



APPROVED BY FISCAL COMMITTEE

FEB 14 2020

FIS 20 033

67

555 Market Street, Suite 1 Portsmouth, NH 03801

The Honorable Mary Jane Wallner, Chairman
 Fiscal Committee of the General Court
 State House
 Concord, New Hampshire 03301

January 17, 2020

His Excellency, Governor Christopher T. Sununu
 And the Honorable Council
 State House
 Concord, New Hampshire 03301

REQUESTED ACTION

1) Pursuant to RSA 14:30-a, VI, authorize the Pease Development Authority - Division of Ports and Harbors (PDA-DPH), to budget and expend prior year carry forward funds in the amount of \$1,122,293 for the purpose of providing matching funds for the rehabilitation of approximately 17,500 square feet of the Main Wharf at the Market Street Marine Terminal in Portsmouth, NH, effective upon Fiscal Committee and Governor and Council approval through 06/30/2021. 100% Federal Funds.

Funding is to be budgeted in FY 2020 as follows:

03-36-036-360030-9425 – 91351:5-Port Expansion

Class/Object	Class Title	FY 2020 Current Budget	Requested Action	FY 2020 Revised Budget
Expenditures				
034-500161	Capital Projects	\$4,342,867	\$1,122,293	\$5,465,160
	Total:	\$4,342,867	\$1,122,293	\$5,465,160
Revenue				
00S-000030	Capital Funds	\$4,342,867	\$0	\$4,342,867
000-404141	Federal Funds	\$0	\$1,122,293	\$1,122,293
	Total:	\$4,342,867	\$1,122,293	\$5,465,160

2) Upon approval of requested action #1, pursuant to RSA 14:30-a,VI, authorize the PDA-DPH to accept and expend grant funds in the amount of \$7,504,854, from the U.S. Department of Transportation (USDOT), FY 2018 Better Utilizing Investments to Leverage Development grant (BUILD), for the rehabilitation of approximately 17,500 square feet of the Main Wharf at the Market Street Marine Terminal in Portsmouth, NH, effective upon Fiscal Committee and Governor and Council approval through 06/30/2021. 100% Federal Funds.

Funding is to be budgeted in FY 2020 and FY 2021 as follows:

03-13-013-130510-1363 – Market Street BUILD Project

Class/Object	Class Title	FY 2020 Budget	FY 2021 Budget	FY 2020 / FY 2021 Total Budget
Expenditures				
020-500252	Current Expenses	\$100,000	\$100,000	\$200,000
046-500463	Engineering Consultants	\$300,000	\$100,000	\$400,000
046-500464	General Consultants	\$500,000	\$150,000	\$650,000
102-500731	Contracts For Program Services	\$4,100,000	\$2,154,854	\$6,254,854
	Total:	\$5,000,000	\$2,504,854	\$7,504,854
Revenue				
000-404141	Federal Funds	\$5,000,000	\$2,504,854	\$7,504,854
	Total:	\$5,000,000	\$2,504,854	\$7,504,854

EXPLANATION

PDA-DPH requested and received approval at the September 17, 2017 Capital Budget Overview Committee (CBOC) item, CAP 17-028, to expend funds from the Port Expansion Fund, for the design, engineering, and permitting for the Functional Replacement of the Barge dock at the Market Street Marine Terminal in Portsmouth, NH, in an amount not to exceed \$1,773,028. At that time, the Port Expansion Fund, authorized by the provisions of Chapter 351:5, Laws of 1991, amended by Chapter 2, Laws of 2013, held a balance of \$5,465,160. The authorized expenditures to date, \$1,122,293, have been 100% reimbursed on a per payment basis by the Federal Highway Administration. Requested action #1 requests authority to budget the funds on hand to re-establish the capital project appropriation to the previous unexpended level.

In hindsight, our request to the CBOC might better have been forgone in lieu of a straightforward request to Fiscal Committee and Governor and Council, seeking authorization to accept and expend federal funds in an amount not to exceed \$1,773,028, in a new program structure, 100% federally funded, where the expenditure appropriations would have been met or offset by 100% federal reimbursement(s) from the Federal Highway Administration.

Approval of this request will return our Port Expansion Fund capital projects appropriation to \$5,465,160, and allow us to meet the BUILD requirement of requested action #2, that we provide 40% of the total project costs of \$12,508,089 (\$5,003,235), as was approved by the CBOC (CAP 19-025) on November 6, 2019.

Page 3 of 4

As noted above, this requested action is required as the PDA-DPH was recently awarded a BUILD grant from the USDOT in the amount of \$7,504,854. This represents 60% of the total Market Street Marine Terminal Main Wharf rehabilitation project costs of \$12,508,089. In the event that Federal Funds become no longer available, General Funds will not be requested to support this program.

As you may know, the Main Wharf at the Market St. Terminal is in overall poor condition, for example, in 2011 the Main Wharf unexpectedly failed and required the closure of the northern bridge. This restriction increased cycle time for loading and unloading operations, which for anyone involved in the shipping industry, knows this translates into increased expenses for any given project or operation. Additionally, it is estimated that without repair, the Main Pier will be forced to completely shut down by the end of 2021. Bringing the port infrastructure back to a state of good repair will ensure to the port's long term viability, the ability to support upstream businesses, and the capacity to increase economic activity in the region and nationally. Additionally, support from BUILD would enable PDA-DPH to address operational deficiencies and return the terminal to full capacity to meet the current and future demands for the regional movement of ocean and coastal cargo.

As the only public seaport in the State of New Hampshire, positioned between ports experiencing roadway and facility congestion, and providing services that other neighboring facilities cannot provide, rehabilitating the Main Wharf is critical for east coast maritime operations, international cargo activity, and regional and national safety and security. For example, because of the nature of many of the private upstream facilities (e.g., Irving and Sprague), which handle fuel and other flammable commodities, a burning ship in the harbor cannot be safely managed anywhere but at the Market Street Marine Terminal. This facility is also included in the State of New Hampshire's and Coast Guards emergency plans.

Other specific economic impacts will include the following:

- Cost savings in the form of average time saved by users of the Main Wharf, reductions in operating expenses, decreased levels of pollution, or more generally, a combination of multiple effects,
- Expansion of the Port's customer base and diversification of the types of cargo, such as container service,
- Decreased transportation on highways resulting in less "vehicle miles traveled, lower levels of vehicle emissions, reduced congestion on the roads, and reduced road maintenance costs,
- The ability to continue to provide emergency services support due to onboard fire, mechanical failures, medical emergencies, oil spills, and port security services,
- The ability to continue support of the Coast Guard's mission of port security and safety, and FEMA's ability to respond to natural disasters using MARAD ships,
- Potential for container service at the Port of NH,
- Potential for ferry service between Nova Scotia and the Port of NH,
- Safety and Security benefits including coordinating with all agencies involved in port security, including the U.S. Coast Guard, NH Marine Patrol, U.S. Customs, FBI, U.S. Navy, NCIS and the Department of Transportation. Specifically, the terminal provides these entities access to its state

The Honorable Mary Jane Wallner, Chairman
Fiscal Committee of the General Court
His Excellency, Governor Christopher T. Sununu
and the Honorable Council

January 17, 2020

Page 4 of 4

of the art camera system, which allows them the ability to reconnoiter or otherwise observe land based facilities, ships in port, and vessels transiting the area between the I-95 and Memorial Bridges. In addition, the facility is included in the State of NH's and Coast Guard emergency plans,

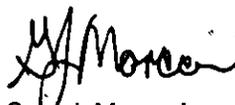
- Diverts cargo off roadways -- \$6.9M in public safety benefits and \$2.5M in roadway maintenance,
- Provides access for emergency services to address on-board fire, contaminated vessels,
- Supports fire, security and terrorist response drills with local and federal law enforcement,
- \$0.8M in emissions benefits due to reduced VMT,
- \$85.5M in shipper cost savings.

For your reference, the BUILD application is attached and provides much greater detail of the project.

We respectfully request your approval.



David R. Mullen
PDA-DHP, Executive Director



Geno J. Marconi
Division of Ports and Harbors, Director

Enc: BUILD Grant Award
CBOC CAP 17-028
CBOC CAP 19-025
Attorney General review and approval of BUILD Grant agreement
Senator Shaheen support letter
BUILD Grant agreement, V10
BUILD Grant Application



U.S. Department of Transportation
Office of the Secretary of Transportation

1200 New Jersey Ave., S.E.
Washington, DC 20590

GRANT ADVANCE NOTICE

Date: 12/06/2018

NOTICE TO CONGRESS OF DOT DISCRETIONARY GRANT AWARDS: This notification is provided to the Committee pursuant to one of the following requirements governing the public announcement of a Department of Transportation discretionary grant, letter of intent, or Federal Transit Administration full funding grant agreement:

(1) Currently applicable General Provision of the Appropriations Act, Continuing Resolution, or Supplemental Appropriation governing Department of Transportation appropriations, containing a prohibition on the use of funds made available unless the Secretary notifies the House and Senate Committees on Appropriation at least three full business days before the Department or its operating administrations announces any discretionary grant award, letter of intent, or full funding grant agreement from: (A) any discretionary grant or federal credit program of the FHWA, including the emergency relief program; (B) the airport improvement program of the FAA; (C) any program of the FRA; (D) any program of the FTA other than the formula grants and fixed guideway modernization programs; (E) any program of the Maritime Administration; or (F) any funding provided under the heading "National Infrastructure Investments" in the Appropriations Act;

(2) Section 311 of title 49, United States Code;

(3) Section 159(b) of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21); or

(4) Section 5334(j) of title 49, United States Code.

Notice:

Title: FY18 Better Utilizing Investment to Leverage Development (BUILD) Grants

Grant Amount: \$ 7,504,854.00

Description:

The project will rehabilitate approximately 17,500 square feet of the Main Wharf at the Market Street Marine Terminal by replacing the deteriorating wharf access bridge and decking the area between the shoreline and the back of the Main Wharf.

Please see below two optional quotes from Secretary of Transportation Elaine L. Chao for possible use in your media outreach:

"The Department is committed to following through on the President's commitment to rebuild our country's infrastructure by investing in road, rail, transit, and port projects, to strengthen economic growth, increase competitiveness and improve quality of life," said U.S. Transportation Secretary Elaine L. Chao.

"The Administration's continued investment in infrastructure promises to stimulate economic investment, improve quality of life, and create safe, reliable transportation in our communities," said U.S. Transportation Secretary Elaine L. Chao.

Congressional members affected:

Carol Shea-Porter

Senators affected:

Maggie Hassan
Jeanne Shaheen

Should you have any questions, please contact the Office of Governmental Affairs (202)366-4573.



CAP 17-028

MICHAEL W. KANE, MPA
Legislative Budget Assistant
(603) 271-3161

CHRISTOPHER M. SHEA, MPA
Deputy Legislative Budget Assistant
(603) 271-3181

State of New Hampshire
OFFICE OF LEGISLATIVE BUDGET ASSISTANT
State House, Room 102
Concord, New Hampshire 03301

STEPHEN C. SMITH, CPA
Director, Audit Division
(603) 271-2785

September 20, 2017

Geno Marconi, Director
Pease Development Authority
Division of Ports and Harbors
555 Market Street, Suite 1
Portsmouth, New Hampshire 03801

Dear Director Marconi,

The Capital Budget Overview Committee, pursuant to the provisions of Chapter 351:5, Laws of 1991, amended by Chapter 2, Laws of 2013, on September 19, 2017, approved the request of the Pease Development Authority, Division of Ports and Harbors, to: 1) expend not more than \$1,773,028 from the Port Expansion Fund to pay monthly invoices to Appledore Marine Engineering for Design, Engineering and Permitting for the Functional Replacement of the Barge Dock located at the Market Street Marine Terminal in Portsmouth, NH which will be 100% reimbursed on a per payment basis by the Federal Highway Administration, and further authorization to; 2) expend not more than \$10,800 for payment to Appledore Marine Engineering for engineering and consulting services, subject to the conditions as specified in the request dated August 15, 2017.

Sincerely,

Michael W. Kane
Legislative Budget Assistant

MWK/pc
Attachment



CAP 19-025

MICHAEL W. KANE, MPA
Legislative Budget Assistant
(603) 271-3161

CHRISTOPHER M. SHEA, MPA
Deputy Legislative Budget Assistant
(603) 271-3161

State of New Hampshire

OFFICE OF LEGISLATIVE BUDGET ASSISTANT
State House, Room 102
Concord, New Hampshire 03301

STEPHEN C. SMITH, CPA
Director, Audit Division
(603) 271-2765

RECEIVED NOV 08 2019

November 6, 2019

Geno Marconi, Director
Pease Development Authority
Division of Ports and Harbors
555 Market Street, Suite 1
Portsmouth, New Hampshire 03801

Dear Director Marconi,

The Capital Budget Overview Committee, pursuant to the provisions of Chapter 351:5, Laws of 1991, amended by Chapter 2, Laws of 2013, on November 6, 2019, approved the request of the Pease Development Authority, Division of Ports and Harbors, to expend \$5,003,235 from the Port Expansion Fund, subject to the approval of the Pease Development Authority Board of Directors, for the purpose of providing matching funds associated with the Main Pier rehabilitation project and the recently awarded US Department of Transportation Better Utilizing Investments to Leverage Development ("BUILD") grant, as specified in the request dated October 17, 2019.

Sincerely,

Michael W. Kane
Legislative Budget Assistant

MWK/pe
Attachment

**ATTORNEY GENERAL
DEPARTMENT OF JUSTICE**

33 CAPITOL STREET
CONCORD, NEW HAMPSHIRE 03301-6397

GORDON J. MACDONALD
ATTORNEY GENERAL



JANE E. YOUNG
DEPUTY ATTORNEY GENERAL

January 22, 2020

Anthony I. Blenkinsop
Deputy General Counsel
Pease Development Authority
55 International Drive
Portsmouth, NH 03801

Re: Market Street Marine Terminal Main Wharf Rehabilitation BUILD Grant Agreement
MARAD FY 2018 BUILD Grant No. 693JF71910009

Dear Attorney Blenkinsop:

Please be advised, this letter memorializes the review and approval of the Office of the Attorney General (as to form and substance) of the Market Street Marine Terminal Main Wharf Rehabilitation BUILD Grant Agreement.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "JD Lavallee".

