

Submitter: Gerard Corbin

Subject: Public Health and Safety Considerations: Contrasting the Carver and Medway BESS Proposals with the Tewksbury Proposal

Introduction:

According to “General Law - Part I, Title XXII, Chapter 164, Section 69O”,

“The board shall make its decision in writing and shall include therein its findings and opinions with respect to the following:

“...
...

2) the compatibility of the facility with considerations of environmental protection, public health and public safety;

...”

Two BESS proposals have gone through the EFSB/DPU process and have been approved:

1. Cranberry Point Energy Storage in Carver MA (EFSB21-02 / DPU22-59)
2. Medway Grid LLC in Medway MA (EFSB22-02 / DPU22-18 & DPU22-19.)

This document describes three areas where there is a significant difference in Public Health and Safety concerns among the three sites:

1. Population Density
2. Emergency Responder Access
3. Vulnerable Populations

Population Density:

The stark disparity in population density between the proposed Tewksbury BESS site and the approved Carver and Medway BESS sites presents a major public health and safety concern.

While the overall population density for the town of Tewksbury (1,509 per square mile) is already much greater than Carver (312) and Medway (1,175), the critical comparison lies in the population immediately surrounding the proposed facility.

	Carver	Medway	Tewksbury
Population (2023)	11,675	13,560	31,243
Land Area	37.4	11.54	20.7
Population Density	312	1,175	1,509

Source data: [MA Division of Local Services](#) (see “Appendix A - Population Density Data Sources” for a Screenshot of the data.)

The calculated population density near the proposed Tewksbury BESS, specifically north east of Old Boston Road and within a half-mile radius, is a critical **7,937** per square mile (1,056 / [3,709,228.05 ft² / 27,878,400 sq ft / sq mile]) . This figure is derived from an estimated 1,056 residents across 539 housing units, which includes the Tewksbury Commons apartment complex, the Emerald Court Over 55 Community, the Bayberry Assisted Living Facility, and stand-alone houses.

Housing	Type	Units	People/ Unit	People	Assumptions
TEWKSBURY COMMONS	Apartment Complex	246	2.61	642	Has 1 bedroom, 2 bedroom, and 3 bedroom units. Using US Census Data / Average Family size for Tewksbury
EMERALD CT	Over 55 Community	180	1.5	270	½ units occupied by couples ½ units occupied by singles
BAYBERRY	Assisted usLiving Facility	94	1.0	94	73 Traditional Units / 21 Special Care
RESIDENCES	Stand alone houses	19	2.61	50	Using US Census Data / Average Family size for Tewksbury
Total		539		1,056	

People per unit is 2.61 according to the [Census Bureau](#) (see “Appendix A - Population Density Data Sources” for a Screenshot of the data.)

And the area was calculated from Google Maps:

