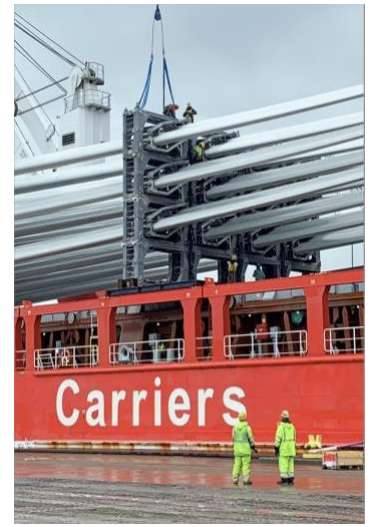


Duluth Port 2024 Intermodal Terminal Expansion Project

2024 Port Infrastructure Development Program

May 10, 2024



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Attachments:

Submitted as Attachments in Grants.gov

- ◆ Standard Form 424
- ◆ Standard Form 424C
- ◆ Project Narrative
- ◆ Project Map
- ◆ Attachment A. Detailed Cost Estimates
- ◆ Attachment B. Funding Commitment
- ◆ Attachment C. Letters of Support
- ◆ Attachment D. Benefit Cost Analysis
- ◆ Attachment E. Design Plans
- ◆ Attachment F. PDAP Award Letter
- ◆ Attachment G. BCA Technical Memo

Appendix Provided on Applicant Website

<https://duluthport.com/2024-port-infrastructure-development-program-pidp-grant-application/>

- ◆ Letters of Support (Attachment C in Grants.gov)
 - ◆ Design Plans (Attachment E in Grants.gov)
 - ◆ GHG Emissions Inventory
 - ◆ Energy Analysis – Electrification and Greenhouse Gas Reduction
 - ◆ EJScreen Report
 - ◆ MPCA-Approved Response Action Plan
 - ◆ Final Draft Climate Action Plan
-

Introductory Information

Information Requested	Response
Name of lead applicant	Duluth Seaway Port Authority
Is the applicant applying as a lead applicant with any joint applicants?	No
Does the applicant or joint applicant own the property where the grant-funded improvements will occur?	Yes
Is the applicant seeking funding under the small project at a small port set-aside?	No
Project name	Duluth Port 2024 Intermodal Terminal Expansion
Project description	The 2024 Duluth Port Intermodal Terminal Expansion project includes 3 main components: (1) reconstruction of 625 linear feet of the Berth 11 dock at the Clure Public Marine Terminal (2) demolishing the former grain elevators and installing utilities at the Duluth Lake Port facility to clear the way for redevelopment of the dock; and (3) reconstruction of 1175 linear feet of dock wall and creation of 7.5 acres of new, high-quality laydown space at the Duluth Lake Port facility.
Is this a planning project?	No
Is this a project at a coastal, Great Lakes, or inland river port?	Great Lakes port
Is this project located in a noncontiguous State or U.S. territory?	No
GIS Coordinates (in Latitude and Longitude format)	46.763023, -92.104693
Is this project in an urban or rural area?	Urban
Project Zip Code	55802
Is the project located in a Historically Disadvantaged Community?	Yes, this project is located in an Area of Persistent Poverty (2020 Census) and an Historically Disadvantaged Community (2010 Census) in Census Tract 156.
Has the same project been previously submitted for PIDP funding?	Yes, components of this project have been submitted in PIDP FY2019 and PIDP FY 2023
Is the applicant applying for other Federal discretionary grant programs (managed by DOT or a separate agency) in 2024 for the same work or related scopes of work?	No

Has the applicant previously received TIGER, BUILD, RAISE, FASTLANE, INFRA, USMHP or PIDP funding?	Yes. PIDP FY 2019 and TIGER FY 2013.
PIDP Grant Amount Requested	\$37,134,650
Total Project Cost	\$48,584,050
Total Federal Funding	\$37,134,650
Total Non-Federal Funding	\$11,449,400
Will the applicant be seeking approval to expend funds prior to grant agreement execution?	No
Will RRIF or TIFIA funds be used as part of the project financing?	No
Does the applicant use LOGINK or a similar logistics platform provided or sponsored by the People’s Republic of China or Chinese state-affiliated entities?	No

Section I. Project Description

Introduction

The Duluth Seaway Port Authority (DSPA) is requesting PIDP grant funds to construct and implement the 2024 Duluth Port Intermodal Terminal Expansion project, which includes 3 main components:

- (1) reconstruction of 625 linear feet of the Berth 11 dock at the Clure Public Marine Terminal;
- (2) demolishing the former grain elevators and installing water service at the Duluth Lake Port facility to clear the way for redevelopment of the dock; and
- (3) reconstruction of 1175 linear feet of dock wall and creation of 7.5 acres of new, high-quality laydown space at the Duluth Lake Port facility.

This urgently needed rehabilitation of port infrastructure will prevent further degradation of the existing dock walls, eliminate ongoing safety concerns, expand valuable laydown/operational area and allow for future expansion at the port, which last year handled an impressive 31.7 million tons of cargo, including iron ore, cement, durum wheat, spring wheat, oats, beet pulp pellets, and general breakbulk and containerized cargo. The port’s total tonnage positions it as the largest port on the Great Lakes and consistently among the top twenty in the nation.



Figure 1: Clure Public Marine Terminal

For ease of access and review, this grant application, supporting documents, and additional information is also available at: <https://duluthport.com/2024-port-infrastructure-development-program-pidp-grant-application/>.

The DSPA is a public agency created by state statute as a special unit of government. The DSPA's mission is to bring business to the port, bring economic development to the region, and advocate for the maritime transportation, freight, and industrial interests. The DSPA owns and operates the Clure Public Marine Terminal located within the Port of Duluth-Superior. The Clure Terminal is the only heavy-lift and general cargo terminal on the western end of Lake Superior, where private businesses can access the deep-water shipping channels of the Great Lakes/St. Lawrence Seaway System¹ to move their goods domestically and export their goods to international markets.

This project will complement and continue a robust series of port upgrades funded in part by federal grant funds. This includes a \$10 million FY2013 TIGER/RAISE grant that was used to reconstruct and modernize a dilapidated former grain dock, adding 28 acres of maritime cargo handling and outdoor storage space and Berths 8-11 to the Clure Terminal. The TIGER Grant project included reconstruction of 1700 linear feet of dock wall and the addition of a heavy-lift dock along Berths 8 and 9 (with twice the load-bearing capacity of existing Clure Terminal berths); there were not sufficient funds to complete dock wall reconstruction along Berths 10 and 11. The TIGER Grant project also included on-dock rail, the construction of a new roll-on-roll-off dock, a new deck surface, stormwater management features, environmental cleanup, lighting, fencing and a guard shack. The DSPA's \$10.5 million FY2019 PIDP grant was used to complete construction of 56,000 square-feet of new warehouse space and, in summer 2024, will be used to construct a new dock wall on Berth 10 and along a 550-foot section of Berth 11.

The Clure Terminal now features 486,000 SF of warehouse space and 40 acres of outdoor storage. The terminal is directly served by four Class-1 Railroads through a unique switching agreement. With its strategic location adjacent to an interstate highway, two US highways and direct rail connections to four carriers, an intermodal (container) terminal, truckers' services, and four Seaway-Max shipping berths actively used to load and unload maritime cargo, the Clure Terminal is a full-service multimodal logistics hub connecting both surface and maritime transportation modes.

Traditionally, Clure Terminal maritime cargos have included breakbulk and general, heavy-lift cargo and machinery for the mining, oil and gas production, construction, wind energy, pulp and paper, and energy production and transmission industries. Storage of these cargos requires outdoor laydown areas. Non-maritime (rail-car, truck and intermodal) cargo tonnage through the Clure Terminal, which has grown by over 400% since 2007, includes raw materials, semi-finished goods, and finished goods associated with regional industries; storage of these cargos generally requires the indoor warehouse space.

Through recent investments in infrastructure and capabilities to meet Homeland Security requirements, the Clure Terminal is only the second U.S. Great Lakes port capable of handling maritime containers. Starting in May 2023, the Dutch shipping company Spliethoff provides a dedicated monthly liner service connecting the Clure Terminal to Antwerp, Belgium, a major

¹ <https://greatlakes-seaway.com/en/navigating-the-seaway/seaway-map/>

gateway to significant markets in Europe and North Africa. The first year of liner service was a big success, with general and breakbulk cargo as well as containers moving to and from as far away as the Pacific Northwest.

Statement of Work - Proposed Project Components

(1) Reconstruction of 625 linear feet of the Berth 11 dock at the Clure Public Marine Terminal.

Berth 11 at the Clure Terminal of the DSPA is in a state of disrepair and is deficient in terms of capacity, physical condition, and safety. The berth cannot currently be used to load or unload ships because of the deteriorated dock walls. Five hundred and fifty linear feet of Berth 11 is already scheduled for rehabilitation using FY2019 PIDP funding and this project would finish the Berth 11 dock reconstruction.

Originally completed in the early 1900s, the original dock face retaining walls are made from timber or steel piling with intermittent concrete caps. Recent high-water levels have accelerated deterioration and further undermined the dock wall structures.

According to a report by engineering consulting firm AMI, the structural components of Berth 11 range in condition from fair to poor and are in need of full replacement, and the adjacent deck (approximately 20 feet from the dock wall) is deteriorated and cannot reliably support heavy cargo laydown. Without repair, the dock deck would continue to deteriorate.

The rehabilitation of Berth 11 will add 625 LF of dock wall with tie-backs, new bollards and bollard foundations, earthwork to tie in with existing deck surface, and associated stormwater management to improve resilience. Berth dock wall reconstruction is necessary and justified because failure to repair this dock wall will result in the eventual deterioration



Figure 2: Berth 11

and erosion of the deck surface, resulting in negative impacts to both the safety of port personnel and water quality within the Duluth-Superior harbor, not to mention the loss of additional cargo storage space.

