



CAPE COD
COMMISSION

Claire Saltonstall Memorial Bikeway:

CAPE COD SEGMENT – RECOMMENDED ROUTE REVISIONS

February 2015





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Introduction

BACKGROUND AND PURPOSE

In 1978 The Massachusetts General Court established the Claire Saltonstall Memorial Bikeway (also known as “Mass Bike Route 1” and the “Boston to Cape Cod Bikeway”) as a memorial to Claire Saltonstall, daughter of Senator William Saltonstall, who died in a bicycle accident in 1974. The bike route consists of a series of interconnected on-road segments and multi-use paths beginning in Boston and ending in Provincetown. A secondary leg extends from Bourne to Falmouth.

Road conditions, development patterns, and bicycle accommodations on Cape Cod have changed since the bikeway’s designation. Portions of the route travel along formerly rural roads that now carry considerably more traffic volumes, creating an uncomfortable ride even for experienced cyclists. Multi-use paths and segments of the Cape Cod Rail Trail (CCRT) and the Shining Sea Bike Path built since the route’s designation are now available and preferred options, however route maps and accompanying signage in some locations still follow the original on-road route.

The purpose of this report is to provide recommendations to the Massachusetts Department of Transportation (MassDOT) for route revisions to create more comfortable conditions for bicyclists.¹ It includes route alternatives that could be designated on existing roads and facilities in the near –term (2016) as well as recommendations for future route revisions when new shared-use paths and other bicycle accommodations currently in planning phases will be constructed. In addition to revising the bike route, maps and signage will need to be updated to reflect the changes.

Bicycling from Boston to Cape Cod is a popular activity that draws cyclists seeking a bicycle tour between the city and the Cape. It is important for their safety that the signed and designated route be updated to direct them to the most comfortable roads and shared-use paths where feasible. As the region’s network of bicycle and shared-use paths expands and new facilities are constructed, new opportunities will become available for future revisions to the Saltonstall bikeway route. Route revision will likely entail a phased implementation process - including new mapping and signage - that should involve Cape Cod Commission staff, the towns, and MassDOT to ensure a coordinated process.

¹ This project is funded by MassDOT as part of the Cape Cod Metropolitan Planning Organization 2014 Unified Planning Work Program.



FIGURE 1 – CLAIRE SALTONSTALL BIKEWAY – CAPE COD SEGMENTS

METHODOLOGY

The project team reviewed the legislation that established the Claire Saltonstall Bikeway to ensure its routing recommendations comport with any guiding principles and objectives behind the route's configuration, e.g. whether it was designed to provide a scenic ride between Boston and Provincetown (and Falmouth) or the most direct route and/or lowest traffic volume roadways, etc. However, the legislation does not include objectives or route priorities, other than to provide a way of bicycle travel between Boston and Cape Cod. MassDOT officials were unable to provide any documentation of the route's original intent.

The team looked for the most direct regional route connections that would provide the most comfortable ride for an experienced or touring cyclist. Multi-use paths that provide/maintain route connectivity were preferred over shared roads, where motorists and bicyclists occupy the same travel space. With the programmed westward extension of the Cape Cod Rail Trail to Yarmouth and then to Mary Dunn Road in Hyannis, for example, additional revision to the Saltonstall route is recommended once complete.

LEGISLATION THAT CREATED THE CLAIRE SALTONSTALL BIKEWAY

Chap. 463. AN ACT DESIGNATING THE BOSTON TO CAPE
COD BIKEWAY AS THE CLAIRE SALTONSTALL MEMORIAL BIKEWAY.
Be it enacted, etc., as follows:

The Boston to Cape Cod Bikeway in the Route 3 Corridor shall be designated and known as the Claire Saltonstall Memorial Bikeway in memory of Claire Saltonstall, daughter of Senator William L. Saltonstall, a pioneer and primary sponsor of bicycle safety legislation and an active participant in the development of said bikeway. Suitable markers bearing such designation shall be attached and maintained by the department of public works at appropriate locations along said bikeway.

Approved July 17, 1978

The project team requested the MassDOT GIS layer for route data. Maps of the route are available on numerous websites but some differ from MassDOT's mapped route, which appears to have been updated in some locations from the original on-road route to the Cape Cod Rail Trail. The team consulted with local bikeways committees, members of the regional bicycle and pedestrian committee and MassBike on suggested route revisions. Other data, including traffic counts, speed limits, roadway conditions, and bicycle/pedestrian level of service were also considered where available and useful for route selection.

The project team looked for the most direct and comfortable connected route that would follow the existing Cape Cod Rail Trail and other off-road bicycle/multi-use paths where inter-town connectivity would be maintained.

TRAFFIC COUNTS

Cape Cod Commission staff conducts manual turning movement counts for motor vehicles each year at intersections throughout the region. Bike and pedestrian counts are taken as well. This information is useful when planning bike routes and seeking roads with lower traffic volumes.

<http://www.capecodcommission.org/counts>

TIMING AND IMPLEMENTATION

The recommendations in this report are intended to serve as guidance to MassDOT as it updates state bicycle routes data and considers revising the Claire Saltonstall Bikeway route. Implementing revisions to a designated bikeway route entails two primary components: mapping and signage. Both elements are important for ensuring bicyclists know about the route changes. This report provides MassDOT with recommended route changes and potential timeframe for implementation, as some segment revisions are dependent on prior completion of proposed/programmed bicycle infrastructure projects.

