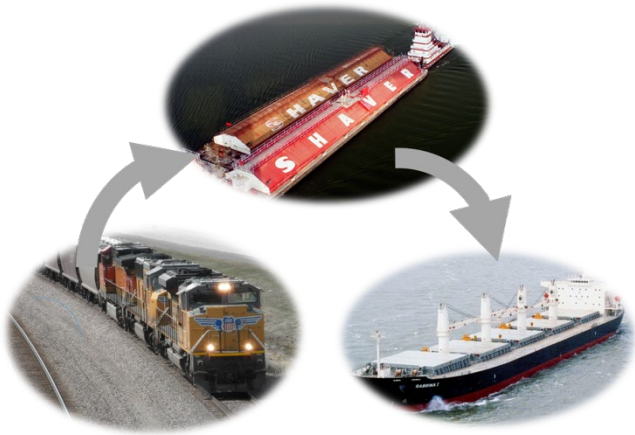
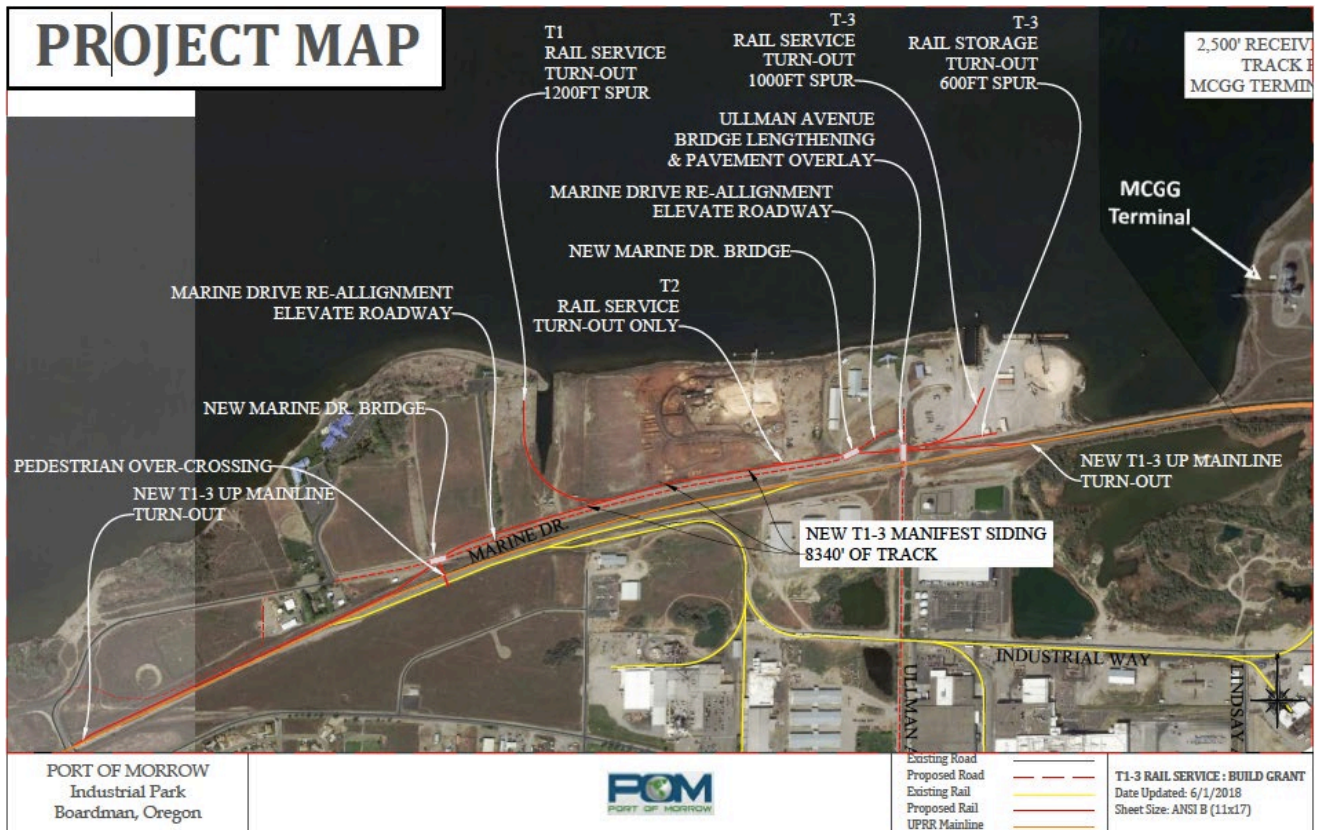


