

Project Narrative

Globalplex Multi-Modal Connections Project

2018 BUILD Grant Application

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Application Snapshot**Project Title:** Globalplex Multi-Modal Connections Project**Application Type:** Urban**Applicant:** Port of South Louisiana**Application Contact:** Paul Aucoin, Executive Director
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The Project application webpage with a copy of the application and supporting and referenced documents is located at: <http://portsl.com/BUILDgrant-globalplex-multimodalexns/>

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1. Project Description

Concise Description

The Board of Commissioners of the **Port of South Louisiana (POSL)** requests funding in the amount of **\$15,235,000** from the 2018 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grants Program for the Globalplex Multi-Modal Connections Project (Project). The requested BUILD funding represents a critical source of funding for this project.

The POSL is a deep-water port situated in the immediate vicinity of the Gulf of Mexico, near major roadways and three railways. It is the largest tonnage port district in the United States, and it is the premier sea gateway for U.S. export and import traffic. Located within the POSL is the intermodal facility Globalplex, a modern, 335-acre maritime industrial park that currently includes multimodal connections to the Canadian National (CN) Railway, local roads and state and interstate highways, local and international airports, and the Mississippi River, all providing various methods of cargo transport. The facility has three docks, which include a general cargo dock, a finger pier, and a deep-draft bulk terminal dedicated to handling cement, mineral ores, woodchips, garnet sand, and other heavy materials. Globalplex is the only public facility within the jurisdiction of the POSL.

The proposed Project consists of the construction of three separate components: **dock access bridge, laydown yard, and a rail spur connection**. The Project has **strong support** from local communities, local and state agencies, elected local and state officials, and private business. It **meets all of the Selection Criteria**. The **key aspects** of the Project are: (1) efficient intermodal access—vessel to truck to staging—between a designated marine highway and the only public facility within the largest tonnage port, (2) construction on a public owned site and right of way, and (3) current and future employment and economic vitality of the region over the Project's 30 year life span. **Key benefits** of the Project include: (1) creation of 387 job years in immediate construction, (2) a BCA ratio of **2.6** and **\$43.2 million** in net benefits utilizing a discount rate of 7%, and (3) reduced emissions, reduced truck operating costs, reduced highway and bridge maintenance costs, and reduced safety costs.

The three separate components of the proposed Project are:

- **Dock Access Bridge:** The existing dock access bridge between the Globalplex's main facility north of LA 44 (River Road) and its dock along the Mississippi River was constructed in 1995 and was damaged during Hurricane Katrina in August 2005. Improvements/repairs were made to the bridge using a \$3 million appropriation from the State of Louisiana through Capital Outlay grant funds. The repaired bridge is designed to support standard American Association of State Highway and Transportation Officials (AASHTO) bridge loads only. The proposed new dock access bridge will be constructed adjacent to the existing bridge and will have a live load capacity to enable fully-loaded, "off-road" trucks (i.e., trucks with weight that exceeds standard AASHTO bridge loads) to travel back-and-forth between the dock and landslide facilities. It will be designed and constructed to support 1,000 lbs. per square foot of live loading and heavy truck axle weights, typical of heavy industrial demands, allowing businesses that transport heavy cargo to access the Globalplex terminal more efficiently, promoting regional economic development. Currently, the existing bridge is

designed only to support single-lane traffic for standard AASHTO class vehicles and is not capable of supporting heavy-haul permit loads or large “off-road” trucks. Once the new access bridge is constructed, the existing bridge will be used by empty or partially-loaded “off-road” truck travel. Loaded “off-road” trucks will cross the new dock access bridge, and then exit unloaded across the existing dock access bridge. This will provide increased access to the General Cargo Dock and Finger Pier, facilitating a more fluid and efficient loading and unloading process. Having two access bridges will also allow the POSL to experience reduced risk. Currently, if the existing access bridge is closed for maintenance, Globalplex does not have another bridge to operate from. Having a second access bridge will allow the POSL to continue operations in the event that one of the two bridges requires maintenance. The POSL has match funding of \$26,000 remaining from a previous phase of the project, which will be used for this next phase of bridge construction. Additionally, POSL submitted a second Capital Outlay request in September 2015 to fund the second Access Bridge. Capital Outlay funds were appropriated in Act 29 of the 2018 Regulatory Session. The State of Louisiana has approved \$975,000 in Priority 2 funding, and \$7,705,000 in Priority 5 funding.

- **Laydown Yard:** The Globalplex facility has multiple warehouses within the public facility, but currently does not have any paved staging areas, also known as “laydown” yards. In 2017, the Port of South Louisiana conducted a study using EDA grant funding to determine the technical and financial feasibility of expanding into the container trade. The study recommended two phases of container implementation. The first phase recommending the Globalplex facility as an interim container facility, and the second to build a new multi-modal terminal with container capabilities. The study acknowledged that the construction of a paved laydown yard would be required for Globalplex to function as an interim facility. Potential tenants have also expressed their need for a laydown yard for storage and staging of steel and alloy products at the Globalplex facility. As a result, the laydown yard was designed strategically to be multi-modal and dual purpose – leveraging federal dollars further. The laydown area will be constructed at the first available site within the Globalplex facility – almost immediately after cargo transits the new access bridge, it will arrive at the new laydown area. Once constructed, this area will serve as the interim container facility while the new multi-modal terminal is being built. The EDA grant study confirmed that the interim facility at Globalplex will start with approximately 40,000 TEUs of container throughput, and grow until it reaches approximately 100,000 TEUs – at that point, the cargo will shift to the new multi-modal facility, and the staging area will then be used to store and stage steel & alloy products.
- **Rail Spur Connection:** The Globalplex facility currently has direct access to the CN rail line, despite being in the immediate vicinity of the KCS rail line. As a result, the facility is victim to a captive shipper scenario. With lack of competition, the existing rail rates are not sustainable. Transloading costs also make it impractical to ship to a nearby rail yard, and then ship the remainder of the journey by rail. Multiple existing tenants have expressed a need for an additional rail connection to both expand potential destinations, and spur competition amongst the rail lines, and the EDA study acknowledged that direct connections to both the CN and KCS rail lines would be required for Globalplex to serve as an interim container facility. Through previous projects, the Port’s engineering contractors have been in contact with representatives from KCS, and have already developed a design that is strategic for both

the Port & KCS. The proposed rail spur would be a partial loop track through a currently empty field north of the Globalplex facility. This partial loop would allow trains to safely navigate off the KCS main line and towards the Globalplex facility without causing congestion or safety hazards. After transiting the partial loop track, the trains would enter into either a small rail yard storage area, or towards existing warehouses and the proposed laydown yard. This design allows for an efficient & direct connection to the KCS line, which will increase the potential rail destinations served, and spark competition within the facility; the design also mitigates potential issues such as increased congestion, and lack of storage space.

