



MORGAN CITY HARBOR AND TERMINAL DISTRICT



PORT DOCK EXPANSION AND ENHANCEMENT (EAST) – PHASE I

FY 2018 BUILD DISCRETIONARY GRANT PROGRAM

“BETTER UTILIZING INVESTMENTS TO LEVERAGE DEVELOPMENT”

TRANSPORTATION DISCRETIONARY GRANT APPLICATION

ATTACHMENT to SF-424

SUBMITTED: July 19, 2018



Project Title:	Port Dock Expansion and Enhancement (EAST) – Phase I
Location (city, state, district):	St. Mary Parish, Morgan City, Louisiana Latitude: 29.68965 Deg. N Longitude: -91.201418 Deg. W
Type of Application:	Capital
Applicant Name:	Morgan City Harbor and Terminal District (dba Port of Morgan City)
Type of Eligible Applicant:	Port Authority - RURAL
Amount of BUILD Funding Requested:	\$4,000,000
Additional Documentation on Website	www.portofmc.com (see BUILD 2018 on left-side column)





MORGAN CITY HARBOR AND TERMINAL DISTRICT

**FY 2018 BUILD Transportation Discretionary Grant Application
July 2018**

ATTACHMENT to SF-424

TABLE OF CONTENTS

Section	Page Number
APPLICATION SUMMARY	
I Project Description	5
II Project Location	12
III Grant Funds, Sources and Uses of Project Funds	16
IV Merit Criteria	22
A. Merit Criteria	23
B. Project Readiness	29
C. Benefit Cost Analysis	33
V Bibliography	37
Appendix	
Appendix A Resolution	
Appendix B Balance Sheet (ending June 30, 2018)	



APPLICATION SUMMARY

Project Title:	Port Dock Expansion and Enhancement (EAST) - Phase I
Geospatial Information:	Latitude: 29.689258 Deg. N Longitude: -91.200268 Deg. W
Parish Demographics: (U.S. Census;	Population: 52,093 (2016 est.) Median Household Income: \$40,781 Personal Per Capita Income: \$21,847 Persons Below Poverty Level: 22.4% Unemployment Rate (April 2017): 9.1%
Congressional District:	LA-003
Economically Distressed:	St. Mary Parish and Morgan City, Louisiana do not qualify as federally designated economically distressed areas.
Special Considerations:	America's Marine Highways Served (M10, M49, & M55)
Project Classification:	Port – Rural
FY 18 BUILD Funding Request:	\$4,000,000
Matching Non-Federal Support:	\$1,000,000
Benefit to Cost:	55.57 at 7% discount and 326.01 at 3% discount
Supporting Documentation:	www.portofmc.com



I PROJECT DESCRIPTION

Ports are significant to the well-being of the state of Louisiana and local communities. The economic activities of port-related firms support 178,582 permanent jobs for the people of Louisiana. This constitutes approximately one out-of-every 10 jobs in the state. In addition, the economic activities of those port-related firms created \$209.0 million in state tax revenue and \$101.1 million in local tax revenue for a total of \$310.1 million in revenue for the state and local governments (Wilbur Smith Associates, 2002). Because of this economic impact, the commissioners of the Morgan City Harbor and Terminal District, local elected officials in St. Mary Parish and citizens view the Port as a catalyst to living in a sustainable community and will work to ensure its success to maintain and enhance the economic vitality of this area, this region, this state and this nation.

-Background Information-

Created by Act 530 of the State of Louisiana Legislature in 1952, the Morgan City Harbor and Terminal District (MCHTD) is a political subdivision of the State of Louisiana; and, therefore, it is eligible to apply for FY 2018 BUILD Discretionary Grant funds. Since it is located approximately 18 miles inland of the Gulf of Mexico in coastal St. Mary Parish, Louisiana, its location at the confluence of the Atchafalaya River and the Gulf Intracoastal Waterway gives it a strategic location. For a number of years, however, following its creation in 1952, it lacked the facilities to be an efficient medium draft vessel port. To remedy this, port officials commissioned the development of an overall master plan for the Port. The first improvement project identified in this new "Strategic Development and Master Plan" involved site preparation and construction of an 80' x 500' reinforced concrete wharf, which was completed in June 1995 at a cost of \$3,330,750. The wharf concrete caps and deck were supported by a total of 31,000 linear feet of steel pipe piling. The deck load capacity of the original wharf was 750 psf allowing for concentrated loads from forklifts and cranes. Also included with this first wharf was a timber fender pile system having a design capacity for horizontal ship berthing and mooring load energy



absorption of 2.5-foot kip/foot. In addition, this wharf had 500 linear feet of steel sheet pile bulkhead with an anchoring system to retain 10,000 cubic yards of backfill, as well as a waterline and an electrical lighting system that completed the project.

Figure 1 Creation of original port wharf in 1995. Photo courtesy of GSE Associates, Inc.



The port completed this initial 500' long x 80' deep wharf along the Gulf Intracoastal Waterway (Bayou Boeuf) in 1995. As ship traffic increased along the GIWW and the Atchafalaya River, the Port decided that additional dockage area was required. A local engineering firm was retained to evaluate the nature of this need and recommend an economical solution. A key requirement was the ability to support a 70-ton crane at some location on the dock extension.

Figure 2 Original wharf in use following its completion in 1995. Photo courtesy of GSE Associates, Inc.



Eventually, a 308' dock extension, with a 40' width, was designed, the first 63 feet of which was capable of supporting a 70-ton load at a 50' crane boom radius. The project, also, included timber fender piles, ship bollards, a 12-inch water main extension with fire

hydrants and an increased area lighting system consisting of high pressure sodium (HPS) lighting. The wharf extension project was completed in January 2000 at a cost of \$1,602,000.



Figure 3 Workers building the East Dock Extension in 2000. Notice that it does not extend to the levee like the original wharf in the background. Photo courtesy of GSE and Associates, Inc.



Figure 4 - Port of Morgan City along GIWW



Figure 5 The East Wharf Extension completed in 2000. Photo courtesy of GSE and Associates, Inc.

- Recent Uses of the Dock-

Over the last decade, business has been very slow at the Port of Morgan City. Attempts to attract aggressive port operators who would, in turn, develop business growth have failed; however, with a newly-hired executive director in September 2013, the Port of Morgan City became very active in rebranding itself, renewing commitments with former tenants and establishing new business relationships with other companies.

During this time, the port became a main shipping location for Purina Mills International (PMI), a Fortune 500 company, who used the port's dock to run an import/export breakbulk operation. Their operations can broadly be segmented into two parts:

- Upland/outbound movement of freight along the inland waterways using barges;
- Ocean-going operation that included ports in Mexico and Haiti

The upland/outbound operation brought freight (such as DDGS, rice, and other commodities) by barge to the Port, where they were transloaded to ocean-going vessels with destinations in the Caribbean. The inbound operation included transporting commodities imported from Mexico, such as salt, for use at PMI's domestic facilities in Burnsville, Minnesota (a 1,300-mile one-way trip from Morgan City). The ocean segment of the operation included a deep-sea vessel calling on Mexican and Haitian ports before returning to the Port of Morgan City. PMI used an OSLO Bulker vessel for its operations (Moffatt & Nichol, p. 24). The port's revenues revolved around primarily dockage and harbor fees, but there were some supporting services such as providing fresh water to the vessel. The vessel stayed at the dock for an average of three days each trip (Moffatt & Nichol, page 31). Sometimes the ship stayed in port longer, depending on the availability of rice exports.

In addition, Planters Rice Mill, L.L.C. used the dock to export rice. Rice arrived at the port from Louisiana rice farmers in trucks as bulk. The farmers/exporters provided their own conveyer



system equipment to transfer the rice from the trucks to stand-by barges, which acted as “floating silos;” and, then the rice was transferred to the ocean vessel. The port generated revenue from those operations by providing crane services and dock labor. Two shipments (each of 2,000 tons) of rice coming into the Port were needed for one export trip. On average, each barge needed two hours of crane service in addition to two hours of crane operator labor. It was envisioned that the Port of Morgan City would become the port of choice for Louisiana rice exporters and handle up to a minimum of eight export trips annually, with each trip handling 4,000 tons (Moffatt & Nichol, p. 34).

Congestion at the dock occurred often when barges were at the dock at the same time as the PMI ship and when other vessels wished to dock at the site. This was detrimental to business growth, as noted by Seacor Marine, who still uses the dock when available for sea trials and docking of new vessels that are being commissioned: *“There have been occasions when our request for use of the facility was denied due to the port being at full capacity.”*

Also, Gulf Craft, LLC uses the dock to test their vessels; and, Morgan City Stevedores, LLC uses the dock to handle rice and is looking to expand into different commodity groups at the port. Additionally, some local companies are bidding on export loading of heavy industrial cargo for the petro-chemical industry and a bagging operation, all to be done at the port’s dock. They would like to expand, but they can’t because of the lack of improved dock space and cargo lay-down area. They are confident that if the port can expand the useable area of the port, they will be able to secure additional business that will add jobs to this region.

In addition, Babin Marine worked with Port officials for several months, importing Mexican salt and exporting grain. This company would like to expand their operations out of the Port of Morgan City, but they require more waterfront dock space along the Gulf Intracoastal Waterway to support their business endeavors. Their expansion would benefit over 6,580 river-miles touching 37 different states located in the Mississippi River Basin Watershed.

-Transportation Challenges-

As noted earlier, the Port of Morgan City is hindered in reaching its maximum potential because of inadequate infrastructure. It can handle only a limited amount of cargo due to weight restrictions on its docks (which affects the time to transload cargo from ships); and, it does not have the infrastructure to provide a berth for vessels and/or to store additional cargo/freight on site. Addressing these deficiencies will improve the resiliency of the port area and enhance its economic competitiveness.

