

An aerial photograph of the Cape Cod Canal. The top half shows the canal's entrance where it meets the ocean, with a long, narrow strip of land in the distance. The bottom half shows a bend in the canal, flanked by dense green forests and a road with some buildings. A semi-transparent blue banner is overlaid across the middle of the image.

# **Cape Cod Canal Transportation Study, Sixth Working Group Meeting.**

**Bourne, Plymouth, Sandwich, Wareham.  
Massachusetts Maritime Academy  
September 28, 2016 4:00 to 6:00**

# Agenda.

- Welcome and Introductions.
- Study Process & Framework.
- Study Framework: Goals and Objectives.
- Alternatives Development.
  - Potential Short-, Mid-, and Long-Term.
- Schedule/Next Steps.

# Welcome and Introductions.

- MassDOT:
  - Ethan Britland – Project Manager.
- US Army Corps of Engineers.
  - Craig Martin, Project Manager.
- Study Team:
  - Bill Reed, P.E., Principal in Charge (Stantec).
  - Mike Paiewonsky, AICP- Team Project Manager (Stantec).
  - Fred Moseley, P.E. –Transportation Engineer (Stantec).
  - Sudhir Murthy, P.E., PTOE –Trans. Modeler (TraflInfo).
  - Frank Mahady – Socio-Economic (FXM Associates).
  - Alison Leflore, AICP – Public Involvement (Cecil Group).



# Study Process & Framework.

- **Step 1:** Goals and Objectives, Evaluation Criteria, and Public Involvement Plan.
- **Step 2:** Existing Conditions, Future Conditions, and Issues Evaluation.
- **Step 3:** Alternatives Development.
- **Step 4:** Alternatives Analysis.
- **Step 5:** Recommendations.



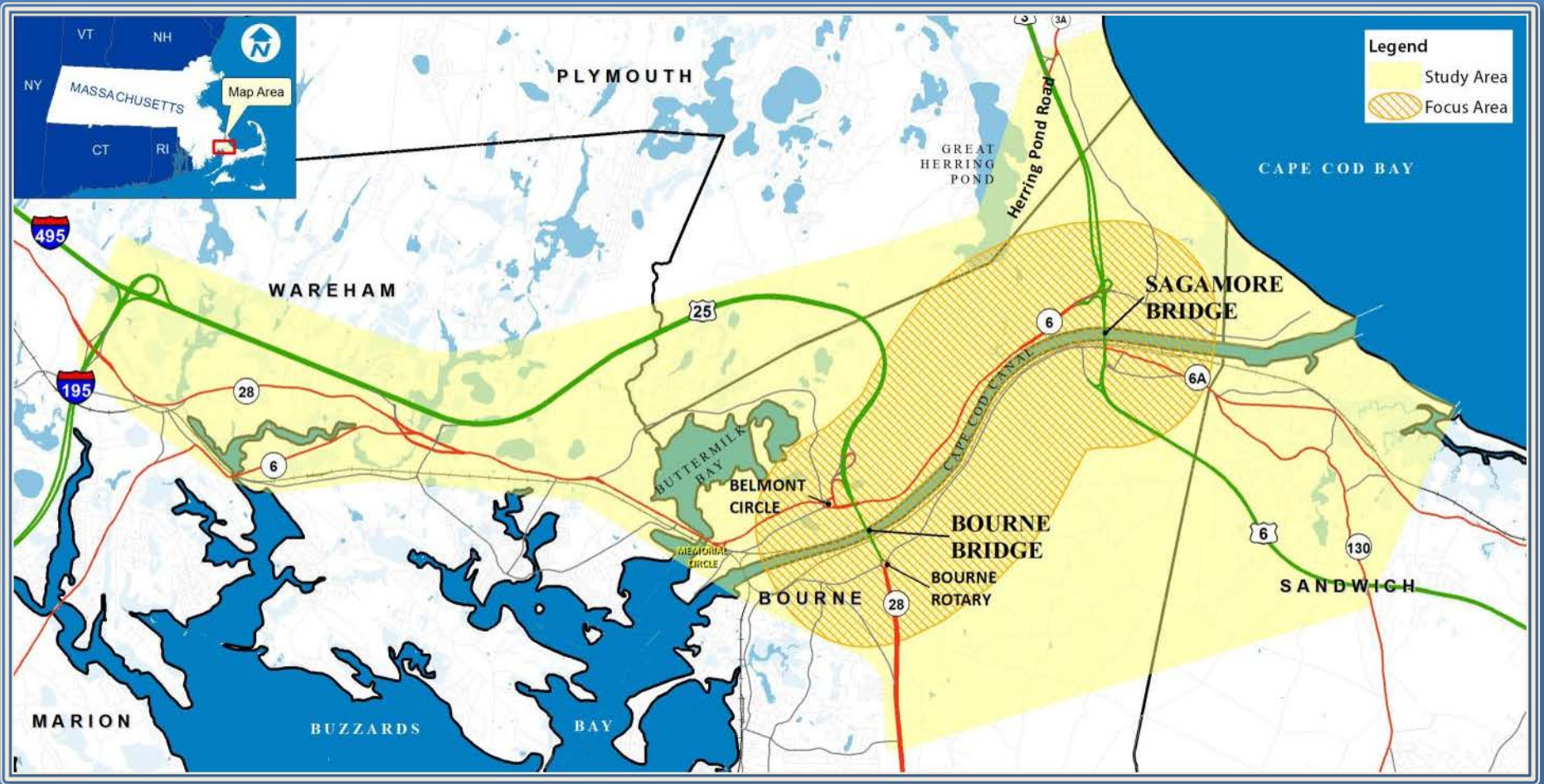
# Study Framework: Goals.

- To create/improve multimodal mobility in the Cape Cod Canal area.
- To establish an alternative or replacement crossing of the Cape Cod Canal to address the diminishing quality and reliability of year-round connectivity over the Cape Cod Canal, due to the aging Sagamore and Bourne Bridges.

# Study Framework: Objectives.

- Create reliable multimodal connectivity and mobility levels such that the quality of life on Cape Cod is not diminished by unreliable connectivity across the Cape Cod Canal.
- Create a reliable multimodal connection across the Cape Cod Canal to maintain/enhance public safety in the event of the need for an emergency evacuation of portions of Cape Cod and to accommodate first responders accessing Cape Cod.
- Ensure that cross canal connectivity does not become a barrier to reliable intra-community connectivity for the Towns of Bourne and Sandwich.

# Study Area.



September 28, 2016



# Preliminary Alternatives Development.

September 28, 2016



# Standard Approach to Preliminary Alternatives Development.

## Seeking Alternatives that:

1. Satisfy Study Goals and Objectives from Task 1.
2. Based on Identified Issues, Constraints, and Opportunities from Task 2.
3. Minimize Property, Community, and Environmental Impact.

# Issues, Constraints, Opportunities.

## *Issues:*

- Severe congestion at bridge approaches and intersections.
- Balancing visitor and resident needs.
- Lack of bicycles and pedestrian accommodation.

## *Constraints:*

- Extensive areas of sensitive environmental resources.
- Developed residential and commercial areas.
- Joint Base Cape Cod.

## *Opportunities:*

- MassDOT and Army Corps collaboration.
- Enhance multimodal accommodation.
- Additional infrastructure.



# Short-, Mid-, and Long-Term Alternatives.

- Roadways/Intersections.
- Bridges.
- Bicycles.
- Pedestrians.
- Transit.



Photo: [capenightphotography.com](http://capenightphotography.com)

# Larger Planned Transportation Improvements (2017 – 2021 TIP).

- Sandwich – Service Road Bike Path.
- Bourne – Belmont Circle Multimodal Improvement.



Image from Cape Cod Commission TIP website

# Assumptions for Alternatives Development Process.

- Focus on year-round safety and mobility problem locations.
- Short- and Mid-Term Alternatives do not preclude new bridge construction.
- New bridges to be built adjacent to existing bridges. Toll-Free.





# Design Understanding.

- Design for future (2040) fall weekday PM peak period.
- Seek further improvements for summer peak period.
- Not trying to resolve all peak-season traffic problems. This would have significant impacts.

An aerial photograph of a wide river flowing through a landscape of dense green forests. A bridge with multiple piers spans the river in the middle ground. The river curves to the right in the foreground. In the background, a large body of water, possibly a bay or another river, is visible under a clear sky. The overall scene is a natural, scenic view of a waterway.

# Questions?

**Comments and feedback can be emailed to:  
Ethan Britland- [ethan.britland@state.ma.us](mailto:ethan.britland@state.ma.us).**



An aerial photograph of a river with a large steel truss bridge spanning it. The river is surrounded by dense green trees. In the foreground, a small boat is moving across the water, leaving a white wake. A blue semi-transparent rectangular box is overlaid on the center of the image, containing white text.

# **Short-Term Alternatives**

**(1-3 Years)**

**Few environmental or property  
impacts.**



# Short-Term Intersection Improvements.



- Signal Timing/  
Adaptive Signals.
- Turning Lanes.
- Improved Stripping  
and Signage.
- Improved Bicycle  
and Pedestrian  
Accommodations.

# What is Adaptive Signal Control?

- Traffic signal control technology that has the ability to use real-time traffic information to adjust signal timing to reduce congestion and delay.





# 2014 Year-Round Problem Intersections.

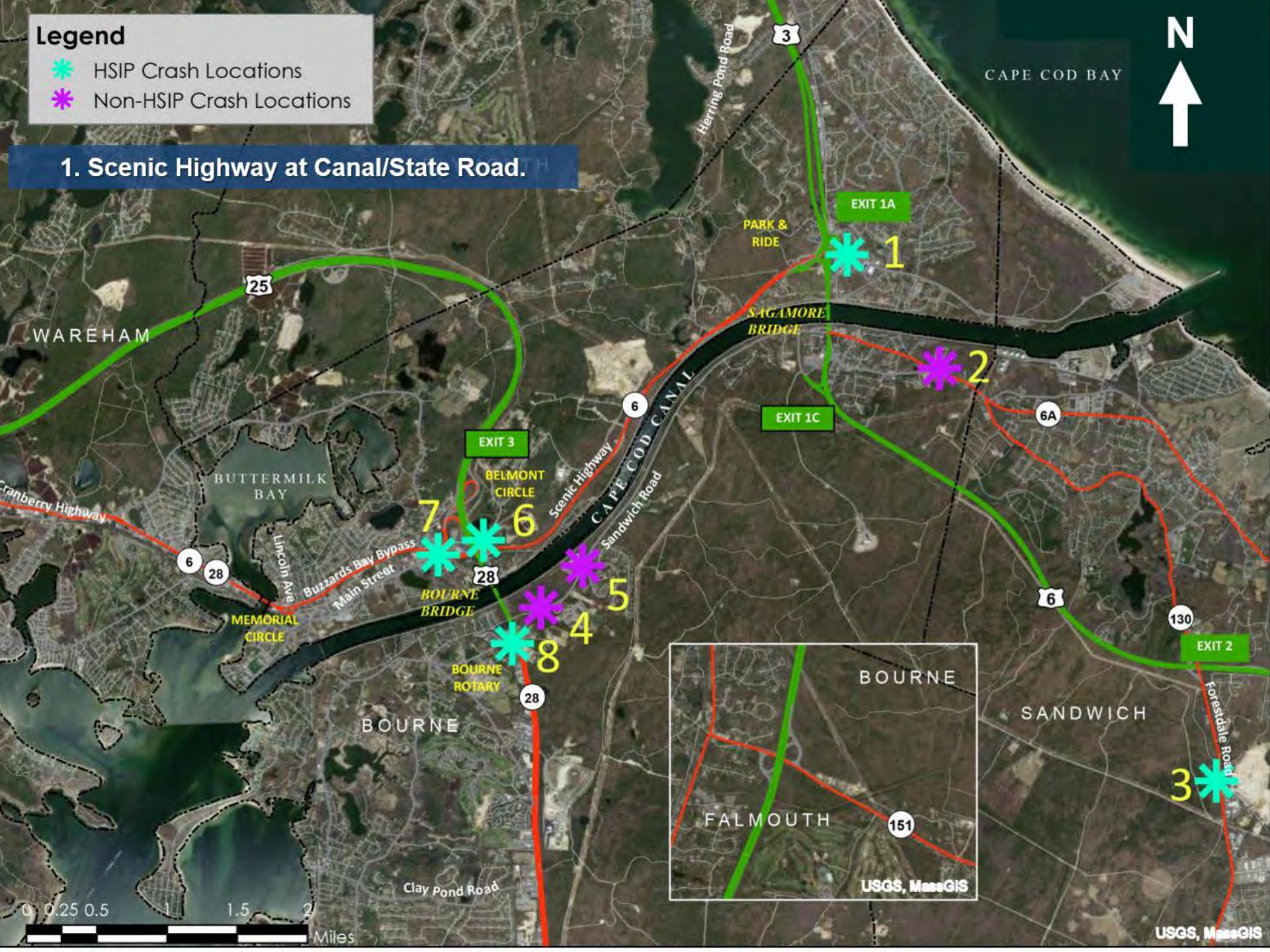
Location.	High Crash	LOS E or F	Town
1. Scenic Hwy at Canal Road/State Road.	Yes	No	Bourne
2. Route 6A at Cranberry Hwy/Sandwich Road.	No	Yes	Bourne
3. Route 130 at Cotuit Road.	Yes	Yes	Sandwich
4. Sandwich Road at Bourne Rotary Connector.	No	Yes	Bourne
5. Sandwich Road at Harbor Lights Road.	No	No	Bourne
6. Scenic Highway at Nightingale Pond Road.	Yes	Yes	Bourne
7. Belmont Circle.	Yes	Yes	Bourne
8. Bourne Rotary.	Yes	Yes	Bourne



## Legend

- HSIP Crash Locations
- Non-HSIP Crash Locations

### 1. Scenic Highway at Canal/State Road.

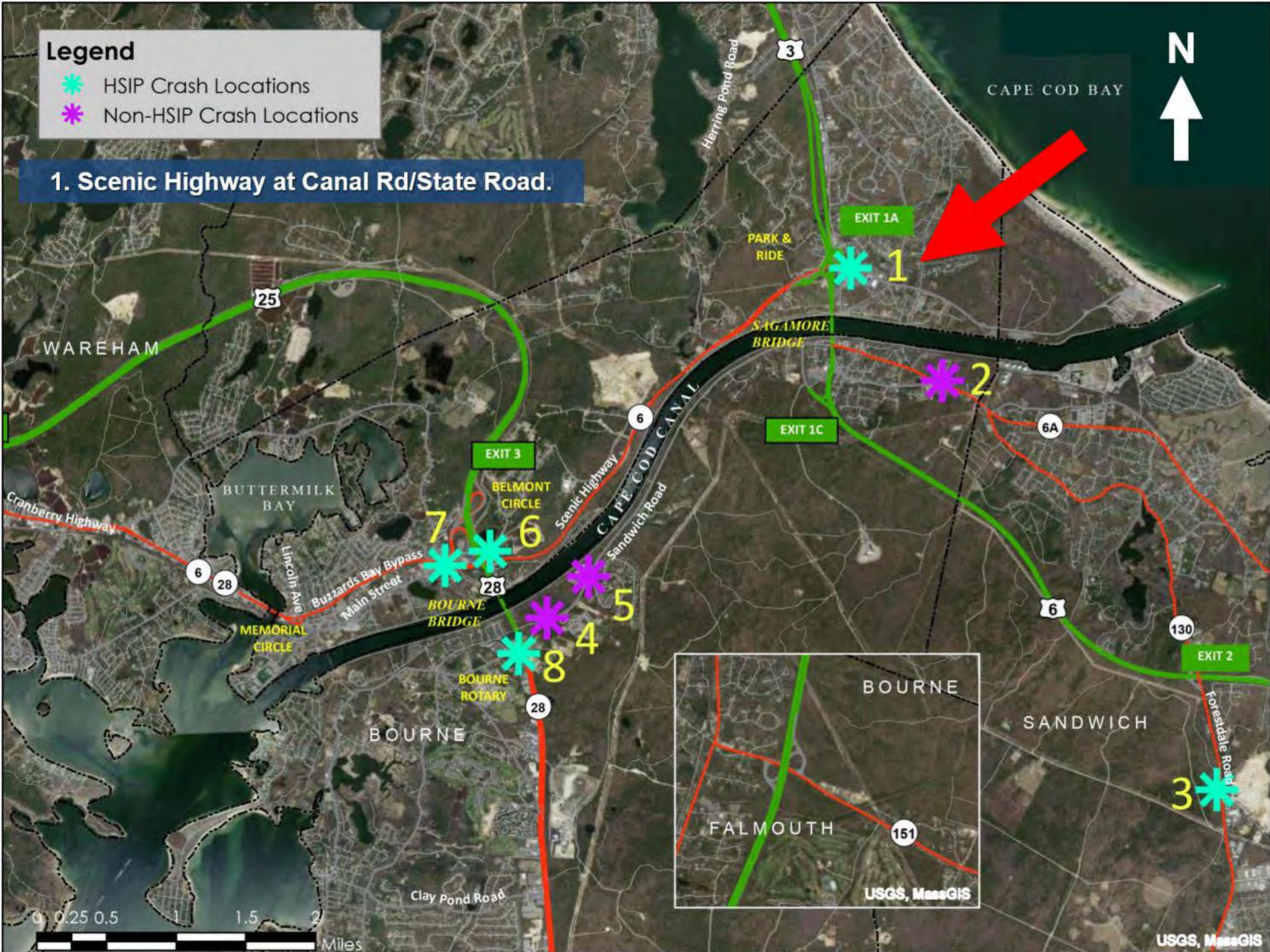




### Legend

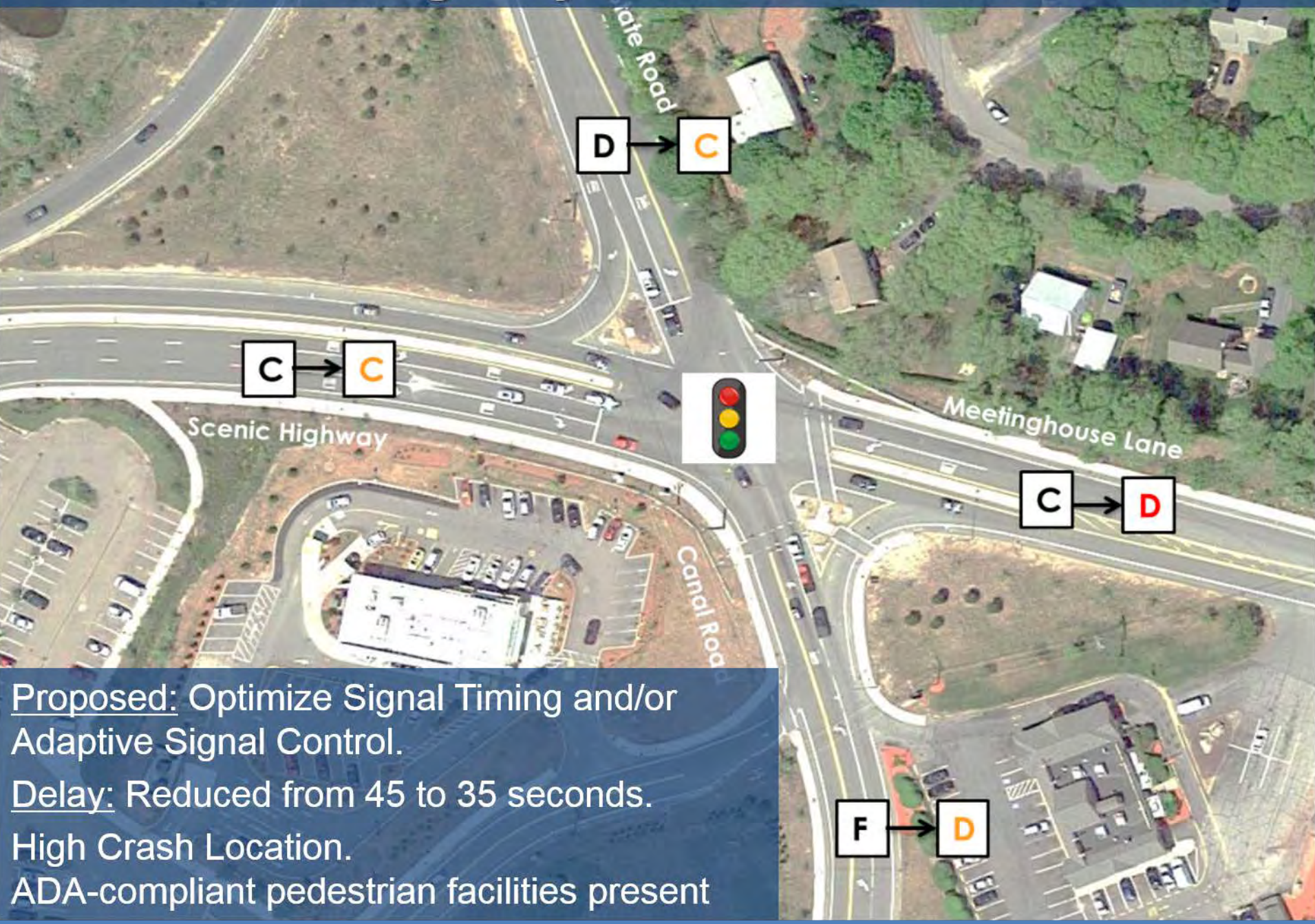
- HSIP Crash Locations
- Non-HSIP Crash Locations

### 1. Scenic Highway at Canal Rd/State Road.





# 1. Scenic Highway at Canal Rd/State Road.



Proposed: Optimize Signal Timing and/or Adaptive Signal Control.

Delay: Reduced from 45 to 35 seconds.

High Crash Location.

