



August 6, 2024

**Disadvantaged Business Enterprise (DBE)  
Project Goal for 2024 – 2025 Vessel Construction Project**

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**Background**

The Maine Department of Transportation (MaineDOT), located in Augusta, Maine, is planning to acquire a new hybrid-electric ferry, partially funded by the Federal Transit Administration (FTA). The amount of FTA funds available for this project is \$28,000,000.

MaineDOT intends to release an RFP for the construction of the new ferry in September 2024. This electric hybrid ferry will be designed and constructed for efficient and reliable ferry service. The expected passenger capacity target range may be 100 - 225 passengers (with 188 available seats) and the expected vehicle capacity target range may be 40 cars or 30 cars and some trucks. The maximum service speed range will be 13 knots.

As a result of the new FTA regulations for DBE programs in effect, new ferry construction projects fall under FTA's transit vehicle manufacturer (TVM) requirements, limiting bidders to FTA-certified TVMs. Because there are no shipyards that are registered as TVMs, MaineDOT has requested FTA approval to establish a project-specific DBE goal for this project, in lieu of limiting proposers to certified TVMs.

This memo addresses the requirements outlined in 49 CFR §26.45 for a grantee to establish a DBE project goal and summarizes findings and conclusions.

**Approach**

There are eight requirements that must be met to establish the appropriate percentage of DBE participation. These are:

1. Develop a detailed list of contracting and subcontracting opportunities;
2. Identify the geographic market area;
3. Develop the step one base figure;
4. Define the sources used to establish the goal;
5. Step two adjustment;
6. Include a race-neutral breakdown;
7. Provide for meaningful consultation; and,
8. Provide proof of publication.

**Requirement 1: Develop a detailed list of contracting and subcontracting opportunities**

In order to develop a detailed list of contracting and subcontracting opportunities, previous MaineDOT ferry construction contracts and similar other in-state electric-hybrid ferry construction contracts were reviewed to determine all possible NAICS codes. This list was then cross-referenced with NAICS code descriptions taken from <https://www.naics.com/>. All available subcontracting opportunities were considered, including opportunities for constructing larger components and subcomponents, for the construction of the proposed ferry. This analysis includes subcontracting opportunities in 18 NAICS codes.

The 18 NAICS codes used to establish this project goal were:

221330	Heating/Cooling Distribution including air-conditioning supply, heated air distribution, steam heating systems
238190	Cathodic Protection/Welding, including curtain wall, metal installation, welding on-site contractors, ornamental metal work installation, fire escape installation
238210	Electrical Contractors and Other Wiring Installation Contractors, including communication equipment installation, control system (environmental, humidity, temperature) installation, electrical wiring contractors
238220	Plumbing, Heating and Air-Conditioning Contractors, including heating, ventilation and air-conditioning (HVAC) contractors, fire sprinkler system installation
238310	Drywall and Insulation Contractors, including acoustical ceiling tile and panel installation, acoustical foam (sound barrier) installation, soundproofing contractors
238320	Painting and Wall Covering Contractors, including ship painting contractors
238350	Finish Carpentry Contractors, including ship joinery contractors
332313	Fabricated Plate Work, including fabricated metal plate work (cutting, punching, bending shaping and welding) of purchased metal plate
332510	Marine Hardware Manufacturing, including metal hinges, handles, keys and locks manufacturing
332913	Plumbing Fixture Fitting and Trim Manufacturing, including faucets, spigots, stopcock drains and supply line assemblies
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, including communications equipment, mobile and microwave, manufacturing Global Positioning System (GPS) equipment manufacturing, marine radio communications equipment manufacturing
332996	Fabricated Pipe and Pipe Fitting Manufacturing, including fabricated pipe and pipe fittings made from purchased pipe
334511	Search, Detection, Navigation, Guidance, Aeronautical and Nautical System and Instrumentation Manufacturing, including sonar systems and equipment manufacturing, navigational instruments manufacturing
335313	Switchgear and Switchboard Apparatus Manufacturing, including switchboard, converters, equipment associated with electric propulsion
335911	Storage Battery Manufacturing, including lithium storage batteries manufacturing, lead acid storage batteries manufacturing, rechargeable nickel-cadmium (NICAD) batteries manufacturing
336611	Ship Building and Repairing, including ferryboat building, shipyard (facility capable of building ships)
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing, including compressor, air and gas rental or leasing, industrial truck rental or leasing, materials handling machinery and equipment rental or leasing, scaffolding rental or leasing
541330	Engineering Services, including acoustical engineering consulting services, engineering consulting services, marine engineering services