JD Lavallee
Attorney
Civil Bureau
N.H. Department of Justice
603.271.3650
jon.lavallee@doj.nh.gov

JDL:jsd

United States Senate

WASHINGTON, DC 20510

July 16, 2018

The Honorable Elaine Chao, Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Dear Secretary Chao:

I write in strong support of the BUILD 2018 Discretionary Grants Program application submitted by the Pease Development Authority, Division of Ports and Harbors (PDA-DPH) for the "Main Wharf Rehabilitation and Modification Project" at the Market Street Marine Terminal located on the Piscataqua River in Portsmouth, New Hampshire. Support from BUILD would enable PDA-DPH to address operational deficiencies and return the terminal to full capacity to meet the current and future demands for the regional movement of ocean and coastal cargo.

To compete in a global economy, transportation infrastructure must keep pace with global growth. In order to meet demand in these global markets, maritime infrastructure must be maintained in a state of good repair while improving facilities' efficiencies to satisfy marine transportation needs of the future. As New Hampshire's only public access, general cargo, deep-water terminal, the Market Street Marine Terminal provides a viable regional marine transportation option for businesses currently located or wishing to move to the Northeast region. Yet, the condition of the terminal's Main Wharf is substandard, and critical repairs are needed to sustain current activity and generate new interest in the port.

Maintenance to the Main Wharf is necessary to maintain and improve structural integrity. Due to age, certain elements of the wharf have been closed to activity, presenting impediments to the safe and efficient handling of cargo. Without funding assistance, additional sections of the Main Wharf will be forced to shut down. Modifications to the existing Main Wharf are also needed to remove obstacles to the efficient handling of cargo and freight that cause costly delays and reduce safety at the facility. These obstacles preclude direct access to vessels secured to the Main Wharf due to an open water area between the wharf and the shore.

Failure to sufficiently repair these flaws will hamper the ability of the Market Street Marine Terminal to keep pace with demand now and exploit potential growth in the future. I respectfully urge you to favorably consider funding the BUILD 2018 Discretionary Grants Program application of the Pease Development Authority, Division of Ports and Harbors "Main Wharf Rehabilitation and Modification Project."

Sincerely,



Jeanne Shaheen
United States Senator

UNITED STATES OF AMERICA
U.S. DEPARTMENT OF TRANSPORTATION
MARITIME ADMINISTRATION
WASHINGTON, DC 20590

GRANT AGREEMENT UNDER THE
CONSOLIDATED APPROPRIATIONS ACT, 2018
(PUB. L. 115-141, MARCH 23, 2018)
FOR THE NATIONAL INFRASTRUCTURE INVESTMENTS
DISCRETIONARY GRANT PROGRAM
(FY 2018 BUILD TRANSPORTATION DISCRETIONARY GRANTS)

PEASE DEVELOPMENT AUTHORITY

MARKET STREET MARINE TERMINAL MAIN WHARF REHABILITATION

MARAD FY 2018 BUILD Grant No. 693JF71910009

7069MA1430 2020 IMS1910009 0000151002 41010 61006600 - \$ 7,504,854.00

This agreement is between the United States Department of Transportation (the "USDOT") and Pease Development Authority (the "Recipient"). It reflects the selection of the Recipient for an award under the provisions of the Consolidated Appropriations Act, 2018 (Pub. L. 115-141, March 23, 2018), regarding National Infrastructure Investments, as described in the Notice of Funding Opportunity for the Department of Transportation's National Infrastructure Investments Under the Consolidated Appropriations Act, 2018, 83 FR 18651 (April 27, 2018) (the "NOFO"). In this agreement, "FY 2018 BUILD Transportation Discretionary Grant" means an award under those provisions.

ARTICLE 1. AWARD TERMS AND CONDITIONS

- 1.1 **Operating Administration.** The Maritime Administration ("MARAD") will administer this agreement on behalf of the USDOT. In this agreement, the "Administering Operating Administration" means MARAD.
- 1.2 **Application.**
 - (a) The application for funding was dated July 19, 2018 and titled "Market Street Marine Terminal Main Wharf Rehabilitation." It contained Standard Form 424 and all information and attachments submitted with that form through Grants.gov.
 - (b) The Recipient states that:

(1) all material statements of fact in the application were accurate when that application was submitted; and

(2) Attachment E documents all material changes in the information contained in that application.

1.3 **Purpose.** The purpose of this award is to advance capital investments in surface transportation infrastructure that will have a significant local or regional impact. The parties will accomplish that purpose by achieving the following objectives:

(1) timely completing the Project; and

(2) ensuring that this award does not substitute for non-Federal investment in the Project, except as proposed in the application identified in section 1.2, as modified by section 2.3 and Attachment C.

In this agreement, the “Project” means the project proposed in the application identified in section 1.2, as modified by the negotiated provisions of this agreement, including sections 2.1, 2.2, and 2.3 and the attachments referenced in section 1.9.

1.4 **Federal Award Amount.** The USDOT hereby awards a FY 2018 BUILD Transportation Discretionary Grant in the amount of \$7,504,854.00 for the period of performance. The USDOT shall not provide funding greater than this amount under this agreement. The Recipient acknowledges that USDOT is not liable for payments that exceed this amount.

1.5 **Period of Performance.**

(a) The period of performance for this award begins on the date of this agreement and ends on the period of performance end date that is listed in section 2.2.

(b) The Recipient shall not charge to this award costs that are incurred after the period of performance.

(c) The Recipient shall not charge to this award costs that were incurred before the date of this agreement. This restriction includes any costs under 2 C.F.R. 200.458 incurred prior to the date of this agreement. This agreement hereby terminates and supersedes any previous USDOT approval for the Recipient to incur costs under this award for this Project.

1.6 **Urban or Rural Designation.** Based on information that the Recipient provided to the USDOT, including the technical application, the USDOT hereby designates the project to be a project in an urban area, as defined in the NOFO. The Recipient shall comply with the requirements that accompany that designation on minimum award size, geographic location, and cost sharing.

1.7 Fund Obligation.

This agreement obligates the total amount of funds stated in section 1.4.

1.8 Federal Award Identification Number. The USDOT identifies this award with the following federal award identification number: 693JF71910009

1.9 Attachments. This agreement includes the following attachments as integral parts:

Attachment A	Statement of Work
Attachment B	Estimated Project Schedule
Attachment C	Estimated Project Budget
Attachment D	Performance Measurement Table
Attachment E	Material Changes from Application
Attachment F	Approved Pre-Award Costs

ARTICLE 2. PROJECT AND RECIPIENT INFORMATION

2.1 Summary of Project's Statement of Work. (See Attachment A for additional details).

The project will rehabilitate approximately 17,500 square feet of the Main Wharf at the Market Street Marine Terminal by replacing the deteriorating wharf access bridge and decking the area between the shoreline and the back of the Main Wharf.

Following construction of the Sarah Mildred Long Bridge, the Main Wharf serves as the only berthing facility for the Port of New Hampshire but its deteriorated condition and limited capacity requires operations restrictions. By rehabilitating the existing wharf, including repairing deteriorated caissons and concrete superstructure elements, recoating portions of the steel sheet bulkhead, and resurfacing concrete deck, the project will extend the berth's useful working life, preventing a full closure anticipated in 2022. The rehabilitated wharf will facilitate improved freight movement by enabling more efficient truck access, increasing cargo handling area, and improving operational efficiency at the port. Continued operations at the wharf and possible tonnage increases resulting from the improvements will divert cargo from highways to marine highways, which reduces the likelihood of crashes on roadways and reduces fuel emissions.

2.2 Summary of Project's Estimated Schedule. (See Attachment B for additional details).

Actual Completion of NEPA:	10/4/2019
Planned Completion of Final Design:	4/1/2021
Planned Plans, Specifications & Estimates (PS&E) Approval:	5/1/2021

Planned Construction Start Date: 9/1/2021
 Planned Construction Substantial Completion Date: 6/1/2023
 Period of Performance End Date 9/1/2023
 Planned Project Closeout Date 12/1/2023

2.3 Summary of Project's Estimated Budget. (See Attachment C for additional details).

BUILD Funds and Additional Sources of Project Funds:

BUILD Grant Amount: \$7,504,854
 State Funds (if any): \$5,003,235
 Other Funds (if any): \$ 0
 Total Project Cost: \$12,508,089

2.4 Recipient Cost Share Certification.

As negotiated, the Recipient hereby certifies that not less than \$5,003,235 in non-Federal funds are committed to fund the Project.

2.5 Project's State and Local Planning Requirements.

N/A, this facility is included in the State Transportation Improvement Plan. The facility is not subject to state or local planning requirements.

2.6 Project's Environmental Approvals and Processes.

Environmental Documentation Type, Titles and Date: Categorical Exclusion (CE), 10/4/2019

Environmental Permits Received:

Permit/Action	Date Permit Approved	Permit expiration date	Permit No.
Army Corps NH General Permit	5/1/2019	8/18/2022	NAE-2009-00088

Environmental Decision Type and Date: Categorical Exclusion Approval 10/4/2019

Name of Agency and Office Approving each Environmental Decision Document:
United States Department of Transportation, Maritime Administration (MARAD), Office
of Environment.

2.7 Recipient's and any Subrecipient's Unique Entity Identifiers.

Dun and Bradstreet Data Universal Numbering System No. (the "DUNS No.") of the
Recipient: 620094771

Name of any First-Tier Subrecipients (if applicable – to be reported if/when identified. If
not applicable please note is N/A): N/A

DUNS No. of First-Tier Subrecipient (if applicable – to be reported if/when identified):
N/A

2.8 Recipient Contacts:

Geno Marconi
Division Director
Pease Development Authority Division of Ports and Harbors
555 Market Street
Portsmouth, NH 03801
(603) 436-8500
g.marconi@peasedev.org

Brenda Therrien
Administrative Assistant
Pease Development Authority Division of Ports and Harbors
555 Market Street
Portsmouth, NH 03801
(603) 463-8500
b.therrien@peasedev.org

ARTICLE 3. GENERAL REPORTING TERMS

3.1 Report Submission. The Recipient shall send all reports required by this agreement to all
of the USDOT contacts who are listed in Section 9.1.

3.2 Alternative Reporting Methods. The Administering Operating Administration may
establish processes for the Recipient to submit reports required by this agreement,
including electronic submission processes. If the Recipient is notified of those processes in
writing, the Recipient shall use the processes required by the Administering Operating
Administration.

- 3.3 **Reporting as History of Performance.** Under 2 C.F.R 200.205, any Federal awarding agency may consider the Recipient's timely submission of the reports that this agreement requires, or the Recipient's failure to timely submit those reports, when evaluating the risks of making a future Federal financial assistance award to the Recipient.
- 3.4 **Paperwork Reduction Act Notice.** Under 5 C.F.R. 1320.6, the Recipient is not required to respond to a collection of information that does not display a currently valid control number issued by the Office of Management and Budget (the "OMB"). Collections of information conducted under this agreement are approved under OMB Control No. 2105-0563.

ARTICLE 4. PROGRESS REPORTING

- 4.1 **Quarterly Project Progress Reports and Recertifications.** On or before the 20th day of the first month of each calendar year quarter and until Project Closeout, the Recipient shall submit to the USDOT a Quarterly Project Progress Report and Recertification with the form and content described in Exhibit H. If the date of this agreement is in the final month of a calendar year quarter, then the Recipient shall submit the first Quarterly Project Progress Report and Recertification in the second calendar year quarter that begins after the date of this agreement.
- 4.2 **Closeout Information.** No later than 90 days after the period of performance end date that is listed in section 2.2, the Recipient shall:
- (1) submit a final Federal Financial Report (SF-425), a certification or summary of project expenses, and any other information required under the Administering Operating Administration's closeout procedures; and
 - (2) provide a report comparing the final work, schedule, and budget to the statement of work described in section 2.1, the schedule described in section 2.2, and the budget described in section 2.3.
- 4.3 **Project Closeout.** In this agreement, "Project Closeout" means the date that the USDOT notifies the Recipient that the award is closed out. Under 2 C.F.R. 200.343, Project Closeout should occur no later than one year after the Recipient liquidates all obligations under this award and submits the reports identified in section 4.2.

ARTICLE 5. PERFORMANCE REPORTING

- 5.1 **Performance Measure Data Collection.** The Recipient shall collect the data necessary to report on each performance measure that is identified in the Performance Measurement Table in Attachment D.
- 5.2 **Pre-project Performance Measurement Report.** The Recipient shall submit to the USDOT, on or before the Pre-project Report Date that is stated in Attachment D, a Pre-project Performance Measurement Report that contains:

- (1) baseline data for each performance measure that is identified in the Performance Measurement Table in Attachment D, accurate as of the Pre-project Measurement Date that is stated in Attachment D; and
 - (2) a detailed description of the data sources, assumptions, variability, and estimated levels of precision for each measure.
- 5.3 **Interim Performance Measurement Reports.** After project completion, the Recipient shall submit to the USDOT on or before each of the periodic reporting dates specified in the Performance Measurement Table in Attachment D, an Interim Performance Measurement Report containing data for each performance measure that is identified in that table, accurate as of the final date of the measurement period specified in that table. If an external factor significantly affects the value of a performance measure during a measurement period, then in the Interim Performance Measurement Report the Recipient shall identify that external factor and discuss its influence on the performance measure.
- 5.4 **Project Outcomes Report.** The Recipient shall submit to the USDOT, on or before the Project Outcomes Report Date that is stated in Attachment D, a Project Outcomes Report that contains:
- (1) a narrative discussion detailing project successes and the influence of external factors on project expectations;
 - (2) all baseline and interim performance measurement data that the Recipient reported in the Pre-project Performance Measurement Report and the Interim Performance Measurement Reports; and
 - (3) an *ex post* examination of project effectiveness relative to the baseline data that the Recipient reported in the Pre-project Performance Measurement Report.

