

Leicester Emergency Medical Services Department

Michael R. Dupuis – Fire Chief

Brian D. Kelley – Interim EMS Director

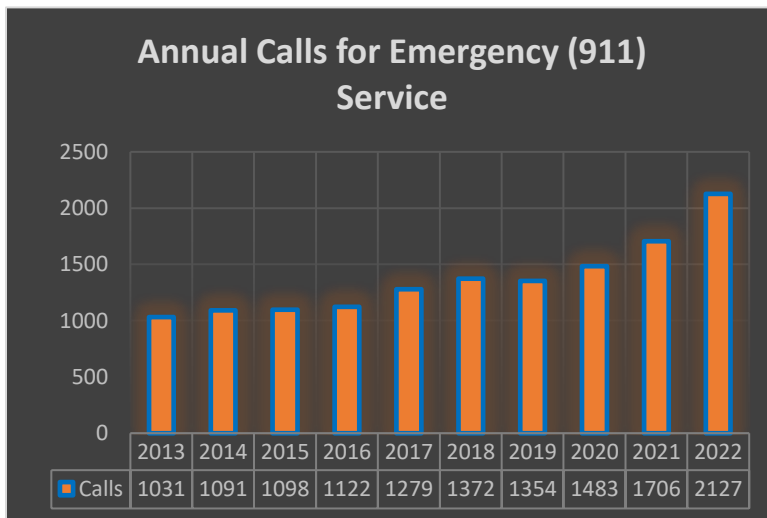
Donna Fields – Fire/EMS Administrative Assistant

INTRODUCTION

It is my honor and privilege to submit the Leicester Emergency Medical Services (LEMS) Department’s annual report. In 2021, like many communities surrounding us, Leicester EMS continued to experience an unprecedented increase in call volume, with a 15 % increase from 2020.

2022 saw this trend continue with nearly a 25 % increase in call volume, responding to 2,127 calls for emergency (911) service, in addition to 119 non-emergency calls for service – a total of 2,246 calls for service.

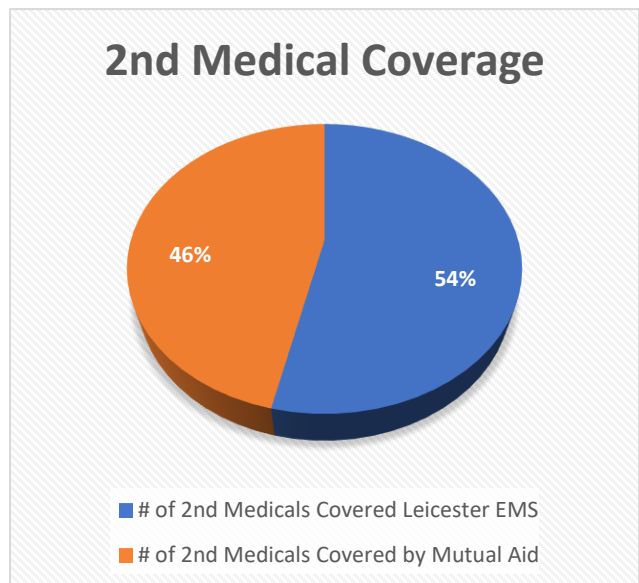
EMERGENCY RESPONSES



In 1981, when the Ambulance Service separated from the Leicester Police Department, we responded to 396 calls for service. Over the last five years, Leicester EMS has seen a 66 % increase in call volume.

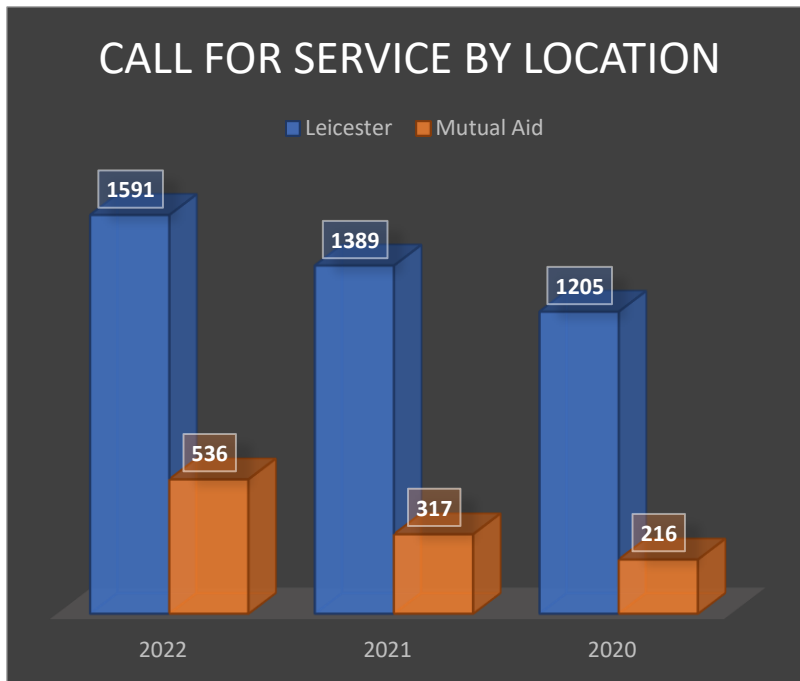
For the third straight year, the department set a record for the busiest month in our history – in October 2022 we responded to 227 emergency medical calls. If this trend continues, by 2026 we will respond to an estimated 2,549 calls for emergency service annually.