Once reconstructed, Berth 11 will serve Seawaymax saltwater vessels bringing in large, oversized, overweight (OSOW) industrial cargo (wind turbines, reactor vessels, etc). Berth 11 will also be used for ship lay-up for emergency and maintenance repair activities supplied by local contractors including Fraser shipyards. The available shore power at the berth will make them especially attractive for this purpose and mitigate carbon emissions while at dock.

The scope of work includes rebuilding the dock walls to regain structural integrity and address safety hazards and accommodate ship loading and unloading requirements. Since there is sufficient depth in the slip along Berth 11 to accommodate vessels, maintenance dredging will not be included in this project. These improvements will provide an all-purpose facility capable of handling current project cargo (i.e. steel plate, pipe, large wind turbine components and heavy-lift equipment),

containers and developing cargoes such as precious metals concentrate, forest products, and other large ship-borne products.

The following elements will be completed as part of the proposed project:

- A new coated steel sheet pile wall will be driven just in front of the existing failing dock structures along the water's edge, as close to the existing structure as possible to minimize the fill needed along the dock between the old and new structures. The new dock wall will have a heavy lift capacity of 2,000 psf lift capacity to match that of Berths 8, 9.
- Additional steel sheet pile will be used to construct a new anchor wall approximately 95 feet back from the water's edge. The new anchor wall will be connected to the new sheet pile dock wall with steel wale and tie rods. Concrete strip footings will add strength to the anchor wall and tie rods. New mooring bollards and fenders will also be added to support proper berthing and mooring operations for seaway class vessels.
- The new dock wall will be one to two feet higher than the existing structure. Fill will be placed on the surface behind these walls to bring the surface to grade, tie into the new deck on the remainder of the dock and create proper drainage to preexisting storm water collections systems installed during the recent construction of Berth 8 and 9.
- The dock wall installed as part of this grant project will total be 625 feet in length, bringing the total length of Berth 11 to approximately 1175 LF feet. The existing top of dock elevation varies from 605 to 606 feet; the proposed new top of dock elevation is 608.7 feet.

(2) Demolishing the former grain elevators and installing water service at the Duluth Lake Port facility to clear the way for redevelopment of the dock.

The Duluth Lake Port facility is strategically positioned in a premier location near the Clure Public Marine Terminal, immediately adjacent to the federal navigation channel, and less than a mile inside the Port of Duluth-Superior's Duluth Entry. The grain elevators have been out of service since June 2016 because they were found to be structurally unsafe for grain storage via structural reviews conducted for two former owners. They have sat vacant since that time, have become further dilapidated, and currently serve as an attractive nuisance to adventure seekers and copper thieves, among others. In addition, the water main serving the elevators was extensively cracked with corroded fittings causing the City of Duluth to eliminate water service, including fire hydrants serving the facility. The tunnels beneath the facility, which hold conveyer belts, transloading systems, and electrical infrastructure were destroyed by flooding after pumps were shut down. The DSPA acquired the property in December 2019 and intends to redevelop the 7.5-acre site as an expansion of the multi-modal logistic hub operations of the Clure Terminal.



Figure 3: Disused Grain Elevators

The elevator demolition serves three purposes: (1) it clears the property to make way for commercial reuse of the property; (2) provides public safety benefits by eliminating a dangerous public nuisance and reinstalling water service to allow the return of fire suppression capacity at the location; and (3) enhances climate resiliency by constructing stormwater management features to the property.

Upon redevelopment, this dock (and laydown area as described in the next project component) will immediately provide ship berth and cargo loading/unloading capacity as well as high quality, rail-served laydown space to support the current multimodal logistics hub service model. Long range plans include acquisition of the adjacent dock facility, currently a metals recycling facility and the only property separating the Clure Terminal and its northern slip from the Duluth Lake Port facility.

As noted in the Transportation Challenges and Opportunities section below, laydown capacity and site flexibility to support current and future business growth is lacking. The improved Duluth Lake Port site will be ideal to support new initiatives as these opportunities arise.

The following elements will be completed as part of the proposed project:

- hazardous materials abatement;
- demolition of existing site buildings, including outmoded, dilapidated grain elevators
- recycle all concrete recovered from the demolition for reuse onsite;
- salvage all usable equipment for use at other grain facilities in the Port; and
- installation of water service to support the creation of 7.5-acre laydown area and future site redevelopment.

The hazardous materials building survey has already been completed and the design work associated with this component is approximately 20% complete.

(3) Reconstruction of 1150 linear feet of dock wall and creation of 7.5 acres of new, high-quality laydown space at the Duluth Lake Port facility.

The demolition of the grain elevators (Component 2) clears the way for dock wall reconstruction and the creation of 7.5 acres of rail-served laydown area, adding 1150 LF of dock wall with tie-backs, new bollards and bollard foundations, and earthwork to create the new deck surface.



Figure 4: Duluth Lake Port Facility

Berth rehabilitation is necessary to prevent dock wall collapse, arrest deterioration and erosion of the deck surface, and support laydown of heavy cargos. Reconstruction is further justified to eliminate negative impacts to the safety of port personnel, the public and water quality within the

Duluth-Superior harbor.

Once reconstructed, the Duluth Lake Port dock will serve Seawaymax ocean-going vessels carrying containers and large, oversized, overweight (OSOW) industrial cargo. The Berth will also extend the Clure's capacity for ship lay-up for emergency and maintenance repair activities supplied by local contractors, including Fraser shipyards.

The scope of work includes rebuilding the dock walls to regain structural integrity and address safety. Maintenance dredging in the slip along the Lake Port dock to accommodate vessels is included in this project. These improvements will provide an all- purpose facility capable of handling current project cargo (i.e. steel plate, pipe, large wind turbine components and heavy-lift equipment), and developing cargoes such as precious metals concentrate, forest products, and other large ship-borne products. In addition to allowing ships to load and unload, a simulation study shows that an average of nearly 6,000 short tons of precious metals concentrate could be processed through the facility on a weekly basis with this added berth capacity. Without repair, the dock deck would continue to deteriorate.

The following elements will be completed as part of the proposed project:

- New coated steel sheet pile wall will be driven just in front of the existing failing dock structures along the water's edge as close to the existing structure as possible to minimize the fill needed along the dock between the old and new structures. The new dock wall will have a heavy lift capacity of 2,000 psf surcharge loading to match that of Berth 8 and 9 at the Clure Terminal. The total length of the Duluth Lake Port cargo berth when completed will be approximately 935 LF.
- Additional steel sheet pile will be used to construct a new anchor wall approximately 95 feet back from the water's edge. The new anchor wall will be connected to the new sheet pile dock wall with steel wale and tie rods. New mooring bollards and fenders will also be added to the dock to support proper berthing and mooring operations for Seaway class vessels.
- The new dock walls will be one to two feet higher than the existing structure. Fill will be placed on the surface behind these walls to bring the surface to grade and create proper drainage for storm water management at the site.

Project History – Infrastructure Investments and Improvements

The DSPA is currently implementing its Duluth Port Logistics Hub 2020 Revitalization & Expansion Project funded in part by the 2019 MARAD PIDP grant program. This \$20.3M (\$10.5M PIDP) project includes the 56,000 SF East Annex Warehouse Expansion (construction completed August 2023) that increased our total warehouse space from 430,000 SF to 486,000 SF. Additionally, the project will reconstruct the entire dock wall on Berth 10 (approximately 600') and a 550' section of the Berth 11 dock wall.

In 2016, the DSPA completed the reconstruction and modernization of a dilapidated former grain dock, a \$17.7M redevelopment project funded by a USDOT TIGER Grant, State grants (MN DOT and MN Department of Employment and Economic Development), and DSPA port funds. This project added 28 acres of maritime cargo handling and outdoor storage space and Berths 8-11 to the Clure Terminal. The TIGER Grant project included the reconstruction of 1,700 feet of dock wall and the addition of a heavy-lift dock along Berths 8 and 9 (with twice the load-bearing capacity of existing

berths), but did not include funds for the reconstruction of Berths 10 and 11. The project also included the addition of on-dock rail, the construction of a new roll-on-roll-off dock, new deck, stormwater management features, environmental cleanup, lighting, fencing and a guard shack.

The additional outdoor storage space created by the TIGER project freed up space on the original Clure Terminal, which provided the opportunity to attract an intermodal terminal. To prepare for the intermodal terminal, the DSPA built a circulation and hauling access road to improve traffic flow, added a scale and trucker's lounge, security fencing and lighting; this \$2.8 M project was funded by DSPA port funds and a State MN DOT grant.

Finally, the DSPA adapted a portion of existing warehouse space, making significant investments in order to meet U.S. Customs and Border Protection international container examination facility requirements for import containers whether they arrive via rail or vessel.

