

Project Overview

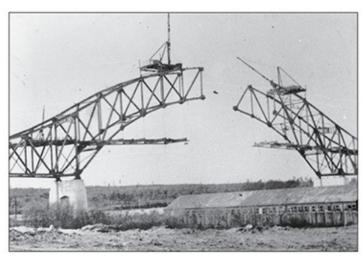
The U.S. Army Corps of Engineers (USACE), New England District, is conducting a multi-year Major Rehabilitation Evaluation Study of the Bourne and Sagamore highway bridges spanning the Cape Cod Canal to evaluate the current conditions of the bridges and what alternatives are feasible for the future.

The existing bridges were constructed more than 83 years ago and require frequent maintenance, which is costly and causes significant impacts to traffic crossing the Cape Cod Canal. The Study will result in a Major Rehabilitation Evaluation Report (MRER) and determine whether standard operation and maintenance, major rehabilitation, or replacement of both bridges will provide the most reliable, fiscally responsible solution for the future. The MRER will provide the basis of decision-making for USACE and Congress on the most cost-effective, safe alternative for critical public transportation access across Cape Cod Canal for the next several decades.

As part of the MRER, the USACE will develop an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) to examine the potential effects associated with the alternatives examined within the MRER, and allow for public involvement in the evaluation process.

History of the Bridges

On March 31, 1928, under direction from Congress and through authorization of the River and Harbors Act of 1927, the USACE assumed control of the Cape Cod Canal previously constructed by wealthy financier August Belmont, Jr. Along with maintaining the Canal, this authorization directed the USACE to build, operate, and maintain two high-span highway bridges to replace smaller cantilever bridges which had previously made navigating the canal difficult and unpopular with the maritime community. After listening to the concerns of waterway users and the public, the USACE constructed



new bridges, the Bourne and Sagamore, from 1933 to 1935, to provide two lanes of vehicle access (toll free) each way including pedestrian access. The highway bridges, and the companion Railroad Bridge constructed during the same era, provide the only means of access to the towns on Cape Cod and Islands. Approximately 215,000 residents and 5 million visitors use these bridges each year.

The USACE performs regular bridge inspections every 24 months, and maintains a 5-year operation and maintenance (O&M) plan to identify and schedule regular maintenance activities. The last major rehabilitation of the bridges was completed in the early 1980s. Since then, numerous O&M activities have been performed; some of these requiring lane closures dependent on the nature of the maintenance effort. Most recently these included steel repairs on the Bourne Bridge in 2012, joint replacement on the Sagamore Bridge in the spring of 2018, and upcoming effort to replace joints on the Bourne Bridge during the spring of 2019.

While the USACE will continue its rigorous inspection and maintenance schedule to keep the bridges operating as intended, construction costs and durations of these maintenance activities are anticipated to be significant. This is why the USACE is conducting the MRER Study.

Major Rehabilitation Study

To better understand the condition of its Civil Works projects the USACE completes a MRER whenever infrastructure maintenance construction costs are expected to exceed \$20 million and take more than 2 years of construction to complete. The MRER is based on four pillars of evaluation: a structural engineering risk and reliability analysis of the current structures, cost engineering, economic analysis, and environmental evaluation of all feasible alternatives. A MRER identifies operational and potential reliability issues, as well as opportunities for efficiency improvement, over a 50-year period of analysis.

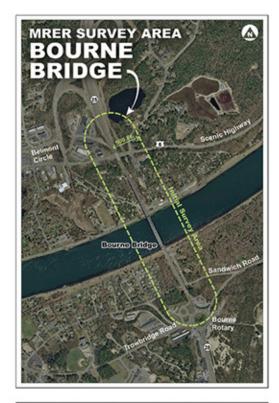
The MRER will compare the "without project" condition to all other alternatives. The "without project" condition refers to a baseline of continued regular inspections and standard maintenance construction on the bridges.

The MRER is the basis for USACE and Congressional decisionmaking between completing major rehabilitation or construction of new structures. While the MRER encompasses all necessary permitting of the selected plan, it will not result in a full design and construction. Additional efforts will be undertaken at the conclusion of the MRER to derive any additional Congressional authorization necessary leading to a full design and construction of the selected path forward.

Partnerships

The USACE is working with Federal and State partners, and local stakeholder groups to get technical and regional input for development of the MRER. Specifically, the USACE has entered into a Memorandum of Understanding with the Massachusetts Department of Transportation to continue sharing information and collaborative decision-making regarding the Bourne and Sagamore Bridges and future Cape Cod Canal regional transportation infrastructure alternatives into the future.

In addition, the USACE is closely coordinating with the Federal Highway Administration, U.S. Coast Guard, the Environmental Protection Agency, National Oceanic and Atmospheric Administration's National Marine Fisheries Service, federally recognized Tribes, a number of regulatory agencies of the Commonwealth of Massachusetts, and the more than 20 towns in the area to inform these stakeholders on the MRER process.







To learn more about the study, please visit the project website: www.CapeCodCanalBridgesStudy.com