



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

November 2021

HIGHLIGHTING DATA METRICS
TO IDENTIFY OPERATIONAL TRENDS
AND
FACILITATE INFORMED DECISION-MAKING

70 E. MAIN STREET
LAKE ZURICH, IL 60047

OUR MISSION: To care for and protect our community.

OUR VISION: The Lake Zurich Fire Department is dedicated to meeting the ever-changing needs of our community, while ensuring a safe and secure environment for all, through professional development, unity, and teamwork.

OUR VALUES: Professionalism, Responsibility, Integrity, Dedication, Honor

Departmental Narrative - November 2021 Overview

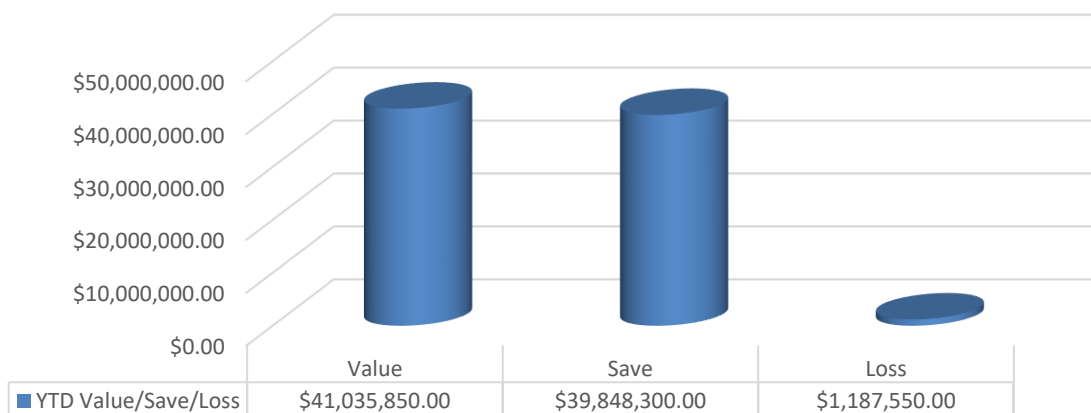
In November, the Department responded to **324** calls for service, averaged **11** calls per day and required **462 individual vehicle responses** to provide the necessary personnel for each incident.

Thirty-four percent (**34%**) of the service area responses occurred while another call was in progress. Fifteen (**15%**) of needs required a response from the non-primary engine, ambulance, or a mutual aid department due to multiple calls in progress.

Our current staffing model increases response times when simultaneous calls occur as the Department is only structured to handle a single response per station. We staff two vehicles with only three personnel using what is called a "jump company." If the call is for the ambulance, the personnel respond with the ambulance, and if it is a fire call, the staff responds with the engine. One of the vehicles remains in the station unstaffed on every incident we respond to due to the limited personnel we have on shift. Once a station commits on a call, the next call for service requires another station or mutual aid to handle the incident.



Lake Zurich - Year To Date - Fire Value/Save/Loss



Member Spotlights



Congratulations to Lieutenant Clayton Booth on his Fire Service Instructor II certification.

(Pictured above/ left)



Firefighter/Paramedic Daniel Frano on his Fire Service Vehicle Operator certification.

(Pictured above/ right)



Firefighter/Paramedic Nathan Welter on his Fire Service Vehicle Operator certification .

(Pictured right)



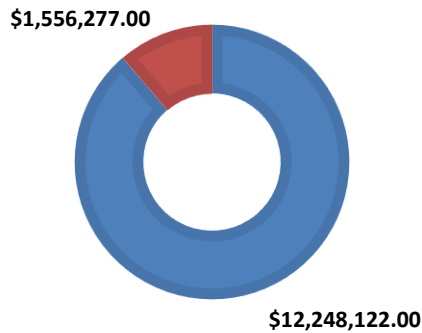
Congratulations to Lieutenant Matt Kempf (*left*) and Deputy Chief Joe Christopherson (*right*) on 20 years of service with the Lake Zurich Fire Department!

Administration Division

Budget Update – The administrative team is busy working on entry-level and promotional testing and preparing for the 2022 budget and looks forward to working with the Board to meet our future needs.