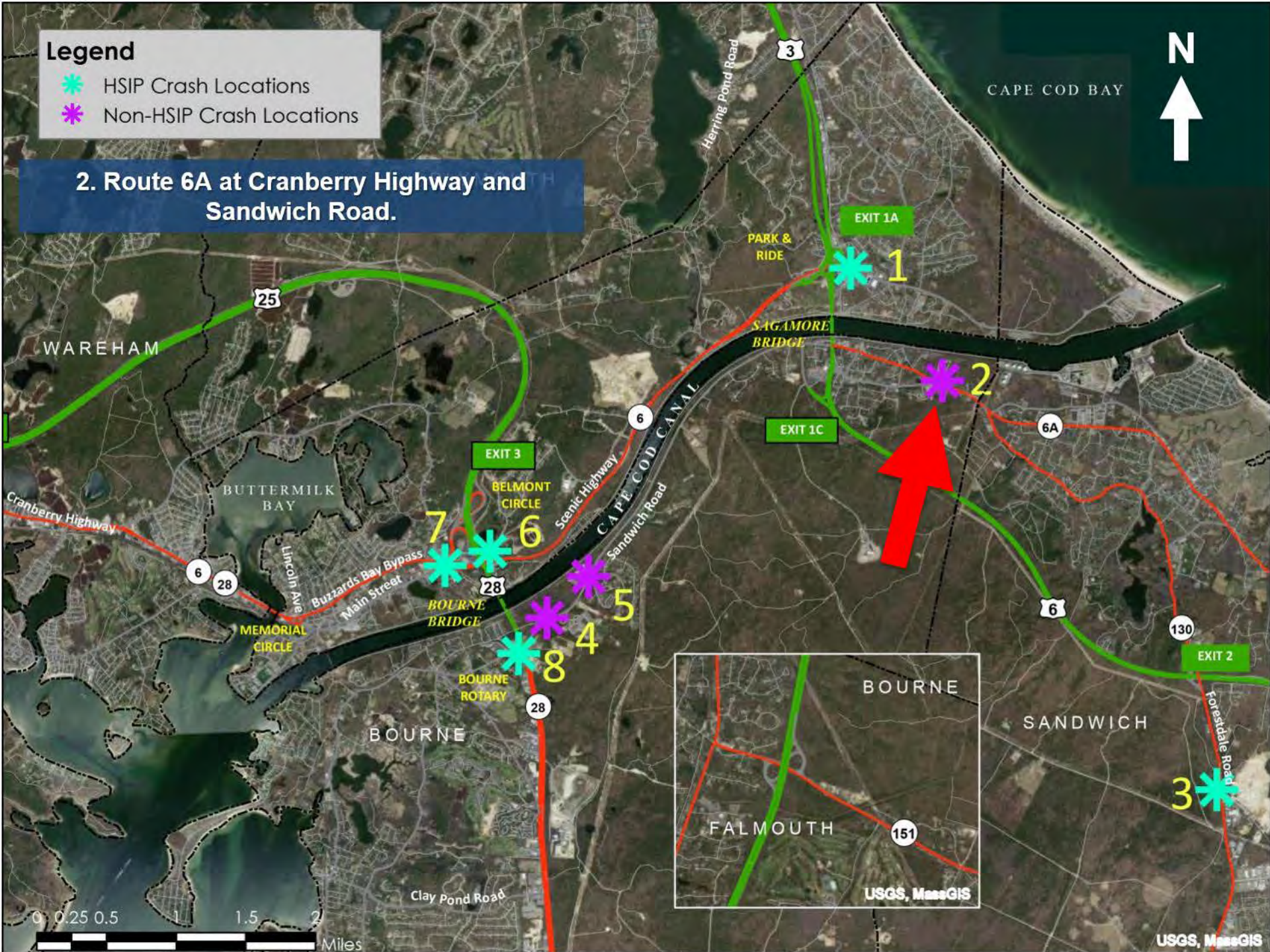
ADA-compliant pedestrian facilities present



## Legend

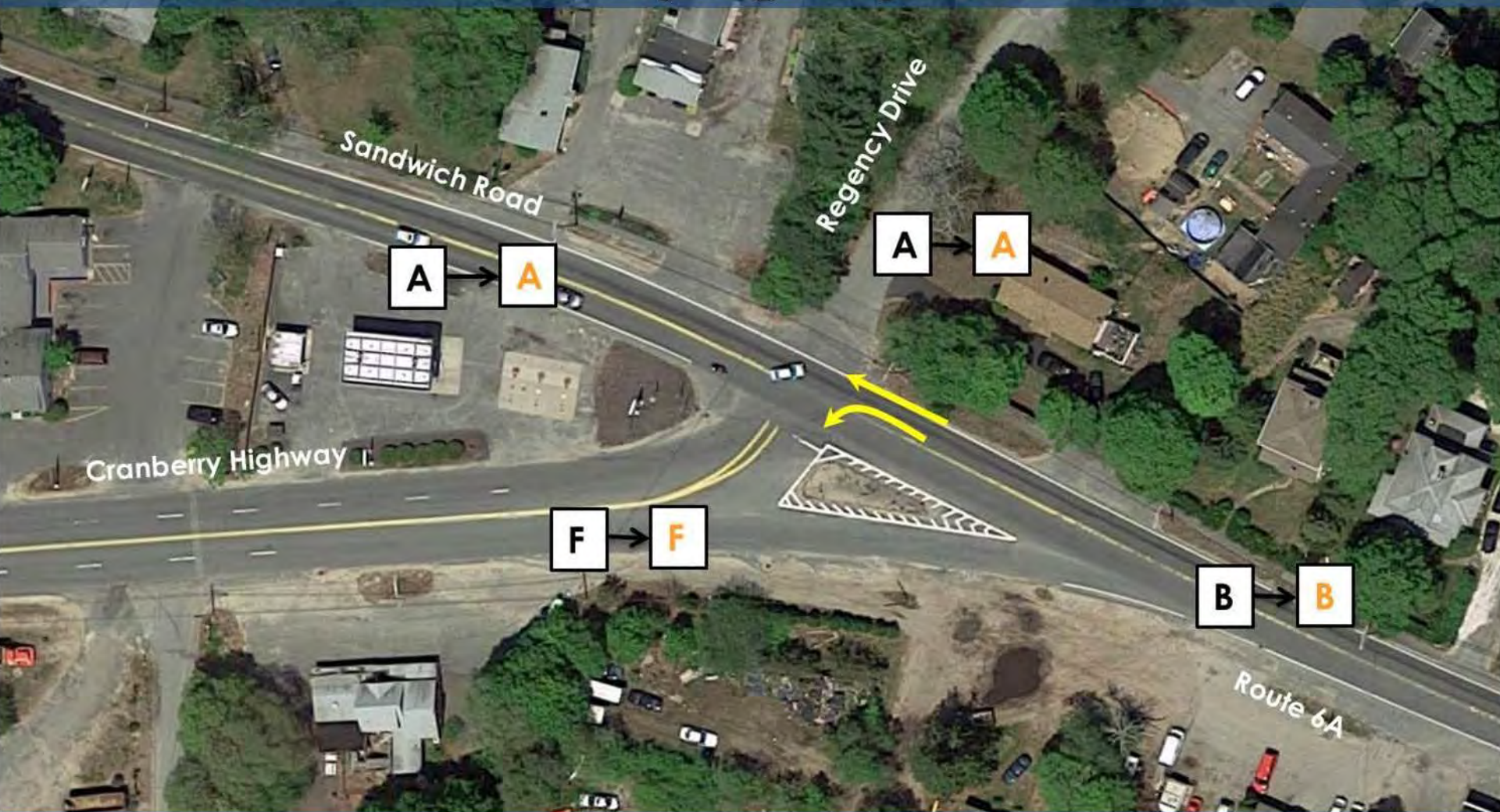
- HSIP Crash Locations
- Non-HSIP Crash Locations

## 2. Route 6A at Cranberry Highway and Sandwich Road.





## 2. Route 6A at Cranberry Highway and Sandwich Road.



Proposed: Add exclusive left-turn lanes on westbound approach.

Delay: Overall delay reduced from 74 to 30 Seconds.

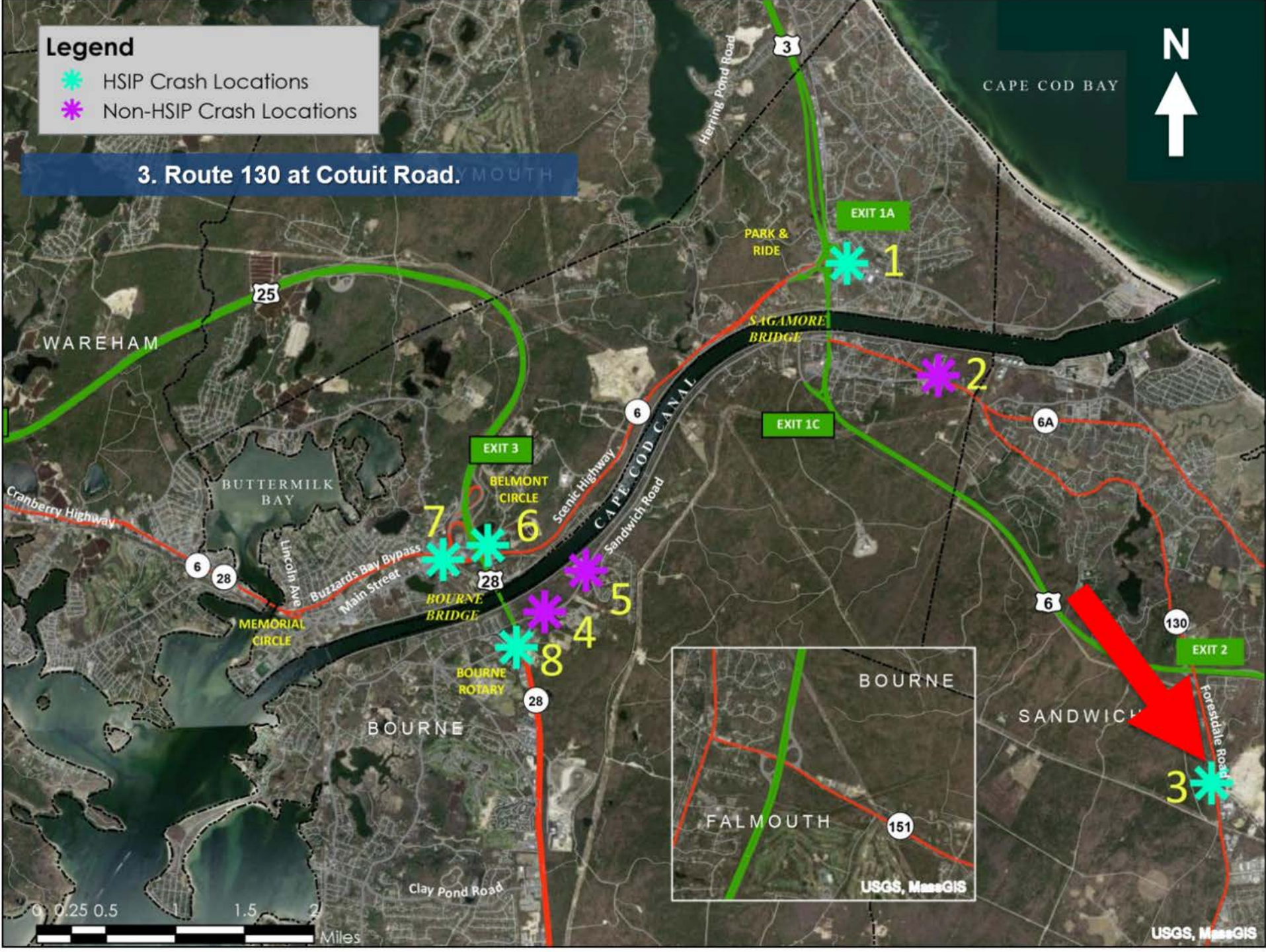
Sidewalk on Sandwich Rd. No sidewalk on Cranberry Hwy.



## Legend

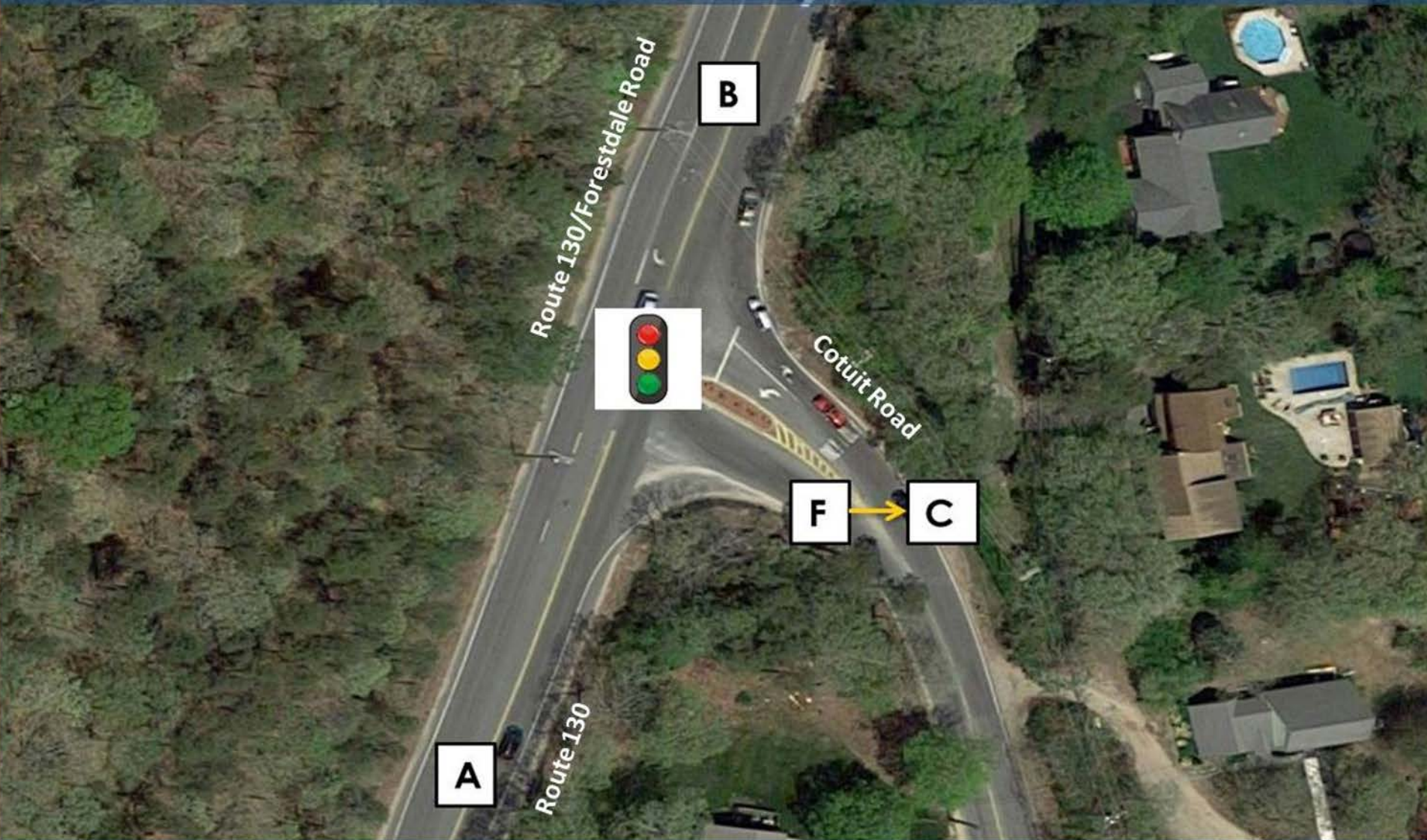
-  HSIP Crash Locations
-  Non-HSIP Crash Locations

### 3. Route 130 at Cotuit Road.





### 3. Route 130 at Cotuit Road.



Proposed: Signalize Intersection.

Delay (for Cotuit Rd): Reduced from 242 to 32 Seconds.

High Crash Location. No sidewalks present

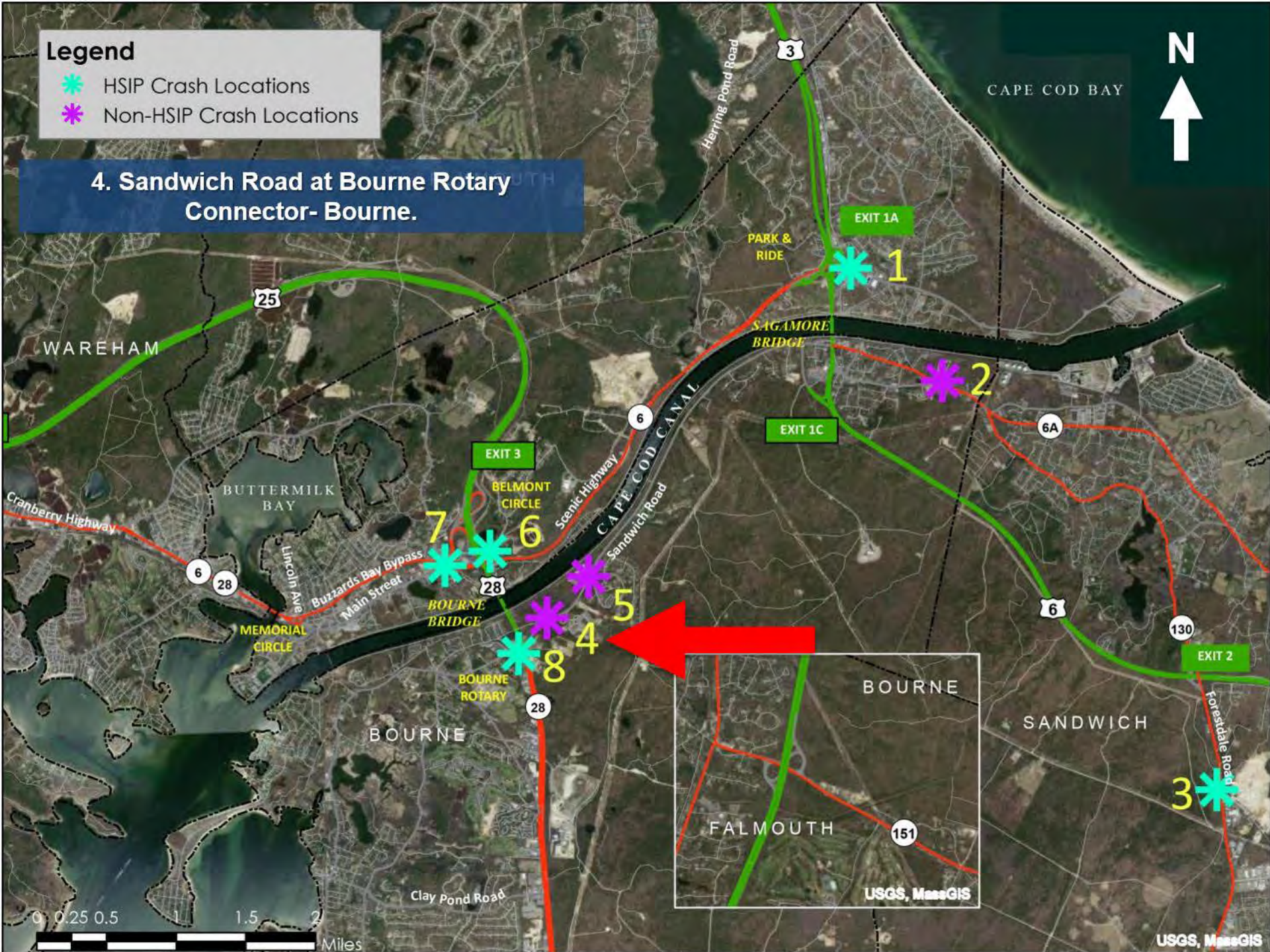




### Legend

- HSIP Crash Locations
- Non-HSIP Crash Locations

#### 4. Sandwich Road at Bourne Rotary Connector- Bourne.





## 4. Sandwich Road at Bourne Rotary Connector – Bourne.



Proposed: Meets Signal Warrants but signalization not proposed at this time (may worsen queues).

Will be incorporated in Bourne Rotary Improvements.