Next, the MCHTD completed a strategic plan in 2008 listing infrastructure enhancements needed to improve business development. Plan developers realized that there existed a potential for the MCHTD to attract and sustain short sea-service to the Caribbean Islands, Mexico and Central America based on reviews from other foreign trade services in the Gulf; however, possessing facilities that can efficiently handle this freight leave some to question the port’s capacity to handle new business. For example, the Port does not have enough berthing area for ships; it lacks enough concrete lay-down areas for cargo; (Amdal, Swigart, Jayawardana, Ashar, &



Duplechain, 2008). If it can enhance its dock by extending it to the west and enhancing the Eastern section by extending it inland toward the levee, the port will be able to accommodate additional vessels and increase cargo lay-down areas. Consequently, the port would be in a better position to grow and sustain local communities, as well as other domestic and international communities/markets.

Identified in its 2008 Strategic Plan, the MCHTD has several weaknesses that affect its potential to grow: it exists within a unique environment where most potential port users have built and use their own private terminals or docks (This substantially reduces the potential market for cargoes using the PMC); the port is relatively small and somewhat constrained with limited expansion options; and, it competes with other Gulf Coast ports with substantial lands available for development, such as Port Fourchon, Port of West St. Mary, Port of Iberia, and the Port of Terrebonne. Given this situation, it is imperative that the MCHTD identify and establish a niche market that complements existing public and private terminals within the region and not position itself as a competitor (Amdal, Swigart, Jayawardana, Ashar, & Duplechain, 2008).

-Challenges to be Addressed-

Recently, almost a quarter of a century after the original dock was built, port commissioners decided that the entire berthing complex needed to be expanded and enhanced. Because of past experiences, port officials agreed that the port needed to extend the current dock about 450' to the WEST and to complete the EAST wharf decking by extending it inland toward the sea wall, replicating what is currently in place at the port's terminal facility.

It is estimated that work on the East and West sections of the current wharf would cost approximately \$15 million, far more than what the port could afford on its own. So, the port sought financial assistance from outside sources, and the port submitted several TIGER grant proposals requesting funds to complete the ENTIRE project (EAST and WEST sections). In its entirety, the original project proposal would have addressed the challenges identified that restrict the growth of business in the region. For example, the current dock is not long enough to handle more than two vessels simultaneously. This means that cargo barges must be stored offsite, incurring additional berthing fees, until they are ready to transload cargo; or, the barges are "hipped" together, 3-abreast, at the port's dock, causing them to encroach upon the main shipping channel of the GIWW, posing as a marine hazard. This "hipping" process, also, delays the cargo transfer process since barges must be constantly moved by a tug and placed alongside the vessel when transloading cargo. In addition, if there is no space available at the dock for another ship, then that ship must idle in the river. This adds to the amount of fossil fuels being consumed, increasing the amount of emissions in the atmosphere and increasing the chances of a possible maritime collision or allision since the channel is narrow.

The port was planning to request funds for the same thing this year with the FY 18 BUILD grant. The port commission adopted a resolution agreeing to the submission of a FY 18 BUILD grant application and to providing the local 20% match (see Appendix A); however, in the weeks following the June 2018 Commission meeting, port officials had additional discussions about their FY 2018 BUILD application and decided to separate the scope of work into two different



project areas (the EAST section and the WEST section) and, instead, seek FY 2018 BUILD funds for just one section. Port officials believed that the permitting process for the WEST section would take too long and prevent the port from meeting a September 30, 2020 BUILD obligation deadline due to the wetlands in that area. Consequently, the port is going to focus on addressing the EAST section's deficiencies (estimated to cost \$5 million) using 2018 BUILD funds; therefore, the port is requesting \$4 million in FY 18 BUILD funds and will provide a \$1 million match (To help fund the implementation of the remaining WEST section, the port will seek \$9 million in funding from the Louisiana Port Priority Program in fall 2018). The resolution adopted at the June 2018 Commission meeting related to the FY 2018 BUILD submission and match will remain the same, since the commissioners agreed to submit a FY 2018 BUILD application and to providing a 20% match.

-Scope of Work-

Acquiring FY 2018 BUILD Transportation Discretionary Grant funds enables the Port to implement its "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project which is incorporated in its master plan that recommends enhancing its infrastructure and its capacity to handle cargo. If funded, the project allows the Port to hire professional firms to design, engineer and construct an extended EAST dock enhancing it inland toward the shore and the seawall, the need for which was identified in the Port's 2008 Strategic Plan. The general scope of work consists of the following: the construction of steel foundation piles; reinforced concrete pile bents and wharf deck; a steel sheet pile wall; concrete paving and other incidental items of work in connection therewith, including the replacement of 24 1000-watt High Pressure Sodium (HPS) light fixtures with 24 300-watt LED flood lights and ancillary items. This additional East wharf deck will be approximately 300' long and extend about 120' inland toward the USACE seawall. This will provide enough concrete laydown area for an additional 2200+ cargo containers (20' TEUs) stacked 4-high.

The Port's FY 2018 BUILD Transportation Discretionary Grant proposed project is part of the overall Port enhancement plan, as identified in its 2008 Strategic Plan. In addition to this local plan, the entire enhancement wharf project aligns with the Five-Year Capital Improvement Plan 2007-2011 For Ports Association of Louisiana Member Ports (Shaw Environmental and Infrastructure, Inc., 2007), 2009 Port Association of Louisiana Strategic Economic Development Plan (Shaw Environmental and Infrastructure, Inc., 2009) and with former-President Obama's call to double U.S. exports within five years.¹

-Project Benefits-

In addition to what was mentioned earlier, enhancing the port's infrastructure is significant to the region and to the nation for several other reasons. First, the infrastructure improvements enhance the Port's capacity to handle cargo (bulk or container); second, the enhancements will increase

¹ Obama, President Barak H. "2010 State of the Union Address." U.S. House of Representatives. Washington, D.C. 27 Jan 2010.



the number of jobs at the port because of the increase in business; third, the enhancements increase the region's resiliency. For example, the Port is a coastal port that is protected from the Gulf of Mexico by 18 miles of marshland, in a portion of the Atchafalaya Basin that is, in fact, growing wetlands/marsh, a unique natural phenomenon along the Louisiana Coast. This semi-land buffer, affording a natural barrier to storm surge, creates a "safe-harbor" condition at the Port during hurricane events (Amdal, Swigart, Jayawardana, Ashur, & Duplechain, 2008). When other regional ports are forced to close because of a hurricane, the Port of Morgan City can provide them with a location to conduct business until they return to operation. Plus, the enhancements will provide additional safe-harbor for vessels. Finally, the infrastructure improvements are regionally and nationally significant because then the Port can become competitive in attracting South American and Asian/Pacific business due to the expansion of the Panama Canal.²

Another possibility for growth and a justification to ensure that the Port's infrastructure is maintained and enhanced lies south of the state of Louisiana in the Republic of Panama. In what is being called a "game-changer" for the shipping industry (Ashar, 2010), a new set of locks were constructed on the Panama Canal and will double its capacity and allow new Panamex (NPX) ships of 12,500 TEU to transit its waters. Most US East and Gulf Coast (USEC/GC) ports believe the expansion of the Panama Canal will deliver more cargo, especially from Asia (Ashar, 2010). It is critical that the Port of Morgan City prepares itself as a possible new participant in the Asian/Western Pacific – Gulf Coast trade. While the new Post-Panamex ships are too large to access the Port's waterways, ancillary and service vessels can and will use this area to transport cargo. Now that the new locks have opened, the Port must position itself to capitalize on the change in routing of cargo to and from the United States (McCue, 2009). While the port will never be able to directly handle the new Post-Panamex ships due to their size and draft requirements, the port will be able to service smaller ships that will be related to these massive vessels.

The importance of these aforementioned projects to the Port's sustainability is unquestioned. In fact, the next couple of years could present several opportunities to increase Port business. For example, Cenac Towing, L.L.C. selected the Port of Morgan City for its United States base of operations as the company began to import and export general cargo between various ports in Mexico, Central America and the Caribbean (Ports Association of Louisiana, 2009; Schmidt, 2009). In January 2013, Lamol Inmobiliaria leased the port facilities to conduct export/import business, but they ended their project in late 2013. The potential of this area is ripe for development.

² Trottenberg, Polly. "Doubling U.S. Exports: Are U.S. Sea Ports Ready for the Challenge?" U.S. Senate Subcommittee on International Trade, Customs, and Global Competiveness: Committee on Finance. Washington, D.C., 29 Apr. 2010.



Figure 6 - U.S. exports can easily be shipped to ports of call in Mexico, Latin America or the Caribbean from the Port of Morgan City

Once the infrastructure has been improved, the business community will reap the benefits of the project. For example, major industries in the area include agriculture, sugar mill, carbon black plants, shipbuilding, OG (Oil & Gas) Supply and services, metal fabrication facilities and seafood processing (Amdal, Swigart, Jayawardana, Ashar, & Duplechain, 2008). These companies include, but are not limited to, Oceaneering, New Industries, J. Ray McDermott, Danos, Baker-Hughes, Halliburton, and Hudson Dry Docks. These businesses employ thousands of workers that live within and adjacent to the port area, thereby affecting the economic stability of this region. Since the economic base of this area is related to the coastal zone of south Louisiana and the Gulf of Mexico, business development is related directly to the Outer Continental Shelf (OCS) and the significant oil and gas (OG) activities in the Gulf of Mexico.

