

Project Description

Truck to Barge

Multimodal Project Discretionary Grant Program | FY25 and FY26



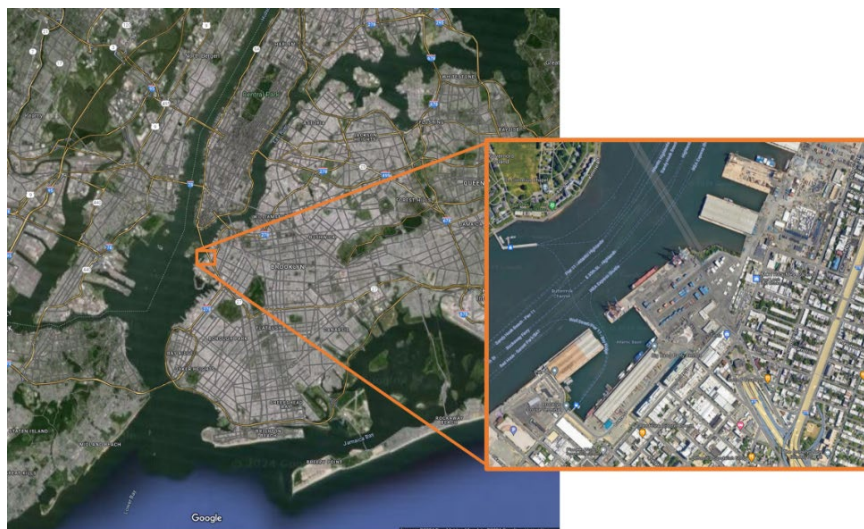
PROJECT DESCRIPTION

Introduction

The City of New York, through its Department of Small Business Services (NYCSBS) operating through the New York City Economic Development Corporation (NYCEDC), is requesting \$273 million dollars in funding from the U.S. Department of Transportation (DOT) to rebuild and remake the Brooklyn Marine Terminal (BMT) into the world's first model for a modern maritime facility optimized for international cargo handling as well as low-carbon intermodal last-mile freight movement. With funding from DOT, NYCEDC will implement this project – *From Truck to Barge: Modernizing Brooklyn Marine Terminal for Global and Micro-Freight* – by making a series of critical investments to modernize pier and transportation infrastructure at the 110-acre BMT, advancing the City's vision for a Harbor of the Future.

Brooklyn Marine Terminal includes Red Hook Container Terminal (RHCT), Brooklyn Cruise Terminal (BCT), and a US Customs Facility serving RHCT, and a NYC Ferry stop. The RHCT on the Brooklyn waterfront is the largest full-service container terminal east of the Hudson River, serving the region all the way to Boston. As a vital economic node, the RHCT is critical to bringing international shipments into the United States and connecting to the national freight networks. Locally, RHCT creates jobs, reduces greenhouse gas (GHG) emissions, provides shipping services for businesses in Brooklyn, Queens, and the Bronx, and is a vital part of the supply chain for the City's food and construction industries. For example, RHCT imports produce from the Caribbean and South America, and lumber and aggregate from the metropolitan region. The terminal operations eliminate over 30,000 truck trips from New York City streets each year (*Freight NYC*). Brooklyn Cruise Terminal is also a critical economic engine for the cruise and tourism industry, and the NYC Ferry stop serves a growing network of citywide ferry service to improve mobility and access to jobs.

This project will focus on preserving and expanding RHCT while improving traffic and circulation across and around the Brooklyn Marine Terminal for pedestrians, vehicles, and cyclists. BMT is ideally situated to serve as both a container terminal and a micro-distribution hub due to its proximity to piers west and east of the Hudson River, and to dense residential and commercial districts in Brooklyn, Queens, and Manhattan.



