Cut Terminal. The weekly service makes an all-water connection between Houston and East Asian countries via the Panama Canal. Also in August, CP Ships expanded its U.S. Gulf/Caribbean/Brazil service by adding three 1,700-TEU vessels. The service calls every two weeks at the Barbours Cut Container Terminal.

In October, BrasTex Express Line started a new service from the Turning Basin to Brazil with the sailing of the Junior S. Also in October, SCM Lines began service from Jacintoport Terminal to the north coast of South America with the sailing of the SCM Olympic. This service calls at Houston every 10 days and accepts breakbulk, containers and RO/RO cargo for export to the Venezuelan ports of Guanta and Puerto Ordaz as well as Point Lisas, Trinidad.

Shipments arriving on these lines are bound for customers such as the major distribution center and retail accounts, steel companies, synthetic resin producers, power generation companies and oil-field equipment suppliers plus USDA/USAID bagged cargo.

The PHA's import steel tonnage totaled 2,617,847 tons in 2004 compared to 1,402,651 tons in 2003. The Trade Development Division continued to focus on major steel accounts and participate in American Institute for International Steel seminars both at the local level and on the East Coast. The end of Section 201 countervailing duties that were placed on all steel products during 2003 removed import tariffs and allowed for steel imports to increase.

Left: PHA chairman Jim Edmonds and Rafael Meseguer Lima, the then-port director of the Port of Tampico, signed an agreement of friendship and cooperation between the two ports.

Above: Steel imports at the Port of Houston during 2004 totaled 2,617,847 tons.

Attracting new and various cargo creates a positive effect on the local economy, contributing not only to PHA's bottom line but also that of Houston's many small businesses. In 2004, PHA celebrated the second anniversary of the Small Business Development Program. By year's end, more than 800 companies qualified for SBDP registration while another 300 applications were pending approval.

The SBDP has been so successful that Gilda Ramirez was promoted to director. "As a world-class organization, the Port of Houston Authority recognizes that a vibrant entrepreneurial spirit is vital for leadership in global trade and commerce," said Tom Kornegay, PHA executive director. "Gilda is personally dedicated to assuring that small businesses play major roles in all port business. We applaud her unwavering commitment and look forward to great results from her expanded leadership role."

The SBDP encourages PHA vendors of contracts exceeding $25,000 to use good faith efforts to include certified small businesses. In 2004, about 51 percent totaling $61,299,423 in committed dollars went to small business primes and sub-contractors. Moreover, 36 percent of purchase orders and check requests under $25,000 went to small businesses.

Based on the program's overwhelming success and commitment, the Indo-American Chamber of Commerce presented its annual "president's award" to Gilda Ramirez and staff for leading the very successful SBDP. In fact, the program is so successful that one small business, Forde Construction, has graduated from the program. This once-small construction company has outgrown the SBDP and is now competing with larger construction companies.

The SBDP staff is proactive in networking and outreach efforts to attract more business participation. To reach all areas of the community, the staff attended and participated in about 150 expos, chamber and small business organization events and meetings during the year, reaching about 5,000 business owners and individuals.

The education and training program was expanded during 2004 by launching the Port University. The complete course consisted of six classes of extensive training, and the first class graduated 19 students. The core function of the university curriculum is to educate students on the port authority terminals and facilities and the mechanics of submitting a proposal.

In 2004, the PHA also made a definitive move to assure the port authority's growth and prosperity. In August, PHA created the Planning and Environment Division and named Charlie Jenkins as director. In this role, Jenkins directs the PHA's long-term financial and strategic planning, capital development programs, facility planning and environmental programs. He also serves as the PHA's representative for Houston Ship Channel industry groups and takes a leadership role in advancing the Harris County Freight Railroad Corridors and Urban Mobility Program, an on-going initiative aimed at consolidating local rail traffic to increase safety, reducing congestion, lowering air emissions and improving mobility.

"The Port of Houston Authority recognizes the need to provide added focus on long-term planning and to better prepare for future growth," Kornegay said. "Charlie has repeatedly demonstrated his ability to plan and facilitate major port authority initiatives. We applaud his unwavering commitment and look forward to great results from his expanded leadership role."