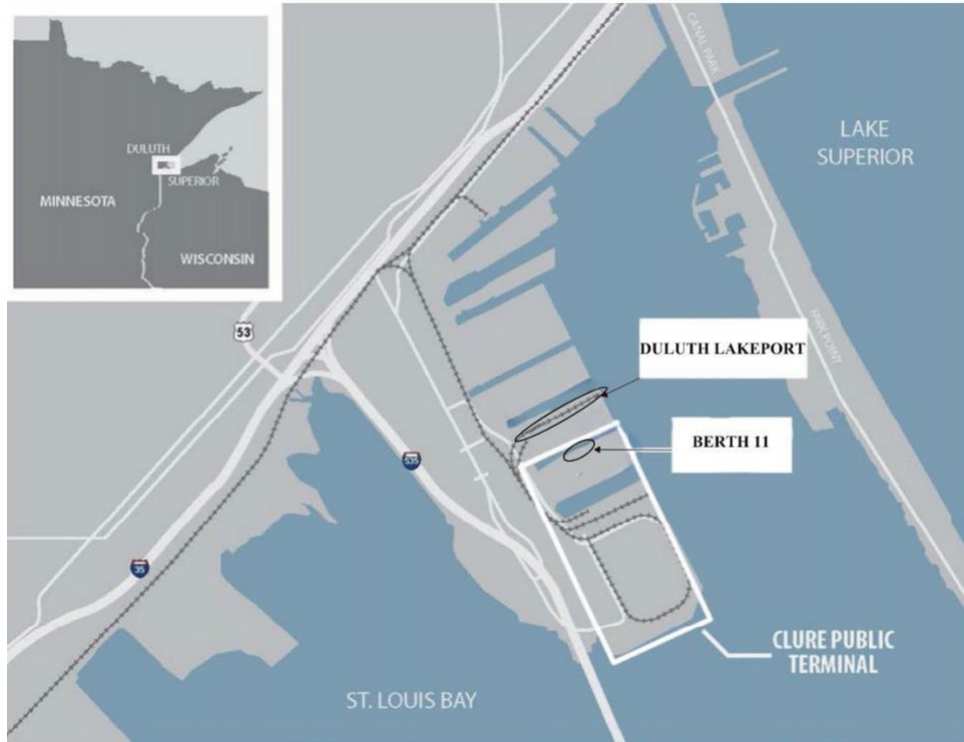
In March 2017, Canadian National (CN), in partnership with the DSPA, officially opened the "CN Duluth Intermodal Ramp." The Intermodal Ramp is located on the Clure Terminal and is directly served by CN Railway. The Intermodal Ramp provides regional shippers with direct service to six ports on the East, West, and Gulf Coasts (Figure 3). A \$3.1M expansion of the Intermodal terminal was completed in July 2019 with funding from DSPA port funds and a MN DOT grant, adding 2,600 feet of track and six acres of new surface (paved and crushed concrete).

Performance at the CN Duluth Intermodal Ramp has exceeded expectations. The geographic "catchment area" is much larger than expected, extending east into northern Michigan, west to eastern Montana, and south of the Twin Cities into Iowa. In addition, the range of customer types is broader than originally expected and they are asking us for value added services on over 90% of the containers, well over the predicted 25%. In the end, Customers have achieved real economic saving. Feedback from terminal customers indicates the efficiencies described above have saved them as much as a third of their freight costs. This cost savings and efficient handling of freight allows regional businesses to be more competitive in global markets and opens possibilities for business expansion in the region. As noted above, the DSPA made significant investments in infrastructure and capabilities to meet Homeland Security requirements to ensure the Clure Terminal is capable of handling maritime containers.

The DSPA has completed a FEMA Port Security Grant project to expand and modernize the security surveillance system at the Clure Terminal. Working with local law enforcement, the system is designed to cover the entire terminal, and the surrounding harbor, including vulnerable locations such as bridges, convention center and the hospitality/tourism district. Local law enforcement can be provided access to the system, increasing terminal and port resilience.

Section II. Project Location

The Port Duluth 2024 Intermodal Terminal Expansion Project will improve the Clure Terminal and the Duluth Lake Port sites located on Rice’s Point - an industrially-zoned peninsula in the Duluth-Superior Harbor – and within the Lincoln Park Neighborhood in Duluth, Minnesota.



Project Area Impacts and Demographics

The City of Duluth’s economic base grew up around shipping, railroad activity and natural-resource based industry from the mid-1800s through the 1960s. Key industrial employers experienced a significant decline in the 1970s through 1980s. Famously, in the early 1980s, a billboard stood for a time at the western end of town, reading: “Will the Last One to Leave Duluth Turn Out the Lights?”

Since that time, the City has methodically rebuilt its economic base, focusing on the health care, education, industry, shipping and tourism sectors. Duluth’s economy is now more diversified, and its population, after plunging from a high of 106,884 in 1960, has stabilized to around 86,000 (86,697 in 2020; US Census records). See project site specific attributes in above table.

Duluth Seaway Port Authority Clure Public Marine Terminal	
Project Location	Duluth, MN
Project Classification	Urban
Port Type	Great Lakes
Small Port	No
HDC	Yes
CDZ	Yes, Opportunity Zone
Opportunity Zone ID	27137015600
Census Tract	CT 156, St. Louis County

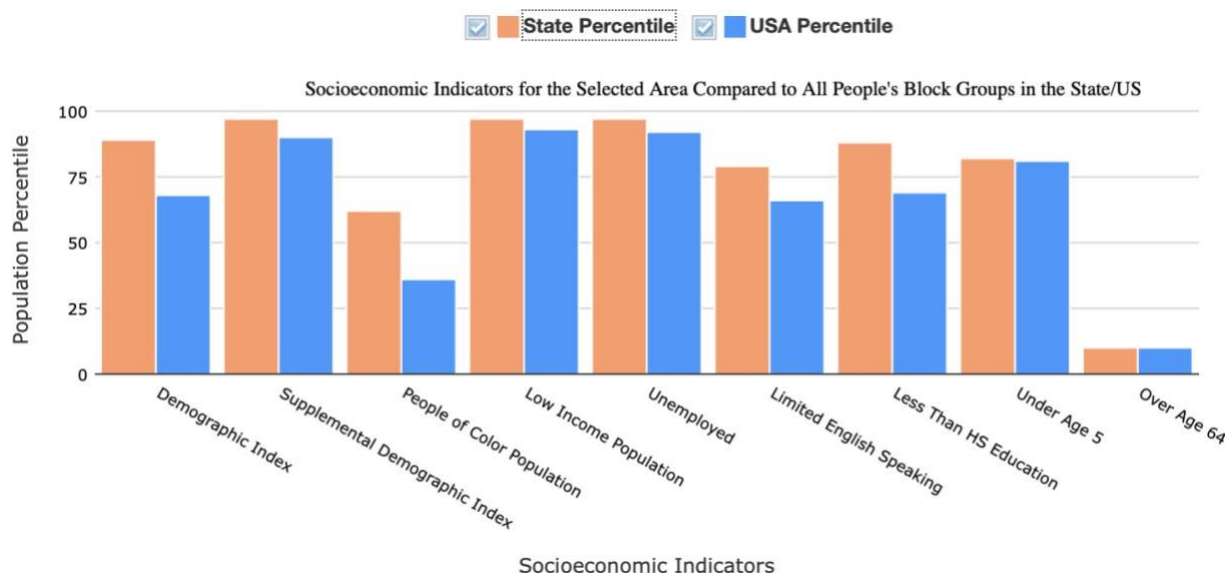
The project is located on Rice’s Point, within the larger Lincoln Park Neighborhood. The project and Rice’s Point are fully within Census Tract 156, the remaining Lincoln Park Census Tracts include 020 and 024, all in St. Louis County. The whole of Lincoln Park is designated as an “Area of Persistent Poverty” and a “Historically Disadvantaged Community” using the Department of Transportation’s HDC locator tool; this indicates that this Census Tract has had a poverty rate of at least 20% as measured over a five-year period from American Community Survey data.

The Environmental Protection Agency’s EJScreen tool (<https://www.epa.gov/ejscreen>) reflects that the people living in the vicinity of the project location are economically distressed: 40% of people in Census Tract 156 and 53% of Lincoln Park residents live in low income households. The immediate project area (CT 156) and all of Lincoln Park also face much higher unemployment rates in comparison to the rest of Minnesota and the United States.

The table below provides socioeconomic data points for both Census Tract 156 and for Lincoln Park (aggregated) from EJScreen:

EJScreen Socioeconomic Indicators

Socioeconomic Indicators	Percentile in Minnesota: CT 156 / Lincoln Park	Percentile in United States CT 156 / Lincoln Park
People of Color	66 th / 62 nd	40 th / 37 th
Low Income	83 rd / 92 nd	68 th / 82 nd
Unemployment Rate	84 th / 88 th	72 nd / 77 th
Limited English Speaking Households	78 th / 72 nd	65 th / 60 th
Low Life Expectancy	99 th / 98 th	99 th / 92 nd



Within Census Tract 156, natural features and current land use and infrastructure create a distinct separation between Lincoln Park residents (including those living within the Census Tract) and the industrial/port activities on Rice’s Point. The surface transportation network, including I-35 in particular, creates a physical barrier northeast of the Duluth-Superior Port.

People living near the project site face challenges in having access to good-paying jobs. The U.S. Bureau of Labor Statistics (BLS) evaluated [Occupational Employment and Wages in Duluth in May of 2021](#) and found that average hourly wages in Duluth were 10% below the nationwide average. Low wages cause hardships for many families facing higher housing and other household costs and contribute to negative outcomes for residents, including in health indicators such as life expectancy. The proposed Project will help address these inequities as further described in Section V.

Transportation Connections

The Port of Duluth-Superior is the largest port on the Great Lakes and the 19th largest port in the US by tonnage.

Located at the western tip of Lake Superior, at the head of the Great Lakes St. Lawrence Seaway System, the Port is mid-America’s gateway to global trade. It serves as a hub for domestic and international cargo, and it is the largest maritime gateway for US trade with Canada. On average, 33 million tons of cargo moves through the port annually. As of 2018, maritime shipping within the Port generated over 7,000 direct and induced jobs and over \$1.6 B in economic activity.

There are twenty-one port terminals distributed on the Duluth, Minnesota and Superior, Wisconsin sides of the harbor.