The port's 2008 strategic plan examined the employment data of major industries and their characteristics indicate that these port-area businesses have a much stronger manufacturing, transportation and storage base than the surrounding parishes, which obviously is beneficial to port development at the Port of Morgan City. The MCHTD (and other nearby ports) have all identified the Outer Continental Shelf-Oil and Gas (OCS-OG) activities as the main demand driver for port services. With rapid expansion of the industry driven by annual leases of more OCS areas, and the shift of exploration to reserves in deeper waters, these trends will continue to expand the future demand for port services from this industry (Amdal, Swigart, Jayawardana, Ashar, & Duplechain, 2008).

By upgrading the proposed infrastructure improvements adjacent to the PMC mainline, all the container stacking and storage areas can be consolidated on the river dock side of the terminal, instead of being split on either side of the seawall as in the current arrangement. Consolidating the container stacks into one area allows for them to be sorted and managed efficiently.



In summary, the MCHTD owns and operates a public terminal in Morgan City along the Gulf Intracoastal Waterway (GIWW) in St. Mary Parish, Louisiana, outside of any urbanized areas, as defined by the U.S. Census Bureau. The terminal contains 800 linear feet of berthing space; 50,000 ft² of concrete open storage dock; and, a 20,000 ft² transit shed storage that was completed in February 1999. The public terminal is capable of handling containerized cargo, bulk, neo-bulk, and project cargo. It is accessible to on-site rail service and is approximately one mile from U.S. Hwy. 90/I-49.

Due to an increase in river traffic, the port is in need of completing its dock facility by extending its wharf 450' to the west and by extending and enhancing its East section (thus replicating what currently exists at the dock). Because of the estimated \$15 million price tag and because of the short time limit to go through the permit approval process, the port will focus its 2018 BUILD request on the EAST section of its wharf, which is estimated to cost \$5 million. Consequently, the port, as a RURAL APPLICANT, is respectfully requesting \$4 million in 2018 BUILD funds and will provide a \$1 million cost share match (As a RURAL APPLICANT, the port is allowed to request less than \$5 million in 2018 BUILD funds and will provide a local match even though it is not required to do so) to improve, extend and enhance its EAST wharf section.



Figure 7 Photo of Eastern Section project area. Concrete dock will extend from the left (over the water) to the right, onto the land and pass the access road.

II PROJECT LOCATION

As a Louisiana coastal port that is approximately 18 miles from the Gulf of Mexico, the Morgan City Harbor and Terminal District is positioned in an enviable geographical location along the northern Gulf coast and at the confluence of the Gulf Intracoastal Waterway (GIWW) and the Atchafalaya River. It's Lat/Long = 29.689258° N (Lat) / -91.200268° W (Long) and GPS coordinates 29° 41' 21.3288 N / 91° 12' 0.9648" W.



The port connects the continental United States to the international community. According to the U.S. Coast Guard and reported by the *Ports Association of Louisiana*, over 60,000 passages



per year have gone through the Port of Morgan City. The Port District primarily serves inland and offshore oil and gas drilling and production industry. Major activities include fabrication, shipbuilding, and vessel repair and conversion. Primary cargos include fabricated items, limestone and aggregates, barite, petroleum oils and fuel oils, and oil and gas drilling and production equipment and supplies. The port's tonnage averages 2 million tons annually (Richardson. Page 1; 2015).

Figure 9 - Location of Port of Morgan City (source: Moffat & Nichol)

Because of the expanding economies in South America and Asia, now is an opportune time to prepare the region for the eventual opening of access to ports and markets, with many Asian areas becoming more accessible since the expansion of the new locks at the Panama Canal has been completed a few years ago. The first step toward this is to support the Port of Morgan City's wish to extend and enhance its dock.

Although the port has water access, it, also, has rail and truck access enabling it to ship to areas throughout the region, as well as throughout the entire nation; however, its FY 2018 BUILD grant project proposal is strictly related to its EAST dock extension.



Figure 10 Project Locations (East and West) at Port Dock (source: Google Maps)



The Morgan City Harbor and Terminal District lies in St. Mary Parish and comprises the municipalities of Morgan City and Berwick; however, it is not located in a US Bureau of Census-designated “Urbanized Area.” Its terminal facilities (including the dock) are located in the City of Morgan City, which has a population of just over 11,646 as of 2016. The population in St. Mary Parish has 52,810 in 2016. The *per capita income* for St. Mary Parish is \$21,088 (source: <http://www.city-data.com/city/Morgan-City-Louisiana.html>) and the current Unemployment Rate is 6.6% (March, 2018). The port’s terminal facility (and project site) is located along the Gulf Intracoastal Waterway (GIWW), just east of the GIWW’s intersection with the Atchafalaya River, which heads south to enter the Gulf of Mexico. It is, also, proximate to US Hwy 90 / I-49.

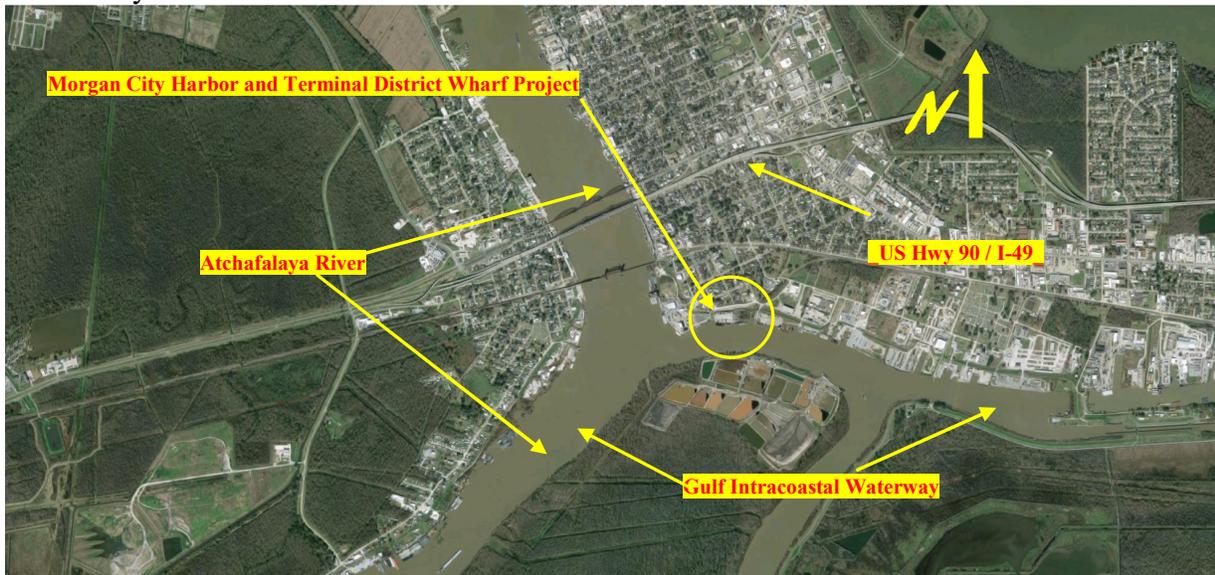


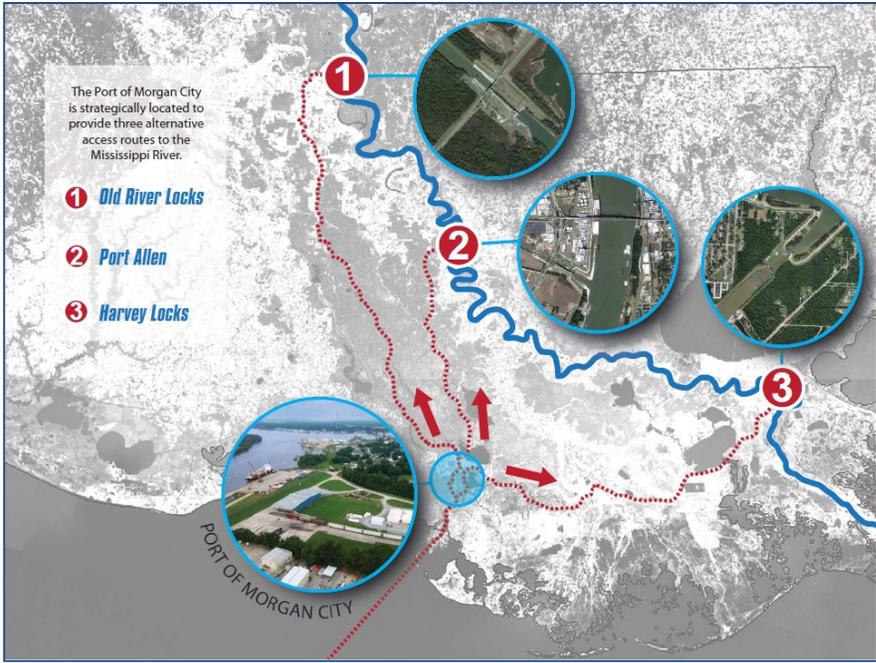
Figure 11 - Aerial View of Port of Morgan City Location (source: Google Maps)



The Port, as shown in Figure 12, provides three different access points to the Mississippi River: the Harvey Locks in New Orleans; the Port Allen Locks in Port Allen, Louisiana (across from Baton Rouge); and the Old River Structure (at the juncture of the Atchafalaya River, the Red River and the Mississippi River).

