FAQs

What is the Condition of the bridges?
The Bourne Bridge is functionally obsolete and, as of 2022, was rated in "Poor" condition. The bridge is considered structurally deficient. Inspections have revealed concerns - deterioration of the concrete T-beams, deterioration of gusset plates, and broken anchor bolts at truss expansion bearings.

What is the Condition of the Sagamore Bridge?
The Sagamore Bridge is functionally obsolete and, as of 2021, was rated in "Fair" condition. The bridge was considered structurally deficient as recently as 2011. Inspections have revealed concerns such as gusset plates that exhibit significant section loss and/or deformation due to pack rust.

What other options have been explored?
The alternatives analysis considered multiple options including tunnels, adding a third bridge, and filling in the canal. These and other options were eliminated based on higher costs, increased property impacts, and/or significant environmental impacts.

What will happen to the current bridges after the new ones are built?
The existing Bourne and Sagamore Bridges will be demolished as it has been determined that it would not be cost effective to maintain these aging structures even for lighter loads such as use as a pedestrian bridges.

BRIDGES PROGRAM PHASES

Phase 1	Data collection and public outreach/involvement efforts
Phase 2	Based on public input, MassDOT develops and refines bridge and roadway options
Phase 3 *Current phase*	MassDOT identifies preferred options. Environmental documentation process begins. Design development.
Phase 4	MassDOT completes preliminary design and environmental permitting
Phase 5	Construction underway
Delivery	The Cape Cod Bridges Program is completed

Roles and Responsibilities

The **U.S. ARMY CORPS OF ENGINEERS** owns and maintains the Cape Cod Canal, Canal Pathways, and Bourne, Sagamore, and Rail bridges. The Army Corps is responsible for ensuring safe navigation of all these federally owned assets, including all construction and maintenance activities.

The **MASSACHUSETTS DEPARTMENT OF TRANSPORTATION** (MassDOT) owns and maintains most of the transportation infrastructure approaching the bridges. A series of agreements between the Army Corps and MassDOT names as the lead project delivery agency to complete the feasibility study and alternatives analysis, preliminary design and environmental permitting process, and construct the new bridges. Once completed, ownership of the new bridges will be transferred to MassDOT and they will assume operations and maintenance responsibilities.

The federal government will continue to play a role in the bridge replacement project. In particular, the **FEDERAL HIGHWAY ADMINISTRATION** (FHWA) has been designated the lead federal agency responsible for the oversight of permitting.

REGIONAL AND LOCAL INVOLVEMENT plays an important role in the process, including stakeholders in the public and decision-making processes. Public meetings and other outreach activities will continue to occur over the duration of the program to ensure the public is informed and has the opportunity to provide input.

Resources and Additional Info

MassDOT Cape Cod Canal Transportation Study (2019)

MassDOT's conceptual planning study identified existing and future multimodal transportation deficiencies and needs around the Cape Cod Canal area and offers recommendations. *cccom.link/Canal-Study*

U.S. Army Corps of Engineers Cape Cod Canal Bridges Major Rehabilitation Evaluation Study (2020)

This study looked to identify the most reliable, fiscally responsible solution for the future of the bridges. The Study culminated in the Major Rehabilitation Evaluation Report (MRER) that recommended the replacement of the Bourne and Sagamore bridges with two entirely new structures. *cccom.link/Canal-Bridges-MRER*

Where to Find the Latest Information About the Canal Bridges Project

mass.gov/cape-bridges

capecodcommission.org/canal

ABOUT: This factsheet was prepared by the Cape Cod Commission. The Cape Cod Commission is member of the Cape Bridges Program Advisory Group, a Concurring Party to the Section 106 Programmatic Agreement for the Cape Bridges Program, and staff to the Cape Cod Metropolitan Planning Organization. The information presented in this factsheet does not represent views of the Massachusetts Department of Transportation, the United States Army Corps of Engineers, or the Federal Highway Administration.

