

**Transportation Observations,
Considerations, and Recommendations for
Monomoy National Wildlife Refuge**
**Provided by the Interagency Transportation Assistance Group (TAG) /
Alternative Transportation in Parks and Public Lands (ATPPL) Program**

**Chatham, MA
July 17 – 19, 2007**

A field investigation of the current transportation infrastructure and issues at Monomoy National Wildlife Refuge (NWR) by the interagency Transportation Assistance Group (TAG) was conducted July 17-19, 2007, on behalf of the U.S. Fish and Wildlife Service (FWS). This TAG report was prepared subsequent to the site visit and documents the conditions observed, transportation issues and considerations, and recommendations arising from the TAG team's analysis. The site visit and the preparation of this report were facilitated and funded by the Alternative Transportation in Parks and Public Lands (ATPPL) program, administered by the Federal Transit Administration (FTA) in coordination with the Department of the Interior (DOI).

Background and Conditions

Monomoy NWR is located within the Town of Chatham. The refuge and the Town both have a rich history of fishing, boating and living off the ocean. The Town is dotted with picturesque harbors with commercial fishing fleets and mixed with recreational sailboats and powerboats. Three lighthouses are located within the Town - the Chatham Lighthouse, the Stage Harbor Lighthouse and the Monomoy Lighthouse. The Town of Chatham has a bustling mix of shops along Main Street in its historic business district which becomes extremely congested during summer months. The Chatham Lighthouse, the Monomoy Memorial and the adjacent overlook are very popular areas for scenic views. Nearby is South Beach, the southernmost extremity of the Cape Cod National Seashore, which is managed by the National Park Service and the Town of Chatham.

Visitors to Monomoy NWR enjoy birding, seal-watching, recreational fishing and shellfishing, and beachgoing. There are also kayaking opportunities nearby. The refuge itself is a world renowned birding hotspot, designated as a Western Hemispheric Shorebird Reserve Network Site (WSHRN) and an Important Bird Area Site (IBA). Ninety seven per cent of the refuge is designated as a National Wilderness Area. It currently has the largest common tern colony on the Atlantic coast with approximately 10,000 pairs of terns. The refuge is the largest haul out site* for gray seals, with approximately 7000 seals to thrill wildlife watchers. Monomoy NWR is also renowned for its recreational striped bass fishery and shellfishing opportunities.

* Where seals come out of the water to rest and sleep out of reach of aquatic predators like sharks and killer whales. The sites also may be used by some species to mate and give birth.

The popularity of the area, the narrowness of the roadways, and limited parking and transit service have combined to create traffic congestion and spillover parking impacts in the area around the refuge. The FWS submitted an application for 2007 ATPPL planning funding to study the expansion of the new FlexRoute bus system to the Chatham area, with potential connections to Federal Lands.

