

CHAPTER 7



Photo: CSX Railyard in West Springfield, MA

SECURITY

The security of the regional transportation system is an ever increasing priority. It is critical to ensure that the highest levels of security are provided for the users of our regional transportation system and that appropriate measures are taken to restrict access to our critical transportation infrastructure.

A. EXISTING CONDITIONS

The region works in collaboration with the Massachusetts Executive Office of Public Safety (EOPS) and the Massachusetts Emergency Management Agency (MEMA) to improve the security of the regional transportation system. In cooperation with both agencies a number of changes have been made to increase both existing security measures and public awareness of potential threats to security. The following sections provide additional information on the topic of security for the Pioneer Valley Metropolitan Planning Organization.

1. Homeland Security

The Pioneer Valley Metropolitan Planning organization is part of the Western Massachusetts Homeland Security Region. The Western Region Homeland Security Advisory Council provides planning, financial and technical resources to all 101

communities within Hampden, Hampshire, Franklin, and Berkshire counties of Massachusetts.

The focus of this organization is to support the following activities:

- Identification of Threats and Vulnerabilities within the Region
- Plan Regionally to Protect Critical Infrastructure and Key Assets
- Training First Responders and Local Officials
- Improve Interoperability
- Multi-jurisdiction Exercises
- Intelligence Gathering & Information Sharing

The Pioneer Valley MPO has also assisted in improving Homeland Security by providing planning assistance in the following areas:

- Assisting in the development of Mutual Aid Agreements between the state and local communities.
- Updating maps for critical infrastructure such as bridges and Tier II Haz-Mat locations.
- Providing technical assistance as needed for use in local and regional evacuation planning efforts.

Western Mass Ready (<http://www.westernmassready.org/>) was created by the WRHSAC and provides resources for individuals in the Pioneer Valley to prepare for emergency events.

a) Western Region Homeland Security Plan

This plan seeks to enhance the region's capabilities to support homeland security-related public safety efforts, and is guided by the principles established by the Commonwealth in the Massachusetts State Homeland Security Strategy. The Plan identifies and prioritizes key vulnerabilities that exist in the region and develops steps to mitigate these potential threats.

Regional solutions were developed in order to strengthen core functions and provide all public safety agencies the tools required to effectively prevent, provided early response, and recover from terrorist events or other high profile events that threaten security. The Plan also defines funding levels to address the identified priorities and improve interoperable communications and overall emergency preparedness through focused training exercises and upgraded equipment.

PVPC has conducted evacuation planning studies using the regional transportation model and dynamic traffic assignment. The TransCAD modeling software was used to analyze the evacuation scenarios at the macro level. The network used in this study excludes local roads; only major arterials and highways are considered. Dynamic Traffic assignment was utilized because it is more responsive to

operational factors, route changes, and produces more realistic results for modeling unexpected results than traditional travel demand models. PVPC has conducted analysis on the following four evacuation scenarios using this methodology.

2. Transit Security

The Pioneer Valley Transit Authority (PVTA) has undertaken extensive efforts in order to increase the security of the regional transit system. This includes the development of an emergency operations plan for the agency and the placement of security cameras on their entire fleet of buses. PVTA has also installed security cameras and audio alert equipment in passenger terminals, vehicle storage and maintenance facilities. Most importantly, the PVTA has committed transit vehicles for use in situations that may require the evacuation of residents.

The PVTA participates in regional emergency drills and has provided extensive emergency training for their staff. PVPC has also worked in cooperation with the PVTA to develop videos for emergency responders on how to access PVTA vehicles and provide information on the configuration of the different buses in their fleet.

3. Rail Security

Similar to rail service itself, rail security is usually defined by both passenger and freight rail services, separated into two parts: passenger rail and freight rail. Unlike air travel, neither passenger or freight rail services lend themselves to the increased security measures utilized at airports. While each type of rail service has its own security concerns, they must not be separated because they often share the same track. Passenger rail stations are often located in densely populated areas, and freight rail transports nearly half of the nation's hazardous waste materials. As a result, the Pioneer Valley Metropolitan Planning Organization has continually integrated both passenger and freight rail security concerns into its regional planning efforts. Representatives from the region's rail providers are invited to participate in monthly Joint Transportation Committee meetings. In addition, all planning studies approved by the MPO include a rail component when appropriate.

a) Pedestrian Rail Access

Trespassing by local residents within the rail yard, across railroad bridges and along railroad tracks is not only a safety problem but also is frequently a security problem that involves theft and vandalism. Because of the hazardous materials, dangerous equipment, and unsafe settings found within the rail yard, this unhindered trespass is significant and needs to be addressed. CSX implemented a series of security improvements as part of a recent upgrade to their rail yard. These improvements include:

- Physical barriers;
- Secure access gates at portals;
- Closed circuit television system;

- Conspicuously located signage;
- Surveillance patrols utilizing two-way radio communications; and,
- Sensors, alarms and detectors with audible/visual alerts.

