



City of Boston, Massachusetts  
Office of the Mayor  
**MICHELLE WU**

February 12, 2024

TO THE CITY COUNCIL

Dear City Councilors:

In response to a 17F request filed by your Honorable Body on January 22, 2024, Docket #0205. Re: Relative to Boston Emergency Medical Services response times.

Sincerely,

Michelle Wu  
Mayor of Boston



Michelle Wu, *Mayor*  
Bisola Ojikutu, MD, MPH, *Executive Director*



James Hooley, *Chief of Department*  
Sophia Dyer, MD, *Medical Director*

February 6, 2024

Boston City Council  
One City Hall Square, 5<sup>th</sup> Floor  
Boston City Hall  
Boston, MA 02201

Re: Docket #0205

Dear Councilor Breadon,

Attached please find responses to Docket #0205: *Order requesting certain information under 17F relative to Boston Emergency Medical Services response times*, filed on January 22, 2024.

Sincerely,

A handwritten signature in black ink that reads "James Hooley".

James Hooley  
Chief of Department  
Boston EMS



# Boston EMS

## Re. Docket #0205: Order requesting certain information under 17F relative to Boston Emergency Medical Services response times

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In the three years post-COVID-19, Boston EMS has seen record increases in emergency medical call volume. The Department went from answering the call for 115,537 emergency medical incidents in 2020 to 138,797 incidents in 2023, a 20% increase. Although the City has actively invested in the Department, adding 29 uniformed positions during this timeframe, a statewide shortage in EMTs has presented challenges filling vacancies. To address this, Boston EMS has taken a multifaceted approach, with the positive impact to begin taking effect in February of 2024. As Boston EMS aligns resources with demand, response times will go down.

Actions to fill vacancies, address rising demand for services, and reduce response times include:

1. **Pipeline to Employment** – In 2022, Boston EMS secured federal grant funding in partnership with the Worker Empowerment Cabinet to offer over 300 EMT course scholarships for individuals interested in employment.
2. **Cadet Program** – In 2023, the first cohort of EMS Cadets in approximately two decades began their employment, creating a pay-to-learn opportunity for individuals to become certified EMTs and transition to an EMT Recruit Academy after 6 months.
3. **Recruitment** – In 2022, Boston EMS assigned a Deputy Superintendent to oversee year-round recruiting as well as adding a second grant-funded recruitment position in 2023.
4. **Hiring Campaign** - A 'Bring who you are, to who we are' hiring campaign was launched in 2023, including ads on MBTA buses, subway stations and social media.
5. **Residency waiver** – In 2023, a temporary suspension of the residency requirement has expanded the pool of individuals eligible for employment at Boston EMS.
6. **Filling vacancies** – in the last six months, Boston EMS has onboarded 58 new hires, with active hiring for the next EMT-Recruit Academy and Cadet class underway.
7. **Ambulance stations** - A new station in West Roxbury is scheduled to open in March of 2024. Additional efforts are underway to address stations needs in multiple neighborhoods across the city. Ambulance availability is positively impacted by units having a station within their service area.
8. **Mobile Integrated Healthcare ED Avoidance (MIH EDA)** – Since becoming the first EMS in the Commonwealth to secure MIH EDA, in July of 2022, hundreds of patients have benefited from alternative services and enhanced care coordination.

### Priority 1 Response Times

Incidents determined to be more life-threatening, based on what is communicated by the 9-1-1 caller, as well as those where the severity of illness/injury is unknown, are categorized as 'Priority 1'. For the 31,985 Priority 1 calls in 2022 and 35,167 Priority 1 calls in 2023, below are the median response times (in minutes) by neighborhood. It should be noted that of the Priority 1 calls, those that are more life-threatening, continue to have faster response times. For example, Priority 1 incidents type coded as 'trauma' have a citywide 5.18-minute median response time in 2022 and 5.87 in 2023.

<b>Neighborhood</b>	<b>2022</b>	<b>2023</b>
Boston Downtown	6.58	6.90
Allston/Brighton	7.62	7.82
Charlestown	6.67	7.85
Dorchester	7.29	7.70
East Boston	7.65	7.88
Hyde Park	9.12	9.15
Jamaica Plain	7.62	7.63
Mattapan	7.23	7.43
Roslindale	7.68	7.67
Roxbury	6.22	6.38
South Boston	6.75	7.20
West Roxbury	8.92	8.87
<b>Citywide</b>	<b>7.07</b>	<b>7.15</b>

Boston EMS response times are from 9-1-1 call entry to ambulance arrival; they include the time Boston EMS 9-1-1 call-takers triage the incident and record pertinent information, the time for the unit(s) to be dispatched, and ambulance travel time.