From its early days as a shallow-draft bayou providing barge transportation for cotton commodities to today's ranking as the largest U.S. port in terms of foreign tonnage to tomorrow's positioning for global strength, the Port of Houston Authority is an economic engine for Houston, Harris County, Texas and beyond. The port has been delivering the goods for nine decades, and with prudent financial planning and measured growth, the port will continue to deliver for centuries to come.

Left top: PHA Small Business Director Gilda Ramirez receives an award from the Indo-American Chamber of Commerce.

Left bottom: Forde Construction was the small business development program's first graduate. The company grew so large that it no longer qualifies for the program.

Above: Charlie Jenkins was promoted to PHA's director of planning and environment in 2004.

Historical PHA Commissioners

1914

Charles Dillingham
1911–1916 Chairman

Camille G. Pillot
1911–1922

Ross S. Sterling
1911–1922

1916

Thomas H. Ball
1916–1922

Late 1987

Archie Bennett Jr.
1984–1985
Represented the city of Houston
1985–1988
Chairman, Represented Harris County and the city of Houston

Alan B. Shephard Jr.
1985–1988
Represented the city of Houston

Leroy Bruner
1987–1997
Represented the city of Pasadena

Howard J. Middleton
1978–1996
Represented Harris County

Robert Gillette
1987–1999
Represented Harris County Assoc. of Mayors and Councils

Ned S. Holmes
1987–1988
Represented Harris County
1988–2000
Chairman, represented Harris County and the city of Houston

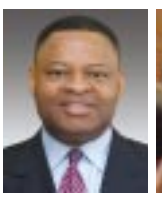
Milton Carroll
1987–1993
Represented the city of Houston

When the ship channel opened in 1914, civic leaders took the helm to create the Harris County Houston Ship Channel Navigational Board and Houston City Harbor Board. In 1922, the size increased to a five-member board. In 1987, the number of commissioners increased by two to include representatives from Pasadena and 25 surrounding cities.

2004 PHA Commission


James T. Edmonds, Chairman
Principal
Edmonds and Company
Appointed to the PHA Commission in 1996
Represents Harris County and the city of Houston

Kase L. Lawal, Vice Chairman
Chairman & Chief Executive Officer
CAMAC Holdings Inc.
Appointed to the PHA Commission in 1999
Represents the city of Houston





Steve Phelps
Attorney
Phelps State Farm Insurance
Appointed to the PHA Commission in 1997
Represents the city of Pasadena

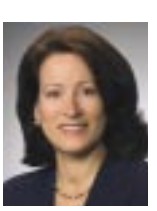
James W. Fonteno, Jr.
Vice President
Paine Webber, Inc.
Appointed to the PHA Commission in 1999
Represents Harris County



Jimmy A. Burke
Retired, Shell Oil Co.'s Deer Park Manufacturing Complex
Mayor of Deer Park 1981–1999
Appointed to the PHA Commission in 1999
Represents Harris County Assoc. of Mayors and Councils

Cheryl Thompson-Draper
Owner & CEO, Thompson Real Estate, T bar D Holding Co.,
Texas Starmasters Dance Studio
Appointed to the PHA Commission in 2000
Represents Harris County





Janiece Longoria
Partner
Ogden Gibson White Brooks & Longoria, L.L.P.
Appointed to the PHA Commission in 2002
Represents the city of Houston

Port of Houston Executive Directors 1919-1992

Benjamin Casey Allin
1919–1930

J. Russell Wait
1930–1947

Vernon Bailey
1947–1948, 1952–1953, 1956–1957

William F. Heavey
1948–1952

Warren D. Lamport
1953–1956

Jerry P. Turner
1957–1971

George W. Altvater
1971–1979

Richard P. Leach
1979–1986

James D. Pugh
1986–1992

PHA Executives

H. Thomas Kornegay
Executive Director
1992—present

Wade M. Battles
Managing Director

John P. Horan
Director of Trade Development

James O. Eldridge
Director of Finance and Administration

James B. Jackson
Director of Facilities

Argentina M. James
Director of Public Affairs

* **Jimmy M. Jamison**
Director of Operations

Gilda Ramirez
Director of Small Business Development

Charlie Jenkins
Director of Planning and Environment

** **Erik A. Eriksson**
General Counsel

Barbara J. Schott
Harris County Auditor

* Jimmy Jamison was promoted to Director of Operations in April 2005.
Capt. John Scardasis retired from the position in October 2004.