ARTICLE 6. AGREEMENT MODIFICATIONS

- 6.1 **Bilateral Modifications.** The parties may amend, modify, or supplement this agreement by mutual agreement in writing signed by the USDOT and the Recipient. Either party may request to amend, modify, or supplement this agreement by written notice to the other party.
- 6.2 **Limited Unilateral Modifications.**
- (a) The Recipient may update the contacts who are listed in section 2.8 by written notice to all of the USDOT contacts who are listed in section 9.1.
 - (b) The USDOT may update the contacts who are listed in section 9.1 by written notice to all of the Recipient contacts who are listed in section 2.8.
- 6.3 **Other Modifications.** The parties shall not amend, modify, or supplement this agreement except as permitted under section 6.1 or section 6.2. If an amendment, modification, or

supplement is not permitted under section 6.1 and not permitted under section 6.2, it is void.

ARTICLE 7. STATEMENT OF WORK, SCHEDULE, AND BUDGET CHANGES

- 7.1 Statement of Work Changes.** If the Project's activities differ from the statement of work that is described in section 2.1 and Attachment A, then the Recipient shall request a modification of this agreement to update section 2.1 and Attachment A.
- 7.2 Schedule Changes.** If the Project's substantial completion date changes to a date that is more than six months after the substantial completion date listed in section 2.2 or a schedule change would require the period of performance to continue after the period of performance end date listed in section 2.2, then the Recipient shall request a modification of this agreement to update section 2.2 and Attachment B. For other schedule changes, the Recipient shall request a modification of this agreement to update section 2.2 and Attachment B unless the USDOT has consented, in writing consistent with the Administering Operating Administration's requirements, to the change.
- 7.3 Budget Changes.**
- (a) If, in comparing the Project's budget to the amounts listed in section 2.3, the "Other Federal Funds" amount increases or one or more of the "State Funds," "Local Funds," "Private Funds," "Other Funds," or "Total Project Cost" amounts decrease, then the Recipient shall request a modification of this agreement to update section 2.3 and Attachment C. For other budget changes, the Recipient shall request a modification of this agreement to update Attachment C unless the USDOT has consented, in writing consistent with the Administering Operating Administration's requirements, to the change.
 - (b) If the actual eligible project costs are less than the "Total Project Cost" that is listed in section 2.3, then the Recipient may propose to the USDOT, in writing consistent with the Administering Operating Administration's requirements, specific additional activities that are within the scope of this award, as defined in sections 1.3 and 2.1, and that the Recipient could complete with the difference between the "Total Project Cost" that is listed in section 2.3 and the actual eligible project costs.
 - (c) If the actual eligible project costs are less than the "Total Project Cost" that is listed in section 2.3 and either the Recipient does not make a proposal under section 7.3(b) or the USDOT does not accept the Recipient's proposal under section 7.3(b), then:
 - (1) in a request under section 7.3(a), the Recipient shall reduce the Federal Share by the difference between the "Total Project Cost" that is listed in section 2.3 and the actual eligible project costs; and
 - (2) if that modification reduces this award and the USDOT had reimbursed costs exceeding the revised award, the Recipient shall refund to the USDOT the difference between the reimbursed costs and the revised award.

In this agreement, “**Federal Share**” means the sum of the “**BUILD Grant Amount**” and the “**Other Federal Funds (if any)**” amounts that are listed in section 2.3.

- (d) The Recipient acknowledges that amounts that are required to be refunded under section 7.3(c)(2) constitute a debt to the Federal Government that the USDOT may collect under 2 C.F.R. 200.345 and the Federal Claims Collection Standards (31 C.F.R. parts 900–999).

7.4 USDOT Acceptance of Changes. The USDOT may accept or reject modifications requested under this article 7, and in doing so may elect to consider only the interests of the BUILD Transportation Discretionary Grant program and the USDOT. The Recipient acknowledges that requesting a modification under this article 7 does not amend, modify, or supplement this agreement unless the USDOT accepts that modification request and the parties modify this agreement under section 6.1.

ARTICLE 8. TERMINATION AND EXPIRATION.

8.1 USDOT Termination.

- (a) The USDOT may terminate this agreement and all of its obligations under this agreement if any of the following occurs:
 - (1) The Recipient fails to obtain or provide any non-BUILD Transportation Discretionary Grant contribution or alternatives approved by the USDOT as provided in this agreement and consistent with sections 2.2, 2.3, and 2.4;
 - (2) The Recipient fails to begin construction before 11/1/2021;
 - (3) The Recipient fails to begin expenditure of award funds by 12/15/2021;
 - (4) The Recipient fails to achieve the Construction Substantial Completion Date by 9/1/2023;
 - (5) The Recipient fails to meet the conditions and obligations specified under this agreement, including a material failure to comply with the schedule in section 2.2 even if it is beyond the reasonable control of the Recipient; or,
 - (6) The USDOT determines that termination of this agreement is in the public interest.
- (b) In terminating this agreement under this section the USDOT may elect to consider only the interests of the USDOT.

8.2 Closeout Termination. This agreement terminates on Project Closeout.

8.3 Fund Liquidation, Adjustment, and Cancellation.

- (a) The Recipient shall liquidate all obligations under this award not later than 90 days after the period of performance end date that is listed in section 2.2. The Recipient

acknowledges that this period of availability for liquidation ends before the statutory expenditure deadline identified in section 8.3(c).

(b) Liquidation and adjustment of funds under this agreement follow the requirements of 2 C.F.R. 200.343–.345.

(c) Outstanding FY 2018 BUILD Transportation Discretionary Grant balances are canceled by statute after September 30, 2025, and are then unavailable for any purpose, including adjustments and expenditures.

8.4 **Reporting Survival.** The reporting requirements set forth in articles 4 and 5 of this agreement survive the termination of this agreement and the expiration of award funds.

ARTICLE 9. USDOT CONTACTS

9.1 **USDOT Contacts.** Except as authorized by the USDOT under section 3.2, the Recipient shall send all notices, reports, and information required by this agreement to all of the following contacts:

Wilbur Turner
Grants/Contracting Officer, Office of Acquisition
DOT Maritime Administration
1200 New Jersey Ave, SE
Washington, DC 20590
MAR-380
W26-435
Mailstop 5
(202) 366-0700
wilbur.turner@dot.gov

and

Robert Bouchard
Director, Office of Port Infrastructure Development
DOT – Maritime Administration
1200 New Jersey Avenue, SE
Washington, DC 20590
MAR-510
W21-308
Mailstop 3
(202) 366-5076
robert.bouchard@dot.gov

and

David Bohnet
Grant Management Supervisor

DOT Maritime Administration
1200 New Jersey Ave, SE
Washington, DC 20590
MAR-510
W21-226
Mailstop 3
(202) 366-0586
david.bohnet@dot.gov

and

OST BUILD Transportation Discretionary Grants Coordinator
United States Department of Transportation
Office of the Secretary
1200 New Jersey Avenue, SE
Washington, DC 20590
(202) 366-8914
BUILDGrants@dot.gov

ARTICLE 10. ADDITIONAL TERMS AND CONDITIONS

- 10.1 **Catalog of Federal Domestic Assistance Information.** This award is under the program titled "National Infrastructure Investments," with number 20.933 in the Catalog of Federal Domestic Assistance.
- 10.2 **Research and Development Designation.** This award is not for research and development.
- 10.3 **Exhibits.** This agreement includes the exhibits as integral parts located at:
<https://www.maritime.dot.gov/grants/federal-grant-assistance/federal-grant-assistance>.

Exhibit A	Legislative Authority
Exhibit B	General Terms and Conditions
Exhibit C	Applicable Federal Laws and Regulations
Exhibit D	Grant Assurances
Exhibit E	Responsibility and Authority of the Recipient
Exhibit F	Reimbursement of Project Costs
Exhibit G	Grant Requirements and Contract Clauses
Exhibit H	Quarterly Progress Reports: Format and Content

- 10.4 **Construction.** If a provision in the exhibits or the attachments conflicts with a provision in Articles 1 – 12, then the provision in Articles 1 – 12 prevails. If a provision in the attachments conflicts with a provision in the exhibits, then the provision in the attachments prevails.

ARTICLE 11. SPECIAL GRANT REQUIREMENTS

11.1 Reimbursement Requests.

- (a) The Recipient may request reimbursement of costs incurred in the performance of this agreement if those costs do not exceed the funds available under section 1.6 and are allowable under the applicable cost provisions of 2 C.F.R. Part 200, Subpart E. The Recipient shall not request reimbursement more frequently than monthly.
- (b) The Recipient shall request reimbursement of a cost incurred as soon as practicable after incurring that cost. If the Recipient requests reimbursement of a cost more than 180 days after that cost was incurred, the USDOT may deny the request for being untimely.
- (c) The Recipient shall request reimbursement by completing forms in iSupplier, which is on-line and paperless. The USDOT may deny a payment request that is not submitted through iSupplier. Recipients access iSupplier to complete the on-line form (e.g., SF-270) to request grant payments.
- (d) The Recipient shall complete training on using iSupplier before submitting a request for reimbursement. To guide the Recipient when completing this training, the USDOT provides the following additional information, which may change after execution of this agreement:
 - (1) The Recipient may access the training from the USDOT "Delphi eInvoicing System" webpage at <http://www.dot.gov/cfo/delphi-einvoicing-system.html>. The training is linked on the right side of that page under the heading "Web-Based Training (WBT)." The Recipient should click on "Grant Recipient WBT" to access the training, which is also available directly at https://www.transportation.gov/sites/all/dot_assets/DOT_GR_04-24-2012/lessons/index.html.
 - (2) A username and password are not required to access the on-line training.
 - (3) The training is currently available and will be accessible 24/7.
 - (4) The training will take approximately 1 hour to complete.
- (e) Once the above referenced training has been completed, Recipients must request and complete the External User Access Request form in order to receive a user name and password. Recipients can submit a copy of their certificate of training and request the External User Access Request form by sending an email to: Wilbur Turner at wilbur.turner@dot.gov. A user name and password will be sent once the External User Access Request form is received.
- (f) Requests for Reimbursement: When requesting reimbursement of costs incurred, the Recipient shall submit supporting cost detail with the SF-270 (available at <https://www.grants.gov/forms/post-award-reporting-forms.html>) to clearly document

costs incurred. Cost detail includes a detailed breakout of all costs incurred including direct labor, indirect costs, other direct costs, travel, etc. The DOT/Enterprise Service Center (ESC) OFO/FAA, Oklahoma City, OK and the Program Office, DOT/MAR 510 reserve the right to withhold processing requests for reimbursement until sufficient detail is received. In addition, reimbursement will not be made without DOT/ESC OFO/FAA and program official review and approval to ensure that progress on the Agreement is sufficient to substantiate payment. After approval, ESC will certify and forward the request for reimbursement to the payment office.

11.2 Buy American Requirements.

- (a) The Recipient shall apply, comply with, and implement all provisions of the Buy American Act, 41 U.S.C. §§ 8301-8305. The project is a public work of the Federal Government under 41 U.S.C. § 8301.
- (b) This section 11.2 implements 41 U.S.C. §§ 8301-8305, the Buy American Act, by providing a preference for domestic construction material. The Recipient shall not use foreign construction materials in performing this agreement, except that:
 - (1) the Recipient may use a commercially available off-the-shelf item under 41 U.S.C. § 1907 regardless of its components if the item is manufactured in the U.S.;
 - (2) the Recipient may use information technology that is a commercial item;
 - (3) the Recipient may use foreign construction materials that are listed at 48 C.F.R. 25.104; and
 - (4) the Recipient may use foreign construction materials if the USDOT has authorized their use under section 11.2(d).
- (c) If the Recipient uses foreign construction material in violation of section 11.2(b), the USDOT may disallow and deny reimbursement of costs incurred by the Recipient and take other remedial actions under section 8.1 and 2 C.F.R. 200.338.
- (d) The USDOT may authorize the Recipient to use foreign construction material, by modifying this agreement under section 6.1, if the USDOT determines that:
 - (1) applying the Buy American statute to the construction material would be impracticable or inconsistent with the public interest;
 - (2) the construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or
 - (3) The cost of a domestic construction material is unreasonable under section 11.2(d)(3) if the cost of that material exceeds the cost of comparable foreign material by more than 6 percent.

- (e) The Recipient may request that the USDOT authorize the Recipient to use foreign construction material under section 11.2(d). If the Recipient makes a request under this section 11.2(e), the Recipient shall provide adequate information for the USDOT to evaluate the request, including:
- (1) a description of the foreign and domestic construction materials;
 - (2) unit of measure;
 - (3) quantity;
 - (4) price, including all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued);
 - (5) time of delivery or availability;
 - (6) location of the construction project;
 - (7) name and address of the proposed supplier; and
 - (8) a detailed justification of the reason for use of foreign construction materials identifying the specific basis for an exception under section 11.2(d);
 - (9) if the Recipient requests authorization under section 11.2(d)(3), a reasonable survey of the market and a full price comparison measuring the relative costs of the available domestic and foreign construction materials; and
 - (10) if the Recipient submits the request after contract award, an explanation why the Recipient could not have, before contract award: (A) reasonably foreseen the need for the determination and (B) requested the determination.
- (f) The Recipient acknowledges that (1) this agreement is not a Government procurement contract; (2) acquisitions of supplies, services, or construction materials by the Recipient under this agreement are not acquisitions by the Government; and (3) the Free Trade Agreement exceptions to the Buy American Act as provided by 48 C.F.R. Part 25, Subpart 25.4 are inapplicable to this agreement.
- (g) In this section 11.2, the following definitions apply:
- “Commercially available off-the-shelf (COTS) item”**
- (1) Means any item of supply (including construction material) that is—
 - (i) A commercial item as defined by 48 C.F.R. § 2.101;
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the Government, under an agreement, without modification, in the same form in which it is sold in the commercial marketplace; and
 - (2) Does not include bulk cargo, as defined in 46 U.S.C. § 40102(4), such as agricultural products and petroleum products.

