

PORT OF TOLEDO STRATEGIC BUSINESS PLAN UPDATE



11/23/2021

FINAL Strategic Business Plan Update

BST Associates
Market Research & Strategic Planning

TABLE OF CONTENTS

TABLE OF CONTENTS.....	II
CHAPTER 1. EXECUTIVE SUMMARY	2
2018 Plan.....	2
2021 Plan.....	2
CHAPTER 2. SHIPYARD.....	4
Evaluation of Shipyard Markets	4
Vessel Types.....	4
Labor Hours.....	4
Market Region	5
Competition	6
Coastal Ports.....	6
Puget Sound competitors	6
Alaska.....	7
Yard Selection Criteria	8
Market Opportunities.....	10
Commercial Fishing Vessels	10
Recreational Vessels.....	13
Government Vessels.....	13
Market opportunities.....	14
Financial Analysis	15
Shipyard Operations.....	15
Shipyard Financial Pro Forma	17
Economic Impacts.....	20
Importance of the Commercial Fishing Fleet.....	20
Economic Impact of Port of Toledo Shipyard	21
Recommendations for Shipyard	22
CHAPTER 3. INDUSTRIAL PARK.....	23
Welding Lab.....	24
Development Project.....	25
Buildings.....	25
Sewer Extension.....	26
Recommendations for Industrial Park.....	27
CHAPTER 4. YAQUINA RIVER NAVIGATION CHANNEL	29
Yaquina River Channel.....	29
Depot Slough Channel.....	30
Dredge Disposal Sites	32
Tokyo Slough.....	32
Siletz Tribe Mill Site.....	32
City TIP Property	32
Georgia Pacific Property	32
Recommendations for Channel Navigation Improvements.....	33

CHAPTER 5. MOORAGE FACILITIES..... 34
 Description of Facilities 34
 Waterfront Park..... 34
 Boathouses..... 34
 Proposed Access Project 35
 Marketing 37
 Recommendations for Transient Moorage..... 37

APPENDIX A DETAILED COST ESTIMATES..... 38

APPENDIX B INDUSTRIAL PARK BACKGROUND 41
 Oregon Welding Job Projections 41
 Welding MARAD Grant Description 43
 Welding programs begin..... 45

APPENDIX C NAVIGATION CHANNEL BACKGROUND 48
 Navigation Channel Maps..... 49
 WRDA to increase funding for Oregon ports 52
 Oregon Public Ports Dredging Partnership..... 53
 Dredging Approved for Depot Slough..... 54

APPENDIX D TRANSIENT MOORAGE BACKGROUND 55
 Downtown Waterfront 55
 Boating Activity..... 55
 Boating Facility Grant No. 1407, Depot Slough Transient Tie-up Dock..... 56
 Item C Port of Toledo..... 56

APPENDIX E MARKETING..... 59
 Example: Lower Columbia River Water Trail 59

Figures

Figure 1-1: Port of Toledo Property Map 3
 Figure 2-1: Share of Projects by Vessel Type 4
 Figure 2-2: Share of Labor Hours by Vessel Type 5
 Figure 2-3: Share of Market by # of Projects and Labor hours (FY2017-20)..... 5
 Figure 2-4: Oregon Commercial Fishing Landings and Revenue 10
 Figure 2-5: Size of Oregon Commercial Fleet and Revenue per Vessel..... 11
 Figure 2-6: PNW Seafood Export Trends 11
 Figure 2-7: Ex-Vessel Revenue at U.S. West Coast ports (Feb-Dec 2020 change in real \$)..... 12
 Figure 2-8: Trends in Vessel Lifts 15
 Figure 2-9: Average Yard Revenue Excluding Net Retail Sales (2017-2020) 17
 Figure 2-10: port of Toledo Shipyard Gross Revenue..... 18
 Figure 3-1: Port of Toledo Industrial Park 23
 Figure 3-2: Proposed Welding School Building 25
 Figure 3-3: Industrial Park Improvements Overhead View 26
 Figure 3-4: Industrial Park Improvements Perspective View 27

Figure 4-1: Upper Yaquina Bay and River Project Area 29

Figure 4-2: Depot Slough prior to Dredging (2010)..... 31

Figure 4-3: Depot Slough..... 31

Figure 4-4: Potential Dredged Material Disposal Sites..... 33

Figure 5-1: Port of Toledo Waterfront Park..... 35

Figure 5-2: WREC Boathouse 35

Figure 5-3: Proposed Marina Gangway & Boathouse Location..... 35

Figure C-1: Weiser Point to Johnson Slough..... 50

Figure C-2: Fleisher Slough to Nutes Slough..... 50

Figure C-3: Amundson Slough to Toledo 51

Figure C-4: Toledo to Mi. 14.5 Depot Slough..... 51

Figure E-1: Lower Columbia River Water Trail 59

Tables

Table 2-1: Vessel Lift Forecast by Fiscal Year..... 16

Table 2-2: Port of Toledo Shipyard Pro Forma 19

Table 2-3: Regional Contributions of Onshore Commercial Fisheries by Port Group (2017)..... 20

Table 2-4: Economic Impacts of Port of Toledo Shipyard in 2026 (in 2021 \$1,000s)..... 21

Table 2-5: Port of Toledo Vendors 21

Table 3-1: IP Expansion Cost Estimate 25

Table 3-2: Sewer Extension Cost Estimate 26

Table 5-1: ADA Gangway Cost Estimate 36

Table A-1: Industrial Park Development Cost Estimate 39

Table A-2: Marina ADA Gangway Cost Estimate..... 40

Table B-1: Occupational Forecast for Metal Workers in Oregon (2019 to 2029)..... 42

Table C-1: Navigation Channel Depths..... 48

Table C-2: Oregon Public Ports Dredging Partnership Members..... 53

Table D-1: Boating Activity in Yaquina River and Yaquina Bay..... 55

Table D-2: Port of Toledo Depot Slough Tie up Dock Expenditures (FG1407) 56

Port of Toledo Strategic Business Plan Update

STRATEGIC BUSINESS PLAN

CHAPTER 1. EXECUTIVE SUMMARY

The Port of Toledo operates and maintains a combination of shipyard, marine industrial, marina, and public access facilities in Lincoln County, Oregon. The Port of Toledo completed its latest Strategic Business plan in September 2018, which built on the foundation and vision embodied in the Port's 2013 Strategic Plan.

2018 Plan

The 2018 plan recognized three major investment strategies:

- **Shipyard** - construction of the Environmental Services building, among other improvements,
- **Diversification** - promotion of additional investment in light industrial infrastructure designed to help local industries grow and attract new businesses, and
- **Training** - continue to expand local business and job opportunities through the support of local training programs that encourage the development of this labor pool.

2021 Plan

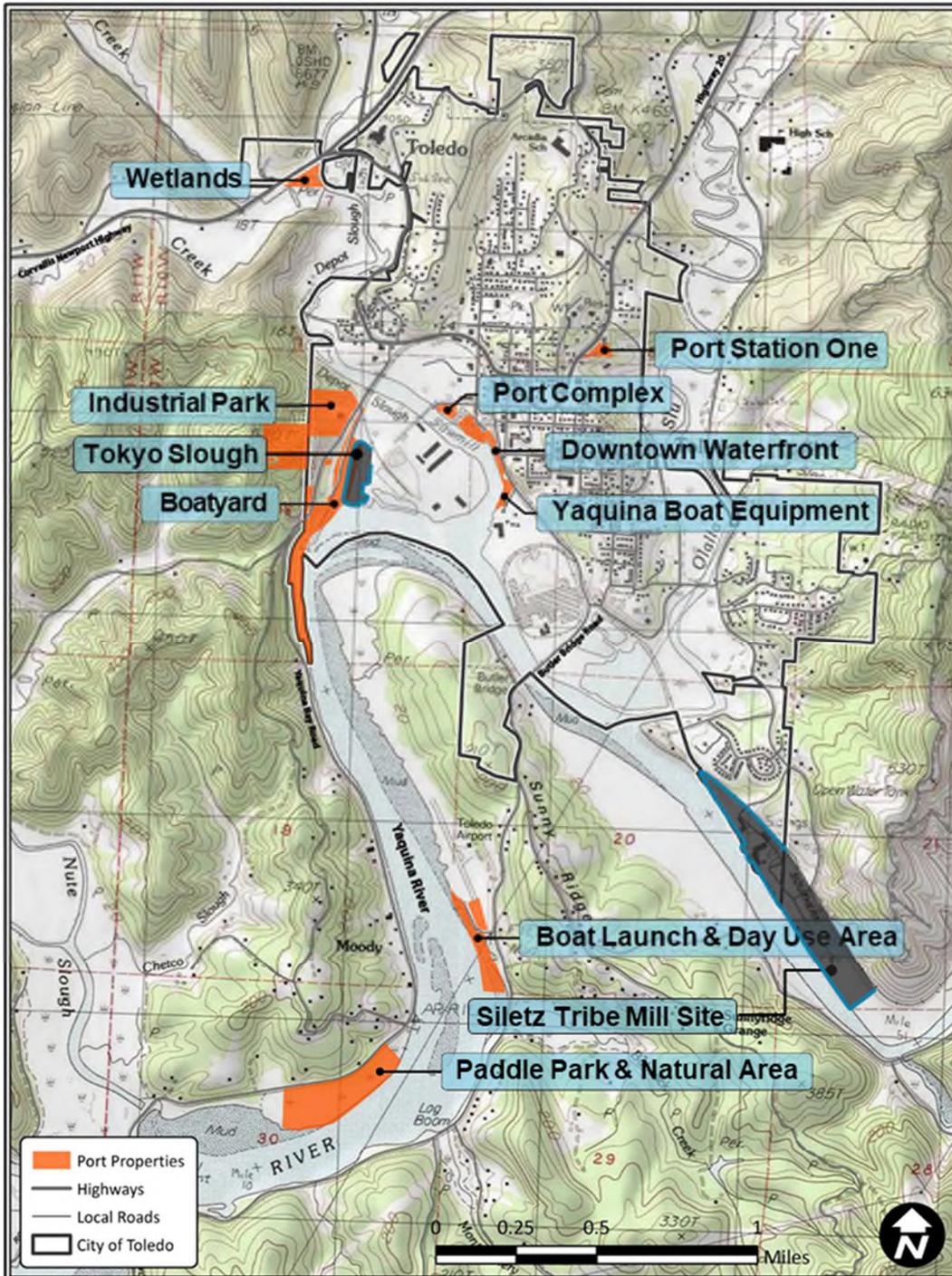
The 2021 strategic business plan update seeks to enhance specific Port facilities and programs, and does not address strategies for the full Port district. The four areas of focus of this update include:

- **Shipyard** - updating the Shipyard's business plan, operational policies, and fee structure, in order to ensure successful future operation of the shipyard. This update also includes

improved marketing tools (market assessment and potential contacts), and plans for Vocational Fabrication Building.

- **Industrial Park Expansion** - Industrial Park is at capacity and needs to expand in order to accommodate growth of the Welding Lab. There is an opportunity to work with our current partners, Oregon Coast Community College (OCCC) and Lincoln County School District, to expand the maritime vocational program through construction of a dedicated building. Preliminary engineering for the additional buildings at the Industrial Park has been completed as a part of this update.
- **ADA Gangway** – Replace existing gangway to the Marina's docks and relocate WREC Boathouse to become compliant with Transient Dock grant funding.
- **Dredging** - maintaining dredged channels to Port facilities, including the Yaquina River and Toledo Slough, are also a part of this plan. There is a need to identify upland sites for disposing of dredge spoils. One potential disposal site is Tokyo Slough (adjacent to the Shipyard), where filling of the slough could also create land for expansion of the Shipyard.

FIGURE 1-1: PORT OF TOLEDO PROPERTY MAP



CHAPTER 2. SHIPYARD

The Port of Toledo Shipyard services a wide variety of vessel types, including commercial fishing boats, recreational boats, government vessels, and other boats. This section evaluates the market for the shipyard, a review of competitive facilities and projections of shipyard finances and economic impact for the next five years.

Evaluation of Shipyard Markets

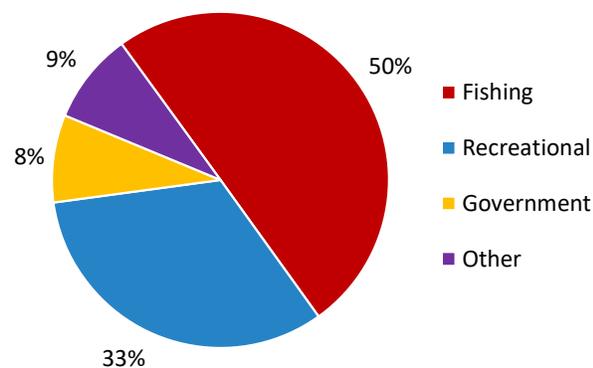
Vessel Types

The commercial fishing fleet is the critical market for the shipyard, particularly the vessels based at Newport and other nearby harbors.

For the four-year period of FY2017 through FY2020, fishing vessels accounted for 50% of all projects in the shipyard.¹ During the same

period, recreational vessels accounted for 33% of projects, government vessels accounted for 8%, and other types of vessels accounted for 9% of all projects. (See Figure 2-1).

FIGURE 2-1: SHARE OF PROJECTS BY VESSEL TYPE



Source: Port of Toledo

Labor Hours

The value of the commercial fleet is even greater when focusing on the number of labor hours per market component.

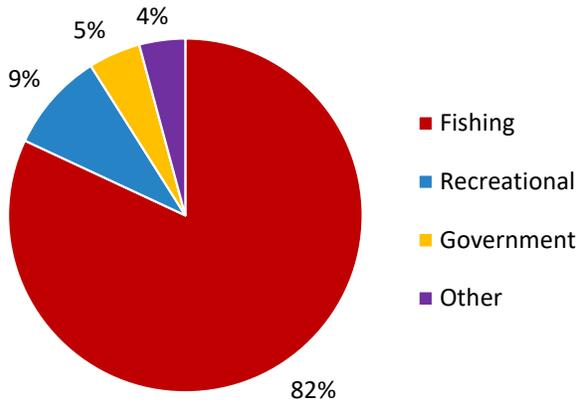
For the four-year period of FY2017 through FY2020, fishing vessels accounted for 82% of

labor hours in the shipyard; recreational vessels accounted for 9% of hours, government vessels accounted for 5%, and other types of vessels accounted for 4% of all labor hours. (See Figure 2-2)

¹ "FY" refers to "Fiscal Year". The Port of Toledo fiscal year runs from July 1 through June 30. The

label refers to the ending year (e.g., FY2017 runs from July 1, 2016 through June 30, 2017).

FIGURE 2-2: SHARE OF LABOR HOURS BY VESSEL TYPE



Source: Port of Toledo

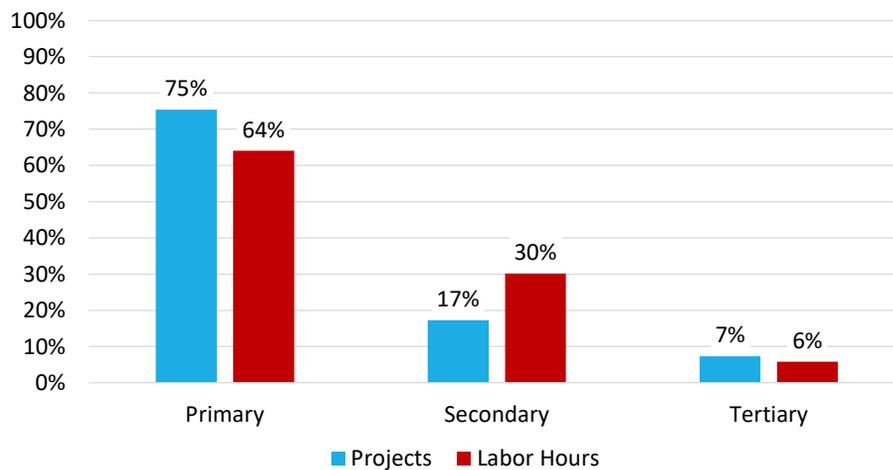
Market Region

Port of Toledo billing data was analyzed to determine the geographic region served by the shipyard. For this analysis, the billing address of the owner or vessel representative was used as the location where the boat is based.

As shown in Figure 2-3, over the last four fiscal years, the share of Shipyard work by market area included:

- The primary market (Lincoln, Lane, Benton, Linn, Marion, Polk and Yamhill Counties) accounted for 74% of projects and 64% of labor hours,
- The secondary market (Humboldt County, CA to Clallam County, WA, and the other Oregon counties excluding the primary market) accounted for 17% of projects and 30% of labor hours,
- The tertiary market (consisting of all other addresses including California south of Humboldt Bay, Washington including Puget Sound and Eastern Washington, and all out of state residents) accounted for 7% of projects and 6% of labor hours.