Leicester EMS was able to cover 92 % of our call volume this year as the primary ambulance on scene. There were 364 incidents of a 2nd or simultaneously occurring medical emergency in 2022. Leicester EMS was able to cover 134, or 54 % of these incidents.



It should be noted that since July 1, 2022, when Leicester EMS began staffing a 2nd Ambulance Monday through Friday, the number of 2nd Medicals covered has increased to an average of 54% for the year:

- 2022 July to December: 62.6 % (95 of 134)
 - The 2nd Ambulance Crew covered 70.9% of the 2nd Medicals
- 2022 January to June: 40.7 % (61 of 150)
- 2021 July to December: 33.6 % (38 of 113)



Leicester EMS provided mutual aid 535 times in 2022 but received mutual aid 231 times. Nearly 27 % of our mutual aid requests have been for an Advanced Life Support (ALS) ALS Intercept – a request for another ambulance service to provide Paramedic Services to a patient being cared for by Leicester EMS EMTs when one of our Paramedics is unavailable.

It should be noted that the vast majority of our calls for service occur in the Town of Leicester. We have seen a steady increase in calls for service in Leicester by an average of 13 % per year, and Mutual Aid by an average of 62 % per year over the last 3 years.

NON-EMERGENCY INTER-FACILITY TRANSPORT (IFT) RESPONSES

In late 2021 Leicester EMS was approached by Vibra Hospital / The Meadows of Leicester looking for assistance with providing non-emergent inter-facility transports (IFTs). In accordance with a directive issued by the Commonwealth of Massachusetts in a memo released in November 2021 – directing all ambulance services (including municipalities) to provide assistance to facilities if possible, we began exploring the possibility of providing non-emergent transports, to benefit Vibra Hospital / The Meadows of Leicester, as well as the Town of Leicester.

In April 2022 an agreement was reached and signed, where Leicester EMS would be the primary provider of non-emergent inter-facility transports for both Vibra Hospital and the Meadows of Leicester effective July 1, 2022 for a term of 3 years. As part of the contract it was agreed that any request for emergency service shall take priority over a non-emergent request, and the ambulance will be required to divert to the emergency if they have not already arrived on scene for the non-emergent request for service.

A non-emergent inter-facility transport consists of placing a patient that requires continuous medical monitoring into an Ambulance and transporting them with the normal flow of traffic (no lights or siren) to another medical facility, doctor’s office, etc for an appointment or procedure, etc. It is anticipated that we will perform between 200 to 300 non-emergent transports in a typical calendar year. To facilitate this contract, two Full-Time employees were hired to staff a 2nd Ambulance on a regular basis – paid for by the revenue generated performing the non-emergent transports. The added benefit, is that now the Town has a 2nd Staffed Ambulance that will respond when available to all 2nd Medicals.

In 2022 Leicester EMS performed 68 of the accepted inter-facility transport requests which resulted in 119 non-emergent transports. The average duration of a location transport is approximately 2.5 hours, whereas a long-distance transport is 2.7 hours. The 2nd Ambulance Crew (IFT Duty Crew) performed nearly 71 % of the local transports. In total, Leicester EMS Crews spent 174.25 hours performing non-emergent inter-facility transports in 2022.

REVENUE

Effective October 1, 2021 the Leicester Selectboard approved and implemented a revised fee schedule for services provided by Leicester EMS. Furthermore, Leicester EMS began participating in the Massachusetts Certified Public Expenditure (CPE) Program, which provides municipalities with additional funds to assist with covering the cost of providing services to Medicaid patients. These changes have provided a substantial increase in revenue to continue to offset the majority of the operating costs of Leicester EMS. It should be noted however, that the Departments ability to completely offset its operating budget while still maintaining effective staffing with safe, reliable, and modern apparatus and equipment will not be possible without partially being subsidized by the Town of Leicester. This is as a direct result of the low reimbursement rates from Medicare and Medicaid, despite the recent increased implemented in 2021 and 2022.

