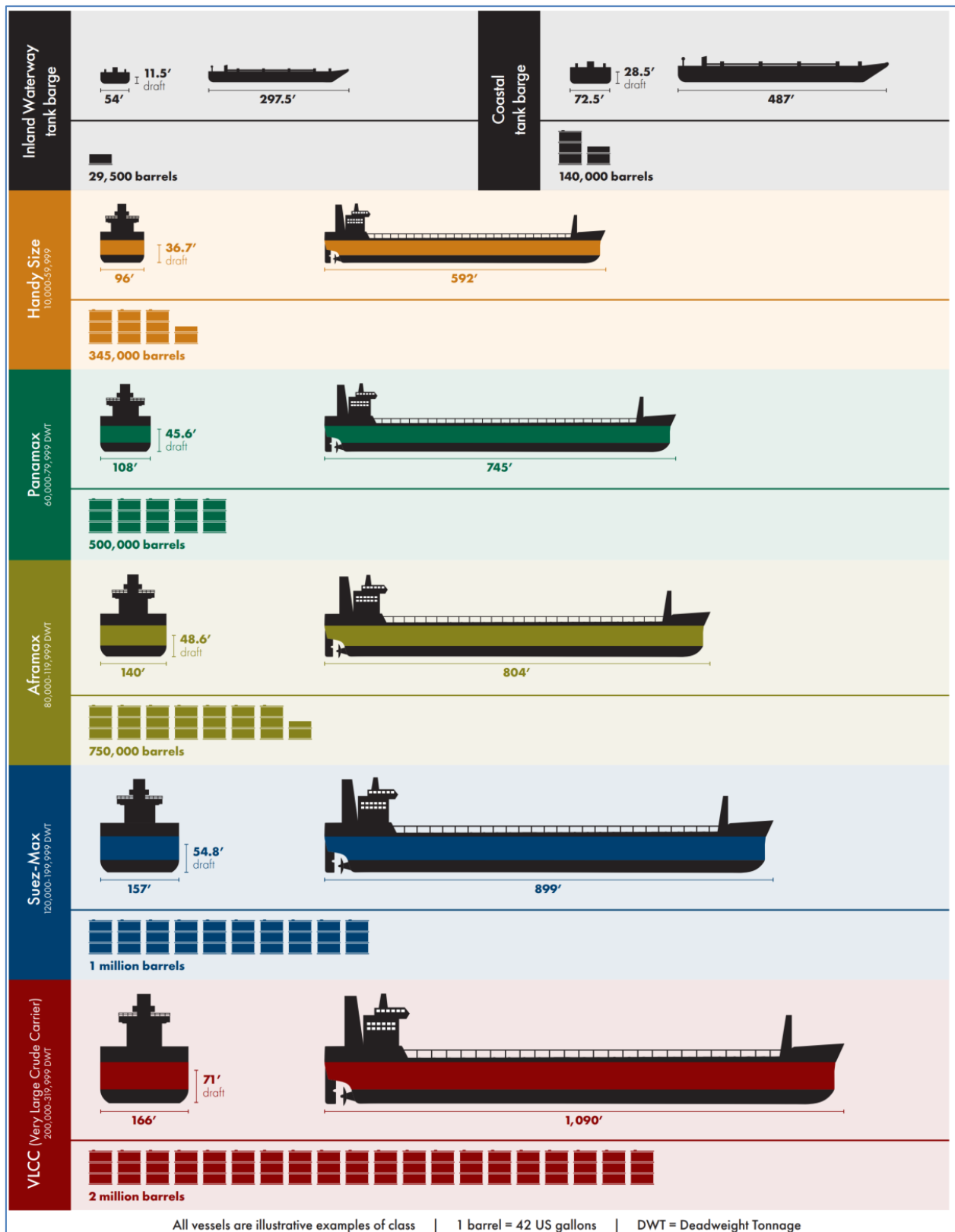


APPENDIX C: CLASSES OF TANKER VESSEL

Liquid bulk vessels that carry crude oil and refined petroleum products range in size from unpowered river barges to large ocean-going vessels capable of carrying over 100 million gallons of crude oil. Figure C-1 depicts the primary class sizes used to define tanker vessels and includes an illustrative example each class. Deadweight tonnage (DWT) is a measure of a vessel's carrying capacity and is used to delineate the class of ocean-going vessels. The capacity and physical size of vessels within each class varies, so the dimensions of the illustrative vessels in Figure C-1 should be considered representative rather than definitive.

Multiple inland waterway barges linked together are pushed or pulled by tugs and connect river ports to each other and to coastal ports. Coastal barges move individually and serve coastal ports. Articulated tug-barges (ATB) are large coastal barges that are undergoing rapid increases in capacity, with the most recent vessels capable of transporting 327,000 barrels of petrochemical products and rivaling Handymax vessels in length and breadth. Aframax vessels can transit the new Panama Canal locks, whereas Suezmax, Very Large Crude Carriers (VLCC), and Ultra Large Crude Carriers (ULCC, not illustrated) are unable to transit the Panama Canal. ULCC vessels have a DWT of over 320,000 and can carry 3 million barrels of crude oil but are currently unable to call at any U.S. coastal port. ULCC vessels can be serviced at deep-water mooring stations, such as the Louisiana Offshore Oil Port, that use hoses connected to land-based pipelines and pumping stations.

Figure C-1: Classes of Tanker Vessels with Illustrative Examples



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and Volpe Center, November 2018.