MAPPING

Updating the MassDOT website with revised route information is a critical step in the implementation process. In the days when the Saltonstall bikeway was created, bicyclists would use printed maps and informational brochures but today are more likely to look for route information on the internet, often with mobile devices as they ride. One key source to be updated is the regional transit routes and bicycle routes map that the Cape Cod Regional Transit Authority produced in partnership with the Cape Cod Commission. Once the revised route is available from MassDOT, the CCC and other organizations can update their GIS bicycle route data.

SIGNAGE

Green oval signs mark the Claire Saltonstall route (see photo). Signs are missing from several locations and many of those that remain have been damaged over the years and/or are faded. Signs in poor condition should be replaced with new signage to mark the updated route. Town representatives should be consulted on signage locations to ensure they receive the community's approval. The Cape Cod Commission, in partnership with the Cape Cod Regional Transit Agency, developed new Cape Cod bicycle route signage in 2012 and worked with town representatives to develop local installation plans. Signage consolidation (i.e. sharing sign posts and reducing duplicative signage) should be considered when choosing locations to sign the revised Saltonstall route.

Existing Route and Problems/Issues

MAPS

See pages 11–18 for maps of the existing route and recommended route.

ROUTE DESCRIPTION

The following table provides a description of the existing route by town, with comments on condition, issues, and potential alternatives.

Bourne: Existing route segment
<p><u>Primary route</u>: Route 3A – Meetinghouse Lane – Sagamore Bridge – Cranberry Highway – Sandwich Road/Route 6A to Route 130.</p>
<p><u>Falmouth spur</u>: Canal Path south to under Bourne Bridge – Sandwich Road – County Road to Falmouth town line.</p>
Comments/Issues
<ol style="list-style-type: none"><li>1. <i>Adams Street</i> is preferable to Cranberry Highway for a Sagamore Bridge - Cape Cod Canal bike path connection. The Town of Bourne is considering changing Adams Street from a two-way road to one way, which may provide sufficient room for a two-way bike lane.<li>2. <i>Sandwich Road/Route 6A</i> has high vehicle volume and speeds, with little separation between motor vehicles and bicyclists. Alternatives to Route 6A should be encouraged where feasible.<li>3. <i>Canal bike path access</i>: The Cape Cod Canal bike path is less than 400 feet from Sandwich Road, but no legal access point exists near Adams Street. Bicyclists traveling from or to the bridge must use Sandwich Road. A legal crossing in this location would enhance safety for cyclists and pedestrians trying to access the Canal paths. The Town of Bourne owns the ballfield on Sandwich Road across from Adams Street. The site abuts the state-owned land (railroad tracks), adjacent to the bike path (owned by the Army Corp. of Engineers). An existing drainage easement may affect location of access. (See Figure 2.)

Falmouth Existing Route Segment
Route 28A – County Road – Shining Sea Bike Path.
Comments/Issues
Falmouth Bikeways Committee requests that route be revised to enter Falmouth on Garnet Ave – County Road – Shining Sea Bike Path. Re-routing onto shore roads would provide a scenic route and comfortable ride. Claire Saltonstall Bikeway signs are still located on Route 28A in some locations where route follows newer section of Shining Sea bike path.
Sandwich Existing Route Segment
Sandwich Road/Route 6A – Main Street/Route 130 – Service Road.
Comments/Issues
Route 130 crossing to access Service Road is challenging for bicyclists coming from Bourne. Safety signage, including pavement markings, to direct motorists and cyclists in the vicinity of Route 6 interchange would be beneficial.
Barnstable Existing Route Segment
Service Road – Shootflying Hill Road – Route 132 – Phinneys Lane – Route 6A.
Comments/Issues
Route 6A is uncomfortable for cyclists but is the only through-route in Barnstable north of Route 6. The proposed Cape Cod Rail Trail extension, once constructed, will provide an off-road alternative through Hyannis to Yarmouth and points east and will eliminate the need for travel on Route 6A. Until then, better safety and Share the Road signage is needed on Route 6A.
Yarmouth Existing Route Segment
Route 6A – Setucket Road- Old Bass River Road.
Comments/Issues
The Route 6A segment is uncomfortable for cyclists. Alternative roads are available for some of this segment.
Dennis Existing Route Segment
Old Bass River Road – Main Street - Upper County Road – Route 134 – Cape Cod Rail Trail.
Comments/issues
The Cape Cod Rail Trail crossing over Route 134 is due to be constructed in 2016 and will eliminate the need to travel south to Upper County Road crossing.
Harwich Existing Route Segment
Cape Cod Rail Trail
Brewster Existing Route Segment
Cape Cod Rail Trail
Orleans Existing Route Segment
Cape Cod Rail Trail – West Road – Old Colony Way – Main Street- Rock Harbor Road - CCRT
Comments/Issues
Main Street – Rock Harbor Road segment is no longer necessary, with 2003 construction of Cape Cod Rail Trail bridge over Route 6.