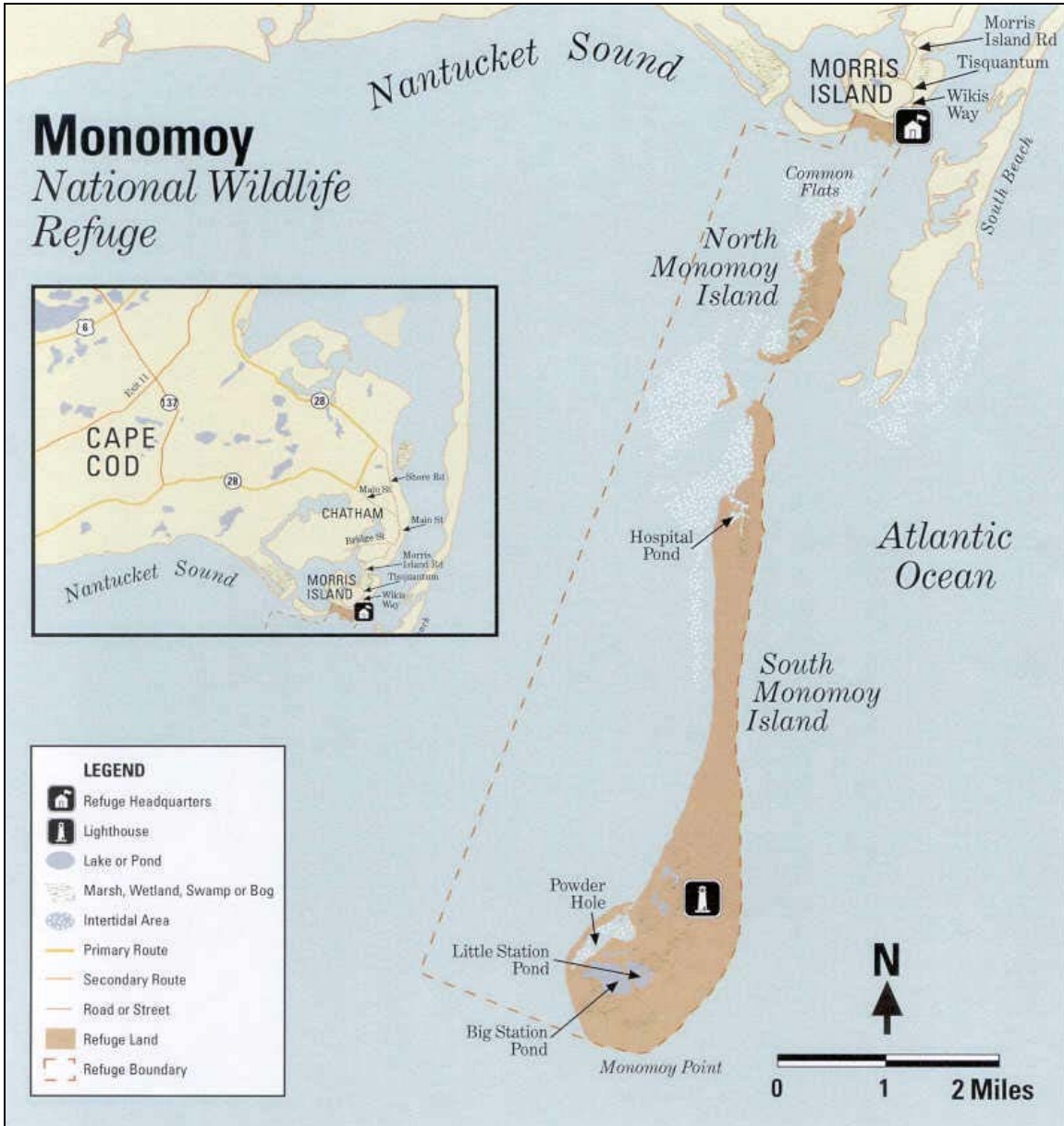


Figure 1: Map of Monomoy NMR

The refuge has a visitor center which is open daily during summer months and intermittently during the offseason. There are currently two private ferry services that operate 25 passenger boats and are permitted to bring visitors to the refuge islands. Parking is also an issue for these services.

Peak visitation times are late morning through afternoon (10 am to 2 pm) in the summer season, beginning on weekends in the month of May and beginning to ebb after Labor Day, although there is some weekend activity into September and early October. In inclement weather, the visitor center experiences increased visitation, but there is less outdoor activity. Each year, approximately 20,000 visitors come to the Monomoy NWR Visitor Center and total of about 50,000 visitors use the refuge parking lot during the summer months on the refuge.

Monomoy NWR is in the process of updating its ten-year Comprehensive Conservation Plan (CCP), its primary management document. Completion of the CCP is anticipated in 2009.

Partnerships

The National Park Service, Cape Cod National Seashore (CCNS), the Cape Cod Commission, and the Cape Cod Regional Transit Authority (CCRTA) have strong and longstanding working relationships in place. CCNS and the CCRTA have partnered on the implementation of two transit services, the Provincetown Shuttle and the FlexRoute bus line. The success of FlexRoute is due at least partially to this atmosphere of cooperation. Potential expansion of the FlexRoute service to Chatham has been included in the Cape Cod Commission's planning documents, to facilitate implementation if funding is identified.