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This project includes the following three central components:

- **Component 1 – Pier 10 Rehabilitation:** This project would provide critical structural upgrades and preventative maintenance to Pier 10, home to all current RHCT operations. This investment would ensure the continued operation of this vital economic asset for international freight coming into the United States, while lowering future operating costs.
- **Component 2 – New Pier 9:** Piers 9a/b, previously a part of RHCT, have deteriorated and are out of operation. This project would create a new Pier 9 to replace the existing structures and expand capacity for international freight movement, as well as local freight movement through both an expanded network of Blue Highway sites to move intra-harbor freight and low to zero emissions micro-distribution.
- **Component 3 – Traffic & Circulation Improvements:** Lastly, with so many critical and growing uses at BMT, this project would seek to improve traffic and circulation for pedestrians, cyclists, and motorists. This would include enhancements to traffic ingress and egress, as well as improved sidewalks and connections within the campus, thereby reducing the traffic impacts of BMT on the surrounding Red Hook community and improving public access to and from the NYC Ferry stop.

In the next 10 years, with support from DOT, *From Truck to Barge* will generate 9 billion dollars of economic value, while creating 150 construction jobs and 244 permanent jobs, and retaining 170 permanent jobs at the current RHCT. This project will also advance a new model for sustainable freight delivery solutions that can be replicated across the county. The project benefits far outweigh the costs with a BCR of 3.7.

Absent federal investment, the future viability of piers for maritime uses at BMT and the significant public benefits they provide is in jeopardy, as is the opportunity to create a more efficient freight system while generating continued economic benefits. Further, without Pier 10, the international freight the pier currently handles will be displaced to other ports along the Eastern Seaboard. This freight would then need to be trucked back to the region, generating increased congestion, pollution, and noise along the regional highway network. Investing to sustain and develop RHCT is a more economically beneficial alternative that ensures the resiliency of the national freight network, while protecting the environment and public health.

Overall, the project's outcomes align with the MPDG grant criteria in the following ways.

- **Safety:** Reduce regional truck traffic, thereby improving safety and health, and enhance circulation and safety on the BMT campus for cyclists, pedestrians, and motorists.
- **State of Good Repair:** Generate economic growth and secure the reliability of freight in the New York-New Jersey Harbor, while lowering long-term maintenance costs.
- **Economic Impacts:** Incentivize mode shift to improve freight mobility and reliability, while relieving the #1 freight bottleneck in the U.S.
- **Climate Change:** Reduce GHG emissions by 1.2 million metric tons; Increase the climate resilience of RHCT and integrate nature-based features to enhance aquatic habitats.
- **Equity:** Support disadvantaged communities by improving public health and ferry access and creating new employment and workforce development opportunities.
- **Innovation:** Aim to achieve a 50% reduction in embodied carbon through circular economy practices and explore innovative project delivery mechanisms.

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Project Background

Throughout its history, the New York Harbor has played a vital role in creating economic opportunity for New Yorkers. NYC grew into a domestic and international center of trade and commerce partly due to the presence of its deep harbor and connection to the Erie Canal (*NYC Comprehensive Waterfront Plan, 2020*). BMT is a critical part of the City's important role as a maritime hub. BMT and the Red Hook Container Terminal are a part of the America's Marine Highway System, which makes it an important maritime port, and if lost, will have significant impacts for the City, as well as the national economy and resilience of the national freight supply chain. In March 2024, the Biden Administration released its [*National Zero-Emission Freight Corridor Strategy*](#) which specifically identifies Red Hook Container Terminal as a Zero-Emission Freight (ZEF) Hub. Phases 1 and 2 of the strategy aim to decarbonize the movement of freight and goods around the nation and prioritize areas that bear a disproportionate environmental and air quality burden from medium and heavy-duty vehicle emissions. While the strategy identified the NY-NJ Metro as a critical first mover, limited funding has been made available to make improvements to date.