Eastham Existing Route Segment
Cape Cod Rail Trail
Comments/Issues
Older MassDOT files show route on Bridge Road, Herringbrook Road, and Massasoit Road, not CCRT.
Wellfleet Existing Route Segment
Cape Cod Rail Trail – Lecount Hollow Road – Ocean View Drive – Long Pond Road – Main Street – West Main – Old County Road.
Comments/Issues
Wellfleet Bikeways Committee requests revising route onto Cahoon Hollow Road (rather than Long Pond Road) once Main Street/Route 6 intersection bicycle/pedestrian improvements are complete. Old signage at West Road/Route 6 should be removed, as the route was moved to CCRT when it was extended to Wellfleet.
Truro Existing Route Segment
Old County Road – Depot Road – Castle Road – Route 6 – Route 6A/Shore Road
Comments/Issues
Truro Bikeways Committee requests route revision for northbound travel from Route 6 onto South Highland and Highland Road to Route 6A, to avoid challenging crossing at Route 6/Route 6A intersection. The existing route would remain the same for southbound (i.e. towards Truro center) travel.
Provincetown Existing Route Segment
6A/Bradford Street – Commercial Street – Arch Street
Comments/issues
Route come to abrupt ending at Arch Street – extend Route to Macmillan Wharf, where ferry and bus connections are located.

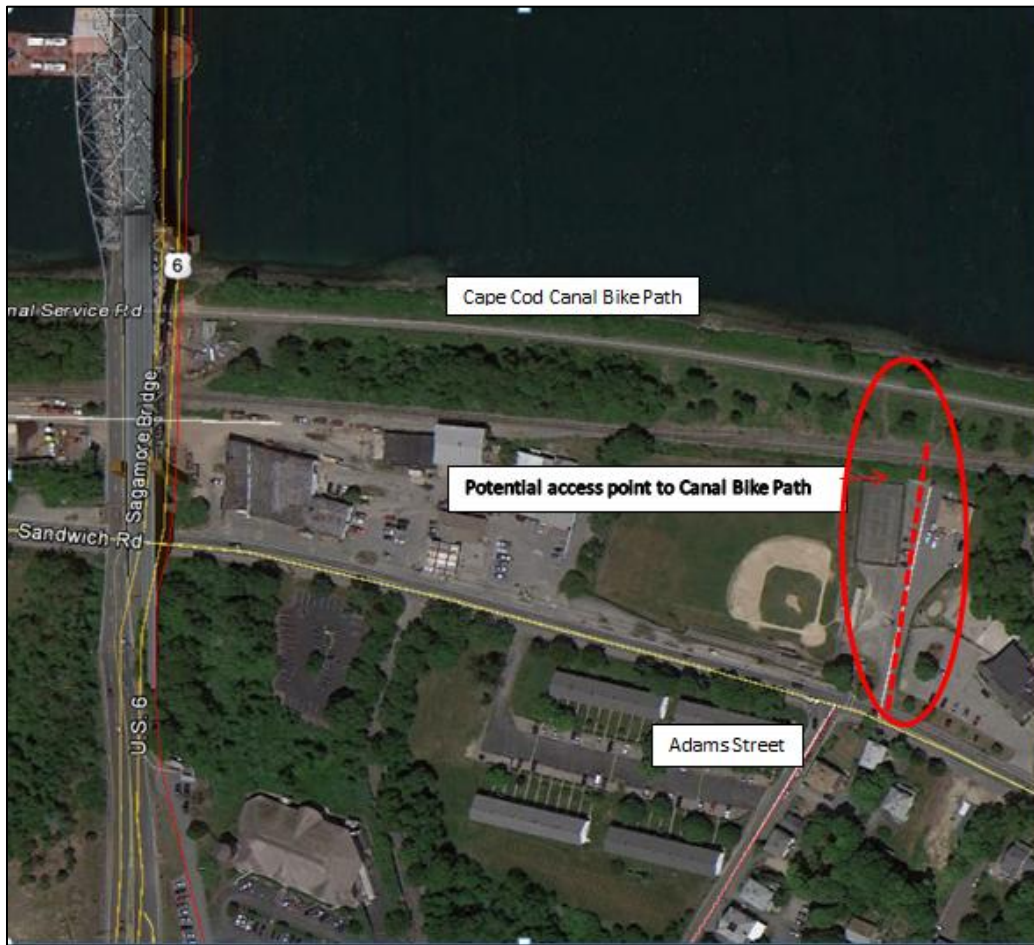


FIGURE 2. BICYCLISTS AND PEDESTRIANS WOULD BENEFIT FROM A LEGAL ACCESS POINT TO THE CAPE COD CANAL BIKE PATH IN THE VICINITY OF ADAMS STREET. THIS WOULD ELIMINATE/REDUCE THE NECESSITY TO TRAVEL ON SANDWICH ROAD, WHICH HAS HIGH TRAFFIC VOLUMES AND SPEEDS, AND LITTLE SHOULDER ROOM FOR BIKES. (AN EXISTING DRAINAGE EASEMENT MAY AFFECT LOCATION OF ACCESS.)

Route Recommendations

The following section provides an outline of the revised/recommended route for the Claire Saltonstall Bikeway from Bourne to Falmouth and from Bourne to Provincetown.

Segment descriptions that include “A” and “B” alternatives indicate a recommended two-phased revision; “A” identifies a 2016 route segment implementation, and “B” identifies a later (estimated 2020) implementation, pending completion of future programmed construction projects. “Prerequisite” in the description identifies a necessary step prior to implementation of segment revision. **Red** indicates changes to existing route.