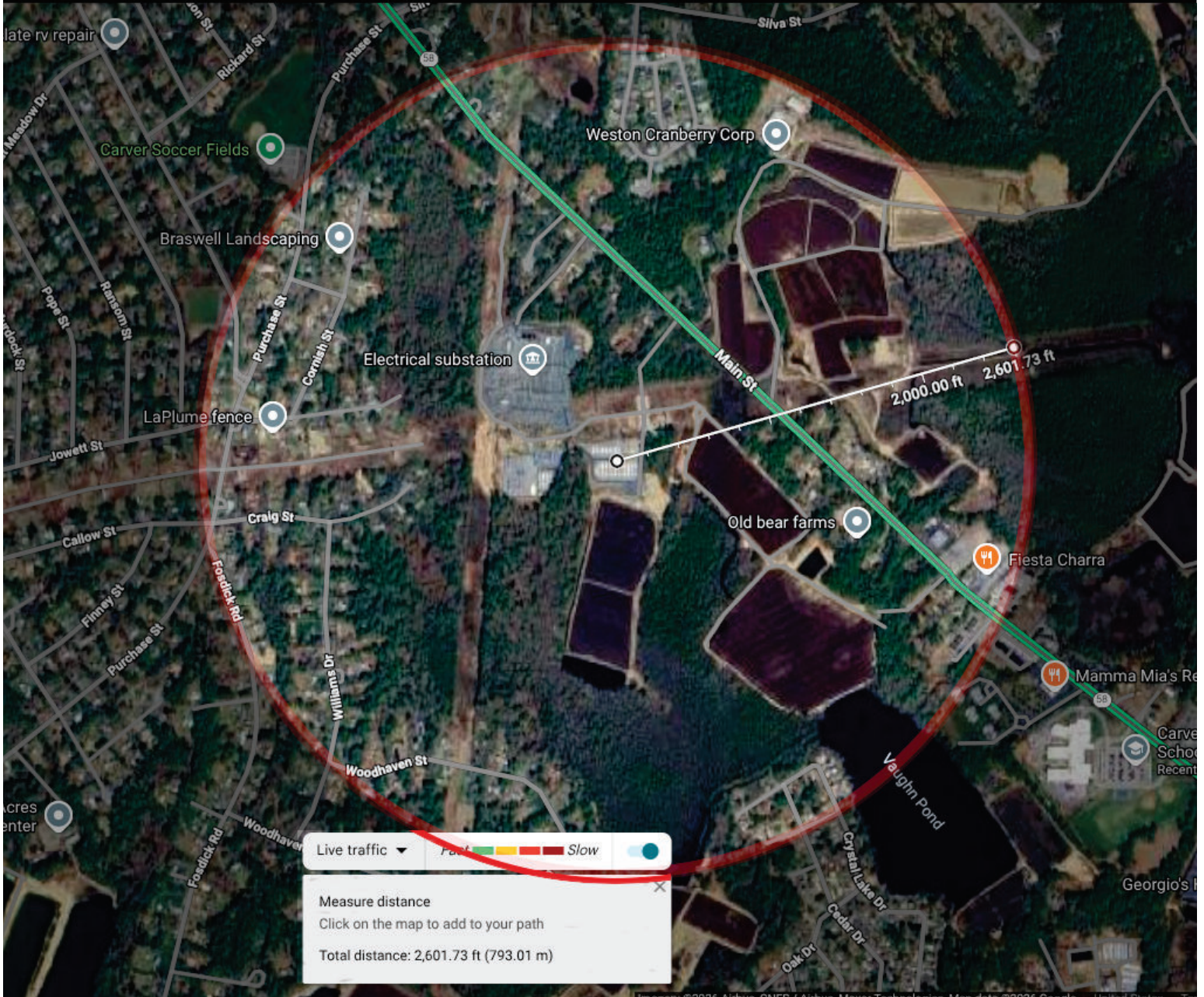


Note that all of the enclosed area in the map above is within a half mile of the center of the proposed Tewksbury BESS.

This localized density of **7,937** is higher than the overall density of the Massachusetts city of Medford (7,252) and would rank the area as the 338th most densely populated out of the 351 cities and towns in the state. Importantly, this calculation does not account for the staff at Bayberry or the employees of the 45 businesses operating in the immediate area.

While a comparable, precise calculation for the near-BESS population density in Carver and Medway is unavailable, the available data and maps clearly indicate that their surrounding areas are significantly less populated than the proposed Tewksbury location. The varying distance categories ("buckets") used by each proposal in their EFSB resident data further complicate a detailed, side-by-side comparison of proximity to residences.

Carver BESS



Medway BESS



All three sites provided data as to the number of residences, and in two cases businesses that are located within certain distances of the BESS facilities. (Each site used different “buckets” to group their responses making detailed comparisons difficult. See “Appendix B - EFSB Resident’s Data” for the details provided to the EFSB for each proposal.

Emergency Responder Access:

Quick and easy access for emergency responders is critical in the event of a BESS incident. The access plans for the approved Carver and Medway sites are significantly different from the proposed Tewksbury location.