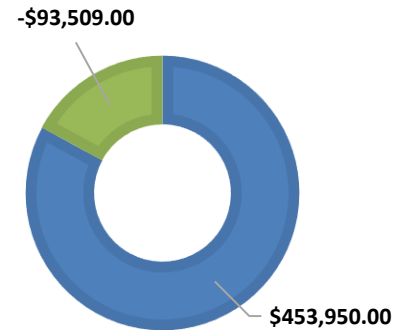
FIRE DEPARTMENT BUDGET

Overall Budget w/ Amendment Available Balance



OVERTIME ACCOUNTS

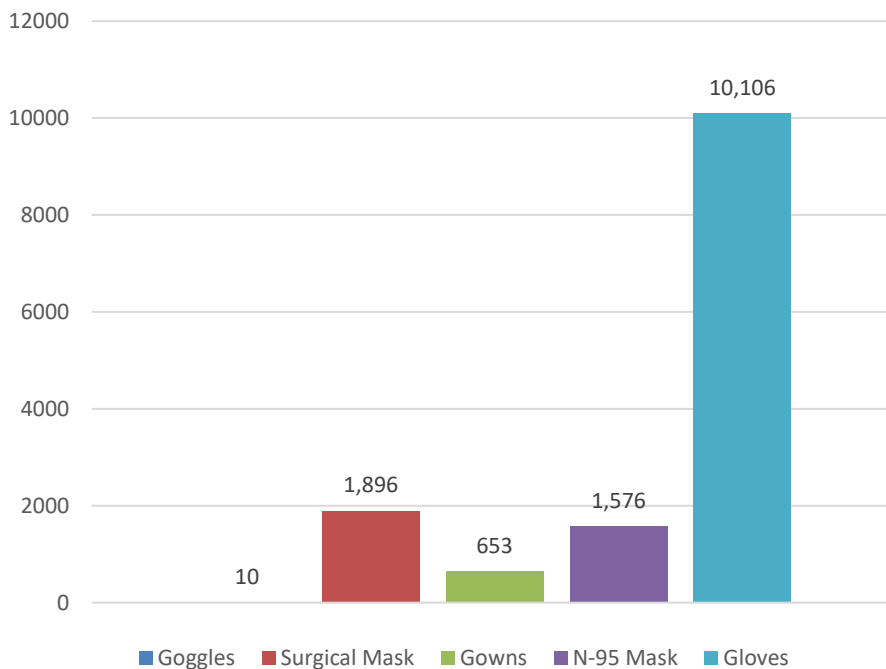
Overtime Budget Negative Balance



COVID-19 Updates

We are currently tracking the Personal Protective Equipment (PPE) that members use and dispose of due to the COVID-19 pandemic. In November, we issued **0 pairs of safety goggles** and used **259 surgical masks** on patients, **128 - N95 respirators** for our personnel, **21 gowns**, and approximately **909 surgical gloves**. The graph pictured below shows year-to-date.

PPE Utilized & Disposed 2021



Community Focus/Risk Reduction/Public Education

Examples of community focus/risk reduction/public education include but are not limited to; school talks and station tours where a safety message such as stop, drop, and roll is covered. We also monitor fire and severe weather drills in schools and educate children about fire safety. Also, we teach exit drills in the home to middle school students and provide CPR/First-Aid training.

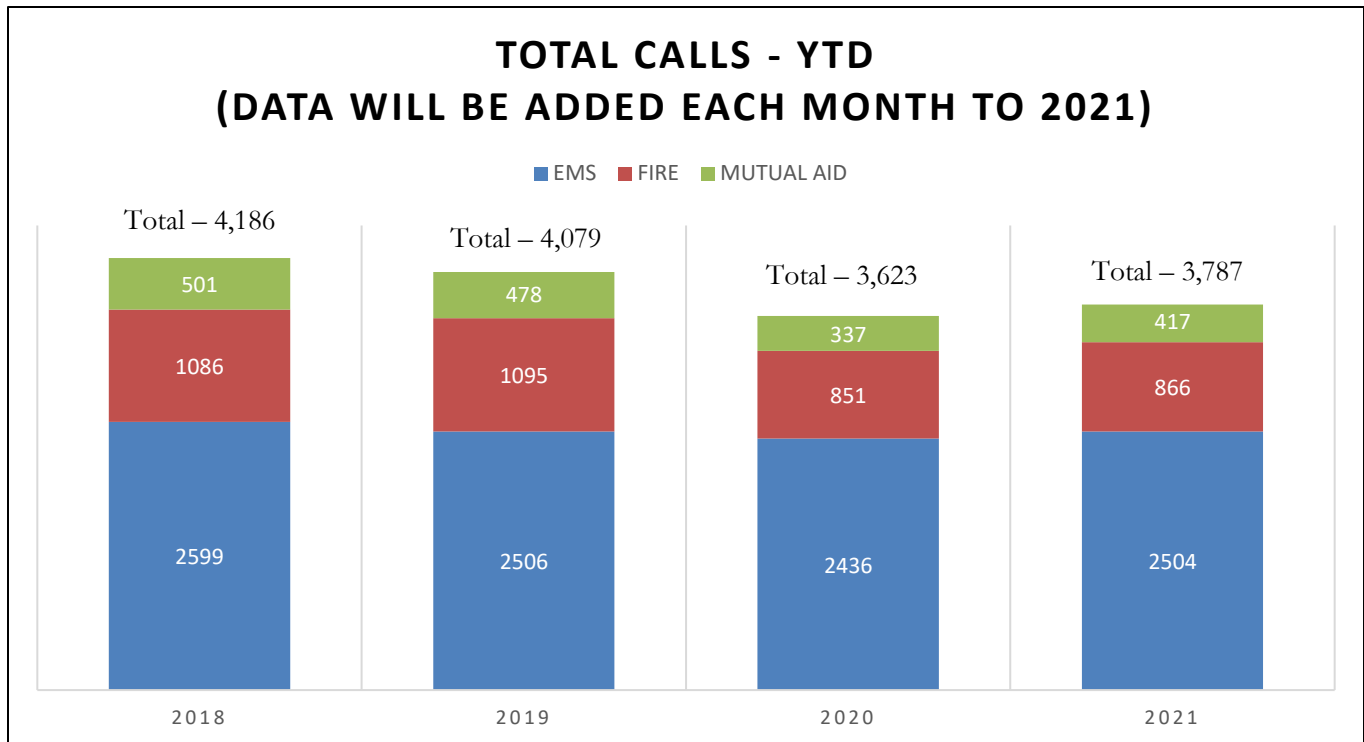
So far in 2021, we have attended about **87 events** and interacted with approximately **26,299 people** in public education.