Locally, Red Hook Container Terminal was identified as a priority by NYCEDC in the agency's 2018 [*FreightNYC: Goods for the Good of the City*](#) report. Further, the importance of investments in waterborne freight in the New York-New Jersey Harbor has been highlighted consistently as a priority throughout multiple plans and studies by the State, City and New York Metropolitan Transportation Council (NYMTC), including:

- [New York – New Jersey Metropolitan Statistical Area Priority Climate Action Plan](#), 2024
- [Clean Freight Corridors Study](#), NYMTC, 2022
- [Green Economy Action Plan](#), NYCEDC and NYC Office of the Mayor, 2024
- [PlaNYC: Getting Sustainability Done](#), NYC Office of the Mayor, 2023
- [New New York: Making New York Work for Everyone](#), Mayor Adams and Governor Hochul, 2022.
- [Delivering New York: A Smart Truck Management Plan for New York City](#), NYC DOT and NYCEDC, 2021

Blue Highways

NYCEDC is leading the development of a harbor-wide Blue Highway network to get trucks off the road, improve the environment, and address the explosion of e-commerce and last-mile facilities in environmental justice communities. Approximately 300,000 trucks cross the George Washington Bridge, the busiest and most congested Hudson River crossing between New Jersey ports and warehouses and the NYC market - and daily VMT in New York City is projected to grow by 8% to almost 50 million daily VMT by 2050 (Source: NYMTC *Moving Forward Plan*). To drive a reduction in trucks and emissions, with \$5.16 million from a DOT and MARAD grant, NYCEDC is managing the implementation of six harbor Blue Highway landings by early 2026 to dock vessels and transload cargo for last-mile deliveries by zero-emission cargo bikes, e-quads, and electric vans in Manhattan, Brooklyn, and the Bronx.

Yet, this is just the start. NYCEDC released a Blue Highway RFEI in November 2023, jointly with the NYC Department of Transportation, to gauge private-sector demand for short-sea shipping routes. BMT was identified as one of the most desirable locations for integrating micro-distribution with cross-harbor and intra-harbor barge service through this RFEI. Recently, a \$1.47 million MARAD grant was secured to modify a deck barge for piloting an intra-harbor

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service between Port Jersey and Red Hook for UPS package delivery. Potential future connections for intra-harbor services from BMT include Governors Island, Downtown Manhattan Heliport, Pier 92 in Manhattan, and Hunts Point in the Bronx to deliver cargo as varied as construction materials, produce containers, food and beverages, and e-commerce packages. Freight that is currently trucked across the harbor could instead be barged to and from Pier 9. Last-mile freight destined for local deliveries could be transloaded to micromobility (e.g., cargo bikes) and EV vans on site. This would help to mitigate vehicle miles traveled (VMT), congestion, and pollution, while improving conditions for delivery workers.

Site Ownership and Control

Brooklyn Maritime Terminal is currently managed under a tri-party agreement between the Port Authority of New York and New Jersey (PANYNJ), the State of New York, and City of New York. The City and NYCEDC believe in and are committed to the working waterfront as a foundational part of the city's future. Accordingly, the City is taking bold steps to ensure that BMT continues to support the operations of a container terminal, while also unlocking its potential as a micro-distribution hub for low-emission, second and last-mile deliveries. However, the upkeep and proactive development of BMT for modern maritime uses has stalled under the tri-party agreement. The recent decommissioning of two piers after failing a routine PANYNJ inspection raised the alarm that the status quo could result in further diminished freight capacity. To facilitate significant public investment into protecting and restoring the functionality of piers for maritime uses, NYCEDC, with support from the PANYNJ and State, will take over management control of BMT this spring through a 99-year lease. Transferring management control of BMT to NYCEDC will also align BMT's modernization as a container terminal and micro-distribution hub with NYCEDC's capabilities in waterfront asset management and capital project delivery, and in driving innovation in the use of City-owned maritime facilities and infrastructure for sustainable transportation and economic growth.

Red Hook Terminals (RHT) has managed RHCT since 2011. Before expiration of the current agreement in 2028, NYCEDC plans to go to market with the opportunity for a long-term lease or operating agreement. This would reflect the infrastructure enhancements funded by this grant and is intended to generate a significant private investment and capital commitment to the facility. NYCEDC has already invested over \$160 million in Piers 11 and 12. Long-term, the City intends to continue building on these investments by improving BMT with new neighborhood amenities like public spaces and mixed-use facilities, creating a campus that benefits the economy and the reliable movement of freight while serving adjacent communities. NYCEDC plans to begin a stakeholder engagement and master planning process this summer to guide BMT's future development in support of maritime industry and neighborhood growth.