“Construction material” means an article, material, or supply brought to the construction site by the Recipient for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site.

“Cost of components” means—

- (1) For components purchased by the Recipient, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Recipient, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means—

- (1) An unmanufactured construction material mined or produced in the United States;
- (2) A construction material manufactured in the United States, if—
 - (i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
 - (ii) The construction material is a COTS item.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

11.3 **Final Section.** There are no other special grant requirements for this project.

ARTICLE 12. EXECUTION

12.1 **Counterparts.** This agreement may be executed in counterparts, which constitute one document. The parties shall execute this agreement in triplicate and intend each countersigned original to have identical legal effect.

12.2 **Effective Date.** This agreement is effective when fully executed by authorized representatives of the Recipient and the USDOT. The Recipient shall execute this agreement and then submit three original signed copies of the agreement to the USDOT for execution. This instrument constitutes a FY 2018 BUILD Transportation Discretionary Grant when it is signed and dated by the authorized official of the USDOT.

EXECUTION BY THE USDOT

Executed this _____ day of _____, 2020.

Signature of USDOT's Authorized Representative

Name of USDOT's Authorized Representative

Title

EXECUTION BY PEASE DEVELOPMENT AUTHORITY

By signature below, the Recipient acknowledges that it accepts and agrees to be bound by this agreement.

Executed this _____ day of _____, 2020.

Signature of Recipient's Authorized Representative

Name of Recipient's Authorized Representative

Title

ATTACHMENT A STATEMENT OF WORK

The proposed project includes design and construction of the Main Wharf Rehabilitation at the Pease Development Authority – Division of Ports and Harbor’s Market Street Marine Terminal in Portsmouth, NH.

The proposed repairs to the Main Wharf include the following:

- Replacement of failed approach bridge and deck over the open area between the wharf and shore between the two bridges This area is approximately 17,500 SQ.FT.
- Repair deteriorated caissons (install protective jackets and sacrificial anodes) to restore structural integrity and extend service life.
- Recoat portions of the steel sheet pile bulkhead to extend service life.
- Repair deteriorated concrete superstructure elements, which includes repair of the spalling and delamination of the concrete on the pile caps and beams, to restore structural integrity and extend service life.
- Resurface deteriorated concrete deck to restore structural integrity and drainage. This area is 34,000 SQ.FT. +/- 6” and 1,000 PSF.
- Other miscellaneous top of deck repairs includes recoating mooring hardware, replacing mooring hardware and associated concrete pedestals, and replacing three deteriorated fender units.

**ATTACHMENT B
ESTIMATED PROJECT SCHEDULE**

Planned Start of Preliminary Engineering: 4/1/2020
 Planned End of Preliminary Engineering: 8/1/2020
 Actual Completion of NEPA: 10/4/2019

I	Application Date (Actual)	Application Date (Estimated)	Actual Permit Approval Date	Permit Expiration Date
Section 404 GP Authorization	09/10/2009		05/01/2019	8/18/2022
NHDES Dredge & Fill Permit		11/01/2019	02/01/2020	

Planned Start of Final Design: 9/1/2020
 Planned Completion of Final Design: 4/1/2021
 Start of Right of Way Acquisition: N/A
 End of Right of Way Acquisition: N/A
 Planned PS&E Approval: 5/1/2021
 Planned Construction Contract Award Date: 9/1/2021
 Planned Construction Start Date: 9/2/2021

 Planned Construction Substantial Completion Date: 6/1/2023
 Period of Performance End Date: 9/1/2023
 Planned Project Closeout Date: 12/1/2023

**ATTACHMENT C
ESTIMATED PROJECT BUDGET**

Activity	FY 2018 BUILD Grant Funds	State Funds	Other Funds	Project Cost
DESIGN				
Preliminary Design	\$129,394.00	\$86,263.00	\$0.00	\$215,657.00
Design	\$388,182.00	\$258,788.00	\$0.00	\$646,970.00
Site Investigations	\$161,743.00	\$107,828.00	\$0.00	\$269,571.00
Regulatory Permitting	\$116,455.00	\$77,636.00	\$0.00	\$194,091.00
Construction Inspection	\$239,379.00	\$159,586.00	\$0.00	\$398,965.00
Total Design Phase	\$1,035,153.00	\$690,101.00	\$0.00	\$1,725,254.00
CONSTRUCTION				
Demolition	\$61,794.00	\$41,196.00	\$0.00	\$102,990.00
Caissons	1,831,704.00	1,221,136.00	\$0.00	\$3,052,840.00
Retaining Wall	\$307,188.00	\$204,792.00	\$0.00	\$511,980.00
Pile Caps and Edge Beams	\$1,414,182.00	\$942,788.00	\$0.00	\$2,356,970.00
Deck Planks and Overlay	\$1,237,508.00	\$825,006.00	\$0.00	\$2,062,514.00
Associated Site Work	\$101,647.00	\$67,764.00	\$0.00	\$169,411.00
Caisson Repairs	\$314,982.00	\$209,988.00	\$0.00	\$524,970.00
Bulkhead	\$142,608.00	\$95,072.00	\$0.00	\$237,680.00
Superstructure Repairs	\$972,000.00	\$648,000.00	\$0.00	\$1,620,000.00
Fender System	\$23,400.00	\$15,600.00	\$0.00	\$39,000.00
Mooring Hardware	\$62,688.00	\$41,792.00	\$0.00	\$104,480.00
Total Construction Phase	\$6,469,701.00	\$4,313,134.00	\$0.00	\$10,782,835.00
Total Project Cost	\$7,504,854.00	\$5,003,235.00	\$0.00	\$12,508,089.00

**ATTACHMENT D
PERFORMANCE MEASUREMENT TABLE**

Study Area: Market Street. Marine Terminal, Main Wharf

Pre-project Measurement Date: Twelve consecutive months of data covering the periods between July 31, 2020 and August 1, 2021.

Pre-project Report Due Date: November 1, 2021

Project Outcomes Report Date: November 1, 2026

Table 1: Performance Measurement Table

Measure	Description and Category of Measure	Measurement Period	Reporting Period
Gross Tons	Economic Competitiveness The movement of gross tonnage of freight in the project study area. Measured in metric short tons	Baseline Measurement: Annual average, accurate as of the Pre-project Measurement Date Interim Performance Measure: Accurate of of the first full quarter after Substantial Completion	Baseline Measurement: Pre-project Report Due Date November 1, 2021 Interim Performance Measure: For a period of 3 years, (12 consecutive quarters) beginning the first full quarter after Substantial Completion
Vessel Calls	Economic Competitiveness Vessel type and freight capacity of vessels calling on the project study area. Measured in number of vessel calls	Baseline Measurement: Annual average, accurate as of the Pre-project Measurement Date Interim Performance Measure: Accurate as of the first full quarter after Substantial Completion	Baseline Measurement: Pre-project Report Due Date November 1, 2021 Interim Performance Measure Due Date: For a period of 3 years, (12 consecutive quarters) beginning the first full quarter after Substantial Completion

ATTACHMENT E
MATERIAL CHANGES FROM APPLICATION

N/A

ATTACHMENT F
APPROVED PRE-AWARD COSTS

None. The USDOT has not approved under this award any pre-award costs under 2 C.F.R. 200.458. Because unapproved costs incurred before the date of this agreement are not allowable costs under this award, the USDOT will neither reimburse those costs under this award nor consider them as a non-Federal cost sharing contribution to this award. Costs incurred before the date of this agreement are allowable costs under this award only if approved in writing by USDOT before being included the project costs and documented in this Attachment F. See section 1.5(c).

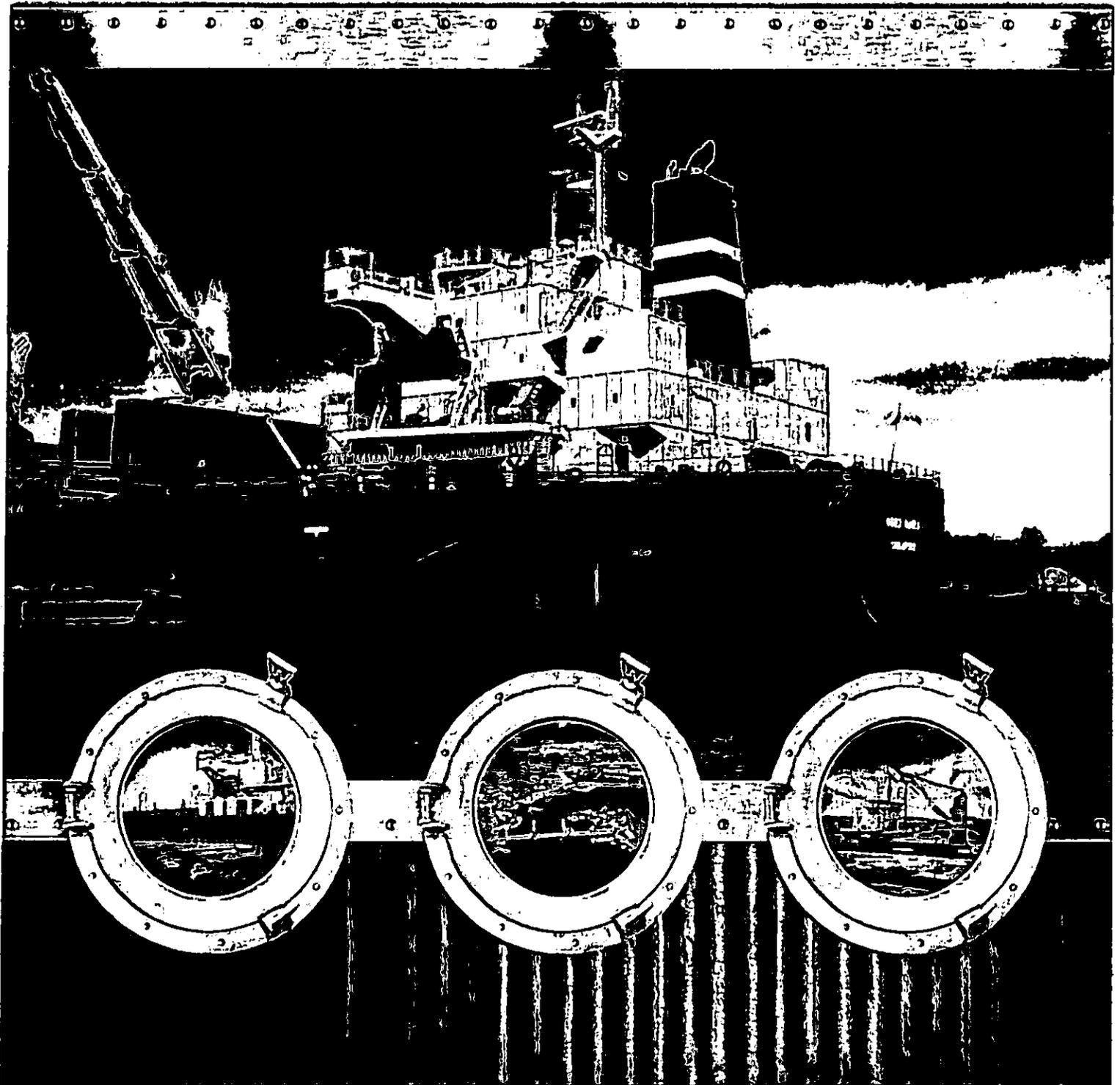
N/A



FY 2018 BUILD Grant Application

Market Street Marine Terminal Main Wharf Rehabilitation

July 19, 2018



Executive Summary

The Pease Development Authority Division of Ports and Harbors (PDA-DPH), an agency of the State of New Hampshire, is pleased to submit this application to the U.S. Department of Transportation requesting Better Utilizing Investments to Leverage Development (BUILD) funding for the rehabilitation of the main ship wharf at the Market Street Marine Terminal on the Piscataqua River in Portsmouth, New Hampshire. The proposed rehabilitation improves the transfer of cargo by decking the open water area between the wharf and shore. The decking over also replaces a wharf access bridge that collapsed.

The Port of New Hampshire traditionally has balanced the demands of visiting vessels between two wharves, the Main Wharf and the adjacent Barge Wharf. This allowed the port to sustain short outages of the Main Wharf during inspections and repair of the aging docking facility. Historically, the Sarah Mildred Long Bridge dissected the port between the two docking facilities. The bridge was recently replaced on a revised alignment to improve the safety of navigating vessels. The realignment dissected the Barge Wharf with bridge piers and new rail line, making this facility permanently unavailable for barge berthing. As part of the Federal Highway Administration's "Functional Replacement," for what was lost, the Port has gained an additional two acres and two piers are now connected to the Main Wharf. The project has started and the Port is in the design and permitting phase. The FHWA investment, however, did not address the lack of decking between these two piers.

This dramatic change at the port increases pressure on the Main Wharf serving now as the only berthing facility at the Port. The port director and marine engineers most familiar with the wharf anticipate complete port closure by the end of 2021 without significant Main Wharf improvements. When the Sarah Mildred Long Bridge was being reconstructed, FHWA invested in two piers connected to the Main Wharf as part of the functional replacement mitigation related to the Barge Wharf dissection. The investment did not address the open water area between the wharf and shore, nor did it rehabilitate the Main Wharf.