Requirement 2: Identify the geographic market area

This vessel construction project includes both a construction management/design contract and a shipyard construction contract. We are engaging in a CID process, meaning before we put the project out to bid, we are meeting with pre-qualified shipyards. We have 3 participating:

1. Thoma-Sea in Houma, Louisiana;
2. Eastern Shipbuilding Group, Inc. in Panama City, Florida; and
3. Senesco Marine in North Kingstown, RI

Based upon historical data and the geographic market area for MaineDOT’s previous project specific goals for the Department’s most recent vessel construction projects, MaineDOT has defined the geographic market area to be the east coast of the United States.

Requirement 3: Develop the step one base figure

This analysis uses a “snapshot” of data from a specific point in time as the source of data and the basis for the analysis. The source data used for this analysis can be referenced in **Appendix 1** (excel spreadsheets) provided with submission of this report.

Data was pulled from the Census Bureau’s 2022 County Business Patterns database for each of the 18 NAICS codes included in this analysis for “all firms” in the geographic market area of the states of Florida, Louisiana and Rhode Island. Data was also pulled from the state of Florida’s Unified Certification Program (FUCP), state of Louisiana’s Unified Certification Program (LUCP) and state of Rhode Island’s Unified Certification Program (RIUCP) databases for “ready, willing and able DBEs” in the 18 NAICS codes for Florida, Louisiana and Rhode Island. The FUCP, LUCP and RIUCP data was used as the numerator. Relative Availability of DBE Firms was derived by dividing the number of ready, willing, and able DBEs in a particular NAICS code by the number of all firms (DBEs and non-DBEs) in that NAICS code.

$$\text{Relative availability for each NAICS code} = \frac{\text{Ready, willing, and able DBEs}}{\text{All firms ready, willing, and able (including DBEs and non-DBEs)}}$$

**Appendix A – Step One – Base Figure** displays the relative availability of DBE firms for each of the NAICS codes in Florida, Louisiana and Rhode Island.

In order to ensure that the Step One Base Figure is as accurate as possible, the relative availability of DBEs for each NAICS code is weighted. Estimated contract dollars for each industry classification were divided by the total FTA contract dollars (\$28,000,000) resulting in percentage of total dollars per NAICS classification, called the weighted percentage.

Next, the base figure for each NAICS code was calculated by multiplying the weighted percentage of funds to be expended for each NAICS code by DBE relative availability for each NAICS code (carried forward from Appendix A and shown in Column E in Table 1 below). Base figures for each of the NAICS codes are added together to come up with the Weighted Step One Base Figure for this vessel construction project. The Weighted Step One Base Figure is 2.17%.

**Table 1: Calculation of Weighted Step One Base Figure**

<b>A. NAICS Code</b>	<b>B. NAICS Description and Associated Contracts</b>	<b>C. FTA Dollars</b>	<b>D. Weighted % of Total FTA</b>	<b>E. DBE Availability</b>	<b>F. Base Figure</b>
221330	Heating/Cooling Distribution	\$500,000.00	1.79%	1.99%	0.04%
238190	Cathodic Protection/Welding	\$3,000,000.00	10.71%	5.77%	0.62%
238210	Electrical Contractors and Other Wiring Contractors	\$1,000,000.00	3.57%	1.69%	0.06%
238220	Plumbing, Heating and Air-Conditioning Contractors	\$500,000.00	1.79%	0.64%	0.01%
238310	Drywall and Insulation Contractors	\$500,000.00	1.79%	4.85%	0.09%
238320	Painting and Wall Covering Contractors	\$3,000,000.00	10.71%	3.34%	0.36%
238350	Finish Carpentry Contractor	\$500,000.00	1.79%	1.21%	0.02%
332313	Fabricated Plate Work	\$4,000,000.00	14.29%	1.39%	0.20%
332510	Marine Hardware	\$2,000,000.00	7.14%	0.00%	0.00%
332913	Plumbing Fixture Fittings	\$100,000.00	0.36%	0.00%	0.00%
332996	Fabricated Pipe and Pipe Fitting Manufacturing	\$1,500,000.00	5.36%	9.52%	0.51%
334220	Radio & Television Broadcasting and Wireless Communications Equipment Manufacturing	\$750,000.00	2.68%	0.00%	0.00%
334511	Search, Detection, Navigation, Guidance and Aeronautical and Nautical Systems and Instrumentation Manufacturing	\$750,000.00	2.68%	0.00%	0.00%
335313	Switchgear and Switchboard Apparatus Manufacturing	\$1,000,000.00	3.57%	5.26%	0.19%
335910	Lithium Battery Manufacturing	\$3,000,000.00	10.71%	0.00%	0.00%
336611	Shipbuilding and Repair	\$5,000,000.00	17.86%	0.00%	0.00%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	\$400,000.00	1.43%	0.28%	0.00%
541330	Engineering Services	\$500,000.00	1.79%	4.53%	0.08%
<b>Total Federal Funds:</b>		\$28,000,000.00	<b>Weighted Step One Base Figure:</b>		<b>2.17%</b>