Figure 1 shows both the existing structures at POSL and the proposed Project components.

Figure 2 shows the location of the existing school, church, and residential areas and their vicinity to the project. (See larger maps in the Attachments.)

Figure 1 - Project Components

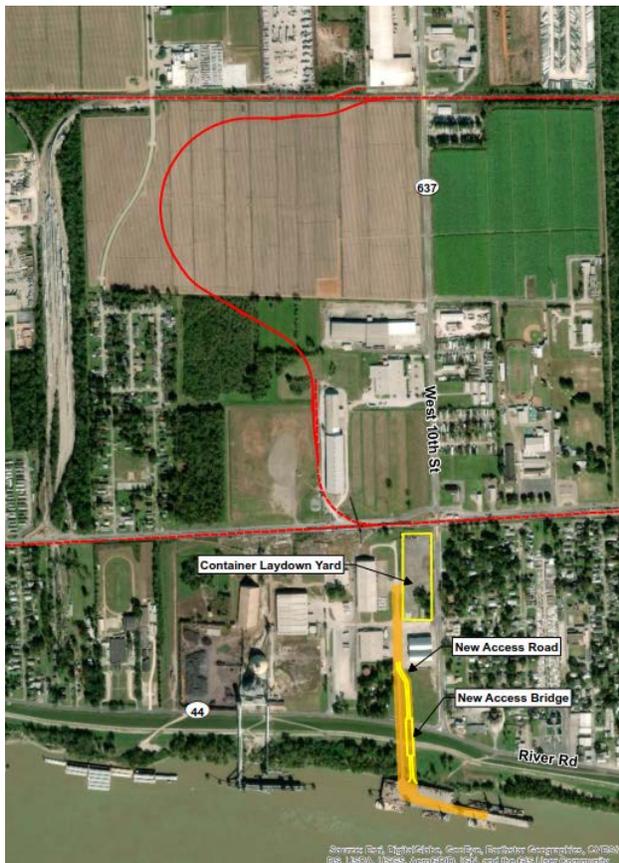
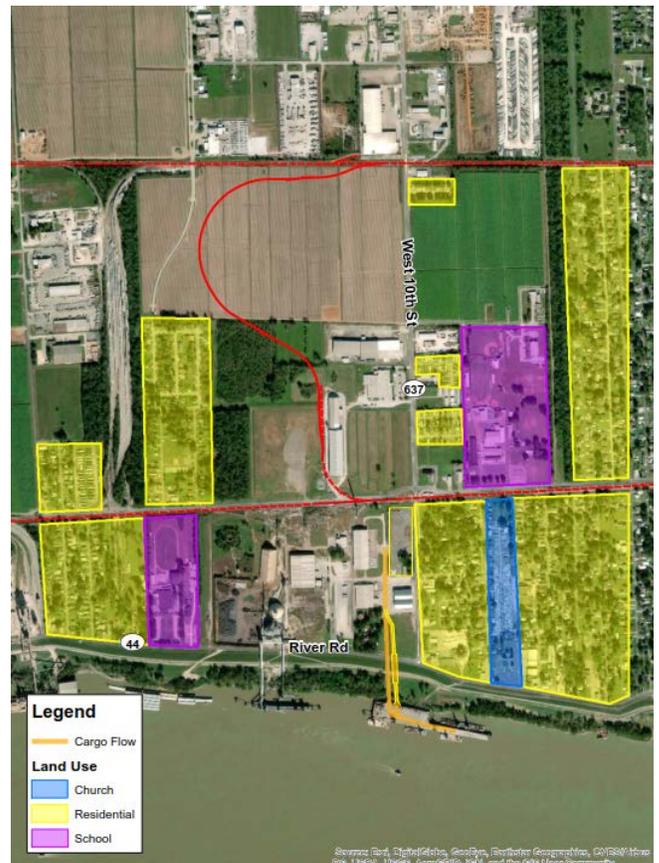


Figure 2 - Project Location



Challenges & Solutions

As the largest tonnage port district in the United States, the POSL terminals receive cargo via deep draft vessels, barges, rail, and truck. Approximately 4,589 oceangoing vessels and 65,490 barges called at the POSL in 2017, making it the top-ranked port in the country for export tonnage and total tonnage.

Cargo throughput accounts for a significant portion of U.S. exports, with 71 million short tons of total throughput in 2017. An additional 76 million short tons of throughput was imports - more than any other port in North America. The Port handled 308 million short tons of cargo, a 4% increase from 2016 led by an 80% increase in coal exports, an expansion of petroleum exports, and a large jump in steel imports, as well as the handling of chemicals, fertilizers, ores/phosphate rock, and petrochemicals. The more recent state export data is not yet released by the Navigation Data Center Waterborne Commerce Statistics Center; however, in 2015, the Port of South Louisiana accounted for 48% of Louisiana exports.

The POSL's distinction as America's largest tonnage port was underscored in 2017, as POSL set a new cargo volume record with 308 million short tons of total throughput (a 13 million short ton increase over 2016). This growth is expected to continue given the high demand from industries drawn to the Port's unique position at the convergence of deep draft navigation and the nation's inland waterway system.

Within the Globalplex Facility, cargo has quadrupled since 2007, largely in part due to the continuous strides of the POSL to bring the facility to a state of good repair. In 2015, the Globalplex facility experienced 2.2 million tons of throughout, largely exports and imports. In 2016, the facility saw a slight drop to only 1.2 million tons. However, this is not a result of lack of development; the Port's existing dilapidated cranes are causing logistic failures, and exponentially increasing downtime. In Year 22 of what was anticipated to be a 20-year lifecycle, the cranes are overdue to be replaced. In 2015, the Port's stevedore, Associated Terminals, helped mitigate this issue by bringing in their own temporary on-barge cranes. However, these are not owned by the Port, and can only be brought to the Globalplex Facility when not in use at the stevedores other facilities. In 2016, the on-barge cranes were not always available for the facility, and as a result, tonnage declined.