FIGURE 2-3: SHARE OF MARKET BY # OF PROJECTS AND LABOR HOURS (FY2017-20)



Source: Port of Toledo

Competition

This section reviews boatyards and shipyards that compete for business with the Port of Toledo.

The competing shipyard are grouped into several geographical regions, including:

- Coastal ports
- Puget Sound, and
- Alaska.

While all of these yards perform work on fishing vessels, for several of these yards that is not their primary focus. These yards tend to be used by fishing vessels only when:

- rapid turnaround is required,
- costs are lower (additional travel days and fuel costs are required to access an alternate yard), or
- other options are not available.

Coastal Ports

The primary coastal competitors are:

Reedsport, OR - Fred Wahl (two facilities)

- Full-service shipyard
- Original site (marine railway with 900-ton capacity, Travelift 85-ton mobile hoist).
- Bolon Island site (Ascom 685-ton mobile hoist, large fabrication building similar to that in Toledo).
- Fred Wahl is a formidable competitor
 - Prices are considered reasonable by the fleet
 - Quality of work is very good
 - Room to stage approximately 22 vessels at once
 - Labor and housing availability is a concern; Fred Wahl is considering building housing on site

- 200-ton marine ways
- Solid reputation with vessel owners and management companies and a loyal following.

Crescent City, CA - Fashion Blacksmith

- Full-service shipyard
- 230-ton Syncrolift with 100' by 34' platform.

Port Angeles, WA - Platypus Marine

- Full-service shipyard
- Travelift 300-ton mobile hoist, Travelift 500-ton mobile hoist.
- Serves recreational, commercial fishing, and government fleets.
- Port of Port Angeles is developing a 19-acre marine trades park adjacent to Platypus.

Charleston, OR – Giddings Boat Works

- Full-service shipyard

Puget Sound competitors

Puget Sound has several shipyards that serve recreation, commercial fishing (coastal and Alaska fleets), other commercial boats and government boats.

Seattle, WA - Fishing Vessel Owners Marine Ways

- 300-ton marine rail and 500-ton marine rail

Seattle, WA - Foss Maritime

- 2,000-ton drydocks

Seattle, WA - Lake Union Drydock

- 6,000-ton drydock, 1,200-ton drydock

Seattle, WA - Northlake Shipyard

- 1000-ton drydock, 1,900-ton drydock

- Northlake Shipyard is a completely open yard

Seattle, WA - Pacific Fishermen

- Four marine ways, from 150-ton to 600-ton

Seattle, WA - Stabbert Yacht & Ship LLC

- 1,100-ton drydock

Everett, WA - Hansen Boat Company

- (860-ton drydock);

Everett, WA - Everett Shipyard

- Semi-submersible barge *Faithful Servant* (20,000 tons)

Anacortes, WA - Dakota Creek Shipyard

- 9,000-ton drydock, 5,000-ton Synchrolift
- Full-service yard, excellent work on all vessels

Blaine, WA - On Board Services

- 250-ton marine rail

Port Townsend, WA - Port of Port Townsend Shipyard

- 70-ton, 75-ton, and 330-ton Travelift
- Serves recreational, commercial fishing, and government fleets

Alaska

In Alaska, several yards serve the Alaskan fishing fleet as well as other commercial, recreational, and government boats.

The market for yard in Alaska is primarily boats based in Alaska, but there is an effort to try to attract boats that are based in the Lower 48 and fish in Alaska.

Weather, and seasonal nature of the work, is a constraint on growth for yards in Alaska. Another is the relatively low cost of fuel, which reduces the transportation cost to take a vessel to Lower 48 yards.

Key competitors are presented below, but there are also other small yards in Alaska.

Kodiak, AK – Kodiak Shipyard

- 660-ton Travelift
- Highmark Marine now operates the yard

Seward - Seward Marine Industrial Center

- 330-ton Travelift (run by the City of Seward,
- 5,000-ton Synchrolift (run by JAG Industrial)
- upland storage and repair areas

Wrangell, AK - Wrangell Marine Service Center

- 150-ton Travelift, 300-ton Ascom lift

Yard Selection Criteria

Vessel owners and operators choose a shipyard based on a number of interrelated factors.

Quality and size of facilities:

- The Environmental Building at the Port of Toledo will enable more work to be scheduled during the wet months when much of fleet is in between active seasons (the preferred time for repair).
- The Environmental Building will also improve the quality of the work product by eliminating the vagaries of the weather and reducing the number of days in the yard. For these reasons, the new building adds flexibility and is attractive to boat owners.
- The Port's facilities are brand new and additional improvements are being considered in the Capital Improvement Plan to continue to improve the Shipyard.

Shipyard availability:

- Minimizing downtime is critical for fishing boats, but is important to other market sectors, as well.
- The Port has increased the types of work and size of jobs that can be performed, by upgrading facilities and improving workforce skills and productivity.

Choice of contractors:

- Many customers prefer an "open" shipyard, where work may be performed by the vessel owner and crew or by their choice of contractors to do some of the work, versus a yard that requires that all work be handled by shipyard employees.
- The Port works with its customers to provide the best labor force for the project. There are 39 local marine trade businesses in the Toledo area, and the Port has excellent relationships with these firms. The Port performs



environmentally sensitive work per Best Management Practices

Reputation of the shipyard:

- The Port of Toledo Shipyard has gained a good reputation with vessel owners in all market sectors.
- Recent high-profile projects, such as sponson and reconstruction projects (e.g., F/V Pegasus, F/V Predator) were useful for enhancing the yard's reputation.

Reputation of the labor force:

- Both the Port labor force and local contractors have developed a long-term reputation for excellent work
- The labor force in the Toledo area has gained a good reputation with vessel owners in all market sectors.

Convenience:

- The option for vessels to load/unload supplies and to store fishing gear and supplies at the nearby Port of Newport



increases the convenience of using the Port of Toledo Shipyard.

- Location of the Shipyard relative to the vessel owner's home port or primary fishing area or cruising area is often an important consideration.
 - As noted above, the market for the Port of Toledo Shipyard is mainly in Oregon with some participation by Washington and Alaskan customers. These markets can be broadened. Larger jobs can support

selecting a Shipyard that is further from the homeport or fishing grounds as long as the cost and value of the job exceeds the additional expenses (additional fuel costs etc.).

- Project budget versus actual costs, managing required cost increases and schedule changes.
 - The Port has a good reputation for managing budgets.

Market Opportunities

Market opportunities for the Port of Toledo Shipyard are evaluated in this section.

Commercial Fishing Vessels

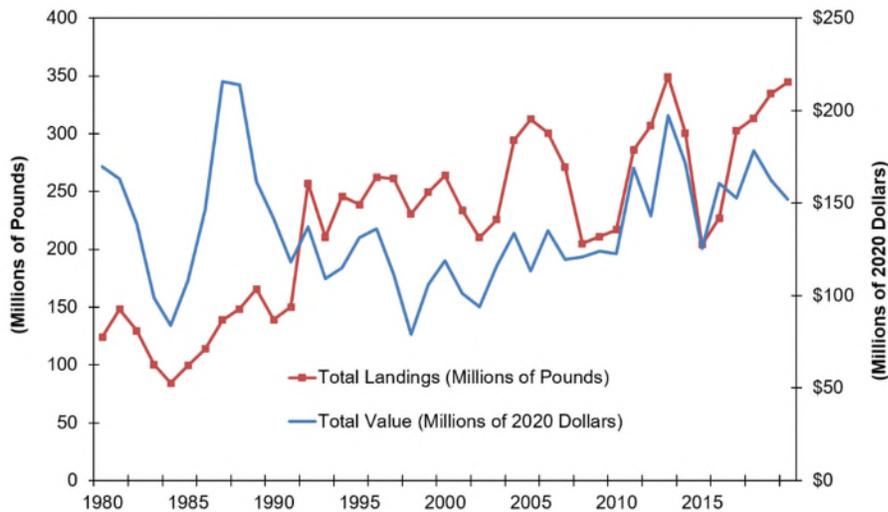
Oregon commercial fisheries are generally well managed. Since 1990 the volume and value of commercial landings have generally increased, despite fluctuations from year to year. (See Figure 2-4).

This growth in landings occurred while the number of vessels declined. As shown in Figure

2-5, the number of fishing vessels declined from 1985 to 1995 as a result of rationalization of the fleet (individual quotas et al) but has become more stable since 2000.

The average revenue per boat has fluctuated annually but has generally increased since 1985.²

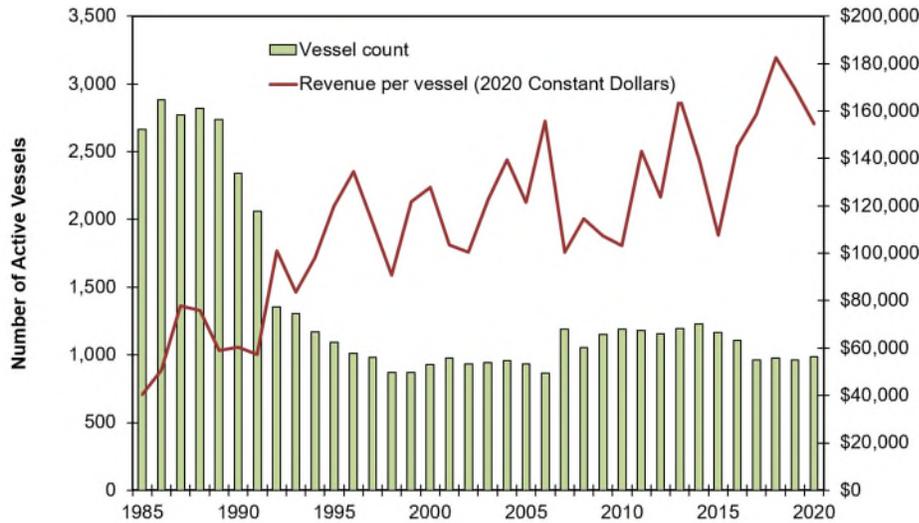
FIGURE 2-4: OREGON COMMERCIAL FISHING LANDINGS AND REVENUE



Source: Oregon Employment Department and PacFin and Oregon Department of Fish & Wildlife

² Oregon's Commercial Fishing in 2019, Oregon Employment Department, March 5, 2020

FIGURE 2-5: SIZE OF OREGON COMMERCIAL FLEET AND REVENUE PER VESSEL



Source: Oregon Employment Department and PacFin and Oregon Department of Fish & Wildlife

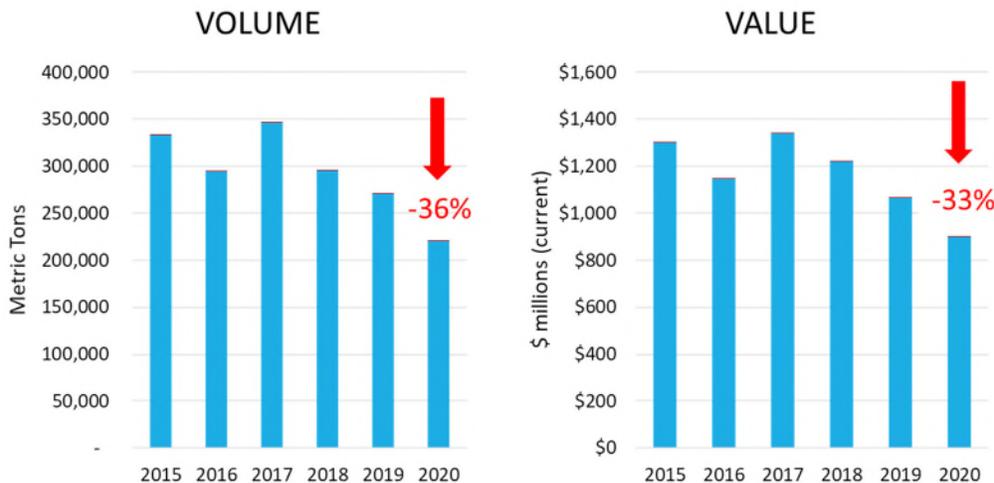
In the past several years, two external issues have negatively impacted the commercial fishing industry in Oregon: tariff disputes and the Covid 19 pandemic.

Beginning in 2018, the United States imposed a series of higher import duties on a variety of products from many trading partners. Many of these countries responded by raising tariffs on products from the U.S., including Canada, Mexico, China, the European Union (EU), India, Russia, and Turkey.

Among the products impacted were seafood products from the U.S; seafood product exports declined each year from 2017 to 2020. China and other countries reduced imports from the U.S., and in some cases began to compete with the U.S. for exports.

Exports decreased 36% (by volume) from 2017 to 2020, and China accounted for 46% of this loss. Export value decreased 33% from 2017 to 2020 (unadjusted for inflation), and China accounted for 45% of the loss.

FIGURE 2-6: PNW SEAFOOD EXPORT TRENDS



Source: WISERTrade

In 2020, the Covid-19 seriously impacted fishermen and the seafood industry.

As restaurants and schools closed, supply chains were radically altered. Prior to the pandemic, restaurants accounted for about two thirds of total sales.³ When the pandemic hit, sales seafood shifted to retail stores.

Seafood sales at retail stores grew substantially between 2019 and 2020. Revenue was up by 35.3% during the year, and volume grew by 30.4%⁴

The shift to retail did not make up for the drop in food service sales, however, and prices dropped as a result. This, in turn, caused lower revenues for fishing vessel operators.

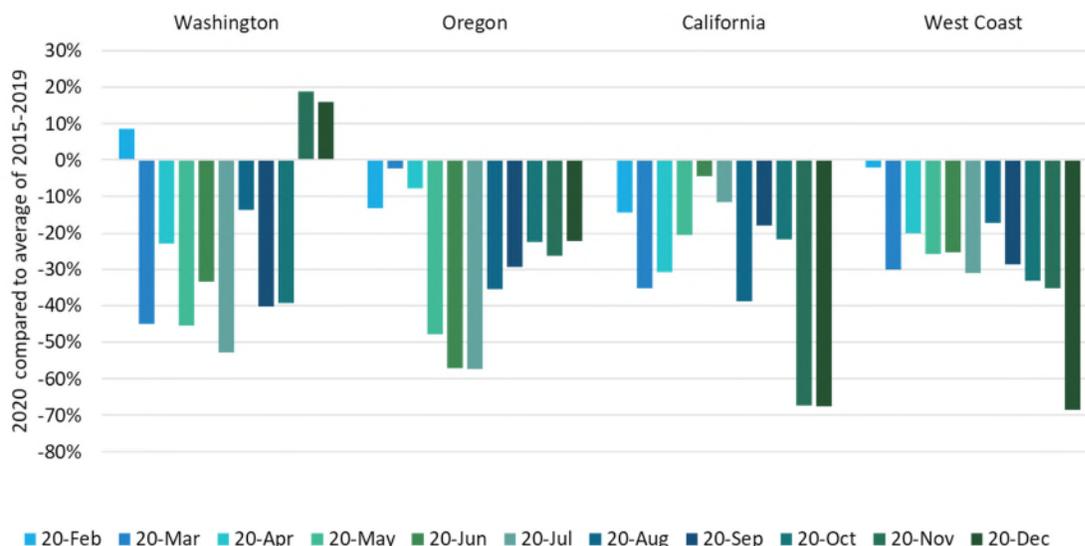
Ex-vessel sales at Oregon ports decreased by approximately 32% from February 2020 to

December 2020, when compared with the prior five-year average. This decline continued through at least the first two months of 2021.⁵

These impacts were partially offset by U.S. government relief programs:

- The USDA Seafood Trade Relief Program provided \$530 Million to fishermen and producers impacted by retaliatory tariffs.
- The Coronavirus Aid Relief and Economic Security (CARES) Act identified \$300 million for fisheries and aquaculture. The state of Oregon was awarded nearly \$16 million.
- The American Rescue Plan (\$1.9 trillion) includes \$4 billion for domestic food production and the supply chain.

FIGURE 2-7: EX-VESSEL REVENUE AT U.S. WEST COAST PORTS (FEB-DEC 2020 CHANGE IN REAL \$)



³ COVID-19 and the U.S. Seafood Sector, Congressional Research Service, September 21, 2020
⁴ Seafood Sales Surge During the Pandemic in Winsight Grocery Business, Feb. 12, 2021

⁵ Sourced from the Landings Tracker database maintained by NOAA Fisheries NWFSC

The difficulties of the past few years have led to vessels operators delaying vessel repairs. This delay is reflected in the decline in vessels hauled at the Port of Toledo. As trade issues are resolved and the pandemic recedes, the boat repair industry is expected to grow.

The Port has a good opportunity to increase the Shipyard's market share for commercial fishing vessels. The Port should prioritize targeting the primary market, which consists of vessels homeported in Lincoln and Lane counties, as well as boats homeported along the coast and in Alaska.