New security fencing was added along the Knowledge Corridor rail line prior to the return of passenger rail service at the end of 2014. Many pedestrians and bicyclists cross this rail line in Northampton, MA between King Street and Woodmont Road to access the Norwottuck Rail Trail and businesses along King Street. A new pedestrian underpass was constructed in 2018 to deter pedestrians from illegally crossing this rail line.

B. WESTERN MASSACHUSETTS EVACUATION PLAN

Completed in January of 2013, the Western Massachusetts Evacuation Plan provides emergency responders on the local, state, and federal levels with the resources necessary for conducting a regional evacuation in as efficient and effective a manner as possible. The plan provides maps and lists of evacuation routes, population centers, infrastructure, and other critical assets. Contact information for municipal and state officials, as well as major employers, schools, and hospitals is also provided.

This plan pertains to the counties of Berkshire County, Franklin County, Hampshire County, and Hampden County. Contact information for municipalities in Worcester County that border Franklin County, Hampshire County, and Hampden County is also provided, as these towns and cities would potentially be active in any evacuation from western Massachusetts. Information for state resources applicable to the region is also provided. The plan was completed in conjunction with other emergency plans that have been developed for western Massachusetts, including a regional sheltering plan and regional communications plan. Data and recommendations from these plans have been integrated into the evacuation plan to the extent possible.

Evacuation routes were developed based on an analysis of the transportation network, considering factors such as capacity, congestion, and road destinations to develop a hierarchy of primary, secondary, and tertiary routes. Definitions of these routes are as follows:

- Primary – state designated highways that carry the largest capacity and provide the most direct route out of the region.
- Secondary – main arterial roads through towns that carry traffic where primary routes do not exist or provide an alternate route to the primary route.
- Tertiary – local main roads, used to channel traffic towards secondary and primary evacuation routes.

Evacuation routes are shown by county in Figures 7-1 and 7-2.