Figure 12 - The Port of Morgan City provides three access points to the Mississippi River (source: Moffatt & Nichol)

The proposed project is of national significance and is distinguished from other proposals in that it capitalizes on existing strategic advantages only present in Morgan City and this area. Because of its location at the confluence of the Atchafalaya River and the Gulf Intracoastal Waterway (GIWW), the Port of Morgan City provides access to ports around the nation because it has access to the nation's inland waterway system via the Mississippi River system. In addition, the MCHTD can link to the rail system near New Orleans, which is the only deep-water port in the US with six Class I Railroads. This involves 132,000 miles of connecting rail tracks situated within a 14,500-mile inland waterway that serves 37 states (including Louisiana) and 6 Canadian



provinces. The inland waterway and railroad systems serve to make the Port of New Orleans the gateway for international trade to the interior of the United States. The 2010 Census population served by this expansive port service area is 279,099,369.³

Its proximity to the Gulf of Mexico and to the intersection of the Atchafalaya River and the Gulf Intracoastal

Waterway offers a central location for maritime vessels working the Gulf. There are over 60,000 annual transits per year through the Morgan City Vessel Traffic Service area, which is equivalent to 155.4 average daily transits (Marquardt, 2008). Also, about 60 million tons of cargo transit

³ http://en.wikipedia.org/wik/List_of_U.S._states_and_territories_by_population and http://en.wikipedia.org/wik/List_of_Canadian_provinces_and_territories_by_population.



through the area each year (Butler, 2008). In fact, the number of documented arrivals within the Port of Morgan City can rival, if not exceed, the number of arrivals in Houston, Texas.⁴ Next, traffic originating in southeast Texas and west Louisiana traveling to the Upper Mississippi River Valley saves approximately 342 miles round trip by using the Atchafalaya River rather than the alternate link of the Gulf Intracoastal Waterway via the Harvey Locks at New Orleans, resulting in both a cost and time savings for the vessel operator (U.S. Army Corps of Engineers Navigation Data Center, 2008).

III GRANT FUNDS, SOURCES and USES OF PROJECT FUNDS

-Project Costs-

As mentioned in a previous section, the Port of Morgan City had investigated renovating the entire wharf along the GIWW at a cost of \$15 million; however, because it became evident that the permit process would take longer than the September 2020 obligation deadline, port officials decided to break the project into two separate portions: Phase I (East) - \$5 million and Phase II (West) \$10 million. The port is requesting \$4 million in FY 2018 funds for Phase I, the EAST section; and providing a \$1 million match. The Port will seek funding for the WEST section from the Louisiana Port Priority Program in fall 2018.

-Resolution-

A Resolution of Commitment is included in Appendix A of this narrative. It was adopted at the June 2018 Commission meeting; and, although it authorizes the grant application submission, it, also, commits the port to providing the 20% match, even though the port is applying as a RURAL entity. The Resolution supports the match of \$3 million for Phase I and Phase II; but, since the Port is only requesting \$4 million in FY 18 BUILD funds, it will only have to provide a \$1 million match.

Engineers estimate that the cost to fully implement the Morgan City Harbor and Terminal District's "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project totals \$5,000,000. The Port District is requesting \$4 million in FY 2018 BUILD Transportation Discretionary Grant funds; and, during their June 11, 2018 regularly scheduled board meeting, Port Commissioners unanimously adopted a resolution authorizing the submission of the port district's FY 2018 BUILD Transportation Discretionary Grant application and to provide the 20% local, non-federal match (\$1 million). Even though applying as a RURAL entity does not require a non-federal match, the port commission is fully-committed to this project and to improving the Port's infrastructure with the belief that doing so will improve the community's sustainability and lead to an increase in new jobs, business development and community pride.

⁴ The number of documented arrivals from October 1, 2007 to September 30, 2008 at the Port of Morgan City totaled 6,080, which was 89 more documented arrivals than at Houston (U.S. Army Corps of Engineers Navigation Data Center, 2008).



The source of the port's 20% non-federal match is its bank account. A copy of the port's balance sheets (ending June 30, 2018) is in Appendix B.

The dock improvements proposed under the FY 2018 BUILD Transportation Discretionary Grant Program will provide a smooth and rigid paved surface with high-loading capacity to efficiently accommodate increasingly heavier cargos at the Port with no dust or contaminants. The new paving improvements will be designed for a uniform live-load of 1,000 pounds per square foot to accommodate the handling and storage of ultra-heavy loads inherent to steel and project cargo, enabling the PMC to process more such cargo.

All funds related to this proposed project will be used to design, engineer and construct the western wharf extension and enhance its eastern extension that is currently in place.

- *Port Dock Expansion and Enhancement (Both Phases)*
 - PHASE I - Eastern Wharf Extension Enhancement:
 - 40,000 ft² of existing wharf upgrades
 - The port's current wharf is not rated for HS-20 loading; therefore, funds will be used to rehabilitate and upgrade the current wharf.
 - Estimated Cost: \$5 million
 - Sources of Revenue
 - FY 18 BUILD: \$4 million
 - Port of Morgan City: \$1 million
 - PHASE II - Western Extension of Wharf:
 - 12,000 ft² of new wharf construction/demolition
 - The port needs to construct additional wharf space that is rated for HS-20 loading; and, this new wharf will provide additional space for the handling and storage of shipping containers.
 - Estimated Cost: \$10 million
 - Sources of Revenue
 - Louisiana Port Priority: \$9 million (Proposed fall 2018)
 - Port of Morgan City: \$1 million
 -

Project Budget

FY 2018 BUILD Transportation Discretionary Grant
Morgan City Harbor and Terminal District
Port Dock Expansion and Enhancement (EAST) - Phase I

	Item Description	Unit	Qty	Unit Price		Amount
A	Public Advertisement					\$1,500.00
B	Estimated Construction Cost					\$4,228,500.00
1	Clearing and Grubbing	L.S.	1	\$7,000.00	\$7,000.00	
2	Removal of Structures & Obstructions	L.S.	1	\$7,000.00	\$7,000.00	



**Application to the U.S. Department of Transportation's
Fiscal Year 2018 BUILD Transportation Discretionary Grant Program**

3	Mobilization	L.S.	1	\$300,000.00	\$300,000.00
4	Class AA Concrete (Pile Cap)	C.Y.	300	\$1,000.00	\$300,000.00
5	Class AA Concrete (Deck and Beams)	C.Y.	1,030	\$750.00	\$772,500.00
6	Deformed Reinforcing Steel	Lb.	280,000	\$1.10	\$308,000.00
7	Steel Sheet Pile Bulkhead	Lft.	310	\$3,000.00	\$930,000.00
8	Steel Pipe Piles (20" Dia.)	Lft.	14,300	\$75.00	\$1,072,500.00
9	PCC Pavement (16" Thick)	S.Y.	3,200	\$85.00	\$272,000.00
10	Class II Base Course (12" Thick)	S.Y.	3,200	\$32.00	\$102,400.00
11	Storm Drain Pipe (18" Dia.)	Lft.	200	\$42.00	\$8,400.00
12	Catch Basin (CB-01)	Ea.	3	\$4,500.00	\$13,500.00
13	Lime Treatment	S.Y.	3,200	\$8.00	\$25,600.00
14	Geotextile Fabric	S.Y.	3,200	\$3.00	\$9,600.00
15	Lighting (LED)	L.S.	1	\$100,000.00	\$100,000.00
C	Basic Engineering Services (Design, Bidding, Construction Administration)				\$380,500.00
D	Additional Services				
1	Topographical and Elevation Survey				\$6,000.00
2	Permits				\$8,000.00
3	Project Representation				\$95,000.00
4	Record Drawings				\$1,000.00
5	Reimbursable Expenses				\$15,000.00
E	Contingency				\$264,500.00
Total Probable Project Budget					\$5,000,000.00



Categorial Budget

FY 2018 BUILD Transportation Discretionary Grant
Morgan City Harbor and Terminal District
Port Dock Expansion and Enhancement (EAST) - Phase I
Categorial Budget

	Item Description	Local (20%)	BUILD (80%)	Other Non-federal	Sub-total (100%)	Total (100%)
A	Public Advertisement	\$300.00	\$1,200.00			\$1,500.00
B	Estimated Construction Cost					\$4,228,500.00
1	Clearing and Grubbing	\$1,400.00	\$5,600.00	\$0.00	\$7,000.00	
2	Removal of Structures & Obstructions	\$1,400.00	\$5,600.00	\$0.00	\$7,000.00	
3	Mobilization	\$60,000.00	\$240,000.00	\$0.00	\$300,000.00	
4	Class AA Concrete (Pile Cap)	\$60,000.00	\$240,000.00	\$0.00	\$300,000.00	
5	Class AA Concrete (Deck and Beams)	\$154,500.00	\$618,000.00	\$0.00	\$772,500.00	
6	Deformed Reinforcing Steel	\$61,600.00	\$246,400.00	\$0.00	\$308,000.00	
7	Steel Sheet Pile Bulkhead	\$186,000.00	\$744,000.00	\$0.00	\$930,000.00	
8	Steel Pipe Piles (20" Dia.)	\$214,500.00	\$858,000.00	\$0.00	\$1,072,500.00	
9	PCC Pavement (16" Thick)	\$54,400.00	\$217,600.00	\$0.00	\$272,000.00	
10	Class II Base Course (12" Thick)	\$20,480.00	\$81,920.00	\$0.00	\$102,400.00	
11	Storm Drain Pipe (18" Dia.)	\$1,680.00	\$6,720.00	\$0.00	\$8,400.00	
12	Catch Basin (CB-01)	\$2,700.00	\$10,800.00	\$0.00	\$13,500.00	
13	Lime Treatment	\$5,120.00	\$20,480.00	\$0.00	\$25,600.00	
14	Geotextile Fabric	\$1,920.00	\$7,680.00	\$0.00	\$9,600.00	
15	Lighting (LED)	\$20,000.00	\$80,000.00	\$0.00	\$100,000.00	
C	Basic Engineering Services (Design, Bidding, Construction Administration)	\$76,100.00	\$304,400.00			\$380,500.00
D	Additional Services					
1	Topographical and Elevation Survey	\$1,200.00	\$4,800.00	\$0.00		\$6,000.00
2	Permits	\$1,600.00	\$6,400.00	\$0.00		\$8,000.00
3	Project Representation	\$19,000.00	\$76,000.00	\$0.00		\$95,000.00
4	Record Drawings	\$200.00	\$800.00	\$0.00		\$1,000.00
5	Reimbursable Expenses	\$3,000.00	\$12,000.00	\$0.00		\$15,000.00
E	Contingency	\$52,900.00	\$211,600.00	\$0.00		\$264,500.00
	Totals	\$1,000,000.00	\$4,000,000.00	\$0.00		\$5,000,000.00



Also, the MCHTD has requested funding for this project in prior TIGER funding cycles, as well as in the 2017 FASTLANE funding program and from the 2017/2018 INFRA Grant Program in November 2017; however, the port's grant applications were rejected.