The majority of the Duluth terminals, including the Clure Terminal, are located on Rice’s Point at the center of the Harbor. The Clure Terminal boasts four active Seaway-depth shipping berths with direct access to the federal navigational channel. The Clure Terminal features direct access to four Class I rail carriers [Canadian National (CN), Burlington Northern Santa Fe (BNSF), Canadian Pacific Kansas City (CPKC), and Union Pacific (UP)] through a highly unique and beneficial switching agreement, as well as uncongested direct access (less than half a mile) to I-535 and I-35, a principal international trade corridor, and US 53, and US 2. As further detailed in the previous section, the Clure Terminal functions as a multi-modal logistics hub, connecting surface and maritime transportation modes.



Figure 5: Intermodal Container Terminal Access to 3 Coasts

The CN Duluth Intermodal (container) Terminal is located on the Clure Terminal and is directly served by CN Railway. The Clure Terminal is located in the center of CN Railway’s North American Intermodal network that runs between Prince Rupert and Vancouver to the west; Chicago, Halifax, Nova Scotia, and Montreal to the east; and New Orleans and Mobile to the south. The Duluth Intermodal Terminal is the only container terminal in the Minnesota market that provides shippers with direct service to the East, West, and Gulf Coast ports, and direct access to Asian markets. In 2022, the Clure Terminal became only the second US Great Lakes port capable of handling maritime containers, and since May 2023, the Dutch shipping company, Spliethoff provides a dedicated monthly liner service connecting Duluth to Antwerp, Belgium, a major gateway to significant markets in Europe and North Africa. Please see Section I for additional

information on the Clure Terminal's transportation assets.

The Clure Terminal operating agent employs 47 people, expected to grow by 10 with successful funding of this project. Most employees drive to work, and the terminal is also easily access via public transportation. The Duluth Transit Authority (DTA) is one of the most technologically sophisticated transit systems in the country. The DTA provides bus service in Duluth, Proctor and Superior, Wisconsin, including multiple routes that directly serve Rice's Point. The DTA maintains a modern fleet of transit buses that includes diesel, electric and hybrid-electric buses. [see <https://www.duluthtransit.com/home/about/about-dta/>]



Figure 6: Duluth-Superior Harbor

Section III. Grant Funds, Sources, and Uses of Project Funds

Detailed cost estimates are provided for all components of the proposed 2024 Duluth Port Intermodal Terminal Expansion project in Attachment A and are summarized in Table 2. The background on cost estimates is provided for each project component below:

(1) Reconstruction of 625 linear feet of the Berth 11 dock at the Clure Public Marine Terminal.

The cost is based on 20% engineering design. DSPA staff compiled cost estimates using current construction unit prices from a recently (April 29, 2024) awarded construction contract for a dock wall project at our terminal. A regional marine construction contractor independently verified these unit prices and overall project cost estimates.

(2) Demolishing the former grain elevators and installing water service at the Duluth Lake Port facility to clear the way for redevelopment of the dock.

This cost estimate consists of sub-contract quotes compiled by a general contractor with extensive experience with similar scale projects. The cost includes salvage and hazardous materials abatement prior to demolition and beneficial reuse of the crushed concrete on-site. The estimate also includes engineering support services such as NEPA review, permitting, plans and specifications, and construction oversight.

(3) Reconstruction of 1150 linear feet of dock wall and creation of 7.5 acres of new, high-quality laydown space at the Duluth Lake Port facility.

The cost is based on 20% engineering design. DSPA staff compiled cost estimates using current construction unit prices from a recently (April 29, 2024) awarded construction contract for a dock wall project at our terminal. A regional marine construction contractor independently verified these unit prices and overall project cost estimates.

Table 2. Project Budget

Project Costs, Sources and Uses for Project Funds, Non-Federal Matching Funds							
Component	Cost Estimate*	Federal	Non-Federal			Total Non-Federal Funds	Total Funds
		Proposed MARAD PIDP Funds	2024 State PDAP Funds Requested**	Committed State PDAP Funds***	Committed DSPA Funds		
Dock Wall Berth 11	\$11,463,200	\$10,583,800 (92%)	---	---	\$879,400 (8%)	\$879,400 (8%)	\$11,463,200
Duluth Lake Port Demo	\$10,466,150	\$2,896,150 (28%)	---	\$7,570,000 (72%)	---	\$7,570,000 (72%)	\$10,466,150
Dock Wall Duluth Lake Port	\$26,654,700	\$23,654,700 (89%)	\$3,000,000 (11%)	---	---	\$3,000,000 (11%)	\$26,654,700
TOTALS	\$48,584,050	\$37,134,650	\$3,000,000	\$7,570,000	\$879,400	\$11,449,400	\$48,584,050
Federal Funds (MARAD-PIDP): 76%			Non-Federal Funds: 24%				

*See attached Cost Estimate Details in Attachment A.

**If State PDAP funds are awarded at a lower amount than shown, additional DSPA funds will be used to make up the difference.

*** See Attachment F Minnesota PDAP Award Letter Committed Funds.

Table 2 describes the proposed project budget. No funds for previously incurred costs are being sought. This project is located entirely within one census tract (CT 156) and within an urbanized area.

The project has a total non-federal match of 24% of \$11.449M, with DSPA committing to providing \$879,400 (2%). The remaining \$10.57M (22%) is comprised of committed and expected Port Development Assistance Program (PDAP) grant funds administered by the Minnesota Department of Transportation. The PDAP program is a competitive grant program that supports port infrastructure improvements at publicly owned port facilities. The dock wall reconstruction and demolition/laydown area preparation are eligible expenses under PDAP.

The port has received \$7.570M in committed PDAP funds to date [see Attachment F containing the PDAP award letter] and fully expects to be awarded the remaining \$3M in PDAP funds. These funds are available most years and are queued up in the Minnesota House and Senate bonding bills for the current FY2024 legislative session. The DSPA has a long-term record of success in securing PDAP funding: the DSPA has received over \$25.4M in PDAP funds since the program's inception in 1998. PDAP grant applications are generally due in September for award in January; the DSPA plans to apply for these funds in September 2024 for award in January 2025. The attached letters of support [Attachment C] from key state legislative committee chairs and Minnesota Department of Transportation, the department that administers the PDAP program, provide further confidence in the DSPA's ability to procure additional PDAP funds. While the DSPA is confident that the PDAP funds will be realized for this project, we are able and willing to commit \$3,879,400 in non-federal match to ensure full project funding.

IV. Merit Criteria

Section A: Achieving Safety, Efficiency, or Reliability Improvements

The three proposed project components collectively improve safety, efficiency and reliability of the movement of goods through the terminal. The Benefit Cost Analysis [Attachment D] provides further details.

Berths at the Clure Public Marine Terminal, including Berth 11, are called out in the US Coast Guard’s 2022 Western Lake Superior Area Contingency Plan (ACP). Since Berth 11 (as well as Duluth Lake Port) is currently not available for vessel refuge or emergencies, reconstruction of the dock for safety purposes is supported by the ACP as well as the Lake Carriers’ Association (as noted in the attached Letter of Support), which represents the US-flag Great Lakes Fleet.

The removal of the former grain elevators increases safety by eliminating the risk of a serious injury or death of someone trespassing at the site. As is often the case with older structures, the building has become attractive to “urban explorers” and people climbing the structure for the vantage point to take photos. This activity is extremely dangerous and while the DSPA has secured the site against such activity, the trespassing still occurs on a frequent basis, particularly at night when the activity is especially precarious.

The risk of injury is not only due to the real possibility of a misstep that causes a fall, but also the poor condition of the building which could result in building material failure or materials separating from the structure causing injury or worse for those at the site. This safety risk extends to DSPA employees and law enforcement officers who need to address the situation and safely remove the trespassers from the property. Removing the attractive nuisance will ensure the proper disposal of the asbestos – and other hazardous materials – containing materials within the building and will eliminate the current safety risks while creating a new laydown area that provides adequate spacing for port operations to occur safely.



Figure 7: Sinkholes at Duluth Lake Port Dock

The dock wall reconstruction, elevator demolition and laydown area preparation play a key role in the efficiency and reliability of cargo movements at the Clure Terminal. Additional berth space allows for greater flexibility in vessel movement at the terminal, allows available berths to accommodate emergency maintenance activities for vessels resulting in less wait time or relocation of vessels already at berth, and improves safety by reducing congestion at the terminal for employees and outside maintenance contractors. The new laydown area at the elevator location grows on-dock laydown at the Clure Terminal allowing for continued efficient placement of oversize cargos that require complex handling. The additional laydown area assures the Clure Terminal can reliably support current and future business growth detailed in Figure 5.

Section B: Supporting Economic Vitality at the Regional or National Level

The Benefit Cost Analysis (BCA) completed for this project found that the project benefits greatly exceed the cost; the overall Benefit Cost Ratio (BCR) for the entire project is 2.69. The full Benefit Cost Analysis in Attachment D provides further detail and analysis. The key benefits include eliminating the substantial safety risk of a serious injury or death, increased freight volumes, and the value of time savings by not having customers utilize the Port of Milwaukee if their specialized cargo cannot be accommodated at the Clure Terminal. In addition, once reconstructed, Berth 11 will serve Seawaymax saltwater vessels bringing in large, oversized, overweight (OSOW) industrial cargo (wind turbines, reactor vessels, etc); thereby providing benefits due to Berth 11's use for ship lay-up for emergency and maintenance repair activities supplied by local contractors including Fraser shipyards.

The full project also results in benefits that are not included in the BCA, including the creation of dozens of good-paying construction jobs, the creation of 10 permanent, high-quality, good paying jobs at the Clure Terminal, and supported industrial jobs. This project will support industries in the region and facilitate business expansion within industries that are known to pay higher than average wages. See study of Duluth's Industrial Sector at: https://duluthport.com/wp-content/uploads/2024/05/24-DSPA-0219_Duluth-Port-ICIC-Handout_8.5x11_FINAL-1.pdf.

