Mass Receiving Phase II Project

WRHSAC
Western Region Homeland Security Advisory Council

Prepared by the Berkshire Regional Planning Commission, Franklin Region Council of Governments, and Pioneer Valley Planning Commission for the Western Region Homeland Security Advisory Council

June 2015

Acronyms used in this report

ARRL	Amateur Radio Relay League (HAM)
ADA	Americans with Disabilities Act
CERT	Community Emergency Response Team
COAD	Community Organizations Active in Disasters
EMD	Emergency Management Director
EOC	Emergency Operations Center
ESC	Evacuation Service Center
ESF	Emergency Support Function (Desk)
DPW	Department of Public Works
FNSS	Functional Needs Support Services
IAP	Incident Action Plan
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
JIS	Joint Information System
JITT	Just in Time Training
IMT	Incident Management Team
MACC	Multi Agency Coordination Center
MEMA	Massachusetts Emergency Management
MRC	Medical Reserve Corps
MSP	Massachusetts State Police
NGO	Non-Government Organization
PHF	Potentially Hazardous Foods
PIO	Public Information Officer
VRC	Volunteer Reception Center
VIPS	Volunteers in Police Service

Table of Contents

List of Figures

1. Defining Evacuation Service Centers

Evacuation Service Centers[1] (ESCs) are temporary stopping facilities where evacuees who are traveling in motor vehicles and passing through Western Massachusetts from other areas of the U.S. Northeast that may be under threat can receive services and acquire resources to get back on the road rapidly and continue on to a final destination for sheltering. ESCs are not intended or expected to provide a full range of traditional traveler services or shelter.

ESCs are intended to be located well outside of area(s) that are impacted by a hazard event that would necessitate a large-scale evacuation of some areas of the U.S. Northeast, such as coastal flooding, which could result in large numbers of evacuees travelling into or through Western Massachusetts. The WRHSAC Mass Receiving Phase I project prepared in 2013 identified resource gaps and capacity shortfalls in providing the services required by the estimated numbers of evacuees arriving in the region. Establishment of ESCs would enhance the region's capabilities and capacity to respond to the needs of a large influx of evacuees seeking services.

Other terms used for these types of facilities in the emergency preparedness planning literature include "temporary rest stops" and "reception sites." The Commonwealth of Massachusetts Evacuation Coordination Plan draft of April 28, 2014 includes the establishment of "temporary rest stops" on the list of future decisions to be made by the local and state authorities in response to an emergency, based on the following criteria:

- Location of incident
- Areas evacuated
- Estimate of travel time for evacuees
- Roadway capacity
- Traffic conditions
- Availability of suitable locations[2]

The Rural Preparedness Planning Guide: Planning for Population Surge Following Urban Disasters (2008)[3] includes the following general recommendations for planning for "reception sites":

[1] The Draft Commonwealth of Massachusetts Evacuation Coordination Plan of April 28, 2014 uses the term "Temporary Rest Stops" to refer to the "Evacuation Service Centers" described herein.

[2] Commonwealth of Massachusetts Evacuation Coordination Plan; April 28, 2014; p. 3-11.

[3] <http://www.norc.org/PDFs/Projects/Emergency%20Preparedness%20Planning/rural_guide_main_and_appendices.pdf

- Reception site staff can triage, facilitate movement, communicate with other reception points, provide acute medical care, distribute maps and provide directions, disseminate risk communication messages, provide the latest information on the disaster and weather, and store basic supplies. Take advantage of all potential uses and plan accordingly.
- Use rest stops along highways as reception sites.
- Discourage evacuees from stopping at the reception points if they have no urgent needs.
- Reception centers should always have medical staff available.
- Be sure that the reception sites have sufficient bathrooms/porta-potties.
- Plan for the unexpected. Communities are not always notified by nearby jurisdictions of incoming evacuees.

ESCs will be designed to fill the gap between Evacuation Assembly Points (EAPs) established in communities close to the impact area and Regional Reception Centers (RRCs) that will direct evacuees to state-supported and/or local shelters providing mass care to evacuees. (See Figure 1-1 below for the Commonwealth of Massachusetts' accepted terminology, definitions and additional information regarding facilities associated with an evacuation.) These definitions envision only a traffic flow support role for the "pass-through communities" and no need for facilities.

However, research by regional planners on behalf of WRHSAC suggests that a larger role, including the establishment of ESCs, would need to be played by local and regional officials in order to manage the needs of evacuees and the challenges that they could present to communities along the evacuation route(s).

Therefore, for this project, researchers have evaluated how ESCs can best be integrated into and coordinated with the state's system of facilities to support evacuees during an emergency. Issues and analysis related to use of specific locations, municipal constraints, memorandums of understanding for potential use of sites and related information will be addressed in subsequent evaluations.

Figure 1-1: Key Site Terminology, Definitions, and Staffing[4]

Community Classification	Location Name	Definition	Staffing
Sending	**Evacuation Assembly Point**	Temporary location exclusively for evacuation embarkation and transportation coordination in a field setting. Basic services, including emergency medical treatment and respite, are not generally available.	Typically staffed by local fire, emergency medical services, law enforcement, and transportation authorities.
Pass Through	**(In Western Mass: Evacuation Service Centers)**	No facilities are required. Communities serving as "pass through" will be identified and listed in the IAP and should support traffic flow through their communities. Western Mass does this with ESC.	Typically staffed by local fire, emergency medical services, law enforcement, transportation, Public Health, Medical Reserve Corps (MRC) and Community Organizations Active in Disasters (COAD)."
Host	**Regional Reception Center**	Regional facility where those displaced by the incident can receive assistance in identifying the most appropriate shelter location for their needs. Reception centers are not sheltering facilities but are short-term-stay mass care centers for satisfying survivors' immediate needs while they await assignment to a general population shelter or other appropriate facility.	Typically activated and staffed by mix of local government (e.g., fire, emergency medical services, law enforcement, and transportation authorities), select non-governmental organizations, and state-government.
	State-Supported or Local Shelter	Temporary location providing mass care to displaced survivors. General populations include individuals with access and functional needs and those requiring basic first aid.	Typically activated and staffed by local government and non-governmental organizations (e.g., American Red Cross)

It is anticipated that evacuees would be present for no more than a few hours at an ESC. These centers would minimize the possibility of exceeding local capacity by providing the following essential support services for evacuees travelling through:

- Immediate physical and emotional support needs such as:
  - first aid (including medical triage and decontamination)
  - limited psychological first aid

[4] Massachusetts Statewide Evacuation Coordination Plan, April 28, 2014 Draft, p. 3-1, annotated.

    - basic emotional/spiritual care
    - limited respite
    - sanitary sites/restrooms
    - water and meals (can be for purchase);
    - companion animal services (food, water, outside areas to walk pets)
- Travel services such as:
    - fuel
    - vehicular care
    - wrecker services (also may need to be deployed to the evacuation route itself)
- FNSS access and needs such as:
    - consumable medical supplies (i.e., diabetic supplies, diapers, and similar needs)
    - personal care assistance in using ESC services
    - translation services
- Information and situational updates
- Communication services and devices such as wireless internet, computers and phones and charging areas for personal devices
- Family reunification support

ESCs will **not** provide the following services:

- Post-disaster relief services or counseling
- Dormitory services or sheltering of individuals
- Ongoing mass care services (mass feeding, distribution of goods, etc.)
- Medical care beyond first aid
- Coordination of alternate transportation to RRCs, shelters, hospitals, or other facilities

Typically, an ESC would not be located in the same county as an RRC and/or shelters. In the event that an emergency affects the Western Massachusetts region, a county with a lesser impact might establish an ESC, while other, more affected, counties might determine that RRCs and/or shelters would be required in their area. Potential sites can be identified that could serve as either an ESC or RRC, depending on the nature of the hazard. Further, ESCs may be re-designated as Regional Reception Centers if it is determined during the course of an emergency response that there is a need to shelter evacuees in Western Massachusetts.

Figure 1-2 below displays graphically what services could be provided at each of the various types of sites that might be established in an evacuation. A full range of services is not intended to be available at every ESC; the primary purpose of an ESC is to provide a safe place for travelers to rest briefly

Figure 1-2: Services Provided by Type of Evacuation Site

Services Provided	Type of Evacuation Site			
	Evacuation Assembly Point (EAP)	Evacuation Service Centers (ESC)	Regional Reception Center (RRC)	State-Supported or Local Shelter
Immediate first aid	X	X	X	X
Psychological first aid & emotional/spiritual care		Limited	X	X
Respite		Limited	X	X
Water and meals		Limited	X	X
Sanitary sites/restrooms	X	X	X	X
Fuel		X		
Vehicular care		X		
Wrecker services		X		
Information and situational updates	X	X	X	X
FNSS access & services, incl. translation	X	Limited	X	X
Communication devices and charging areas		Limited	X	X
Family reunification		Limited	X	X
Initial shelter registration and assessment			X	X
Coordination of shelter capacity issues and mitigate overflow			X	X
Transport of individuals to shelter facility	X		X	X
Animal companion services	X	Limited	X	X
Pet shelter operations			X	X
Post-disaster relief services				X
Dormitory services or sheltering of individuals				X
Ongoing mass care services (e.g., mass feeding, distribution of goods)				X
Medical care beyond first aid				X

Jurisdictions that host ESCs will need to determine what level of support services will be made available at the site. It is recommended that a flexible structure be established, which would allow for various levels or types of services to be provided depending on the nature of the hazard event causing the evacuation, the level of skilled staff available, resources at their disposal, and the condition of the infrastructure in proximity to the ESC location. More detailed

assessments of the minimum and ideal capabilities and services will be included in subsequent tasks included in this project, including delineating which services should be provided free of charge and what services may be available for purchase, depending on circumstances.

It is anticipated that ESCs will be operated and supported by local and regional first responders and community organizations. Decisions about opening, operating, and closing an ESC should be made in coordination with all appropriate local, regional, and state authorities, including: MEMA; EMDs; law enforcement officials; fire safety officials; hazardous materials (HazMat) teams; public health officials; MRC/CERT volunteers; the American Red Cross; and Regional Emergency Operations Center (REOC) or regional Multi-Agency Coordination Centers (MACC), SEOC, and/or local EOCs. Relevant information should be entered into WebEOC and operations documented following the Incident Command System (ICS) requirements.

Evacuations consist of the following general phases: mobilization, evacuation, zero-hour, and recovery/re-entry (and in some cases de-mobilization). Depending on the nature of the evacuation event, not all these phases may be applicable to the Western Massachusetts region, as this area may be outside the event area (i.e., coastal storm and flooding would not require a recovery stage in Western Massachusetts). The time frames in which these phases occur will depend on whether the evacuation occurs with advance notice (such as a hurricane warning) or no notice (such as an industrial accident occurring with little or no warning). The initial mobilization and evacuation timeframes will be compressed for no-notice incidents. ESCs are primarily intended to provide services during the evacuation phase of an emergency. However, depending on the circumstances surrounding a specific hazard event, there may also be a role for them to play during the recovery phase, when evacuees are returning to impacted areas once they have been deemed to be safe for re-entry.

ESCs are intended to be established in ADA-compliant facilities and the layout (such as width of queue lanes) should also meet the requirements of the ADA. RRCs will be operated to ensure communications access and will include a variety of forms of communication for individuals with access and functional needs. When practical, provision of ESC services will occur within a single facility or location; however, in some situations this may not be feasible. Potential ESC locations should include the following attributes:

- a building that is large enough to sustain ESC operations and is ADA-compliant;
- a large parking area with adequate ingress/egress for a large volume of vehicular traffic;
- outside areas to walk pets;
- area that can safely handle fuel, water and other supply trucks; and
- location in close proximity to evacuation routes.

Additional details on the minimum and ideal capacity of ERCs will be developed as part of this project, building on the evacuation/mass receiving flow estimates developed in the first phase of the WRHSAC Mass Receiving project. In addition, this project will develop a detailed evaluation of the security/public safety and fire/hazmat safety concerns to be taken into consideration in locating and operating an ESC.

Facilities to consider for the establishment of ERCs within Western Massachusetts include, but are not limited to[5], the following:

- High schools, middle schools and/or colleges/universities
- Sports arenas, stadiums, and venues
- Convention and exhibition centers
- Public facilities (recreation centers, public gymnasiums, etc.)
- Large recreational camps

Appropriate facilities of these types are limited in the Western Massachusetts region. An Evacuation Service Center cannot be an already identified Emergency Shelter, which may further limit the potential locations for an ESC. Pre-identification of facilities to be used as ESCs and coordination in advance with the appropriate property owners, authorities, and service providers will significantly improve the ability to quickly establish an ESC in the event that the need arises in an emergency. This project will also include the identification of one or more potential locations for ESCs along the major roadways in each of the four Western Massachusetts counties.

[5] Evaluation of Massachusetts Turnpike travel service plazas is not included in this analysis, as emergency use of these facilities is addressed in the Draft Massachusetts Statewide Evacuation Coordination Plan of April 28, 2014.

THIS PAGE INTENTIONALLY BLANK

2. Determining Evacuation Service Center Capacity

To plan for an Evacuation Service Center, it is important to understand how many people may potentially need the services provided at such a facility, and in what timeframe. Western Massachusetts is relatively near the far end of a major evacuation zone, located 2-3 hours from New York City and Boston. Many of the evacuees from these major areas will have found shelters by the time they get to our region. Based on the first phase of the WRHSAC Mass Receiving project, it was determined that each county could expect to see the following maximum numbers of evacuees:

Region	Total Evacuees Seeking Shelter
Berkshire County	87,000
Franklin County	73,500
Hampden County	85,000
Hampshire County	79,000
TOTAL Western Massachusetts	**225,000***

*Note: Counties do not total due to potential overlap; that is, evacuees may have the choice of stopping in one of several counties, so each county must be prepared to receive them, but the total number of evacuees anticipated is only 225,000.

The Western Massachusetts numbers do not total the four county numbers. Depending on the event, some counties will be impacted more than others. The Western Massachusetts total is the most that would expected in any situation. As a region, staff, equipment, and supplies should be planned for the Western Massachusetts total with the expectation that sharing will occur between the counties that are not being utilized and those that are.

Based on the evacuee numbers and geographic location in relation to the major cities, it was determined that no more than the total evacuees would be passing through the region, therefore the above numbers are used as the basis for those that may need an ESC.

The next step that was undertaken was to determine how many of the potential evacuees would using the interstates and not get off. During an emergency, MassDOT officials and the existing service areas would assist the evacuees that are on the interstates. The Regional Planning Commissions determined that 50%-75% of the evacuees in Berkshire County would stay on the interstate. Franklin County determined that since they do not have any service centers on I-91, but being a rural county, they would expect 50% to 75% would stay on the interstates with the rest stopping in the county. Hampden County was determined to have 40% to 60% would be using the interstates, while Hampshire County was determined to have 40% to 60% using the interstates and not getting off. Western Massachusetts is using the average of the four counties and is 45% to 65%.

Another factor that needs to be considered is how many people who are traveling through the county on local roads or those getting off the interstates actually need to use an ESC. As there are other food and gas facilities that would be open in each county, it was assumed that 25% to

35% of those on local roads or getting off the interstate would utilize an ESC in Berkshire and Franklin counties and 40%-50% in Hampden and Hampshire Counties. Western Massachusetts is averaged to be 35%-45%.

Based on the above numbers, the following ranges are expected in each county.

Region	Total people seeking ESC during an event (Minimum – Ideal)
Berkshire County	5,438-15,225
Franklin County	4,593-12,862
Hampden County	13,600 – 25,500
Hampshire County	12,640 – 23,700
Western Massachusetts	**27,562 – 55,687**

Assuming that families would travel in one vehicle, the U.S. average family size is 2.5 persons, the region therefore could expect the following number of vehicles during an event:

Region	Total vehicles seeking ESC during an event (Minimum – Ideal)
Berkshire County	2,175-6,090
Franklin County	1,838-5,145
Hampden County	5,440-10,200
Hampshire County	5,056-9,480
Western Massachusetts	**11,025 – 22,275**

The three Regional Planning Agencies of Western Massachusetts determined that this potential evacuation was a 24-hour evacuation. Given that it would take a few hours for people to get to the region and most likely would not be busy for an entire 24 hours, the above numbers were viewed as an 18-hour event resulting in the following hourly ranges:

Region	Total vehicles seeking ESC per hour (Minimum – Ideal)
Berkshire County	121-338
Franklin County	102-286
Hampden County	302-567
Hampshire County	281-527
Western Massachusetts	**613-1,238**

Region	Total people seeking ESC per hour (Minimum – Ideal)
Berkshire County	302-846
Franklin County	255-715
Hampden County	756-1,417
Hampshire County	702-1,317
Western Massachusetts	**1,531-3,094**

ESC Use Assumptions

Determining the desired capacity of an ESC depends largely on the anticipated use(s) of the facility. Connecticut recently conducted a study[6] on the service areas on their interstates to look at capacity and usage. Connecticut found that 80% of visitors' use bathrooms, 42% stop for food or drink, 19% stop for rest and 7% stop for fuel. While these percentages provide some insight into motorist behaviors, they needed to be modified for emergency evacuation situations. The below figure lists the estimated proportion of people who would use the facilities as well as the average time for each facility.

Facility	% of ESC users who use facility	Average Time Spent
Bathrooms	80%	3 minutes/person
Gas	80%	5 minutes/vehicle
Food/Drinks	50%	15 minutes/vehicle
Rest	10%	30 minutes/vehicle
Pet breaks	60%	3 minutes/vehicle

In addition to these times, five minutes of extra time was added for uncertainties. The result is that the average time to visit an ESC is 23.7 minutes/car.

Based on the use statistics and the number of people visiting an ESC, the capacity for each of the various functions at an ESC can be determined shown in Figure 2-1 below.

[6] www.ct.gov/dot/lib/dot/documents/dpolicy/restarea/master_voli.pdf

Figure 2-1: Anticipated ECS Needed Service Capacities

Region	Bathrooms (stalls)	Gas (pumps)	Food-Beverages (people served/hour)	Rest (parking spots)	Pet breaks (vehicles)
Berkshire County	12-34	8-23	38-106	6-17	4-10
Franklin County	10-29	7-19	32-89	5-14	3-9
Hampden County	30-57	20-38	94-177	15-28	9-17
Hampshire County	28-53	19-35	88-165	14-26	8-16
Western Massachusetts	**61-124**	**43-83**	**191-387**	**31-62**	**18-37**

Based on these assumptions, the number of parking spots needed can be estimated, as shown below.

Figure 2-2: Anticipated ECS Needed Parking Capacities By Region

Region	Parking spots per hour (Minimum – Ideal)
Berkshire County	48-134
Franklin County	40-113
Hampden County	119-224
Hampshire County	111-208
Western Massachusetts	**242-489**

In addition to the above parking needs for evacuees, the staff and volunteers who will operate the ECS will also need places to park, as well as restrooms and food services. Based on the above ranges, it is estimated that between 18 and 128 staff would be needed at each ESC. Each volunteer would most likely need a parking spot and they would need food, rest area and usage of the bathrooms (1 additional stall per ESC).

3. Determining Evacuation Service Center Capability and Service Needs

This portion of the analysis was performed to help understand the minimum and ideal capabilities and desired services of an Evacuation Service Center. Starting with the ESC definition established in Section 1 of this report, the minimum and ideal capabilities are more fully explored and defined in this section.

Initially, the anticipated desired capabilities of ESCs were determined to include: parking; restrooms; food/water (either purchased or emergency); refueling station; first-aid medical care; seating; information-situational update station (possible inclusion of PIO); communications and messaging; outside area to walk pets, vehicular care station, etc.

Delineation is made between services for free, and services for purchase/cost, and services that may have both options. Other capabilities shall be added based upon the definition established in Section 1 and project research. This analysis also discusses needs and standards for the operation of ESCs, such as: staffing, square footage, variety, public safety and public health considerations, as well as other topics. This analysis attempts, to the degree possible, to delineate between services for free, services for cost and services with both free and cost option

For the purpose of this analysis, it was assumed that an ESC could range in size from a relatively small site that would rely on existing gas stations at major intersections with a few portable toilets, all the way up to a larger site capable of accommodating multiple gas/diesel tanker trucks that could dispense emergency fuel to thousands of stranded evacuees with significant medical and behavioral health issues.

One lesson of recent major evacuations in the U.S., such as occurred during Hurricanes Katrina and Rita, was that communities along evacuations routes will be greatly impacted by the needs of evacuees who are traveling through these communities.

At a minimum, it was established for this exercise that an ESC should be able to provide evacuees with information, fuel and toilet facilities. Because no evacuation scenario would likely affect all four Western Massachusetts counties to the same degree, the Western Massachusetts total estimates show the expected ranges for a single event across the region. In large operations, suggested staffing levels could be reduced up to 20% as workers can be shifted to other areas as needed. This list of capabilities is organized according to an ICS structure to make planning for this event consistent with National emergency response planning protocols.