FY 2018 BUILD Discretionary Grant funds will be used to assist the port in paying for the design and construction of the wharf's EAST extension and the enhancement. No funds have been spent on the project, yet, even though the port has applied previously for funding from earlier TIGER funding cycles.

It is expected that once the "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project is fully-implemented, the Port of Morgan City will no longer be the sleepy little site along the GIWW it has been for the last two decades; but, rather, it will be transformed into a major economic engine, attracting new business to the area and helping to grow businesses that currently exist in this area.

Figure 13 Photo shows PHASE II – The WEST expansion area of current dock to be funded with state Port Priority funds (proposed, fall 2018).

Port officials know that if their FY 2018 BUILD request is fully-funded, it will lead to an increase of business at the port because the project results in an increase in the wharf's cargo handling capacity, allowing multiple vessels to transload simultaneously, dock additional barges onsite and store more cargo/ containers (TEUs) safely.

In addition, the proposed "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project will allow the port to capitalize on a niche it recently began to fill regarding servicing small-scale ships that require a draft of less than 20'. These ships are not well-received at larger ports (i.e., Port of New Orleans, Port of South Louisiana, and Port of Lake Charles) because these smaller ships do not bring in the business that these larger ports prefer (Moffatt & Nichol, pages 9, 12 and 15. 2015). Larger ports require more operating capital because they have the heavy equipment, the labor, and other major expenditures that smaller ports, like the Port of Morgan City, do not have.

In fact, this answers the question, "Why the Port of Morgan City?" Ships requiring a draft in excess of 20' cannot go further north on the Mississippi River than Baton Rouge because of the normal 12' draft of the Mississippi River. The Port of Morgan City is the answer to these ships' need to unload because they are not wanted by the larger ports. In addition, using the Port of Morgan City requires no Pilot Fees to transit the Atchafalaya River; whereas, shippers using the Mississippi River must pay expensive Pilot Fees from the mouth of the Mississippi River to Baton Rouge.



For example, in 2013 the river pilots of vessels that transit the Mississippi River between Baton Rouge, Louisiana and New Orleans were paid in excess of \$60 million (See <https://www.dropbox.com/s/g9yjwf2lessys15/NOBRA's%20Pilot%201099%20Income%20Distribution%20Disclosure.pdf?dl=0>). This does not include the millions of dollars in pilot fees paid to river pilots for the portion of the Mississippi River between the City of New Orleans and the mouth of the Mississippi River. There are no Pilot Fees for ships using the Atchafalaya River, a major cost-savings for shippers, making the Port of Morgan City an ideal location. This is another reason why the Port of Morgan City is an enviable location to import/export and transload cargo.



Figure 15 Photo of area of Eastern Enhancement project site where current dock (on right) will expand to the left onto the land and build a concrete cargo-handling area.

IV MERIT CRITERIA

Locals recognize the Port of Morgan City as an asset to this region and the need to enhance its infrastructure. During public meetings in 2002 when the Parish was creating its comprehensive plan, citizens and stakeholders addressed the need to make the Port a viable entity, able to compete with other ports, foreign and domestic. The “continued maintenance and enhancement of these transportation facilities will be instrumental to continued economic development in the Parish” (Wilbur Smith Associates, 2002). There exists an effort to ensure that the “region can grow to become a center of industrial and marine fabrication and other maritime industries unsurpassed in the nation and one that is highly competitive in the worldwide marketplace” (Wilbur Smith Associates, 2002). Recognizing this charge, the St. Mary Parish’s Comprehensive Plan comprise several goals and action plans that address the need to provide for the long-term development and enhancement of the port and to “improve and enhance waterborne commerce and transportation through effective and efficient operations” of the port (Wilbur Smith Associates, 2002).

The Morgan City Harbor and Terminal District is a political subdivision of the State of Louisiana created by Act 530 of the State Legislature in 1952. The Port District is governed by a nine-member Board of Commissioners, appointed by various state and local government officials. The Port has an executive director, an office manager and a manager of economic development.



The executive director is the designated staff member that will manage the proposed project. Once the project engineer firm and construction contractor are selected by the commission, the executive director will meet with company representatives to ensure the efficient implementation of the grant. Eligible activities will be initiated immediately following the official notification of the effective start date of the grant award.

Since the staff of the Port is limited in number, the Port has procured the services of consultants, engineers, architects and other professionals to implement various projects. It is extremely experienced in the procurement process for professional services, labor, and supplies and materials.

Also, the Port is the recipient of several grant awards from different agencies. For example, DHS/FEMA awarded the port funding grants from several of its Port Security Grant Program (PSGP) funding cycles: FY 2009 (\$560,000); FY 2010 (\$1,000,101); FY 2011 (\$1,100,000); FY 2013 (\$303,000); FY 2014 (\$154,170); FY 2015 (\$201,100); and, FY 2016 (\$444,750). The state of Louisiana has provided the port with Capital Outlay Grants and Port Priority Grants. In 2014, it received \$7.1 million in state Capital Outlay funds to construct a 35,000 ft² Emergency Operations Center in Morgan City (that opened in January 2016); and, the U.S. Department of Economic Development has provided financial assistance in the past for other capital projects. Consequently, the port is extremely familiar with the federal grant process, the need to follow various grant guidelines and laws, as well as grants management procedures.



Figure 16 - Aerial View of Port of Morgan City Project Location

The proposed project aligns well with the BUILD 2018 Merit Criteria selection criteria. The Morgan City Harbor and Terminal District's "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project capitalizes on intermodalism by enhancing infrastructure to facilitate cargo movement via maritime modes resulting in a diversion of cargo from highways.

Officials believe that this project will provide the following numerous long-term benefits over the 50-year life-cycle of the project:

- Enhanced marine – rail connectivity;
- Reduced reliance on truck transport, taking trucks off streets and highways;
- Reduced transit time for cargo movements;
- Reduced transportation costs;
- Increased productivity;
- Reduced congestion and fuel consumption; and,
- Reduced carbon footprint in Louisiana and the expansive MCHTD service area.

If the project is not implemented (i.e., under a no-build scenario), there will be a greater reliance on truck transport, increasing congestion and fuel consumption and the carbon footprint of transportation services from Morgan City through the entire North American market served by the port. In addition, with more cargo being transported on the US highway system, additional roads and related infrastructure (i.e. bridges) will need to be fixed from all the wear-and-tear, costing taxpayer billions of dollars over the course of the years.

The Port's FY 2018 BUILD Transportation Discretionary Grant Request addresses many the criteria required of the grant guidance. Specifically, the results of the project affect the following:

1. Merit Criteria

- Safety
- State of Good Repair;
- Economic Competitiveness;
- Environmental Protection; and,
- Quality of Life.

1. Safety

There are safety benefits that will be derived from this project. For example, by being able to bring in more ships to the port's dock to transload cargo, fewer trucks will be on the highway. This will reduce the number of truck-related traffic accidents and deaths. Also, by building the extension to the land from the eastern side, machine operators won't have to worry about backing over into the water. They will remain on a concrete laydown area.



2. State of Good Repair

The proposed project is consistent with efforts to maintain transportation facilities in a state of good repair. The new dock improvement will eliminate existing inefficiencies and eliminate a physical barrier to the layout of cargo storage by providing a flat, rigid and consistent concrete surface to increase safety and reduce transit time, generally increasing functionality and the efficient movement of goods and services through the PMC. The “Port Dock Expansion and Enhancement (EAST) - Phase I” will upgrade surface transportation assets. The port has out-grown its existing dock. If left unimproved, the port will fail in reaching an effective mode.

The project is part of a two-phased capital improvement plan developed by the port to upgrade port facilities and expand capacity at its riverfront facilities to meet existing demands and attract new business. The proposed project is capitalized up front, using asset management approaches to optimize long-term cost structure. The construction cost estimate of \$5,000,000 was provided by Providence, a local engineering firm very experienced in construction projects. It was derived from a breakdown of construction items from a preliminary design analysis and based on recent bid prices for similar projects, including factors for contingencies and inflation.

3. Economic Competitiveness

The results of this grant proposal enhance the port’s economic competitiveness, as well as for the companies that will use the port’s facilities. Implementing the infrastructure extension and enhancement project improves its capacity to handle exports and/or imports. For example, there will be additional berthing space for ships to transload cargo; and, there will be additional concrete lay-down areas for cargo and/or containers.

This project investment will augment the physical infrastructure of the Port which will improve the local business climate. Infrastructure improvements can get goods and services to their markets. Inadequate infrastructure decreases access to economic opportunities and the ability to integrate into wider state, national and international markets. Programs to build and enhance ports bestow substantial economic benefits, such as job creation and business creation and retention to a community. Modernizing physical infrastructure can help improve the image of a distressed region, too.

If additional companies can use the port, more people can be hired to work at the port. An increase in jobs will off-set any losses that are occurring elsewhere in the local economy. With more people working, there will be an increase in local spending, business revenue and tax dollars for government programs.