Operations Division

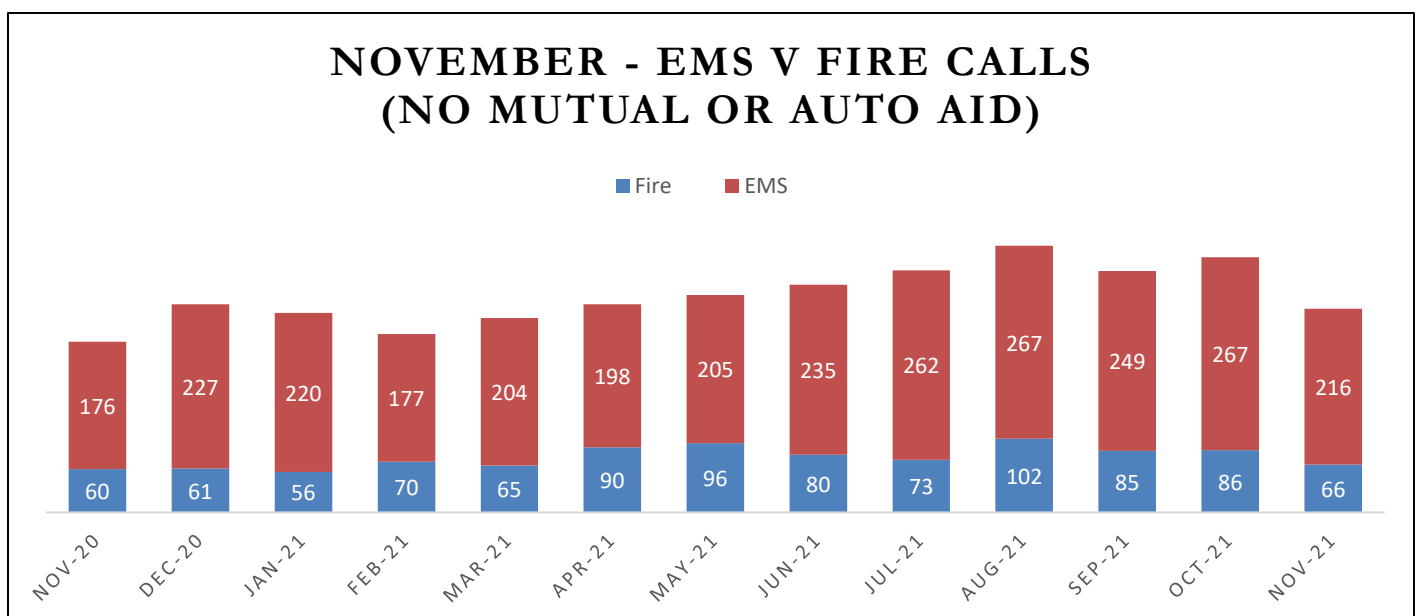
Vehicles Out of Service

- During November, the following vehicles were out of service due to maintenance, repairs, or breakdowns:
 - Ambulances – 21.5 hours
 - Engines – 58 hours
 - Year-To-Date Hours:

Ambulances: **992 hours** | Engines: **2,806 hours**

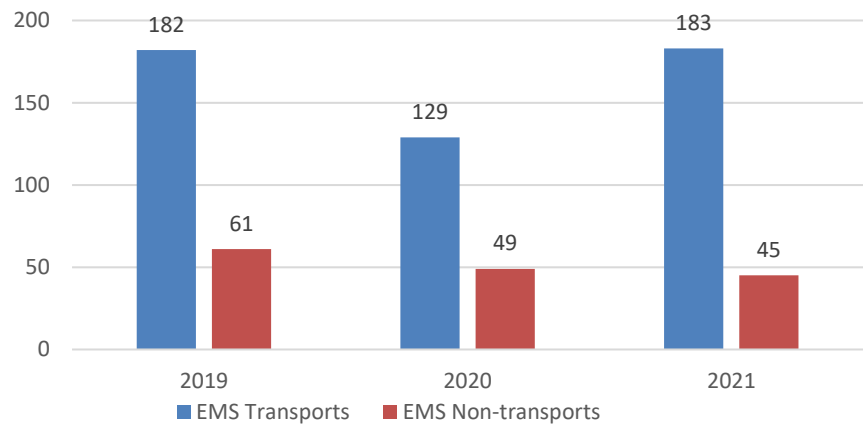


Below is the breakdown of Fire versus EMS incidents in Lake Zurich – minus aid given. Our fire calls include structure fires, car fires, grass fires, dumpster fires, wires down, and other types of service calls.



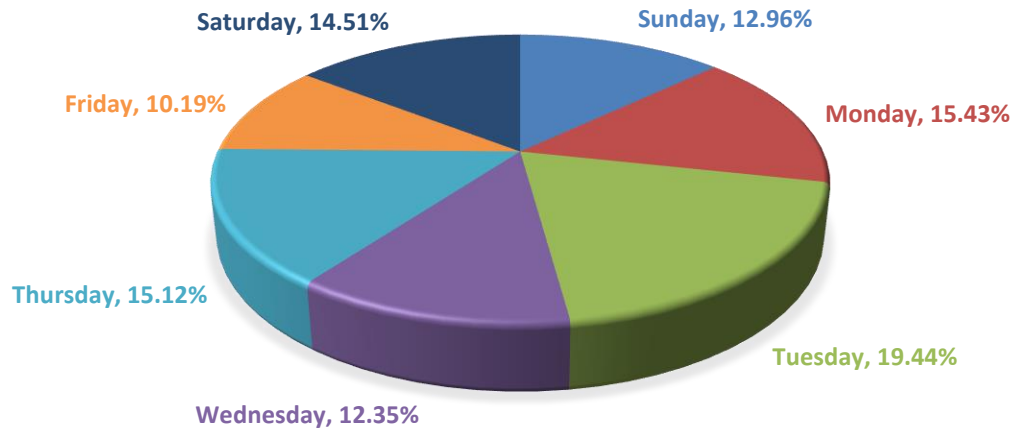
The following chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call result in transport. A prime example of this is an automobile accident where several victims refuses transport. EMS transports always outpace refusals. This chart compares the month of November across 3 years. The trend is consistent with the data period. These numbers represent the patients seen.