PERSONNEL AND STAFFING

Leicester EMS currently employs 54 Personnel (35 EMTs, 1 Advanced EMT, 16 Paramedics, and 1 Administrative Assistant). Leicester EMS utilizes a variety of Full-Time, Part-Time Non-Benefited, Per-Diem, and On-Call Employees:

1 Full-Time Fire Chief	19 Part-Time Non-Benefited EMS Providers
1 Part-Time Administrative Assistant	25 Per-Diem EMS Providers
1 Part-Time EMS Director	3 On-Call EMS Providers
4 Full-Time EMS Providers	

This staffing model presents a unique challenge in terms of ensuring adequate 24/7 Paramedic Level coverage due to not having Full-Time employees on-duty 24/7. Despite the national paramedic shortage, and in no small part due to the dedication of our employees we have seen a significant increase in the department's ability to staff our Primary Ambulance Crew (911 Duty Crew) at the Paramedic Level from a low of 34.4 % in September 2021 to an average of over 75 % by the end of 2022.

In July 2022 a 2nd Ambulance Crew was placed on duty Monday through Friday from 10am to 6pm. This purpose of this truck is not only to provide non-emergent transports as part of our inter-facility transport agreement, but more important to respond to 2nd or simultaneously occurring medical emergencies. This ambulance has been staffed at the Paramedic Level nearly 92 % of the time. In addition, it should be noted that the 2nd Ambulance Crew (IFT Duty Crew) was available to respond to 2nd or simultaneous occurring medicals 90 % of the time it was staffed, spending only 10 % of its time performing non-emergent inter-facility transports.

Furthermore, during periods of severe weather, or when large events are held within the Town of Leicester, additional personnel are placed on-duty to ensure that we have appropriate levels Emergency Medical Services (EMS) Personnel available.

2022 saw continued reorganization of Leicester EMS with four (4) EMS Supervisor – Lieutenants promoted (Lt Colleen Plante, Lt Ryan Murphy, Lt Jeremy Parkinson, and Lt Robert Fitzgerald). Additional administrative positions include CQI Specialists (Lt Robert Fitzgerald and Paramedic Christopher Montiverdi), Scheduling Coordinator (EMT Jennifer Franklin), Supply Coordinator (EMT Molly Dube), and Training Coordinator (Paramedic Ashley Belanger).

In addition, our first four (4) Full-Time EMS Providers were hired in 2022: 2 Paramedics who serve on the Primary Ambulance Crew (911 Duty Crew) as well as 1 Paramedic and 1 EMT who serve on the 2nd Ambulance Crew (IFT Duty Crew).

I strongly urge the residents of Leicester to consider the creation of two additional Full-Time Paramedic Positions in the next one to two years to serve on the Primary Ambulance Crew (911 Duty Crew). These

positions would permit the Town of Leicester to guarantee that the first ambulance out the door, will always be staffed at the Paramedic Level. Furthermore, it should strongly be considered that the 2nd Ambulance Crew (IFT Duty Crew) be expanded to include Saturday and Sundays, thus further expanding Leicester EMS's capability to cover 2nd or simultaneously occurring medical emergencies.

APPARATUS

Leicester EMS currently operated three Advanced Life Support (ALS) Paramedic Level and one Basic Life Support (BLS) Level Ambulances in 2022:

- Ambulance 1 – 2021 Ford
- Ambulance 2 – 2022 Dodge
- Ambulance 3 – 2012 International
- Ambulance 4 – 2005 Chevrolet

Leicester EMS apparatus was plagued by mechanical issues throughout 2021 and 2022, resulting in multiple ambulances being placed out of service simultaneously, resulting in an increased number of requests for mutual aid – despite Leicester EMS personnel being available to respond to emergencies. Fortunately we took delivery of 2 new ambulances in 2022 (Ambulance 1 and Ambulance 2) and this has permitted us to provide consistent, regular service to our residents despite the continued mechanical issues that effect Ambulance 3 and Ambulance 4. Ambulance 4 was permanently removed from service at the end of 2022 and it is our hope to replace this with a new Ambulance in 2023.

In 2022, the Leicester Fire and EMS Department's took possession of a former Leicester Police SUV which replaced Car 1. The old Car 1 was converted into a utility vehicle to be utilized by members of Leicester EMS and Leicester Fire to attend trainings, details, operate as a "back-up" command vehicle, and respond to emergency calls as needed. Unfortunately this vehicle, now known as Car 10 was plagued by mechanical issues and became cost prohibitive to utilize. Fortunately another vehicle from Leicester Police is expected to arrive in early 2023 which will allow for the current Car 10 to be replaced.

EQUIPMENT, TECHNOLOGY, AND TRAINING

Over the last several years, several capital needs of Leicester EMS have been met including replacement of all three Cardiac Monitors with Lifepack 15s, and the purchase of Lucas CPR Devices for all ambulances.