The Port understands the needs for infrastructure improvements at the Globalplex facility. In 2017, the Port had several projects on the recommended projects list for the State of Louisiana's Port Construction and Development Priority Program (PPP). Two of these projects solve some of the existing infrastructure issues at the facility. First, the Globalplex Dock Reinforcement project, which is currently underway, will strengthen the dock such that it can handle heavier loads, and larger, more efficient cranes. The second project, the Globalplex Equipment Construction project, currently wrapping up final design, will construct and install two new mobile harbor cranes at the facility – increasing efficiency for existing cargo, and preparing the port to expand. Once these projects are complete, the remaining bottlenecks within the infrastructure are the dock access bridge, a lack of laydown area, and a missing rail connection. The Project can solve these missing pieces and make the Globalplex facility's transportation connections whole.

The economic impact of the POSL on the region cannot be overstated. The combination of POSL companies' capital spending and operational spending in 2013 supported 41% of all personal income and a notable 63% of all jobs in the region (Source: Economic Powerhouse on the River: The Economic Impact of Industries within the Port of South Louisiana Jurisdiction on the Louisiana and PSL Regional Economies). With its tremendous growth, the POSL has an ever-increasing need for infrastructure improvements. BUILD funds will allow the POSL to meet industry demands and continue to serve as a major economic driver of the region by solving key transportation challenges.

Project History

Over the last 5 years, the Port of South Louisiana has been making continuous improvements to the Globalplex facility. The pieces have been developed strategically and now are part of an ultimate goal. As researched in the EDA study, the Globalplex facility is recommended to serve as an interim container facility such that the Port of South Louisiana can expand into the container business. However, the study also acknowledges that long-term the Globalplex Facility will function best as a public bulk and breakbulk facility. To do this, the facility will need to be equipped to serve existing bulk and breakbulk cargo, as well as containers for 5 to 10 years, when it will then transition back to only bulk and breakbulk cargoes – this time more efficiently than before. To do this, several projects have been undertaken. In 2016, the Port completed construction on a new highly efficient warehouse with heavy floor and wall load capabilities. Heavy-load warehouses are in high demand along the Mississippi according to a previous New Orleans Annual Economic Outlook and Real Estate Forecast study presented by the University of New Orleans (UNO). This warehouse is now used to store, stage, process, and distribute bulk cargo from Globalplex facility, and it is a key piece to the facility's long-term goal as a highly efficient bulk and breakbulk dock. After, the Port then undertook the facilities' need to accommodate new cranes. The Globalplex Dock Reinforcement and Globalplex Dock Equipment Construction projects were then commenced to address this critical need. Once complete, these projects will work in unison with the Globalplex Multi-Modal Connections project to meet the Port's short term goal of utilizing Globalplex as an interim container facility, while also preparing the facility to meet its long term goal to be a highly efficient bulk and breakbulk facility.

At present, the primary industries affected most immediately by the proposed Project are cement, mineral ores, woodchips, garnet sand, and other heavy materials. However, it is expected that a variety of other industries, both domestic and foreign, will be more attracted to use the facility to transport finished cargo products from area expansions once the transformative improvements included in this project are complete. This project will also facilitate the movement of containerized exports from nearby industry and the shipment containers on the Marine Highway. Potential tenants have already been contacted and are ready to move forward with container facilities within the Port of South Louisiana's jurisdiction.

The Louisiana Economic Development (LED) estimates that there will be \$23.2 billion of upcoming industrial development within the Port's jurisdiction. Industrial construction will require the shipment and unloading of large, heavy equipment at the Globalplex facility. Without the Globalplex Multi-Modal Connections project, the development could be stalled or require longer and more expensive transportation options.

Benefitting Rural Communities

Although the project is located within the New Orleans Urbanized Area and is, as a result, classified as an Urban project, the surrounding community is almost entirely outside of the UA. Additionally the vast majority of St. Charles, St. James, and St. John the Baptist Parishes are not within an UA. As previously stated, the Port produces much of the economic activity in these parishes and strives to not only continue to do so – but expand its economic reach even further.

The proposed Project will promote opportunities in rural communities primarily by creating jobs. In addition to temporary construction jobs provided by the proposed Project, there will also be permanent jobs associated with the Project. The maritime jobs range from \$55,000/year for dock laborers to \$65,000/year for equipment operators, plus benefits. These jobs are considered high-paying for the region and, thus, will help to strengthen the community by providing greater economic stability to individuals and families. To make sure individuals are able to acquire the skills needed for these high-paying jobs, the POSL will work in tandem with South Central Louisiana Technical College (SCLTC) and River Parish Community College (RPCC) to provide on-the-job accelerated workforce training to enable unskilled workers to attain the specific skills they need. The Port recently donated a \$15,000 grant to expand the maritime program curriculum at SCLTC. Through this program, residents of rural communities will be prepared to accept jobs at the Globalplex Multi-Modal Connections Project, and beyond.

In addition, by providing a dock access bridge, laydown yard, and a rail connection to facilitate the intermodal movement of goods, the Project will, quite literally, pave the way for business growth and vitality, increasing the productivity and reliability of cargo transport, and eventually leading to more affordable goods for U.S. consumers.

2. Project Location

Project Area Description

The POSL is a deep-water port encompassing a 54-mile jurisdiction. It is situated in the immediate vicinity of the Gulf of Mexico, extending along the Mississippi River through three parishes (counties): St. Charles, St. John the Baptist, and St. James from river mile 114.9 AHP (above head of passes), near the New Orleans International Airport (MSY), and continuing north to river mile 168.5 AHP, just north of Sunshine Bridge. In addition to its proximity to MSY (approximately 20 miles), the POSL has convenient access to major highways and rail lines, as well as their own airport – the Port of South Louisiana Executive Regional Airport. Figure 3 graphically illustrates the POSL jurisdiction/location.

Maps

Figure 3 - POSL Jurisdiction



As illustrated by the Table 1, the population of the region is more diverse than the United States or the State of Louisiana as a whole. Thus, the jobs provided through the proposed Project will result in employment for underserved and minority populations.