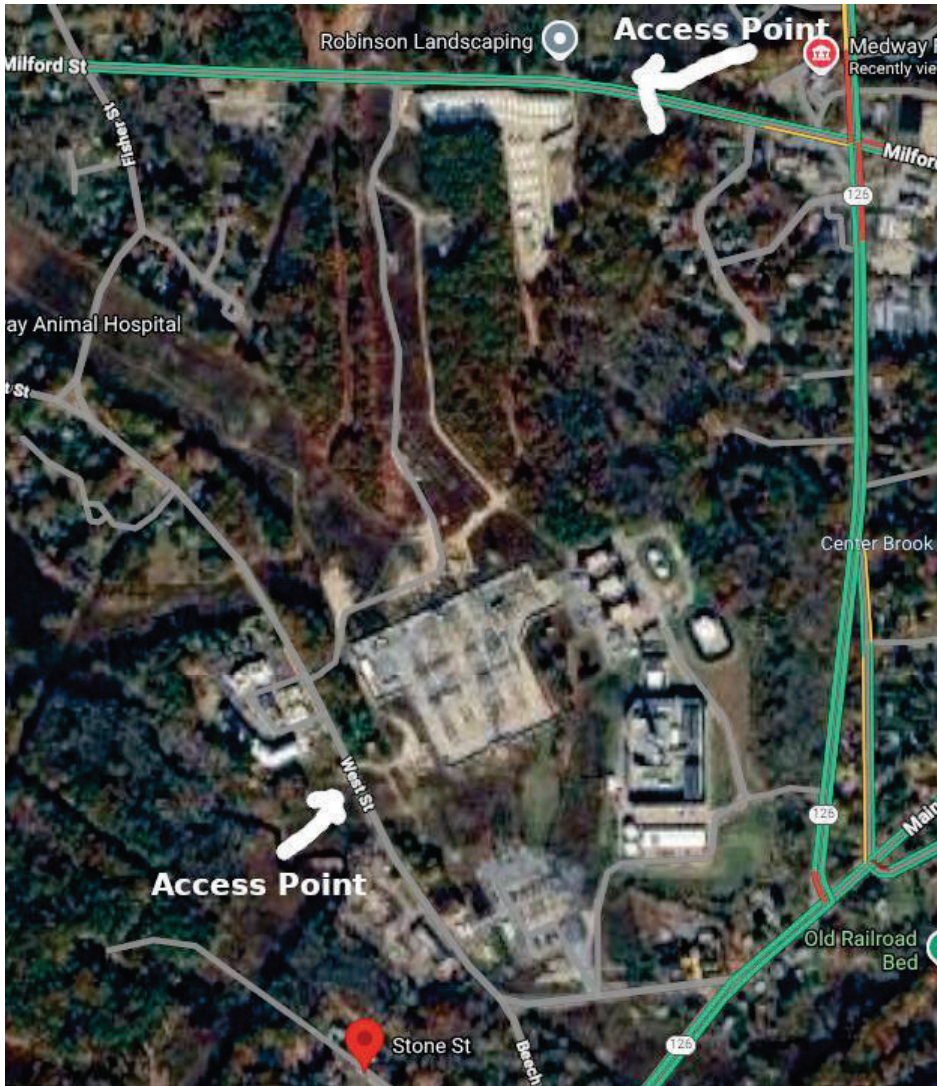
According to submittals to the EFSB, Cranberry Point Energy Storage BESS has two access points:

1. Main Street Entrance (Route 58)
2. Northwest Access Point (Secondary/Emergency)



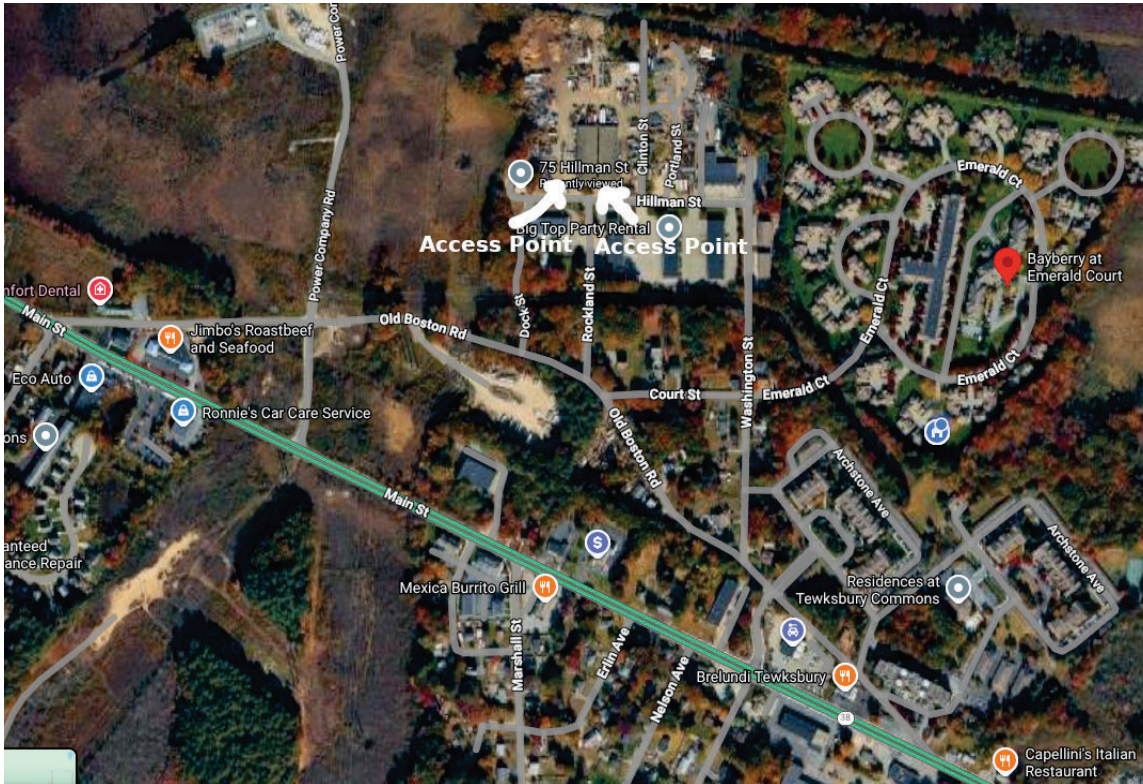
According to submittals to the EFSB, Medway Grid LLC BESS also has two access points:

1. Milford Street (Route 109)
2. West Street & Stone Street
(Project updates indicate that access is also anticipated via a network of gravel roads extending from these streets to the site)



The access points for Carver and Medway are fairly separated, limiting the likelihood of traffic congestion on one access point impacting the other access point.

According to the images submitted to the EFSB, it appears that the Tewksbury facility will have two access points, both on Hillman Street (Note that the draft Host Community Agreement states “Site access will need to include multiple entry/egress points. A dedicated fire access road, from these access points.”)



Notes on the accesses to the three facilities:

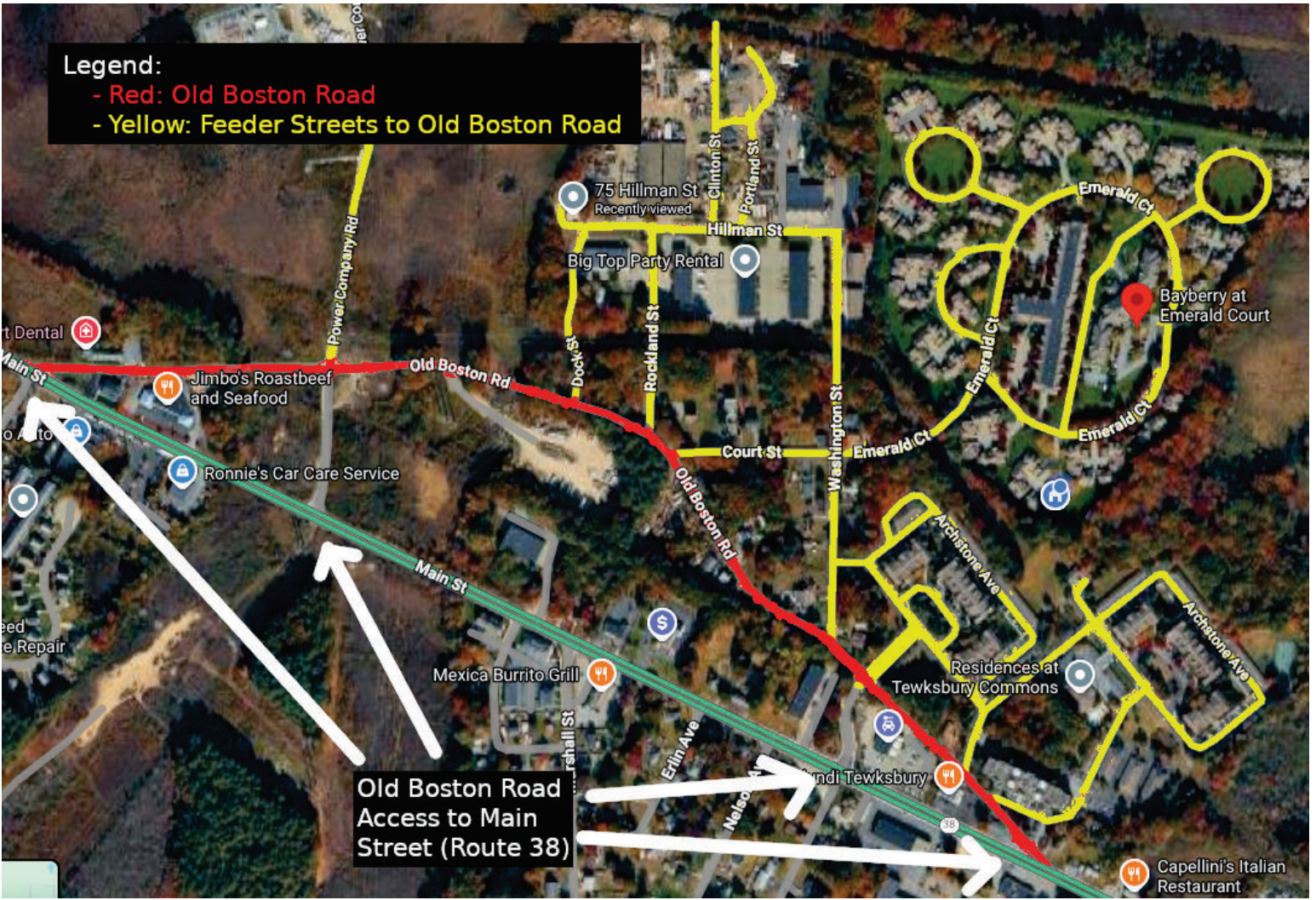
- The distance from the Carver Fire Department to entrance of the Carver BESS is approximately 1.1 miles all on Main Street (Route 58)
- The distance from the Medway Fire Department to the entrance of the Medway BESS is approximately 0.2 miles all on Milford Street (Route 109)
- The distance from the Tewksbury Fire Department and the proposed Tewksbury BESS is approximately 0.8 miles. However only 0.3 miles is on Mains Street (Route 38.) The remaining 0.5 miles is through the densely populated area highlighted in the Population Density section.
- The routes of the Carver and Medway Fire Departments do not go through residential areas as the Tewksbury route does.