Figure 3-1: Evacuation Service Center (ESC) Desired Capabilities List

Total Recommend ESC Staffing per Shift - Minimum/Peak Ideal 12/82

Position/ Function	Objectives/ Tasks	Minimum Services	Peak Ideal Services	Min. Staff Training	Ideal Staff Training	Fee ✓	Vendors/ Providers	Shift Staff Min/ Ideal
Command Staff	*Command and Control*	2 FTE perform all Command Functions	8 FTE	• ICS 300	• IMT Training • Experience • ICS 400			2/8
ESC Manager	*Stage (set-up), Coordinate and Manage ESC*	• Sets up ESC	• Set-up 1 or more ESC locations • Manage ESC in coordination with EMD/EOC/MACC/MEMA	• ICS 300 • Experience	• IMT Train. • Experience • ICS 400		• IMT • Fire Dept • EMD • MACC/HMCC	.5/1
Safety Officer	*Ensure Staff/Site Safety*	• Staff Safety • Site Safety • Public Safety	• Staff Safety • Site Safety	• ICS 100 • Experience	• IMT Train. • Experience • ICS 300		• IMT • Municipalities • Fire Dept.	1/1
Liaison Officer	*Connect/coordinate with partners*	• Connect with local EOC/EMD, MSP, MassDOT	• Connect with local EOC, EMD, Police MACC/HMCC, MEMA, MSP, MassDOT, COAD • Connect with other response partners	• ICS 200 • Experience	• IMT Train. • Experience • Trained PIO • ICS 300		• IMT • MACC/HMCC • Municipalities	.2/2
Public Information Officer (PIO)	*Provide Public Information to staff/clients: First, Accurate, Coordinated, Compassionate, Timely*	• Coordinate with regional JIS • ESC Info Board and/or flyers	• Coordinate with JIS, MEMA/MACC • Provide info to clients/staff • Post Info: 511, 211, media, road signs • Maintain ESC Info Board • Send to Community ListServes, etc.	• ICS 100 • Experience	• IMT Train. • Trained PIO • PIO Experience • ICS 300		• IMT • MACC/HMCC • Municipalities	.2/2
Public Health Officer /FNSS Advisor	*Ensure Public Health compliance/ FNSS services*	• Safe Food/Water • Adequate Sanitation • ADA compliant	• Safe Food/water; toilets/sinks • ADA compliance; equal access • Sanitation; Public Health and Safety • FNSS services coordination • Social Services coordination	• ICS 100 • Experience	• Public Health Officer/Agent • ICS 300 • ServSafe • Psychol. F.Aid		• Bds of Health • HMCC • Com. Hth. Ctrs • MRC • Schools	.1/2

Figure 3-2: Evacuation Service Center (ESC) Desired Operational Characteristics								
	Safely and efficiently ensure/provide ESC services	**5 FTE perform all Operations Section Functions**	**35 FTE**	**•ICS 200**	**• IMT Train. • ICS 300 • Experience**			**5/38**
Security and Traffic Flow Unit	*Ensure site security and efficient/safe traffic flow*							
	Security Team: *Manage Security at ESC*	• Security at ESC • 9-1-1 backup	• Security at ESC • Security CheckPoints if needed at controlled spot off highway, before ESC entrance	•VIPS •Fire •CERT	• Police • Sheriff • Military • Experience		• Police/Sheriff • Fire Mutual Aid • CERT; Schools • Private, Banks	1/3
	Traffic Team: *Manage ESC traffic and keep travel ways clear. (Assumes DPWs plow and treat access roads as usual.)*	• 100 feet stacking lanes each way • 1 lane in/1 out • Safety vehicles use shoulders • Traffic Team directs service/ emergency access	• Manage Traffic Control Points at major intersections • 500 feet stacking lanes off highway each direction • 2 lanes in and 2 lanes out • Separate entrance for service/emergency vehicles • Controlled traffic signals	•DPW • Fire	• Traffic Control Experience and training • JIT Training • ICS 100		•DPW •Police •Fire •CERT •MassDOT •Tree and Utility Service Companies	3/8
	Parking Team: *Ensures adequate/ safe parking for cars, busses, trucks at ESC*	• Use nearby store parking lots • 2 ADA parking spots/lot	• Berkshire: 48 - 134 car lot; 2 ADA • Franklin: 40 – 113 car lot; 2 ADA • Hampden: 119 – 224 car lot; 4 ADA • Hampshire: 111 – 208 car lot; 4 ADA • WMass: 123 –346 cars; 8 ADA	• JIT Training	• Traffic Control Experience • JIT Training • ICS 100		• CERT/MRC • Fire Dept. • Police • VIPS • COAD/NGO	Each Lot 0/3
Vehicle Services Unit	*Ensure vehicles can travel through Western Mass safely/efficiently*							
	Fueling Team Fixed: *Support/use existing Service Stations for gas and diesel*	• Berkshire: 8 gas • Franklin: 7 gas • Hampden: 20 gas • Hampshire: 19 gas • WMass: 21 gas - 1 assistants/lot	• Berkshire:23 gas pumps; 2 diesel • Franklin: 19 pumps; 2 diesel • Hampden: 38 pumps; 2 diesel • Hampshire: 35 pumps; 2 diesel • WMass: 58 pumps; 4 diesel - 1 assistant per 2 pumps	• JITT by Fire Dept.	• Trained Gas Station Attendants • Fire Training • ICS 100	✓	• ESF 12 Desk • Fire Dept. • Gas Stations • CERT/MRC • COAD/NGO	1/18

	Fueling Team Mobile: *Mobile Fueling Station (if operational)*	• 1 gas tanker and operator • 1 assistant/tanker	• 3 Gas tankers at each location (each tanker comes with a company operator) + 3 assistants/tanker	• Tanker company	• Tanker empl • Fire Training • ICS 100	✓	• Tanker Comp. • Fire Dept. • CERT/MRC	(1/9)
	Repair Team: *Provide minor vehicle repairs to keep traffic moving*	• Water	• Basic maintenance items: wash windows, patch tires, replace belts, add oil and water, washer fluid, replace plugs, etc.	• JITT	• Car Mechanic • Experience • ICS 100	✓	• COAD/NGO • DPW • Fire Dept.	0/2
	Road Crew: *Clear roads of stalled vehicles. (Can be done by local towing services)*	• DPH /Police push vehicles off roads • Call Towing Services	• Able to clear roads • Fuel vehicles out of gas • Bring vehicles to repair stations • 2-6 gas cans to carry gas to vehicles	• DPW	• Tow Truck License and experience • ICS 100	both	• Towing Services • DPW • Police	0/4
Logistics Section	*Ensure adequate resources: people, equipment , supplies*	3 FTE perform all Logistics Section Functions	26 FTE	• ICS 100	• IMT Train. • ICS 200 • Experience			3/24
Service Branch	*Ensure support for evacuees safely /efficiently travel on*	2 FTE	16 FTE	• ICS 100	• IMT Train. • ICS 200 • Experience			2/14
Communication Unit	*Ensure continuous communications for responders and public*	• Radios	• Radios, Cell, Internet/HotSpot, HAM • Post Box – Stamps for purchase • Public Phone • Charging Station	•Radio/IT Experience	• IMT Train. • HAM • IT/Comm. • ICS 100	Both	• ARRL/HAM • Fire/Police • Business • COAD/MRC	1/2
Food Unit	*Provide food and water to staff and evacuees. (This may be provided by the facility staff)*	• NGO provides all • Water, coffee, milk, sugar, package snacks • Restock as needed from local grocery stores	- Water, coffee; tea, soft drinks, milk, sandwiches, snacks, hot soup, sugar • Berkshire: 38 - 106/people/hr • Franklin: 32 – 89/people/hr • Hampden: 94 – 177/people/hr • Hampshire: 88 – 165/people/hr • WMass: 98 – 273/hr	• None for non-PHF in com-mercial packages	• ServSafe • Restaurant Experience • ICS 100	both	• COAD/MRC • Restaurants • NGO • MaResponds	1/4
Retail Unit (Optional)	*Provide evacuees with access to basic travel supplies (Retail services may be provided by nearby stores.)*	• None	• Formula, snacks, bug repellant, sunglasses, blankets, water bottles, diapers, feminine supplies, stamps, envelopes, ice, sanitizer, special diets (allergies, salt/sugar, Kosher..)	• None	• Retail Experience • ICS 100 • Procurement	✓	• CERT/MRC • COAD/ARC • NGO • Chamber of Commerce	(0/2)
Medical Unit:	*Provide First Aid/Triage*	• 9-1-1 • On-Scene	• Triage and Transport • Basic First Aid by on-scene EMS/Fire	• Basic First Aid	• First Aid • EMT/Nurse		• EMS/Fire • MRC	0/2

		Responders	• Referrals to Medical Services	Training	• ICS 100		• COAD/ARC	
Social Services Unit:	*Provide Visitor assistance and accessible Information on available services*	• Sign directing people to call Mass 2-1-1 for services/help. • List of Referral Phone Numbers	• **Information Board** - updates hourly - multiple languages - road conditions - lodging information • **FNSS Services Staff/List:** Elders, children, pets, deaf, handicapped, others	• Some training or exp'rnce advised	• MRC/CERT • Translators • Social Service Worker • Pictographs • ICS 100		• COAD/ARC • CERT/MRC • Visitor Bureau • NGO • Chambers of Commerce • MA Responds	0/4
Pet Unit	*Provide services to support pets/service animals*	• Dog walking area	• Food, water, toileting, pet first aid. • Connect Pet owners to services • List of area Vets	• Familiarity with animals	• Vet/ACO • DART • ICS 100	both	• DART • ACO • Animal Shelters	0/2
Support Branch	*Ensure safe/effective Facility Operations*	1 FTE	10 FTE	• ICS 100	• IMT Train. • ICS 200 • Experience			1/10
Facility Support Unit	*Facility adequate and maintained. (Likely employees of the facility used.)*	• Power • Water • Toilets/sinks • Trash	• Access: ADA compliant • Power & HVAC; shade; heat • Water: potable and for vehicles • Sewer: adequate/maintained • Pet and smoking areas • Seating; eating areas	• Familiarity with facility advised	• Facility Maintenance Staff • Experience • ICS 100		• Municipalities • Schools • COAD/NGO	.25/2
Parking Lot Support Unit	*Plowing, grading, shoveling, sanding (May use Facility Staff)*	• Plowing • Shoveling • Gravel if wet field	• Safe, fast in/out • Hourly during snow • Drainage to prevent flooding	• Truck Driver	• Plowing Experience • ICS 100		• DPW • Contractors • CERT/COAD/NGO	0/1
Sanitation Support Unit	*Provide adequate and clean toilets; sinks, cleaning and waste management*	• 4 toilets; 1 sink • 1 ADA toilet/sink	• Berkshire: 12 - 34 toilets; 3 – 8 sinks • Franklin: 10 - 29 toilets; 3 - 7 sinks • Hampden: 30 -57 toilets; 7 - 14 sinks • Hampshire: 28 -53 toilets; 7 – 13 sinks • WMass: 31 – 88 toilets; 7 – 22 sinks	• None	• Janitorial Experience • JITT by Pumper Co. • ICS 100		• Septic Pumper Service Company • COAD/NGO	.25/2
		• Floor mat at main entry • 2 x 55 gallon lined trash cans • 1 sharps cont.	• Mats at doors to control dirt/wet • Cleaning every 4 hours • 6 x 55 gallon trash cans – heavy duty trash bags. Empty every hour • 3 sharps containers	• None	• Janitorial • ICS 100		• Municipalities • Trash Hauler • Janitorial Service • COAD/NGO • CERT	0/1
Staffing Support	*Provide adequate*	• Register volunteers	• Volunteer Reception Center/System:	• Experienc	• ICS 100		• Municipalities	.25/2

Unit	*number of trained, credentialed volunteers*	at the Incident Command Post	- Recruit, Register, Credential, Train, Deploy, Debrief, Thank, Discharge Volunteers - Use affiliated volunteers first	managing volunteer strongly advised	• VRC JITT • MRC 101		• COAD/MRC • CERT • Schools • NGO	
Supplies Support Unit	*Ensure adequate supplies to run ESC for 18 hours*	• Gas only • Water only • No Sundries	• Fuel: Diesel and Gas tankers on call • Food/Water: vendors on call • Sundries: retail/wholesale vendors	• Procure-ment exp advised	• Procurement • Retail Exp. • ICS 100		• Municipalities • COAD/MRC • CERT/NGO	.25/2
Planning Section	*Ensure effective, efficient safe operations*	1 FTE performs all Planning Section Functions	• 7 FTE	• ICS 200	• IMT Train. • ICS 300 • Experience			1/7
Situation Unit	*Situational Awareness and preparation of Incident Action Plan (IAP)*	• Connection with MEMA/MSP • Connection with EOC/MACC	• Maintain Situational Awareness • Work with PIO, Liaison, MEMA, MSP • Incident Objectives ICS 202 • Incident Map • Updates every hour to ESC Manager • Oversee Incident Action Plan prep	• ICS 100	• IMT Train. • PIO Train. • EOC Train. • ICS 300 • Experience		• IMT • Municipalities MRC/CERT • Fire Dept. • HMCC/MACC	.5/2
Resource Unit	*Resource Tracking*	• Connection with EOC/MACC	• Resource Management System • Type and track all resources • Assignment List ICS 204 • ESC Organization Chart ICS 207 • Communications Plan ICS 205a	• ICS 100	• IMT Train. • ICS 200 • Town Staff • Experience		• IMT • Communities • MRC/CERT/COAD • Fire Dept. • HMCC/MACC	.25/2
Documentation Unit	*Maintain all Incident Documents/Records*	• Connection with EOC/MACC	• Maintain all documents/records • File all Incident Action Plans (IAP)	• ICS 100 •	• IMT Train. • ICS 200 • Town Staff • Experience		• IMT • Municipalities MRC/CERT/COAD • HMCC/MACC	.25/2
Demobilization Unit	*Demobilization and Transition to Sheltering if needed*	• None	• Create Demobilization Plan • Work with Regional Shelters to provide services to Evacuees • Re-assign staff/volunteers	• ICS 100 •	• IMT Train. • ICS 200 • Town Staff • Experience		• IMT • Municipalities MRC/CERT/COAD • HMCC/MACC	0/1

Finance Section	*Ensure data and finance tracking*	1 FTE performs all Finance Section Functions	5 FTE	• ICS 100	• IMT Train. • ICS 200 • Experience			1/5
Payment Unit	*Payment Unit: Payment Systems for evacuee purchases*	• None	• ATM • Cash • Credit Cards	• Municipal Employee	• Accounting • Mun.Finance • ICS 100	✓	• IMT • Municipality • Business	0/1
Data/Time Unit	*Tracking of donations, volunteers, staffing*	• Tracking done by each agency/NGO	• Resources • Staffing • Volunteers/Donations	• Municipal Employee	• Accounting • Data Man. • ICS 100		• IMT • Municipalities • Schools/COAD	0/1
Procurement Unit	*Purchasing, Procurement*	• MEMA • By Lead Municipality	• MEMA Resource Requests • Joint purchases/contracts by participating communities	• Municipal Employee	• Purchasing • Data Man. • ICS 100		• IMT • Municipalities • Schools/COAD	.5/1
Cost Unit	*Tracking and recording all costs and expenses*	• By Lead Municipality	• Electronic/online data tracking • REOC/MACC Cost Unit	• Municipal Employee	• Accounting • Data Man. • ICS 100		• IMT • Municipalities • Schools/COAD	.5/1
Legal - Municipal Unit	*Agreements; contracts; complaints*	• By Lead Municipality	• All participating communities • Fielding complaints • Contracts/Agreements • MAA Issues	• Municipal Employee	• Municipal • ICS 100		• Municipalities	0/1

Note: Planning and Finance Sections could be part of the Emergency Operations Center (EOC).

*Note: The Western Massachusetts lines reflect that fact that an evacuation incident is not likely to impact all four counties at one time. Ranges are adjusted to reflect the likely Western Region resource needs during a single event. It is expected that Mutual Aid Agreements would be used to support the functions and areas that are needed to establish ESCs. For planning purposes, minimum and maximum projected resource needs are shown by county to reflect the different scale of response needed in each.

THIS PAGE INTENTIONALLY BLANK

4. Security and Public Safety Considerations of Evacuation Service Centers

The establishment and operation of Evacuation Service Centers (ESCs) present significant security and public safety challenges. Emergency responders will need to coordinate with the agencies and officials serving the Massachusetts emergency support function for public safety and security (MAESF-13) to maintain law and order and to provide the following ESC services:

- Sufficient numbers of staffing and personnel with the skills needed to protect evacuees and their personal property, as well as private and/or public property where the ESC is located;
- Physical security provisions (e.g., emergency access, adequate lighting, secure access doors, fire suppression and alarm systems, etc.) to protect evacuees and their personal property, as well as private and/or public property where the ESC is located;
- Coordinated messaging on the highways, local access roads, and at the ESC informing evacuees of the status of the emergency situation, existing evacuation orders, and/or other public safety notifications affecting their travel plans; and
- Adequate signage to direct travelers to the appropriate areas within the ESC to receive available services.

Staffing and Personnel

Staffing and personnel will need to be provided in sufficient numbers and with the necessary skills to protect evacuees, their personal property, and the private and/or public property where an ESC is located. Emergency managers should plan to increase law enforcement manpower in and on the roadways around an operating ESC. Banks, schools, and other venues have security personnel that may be employed. The Medical Reserve Corps (MRC) and other volunteer response groups, such as Community Emergency Response Teams (CERTs), can be a source for credentialed volunteers to assist in providing many of the security and public safety services at an ESC. Local Police, Fire, Board of Health and EMS personnel may be available to assist at an ESC, as well as State Police and National Guard units in the event of a widespread hazard event, but it is also likely that these resources may already be mobilized elsewhere if the impacts of an emergency are serious enough.

The chart on the following page, extrapolated from the Evacuation Service Center Capabilities List, provides estimates of the minimum and ideal numbers of security and public safety personnel required per shift to be able to safely operate an ESC, and the skills and training that they should have. The recommended ESC security/ public safety staffing per shift ranges from a minimum of 3 people to a maximum of 15, depending on the size and nature of the event. At an estimated duration of 18 hours for an emergency evacuation situation, staffing would need to be provided for at least two 9-hour shifts to operate an ESC, preferably three 6-hour shifts, and would need to be scaled up for larger evacuation emergencies.

Figure 4-1: Evacuation Service Center Capabilities List – Security and Public Safety Personnel								
Position/ Function	**Objectives/ Tasks**	**Minimum Services**	**Peak Ideal Services**	**Min. Staff Training**	**Ideal Staff Training**	**Service Fee**	**Vendors/ Providers**	**Shift Staff** Min/Ideal
Command Staff								
Safety Officer	*Ensure Staff/Site Safety*	• Staff Safety • Site Safety • Public Safety	• Staff Safety • Site Safety	• ICS 100 • Experience	• IMT Train. • Experience • ICS 300		• IMT • Municipalities • Fire Dept.	1/1
Operations Section								
Security and Traffic Flow Unit: *Ensure site security and efficient/safe traffic flow*								
Security Team	*Manage Security at ESC*	• Security at ESC • 9-1-1 backup	• Security at ESC • Security Check Points if needed at controlled spot off highway, before ESC entrance	• VIPS • Fire • CERT	• Police • Sheriff • Military • Experience		• Police/Sheriff • Fire Mutual Aid • CERT; Schools • Private, Banks	1/3
Traffic Team	*Manage ESC traffic and keep travel ways clear (Assumes DPWs plow and treat access roads as usual)*	• 100 feet stacking lanes each way • 1 lane in/1 out • Safety vehicles use shoulders • Traffic Team directs service/ emergency access	• Manage Traffic Control Points at major intersections • 500 feet stacking lanes off highway each direction • 2 lanes in and 2 lanes out • Separate entrance for service/emergency vehicles • Controlled traffic signals	• DPW • Fire	• Traffic Control Experience and training • JIT Training • ICS 100		• DPW • Police • Fire • CERT • MassDOT Tree and Utility Service Companies	3/8
Parking Team	*Ensures adequate/ safe parking for cars, busses, trucks at ESC*	• Use nearby store parking lots • 2 ADA parking spots/lot	• Berkshire: 48 - 134 car lot; 2 ADA • Franklin: 40 – 113 car lot; 2 ADA • Hampden: 119 – 224 car lot; 4 ADA • Hampshire: 111 – 208 car lot; 4 ADA • WMass: 123 –346 cars; 8 ADA	• JIT Training	• Traffic Control Experience • JIT Training • ICS 100		• CERT/MRC • Fire Dept. • Police • VIPS • COAD/NGO	Each Lot 0/3

Site Security

There are a number of physical security concerns that must be taken into consideration in setting up and operating an ESC in such a way as to protect the public safety. Below is a list of physical security issues to be reviewed in assessing the suitability of a given site for use as an ESC, identifying both minimal and ideal requirements:

Figure 4-2: ESC Site Security Requirements

Area/Function	Minimum Requirements	Ideal Requirements
Site and Building Exterior		
All external areas where evacuees will be fueling vehicles, parking, walking, eating, waiting to use bathrooms, etc.	Adequate security lighting	Powered by emergency generators for continued use in the event of a power outage
Facility grounds	Securable, e.g., with barriers that can be set up to control public access and traffic	Fenced with gated access
Emergency access	Full-time emergency vehicle access *(*police, fire, ambulance)	Emergency staff and vehicles pre-positioned on site during operations. Separate emergency and service road access.
Building Interior		
All internal areas where evacuees will be receiving services	Adequate safety lighting	Adequate security lighting. Powered by emergency generators for continued use in the event of a power outage.
Securable access to critical areas	Doors with locks	Doors with key-card or other secure access method
Security Alarm Systems	Regularly maintained and tested	Automatically alerts Police Dept. Easily used by facility staff or volunteers.
Fire Alarm Systems	Manual (pull station)	Automatic initiation, alerts Fire Dept.
Fire Suppression Systems	Fire extinguishers throughout	Sprinkler systems

Other physical security and public safety concerns that would need to be taken into consideration in establishing an ESC include being on alert for increased domestic violence issues during an emergency and the potential for evacuees subject to judicial or administrative orders restricting their freedom of movement (such as parolees, sex offenders, and individuals with outstanding warrants) to present at ESCs seeking service. Both of these situations could potentially create the need to segregate certain individuals for their own or others' safety, or even to ask them to leave the ESC. Law enforcement personnel with the authority to deal with these and other potentially volatile (or criminal) situations) should be available at all times at

operating ESCs, if possible and, if not, should participate in establishing protocols for other security personnel and volunteers to follow until an officer became available.

Messaging and Signage

Emergency responders setting up and establishing ESCs will need to coordinate with the Mass Highway Division of MassDOT, the Massachusetts State Police, and MEMA, as well as with regional and local officials to set up road signage to guide evacuees to ESCs and to provide real-time evacuation information. This should include coordinating with MassDOT to use the Intelligent Transportation Systems (ITS) message boards that have been installed on the major interstates. Portable message boards, light towers and trailers containing traffic safety supplies such as cones, directional signs, etc. can be used on state routes and local roads to inform evacuees of plans and available services. These resources have been purchased by the Western Region Homeland Security Advisory Council (WRHSAC) and are available for use upon request. They are stored in a number of strategic locations throughout Western Massachusetts. Information about these and other WRHSAC available items can be found in the "Resource Guide for Available Emergency Equipment and Supplies in Western Massachusetts," which is available on the website at www.wrhsac.org. Particular care should be taken to establish the appropriate channels within the Incident Command System for making changes to the digital signage and transportation messaging along the highways to inform evacuees/residents of the latest developments and preferred routes.

In addition, signage will need to be provided within the grounds of an ESC facility and at the entry and egress points to direct evacuees to needed services and then back out onto the highways. The light towers, message boards, and traffic safety supplies available from the WRHSAC referenced above could also be used on the site of an ESC to help direct the internal flow of traffic.

Sources

Massachusetts Statewide Local Evacuation Toolkit, April 28, 2014; Evacuation Assembly Point/Regional Reception Center Facility Survey.

MEMA, *Commonwealth of Massachusetts Evacuation Coordination Plan,* Revised Draft; April 28, 2014.

Western New York Public Health Alliance, NORC, *Rural Preparedness Planning Guide: Planning for Population Surge Following Urban Disasters*; 2008.

5. Detail Fire and Hazardous Materials Safety Considerations for Evacuation Service Centers

Identifying fire and hazardous material safety concerns and procedures to address them will ensure the safe, efficient operation of the Evacuation Service Center (ESC). There are two primary concerns related to fire and hazardous waste at an ESC: vehicle maintenance and vehicle fueling.