As a two-tiered pre-hospital system, the department includes both Basic Life Support (BLS) and Advanced Life Support (ALS) skills. Boston EMS does not have a benchmark for ALS response times because care is initiated with the first arriving unit, which may be EMTs or Paramedics. Response times are not tracked or reported by resource type, which can be added or removed, based on the evolving needs of an incident. With 21 frontline EMT-staffed BLS ambulances and 5 paramedic-staffed ALS ambulances, Boston EMS typically sends both an ALS and BLS ambulance to the more critical medical emergencies. This allows the more readily available BLS crews to arrive and begin the provision of care, as well as drive both ambulances while paramedics work jointly to render care.

### **Additional Personnel**

The current 31 EMT Recruits completed their 17-week classroom portion of their training in January (2024) and will be assigned to training ambulances in February, responding to real 9-1-1 emergencies and providing additional resources to residents across the city experiencing a medical emergency. Shortly after these EMT-Recruits graduate on April 12<sup>th</sup>, a new EMT Recruit class is scheduled to start 10 days later, which will include current Cadets. A second Cadet cohort is scheduled to start the week after, on April 29<sup>th</sup>.

Since 2020, Boston EMS has offered over 20 scholarships to department EMTs, to attend paramedic training, necessary to secure state certification and become eligible for promotion to paramedic.

### **Background**

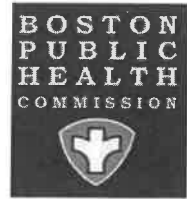
Boston Emergency Medical Services is the City's municipal ambulance service, responding to 9-1-1 clinical incidents across every neighborhood, 365 days a year. Personnel are principally assigned to field and dispatch operations, answering the call, providing patient care, and transporting to area hospitals. As a bureau of the Boston Public Health Commission, Boston EMS strives to offer clinical proficiency, professionalism, and compassion, while adapting services to meet the evolving needs of

our patient population. Bridging the dual public health and public safety role, Boston EMS has always been a safety net to the City's most vulnerable residents.

In Boston, when a 9-1-1 call is made, a civilian Boston Police Department call-taker is the first point of contact. They assess whether the emergency is principally an EMS, Police or Fire matter. Calls that are medical in nature are promptly transferred to a Boston EMS call-taker, who is also an experienced Department EMT with enhanced (9-1-1 dispatch) training and certifications. The EMT call-taker can capture relevant information and remain on the line while an ambulance is dispatched, coaching the caller through steps to render care, including CPR or first aid, as well as childbirth. This process allows emergency medical care to be initiated immediately after someone calls 9-1-1.



# BOSTON EMERGENCY MEDICAL SERVICES



## 2023 VITAL STATISTICS

[www.boston.gov/ems](http://www.boston.gov/ems)

Boston Emergency Medical Services (Boston EMS), the primary emergency medical services provider for the City of Boston, is a nationally recognized leader in the field of pre-hospital emergency medicine. The Department leverages the latest advances in both medicine and technology to bring high-quality, compassionate care to the people of Boston. Boston EMS also plays a key role in the City's emergency preparedness efforts and provides community programming designed to educate the public about important health and safety topics.

**Boston Land Area:** 48 sq. miles      **Daytime Population:** 1.2 million      **Budgeted FTEs:** 460  
**Peak Staffing:** 21 Basic Life Support/5 Advanced Life Support Ambulances      **Stations:** 16

SYSTEM WIDE CALL VOLUME			
	2023	2022	Pct. Change
Total Clinical Incidents	138,797	134,424	3.15% increase
Total ALS and BLS Responses	165,611	168,060	-1.48% decrease
Total Transports	91,369	89,265	2.30% increase

MEDIAN RESPONSE TIMES			
	2023	2022	Goals
Priority 1	7.15 min	7.07 min	6.0 min
Priority 2	10.4 min	9.9 min	7.0 min
Priority 3	10.6 min	10.0 min	8.0 min

INCIDENTS BY PRIORITY	NUMBER	PCT.
Priority 1	35,167	25.33%
Priority 2	61,776	44.51%
Priority 3	39,397	28.38%
Priority 4 & Other	2,467	1.78%
<b>Total</b>	<b>138,797</b>	<b>100%</b>

PERSONNEL	COUNT	PCT.
EMTs (Field/Dispatch)	329	77%
Paramedics	52	12%
Supervisor/Command	47	11%

INCIDENTS BY TYPE	NUMBER	PCT.
Illness (abdominal pain, fever, dizzy)	48,564	34.99%
Investigations (person down, alarm)	24,146	17.40%
Injury (lacerations, fractures, etc.)	16,415	11.83%
Cardiac Related (unconscious, CPR, etc.)	12,772	9.20%
Respiratory (Asthma, CHF, etc.)	9,728	7.01%
Psychological/Suicidal	10,796	7.78%
Motor Vehicle (MVA, pedestrian)	5,477	3.95%
Neurological (CVA, seizures)	5,051	3.64%
Fire/ Hazmat/ Standby/ Environ.	2,155	1.55%
Trauma (penetrating injury, long fall, etc.)	1,028	0.74%
Overdose	2,665	1.92%
<b>Total</b>	<b>138,797</b>	<b>100%</b>