Recreational Vessels

The recreational boating market was very strong in 2020, and much of the growth in the market was attributed to the Covid 19 pandemic.

Surveys have shown that boating was viewed as an acceptable way to enjoy outdoor recreation in socially-distanced way.

In addition, the pandemic provided many people with more free time than they previously had, due to flexible schedules, reduced working hours, and the elimination of typical activities.⁶

U.S. boat sales were up in 2020, including 12% growth in unit sales of new powerboats. Prior to the pandemic, growth for 2020 was projected to be just 2%.

Sales of boats, marine products and services in the U.S. were an estimated \$47 billion in 2020, up 9% from 2019.

Retail sales of outboard engines were up across all horsepower segments, with growth ranging between 6% and 38%.⁷



Source: Port of Newport

Government Vessels

NOAA began the process of moving the fleet operations center from Seattle to Newport in 2011. Since that time, a substantial amount of topside vessel repair work has been completed dockside at the NOAA facility.

The total obligated amount for federal shipyard activities in Oregon averaged approximately \$130 million per year from 2012 to 2020. Most of this was contracted to Vigor in Portland. Excluding Vigor, shipyard contracts averaged \$8.4 million per year statewide, including approximately \$3.0 million per year in Lincoln County. Lincoln County ranks as the third-largest

recipient in Oregon for federal shipyard work, behind Multnomah County and Clackamas County.

In Lincoln County, one of the main recipients of federal shipyard contracts is Van Port Marine. Van Port Marine, headquartered in Portland, has a contract to provide topside repair of NOAA ships at Newport.

The Port of Toledo has successfully completed work for NOAA, and there is an apparent opportunity for the Port of Toledo to gain a share of this contract.

⁶ TAKEMEFISHING/IPSOS. Casting a wide net: Identifying New Anglers & Boaters and Determining Tactics for Retention, November 2020.

⁷ National Association of Marine Manufacturers.

Market opportunities

Market opportunities for the Port of Toledo are summarized below:

- Increasing share of Commercial Fishing Vessel repair
 - Positive opportunity for Toledo,
 - Expand draw into coast and Puget Sound and Alaska,
 - The commercial fishing fleet is stable in size, and,
 - Growth will require attracting customers from other yards.
- Expand into government contracts
 - Topside repair at Newport contracts approximately \$3.0 million per year on average.
- One of the largest recipients in Lincoln County is Van Port Marine (headquartered in Portland).
- There is an apparent opportunity for the Port of Toledo to gain a share of this contract. The Port of Toledo has successfully completed work for NOAA.
 - Schedule to avoid conflict with fishing fleet's calendar.
- Expand share of recreational and other boats

Financial Analysis

This section presents a financial assessment of the Port of Toledo shipyard.

Shipyard Operations

The Port of Toledo shipyard has undergone substantial changes during the past five years, which will enable the Shipyard to increase the number of boats served. This is reflected in the financial analysis of the yard.

Major changes included improvements to the uplands (notably construction of the Environmental Services Building) and additions of new equipment (Ascom mobile hoist, etc.).

As shown in Figure 2-8, the number of vessel lifts performed at the yard increased substantially between FY 2015 and FY 2018.

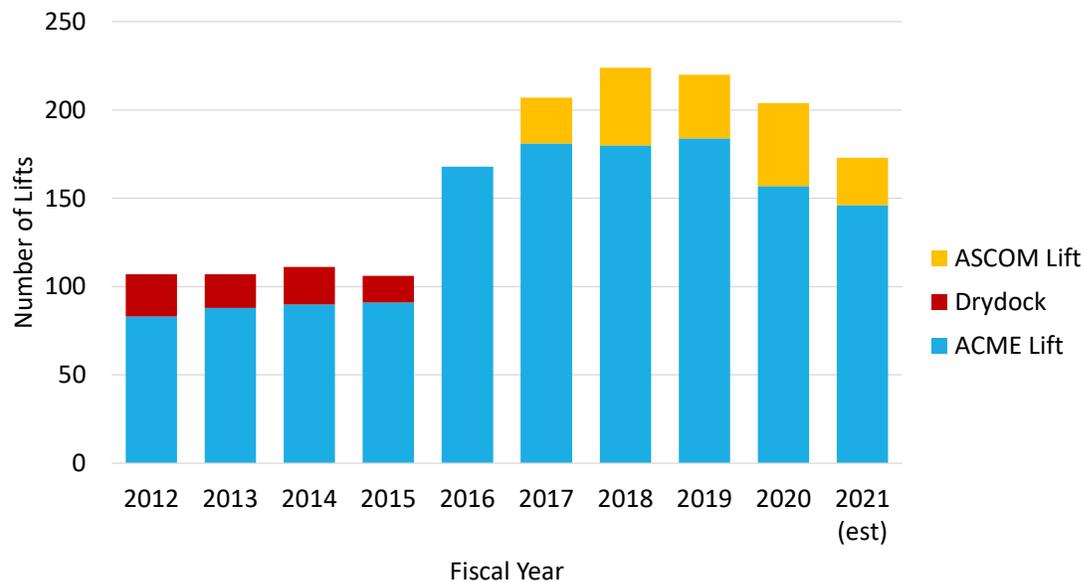
- Lifts using the Acme mobile hoist jumped from an average of 88 per year (FY 2012 through FY 2015) to an

average of 176 per year (FY 2017 through FY 2020).

- The number of lifts using the floating drydock declined from 21 in FY 2014 to 15 in FY 2015. The poor condition of the drydock led the Port to discontinue its use in FY 2016.
- In FY 2017 the drydock was replaced with the Ascom mobile hoist; the number of lifts using the Ascom grew from 26 in FY 2017 to 47 in FY 2020.

The increase in lifts using the Acme was partially due to the Port of Toledo Shipyard absorbing much of the business from the Riverbend Boatyard after that yard closed.

FIGURE 2-8: TRENDS IN VESSEL LIFTS



Source: Port of Toledo

The Covid pandemic began to impact the Shipyard in FY 2020, and continued to depress activity levels in FY 2021.

- In FY 2020:
 - The number of lifts using the Acme dropped to 157 in FY 2020, down from 184 in FY 2019.

- The number of lifts using the Ascom grew from 36 in FY 2019 to 47 in FY 2020.
- The total number of lifts in FY 2020 was 204.
- In FY 2021:
 - Acme lifts grew to 169, up from 157 in FY 2020.
 - Ascom lifts dropped to 38, down from 47 between in FY 2020.
 - The total number of lifts was 207 in FY 2021.



The number of lifts is expected to increase as the industry recovers from the impacts of the pandemic. The Acme and Ascom mobile lifts are projected to handle 179 lifts and 56 lifts, respectively in FY 2026, or a total of 236 lifts. (See Table 2-1).

The Environmental Services Building is expected to account for 21% of projects overall (20% of Acme lifts and 37% of Ascom lifts) in FY 2026.

TABLE 2-1: VESSEL LIFT FORECAST BY FISCAL YEAR

	Actual				Est'd 2021	Forecast					CAGR	
	2017	2018	2019	2020		2022	2023	2024	2025	2026	2017-26	2021-26
Acme												
W/out building	181	180	184	157	100	125	131	138	141	143	-2.6%	7.5%
W/building	-	-	-	-	2	14	20	24	26	28	NM	69.5%
Total	181	180	184	157	102	139	151	162	167	171	-0.6%	10.9%
Ascom												
W/out building	26	44	36	47	25	33	34	34	35	36	3.6%	7.1%
W/building	-	-	-	-	2	14	20	24	26	28	NM	69.5%
Total	26	44	36	47	27	47	54	58	61	64	10.5%	18.4%
Total												
W/out building	207	224	220	204	125	158	165	172	176	179	-1.6%	7.4%
W/building	-	-	-	-	4	28	40	48	52	56	NM	69.5%
Total	207	224	220	204	129	186	205	220	228	235	1.4%	12.7%

Note: 2021 estimate dated February 2021; actual lifts increased at a faster rate than expected

Source: Port of Toledo, BST Associates

Shipyard Financial Pro Forma

This section provides a pro forma financial assessment of the shipyard.

The financial projections for shipyard operations are based on market conditions as well as a detailed review of revenues and expenses. BST Associates conducted a detailed assessment of Port of Toledo Shipyard activities and finances, which served as the basis of these projections.

Revenues

Figure 2-9 illustrates the importance of labor (yard hours) to the Shipyard’s operation. On average, from FY 2017 through FY 2020, yard hours accounted for 74% of total revenue (excluding net sales of products).

The share of total revenue from other sources include:

- Haul (lifts) 9.7%
- Moorage 6.1%
- Sub-Contractor fees 5.3%
- Other Fees 2.1%
- Small Boat Division 1.7%
- Rental Equipment 0.9%

Increasing the number of billable yard hours provides the best way to ensure the financial success of the Shipyard.

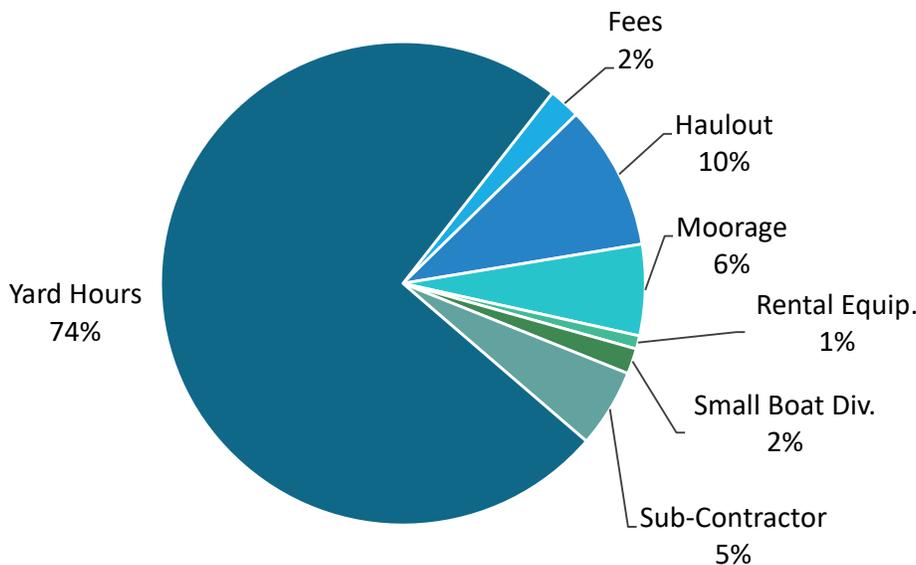
The Port of Toledo is currently evaluating its rate structure, with the twin goals of attracting additional boats as well as improving the Port’s net profit.

As part of this effort, BST Associates prepared a comparison of Port of Toledo rates and those of competitive shipyards.

With few exceptions, the Port of Toledo tariff rates did not increase between 2013 and 2020. In contrast, most other shipyards regularly raise rates based on consumer price index (CPI) or other factors.

The Port of Toledo should consider a policy of raising rates on an annual basis, in order to match rising costs. Even with this policy, the Port could retain the ability to negotiate rates as required to attract large projects.

FIGURE 2-9: AVERAGE YARD REVENUE EXCLUDING NET RETAIL SALES (2017-2020)



Source: Port of Toledo

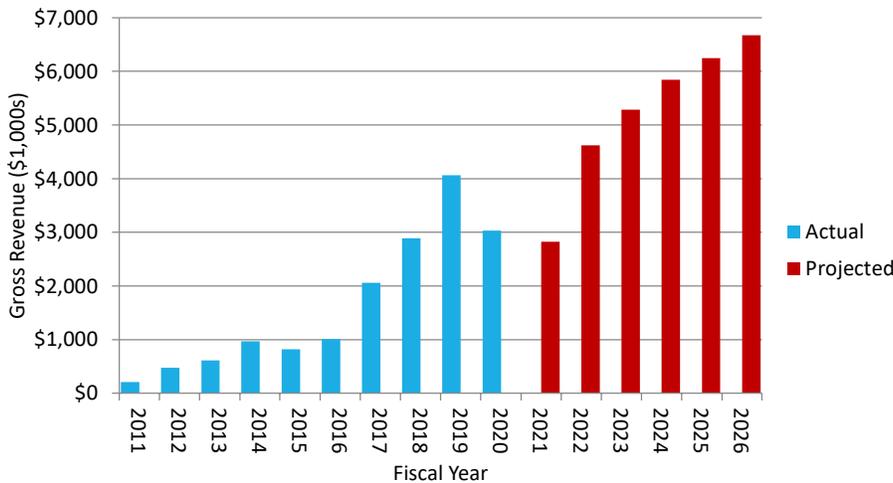
Actual and projected revenues for the Shipyard are presented in Figure 2-10. Gross revenues grew from \$0.2 million in FY 2011 to more than \$4.0 million in FY 2019.

A key reason for the growth in revenues was the Port changing its business model, to providing additional services. The Port initially focused on providing vessel haulouts and washdowns, but changed to providing maintenance and construction services (i.e., painting, welding and reconstruction). This change significantly increased the average revenue per lift.

Revenues declined in FY 2020 and F 2021, primarily due to the impacts of Covid 19 on the commercial fishing industry. Fisheries are in relatively good condition, however, and shipyard activity is expected to recover. There is also the opportunity for the Shipyard to attract additional work.

Shipyard revenue is expected to return to pre-Covid trends in FY 2022, reaching \$4.5 million. By FY 2026 revenue is projected to reach \$6.7 million, with an average growth of 9.6% from FY 2022 to FY 2026.

FIGURE 2-10: PORT OF TOLEDO SHIPYARD GROSS REVENUE



Source: Port of Toledo, BST Associates

Expenses

Labor costs have risen rapidly during the past four years, due to increased activity as well as to increases in wage rates and benefits.

Currently, the ratio of non-billable time to billable time is relatively high. This was caused primarily by

the effects of Covid 19 delaying commercial fishing boat repairs. In future years, the share of non-billable to total hours is expected to decline. Other expenses, which include materials and services required for shipyard operations, are directly linked to shipyard operations.

Net Revenue for Debt Service

Funds available for debt service are projected to increase from \$41,000 in FY 2021 to \$674,000 in FY 2026, resulting in debt service coverage ranging from 1.5 to 2.7 between FY 2022 and FY 2026. The

ending fund balance is also expected to increase, from \$386,000 in FY 2022 to \$1.5 million in FY 2026. (See Table 2-2).

TABLE 2-2: PORT OF TOLEDO SHIPYARD PRO FORMA

PRO FORMA Year (ending June 30th)	Current FY	Projected				
	2021	2022	2023	2024	2025	2026
Beginning Fund Balance	-93,935	-135,365	387,544	534,396	769,642	1,077,025
Operating Revenues						
Existing operations	2,697,838	3,639,449	3,842,407	4,057,432	4,256,611	4,465,653
Environmental Building	128,439	982,231	1,445,283	1,786,370	1,993,291	2,211,019
Total Operating Revenues	2,826,277	4,621,680	5,287,689	5,843,802	6,249,901	6,676,673
Operating Expenses						
Personal Services	1,772,301	2,624,433	2,984,915	3,268,061	3,467,439	3,674,958
Materials & Services	599,650	954,912	1,081,509	1,185,888	1,261,211	1,339,888
Cost of Goods Sold	413,317	690,744	786,133	866,326	925,586	987,863
Total Operating Expenses	2,785,268	4,270,089	4,852,556	5,320,275	5,654,237	6,002,709
Debt Service						
Funds Avail for Debt Coverage	41,009	351,591	435,133	523,527	595,664	673,963
525192 Mortgage	90,772	90,772	90,772	90,772	90,772	90,772
525201 BY Expansion	26,088	26,088	26,088	26,088	26,088	26,088
525187 - Tent	3,421	3,421	3,421	3,421	3,421	3,421
IFA Proposed Loan	0	8,400	168,000	168,000	168,000	168,000
Total Debt Service	120,281	128,681	288,281	288,281	288,281	288,281
Debt Service Coverage Ratio	0.34	2.73	1.51	1.82	2.07	2.34
Other Activities						
Cash Avail After Debt Service	-79,272	222,910	146,852	235,246	307,383	385,682
Loan Proceeds / Drawdowns	1,668,632	0	0	0	0	0
Capital Outlay (OUT)	-1,668,632	0	0	0	0	0
Other Non-Operating Activity	37,842	100,000	0	0	0	0
Net Other Activity	37,842	100,000	0	0	0	0
Oregon Coast Bank LOC Income	1,500,000	0	0	0	0	0
Oregon Coast Bank LOC Debt Service	-1,500,000	100,000	0	0	0	0
Net Transfers & Adjustments	0	100,000	0	0	0	0
Adjustments	0	0	0	0	0	0
Net Transfers & Adjustments	0	200,000	0	0	0	0
Ending Fund Balance	-135,365	387,544	534,396	769,642	1,077,025	1,462,707

Source: BST Associates, Port of Toledo

Economic Impacts

This section presents a summary of the commercial fisheries industry in the Newport area as well as an economic impact assessment of the Port of Toledo Shipyard.