MARCH 2025

Cape Cod Canal Bridges

VITAL LIFELINE TO THE CAPE & ISLANDS

CAPE COD COMMISSION

THE PROBLEM WITH THE BRIDGES

Built in 1935, the Bourne and Sagamore bridges span the Cape Cod Canal and connect residents, businesses, and visitors on the Cape and Islands to the mainland. The bridges are essential for general transportation, freight, and tourism, and in an emergency are critical routes for evacuation. The bridges are the only connection to and from Cape Cod for vehicular traffic.

The nearly 90-year-old bridges are both considered "functionally obsolete" while the Bourne Bridge is rated in poor condition and the Sagamore Bridge rated in fair condition by the U.S. Army Corps of Engineers, who owns and maintains both bridges. The Army Corps 2020 Cape Cod Canal Bridges Major Rehabilitation Report (MRER) concludes that **replacement of the bridges is the most reliable, fiscally responsible solution**.

Critical Connection for Residents, Businesses, and Millions of Visitors

The Bourne and Sagamore Bridges provide the only roadway connections for:

229,000 Year-round residents

8,600 Businesses

50,000 Daily commuters

5 Million Annual Visitors

6,600 Daily truck trips over the canal bridges

122 Daily school bus crossings over the bridges, splitting students and schools

Impacts of Closure

The canal bridges impact emergency services, health care access, transportation of goods & services, commute times, school access, retail tourism, disaster management, recreation access, air quality, pedestrian access, safety, and overall perceptions of the region.

The following economic impacts have been estimated if there was a superstructure failure on just one of the bridges (resulting in a required 60-month bridge closure):

$10 BILLION Traveler Delay Cost

$1.4 BILLION Loss of Tourism Revenue

$557 MILLION Loss of Short-term Rental Revenue

$254 MILLION Loss of Tax Revenue

Estimates do not include other monetizable impacts such as real estate impacts and impacts of export of local goods.

Bridge Replacement Is Needed

<1 Million
1935 (ESTIMATED CROSSINGS)

ANNUAL COMBINED VEHICLE CROSSINGS

38 Million
PRESENT DAY
This is nearly as much traffic as the Golden Gate Bridge.

Traffic today far surpasses the design of the bridges. The Army Corps MRER report outlines that major rehabilitation or bridge replacement is required and recommends replacement as the best path forward.

Canal Bridges Timeline

Cape Cod when the bridges opened for vehicle travel...

Population: 36,650 people & 1,500 cattle
Peak summer Sunday traffic: 4,700 trips
Average daily winter trips: 1,200
Estimated annual crossings: <1 million

Cape Cod today...

Average daily trips: 105,000

Population: 230,000
Peak summer Sunday traffic: 165,400 trips
Average daily off season trips: 80,000
Estimated annual crossings: 38 million

Bridges closed — Lane closures

1928 — Federal government purchases the Canal and places under management of the U.S. Army Corps of Engineers

1935 — The current Bourne and Sagamore Bridges open to vehicle traffic, replacing older drawbridges

1950s — Construction of the Mid-Cape highway begins

1962 — Bridge traffic crosses 10 million trips per year

1971 — Mid-Cape Highway expansions completed

1979 & 1981 — Major Rehabilitation Projects completed on both bridges

1988 — Bridge traffic crosses 25 million trips per year

2006 — Sagamore Flyover project completed, replacing the Sagamore Rotary

2010-2014 — Significant steel repairs made to both bridges

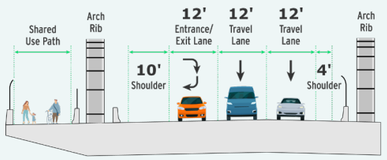
2019-2020 — MassDOT and Army Corps of Engineers complete studies and enter agreement to replace the bridges

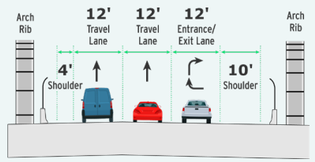
2021 — MassDOT initiates process to replace bridges (Cape Bridges Program)

CAPE COD BRIDGES PROGRAM

The Cape Cod Bridges Program is overseen by MassDOT and will include the replacement of the Bourne and Sagamore bridges, provide new connections to the local roadway network and improve multimodal accommodations within the Cape Cod Canal area.