In addition, the new Duluth Lake Port laydown area is ideally located for use as a material staging and storage area during the nearby Blatnik Bridge replacement project, which was recently funded, in large part, with federal funds. The Minnesota Department of Transportation has secured 2 large land tracts for this purpose, but has stated that at least 3 areas will be needed due to the project size. They expressed great interest in this location because rail and water access are desired factors in choosing laydown area locations; both are available at the Duluth Lake Port site. Construction is estimated to start in 2027 and last through 2032.

The DSPA and its operating agent are routinely involved in regional business development discussions with prospective industries and manufacturers. We currently do not have the space to commit long-term to support opportunities currently under development. Examples under consideration include green energy initiatives such as hydrogen fueling, and developing cargos such as precious metals concentrate, alternative energy storage (battery technology), kaolin clay for the regional paper industry, anticipated growth of wind turbine cargo associated with available

Section C: Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment

This project will directly leverage \$8.45 million in non-federal funding, of which \$879,400 is committed by DSPA and \$7,570,000 will be provided through the state Port Development Assistance Program. This represents a non-Federal share of 24%. As further described in Section III, the DSPA is including the pending PDAP funds as match for this funding application due to DSPA's long-term record of success in securing PDAP funding and the State of Minnesota's demonstrated desire to cooperate with DSPA on Federally funded projects, including the TIGER grant completed in 2016 and the 2019 PIDP project currently under construction. The attached letters of support [Attachment C] provide further confidence in DSPA's ability to procure additional PDAP funds. However, should these funds not be awarded, or be awarded at a lower level than shown in Table 2, additional DSPA funds will be used to fill the resultant gap in the

budget.

Recent infrastructure improvements at the Clure Terminal are summarized in Section I. In total over the past eight years, the DSPA completed over \$52M in capital investments in infrastructure projects and lift capacity; of this \$27M in federal grant funds, \$10M in DSPA funding, and \$25M in state-grant funds.

Starting with the TIGER grant project, which was completed in 2016, the DSPA reclaimed a dilapidated, underused 28-acre dock, expanding the Clure Terminal and rebuilding two Seawaymax cargo berths (Berths 8 and 9). With the DSPA's FY2019 grant, the DSPA was able to reconstruct Berth 10 and 550 feet of Berth 11 (in addition to building 56,000 SF of new warehouse space). This FY2024 PIDP grant will enable the DSPA to complete the reconstruction of Berth 11 with the proposed construction of 625 feet of new dock wall, including tying the dock wall into the existing deck. While the FY2019 PIDP grant was initially intended to include rehabilitation of the entire length of Berth 11, inflation in the cost of materials and labor between the time of grant application and grant contract execution meant necessitating an adjustment of project scope, reflected in a MARAD-approved modified grant contract. At the time the contract modification was initiated in 2022, the available grant funds were expected to cover 250 linear feet of Berth 11 dock wall reconstruction. Upon receiving favorable bids on April 29, 2024, the available grant funds will now allow 550 feet of Berth 11 dock wall reconstruction, which will be completed summer 2024.

The DSPA has been awarded and managed more than 30 grant projects to completion since 1999 and has partnered with state and federal agencies to sequentially grow and expand the Clure Terminal logistics hub services and capabilities as part of their vision and long-term strategy to contribute to the economic vitality of the region and country. The DSPA is a proud steward of public investment.

Section D: Port Resilience

DSPA has taken sequential strategic steps over the past 15 years to improve port infrastructure in order to expand service offerings and operations so that customers have the options that best support their shipping needs. The result of this effort has been a 400% increase in non-maritime cargo tonnage through the Clure Terminal and consistently oversold warehouse space, including the 56,000 square feet of warehouse space recently completed. This proposed project is critical to furthering DSPA's long term strategy, with each project component improving the Port's resilience through efficiency, capacity increase, and diversity in options for current and future customers; adding resiliency to the supply chain. The added laydown space allows the DSPA to further enhance our ability to handle large-scale cargos, such as those associated with wind turbine components, along with our capacity as an intermodal terminal for container shipping and ability to support new initiatives expected around energy transformation (further described in Section I).

Both Berth 11 and Duluth Lake Port are in a state of disrepair; it is deficient in terms of physical condition and resiliency. While Duluth is not an ocean port and subject to rising sea levels, fluctuating lake levels do occur and have accelerated deterioration and further undermined the dock wall structures. According to a report by engineering consulting firm AMI, the structural components of Berth 11 range in condition from fair to poor and are in need of full replacement, and the adjacent deck (approximately 20 feet from the dock wall) is deteriorated. The proposed

dock wall reconstruction not only prolongs the life of the dock, but allows the dock elevation to be raised to make it more resilient to lake level changes, increased storm frequency and intensity, and other extreme weather events.

Removal of the former grain elevators increases resiliency by eliminating a dilapidated structure that already poses a threat in its current state as further described in section I, but is made worse during extreme weather events, including high winds, extreme rainfall, and increased temperature swings causing more freeze/thaw cycles. Demolition of the former grain elevator eliminates the risk of catastrophic failure from more frequent weather events.

V. Selection Considerations

Section E: Climate Change and Sustainability

The DSPA is strongly committed to continually improving its environmental performance, including reducing criteria pollutant and greenhouse gas emissions from port operations at the Clure Terminal and helping our customers to reduce climate impacts of supply chains. Following are specific actions taken at the terminal and in support of our customers to reduce greenhouse gas emissions, and a summary of how the proposed project component features will build on our climate action efforts. These efforts are entirely consistent with the U.S. National Blueprint for Transportation Decarbonization, which calls on the transportation sector to work boldly and collaboratively to work toward decarbonization.

Project-related Emissions Reduction

The BCA demonstrates emission reductions that will accrue through the implementation of this project. Specifically, the creation of extra berth capacity enables the DSPA to accommodate a steady growth of international vessels carrying cargo as well as accommodate additional vessels needing emergency repair and regular maintenance. While it is well documented that maritime shipping is by far the most carbon efficient freight mode producing the least volume of emissions on a per “tons of goods delivered” basis, maritime shipping still produces a large volume of emissions simply due to the horsepower and size of engines required to move goods. Therefore, even a small amount of reduction in operating or dwell time can have a significant impact on the total emissions per day for ships. The attached BCA details the projected reduction in offshore delay or dwell time from ships waiting for emergency repairs and/or the anticipated reduction in dwell time in future projected years for cargo ships. The anticipated total emissions reduction potential of the project is:

Total Tons of Emissions Reductions:

- CO₂ 47,911
- NO_x 2,700
- SO_x 815
- PM_{2.5} 79

Clure Terminal

These project emission reductions are consistent with broader efforts by the DSPA to continuously improve environmental performance. The DSPA is a founding member of Green Marine, a voluntary environmental certification program which promotes environmental excellence by encouraging maritime enterprises to adopt concrete measurable actions that go beyond regulatory

obligations. Under the program, the DSPA has completed annual GHG emissions inventories for the Clure Terminal since 2017 [website]. The emission inventory data is available to the public, discussed in our quarterly magazine, and routinely incorporated into presentations to the public. This historic information and our continued commitment to Green Marine will enable us to prioritize and track the GHG emissions savings resulting from the project.

The DSPA collaborated with Minnesota Power, the local electric power utility, and their energy efficiency/electrification consultant on a July 2022 study “Energy Analysis – Electrification and Greenhouse Gas Reduction” [website]. The study identified detailed energy conservation and electrification opportunities with a focus on GHG reduction, helping set the stage for development of a climate action plan.

In 2023, the DSPA contracted with Burns & McDonnell, a national engineering firm, to develop a detailed Climate Action Plan (CAP) for our terminal operations. The final draft CAP (May 2024; website) defines DSPA’s emission goals, strategies to meet that goal, and concrete near-, mid-, and long-term action steps. The DSPA CAP is also consistent with the City of Duluth Climate Action Work Plan 2022-2027 and the Minnesota Pollution Control Agency’s state-wide CAP. The stated emissions goal of net zero carbon emissions by 2050 for DSPA terminal operations will be proposed for approval by our board of commissioners on May 29, 2024.

Based upon CAP outcomes, the DSPA is applying for a U.S. Environmental Protection Agency Clean Ports grant in the current (due May 28, 2024) cycle; we are applying as one member of a state-wide port consortium organized by the Minnesota Pollution Control Agency. The DSPA’s request under this application will replace existing diesel- and propane- lift equipment (fork lifts, reach stacker, yard tractor) with electric equivalents and add two electric mobile harbor cranes to service our expanded berth space. The associated electric charging infrastructure consistent with the CAP is also included in the request.

Customer Supply Chains

Often freight transportation cost savings and air pollutant emissions reductions go hand-in-hand. The inherent efficiencies in modal shift capabilities of the Clure Terminal produce real results – reduced air emissions from efficient freight movement. To drive home that point, the DSPA contracted with a transportation and infrastructure consulting firm to develop an emissions calculation tool to help our customers understand and act upon the climate impacts of their supply chain decisions. The tool enables the DSPA and its partners to query the emissions and travel times associated with varied supply chain routings between the Upper Midwest and ports in Europe, Asia, and the Great Lakes. This tool has been instrumental in helping to build a trade lane with the United Kingdom, working with the U.K. Consulate in Chicago and the U.S. Great Lakes Seaway Administration. The tool is proprietary, so we are not sharing it as part of this public grant application. However, we are available to provide a demonstration to MARAD staff upon request.