Table 1 - Area Population & Demographics

Topic	United States	Louisiana	St. Charles Parish	St. James Parish	St. John the Baptist Parish
Total Population	316,515,021	4,625,253	52,639	21,650	44,161
Male	49.2%	48.9%	48.8%	48.2%	48.6%
Female	50.8%	51.1%	51.2%	51.8%	51.4%
White	73.6%	62.8%	70.6%	48.7%	42.1%
Black	12.6%	32.1%	26.3%	50.3%	54.3%
American Indian/Alaska Native	0.8%	0.6%	0.2%	0.1%	0.1%
Asian	5.1%	1.7%	1.1%	0.1%	0.5%
Native Hawaiian/Pacific Islander	0.2%	0.0%	0.0%	0.0%	0.3%
Two or more races	3.0%	1.8%	1.1%	0.6%	1.8%
Hispanic	17.1%	4.7%	5.6%	1.5%	5.3%
High School Graduate or Higher	57.9%	54.8%	57.2%	56.3%	53.7%
Bachelor's Degree or Higher	19.9%	14.8%	13.3%	9.5%	10.7%
Persons in Poverty	15.5%	19.8%	11.8%	18.0%	18.2%

Source: US Census Bureau, 2015 ACS 5-year Estimates

Existing Transportation Connections

Situated along the Mississippi River, the Project's strongest transportation connection is this coveted gateway. At RM 138, Globalplex has the advantage of being located in close proximity to the Gulf of Mexico, but it also has the resiliency advantages of inland protection. The facility is in the immediate vicinity of two major rail lines, CN & KCS, and after project completion will have direct access to both. Globalplex is a short, uncongested drive away from Interstate 10, the southern-most cross-country interstate highway in the American Highway System, and Interstate 55, a major interstate highway in the central United States connecting the Gulf Coast to Chicago. Globalplex is conveniently located near the POSL Executive Regional Airport and it is only a short distance from the New Orleans International Airport. With these key transportation connections, the Port has an opportunity to not only be the nation's largest tonnage port district, but also one of the nation's best public port facilities with the right strategic investments.

Latitude & Longitude

Globalplex is located in Reserve, LA at 30.056871, -90.566993. The facility is in St. John the Baptist Parish, and serves the tri-parish River Region of St. John the Baptist, St. James, and St. Charles Parishes. Economically, the facility supports the entire state of Louisiana, and beyond.

Urbanized Area

According to the TigerWeb GeoCensus files, the Project is located in the New Orleans Urbanized Area. As a result, the Project is considered an urban project. However, only a small portion of the Port's district, a thin area immediately adjacent to the river, is considered part of the UA. The majority of the tri-parish jurisdiction that the facility serves is made up of rural communities.

3. Grant Funds, Sources, and Uses of all Project Funding

Project budget

Table 2 - Detailed Cost Estimate (2017\$)

Item Description	Quantity	Unit of Measure	Unit Cost	Item Total
Access Bridge & Inter-facility Heavy-Load Access Road				
Railing	1	Lump	\$239,000	\$239,000
120' Long Piles	160	Each	\$14,000	\$2,210,000
Bents	1	Each	\$724,000	\$724,000
8" Slabs	15	Each	\$103,000	\$1,548,000
70' Girders	1	Each	\$1,445,000	\$1,445,000
Incidentals	1	Lump	\$568,000	\$568,000
Contingency (10%)	1	Lump		\$973,000
Subtotal – Access Bridge Construction				\$7,707,000
Subtotal – Access Bridge Design				\$973,000
Subtotal- Access Bridge				\$8,680,000
Access Road with Ramp	1	Lump	\$1,000,000	\$1,000,000
Contingency (25%)	1	Lump		\$250,000
Subtotal – Inter-facility Access Road Construction				\$1,250,000
Subtotal – Inter-facility Access Road Design				\$100,000
Subtotal - Inter-facility Access Road				\$1,350,000
TOTAL – Access Bridge & Road Construction				\$8,957,000
TOTAL – Access Bridge & Road Design				\$1,073,000
TOTAL- Access Bridge & Road				\$10,030,000
Container Terminal Upgrades & Laydown Yard				
Wheeled reefer plugs	100	ea.	\$3,000	\$300,000
CY paving (wheeled)	4	acre	\$870,000	\$3,480,000
CY paving rehab	10	acre	\$100,000	\$1,000,000
TOS and IT	0.5	ea.	\$3,000,000	\$1,500,000
Buildings (maint+admin)	5000	sf	\$300	\$1,500,000
Contingency (25%)				\$1,945,000
TOTAL – Laydown Yard Construction				\$9,725,000
TOTAL – Lay Down Yard Design				\$1,167,000
TOTAL- Laydown Yard				\$10,892,000
Rail Spurs & Rail Connection				
New Track	10,100	Lin Ft	\$250	\$2,525,000
#11 Switches	2	Each	\$250,000	\$500,000
#9 Switches	6		\$125,000	\$750,000
Embankment	41,320	cu yd.	\$12	\$496,000
Contingency (25%)	1	lump	\$1,067,710	\$1,068,000
TOTAL – Rail Construction				\$5,339,000
TOTAL – Rail Design				\$534,000
TOTAL- Rail				\$5,873,000
TOTAL PROJECT - DESIGN				\$2,774,000
TOTAL PROJECT - CONSTRUCTION				\$24,021,000
PROJECT TOTAL:				\$26,795,000

Project costs

As part of a strategic and long-term lease at the Globalplex facility, operations & maintenance is strictly borne by the tenants at the Globalplex facility and, as a result, will not increase with or without the project. With this arrangement, the only project costs are those budgeted for design and construction. Based on the benefit cost analysis (BCA) appendix, the project costs have been discounted using a 7% discount rate to 2018 for a total project cost of \$26.8 million.

Funding Sources & Amounts

As demonstrated above, BUILD grant funding is necessary to enable the POSL to complete all components of the Globalplex Multi-Modal Connections Project. Table 3 shows how much of each component has existing match funding, and how much BUILD grant funding investment would be required to leverage further development.