> **Vehicle maintenance** (motor oil, transmission fluid, antifreeze, brake fluid, and car batteries): Vehicle maintenance and repair at the ESC will require disposal of used chemicals that are flammable and/or toxic. If these chemicals are not properly disposed of they also present a significant environmental risk. As discussed later in this section, MassDOT has guidelines for the handling and storage of hazardous materials that are recommended to address these concerns.
>
> **Vehicle fueling** (gasoline and diesel fuel): Fueling presents the largest potential hazard due to the high flammability of gasoline and the large number of cars to be fueled at the ESC. Based on a study conducted by the National Fire Protection Association, there were an average of 600 daily incidents involving gas stations that U.S. fire departments responded to between 2003 and 2006.[7] Frequent causes of gas station fires are the discharge of static electricity (a result of drivers returning to the inside of their car during pumping) and cigarettes. "Hold-open" clips on fuel pumps have been disabled for decades in Massachusetts, preventing drivers from returning to their car during pumping and limiting static discharge. However, recent changes to the Massachusetts Fire Code will again allow for the installation of hold-open clips, increasing the risk of fire.

This section discusses these and related concerns with respect to ESC operations.

Fuel Types and Flammability

Gasoline is most dangerous as a vapor because in this state it is most likely to come into contact with an ignition source. For this reason, a vapor recovery system is an essential component of fueling pumps, both at stationary fuel pumps or tanker trucks. The Massachusetts Fire Code requires all fueling devices to have vapor control devices which prevent gasoline vapors from leaving fuel tanks. In addition, the EPA regulates the delivery of fuel at dispensing stations to 10 gallons per minute, in order to not overwhelm the vapor recovery systems built into modern cars.[8]

Diesel fuel is not as flammable as gasoline because it requires a much hotter flame to ignite. However, diesel fuel is flammable and still presents a fire risk. Only 3% of diesel cars and trucks sold in the United States are diesel, though this number has been increasing over time. In 2014,

[7] "Structure Fires in Stores and Other Mercantile Properties," NFPA.
[8] http://www.epa.gov/otaq/standards.htm

there are 40 models of diesel passenger vehicles available, a number projected to increase to 60 by the end of 2018.

In addition, diesel car registrations increased nationally by 24% and in Massachusetts by 45% between 2010 and 2012.[9] Because of this increase in diesel vehicles, it is likely that there will be a significant number of private vehicles, including cars, busses and trucks at the ESC requiring diesel fuel.

Storage, Clean-up, and Disposal for Hazardous Materials and Hazardous Waste

The MassDOT Facility Environmental Handbook and MassDOT Highway Facility Hazardous Waste Generator Emergency Response Plan include specific procedures for hazardous material safety, including requirements for preventing fires and explosions, as well as procedures for cleaning up a hazardous waste spill.[10] Key recommendations from these documents, to be followed at ESCs, are shown in the following figure.

Figure 5-1: ESC Storage/Clean-Up for Hazardous Materials and Waste

Hazardous Waste Containers
Make sure the container/drum is in good condition (not rusted or damaged). Label it with a hazardous waste label. Place the label where it can be seen and clearly mark the contents.
Keep the container closed.
Store containers inside on spill containment pallets. If pallets are not available, store containers on a surface that is free of cracks and away from floor drains.
Place the containers in the designated hazardous waste storage area.
Containers stored outside must be protected from weather with adequate secondary containment.
Cracked automotive batteries must be disposed of as hazardous waste.
Hazardous Waste Storage Area
Located indoors on a surface free of cracks, away from floor drains.
Have clearly marked boundaries.

[9] http://business.time.com/2013/08/23/2014-may-turn-out-to-be-the-year-of-the-diesel-engine/

[10] MassDOT Facility Environmental Handbook, http://www.massdot.state.ma.us/Portals/8/docs/environmental/FacilityHandbook.pdf

Marked with a HAZARDOUS WASTE sign (all capital letters, at least one inch high).
Have adequate aisle space between drums to allow for inspections of containers.
If the facility does not have enough secondary containment pallets, store full drums on an impervious surface and active drums on the secondary containment pallet.
A maximum of 55 gallons of waste oil can be transported at a time in any size container.
Procedures for a Small Spill Clean Up
A small spill of oil is less than 10 gallons and is easily controlled and contained. Use absorbent from a spill kit for this purpose. In an emergency kitty litter can be used.
If any amount of oil or solvent can drip from the clean-up materials when squeezed or rung out, the materials are considered saturated and must be disposed of as hazardous waste (put in a container and label with a hazardous waste label).
If no oil or solvent drips from the clean-up materials when squeezed or rung out, the materials can be disposed of as solid waste and can be placed in the dumpster.
To properly contain and clean-up a minor spill of oil, use the designated absorbent materials such as granular absorbents (clay pellets).
Sand/soil should only be used to contain spills in emergencies if sufficient absorbent materials are not available.
Storage of Hazardous Materials
Label all hazardous materials and store in an authorized area, in an organized manner.
Keep all hazardous material containers closed when not being used.
Store flammable materials inside a flammables storage cabinet.
All hazardous material containers must be labeled with the contents. Labeling can be done using a grease pen or duct tape and a permanent marker.
All containers used for temporary storage or transporting of hazardous materials must be labeled with the contents.
National Fire Protection Association (NFPA) labels are required for all hazardous materials stored in containers of greater than 5 gallons and identify the hazards of the material using four hazard classes — Health, Fire, Reactivity, Specific

Used motor oil may be a hazardous waste product stored at the ESC. Used motor oil should be stored separately from other used vehicle fluids, as it can be cleaned and reused (at another facility). The cost of storing, transporting, and disposing of this waste will likely be minimal, as

oil changes are not an anticipated service at ESCs. However, there may be oil-soaked rags, plastic containers of used or new oil, and other items left by some motorists with mechanical trouble or those who may attempt to, and/or succeed in, changing their own oil. In these cases, the used oil and related items will need to be disposed of off-site, though the quantities will be relatively small. This waste can be transported via 55-gallon containers on a flat bed truck to local auto part supply stores, which offer disposal services to consumers and have established procedures for vehicle waste recycling. MOUs could be arranged with local auto part supply stores for this purpose.

Dispensing of Fuel at an ESC

Procedures for dispensing of fuel at the ESC will largely depend on whether the fuel is being dispensed from an existing gas station or directly from tanker trucks. It is recommended that existing gas stations be used when possible because of their built-in safety devices and convenience. However, in some locations in western Massachusetts, ESCs may need to be established at locations that do not have access to existing gas stations, in which case vehicles will need to be fueled directly from tanker trucks.

Regardless of the dispensing method, it is recommended that fuel only be available for pumping directly into vehicle gas tanks, and dispensing into portable fuel containers by evacuees not permitted. This will reduce the potential of a spillage by untrained personnel handling fuel. It will also discourage hoarding of fuel and ensure that fuel supplies last longer at the ESC. It should be noted that trained emergency personnel will be permitted to utilize portable gas containers to refuel stalled cars. All portable containers used should be National Fire Protection Association approved.

Fueling at Existing Gas Stations

Existing gas stations will be used when the designated location of the ESC makes them practical to use, given distance from evacuation routes and traffic patterns. All existing fire safety and hazardous materials regulations for routine operation of the gas station should be followed and will be sufficient to minimize fire risk. Assuming staffing resources are available, it is recommended that trained emergency volunteers or responders be responsible for fueling vehicles at gas stations, in order to make the process as safe and efficient as possible. If staffing resources are not available to handle fueling, at least one ESC staff should be available to monitor evacuees fueling their own cars.

A lack of power at gas stations is a key challenge for providing evacuees with fuel during an emergency. Widespread power loss at a large number of gas stations in the state would lead to more fueling capacity needed at the ESC. One way to reduce ESC capacity needs is through a state-wide portable generator program, which would provide gas stations located near evacuation routes with grants to install emergency generators. New York State has implemented this type of program and in order to reduce the fueling capacity requirements of

the ESCs, it is recommended that Massachusetts adopt a similar generator grant program.[11] This will increase the ability of evacuees to fuel at other locations and free up capacity at ESCs.

To facilitate the ability of the public to fuel at as many locations as possible, signage along evacuation routes should encourage evacuees to utilize Lantern Live, the Department of Energy's mobile app for allowing consumers to quickly find and share critical information about nearby gas stations and power outages during emergencies (currently available free for Android devices through Google Play). In addition, the Department of Energy should be notified about the location of potential ESCs so that these locations can be included in the mobile app during an evacuation.

Fueling from Tanker Trucks

At ESCs that do not have gas stations available, fuel will need to be dispensed directly from tanker trucks that are generally not designed for dispensing fuel to individual cars. While feasible, fueling directly from a tanker truck presents a variety of challenges:

- **Fueling multiple vehicles simultaneously** - To meet the capacity demands necessary for each ESC, it will be critical that multiple vehicles can be fueled at the same time. To reduce the number of tanker trucks that must be staffed and utilized, tanker trucks equipped with multiple hoses should be used. These type of trucks are usually designed for mass vehicle fleet fueling (school busses, mass transit systems, etc.) and most likely to be owned by companies that specialize in this service (see list of fueling organizations below). It is expected that this type of truck will be able to fuel up to four vehicles at one time (two hoses on each side).

- **Staffing requirements** - As per requirements of the Massachusetts Board of Fire Prevention Regulations, only approved personnel can dispense fuel from a tanker truck. Whereas an existing gas station could provide self-service fueling (if ESC staff are not available), fueling directly from a tanker requires one staff person for each dispensing hose. If multiple hoses are to be used simultaneously, this means that personnel in addition to the driver would be required. In order to provide uninterrupted fueling service for many hours at a time, backup personnel will also be necessary to allow for staff to have breaks, eat, and sleep. Based on these requirements, it is anticipated that each four-hose tanker will require six certified personnel per shift. Memoranda of Understanding should be established with private fuel transportation companies to engage their services during an emergency and identify their ability to meet this requirement. Identifying personnel that are not employed by the fueling company, to supplement staffing, is also recommended.

- **Tracking of fuel** - Because they are used for large-scale fuel delivery, many tanker trucks are not equipped to measure fuel for a single private vehicle (10 to 30 gallons at a time). However, some tanker models do have individual gauges for each fuel hose. It will be

[11] http://www.nyserda.ny.gov/peg-faqs

important that these gauges be installed on tankers used so that accurate fuel volumes can be tracked for payment. In case the tankers used for dispensing fuel do not have a built-in gauge, there are add-on gauges that can be purchased to add on at the end of each fuel hose for approximately $130 each.

- **Payment of fuel** - Without the availability of a built-in payment system used at a gas station pump, an alternative electronic payment system will need to be established. Because of the security issues associated with keeping a large amount of money on site, it is recommended that evacuees be encouraged to use card payment instead of cash. However, in order to best accommodate special needs populations who may not have access to a credit or debit card, it is important that cash payment be possible. This means that the ESC will need to be stocked with change. For electronic purchases, it is recommended that a service called SquareUp be used. SquareUp allows for credit card or debit card transactions by swiping a credit card through a device connected directly to a smart phone or tablet device.[12] This service is currently used in many commercial applications, and works even when no cellular signal available by storing the transaction on the device until a connection is available. The service can also provide e-mailed sales receipts to customers. The fee to use this service is 15 cents per transaction plus 3.5% of the fuel cost, both of which would be passed on directly to the evacuee purchasing the fuel.

General Guidelines for Dispensing Fuel Safely at ESCs

To prevent the severity and frequency of fires at gas stations, several organizations have developed regulations and guidelines for the dispensing of fuel, including the National Fire Protection Association, Federal Occupational Safety and Health Administration, and the Massachusetts Board of Fire Prevention Regulations.[13,14,15]

[12] www.squareup.com
[13] NFPA Standards:www.willis.com/documents/publications/Services/Claims_Management/Motor_Fuel_Dispensing_Safety.pdf
[14] OSHA Standards: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10420
[15] BFP Standards: http://www.mass.gov/eopss/docs/dfs/osfm/cmr/cmr-secured/527005.pdf

Based on a review of these regulations and guidelines, the following measures should be implemented when dispensing fuel at ESCs:

Figure 5-2: Guidelines and Regulations for Dispensing Fuel at ESCs

General Operating Procedures
No delivery shall be made except by the owner/operator of the diesel truck or a duly authorized emplc
No gasoline shall be delivered or taken from a motor vehicle while the engine thereof is running. This does not apply to tank trucks making delivery by power.
Smoking is prohibited in the entire fueling area and allowed at the ESC only in designated areas.
Strictly enforce good housekeeping practices. This includes maintaining clear aisle space to firefighting equipment, using approved covered metal receptacles where appropriate, and keeping floors clean and free of oil and grease.
Dispensing Area
Locate dispensing devices 10 feet or more from property lines and buildings.
Provisions should be in place to prevent spilled liquids from flowing into the interior of buildings, such as grading of driveways or raising door sills.
Fire extinguishers should be present so that the maximum distance from the fuel dispensing station to the extinguisher is less than 75 feet.
The nozzle, when the hose is fully extended, will not reach within 5 feet of building openings.
A fire truck should be on site for all locations at which fuel is dispensed to vehicles directly from a tanker truck.
Dispensing Equipment
Only approved hose assemblies should be used to dispense fuel. Requirements should be used as set forth in Underwriters Laboratories UL 330, Standard for Safety for Hose Assemblies for Dispensing Flammable Liquids, which covers hose and hose assemblies, including vapor recovery hose and assemblies for use on dispensing devices for flammable liquids.
Hose length at automotive fuel dispensing facilities should not exceed 18 feet.
Hoses should be checked daily for cuts, cracks, bulges, blisters, flat spots, kinks or worn spots.
Hoses must be equipped with a self-closing nozzle which shall be held open manually while making delivery or by an automatic shut-off nozzle.

Transportation of Fuel to ESC

Regardless of whether the fuel is dispensed through existing gas stations or directly from tanker trunks, ESCs will require access to large emergency fuel supplies. Delivery companies usually obtain gasoline from pre-arranged agreements with large-scale fuel suppliers. If these suppliers

are able to operate during a mass-scale evacuation, it is anticipated that delivery companies will continue to use normal sources for fuel. In this case, the entities involved in operating the ESC (MEMA and the community in which the ESC is located) will be responsible for providing payment to the delivery companies for fuel.

As a next step, MEMA and the communities identified as locations for ESCs should collaborate to determine whether MEMA will pay directly for the fuel, or whether the town will pay for fuel with MEMA providing reimbursement after the evacuation. Additionally, Memoranda of Understanding should be established with delivery companies that designate timing and the entity that will be responsible for payment.

If private fuel services are not available during an evacuation, a key potential source will be the U.S. Department of Energy's planned reserve facility in Massachusetts, designed to address the fuel shortages that occurred immediately after Superstorm Sandy in 2012.[16] The reserve will include 500,000 barrels in the Boston area and an additional 500,000 barrels in the New York metropolitan region. Because the Northeastern United States consumes more than a million barrels of gasoline a day, this reserve will be primarily focused on ensuring that consumers and first responders have access to fuel immediately following an emergency event.[17] While this fuel source will likely provide enough gasoline for use at ESCs, there are currently no procedures for how this fuel will be transferred from the reserve facilities to the ESCs, or how payment for this fuel will occur. Should this fuel reserve or any other government-owned fuel be used, it is anticipated that payment will occur between the ESC and that government entity, with the fuel delivery company not involved. MOUs should still be established with the fuel delivery company to determine payment procedures for the transportation and dispensing of fuel. As a recommended next step, state and federal officials should be contacted to coordinate formal procedures and agreement for how this fuel supply can be utilized by the ESCs.

While the Massachusetts National Guard owns tanker trucks for the regular transportation of fuel for their vehicle fleet and operations, it is likely that during a large-scale evacuation, these tanker trucks will be needed for other purposes and not available in sufficient number for ESCs. In this case, tanker trucks from private companies will need to be utilized.

New England fuel delivery companies that could provide this service are shown in the following figure.

[16] http://www.bostonglobe.com/business/2014/05/02/create-gas-reserves-for-new-england-northeast/BgxwGRCHr0aPijAeV6S4XN/story.html

[17] http://www.reuters.com/article/2014/05/02/us-usa-gasoline-new-york-idUSBREA410CO20140502

Figure 5-3: Fuel Delivery Companies Near Western Massachusetts

Company	Address	Town/City	Phone	Website
Pure Energy Solutions (Diesel only)	7 Ribero Drive	Franklin, MA	508-528-3345	www.pureenergysol.com
Diesel Direct (Diesel only)	74 Maple Street	Stoughton, MA	888-900-7787	www.dieseldirect.com
P J Murphy Transportation Inc.	225 North Lowell Street	Methuen, MA	978-687-3166	www.pjmurphy.8m.com
Volta Oil	One Roberts Road	Plymouth, MA	508-746-1341	www.voltaoil.com
Dennis K. Burke Inc.	284 Eastern Avenue	Chelsea, MA	617-884-7800	www.burkeoil.com
Northern Gas Transport	212 Northern Circle	Lyndonville, VT	802-626-8621	www.northerngastransport.com
O'Connell Fuel Oil – gasoline and diesel			Pittsfield413-499-4800 Northampton 413-586-6800 North Adams 413-663-6588	www.oconnelloil.com/commercial-fuels

The fuel delivery regulations set by the Massachusetts Board of Fire Prevention should be followed for the transportation of flammable and combustible liquids.[18]

[18] 527 CMR 8.00: Transportation of Flammable and Combustible Liquids, http://www.mass.gov/eopss/docs/dfs/osfm/cmr/cmr-secured/527008.pdf

Equipment Needs and Costs

Based on the procedures discussed in this chapter for ensuring safe handling of fire and hazardous materials, as well as the procedures for gasoline fueling and payment, the following equipment should be made available at each ESC:

Figure 5-4: Fire Safety and Hazardous Equipment Needs for ESCs

Item	Estimated Cost
Personal protective equipment: • Heavy duty rubber gloves or work gloves with surgical latex lining • Tyvek standard coveralls or other splash protection • Eye protection (full face protection if skin irritant)	 $10 - $20 pair $5 - $10 each $5 - $15 each
Hazardous materials storage container[19]	$450 each
Hazardous waste storage equipment[20]	$ 75 each
Small spill kit[21]	$120 each
Large spill kit[22]	$900 each
iPad Air 2	$500 each
iPad Cases[23]	$90 each
5 SquareUp credit card readers	No initial cost*
Mobile hotspot[24]	$170 + subscription of $100/month
Wi-Fi signal booster[25]	$100
Fuel gauge meter[26]	$130 each
Industrial 55 gallon garbage bags	

*Card reader cost included as percentage of each transaction (2.75% to 3.5%, depending on plan)

[19] Compact flammable storage cabinet: http://www.globalindustrial.com/p/storage/flammable-osha-cabinets/flammable/compact-flammable-storage-cabinet-24-gallon-capacity

[20] 55-gallon container: http://www.uline.com/Product/Detail/S-9945BLU/Drums/55-Gallon-Blue-Open-Top-Plastic-Drum-with-Lid

[21] 5-gallon portable spill kit: http://www.grainger.com/product/ENPAC-Spill-Kit-3TYR1

[22] 62-gallon spill kit: http://www.grainger.com/product/6XGJ3?cm

[23] Otterbox Defender Series Case: http://www.otterbox.com/Defender-Series-Case-for-iPad-Air-2/77-50969,default,pd.html

[24] Verizon mobile hot-spot: http://www.t-mobile.com/internet-devices/samsung-lte-mobile-hotspot-pro.html

[25] Wi-Fi Repeater and Range Extender: http://www.bestbuy.com/site/amped-wireless-high-power-wireless-n-600mw-gigabit-dual-band-repeater-and-range-extender/5471152.p

[26] http://www.grainger.com/product/33TN31

Assumptions Regarding Private Vehicle Fueling at ESCs

- Should tanker trucks be used to directly fuel cars, an iPad or other tablet device equipped with a credit card reader may be used to allow for convenient portable payment. The use of electronic devices around fuel is a common concern around pump stations. However, there are no documented cases of cell phone or tablet use creating a gas station fire. It is assumed that these devices do not present a risk.
- Tanker trucks will be equipped with all state-required safety devices, including vapor collectors and approved fuel hoses.
- While a variety of hazardous materials are regularly transported along common state evacuation routes, MassDOT will restrict the transportation of trucks carrying these materials during an evacuation. The Federal Highway Administration, in its Evacuation Primer, recommends that state DOT's "plan for shut down of highway work zones, non-essential commercial vehicle traffic including oversize loads, hazardous materials, etc."[27] For this reason, hazardous materials, other than those listed in this section, will not present a concern.
- If a hazardous material spill occurs on an evacuation route (away from the ESC), mobile services will be necessary to conduct cleanup. These services will be coordinated with MassDOT and other state evacuation personnel.
- Local, state, and Federal emergency response vehicles will not fuel at ESCs, but rather utilize fuel at other storage facilities that are established by state and local evacuation plans.

Recommended Next Steps (Summary)

Following are recommended next steps related to continue advancing fire safety and hazardous materials handling at ESCs:

1. Determine government entity or entities with authority/jurisdiction to enter into MOUs for each ESC location.
2. Develop and sign MOUs with existing gas station operators in strategic locations as part of an ESC group plan.
3. Determine how back-up electric power can be provided at strategically located gas stations.
4. Develop and sign MOUs with tanker companies.
5. Develop and sign MOUs with hazardous waste haulers.
6. Determine ability to access federal gasoline reserve located in Massachusetts for ESC use.
7. Acquire or plan for to buy necessary fueling and hazardous materials handling equipment.
8. Provide both diesel and gasoline for evacuees.
9. Provide enough staff at fueling stations so that evacuees do not fuel vehicles themselves.
10. Ensure ESC locations are integrated into Lantern Live, the Department of Energy's mobile app.

[27] Federal Highway Administration, http://ops.fhwa.dot.gov/publications/evac_primer/primer.pdf

THIS PAGE INTENTIONALLY BLANK

6. Evacuation Service Center Criteria Summary

The figure below summarizes the minimum and ideal criteria for Evacuation Service Centers.