**EMS Transports vs Non-Transports - (Patients)
Monthly 3 year - Comparison**

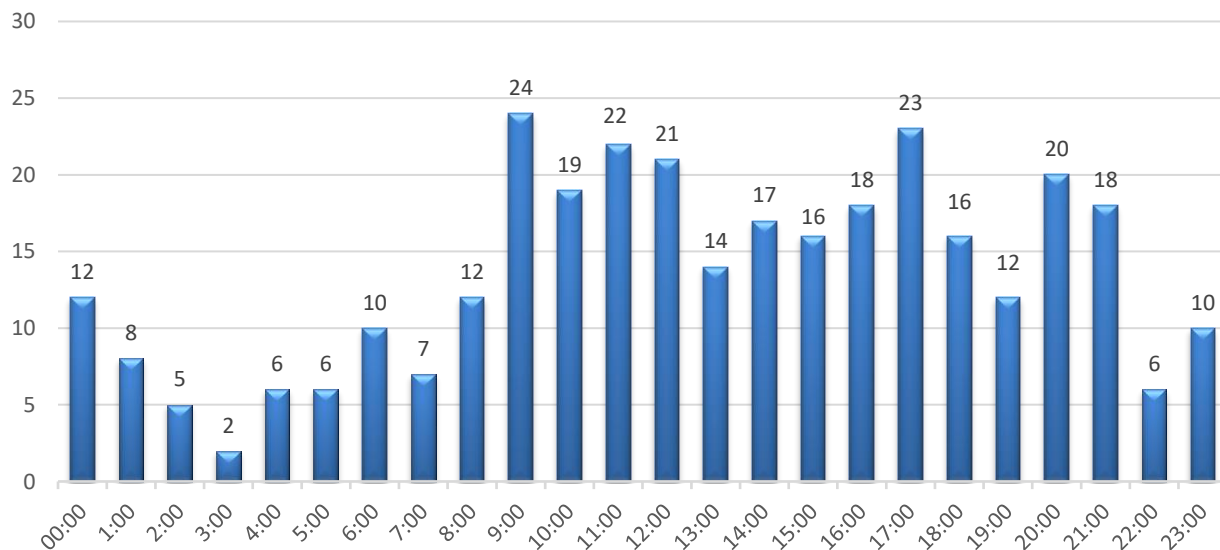


The following two charts break down calls by the day-of-week and hour-of-day.

RESPONSE BY DAY OF WEEK - NOVEMBER



RESPONSE BY HOUR OF DAY - NOVEMBER



STATION 1

321 S. Buesching Road
Lake Zurich, IL 60047

APPARATUS & STAFFING BATTALION 32



ENGINE 321
AMBULANCE 321



STATION 2

350 W. Highway 22
North Barrington, IL 60010

APPARATUS & STAFFING

ENGINE 322
AMBULANCE 322



STATION 3

1075 Old McHenry Road
Lake Zurich, IL 60047

APPARATUS & STAFFING

ENGINE 323
AMBULANCE 323



STATION 4

21970 Field Pkwy
Deer Park, IL 60010

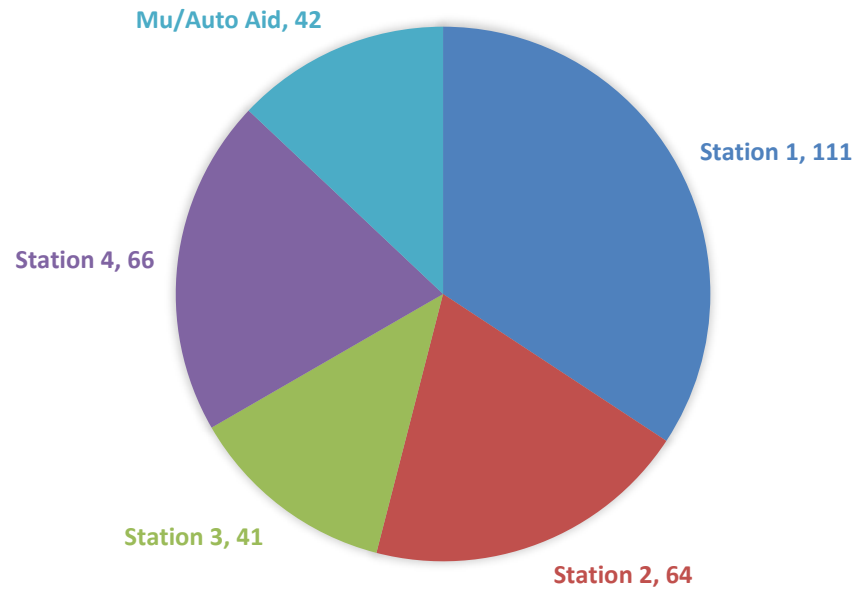
APPARATUS & STAFFING

ENGINE 324
AMBULANCE 324



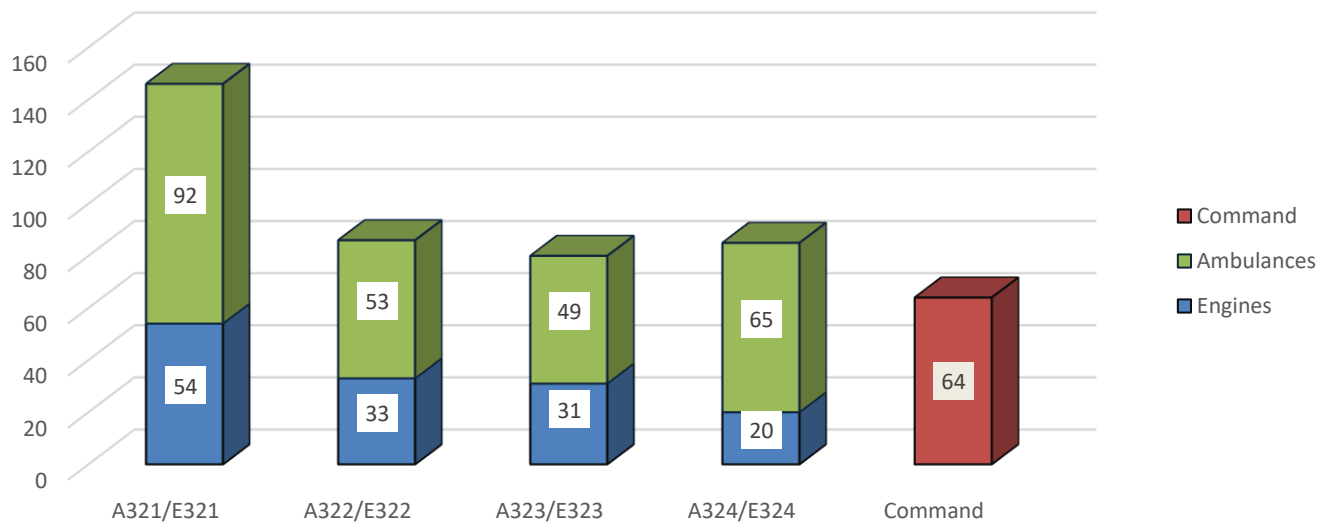
The graph below represents the percentage of calls by each station and mutual/auto aid for November, 2021. The chart does **not** represent the station that responded as the primary resource to the area – it means **where** the call originated. Station 1 is historically the busiest district.