Table 3 - Funding Sources & Amounts (2017\$)

Source	Engineering and Design	Construction	Total Funding Amount	% of Total
Requested BUILD Funding	\$1,491,000	\$13,744,000	\$15,235,000	56.9%
Louisiana Capital Outlay Grant Funding	\$1,283,000	\$10,277,000	\$11,560,000	43.1%
TOTAL PROJECT COST	\$2,774,000	\$24,021,000	\$26,795,000	100.0%

The estimated, undiscounted construction cost of the Globalplex Multi-Modal Connections Project is \$26.8 million. BUILD funding requested equals \$15.2 million or 56.9%. The POSL is proposing \$11.6 million (43.1%) in local matching funds. Table 4 lists the costs for each component and reflects the percentage of the BUILD funds request:

Table 4 - Matching Funds by Component (2017\$)

Item	BUILD Funds		Match Funds		Total
	Amount	%	Amount	%	Amount
Design	\$1,618,000	58.3%	\$1,156,000	41.7%	\$2,774,000
Rail	\$2,770,000	51.9%	\$2,568,000	48.1%	\$5,339,000
Laydown Yard	\$9,725,000	100.0%	\$0	0.0%	\$9,725,000
Access Bridge	\$1,121,000	12.5%	\$7,836,000	87.5%	\$8,957,000
TOTAL	\$15,235,000	56.9%	\$11,560,000	43.1%	\$26,795,000

Funding commitments

Match funding consists of State of Louisiana Capital Outlay grant funding for several projects. State entities apply for projects through the State's eCORTS system each year in hopes of receiving funding. The Globalplex Dock Access Bridge and Equipment Replacement/Repair and Globalplex Rail Siding Capital Outlay projects have been previously authorized by the Capital Outlay program. The Globalplex Dock Access Bridge project has \$975,000 in Priority 2 and \$7,705,000 in Priority 5 appropriations, as well as \$26,000 in unspent balance from a previous phase. The Globalplex Rail Siding project has \$336,700 in unspent balance of Priority 1 funding from a previous phase, as well as \$2,516,800 in Priority 5 appropriations. A cooperative endeavor agreement (CEA) is attached in the application appendices from previous phases of the rail project.

Funding Management

POSL has extensive experience in successfully managing every aspect of federal grants. Past federal grants successfully completed by POSL, including projects as well as those still in progress, are:

Table 5 - Federal Grants Successfully Managed

Award	Amount	Description	Completed
EDA Grant	\$446,890	Globalplex Southside Property Rail Project	05/1997
HUD CDGB Grant	\$988,785	Internal Roadway	12/2003
EDA Grant	\$900,000	Rail Spur North Property, Phase I & Switch	09/2005
FEMA PSGP 2006	\$92,238	Security Patrol Vehicle; Communication Surveillance	2008
FEMA PSGP 2007	\$1,300,000	Maritime Security Operations Center and Installation of Computer Servers	05/2012
FEMA PSGP 2009	\$1,695,189	Communication Towers and Mariner Software	2012
FEMA PSGP 2010	\$618,589	Barge and Response Staging Site	2013
FEMA PSGP 2011	\$3,500,000	Fire Boat	06/2015
FEMA PSGP 2012	\$1,142,000	Communications Upgrades	06/2015
FEMA PSGP 2013	\$416,448	Security Cameras and Software	06/2015
FEMA	\$175,287	Scale House	07/2013
FAA AIP 2009 Grant #13	\$611,784	Rehabilitate Runway 17/35 Lighting	2010
FAA AIP 2010 Grant #14	\$161,500	Conduct Airport Action Plan	12/2015
FAA AIP 2014 Grant #15	\$270,000	Update Airport Layout Plan; Conduct Approach Study	12/2015
EDA	\$250,000	Container Strategic Planning and Market Study	1/2017
FEMA PSGP Grant 2017	\$665,199	TWIC Reader, Cyber Security & Sustaining Systems	-

The POSL is able to use its own resources to leverage local and state funding partnerships to match BUILD funding, but POSL cannot complete this project without this critical federal support. In fact, without BUILD grant funding, POSL would likely need 10 years, at a minimum, to accumulate funding reserves that would be adequate to fully fund the construction aspects of this Project, internally or through state appropriations. Existing and potential marine-related operations would likely be lost if the dock access bridge, laydown area, and rail connections are not completed, and it is certain that further development would not occur without the project.

4. Merit Criteria

Safety

Shifting freight from smaller trucks to larger, fully-loaded “off-road trucks improves safety through significant reductions in the number of miles traveled by trucks carrying freight. Additionally, the number of miles traveled by trucks is reduced further when some cargo is shifted to rail, and heavy equipment is driven shorter distances by being able to transit the Globalplex dock access bridge. According to data reported by the National Highway Truck Safety Association (NHTSA), large trucks were involved in 4,213 fatal and 87,000 injury crashes in 2016 over 287.9 billion truck VMT. Using this data and the recommended value of statistical life guidance, within the Guidance document, a crash cost per mile for large trucks was calculated to be \$0.19 per VMT. Through multi-modal connection changes, the Project reduces truck VMT by 112.7 million over the 30 year project life. Using the \$0.19 per VMT crash cost, the present value of the net safety benefits of reducing truck VMT is estimated at \$7.9 million over the entire 30-year period, using a 7% discount rate.

The intermodal improvements at the Globalplex facility are an infrastructure upgrade that will improve the functional capability on the top-side and integrity of supporting infrastructure, while enabling future innovations related to vessel operations, environmental quality and resiliency. Safety is of the utmost importance and is a priority carried through from project design to project implementation for the construction of the dock access bridge, laydown yard, and rail connections – as well as previously undertaken phases such as the mobile harbor cranes and dock reinforcement projects.

All of these benefits will have positive impacts on all populations, including those who are economically disadvantaged, senior citizens, and persons with disabilities, as the safer transportation of freight will make goods, commodities, and services more readily available.

State of Good Repair

The redevelopment of Globalplex Intermodal Terminal, a one-of-a-kind public facility, is guided by a master plan that focuses on the dynamic needs of today's shippers and manufacturers. Flexibility, efficiency, and connectivity are the hallmarks of the project and represent a significant improvement over existing systems. The facility is operated and maintained by Associated Terminals (project partner), which has an excellent history of acquiring and overseeing tenants, as well as maintaining the condition of the facility to ensure it remains viable and meets the needs of the POSL well into the future. The volume of cargo passing through the system provides a steady stream of revenue to ensure operations and maintenance are sustainable. The variety of funding opportunities identified for various components of the project, with assistance from the BUILD program, will properly capitalize the project up front and will help to ensure the facility reaches optimum capacity.