The project detailed in this grant application is instrumental to assure continued operations at the Port of New Hampshire as well as realizing the investment that FHWA made in the facility. Without Main Wharf rehabilitation, existing operations will cease because the existing structure will be unsound and the functional replacement improvements are insufficient in isolation to support on- and off-loading of marine vessels. The Main Wharf was inspected in 2017 by Appledore Marine Engineering, LLC and overall rated in Poor condition. The wharf has advanced deterioration of the concrete superstructure and mooring hardware that require restrictions on operations. One section of the wharf has failed due to deterioration and is now taken out of

Table ES-1: Outcomes and Benefits (7% discount)

MERIT OUTCOME	BENEFITS (\$M)
Safety	\$6.9
State of Good Repair	\$3.5
Economic Competitiveness	\$85.5
Environmental Protection	\$0.8
Total Benefits	\$96.7
Benefit-Cost Ratio	7.4
<i>Qualitative benefits are addressed in the application narrative.</i>	



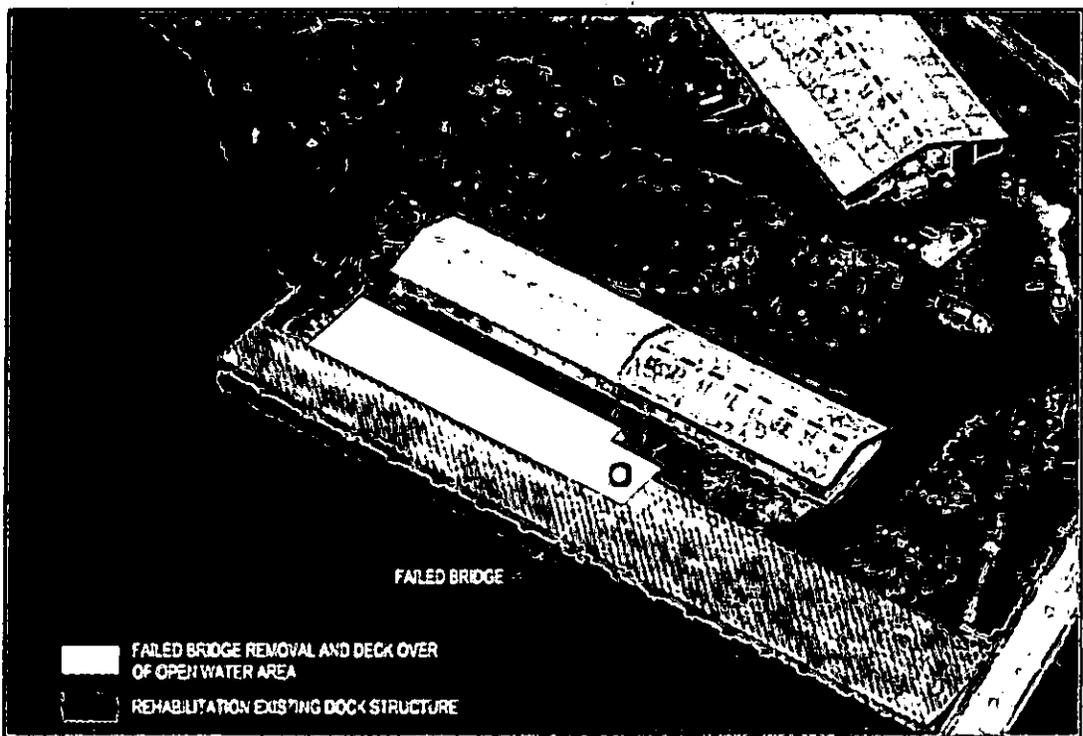


Market Street Marine Terminal Main Wharf Rehabilitation

service. It is anticipated that by the year 2022 the deterioration will progress to a point requiring complete closure of the entire wharf if not repaired. If the Main Wharf is rehabilitated, existing operations can be maintained and there is significant opportunity to increase domestic and international cargo activity currently utilizing this facility. For example, discussions have recently been held with members of the wood chip industry about potentially using this port facility to transport cargo.

The project provides direct access to ships for the entire length of the Main Wharf, assuring continued use for ocean commerce and greatly enhancing safety, functionality and operational efficiency. The U.S. Army Corps is expanding the uppermost turning basin from 800 feet to 1,200 feet as part of the overall navigation safety improvement of the Piscataqua River. This project should begin in November 2019. Combined with the functional replacement, the port facility will be able to receive 750 foot ships for the first time ever, as the navigation project is designed for a ship of this size. The project also provides much needed repairs to the steel caissons, concrete superstructure, and other key structural elements to assure continued service of the facility into the future.

Figure ES-1: Market Street Marine Main Wharf Rehabilitation



A video is available at <https://youtu.be/K611O8hviXU> that shows the Terminal and wharf, and the challenges it is currently facing.

The port supports businesses and promotes public benefits in the region through its support of other terminals in the River. **The ability of businesses to transport their freight via water means an opportunity for increased economic activity regionally, as well as nationally, fewer trucks on the road and lower levels of vehicle emissions.** For example, discussions have been had with ferry service providers interested in a





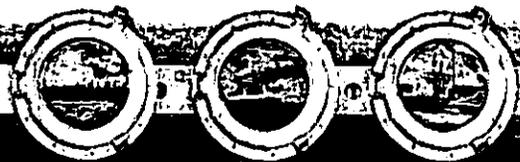
Market Street Marine Terminal Main Wharf Rehabilitation

potential service between Nova Scotia and the Port of NH. Pavement maintenance cost and shipper cost savings are supported by the proposed wharf improvement. Finally, there are safety and security benefits associated with the project. Though difficult to quantify, a rehabilitated wharf enables the port to continue to provide emergency services support due to on-board fire, medical emergencies, and oil spills, as well as port security services. A \$1 investment in the project supports \$7.41 in public benefits.

The Market Street Marine Wharf Rehabilitation project is estimated to cost \$12.5 million, beyond the previously incurred costs, and the State of New Hampshire is committed to providing \$5.0 million toward the project, representing 40 percent of the total project cost. BUILD funding of \$7.5 million will complete the financing package for these improvements. With the improvement, project highlights include:

Table ES-2: Project Summary

CRITERION	PROJECT HIGHLIGHTS
<p>Supports BUILD Merit Criteria</p>	<ul style="list-style-type: none"> ✓ Diverts cargo off roadways -- \$6.9M in public safety benefits and \$2.5M in roadway maintenance ✓ Provides access for emergency services to address on-board fire, contaminated vessels ✓ Supports fire, security and terrorist response drills with local and federal law enforcement ✓ \$85.5M in shipper cost savings ✓ \$0.8M in emissions benefits due to reduced VMT ✓ Fewer trucks improves mobility for freight and people going to work ✓ Provides state-of-good-repair for Main Wharf ✓ Optimizes Sarah Mildred Long Bridge functional improvement
<p>Leveraging of Federal Funding</p>	<ul style="list-style-type: none"> ✓ State of NH match of \$5M ✓ Existing and new shippers' investment in equipment and labor
<p>Potential for Innovation</p>	<ul style="list-style-type: none"> ✓ Coordination with jurisdictional regulators ✓ Safety innovations to address ocean current issues
<p>Project Readiness</p>	<ul style="list-style-type: none"> ✓ 15% of project design complete ✓ NEPA complete July 2019 ✓ Start of construction December 2019 ✓ All program elements completed in August 2021



Contents

1.0	Project Description	1
1.1	Description of the Main Wharf and Rehabilitation	1
1.2	Transportation Challenges	2
1.3	Project History	3
2.0	Project Location	5
3.0	Grant Funds, Sources and Uses of all Project Funding	6
4.0	Merit Criteria	7
4.1	Enhances Safety	7
4.2	Support a State of Good Repair	8
4.3	Promote Economic Competitiveness	9
4.4	Protect the Environment	10
4.5	Enhance Quality of Life by Improving Connectivity	10
4.6	Potential for Innovation	11
4.7	Project Parties and Partnership	11
4.8	Nonfederal Revenue for Transportation Infrastructure Investment	12
4.9	Project Readiness	12
4.10	Project Risks and Mitigation Strategies	17
5.0	Project Summary	18

List of Figures

Figure 1: Market Street Marine Terminal Main Wharf	3
Figure 2: Market Street Terminal and Sarah Long Bridge	4
Figure 3: Location Map	5
Figure 4: Schedule for the Main Wharf Rehabilitation	14
Figure 5: Area Overview	16

List of Tables

Table ES-1: Outcomes and Benefits (7% discount).....	i
Table ES-2: Project Summary.....	iii
Table 1: Main Wharf Project Components.....	1
Table 2: Committed Funding Sources.....	6
Table 3: Project Costs and Funding.....	6
Table 4: Benefit-Cost Analysis Results.....	19





1.0 Project Description

The Pease Development Authority Division of Ports and Harbors (PDA-DPH), an agency of the State of New Hampshire, is pleased to submit this application to the U.S. Department of Transportation requesting funding for the rehabilitation of the main ship wharf at the Market Street Marine Terminal on the Piscataqua River in Portsmouth, New Hampshire.

The rehabilitation will *return the Main Wharf to a state of good repair and replace the deteriorated wharf access bridge that has collapsed, by decking the open water area between the existing shoreline and the shore side limit of the existing Main Wharf.* The project repairs the steel caissons and concrete superstructure of the Main Wharf and leverages a recent FHWA functional replacement investment associated with reconstruction of a nearby bridge.

The proposed rehabilitation will facilitate better freight movement between water and land and improve connectivity to all major freight transportation modes. Onsite rail is available at the facility, and the port is ½ mile from interstate 95. When completed, the project provides access from the main entrance of the facility directly to ships for the entire length of the Main Wharf. This assures continued use of the port for ocean commerce, and it greatly enhances safety, functionality and operational efficiency. A video is available at <https://youtu.be/K6l1O8hyixU> that shows the Terminal and wharf.

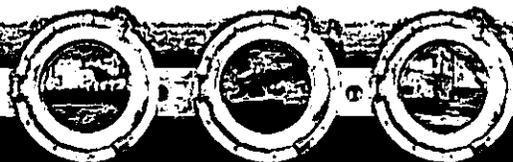
Table 1: Main Wharf Project Components

COMPONENT	OUTCOME
Deck over existing open water	<ul style="list-style-type: none"> Facilitate improved freight movement between water and land
Repair deteriorated caissons	<ul style="list-style-type: none"> Restore structural integrity Extend service life
Recoat portions of the steel sheet bulkhead	<ul style="list-style-type: none"> Extend service life
Repair deteriorated concrete superstructure elements	<ul style="list-style-type: none"> Restore structural integrity Extend service life
Resurface deteriorated concrete deck	<ul style="list-style-type: none"> Restore structural integrity
Miscellaneous top of deck repairs: recoating mooring hardware, replacing mooring	<ul style="list-style-type: none"> Extend service life

1.1 Description of the Main Wharf and Rehabilitation

The Main Wharf at the Market Street Marine Terminal is in overall Poor condition due to continued degradation of the 1964 and 1977 vintage marine structures that comprise the wharf. In 2017, a structural analysis was completed that recommended reductions in live load capacity, along with restrictions and operational limitations. Isolated areas of the structure are in severe condition and include localized structural failures.

For example, the northern access bridge of the Main Wharf unexpectedly failed in 2011 due to deterioration and corrosion of internal reinforcing steel within the bridge planks. This partial failure required the closure of





Market Street Marine Terminal Main Wharf Rehabilitation

the northern bridge, thus requiring vehicles to traverse to the northern end of the wharf. This increased cycle time of loading and unloading operations has negatively impacted the mobility of freight at the port. The southern bridge was recently replaced because, like the northern bridge, it was old and deteriorating. There were concerns that its failure, which was likely imminent, would immediately shut down the Terminal. This “band-aid” approach to facility infrastructure, however, is not ideal. Bringing the port infrastructure into a state of good repair through rehabilitation of the Main Wharf is becoming increasingly important to ensure the port’s long-term viability, ability to support upstream businesses, and capacity to increase economic activity in the region and nationally.

This improvement will address the northern access bridge by decking the area between the existing shoreline and the back of the current Main Wharf. Left unrepaired, the continued corrosion of the wharf’s concrete reinforcing steel and steel caissons will require complete closure of the facility in the near future.

The bigger deck will also provide a larger area for material lay down and assembly. The rehabilitated wharf will result in an increased loading capacity as well, which will allow larger cranes and vehicles to operate at the site. These improvements will result in a more efficient and operational marine facility that is better able to provide the marine support services needed by this busy, and growing, seacoast port. More importantly, the rehabilitation will ensure that the Market Street Marine Terminal can remain open for business. In addition to improving the physical condition of the Main Wharf itself, the project will also reduce pavement wear and tear on roadways by supporting the diversion of cargo from trucking. The associated reduction in maintenance expenses is estimated to generate benefits of \$2.5 million in discounted benefits over 20 years.

Main Wharf rehabilitation is estimated to cost \$12.5 million, and the State of New Hampshire is committed to providing \$5.0 million toward the project, representing 40 percent of the total project cost. BUILD funding of \$7.5 million will complete the financing package for these improvements. Securing this funding is critical because the Main Wharf’s condition is deteriorating rapidly.

1.2 Transportation Challenges

There are two access bridges to the Main Wharf, but in 2011, one collapsed and remains inoperable. This has substantially impacted the flow of operations. Trucks are now only able to enter and exit the wharf via the remaining access bridge, which was replaced recently to avoid a situation where neither bridge is available. While other means of access are provided to the north and south of the bridge, the efficiency and reliability of the facility is severely hampered by impacting cycle time during loading and unloading. For example, when larger, more bulky cargo comes to the port such as a windmill turbine blade, the trucks must make multiple turns which causes the ship to be docked longer. This example can be seen in the video mentioned previously.

The combination of the access bridge closure and the elimination of the Barge Wharf have put the port in a precarious situation. Something must be done in the very near term, or the port will not be able to continue to operate. In addition, an opportunity to leverage the new infrastructure provided through the functional replacement will be lost. As the only public seaport in the State of New Hampshire, positioned between ports experiencing roadway and facility congestion today and providing services that other neighboring facilities cannot provide, rehabilitating the Main Wharf is critical for east coast maritime operations, international





cargo activity, and regional and national safety and security. For example, oversized cargo landed in the Port of New York and New Jersey cannot be transported efficiently by truck through New York and Massachusetts to New Hampshire. When cargo is barged to the Port in New Hampshire, it avoids permitting fees for using the regional roadway network.