RECOMMENDED CAPE COD ROUTE

1. ROUTE 3A TO CAPE COD CANAL (BOURNE)
Route 3a – Meetinghouse Lane – Sagamore Bridge – Adams Street – Sandwich Road/Route 6a - Cape Cod Canal Bike Path (nearest legal access point).
(Prerequisite: Legal access point to Cape Cod Canal bike path in vicinity of Adams Street.)
2. CAPE COD CANAL TO SHINING SEA BIKE PATH (BOURNE – FALMOUTH)
Cape Cod Canal Bike Path – Railroad Bridge Parking Lot – Bell Road - Shore Road – Red Brook Harbor Road- Squeteague Harbor Road – Megansett Road - Garnet Ave – County Road – Shining Sea Bike Path.
3. CAPE COD CANAL TO ROUTE 132/PHINNEYS LANE (BOURNE – SANDWICH-BARNSTABLE (HYANNIS)
Cape Cod Canal Bike Path - Freezer Road – Tupper Road – Main Street/Route 130 –Service Road (Sandwich and Barnstable) – Shootflying Hill Road – Route 132 – Phinneys Lane.
4. ROUTE 132/PHINNEYS LANE TO CAPE COD RAIL TRAIL (BARNSTABLE /HYANNIS – YARMOUTH - DENNIS)
A. Phinneys Lane– Route 6A (Barnstable) - Keveney Lane (Yarmouth) – Wharf Rd – Thatcher Shore Road - Church Street – Strawberry Lane – White Rock Road – Starbuck Lane – Weir Road - North Dennis Road - Setucket Road – Mayfair Road - Main Street (Dennis) - Route 134 – (bridge crossing) – Cape Cod Rail Trail.
(Prerequisite: Completion of bicycle/pedestrian bridge crossing over Route 134.)
B. Phinneys Lane – Attucks Way –Independence Way – Mary Dunn Road – Cape Cod Rail Trail (Barnstable/Hyannis).
(Prerequisite: Completion Of Cape Cod Rail Trail extension To Mary Dunn Road.)
5. CAPE COD RAIL TRAIL – SOUTH WELLFLEET (DENNIS –HARWICH – BREWSTER – ORLEANS – EASTHAM - SOUTH WELLFLEET)
Cape Cod Rail Trail

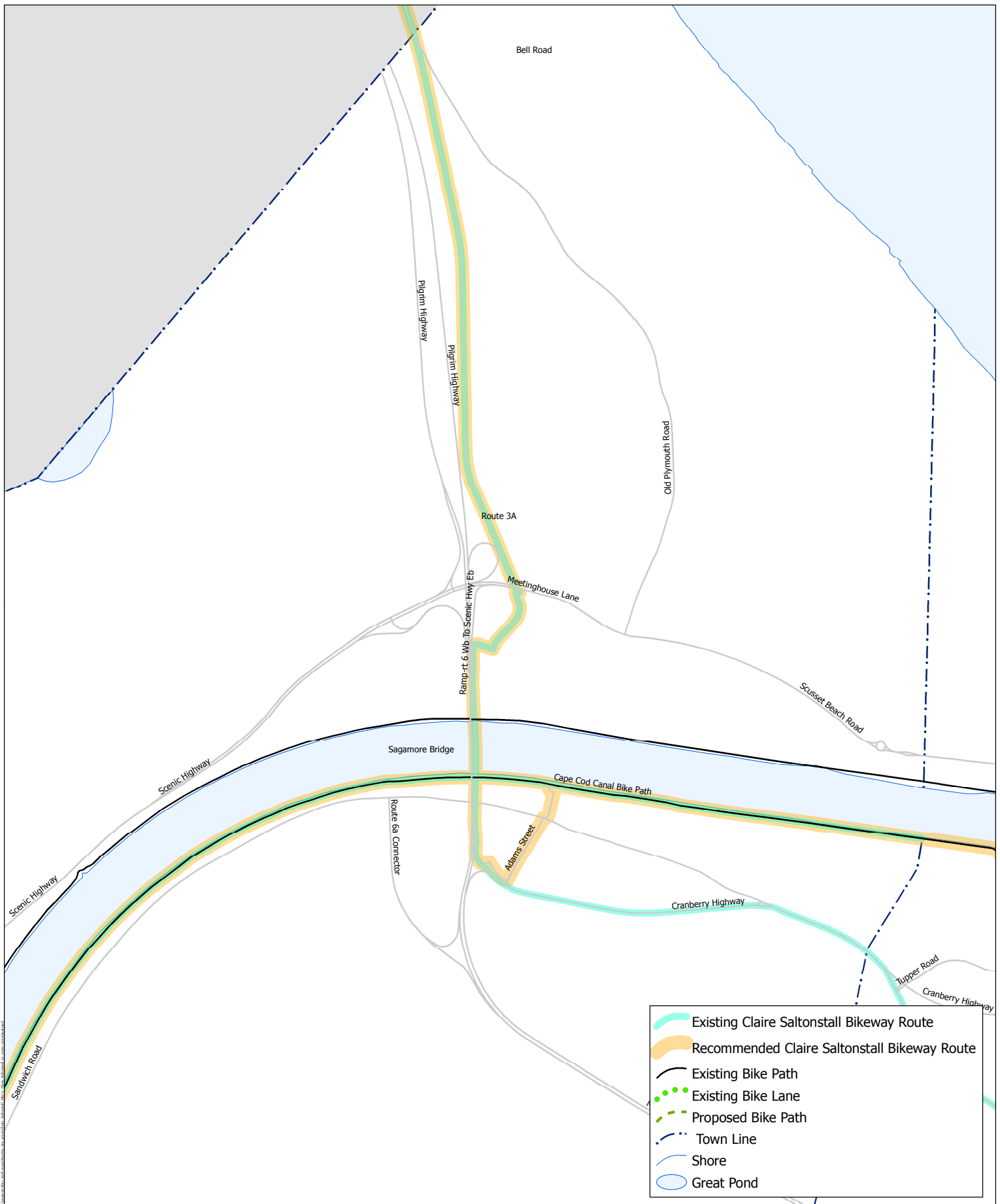
6. CAPE COD RAIL TRAIL TO MAIN STREET (SOUTH WELLFLEET – WELLFLEET) ²
A. Cape Cod Rail Trail – Lecount Hollow Road – Ocean View Drive Long Pond Road – Main Street
B. Cape Cod Rail Trail – Lecount Hollow Road – Ocean View Drive – Cahoon Hollow Road – Route 6 – Main Street.
Prerequisite: Completion Of Route 6/Main Street Intersection Project.
7. MAIN STREET – MACMILLAN WHARF (WELLFLEET –TRURO PROVINCETOWN) ³
Main Street – West Main Street –Old County Road – Depot Road – Truro Center Road – Castle Road – Route 6 - South Highland Road – Highland Road – Route 6a/Shore Road –Provincetown - Commercial Street – Macmillan Wharf. (Note: Southbound from North Truro use Shore Road/Route 6A To Route 6, same as existing route.)

