

Technical Appendix D: Security

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The transportation system must prepare for natural disasters, such as hurricanes or flooding events. Moreover, post-September 11th, protecting users from man-made hazards is also a priority, as indicated by the increased emphasis on security in federal and state transportation regulations and guidelines. A variety of local, county, state, and federal agencies play key roles in ensuring the security of the Cape Cod transportation system.

EMERGENCY TRAFFIC PLANNING

The most frequently identified security concern is the threat of a weather-related event such as a hurricane. In many cases, Cape Cod residents and visitors "shelter in place," a term that refers to staying in homes or local shelters that are supplied with food, water, etc.

Residents should heed warnings of public safety officials and evacuate accordingly. A danger occurs out of panic when vast numbers of people get into their automobiles with the idea that they should "evacuate," clogging up the roadway network. These traffic jams pose a threat to those who truly

need to access the network (persons with health problems, injuries, etc.). In the event of a mass exodus from Cape Cod (due to major weatherrelated, radiation event, etc.), planning is underway by the Barnstable County Emergency Planning Committee (BCREPC), in coordination with the Massachusetts Emergency Management Agency and implementation organizations such as the Massachusetts State Police and MassDOT. Planning for large-scale traffic flows leaving Cape Cod requires coordination with neighboring regions. For example, routing Cape Cod traffic to I-195 West during an impending hurricane may bring motorists closer to the hurricane's landfall. Landfall predictions always include some uncertainty, such as the exact time and path of impact. When the path of a storm is projected in a wide, imprecise area it can make the evacuation route itself a potentially hazardous area.

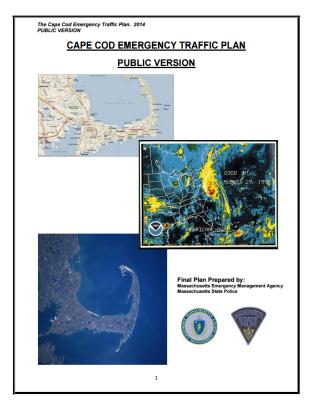


FIGURE 1. Cape Cod Emergency Traffic Plan

The "Cape Cod Emergency Traffic Plan" (ETP) has been developed by the Massachusetts State Police in cooperation with the Massachusetts Emergency Management Agency (MEMA) and several other agencies to facilitate the egress of a high volume of traffic from Cape Cod in the event of a hurricane, particularly during peak tourist season. The design of the ETP is based upon the need to eliminate the causes of congestion in the area of the Bourne and Sagamore Bridges and the main arteries leading up to them, Routes 6 and 28. The following is a general outline of the plan's implementation:

- As traffic levels build before the hurricane arrives, direct access to and from off-Cape locations will be restricted at the bridges in order to allow vehicles to continue north from the bridges unimpeded.
- At higher traffic levels, and as bridge flows warrant (e.g., lower demand at Bourne Bridge than at Sagamore Bridge), traffic on Route 6 destined for Routes 25 & 495 would be diverted through the Massachusetts Military Reservation (MMR).
- When sustained winds reach 80 mph, the bridges will be closed and the motorists will have the option of going to designated emergency parking areas in the MMR and to be shuttled to shelter in the MMR.

The ready availability of advance information to the public is a vital component necessary to maximize the efficiency of the ETP. Traffic will flow only as fast as the slowest vehicles are traveling. The following measures are planned in order to provide a high level of public knowledge regarding the various aspects and the changes in traffic patterns that will be encountered during the ETP:

- Signage: MassDOT will erect ETP signs giving advance notice of all detours and changes in traffic flow. The signs will include a radio frequency for ETP information.
- FM Radio Broadcast: Changes in traffic patterns will be announced on WQRC (99.9 MHz). WQRC will continually play a variety of pre-recorded instructions geared to address the various phases of the ETP.
- Internet: Detour instructions and maps will be available on the Internet from the state police web site: <u>www.state.ma.us/msp</u>

SHELTER IN PLACE SCENARIOS

It is extremely important that the public is informed of the need to evacuate only under a set of specific scenarios. For example, Hurricane events may only threaten certain coastal areas. For those residents in the affected areas, public safety officials would likely direct evacuees to local or

¹ https://www.mass.gov/lists/state-emergency-management-all-hazards-plans

regional shelters. By 'sheltering in place' or relocating to the nearest emergency shelter, impacts on the roadway network are minimized, freeing up capacity for emergency responders.

Sheltering in place and waiting instructions from emergency response officials is also the recommended course of action during a radiation event as detailed on the BCREPC Radiation Emergency Reference Sheet². This reference sheet details the proper actions to take in response the radioactive emergency at the Pilgrim Nuclear Power Station (PNPS) located in Plymouth. Cape Cod lies outside of the 10-mile radius Emergency Planning Zone so no emergency evacuation is planned should there be a radiation emergency at the PNPS. If a radiation event occurs, individuals on Cape Cod should get inside, stay inside, and stay tuned. For more information about preparedness, sheltering, and radiation emergencies, visit the following websites:

Centers for Disease Control: https://emergency.cdc.gov/radiation/index.asp

MEMA: <u>www.mass.gov/mema</u>BCREPC: <u>www.bcrepc.org/prepare</u>

PUBLIC TRANSPORTATION SECURITY

Security of public transportation systems has been regarded with greater importance in recent years. The Federal Transit Administration (FTA) provides guidance and a wide variety of strategies to maintain and improve security. It is also important to note that public transit may serve an important role in evacuation (e.g., moving residents from nursing homes etc. to shelters). Also, verification and certification of public transit employees in security procedures is important to assure response capability.

AIR TRAVEL SECURITY

Security for travel by air is a primary function of the Transportation Security Administration (TSA). The TSA has been required to make a number of improvements to aviation security. The improvements included that by November 19, 2002, screening of individuals and property in the United States would be conducted by TSA employees and companies under contract with TSA. Federal law also requires enhanced qualifications training and testing of individuals who perform screening functions. It requires that Federal law enforcement officers be present at screening locations. More information is available at: http://www.tsa.gov

² http://www.bcrepc.org/wp-content/uploads/2014/09/BCREPC_Radiation-Emergency-Reference-Sheet-092214.pdf

INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) technologies are applied to vehicles and roadways that perform communications, data processing, traffic control, surveillance, navigation, sensing, and various other functions that aid in the management of the security process. ITS elements, such as traffic cameras, signal preemption devices and Variable Message Boards (VMB), would provide timely responses for emergency vehicles and the ability to monitor evacuations during times of natural, or other disasters.

The Massachusetts Department of Transportation's Traffic Operations Center (TOC) is located in South Boston. The TOC's primary mission is traffic incident management throughout the Commonwealth of Massachusetts. The MTOC is the headquarters for the application of Intelligent Transportation Systems (ITS) around the state. From the MTOC, reports on traffic incidents are relayed to the involved MassDOT district office, which assigns the necessary personnel and equipment, required to abate the incident.

The TOC integrates information from the Cape Cod Canal Area Intelligent Transportation System. The Cape's system will include about 10 adjustable (point-tilt-zoom) high definition cameras and supplemental speed detectors and fixed-view webcams. This system will yield travel time and incident data to travelers and emergency responders.

Security is a high priority goal of the Regional Transportation Plan. The transportation system must be prepared for natural disasters, such as hurricanes. This plan also adds emphasis on security from federal and state transportation regulations and guidelines.

The most pressing security issue facing Cape Cod is the heavy volume of traffic departing during weather events, such as impending hurricanes.

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