1.3 Project History

1.3.1 Port Activity

Historically and over the past year, the Market Street Marine Terminal received shipments of salt and special project cargo. Construction materials to support the building of the Sarah Mildred Long Bridge were also marshaled at the facility and drawn upon as needed during construction. While this construction-related activity has helped the port maintain its revenue levels, despite its Main Wharf's condition and elimination of the barge wharf, this is not a long-term solution. Recently, we have turned away a project cargo customer because we could not get the appropriate equipment on the dock to service the ship. As a result, they went to another port. Efficient loading is also hampered because of the open water "pond" between the piers. In years prior, the Terminal handled salt, gypsum, and scrap metal, as well as special project parts such as windmill components and large pieces of equipment. The port would like to return to handling these types of commodities and others, but is limited because of its Main Wharf's condition and the elimination of the barge wharf at the port. Some potential shippers and receivers have expressed concern about the port's current physical condition and ability to manage shipment of certain heavy and bulky cargo.

Figure 1: Market Street Marine Terminal Main Wharf



Along with traditional port economic activity, the Market Street Marine Terminal has coordinated for years with all agencies involved in port security, including the U.S. Coast Guard, NH Marine Patrol, U.S. Customs, FBI,



Market Street Marine Terminal Main Wharf Rehabilitation

U.S. Navy, NCIS and the Department of Transportation. Specifically, the Terminal provides these entities access to its state of the art camera system, which allows them the ability to reconnoiter or otherwise observe land based facilities, ships in port, and vessels transiting the area between the I-95 and Memorial Bridges. These efforts help maintain security at the port, as well as other facilities located along the river, including the Portsmouth Naval Shipyard. Other safety services historically provided by this facility include the ability to handle on-board ship fires. Because of the nature of many of the private upstream facilities (e.g., Irving and Sprague), which handle fuel and other flammable commodities, a burning ship in the harbor cannot be safely managed anywhere but at the Market Street Marine Terminal.

This section of the wharf, built in 1977, is 40 years old with crumbling concrete and exposed rebar. There is a unique opportunity now to invest in this facility while repairs are feasible. Without improvements to the Main Wharf, the port will be forced to cease operations at the Terminal.

1.3.2 Sarah Mildred Long Bridge Functional Replacement

On the Market Street Terminal facility, there have historically been two wharves, the Terminal Main Wharf and the Barge Wharf. A major Piscataqua River crossing, the Sarah Mildred Long Bridge, dissected the port between the two docking facilities. The bridge was recently replaced on a revised alignment to improve the safety of navigating vessels. The realignment dissects the area where the Barge Wharf once resided with bridge piers and new rail line, making this facility permanently unavailable for barge berthing.

Figure 2: Market Street Terminal and Sarah Long Bridge





Market Street Marine Terminal Main Wharf Rehabilitation

A functional replacement was provided by FHWA during this bridge project. If the Main Wharf was in a state of good repair, this functional replacement would accommodate existing marine cargo but also position the port to take advantage of new cargo activity and potentially larger vessels. In the absence of the Main Wharf improvements identified in this application, however, the functional replacement is not sufficiently sized to accommodate even existing cargo vessels.

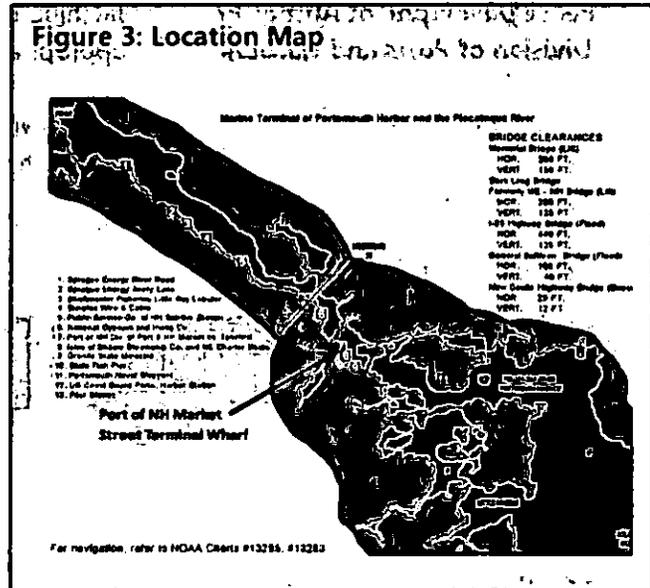
2.0 Project Location

Located on the Piscataqua River in Portsmouth, New Hampshire, The Market Street Marine Terminal is the only public access, general cargo terminal on the river. The project is located in the Portsmouth NH – ME Urbanized Area. The port is 1/2 mile from Interstate-95 and two miles from Pease International Tradeport’s airport and business parks. Onsite rail access is also available at the port, making the facility accessible by all major freight transportation modes.

The Main Wharf project consists of a 17,500 square foot deck rehabilitation that will replace the deteriorating wharf access bridge by decking the area between the existing shoreline and the back of the current Main Wharf, as shown in wharf design (see Figure 3). This will provide easy and direct access for the entire length of the Main Wharf, greatly enhancing its safety, functionality and operational efficiency.

Geospatial Data Describing the Project Location

The project has been geospatially located to the State Plane system, and further broken down by project component and key structural members. The project is located at 43° 5'2.43"N, 70°45'40.35"W.



Primary Point of Contact:
 Geno J. Marconi, Director of Ports and Harbors
 Port of New Hampshire
 555 Market Street
 Portsmouth, New Hampshire 03801
 Phone: 603-436-8500
 Email: g.marconi@peasedev.org





3.0 Grant Funds, Sources and Uses of all Project Funding

The Market Street Marine Terminal Main Wharf rehabilitation project is estimated at \$12.5 million. The State of New Hampshire will provide a match of \$5.0 million, representing 40 percent of the total project cost (see Table 2). Pease Development Authority Division of Ports and Harbors is requesting a BUILD grant of \$7.5 million. All costs are eligible for BUILD funding.

Table 2: Committed Funding Sources

FUNDING PARTNER	DESCRIPTION	FUNDING AMOUNT (\$M)	FUNDING PERCENT
Pease Development Authority Division of Ports and Harbors	Matching funds appropriated	\$5,000,000	40%

A letter documenting this funding commitment is provided in the Appendix to this application. The individual project cost elements, as well as the allocation of both BUILD funding and State of New Hampshire funding across each element is represented in Table 4.

Table 3: Project Costs and Funding

PHASE/ITEM	BUILD	OTHER FEDERAL	NON-FEDERAL	TOTAL PROJECT
PREVIOUSLY INCURRED COSTS	\$0	\$0	\$1,565,600	\$1,565,600
DESIGN				
Preliminary Engineering	\$129,394	\$0	\$86,263	\$215,657
Design	\$388,182	\$0	\$258,788	\$646,970
Site Investigations	\$161,743	\$0	\$107,828	\$269,571
Regulatory Permitting	\$116,455	\$0	\$77,636	\$194,091
Construction Inspection	\$239,379	\$0	\$159,586	\$398,965
TOTAL DESIGN PHASE	\$1,035,152	\$0	\$690,101	\$1,725,254
<i>funding share by phase</i>	<i>60%</i>	<i>0%</i>	<i>40%</i>	<i>100%</i>
CONSTRUCTION				
Demolition	\$61,794	\$0	\$41,196	\$102,990





Market Street Marine Terminal Main Wharf Rehabilitation

PHASE/ITEM	BUILD	OTHER FEDERAL	NON-FEDERAL	TOTAL PROJECT
Caissons	\$1,831,704	\$0	\$1,221,136	\$3,052,840
Retaining Wall	\$307,188	\$0	\$204,792	\$511,980
Pile Caps and Edge Beams	\$1,414,182	\$0	\$942,788	\$2,356,970
Deck Planks and Overlay	\$1,237,508	\$0	\$825,006	\$2,062,514
Associated Site Work	\$101,647	\$0	\$67,764	\$169,411
Caisson repairs	\$314,982	\$0	\$209,988	\$524,970
Bulkhead	\$142,608	\$0	\$95,072	\$237,680
Superstructure Repairs	\$995,400	\$0	\$663,600	\$1,659,000
Mooring Hardware	\$62,688	\$0	\$41,792	\$104,480
TOTAL CONSTRUCTION	\$6,469,701	\$0	\$4,313,134	\$10,782,835
PHASE	60%	0%	40%	100%
total funding share	60%	0%	40%	100%
TOTAL BUILD PROJECT COST	\$7,504,853	\$0	\$5,003,235	\$12,508,089
total funding share	60%	0%	40%	100%

The requested BUILD funds, supplemented by the \$5.0 million match, will unlock a wealth of opportunities and provide substantial benefits extending beyond the region in which the port is located. The public benefits associated with this project are provided in the Merit Criteria section of the application. A discussion of the project's readiness is provided in section 6.0. Included in our budget is a contingency of 10 percent to cover any unanticipated cost increases.

4.0 Merit Criteria

Deficient links in a transportation system restrict travel and can significantly impact economic growth, mobility, and safety. Ensuring that transportation is efficient and reliable is a critical element in ensuring safety and providing opportunities for economic competitiveness. Rehabilitation of the Market Street Marine Terminal will ensure that the Main Wharf is in good physical condition, which will support national and regional economic vitality and leverage investments already made in the port to further support domestic and international economic growth. The relevance of each BUILD merit criteria to the Main Wharf rehabilitation is described below.

4.1 Enhances Safety

Because this project will provide a viable option to moving cargo by truck, it is anticipated to reduce traffic fatalities and serious injuries on the surface transportation system by diverting some cargo off roadways and on to the marine highway. By providing an alternate mode to roadway travel, it also reduces the likelihood of high consequence events on the roadway network.



To estimate the accident reduction benefits associated with the improved Main Wharf, the reduction in vehicles on the road is combined with a multiplier, which is a weighted average of fatal, injury, and property damage only (PDO) accidents. These benefits are estimated to be \$6.9 million with the wharf rehabilitation, discounted by 7 percent.

In addition to roadway accident reduction benefits, the facility provides other safety and security services that are not easily monetized. For example, the Market Street Marine Terminal would be called upon to respond in the event of a natural or manmade disaster. Upstream terminals (i.e., Sprague, Irving and Sea-3) have enough fuel and energy production capabilities to service their customers for the better part of a week. Beyond that, the Market Street Marine Terminal would likely play a pivotal role by receiving ships carrying home heating oil, wood chips and other equipment and supplies that may or may not be able to be delivered by rail or by road. In the event of a natural disaster, the Terminal is recognized by FEMA as available to receive relief supplies utilizing MARAD ships.

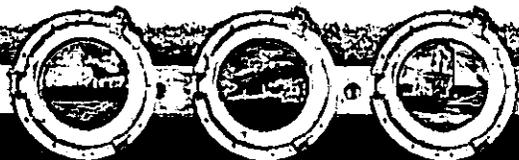
The port is also critical to the harbor's emergency response capabilities in that it assists marine vessels that are distressed. The facility supports fire, security and terrorist response drills with local and federal law enforcement. If there is an emergency situation on board a ship, the pilot brings the ship to the Terminal for several reasons. First, it would be illogical and extremely dangerous to take a shipboard fire to the nearby oil/propane terminal, which is a private pier option on the Piscataqua River. Second, it is difficult, if not impossible, to get emergency assets to the ship's side at the other terminals located along the river.

Security at the Portsmouth Naval Shipyard, located on an island directly across the Piscataqua River from the port, is elevated at all times. There are nuclear submarines docked at the Naval Shipyard and the Market Street Marine Terminal is utilized to load and unload cargo from foreign flag vessels. This practice maintains some separation of the foreign vessels from the Naval Shipyard for security reasons, thus reducing the likelihood of a high consequence event. In the absence of the Main Wharf, it is not clear how the Shipyard would maintain this distance and security precaution. The Terminal also contributes to the security of the Naval Shipyard by enabling it to move a percentage of its work off site and out of the high security zone.

These types of safety and security functions are critical to the harbor and its commercial and leisure users. The Market Street Marine Terminal is an integral part of the overall emergency planning for the harbor and Piscataqua River areas and rehabilitating the Main Wharf will allow these functions to continue. If the Port of New Hampshire was to close, the harbor would lose its only platform for emergency response. This facility is included in the State of New Hampshire's and Coast Guard's emergency plans.

4.2 Support a State of Good Repair

The Market Street Marine Terminal Main Wharf project will rehabilitate the existing wharf infrastructure used to support commerce and economic growth. This is, in and of itself, a state of good repair benefit. In addition, the project will generate roadway pavement maintenance savings as truck traffic is removed from the roadways when businesses divert the transportation of their cargo via marine vessel. With the wharf rehabilitation, VMT is reduced, and wear and tear on highways and the associated maintenance cost is decreased. This category of savings is estimated to be \$2.5 million.





For the purpose of the benefit-cost analysis, which is described later in this application as well as in the Benefit-Cost Technical Appendix that accompanies this application, benefits were estimated for a period of 20 years after the completion of construction on the rehabilitated Main Wharf. However, the useful life of the project is actually 50 years. In order to capture the un-used value of the investment, a residual value of \$0.98 million has been calculated.

4.3 Promote Economic Competitiveness

Along with supporting existing customers, thus maintaining economic activity in the region, the project will position the port to receive diverse vessels, increasing operational efficiency and throughput capacity for cargo handled at the Market Street Marine Terminal. The additional cargo lay down space and easier wharf access will contribute to more efficient and productive operations at the port, as well as the opportunity to expand the port's customer base.

With the rehabilitation of the Main Wharf, existing businesses are expected to increase their tonnage by an estimated one to three percent annually, depending on the cargo transported. This growth, however, may be conservative, as it is based on historic activity at the port and does not reflect the significant shifts occurring in the marine transportation industry as a whole, as described later in this section.