Importance of the Commercial Fishing Fleet

According to an analysis produced for the Oregon Department of Fish and Wildlife⁸, the economic contribution of the commercial fishing industry in the Newport Area (i.e., Newport, Depoe Bay and Toledo) is significant:

- Statewide contribution:
 - \$170 million of statewide total output (24% of the total statewide commercial fishing output) and
 - 1,842 jobs (27% of statewide employment in this sector).
- Coastal contribution:
 - \$163 million of output (30% of the total coastal output) and
 - 1,302 jobs (30% of coastal employment in this sector).

In addition, the seafood sector has a very large impact on the local community

“For coastal residents, ocean fisheries provide a sense of identity and pride that allow the fishing tradition to be passed down

through generations. Marine fisheries also provide community support for coastal regions of Oregon through organizations like the Fishermen’s Wives Association in Newport and membership in ports and trade associations.

Having access to fresh Oregon seafood also increases the quality of life for Oregonians who expect high quality and fresh seafood to be available locally. Tourism to coastal areas is partially fueled by a desire to consume fresh seafood. For example, the Newport Seafood and Wine festival sees an average of 25,000 visitors per year in a town with a population of less than 11,000.”

A frequently cited economic concern for this industry is that the loss of key infrastructure, including but not limited to boat and ship repair services, could result in a further decline in the area’s local fishing industry. The improvement of operations at the Port of Toledo Shipyard continues to resolve these potential losses.

TABLE 2-3: REGIONAL CONTRIBUTIONS OF ONSHORE COMMERCIAL FISHERIES BY PORT GROUP (2017)

Port Group	Total Employment			Total Output (\$M)		
	Coastal	Rest Of Oregon	Statewide	Coastal	Rest Of Oregon	Statewide
Newport	1,302	540	1,842	\$163.3	\$6.1	\$169.5
Total	4,316	1,510	6,847	\$535.5	\$20.1	\$697.9
Newport share	30%	36%	27%	30%	30%	24%

Source: ECONorthwest, 2017 data

⁸ ECONorthwest. Economic Contributions of Oregon’s Commercial Marine Fisheries, October 2019. Produced for the Oregon Department of Fish and Wildlife.

Economic Impact of Port of Toledo Shipyard

In FY 2026, the Port of Toledo Shipyard is projected to have the following economic impacts.⁹

Revenues

Direct sales of \$8.2 million, including sales through the shipyard and through related private boatyard operations. The total impact is \$14.5 million, including direct, indirect and induced effects. Each \$1 of direct sales supports \$0.81 of additional output in Oregon state.

Income

Direct payroll associated with the shipyard and related private operations is projected to be \$4.7 million. Total income generated is projected to be \$7.8 million (direct, indirect and induced effects). Each \$1 of direct payroll supports \$0.67 of additional income in Oregon state.

Employment

There are projected to be 64 direct, full-time-equivalent jobs associated with the Shipyard operation (including Port staff and vendors) in FY 2026. The total employment impact associated with the Shipyard is 154 jobs in the State of Oregon; each direct job supports 1.4 additional jobs in Oregon state.

The jobs generated at the shipyard are considered family wage jobs, with an average payroll (wages plus benefits) of \$62,000.

TABLE 2-4: ECONOMIC IMPACTS OF PORT OF TOLEDO SHIPYARD IN 2026 (IN 2021 \$1,000S)

Factor	Direct	Total
Sales	\$8,190	\$14,482
Payroll/income	\$4,693	\$7,848
Jobs	64	154

Note: estimates are for activities in FY 2026 calculated in 2021 dollars

Source: BST Associates, Implan Model for multipliers

The Port of Toledo Shipyard works closely with local vendors and individuals, a partial list (in alphabetical order) includes:

TABLE 2-5: PORT OF TOLEDO VENDORS

Above Board Electric	Gus Loomis	Ocean Currents
B & F Marine Electronics	Halco Welding	Peterson Caterpillar
Bob Shones Surveyor	Jammie's Environmental	Quality Marine Resources, Inc.
Braemar - Engine Surveyor	Jensen Communications	Rainbow Total Wash Systems
Brent Steenkolk	Kasner Marine Service	Brad's Refrigeration
Bruce Johnson	Kaye's Radiator	Reino's Boat Works
Carson Oil	Kevin Hill's Marine Service	Roberto Dorantes
Chandler Marine Services	Koontz Marine	Ryan Metcalf
Coast Range Equipment & Repair	Krause Marine Service	Schiewe Marine Electric
Coastal Marine & Hydraulics	Lamb Electric	Sea Captain Mobile Marine
Coastal Refrigeration	Matheson Marine Services	TCB Security
Cook Engine	Mike Pittman	TJ Marine Electronics
Curry Marine	Mill Log Equipment	Valley Fire Control
Danny Blackwell	Newport Diesel	W.L. Thomas Environmental
Dustin's Custom Fiberglass	Newport Fabrication	West Coast Propeller Service
Ernie's Mobile Marine	Newport Marine & RV	Westlake Consultants
Fred Wahl Marine Const.	Norm Halsey Graphics	Yaquina Boat Equipment
Giddings Boat Works	NW Welding & Fabrication	

⁹ All dollar estimates are presented in 2021 dollars.

Recommendations for Shipyard

The Port will continue to improve the shipyard to grow existing businesses and attract new businesses to the area. These actions by the Port meet several of the State's and the Port's goals and objectives:

The State of Oregon recognizes the importance of the shipyard to local and state economies:¹⁰

- Economic Development
 - Support for and coordination with local and regional economic development plans.
- Water Dependent Use
 - Actively marketing waterfront properties to attract water dependent and light-industrial tenants.
- Focus on opportunities to support locally-based businesses and job growth.
- Intergovernmental Relations
 - Maintain and enhance opportunities to partner with the City of Toledo on infrastructure investments and maintenance, including water and sewer connections that support local businesses
- Community Role
 - Work to create family-wage jobs and year-round employment opportunities for local residents

The Port will work with the City of Toledo, State of Oregon, Lincoln County, Lincoln County School District and Oregon Coast Community College as well as other public and private sector partners, to continue to enhance the capabilities of the Shipyard that complement economic development in the local, regional and state areas.

The benefits of the proposed projects and the industrial park enhance the Port's goals:

- Market
 - Expand the capacity of the Shipyard to add opportunities for local business development

¹⁰ Business Oregon, Dredge Operations, Intergovernmental Project Planning 2020-2021 In-Water Work Period

CHAPTER 3. INDUSTRIAL PARK

The Industrial Park is located directly across North Bay Road from the Shipyard. The industrial park has one metal building (8,500 square feet) that contains units leased to tenants, including marine-industrial businesses that provide fabrication, carpentry, and related services. The Port shops are located in the building, as well. (See Figure 3-1).

The industrial park is also the location of the welding lab, which is a joint project of the Port of Toledo, Lincoln County School District and Oregon Coast Community College.

FIGURE 3-1: PORT OF TOLEDO INDUSTRIAL PARK



Welding Lab

The Port partnered with the Lincoln County School District and Oregon Coast Community College to develop a welding training program and facility at the Port Industrial Park. Oregon Coast Community College administers the training program, and provides the curriculum and instructors

A grant from U.S. Department of Transportation (Maritime Administration Small Shipyard Grant) and Port matching funds were used to purchase welding equipment and make improvements to an existing building at the industrial park for a training lab that can accommodate 12 students.

The welding program debuted in early 2020, and demand for the program has been strong enough that there are currently 200 names on the waiting list. In order to meet this demand, as much as four times as much building space is needed.

The College estimates that a class needs 13 to 14 students in order to break even. Since the existing welding lab has room for only 12 booths, additional space is also needed to meet financial goals. To meet this need, the Port is proposing to construct a new welding lab building at the Industrial Park. (See Figure 3-2)

A key issue that must be resolved among the three partner agencies (i.e., Port, College, and School District) is the location of expanded welding lab. The Port prefers the Industrial Park location, because proximity to the shipyard provides students the opportunity to gain real-life welding experience at the shipyard. However, the college may prefer to locate the facility on the existing campus in Newport.

There is a critical nationwide demand for welders and other metal workers. In 2019, there were 5,125 welders, cutters, solderers, and brazers in Oregon. In order to meet new demand and replace retiring workers, there will be a demand for 6,597 workers between 2019 and 2029.¹¹



¹¹ Source: Felicia Bechtoldt, Oregon Employment Department

FIGURE 3-2: PROPOSED WELDING SCHOOL BUILDING



Development Project

The Port is planning two new buildings at the industrial park (in addition to the new welding lab building), as well as improvements to water, sewer, and other utilities. (See Figure 3-3 and Figure 3-4).

Buildings

The two new buildings would be built to support demand, such as from shipyard vendors. Paving and new utility connections will be needed to support the new buildings.

The total project cost is \$3.69 million, including engineering/design and 30% contingency.

TABLE 3-1: IP EXPANSION COST ESTIMATE

Category	Est. Cost
Site prep & foundations	\$331,750
Water, sewer, fire hydrants	\$180,200
Buildings	\$2,084,400
Other	\$251,050
Contingency	\$837,600
Total	\$3,685,000

Source: PBS Engineering and Environmental, Inc.

Sewer Extension

The industrial park is currently not connected to the city sanitary sewer system, which limits potential growth.

The Port has an existing plan to connect the Shipyard to the City of Toledo sewer system via a new sewer line. The Industrial Park plan will take advantage of this new sewer line by connecting the new Industrial Park sewer infrastructure to it.

Engineering for the sewer extension project has been completed with funding provided through a Technical Assistance grant from Business Oregon Special Public Works Fund.

The Port has obtained funding for the project from the State of Oregon, American Recovery Plan Act, through HB 5006-1.

Permits for the project are in place, and the project is shovel ready.

The total project cost is \$2.38 million, including engineering/design and 20% contingency.

TABLE 3-2: SEWER EXTENSION COST ESTIMATE

Category	Est. Cost
Site prep & foundations	\$331,750
Water, sewer, fire hydrants	\$180,200
Buildings	\$2,084,400
Other	\$251,050
Contingency	\$837,600
Total	\$3,685,000

Source: PBS Engineering and Environmental, Inc.

FIGURE 3-3: INDUSTRIAL PARK IMPROVEMENTS OVERHEAD VIEW



Source: PBS Engineering and Environmental, Inc.

FIGURE 3-4: INDUSTRIAL PARK IMPROVEMENTS PERSPECTIVE VIEW



Recommendations for Industrial Park

The Port will continue to improve the Industrial Park to grow existing businesses and attract new businesses to the area. These actions by the Port meet several of the State’s and the Port’s goals and objectives:

The State of Oregon recognizes the importance of the industrial park improvements in meeting state and local economic goals:¹²

- Economic Development
 - Active marketing of the Port’s light-Industrial properties.
 - Support for and coordination with local and regional economic development plans.
- Water Dependent Use

- Actively marketing waterfront properties to attract water dependent and light-industrial tenants.

The benefits of the proposed projects and the industrial park enhance the Port’s goals:

- Market
 - Expand the capacity of the Industrial Park to add opportunities for local business development
 - Focus on opportunities to support locally-based businesses and job growth.
- Intergovernmental Relations

¹² Business Oregon, Dredge Operations, Intergovernmental Project Planning 2020-2021 In-Water Work Period

- Maintain and enhance opportunities to partner with the City of Toledo on infrastructure investments and maintenance, including water and sewer connections that support local businesses.
- Continue to grow the relationship the Lincoln County School District and Oregon Coast Community College to enhance the welding training program and facility.
- Community Role
 - Work to create family-wage jobs and year-round employment opportunities for local residents

The Port will work with the City of Toledo, the Lincoln County School District and Oregon Coast Community College as well as other public and private sector partners, to continue to enhance the capabilities of the Industrial Park to provide a state-of-the-art center for education and industrial activities that complement the Shipyard and the Toledo area.

CHAPTER 4. YAQUINA RIVER NAVIGATION CHANNEL

This section describes the navigation channel in the Yaquina River (including Depot Slough and Tokyo Slough). Included are discussions of the periodic need for dredging, the potential locations of deposit areas for dredge spoils, and the importance of the navigation channel to the economy of Lincoln County.

Yaquina River Channel

The Yaquina River Navigation Channel starts at the eastern end of the Yaquina Bay Channel and proceeds to Toledo, which is approximately 14 miles upriver. Dredging of the Yaquina River (including Depot Slough) was authorized by Congress under the River and Harbors Act (RHA) of March 4, 1913 and a RHA section 107 Project in 1960.¹³

The channel from Yaquina to Toledo is authorized to a depth of 10-foot-deep channel (at mean lower low water, or MLLW). The authorized width of the channel is 150 feet for most of its length, while the Depot Slough channel has an authorized width of 200 feet.

Most of the Yaquina River Channel appears to be maintaining authorized dimensions without regular dredging at this time.¹⁴

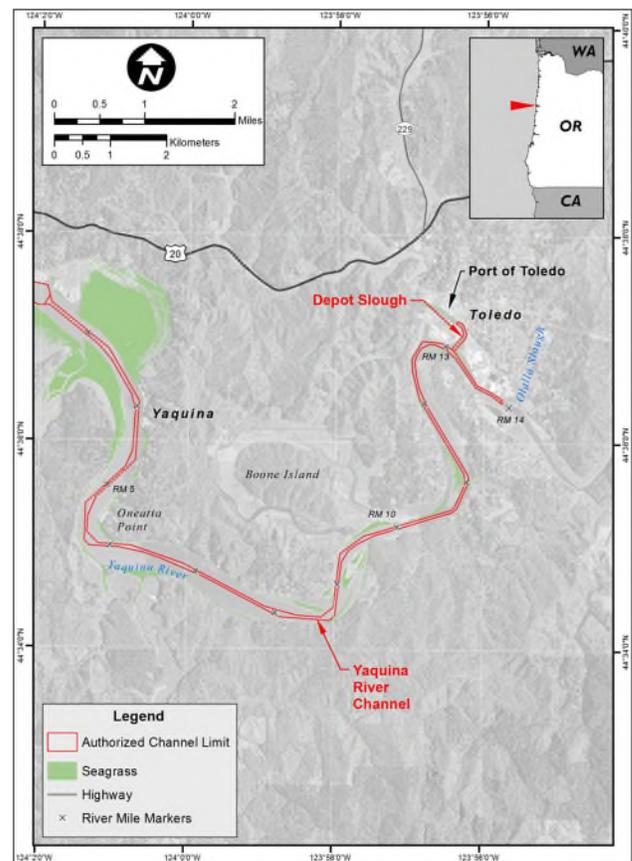
Currently, the channel in the river has a controlling depth of 7 to 8 feet. The tidal influence at Toledo is 8.15 feet at mean high water (MHW).¹⁵ At MHW the channel has a depth of approximately 15 to 16 feet.

Larger vessels arrive and depart the Toledo area during high tides. Vessels will also unload excess fuel and gear at Newport Terminals in order to come up the river light; the light draft of these vessels is approximately 10 to 13 feet. This allows an adequate under-keel clearance margin for safe transit.

Maintenance Dredging to a depth of 12 feet will allow adequate depth for fishing vessels and attract for barge traffic.

Periodic shoals could develop within the river navigation channel due to the buildup of materials from fluvial and marine origins. If unaddressed, shoals and sedimentation could restrict or prohibit vessel navigation and dredging to authorized depths and widths.

FIGURE 4-1: UPPER YAQUINA BAY AND RIVER PROJECT AREA¹⁶



Source: Moffat & Nichol

¹³ Moffat & Nichol. Yaquina Bay and River Maintenance Dredging Environmental Assessment, prepared by for US Army Corps of Engineers Portland District, June 30, 2015.

¹⁴ Ibid

¹⁵ NOAA.

<https://tidesandcurrents.noaa.gov/datums.html?id=9435362>, accessed April 16, 2021. Datums for 9435362, TOLEDO OR. All data values are relative to MLLW.

¹⁶ Ibid

Periodic dredging is critical to keeping the river and harbor open and to sustaining important navigation components of the local and state economy.

A second issue is the age of king piles in the river, which direct the flow of the river to maintain the

Depot Slough Channel

The Depot Slough channel begins at approximately River Mile 14 of the Yaquina River. The authorized dimensions of the Depot Slough Channel are: 1,800 feet long, 10 feet deep, and 200 feet wide.

Dredging is generally required approximately every five to eight years, with removal of around 100,000 cubic yards.