Also, export/import trade development and promotion enable firms to expand their market area and possibly extend the life-cycle of products or services that have exhausted their existing markets. Typically, firms do not have the resources to explore or develop an export marketing plan. Exporting can contribute to a firm's sales volume and create new jobs for the local economy.

St. Mary Parish's transportation network gives it access to the entire NAFTA region, in which U.S. companies can export products and services with low tariffs.

Also, funding the Port's request will improve the area's resiliency during emergencies, such as hurricanes. By having updated, modernized facilities, the Port will be able to remain in operation when a hurricane approaches. All other area ports will be out of operation for a while since they are not protected from a storm's tidal surge or high winds. Most of these area ports could be out of business for weeks, as what happened when hurricanes Katrina, Rita, Gustav and Ike impacted this area. The Port of Morgan City could serve as an alternate site for them until they are able to return to full operations. When a storm hits this region, a lot of physical damage is done to neighboring ports and their employees evacuate this area, leaving the other ports without a workforce. Because the Port of Morgan City is considered a "safe harbor," it could provide these area ports with a location to bring in relief equipment and organize their recovery efforts.

The BCA contained in this application concludes that the "*Port Dock Expansion and Enhancement (EAST) - Phase I*" project will promote economic competitiveness with shipper cost savings in association with truck diversion to rail and marine transportation modes. In the no-build scenario, diversion to trucks is anticipated, creating a bottleneck that increases the generalized costs of fuel, time, reliability, and other items for shippers. The implementation of the project allows shippers that would have diverted to continue operations at the lower costs of maritime freight (especially for low inventory-cost commodities) realizing direct monetary cost savings.

4. Environmental Protection

Environmental costs are increasingly considered as an important component in the evaluation of transportation projects. The environmental impacts of vehicle use and exhaust emissions can impose wide-ranging social costs on people, material, and vegetation. The negative effects of pollution depend not only on the quantity of pollution produced, but also on the types of pollutants emitted such as carbon monoxide, volatile organic compounds, nitrogen oxides, particulate matter, sulfur dioxide and carbon dioxide, as well as the conditions under which the pollution is released. The environmental cost reduction is calculated as the difference between the cost of vessel pollution and truck pollution.

5. Quality of Life



By enlarging the wharf along the GIWW, businesses will be able to ship their goods along Louisiana waterways and access the nation's inland waterway system. This will remove a great deal of truck traffic from the local, state and national highways and by-ways. In addition, this will reduce the amount of emissions that develop as a result of vehicles on the roadways, as well as reduce the number of traffic accidents since fewer vehicles will be on the highways.

Also, the grant proposal addresses the need to support existing communities. Since the jurisdiction of the Port of Morgan City includes the city of Morgan City and the town of Berwick, the Port helps to sustain these municipalities and the surrounding unincorporated areas of St. Mary Parish, as well as the surrounding parishes of Terrebonne, St. Martin, Iberia and Assumption, by being an economic engine, creating jobs for the local region, creating vibrant communities and helping to support the local tax base. The Port alleviates traffic on the local roadways by providing the water system as a marine highway for the shipping of materials, which reduces the wear-and-tear on local roadways and bridges and the amount of pollution from automobiles and trucks.

Also, the Port's request improves the "Quality of Life" of communities and neighborhoods. The Port is located near a residential area. Seaports are usually located in great cities and are a key reason why certain communities flourish. "When discussing livability, one cannot overlook how quality of life in America is improved by providing our citizens the world's most robust access to market goods. Because of seaports, consumers enjoy less expensive options for purchasing food, clothing, medicine, fuel, technology, finished goods and building materials. Having less-expensive choices has allowed American families to better weather the economic downturn" (Nagle, 2010).

Additionally, this project will improve the quality of living and working environments and the experience of people in communities across the United States by shifting cargo operations to the marine modes of transportation and reducing the number of trucks that transport cargo on interstate highways. The project is positive for several measures of livability, including the following: congestion cost savings at the PMC, congestion cost savings on roads, and noise avoidance on roads.

Truck miles avoided in the build scenario mean less congested roads. The cost that truck-driven congestion imposed on other vehicles can be substantial. Improvements at the port, by making shipping freight more efficient, reduce diversion to trucks and congestion for all the vehicles that remain on the highways, shorten travel times, and decrease vehicle operating expenses.

Under existing conditions, cargo operations at the MCHTD are not optimal because of the imperfect state of the dock. This creates congestion at the PMC



that impacts the amount of time spent handling cargo/containers. Implementation of the project would reduce current and future levels of congestion at the port.

Therefore, the build scenario implies reduced operational times per vehicle at the port, lower vehicle emissions and noise, and reduced maintenance and repair of the vehicles and the yards. Although all these benefits are tangible and sensible, due to the lack of data to substantiate assumptions and the intension to produce conservative estimates of benefits, port officials can only evaluate congestion time savings for truck drivers at the port.

6. Innovation

A. Innovative Technology – LED Lighting

Payback Analysis:

The analysis is based upon the existing lighting layout, which consists of twenty-four (24), 1000W High Pressure Sodium (HPS) fixtures. In the port's analysis, it used an equivalent Lumark NFFLD-L Night Falcon Large LED flood light. The Night Falcon was selected to give an equivalent amount of light as the existing HPS fixtures because the lumen output is actually less than existing; but taking into account the lumen maintenance curve, along with the fact that the human eye sees better in white light, the fixture offered is considered an equal.

Assumptions:

- Cost per Kilowatt hour (KWh): \$0.08
- KWh Inflation Rate (%/year): 1.00%
- All existing and new fixtures operate 12 hours per day at full power
- Existing fixtures are 1000W High Pressure Sodium (HPS) fixtures which have an input wattage of 1,100W
- Existing HPS Fixture Life Span: 24,000 hours
- New fixtures are LED fixtures (Lumark NFFLD-L Night Falcon Large LED flood light) which provide 48,000 Nominal Lumens
- LED fixture costs: \$795 per fixture
- New LED Fixture Life Span: Theoretical L70 Lifespan of LED is >180,000 Hours
- Installation costs (new fixtures and wiring): \$24,000

Results

- Based upon the information given above, it is estimated that Annual Savings will be \$6,564 (this includes an annual energy savings of \$6414 and an annual lamp maintenance savings of \$150)
- The Simple Payback is 4.63 years (i.e. the initial investment will pay for itself in 4.63 years).
- Cost of Waiting (Monthly) à \$547 per month (this is the dollar amount wasted per month if the lights are not changed to LED)



- The 10-year cash flow amount will be \$35,280, meaning that 10 years after the installation (and 5.37 after the investment has paid for itself), the LED fixtures will have saved \$35,280.

In addition, the project will use innovative strategies in upgrading its dock by using the latest design to handle higher loads in order to accept containers and the extreme weights of other breakbulk cargo. The project is, also, innovative in that it shifts operations away from trucks/highways to the more efficient maritime mode resulting in less fuel consumption and congestion and greater energy efficiency.

7. Partnership

The MCHTD has partnered with various federal, state, regional and local governmental agencies on past projects and will do so, again, for this submitted 2018 BUILD project: the U.S. Economic Development Administration (EDA), the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers (USACE), the U.S. Coast Guard (USCG), the Regional Development Authority (RDA), the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), the Louisiana Department of Transportation and Development (LADOTD), the Louisiana Department of Economic Development (LDED), as well as local governments (parish, municipalities).

Additional project partners include, but are not limited to, the following, some of which have provided "Letters of Support," which are all included in the attachments and/or listed on the Port's BUILD 2018 webpage (which can be found at www.portofmc.com):

- Private Sector Partners
 - Babin Marine
 - Baker Hughes
 - Planters Rice Mill, LLC
 - Gulf Craft
 - Seacor
- Non-Profit Partners
 - South Central Planning and Development Commission Executive Director Kevin Belanger
- Public Sector Partners
 - Federal Level
 - United States Senator John Neely Kennedy
 - United States Senator Bill Cassidy, MD
 - United States Representative Clay Higgins
 - State Level
 - Lt. Governor Billy Nungesser
 - Louisiana Department of Agriculture and Forestry Commissioner Mike Strain, DVM
 - Louisiana State Senator Bret Allain, II (District 21)



- Louisiana State Representative Beryl Amedee (District 51)
- Local Level (Parish/Municipality)
 - St. Mary Parish President David Hanagriff
 - St. Mary Parish Director of Economic Development Frank Fink
 - Morgan City Mayor Frank "Boo" Grizzaffi, III
 - Berwick Mayor Louis Ratcliff

2. Project Readiness

The Morgan City Harbor and Terminal District has not initiated NEPA review as of yet because there were no reasonable expectations of receiving federal funding for this project, previously. The MCHTD assures US DOT officials that the necessary environmental reviews can be completed with enough time for any post-NEPA, pre-obligation activities to be completed by June 30, 2020, in order to give DOT comfort that all of the FY 2018 BUILD Transportation Discretionary Grant funds are likely to be obligated in advance of the September 30, 2020 statutory deadline and that any unexpected delays will not put 2018 BUILD Transportation Discretionary Grant funds at risk of expiring before they can be obligated. There are no right-of-way acquisitions necessary for the completion of these projects.

Following is the project's schedule. It takes into account the various planning approvals, NEPA and other Environmental Reviews needing approval. Based on this table, all preconstruction activities can be completed before the September 30, 2020 obligation deadline. Then, the project itself can be completed by spring 2020. These figures were provided by Providence, a local engineering firm experienced in construction.