Freight shippers have many options for transporting their cargo, and each business makes their location and logistics decisions based on a variety of factors. It is presumed that existing port customers are utilizing the Market Street Marine Terminal because it is operationally efficient for them to do so. As specifically stated by existing port customers, rehabilitation of the port could allow them to expand operations and shipping volumes by using the low-cost rail connections and port facilities. If the port were to close, these businesses would either need to limit their expansion plans and/or find an alternative location for their transportation needs to be served. Access to the port avoids the need to use other, more expensive and less efficient shipping modes or otherwise add to the already congested Northeast roadway network. Shipper cost savings associated with the project, due to direct port shipments compared to port shipments combined with longer-distance truck, are estimated to be \$85.5 million over 20 years, assuming a 7 percent discount rate. A sensitivity test related to the shipper cost per mile estimate used in the benefit-cost analysis was also conducted and the results are presented in the technical appendix that accompanies this application. Even when shipper cost assumptions are significantly reduced, the project is still economically justifiable.

Along with maintaining existing customers, there have been recent discussions regarding initiating freight ferry service between Portsmouth and Nova Scotia. While this new service is not guaranteed, the rehabilitation of the Main Wharf will make the Port of NH more suitable for this type of service. According to preliminary discussions, ferry service would likely carry 30-35 tractor-trailers every other day. With each of the 35 trucks hauling 88,000 pounds, the port could experience an increase of 3 million pounds of cargo one way each day of service. Items such as tires, aerospace parts, and fish product that would be delivered to other locations in New England would likely be shipped. Another option relates to the current seasonal container ferry service operating between Nova Scotia and Portland, Maine. This service does not take large commercial trucks and the Digby to St. John ferry is limited to about 6 large trucks, which may be bumped in favor of personal vehicles. This makes the truck transit very uncertain and seasonal when operations are year round,





but it provides an opportunity for a new service offering at the Market Street Marine Terminal once the Main Wharf is rehabilitated.

4.3.1 Job and Other Relevant Impacts

A 2012 study authored by researchers at the University of New Hampshire and the University of Southern Maine examined the economic impacts of the Piscataqua River and the Ports of New Hampshire and Newington, finding that 16 businesses utilizing the ports along the Piscataqua River were directly responsible for 987 jobs paying \$90.2 million in wages and benefits, with approximately 90 percent of the economic impacts experienced in New Hampshire and the remaining 10 percent in Maine. The total regional impacts of the port-related activities include 2,357 jobs paying \$156 million in income and \$274.5 million in value added. In addition, \$25 million in state and local taxes are generated as a result of these activities. The businesses that generate this economic activity are supported by the Market Street Marine Terminal.

Despite the existence of private wharfs upstream (see map in Project Description), these are cargo-specific wharfs, designed to handle cargo of the specific businesses that own the wharfs. Much of the special project cargo handled at the Market Street Marine Terminal could not be handled by these other wharfs. Although much of this cargo would still be bound for New Hampshire and the region if the Terminal was not available, it would need to be shipped through alternative ports and then transported by truck (primarily) or rail to its final destination in the region. Completion of the project retains this waterborne cargo, allows for projected growth and expansion of businesses.

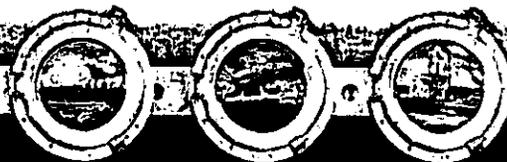
Adding to the port's economic competitiveness is its designation as part of Foreign-Trade Zone (FTZ) #81. For the purpose of duty assessment, goods entered into the zone are considered to be outside the commerce of the United States and, therefore, no duty is paid while in the zone. This designation is advantageous, and a number of businesses served by the port utilize the zone. Customers who utilize both the port and the FTZ designation would be significantly impacted by closure of Market Street Marine Terminal

4.4 Protect the Environment

Along with improving the flow of freight, this project generates emissions benefits by reducing VMT and by transporting cargo by marine vessel. Emissions measured include VOC (HC), NOX, SO₂, and PM, varying by auto and truck. The rehabilitation of the Main Wharf will result in emissions benefits estimated to be \$0.8 million.

4.5 Enhance Quality of Life

The project is also expected to generate congestion reduction benefits to highway users if the port continues to provide marine transportation for cargo, rather than limiting shippers to the use of trucking. Congestion reduction benefits generated by the improved facility were not included in the benefit-cost analysis prepared for this application because local or project-specific information was unavailable. US DOT guidance discourages the use of broad, national level data to estimate these benefits.





Nonetheless, given the Port's location near I-95, it is expected that maintaining a marine transportation option for cargo shipments in this location will reduce future truck traffic growth and its associated congestion. Fewer trucks on the road save remaining vehicle drivers time and potentially improving trip reliability.

4.6 Potential for Innovation

When the Main Wharf rehabilitation was designed, it was a goal of the port to minimize the environmental impact. The rehabilitation design technique involves sustainable practices including maximizing the use of alternative and recycled materials as well as designing for total life cycle and not focusing merely on first cost. This innovative approach to design and construction limits future maintenance and other environmental impacting activities.

In addition to these post-construction benefits, the design of the rehabilitation itself includes several sustainable elements that reduce the negative effects of the existing infrastructure. Specifically, the Main Wharf project includes the rehabilitation of a section of the wharf, rather than completely replacing it. The rehabilitation approach leverages design techniques that substantially increases the time to future rehabilitation cycles reducing future environmental impacts.

4.6.1 Innovative Technology

Through the BUILD program, USDOT is seeking opportunities to experiment with innovative approaches to transportation safety, particularly projects incorporating innovative design solutions, enhancing the environment for automated vehicles, or using technology to improve the detection, mitigation, and documentation of safety risks. The Market Street Marine Terminal facility is subject to alternating tidal currents of 4 knots daily. It is also located in a relatively congested port. The design to rehabilitate the facility includes an open pier design that allows the current to flow through the pier structure without amplification of the current.

4.6.2 Innovative Project Delivery and Innovative Financing

In an effort to understand the environmental opportunities and challenges associated with this project, the Port Director had a series of meetings with the jurisdictional regulators to discuss the project and the best approach to permitting and mitigating. Through these discussions, a previously unused mitigation fund was identified that could be used to offset the impacts from this project.

4.7 Project Parties and Partnership

The Pease Development Authority (PDA) is a state agency created by NH-RSA 12-G. The PDA is a component unit of the State of New Hampshire, and is discretely presented in the Comprehensive Annual Financial Report of the State. PDA is a body corporate and politic with a governing body of seven members. Four members are appointed by the Governor and state legislative leadership, and three members are appointed by the City of Portsmouth and the Town of Newington. Pursuant to Chapter 290, Laws of 2001, the New Hampshire State Port Authority, a former department of the State of New Hampshire became a division of the PDA effective July 1, 2001.

PEASE Market Street Marine Terminal Main Wharf Rehabilitation

The PDA through the Division of Ports and Harbors is charged with the responsibility to: 1) plan for the maintenance and development of the ports, harbors and navigable tidal rivers of the state to foster and stimulate commerce and the shipment of freight; 2) aid in the development of salt water fisheries and associated industries; and 3) cooperate with any federal agencies or departments in planning the maintenance, development and use of the state ports, harbors and navigable tidal rivers. Pursuant to State and Federal regulations, Airport Revenue received by the PDA for the management and development of the former Pease Air Force Base cannot be used in support of division activities.

The importance of the Main Wharf rehabilitation project to the Seacoast region can be determined by the number of parties that have worked cooperatively to develop this planned improvement. The New Hampshire Legislature enacted and continually approves legislation in support of the project. The Pease Development Authority took the lead in developing the design, engineering, permitting and contract plans necessary for this work to proceed once funds were obtained. The New Hampshire Department of Environmental Services and Army Corps of Engineers issued permits approving this work.

In addition, community members, shipping operators, businesses, and elected officials all strongly support the rehabilitation to the Main Wharf. These individuals can easily recognize the benefits from improved safety, operation, and functionality of the rehabilitated and expanded Marine Terminal. This effort will truly enhance the connectivity of the region and provide an international link to the global community.

The result is an area-wide multi-modal transportation improvement project that addresses the needs of many individuals, businesses, organizations and tourists traveling in the region. It also offers the opportunity to improve economic competitiveness in an environmentally sustainable manner. Letters of support for this project are provided below and at the following link: <http://portofnh.org/>

4.8 Nonfederal Revenue for Transportation Infrastructure Investment

There is currently no expectation of a new, nonfederal revenue source to support this infrastructure investment, beyond the support provided by the State of New Hampshire via its match.

4.9 Project Readiness

If awarded funding, the Market Street Marine Terminal project is positioned to begin construction by December 2019. The following section details the readiness levels of the project from technical, scheduling, approvals and financial perspectives. In addition, potential risks are identified, along with mitigation strategies to address the risks.

4.9.1 Technical Feasibility

The proposed project includes the repair of the Main Wharf at the Pease Development Authority – Division of Ports and Harbor’s Market Street Marine Terminal in Portsmouth, NH. At 30-40 years old, the wharf requires repairs to continue cargo handling operations and safe berthing of vessels. The proposed repairs to the Main Wharf include the following:

- Repair deteriorated caissons (install protective jackets and sacrificial anodes) to restore structural integrity and extend service life
- Recoat portions of the steel sheet pile bulkhead to extend service life
- Repair deteriorated concrete superstructure elements to restore structural integrity and extend service life
- Resurface deteriorated concrete deck to restore structural integrity and drainage
- Other miscellaneous top of deck repairs include recoating mooring hardware, replacing mooring hardware and associated concrete pedestals, and replacing deteriorated fender units
- Replacement of failed approach bridge and deck over the open area between the wharf and shore between the two bridges

The project design has been completed by an engineering firm that specializes exclusively in the inspection and design of marine structures since 1987. The design for this structure is a proven design that leverages local best practices, technology and experience of regional marine construction contractors. To mitigate potential variations in cost and schedule the design has been progressed to the 95 percent stage, thus flushing out the final details of the project that often have a significant impact on cost and schedule.

Historically, the existing wharf deck has drained directly to the Piscataqua River through deck scuppers. The wharf overlay has been designed to restore these existing grades and elevations to minimize construction costs. Since this design was completed, shoreside drainage improvements and regrading has been completed that improves treatment of shoreside storm water. It is now proposed to leverage this improvement by regrading the wharf deck to direct wharf storm water towards these shoreside drainage units. This change would be incorporated into the contract documents prior to solicitation. Detailed construction cost estimates and schedules have been completed and updated for current market conditions.



4.9.3 Required Approvals

Pease Development Authority has legal authority to apply for federal grants and has received other federal grants, including funding from the Federal Aviation Administration. In addition, the port has received federal funding through Homeland Security Federal Emergency Management Agency (FEMA) grants as well. Additional legislative approval is not needed for the project proposed in this application. The legislature has already approved this project by appropriating the matching funds. We have sought and received letters of support from local and federal elected officials, included in the Appendix to this document.

Environmental Permits and Reviews

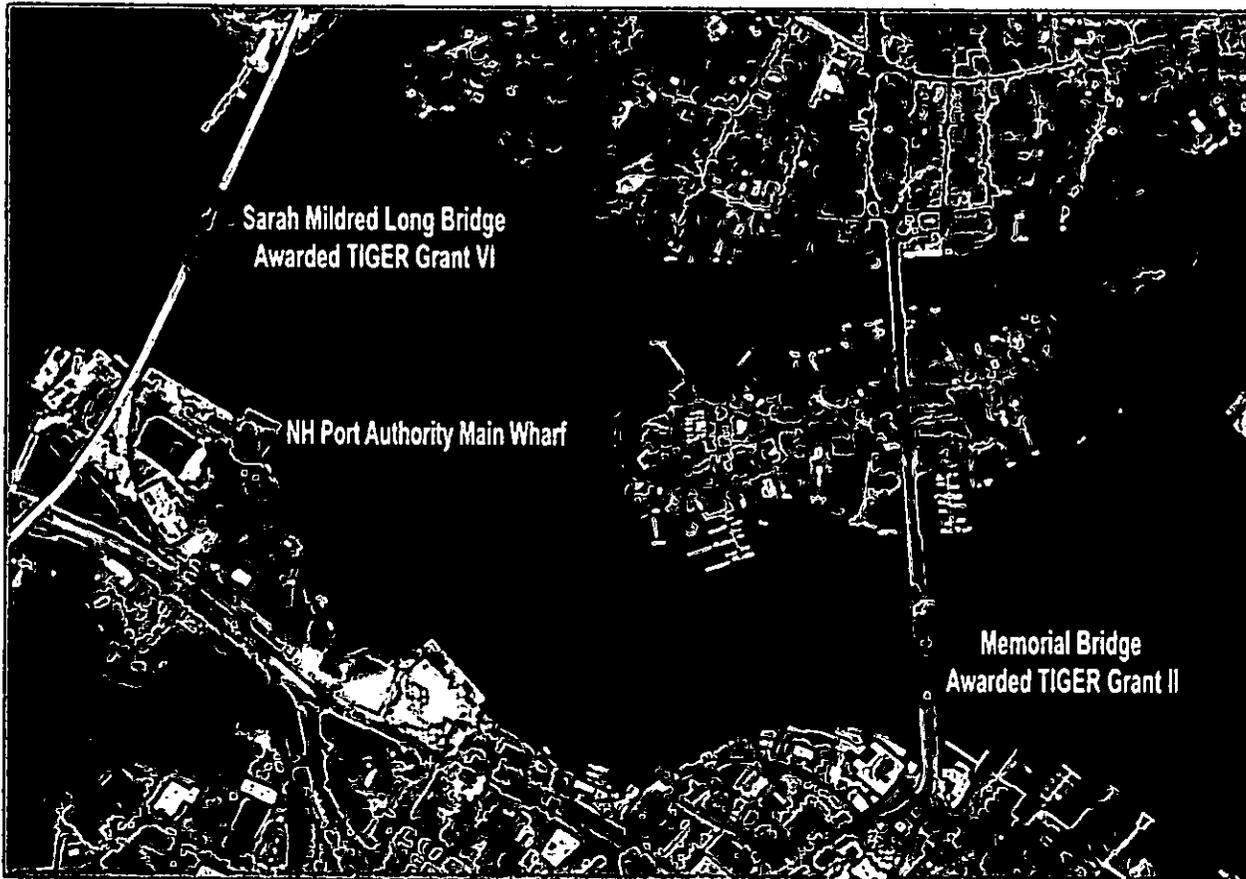
As a federal action, the BUILD grant commits the PDA to securing federal environmental approvals for the Market Street Marine Terminal Main Wharf Rehabilitation Project for compliance with Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and the National Environmental Policy Act (NEPA). In addition, anticipated permits for impacts to the Piscataqua River will consist of a Standard Dredge and Fill Permit from the NH Department of Environmental Services (DES) and authorization under the US Army Corps New Hampshire General Permits.