** Erik Eriksson was appointed General Counsel in April 2005.

The Houston Ship Channel was the first federally approved public works project to include a local funding match component. In 1909, Houston Mayor Horace Baldwin Rice and Congressman Tom Ball presented the "Houston Plan" to the U.S. House of Representatives Rivers and Harbors Committee. The plan received congressional approval, and every port constructed in the U.S. since 1910 has followed this concept.

1909

In 1920, the Port of Houston's first director, Benjamin Casey Allin III, developed and subsequently patented an industrial site and railway access design that ports and maritime industries continue to use today. His warehouse and wharf shed design features a spur of the main railway line running through it so that railcars can be loaded and unloaded without delaying traffic on the mainline.

1919

In 1937, the Port of Houston reached the status of second only to New York in tonnage and importance, according to Fortune Magazine. Its position slipped slightly during World War II, but by 1948, the Port of Houston was once again ranked second in overall tonnage.

1920

The first direct shipment of cotton to Europe left the Port of Houston in November 1919 on the *M/V Merry Mount.* A total of 23,719 bales of cotton was shipped to Liverpool, England.

1930

By 1930, the Port of Houston had surpassed all its Texas rivals and ranked third in the U.S. for foreign exports.

1937

Synthetic rubber was mass produced for the first time in 1943 by two new Houston area plants and shipped for use in World War II through the Port of Houston.

1943

The Port of Houston Delivers First and Foremost From The Very Beginning

After World War II, development of the petrochemical industry along the Houston Ship Channel accelerated and transformed the Port of Houston into the nation's largest petrochemical production complex and one of the largest in the world.

1950

Developed by the Port of Houston Authority, the Houston World Trade Building was the first facility of its kind in the nation. The $3.5 million building opened January 29, 1962, and was designed as a central location for international trade interests including consular offices, transportation companies, importers and exporters.

1956

Containerization was born when the world's first container ship, *M/V Ideal X,* sailed with 58 truck trailers from New York/New Jersey and unloaded at the Port of Houston in April 1956.

1962

Use of the double-stack train was introduced at the Port of Houston in 1981. By placing one container on top of another, transportation costs were greatly reduced.

1981

In 1990, the fast-loading Spiralveyors were installed at Jacintoport making it the first facility of its kind in the country.

Also in 1990, the Beneficial Uses Group (BUG) was formed to develop environmentally innovative and beneficial ways to use dredge material from the Houston Ship Channel. A 250-acre demonstration marsh was built, which surpassed anything ever attempted in marsh restoration. Over the 50-year life of the deepening and widening project, an unprecedented 4,250 acres of marsh, a six-acre bird island, the 3,000-foot long Goat Island and Redfish Island will be built.

1990

During the Gulf War in 1990–91, the Port of Houston was the third-largest load center for the U.S. military and ranked second in the nation in the number of ships handled.

1990–91

In 1996, the Port of Houston Authority became the first U.S. port with a multi-site Disposal Area Management Program.

The Port of Houston first joined the "One Million Container Club" in 1999 when it moved 1,001,170 TEUs that year.

In 2002, the Port of Houston Authority's Barbours Cut maintenance and central maintenance facilities became the first U.S. port facilities with an Environmental Management System that meets the internationally recognized ISO 14001 standards for environmental excellence.

1996 1997 1999 2000 2002 2004

Originally built in 1953, the Baytown Tunnel had to be removed in 1997 as a part of the deepening and widening of the Houston Ship Channel. Houston became the first port to remove a tunnel of this magnitude (35' diameter by 1,041' in length) without closing the ship channel, lost time accidents, or navigational safety impacts.

In 2000, the Environmental Protection Agency selected the Port of Houston Authority to develop and implement a sophisticated environmental management system that meets the rigorous standards for ISO 14001.

Also in 2000, the Port of Houston Authority became the first U.S. port to conduct air emissions testing on off-road equipment.

In 2004, the first freight rail corridor study was released.

Sue Campbell, daughter of Houston mayor Ben Campbell, christened the Houston Ship Channel in 1914.

The Port of Houston Authority
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