² The Outer Cape Bicycle and Pedestrian Master Plan, currently under development, will produce a priority list of bicycle and pedestrian projects in the towns of Wellfleet, Truro, and Provincetown, including a preferred alternative for connecting the Cape Cod Rail Trail from its terminus in South Wellfleet to Truro and Provincetown. Once constructed, it will likely become a recommended route for the Saltonstall Bikeway.

³ See Footnote 2.

MAPS

The following maps show the existing Claire Saltonstall Bikeway route (as described by town on pages 5-7) and the recommended Claire Saltonstall Bikeway route (as described by segment on pages 9-10). Note: The existing route and recommended route are shown as overlapping except in locations where a route revision is recommended.



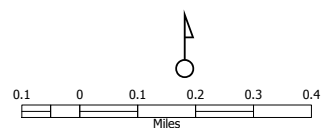
1. Route 3A To Cape Cod Canal (Bourne)

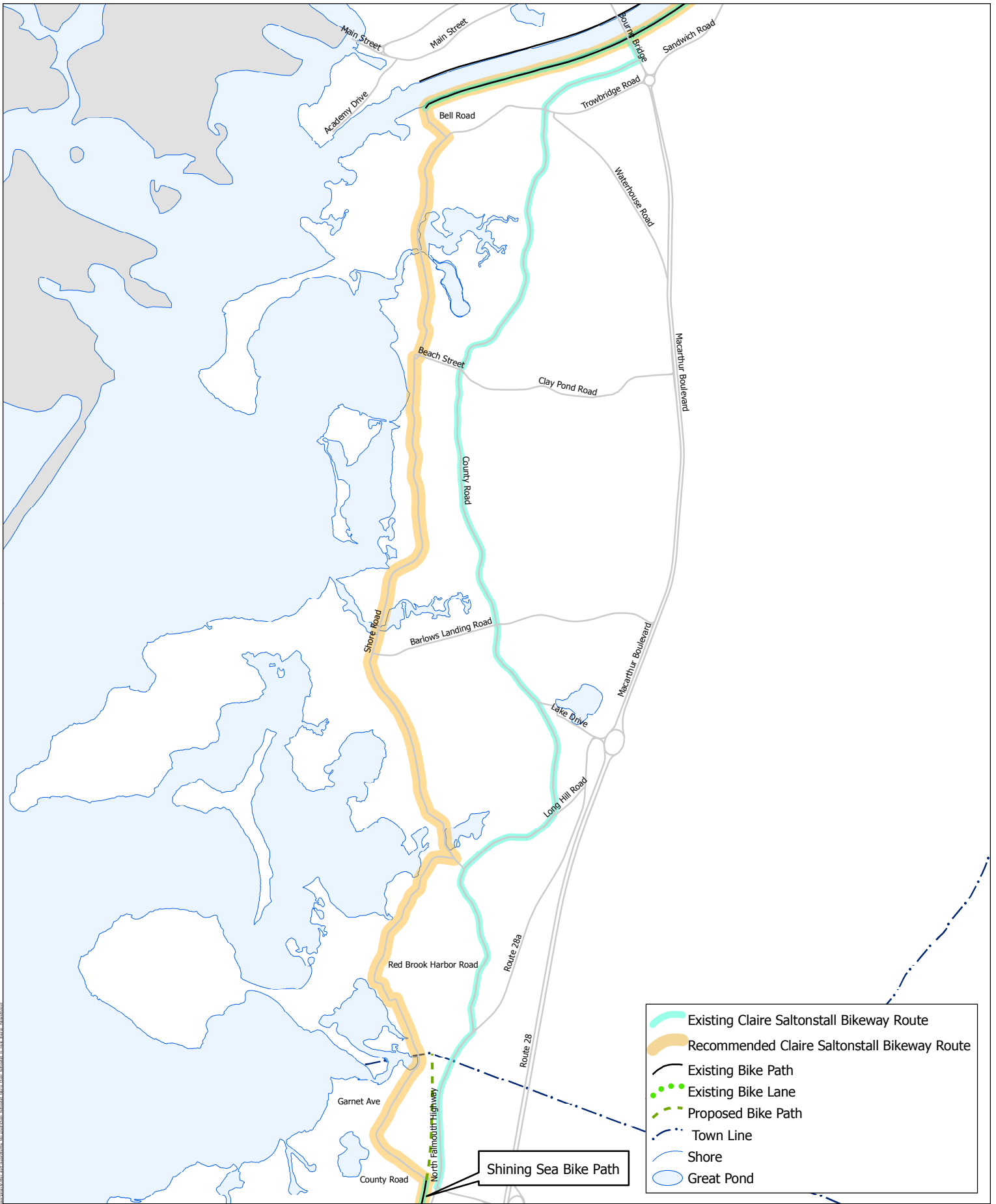
Sources:
 Bike Route: MassDOT files obtained December, 2013.
 Base map features: ESRI, MassGIS.
 This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County.