**Requirement 4: Define the sources used to establish the goal**

Data from the Census Bureau’s 2022 County Business Pattern (CBP) Database was used to identify “all firms” within a NAICS code in Florida, Louisiana and Rhode Island. The webpage link used to obtain this data is:

<https://www.census.gov/programs-surveys/cbp/data/tables.html>. The DBE UCP Directories for Florida, Louisiana and Rhode Island were used to determine the number of “ready, willing and able” DBEs within each given NAICS code.

Summary data is located in **Appendix A – Step One**, submitted with this report. The webpage links for the state websites used to collect the data are:

1. Florida: <https://fdotxwp02.dot.state.fl.us/EqualOpportunityOfficeBusinessDirectory/CustomSearch.aspx>
2. Louisiana: <http://www8.dotd.la.gov/UCP/UCPSearch.aspx>
3. Rhode Island: <https://dedi.ri.gov/divisions-units/minority-business-enterprise-compliance-office/us-dot-disadvantaged-business>

**Requirement 5: Step two adjustment**

The marine industry is highly specialized, and construction must comply with several regulatory agencies, including the United States Coast Guard (USCG) and the America Bureau of Shipping (ABS). For mostly all of the NAICS codes included in the analysis, firms performing work on vessel construction projects must have either a shipyard to perform the prime work or required training, knowledge and expertise specific to marine environment and regulations to perform the majority of the subcontracting work. These requirements limit the number of available DBE firms capable of performing work in areas applicable to new ferry builds.

The prime work for this project falls under NAICS code 336611, Ship Building and Repair, and is 17.86% of the project. The initial data for this NAICS code identified 0 DBE firms in Florida, 0 DBE firms in Louisiana, and 0 DBE firms in Rhode Island. MaineDOT staff therefore removed the available prime work from the DBE goal calculation, resulting in the same 2.17% proposed DBE project goal.

**Past Participation:** Over the last 10 years, MaineDOT has conducted 2 federally funded procurements to construct 2 vessels. There has been 0% DBE participation on each of these federally funded contracts.

Following FTA’s guidelines for using past participation to adjust the step one base figure, the table below shows the median DBE participation of the last 2 vessel construction projects and the calculation to adjust the step one base figure:

**Table 2: Step 2 Adjustment for Past Participation**

Base Figure	
Past DBE Participation:	
• 2022 Vessel Construction Project	0.00%
• 2021 Vessel Construction Project	0.00%
Median Past DBE Participation	0.00%
Adjusted Base Figure:	2.17%
$(2.17\% + 0\%)/2 =$	1.09%

**Requirement 6: Include a race/gender-neutral breakdown**

An analysis of the construction records for the two vessels shows that historically, there has not been any DBE prime contractors or DBE subcontractors used for the construction of MaineDOT’s ferry vessels. Currently, the availability of DBEs in the marine shipbuilding industry is very limited.

The above analysis produced a 1.09% project goal for this new vessel construction project. Based on the \$28,000,000 of FTA funds allocated to this project, a 1.09% DBE project goal represents \$305,200 in FTA funding that may be awarded to DBE subcontractors during this vessel construction project. DBE participation shall be sought on a race/gender neutral basis, in other words, 1.09% DBE participation with 100% race neutral.

**Requirement 7: Provide for meaningful consultation**

MaineDOT is taking a targeted approach to establishing, advertising, and soliciting this proposed DBE project goal, and has provided meaningful consultation to potential prime contractors and subcontractors. Only three shipyards are pre-qualified and may bid on this project.