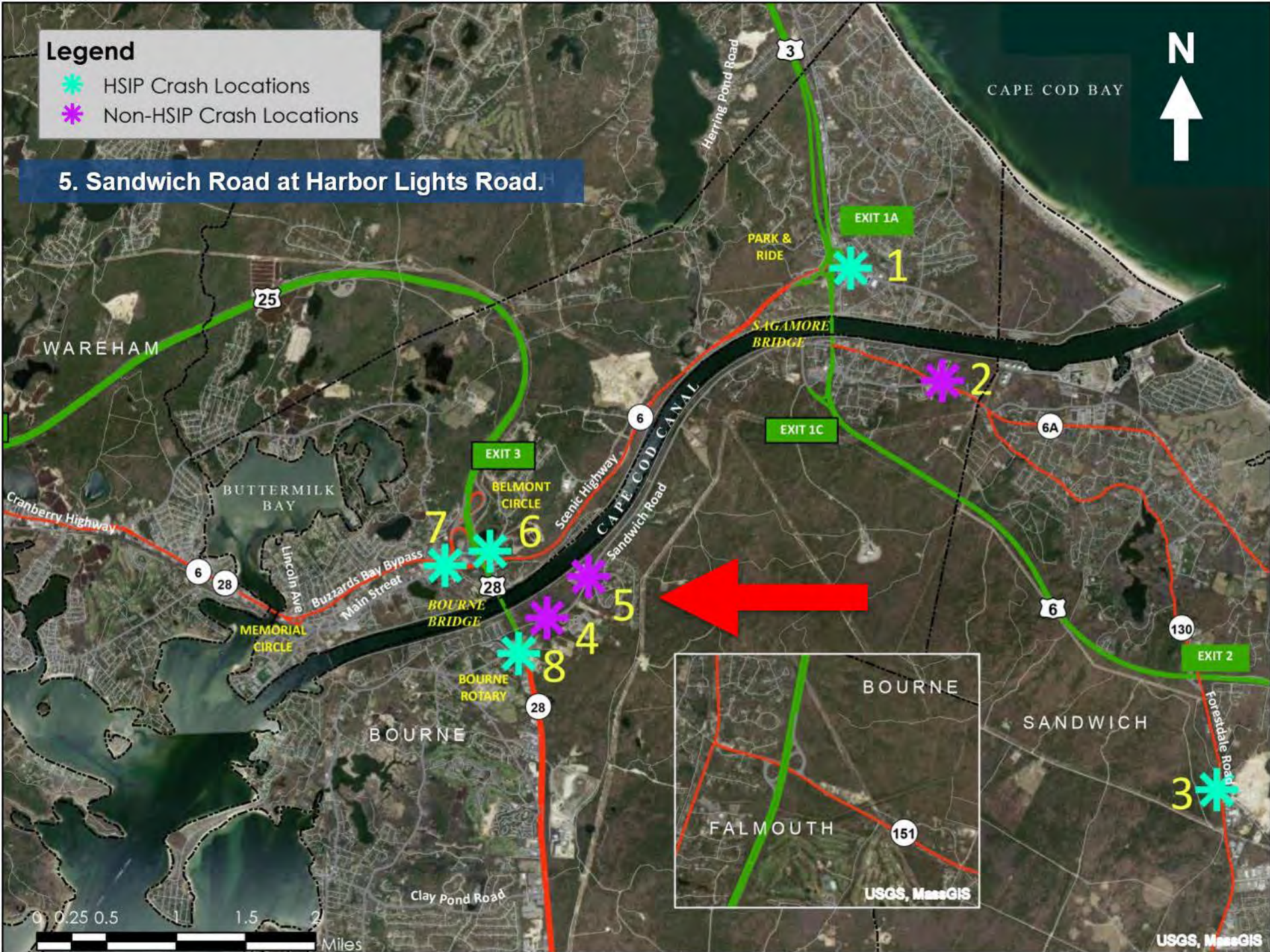
No sidewalks present (High School nearby)



## Legend

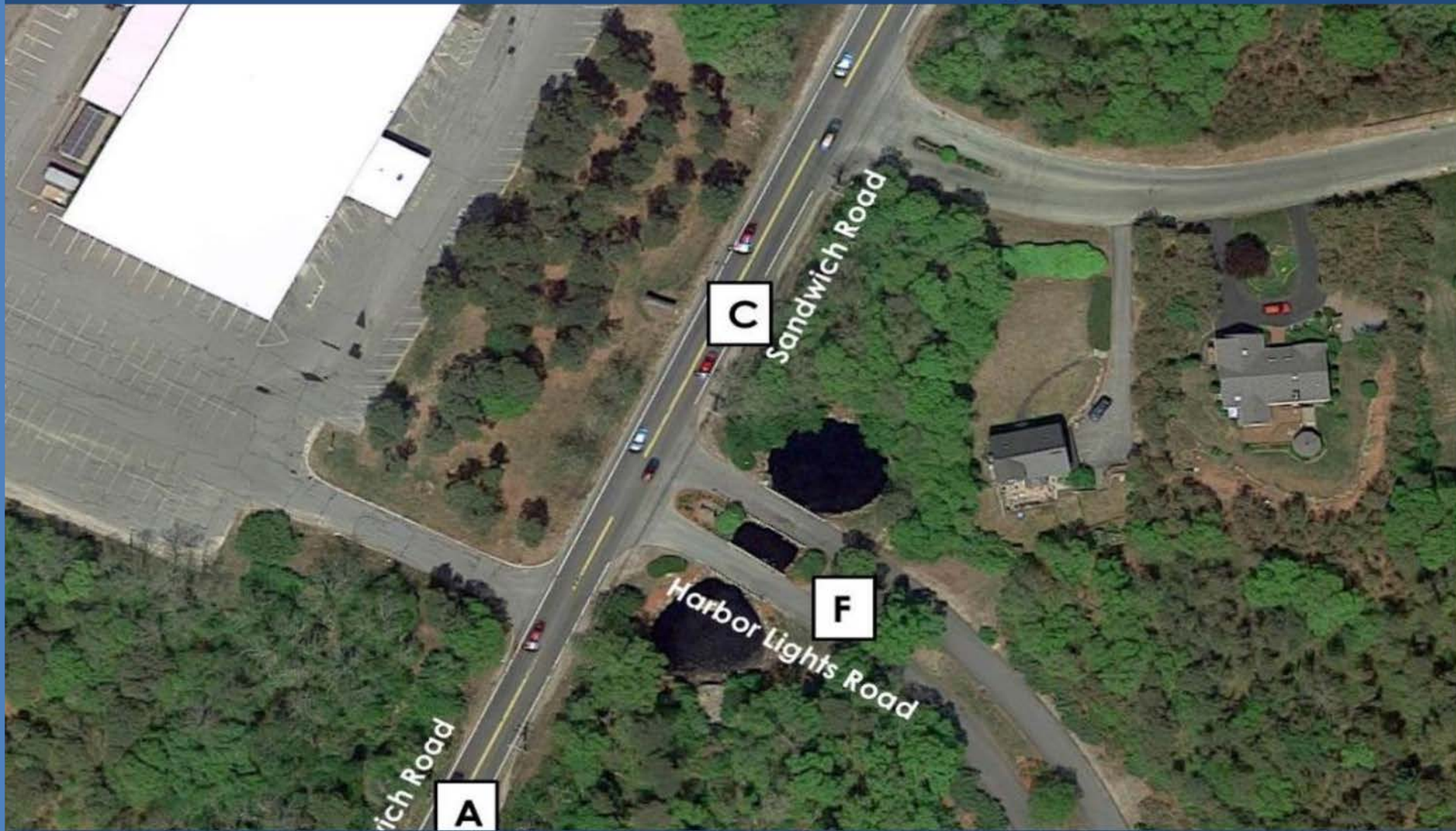
- HSIP Crash Locations
- Non-HSIP Crash Locations

### 5. Sandwich Road at Harbor Lights Road.





## 5. Sandwich Road at Harbor Lights Road.



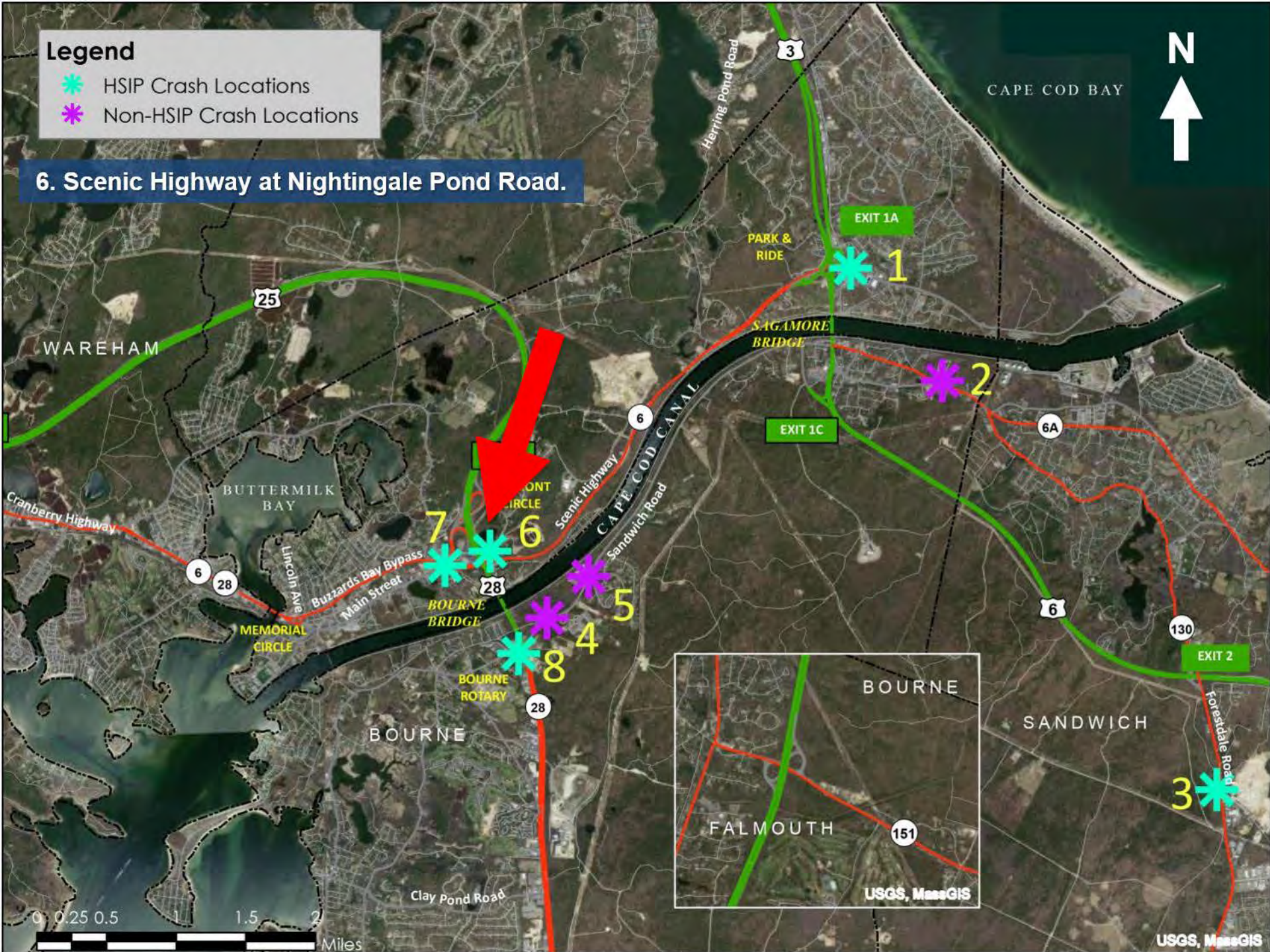
Proposed: No work proposed. Does Not Meet Signal Warrants.  
Delay is on Minor Approach. Major Approaches Operate Acceptably.  
No sidewalks present (ice arena nearby)



## Legend

- HSIP Crash Locations
- Non-HSIP Crash Locations

### 6. Scenic Highway at Nightingale Pond Road.





## 6. Scenic Highway at Nightingale Pond Road.



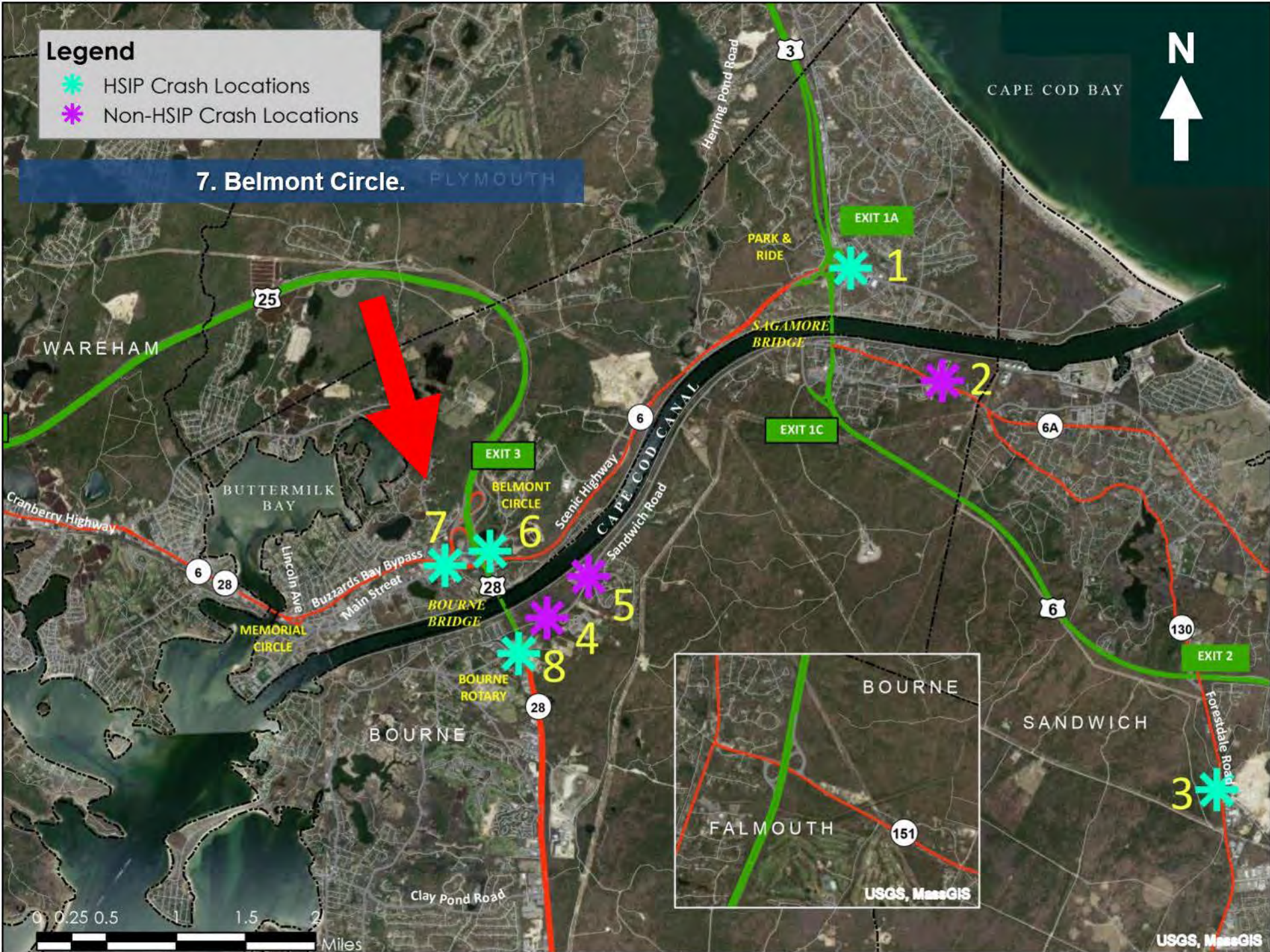
Proposed: Optimize Signal Timing. Delay is Reduced from 60 to 29 seconds.  
Candidate for Adaptive Signal Control. High Crash location.  
ADA-compliant sidewalks on Scenic Hwy. None on Nightingale Pond Rd.



## Legend

- HSIP Crash Locations
- Non-HSIP Crash Locations

### 7. Belmont Circle. PLYMOUTH





## 7. Belmont Circle.



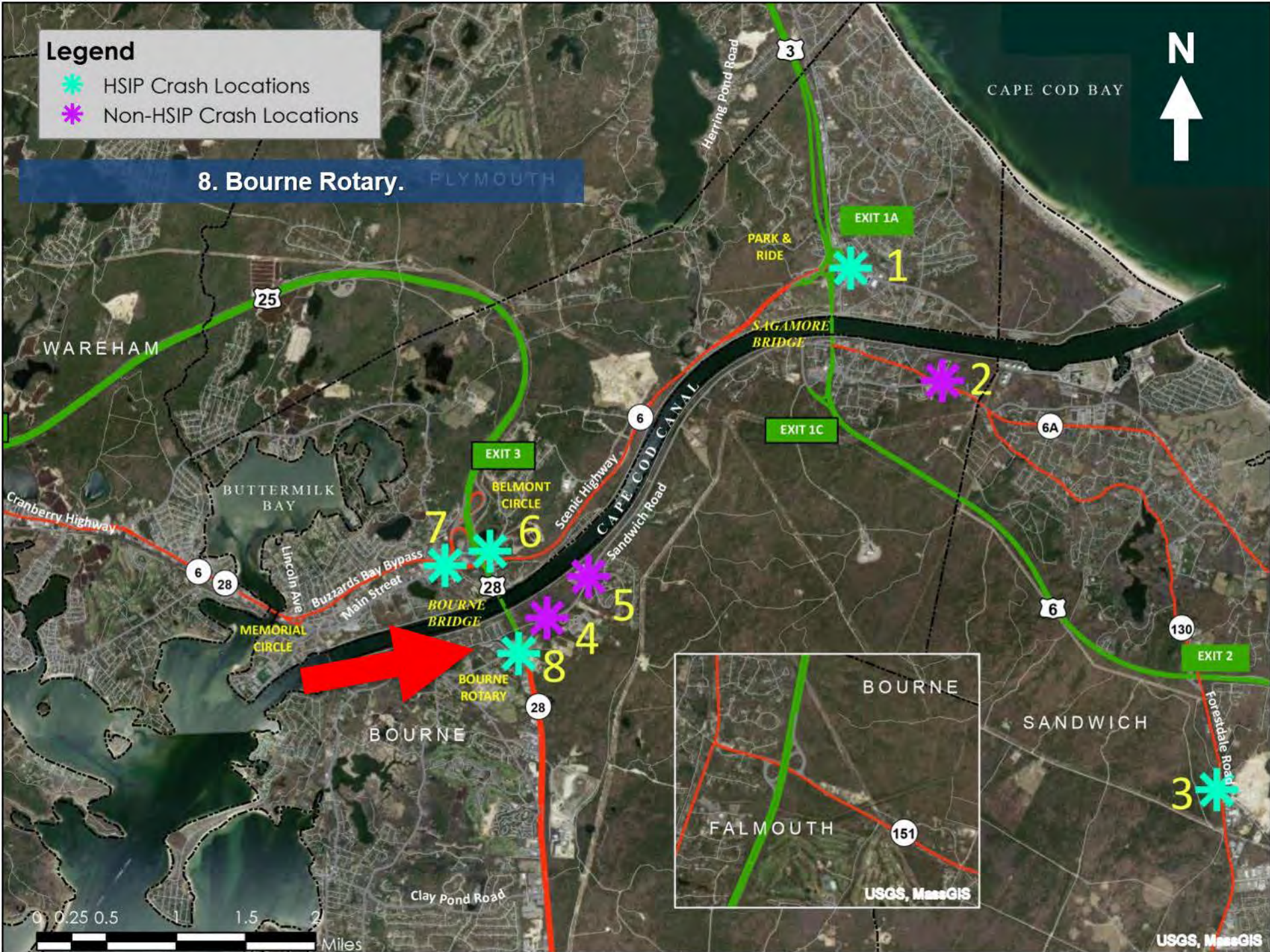
Proposed Improvements: Multimodal Improvements for Improved Bicycle and Pedestrian accommodation. Lane striping, shared-use path, lighting, pedestrian-activated crossing. On Cape Cod Commission's Draft 2017 – 2021 Transportation Improvement Program (TIP #606900 - 2020). High crash location. Sidewalks present on Main St. Lacks sidewalks elsewhere.



## Legend

- HSIP Crash Locations
- Non-HSIP Crash Locations

### 8. Bourne Rotary.





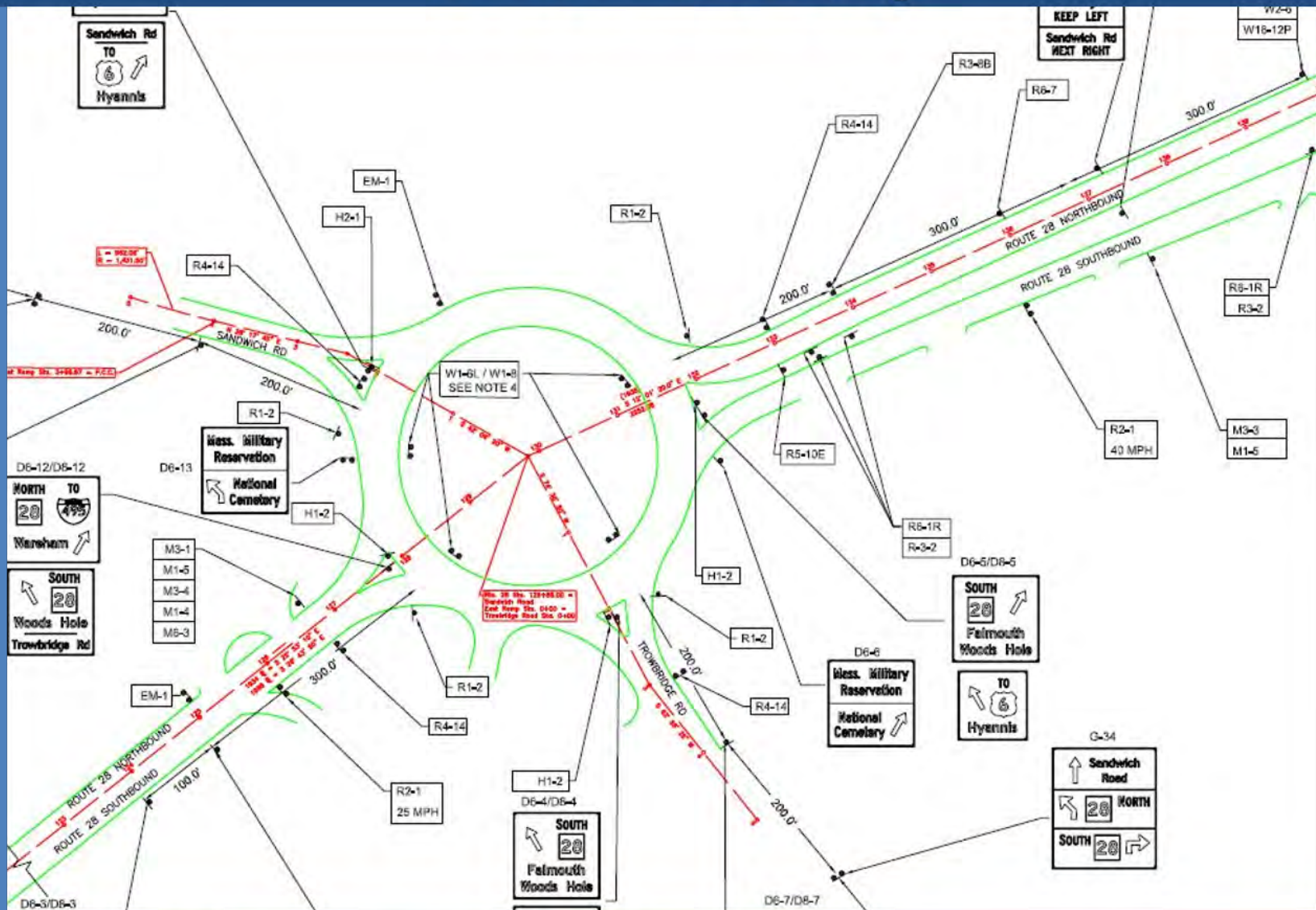
## 8. Bourne Rotary.