Figure 6-1: Location: Area Surrounding ESC		
Criteria	**Minimum**	**Ideal**
Route to ESC from evacuation route is accessible to emergency vehicles, delivery vehicles, and tankers	• Minimum turning radii of 27' • Minimum clearance of 13' 8"	• Minimum turning radii of 35' • Minimum clearance of 14' • Private service entrance for loading / unloading at ESC
Road capacity that can accommodate expected use	• Minimum traffic volumes indicated in capacities section	• Ideal traffic volumes indicated in capacities section
Traffic flow routing	• One road to and from the evacuation route	• Separate roads to and from the evacuation route
Distance from evacuation route	• Maximum 20 miles	• Maximum 10 miles
Distance from shelters and private service providers	• Minimum 5 miles	• Minimum 10 miles
Near grocery stores and other food services	• Maximum 15 miles	• Maximum 5 miles
Not near a hospital or emergency facility such as a fire or police station	• Minimum 5 miles	• Minimum 15 miles
Not located in a flood plain or susceptible to localized flooding	• Outside of 100-year floodplain, no localized flooding in past 5 years	• Outside of 500-year floodplain, no localized flooding in past 20 years
Facility: Capabilities and Resources		
Criteria	**Minimum**	**Ideal**
Existing personnel that are associated with events at facility	• None	• Event parking staff
Nearby helicopter landing site	• None	• Available within 1 mile
Backup electrical generator	• Able to provide backup power to pumps, registers, lighting	• Able to power entire building
Parking	• Accommodation for minimum number of cars indicated in capacities section (300 square feet per car) • At least 50% of parking areas paved	• Accommodation for ideal number of cars indicated in Capacities Section (300 square feet per car) • 100% of parking areas paved
Restrooms	• Space available for portable toilets – minimum 4 toilets	• Toilets in facility as per Ideal Capabilities Section
Food service areas, including refrigerators	• None	• Available
Suitable area for pet walking	• 1,000 square feet of grass	• 5,000 square feet of grass
Automobile minor repair area	• 5,000 square feet of space	• 5,000 square feet of space
ADA compliant facility, including parking areas	• Required	• Required
Utility / storage area for car repair materials and hazardous waste storage	• 20 square feet of space that meets requirements indicated in Task 5	• 100 square feet of space that meets requirements indicated in Task 5

Figure 6-2: Additional Requirements - ESC Locations w/o Existing Gas Station Facilities (Tankers Required)

Criteria	Minimum	Ideal
Existing staff to pump gasoline from tankers	• 1 per tanker truck	• 1 per pump on tanker truck, with shifts allowing all staff to break every 4 hours
Space for tanker trucks	• 5000 square feet per truck	• 10,000 square feet per truck
Number of tanker trucks	• Minimum number of pumps indicated in capacities section	• Ideal number of pumps indicated in capacities section

Figure 6-3: Additional Requirements - ESC Locations with Existing Gas Station Facilities

Criteria	Minimum	Ideal
Distance from existing fuel facilities	• Maximum distance of 3 miles	• Maximum distance of 1 mile
Number of gasoline pumping stations available	• Minimum number of pumps indicated in capacities section	• Ideal number of pumps indicated in capacities section
Existing staff to pump gasoline from existing pumps	• 1 staff person for every 3 pumps	• 1 staff person for every pump

7. Potential Evacuation Service Center Locations in Western Massachusetts

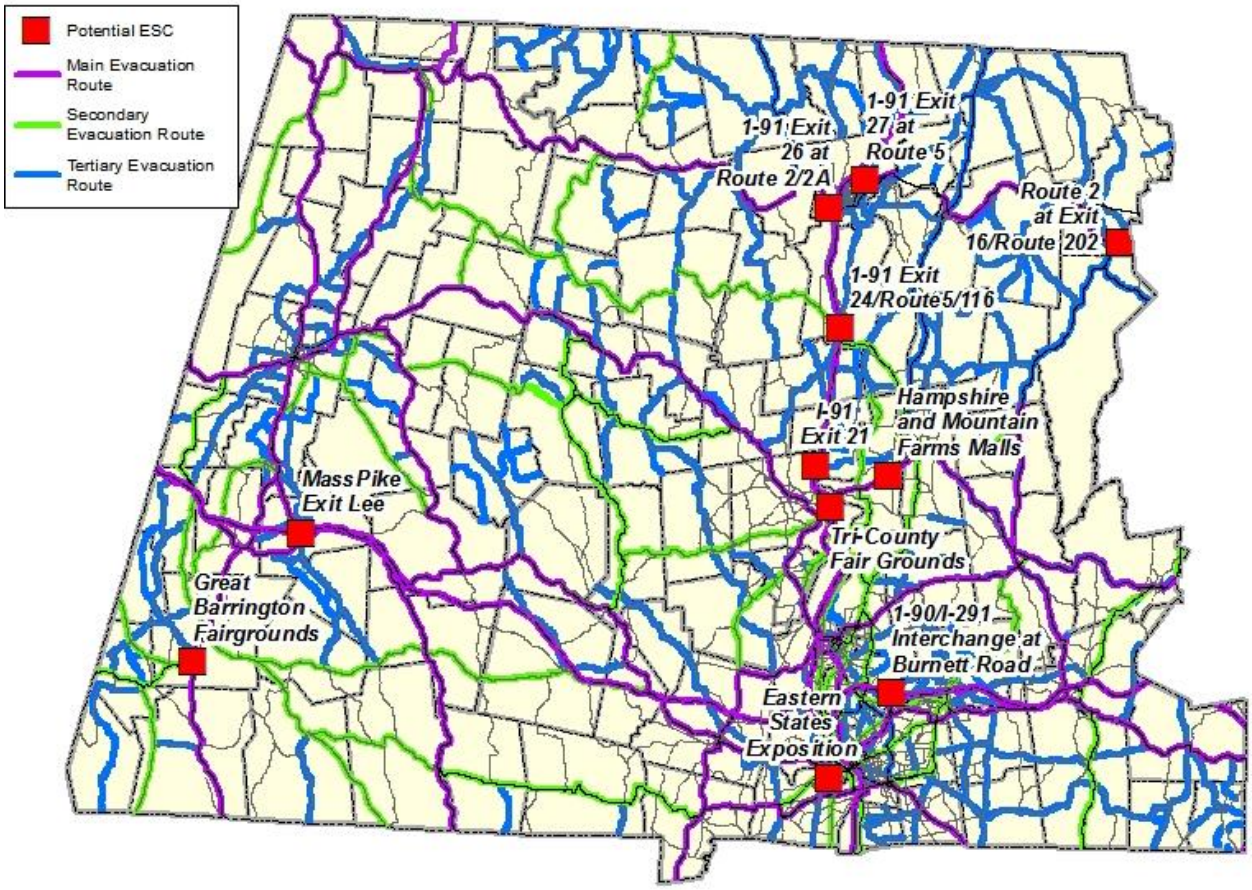
The following locations were identified by planning staff and reviewed by the Pan Flu Planning Subcommittee with respect to their potential to satisfy the desired characteristics of an Evacuation Service Center for Western Massachusetts, as described in the prior chapters.

This list was developed for purposes of discussion and information only. Potential sites were chosen so that a preliminary screening exercise could be conducted to further identify issues and information that will be important to the future selection of actual ESC sites. No property owners or municipal offices were contacted to develop this list, and these sites should not in any way be considered to be recommended or prioritized as ESC sites.

Figure 7-1: List of Potential Evacuation Service Center Locations

Berkshire County
1. Lee: I-90 Exit 2 at Route 20/102, Water Street **2. Great Barrington: Route 7 Fairgrounds**
Franklin County
3. Orange: Route 2 at Exit 16/Route 202 **4. South Deerfield: I-91 Exit 24/Routes 5/116** **5. Greenfield: I-91 Exit 27 at Route 5** **6. Greenfield: I-91 Exit 26 at Routes 2/2A**
Hampden County
7. West Springfield: Eastern States Exposition (Big E) at Memorial Ave/Route 147 **8. Chicopee: I-90/I-291 interchange at Burnett Road**
Hampshire County
9. Hadley: Hampshire and Mountain Farms Malls, Route 9 at Maple St **10. Hatfield: I-91 Exit 21 at Route 5** **11. Northampton: Three County Fair Grounds**

Figure 7-2: Map of Potential Evacuation Service Center Locations and Evacuation Routes



Appendix 1: Evacuation Service Center Data Sheet Check List

To better understand how evaluation of potential ESC sites with respect to the established criteria might proceed, a detailed data sheet in a “check list” format was prepared that could be used for office and field data gathering for each potential ESC site. This draft data sheet template is presented as Appendix 1.

THIS PAGE INTENTIONALLY BLANK

Evacuation Service Center Data Sheet Check List

SECTION 1: SITE LOCATION AND CONTACT INFORMATION

SITE NAME:	
STREET ADDRESS:	
CROSS STREET/LANDMARK:	
CITY/MA/ZIP:	
MAILING ADDRESS (if different):	

FACILITY CONTACTS	
Principle Contact (Site Access)	
Name/Title:	
Email:	
Daytime Phone:	
Alt. Phone:	
After Hours:	
Contact (Security)	
Name/Title:	
Email:	
Daytime Phone:	
Alt. Phone:	
After Hours:	
Contact (Maintenance)	
Name/Title:	
Email:	
Daytime Phone:	
Alt. Phone:	
After Hours:	
Contact (Kitchen/Food/Other)	
Name/Title:	
Email:	
Daytime Phone:	
Alt. Phone:	
After Hours:	

Evacuation Service Center Data Sheet Check List

SECTION 2: SITE ACCESSIBILITY AND PROXIMITY TO SUPPORTING SERVICES

Criteria	Minimum	Preferred	Actual
Distance from nearest evacuation route	20 mi	10 mi	
Distance from evacuee shelters (public and private)	10 mi	5 mi	
Proximity to grocery store(s), other food services	15 mi	5 mi	
Proximity to hospital or emergency facility (i.e., fire or police station(s))	15 mi	5 mi	
Vehicle access to/from designated evacuation route supports emergency vehicles, delivery vehicles, tankers	Turning radii 27-35’	Turning radii >35’	
Vertical clearance to/from evacuation route	13’8” to 14’	>14’	
Service entrance	none	Has private entrance	
Access road vehicle capacity (per “Capacities” section)	Meets minimum	Meets or exceeds “ideal”	
Traffic flow routing to evacuation route	1 road to/from	Separate roads to/from	
Proximity to FEMA flood zones or known localized flooding	Outside 100-yr zone; no floods past 5 yrs	Outside 500-yr flood zone; no floods past 20 yrs	
Helicopter landing site	None	On-site or within 1 mi	

SECTION 3: VEHICLES AND PARKING

Criteria	Minimum	Preferred	Actual
Vehicle parking capacity	300 sf per vehicle for **minimum #** cars per Task 3	300 sf per vehicle for **ideal #** cars per Task 3	
Pavement coverage of all parking areas	50%	100%	
ADA compliant parking areas	Required	Required	
Area available for minor vehicle repairs (outdoor)	5,000 sf	10,000 sf	
Utility and storage area for vehicle repair materials, supplies, equipment	20 sf compliant with Task 5	100 sf compliant with Task 5	
Personnel available associated with on-site events	None	Event parking staff	

Evacuation Service Center Data Sheet Check List

3.1 Parking Lot Descriptions: List any available parking lots on site (e.g. Parking Lot 1, Parking Lot 2)

Parking Lot Name/Descr.	# of Spaces	# Disability Accessible Spaces	Type of Surface	Trucks OK?
				☐
				☐
				☐
				☐

SECTION 4: VEHICLE FUELING AND SERVICING

Fueling-related Criteria	Minimum	Preferred	Actual
Number of gasoline pumping stations available	Min # per "Capacities"	Ideal # per "Capacities"	
Number of diesel pumping stations	TBD	TBD	
On-site staff to pump gasoline/diesel from existing pumps (into vehicles?)	1 person per 3 pumps	1 person per pump	
Space for tanker truck delivery, queuing	5,000 sf per truck	10,000 sf per truck	
Number of tanker trucks accommodated	Min # per "Capacities"	Ideal # per "Capacities"	
Staff on-site to pump fuel from tanker trucks	1 per tanker	1 per pump on tanker, sufficient to allow shift break every 4 hrs	
Distance from existing petroleum fuel supply facilities	3 mi or less	1 mile or less	
Hazardous material holding/storage (petroleum products, anti-freeze, etc.)	TBD	TBD	

Evacuation Service Center Data Sheet Check List

SECTION 5: SANITATION

Potable water source: ☐ City ☐ Small Public Water System ☐ Private Well

Drinking water distribution: ☐ Drinking fountains ☐ Rest room sinks ☐ Exterior spigot(s)

Solid waste (trash) collection service/company: _____

Pick up frequency: _____

Waste water: ☐ Sewer ☐ Aerobic Onsite Wastewater ☐ Septic Onsite

If on-site, estimated/actual capacity of tanks and system processing (daily)

_____

Facility	**Men**	**Women**	**Unisex**	**Disability Accessible (M/W)**	**Hot Water?**
# Toilets*					
# Diaper Changing Stations					
# Sinks					

**Minimum is 4 toilets (inside a building or outside "porta-johns") per site;*

Preferred is more than 4 toilets inside building

SECTION 5: OPEN SPACES AND RECREATION FACILITIES/FEATURES

Exterior Space	**Size/#**	**Fenced?**	**Notes**
Picnic grounds		☐	
Picnic benches		☐	
Pet walk/exercise area*		☐	
Athletic field		☐	
Playground		☐	
Other			

*1,000 sf min; >5,000 sf preferred

Evacuation Service Center Data Sheet Check List

SECTION 6: ADA ACCESSIBILITY

	Min/Max	Yes	No	N/A	Actual
1. Is there at least one parking space that is van accessible for every 25 spaces?	9 ft wide 18 ft long 8 ft aisle	☐	☐	☐	
2. Is an accessible egress provided from accessible parking spaces to an accessible entrance to the building?	36" wide at a single point/ 48" wide	☐	☐	☐	
3. If egress route(s) have grating, are grate openings perpendicular to the path of travel?	No greater than ½" wide	☐	☐	☐	
4. Does the building exterior have accessible ramps?	48" min. width/ 1:50 or 2% max slope/ Edge protection/ 2 handrails 34 – 38" above ramp surface	☐	☐	☐	
5. Does the building exterior have accessible doorways?	Min 35" wide	☐	☐	☐	
6. Does the building exterior have auto-doors or appropriate door handles?		☐	☐	☐	
7. Are bathroom facilities ADA accessible?		☐	☐	☐	
8. Are all services accessible from the entry level?		☐	☐	☐	

Evacuation Service Center Data Sheet Check List

SECTION 7: EXTERIOR SITE SECURITY

	Yes	No	N/A	Notes
1. Sufficient external security lighting?	☐	☐	☐	
2. Can exterior lights be powered by on-site generator?	☐	☐	☐	
3. Facility grounds securable (gates, fences)?	☐	☐	☐	
4. Adequate ingress/egress for cars and trucks?	☐	☐	☐	
5. External electrical outlets?	☐	☐	☐	
6. Full-time emergency vehicle access (police, fire, ambulance)?	☐	☐	☐	

SECTION 8: STRUCTURE(S) CHARACTERISTICS

8.1 STRUCTURE TYPE

☐ Wood Frame
☐ Metal/Steel Frame
☐ Concrete (Reinforced)
☐ Prefabricated
☐ Reinforced Masonry (Brick)
☐ Unreinforced Masonry
☐ Trailer
☐ Other _____

Construction Year: _____ ☐ Earthquake Retrofit? Date of last retrofit? _____

☐ Loading Dock? - Description:

_____

_____

☐ Staging Area? - Description:

_____

_____

8.2 BUILDING INTERIOR FEATURES

Attach a space diagram and photographs for each of the following (if applicable):

- ☐ Food/water service and dining area
- ☐ First Aid Station
- ☐ Public information desk
- ☐ Public computer access area
- ☐ Battery charging for phones, digital devices
- ☐ Bathrooms
- ☐ Isolation area
- ☐ Office
- ☐ Staff break area

8.3 BUILDING FURNITURE

Furniture	Description/Quantity/Size
Tables	
Chairs	
Cafeteria Tables/Benches	
Portable Room Dividers	

8.4 FOOD PREPARATION FACILITIES

☐ None on site ☐ Warming oven kitchen ☐ Full-service kitchen (capacity = _____ meals/day)

☐ Kitchen with valid health permit ☐ Kitchen without valid health permit

☐ Facility representative required on site when using kitchen?

☐ Refrigeration? Capacity _____ sq ft

8.5 BUILDING SECURITY

Building Security	Yes	No	N/A
1. Interior security lighting?	☐	☐	☐
2. Secure access to critical areas?	☐	☐	☐
3. Security alarm system?	☐	☐	☐
3a. Automatic alert to Police Department?	☐	☐	☐
4. Fire alarm system?	☐	☐	☐
4a. Automatic?	☐	☐	☐
4b. Manual (pull station)?	☐	☐	☐
4c. Automatic alert to Fire Department?	☐	☐	☐
5. Sprinkler system?	☐	☐	☐
6. Fire extinguishers?	☐	☐	☐

Evacuation Service Center Data Sheet Check List

SECTION 9: POWER AND UTILITIES

Usage	Utility Provider	Energy Source
Heating		☐ Electric ☐ Natural Gas ☐ Propane ☐ Fuel Oil
Cooling		☐ Electric ☐ Natural Gas ☐ Propane ☐ Fuel Oil
Cooking		☐ Electric ☐ Natural Gas ☐ Propane ☐ Fuel Oil
Lighting		
Water		

On-site Emergency Generators
Type (fixed/portable): _____
Fuel type(s): _____ (include solar, if any)
Capacity: Fuel: _____ Watts: _____
Operating time: _____ hours at rated capacity
What building areas and/or equipment does the generator power?_____ _____ ***Minimum:*** *Can run fuel pumps, cash registers/payment systems, lighting* ***Preferred:*** *Can power entire building*

Evacuation Service Center Data Sheet Check List

SECTION 10: COMMUNICATIONS

Item	Location	#	Phone Number
Office Phone			
Pay Phone			
Text Telephone (TTY) Phone			
Fax			
Network/Internet Access			
PA System			
Audio Visual Equipment			

SECTION 11: STAFF

Type of Available Staff	Yes	No	If yes, how many?	Source/Contact
Parking attendants	☐	☐		☐ Staff ☐ Contract Provider: _____ Phone number: _____
Kitchen staff	☐	☐		☐ Staff ☐ Contract Provider: _____ Phone number: _____
Custodians/maintenance	☐	☐		☐ Staff ☐ Contract Provider: _____ Phone number: _____
Security personnel	☐	☐		☐ Staff ☐ Contract Provider: _____ Phone number: _____
Gas pump attendants	☐	☐		☐ Staff

Evacuation Service Center Data Sheet Check List

Type of Available Staff	Yes	No	If yes, how many?	Source/Contact
				☐ Contract Provider: _____ Phone number: _____
Other: _____	☐	☐		☐ Staff ☐ Contract Provider: _____ Phone number: _____

SECTION 12: ADDITIONAL COMMENTS/NOTES

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix 2: Brief Detail Data Sheets for Potential Evacuee Service Center Sites

This appendix presents brief detail sheets for the potential evacuee service center sites. This list of potential sites was developed for purposes of discussion and information only. Potential sites were chosen so that a preliminary screening exercise could be conducted to further identify issues and information that will be important to the future selection of actual ESC sites and use of the data sheet check list presented in Appendix 1.

No property owners or municipal offices were contacted to develop this list, and these sites should not in any way be considered to be recommended or prioritized as ESC sites.

Potential Site #1—Lee: Massachusetts Turnpike Exit 2

SITE NAME:	Lee MassPike Exit (Reference #1)
STREET ADDRESS:	Exit 2 MassPike
CROSS ST/LANDMARK:	Rt 20, 102 and Water Street
CITY/MA/ZIP:	Lee, MA
COUNTY:	Berkshire

SUMMARY

This busy intersection is serviced by 4 traffic signals and the roads are in good condition. During evacuations from the East, this site is the first exit on the MassPike in Berkshire County. It is also the likely access point for evacuations from the south on Route 7 and the north on Route 20 onto the MassPike. The intersection is serviced by multiple gas stations, food service businesses and is in close proximity to the Big Y Foods and Lee Outlet Mall which both have large, paved parking lots and offer food services.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	At the intersection of several evacuation routes, Rt 90, 20 and 102.
Traffic flow, routing, access issues	Largest, Berkshire full service MassPike Exit. Intersection is serviced by 4 traffic signals.
Vehicle fueling: existing pumping capabilities	2 gas stations (8 gas/2 diesel; 8 gas/2 diesel) in close proximity to the MassPike Exit with 2 more stations (4 gas/2 diesel; 8 gas/2 diesel) nearby.
Vehicle fueling: tanker accommodation	Lee Outlet Mall could serve as the center for this ESC as it provides a large parking lot, a second, rear entrance for service vehicles, a good traffic flow for tanker operations. The Manager of Lee Outlet Mall has expressed willingness to cooperate in the event of an emergency as has the Lee Emergency Management Director. Also nearby is a large Big Y parking lot that could be used for a second tanker.
Parking capacity	285 at Big Y, 1040 at the Lee Outlets
Parking area(s) paved coverage	All parking areas are paved.
Structures	The Lee Outlet Mall has multiple buildings and could accommodate a large number of people in an emergency.
Toilets, washroom facilities	20 - 30 or more toilets/sinks, many of them ADA compliant
Food service	Large Food Court at the Lee Outlet Mall and additional restaurants and grocery stores nearby.
Picnic and recreation area	Large grassy areas surrounding the parking lot, but no picnic tables or recreational facilities noted.

Pet exercise area	Large grassy areas surrounding the parking lot.
Proximity to evacuee shelters	No known designated regional shelters in this area. Nearest one would likely be Pittsfield or Great Barrington.
Grocery stores/restaurants/ other retail food	There are more than 12 nearby food service establishments including a Big Y grocery store, McDonalds, Friendlies and Dunkin Donuts.
Proximity to police (local or state), fire, EMS services	Lee Police station within 1500 meters.
Proximity to medical care services	Lee Family Practice with a Berkshire Health System Lab within 2250 meters
Proximity to helicopter landing site	17.5 kilometers to Pittsfield Municipal Airport
Proximity to FEMA flood zones	The Big Y site is in the floodplain of the Housatonic and may be unusable depending on the nature of the event.