The separated access points for the Carver and Medway sites limit the likelihood of one access point being impacted by traffic congestion. The Tewksbury route is problematic because emergency vehicles would be forced to contend with potential evacuation traffic. Old Boston Road is the only entry/exit for the 539 housing units and 45+ businesses in the immediate area. In an emergency, this single road would be used by both the 539+ evacuating vehicles and emergency responders, creating a severe public safety challenge, particularly when considering the specialized requirements for evacuating facilities like Bayberry Assisted Living, especially the 21 residents in the Memory Care unit.

The following figure illustrates that the only way for the residents and businesses, in the area described in the Population Density section, to enter or exit this area is by traversing Old Boston Road. The only way for emergency vehicles to access the BESS is through Old Boston Road. In the event of an emergency, there could be 539 cars (assuming one per unit) leaving the area while emergency vehicles are entering the area.

Legend:

- Red: Old Boston Road
- Yellow: Feeder Streets to Old Boston Road



Vulnerable Populations

The proposed Tewksbury BESS site poses a significant risk to vulnerable populations (children and elderly) due to the concentration of facilities within a 0.8-mile radius. These facilities include:

Day Care Centers:

- Green Meadows Country Day School - 64 students
- Main Street Learning Academy - 24 students
- BrightPath Tewksbury (opening 2026) - TBD

Elementary Schools:

- Center Elementary School - ~767 students / 78 staff
- John F Ryan Elementary School - ~500 students / 73 staff

Senior Housing:

- Emerald Court - 180 units
- Carnation Drive - 80 units

Adult Care Centers:

- Bayberry - 94 units (73 Traditional / 21 Memory Care)
- Blair House Assisted Living - 35 units (23 Traditional / 12 Memory Care)
- Blair House Nursing Facility- 131 units (86 Traditional / 45 Memory Care)

Note that evacuating many of these locations will be impacted by the evacuation of the 246 units at Tewksbury Commons using Old Boston road for their evacuation.



In contrast:

- **Carver** has one elementary school (0.9 miles) and one daycare (0.8 miles), but no Assisted Living or Senior housing within 0.8 miles.
- **Medway** has one daycare (0.4 miles) and no elementary school, senior living, or assisted living facilities within 0.8 miles.

The high concentration of these vulnerable populations in Tewksbury, especially those requiring specialized evacuation (e.g., Memory Care residents), is further complicated by the fact that the evacuation of the nearby 246-unit Tewksbury Commons apartment complex will also rely on the same critical evacuation route (Old Boston Road).