-Project Timeline-

ID	Task Name	Duration	Start	Finish
	Project Timeline	833 Days	1/4/19	4/16/21
1	Initiate Project	1 day	1/4/19	1/4/19
2	Data Collection	2 mons	1/5/19	2/28/19
3	Develop Project Alternatives	1 mon	3/1/19	3/28/19
4	Project Alternatives Drawings	2 wks	3/29/19	4/11/19
5	Schedule Pre-Application Meeting	1 day	4/12/19	4/12/19
6	Preliminary Design	1 mon	4/13/19	5/10/19
7	Submit Permit Applications	335 days	5/11/19	4/11/20
	State Permit (LaDNR)	270 days	5/11/19	1/17/20
8	-Permit Reviewed and Deemed Complete	1 mon	5/11/19	6/7/19
9	-Advertise Permit	1 mon	6/8/19	7/5/19
10	-Receive Comments from public and agencies	3 mons	7/6/19	9/27/19
11	-Engineer to Respond to Comments	1 mon	9/28/19	10/25/19
12	-Second review	2 mons	10/26/19	12/20/19
13	-Issue Permit	1 mon	12/21/19	1/17/20
	Federal Permit (USACE)	335 days	5/11/19	4/11/20
14	-Permit Reviewed and Deemed Complete	1 mon	5/11/19	6/7/19
15	-Advertise Permit	1 mon	6/8/19	7/5/19
16	-Receive Comments from public and agencies	4 mons	7/6/19	10/25/19
17	-Engineer to Respond to Comments	1 mon	10/26/19	11/22/19
18	-Second review	3 mons	11/23/19	2/14/20
19	-Issue Permit	2 mons	2/15/20	4/11/20
20	Final Design	3 mons	5/11/19	8/2/19
21	Bid Project for Construction	1 mon	3/12/19	4/12/20
22	Construction Phase	12 mons	4/15/20	4/16/21

A permitting strategy will be developed early in the process and continually worked to ensure the project stays on schedule. The permitting process can take up to 12 months to complete. A project timeline including permitting is presented above.



-Required Approvals / Environmental Permits and Review-

The State of Louisiana has a joint permit with the United States Army Corps of Engineers (USACE) application process. One permit is submitted and reviewed by the appropriate entities. Copies of the permit and support material is sent to the following entities: United State Army Corps of Engineers (USACE), Louisiana Department of Natural Resources (LDNR) and the St Mary Levee District. The USACE and LDNR serve as a clearing house. They will solicit comments from their sister agencies and incorporate the comments into one document. In the end a federal permit and a separate state permit will be issued.

A pre-application meeting will be scheduled with the permitting agencies. The purpose of the meeting is to present the project and receive feedback on concerns the regulatory agencies would have on the project. This provides the designer with important information to assist in the design. It also helps to eliminate unnecessary delays in the permitting process. The pre-application meeting is scheduled once the project alternatives have been established.

✓ USACE Permits

When applying for a USACE permit you are applying for three permits. The three permits you will receive are:

Section 10 Permit

This permit reviews all activities that are planned in the Mississippi River, batture, over the levee and within 1500 feet of the protected side toe of the Mississippi River Levee.

Section 404 Permit

The Section 404 permit is an environmental permit and looks at activities which would impact wetlands, jurisdictional waters and cultural resources. A separate effort will need to be tasked for a wetland assessment and cultural survey of the property.

Section 408 Review.

The section 408 review is a review of the proposed project features related to any federally authorized structure. In this case the USACE will be reviewing the proposed project to ensure it would not negatively impact the flood wall adjacent to the project.



-State and Local Approvals-

✓ **Louisiana Department of Natural Resources - Coastal Zone Evaluation:**

For facilities within the defined Coastal Zone of Louisiana, a Coastal Zone permit must be obtained. The boundaries of the coastal zone have been developed and modified by the Louisiana Department of Natural Resources (LDNR). The purpose of the Coastal Use Permit process is to make certain that any activity affecting the Coastal Zone, such as a project that involves either dredging or filling, is performed in accordance with guidelines established in the LCRP. The guidelines are designed so that development in the Coastal Zone can be accomplished with the greatest benefit and the least amount of damage.

✓ **St. Mary Parish Levee District:**

Typically, the Levee District will rely on the USACE and the CPRA in review of the permit. The Levee District is short staffed and typically do not have engineers on staff to review the permit. Once the USACE and State review and approve the project the Levee District will issue a Letter of No Objection (LNO).

Legislative Approvals

While the port has not commenced NEPA or sought approval from state and local planning and permitting organizations, the Port's project is broadly supported by numerous officials, organizations and businesses. A listing of those that have provided (or will provide "Letters of Support," as posted on the port's BUILD 2018 webpage), is as follows:

- Private Sector Partners
 - Babin Marine
 - Baker Hughes
 - Planters Rice Mill, LLC
 - Central Boat Rentals, Inc.
 - SwiftShips
 - Gulf Craft
 - Seacor
- Non-Profit Partners
 - South Central Planning and Development Commission Director Kevin Belanger
- Public Sector Partners
 - Federal Level
 - United States Senator John N. Kennedy
 - United States Senator Bill Cassidy, MD
 - United States Representative Clay Higgins
 - State Level
 - Louisiana Lt. Governor Billy Nungesser
 - Louisiana Department of Agriculture and Forestry Commissioner Mike Strain, DVM
 - Louisiana State Senator Bret Allain, II (District 21)



- Louisiana State Representative Sam Jones (District 50)
- Louisiana State Representative Beryl Amedee (District 51)
- Local Level (Parish/Municipality)
 - St. Mary Parish President David Hanagriff
 - St. Mary Parish Director of Economic Development Frank Fink
 - Morgan City Mayor Frank “Boo” Grizzaffi, III
 - Berwick Mayor Louis Ratcliff

-Assessment of Project Risks and Mitigation Strategies-

Other than “*Acts of God*” (such as natural disasters like hurricanes and high-water events), the port cannot identify any material risks to the project. If the area is affected by a tropical system, then the plan will be to simply wait it out, allowing the storm to make landfall and then initiate post-disaster steps to bring the port back on line. Because this is a dock construction project that will use materials that can be easily procured, the port sees no delays in procuring materials. Any environmental questions should not exist since the port is simply extending its EAST dock footprint and all the permits will be obtained prior to construction. Also, the property is publicly owned by the city and leased to the port, so there will be no surprises with increases in real estate acquisition costs.

C. Benefit Cost Analysis

The Benefit Cost Analysis (BCA) results look at the project from the standpoint of society as a whole, and it accounts for the net benefits and net costs based on the criteria described in the 2018 BUILD Transportation Discretionary Grant Notice of Funding. Analysis of the project sought to answer the question, “Is the region, the state and the nation enhanced by the completion of the project?” The Benefit Cost Analysis addresses the issues of reduction of freight travel time, fuel costs, operating and maintenance costs, emissions and crash reductions.

The BCA analyzed the national and international significance of the Morgan City Harbor and Terminal District’s “*Port Dock Expansion and Enhancement (EAST) - Phase I*” project, with documentation of the population of the port service area, which comprises 37 states (including Louisiana) and 6 Canadian provinces. The 2010 population of the 37 states served by the rail and the inland waterway system of the PMC service area equals 247,551,503 or 80% of the total U.S. population. The six provinces served by the PMC service area account for 31,547,866 or 92% of the 2010 Canadian population. The combined population served by the PMC service area for the U.S. and Canada constitutes 279,099,369 or 82% of the 2010 population for both countries.

The Morgan City Harbor and Terminal District is requesting \$4,000,000 in FY 2018 BUILD Transportation Discretionary Grant funding to match a local, non-federal investment of \$1,000,000 to extend and enhance the port’s EAST dock in Morgan City, Louisiana. The current dock is outdated and keeps the port in a position that is unsafe and non-competitive.



Currently, the port has a dock that is 800' in length, but it can only handle one cargo ship at a time. It cannot use heavy equipment to unload/load ships because the wharf is unable to accept heavy weight (It is not HS-20 load-rated). Although a small area of the dock has been reinforced from below with additional piers, the dock as a whole cannot take heavy equipment that can transload vessel cargo. This causes delays in shipping because it takes a longer amount of time to unload/load a ship, which causes it to stay in port for a longer period of time. When a ship is docked, it's not making money.

Also, the port has a limited amount of space to use as lay-down area for cargo that is shipped into the area for export or import. By extending the current wharf along the waterfront and into the port property, the port will increase the area that can be used to store cargo. Currently, cargo containers must be brought from dockside, through the flood gates to a building that is approximately ½ mile away from the dock. This takes too much time and causes cargo to back-up and makes the ship remain in port for an extended amount of time. Again, this delays the ship from returning to service to make money for its owner and shipper.

The economic activities of port-related firms support 178,582 permanent jobs for the people of the state. This constitutes approximately one out-of-every 10 jobs in the state. In addition, the economic activities of those port-related firms created \$209.0 million in state tax revenue and \$101.1 million in local tax revenue for a total of \$310.1 million in revenue for the state and local governments (Wilbur Smith Associates, 2002).

The Benefit Cost Analysis performed for this project indicates that **the benefits** derived from the awarding of the Port's FY 2018 BUILD Transportation Discretionary Grant request would **out-number the costs** from the federal government and local source. Based on the results of this BCA, there is a benefit ratio of 326.01-to-1 (NPV 3%) and a 55.57-to-1 (NPV 7%).

1. Baseline

The baseline established for the BCA assumes that the port operations continue without the project improvements. Therefore, there are two main expected consequences:

- A. Marine freight capacity, although not yet reached, will face a choke-point in the near future, causing some of the freight to divert to other modes, especially trucks. It is assumed that separate improvements at the port will increase the maritime-handling capacity in the future, but the lack of implementation of these important components would create limits on the expected growth of marine operations.
- B. Cargo operations will continue to be constrained by the lack of efficiency created by the imperfect design of the current dock at the existing facility along the Gulf Intracoastal Waterway. Maritime congestion at the PMC is expected to increase, generating time waste that will impact all vessels and barges operating at the port. Longer distances and obstructed paths will also maintain and even increase the cost of handling cargo, especially marine freight.

