

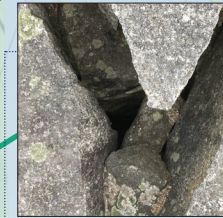
Deer Isle-Sedgwick Bridge: Too Critical to Fail

ORIGINS

Labor, students, and materials flow to the island at the rate of more than 4,000 vehicles / day from across the region.

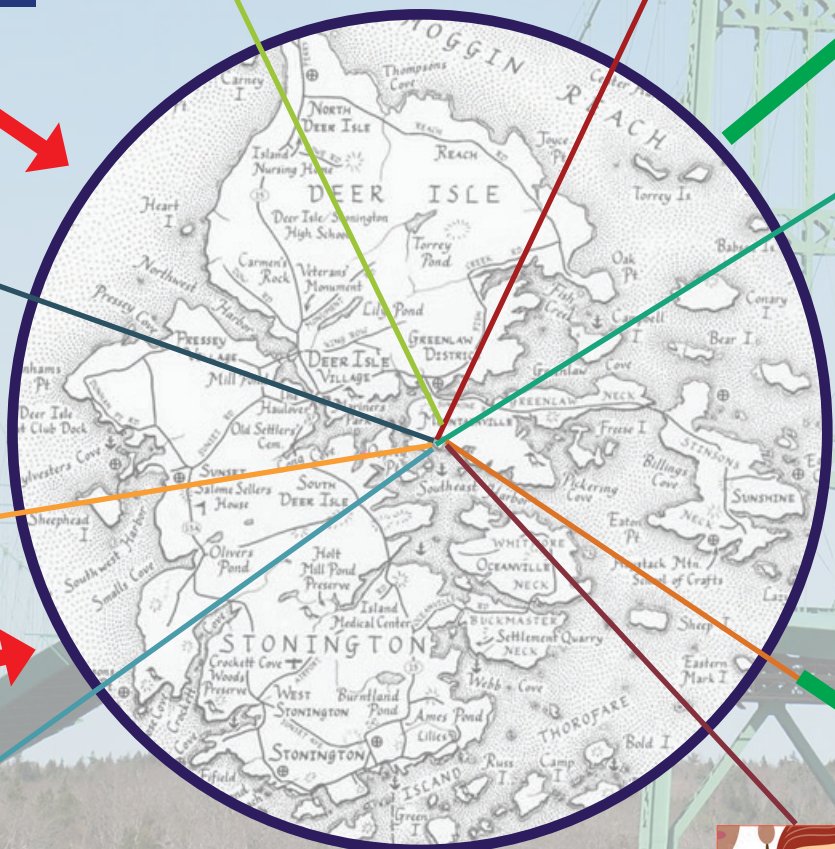


\$70M CHINA
CANADA
350 boats



JAPAN
NEW YORK

PHILADELPHIA
WASHINGTON, D.C.



DESTINATIONS

The island economy is an export economy. Granites of America alone moves an average of 150 loads of granite blocks per year to fabricators in Canada, the U.S., and as far away as Japan.



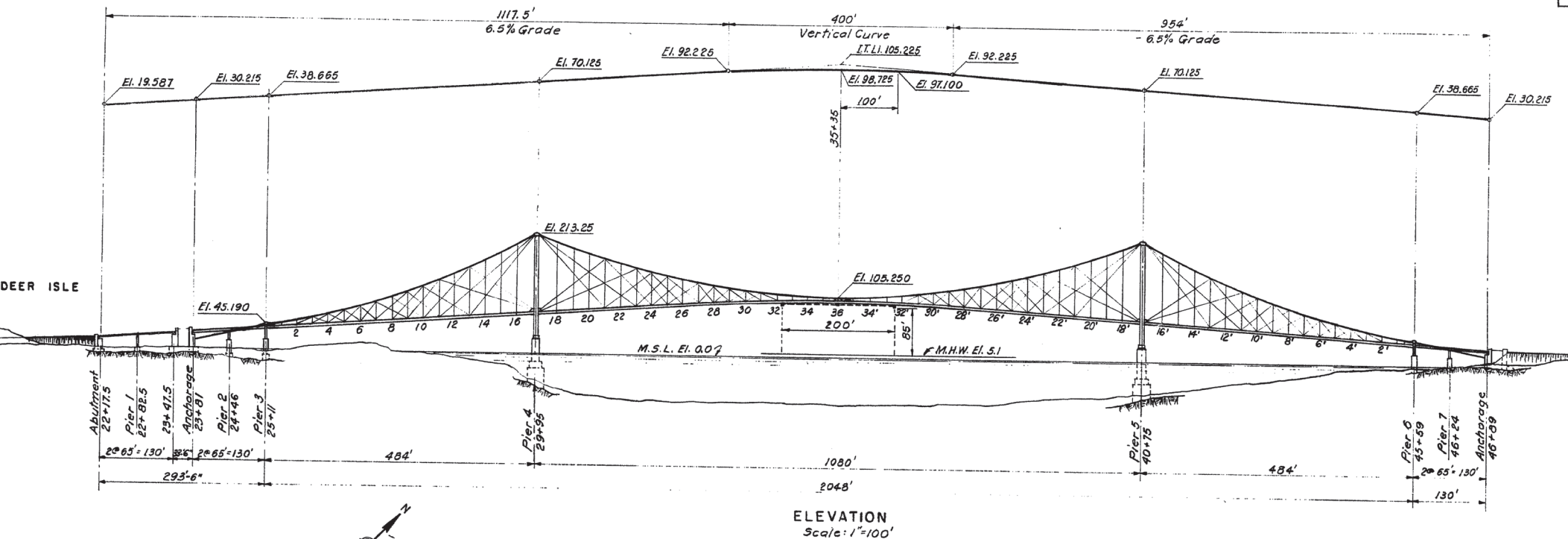
SOCIO-CULTURAL IMPACTS

More than 50% of island school teachers commute across the bridge daily, as do dozens of residents seeking regular, critical medical care including dialysis & chemo.



Our 84-year-old Bridge: Flawed from the Start

“It is notable for the innovation of its designers and contractors in creating a durable, long-span, high-level structure across a navigable arm of the Atlantic at minimal cost. Unprecedented use of prefabricated and previously used materials simplified construction and minimized costs...”



Climate Change = More Severe Storms

- * slim, low profile design was geared for WPA, Depression-era budgets: high labor, low material costs
- * its pre-stressed, twisted-strand bridge cables were first used on the Waldo-Hancock Bridge in Bucksport, which was replaced due to deteriorating cables when it was 74 years old
- * severe storms in the winter of 1942-43, close on the 1940 failure of the Tacoma Narrows Bridge, caused extensive damage and destroyed some of the cable stays, leading to the addition of stronger and more extensive longitudinal and transverse diagonal stays
- * the original stiffening girder was too shallow for the length, likely for economic reasons. After the collapse of Tacoma Narrows, the girders of the Deer Isle Bridge were stiffened by adding a system of cable and floor stays while maintaining the original girders
 - * in 1993, the special system of fairings that direct wind over and below the girders was added.
 - * in 2008, deck replacement further solidified the bridge structure