As noted above and in the following section (Section F: Equity and Justice⁴⁰), MPCA, DSPA and numerous partners have taken proactive steps to address climate change and promote equitable development. Based on environmental review experience, no negative impacts are anticipated to water quality, wetlands, or endangered species. Air quality will be improved by this project due to reduced emissions. As noted in Section VI, environmental remediation will occur prior to construction in coordination with the Minnesota Pollution Control Agency. This project results in positive environmental impacts, benefitting residents living near Rice’s Point. Further information

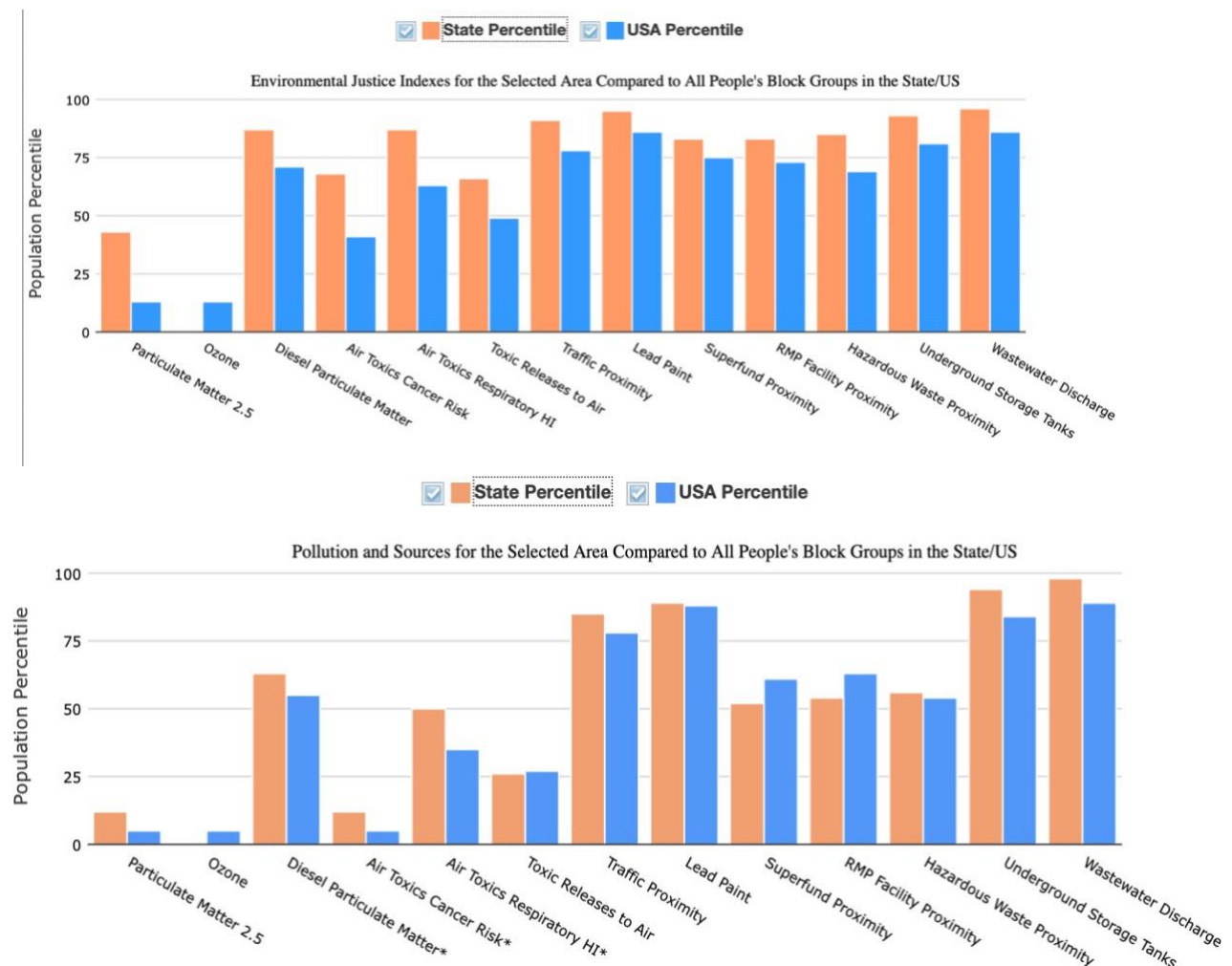
on public involvement and engagement, as well as environmental justice impacts, can be found below in Selection Criteria (2) Section F: Equity and Justice40.

Section F: Equity and Justice40

As further described in Section II (Location), this project is located within US Census Tract 156, St. Louis County, Minnesota, and within the larger Lincoln Park neighborhood [which also includes Census Tracts 024 and 020]; all are Areas of Persistent Poverty (APP), and higher minority populations relative to the City and State.

Additionally, the US DOT Transportation Disadvantaged Census Tract map identifies Census Tracts 156 and 24 as having a Health Disadvantage Indicator and CT 156, 20, and 24 as having an Economy Disadvantage Indicator. As noted by US DOT, the Health Disadvantage Indicator reflects “variables associated with adverse health outcomes, disability, as well as environmental exposures.” Further evaluation of this project using the Environmental Protection Agency’s EJScreen tool noted numerous Environmental Justice variables related to health and socioeconomic outcomes affecting people living in the project census tract, as reflected in the table below.

Table 3 – Health Related Environmental Justice Indicators for Census Tract 156



From a community perspective, the major benefits of the proposed project are job creation, economic growth for the region (Section IV), and air emissions reduction (previous sub-section regarding Climate Change and Sustainability), with most of these benefits occurring in and adjacent to an underserved community. The DSPA recognizes the importance of ensuring that the work we do to accomplish our mission, including the performance of the proposed grant project, not only delivers these benefits, but that our Lincoln Park neighbors experience these benefits without experiencing added environmental or health burdens. To ensure this outcome, the DSPA has leveraged, and will continue to leverage, its partnerships with the City of Duluth, key non-profit partners, and coalition groups to work effectively with and for the community.

Leveraging our partners' programs, relationships and expertise helps expand the reach and capacity of our small (nine total) staff and builds upon the history and momentum of successful outreach/engagement programs without causing engagement fatigue within the community.

Examples of actions and work that have been and will be done with our partners that relates to realizing community benefits and minimizing burdens includes:

- The DSPA is governed by a 7-member Board of Commissioners and is deliberate in maintaining a board seat for a union laborer. This seat is currently filled by Commissioner and Treasurer Tyrone Walker, a foreman with Ironworkers Local 512 who lives and raises a family in the Lincoln Park neighborhood. The highly engaged Board meets monthly and is responsible for setting policies and approving all contracts over \$25K. Commissioner Walker's involvement provides strong connection to the Lincoln Park community.
- The DSPA worked closely with the City of Duluth on "Imagine Duluth 2035 Comprehensive Plan" to ensure that Rice's Point remains industrial and to ensure continued clear physical separation between industrial and residential uses in Lincoln Park. This ensures that industrial jobs with excellent wages and good benefits are in close proximity to residents but that traffic and immediate emissions are not proximate to the residential community.
- The DSPA works closely with Eco3, the lead frontline community-based organization for the Lincoln Park neighborhood. Eco3's mission is to lead and inspire change towards an equitable and sustainable future. They accomplish this through two focus areas: 1) serving as the convening organization in the low-income Lincoln Park neighborhood, advancing opportunities for residents and business, and 2) advancing community sustainability and resiliency including aspects of energy transition, economic security and health. Eco3 stewards "Justice40 Lincoln Park Neighborhood," which incorporates the Rice's Point port lands and the proposed project. This program focuses on the intersection of energy, equity and economic vitality. Eco3 and their "Main Street Lincoln Park Program" continually partners with the DSPA to ensure that our projects and actions are beneficial to Lincoln Park residents and help move Lincoln Park toward greater health and lower economic disparity. Eco3 has worked to ensure that their community outreach and engagement efforts reflect community demographics and accommodate the needs of overburdened community members. For the proposed project, Eco3, as evidenced in their commitment letter [Attachment C], will serve as a forum for community outreach and engagement within Lincoln Park during project

implementation, and to incorporate our decarbonization efforts into their 10-year decarbonization plan for Lincoln Park. We will use Eco3's regular community meetings to gain community input prior to construction, where wanted and warranted, and to report out on project progress at appropriate intervals during the entire construction period.

- As further described in the next section, the DSPA will continue to work with various workforce development partners in realizing workforce development programs that help prepare disadvantaged Duluth residents within and beyond Lincoln Park for the high-paying industrial (and essentially all union) jobs with that will be created by this grant directly (at the terminal or with related transportation firms) and indirectly (as supported by the proposed project within the industrial/manufacturing sector). It is not enough to help create jobs, to achieve equitable outcomes, we and our partners must continue to help remove barriers to obtaining those jobs (soft skills training, technical training, identifying and filling transportation gaps, identifying and filling childcare gaps). These disparities aren't easily solved but the workforce programs described in the next section are an important step.
- The DSPA is a member of the Mayor's Economic Development Coalition, which meets monthly to strategize around economic development. This is a forum rich in resources for ensuring that diversity, equity and inclusion are cornerstones of the region's economic development plans. While the proposed project is only one element of the region's economic growth, this DEI context helps ground and shape the DSPA's implementation of its mission. The DSPA also works with LISC Duluth [see letter of support, Attachment C], the City's Workforce Board and the Duluth Area Chamber of Commerce on related economic development and job-training efforts to further related DEI efforts.
- The DSPA will continue engagement with the above groups as the project proceeds, including regular project updates and opportunities for feedback.

The DSPA has reviewed potential equity assessment tools and will follow MARAD and local guidance as to the preferred tool for this project. The DSPA has not been involved in any compliance reviews, external lawsuits, investigations, or complaints alleging discrimination of any kind in the past five years.