Transportation to and on Cape Cod

Visitors can reach Cape Cod by private vehicle, intercity bus, ferry, or plane. The primary access points for visitors arriving by bus or ferry are the Hyannis Transportation Center and the Provincetown ferry terminal.

Traffic congestion has been steadily increasing for years as the year-round population increases and more visitors arrive during the summer season. According to the Cape Cod Commission, average bridge traffic in 2000 exceeded the summer season bridge traffic of 1985. Barnstable County went from being rural, under 50,000 in population in 1990 to a large urban area, with over 200,000 residents in the 2000 Census. Human service transportation needs are growing, as 24 percent of the Cape's residents are senior citizens, nearly double that of the rest of the state. This is a demographic trend that is expected to continue.

CCRTA serves several routes with a variety of service types. The relevant services are highlighted below.

FlexRoute is an innovative transit service which operates along a fixed route "centerline" with the ability to pick up and drop off 0.75 miles from the centerline. This allows the FlexRoute to serve more of the population than fixed route and on a more convenient demand response basis. The service began revenue service in June of 2006 serving seven towns and CCNS. FlexRoute has been very successful to date with ridership numbers higher than initial forecasts. 63,194 riders were served between June 1, 2006 and May 31, 2007; the initial forecast for this period was 42,000. FlexRoute does not currently serve

Chatham, but expansion of service to Chatham has been proposed. Service to Monomoy NWR as part of a FlexRoute expansion (or as a separate service) has also been proposed.