ORIGIN OF CALLS - NOVEMBER, 2021

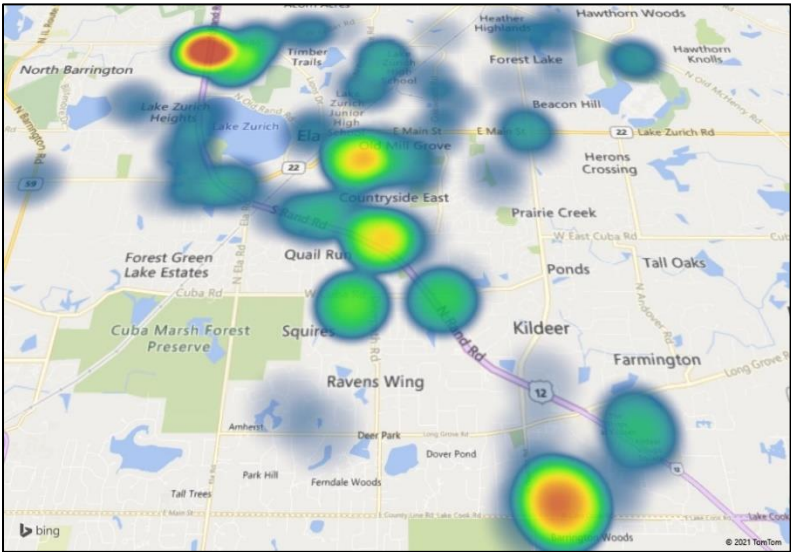


The graph below shows the responses by each unit – Ambulances, Engines, and Command Officer – in November

Total Unit Responses - Ambulances, Engines, & Command Officer



The following graphic is a visual representation of call distribution for November. As visually displayed, the assisted living/memory care facilities are a large portion of our department calls and are consistently within the top ten locations responded to each month. We frequently respond to doctor offices and health clinics, along with automobile accidents near the Route 12 corridor.

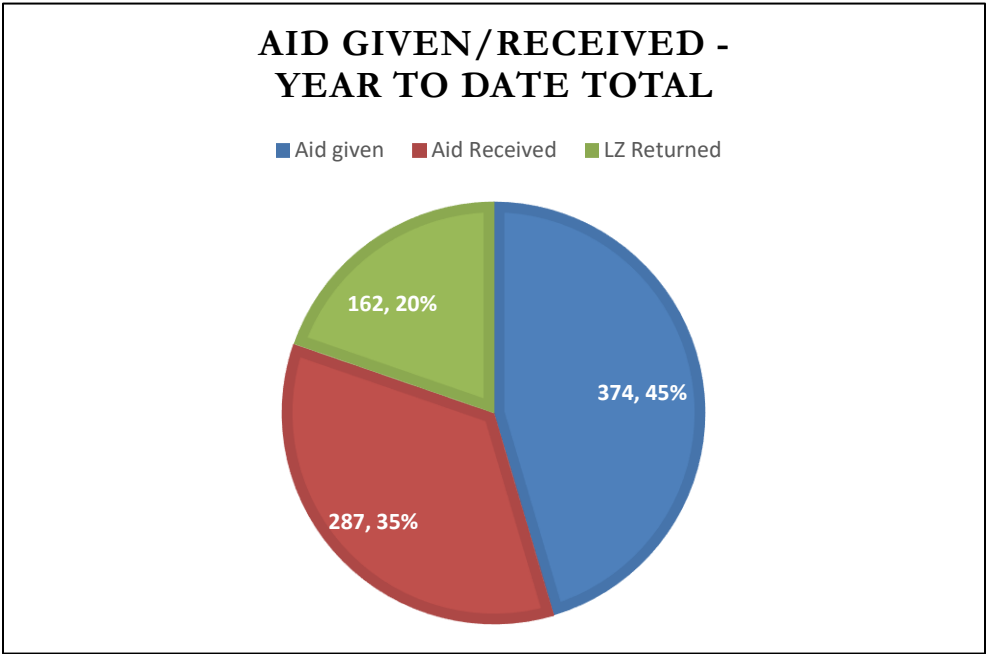


Frequent Call Locations:

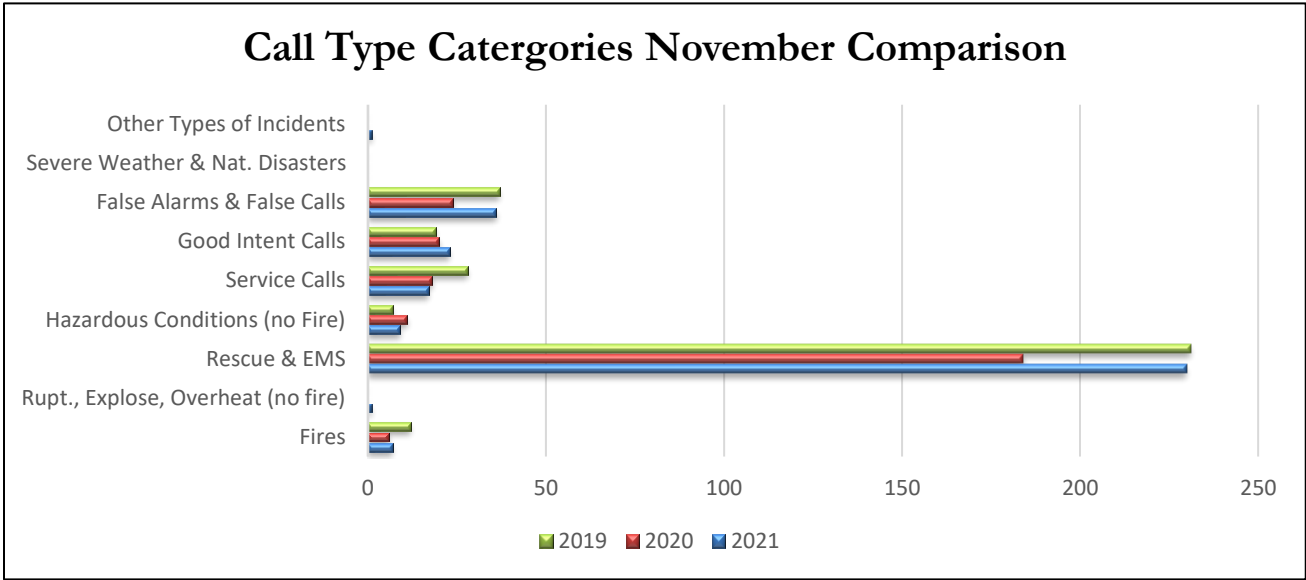
- 795 N. Rand Road – Azpira Place of Lake Zurich – 23 responses
- 21840 Lake Cook Road – Deer Park Village Senior Living – 19 responses
- 900 S. Rand Road – Avantara Health Care Center of Lake Zurich – 10 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 8 responses
- 777 Church Street - Cedar Lake Assistant Living - 5 Responses

Mutual/Auto Aid Response Year to Date –

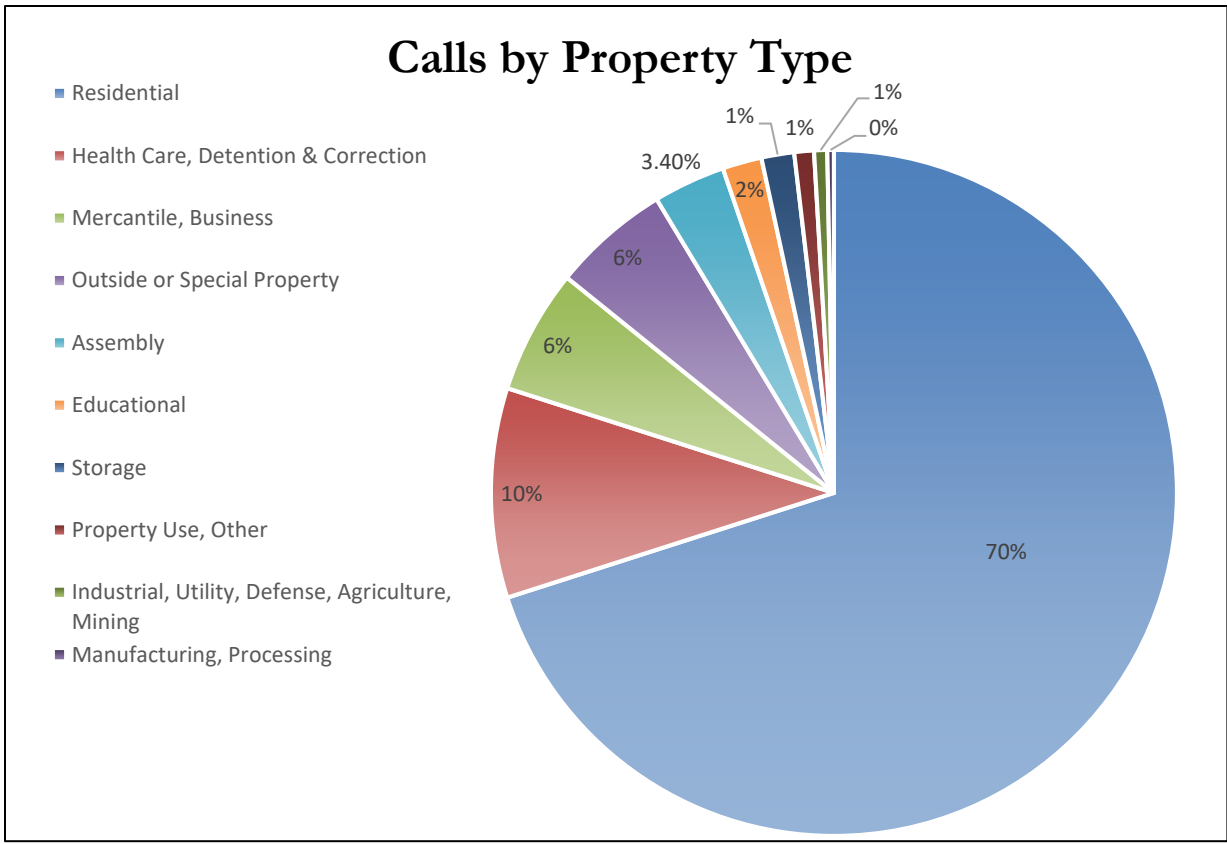
The mutual aid agreements are designed not to overburden any one agency and are looked at carefully for any necessary adjustments. Run cards for the Department have changed, and our partners are responding to assist us more often. In November, we responded to **42 mutual aid calls and returned 20 times** before our arrival. The chart to the right shows YTD Aid Given/Received and how many times LZ returned before their arrival. Many of our response incidents do not require intervention from the LZPD 911 center through automated dispatching and resource sharing. They are entirely handled by the agency requesting our response — direct cost savings to our budget and an added benefit of the automated dispatch system.