The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research.

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	Existing Claire Saltonstall Bikeway Route
	Recommended Claire Saltonstall Bikeway Route
	Existing Bike Path
	Existing Bike Lane
	Proposed Bike Path
	Town Line
	Shore
	Great Pond

Shining Sea Bike Path

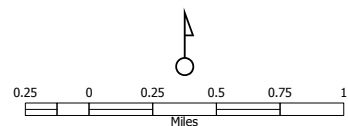
2. Cape Cod Canal To Shining Sea Bike Path (Bourne-Falmouth)

Sources:
 Bike Route: MassDOT files obtained December, 2013.
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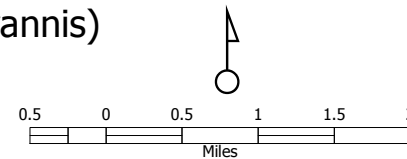
3. Cape Cod Canal To Route 132/Phinneys Lane (Bourne-Sandwich-Barnstable-Hyannis)

Sources:
 Bike Route: MassDOT files obtained December, 2013.
 Base map features: ESRI, MassGIS.
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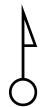
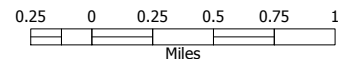
4A. and 4B. Route 132/Phinneys Lane To Cape Cod Rail Trail (Barnstable/Hyannis-Yarmouth-Dennis)

Sources:
 Bike Route: MassDOT files obtained December, 2013.
 Base map features: ESRI, MassGIS.
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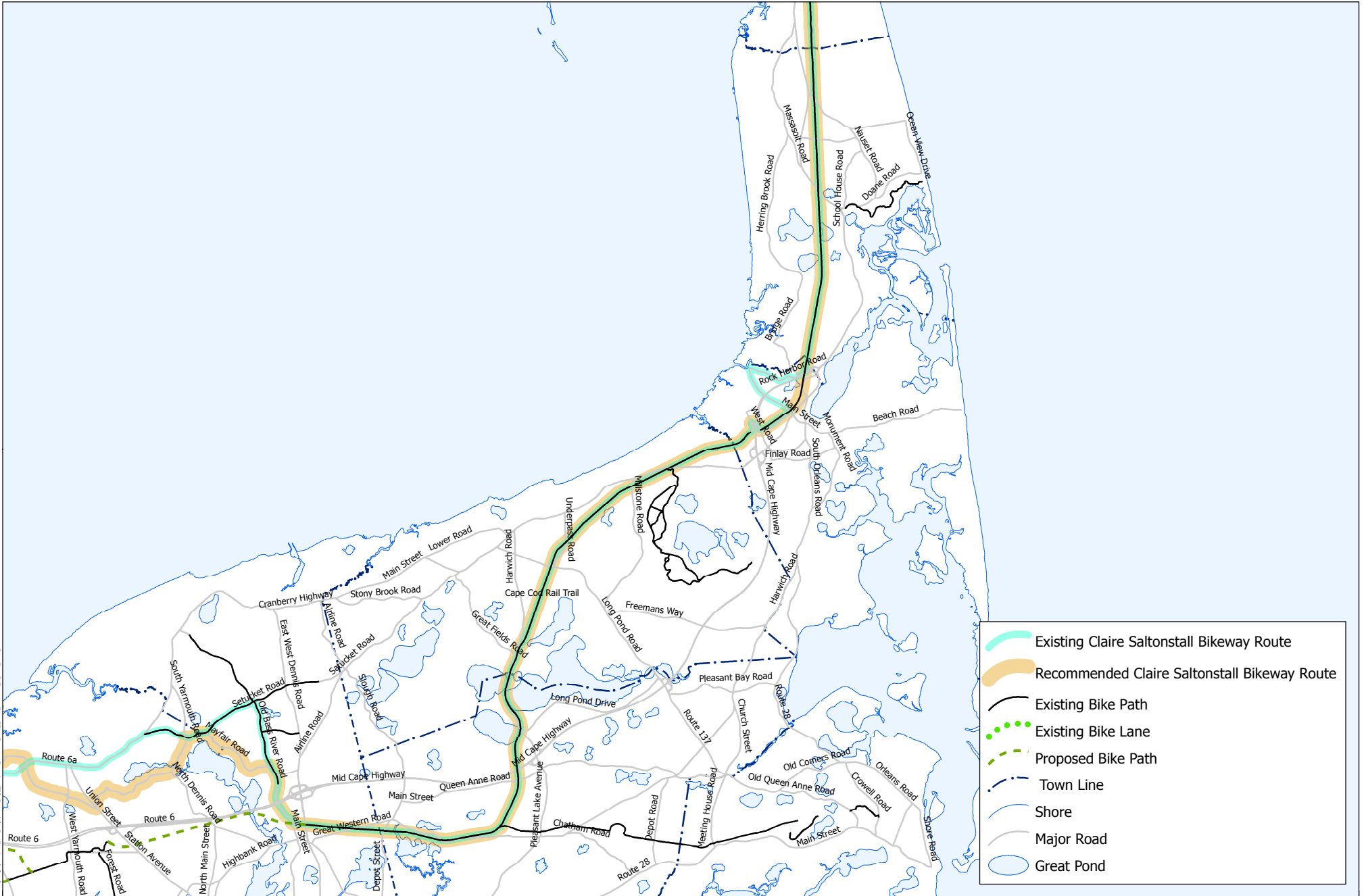
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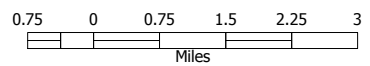
5. Cape Cod Rail Trail - South Wellfleet (Dennis - Harwich - Brewster - Orleans - Eastham - Wellfleet)