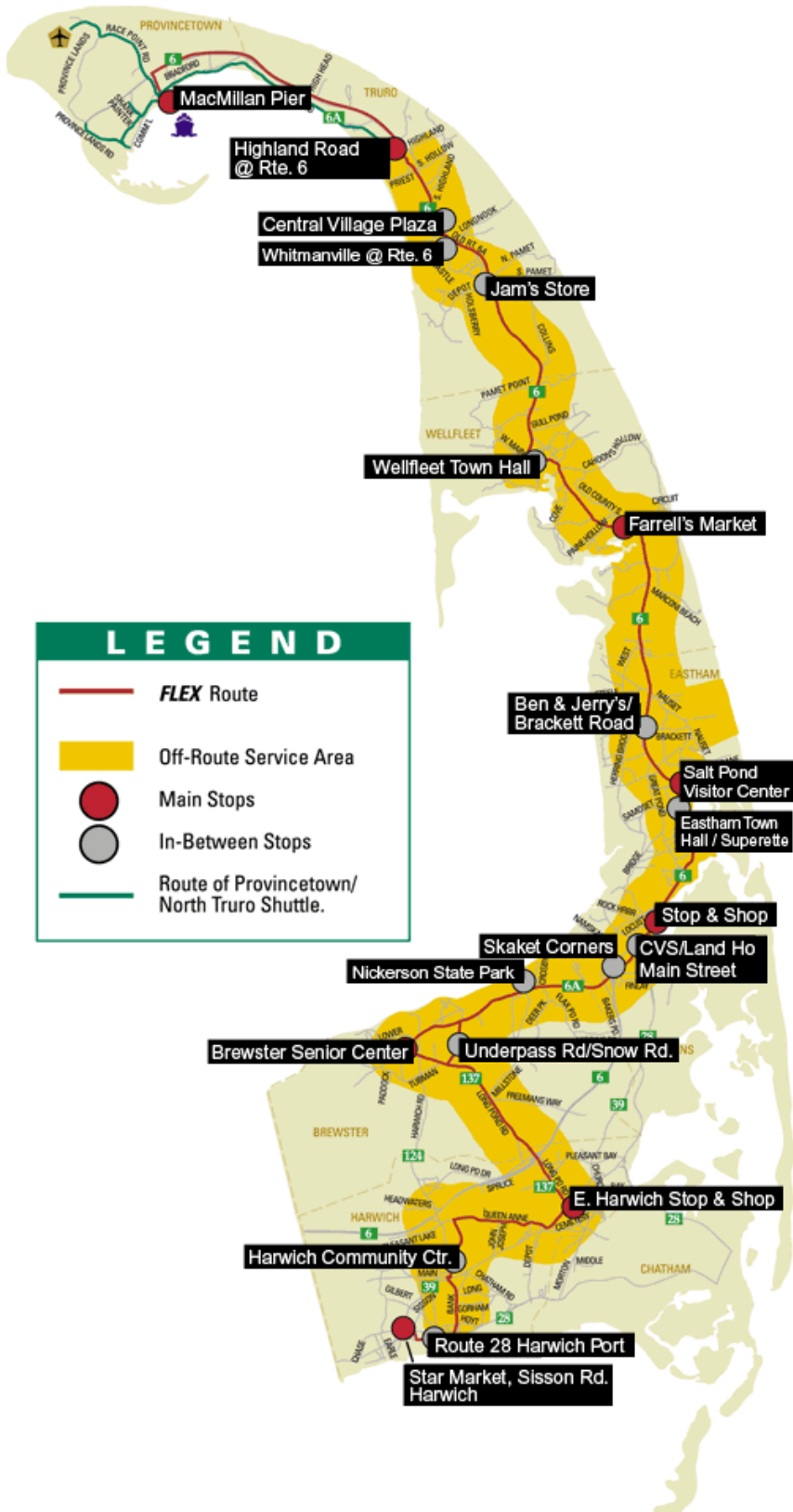


Figure 2: FlexRoute Map Source: Cape Cod RTA

The **b-bus** is a Cape Cod-wide door-to-door demand-responsive paratransit service. Passengers must make advance reservations.

The **H2O (Hyannis to Orleans)** route is the only regional transit service currently serving Chatham. Service is less frequent than FlexRoute, and route deviations are not allowed.

Other Chatham transportation services (seasonal operations)

- The Chatham Bars Inn, a high-end resort, runs a small shuttle to downtown Chatham and to Monomoy NWR a few times each day. This service provides transportation mainly to resort guests.
- A private operator offers offsite parking for Lighthouse Beach with van shuttle service to the lot.
- As noted below, ferry operators provide van services for their customers between offsite parking lots and ferry docks.

Refuge Ferry Service

Two companies hold special use permits to operate commercial ferry service departing from the refuge; this serves primarily tourists, beachgoers, birdwatchers, and fishermen. The ferry boats hold fewer than 25 passengers. When the refuge lot overflows, passengers park on the causeway and are shuttled to the ferry in vans operated by the ferry companies. One of the two companies uses four parking spaces at the refuge for its passengers; after those spaces are occupied, passengers are directed to park offsite and use the shuttle van. A concession to provide ferry service has been discussed as part of the CCP effort.

Transportation Issues/Problems

Parking capacity and management

Limited parking capacity at the refuge and in the Town of Chatham is a serious issue during peak operations. The Town of Chatham has collected data on parking and congestion on refuge access roads, the causeway, Bridge Street and other locations within town, since 2001.



Figure 3: Overflow parking along Bridge Street

Chatham Police Chief Mark Pawlina described to the TAG the heavy volume of parking violations and increasing “parking rage” among both locals and visitors. He noted that most tickets are issued to visitors, since locals “know when and where to park.” The narrow construction of the roads that are indicative of the town’s historic character and “charm” (much of what draws visitors) limits in no small part the expansion of roadway parking. The Town of Chatham has been reluctant to change the overall character of the town, limiting significant road expansion. There have been incidents of visitors parking on residents’ lawns. The competition for parking results in vehicles “sharking” for parking, driving slowly up and down the streets looking for an open spot.

