

ABSTRACT

Over the years, major US highways and interstates have become overcrowded with tractor-trailers moving goods and cargo, which has caused numerous problems from increased traffic to increased air-borne pollutants. The US Department of Transportation has increasingly sought after long term solutions including rail and maritime shipping. Specifically, Interstate 95 (I-95) has been the source of major problems for US east coast shipping. In an effort to provide a solution, this paper addresses the need for sea-based shipping, the advantages that it will provide, and the design of a vessel to address the issue. The paper revolves around the need to provide a feasible, economically friendly vessel capable of transporting 150 tractor-trailers (trailers as well as cabs) from Jacksonville, Florida to Bridgeport, Connecticut and back daily. Additionally, the paper outlines the procurement and maintenance operations demanded by the short-sea shipping ferries.