Proposed: Interim Improvements. Pavement Markings for Approaches. HSIP High Crash Location.  
No pedestrian accommodation.



## 8. Bourne Rotary.



Proposed: Interim Improvements. Guide signs and pavement markings for approaches. Construction Nov. 2016. High Crash Location. No existing pedestrian accommodation.



An aerial photograph of a wide river flowing through a landscape of dense green forests. A bridge with multiple piers spans the river in the middle ground. The riverbanks are lined with trees, and some small buildings or structures are visible on the left bank. The sky is clear and blue.

# Questions?

**Comments and feedback can be emailed to:  
Ethan Britland- [ethan.britland@state.ma.us](mailto:ethan.britland@state.ma.us).**

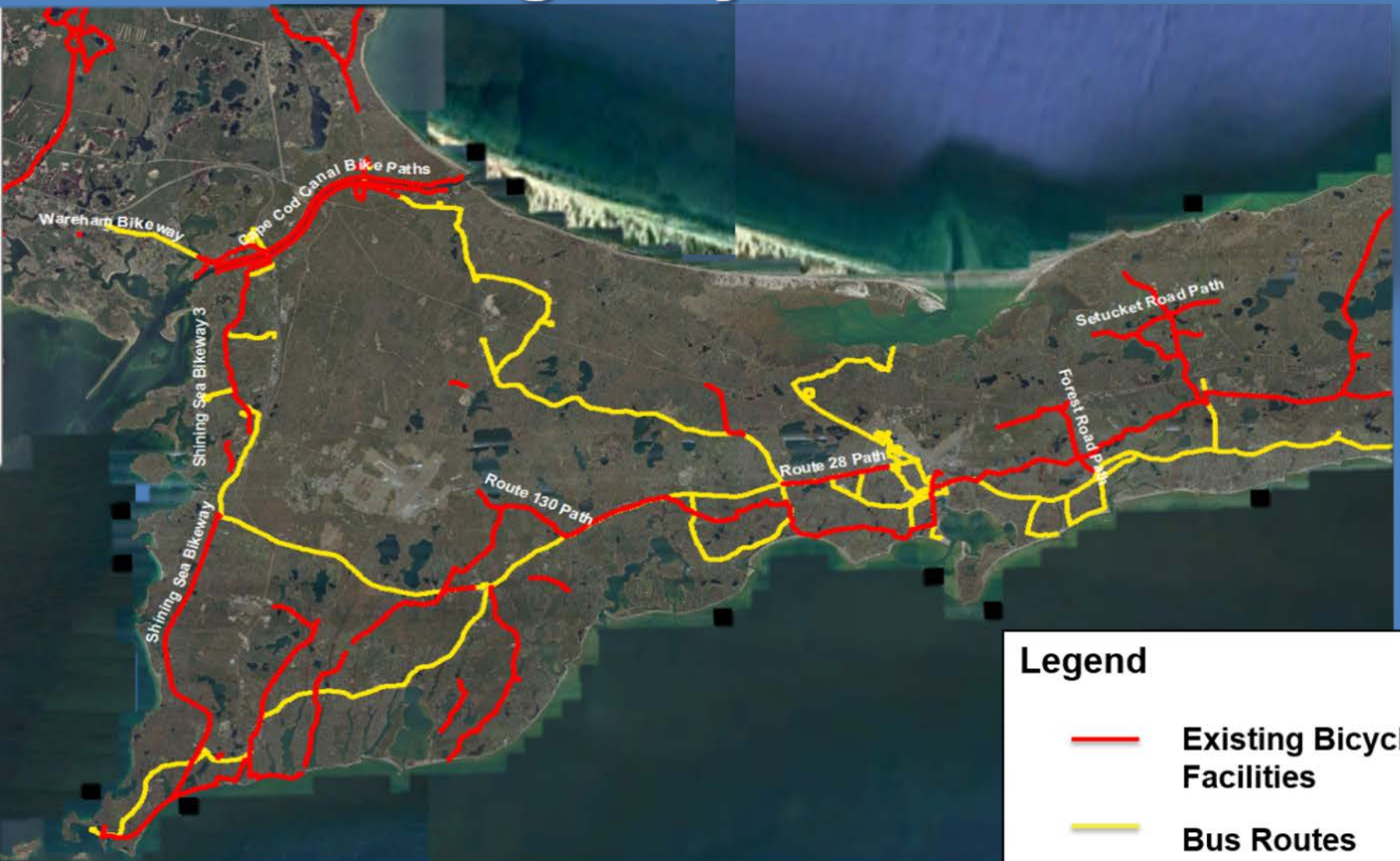


The background image shows a scenic waterfront path. On the left, there's a body of water and a large steel truss bridge in the distance. A paved path runs along the water, with several people walking and cycling. In the foreground, two cyclists are visible from behind, riding away from the camera. The path is bordered by trees and utility poles on the right side. A semi-transparent blue rectangle is overlaid on the center of the image, containing the text.

# **Short-Term Alternatives Bicycles and Pedestrians.**

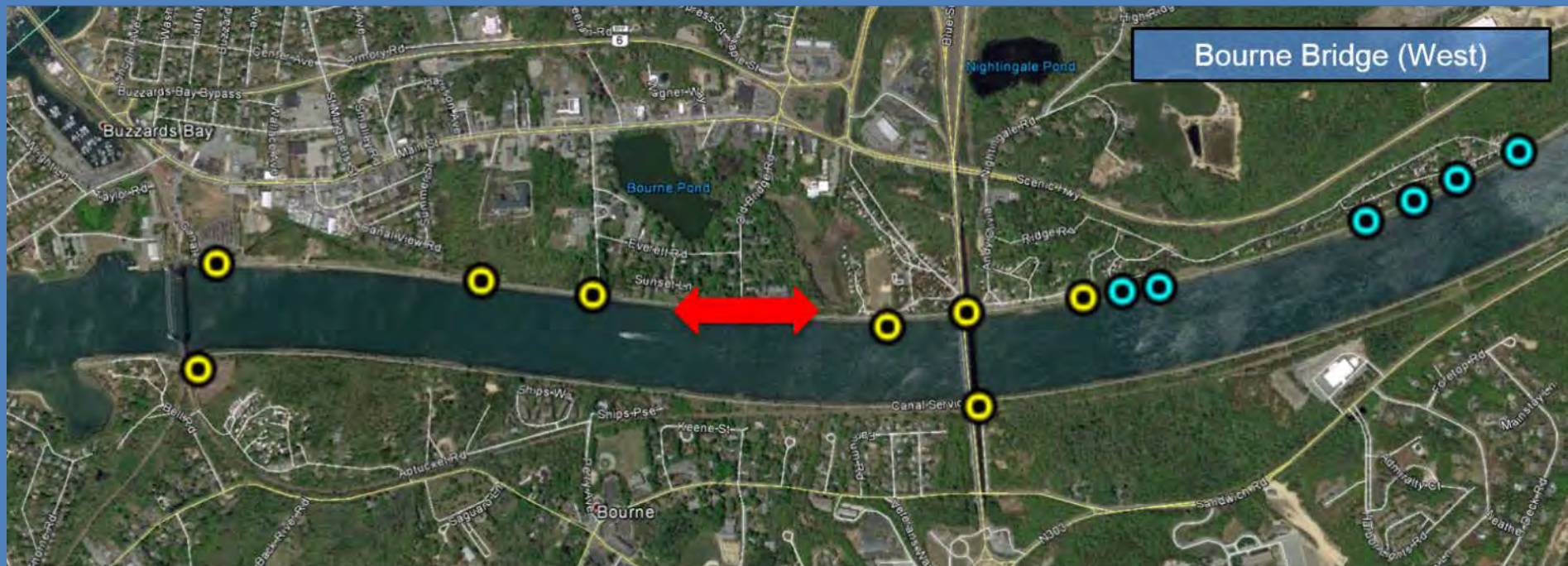


# Existing Bicycle Facilities







# Gaps in Bicycle/Ped Connections to Canal Bikeway- West.



## Legend

-  Existing Bikeway Access
-  Existing Pedestrian Only Access



# Potential Bicycle/Ped Connections to Canal Bikeway- West.

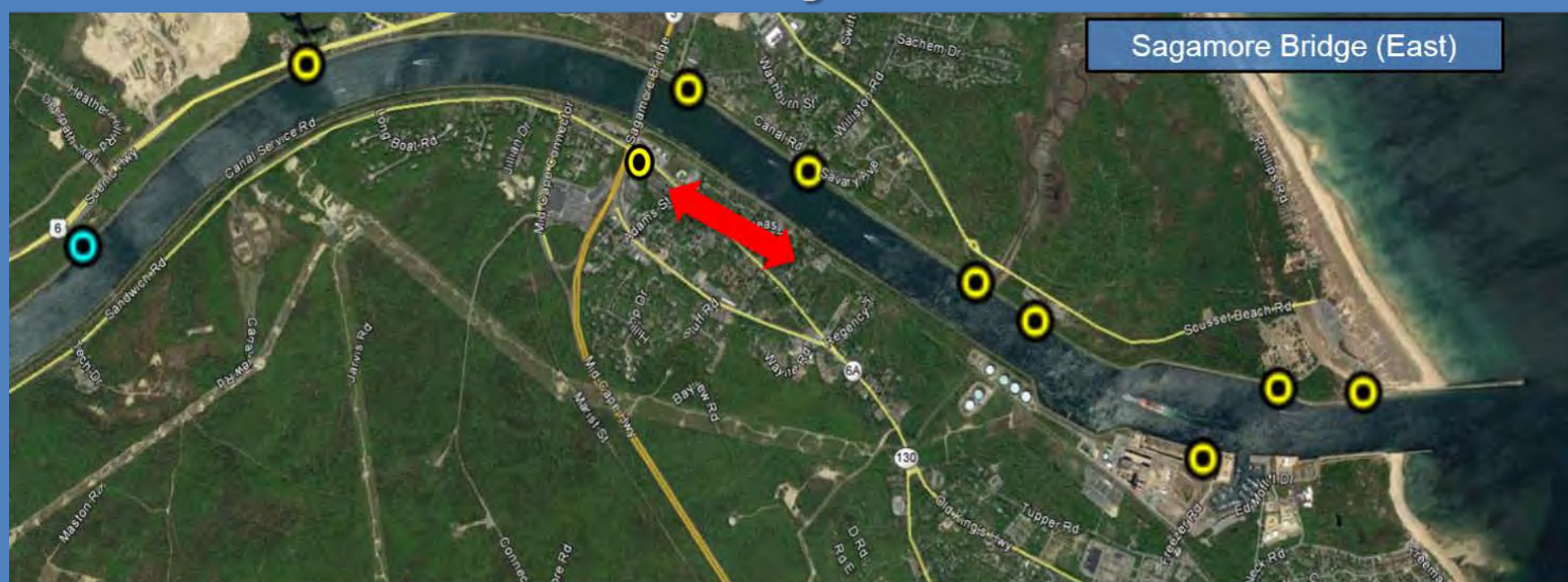


## Legend

- Existing Bikeway Access
- Existing Pedestrian Only Access
- Potential Bikeway Access



# Gaps in Bicycle/Ped Connections to Canal Bikeway-East.

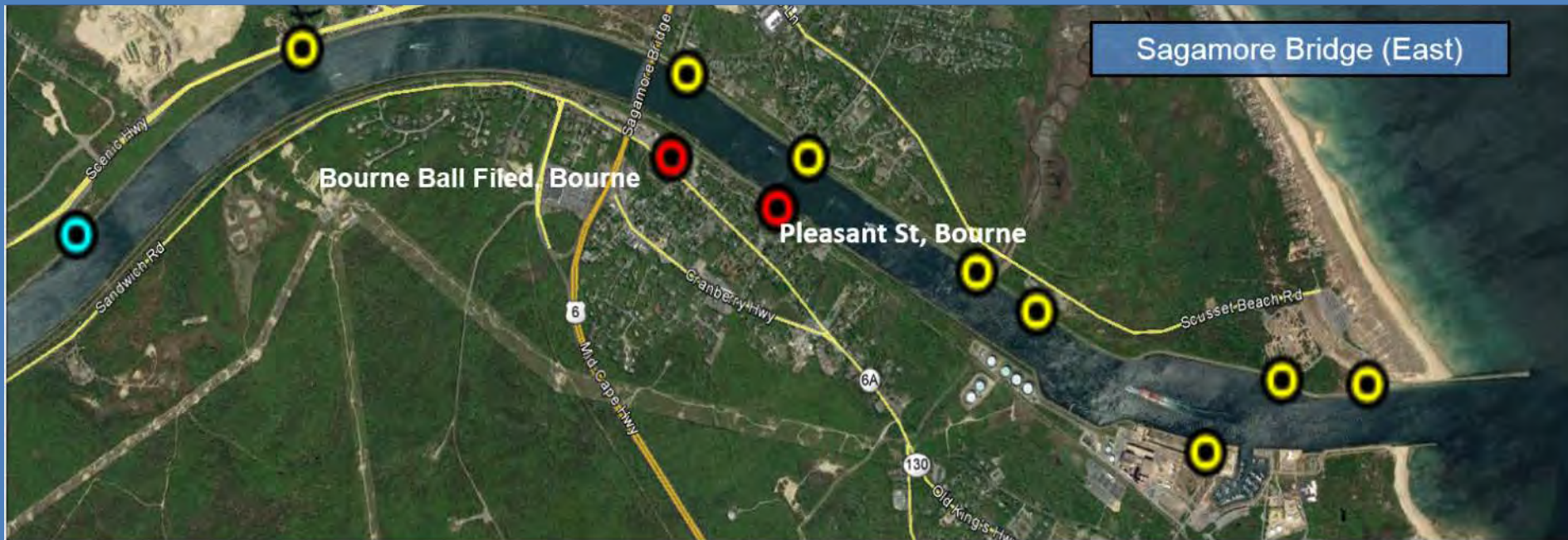


## Legend




- Existing Bikeway Access
- Existing Pedestrian Only Access



# Potential Bicycle/Ped Connections to Canal Bikeway-East.



## Legend

-  Existing Bikeway Access
-  Existing Pedestrian Only Access
-  Potential Bikeway Access



# Potential New Connections to Canal Bikeway.

- Old Bridge Road – Bourne.
- Pleasant Street – Bourne.
- Bourne Ball Field- Bourne.





# Potential Bicycle/Ped Connections to Canal Bikeway.



**Informal Path**



**Constructed Crossing**



# Potential Sidewalk and ADA-Accessibility Improvements.

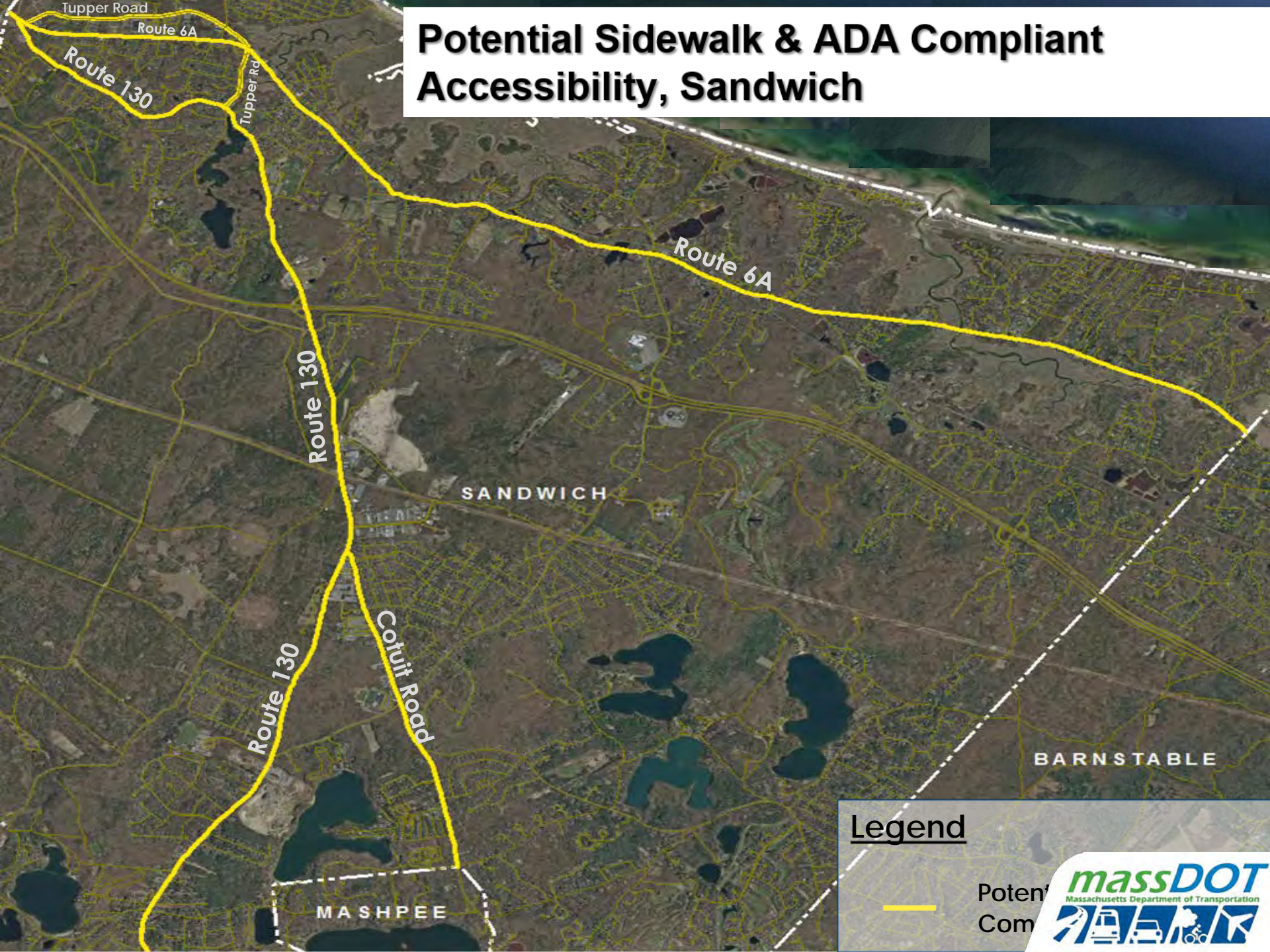
## Sandwich:

- Route 130  
(bus route).
- Route 6A.
- Cotuit Road.
- Tupper Road.





# Potential Sidewalk & ADA Compliant Accessibility, Sandwich





# Potential Sidewalk and ADA-Accessibility Improvements.

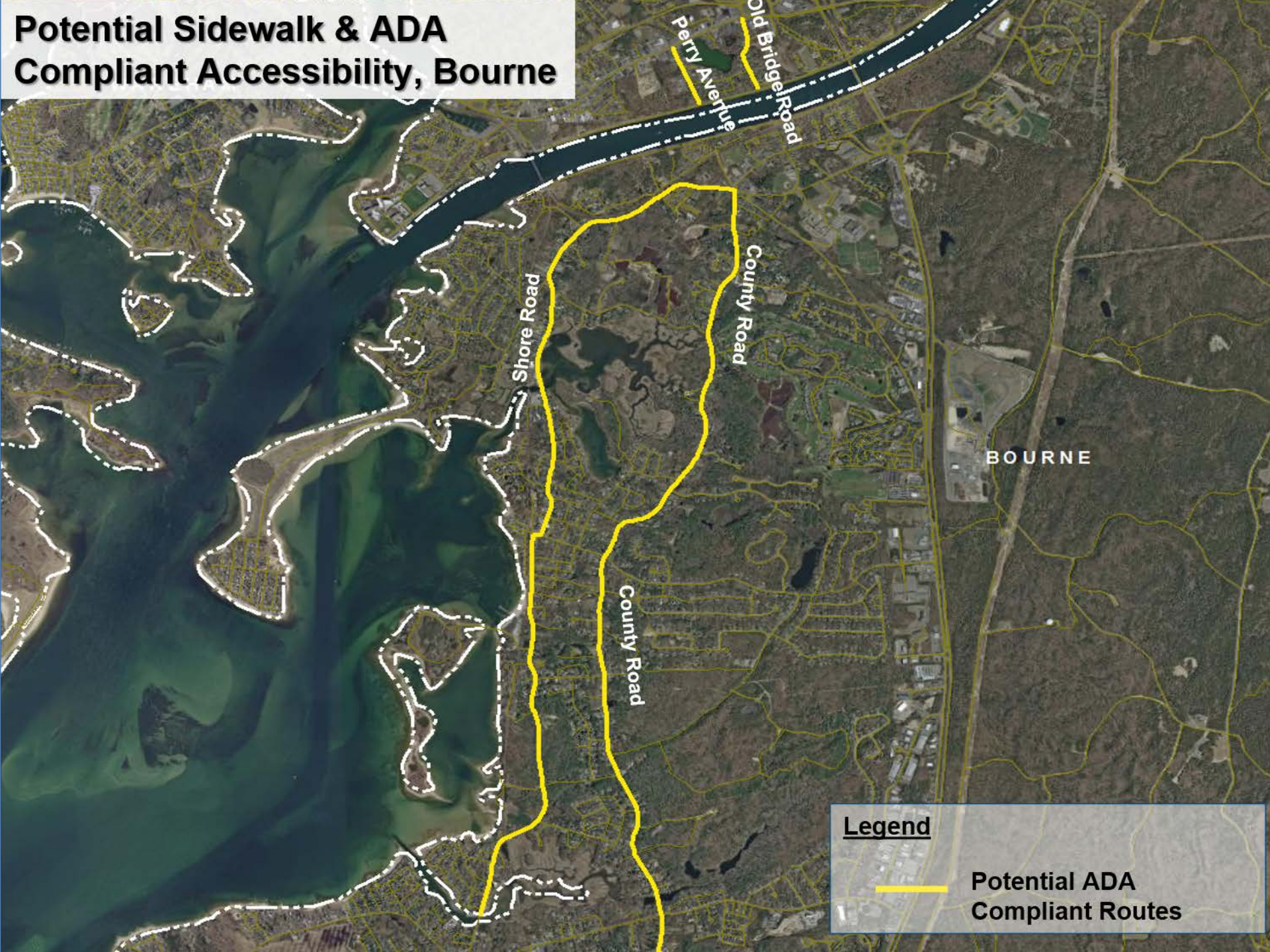
## Bourne:

- County Road (bus route)
- Shore Road





Potential Sidewalk & ADA  
Compliant Accessibility, Bourne



Legend

Potential ADA  
Compliant Routes



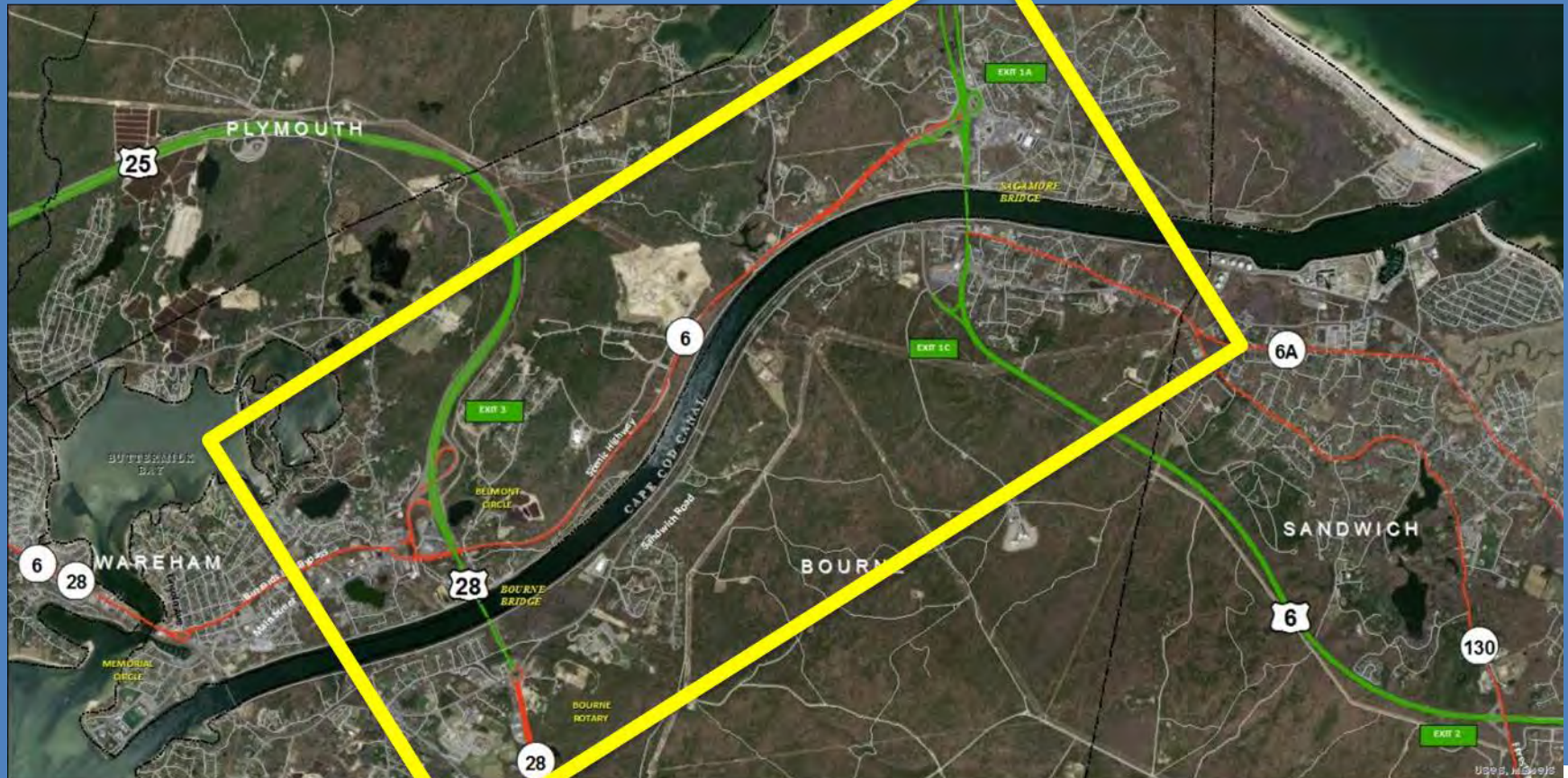


# **Potential Mid-Term Alternatives. (3-8 Years)**

**Higher cost and greater  
potential for environmental  
and property impacts.**



# Long-Term Alternatives - Goal is to Improve the Transportation System's Mobility, Reliability, and Safety.



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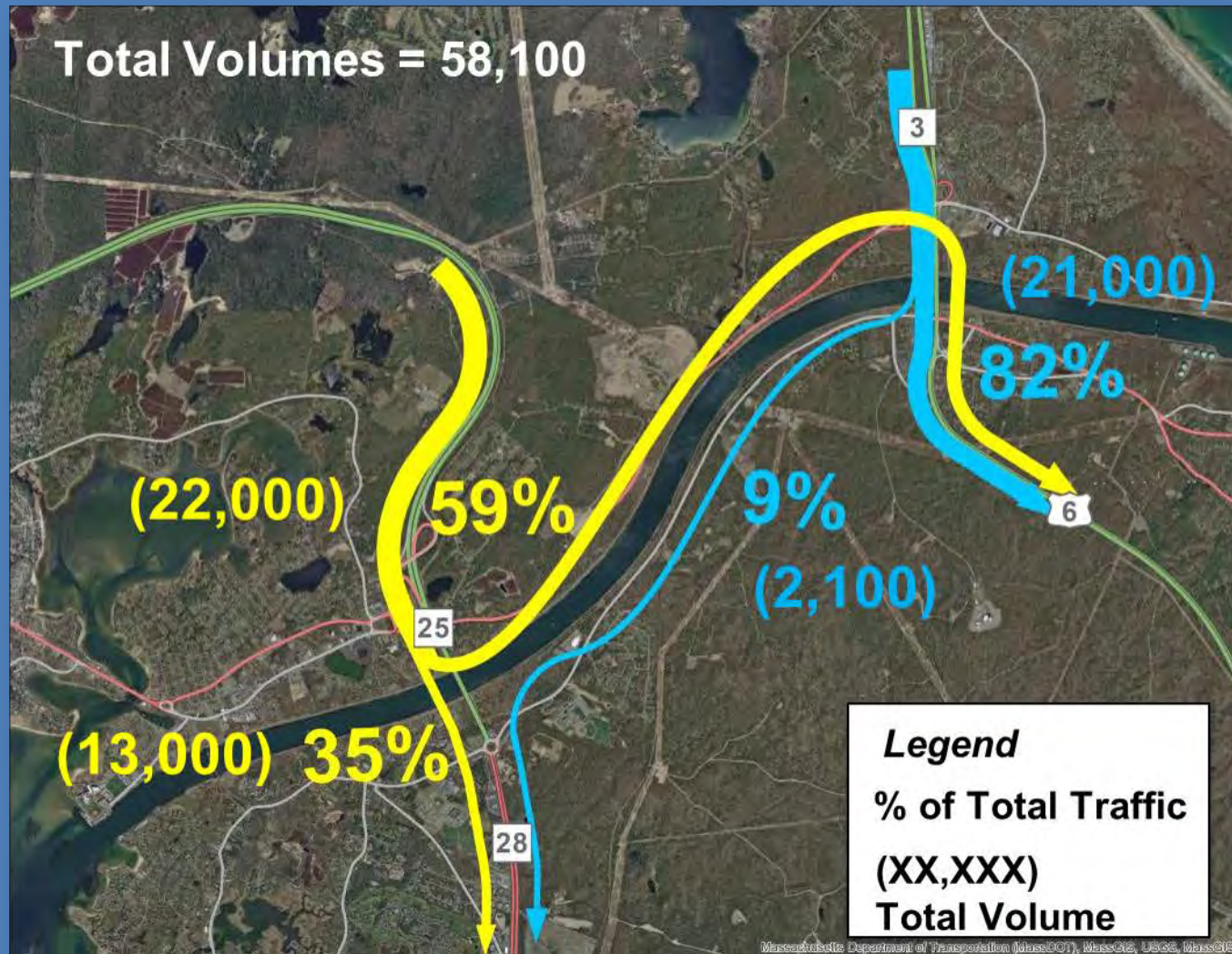


# **Travel Patterns within the Study Area Strongly Influence Preliminary Alternatives Development.**

September 28, 2016



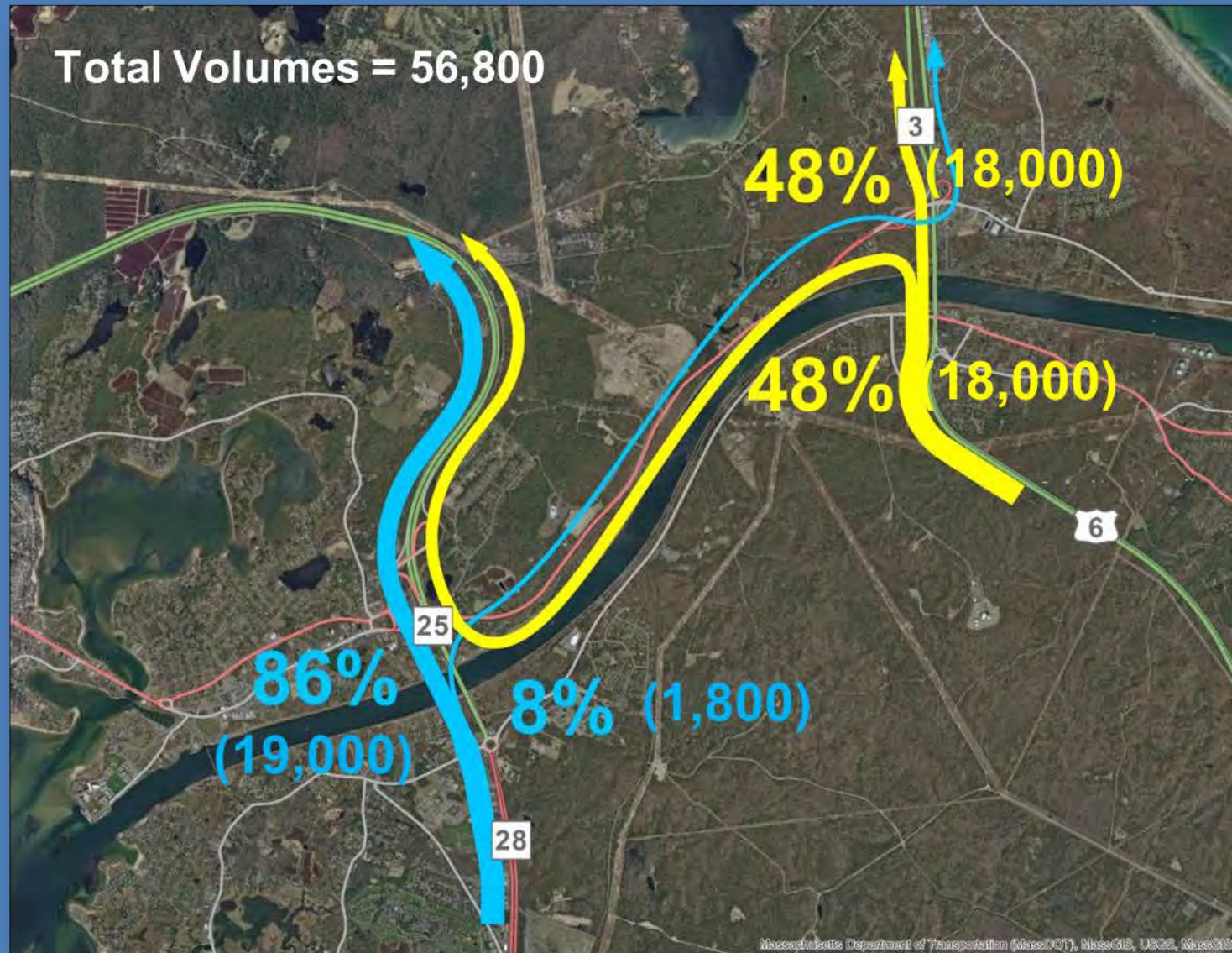
# 2014 Summer Saturday (10 – 11AM) Cape-Bound Routing.



September 28, 2016

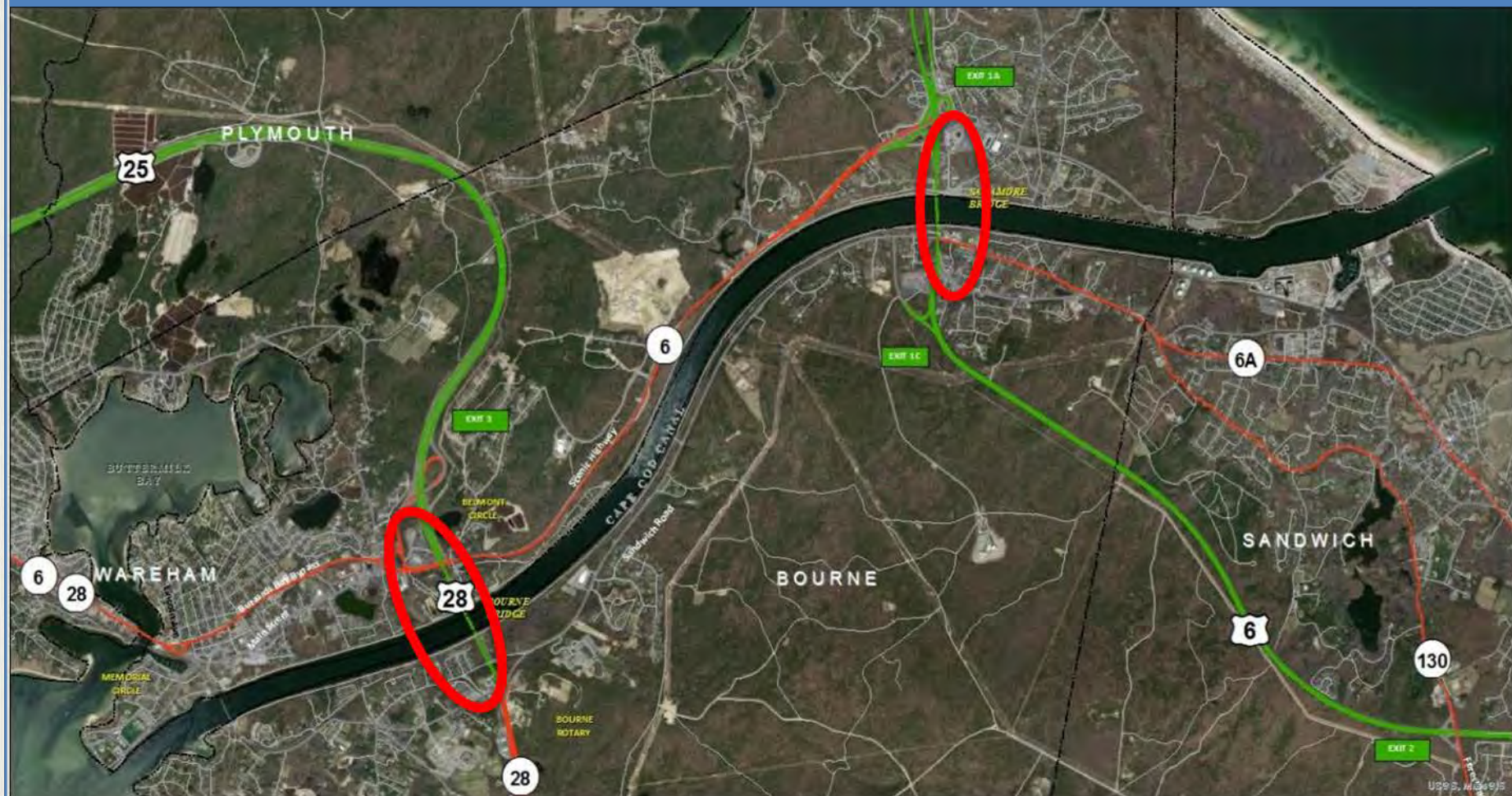


# 2014 Summer Sunday (12 -1PM) Off-Cape Routing.





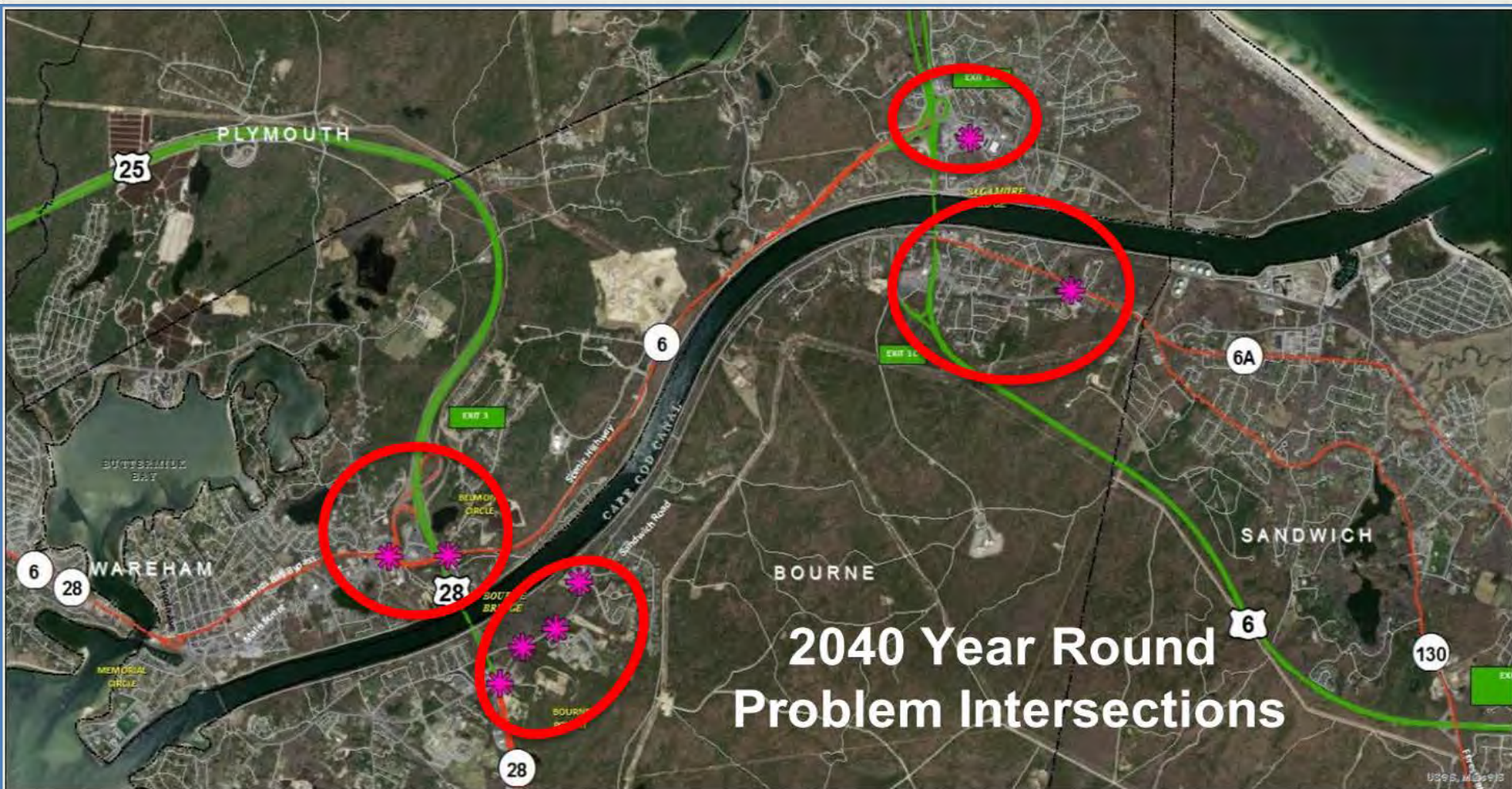
# Focus Areas – Canal Bridges.



September 28, 2016



# Focus Area - Canal Area Intersections.



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# Belmont Circle.