Image 1: Locus Map

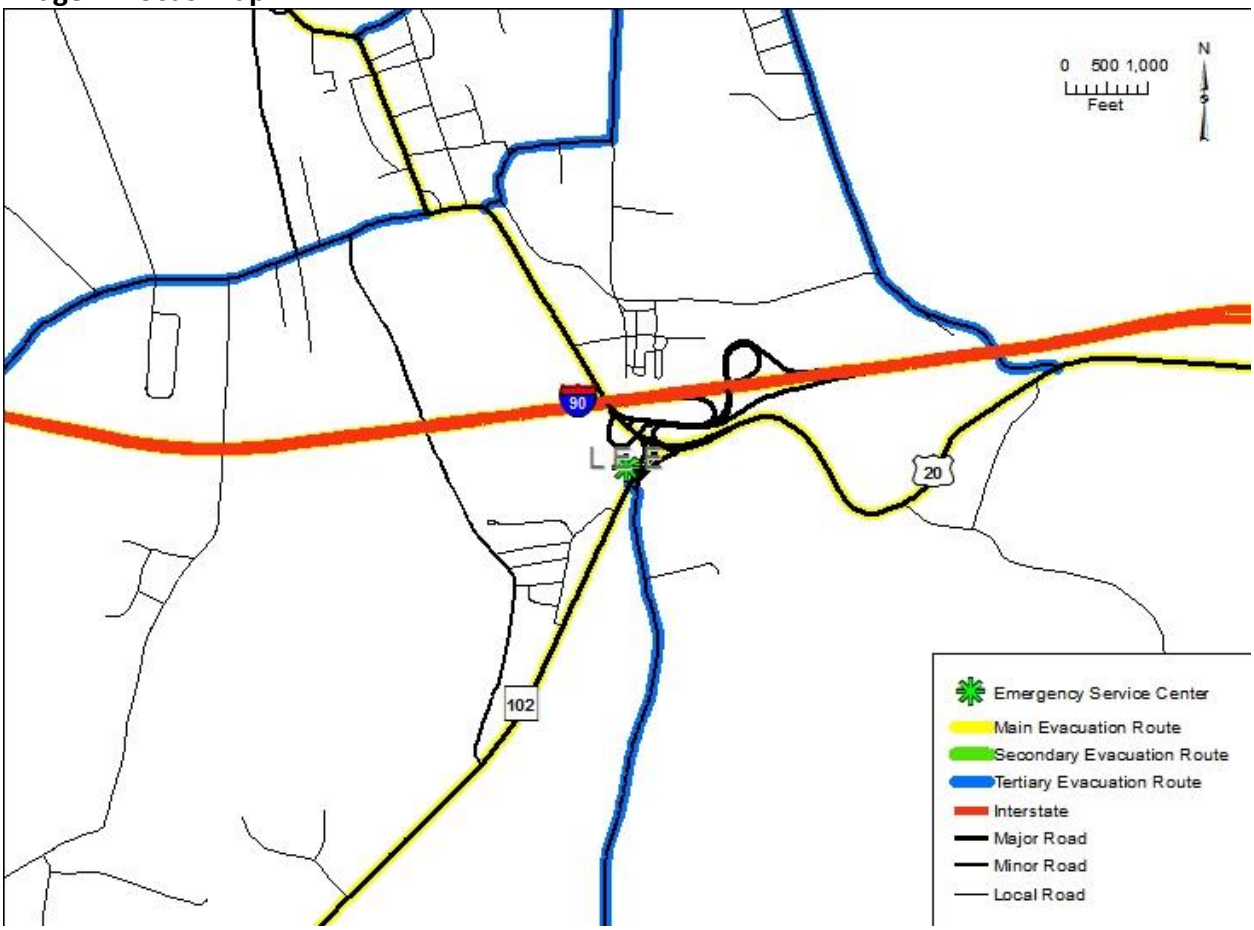
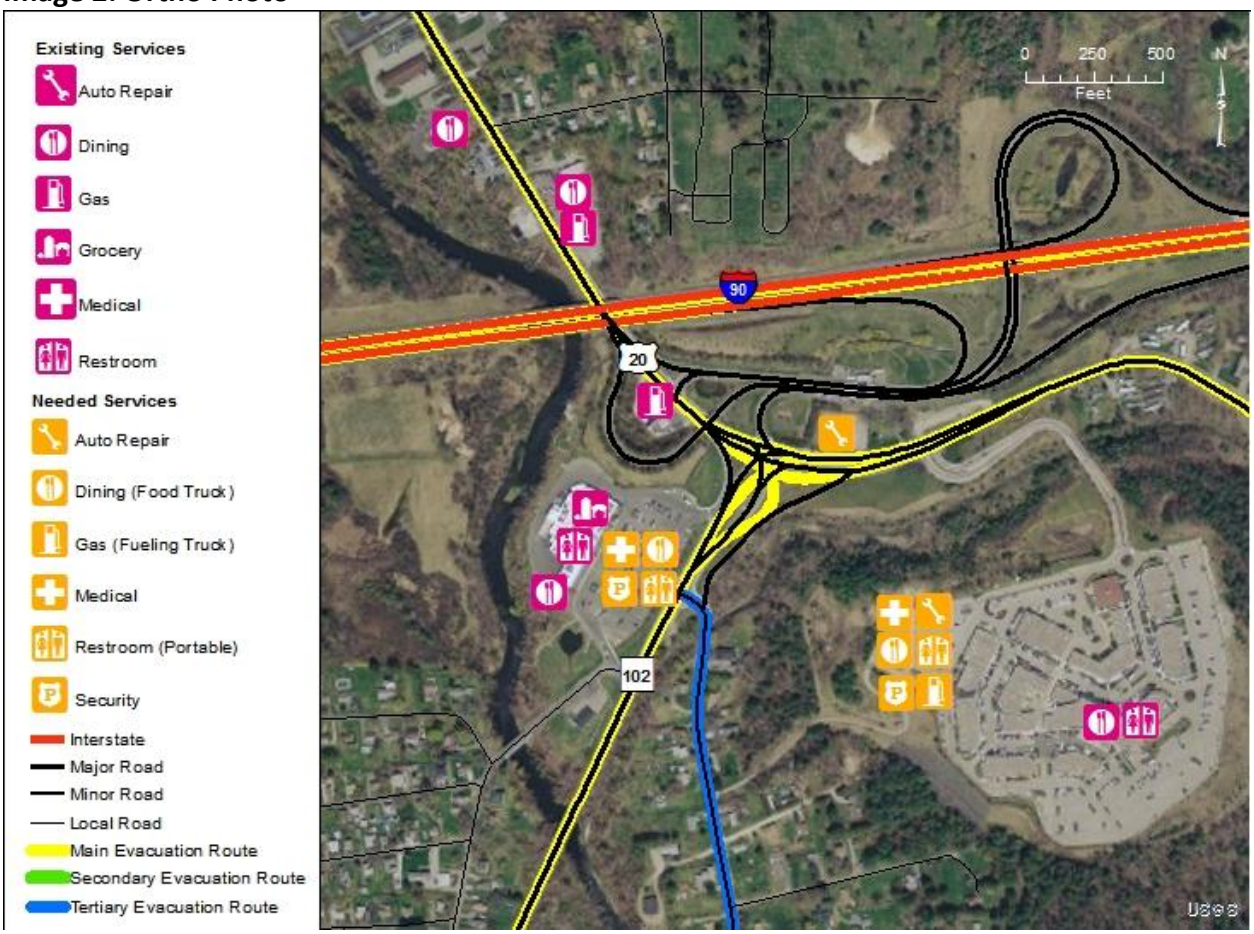


Image 2: Ortho Photo



Although a busy intersection, the lanes are wide and well-marked and signals are timed to keep traffic moving on and off the Mass Pike. Additional public safety personnel will be needed to keep traffic flowing as the existing gas stations develop gas lines that back-up onto the streets.

Potential Site #2—Great Barrington: Fairgrounds

SITE NAME:	Great Barrington Fairgrounds (Reference #2)
STREET ADDRESS:	739 South Main – Route 7 south
CROSS ST/LANDMARK:	Rt 7 and Rt 23 West
CITY/MA/ZIP:	Great Barrington, MA
COUNTY:	Berkshire

SUMMARY

This site would be useful for evacuations that involved Route 7 north out of Connecticut and Route 23 west from New York State. The site is a mostly open field and has recently been used as a large Farmer's Market. Though the parking area is unpaved, the site could easily accommodate multiple tankers and vehicles if weather conditions permit. Usefulness may be limited during times of flooding, mud, snow or high grass. The utility of the site is enhanced by the proximity of the Big Y and Guido's food grocery stores and their accompanying paved parking lots across the street. Using this site will likely not require any existing business or services to close during the operation. The intersection at the Big Y and Fairgrounds is signaled which would help to manage traffic in the area.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	On the Rt. 7 evacuation route and near the Rt. 23 route.
Traffic flow, routing, access issues	Access at the site is limited to north/south, though the Route 23 intersection is within 1000 meters.
Vehicle fueling: existing pumping capabilities	1 gas station in close proximity (8 gas pumps); 4 gas stations to the north along Rt 7 (8 gas/2 diesel; 8 gas/2 diesel; 4 gas; 8 gas); and 2 (4 gas/2 diesel with generator; 4 gas/2 diesel) to the south in Sheffield on Rt 7.
Vehicle fueling: tanker accommodation	Space for multiple tankers, but unpaved.
Parking capacity	400 at Fairgrounds, 200 at Big Y, 80 at Guidos
Parking area(s) pavement coverage	All parking areas at the Fairground are unpaved with some gravel drives and parking. The neighboring lots are all paved.
Structures	The site as a large but mostly unused outdoor stadium.
Toilets, washroom facilities	There are likely no usable toilets on the site. Neighboring businesses likely have 4-8 toilets/sinks; most are handicapped accessible.
Food service	No food service at the site.
Picnic and recreation area	Large picnic area possible using the viewing stands.
Pet exercise area	Large grassy areas available for pets.

Proximity to evacuee shelters	The regional shelter is designated at Bard College at Simon's Rock which is about 3,750 meters from this site.
Grocery stores/restaurants/ other retail food	Nearby food service includes The Great Barrington Bagel Company, Big Y, Guidos (take out only) and Bizalion's French Café. An additional 20 or 30 restaurants are available in the Great Barrington area ranging from Dunkin Donuts to high end restaurants.
Proximity to police (local or state), fire, EMS services	Great Barrington Police station within 1000 meters
Proximity to medical care services	Fairview Hospital within 2000 meters. East Mountain Medical is within 250 meters.
Proximity to helicopter landing site	Great Barrington Airport within 4000 meters, however a landing site could be delineated at the fairgrounds.
Proximity to FEMA flood zones	Most of the site is within flood plain.

Image 1: Locus Map

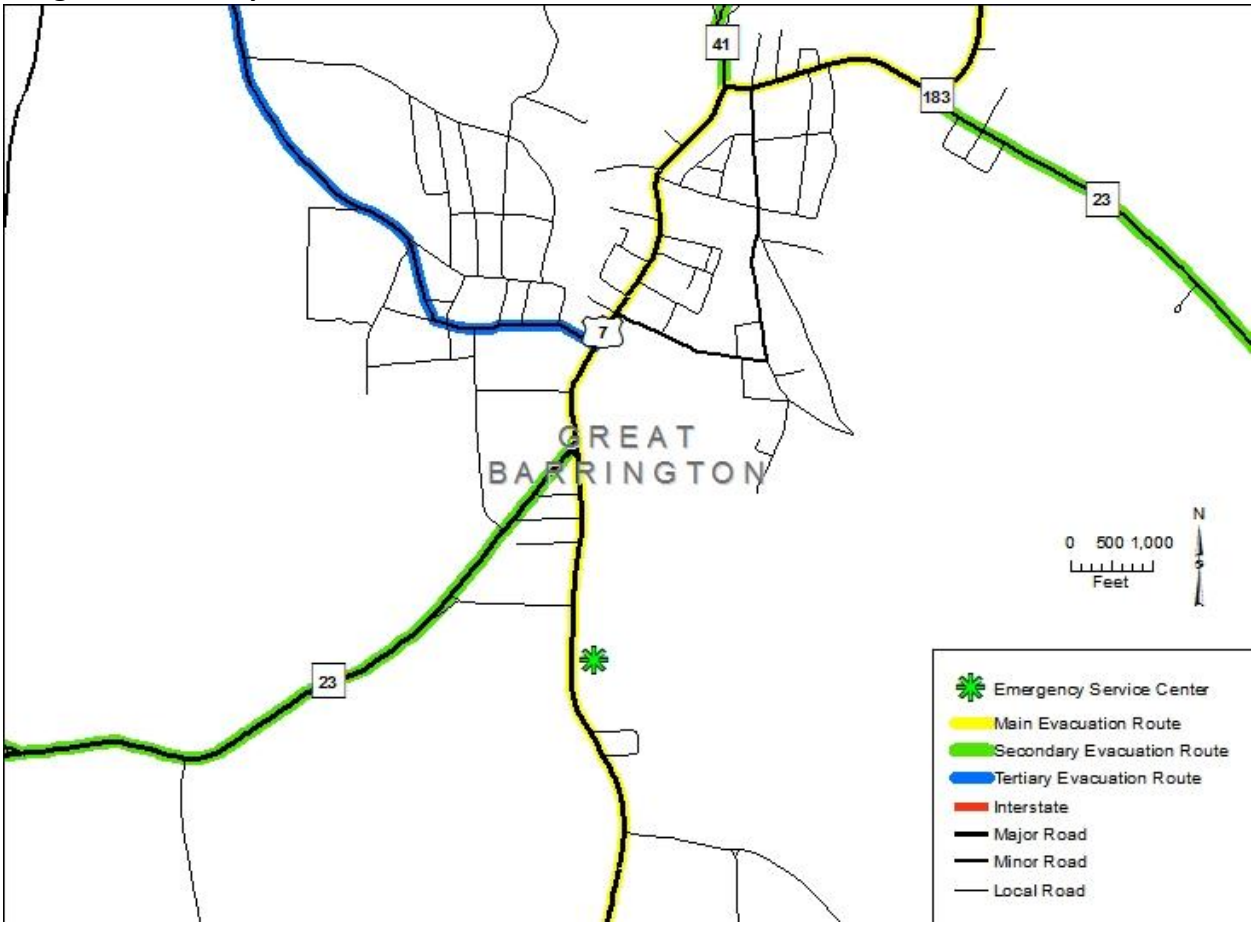


Image 2: Ortho Photo

During dry weather, this site has the advantage of being on a major evacuation route and its use would not close any existing business, though all services would have to be brought in.

Potential Site #3—Orange: Route 2 at Exit 16/Route 202

SITE NAME:	Orange
STREET ADDRESS:	Exit 16 on Route 2
CROSS ST/LANDMARK:	Route 202 (Daniel Shays Highway)
CITY/MA/ZIP:	Orange, MA
COUNTY:	Franklin

SUMMARY

This is one of the few exits on Route 2 that has services for travelers. The area serviced by two gas stations, one of which also has a Dunkin Donuts.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	At the intersection of several evacuation routes, Route 2 (main) and Route 202 (tertiary).
Traffic flow, routing, access issues	No traffic signals in area. Services would be located on both sides of Rte 202; possible traffic bottlenecks.
Vehicle fueling: existing pumping capabilities	2 gas stations in close proximity. Total number of pumps not known at this time.
Vehicle fueling: tanker accommodation	Nearby large lots are located at an auto repair facility, a Jehovah's Witness facility, and a Travel Inn motel, which could potentially be used for tanker fueling.
Parking capacity	Travel Inn: 25 spaces. Jehovah's Witness:~60 spaces. Spaces not delineated at gas stations, but there are large open areas on both properties.
Parking area(s) pavement coverage	All parking areas are paved.
Structures	There is limited indoor space in the structures in this area.
Toilets, washroom facilities	N/A
Food service	Dunkin Donuts. Other food would have to be brought in.
Picnic and recreation area	Limited. Some grassy areas surrounding gas stations and motel. No picnic tables of other recreation facilities.
Pet exercise area	See picnic area above.
Proximity to evacuee shelters	The Orange Armory has tentatively been designated as a regional shelter for Franklin County (located 2.4 miles away).
Proximity to police (local or state), fire, EMS services	Orange Fire Station located 2.5 miles away.
Proximity to medical care services	Community Health Center of Franklin County located 3.25 miles away.
Proximity to helicopter landing	Orange Municipal Airport located on other side of Route 2.
Proximity to FEMA flood zones	Not located in a FEMA flood zone

Image 1: Locus Map

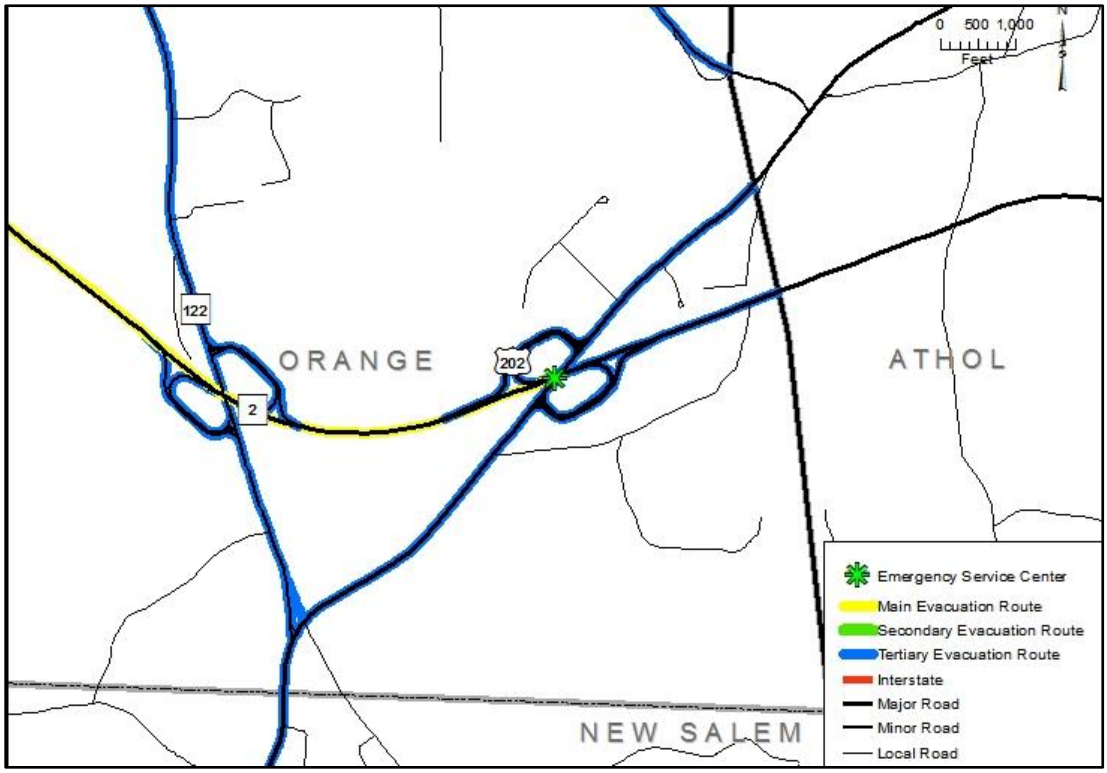


Image 2: Ortho Photo

Potential Site #4—South Deerfield: I-91 Exit 24 at Routes 5 and 116

SITE NAME:	South Deerfield
STREET ADDRESS:	Exit 24 on I-91
CROSS ST/LANDMARK:	Routes 5/10 and Route 116
CITY/MA/ZIP:	Deerfield, MA
COUNTY:	Franklin

SUMMARY

This busy intersection is serviced by two traffic signals and the roads are in good condition. During evacuations from the South, this site is the first exit on I-91 in Franklin County. The intersection is serviced by multiple gas stations, food service businesses and is in close proximity to a Red Roof Inn, the Yankee Candle flagship store, and the South Deerfield/Whately Park & Ride Lot which all have large, paved parking lots.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	At the intersection of several evacuation routes, I-91 (main), Routes 5/10 (secondary) and Route 116 (secondary).
Traffic flow, routing, access issues	Very busy intersection and roadways in all directions. Traffic would have to cross the busy roadway, which could result in bottlenecks.
Vehicle fueling: existing pumping capabilities	2 gas stations in close proximity. Irving 1 on Route 116 has 8 pumps (no diesel). Irving 2 on Routes 5/10 has 12 gasoline pumps and 2 diesel pumps.
Vehicle fueling: tanker accommodation	Yankee Candle and/or the Red Roof Inn could potentially serve as locations for vehicle fueling from tankers.
Parking capacity	Yankee Candle property is over 9 acres with ample parking. The Subway/Irving gas station has 38 spaces and the Park & Ride lot has 54 spaces. The Red Roof Inn has 200 spaces.
Parking area(s) pavement coverage	All parking areas are paved. The Park & Ride lot has pervious pavers in some areas.
Structures	The Yankee Candle Store has multiple buildings and could potentially accommodate a large number of people.
Toilets, washroom facilities	N/A
Food service	Chandler's Restaurant at Yankee Candle, Subway at Irving gas station next to Park &Ride. Circle K Convenience Stores also located at both Irving gas stations.
Picnic and recreation area	Large grassy areas surrounding the Subway/Irving gas station parking lot and nearby Park & Ride. There are 6 picnic tables next to the Subway.

Pet exercise area	Multiple grassy areas surrounding Subway/Irving gas station so that pet exercise area could be separate from other recreation and food service areas. However, this area is surrounded by wetlands and disposal of pet waste might be an environmental issue.
Proximity to evacuee shelters	No known designated regional shelters in this area.
Grocery stores/restaurants/ other retail food	Chandler's Restaurant at Yankee Candle, Subway and Dunkin Donuts at Irving gas station next to Park &Ride. Circle K Convenience Stores also located at both Irving gas stations. Other restaurants are available in downtown So. Deerfield (0.6 miles) and out Route 116 (1.5+ miles)
Proximity to police (local or state), fire, EMS services	South Deerfield Fire Station 0.9 miles away. South County EMS services also located there.
Proximity to medical care services	Deerfield Medical Associates located across Route 5 from the Red Roof Inn. Baystate Medical Practices and Deerfield Pediatrics located in office building across from Park & Ride lot. Deerfield EMS is located at nearby Fire Station.
Proximity to helicopter landing site	Ball fields behind nearby Elementary School (1 mile).
Proximity to FEMA flood zones	This area is not in a FEMA flood zone, but is surrounded by wetlands and Routes 5/10 further north are subject to flooding and may be unusable depending on the nature of the event.

Notes: There is also a stand-alone Bank of America ATM at the Irving gas station on Route 116.