Columbia River Barge Terminal Rail Access Project



Project Title: Columbia River Barge Terminal Rail Access Project
 Location: Boardman, Morrow County, OR
 Urban/Rural: Rural
 Project Type: Maritime – New Capacity
 Applicant: Port of Morrow
 Applicant Type: Port Authority
 BUILD Request: \$19,414,875



1. Project Description

The Port of Morrow is requesting a BUILD grant of \$19,414,875 to establish rail-to-barge transloading capability within the Port’s barge terminals on the Columbia River in eastern Oregon. This project, the Columbia River Barge Terminal Rail Access Project (CRBTRA), will unleash untapped economic potential in a rural area over the next 30 years through an innovative solution that enables the direct transportation of goods between Columbia River barge ships and railcars. Project components include the construction of rail infrastructure access to four separate barge terminals within the Port’s industrial park, as well as road improvements and terminal site improvements to facilitate the new transportation activity. This project capitalizes on investments from the Port, the State of Oregon, and private partners, to create economic opportunities for new industries and existing tenants of the Port of Morrow that will mitigate Interstate and rail congestion throughout the region. The Port’s location in eastern Oregon falls well within the rural project requirements of the BUILD program. While no non-federal cost match is required as a rural project, this proposal will leverage \$6,550,000 in matching funds from the State of Oregon.

1.1 Project Components

The Port of Morrow’s Columbia Barge Terminal Rail Access Project consists of two major components:

Industrial Barge Terminal Rail Access – This proposed project will extend new rail lines from the adjacent Union Pacific mainline to three separate marine terminals within the Port of Morrow’s industrial park to create rail-to-barge access for shipments along the Columbia River. In addition to new rail infrastructure, the project includes additional infrastructure improvements to facilitate seamless intermodal operational capacity. These improvements include new vehicle bridges and connecting road improvements, upgrades to an existing bridge, and site improvements for Terminal 1 on the Columbia River.

As a result of the project, these three marine terminals will be equipped with the necessary infrastructure to facilitate rail-to-barge transloading. Based on discussions with private partners, the Port expects maximum utilization of these terminals’ new capability. Among these uses, the Port anticipates the shipment of 500,000 tons of solid waste from Portland through the Port’s terminals to nearby landfills in Arlington, OR, and at Finley Buttes in Boardman, OR. The Port has also had interest from private freight shipment partners such as Omega Morgan, who would like to use the proposed transloading infrastructure to ship wind turbine components and other high, wide, and heavy freight loads that can be more efficiently transported by barge. These uses will all relieve dependence on trucking and rail transport, significantly reducing costs and creating new opportunities for commercial activity inside and outside of the Port’s rural community.

Grain Terminal Access – The proposed project will also maximize recent investments into the Port’s grain terminal on the Columbia River, a vital asset for the local agricultural economy. A

Columbia River Barge Terminal Rail Access Project – 2018 BUILD Application Summary

recent \$8.2 million expansion of the grain terminal was funded through public and private investments from the Morrow County Grain Growers, the State of Oregon, and two private barge lines (Shaver and Tidewater). As a result of this expansion, the grain terminal will include five new 200,000-bushel storage bins (1 million bushels of new storage, the equivalent of about 25,000 metric tons of grain), a new bottom-dump rail unloading facility, and associated conveyor systems. The new storage bins will be able to hold the equivalent of two unit trainloads.

Under the project, a receiving rail track will be built to the new rail unloading facility, enabling the terminal to unload a 400,000-bushel unit train in a single shift. Just over 20,000 linear feet of total rail will be extended on which unit trains can be received, unloaded, and delivered back to the railroad, as well as a 2,500-foot spur track on which the MCGG terminal will receive and unload grain trains. It is expected that 508,130 tons of product will be diverted from rail; with 84% or 426,829 metric tons of the grain transferred to barges. The remainder (81,301 tons) will be trucked to nearby ranches to serve as feed for livestock.