Section G: Workforce Development, Job Quality, and Wealth Creation

Implementation of this project will create dozens of good-paying construction jobs, 10 permanent, high-quality, good paying jobs at the Clure Terminal following completion, and will support growth in industrial (manufacturing and transportation logistics sector) jobs in the region. The Clure Terminal Operator, Lake Superior Warehousing, is a union shop staffed by the Operating Engineers Local 49. These jobs are highly sought after with excellent wages, benefits and working conditions.

The DSPA's board-approved bidding and contracting processes will ensure that the numerous high-wage construction jobs associated with this the implementation of this project will pay good wages, feature fair work conditions and promote equity and entrepreneurship in underserved communities. The DSPA uses a fair and open, publicly advertised, competitive bidding process. Our region has strong unions and recognizes the benefits this brings for the local workforce.

While bidding documents will require a wage minimum, set at the higher of Davis Bacon wages or Minnesota Prevailing wages, they will also encourage strong labor standards as part of the contractor evaluation.

Bid packages will reflect the DSPA's commitment to working with Disadvantaged Business Enterprises (DBE), Minority-owned Business Enterprises (MBE), and Women-owned Business Enterprises (WBE). The DSPA will encourage bidders to break out portions of the project and sub-contract to DBE, MBE, or WBE firms to help increase opportunities for such firms. This results in improved project outcomes and positively impacts the owners and employees of those firms. Additionally, the DSPA requires a Project Labor Agreement (PLA) for all projects of over \$150K. The PLA is signed by the selected contractor and local labor union representative. The PLA enforces the higher of Davis Bacon or Minnesota Prevailing wages, and establishes fair and safe hours and working conditions.

Finally, the project will indirectly create additional jobs in businesses that are able to expand their operations due to supply chain savings and optionality. Industrial jobs in Duluth (based on 2023 data) pay an average annual wage of \$77K compared to the City's average annual wage of \$60K, and the City's average wage with industrial jobs removed (\$56K).

DSPA works with many partner work force development agencies and educational institutions with a common goal of growing high-quality, good paying jobs in the Duluth-Superior region and ensuring equitable access to those jobs. Examples of efforts in which the DSPA is involved (all ongoing) include:

- ◆ In February of 2022, the City of Duluth and City of Superior co-hosted the "Port and Industry Workforce Forum" which brought together more than 100 private port and industry representatives, city/state/county officials, and workforce development system representatives to collectively discuss strategies to articulate and solve systemic (port/industry) workforce issues. The result was a deeper understanding of the types of jobs that port employers struggle to fill and solutions to address the barriers. Among those participating was Lake Superior College, a vocational, two-year college, who conducted an in-depth survey process during and after the event to build programs focused on port-centric career paths. Lake Superior College subsequently joined forces with two other State schools; the three were recently designated collectively by MARAD as the *Minnesota Center of Excellence in Domestic Maritime Workforce Training and Education*. This coalition will use their collective strengths and resources to meet the demanding workforce development needs of the maritime and related freight industries.
- ◆ City of Duluth Workforce Development and SOAR Career Solutions offer Building Strong Communities, a construction training program that offers an introduction to the trades and an opportunity to explore career options. Participants receive the Multi-Craft Core Curriculum (MC3) certification, developed and approved by the Building Trades National Apprenticeship and Training Committee. Participants also receive an overview of the multitude of trade opportunities, get hands-on exposure at various union training sites, prepare for job interviews, and meet directly with union representatives and contractors. Participants in this program have opportunities to train with the Iron Workers Local 512,

Operating Engineers Local 49, and others. This program is tailored for any Lake, Carlton, or St. Louis County resident who is income-qualified, 18+ years old, with no prior experience. Common starting wages for those out of the program start at \$24/hr.

- ◆ Regional manufacturing training programs targeted to underserved communities have existed in various forms over the last decade. Currently, the Duluth Workforce Development Board is convening a Manufacturing Working Group as part of the National League of Cities (NLC) “Good Jobs, Great Cities Academy”. The aim of the NLC program is to “support cities in leveraging the Biden-Harris Administration’s new federal infrastructure, clean energy and advanced manufacturing investments to prepare a diverse, skilled and ready workforce to build America’s next-generation infrastructure and an economy that works for everyone.” The Duluth Workforce Development Board is the key partner – along with employers, training providers, and labor unions. The working group is developing a set of strategies that will strengthen training pathways, raise visibility of jobs in the industry, and increase the number of people pursuing manufacturing careers, increasing access to those who have too often been left behind – including workers of color, rural workers, women, opportunity youth, people with disabilities, and justice-impacted individuals. The end goal is to grow the workforce pipeline while recognizing and breaking down systemic barriers to good jobs.

Section VI. Project Readiness

The Duluth Seaway Port Authority has undertaken numerous steps, including coordination with State and Federal agencies, to ensure that the project is ready to proceed should grant funding be awarded.

Technical Capacity

The DSPA has extensive experience successfully undertaking federally-funding projects of this scale and has a thorough understanding of Federal requirements. Construction is well underway for the Duluth Port Logistics Hub 2020 Revitalization & Expansion Project partially funded through the MARAD PIDP program, which includes a warehouse expansion (complete) and dock wall reconstruction (summer 2024). In addition to the PIDP program, DSPA effectively utilized a FY13 US DOT TIGER grant in 2016 to modernize and reconstruct a dilapidated former grain dock, is conducting environmental investigation and assessment projects utilizing US Environmental Protection Agency Brownfield Assessment Grant and is near completion of a FEMA Port Security Grant project to modernize our terminal surveillance system.

DSPA has the knowledge of Federal funding requirements, including cross-cutting requirements, and the experience of full project implementation, and has an excellent track record of coordinating Federal, State, and local agency funding sources and regulatory requirements to ensure project success. Project design and construction will comply with all Federal requirements, including but not limited to NEPA, Davis Bacon, and Build America, Buy America.

Licensed Professional Engineers in the State of Minnesota have developed conceptual level Opinions of Probable Costs [Attachment A].

Cost estimates for project components were based on the following:

- Duluth Lake Port Demolition and Laydown - Grain elevator demolition and laydown area preparation: Cost estimate is based on 20% engineering design and sub-contract quotes compiled by a general contractor with extensive experience with similar scale projects. This cost estimate was compiled in 2023 and has been adjusted for inflation as shown in Attachment A.
- Berth 11 Reconstruction and Duluth Lake Port Dock Reconstruction – Cost estimates are based on 20% engineering design. DSPA staff compiled cost estimates in April 2024 using current construction unit prices from a recently (April 29, 2024) awarded construction contract for a dock wall project at our terminal. A regional marine construction contractor independently verified these unit prices and overall project cost estimates in May 2024.

The conceptual designs account for up-to-date engineering practices while also incorporating known solutions from past and current DSPA projects. Incorporating these elements and practices while also comparing the budget to previous work activities demonstrates that the project is technically feasible.

This project is consistent with local, regional, and state plans including the “[Duluth-Superior Port Land Use Plan](#)” (2016), “[Imagine Duluth 2035](#)” City of Duluth Comprehensive Plan, “[Duluth-Superior Area Sustainable Choices 2045](#)” the Long Range Transportation Plan for the Duluth-Superior Metropolitan area, the [2018 Minnesota Statewide Freight System Plan](#), and the [Statewide Ports and Waterways Plan](#).

The Port Land Use Plan (page 42) specifically states “The Rice’s Point area has potential for more intensive transportation use as it currently contains key multimodal transportation assets including major highway and rail connections along with port facilities including the recently completed Clure Public Marine Terminal & Expansion (formerly Garfield Docks C & D) project.” The Project expands multi-modal transportation hub functionally and the Clure Public Marine Terminal by providing additional capacity to support regional manufacturers’ supply chain logistics transferring various raw materials and finished goods between maritime, truck, and rail modes of transportation.

The City of Duluth’s Comprehensive Plan, *Imagine Duluth 2035*, provides background information and sets a specific policy to “Protect and enhance regional transportation networks, especially for purposes of expanding opportunities for movement of freight.” (https://duluthmn.gov/media/rtgk5tin/imagine-duluth-2035-combined_website_temp.pdf, page T-34).

Project Schedule

The project schedule will be as follows, in which the Duluth Seaway Port Authority will show that it will advance the project to completion by September 30, 2028; thereby meeting the obligation deadline of September 30, 2027, and the funds liquidation deadline of September 30, 2032.

Project Component	FFY2025				FFY2026				FFY2027				FFY2028			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
General Project																
Notice of Award																
State/Local Planning Approval																
NEPA Review																
Draft Contract / Grant Agreement																
Final Contract																
Public Input/Engagement																
Grant Closure																
Duluth Lake Port Demo																
Environmental Documents																
Final Design																
Bids / Procurement																
Contractor Agreement																
Construction																
Punch List / Completion																
Duluth Lake Port Dock																
Environmental Documents																
Final Design																
Bids / Procurement																
Contractor Agreement																
Construction																
Punch List / Completion																
Berth 11 Dock																
Environmental Documents																
Final Design																
Bids / Procurement																
Contractor Agreement																
Construction																
Punch List / Completion																

Risk Mitigation

DSPA has already begun to minimize project risks using several strategies. The most effective and widely used strategy is early agency coordination, which is well underway. Recognizing the risk of delayed approvals and the need to incorporate agency feedback into design plans, the DSPA has engaged the Minnesota Department of Natural Resources (DNR), the Minnesota Pollution Control Agency (MPCA), the Minnesota State Historic Preservation Office (SHPO), the US Army Corp of Engineers (USACE) and the City of Duluth.