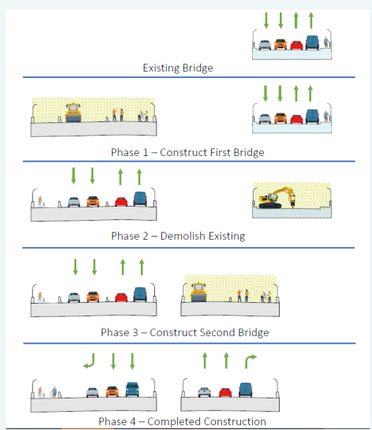
Updated sketches of the preferred design alternatives presented as part of the public outreach process. maintain the iconic curved look of the existing bridges while allowing for required modernizations and safety measures.



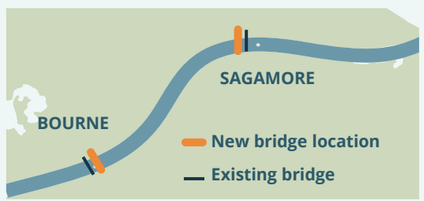


What's included in the new bridge design?
The preferred design includes two bridges at each crossing because they are more cost effective, structurally efficient structures. This approach allows for staged construction while keeping two lanes of traffic operational in both directions and allowing all existing roadway connections to be maintained. The proposed new lanes will be wider to meet current highway standards and include two travel lanes in each direction with an additional entrance/exit lane to help maintain the flow of traffic. The new bridge design also includes for a shared use path and shoulders that will allow for emergency vehicle access.

CONSTRUCTION SEQUENCING



Where will the new bridges be located?
The new bridges will be built adjacent to the current bridges to allow traffic to continue to flow during construction. The exact location is still being finalized, but the current plan indicates the new bridges to the east of the Bourne Bridge and to the west of the Sagamore Bridge.



How will the new bridges connect to existing roads?
MassDOT now has recommended alternatives for the four approaches to the new bridges. **Latest designs and a virtual 3D fly-over can be found on the MassDOT website (*mass.gov/cape-bridges*).**

Next Steps: Project design, permitting, and community outreach will continue for the replacement of both bridges. The study team submitted initial environmental permit applications in early 2023, and more detailed analysis and federal permitting documents are anticipated int 2025.

Bridge Program Funding

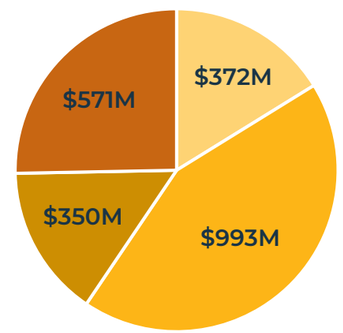
$4.5 Billion is the estimated cost to replace both bridges including design, permitting, property acquisitions, construction, and contingencies for inflation. The state has allocated funding to support this project and are actively pursuing a number of federal grants to cover the bulk of project costs.

The state maintains a commitment to replace both bridges and has **secured funding for replacement of the Sagamore Bridge as Phase 1 of the Canal Bridges Program.** It continues to pursue federal grant opportunities for the replacement of the Bourne Bridge as Phase 2.

PHASE 1	PHASE 2
$2.1 Billion Sagamore Bridge	$2.4 Billion Bourne Bridge
Funding secured	Funding plan under development

Based on information available as of March 2025.

Sagamore Bridge Funding



Phase 1 – Sagamore Bridge ($2.3 Billion secured)

- $372M Federal Grants: Mega Grant Funds
- $993M Federal Grants: BIP Grant Funds
- $350M Federal Appropriation
- $571M State Bond Funds