The DES and Corps permits were secured in 2009 and the PDA has initiated coordination and compliance efforts under NEPA and related regulations. Actions that do not individually or cumulatively have a significant effect on the environment are categorically excluded and thus do not require an environmental assessment or an environmental impact statement. In accordance with Maritime Administrative Order 600-1, "Procedures for Considering Environmental Impacts," the project would not normally be a major action significantly affecting the environment, as it is a reconstruction and modification of a structure that will not substantially change the character of the facility. The anticipated impacts, and the resources to be impacted, are similar to the adjacent Sarah Mildred Long Bridge project, which was recently approved as a Categorical Exclusion (CE). Further, FHWA has indicated that the main pier functional replacement project is expected to qualify as a CE. For these reasons, it is assumed that the proposed wharf rehabilitation project will also qualify for classification as a CE and an Environmental Assessment will not be required.

PDA has retained McFarland Johnson, the environmental consultants that recently assisted the New Hampshire Department of Transportation in obtaining NEPA clearance for the replacement of the Portsmouth – Kittery Memorial Bridge, directly downstream of the wharf, and Maine DOT with the Sarah Mildred Long Bridge and Albacore Park (across the street from the terminal). The NEPA, Section 106, and Section 7 reviews for the functional replacement project are well underway, including resource identification and agency consultation, and will be directly applicable to the wharf rehabilitation project. Therefore, approximately 50% of the environmental review for the rehabilitation project will be complete at the start of this project.

As highlighted in the following figure, Sarah Mildred Long Bridge and Memorial Bridge both received TIGER grants (VI and II, respectively). As such, we are confident the NEPA process will be minimal as previously addressed.

Figure 5: Area Overview



A proposed schedule for completion of the NEPA process is included in the overall project schedule, previously provided. As shown in the schedule, the NEPA process is expected to be completed by July 2019.

State and Local Approvals

The Market Street Marine Terminal Main Wharf rehabilitation was initially approved by the New Hampshire Legislature under Chapter 351:5 of the Laws of 1991 and has been continually approved by the Pease Development Authority Board of Directors with concurrence by the New Hampshire General Court's Capitol Budget Overview Committee. In June 2007, the Pease Development Authority obtained approval for design, engineering, permitting, construction documents, and hydrographic survey. In 2008, approval for submission of NH-DES Standard Dredge and Fill Application was obtained. The legislation will remain in effect until the completion of the project. This application will be submitted for state review in accordance with E.O. 12372.

Federal Transportation Requirements Affecting State and Local Planning

The Market Street Marine Terminal Main Wharf rehabilitation project is included in the Rockingham Metropolitan Planning Organization's Long Range Transportation Plan. A state freight plan is currently being developed by the State of New Hampshire. The Port Director, Geno Marconi, is a part of the technical advisory committee for that planning effort and the port project will be included in the freight plan.



4.9.4 Other Related Infrastructure Investments

There are several infrastructure investments that are being made or were recently made that are proximate to or on Market Street Marine Terminal property.

Sarah Mildred Long Bridge

The Sarah Mildred Long Bridge replacement project is a joint venture between the Maine and New Hampshire Departments of Transportation, with MaineDOT serving as the lead. This project is part of a “Three Bridge Agreement” between Maine and New Hampshire to address their jointly owned bridges spanning the Piscataqua River. The other two bridges are the “high level” bridge that carries I-95, and the Memorial Bridge that links the communities of Portsmouth and Kittery, and offers vehicle, bike and pedestrian travel. The Memorial Bridge has been rebuilt in recent years. The Sarah Mildred Long Bridge is located very near the Market Street Marine Terminal; in fact some Terminal property was required to accommodate the new alignment. The design process began in 2013 and construction started in January 2015. The new bridge is currently open.¹

Rail

Rail use at the Terminal has grown in the past few years. For example in 2014, shredded scrap was shipped from Maine to the port on rail cars where it was sent overseas. During the past year, construction materials related to the Sarah Mildred Long Bridge were shipped and stored at the port by rail. In addition, a recently demolished warehouse building has expanded port capacity, which provides the potential for increased activity.

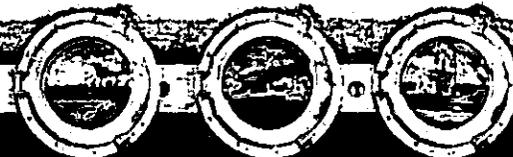
4.10 Project Risks and Mitigation Strategies

With BUILD funding, the Market Street Marine Terminal Main Wharf rehabilitation is fully funded. Risks associated with the funding are very minimal, as the State of New Hampshire has committed the \$5.0 million match and the remaining project funding will be provided through the BUILD program, assuming it is awarded to the project. Technically, the project is completely designed and ready for construction. The primary risks associated with this project are environmental and are described below.

4.10.1 Federal Endangered Species Act

The project requires a Biological Assessment to comply with the Federal Endangered Species Act, because of two federally listed fish species in the Piscataqua River, the Atlantic sturgeon and short-nosed sturgeon. Currently, the Sarah Mildred Long Bridge project is under construction near the proposed wharf rehabilitation project location. For the bridge work, in-water work has been restricted to between November 15 and March 15. Whether the wharf project will be subject to a similar restriction is an unknown until the project receives clearance from the National Marine Fisheries Service.

¹ Maine Department of Transportation





4.10.2 Proposed Mitigation Strategy

To address this potential risk, mitigation for the endangered fish species would be determined in consultation with the National Marine Fisheries Service. Most likely it would involve construction timing in water work to avoid predetermined windows.

5.0 Project Summary

Rehabilitation of the Main Wharf provides a variety of benefits that align with the BUILD merit criteria, estimated based on the United States Department of Transportation guidance on the preparation of BUILD applications. Where U.S. DOT has not provided valuation guidance or a reference to guidance, standard industry practice has been applied. (See Benefit-Cost Analysis Technical Appendix for complete summary and backup information).

In the benefit-cost analysis conducted for this application, benefits are estimated for current and future users on an incremental basis; that is, the change in welfare that consumers and, more generally, society derive from the Main Wharf rehabilitation, as compared to the current situation. As with most transportation projects, the benefits derived from the implementation of an infrastructure project are actually a reduction in the costs associated with transportation activities. The benefits of a project are the cost reductions that may result from the project's implementation. These cost reductions may come in the form of average time saved by users, reductions in operating expenses, decreased levels of pollution, or more generally, a combination of multiple effects. The benefit-cost analysis was conducted by HDR Decision Economics; the following principles guide the estimation of benefits and costs in the analysis:

- Only incremental benefits and costs are measured.
- Incremental benefits of the project include transportation cost savings for the users of the Main Wharf.
- Incremental costs of implementation of the project include initial and recurring costs. Initial costs refer to capital costs incurred for design and construction of the Main Wharf rehabilitation. Recurring costs include incremental operating costs and maintenance expenses. Only additions in costs to the current operations and planned investments are considered in the analysis.
- Benefits and costs are valued at their opportunity costs.
- The benefits stemming from the implementation of the Main Wharf rehabilitation are those above and beyond the benefits that could be obtained from the best transportation alternative.
- Annual costs and benefits are computed over a long-run planning horizon and summarized through a lifecycle cost analysis. The Main Wharf rehabilitation project is assumed to have a minimum useful life of 50 years. The analysis includes 20 years of operation.

The opportunity cost associated with the delayed consumption of benefits and the alternative uses of the capital for the implementation of the project is measured by the discount rate. All benefits and costs are discounted to reflect the opportunity costs of committing resources to the project. Calculated real discount rates are applied to all future costs and benefits as a representation of how the public sector evaluates investments. A 7 percent real discount rate is used in the analysis, with a sensitivity test at 3 percent.





Market Street Marine Terminal Main Wharf Rehabilitation

Build and No-Build Scenarios and Associated Costs

Two alternatives were compared in the benefit-cost analysis, a build and no-build scenario. The build scenario represents the Main Wharf rehabilitation as described in this application. The no-build scenario reflects no rehabilitation to the Main Wharf and complete closure of the Market Street Marine Terminal by the end of 2021, due to the continued degradation of the facility indicated by localized failures of individual structural components.

For the build scenario, it is estimated that the project will require \$12.5 million in capital expenditures. Maintenance after the rehabilitation is estimated to cost \$500,000 every ten years. Operating costs are currently \$1.1 million annually and anticipated to remain at this level after the wharf is improved.

The no-build scenario is predicated on complete closure of the Market Street Marine Terminal by the end of 2021, but prior to the port's closure, operating and maintenance costs would be incurred. After closure, no operating or maintenance expenditures are anticipated.

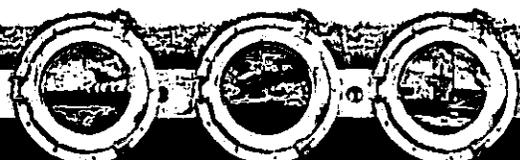
Variable costs associated with transportation projects are dependent on Vehicle Miles Traveled (VMT). If the port closes, shippers and receivers would seek alternative ports (some domestic, some international) and modes for transporting their goods. While the destinations of the cargo they transport would not change, the alternative ports would be farther away and require additional truck and rail services. This would mean more vehicle miles traveled than currently required to ship this same cargo. VMT reductions due to the Main Wharf rehabilitation drive many of the benefits described below.

Table 4 presents results for the primary scenario of the Main Wharf Rehabilitation. The BCA assumes increases in bulk and project cargo activity, but no new activity (e.g., container handling) to the facility. Using the discount rate recommended in the BUILD Grant Program guidance (7%), the rehabilitation will result in:

Total benefits of	\$96.2M	<i>in present value terms</i>
Total costs of	\$20.8M	<i>in present value terms</i>
Total net present value of	\$75.9M	<i>with a benefit-cost ratio (BCR) of 7.41</i>

Table 4: Benefit-Cost Analysis Results

Benefit-Cost Analysis – Main Wharf Rehabilitation (\$Millions)		
BENEFIT	7% discount rate	3% discount rate
Safety Benefits	\$6.9	\$11.9
State of Good		
Repair Benefits	\$2.5	\$4.1
Pavement Maintenance		
Residual Value	\$0.98	\$2.5
Economic		
Competitiveness	\$85.5	\$138.4
Shipper Cost Savings		
Environmental Protection	\$0.82	\$1.2
Quality of Life	qualitative	qualitative
Total Costs	\$20.8	\$27.66
Net Present Value (NPV)	\$75.9	\$129.8
Benefit-Cost Ratio (BCR)	7.41	10.95





The port supports businesses and promotes public benefits in the region. The ability of businesses to transport their freight via water means improved mobility due to reduced congestion on the road and lower levels of vehicle emissions. Pavement maintenance cost and shipper cost savings are supported by the proposed wharf rehabilitation. Finally, there are safety and security benefits associated with the project. Though difficult to quantify, a rehabilitated wharf enables the port to continue to provide emergency services support due to on-board fire, mechanical failures, medical emergencies, and oil spills, as well as port security services. Without the rehabilitation, the Port's ability to support the Coast Guard's mission of port security and safety, as well as the Federal Emergency Management Administration's (FEMA's) ability to respond to natural disasters utilizing MARAD ships, is reduced. **A \$1 investment in the project supports \$7.41 in public benefits.**

Summary Benefit-Cost Results for Alternative Scenario

Along with growth in project and bulk cargo discussed above, Northeastern Marine Services is ready to re-initiate container service at the port, but for the Main Wharf condition. Letters of intent to use the port for this activity are in hand. If this business chooses to utilize the Terminal once the Main Wharf is rehabilitated, approximately 12,000 containers are expected to be moved to and from the Port of New Hampshire. Of these, 6,000 containers currently using other northeastern ports will be moved to the Port of New Hampshire because of operational efficiencies. Another 6,000 new containers would be exported through the Terminal. While this business decision reflects a diversion of some containers from other ports, the distance between the Port of New Hampshire and the destinations in New England is shorter than it is from the other ports. As a result, benefits that are generated by a reduction in vehicle miles traveled would be expected.

Because the container service, in particular, seems viable based on discussions with Northeastern Marine Logistics, an alternative scenario of the benefit-cost analysis includes the container service. This scenario shows even greater benefits than the primary scenario. Using the discount rate recommended in the BUILD Grant program guidance (7%), rehabilitation of the Main Wharf at the Market Street Marine Terminal with the inclusion of container service in this alternative scenario will result in:

Total benefits of	\$126.5M	<i>in present value terms</i>
Total costs of	\$20.8M	<i>in present value terms</i>
Total net present value of	\$105.6M	<i>with a benefit-cost ratio of 9.91</i>

Assuming a discount rate of three percent yields a BCR of \$9.91 in this alternative, more robust, scenario. A complete discussion of the Benefit-Cost Analysis is provided in a Technical Appendix included with this application.

A complete benefit-cost analysis technical appendix that describes key assumptions and parameters used in this analysis is provided with this application.