Sources:
 Bike Route: MassDOT files obtained December, 2013.
 Base map features: ESRI, MassGIS.
 This map is produced by the GIS Department of the Cape Cod Commission, a division of Barnstable County.

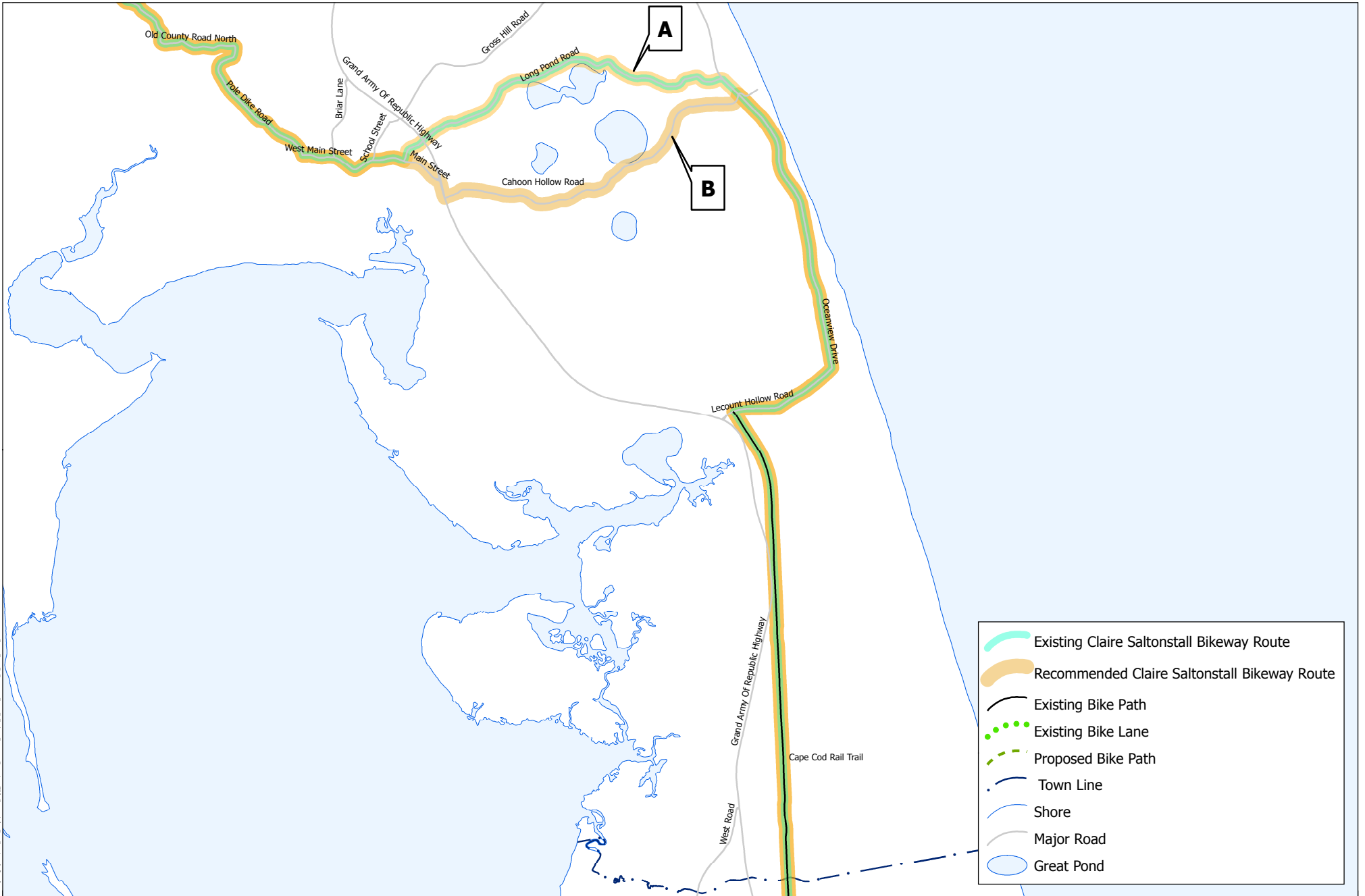
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6A. and 6B. Cape Cod Rail Trail to Main Street (South Wellfleet - Wellfleet)

Sources:

Bike Route: MassDOT files obtained December, 2013.