2. Alternatives

There were three alternatives briefly analyzed for this BCA:

- A. "No build"
- B. Build Another Dock



C. Rental of Another Dock

Based on the results of the BCA, there is no other way to increase the port's capacity to handle cargo and provide vessels with more space to dock than to provide them with actual additional docking space and laydown area. In this case, the most efficient and cost-effective way would be to extend and enhance the port's dock.

3. Long-Term Outcomes and Types of Societal Benefits

The Port of Morgan City's analysis estimated the project's expected benefits with respect to each of the five long-term outcomes that the USDOT specified under "Selection Criteria" in the FY 2018 BUILD Transportation Discretionary Grant Notice of Funding. For purposes of this project, the analysis focused on the following long-term outcomes and their respective expected societal benefits:

- A. Quality of Life
- B. Economic Competitiveness
- C. Safety
- D. State of Good Repair
- E. Environmental Protection

Each of the five expected outcomes were analyzed separately, resulting in the following table.

Status and Problem to be addressed	Change to Baseline/ Alternatives	Types of Impacts	Population Affected by Impact	Economic Benefit	Summary of Results	Page Reference in BCA
25-year old Dock is not large enough to meet future demands and to expand export/import opportunities	450' foot extension, and additional laydown area of @ 64,000 sf	Increased export/import capacity; time and fuel cost savings; State of Good Repair through the reduction of long-term maintenance and repair costs	Shipping carriers; Exporters and Importers	Monetized value of reduced travel times, fuel consumption, emissions and safety benefits	The benefits to cost analysis indicates a benefit of 326.01 to 1 (at a 3.0% NPV) and 55.57 to 1 (at a 7.0% NPV)	Pages 6-20

4. Affected Population

The Morgan City Harbor and Terminal District's "*Port Dock Expansion and Enhancement (EAST) - Phase I*" will have different impacts over the course of the dock's lifetime. Evidently, by transferring the shipping of cargo from trucks, the project will reduce the number of trucks on the highway and reduce the amount of emissions in the atmosphere. This action will, also, reduce the number of accidents on the highways involving trucks.



5. Conclusion

Based on the information analyzed, the Port's project will have a benefit of 326.01 to 1 (NPV 3%) and 55.57 to 1 (NPV 7.0%) benefit to cost ratio. The project is determined to be financially beneficial.



V BIBLIOGRAPHY

Amdal, J., Swigart, S., Jayawardana, J., Ashar, A., & Duplechain, R. (2008). *Port of Morgan City*. New Orleans: University of New Orleans.

Ashar, A. (2010, July). An Expanding Brief. *Containerization International* , pp. 28-29.

Butler, R. (2008, November 13). Gulf Intracoastal Canal Association. Friendswood, Texas, USA.

Marquardt, L. R. (2008, November 14). Chief of Waterways Management; Chief of Vessel Traffic Service Berwick Bay. Morgan City, Louisiana, USA.

McCue, D. (2009, October 5). *Gulf State Ports See Panama Canal as Game Changer*. Retrieved August 5, 2010, from World Trade Magazine:
http://www.worldtrademag.com/Articles/Column/BNP_GUID_9-5-2006_A_10000000000000675890

Moffatt & Nichol. (2015). *Port of Morgan City Market Analysis*.

Nagle, K. J. (2010). *Comments on Department of Transportation's National Infrastructure Investments (BUILD II) under the Transportation, Housing and urban Development, and Related Agencies Appropriations Act for 2010*. American Association of Port Authorities, Washington, D.C.

Ports Association of Louisiana. (2009, November). *News from the Docks*. Retrieved August 15, 2010, from Ports Association of Louisiana: <http://portsoflouisiana.org/wp-content/uploads/november.pdf>

Richardson, James A. (2015). *Economic Impact Related to Loss of PMI Operations at Port of Morgan City*.

Schmidt, K. (2009, February 1). *Offshore company plans to launch shipping line to Mexico*. Retrieved August 18, 2010, from The Daily Comet:
<http://www.dailycomet.com/article/20090201/ARTICLES/902019988>

Shaw Environmental and Infrastructure, Inc. (2009). *Ports Association of Louisiana Strategic Economic Development Plan: Summary Report*. Baton Rouge: Shaw Environmental and Infrastructure, Inc.



Shaw Environmental and Infrastructure, Inc. (2009, February). *Ports Association of Louisiana: Document Library*. Retrieved 08 17, 2010, from Ports Association of Louisiana:
<http://portsoflouisiana.org/document-library/>

Shaw Environmental and Infrastructure, Inc. (2007, January). *Ports Association of Louisiana: Document Library*. Retrieved August 8, 2010, from Ports Association of Louisiana:
<http://portsoflouisiana.org/document-library/>

U.S. Army Corps of Engineers Navigation Data Center. (2008). *Statistics for Calendar Year 2007*. New Orleans, Louisiana, USA.

Wilbur Smith Associates. (2002). *St. Mary Parish Comprehensive Plan*. Baton Rouge.



APPENDIX A

Resolution



MORGAN CITY HARBOR AND TERMINAL DISTRICT
7327 Hwy 182 • P. O. Box 1460 • Morgan City, LA 70381
TELEPHONE (985) 384-0850 • FAX (985) 385-1931
Email: office@portofmc.com • www.portofmc.com

It was moved by Mr. Mayon and seconded by Mr. Dragna, that the following Resolution be adopted:

RESOLUTION

BE IT RESOLVED that the Board of Commissioners of the above, does hereby authorize the submission of a FY 2018 *Better Utilizing Investments to Leverage Development* (BUILD) Transportation Discretionary Grants application to the US Department of Transportation (USDOT) for its proposed "Wharf Extension and Enhancement Project," which is estimated to total \$15,000,000; and, it, also, agrees to provide a twenty percent (20%) local match (estimated at \$3,000,000) for the submitted FY 2018 BUILD Transportation Discretionary Grant project.

WHEREUPON, the motion was put to a vote and the vote thereon was as follows:

YEAS: Gary Duhon, Deborah Garber, Thomas Ackel, Joseph Cain, Tim Matthews, Sr., Adam Mayon, Lee Dragna

NAYS:

ABSENT AND NOT VOTING: Duane Lodrigue and Ben Adams

The Resolution was declared adopted this 11th day of June, 2018.

CERTIFICATE

I hereby certify that the above and foregoing resolution is a true and exact copy adopted at a regular meeting of the Morgan City Harbor and Terminal District on the 11th day of June, 2018 in which a quorum was present and voting, and that the resolution adopted is still in effect and has not been rescinded or modified and that is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand and the seal of said Morgan City Harbor and Terminal District this 22nd day of June, 2018.

Thomas Ackel, Secretary
MORGAN CITY HARBOR AND TERMINAL DISTRICT

Duane Lodrigue <i>President</i>	Gary Duhon <i>Vice-President</i>	Deborah Garber <i>Treasurer</i>	Thomas Ackel <i>Secretary</i>
------------------------------------	-------------------------------------	------------------------------------	----------------------------------

Commissioners: Ben Adams • Joseph Cain • Lee Dragna • Adam Mayon • Tim Matthews, Sr.

Raymond "Mac" Wade, CPE
Executive Director



Appendix B
Balance Sheet
Ending June 30, 2018



8:19 AM
07/16/18
Accrual Basis

Morgan City Harbor & Terminal District
Balance Sheet
As of June 30, 2018

	Jun 30, 18
ASSETS	
Current Assets	
Checking/Savings	
1016 · PSB - PSG	16,616.58
1017 · PSB Flex	3,456,274.21
1018 · PSB Capital Outlay	14,530.42
1019 · PSB - F&P	193,063.10
1023 · Whitney Operating	61,197.41
Total Checking/Savings	3,741,681.72
Accounts Receivable	
1403 · Port Billings	9,303.31
Total Accounts Receivable	9,303.31
Other Current Assets	
1420 · Prepaid Expense	24,930.21
1425 · Prepaid Insurance	96,280.89
1500 · Due to/Due from	-132.00
Total Other Current Assets	121,079.10
Total Current Assets	3,872,064.13
Fixed Assets	
1505 · Land	2,808,615.00
1510 · Dock Equipment	29,774,223.95
1520 · GOEC	11,542,561.42
1590 · Accumulated Depreciation	-13,645,503.95
Total Fixed Assets	30,479,896.42
Other Assets	
1477 · Prepaid Rent	57,623.61
1940 · Deposits	205.58
Total Other Assets	57,829.19
TOTAL ASSETS	34,409,789.74
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Credit Cards	
Credit Card Center	688.00
Total Credit Cards	688.00



8:19 AM
07/16/18
Accrual Basis

Morgan City Harbor & Terminal District
Balance Sheet
As of June 30, 2018

	<u>Jun 30, 18</u>
Other Current Liabilities	
2100 · Payroll Liabilities	419.10
2110 · Direct Deposit Liabilities	-31.85
3221 · Compensated Absences payable	3,734.65
3233 · S I T Withholding	2,364.04
3234 · Retirement Withholding	1,477.76
3235 · Benefits Withholding	199.92
3301 · Deposits Received	125.00
3575 · Other Post Employment Benefits	81,971.00
Total Other Current Liabilities	<u>90,259.62</u>
Total Current Liabilities	<u>90,947.62</u>
Total Liabilities	90,947.62
Equity	
3900 · Retained Earnings	36,380,152.81
4895 · Fund Balance - Designated	402,050.00
4900 · Fund Balance - Undesign	311,856.75
Net Income	-2,775,217.44
Total Equity	<u>34,318,842.12</u>
TOTAL LIABILITIES & EQUITY	<u><u>34,409,789.74</u></u>