Most waterfront facilities on Depot Slough become unusable without dredging, as illustrated in Figure 4-2. This photo, taken before dredging occurred in 2010, illustrates the impact of the lack of dredging.

Tidal exchange is restricted by a tide gate, which provides flood protection for the City of Toledo. River flows affect shoaling rates in the Project Area, as low river flows tend to result in increased shoaling within the Entrance Channels (Corps 1975).¹⁸

Maintaining the navigability of Depot Slough is critical to a number of Port of Toledo facilities. As shown in Figure 4-3, Depot Slough provides water access to:

- Port of Toledo's transient moorage, which serves boaters visiting Toledo, and hosts the

channel. These are nearing the end of their useful life and will require replacement.¹⁷

Wooden Boat Festival. The facility includes an ADA-accessible gangway.

- Port moorage, which provides long-term moorage for boats.
- Boathouses, which house and support community programs.
- Yaquina Boat Equipment, a major employer serving the commercial fishing fleet (facilities leased from the Port of Toledo).

Pending funding and permitting, the Corps of Engineers plans to dredge Depot Slough in 2022 and the Yaquina River in 2023. The Corps will dredge the authorized channel, while the Port is responsible for permitting and dredging the Transient Dock.

The Port could achieve cost savings if a contract can be coordinated with the Corps contractor to dredge the Transient Dock at the same time as Depot Slough Channel. Cost savings would be achieved by reducing mob/demob expenses.

¹⁷ Moffat & Nichol. Yaquina Bay and River, June 30, 2015.

¹⁸ Ibid Page 23

FIGURE 4-2: DEPOT SLOUGH PRIOR TO DREDGING (2010)



Source: Port of Toledo

FIGURE 4-3: DEPOT SLOUGH



Source: Google Earth, BST Associates

Dredge Disposal Sites

In the past, dredge material removed from Depot Slough has been transported offshore to Ocean Dredged Material Disposal Sites (ODMDS). The distance of these sites from the dredging location increases the cost of disposal, however, and the Port of Toledo is evaluating nearby upland placement sites as an alternative.

The dredged material is relatively free of contaminants, which increases the feasibility of upland disposal. As reported by the Corps of Engineers¹⁹, “material dredged from Depot Slough is predominantly silt/clay (up to 95%) with little sand (5%) (Corps 2012).”

The Port of Toledo conducted remedial dredging at the shipyard in 2013. Material dredged in that project was rated by the Project Review Group as “Low-Moderate”, with no further testing at this site required for the next six years.

Based on this rating, the Port of Toledo has identified four nearby sites for potential future disposal of dredge spoils:

- Tokyo Slough,
- Siletz Tribe mill property,
- City of Toledo TIP property, and
- Georgia-Pacific airport property.

Tokyo Slough

Tokyo Slough is a small man-made inlet, adjacent to the Shipyard, that was created to support prior industrial uses. The inlet is jointly owned by the Port of Toledo and Georgia Pacific.

Previous studies have noted that the Slough could serve as a site for future Shipyard expansion, as a potential site for disposal of dredge material, or both. Prior analysis indicates the Slough supports minimal ecological function. Level I ESA has been completed and Level II ESA is in progress, funded through Yaquina Bay Brownfields Initiative and a US EPA Brownfields Community-Wide Assessment Grant. (See Figure 4-4).

Siletz Tribe Mill Site

The Siletz property is the site of a former sawmill, located on the south edge of Toledo, along the Yaquina River. The northern edge of this 60-acre property is less than one-half mile from the entrance to Depot Slough. The property is zoned for industrial use, and most of the site is currently vacant. The Tribe may be interested in using the dredge spoils as fill material. (See Figure 4-4).

City TIP Property

The City of Toledo’s TIP property is a vacant site located north of Depot Slough. Sediment could be dewatered at this site and then relocated.

Georgia Pacific Property

Georgia Pacific owns property adjacent to Toledo State Airport, just north of the Port’s Launch Ramp. Fill at this site could be used to lengthen the airport’s runway in the future.

¹⁹ USACE. Yaquina Bay and River Maintenance Dredging Environmental Assessment, 2012.

FIGURE 4-4: POTENTIAL DREDGED MATERIAL DISPOSAL SITES



Source: Google Earth, BST Associates

Recommendations for Channel Navigation Improvements

The Port of Toledo is the local project sponsor for navigation maintenance and improvements. The role of project sponsor includes:

- Promoting the importance of channel maintenance and improvements to local, state and federal officials as well as to the general public.
- Responsibility for obtaining all environmental clearances, permits and approvals for the dredging site prior to use.

The Port of Toledo Strategic Business plan, completed in 2018, identified lack of dredging as a threat. Specific issues identified included a lack of low-cost dredge disposal sites, and the cost and disposal issues associated with needed maintenance dredging.

Business Oregon has recognized the importance of dredging to local and state economies. As noted in a recent report, dredging:²⁰

- Is vital to economic development and sustainability,
- Is needed for safety of navigation (commercial and recreational),
- Provides access to marine services (moorage, fuel, accommodations, amenities),
- Maintains and protects important infrastructure, and
- Provides safe harbor for vessels.

The benefits of channel maintenance enhance the Port's goals to:

- Promote local and regional economic development.
- Support and grow existing businesses.
- Tap into emerging markets, coordinate with and enhance other local and regional plans, and enhance year-round employment opportunities.

²⁰ Business Oregon, Dredge Operations, Intergovernmental Project Planning 2020-2021 In-Water Work Period

CHAPTER 5. MOORAGE FACILITIES

This section describes the transient moorage facilities and marketing opportunities in the Port of Toledo.

Description of Facilities

Waterfront Park

The Port of Toledo owns and operates Waterfront Park, located along the banks of Depot Slough in downtown Toledo. This two-acre park provides the public with a variety of water-oriented recreational opportunities.

Facilities at the park include a marina, transient moorage, floating boathouses used by Toledo Community Boathouse, an activities pavilion, and a waterfront boardwalk.

The marina has 12 moorage spaces that are 20 feet long, six spaces that are 25 feet long, and approximately 300 feet of lineal moorage.

The transient moorage facility includes 9, 40-foot moorage slips and an ADA accessible gangway. This facility was constructed in 2012, with funding from the Oregon State Marine Board (OSMB).

Two boathouses are moored at the marina, both of which were constructed by the Port. These boathouses are used for waterfront activities and education, described in greater detail below.

As can be seen in Figure 5-1, the waterfront is very popular and well-used by residents and visitors. Annual use is estimated at 85,000 visitors and/or residents. This includes people that walk along the trail on a daily basis as well as the approximately 3,500 people who attend the Wooden Boat Show each year.

Boathouses

The first boathouse was built by the Port in 2010, to enhance public access to the waterfront and to provide a location for activities.

The Toledo Community Boathouse program uses the boathouse as “classroom and workshop space for youth and community members to learn and get hands-on experience with boatbuilding, maintenance, sailing and seamanship.”²¹

Soon after the first boathouse was constructed, it became apparent that this one building was inadequate to meet the demand.

The original boathouse had several limitations, including a lack of access for individuals with disabilities, not enough storage for the boats, too many things being done in one facility, and sporadic operating hours.

To meet the demand, a second boathouse was constructed in 2017. This facility, called the Toledo Waterfront Recreation and Education Center (WREC), provides a base for:

- the Port’s Free Family Boating program,
- storage for 33 (or more) boats,
- a classroom for OSMB Boater Safety Courses,
- a classroom/base for Oregon Boating Foundation Kayak and Sailing Camps, and
- a facility for special events

²¹ <https://www.portoftoledo.org/toledo-community-boathouse>

FIGURE 5-1: PORT OF TOLEDO WATERFRONT PARK

Source: Port of Toledo

Proposed Access Project

Currently, the WREC boathouse is moored between the transient moorage docks and the Port's existing marina. This location provides continuous access to all of the floating facilities, with ADA access via the gangway at the north end of the transient moorage, and non-ADA access to the restrooms at the south end of the Port marina.

This location, however, causes the Port to be out of compliance with the requirements of the grant that funded the transient moorage.

FIGURE 5-2: WREC BOATHOUSE

Source: Port of Toledo

The Port has had discussions with the funding agencies (OSMB and U.S. Fish and Wildlife) on alternatives to this location. The preferred solution

includes constructing a new ADA-accessible gangway to the Port's marina, and relocating the WREC boathouse to the marina. Preliminary engineering has been completed, paid for by a grant from the Oregon State Marine Board. (See Figure 5-3).

FIGURE 5-3: PROPOSED MARINA GANGWAY & BOATHOUSE LOCATION

Source: PBS Engineering and Environmental, Inc.

The estimated cost of the new gangway is \$190,000, with potential funding from OSMB. (See Table 5-1).

TABLE 5-1: ADA GANGWAY COST ESTIMATE

Category	Est. Cost
Mobilization	\$30,000
Demolition	\$10,000
New gangway	\$85,000
Relocate boathouse	\$25,000
Other	\$15,000
Contingency	\$25,000
Total	\$190,000

Source: PBS Engineering and Environmental, Inc.

Marketing

The Port is planning to work with the OSMB and other ports along the Oregon Coast to develop a marketing plan to support the needs of current and future transient boaters in the area.

This marketing plan may be similar to the Lower Columbia River Water Trail, which maintains a website for boaters to provide a GIS-based map and information about the route.²²

The coastal water trail work includes:

- surveying,
- working with landowners, and
- publicizing launch and landing sites, campsites, and other facilities for non-motorized boaters.

Water based recreational activities are very popular in the Yaquina River and Yaquina Bay. According to the most recent survey, in 2017 the Yaquina River had more than 13,000 boating user days and Yaquina Bay had more than 57,000 user days.²³ The marketing plan will help increase activity by local residents as well as visiting boats arriving by land (with trailered boats) or water (recreational cruisers passing by Oregon).

Recommendations for Transient Moorage

The continued development and marketing of transient moorage at Waterfront Park is a priority of the Port of Toledo. The Port is planning to construct a ramp to provide ADA access to the Marina. The Port will also seek assistance in funding this project.

The benefits of improved transient moorage enhance the Port's goals:

- Market
 - Focus on opportunities to support locally-based businesses and job growth.
 - Utilize the new Port website to provide facility information to current and potential tenants.
- Intergovernmental Relations
 - Maintain relations with the Port of Newport to discuss and share joint development opportunities.
 - Maintain and enhance opportunities to partner with the City of Toledo on infrastructure investments and maintenance, including water and

sewer connections that support local businesses.

- Community Role
 - Work to create family-wage jobs and year-round employment opportunities for local residents
 - Continue to host community events such as the annual Port of Toledo Wooden Boat Show and the Toledo Chamber of Commerce Thursday Street Market
 - Continue to embrace Toledo's meeting of art and industry. This includes displaying local art commissions at Port facilities, public access points, and parks.

These actions by the Port meet several of the State's and the Port's goals and objectives:

The State of Oregon recognizes the importance of transient moorage to local and state economies:²⁴

- Economic Development

²² <http://www.estuarypartnership.org/explore/water-trail>

²³ Source: Oregon State Marine Board 2017 Triennial Survey;
<https://www.oregon.gov/osmb/info/Pages/Triennial-Survey.aspx>

²⁴ Business Oregon, Dredge Operations, Intergovernmental Project Planning 2020-2021 In-Water Work Period

- Long-range planning and development of the Downtown Waterfront for commercial and light industrial uses.
- Support for and coordination with local and regional economic development plans.
- Transportation
 - Improved pedestrian connections to and along the Downtown Waterfront.
- Water Dependent Use
 - Additional transient and permanent moorage on the Downtown Waterfront.
 - Actively marketing waterfront properties to attract water dependent and light-industrial tenants.

APPENDIX A DETAILED COST ESTIMATES

TABLE A-1: INDUSTRIAL PARK DEVELOPMENT COST ESTIMATE

Item No.	Description	Unit	Quantity	Unit Costs	Total Costs
1	Mobilization	LS	1	\$56,185.00	\$56,185.00
2	Survey Staking	LS	1	15,000.00	15,000.00
3	General Excavation	CY	100	20.00	2,000.00
4	Erosion Control	LS	1	2,500.00	2,500.00
5	Building Pad (Assumes 6" of 3/4"-0")	TON	520	50.00	26,000.00
6	Crushed Surfacing Base Rock (Assumes 6" of 3/4"-0")	TON	1450	50.00	72,500.00
7	HMA (Assumes 3" AC)	TON	1600	90.00	144,000.00
8	3" Pavement over Existing Gravel	TON	775	90.00	69,750.00
9	Wheel Stops	EA	18	200.00	3,600.00
10	Parking Striping	LS	1	1,500.00	1,500.00
11	ADA Signage	EA	3	600.00	1,800.00
12	Bollards	EA	12	1,500.00	18,000.00
13	1" Water meter	EA	1	2,000.00	2,000.00
14	2" Water meter	EA	1	5,000.00	5,000.00
15	2" backflow device	EA	1	1,500.00	1,500.00
16	1" Water service line (New Welding Building)	LF	535	50.00	26,750.00
17	1" Water service line (Other)	LF	365	50.00	18,250.00
18	2" Water distribution line	LF	300	55.00	16,500.00
19	6" Hydrant line	LF	500	90.00	45,000.00
20	Fire Hydrant Assembly	EA	1	4,000.00	4,000.00
21	Connect to existing blow-off	EA	1	2,000.00	2,000.00
22	Sanitary Sewer Cleanout	EA	13	1,700.00	22,100.00
23	6" Sanitary Sewer Pipe	LF	530	70.00	37,100.00
24	Dry Utility Connections	LS	1	20,000.00	20,000.00
25	Site Illumination (affixed to building)	LS	1	10,000.00	10,000.00
26	Caretaker Residence Relocation	LS	1	10,000.00	10,000.00
27	80' x 100' Pre-Eng Metal Welding Bldg (inc. slab)	SF	8000	135.00	1,080,000.00
28	20' x 180' Pre-Eng Metal Bldg (inc. slab)	SF	3600	115.00	414,000.00
29	30' x 80' Pre-Eng Metal Bldg (inc. slab)	SF	2400	123.00	295,200.00
30	30' x 80' Pre-Eng Metal Bldg (inc. slab)	SF	2400	123.00	295,200.00
<i>Construction Sub-Total</i>					<u>2,717,000.00</u>
31	Engineering and design		1	60,000.00	60,000.00
32	Permitting				15,000.00
<i>Design and Permitting Sub-Total</i>					<u>75,000.00</u>
Escalation 10% (materials)					55,000.00
Contingency 30%					837,600.00
<i>Grand Total</i>					<u>3,685,000.00</u>

Notes and Assumptions:

- 1 Excavation quantity is based on topographic survey provided in June 2021
- 2 Assume that no improvements will be required on Bay Blvd
- 3 A Geotechnical engineer report will be required
- 4 Sanitary mains and manholes will be constructed under separate permit, laterals are included in this estimate
- 5 Assume that a temporary sanitary sewer holding tank will not be needed for building #1.
- 6 Building costs do not include architectural finishes, equipment of furnishing.
- 7 Building cost includes power and plumbing
- 8 Based on conversations with Port staff, assume that the base rock under the existing parking lot has sufficient thickness over
- 9 Site Illumination assume light units affixed to the buildings
- 10 Stormwater improvements are under construction (summer 2021), and therefore are not included in this estimate
- 11 Per Port's coordination with the City of Newport, stormwater treatment and detention is not required

TABLE A-2: MARINA ADA GANGWAY COST ESTIMATE

Item No.	Description	Total Costs
1	Mobilization	\$30,000
2		
3	Removal and storage of existing gangway	\$5,000
4	Demolition of existing abutment	\$5,000
5	Installation of new abutment, railing, paving, bollards	\$25,000
6	Installation of new 60-foot gangway	\$50,000
7	Utilities	\$10,000
8		
9	Drive 2 new piling	\$20,000
10	Relocate boathouse	\$5,000
11		
12	Construction management	\$15,000
13	Contingency	\$25,000
14		
15	Total	\$190,000

Notes and Assumptions:

APPENDIX B INDUSTRIAL PARK BACKGROUND

Oregon Welding Job Projections

In 2019, there were 5,125 welders, cutters, solderers, and brazers in Oregon. This occupation is projected to grow 12.4% by 2029, adding 634 jobs. In addition to growth in this occupation, another 5,963 job openings will be created by 2029 to replace workers who retire, leave the labor force for other reasons, or make a major occupational change. Together, the number of job openings due to economic growth and replacements will total 6,597 between 2019 and 2029. That's basically 9 out of 10 job openings that will be due to the need to replace workers who leave their occupation. Note on job openings: more job openings are created due to turnover caused by people who change jobs while remaining within the occupation. Turnover openings are not included in replacement openings.²⁵

Source: Felicia Bechtoldt, Oregon Employment Department

²⁵ Felicia Bechtoldt, Oregon Employment Department

TABLE B-1: OCCUPATIONAL FORECAST FOR METAL WORKERS IN OREGON (2019 TO 2029)

Standard Occupational Classification Title	Employment			Employment Change	Replacement Openings	Total Openings
	2019	2029	Percent change			
Metal Workers and Plastic Workers	23,691	25,292	6.8%	1,601	26,386	27,987
Computer-Controlled Machine Tool Operators, Metal and Plastic	2,361	2,376	0.6%	15	2,431	2,446
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	517	764	32.4%	187	688	875
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	367	380	3.5%	13	466	479
Faring Machine Setters, Operators, and Tenders, Metal and Plastic	176	149	-15.3%	-27	154	127
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	237	244	3.0%	7	228	235
Cutting, Punching, and Press Machine Setters, Operators, Tenders, Metal and Plastic	1,218	1,207	-0.9%	-11	1,355	1,344
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	149	135	-9.4%	-14	148	134
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,872	1,939	3.6%	67	2,166	2,233
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	105	105	0.0%	0	118	118
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	348	321	-7.8%	-27	350	323
Machinists	3,486	3,897	11.8%	411	3,749	4,160
Metal-Refining Furnace Operators and Tenders	415	449	8.2%	34	511	545
Rimers and Casters, Metal	127	135	6.3%	8	154	162
Model Makers, Metal and Plastic	13	13	0.0%	0	14	14
Patternmakers, Metal and Plastic		-s-				
Foundry Mold and Coremakers	397	421	6.1%	24	446	470
Molding, Coremaking, and Casing Machine Setters, Operators, and Tenders, Metal and Plastic	1,699	1,749	2.9%	50	1,880	1,930
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,819	2,048	12.6%	229	2,023	2,252
Tool and Die Makers	391	406	3.8%	15	395	410
Welders, Cutters, Solderers, and Brazers	5,125	5,759	12.4%	634	5,963	6,597
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	250	255	2.0%	5	277	282
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	283	283	0.0%	0	296	296
Layout Workers, Metal and Plastic						
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	584	573	-1.9%	-11	616	605
Tool Grinders, Filers, and Sharpeners	495	489	-1.2%	-6	707	701
Metal Workers and Plastic Workers, All Other	1,015	1,012	-0.3%	-3	1,061	1,058

Source: Oregon Employment Department, 2020

Welding MARAD Grant Description

The following description of the Port's welding lab comes from an application the Port completed for a Maritime Administration Small Shipyard Grant Application.