Besides ticketing those who park in prohibited areas, relatively little is being done in terms of parking management. All refuge and town-owned parking areas are free of charge. Time limits are placed only on a limited number of spaces at Lighthouse Beach, which are designated as 30-minute parking.

The refuge parking area, known as Morris Island Parking, currently holds 35-40 cars. It was expanded from 11 spaces to 35 in 2001, but this is insufficient to meet demand and the lot is generally at capacity during the peak season. Although there has been no formal study, the refuge manager believes that the lot turns over fairly quickly, with most visitors departing within one or two hours. There are two spaces for oversized vehicles. It would be difficult to increase the lot size further, due to space constraints. Approximately ten tour buses visit each year and must obtain a special permit. School buses usually notify the refuge in advance of their arrival, but do not need special permits. Recreational vehicles are generally sent to park on the causeway.



Figure 4: Overflow parking along the Town causeway.

The adjacent Town causeway holds about 80-85 cars and the Bridge Street Parking area has about 80 spaces. These areas are generally over 85% capacity during the summer months. The causeway is a narrow two-lane road with no shoulder. Chatham's parking surveys have found that approximately one-third of users are shellfishermen, one-third are kayakers, and the remaining third are refuge visitors.

Parking along Bridge Street is popular for visitors who wish to park and walk to South Beach.

Access without a private vehicle

There is no public transit service to Monomoy NWR. An intrepid visitor could take the H2O service to Chatham and walk the remaining distance (approximately 2.25 miles along narrow roads), but it is not an easy connection. The need for use of a private

vehicle exacerbates the existing parking shortages and reduces the accessibility of the site for those without a car.

Potential safety issues

The causeway has no shoulders, so visitors must park with their vehicles partially in the travel lane, effectively reducing the roadway to 1.5 lanes. On busy days, visitors may be parking their vehicles, looking for parking, or traveling to the refuge, causing potential safety hazards. According to FWS staff, emergency responders have problems responding to residential and refuge needs when refuge visitors have filled the parking spaces. The causeway is located on a dredge spoil and could physically be widened, but residents have opposed past plans to construct more formal parking areas along it.

Access to the refuge

Access to Monomoy NWR is via an easement which traverses private land. There have been issues with neighboring landowners over use of the right-of-way, opposition to site improvements, concern over increases in visitation and accompanying traffic, and some encroachment on the right-of-way itself. These issues are not active at present but implementation of a new transportation service could cause them to reemerge.

Affordable housing and job access

The seasonal nature of many service jobs and the high price of limited housing in Chatham mean that many seasonal and service workers are priced out of residing in Chatham. The Town is interested in the possibilities for any new or improved transit service to support local affordable housing and increase accessibility to local jobs.

Analysis and Recommendations

The TAG team determined that transportation problems at the refuge are serious and well-documented, that strong partnerships willing to work with FWS are in place, and that local organizations have the capability to move forward. Consequently, the overall recommendation is to move forward on the proposed planning study with some additional data collection and development of conceptual alternatives.

The proposed planning study suggested a traffic analysis, an alternatives analysis, public involvement, selection of a locally preferred alternative, funding analysis, and some consideration of other service expansion possibilities. The TAG team developed additional considerations for and additions to the scope of the study.

- **Develop study goals and objectives.** The ATPPL application submitted proposed that the focus of the study be on expanding Flex service to Chatham, serving Monomoy and South Beach. While expanding Flex service may be in itself a worthwhile goal, and may also meet the needs of the FWS, it is also quite possible to improve transportation to Monomoy in ways that may not involve Flex Route

expansion, and the study should take this into account. During the early stages of the study, goals and objectives, which will be used to evaluate alternatives, should be developed to ensure that the alternative selected meets the identified goals.