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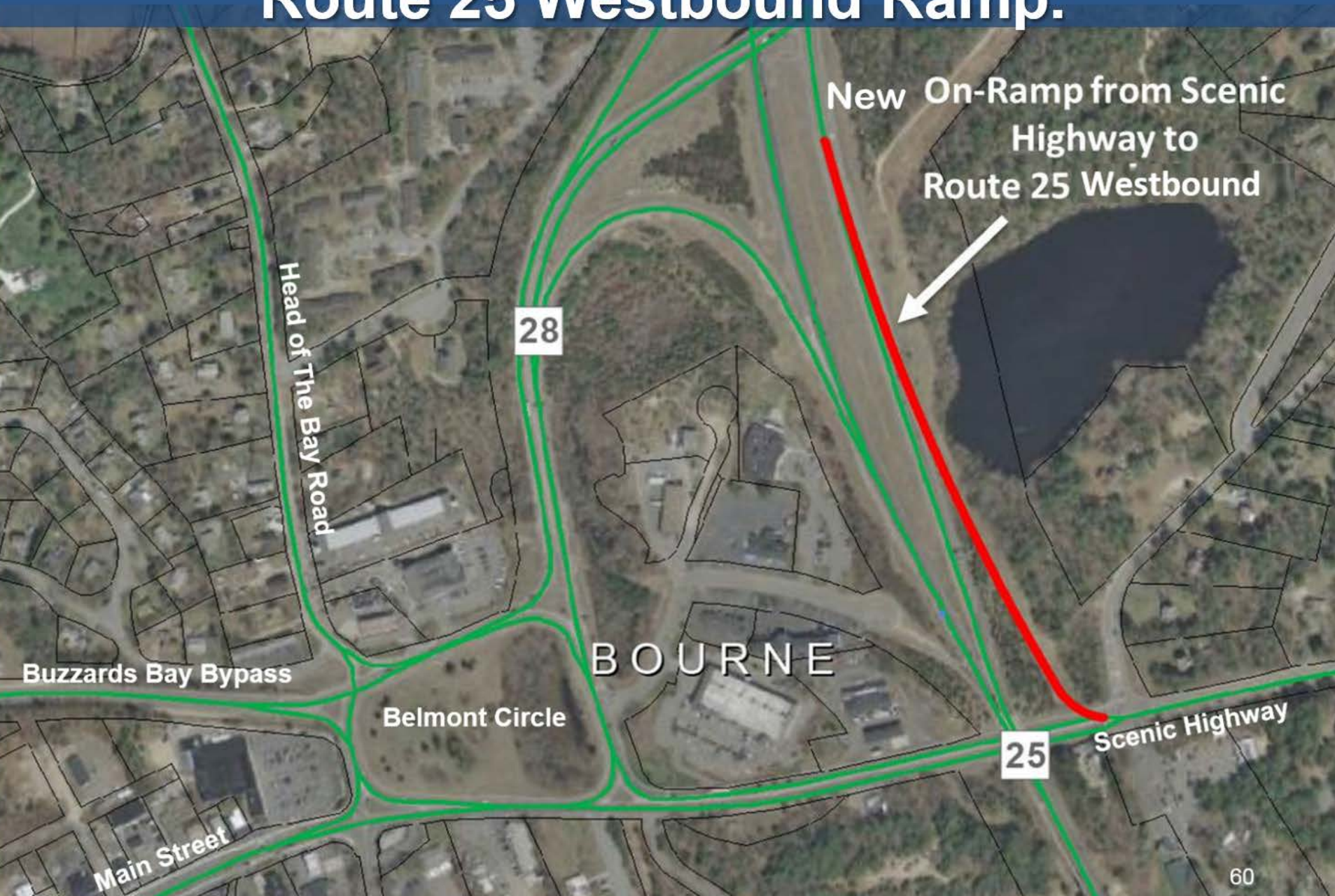


## Potential Mid-Term - Scenic Hwy to Route 25 Westbound Ramp.

- New Ramp from Scenic Highway to Route 25 Westbound.
- Begins at Scenic Hwy/Nightingale Pond Road Intersection.
- Diverts traffic from Belmont Circle.  
(780 cars in summer noontime peak period).
- Access from Scenic Hwy westbound only.
- Potentially improves traffic operations and safety in Belmont Circle  
(high crash location).



# Potential Mid-Term - Scenic Hwy to Route 25 Westbound Ramp.



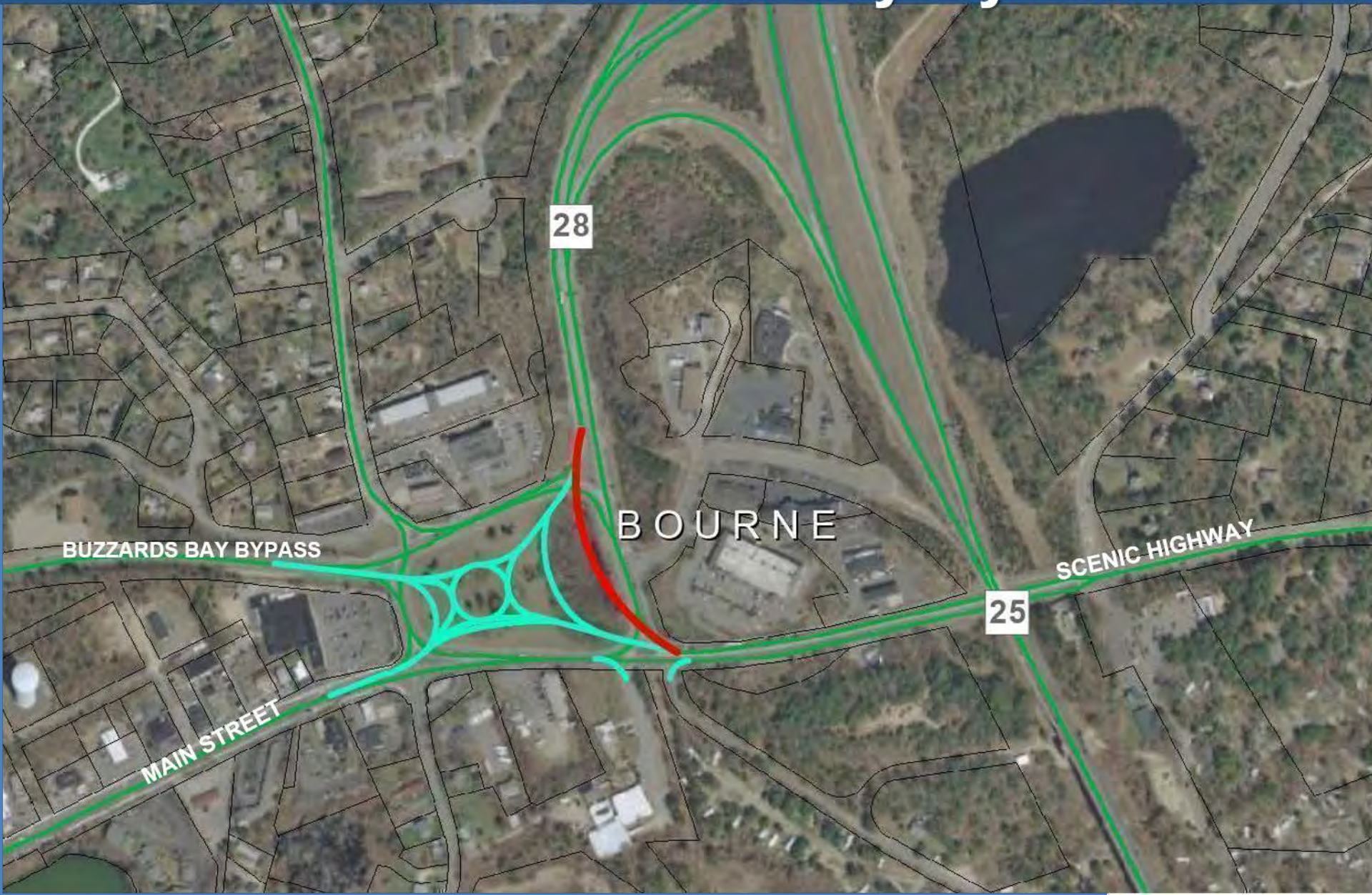


# Potential Mid-Term – Belmont Circle Fly-over Ramp and Roundabout.

- New Ramp from Route 25 eastbound to Scenic Highway eastbound.
- May also include Scenic Hwy to Route 25 westbound ramp.
- Reconstruction of Belmont Circle as a modern roundabout.
- Improves traffic operations and safety in Belmont Circle (high crash location).



# Potential Mid-Term - Belmont Circle – Route 25 to Scenic Hwy Flyover.





# Bourne Rotary.

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# Potential Mid-Term – Bourne Rotary Reconstruction.

- Enhanced southbound access to Sandwich Road (removes 1,175 vehicles from rotary during peak hour Saturday)
- Use of Veterans Way to Sandwich Road
- New bridge under Bourne Rotary Connector. Eliminates need for signalized intersection.
- New Route 28 northbound ramp directly to Bourne Rotary Connector (950 peak hour vehicles).





# Potential Mid-Term Bourne Rotary Reconstruction

Based on 2006 MassDOT  
Study.  
Re-examined with current  
traffic volumes

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## Potential Mid-Term Relocated Route 6 Exit 1C.

- Existing Exit 1C causes congestion Route 6 westbound due to short acceleration lane immediately before Bourne Bridge.
- New Exit 1C at utility corridor (3,400 feet east).
- New roadway to Route 130 at Route 6A.
- Potentially reduces congestion and improves safety with longer acceleration lanes on Route 6.
- Maintains westbound exit/entrance only.



# Mid-Term - Route 6 – Relocation of Exit 1C.



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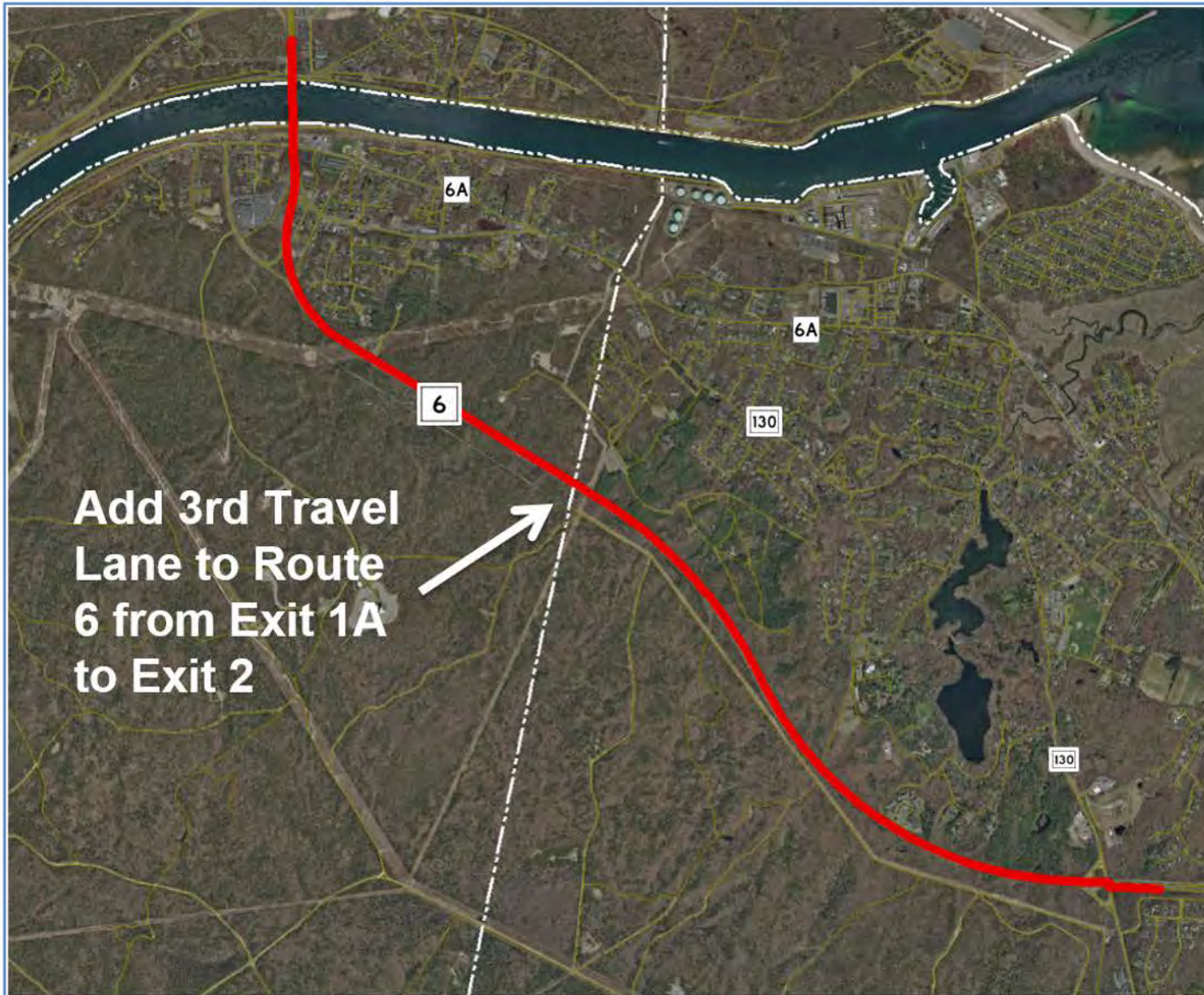


# Potential Mid-Term Route 6 Additional Travel Lane.

- Potential new travel lanes in both direction from Sagamore Bridge to Exit 2 (Route 130).
- Potentially reduces congestion and improves safety on Route 6 by allowing smoother merging of traffic entering or exiting Sagamore bridge.
- Limited environmental impact.



# Route 6 Additional Travel Lane.



Add 3rd Travel  
Lane to Route  
6 from Exit 1A  
to Exit 2



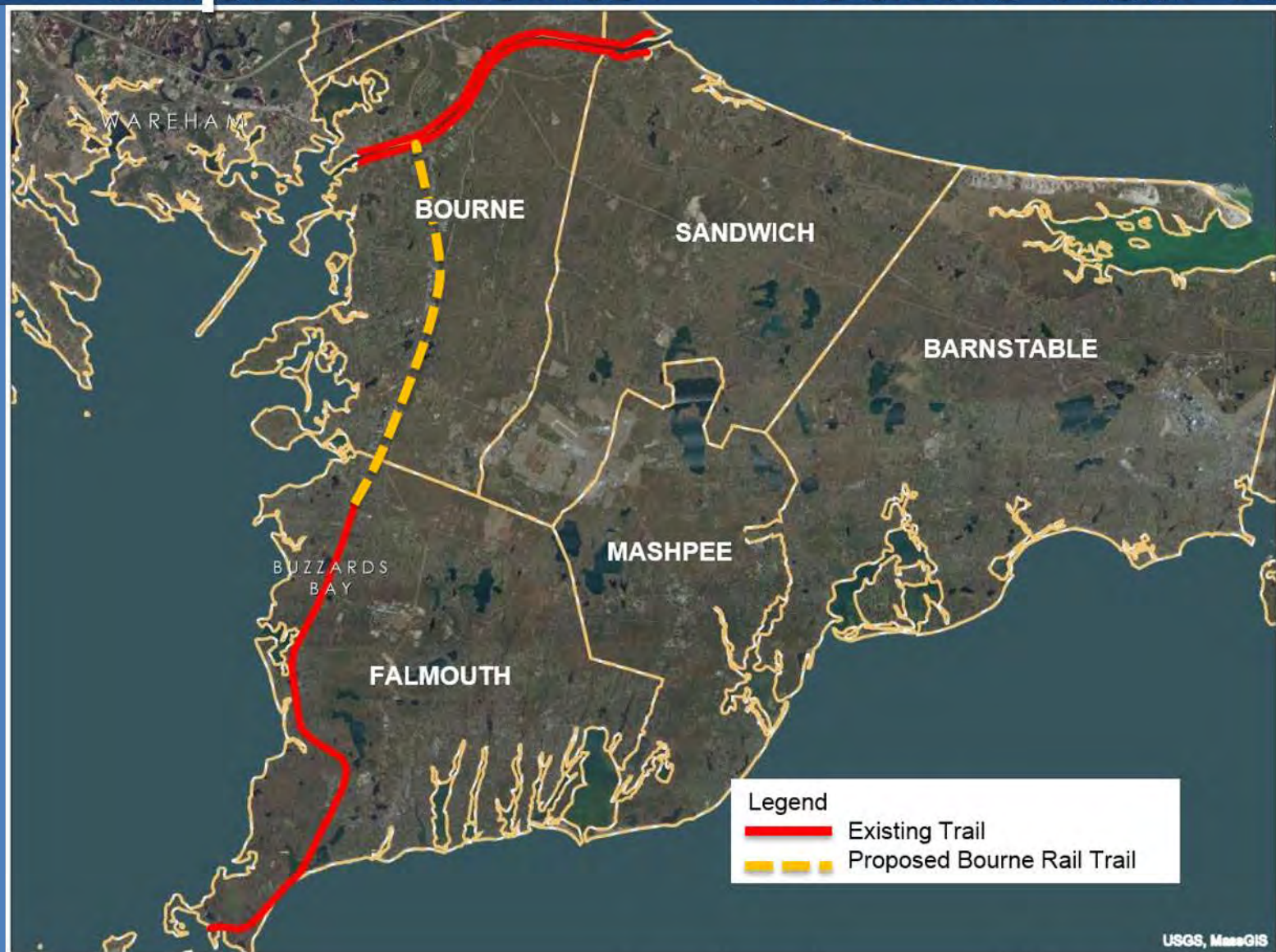
# Potential Mid-Term Bicycle/ Pedestrian/Freight Improvements.

- Bourne Rail Trail  
(Connecting  
Shining Sea  
Bikeway to  
Canal Bikeway).
- Wareham  
Community Path.



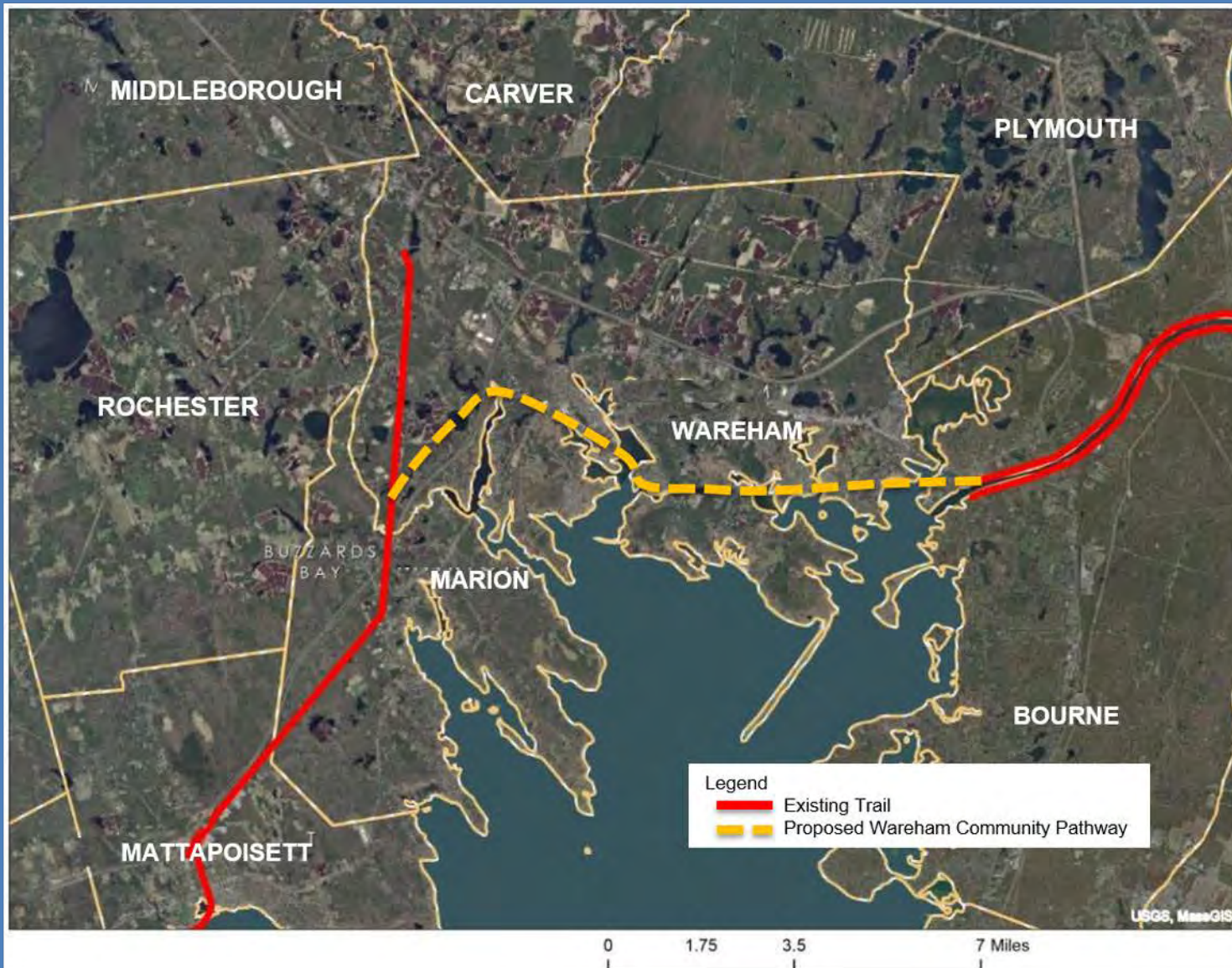


# Potential Mid-Term Bicycle/Pedestrian Improvements. – Bourne Rail Trail





# Potential Mid-Term Bicycle/Pedestrian Improvements – Wareham Community Pathway.



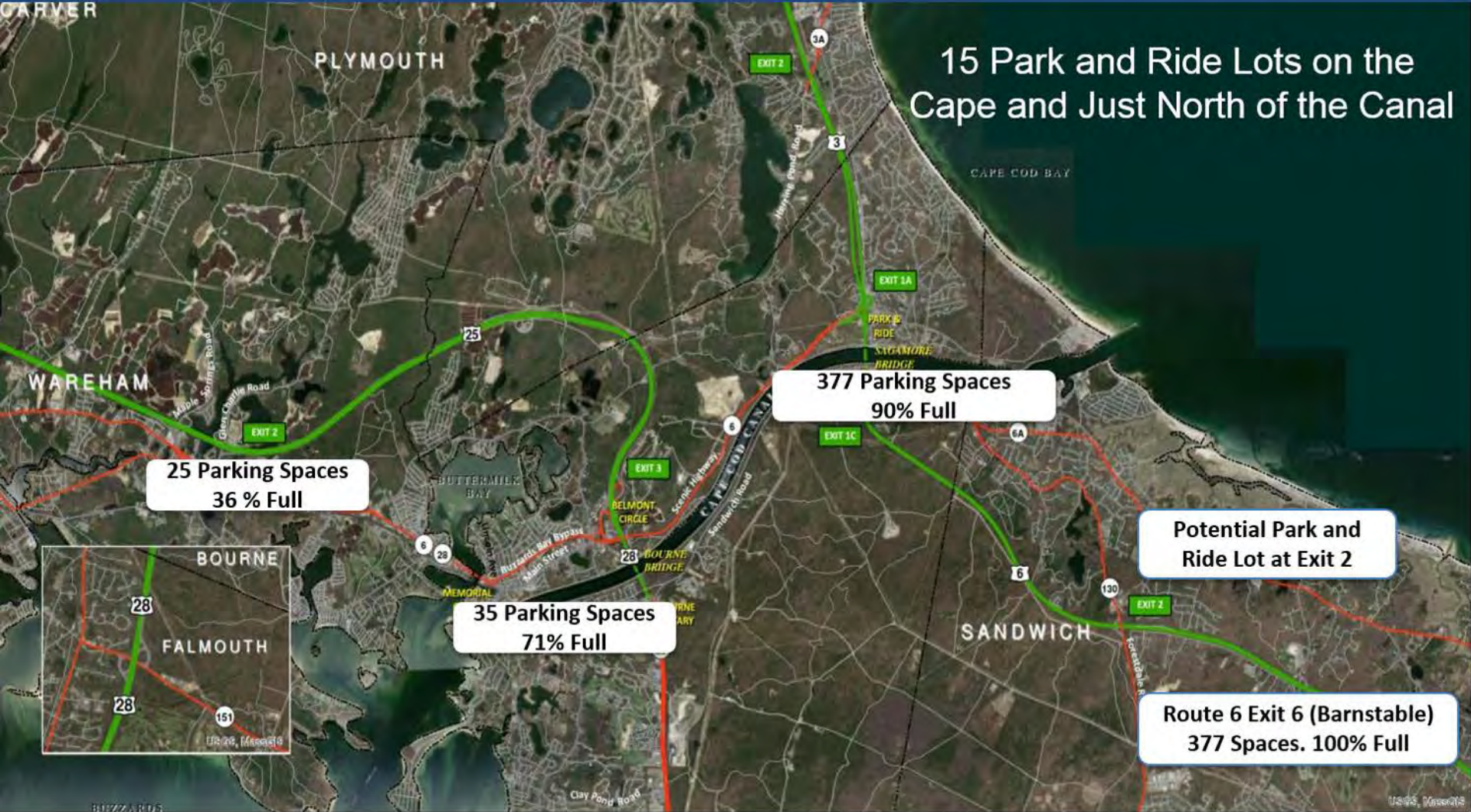


# Park and Ride Lots.

- Existing Park and Ride Lots on Route 6 in Barnstable (Route 132 - Exit 6) and Bourne (Route 3 at Meetinghouse Lane – Exit 1)
- Lots on Route 6 at 90% to 100% capacity.
- Served by bus lines (P&B/CCRTA).
- Route 130 (Exit 2) would provide a P&R lot between the two existing lots.