The proposed reconstruction of the Berth 11 dock will require an update and amendment to the MPCA-approved Response Action Plan and Construction Contingency Plan (RAP/CCP), dated July 2014 with subsequent amendments from 2014 to 2024. The primary contaminant of concern

at the site is benzo-a-pyrene (BaP) equivalent. The DSPA routinely works with the MPCA on brownfield issues and is highly familiar with the processes and actions needed to comply with program guidance. Environmental assessment of the Duluth Lake Port site soils (2018) has not identified contaminants in site soils. A hazardous material survey of the Duluth Lake Port elevators was completed in 2022; abatement is built into the demolition project and schedule.

While no buildings within the project are Nationally or Locally designated as historic, the DSPA has requested a state-level review by SHPO to allow sufficient time for review and response.

The City of Duluth and USACE may each require a permit for portions of the project and DSPA has begun discussions with each entity to ensure they have a common understanding of the project and requirements. Each of these steps helps to minimize surprises throughout the project and keeps the permitting and approvals on track. Recent project experience has helped the DSPA to reduce the risk of encountering technical challenges in the design, construction, and implementation, by learning effective methods of overcoming challenges and addressing the issues in the design phase and implementation planning. The potential for project cost increases is top of mind for the DSPA and mitigation strategies have included comparing estimates to recently bid projects and discussing specific project component costs with professionals with the latest cost information.

DSPA foresees no compliance issues with the requirements of the Build America Buy America Act in the use of goods, materials, and services necessary for the completion of the Port Duluth 2024 Intermodal Terminal Expansion Project. See further discussion in the Domestic Preference section.

Environmental Risk

As mentioned in the prior section, the DSPA has undertaken numerous actions and agency coordination to ensure that project construction can begin in a timely manner and proceed fluidly through relevant regulatory processes. All environmental permitting and authorizations for the proposed project are underway and based on our experience with other infrastructure construction projects, we do not expect any environmental related delays.

Information about the NEPA status of the project

Based on recent project experience, it is anticipated that this project would likely meet the criteria of and be classified as a Categorical Exclusion given there are no extraordinary circumstances such as:

1. Significant impacts to the environment;
2. Substantial controversy on environmental grounds;
3. Significant impacts to Section 4(f) or 106 property; or
4. Inconsistency with any federal, state or local law or administrative determination relating to the environment.

This expectation is based on the Categorical Exclusion classification received for DSPA's FY2019 PIDP-funded project. The remaining project component, demolition of the dilapidated former grain elevator structures, is currently undergoing a state level review by SHPO. The structures have not previously been identified as historically significant and SHPO consultation is a proactive step.

Environmental Permits and Reviews

The table below reflects a list of required permits and approvals, as well as the current status.

Table 4. Required permits/approvals	Status
USACE 401 Permit likely not required	n/a
MDNR Public Waters Permit likely req'd	Permit will be sought if PIDP funds are approved.
MPCA: Construction Storm Water General Permit (NPDES)	Issued: August 1, 2023; Expiration: July 31, 2028; The NPDES permit is a general permit and covers construction storm water for all components of the project. MPCA will reissue with an expected expiration of August 2028.
City of Duluth: Demolition permit	Permit will be sought if PIDP funds are approved.

The MPCA-approved Response Action Plan, which contains environmental information regarding the contamination discussed above under “Risk Mitigation” can be found in the Appendix. Information on public engagement can be found in Section V.

State and Local Approvals

The City of Duluth is the Responsible Government Unit for relevant mandatory categories and determination of discretionary need. The DSPA has discussed this project with the City of Duluth Chief Administrative Officer in April 2023, and has submitted information for a State level review by SHPO in an effort to ensure the City has sufficient information for their review.

Information on environmental reviews, approvals, and permits by other agencies

No additional environmental reviews, approvals, or permits by other agencies, other than those discussed in this grant section are anticipated.

Domestic Preference

All materials and manufactured products which will be used in the project will be produced or manufactured domestically. This provision will be included in all procurement documents used by contractors or tenants for each and every project component. Materials used to improve the port infrastructure are not anticipated to need a waiver from the Build America Buy America Act. The DSPA has demonstrated its commitment and capability to firmly adhere to Build America, Buy America Act requirements through our 2019 PIDP-funded warehouse expansion and dock wall rehabilitation project. We carry that commitment and experience forward into this project proposal.

The DSPA intends to source the project locally to enhance local benefit and job creation. We will require Build America, Buy America provisions to flow down to every project undertaken in the project description and funded with the MARAD Port Infrastructure Development Program grant funding.

Section VII. Determinations

1. The project improves the safety, efficiency, or reliability of the movement of goods through a port or intermodal connection to the port.

This project improves safety for port employees by the removal of the dilapidated former grain elevators that pose a risk of serious injury or death for people who choose to trespass and climb the tall structures. While DSPA has actively worked to stop this dangerous activity, it still occurs on a regular basis and poses a risk for not only the trespasser, but also for DSPA employees and law enforcement officers that must address the situation.

Efficiency gains are made with the demolition/laydown area preparation component. The availability of this space eliminates the possibility of the DSPA needing to turn away cargo best suited to our catchment area, and avoiding it being shipped to another port (such as Milwaukee or Thunder Bay, Ontario), saving both shipping time and rail or trucking cost.

Reliability is improved with all three project components. The demolition and laydown area preparation helps to ensure DSPA can reliably provide outdoor laydown space for current and future client needs, including for large cargo such as wind energy components.

2. The project is cost effective.

The proposed project is cost effective, with a benefit cost ratio (BCR) of 2.69. The project also results in numerous benefits not included within the benefit cost analysis, which are further highlighted in Section IV. The full Benefit Cost Analysis can be found in Attachment D.

3. The eligible applicant has the authority to carry out the project

The Duluth Seaway Port Authority was established under Minnesota Statute 469.049 as a governmental subdivision. Minnesota Statutes 469.055, Subdivision 1(4) provides authorization for Port Authorities in Minnesota to, “provide or promote adequate docks, railroad and terminal facilities open to all on reasonable and equal terms for the handling, storage, care, and shipment of freight and passengers to, from, and through the port.” Minnesota Statutes 469.055, Subd. 6. Control of property states “A port authority may acquire, purchase, construct, lease, or operate bulkheads, jetties, piers, wharves, docks, landing places, warehouses, storehouses, elevators, cold storage plants, terminals, bridges, or other terminal or transportation facilities. The authority may own, hold, lease, or operate real and personal property. . .”

In addition, Minn. Stat. 469 provides that a seaway port authority is a special taxing district and may levy a tax in any year for the benefit of the seaway port authority (469.053) and authorizes the port authority to issue general obligation bonds and revenue bonds (469.060 and 469.061).

4. The eligible applicant has sufficient funding available to meet the matching requirements.

The funding sources and amounts for each project component are specified in Section III of this application. No other federal funds will be used in this project. The sources of non-federal matching funds are committed and planned MN Department of Transportation Port Development

Assistance Program (PDAP) grant funds and committed DSPA funds. The state legislature frequently passes a capital investment bill with PDAP funding. The 2024 legislature is poised to fund PDAP in the current Capital Investment Bill (bonding bill), a reflection of the state's strong interest in leveraging state funds to secure federal infrastructure funds.

The DSPA has committed \$879,400 cash to the project. A letter in which the DSPA commits to a non-federal match is attached to this application as Attachment B. The DSPA has received \$7,500,000 in committed PDAP funds to date [Attachment F]. While the DSPA is confident that an additional \$3M in PDAP funds will be realized for this project, the port is able and willing to commit \$3,879,400 in non-federal match to ensure full project funding.

5. The project will be completed without unreasonable delay.

The DSPA has successfully managed complex infrastructure projects with federal, state and local funding. Should this grant request be awarded, the project will begin as soon as a contract is executed, which is expected to occur as soon as July 2025 (see Project Schedule, Section VI). Once the grant contract is signed, engineering design and specifications can proceed to allow each project component to be competitively bid in accordance with the DSPA Purchasing Policy which mirrors state statutes. The demolition of the former grain elevators to create new laydown space will begin in May of 2026. The project is ready to proceed pending PIDP grant funds; funds will fully obligated by September 30, 2027 and the project will be fully completed by December 31, 2028

The DSPA has demonstrated strong communication and collaboration with state and federal grant administrating agencies to address unanticipated changes in schedule and budget. For example, the COVID-19 pandemic created supply chain and scheduling challenges, and dramatic cost increases over pre-pandemic cost estimates. Schedule changes, funding adjustments and project re-scoping are well-documented and assure the overall success of the project. We carry this experience and skill into this PIDP grant request.

6. The project cannot be easily and efficiently completed without Federal funding or financial assistance available to the project sponsor.

Funding through the PIDP program is essential to allow the project to proceed. While DSPA is fully committed to efficiency and capacity improvements, the project cost is completely out of reach for DSPA to undertake utilizing local funds. The scale of port projects in general creates budget challenges, but the increasing cost of labor and materials has compounded the issue and made it virtually impossible to proceed without grant assistance.

Without PIDP funding, most of the project would be put on hold indefinitely. There are no other funding sources that can provide the level of assistance of a PIDP grant. The Port Development Assistance Program (PDAP) through the Minnesota Department of Transportation is an excellent resource as well, the program funding has been historically limited to approximately \$10 million in statewide, competitive funding. The DSPA would need strong state PDAP funding and additional time to acquire additional funds to complete just one of the three project components.

The entire project would take at least a decade, and likely longer, to fully fund without federal PIDP funding.

If PIDP funds are not awarded, there will be an indefinite delay in the project schedule. Each component would be put on hold until another funding source can be identified and secured.

Project costs are reasonably expected to continue rising if PIDP funds are not awarded. DSPA has experienced inflationary budget issues on current projects and based on this experience, the project costs for the 2024 Duluth Port Intermodal Terminal Expansion project would raise substantially each year that the project doesn't proceed, putting these much needed and highly beneficial projects further out of reach.