

# MAJOR REHABILITATION EVALUATION STUDY

## Cape Cod Canal Bridges



US Army Corps  
of Engineers®



# The Major Rehabilitation Evaluation Study

The U.S. Army Corps of Engineers (USACE), New England District has conducted a multi-year Major Rehabilitation Evaluation Study of the Bourne and Sagamore highway bridges spanning the Cape Cod Canal to evaluate their current condition 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.

## Why a Major Rehabilitation Evaluation Study?

- Based on rigorous inspection history and required when infrastructure maintenance construction costs are anticipated to exceed \$20 million and will take more than two years of construction to complete
- Identifies potential operational and reliability issues for a 50-year period
- Identifies opportunities for efficiency improvements and fiscally responsible spending
- Results in Major Rehabilitation Evaluation Report (MRER) recommending Final Plan

## Components of the Major Rehabilitation Evaluation Report (MRER)

There are four pillars of evaluation in the study:

### Structural engineering evaluation

Perform risk and reliability analysis

### Cost engineering

Analysis of construction costs

### Economic evaluation

Benefit to cost ratio determination

### Environmental compliance

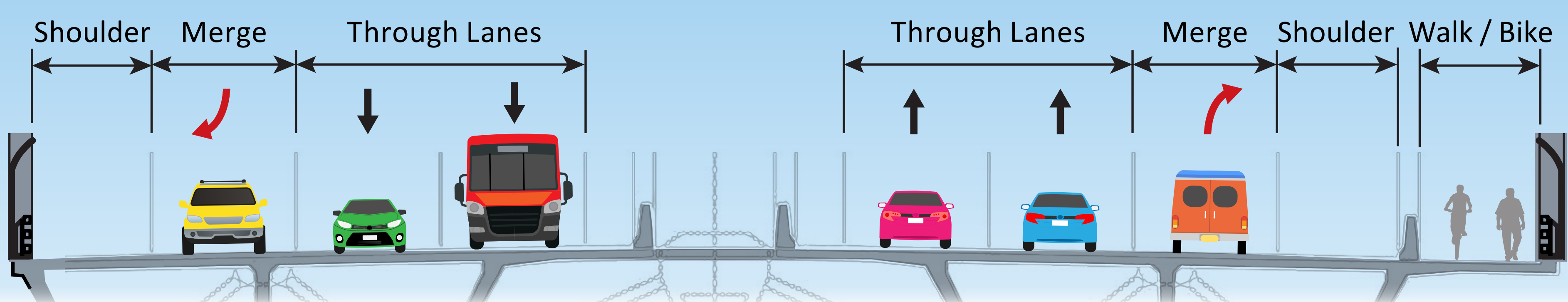
Assess potential environmental effects as required by the National Environmental Policy Act of 1969 (NEPA)

## Agency Recommendation – Replacement with Auxiliary Lanes

The MRER recommends construction of two new highway bridges would be the most cost-effective means of providing safe and reliable access across the Cape Cod Canal. The existing bridges are 84-years-old requiring increasing amounts of maintenance.

A new high level, fixed span bridge would be constructed immediately adjacent to each of the two existing highway bridges to minimize the modifications needed to the connecting roadways on both the mainland and the Cape. The new highway bridges would be designed to include improved access for both pedestrians and bicycles.

To increase safety and through traffic reliability each bridge would include two travel lanes and one auxiliary acceleration/deceleration lane in each direction, for a total of six vehicular lanes on each bridge. The two existing bridges would remain in operation until the new bridges are opened to traffic at which time the current bridges would be closed and demolished.



To learn more about the study, please visit the project website:  
[www.CapeCodCanalBridgesStudy.com](http://www.CapeCodCanalBridgesStudy.com)