## Park and Ride Lots







# Potential Mid-Term – Multi-Modal Center Route 6 at Route 130 Park & Ride Lot.



## Legend

-  CCRTA Sandwich Bus Route
-  Proposed Park and Ride Lot Limits



# Potential Freight Ferry Access between New Bedford and Martha's Vineyard.

- Steamship Authority draft report completed in April 2016.
- Desire to reduce truck traffic on local streets in Falmouth.





# Potential Freight Ferry Access between New Bedford and Martha's Vineyard.

- Study found challenges related to:
  - Pilot program in 2000-2001 carried only 16 trucks per day. Fee charged covered 18.5% of actual cost.
  - Cost of initiating service (buying or chartering an additional vessel).
  - Cost would be higher than Woods Hole (\$579 v. \$260 for one-way trip).
  - SSA subsidizing cost is not desirable. Would need state or other funding.



An aerial photograph of a wide river curving through a dense forest. A bridge with multiple piers spans the river in the middle ground. The surrounding landscape is covered in lush green trees, with some cleared areas and buildings visible on the banks. The sky is clear and blue.

# Questions?

Comments and feedback can be emailed to:  
Ethan Britland- [ethan.britland@state.ma.us](mailto:ethan.britland@state.ma.us).



# Long- Term Alternatives. (8+ Years)

- Highest cost
- Lengthy environmental review and design period.

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# Considerations for Long-Term Alternatives Development.

- US Army Corps of Engineers (USACE) conducting study of bridges.
- We are assuming the replacement of both bridges. Toll Free.
- On-going examination of P3 Alternatives and outside submissions.



# Bourne Bridge.





# Environmental Considerations of Prior P3 Alternatives

September 28, 2016



# P3 Alignment Alternatives

Figure 1  
Canal Crossing and Approach Options

Cape Cod Canal Transportation Study

## Legend

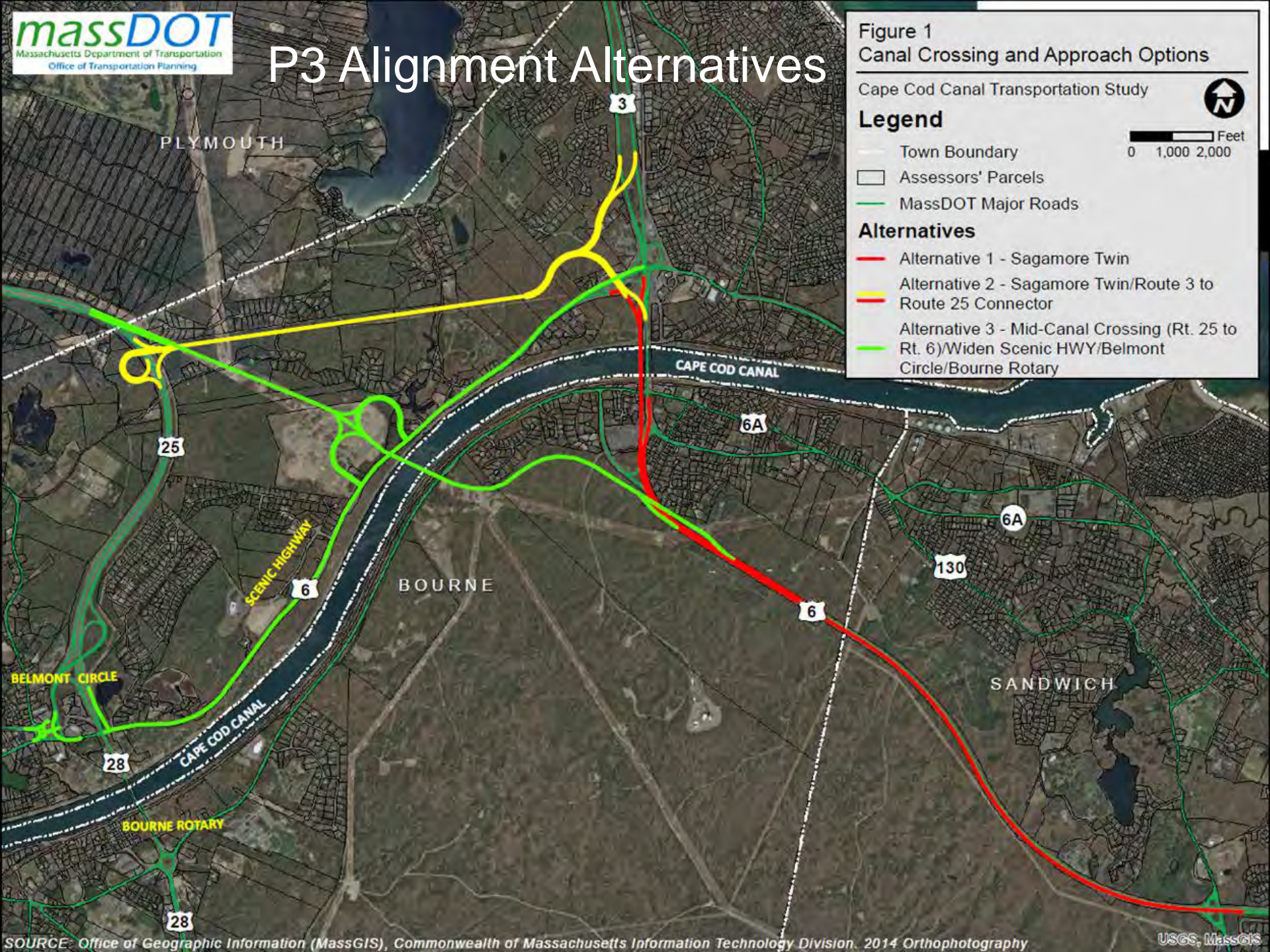
- Town Boundary
- Assessors' Parcels
- MassDOT Major Roads

0 1,000 2,000 Feet



## Alternatives

- Alternative 1 - Sagamore Twin
- Alternative 2 - Sagamore Twin/Route 3 to Route 25 Connector
- Alternative 3 - Mid-Canal Crossing (Rt. 25 to Rt. 6)/Widen Scenic HWY/Belmont Circle/Bourne Rotary





# Environmental Resource Impacts: Route 3 to Route 25 Connector.



Route 3 to Route 25 Connector - Potential Resource Impacts in Acres

Length (mi)	Buffer Area	Wetlands	Open Space (Section 4f)	ACEC	Rare species habitat (PH)	Zone II	Residential Parcels	JBCC
5.6	79.1	7.2	53.6	54.7	51.3	31	0	0



# Environmental Resource Impacts: Route 3 to Route 25 Connector.

**Route 3 to Route 25 Connector Impacts (acres)**

Wetlands	Open Space (Section 4(f))	ACEC	Rare Species Habitat	Zone II	Residential Parcels	JBCC
7.2	53.6	54.7	51.3	31	0	0



# Environmental Resource Impacts: Middle Bridge.





# Environmental Resource Impacts: Middle Bridge.

Middle Bridge Impacts (acres)						
Wetlands	Open Space (Section 4(f))	ACEC	Rare Species Habitat	Zone II	Residential Parcels	JBCC
1.24	37.8	19.2	63.1	19.7	17	19.9



# Conclusion of Preliminary P3 Concepts.

Route 3 to Route 25 Connector and  
Mid-Canal Bridge Alternatives.

Dismissed from consideration due to  
Significant Environmental Impact.



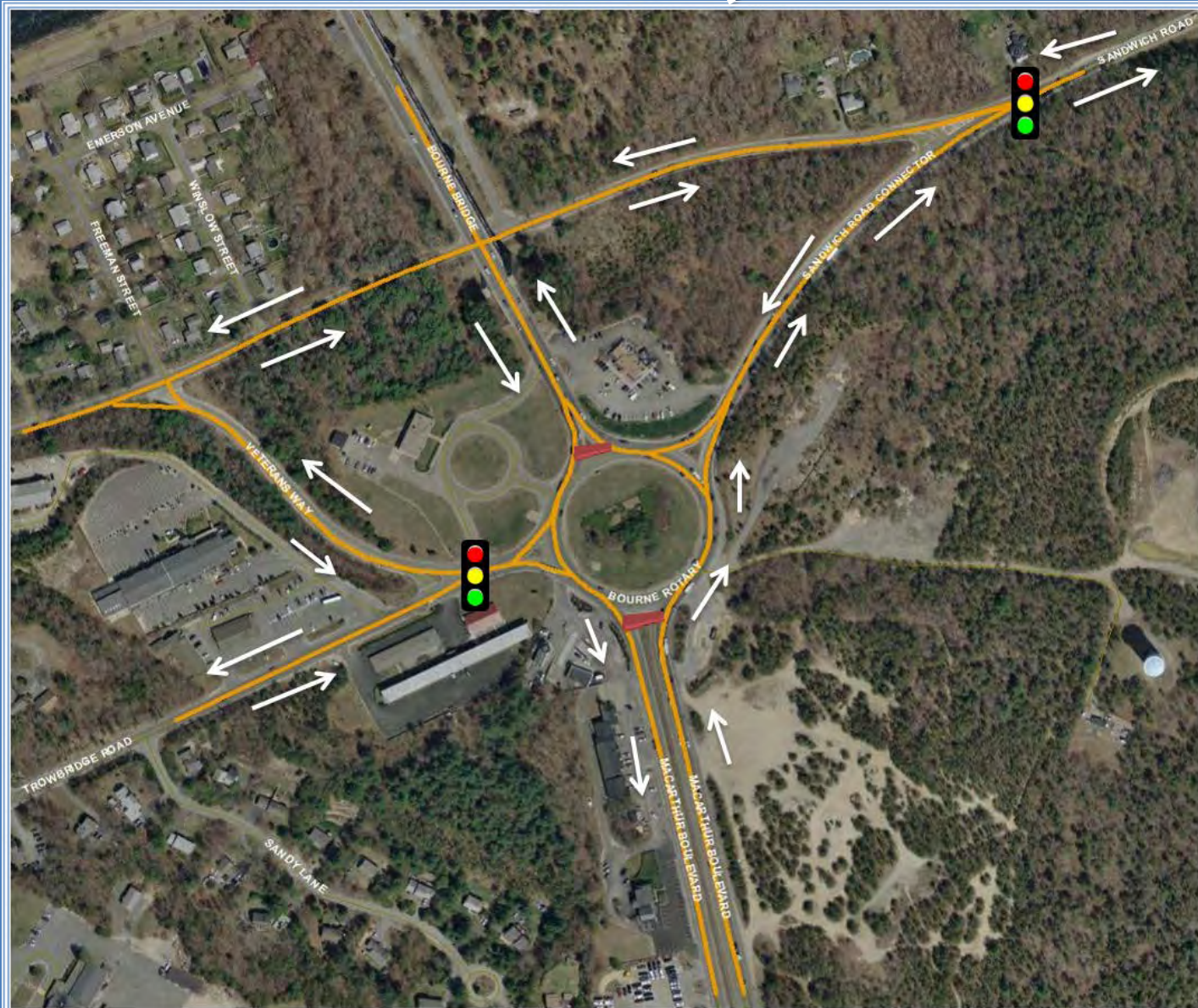
# Preliminary Concepts Provided by Members of the Public.



Tom Baron, South Yarmouth  
Burton Pearlstein, North Falmouth  
David Oakley, Chatham  
Steve Voluckas, Barnstable

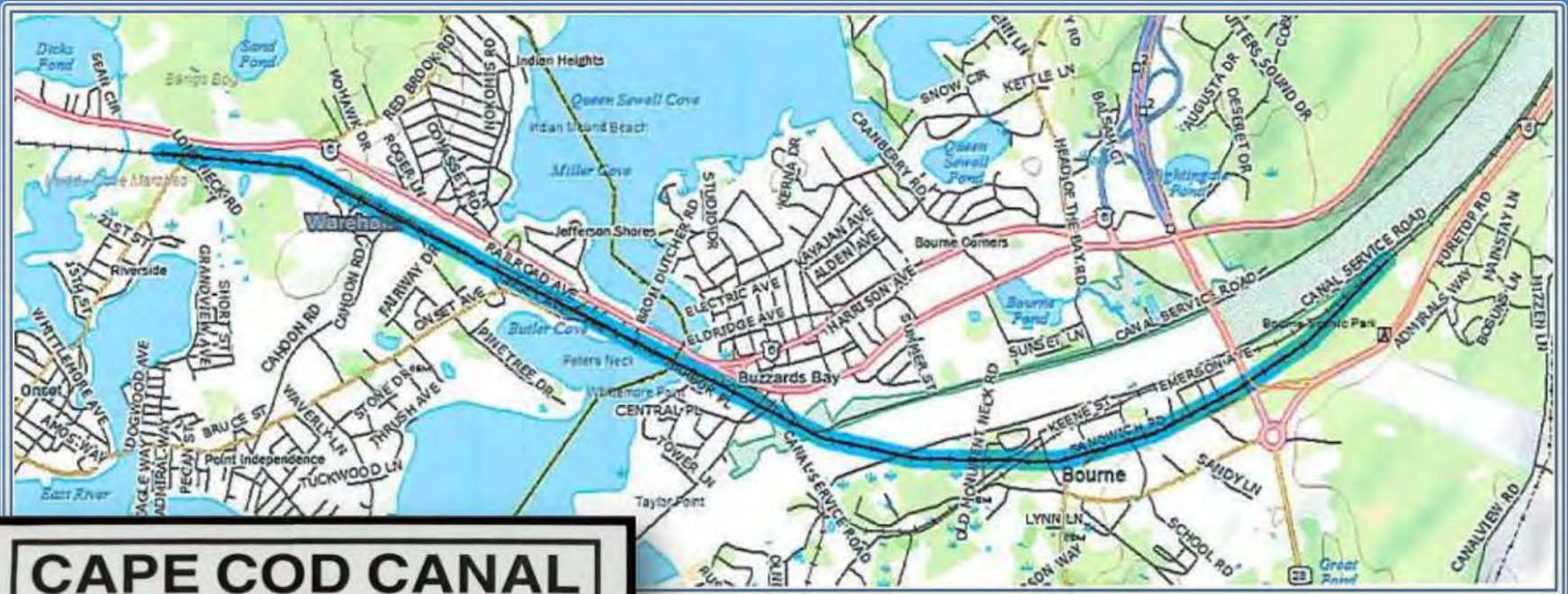


# Bourne Rotary Reconstruction. Burton Pearlstein, North Falmouth





# Canal Tunnels.





# Challenges Related to Canal Tunnel.

- Topography requires much longer tunnel than bridge.
- Requires substantial ventilation equipment and structures.
- Would require major environmental Study (EIS).
- Difficult to accommodate bicycles or pedestrians.
- Construction cost double or more compared to a bridge.



# Conclusion of Transportation Concepts from Members of the Public.

- Modifications to Bourne Rotary – Additional Evaluation on-going
- Mid-Canal Bridge Crossing - Dismissed due to significant environmental impact.
- Roadway/Rail Tunnels – Dismissed due to impact & cost.
- Facilities on JBCC – Right-of-way impacts.

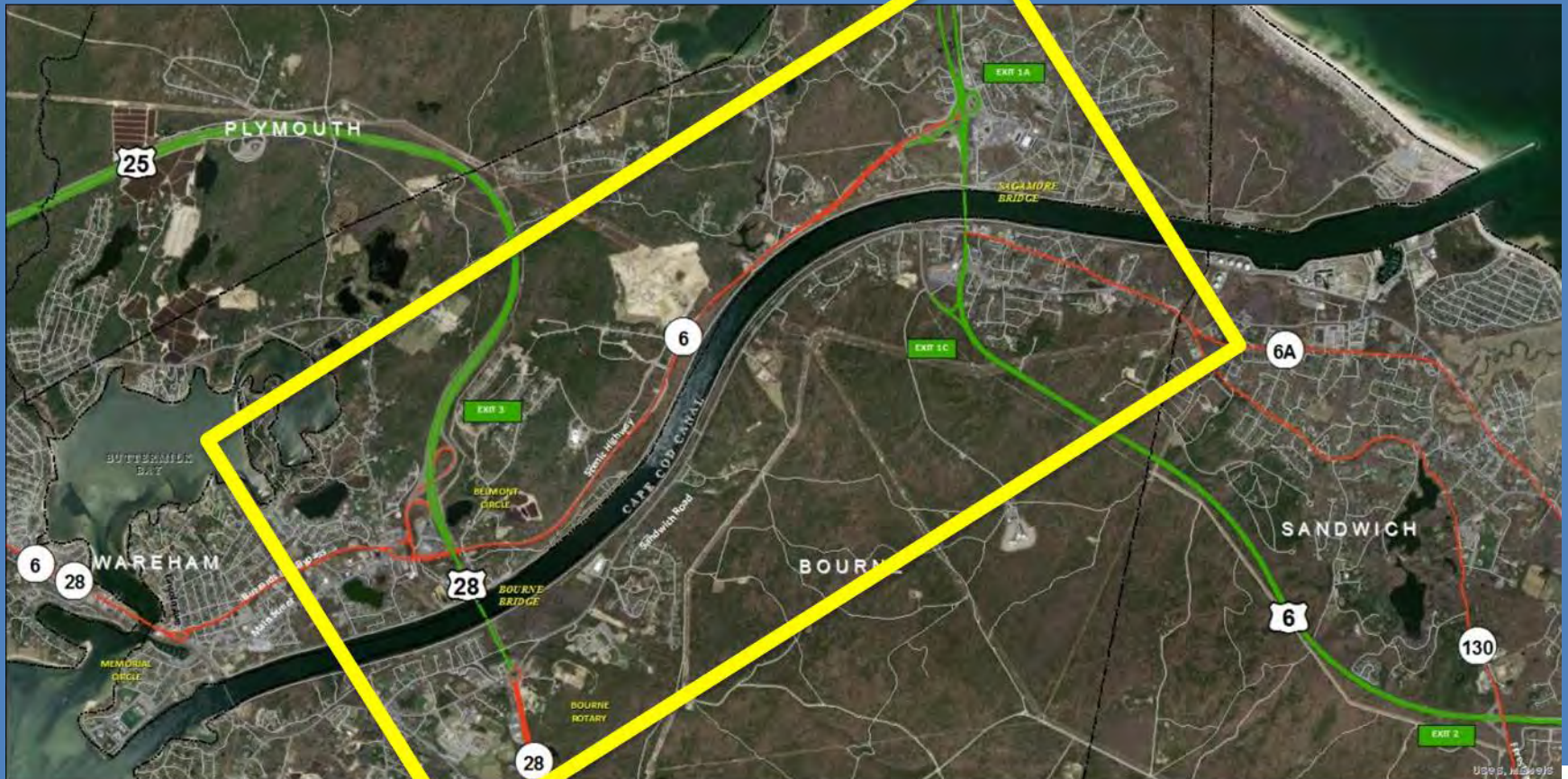


# Long Term Alternatives.





# Term Alternatives - Goal is to Improve the Transportation System's Mobility, Reliability, and Safety.



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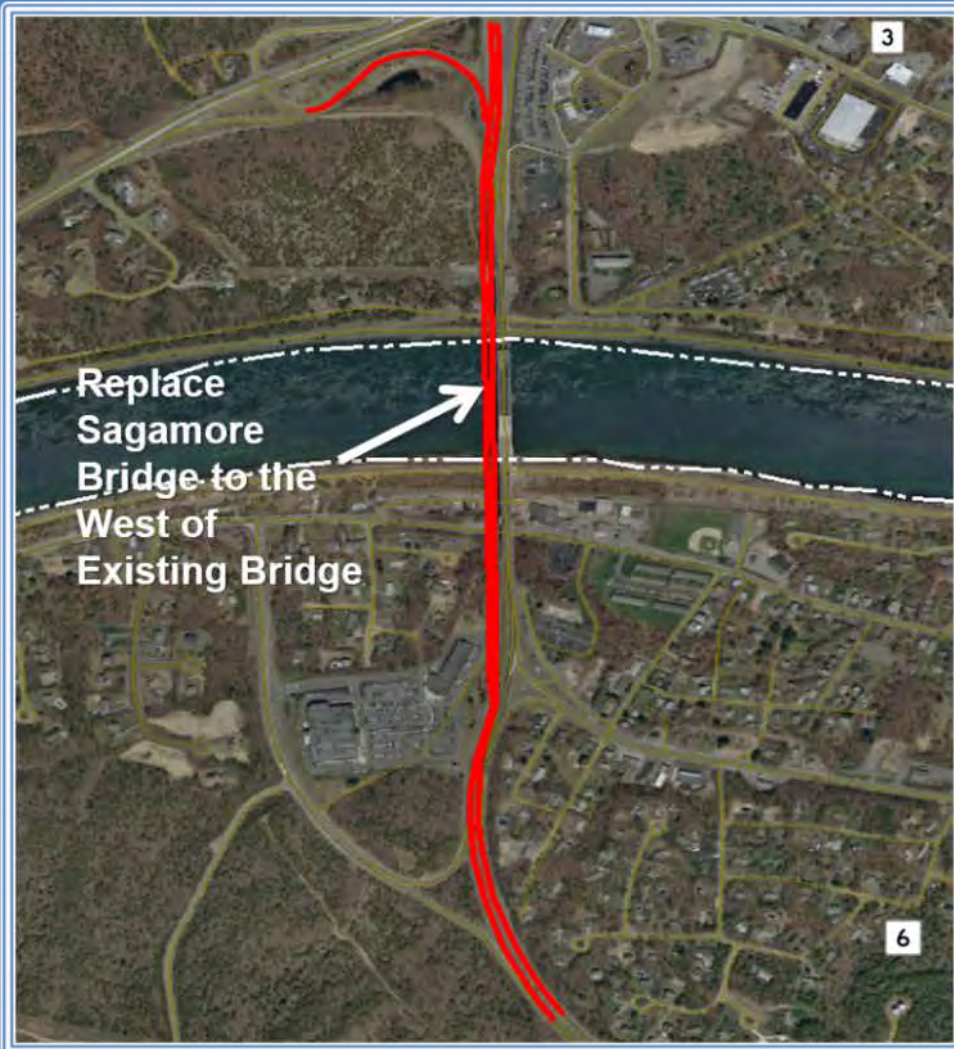
# Connecting Roadways Key to Solution.