All calls we code as a department within the National Fire Incident Reporting System (NFIRS). The codes all relate to the text categories noted in the chart below. As indicated below, you will see across the three years that the trends remain mostly the same. Rescue and EMS incidents account for most calls we respond to and continue to increase, as indicated below.

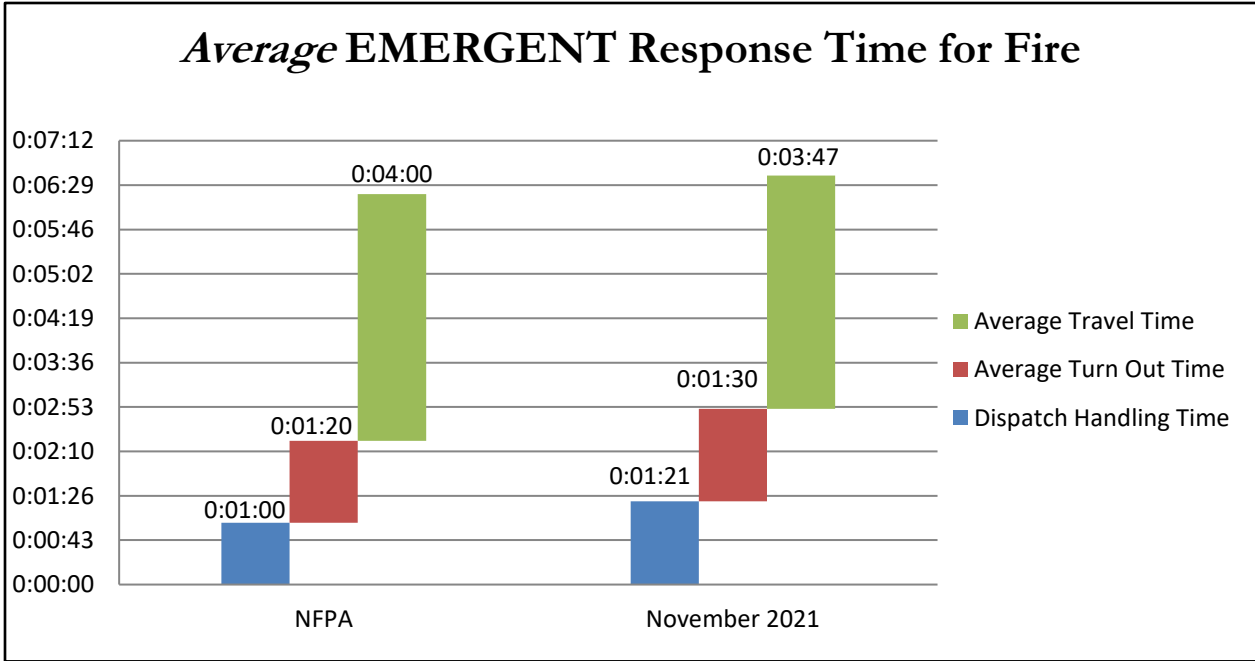
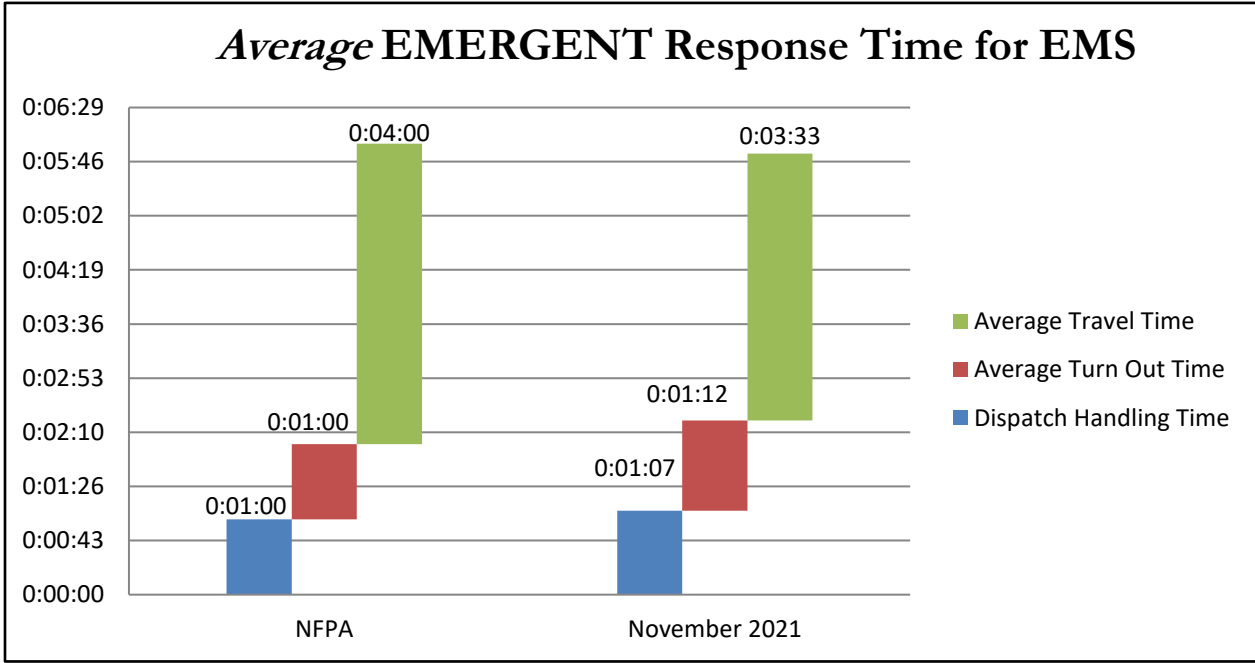


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes were open. As shown below, we continue to respond to Residential Properties more than any other (70%), and Health Care/Detention was second with (10%) of all calls.