Image 1: Locus Map

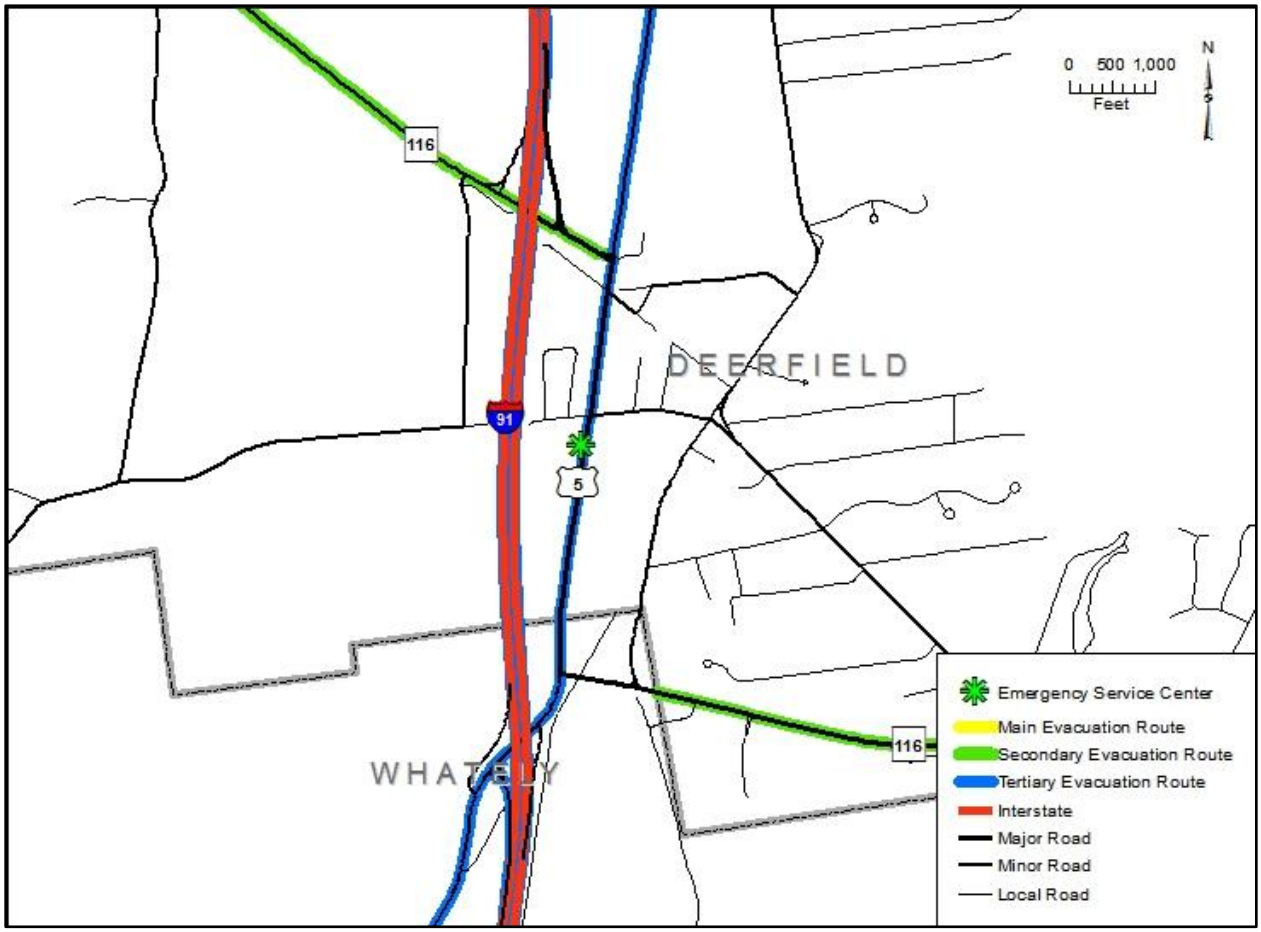
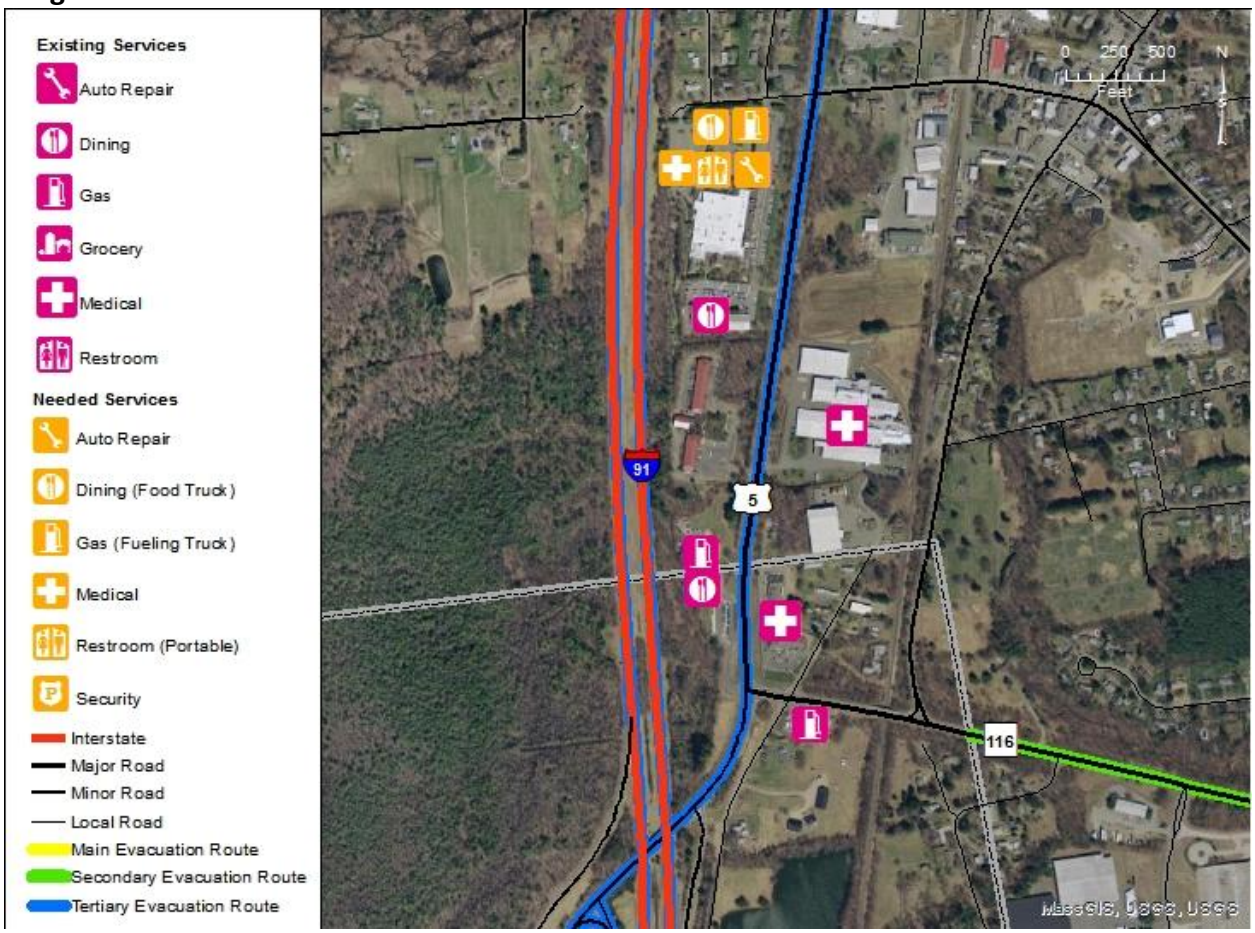


Image 2: Ortho Photo



Potential Site #5—Greenfield: I-91 Exit 27 at Route 5

SITE NAME:	Greenfield #2
STREET ADDRESS:	Exit 27 on I-91
CROSS ST/LANDMARK:	Route 5
CITY/MA/ZIP:	Greenfield, MA
COUNTY:	Franklin

SUMMARY

This exit has the last complex of services available as you travel north towards Brattleboro, VT. The interchange is not as busy as the rotary at Exit 26, but also offers fewer services.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	At the intersection of two evacuation routes: I-91 (main) and Route 5 (secondary).
Traffic flow, routing, access issues	Less traffic flow than at the rotary, but exits could back up onto the interstate if evacuation traffic is excessive.
Vehicle fueling: existing pumping capabilities	There is a single Stop & Shop gas station available right at the exit ramp with 10 gas pumps and no diesel. (Another gas station is located at the intersection of Route 5 and Silver St, but that intersection is very busy and traffic could be difficult to manage there.)
Vehicle fueling: tanker accommodation	Large parking lots at Community Health Center and Four Corners School could potentially serve as locations for vehicle fueling from tankers.
Parking capacity	Hundreds of parking spaces available Community Health Center and Four Corners School.
Parking area(s) pavement coverage	All parking areas are paved.
Structures	Large enclosed structures in the shopping plazas and at school that could potentially accommodate a large number of people in an emergency.
Toilets, washroom facilities	N/A
Food service	Food services available include Denny's Pantry and Burger King.
Picnic and recreation area	Large grassy area and ball fields at Four Corners School.
Pet exercise area	See above.
Proximity to evacuee shelters	The Greenfield Middle School has tentatively been designated as a regional shelter for Franklin County (1.1 miles).

Grocery stores/restaurants/ other retail food	See above.
Proximity to police (local or state), fire, EMS services	Greenfield Fire Station 1.7 miles away from the rotary.
Proximity to medical care services	Baystate Franklin Hospital is located 1.15 miles away from the rotary.
Proximity to helicopter landing site	Ball fields behind nearby Four Corners Elementary School (0.1 miles from the exit ramp). There are also large fields at the Stoneleigh Burnham School on the other side of the interchange.
Proximity to FEMA flood zones	This area is located in a FEMA flood zone.

Notes: There is also a stand-alone Bank of America ATM at the Community Health Center plaza. There are also several auto parts/repair outlets in the area, including Bond Auto Parts, Autozone, and Meineke Muffler.

Image 1: Locus Map

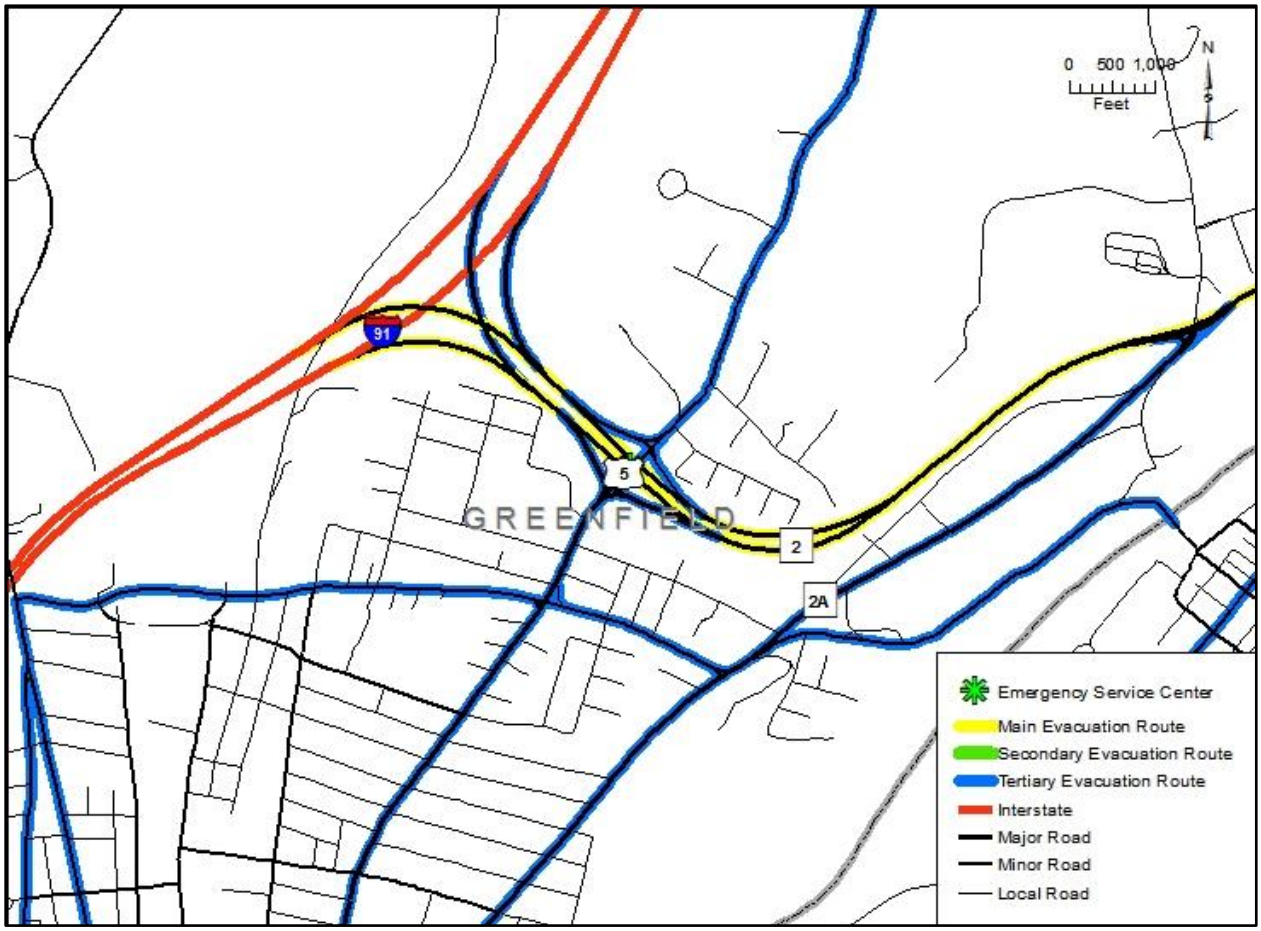


Image 2: Ortho Photo

Potential Site #6—Greenfield: I-91 Exit 26 at Routes 2 and 2A

SITE NAME:	Greenfield #1
STREET ADDRESS:	Exit 26 on I-91
CROSS ST/LANDMARK:	Routes 2 and 2A
CITY/MA/ZIP:	Greenfield, MA
COUNTY:	Franklin

SUMMARY

This busy rotary is a key intersection of the primary transportation corridors in Franklin County. The areas on both sides of the rotary are serviced by five gas stations and multiple food service businesses. The area includes a Big Y plaza, Home Depot Plaza, and the Franklin County Visitor's Center/RMV, all of which all have large paved parking lots.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	At the intersection of three main evacuation routes: I-91, Route 2, and Route 2A.
Traffic flow, routing, access issues	Very busy rotary and roadways in all directions.
Vehicle fueling: existing pumping capabilities	5 gas stations in close proximity. West of the rotary are the following: Irving: 8 pumps/no diesel; Valero: 8 pumps/no diesel. East of the rotary: Mobil: 8 pumps; no diesel; Planet: 8 gas pumps; 2 diesel; Sunoco: 10 gas pumps/ 6 diesel.
Vehicle fueling: tanker accommodation	Large parking lots at Big Y and Home Depot could potentially serve as locations for vehicle fueling from tankers.
Parking capacity	Hundreds of parking spaces available in Big Y and Home Depot plazas. Large parking lots also available between Sunoco gas station and China Gourmet restaurant.
Parking area(s) pavement coverage	All parking areas are paved.
Structures	Large enclosed structures in both shopping plazas that could potentially accommodate a large number of people in an emergency.
Toilets, washroom facilities	N/A
Food service	Food services available include McDonalds, Friendly's, Big Y, KFC, Taco Bell, Applebee's, and China Gourmet.
Picnic and recreation area	7 picnic tables at Franklin County Visitor's Center.
Pet exercise area	Some grassy areas at Franklin County Visitor's Center.

Proximity to evacuee shelters	The Greenfield Middle School has tentatively been designated as a regional shelter for Franklin County (1.5 miles).
Grocery stores/restaurants/ other retail food	In addition to above restaurants, there are Convenience Stores at the following gas stations: Circle K at the Irving gas station, FL Roberts the Valero, and Upton Mart at the Sunoco.
Proximity to police (local or state), fire, EMS services	Greenfield Fire Station 1.2 miles away from the rotary.
Proximity to medical care services	Baystate Franklin Hospital is located 1.55 miles away from the rotary.
Proximity to helicopter landing site	Ball fields behind nearby Newton Elementary School (0.3 miles).
Proximity to FEMA flood zones	This area is not in a FEMA flood zone.

Image 1: Locus Map

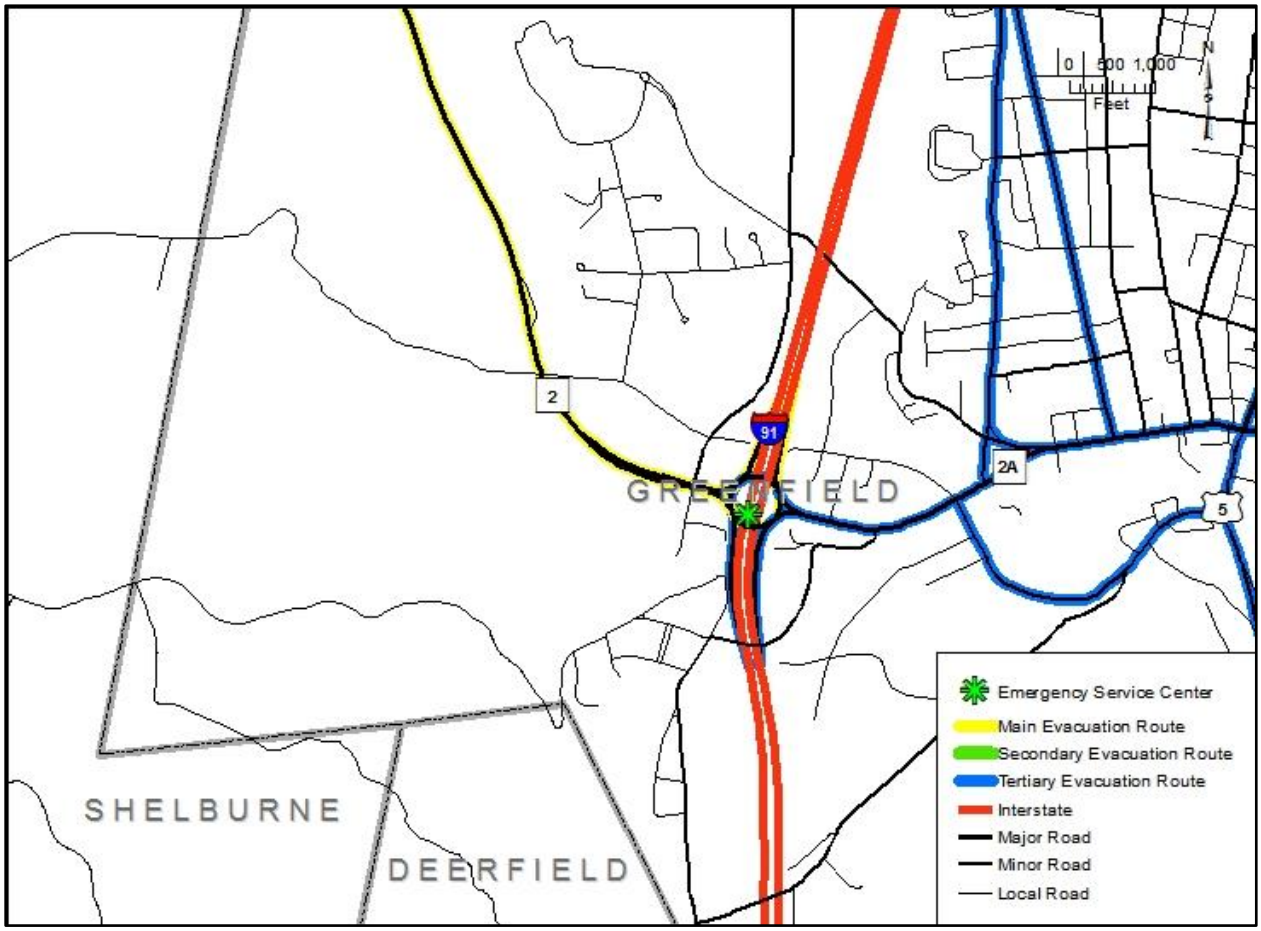
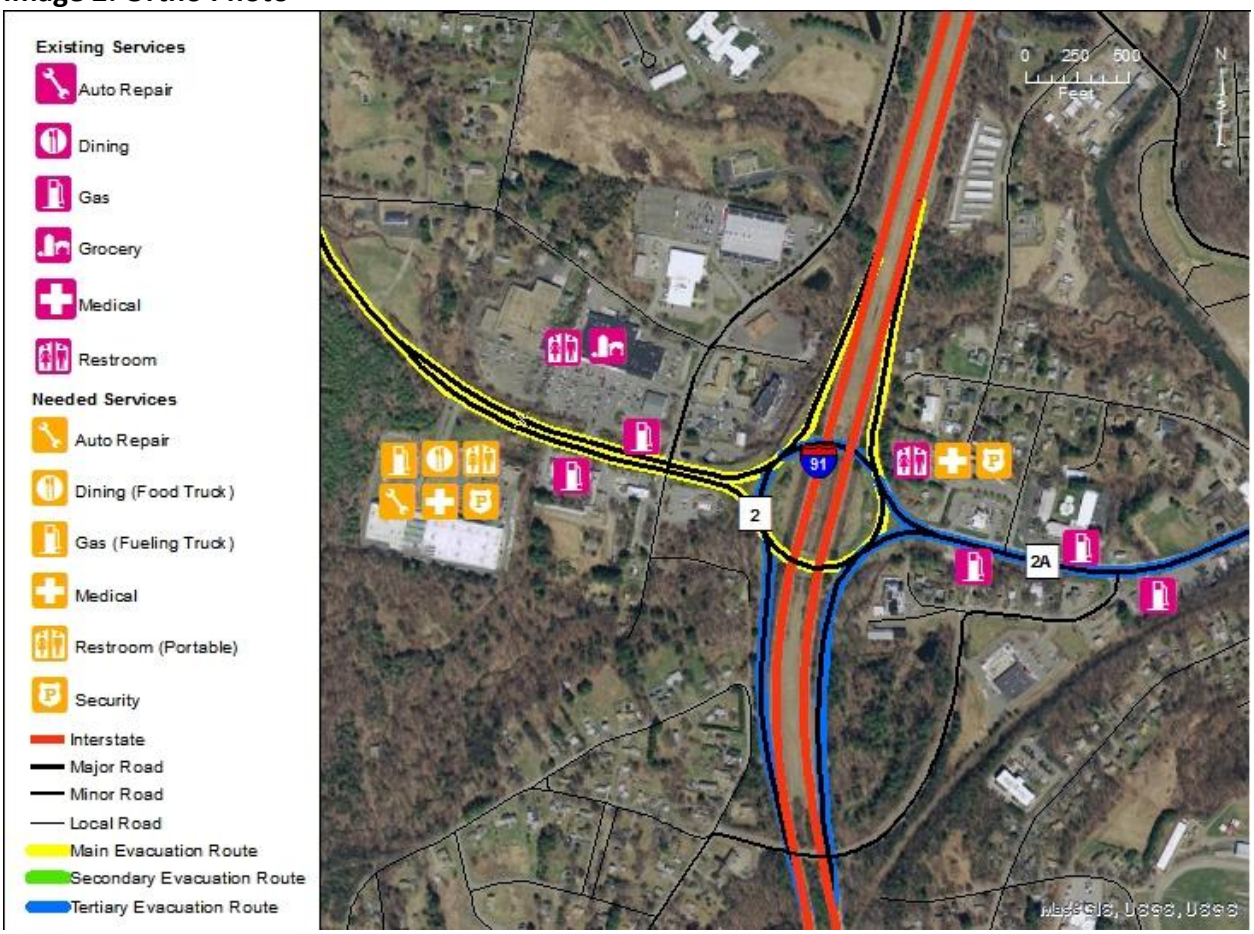


Image 2: Ortho Photo



Potential Site #7—West Springfield: Eastern States Exposition (Big E)

SITE NAME:	Eastern States Exposition (Big E) (Reference #7)
STREET ADDRESS:	1305 Memorial Avenue
CROSS ST/LANDMARK:	Memorial Avenue /Route 147
CITY/MA/ZIP:	West Springfield, MA 01089
COUNTY:	Hampden

SUMMARY

This site could be viable for evacuees travelling on I-91, as it is accessible via Route 147 east and west, Route 159 south, Route 75 south and Route 20 north. This site offers both open fields and multiple structures that are used for the Eastern States Exposition, the largest regional fair in New England, which is held for three weeks during September. The Big E is also in regular use through all seasons of the year as a venue for other large scale events, such as trade shows, on most weekends. Existing parking areas are paved, with available green space for additional parking. This site could easily accommodate multiple tankers and vehicles. Usefulness may be limited during times of flooding, mud, snow or high grass because it sits right on a flood plain. There are multiple permanent structures, some with food service facilities, on the property.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	On the Rt. 147 evacuation route and near the Rt. 20, Rt. 159 and Rt. 75 evacuation routes.
Traffic flow, routing, access issues	Access at the site is limited to east/west, though the Route 159 intersection is approximately .4 miles away
Vehicle fueling: existing pumping capabilities	There is a Hess gas station within .9 miles east along 147 at 300 Memorial Avenue (8 pumps).
Vehicle fueling: tanker accommodation	Space for multiple tankers, both paved and unpaved.
Parking capacity	Approximately 1,000 parking spaces spread out through multiple lots
Parking area(s) pavement coverage	75% of possible parking space is paved.
Structures	Multiple structures available for services and staging, such as the Coliseum and the Mallory Complex
Toilets, washroom facilities	Multiple bathrooms throughout the grounds and in the buildings
Food service	Limited food preparation and service facilities are located in one of the structures
Picnic and recreation area	There are multiple areas for recreation and picnic
Pet exercise area	Large grassy areas available for pets.