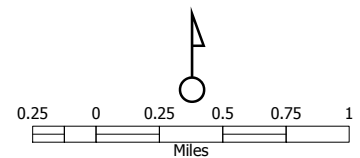
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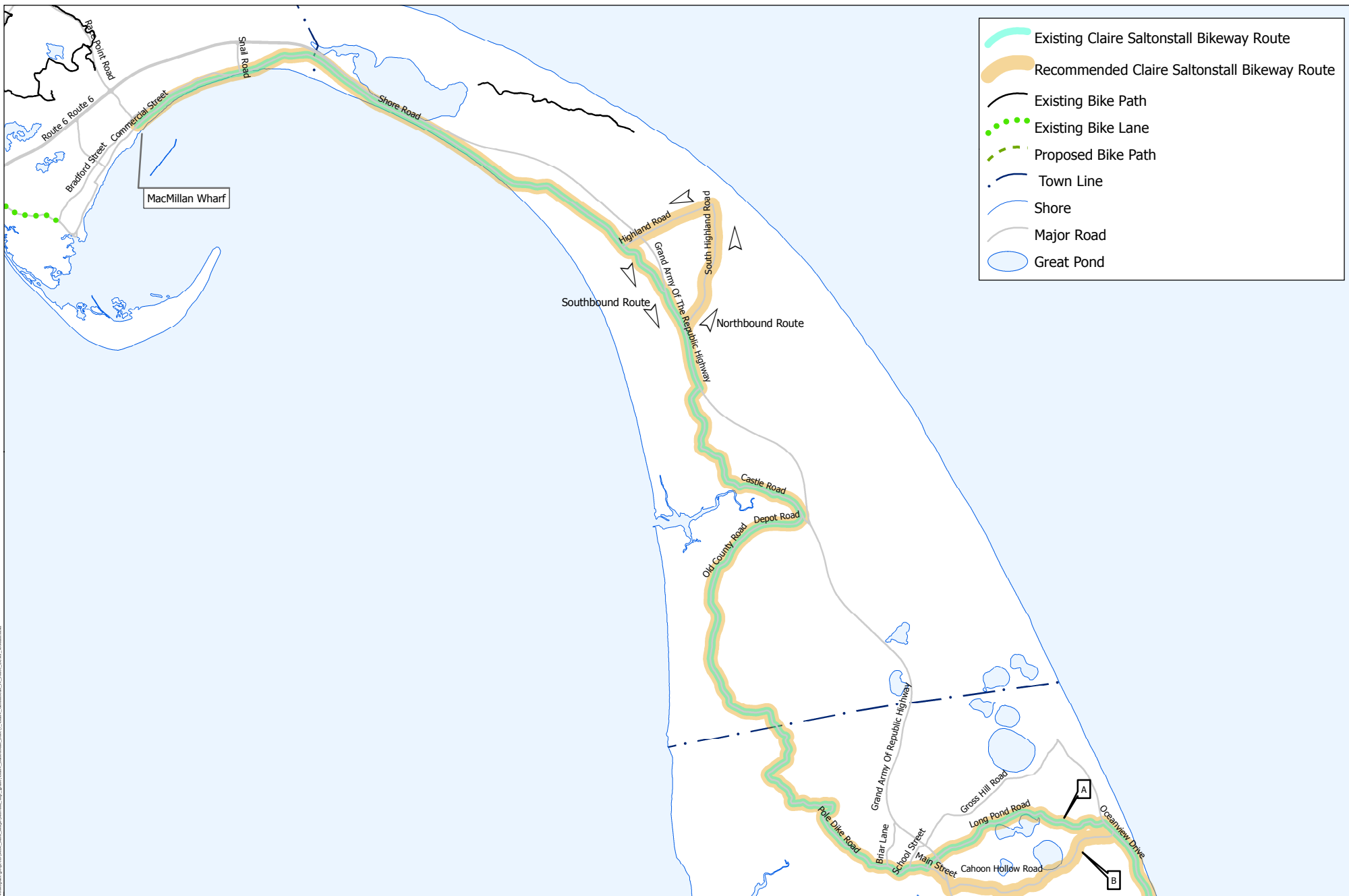
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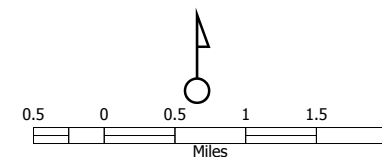
7. Main Street - MacMillan Wharf (Wellfleet - Truro - Provincetown)

Sources:
 Bike Route: MassDOT files obtained December, 2013.
 Base map features: ESRI, MassGIS.
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Conclusion

In 1978 the Massachusetts General Court established the Claire Saltonstall Bikeway, which consists of a series of interconnected on-road segments and multi-use paths beginning in Boston and ending in Provincetown. A secondary leg extends from Bourne to Falmouth. Road conditions, development patterns, and bicycle accommodations on Cape Cod have changed since the bikeway's designation. Alternatives – lower traffic volume road and multi-use paths – are available in some locations and would provide a safer and more comfortable ride.

Problematic sections of the existing route are located primarily in the Upper and Mid – Cape towns, where it follows busy roads that lack sufficient shoulder space for bicyclists. Re-routing recommendations include alternatives that could be implemented in the near – term (2016) as well as future route revisions in areas where new (currently planned/programmed) shared-use paths and other bicycle accommodations will be constructed (estimated by 2020). Key recommendations include creating a legal access point to the Cape Cod Canal bike path near Adams Street to eliminate (or reduce) travel on Route 6A in Bourne and Sandwich, as well as switching the route onto the Cape Cod Rail Trail in Hyannis, once the proposed extension is complete. In addition to producing new maps to incorporate the route updates, MassDOT will also need to update route signage. Route revision will likely entail a phased implementation process that should involve Cape Cod Commission staff, the towns, and MassDOT to ensure a coordinated process.

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