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# Potential Sagamore Bridge Replacement (Preliminary MassDOT/Corp's Concept.



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# Potential Bourne Bridge Replacement (Preliminary MassDOT/Corp's Concept.)





# Bourne Rotary Reconstruction.





# Potential Long-Term Bourne Rotary Reconstruction Concepts.

Alternative 1 - Route 28 Fly-Over.

Alternative 2 - MassDOT/USACE  
Interchange.

Alternative 3 – Modified Interchange.

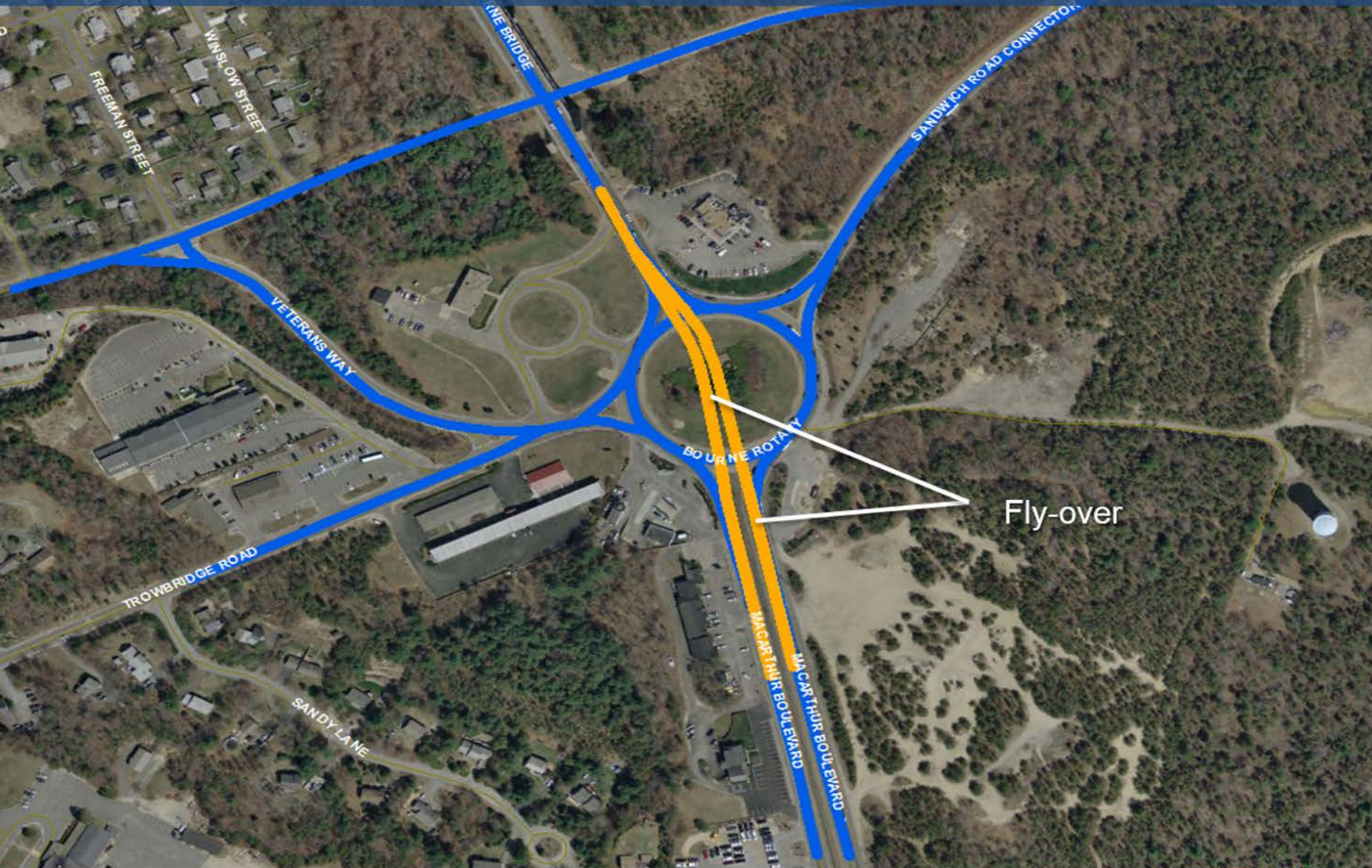


# Alternative 1 - Bourne Rotary Fly-Over Concept.

1. Construction of Fly-over bridge for Route 28 through-traffic.
2. Must be compatible with future bridge
3. All other traffic uses rotary.
4. Minimal environmental or property impact.



# Alternative 1 - Bourne Rotary Fly-Over



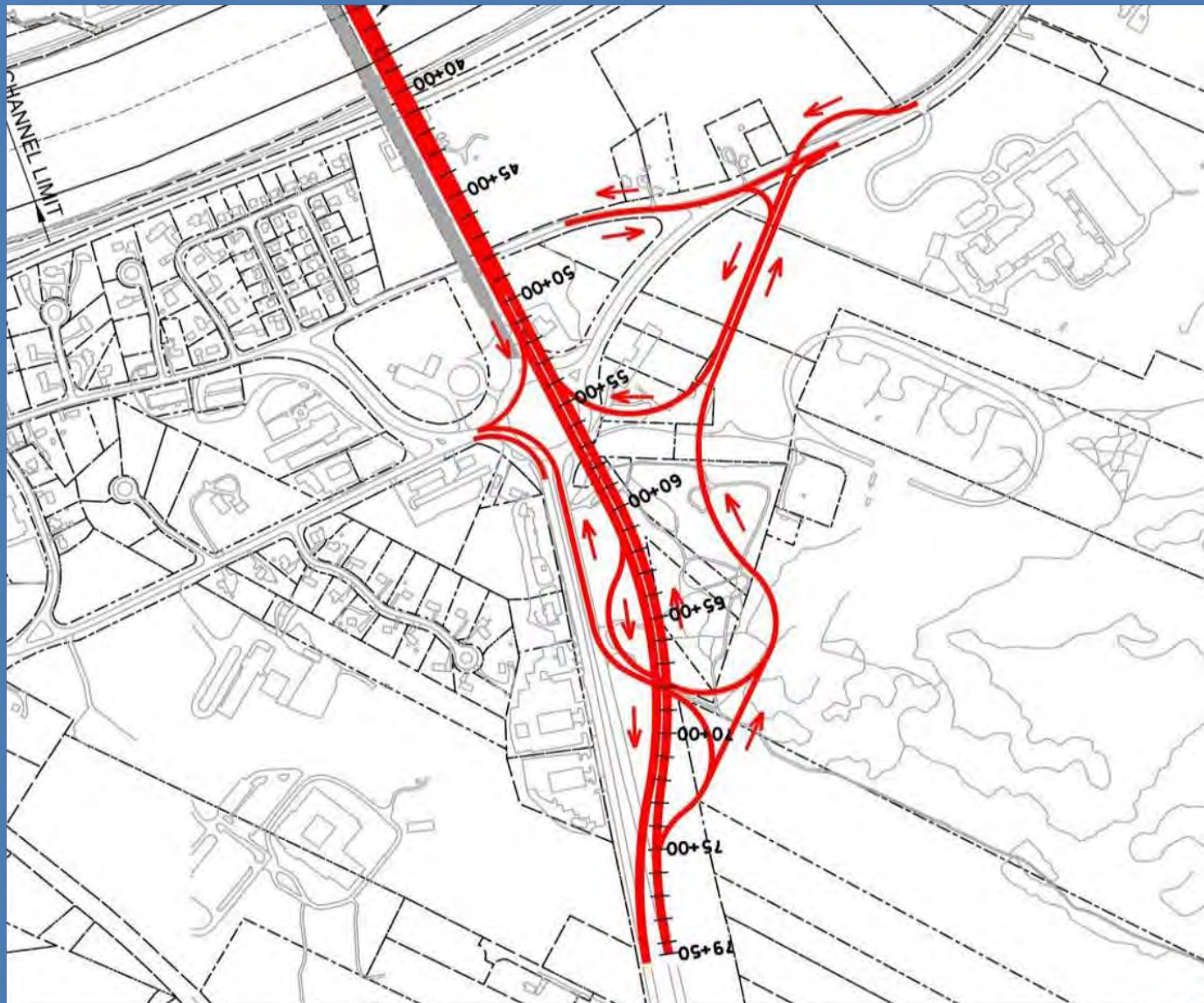


# **Alternative 2 - Bourne Rotary MassDOT/USACE Interchange Concept.**

1. Replacement of Bourne Rotary with highway interchange.
2. Compatible with new bridge alignment to the east.
3. Direct access to and from all approaches.
4. Land impacts to the east.



# Alternative 2 - Bourne Rotary MassDOT/Corps Interchange Concept.

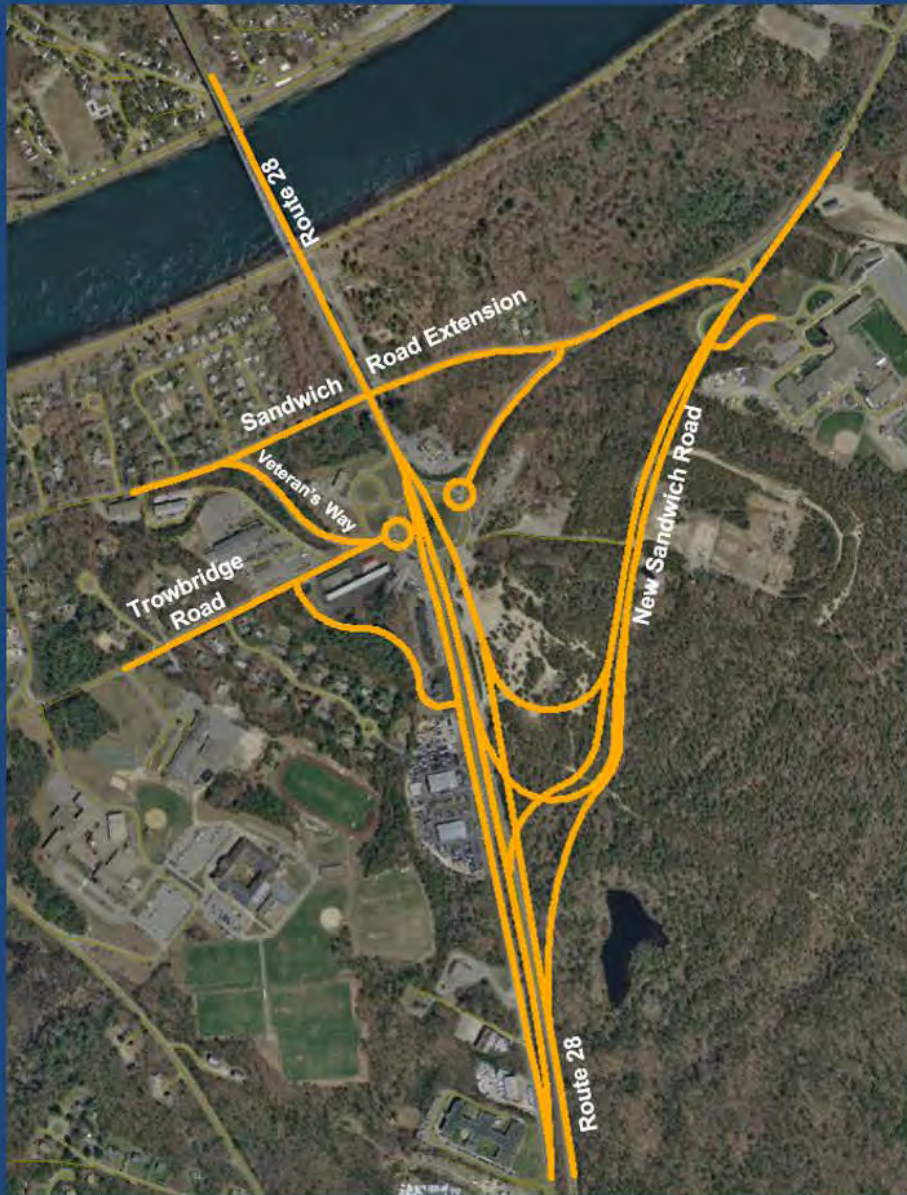




# **Alternative 3 Bourne Rotary Modified Interchange Concept.**

1. Replacement of Bourne Rotary with highway interchange.
2. Modified Access to Trowbridge Road.
3. No Direct Access from Bourn Rotary Connector or Trowbridge Road.
4. Limits impact to adjacent commercial properties.





# Alternative 3 Bourne Rotary Modified Interchange concept

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# Potential Additional Infrastructure.

- New roadway connections to reduce congestion, especially in peak periods.
- Lanes in each direction or reversible lane.
- Considering various concepts which may be combined into a single concept.
- May be an alternative facility type; Toll, High Occupancy Vehicle (HOV), High Occupancy Toll (HOT) or other types.



# Potential Additional Infrastructure Concept 1.

- Potential additional travel lane on Route 3 and Route 6 corridor.
- Limits may extend from Route 3 at Herring Pond Road (Exit 2), over Sagamore Bridge, to Route 6 at Route 130 (Exit 2).
- Lanes on each direction in reversible center lane.



# Potential Additional Infrastructure.



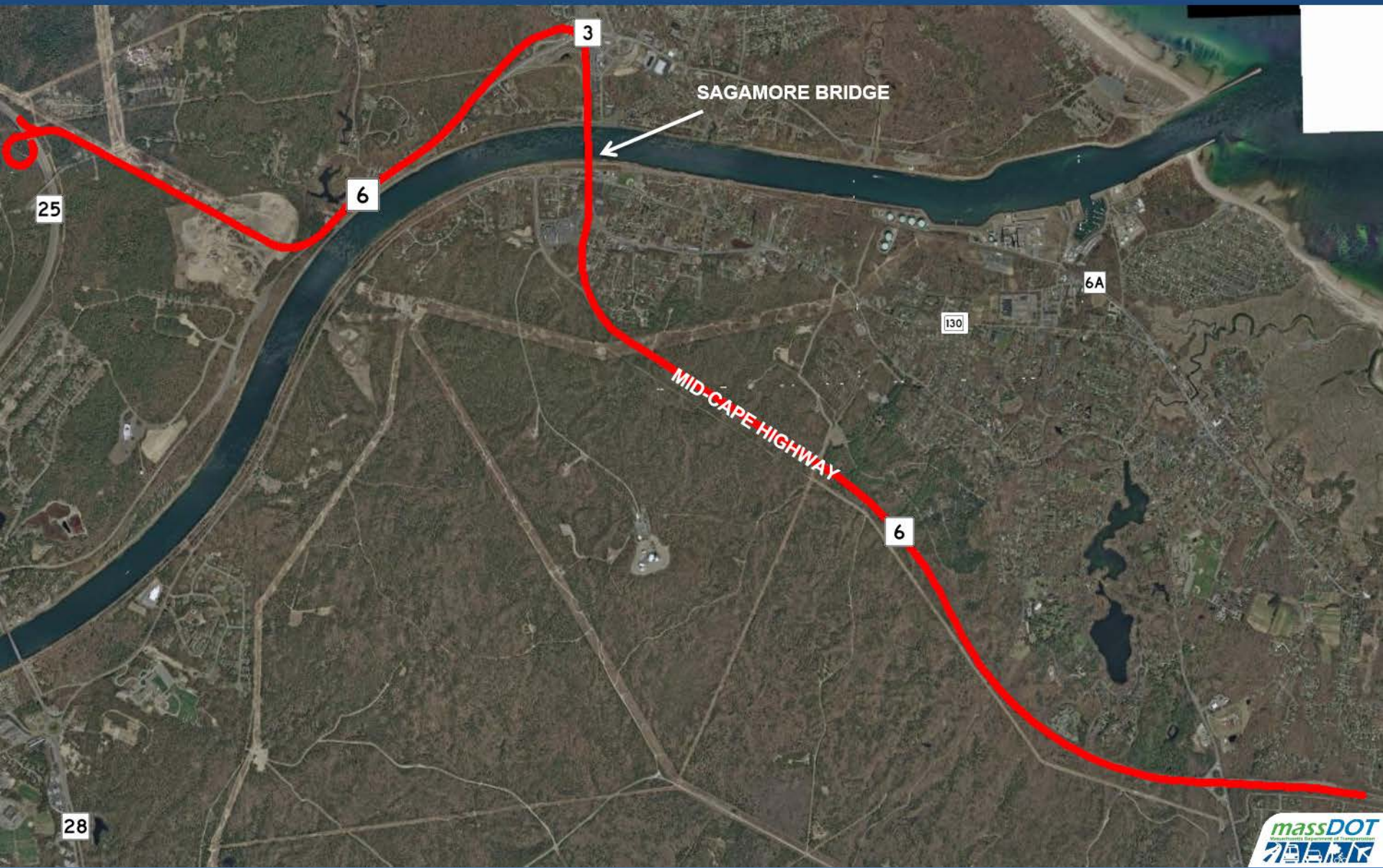


# Potential Additional Infrastructure Concept 2.

- Potential new roadway connecting Route 25 to Route 6 via Scenic Highway.
- Continue south over Sagamore Bridge on Route 6 to Route 130 (Exit 2).
- Addresses high Route 25 to Route 6 travel volumes



# Potential Additional Infrastructure.





# Potential Additional Infrastructure Concept 3.

- Potential new roadway connecting Route 25 to Route 3.
- Continues south over Sagamore Bridge on Route 6 to Route 130 (Exit 2).
- Addresses high Route 25 to Route 6 travel volumes



# Potential Additional Infrastructure.





An aerial photograph of a river flowing through a densely forested landscape. A large dam structure is visible in the middle of the river, with water flowing over it. The surrounding land is covered in green trees, and there are some buildings and roads visible on the banks. The sky is clear and blue.

# Questions?

Comments and feedback can be emailed to:  
Ethan Britland- [ethan.britland@state.ma.us](mailto:ethan.britland@state.ma.us).



# Schedule and Next Steps.





# Selection of Package of Alternatives.

- Overall improvements will be best combination of short-, mid-, and long-term improvements.
- Project sub-areas (Bourne Rotary, Belmont Circle, Sagamore area) to be evaluated using traffic modeling (VISSIM, Synchro)
- Travel demand model will then ensure that the 'transportation system' works as desired.



# Selection of Package of Alternatives.

- Transportation Improvements will layered upon one another until they result in acceptable forecast future traffic conditions.
- Selected Improvements will also be evaluated based on:
  - Effectiveness.
  - Environmental Impact.
  - Community Disruption.
  - Property Impacts.
  - Cost.



# Next Steps.

- Further Evaluation of Short-, Mid-, & Long-Term Improvement Alternatives.
- Evaluation Matrix.
- Working Group Feedback.



# Study Schedule.

	2016						2017											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>TASK 3 Alternatives Development</b>																		
Working Group Meeting	◆		◆															
Public Meeting					◆													
<b>TASK 4 Alternatives Analysis</b>																		
Mobility/Accessibility Analysis																		
Safety Analysis																		
Environmental Effects Analysis																		
Land Use/Economic Development																		
Community Effects/TitleVI/EJ																		
Cost Analysis																		
Working Group Meeting						◆		◆										
Public Meeting								◆										
<b>TASK 5 Recommendations</b>																		
Draft report																		
Working Group Meeting											◆							
Public Meeting											◆							
<b>TASK 6 Final Report</b>																		

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An aerial photograph of a river flowing through a densely forested landscape. A large dam structure is visible in the middle of the river, with water flowing over it. The surrounding land is covered in green trees, and there are some buildings and roads visible on the banks. The sky is clear and blue.

# Questions?

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# End of Presentation.

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