Proximity to evacuee shelters	TBD
Grocery stores/restaurants/ other retail food	There are two restaurants directly north of the complex. Latitude and Memo's are across the street on Memorial Avenue. King's Pizza is west of the complex on Memorial Avenue while Main Street Deli and Friendly's are in close proximity on Rt. 159
Proximity to police (local or state), fire, EMS services	West Springfield Police Station is within 1.3 miles West Springfield Fire Station is within 1.2 miles
Proximity to medical care	Mercy Medical Center is within 2.9 miles
Proximity to helicopter landing site	Large open parking areas on site could accommodate multiple helicopter landing sites. Westover Air Reserve Base is within 11.5 miles
Proximity to FEMA flood zones	Portions of the site are within the 100-yr flood zone. There are multiple areas of jurisdictional wetlands on the site, as well.

Image 1: Locus Map

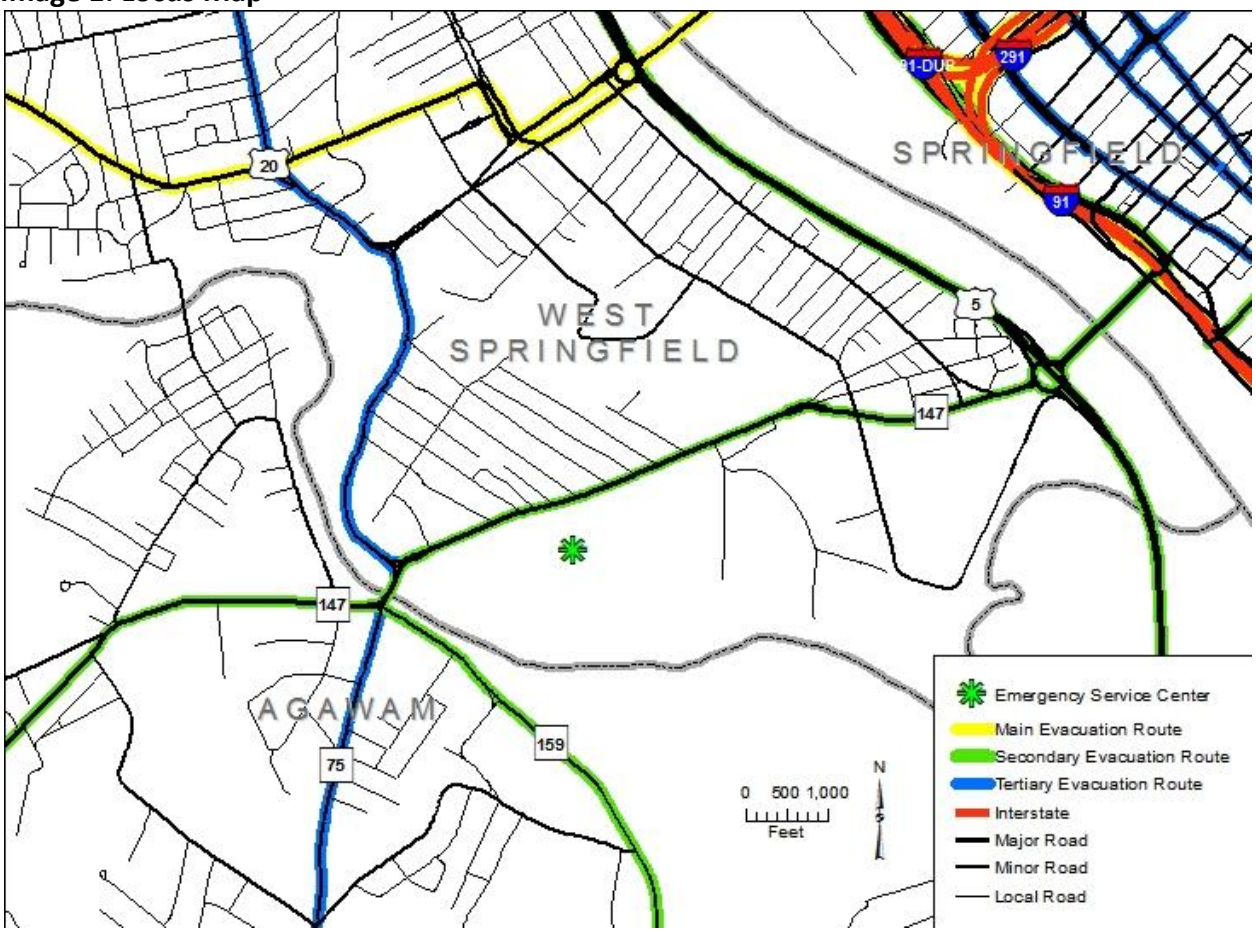
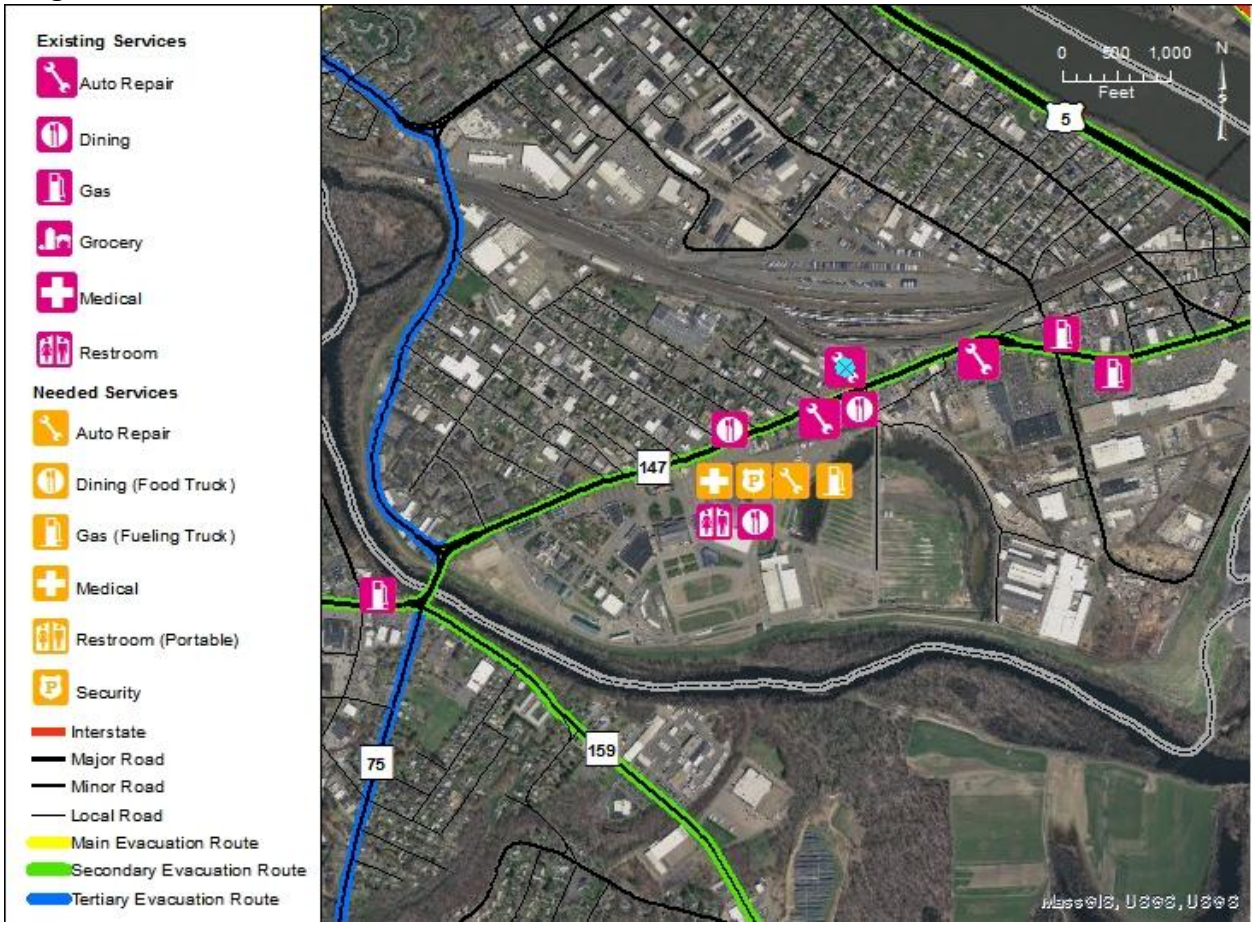


Image 2: Ortho Photo



The Eastern States Exposition site offers multiple structures that would shelter evacuees.

Image 3: Aerial Oblique Photo

Potential Site #8—Chicopee: I-90/I-291 Interchange at Burnett Rd

SITE NAME:	I/90/I-291 Interchange at Burnett Road (Reference #8)
STREET ADDRESS:	363 Burnett Road
CROSS ST/LANDMARK:	Pride Gas Station
CITY/MA/ZIP:	Chicopee, MA 01020
COUNTY:	Hampden

SUMMARY

This site could be useful for serving evacuees using I-90 and heading east and west, and those using I-291 heading south. There are multiple existing and potential parking areas that could accommodate vehicles and multiple tankers for fueling. The site is not in a flood plain (the closest flood plain is .23 miles away). The utility of this site is enhanced by the close proximity of multiple lodging sites such as the Econo Lodge and Motel 6, food services such as Fifties Diner and McDonalds and the Pride gas station.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	On the I-291 evacuation route, near the I-90 evacuation route and the Rt. 141 secondary evacuation route
Traffic flow, routing, access issues	Access is limited to the south, I-90 intersection is .44 miles away and the Rt. 141 intersection is .46 miles away
Vehicle fueling: existing pumping capabilities	1 gas station in close proximity (10 gas pumps/ regular, midgrade, premium and diesel); 1 gas station in proximity of I-291 on Alt. Rt. 20 in Springfield (4 gas pumps)
Vehicle fueling: tanker accommodation	Space for multiple tankers in close proximity at two locations (AMF Chicopee Bowling lanes parking lot, parking lot behind Econo Lodge
Parking capacity	300 at AMF Chicopee Bowling lanes, 150 at Wall Street Journal, 3000 at and behind Econo Lodge, 150 at Alternate Mode Inc, 100 at Valley Communication Systems, 50 at McDonalds
Parking area(s) pavement coverage	All parking areas are paved
Structures	There are two hospitality structures in close proximity. Econo Lodge is directly east while Motel 6 is directly north. Other buildings include a fast-food restaurant, convenience store, and business warehouses and a bowling alley
Toilets, washroom facilities	Econo Lodge and Motel 6 have a toilet and washroom in every room. Restaurant, convenience store, bowling alley and business warehouses likely have toilets and sinks.

Food service	AMF Bowling Lanes, McDonalds, Fifties Diner and Econo Lodge serve food.
Picnic and recreation area	Motel 6 has a pool and surrounding green, Econo Lodge has an outdoor recreation area, green space is connected to business warehouses and McDonalds.
Pet exercise area	There is no designated pet exercise area, but there are large grassy areas available.
Proximity to evacuee shelters	TBD
Grocery stores/restaurants/ other retail food	Nearby food services include McDonalds, Fifties Diner and the Pride Gas Station convenience store.
Proximity to police (local or state), fire, EMS services	Chicopee Police Station and Fire Department within 2.9 miles
Proximity to medical care services	Shriners Hospital 4.8 miles away at 516 Carew Street, Springfield
Proximity to helicopter landing site	Westover Air Force Base, 5.1 miles away
Proximity to FEMA flood zones	.23 Miles away (Chicopee Reservoir)

Image 1: Locus Map

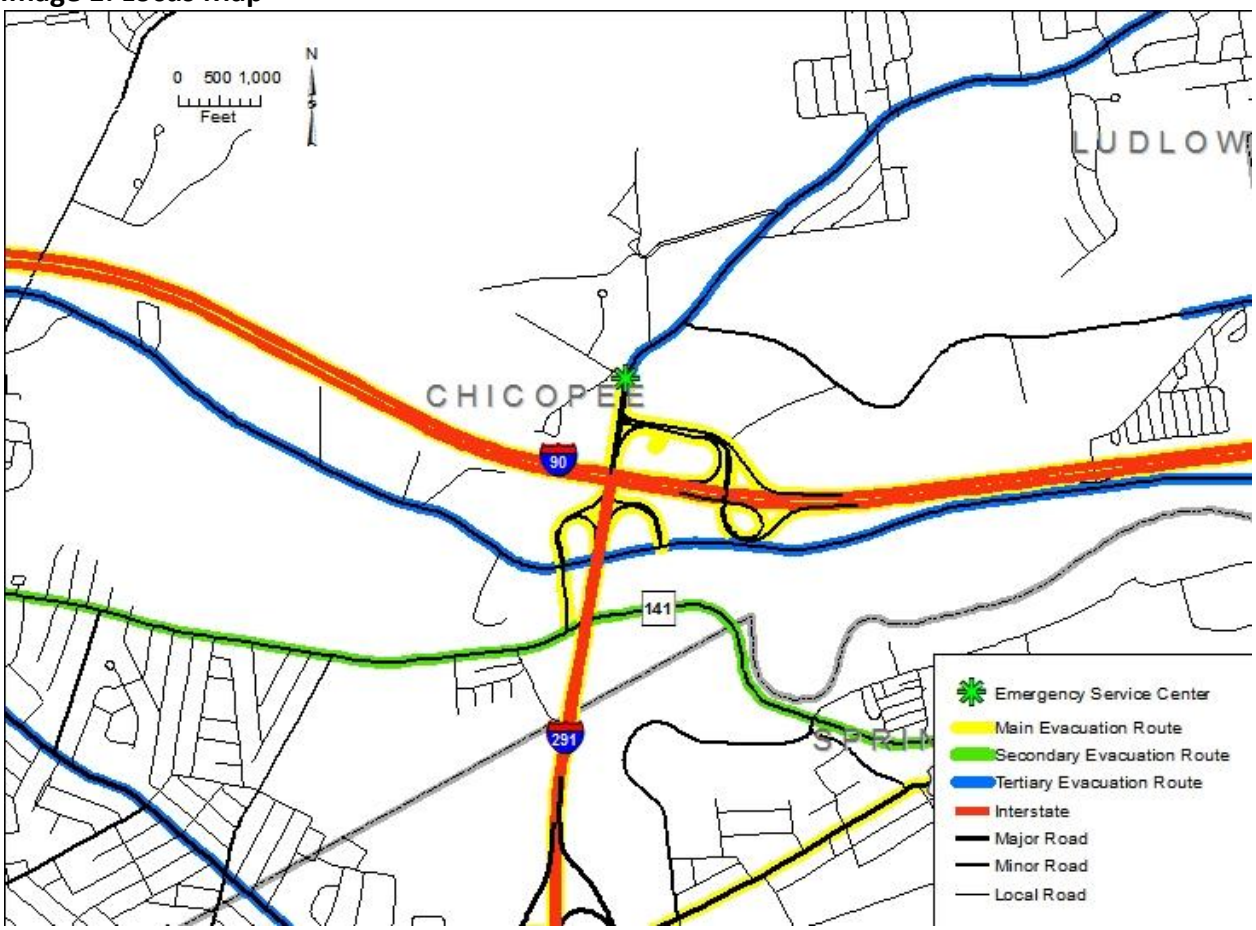
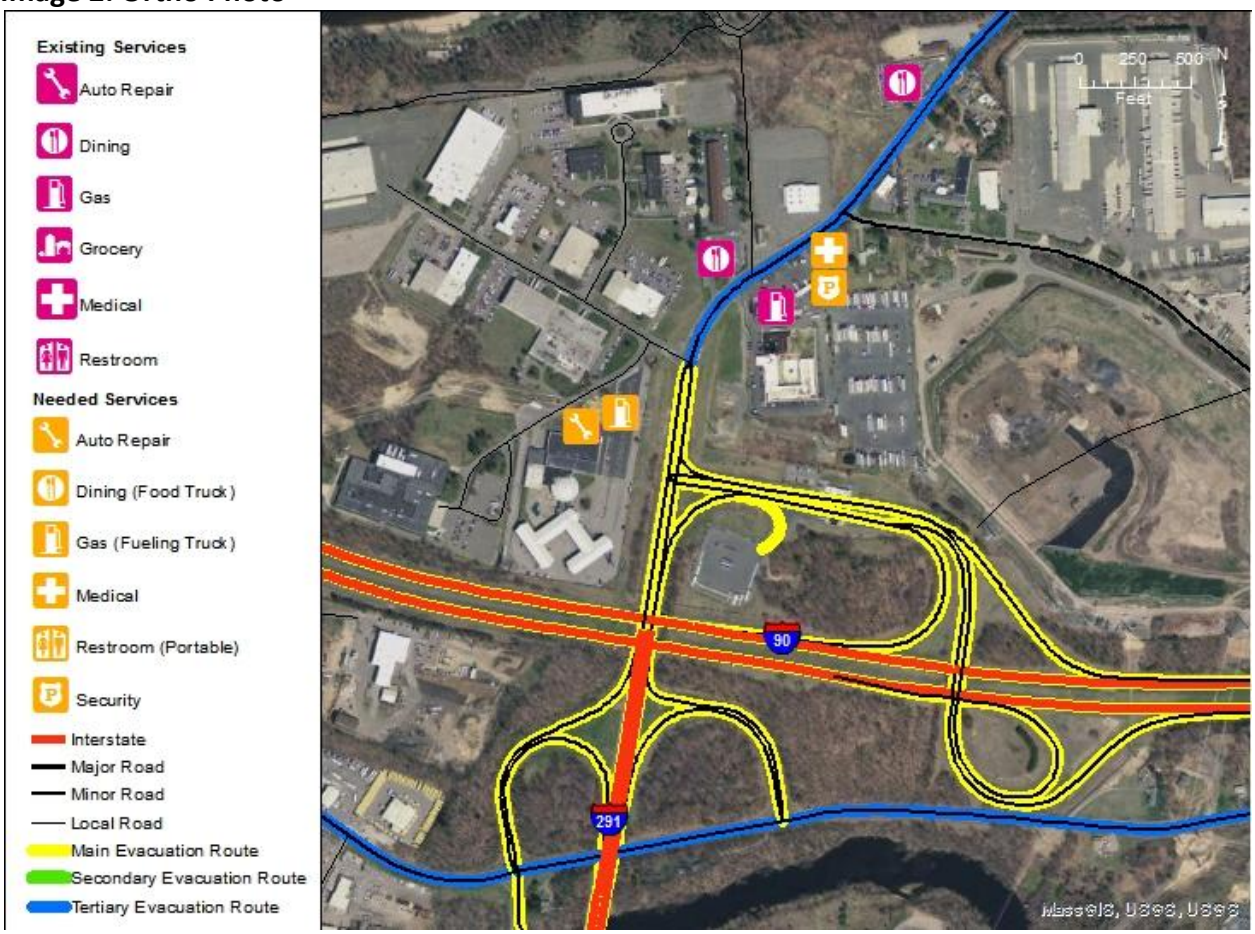


Image 2: Ortho Photo



Potential Site #9—Hadley: Hampshire/Mountain Farms Malls, Route 9 at Maple Street

SITE NAME:	Hampshire and Mountain Farms Malls, Route 9 at Maple Street (Reference #9)
STREET ADDRESS:	337 and 367 Russell Street
CROSS ST/LANDMARK:	Route 9 and Maple Street
CITY/MA/ZIP:	Hadley, MA 01035
COUNTY:	Hampshire

SUMMARY

This site could provide services for evacuees traveling on Route 9 east and west and Routes 47 and 116 north and south. Access from I-91 via Exit 19 is available approximately 3 miles to the east. This site is made up of two large malls; the Hampshire Mall has a traditional interior courtyard, while the Mountain Farms Mall is the newer strip mall configuration. There are numerous outparcels with fast food, banking and other services. The parking lots of both malls are paved and could easily accommodate multiple tankers and vehicles. Usefulness may be varied during times of flooding as both parcels are within a 1 percent annual chance flooding zone. The utility of this site is enhanced by the many resources for shelter and food and other necessities located within the malls and their close proximity to other large businesses and restaurants. Other businesses and restaurants have large paved parking lots available. The intersection along Route 9 next to both malls is signaled, which would help to manage traffic in the area.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	On the Rt. 9 evacuation route and near the Rt. 47 and Rt. 116 evacuation routes.
Traffic flow, routing, access issues	Access to this site is available coming from north as south from Rt. 9 and east and west from Maple Street.
Vehicle fueling: existing pumping capabilities	1 gas station in close proximity (8 gas pumps), 1 gas station east along Rt. 9 (12 gas pumps)
Vehicle fueling: tanker accommodation	Space for multiple tankers, paved
Parking capacity	Over 2,000 parking spaces within mall parking lots, approximately 1,000 parking spaces in adjacent lots.
Parking area(s) pavement coverage	All parking lots are paved.
Structures	The malls offer a variety of structures for evacuee resting areas.
Toilets, washroom facilities	There are multiple toilets and sinks within both malls and

	buildings in close proximity.
Food service	There are numerous fast food services and sit-down restaurants on both mall properties.
Picnic and recreation area	There is abundant farm land to the south of the malls, as well as access to the Norwottuck Rail Trail Bicycle Path.
Pet exercise area	There are limited areas for pet exercise.
Proximity to evacuee shelters	TBD
Grocery stores/restaurants/ other retail food	There are plenty of food sources within both malls, as well as a Trader Joes and Maple Farm Foods market within very close proximity. There are also fast food restaurants such as Chipotle and Taco Bell just north of the site.
Proximity to police (local or state), fire, EMS services	Hadley Police and Fire station within 2.5 miles
Proximity to medical care services	Hadley Family Practice within 1.36 Miles. AEIOU emergency care approximately 2 miles east at Route 9 and university drive.
Proximity to helicopter landing site	Northampton Airport within 4.5 Miles. Helicopter land on adjacent farm parcels 100 yds to the south possible.
Proximity to FEMA flood zones	Some portions of the site are within the 100-yr flood zone.