All components within the proposed Project have been or will be designed and constructed to ensure long-term resilience, extending the useful life of the facility. Associated Terminals will be responsible for the operations and maintenance of the Globalplex facility and its improvements, ensuring they remain in a state of good repair. The company has demonstrated in the past that it has the ability and programs necessary to extend the useful life of the facility as a result of

company diligence and can be expected to apply those same principles to the proposed Project expansion. By constructing a new high-capacity dock access bridge, the Project will increase the useful life of the facility for well over 50 years.

The mission statement for the POSL includes “promoting maritime commerce.” This important objective will be addressed with the proposed Project, and will increase the POSL throughput volume. These benefits are wholly consistent with the word and spirit of the POSL’s Master Plan and mission statement. Even with the expansion of the Globalplex facility, the ongoing costs of repair and maintenance of the facility are not expected to be adversely affected by this project, as all the components represent upgraded or new elements. Increasing the services and capacity at the Globalplex facility will allow more productive vessel calls, greater flexibility with modal choices, and allow for further economic development of the Port.

- *Roadway Maintenance Savings:* As a result of this project, shifting freight from many small trucks to fewer fully-loaded, large “off-road” trucks, as well as a shift from truck to rail, reduces access bridge and roadway wear and tear. The FHWA estimated roadway maintenance costs to be \$0.10 per mile in 1997. Adjusted by the GDP deflator, that value is estimated to be approximately \$0.15 per mile in 2017. Approximately 112.7 million vehicle miles traveled (VMT) in truck traffic is reduced by the project.

The present value of the net benefits on bridge maintenance costs of this shift is estimated at \$5.6 million over the entire 30-year project period using a 7% discount rate. A detailed description of the anticipated benefits can be found in the Benefit-Cost Analysis (BCA) which has been included as an attachment to this application.

Economic Competitiveness

The proposed Project will measurably contribute to the long-term growth in permanent employment and production, and it will create high-value economic activity for the local economy and region by increasing efficiencies and expanding the current range of markets within the United States. The project will attract additional foreign imports, particularly due to the completed widening of the Panama Canal.

As a result of reduced truck vehicle miles traveled and reduced truck delay associated with single-lane movement of small trucks on the dock access bridge, the following benefits will be experienced:

- *Truck Operating Savings* – A reduction in truck vehicle miles traveled, as a result of reduced VMT realized through switching to larger, more efficient trucks, a more timely cargo flow pattern, and a shift to rail, will allow the project to experience \$36.5 million in reduced truck operations costs over the 30 year period utilizing a discount rate of 7%. This savings will spark a significant reduction in the national transportation costs of goods.
- *Truck Driver Travel Time Savings* – The reduction in the number of trucks it will require to unload or load a single vessel, as well as a more efficient flow of cargo, will allow reduced delay for truck drivers within the Port. The present value of the net benefits of reduced truck delay is estimated at \$12.8 million discounted at 7%.
- *Project Residual Value* – Based on Bureau of Economic Administration (BEA) and US DOT recommended values, the rail spur connection will have a useful life of 38 years, the laydown yard 40 years, and the access bridge 75 years. As a result, there will be residual value

remaining at the end of the project's 30 year life. In total, the components residual value is estimated to be \$1.02 million discounted at 7%.

Environmental Protection

The proposed Project champions environmental sustainability by reducing the carbon footprint of regional and national transportation systems. The goal of the proposed Project is not only to meet the needs of today, but also to anticipate the needs of the future while still striking an environmental balance. The Project takes into account long-term growth and is not anticipated to have any negative environmental effects. Environmental sustainability highlights include:

- *Reduced Truck Emissions* – The POSL's capacity to handle and transport increased cargo loads will substantially improve, thereby reducing greenhouse gas emissions when more trucks are taken off the road through the increased opportunity to use fully loaded, "off-road" large trucks, and a shift from truck to rail. According to data reported by David Forkenbrock in "External Costs of Truck and Rail Freight Transportation," published by the University of Iowa, total emissions for Class VIIIa and VIIIb trucks were calculated for the Project. Over the 30-year period, the full completion of the project would result in an avoidance of 293 tons CO₂, 26 tons of PM₃, 56 tons of VOCs, and 1,128 tons of NO_x. The present value of these net benefits is estimated at \$6.4 million using a 7% discount rate.

Quality of Life

The Project improves efficient access to an integrated intermodal transportation system, interfacing barge and vessel freight to staging areas, highways, and rail lines. As efficiency is improved, and capacity is freed, additional economic development can take place at the Globalplex facility.

Two keys to livability within the parishes of the South Louisiana river region are (1) economic development through improved Maritime transportation efficiency and (2) job growth. In particular, this Project seeks to provide:

- More efficient inter-facility movements to reduce dependence on foreign oil and promote public health by improving air quality and reducing noise pollution.
- Alignment of federal policies and funding to leverage new monies and increase effectiveness of programs to plan for future growth.

Because of the efficiencies created with the construction of all the components of this project, freight transportation through POSL will become more affordable. The decrease in truck traffic across the high-capacity Access Bridge and Road will have a direct positive, long-lasting effect on the residents and businesses in the immediate vicinity of the Globalplex facility.

Finally, by enhancing connections for improved access to the only public facility within the POSL, this Project will maintain the status of the POSL as the largest tonnage port district and the premier gateway for U.S. export and import traffic.

Innovation, Innovative Technologies, Project Delivery, & Financing

The Globalplex Multi-Modal Connections Project will employ state-of-the-art technology to maximize the functionality and efficiency of the project to yield the greatest return on public investment in this port infrastructure. The proposed new dock access bridge will have a live load capacity to enable fully loaded trucks to travel back-and-forth between the dock and landslide facilities. It will be designed and constructed to support 1,000 lbs. per square foot of live loading and heavy truck axle weights, typical of heavy industrial demands, allowing businesses that transport heavy cargo to access the Globalplex terminal more efficiently, promoting regional economic development. The laydown yard will be designed to accommodate a wheeled container operation when being used as an interim container facility. This is a highly efficient operation that will reduce container lifts.

The project's investments will replace and rehabilitate obsolete assets. Examples of how the Project Partners utilize innovation to deliver the Project:

- Increasing Port and customer productivity utilizing more efficient cargo flow patterns and equipment, solving existing operational bottlenecks, and encouraging logistics partners to define industry-recognized best management practices,
- Growing economic development opportunities in partnership with existing customers and local industry,
- Creating effective, best in class solutions to maritime issues, and
- Leveraging projects needed for existing cargoes to facilitate Port diversification as an interim container facility

Partnership

The POSL will partner with private terminal operators, United States Department of Transportation, Louisiana Department of Transportation, and the Regional Planning Commission to complete the proposed project successfully and attract foreign and domestic commodities to increase international commerce at the port.