This project is to equip a welding vocational training lab at the Shipyard's Industrial Park.

The lab will be used to provide welding career training in a credited college program. The program will be administered by Oregon Coast Community College. Lincoln County High School will provide support to the OCCC Program and will utilize the vocational training program to enhance its career technical education for students attending schools that don't have dedicated industrial arts facilities.

The Port of Toledo will dedicate an industrial unit for the Shipyard Vocational Lab. The unit is located in the Shipyard's Industrial Park, adjacent to the Port's shipyard. The proximity to the shipyard will allow for site visits, opportunities for practical welding experience, and internships.

The welding lab will be fully equipped to accommodate twelve students with shipyard industry standard welding and cutting equipment and processes. A detailed list of the equipment to be purchased is provided with itemized costs in Section 2. (e).

Oregon Coast Community College is committed to operating the program for at least five years. A full description of OCCC and Lincoln County School District's commitment and contributions is in Section 4. Existing programs of Arrangements on page 21 of this application.

This project is for a new equipment and does not result in the replacement of any existing equipment.

2. (b) Description of Need of Project

Expansion of the Port's shipyard over the last five years has made the Port aware of the critical need for a skilled maritime work force. Currently the Port recruits skilled workers nationwide and contracts for temporary skilled marine welders. With the exception of the Port's present partnership with Lincoln County High School to provide a shipyard workplace educational resource, there are currently no Maritime Workforce Education programs offered within Lincoln County nor on the central Oregon coast. Consequently, the qualified labor pool for the Port of Toledo is very limited.

Oregon's maritime sector is widespread and plays a key economic role in many coastal and rural communities. With a workforce totaling nearly 19,000 in 2017 and average wages exceeding most other industries, the maritime sector supports many family-wage jobs in Oregon. The sector is expected to continue adding new jobs, creating the need for more workers. Oregon's maritime workforce is also aging. A large share of the current workforce will retire or change careers within the next 10 years, creating replacement openings for new workers. These workforce trends represent challenges for employers trying to fill their job vacancies, as well as more job opportunities for Oregonians in the maritime sector.

Maritime industries with the most workers nearing retirement are support activities for water transportation (466 jobs), ship and boat building (390 jobs). Replacement openings, the number of job openings created when workers change occupations or leave the labor force, are expected to total nearly 6,600 through the year 2027. This represents the need for workers with the training required to fill those openings. Replacements are a much larger source of workforce need than jobs created due to sector growth. Through 2027, Oregon's maritime sector will need 16 replacement workers for each new worker needed due to economic expansion. That's a greater need for replacements than across the economy overall. Oregon projections show nine replacement openings for every opening created due to economic growth.

The State of Oregon has recognized the need for skilled marine workers and in 2017 created the Task Force on Maritime Sector Workforce Development. The Port's 2018 Strategic Business and Capital Investment Plan recognized the labor needs of the Shipyard and proposed development of a school-to-workforce pipeline, with the Port providing internship opportunities. The Shipyard Vocational Training Lab will provide opportunities for students to obtain the appropriate skills and participate in shipyard internships that will allow them to secure living wage jobs in marine repair or shipbuilding industries.

Career and Technical Education (CTE) at the High School and College-level is vital to supplying a trained workforce to local communities. Yet, as state funding for secondary and higher education has declined, many high schools and community colleges have been forced to scale-back or cut technician training programs. Within a community, maximum efficiency is achieved when secondary and post-secondary institutions are in dialogue with local industry to identify skillsets for entry level technicians. These common skillsets can form the core of CTE Programs of Study at the High Schools and lead to specializations at the College.

Currently students at only two of the county's six high schools have access to industrial career training at their schools, due to the lack of facilities. The School District will use the Shipyard Vocational Training Lab to provide students from all five of the schools the opportunity to receive industrial welding training. The Port is currently working with Lincoln County High School to provide Career and Technical Education internships in order to introduce future workers to the shipyard industry.

Section 4 Existing Programs of Arrangements

In addition to this project, the overall vocational program is a collaboration between the Port, the Community College, the School District and the local Workforce Investment Board. This is a description of the Oregon Coast College program that is beyond the scope of the Port's grant funding request.

OCCC's project is to a) establish and equip maritime construction learning labs, and b) fund the delivery of initial trainings to at least two student cohorts (up to 12 students each) to complete a Shipbuilding and Repair (Level I) Career Pathways Certificate. This certificate is designed to prepare Coastal Oregon's future workforce to get a head-start on a career in the Maritime Sector. These careers are in high-demand fields and offer solid opportunities to be promoted into expert level positions. Collaboration roles are as follows:

- The Port of Toledo will dedicate the building unit to create a training lab on Port property adjacent to its shipyard, fully tooled to accommodate up to 12 students at a time enrolled in the shipbuilding certificate curriculum. The Port will make any necessary building upgrades.
- Lincoln County School District (LCSD) will dedicate space at Taft High School (located at the northern end of Lincoln County) fully tooled to accommodate up to 8 students at a time enrolled in the shipbuilding certificate curriculum. LCSD will initially fund up to 24 LCSD students to participate in the shipyard project.
- Oregon Coast Community College will develop the Shipbuilding and Repair (Level I) Career Pathways Certificate curriculum and provide the faculty to deliver the curriculum.
- Northwest Oregon Works (NOW) will provide funding to the College to support the instructional costs of a 12-person cohort and will assist in the recruitment and referral of adult job seekers to the training program.

Project duration: the maritime learning labs, once established and equipped, will be available for training purposes for at least five years. The cohort funding (LCSD and NOW) committed to as part of this grant application will support up to three 12-student cohorts, delivered beginning in fall 2019. Once underway, the partners will seek additional cohort funding until such time as enrollment levels become self-sustaining.

The Maritime Construction Program works with educators, economic development leaders, and industry to help ensure that high school and community college students have access to the curriculum, equipment, and materials to learn targeted, industry-specific skills.

Initially, the Maritime Construction Program will focus on the development and delivery of The Shipbuilding and Repair (Level I) Career Pathways Certificate, which offers the core skills necessary for entry level employment as a Maritime Welder.

The Certificate will be designed in such a way as to be available to both community members and high school students from within Lincoln County. Given the County geography (long and narrow, bordered by the Pacific Ocean to the west and Coast Range mountains to the east, with a single road connecting the roughly 50 mile stretch from north to south), a single training location is not feasible. Through funds provided by Lincoln County School District, the first three courses in the certificate will be offered by OCCC at Taft High School (north) in the evenings. Funds provided by the MARAD grant and operating funds from the Port of Toledo will create training facilities at the Port. Northwest Oregon Works (NOW; the local Workforce Development Board) will provide funding for OCCC to deliver the full certificate at the Port of Toledo. In both cases, courses will be available to both community members and high school students.

Throughout the project the Port of Toledo will meet regularly with representatives from maritime industry, NOW, Lincoln County government, and administrators and faculty from Lincoln County School District and Oregon Coast Community College to assess the quality of existing training and explore next-steps for technician training in Maritime Construction on the Coast. All parties (collectively referred to as the Maritime Construction Task Force) will seek additional commitments and funding opportunities to continue the Shipbuilding and Repair (Level I) Career Pathways Certificate for 5 years, after which time program design and employment demand will be reassessed to maintain currency with industry workforce needs.

Welding programs begin

By: Cheri Brubaker - Updated: 1 year ago

Posted Jan 30, 2020

LINCOLN COUNTY — Ribbon-cutting ceremonies on Wednesday at the welding lab in the Port of Toledo industrial park, and today (Friday) at Taft High School in Lincoln City are celebrating the completion of the welding labs and the official start of the program classes in February.

When Port of Toledo Manager Bud Shoemake speaks in his official capacity, he always references the port's strategic master plan. He then graciously thanks the many partners he has forged alliances with, all those who helped out along the way to make the port's most recent accomplishment a reality.

Assistant Port Manager Debbie Scacco pointed out there is a need to develop a local workforce, and it is specified in the port's 2018 plan (portoftoledo.org/strategic-plan).

Georgia-Pacific's C.J. Drake, officially presenting the mill's \$5,000 donation to the program at Wednesday's ceremony in Toledo, also referenced the plan.

"The plan brings all the players and participants in the room," Drake said, before commending Shoemake for having "the vision and gumption to execute a strategic business plan."

Shoemake called out many who played a part leading up to the official ribbon-cutting ceremony held at the new welding lab at 625 NW Bay St., including port staff. He singled out Lincoln County School District's Majalise Tolan, calling her the spark plug that got the internship program going.

The welding program, a partnership between the port, Oregon Coast Community College (OCCC), Lincoln County School District and Northwest Oregon Works, was financed with funds from a Maritime Administration Small Shipyard Grant of \$231,285 — the port matched \$87,096.

The project had federal support from U.S. Rep. Kurt Schrader, U.S. Sen. Jeff Merkley and U.S. Sen. Ron Wyden, noted Scacco. Stacey Jochimsen, Merkley's field representative, and John Serra, Schrader's coastal field representative, attended the ribbon-cutting. Melissa Murphy, State of Oregon regional development officer, was also in attendance. Scacco noted that Murphy assisted the port with Business Oregon funding, including the port planning and marketing grant used for the 2018 Strategic Business and Capital Investment Plan. Sara Means was in attendance representing Gov. Kate Brown's office.

Port of Toledo Board of Commissioner's President Chuck Gerttula spoke of the port's need to partner with the local community college and school district to develop a workforce and keep that workforce in the local community.

Toledo High School student and port intern Clayton Doty cut the ribbon commemorating the collaborative partnership and the community response that drew more than 100 inquiries from potential students.

Doty, a senior, has been taking welding classes since his freshman year. When he started welding, he said, "This is kind of fun." With plans to attend OCCC next year then work for the port, he added, "I'd love to stay local."

"Community colleges are economic engines because of their ability to build a workforce that responds to local and national needs," said OCCC Chief Academic Officer Dan Lara. Exemplary of this response to industry demands are the college's marine science and nursing programs, and now the welding program, he said.

It was announced that the program has 22 students enrolled at two locations, 12 at the port and 10 at Taft High School. Michael Rasmussen, instrumental in developing welding programs at Portland Community College and Swan Island, will lead the program.

"My goal is to have them all entry-level ready by the first week of June," Rasmussen said of his ambitious agenda.

Classes, taught in 5-hour blocks two days a week, start in February. Students will learn how to use plasma cutters and how to perform stick and arc welding (among other things) as they learn the skilled trade that will enable them to secure a well-paying job in Lincoln County.

The second-ribbon cutting takes place at 2 p.m. today (Friday) at Taft High School.

February Welding Program is full; still taking info for potential students for Fall 2020 and beyond

The **Port of Toledo** and OCCC Maritime Welding Training Center is a 2,000-sq-ft facility next to the Port of Toledo Shipyard on the Yaquina River, where students from Toledo High School and the surrounding area advance in the art and craft of welding.

The newly remodeled Welding Lab at **Taft 7-12** provides opportunities for high school and adult learners to take courses that also prepare students for employment in the industrial and maritime sectors.

The Port of Toledo provides the infrastructure to support shipbuilding, repair, conversion, and complex industrial fabrication by the region's thriving maritime service industry. OCCC is Lincoln County's unrivaled educational entry point to training, skills-building and opportunity, and is widely recognized for the excellence of its programs. Together, The Port of Toledo, LCSD, **Northwest Oregon Works**, and the College offer student's hands-on education under the expert guidance of highly experienced and student-centered faculty.

Tuition is FREE for those who qualify.

New welding program sparks donation

The need for more and varied career and technical education programs in Lincoln County has never been clearer than it is today. Not only are local and regional employers aching for qualified tradespeople, but interest is growing among a population of students for whom a traditional two- or four-year college degree may not be the preferred option.

The point was underscored earlier this year, when more than 10,000 people saw, liked, or shared a social media post celebrating a new welding program funded by a grant secured by the Port of Toledo, the Lincoln County School District, Northwest Oregon Works, and Oregon Coast Community College. The Port of Toledo was the lead applicant in the \$261,285 Maritime Administration Small Shipyard Grant from the U.S. Department of Transportation, which was awarded in June.

“Almost one in four Lincoln County residents wound up seeing or interacting with that Facebook post,” said Dave Price, OCCC’s Marketing Director. “The message was clear: Lincoln County is interested in welding instruction.”

Thanks to the grant, the Port of Toledo has invested \$87,096 in remodeling an existing space into a 12-bay welding training lab within the Toledo Shipyard’s Industrial Park. The grant will provide the funding to outfit that space with equipment to serve students from Toledo High School and the surrounding community. Work is currently underway on this project, and lab space will be available in 2020 for Newport High School, Siletz, and Eddyville students through the OCCC program. At the same time as the program gets rolling in Toledo, the College will begin teaching welding classes at Taft High School, thanks to funding support from the District.

More recently, as work has progressed and the welding program inches closer to a planned February 2020 launch, more good news arrived. A North Lincoln County resident, Annette Mulee, reached out to OCCC President Dr. Birgitte Ryslinge. The two began a series of meetings discussing Mulee’s interest in supporting North Lincoln County students in pursuing careers in the trades. The focus soon fell on the OCCC welding program.

“I was looking to fund a general scholarship,” Mulee said. “I was fortunate to have received a scholarship and a fellowship for my undergraduate and graduate study, and I wanted to give back. President Ryslinge told me about the possibility of funding a certificate program. Those programs do not qualify for financial aid, yet they would seem to lead to real jobs with decent pay relatively soon, especially the welding program. That seemed to be the way to make the most difference for the money. Not only would the students get good jobs, the local economy would benefit.”

The Annette M. Mulee Scholarship will ultimately fund a cohort of 10 welding certificate students working out of the Taft 7-12 building. All told, the scholarship will total \$25,000 for the academic year, covering tuition, books, and fees in the welding program for each of the students for all three terms. The program will be open to high-school students as well as adult learners. Interested students may find additional information and application instructions on the College Foundation’s website, oregoncoastcc.org/foundation. The Foundation’s annual scholarship application encompasses a number of different scholarships with one simple application; look for the 2020 application form to go live by late January.

APPENDIX C NAVIGATION CHANNEL BACKGROUND

USACE Yaquina Bay and River Channel – authorized depths and most recent survey depths (conducted November 20, 2020).