Figure 7-1 – Evacuation Routes and Water Hazards in Hampden County

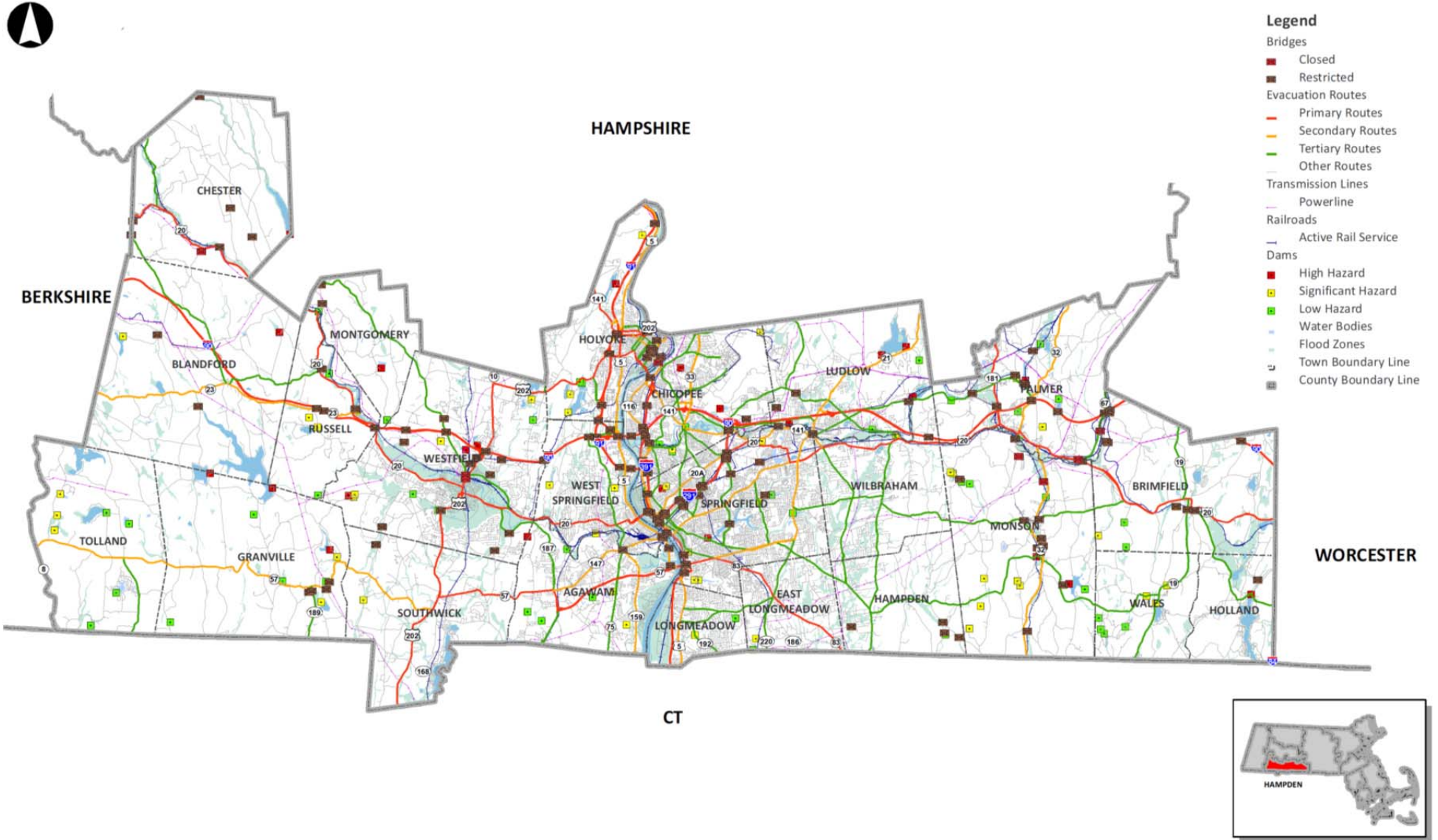
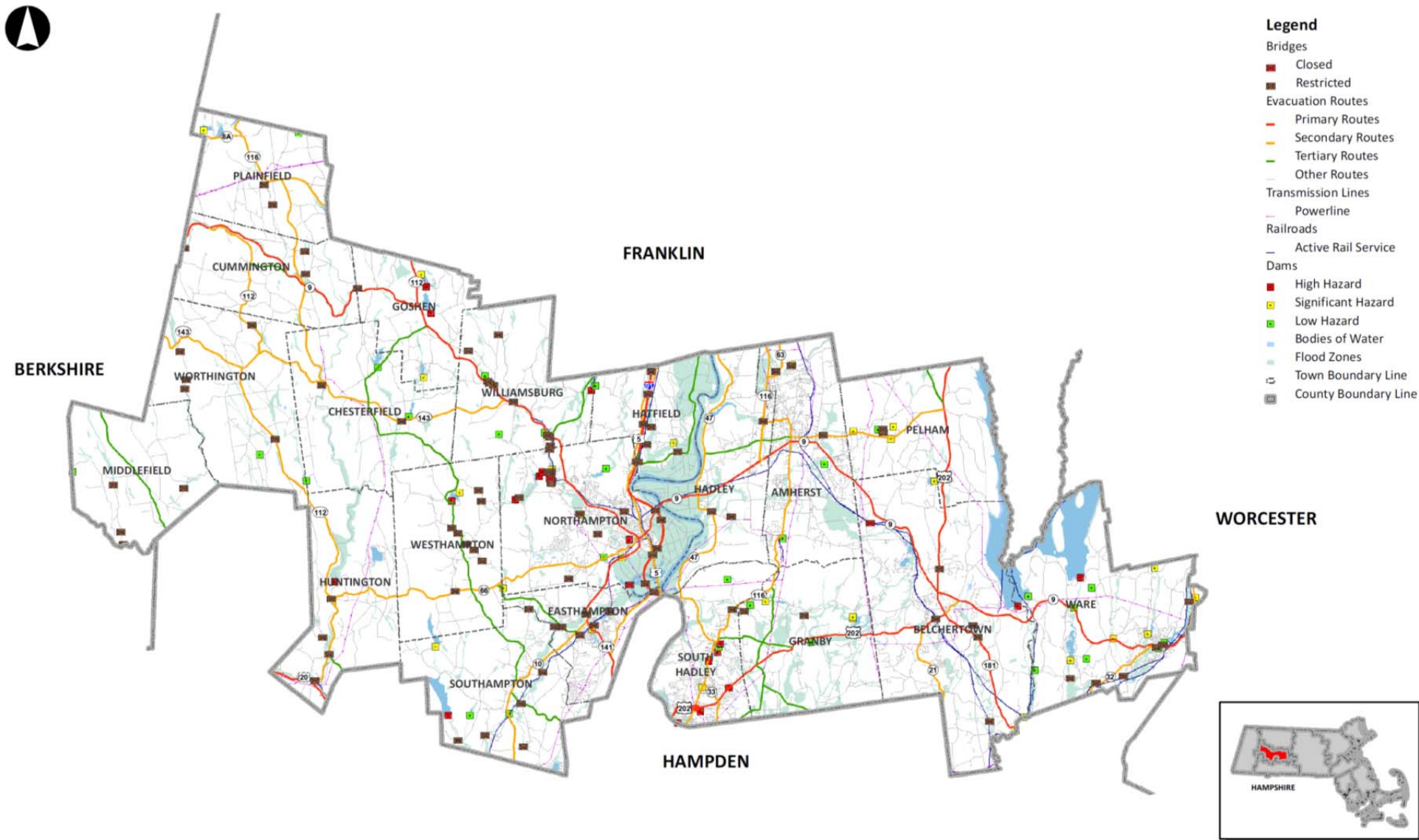