Conclusions

Significant public health and safety differences exist between the approved Carver and Medway BESS proposals and the proposed Tewksbury site.

The Tewksbury proposal presents three major concerns:

- **Population Density:** The localized population density surrounding the Tewksbury site (7,937 per square mile) is significantly greater than the surrounding areas of the Carver and Medway sites, increasing the risk to the public in the event of an incident.
- **Emergency Access:** Emergency responder access to the Tewksbury site is less direct and requires traversing residential areas. This poses a severe public safety challenge, as first responders may be forced to contend with evacuation traffic on the single entry/exit road (Old Boston Road).
- **Vulnerable Populations:** The site is located in close proximity (within 0.8 miles) to a significantly larger number of vulnerable residents, including multiple day care centers, elementary schools, senior housing, and adult care facilities—many of which require specialized evacuation procedures.

For these compelling reasons, the Tewksbury BESS proposal should be rejected based on considerations of public health and public safety.

Appendix A - Population Density Data Sources

Source data: [MA Division of Local Services](#)

DOR Code	Municipality	County	Billing Cycle	Form of Government	School Structure	2023 Population	FY 2025 Single Family Tax Bill	2022 DOR Income Per Capita	2024 EQV Per Capita	Land Area	Population Density	2018 Total Road Miles
052	Carver	PLYMOUTH	Quarterly	OPEN TOWN MEETING	K-12	11,675	7,176	39,725	189,253	37.4	312	104.68
177	Medway	NORFOLK	Quarterly	OPEN TOWN MEETING	K-12	13,560	9,218	64,604	268,322	11.54	1,175	74.00
295	Tewksbury	MIDDLESEX	Quarterly	OPEN TOWN MEETING	K-12	31,243	8,322	52,263	246,488	20.7	1,509	165.27

Source data the [Census Bureau](#)

QuickFacts

Tewksbury town, Middlesex County, Massachusetts

[What's New & FAQs](#)

QuickFacts provides statistics for all states and counties. Also for cities and towns with a *population of 5,000 or more*.

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Table

All Topics	Tewksbury town, Middlesex County, Massachusetts
Population estimates, July 1, 2024, (V2024)	31,796
PEOPLE	
Population	
Population estimates, July 1, 2025, (V2025)	NA
Population estimates, July 1, 2024, (V2024)	31,796
Population estimates base, April 1, 2020, (V2025)	NA
Population Characteristics	
Veterans, 2020-2024	1,469
Foreign born persons, percent, 2020-2024	10.5%
Housing	
Housing Units, July 1, 2024, (V2024)	X
Owner-occupied housing unit rate, 2020-2024	84.5%
Median value of owner-occupied housing units, 2020-2024	\$573,600
Median selected monthly owner costs - with a mortgage, 2020-2024	\$2,727
Median selected monthly owner costs - without a mortgage, 2020-2024	\$1,163
Median gross rent, 2020-2024	\$2,310
Building Permits, 2024	X
Families & Living Arrangements	
Households, 2020-2024	11,709
Persons per household, 2020-2024	2.61
Living in the same house 1 year ago, percent of persons age 1 year+ , 2020-2024	91.0%
Language other than English spoken at home, percent of persons age 5 years+, 2020-2024	13.9%
Computer and Internet Use	
Households with a computer, percent, 2020-2024	96.8%

Appendix B - EFSB Resident's Data

Carver stated that the nearest residency is 650 feet from the nearest battery.

Medway provided the following information:

	Within the Work Area	0 to 25 feet	>25 feet And < 50 feet	>50 feet And <100 feet	>100 feet And <200 feet	> 200 feet And < 300 feet
Residential Structures	3				4	1
Residential Units	3				4	1
Businesses	1					
Sensitive Receptors						
Protected and Recreational Open Space				1	1	1

While the information for Tewksbury is:

	Within 100 feet	Between 100 and 1,000 Feet	Between 1,000 feet and 1 mile
Single Family Residences	2	14	941
Multi-Family Residential Units		470	1351
Businesses	43	45	171
Child Care Facilities			4
Long Term Care Facilities			3
Schools			2
Places of Worship			1
Town Halls			2
Police Stations			1
Fire Stations			2

A comparison of the numbers within 100 feet is:

	Carver	Medway	Tewksbury
Residencies	0	6	2
Business	Unknown	1	43