TABLE C-1: NAVIGATION CHANNEL DEPTHS²⁶

20-Aug-21							
REPORT OF NAVIGATION CHANNELS EP 1130-2-520							
YAQUINA BAY AND HARBOR YAQUINA RIVER - OREGON					Minimum depths in each 1/4 or 1/2 width of channel entering from seaward		
Authorized Project NAME OF CHART Name of Channel (Mileage)	Date of Survey	Feet Width	Miles Length	Project Depth	Left Outside Quarter Feet	Mid-Channel for half project width Feet	Right Outside Quarter Feet
YAQUINA BAY AND HARBOR							
Entrance	26-Jul-21	400	1.0	40	30	31	32
		300	0.5	30	25	31	32
South Beach Marina	14-Apr-21	100	0.4	10	9	9	8
HARBOR							
Entrance To Turning Basin	27-Jul-21	300	1.5	30	25	27	25
Turning Basin		1200	0.3	30	14	21	23
THE MUD FLATS	12-Apr-21	200	2.0	18	11	11	12
YAQUINA RIVER							
Weiser Point to 1 Johnson Slough	2-Feb-21	150	3.1	10	8	9	8
Fleisher Slough 2 to Nute Slough	3-Feb-21	150	2.7	10	7	7	7
Amundson Slough 3 to Toledo	4-Feb-21	150	3.2	10	0	6	1
Toledo to Mi. 14.5 4	4-Feb-21	150	1.0	10	5	6	6
Depot Slough	8-Feb-21	200	0.4	10	2	3	0
ENG Form 4021-R (Nov 1990) Reference is Navigation Chart No. 18581. NOTE All Depths refer to Mean Lower Low Water.							
Page 15							

Source: USACE

²⁶ USACE website, https://hydrosurvey.nwp.usace.army.mil/Channel_Status/20210820/page15.pdf. Last accessed 8/23/2021.

Navigation Channel Maps

The following maps show the results of the most recent soundings of the Yaquina River Navigation Channel.

- Survey data is referenced to Oregon North State Plane Coordinates North American Data 1983.
- Sounding reference is below Mean Lower Low Water in U.S. Survey Feet.
- Surveys were conducted Feb 2 to Feb 8, 2021.
- Source: https://hydrosurvey.nwp.usace.army.mil/nav_pgs/n_coast_north.asp

FIGURE C-1: WEISER POINT TO JOHNSON SLOUGH

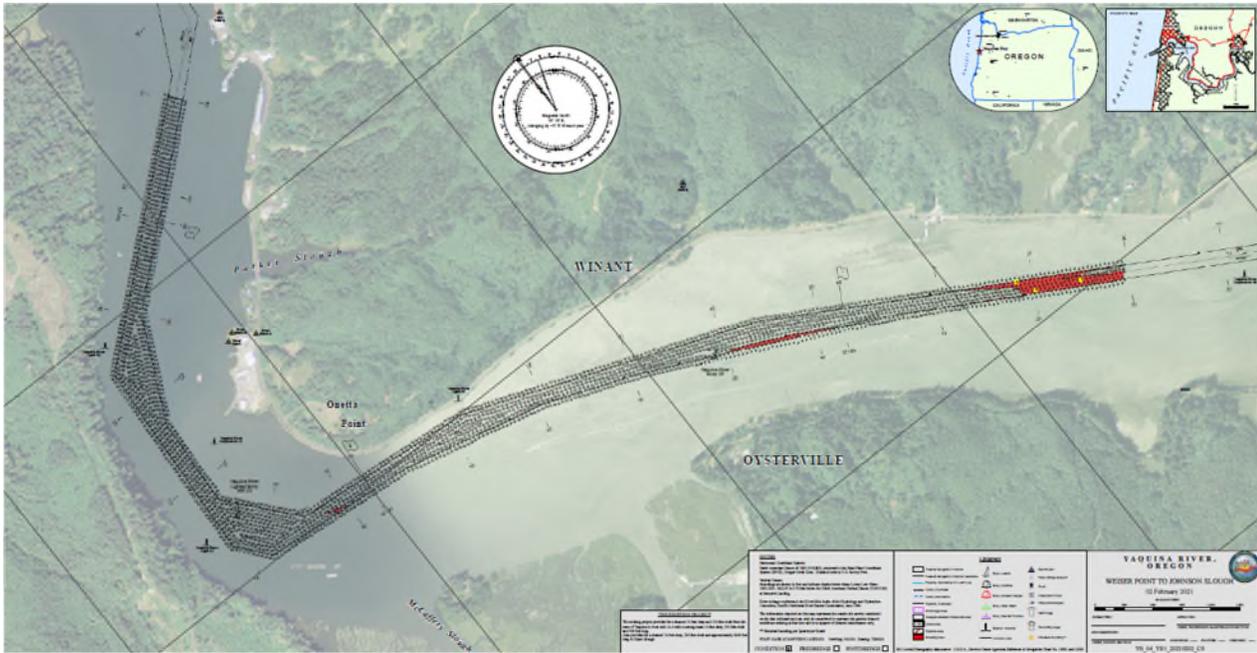


FIGURE C-2: FLEISHER SLOUGH TO NUTES SLOUGH

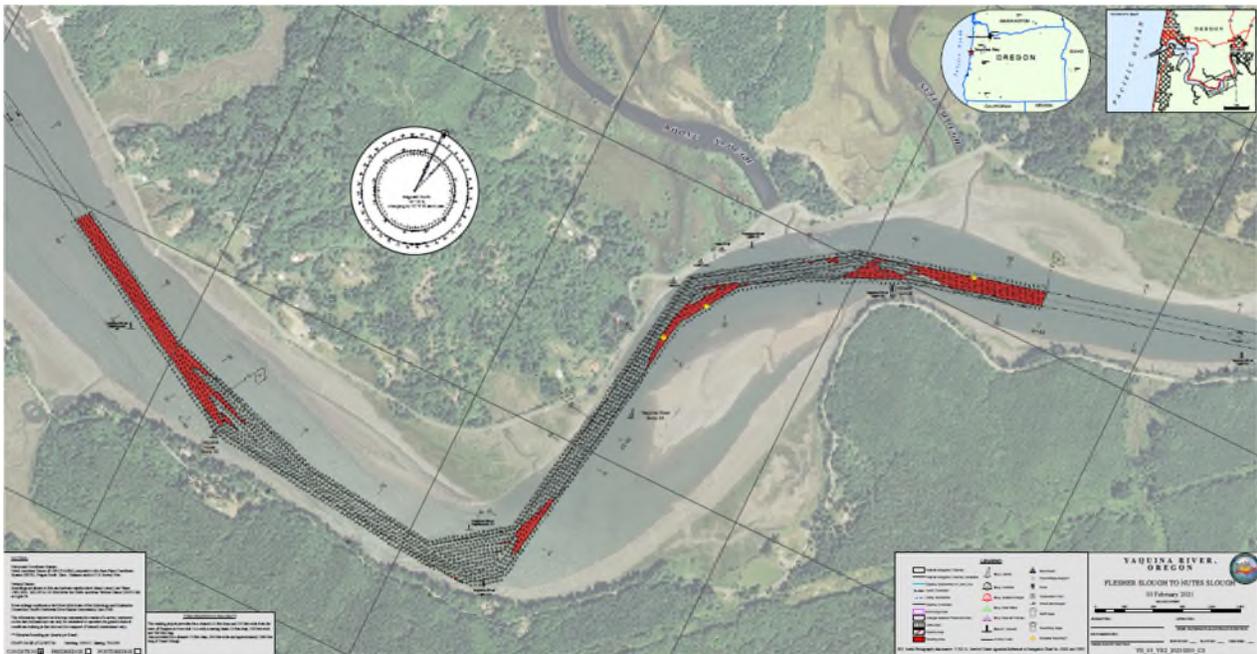


FIGURE C-3: AMUNDSON SLOUGH TO TOLEDO

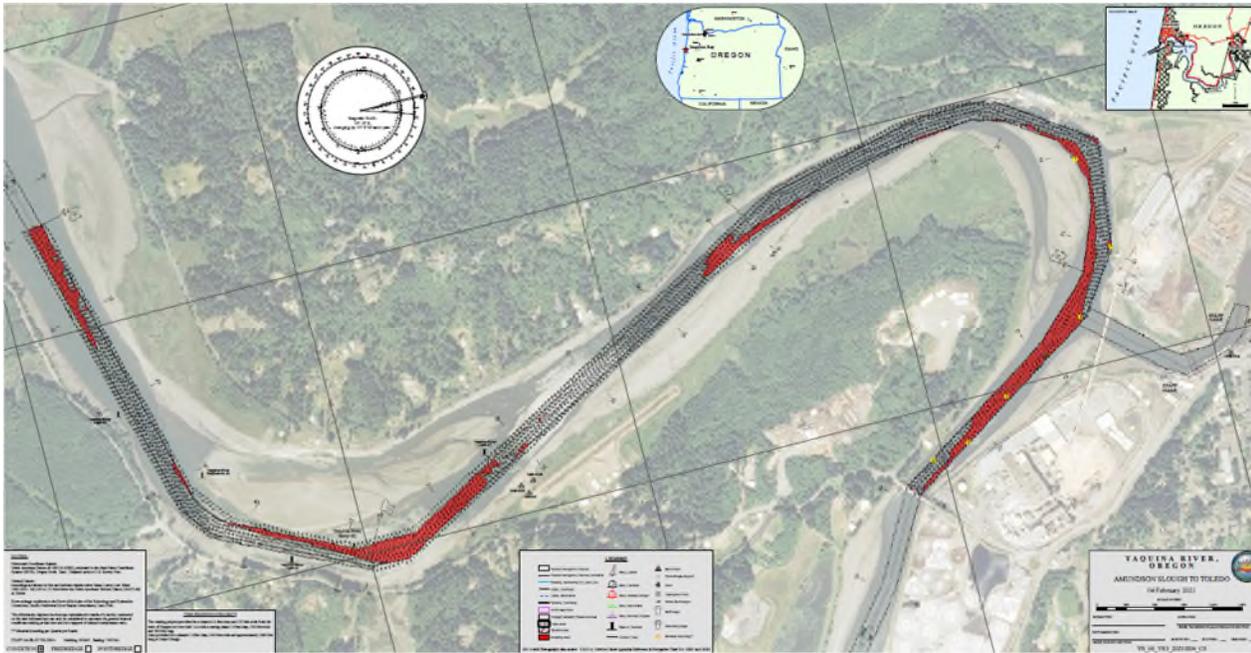
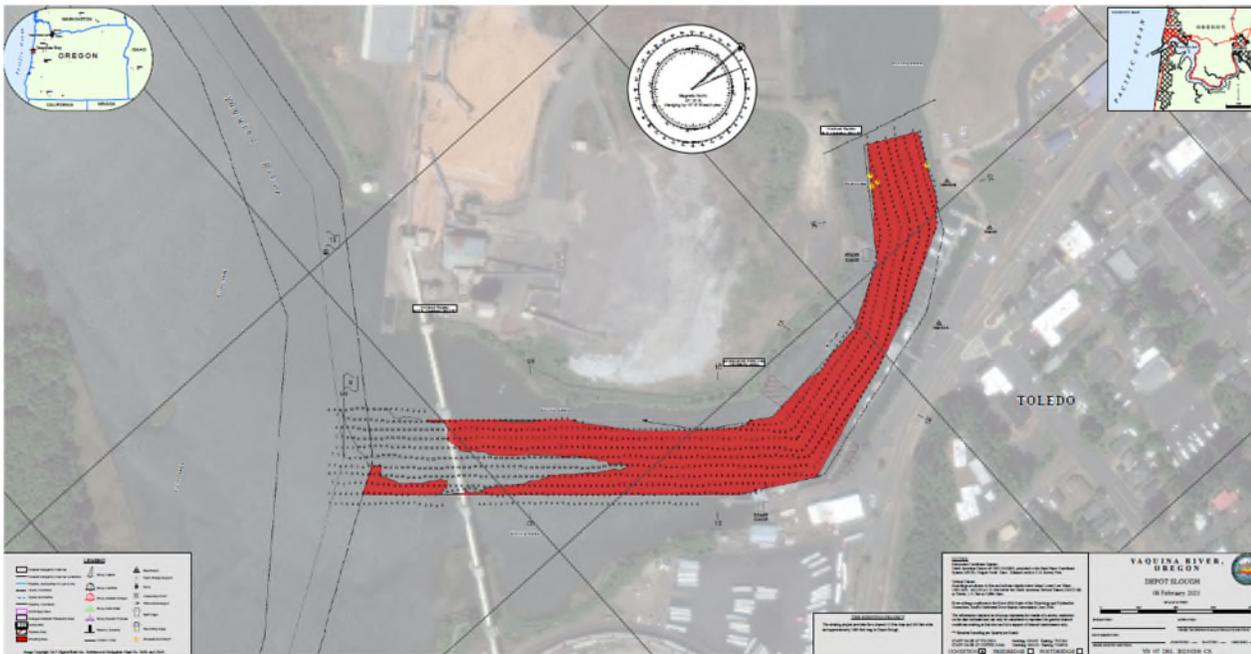


FIGURE C-4: TOLEDO TO MI. 14.5 DEPOT SLOUGH



WRDA to increase funding for Oregon ports

December 24, 2020, posted by Zlatan Hrvacevic

U.S. Senators Jeff Merkley — who serves on the Senate Environment and Public Works Committee and on the Senate Appropriations Committee — and Ron Wyden have announced that after last-minute legislative push, the WRDA 2020 bill will increase funding to nearly all Oregon ports.

“As we continue to work to beat back the coronavirus and rebuild our economies after this devastating year, we must focus on creating the strong foundation our communities need to be healthy and thrive,” said **Merkley**, who authorizes these projects through his role on the Environment and Public Works Committee, and then funds them through his role on the Appropriations Committee. “That’s why I fought to ensure that this year’s WRDA bill will help us safeguard Oregon’s incredible waterways, and make key investments in the harbors and ports that our coastal economies rely on.”

“Much of Oregon’s economy flows through our state’s ports and harbors, and these investments help provide coastal communities a much-needed lifeline to survive the economic fallout of the pandemic,” **Wyden** said. “I’m gratified these resources are headed to Oregon waterways and will keep working to support these job-creating assets throughout our state.”

The Water Resources Development Act (WRDA) provides authorizations for studies and projects that upgrade infrastructure like jetties, levees, and breakwaters in Oregon’s communities, such as West Linn and Coos Bay-North Bend, as well as critical funding for ports, such as the Port of Astoria, Port of Bandon, and Port Orford.

The bill unlocks the Harbor Maintenance Trust Fund (HMTF) by providing the authority to appropriate \$2 billion in additional funds annually for harbor maintenance needs from its existing balance. Combined with a provision from the CARES Act — which provided economic relief in response to the global pandemic — the bill provides for up to \$4 billion in annual expenditures for port maintenance.

Merkley and Wyden have consistently fought to make sure small ports in Oregon and throughout the country receive a share of HMTF funding for dredging and other critical projects.

This year’s WRDA bill includes language that allows, beginning in October 2022, up to \$5 million of HMTF funding for Emerging Harbors — which includes most of Oregon’s — to be available for up to 10 maintenance dredging projects in marinas or berthing areas in harbors located adjacent to, or accessible by, a federal navigation project. This will bolster small ports’ access to funding for maintenance projects.

Oregon Public Ports Dredging Partnership

The Oregon Public Ports Dredging Partnership connects with Business Oregon over dredging and offers peer support to public ports and marinas.

The partnership has five members that meet monthly to engage over the management of dredging projects and programming, and offer peer support to public ports and marinas. One member functions as the operational manager of the state's dredging equipment and the remaining four represent the Oregon public ports.

TABLE C-2: OREGON PUBLIC PORTS DREDGING PARTNERSHIP MEMBERS²⁷

Name	Title	Port	Member Type	Beginning
Mike Dunning	Dir. of Maritime Ops	Coos Bay	Inaugural Member	January 2020
Jeff Griffin	Port Manager	Bandon	Inaugural Member	January 2020
David Huntington	Port Manager	Siuslaw	Inaugural Member	January 2020
Michael Saindon	Port Manager	Garibaldi	Inaugural Member	January 2020
Bud Shoemake	Port Manager	Toledo	Inaugural Member	January 2020

Source: Business Oregon

²⁷ Business Oregon website, <https://www.orinfrastructure.org/Infrastructure-Programs/Oregon-Ports/Dredging-Partnership/>. Last accessed 8/23/2021.

Dredging Approved for Depot Slough²⁸

<http://oregoncoastdailynews.com/2016/03/02/toledo-depoe-slough-dredging-approved/>

By Kiera Morgan



The Port of Toledo announced some good news headed their way this summer. The Army Corps of Engineers has been allocated \$3.75 million dollars for the maintenance dredging of Depot Slough, which goes right into downtown Toledo. This means there will be a mechanical dredge that will remove about 45,000 cubic yards of material. According to Port of Toledo general manager Bud Shoemake this work is scheduled to be done some time between July 1st and October 31st.