- **Fill in data gaps and analyze existing data to understand demand for a potential transit service.** Examples of needed data include traffic counts, parking behavior at the refuge itself, existing private shuttle services, and existing Town parking data. Understanding if the existing services run on a schedule or only on demand, and who their passengers are, will be helpful. In addition, land use data that would help identify trip origins and trip destinations, in Chatham and in neighboring communities as appropriate, would be helpful. Examples include hotels, B&Bs, intensive cottage rental areas, residential neighborhoods as well as destinations, such as Downtown Chatham, South Beach, Morris Island, lighthouses, etc.
- **Determine possibilities for integrating study efforts and findings with the ongoing CCP effort.** The CCP effort and the transit study should integrate public outreach efforts by studying the impacts of a new or improved service on visitation and capacity.
- **Explore opportunities for partnerships. Partnerships could be expanded or implemented** with the Town of Chatham, the NPS, the CCRTA, and local businesses. Identifying attractions outside of the Federal Lands and Town beaches might reveal potential new partners as potential ridership opportunities to help make transit service more successful. However, carrying capacity constraints and the impacts of increased visitation should be kept in mind.
- **Consider the b-bus / demand-responsive service. These should be included** as one of the alternative transportation technologies.
- **Examine management options for improving capacity.** Parking fees and time limits on parking spaces should be considered for the refuge and Town.
- **Reexamine options for improving the causeway.** Current conditions present potential safety hazards for motorists, cyclists, and pedestrians alike. A minimal treatment, such as improving the road shoulders, may make a significant difference in the safe operation of the roadway.
- **Seasonality of Service.** Consider an alternative which offers **seasonal service** only.
- **Work with the Town of Chatham.** Education of residents and decision makers on the benefits of alternatives which may have been rejected in the past should be undertaken. For example, parking management could effectively add capacity without building significant infrastructure, but Town officials must be willing to undertake such a program. Chatham has severe congestion problems. While the ATPPL program is oriented toward Public Lands, it may be possible to leverage ATPPL dollars to meet the Public Lands needs while also helping to solve some local problems. Because the refuge is integral to the Town of Chatham's congestion and land use issues, a comprehensive approach, involving the Town and the Cape Cod Commission, as appropriate, could help produce a stronger ATPPL application and ultimately a better planning product. An study can not solve all of Chatham's transportation problems. But the more the study is done

informed by local context, the greater its likelihood of technical success and community support.

- **Opportunities for interpretation.** These need to be considered to see what a new or improved service would offer. Transit service can be the first stage in orienting visitors to natural resources.
- **Determine marketing needs. These need to be determined** for a new or improved service. The ongoing marketing efforts of the CCRTA offer opportunities for joint marketing campaigns.

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Supporting Documents

1. Cape Cod Five-Year Public Transportation Plan. Cape Cod Transit Task Force.
2. Cape Cod National Seashore, Alternative Transportation Systems, Long-Range Planning Study, *Final Report*, May 2003. Prepared by the Volpe National Transportation Systems Center on behalf of the National Park Service Northeast Region.
3. Cape Cod Transit Partnership: Presentation to the ATPPL Technical Assistance Group. July 17, 2007. Cape Cod Commission.
4. "Lower Cape's Flex bus service more popular than expected." *Cape Cod Times*. June 14, 2007.
5. "With its Outer Cape route, the RTA succeeds by paying attention to people's needs." *Cape Cod Times*. June 19, 2007.
6. MPOs and Federal Land Management Agencies. Presentation to the ATPPL Technical Assistance Group. July 17, 2007. Cape Cod Commission.
7. Smartguide: Getting Around Cape Cod. www.smartguide.org

ACKNOWLEDGMENTS

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NOTICE

The Transportation Assistance Group (TAG) is convened at the request of the recipient agency. The TAG is an agency-independent effort that is intended to provide technical assistance in support of the ATPPL program and does not imply, preference, or guarantee programmatic funding or project support. This document is disseminated in the interest of information exchange. The recommendations found herein reflect the collective expertise and consensus of the individual TAG members, do not represent regulatory or programmatic requirements, and do not in any way reflect the official opinion of any Federal agency. The United States Government assumes no liability for the contents of this document or use thereof.