1.2 Completion of the project will provide the following beneficial long-term outcomes:

- ***Economic Growth and Job Creation.*** New capabilities to ship and receive commodities through rail and barge shipments at the Port will attract industry investment, generating economic activity and job growth in a rural area.
- ***Lower Transportation Costs.*** Options for barge shipments and shorter trucking distances will reduce transportation costs for grain shipments, area feedlots and dairies, anticipated solid waste shipments, and future industry that will utilize unoccupied terminal sites at the Port.
- ***Reduced Rail Congestion.*** The project will reduce rail congestion by shifting cargo from rail-to-barge, thereby reducing rail traffic by at least 51 trains annually on the crowded Columbia River Gorge (Boardman-Portland) and I-5 (Portland to Puget Sound) rail corridors.
- ***Lower Maintenance Cost.*** Reduced truck miles will create an annual savings of an estimated \$1.7 million in lower maintenance costs for local roads and highways, helping maintain transportation infrastructure in a state of good repair.
- ***Fewer Accidents.*** By reducing truck miles on Interstate 84 by over 3.8 million annually, the project will also increase safety by lowering the number of road-related accidents and injuries.
- ***Public and Private Partners.*** The Columbia River Barge Terminal Rail Access Project is a unique public-private collaboration that involves barge operators, a Class 1 railroad, a cooperative of grain growers, the State of Oregon, and the Port of Morrow.
- ***Innovation.*** The rail-to-barge export system envisioned by the project is truly innovative. The grain terminal component will be the first transload system of its kind ever constructed in the United States, and new rail-to-barge transloading will be created at three additional terminals.
- ***Reduced Air Emissions and Fuel Consumption.*** The project will reduce fuel consumption and air emissions by shifting cargo from rail-to-barge and by reducing trucking distances.

1.3 Port of Morrow



The Port of Morrow was established in 1959 as a municipal district within the State of Oregon. Headquartered in Boardman, it is strategically located in Northeast Oregon at the confluence of primary trucking routes (I-84 and U.S. 395) and is served by Union Pacific Railroad, the Columbia River (barge transport), and a Port-owned airport near Boardman.

While located in a rural area, the Port of Morrow is Oregon’s second largest port (behind the Port of Portland), and is likely the largest single owner of vacant industrial land in Oregon. Industries served by the Port of Morrow include agriculture, lumber, food processing, livestock, transportation, freight distribution, information, advanced communications, energy, waste management, and recreation. Total employment at the Port constitutes 8,452 jobs. Port tenants include some of the largest food processing operations in North America, including ConAgra Foods, Calbee North America, and Oregon Potato Company. The Port presently employs 115 full-time and 7 seasonal employees.

1.4 Project Cost and Funding

The total cost of the project is \$25,964,875. The Port of Morrow is seeking \$19,414,875 in BUILD grant funding to match \$6,550,000 in non-federal funds from the State of Oregon. The BUILD grant will provide the final piece of financing needed to construct the project, which already has a funding commitment from the State of Oregon. BUILD funding will be used to complete the financing of rail and road enhancements needed to establish rail-to-barge capacity at the Port’s barge terminals.

1.5 Project Schedule

The Port anticipates project design and permitting to be completed by Quarter 2 of 2020. Procurement and construction will be completed by Q4 of 2023. The Port plans to begin operations on grant-funded improvements no later than the end of 2023. The Port is confident in its ability to promptly deliver this project and quickly utilize federally obligated funds well in advance of September 2020. No property acquisitions or transactions are required by the project. The right-of-way on which the rail expansion will be constructed is wholly owned by the Port of Morrow.

2 Benefit Cost Analysis Summary

The results of the BCA analysis indicate a positive B-C ratio that is over 6:1 at 7% discount rate. The BCA methodology used in this analysis is consistent with the U.S. DOT’s *Benefit-Cost Analysis Guidance for Discretionary Grant Programs*, June 2018 guidelines. The detailed cost and benefit assumptions are provided in this BCA submitted with this application.

BCA Criteria	Benefit Category	Description	Monetized
State of Good Repair	Maintenance Costs	Project will reduce truck and rail miles of travel and related road/rail facility O&M costs.	Yes
Economic Competitiveness	Value of Travel Time Savings	Transportation costs reduced as truck and rail miles are decreased.	Yes
	Freight Mobility and Reliability: National	Reduced long-distance truck and rail operations results in fuel cost savings, energy independence and lower truck/rail vehicle maintenance costs.	Yes
	Freight Mobility and Reliability: Regional	Reduced long-distance truck operations to regional solid waste sites will result in fuel cost savings and lower truck maintenance costs.	Yes
	Freight Mobility and Reliability: Local	Increased terminal usage at Port will increase operating revenues at Ports; and result in valuable new asset.	Yes
Environmental Sustainability	Emission Cost: Trucking	Project will reduce truck vehicle emissions	Yes
	Emission Cost: Rail to Barge Modal Shift	Project will reduce rail vehicle emissions (net of barge emissions)	Yes
Safety	Accident Cost	Project will reduce truck miles of travel and result in fewer accidents and related costs.	Yes
Innovation	Use of Innovative Technology and Operations	Project will optimize underutilized river transportation corridor for freight movement using most efficient freight carriers (barges), and enhance viability of US exports.	No