Response time includes three key factors: dispatch handling time, turnout time, and travel time. Dispatch handling time is the time for dispatch to take in information and then dispatch personnel. The turnout time is when the crews receive the call to the time they get into the vehicles and hit the enroute button. Travel time reflects the time from en route to the time they arrive at the incident scene. Construction, speed limits, weather, and train traffic can impact response times. The overall goal for arrival at an emergency fire call is a total of 6 minutes and 20 seconds from the time of notification until the first unit arrives on the scene. For a response to an EMS incident, this time is 6 minutes.

The following two graphs compare the average emergency response times for both Fire and EMS calls within our first arriving unit's primary response area. These times will vary based in part on the first responding unit's location, multiple calls, weather, time of day, and traffic conditions. *Dispatch handle times have increased after switching to the new CAD system and delays caused by processing an alarm. The ETSB and Infor continue to work on the issue.



Training Division

During November, we completed the following shift training:

EMS Continued Education – Paramedic continuing education covering Shock.

Quarterly Intubations – Paramedics are required to complete mandatory intubation training.

Company Needs – Company Officers evaluated their crew and based the training on the needs of their company. This included department SOG review and Daily Training Bulletin completion.

Weekly Equipment Review – On a weekly bases crews review department equipment and ensure they can operate is properly and effectively.

Officer Training – Company Officers and Acting Company Officers practiced completing a size-up of a building and issuing 1st orders on the emergency scene.

Command Officer Training – Selected Lieutenants continued being mentored to fill the role of the Command Officer as needed.

Water/Ice Rescue - Crews completed training on performing water/ice rescues in a safe manner.

Winter Driving - Crews completed winter driving situational awareness training.

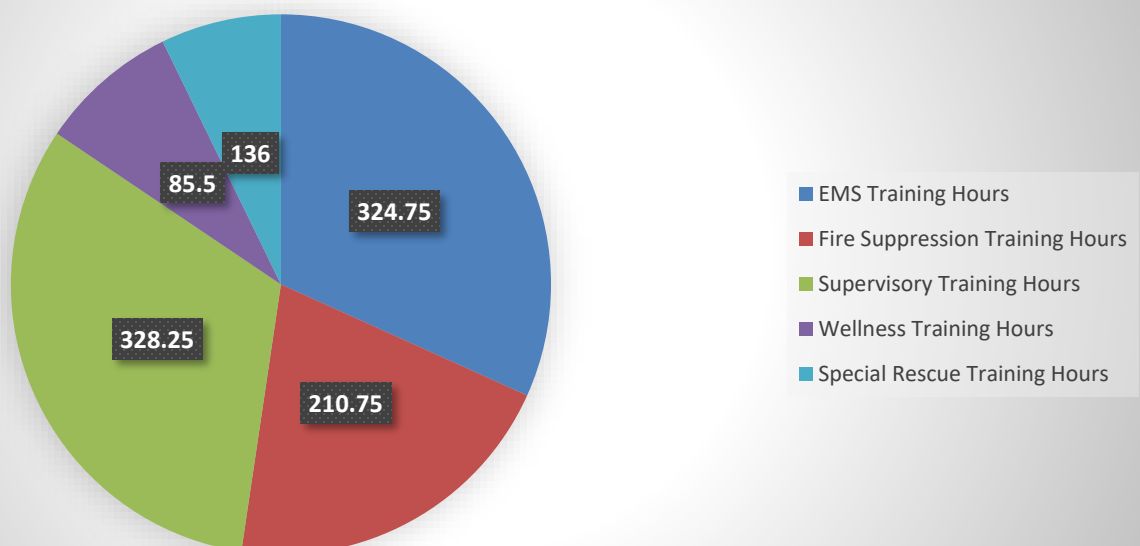
New Hire Orientation – New hires completed a 3 week orientation academy to practice skills, learn Lake Zurich procedures and start NCH EMS system entry.

The following members attended outside training.

Deputy Chief Christopherson – Attended the 24 hour Fire Statistics Class

Captain Kammin – Attended the 40 hour Incident Safety Officer Class

November Training Hours - 1,023 Total



Fire Prevention Bureau Division

November was another busy month for the Fire Prevention Bureau. We are still handling the entire clerical load while keeping up our daily activities, meetings, public education, CRR efforts and inspections.

Featured are a few of the activities that took place in November. On top of our normal assignments, the Fire Prevention plan review section is over 50 reviews more than 2020 at this same time. All of the fire safety reviews are done in-house.

Pictured right is from the Deer Park Santa arrival and fireworks event.

The below picture shows the Bureau checking on the Village open burning activities on Lions Drive.



NOVEMBER FIRE PREVENTION ACTIVITIES

- Two-day Fire Prevention Training Conference in Gurnee - taught over 100 attendees over two days. *(Pictured left)*
- NIFIA board Meeting
- Construction Meetings
 - Uncle Julio's with architect
 - Lifetime
 - May Whitney Demo
 - The Sanctuary project
 - Middle School South construction meeting
- Gere Marie
- DRT with Tim
- Mutual aid fire investigation for Wauconda
- Fire alarm system went offline when Comcast crashed – worked phones with FSS to keep up on alarms
- Meeting with Bonnie on Miracle on Main Event
- Deer Park Santa and Fireworks event

Year-To-Date - November 2021