He said the port is very pleased about the dredging but has asked that it not take place during a certain time of year, when they are doing their Wooden Boat Show. The corps will be going out to bid in April. Depot Slough area is usually on a 10-year dredging rotation and it has been 5-years since the last dredging so Shoemake said that is good news for Yaquina Boat works and their operations there. He thanked the congressional delegation for pushing this dredging through early and advocating for the funding to get it done. Residents and visitors will be able to see the large dredge at Depot Slough sometime this summer.

²⁸ Oregon Coast Daily News. <http://oregoncoastdailynews.com/2016/03/02/toledo-depoe-slough-dredging-approved/>. Last accessed 8/23/2021.

APPENDIX D TRANSIENT MOORAGE BACKGROUND

Downtown Waterfront

The Port owns properties along the Yaquina River (Depot Slough) adjacent to downtown Toledo. These properties are located within a light industrial area commonly called the Toledo Industrial Park (TIP). The Port has developed significant public amenities including the Depot Slough path, public restrooms, and an over-water viewing platform. Public art such as decorative benches and sculptures are weaved throughout the waterfront, "where art and industry meet".

Along Butler Bridge Road the Port maintains Waterfront Park, which has an activities pavilion, and floating docks with transient and permanent moorage facilities. The State of Oregon helps fund maintenance of the transient dock, through an Oregon State Marine Board Maintenance Assistance Program grant. The Port also has two boathouses at the marina supporting a Community Boathouse program that provides classroom and workshop space for community members to get hands-on experience with boatbuilding, maintenance, sailing and seamanship.²⁹

Boating Activity

The Oregon State Marine Board (OSMB) produces a Triennial Survey of Boaters, which estimates the boating use of waterways throughout the state. Data for boating activity in the Yaquina River and Yaquina Bay are presented in the following tables.³⁰

TABLE D-1: BOATING ACTIVITY IN YAQUINA RIVER AND YAQUINA BAY

Quarter	Yaquina River			Yaquina Bay		
	Motorized	Non-Motorized	Total	Motorized	Non-Motorized	Total
Jan-Mar	2,318		2,318	7,906	245	8,150
Apr-Jun	1,663	573	2,236	12,560	687	13,246
Jul-Sep	4,046	814	4,860	24,780	699	25,479
Oct-Dec	2,429	1,561	3,990	9,835	631	10,467
Total	10,457	2,948	13,404	55,081	2,261	57,342

Source: Oregon State Marine Board 2017 Triennial Survey

²⁹ SBP Page 22

³⁰ OSMB. Triennial Survey of Boaters, 2017.

Boating Facility Grant No. 1407, Depot Slough Transient Tie-up Dock

October 24, 2019

Item C Port of Toledo

Background:

1. Marine Board staff inspected the tie-up dock facility and notified the Port of Toledo on July 31, 2017 that corrective actions needed to occur to remain in compliance with the grant. Two of the three items were corrected. The boathouse remains in the location between the tie-up dock and the marina.
2. Staff has met and discussed with the Port options including relocation of the boathouse and potential repayment of grant funds. On August 9, 2019 staff requested that U.S. Fish and Wildlife review our compliance determination and notify us if they concurred with the determination. The request was shared with the Port. On August 27, 2019 the Port Manager met with Director Warren to discuss the boathouse, why they do not want to relocate the boathouse and that they would like consideration to repay a prorated amount.
3. September 16, 2019, the Port Manager met with U.S. Fish and Wildlife and OSMB staff participated by phone to discuss the boathouse and the federal grant. During the call OSMB staff offered to meet with the Port onsite and look at proposed areas to relocate the boathouse.
4. On September 27, 2019 we received a response back from U.S. Fish and Wildlife Service indicating that they concurred with our determination. Additionally, they outlined our requirements to resolve the situation. Staff met with the Port and toured the facilities looking for possible locations to relocate the boathouse on October 7, 2019.

TABLE D-2: PORT OF TOLEDO DEPOT SLOUGH TIE UP DOCK EXPENDITURES (FG1407)

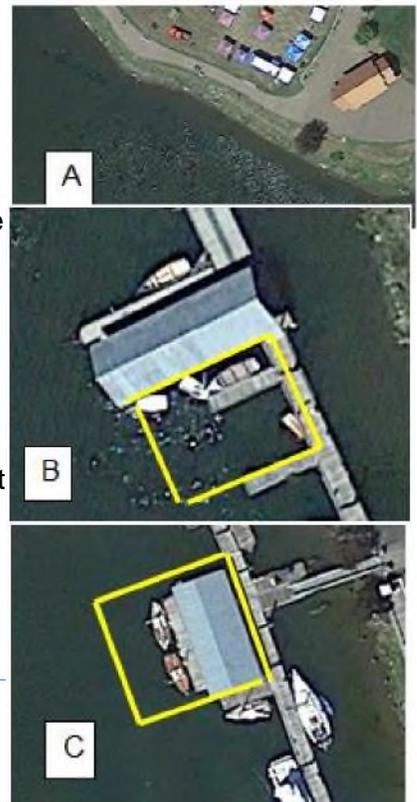
Funding Source	Amount
OSMB Clean Vessel Act (CVA) - Federal Funds	\$60,000.00
OSMB Clean Vessel Act (CVA)- State Funds	\$20,000.00
OSMB Boating Infrastructure Grant (BIG) -Federal Funds	\$286,054.94
OSMB Boating Infrastructure Grant (BIG)-State Funds	\$90,000.00
Marine Navigation Improvement Fund	\$208,727.70
Port of Toledo	\$34,943.86
Port of Toledo labor, equipment and materials	<u>\$98,758.87</u>
Project Expenditure Total	<u>\$798,485.37</u>
OSMB CVA State and Federal Fund Total	\$80,000.00
OSMB BIG State and Federal Fund Total	\$376,054.94
OSMB State and Federal Fund Grand Total	\$456,054.94

Options:

1. The Port can keep the boathouse in the current location and repay the Marine Board \$456,054.94. This would close the grant and the Port would be under no obligation with us and could operate the facility as they determine.
2. The Port can keep the boathouse in the current location, commit to operating the pumpout and dump station with a reserved slip for boats using the pumpout and dump station and repay the Marine Board \$376,054.94. This would amend the grant to only the CVA portion of the facility and the Port could operate the remaining portion of the facility as they determine. The Port would need to obtain all permits associated with installation of the boathouse.
3. The Port can keep the boathouse in the current location, commit to operating the pumpout and dump station with a reserved slip for boats using the pumpout and dump station, operate the tie-up facility for boats under 26ft. in length and repay the Marine Board \$286,054.94. This would amend the grant to remove the federal BIG funding requirements. The Port would operate the facility under standard terms and conditions for state funded grants. The Port would need to obtain all permits associated with installation of the boathouse. This would deviate from grant terms and past practices.
4. The Marine Board could deviate from grant terms and past practices allowing the Port to repay a depreciated amount of \$282,041.20. The Port can keep the boathouse in the current location, commit to operating the pumpout and dump station with a reserved slip for boats using the pumpout and dump station This would amend the grant to only the CVA portion of the facility and the Port could operate the remaining portion of the facility as they determine. The Port would need to obtain all permits associated with installation of the boathouse.
5. The Marine Board could repay U.S. Fish and Wildlife Service federal funds \$286,054.94 and hold the Port harmless. This would amend the grant to remove the federal BIG requirements. Special payments for other construction grants would be reduced by that amount of funding for the biennium. The Port would need to obtain all permits associated with installation of the boathouse.

6. The Port could relocate the boathouse in the following areas or a different location not identified: A). along the path in the park and greenspace. This could provide areas for people to watch rather than the current practice of placing chairs on the tie-up dock. B) relocate the boathouse to the adjacent boat slip area. The boathouse is approximately 20 feet wide and 50 feet long. The area identified is approximately 31feet wide. The additional space can be used to create viewing areas, moor the response boat or create a small rental slip. C) The boat building boathouse could be rotated and the boathouse on the tie-up dock could be located next to it. Collectively the two boathouses are approximately 43 feet wide and 50 feet long. This configuration would most likely not impact

the number of slips available in the marina. This would require no repayment of funds and the grant would be extended by the amount of time the facility was out of compliance. The Port would most likely need to apply for permits to install additional piling. The Port would also need to replace the gangway with an ADA compliant



gangway. Staff estimates the cost for two piling, 80ft aluminum gangway, abutment modification, permitting and Port labor to relocate the boathouses would be \$80,000-\$100,000. This could be less if the Port decided to fabricate the aluminum gangway. If the Port relocates the boathouse to one of the above locations or identifies a different location the Port could apply for a Waterway Access grant to enhance education and access opportunities to underserved community, add a low-freeboard paddle dock or expand access. This potentially could result in cost sharing for the gangway, abutment and piling.

7. The Marine Board could not enforce the terms and conditions of the federal grant. Not resolving this situation by either repaying the federal funds or relocating the boathouse would result in the Marine Board being determined a high risk by U.S. Fish and Wildlife Service for future grants. The Marine Board would no longer be eligible to apply for BIG or CVA funds.

Recommendation:

1. The Port of Toledo and Marine Board have a good relationship. The Port has been a longtime partner with the Marine Board on numerous grants and is always willing to share information, try new designs, materials or products.
2. The Toledo Community Boathouse is operated by dedicated and passionate volunteers from the community. The high level of community involvement is amazing. The group focuses on boating safety and education when paddling or on small sailboats. The Free Boating participation has increased and is often a child's first experience on the water. This also provides an opportunity for people to try different watercraft in a safe venue. As always staff is supportive of education opportunities and promotion of safe boating practices. Unfortunately, the boathouse is connected to the tie-up dock and is not in compliance with federal rules.
3. U.S. Fish and Wildlife Service (USFWS) is working with us to resolve this situation. Staff must respond to USFWS by November 8 acknowledging their letter and identifying the Board's direction. Staff will then prepare a Corrective Action Plan by February 7, 2020 that includes description of the corrective action, milestones, and timeline to achieve the milestones. A draft will be presented to the Board at the January 2020 meeting.
4. Staff recommends that the Board direct staff to continue working with the Port to resolve the situation with Boating Facility Grant 1407. Staff further recommends that the Board direct staff to pursue the following three options in priority order and not pursue other options as identified above:
 1. Relocation of the boathouse. If no location can be found or permitted, move to priority 2.
 2. Port repays \$376,054.94 to the Marine Board and continue operating the pumpout and dump station with one reserved slip. If the Port does not want to continue operating the CVA facilities, move to priority 3.
 3. Port repays \$456,054.94 to the Marine Board. The grant will be cancelled. This may require the Marine Board to pay USFWS and then recover funds from the Port.

APPENDIX E MARKETING

Example: Lower Columbia River Water Trail³¹

The Lower Columbia River Water Trail is a 146-mile, bi-state trail spanning the tidally influenced river waters from the Bonneville Dam to the Pacific Ocean. This water trail was dedicated in the summer of 2004. Work is ongoing surveying, working with landowners, and publicizing launch and landing sites, campsites, and other facilities for non-motorized boaters (those generally using kayaks, canoes, small rowboats, etc.). The new website has a [GIS-based map](#) and increasing amounts of information for those traveling on the Lower Columbia.

FIGURE E-1: LOWER COLUMBIA RIVER WATER TRAIL



Source: Washington Water Trails Association

Frequently Asked Questions

Q: What is a water trail?

A: Around the world there are many types of water trails. For WWTA a water trail is a route along a river or across other bodies of water such as a lake or salt water for people using small beach-able boats like kayaks, canoes, day sailors, or rowboats. Water trails are most often identified by the land facilities that support water travel. These include launch and landing sites, campsites, rest areas, and other points of interest. On land, trails have distinct treads or walkways; on water it's the entire water surface, a surface that is constantly changing with flow, tide, current, boat wakes, and wind.

³¹ <https://www.wwta.org/water-trails/lower-columbia-river-water-trail/>

Q: Where are these water trails located?

A: See [our maps](#).

Q: What is the Cascadia Marine Trail (CMT)?

A: The Cascadia Marine Trail is a salt water trail that stretches over 140 miles, from the Canadian border on the north to southernmost Puget Sound near Olympia. More info is available in our Trails Section.

Q: Rentals & Tours – Does WWTA lead trips?

A: WWTA is an advocacy non-profit using small boats for education and surveys, getting to remote sites for work parties, and the occasional member event. Check the calendar for events. If you are looking for guided trip or classes, we suggest contacting your local recreation department or the great businesses and organizations that support us.

Q: Where can I go?

A: Washington state has a wide variety of water opportunities for rafting, sailing, flat water canoeing, whitewater adventure, and both protected and ocean saltwater boating. Water trails are used mostly by sea kayakers. For a list go to Trails. The Cascadia Marine has mellower excursions in the South Sound region and increasingly challenging conditions around the San Juan Islands and Straits.

Q: Do I have to be a WWTA member to use water trail sites?

A: Water trail camping sites and trailheads are available for the public. Your WWTA membership supports our efforts to increase shoreline access and develop new campsites and facilities in Washington state.

Q: Can you help me plan a trip?

A: We have extensive trip suggestions available under [planning resources](#) and you can find maps under our [trails section](#), depending on which water trail you plan to visit.

Q: Can I buy an annual pass?

A: In 2003 Washington State Parks ended its annual marine trail permit program that was good only at its own Cascadia Marine Trail campsites. Fees and reservations vary; some campsites are free while others may require reservations additional payment. Be prepared to pay the fee with exact dollars, as many sites are self-service. For most State Parks sites, the fees are \$12 per night for up to six adults. The following State Parks sites cost \$14 per night: Belfair, Deception Pass, Fay Bainbridge, Fort Ebey, Fort Flagler, Fort Worden, Kopachuck, Manchester, Penrose Point, Spencer Spit, and Twanoh.

Q: Is it just for kayakers?

A: While Washington Water Trails Association works for public water and shoreline access for those using small non-motorized boats, the Association works for the public; all people who enjoy fishing, wildlife viewing, or just sitting at the water's edge. The majority of WWTA members use kayaks as these boats were designed for the cold-water conditions found on the saltwater and many mountain-fed rivers and streams in Washington state.

Q: Where do you camp?

A: Camp at designated water trail campsites or at public parks and private campgrounds adjacent to the water. For a break from camping, contact bed and breakfasts (B&Bs) or hotels along the route. Do not camp on private property or restricted areas unless you have first received permission from the landowner.

Q: How many people can fit into a campsite?

A: Campsites come in many sizes. Limit your group size and learn about camp capacities before you go. The first principle of Leave No Trace is Plan Ahead and Prepare.

Q: Can I reserve a site?

A: The majority of Cascadia Marine Trail campsites welcome all those who are traveling by human or wind-powered beachable craft. If you are the first to arrive at a site, leave room for others who may arrive late. All users should be considerate and work out tent placement amicably. Some campsites are by reservation only. WWTA works with many land managers, and some require reservations. These include Anderson Island (only available to WWTA members) and Laughlin Cove. Reserve by contacting us.

Q: How much does it cost to camp?

A: Fees and reservations vary; some campsites are free while others may require reservations and payment. Be prepared to pay the fee with exact dollars, as many sites are self-service. For State Parks sites, the fees start at \$12 per night for up to six adults.

Q: Who do I contact if the site is missing a sign or there is something wrong with the site?

A: If you see a ranger or maintenance worker, let them know what you noticed. Follow up with a note, email or letter later. If there is no one at the site, jot down details; location, date and time of your visit and sent to WWTA when you return. If you have a camera, take a picture!

Q: Are there other water trails in North America?

A: Washington state is one of many states with water trails. There are water trails of various lengths from Alaska to California and in many states as well as mainland and maritime Canada. The Great Lakes and Key West have trails but none that has the Cascade volcanoes, fish and ferries, and array of year-round water activities of the Pacific Northwest!

Q: What if I own land on the shoreline that I want to turn into a water trail?

A: Contact WWTA or a local land conservancy. There are a number of resources available to help you.

Q: Who maintains the sites?

A: Many people care for the sites. WWTA Site Stewards and volunteers do periodic maintenance. Park staff lovingly care for the parks where they live and work. Local clubs may adopt a site. If you want to help, check out our get involved page.

Q: What do I get as a member?

A: Membership benefits include access to current trail information, our quarterly newsletter, and discounts at local businesses. More information is available on our join pages.

Q: How do I contact my legislator to support water trails?

A: Be prepared. Know the issues and what your legislator's interests are. There is good information on how to communicate with your state legislator available online. Find out who represents you. Contact local elected officials and government staff and help obtain funding by writing your US representatives and senators.