Image 1: Locus Map

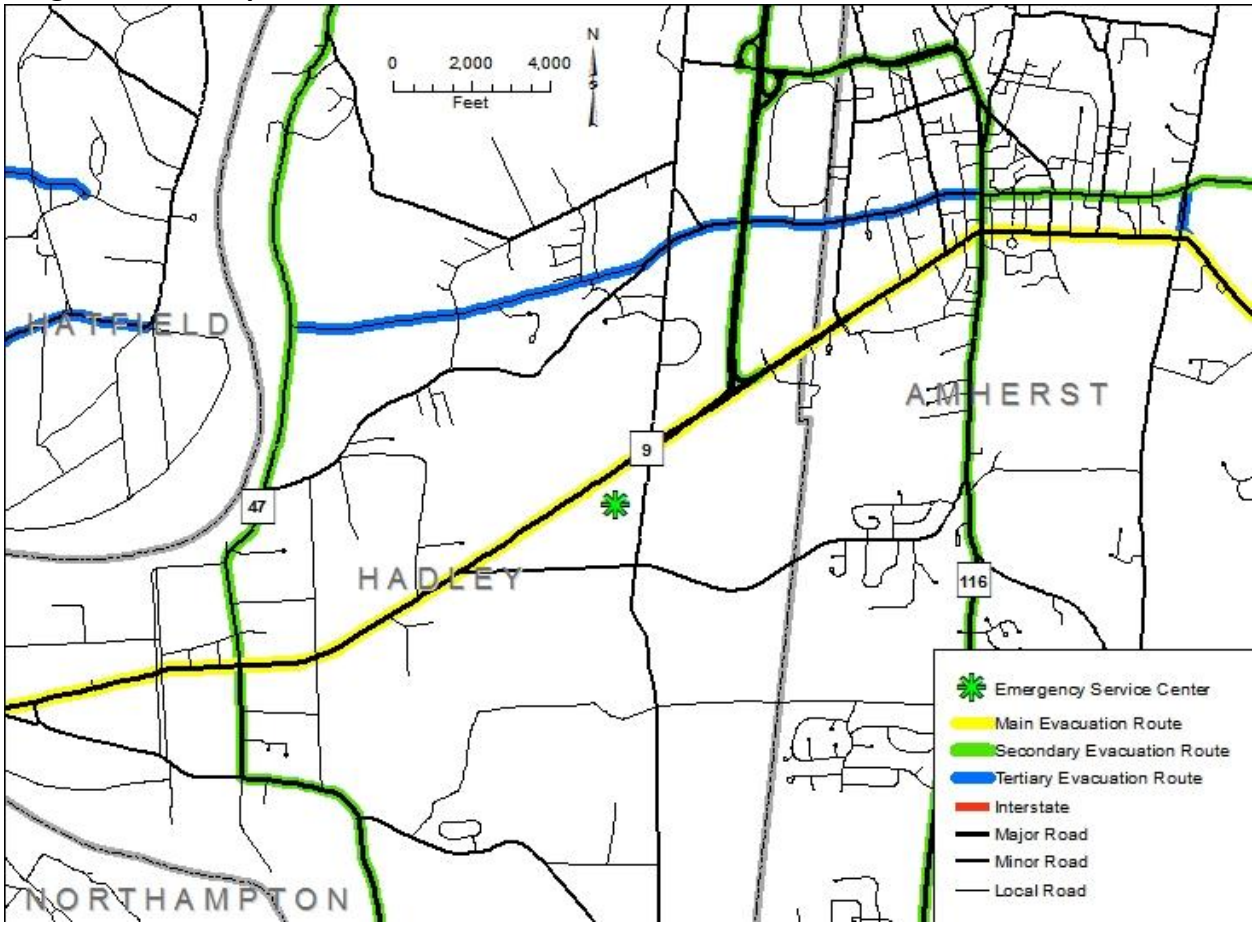


Image 2: Ortho Photo

This site is near many businesses and food sources. There are also many other resources within the direct area and in close proximity.

Image 3: Aerial Oblique Photo

Potential Site #10—Hatfield: I-91 Exit 21 at Route 5

SITE NAME:	I-91 Exit 21 at Route 5
STREET ADDRESS:	776 North King Street
CROSS ST/LANDMARK:	Sunoco Gas Station
CITY/MA/ZIP:	Northampton, MA 01060
COUNTY:	Hampshire

SUMMARY

This site is relatively limited in the range of services that are immediately available. It could provide services to evacuees travelling on Interstate 91 north and south, as well as Route 5. This site, which is in the southwest corner of Hatfield, has one gas station, a doctors' office, and limited food services within 1 mile up or down Route 5. The parking lots of all structures are paved and could accommodate a couple tankers and vehicles.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	On the I-91 Evacuation Route
Traffic flow, routing, access issues	Access at the site is limited to north/south along Route 5, though the I-91 intersection is within .25 miles.
Vehicle fueling: existing pumping capabilities	1 gas stations at site location (8 gas pumps).
Vehicle fueling: tanker accommodation	Space for 1-2 tankers.
Parking capacity	About 75 units combined between the gas station and Pioneer Valley Spine and Sports. Parking could also be considered at the nearby lot of the MassDOT District 2 facility.
Parking area(s) pavement coverage	All parking lots are paved.
Structures	There are limited structures available to house evacuees, including the Pioneer Valley Spine and Sports and housing units close by.
Toilets, washroom facilities	There are multiple toilets and sinks within the housing units, as well as toilets and sinks at Pioneer Valley Spine and Sports.
Food service	There are food services about 1,000 feet from the evacuation center.
Picnic and recreation area	There are open fields and forest area within close proximity.
Pet exercise area	There are large green and forest areas available for pets.
Proximity to evacuee shelters	TBD
Grocery stores/restaurants/	There are a limited number of take-out and sit-down

other retail food	restaurants within 1.5 mi of the site to the north on Route 5. The River Valley Market Coop grocery store is about 1.5 miles south on Route 5. C&S Wholesale Grocers food distribution facility is about .5 mi away. The Food Bank of Western Massachusetts is located 2 miles to the north on Route 5.
Proximity to police (local or state), fire, EMS services	Hatfield Police and Fire station within 3.5 miles. Northampton Fire Department is approximately 3.5 miles. Northampton Police Department is approximately 4.5 miles.
Proximity to medical care services	Cooley Dickinson Hospital within 4.9 miles. Pioneer Valley Spine and Sports Physicians part of the site.
Proximity to helicopter landing site	Northampton Airport within 5.6 miles.
Proximity to FEMA flood zones	No portion of the site is within a flood plain.

Image 1: Locus Map

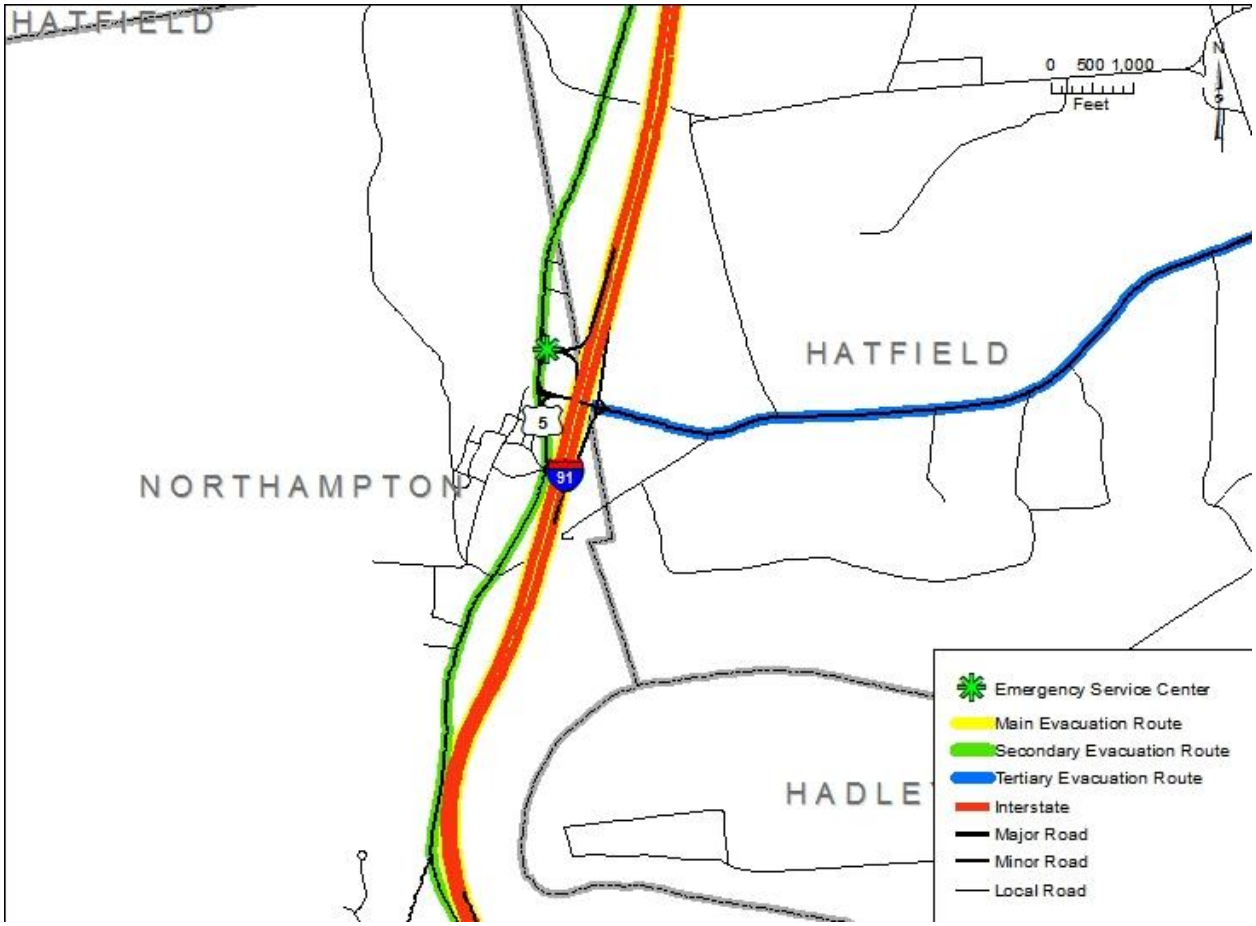
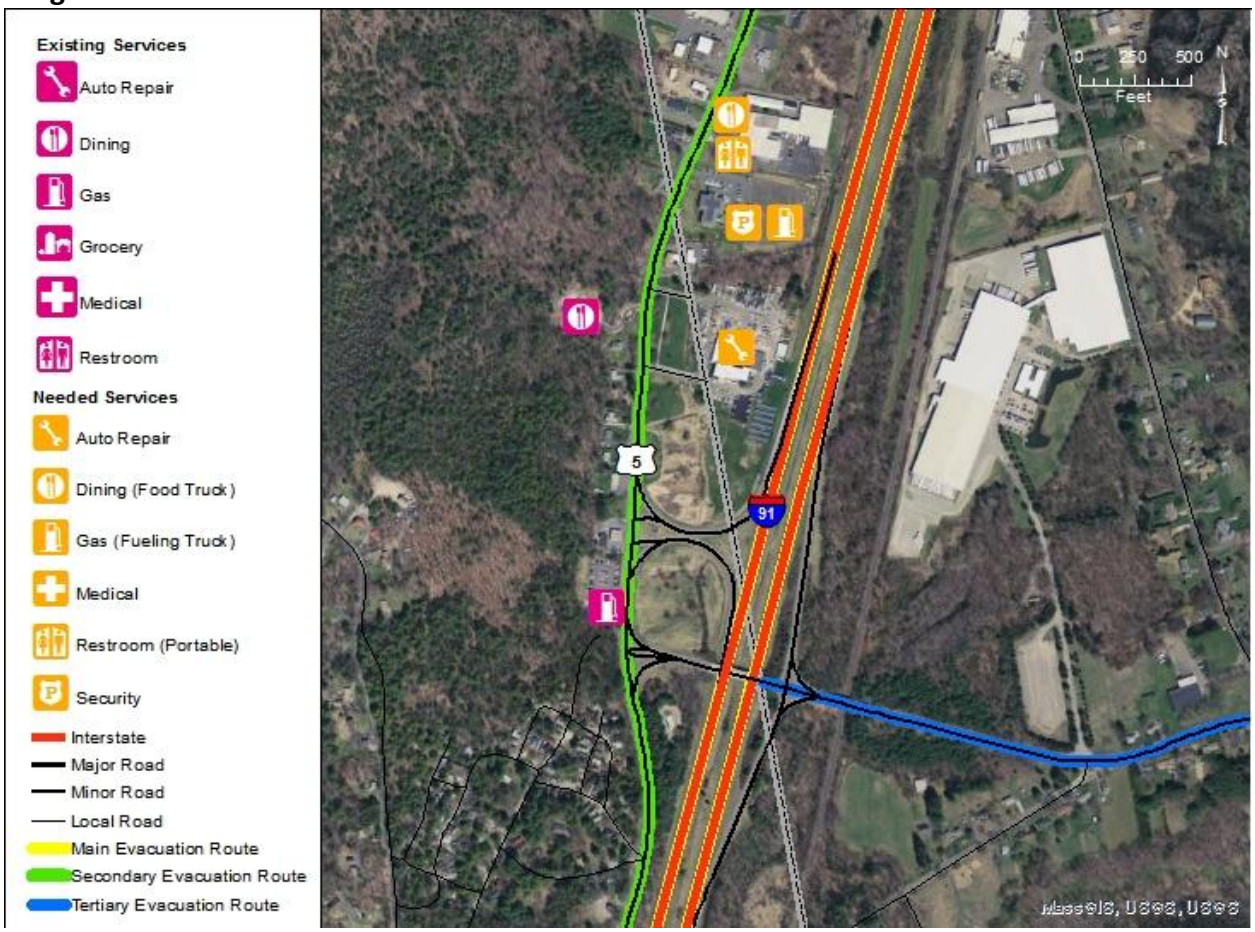


Image 2: Ortho Photo



Potential Site #11—Northampton: Three County Fair Grounds

SITE NAME:	Northampton: Three County Fair Grounds (Reference #11)
STREET ADDRESS:	54 Fair Street
CROSS ST/LANDMARK:	Route 9/Bridge Street
CITY/MA/ZIP:	Northampton, MA 01060
COUNTY:	Hampshire

SUMMARY

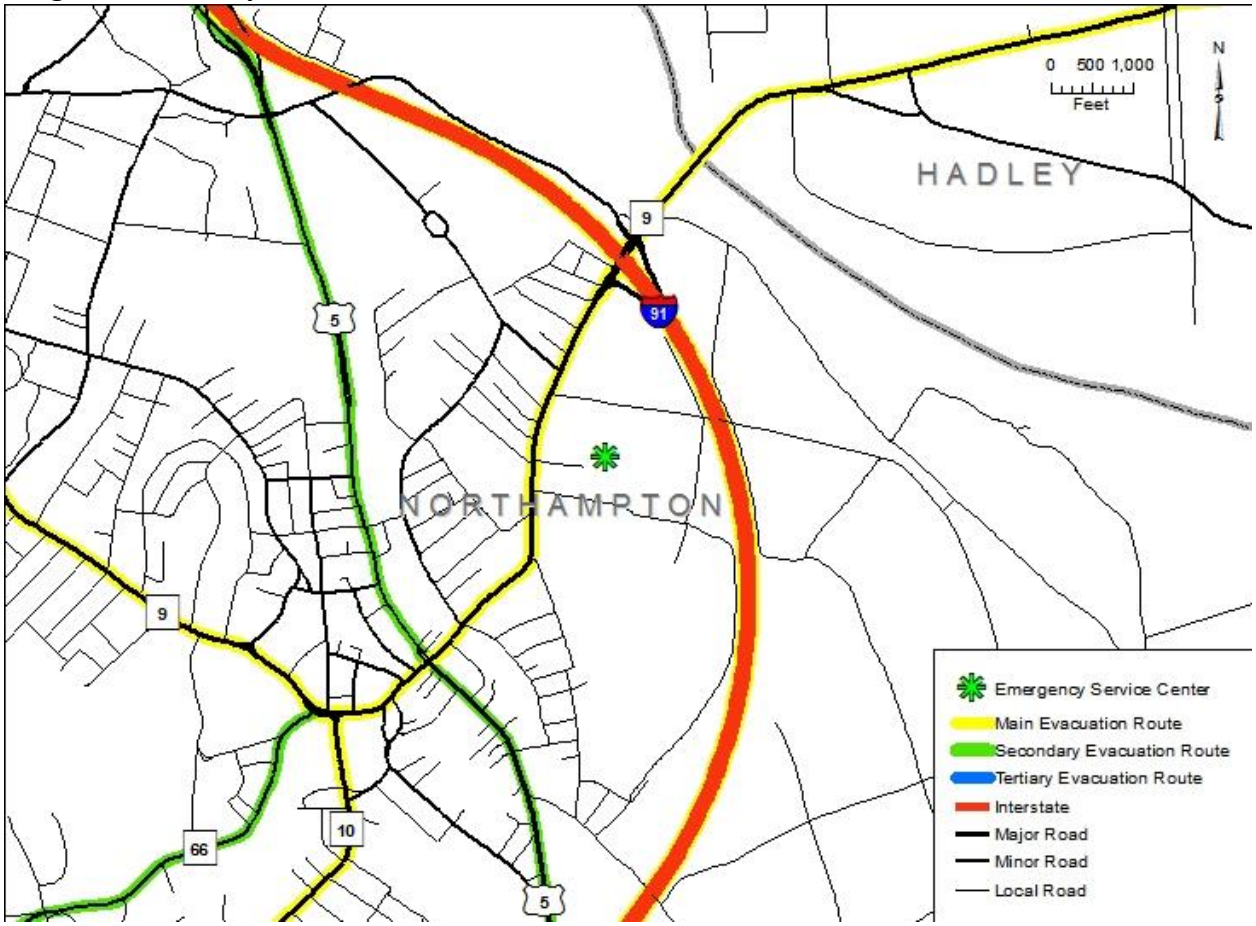
The Three County Fairgrounds are located between Primary and Secondary evacuation routes: Route 9, also known as Bridge Street, and I-91 Exit 19, which is less than 1 mile to the east. Northbound access to I-91 requires travel on Damon Road, which is extremely congested at many times of day. The fair grounds have plenty of parking and areas where tanker refueling could be set up, but there are no gasoline or diesel pumps on the site or within .5 mile of the site.

OBSERVED AND ESTIMATED CHARACTERISTICS

Proximity to evacuation route(s)	420 Yards to Route 9 and 1,600 yards to I-91. 1,260 yards away from Route 5.
Traffic flow, routing, access issues	Route 9/Bridge Street is a major local arterial with congestion at the I-91 Exit 19 interchange to the east and downtown Northampton to the west. Fair Street is a small, two-lane road which adequately serves demand for events with several thousand guest, such as the fair, arts shows and concerts. -Fairground is located off of I-91 N Exit 19 and Off of I-91 S Exit 20. The site location has quick and easy access to Route 9 and Route 5. 22,000 Average Daily Traffic Flow exists on Route 9. 16,129 Average Daily Traffic Count exists on Route 5.
Vehicle fueling: existing pumping capabilities	1.4 miles away is King Street (Route 5). 9 different Gas Stations are present there. North of Route 9 going into the Town of Hadley, 7 gas stations are present. No vehicle fueling is available at the fairground site.
Vehicle fueling: tanker accommodation	No vehicle fueling located at the fair ground site for tankers. However, 9 different gas stations with plenty tanker accommodation is available 1.4 miles away from site on Route 5 (King St.) in Northampton. 7 different gas stations with tanker accommodations are available about a mile away north of Route 9 into the Town of Hadley.

Parking capacity	There are parking spaces available around the fairground categorized by 'Lots'. Lot A: 450sq ft. of parking Lot B: 1,700sq ft. of parking available Lot C: Approximately 2090sq ft of parking available Lot E: 480sq ft of parking available Lot F: 480sq ft of parking available Lot K: Roughly 1,000sq ft. of parking available
Parking area(s) pavement coverage	The fair ground is approximately 6,930sq feet. Roughly 6,200sq ft is dedicated to parking which is about 89% of the total area available on the fair ground.
Structures	There are different structures available on the fairground for rest areas or staging (see map of fair grounds below).
Toilets, washroom facilities	7 Restrooms are located on the fair grounds
Food service	There are limited food preparation and service facilities on site. However, there are numerous fast food and sit-down establishments within walking distance in downtown Northampton.
Picnic and recreation area	The fairground is one big recreation area.
Pet exercise area	[describe if info available from internet search]
Proximity to evacuee shelters	[distance to shelters using Google map/directions tool]
Grocery stores/restaurants/ other retail food	Various grocery stores, restaurants, and other retail food establishments exist on route 9 in Downtown Northampton as it does North of Route 9 into Hadley. King St (Route 5) also has various food establishments as well.
Proximity to police (local or state), fire, EMS services	Northampton Police Station is the closest police station located 1 mile away from the fairground. The Hadley Police Station is located 3.7 miles away from the fairground. The Northampton Fire Station is located 1.7 miles away from the fairground. The Hadley fire station is located 3.7 miles away from the fairground. Mass. State Police is located 3.2 miles away on Route 5.
Proximity to medical care services	Cooley Dickenson Hospital is the closest medical care to the fairground site at 2.4 miles away off of Route 9.
Proximity to helicopter landing site	The Northampton airport is only 2 minutes away from the fairground site. There are also large open areas on the site that could accommodate a helicopter landing site.
Proximity to FEMA flood zones	TBD

Image 1: Locus Map



Site centrally located right off the major routes (Route 5, Route 9 and I-91).

Image 2: Ortho Photo

Image 3: Map of Three County Fair Grounds, Northampton MA

Source: <http://www.threecountyfair.com/facility.html>