NEIGHBORHOOD	INCIDENTS	PCT.
Allston/ Brighton	7,362	5.30%
Boston Central	33,057	23.82%
Charlestown	2,432	1.75%
East Boston	9,335	6.74%
South Boston	7,268	5.24%
Roxbury	24,060	17.33%
Dorchester	29,393	21.18%
Roslindale	3,701	2.67%
Jamaica Plain	7,198	5.19%
West Roxbury	3,639	2.62%
Hyde Park	5,204	3.75%
Mattapan	5,374	3.87%
Other	754	0.54%
<b>Total</b>	<b>138,797</b>	<b>100%</b>

PATIENTS BY AGE	NUMBER	PCT.
Under 15	4,194	5.15%
15-24	10,370	9.56%
25-44	29,866	27.57%
45-64	31,646	29.16%
65-74	14,310	13.15%
75+	16,742	15.43%



# BOSTON EMERGENCY MEDICAL SERVICES



## 2022 VITAL STATISTICS

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Boston Emergency Medical Services (Boston EMS), the primary emergency medical services provider for the City of Boston, is a nationally recognized leader in the field of pre-hospital emergency medicine. The Department leverages the latest advances in both medicine and technology to bring high-quality, compassionate care to the people of Boston. Boston EMS also plays a key role in the City's emergency preparedness efforts and provides community programming designed to educate the public about important health and safety topics.

**Boston Land Area:** 48 sq. miles      **Daytime Population:** 1.2 million      **Budgeted FTEs:** 450  
**Peak Staffing:** 21 Basic Life Support/5 Advanced Life Support Ambulances      **Stations:** 16

SYSTEM WIDE CALL VOLUME			
	2022	2021	Pct. Change
Total Clinical Incidents	134,424	126,790	6.02% increase
Total ALS and BLS Responses	168,060	160,577	4.66% increase
Total Transports	89,265	85,252	4.71% increase

MEDIAN RESPONSE TIMES			
	2022	2021	Goals
Priority 1	7.07 min	6.3 min	6.0 min
Priority 2	9.9 min	8.3 min	7.0 min
Priority 3	10.0 min	8.1 min	8.0 min

INCIDENTS BY PRIORITY	NUMBER	PCT.
Priority 1	34,358	25.56%
Priority 2	59,507	44.27%
Priority 3	38,299	28.49%
Priority 4 & Other	2,260	1.68%
<b>Total</b>	<b>134,424</b>	<b>100%</b>

UNFIRORM PERSONNEL	COUNT	PCT.
EMTs (Field/Dispatch)	324	77%
Paramedics	52	12%
Supervisor/Command	47	11%

INCIDENTS BY TYPE	NUMBER	PCT.
Illness (abdominal pain, fever, dizzy)	44,936	33.43%
Investigations (person down, alarm)	24,412	18.16%
Injury (lacerations, fractures, etc.)	15,707	11.68%
Cardiac Related (unconscious, CPR, etc.)	12,708	9.45%
Respiratory (Asthma, CHF, etc.)	9,617	7.15%
Psychological/Suicidal	10,707	7.97%
Motor Vehicle (MVA, pedestrian)	5,247	3.90%
Neurological (CVA, seizures)	4,893	3.64%
Fire/ Hazmat/ Standby/ Environ.	2,473	1.84%
Trauma (penetrating injury, long fall, etc.)	1,114	0.83%
Overdose	2,610	1.94%
<b>Total</b>	<b>134,424</b>	<b>100%</b>

NEIGHBORHOOD	INCIDENTS	PCT.
Allston/ Brighton	7,371	5.48%
Boston Central	31,549	23.47%
Charlestown	2,426	1.80%
East Boston	8,686	6.46%
South Boston	7,177	5.34%
Roxbury	23,060	17.15%
Dorchester	28,460	21.17%
Roslindale	3,635	2.70%
Jamaica Plain	7,263	5.40%
West Roxbury	3,655	2.72%
Hyde Park	5,168	3.84%
Mattapan	5,145	3.83%
Other	829	0.62%
<b>Total</b>	<b>134,424</b>	<b>100%</b>

PATIENTS BY AGE	NUMBER	PCT.
Under 15	4,619	5.16%
15-24	8,224	9.18%
25-44	24,268	27.10%
45-64	26,441	29.53%
65-74	11,745	13.12%
75+	14,247	15.91%