In 2021 all computers on the ambulances used to complete Patient Care Reports (PCR)s were replaced, and on January 1, 2022 we transitioned to a new reporting software, ESO. This software has enabled to the department to appropriately (and electronically track) call volume and will decrease the amount of time from completion of a PCR to its transmission to our 3rd party billing service – thus decreasing insurance reimbursement times. In addition, modems were placed on all our Ambulances which allow the Cardiac Monitors to transmit telemetry to area hospital, as well as streamlining the process to attach the Cardiac Monitor data to the PCRs written by our EMTs and Paramedics.

In addition, Leicester EMS began utilizing PsTrax to complete checklists and controlled substance logs, CrewSense for Scheduling, and EMS1 Academy to ensure all of our members are able to have access to up to date, current medical training regardless of their in-person availability. Furthermore, our Training Coordinator, Paramedic Ashley Belanger now conducts regular monthly in-person training to allow for members who perform in person training to do so, as well as to conduct hands on training evolutions. A special thank you to Paramedics Ryan and Pamela Plante for teaching a National Continued Competency Requirements (NCCR) Program for our employees.

COVID-19 PANDEMIC

With the beginning of the COVID-19 Pandemic in December 2019, the pandemic further strained the overburdened Healthcare System. Pre-Hospital Emergency Medical Services (EMS) have not been immune. Recruitment and retention of employees has been affected by the pandemic.

The pandemic has not only affected the retention of employees, but also with the length of time it takes to complete a call – the “turnaround time”. Ambulance crews are faced with long waits at Hospital Emergency Departments before being able to transfer a patient (and care of the patient) to the facility on nearly every call. Furthermore, crews that transport patients confirmed or suspected cases of COVID-19, must full decontaminate the ambulance and all equipment contained within. However, with the help of the Leicester Emergency Management Agency and the Leicester Board of Health, Leicester EMS is well equipped in terms of Personnel Protective Equipment (PPE) to respond to calls for service where the patient is suspected or confirmed to have COVID-19.

In conjunction with the Leicester Board of Health, Leicester Emergency Management, and Leicester Fire Department, a plethora of COVID-19 Vaccine Clinics have successfully been developed and held, resulting in hundreds of adult and pediatric individuals receiving their primary series and/or boosters in a timely manner.

SUMMARY

2022 was another year of firsts for Leicester EMS – record breaking number of calls in a single month and in a single year! Leicester EMS has continued to redefine itself as a leader in the Emergency Medical Services industry to ensure we are ready at a moment’s notice to provide compassionate, high quality pre-hospital emergency care to each and every patient.

Without the dedication of employees and the long hours they spend away from their friends, family and loved ones, we would not have been able to accomplish all that we have – and I would like to offer my sincere gratitude for all that you have, and continue to do for the Town of Leicester!

Respectfully Submitted,

Brian D. Kelley, EMT-P, I/C, MA
Interim EMS Director
Leicester Emergency Medical Services Department

Leicester EMS Personnel

Administration:

Fire Chief/EMT	Michael Dupuis #
Interim EMS Director/Paramedic	Brian Kelley *
Administrative Assistant	Donna Fields #

Lieutenant/Paramedic	Colleen Plante #
Lieutenant/EMT	Ryan Murphy *
Lieutenant/Paramedic	Jeremy Parkinson *
Lieutenant/ Paramedic	Robert Fitzgerald *

Paramedics:

Ashley Belanger *	Jeffrey Joseph
Mark Byron	Paul Normandin *
Zachary Clements	Kristopher Mastromatteo
Elizabeth Fitzgibbons #	Pamela Plante
Michael Franklin *	Ryan Plante
Christopher Harrington #	Mark Wilson

Advanced EMTs:

Allison Plante *

EMTs:

Patrick Almstrom	Molly Dube *	Patrick Shea *
Adrianna Bennett *	Jason Edson	Samantha Weaver
Nicole Bourassa-Pratt	Jennifer Franklin *	Riley Whalen *
Anthony Calamare *	Christopher Goodney, Jr. *	Zach Phillips *
Benjamin Carlson	Shawn Honcharik	Mitchell Robbins *
Megan Cooney	Kristen Johnson	Antonio Santana
Brian Dalton *	John Kennedy	Thomas Savage
Drew Dalton *	Blake Lentine	Eli Seiser
Anthony Dizenzo	Eric Montiverdi *	Cheryl Wilson *
Karl Doane	Kate Mullins #	Robert Wilson
Christopher Doeg	Harsh Patel	John Wojcik

- Denotes a Full Time Employee

* - Denotes a Part Time Non-Benefited Employee

- Denotes a Per-Diem or On-Call Employee