Governed by a board of nine commissioners, the POSL stretches 54 miles along the Mississippi River, with facilities in the three-parish area of St. Charles, St. John the Baptist, and St. James Parishes (Counties). If the BUILD grant is awarded, the POSL will be the recipient and lead agency. The Board of POSL is made up of the following Commissioners:

- Paul Robichaux, President representing St. Charles Parish
- Joseph M. Scontrino, III, Executive Vice-President representing St. John the Baptist Parish
- Joseph Murray, III, Treasurer representing St. Charles Parish
- Stanley Bazile, Secretary, representing St. James Parish
- Kelly Buckwalter, Vice-President representing St. Charles Parish
- Robert Roussel, Vice-President representing St. James Parish
- Patrick C. Sellars, Vice-President representing St. John the Baptist Parish
- Judy B. Songy, Vice-President representing St. John the Baptist Parish
- Whitney Hickerson, Vice-President representing St. James Parish

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LaPlace, Louisiana 70069

Another active partner in this project is Associated Terminals, LLC (the stevedores who have been managing the Globalplex facility since 2001). The POSL has an excellent working relationship with Associated Terminals, which is responsible for the transportation, receipt, delivery, interchange, storage, and documentation of maritime cargoes to-and-from the POSL. The POSL has been very pleased with Associated Terminals' maintenance and operation performance, and recently entered into a contract with the company to extend services in three-year increments potentially for the next 24 years (on a 27 year lease). All of the transformative improvements included in the Project will be well cared for with Associated Terminals at the helm.

Associated Terminals manages and maintains the Globalplex facility and, as a private partner, has been directly involved in the planning of this project. The company assisted in identifying the needs as well as prioritizing which facility upgrades were the most pressing and, thus, should be included in this request for funding. Associated Terminals also provided recommendations regarding the design of the various components of the project. The company will continue to play a key role in near-term/long-term asset performance.

Although not active partners, many other agencies and individuals are in strong support of this project. Several members of the Congressional and State Legislative Delegations, as well as the Chamber of Commerce, Parish Presidents, local industries, American Association of Port Authorities (AAPA), and other ports in Louisiana have provided letters of support for this project.

Additionally, several public and private entities are partnering with the Port of South Louisiana to pursue the development of a new Multi-purpose terminal with container capabilities. By completing this Project and supporting the development of the interim container facility, the Project also supports these partnerships for a greater development.

Non-federal Revenue Generation

The Port of South Louisiana is an entity of the State of Louisiana. As a public port facility, the Globalplex facility supports local and state port operations. Globalplex & the POSL generate revenue through dockage fees, cargo tariffs, and leases. The Project will increase these revenues through increasing cargo efficiency, thus allowing for more cargo to be transported through the facility. Revenues will also increase due to an increase in cargo diversification, such as the ability to accept heavy cargoes, such as specialty equipment, and containers. As shown from an exceptional track record, this non-federal revenue is, in turn, reinvested into the Port's facilities to leverage even further growth.

5. Project Readiness

Technical Feasibility

Preliminary design has been completed for the project components.

During the planning process for this project, all components and the project as a whole were evaluated and found to be technically feasible. Components will begin final design once BUILD funding is available. The EDA study extensively evaluated the technical feasibility and has confirmed that with the proposed improvements, the Globalplex facility will be able to function as both a highly efficient bulk and breakbulk terminal, but also an interim container facility for up to 100,000 TEU movements.

All design standards and guidelines for the various elements of the proposed project, including but not limited to American Association of State Highway and Transportation Officials (AASHTO) and others will be followed, and quality-control processes will be monitored closely to ensure the highest standard of care has been adhered to.

In order to demonstrate accountability and transparency, the POSL and its project partners will work with the United States Department of Transportation on the development and implementation of a plan to collect information and report on the project's performance with respect to the relevant long-term outcomes that are expected to be achieved through construction of the proposed project.

The Project's success can be measured by a reduction in vessel idling time, and truck gate movements at the Globalplex facility. Additionally, as the Port improves efficiency, it is likely to improve throughput.

Financial Feasibility

The POSL has strong financial capabilities, as evidenced by successfully managing multiple federal, state, and local grants over the years, including eight federal FEMA and FAA grants since 2009. More information is included in Section D. The POSL has secured funding for 35.5% of estimated total project costs. Combined with BUILD funding, the project's construction will be financially feasible. All projected costs for the various components are current estimates gathered from the appropriate vendors; a contingency is built into the budget since engineering and design is yet to be completed. All maintenance of the Globalplex facility is covered by the private sector through revenue received from port tenants.

Project Schedule

The proposed Project will begin immediately upon award of BUILD grant funds, with final permits expected within nine months and construction completed within 24 months, so there will be no problem obligating the requested grant amount prior to September 30, 2020, or expending funds prior to September 30, 2025. No property or right-of-way issues exist, as the POSL owns the Globalplex property. The site has been cleared, and the Project can continue immediately upon award.

Table 6 - Project Schedule by Phase

Activities	Timeline
Finalization of Project Design	Months 0-16
NEPA Approval	Months 0-6
Final Permit – Fire Code	Months 3-16
Procurement and Construction Bidding	Months 4-16
Project Construction	Months 4-24

The above months designated for completion of various activities have been scheduled to include the possibility of unexpected delays. However, unanticipated delays may extend the project construction end date. The schedule as defined allows for several activities to occur simultaneously, advancing the project completion date. Table 7 shows the schedule of spending spread throughout the anticipated 24 months of the project.