Project Description

The proposed investments to the Brooklyn Marine Terminal will result in a modern international maritime freight operation accommodating net zero last mile delivery. The project will reduce air pollution, create jobs, support workforce development, and improve traffic circulation and resiliency, resulting in economic, mobility, and safety benefits for the project site, adjacent neighborhoods, and the region. As noted in the Introduction, the project includes the following three main components that are all based on a conceptual level of design, including material quantities, conditions assessments of piers and traffic studies:

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Component 1: Pier 10 Rehabilitation

Absent timely investment, continued degradation of the Pier 10 structure will result in a lapse out of state of good repair by 2045, based on the 2021 condition survey and an independent engineering assessment commissioned by NYCEDC in May 2024. This would result in a suspension of RHCT operations. The proposed scope includes critical structural work that will bring the pier to a state of good repair. The structural repairs and improvements across Pier 10's entire 924 feet x 80 ft area will extend its useful life for at least fifty more years, ensuring operational continuity and enabling the port to continue to serve rising regional freight demands. The Pier 10 concept is supported by the condition report noted above, as well as material quantities for structural upgrades and preventative maintenance using a combination of epoxy and concrete encasement, in line with the required structural capacity of the pier.

Component 2: New Pier 9

Critical investment is needed to rebuild Pier 9 and restore a working waterfront facility. The proposed scope includes reconfiguration of the two narrow or "finger piers" into a marginal pier with approximate dimensions of 650 feet x 80 feet. This new pier will accommodate international cargo ship operations (container and bulk) and cross-harbor barging of international containerized freight. This will extend the scope of RHCT operations beyond Pier 10, to again include Pier 9. The new pier will also accommodate Blue Highway freight. The Blue Highway is an emergent regional maritime network for transporting freight and other goods around New York Harbor, including last mile freight. The Blue Highway is compatible with Ro-Ro barges, containerized freight barges, and passenger ferries, depending upon the type of freight being transported. The new facility will also host transloading of arriving last-mile freight to micromobility or EV cargo vans for local deliveries. See Section 4 for additional information about this component's benefits for emissions reduction and technology innovation. The concept and estimate of Pier 9a/b demolition is based upon the condition and geometry of the structures. The concept for the new Pier 9 is based upon a conceptual layout to optimize freight logistics similar to Pier 10 as well as material quantities consistent with new pier construction in NYC.

Component 3: Traffic and Circulation Improvements

The locations of RHCT, BCT, the NYC Ferry stop create challenges for public and employee access. Traffic congestion is a major issue, as access to the BCT and the adjacent NYC Ferry terminal is limited to a single gate at Bowne Street. Additionally, poor pedestrian infrastructure renders transferring between BCT and the ferry inconvenient and potentially unsafe. During ship calls, traffic floods the BCT and surrounding area, complicating movement to and from all three facilities. With forecasted growth in regional cruise passenger traffic, and without a plan for improving circulation, congestion around BCT will continue to worsen and spread to adjacent neighborhoods. The project will alleviate the bottleneck created by the single BCT / NY Ferry vehicle access gate with the addition of a new vehicular ingress gate that will ease traffic and enable the Bowne Street gate to become a dedicated exit. Additional circulation enhancements will include new turning lanes and alignments as necessary to facilitate modified traffic flow. Upgrading access would create added capacity to accommodate future growth in cruise terminal and NYC Ferry traffic. These changes would help to improve traffic circulation throughout the neighborhood, particularly given that Van Brunt Street is the principal north-south artery through the Red Hook neighborhood. The traffic and circulation improvements are based upon traffic enhancement measures developed in response to a BCT Transportation Study and a more recent study currently underway by NYCEDC.