Figure 7-2 – Evacuation Routes and Water Hazards in Hampshire County



C. MASSACHUSETTS COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

The Massachusetts Comprehensive Emergency Management Plan (CEMP) outlines the system that will be used to prevent, prepare for, respond to, and recover from emergencies and disasters. It also identifies and assigns specific areas of responsibility for coordinating resources to support the Commonwealth's response to an emergency or disaster. Last updated in January of 2019, the CEMP is maintained by the Massachusetts Emergency Management Agency (MEMA). Link to the [CEMP Base Plan](#).

1. Massachusetts Emergency Support Function 1 Transportation

The Massachusetts Emergency Support Function 1 (MAESF-1) Transportation provides a framework for coordination and cooperation across state agencies regarding transportation needs for a disaster, emergency, or planned event. An annex to the CEMP, it describes how the Commonwealth will provide transportation related support and assistance to local jurisdictions in the event local needs exceed available local resources during an emergency. Link to [MAESF-1 Transportation](#).

The primary state agency for the MAESF-1 is MassDOT. As the primary regional transit agency, PVTA has a supporting role in MAESF-1 including:

- Provide information on the status of PVTA facilities and operations, including any service restrictions or cancellations.
- Provide buses or other transportation assets as requested to facilitate evacuations or other movements of large numbers of people.
- Provide resources to assist in the movement and/or staging of commodities as needed.

2. Local Hazard Mitigation Planning

PVPC assists its member communities with developing new and updating existing Hazard Mitigation Plans. Hazard mitigation is any action taken to reduce or eliminate the long-term risk to human life and property from hazards. Common mitigation strategies include minor localized flood reduction projects, culvert improvements, wildfire mitigation, and infrastructure retrofits. FEMA requires the plans to be updated every 5 years to maintain eligibility for Hazard Mitigation funding.

The Hazard Mitigation planning process involves an assessment of the risks faced from natural hazards, a review of existing mitigation capabilities currently implemented, identification of action steps that can be taken to prevent damage to property and loss of life, and prioritization of future mitigation efforts to implement. The plans are developed with assistance from MEMA and funding provided by the Federal Emergency Management Agency (FEMA).

D. IMPROVING REGIONAL SECURITY

A key component of homeland security is the ability to work with federal, regional, local, and private partners to identify the critical infrastructure that is at the greatest risk and take the necessary steps to mitigate these risks. This begins through the identification of our critical links in the transportation infrastructure and the agencies responsible for the maintenance and security of these areas. This is an ongoing process that is defined in the State Homeland Security Strategy (SHSS) for the Commonwealth of Massachusetts. The following goals have been identified as part of the SHSS.

- Engage Stakeholders to Maintain, Enhance, Formalize, and Integrate the Various Components of the Homeland Security System into a Structure that Identifies and Guides Implementation of Homeland Security Strategy.
- Increase the ability to effectively provide prompt and accurate public information and alerts.
- Protect the Commonwealth from Intentional Acts of Violence and Terrorism.
- Enhance Resilience across the Commonwealth by Preparing for & Mitigating Against Acts of Terrorism, and Natural, Technological, & Intentional Hazards.
- Increase Capacity across the Commonwealth to Effectively Respond to Acts of Terrorism, and Natural, Technological, & Intentional Hazards.
- Enhance Capacity across the Commonwealth to Recover from Acts of Terrorism, and Natural, Technological, & Intentional Hazards.

Link to the [Massachusetts State Homeland Security Strategy](#).