Table 7 - Project Spending by Schedule (2017\$)

Project Costs	2019	2020	Totals
Design/NEPA	\$2,561,000	\$213,000	\$2,774,000
Rail	\$0	\$5,339,000	\$5,339,000
Laydown Yard	\$5,835,000	\$3,890,000	\$9,725,000
Access Bridge	\$5,374,000	\$3,583,000	\$8,957,000
TOTAL	\$13,770,000	\$13,025,000	\$26,795,000

Detailed Statement of Work

A statement of work summarizing the three major project components and their supporting infrastructure improvements follows here:

Access Bridge

- *Description:* Construction of a second dock access bridge designed and constructed to support 1,000 lbs. per square foot of live loading and heavy truck axle weights. The bridge will increase access to the General Cargo Dock and Finger pier, facilitating a more fluid and efficient loading and unloading process. Construction will also include the creation of an access road within the Globalplex property allowing access from the new dock access bridge directly to warehouses and staging areas.
- *Design Features:* Railing, One hundred sixty (160) 120' long piles, one (1) bents, fifteen (15) 8' slabs, and one (1) 70' girder will be used in the construction of the dock access bridge. Additionally, a direct corridor within Globalplex, including ramping over necessary infrastructure, will be constructed to the bridge.
- *Cost:*
 - Construction - \$8,957,000
 - Design - \$1,073,000
 - Total - \$10,030,000

Laydown Yard

- *Description:* To facilitate in the diversification of cargo at the Globalplex facility and to address the needs of existing tenants, a concrete laydown yard, equipment, and safety features will be constructed to allow the facility to serve as an interim container facility, and then later a staging area for steel and alloy products. The Port has done extensive research to prove the feasibility of an interim container facility.
- *Design Features:* 14 acres of paving, operating shed, and 100 wheeled refrigerated container plugs.
- *Cost:*
 - Construction - \$9,725,000
 - Design - \$1,167,000
 - Total - \$10,892,000

Rail Spur Connection

- *Description:* Although adjacent to two major rail lines, the Globalplex facility currently only has access to the CN rail line, and as a result is subject to a captive shipper scenario. The Rail Spur Connection will give Globalplex direct access to new destinations and spark competition by providing a multi-modal connection to the KCS rail line. This connection will address the needs of existing tenants, and allow the port to expand into new diversified cargoes.
- *Design Features:* 10,000 linear feet of a new partial loop track, 8 switches, and embankment.
- *Cost:*
 - Construction - \$5,339,000
 - Design – \$534,000
 - Total - \$5,873,000

Approvals

To complete the project, a NEPA review and fire code permit will be required.

Environmental Permits and Reviews

The NEPA review process for this project will run concurrently with the final design engineering. A Categorical Exclusion (CE) for the project is anticipated in three to six months. Based on review of the Federal Highway Administration regulations, the project should fall under a CE. Globalplex is within an industrial area, and there are no environmental challenges at the site. Also, the site has been certified for development by the State of Louisiana based upon a wetlands survey and cultural resources survey; there are projects within Globalplex within the few hundred yards of the proposed Project that have been recently constructed.

In addition to the NEPA CE, the Fire Code permit is the only other permit required and should easily be attainable well before construction begins. All required State of Louisiana and legislative approvals have been received.

Legislative Approvals

The Cooperative Endeavor Agreement (See Appendix D) between the State of Louisiana and the POSL is in place and outline the specifications for the non-Federal match provided. Additionally, several state and U.S. senators and representatives have expressed their approval for the Globalplex Multi-Modal Connections in the form of letters of support (see Appendix C).

State and Local Planning

This project is being incorporated into the overall Port of South Louisiana Master Plan. Any roadway improvements will be incorporated into the Regional Planning Commission's Long-Range Transportation Plan and, should BUILD funding be granted, the roadway improvements associated with this project will be considered for incorporation into the State Transportation Investment Plan.

Public Engagement

Since the project will be built entirely on existing Port-owned property, surrounded by existing industrial developments, it is likely that neither an environmental study requiring public engagement, nor any other public engagements will be necessary to complete the project.

Federal Requirements

Federal Wage Rate Certification

The POSL hereby certifies it will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (Federal Wage Rate Requirements) as stipulated in the Notice of Funding Availability.



Paul G. Aucoin – Executive Director

Additional Planning

Assessment of Project Risks and Mitigation Strategies

The POSL has assessed the project risks and built contingencies into the project budget as well as the project schedule. The project is being constructed on Port-owned property, and will be adjacent to recently constructed projects, as well as active industrial activity. As a result, project risk and the need for mitigation strategies is minimal.

Results of the Benefit-Cost Analysis

The Globalplex Multi-Modal Connections Project will consist of the construction of a high-capacity dock access bridge, a laydown yard, and a rail spur connection. The Project will promote environmental sustainability by reducing the carbon footprint of regional and national transportation systems, quality of life by reducing noise pollution and increasing the region's economic diversity, economic competitiveness by reducing transportation operating costs, and incurring travel time savings, environmental protection by reducing truck emissions, and safety through reduced truck VMT—thus providing significant monetary benefits.

The Project is of national significance as it will facilitate the movement of marine cargo, stimulate international commerce, and create short term and long term jobs at America's largest tonnage port.

The Table 8 itemizes the BCA score (2.6) for the project. The BCA score was computed using the present value of benefits and costs over a life-cycle of 30 years.

**Table 8 - Benefit Cost Analysis Summary
(2021-2050, in thousands of 2017\$)**

BCA Summary	7% Discount Rate	3% Discount Rate
Costs		
Capital Cost	\$26,976	\$28,525
Total Costs	\$26,976	\$28,525
Benefits		
Safety Benefits		
Reduced Roadway Fatalities and Crashes	\$7,878	\$13,393
<i>Sub-Total</i>	<i>\$7,878</i>	<i>\$13,393</i>
State of Good Repair Benefits		
Roadway Maintenance Savings	\$5,600	\$9,518
<i>Sub-Total</i>	<i>\$5,600</i>	<i>\$9,518</i>
Economic Competitiveness Benefits		
Travel Time Savings	\$12,794	\$20,905
Truck Operating Cost Savings (Inc. Fuel)	\$36,535	\$62,108
Residual Savings	\$1,025	\$3,468
<i>Sub-Total</i>	<i>\$50,354</i>	<i>\$86,481</i>
Environmental Protection		
Emissions Savings	\$6,385	\$10,883
<i>Sub-Total</i>	<i>\$6,385</i>	<i>\$10,883</i>
Quality of Life		
<i>Sub-Total</i>	\$0	\$0
Net Operating & Maintenance Costs	\$0	\$0
Total Benefits	\$70,216	\$120,275
Outcome		
Net Present Value	\$43,240	\$91,750
Benefit-Cost Ratio	2.60	4.22

Numbers are shown in thousands – Discounted to base year 2018