



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

January 2021

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

70 E. MAIN STREET
LAKE ZURICH, IL 60047

Departmental Narrative

General Operations:

The Department responded to **299** calls for service in January, which averaged **10** calls per day and required **436 individual vehicle responses** to provide the necessary personnel for each incident. Thirty-eight percent (**38%**) of the responses occurred while another call was in progress. Nineteen percent (**19%**) of calls 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 call 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.

YTD Value/Save/Loss



The new command vehicle was placed in service (*pictured left*). The vehicle provides the fire shift commander and members of an incident command team the tools, resources and communication equipment needed to manage multiple company, special team and resource intensive incidents.

Department Updates

Vehicles Out of Service

- During January, the following vehicles were out-of-service due to maintenance, repairs, or breakdowns:
 - **Ambulances** – 176.50 hours
 - **Engines** – 19.50 hours
 - **Year-To-Date Hours:**
 - Ambulances: **176.50 hours**
 - Engines: **19.50 hours**

Overtime

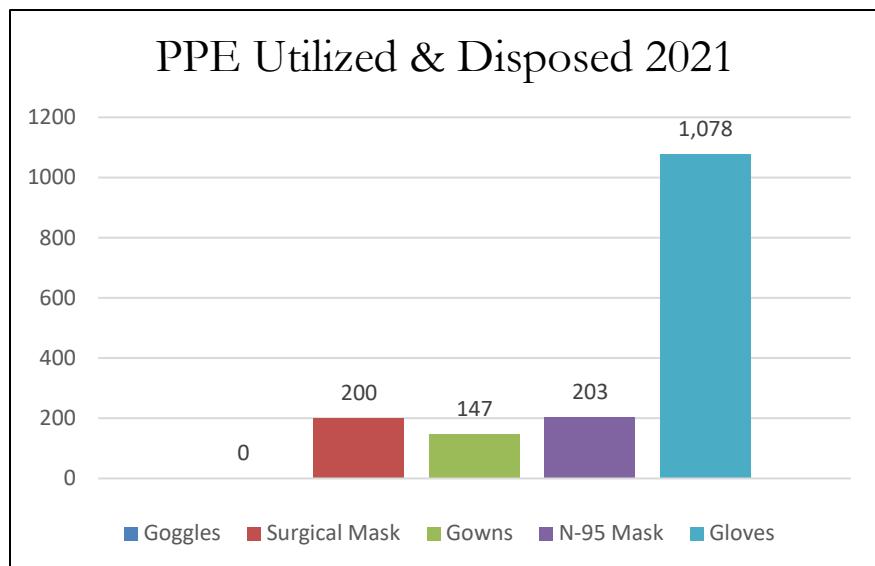
- As of January 31, 2021 – 9.34% of the overtime account (*all divisions*) has been spent:
 - Overtime Budgeted: \$453,950.00
 - Overtime Spent: \$42,392.33

COVID-19 Updates

Personal Protection Equipment

We are currently tracking the PPE that members are using and disposing of due to the COVID-19 pandemic.

In January, we have issued 0 pairs of safety goggles, used 200 surgical masks on patients, 203 N95 respirators for our personnel, 147 gowns, and about 1,078 pairs of surgical gloves. The graph pictured right shows year-to-date.



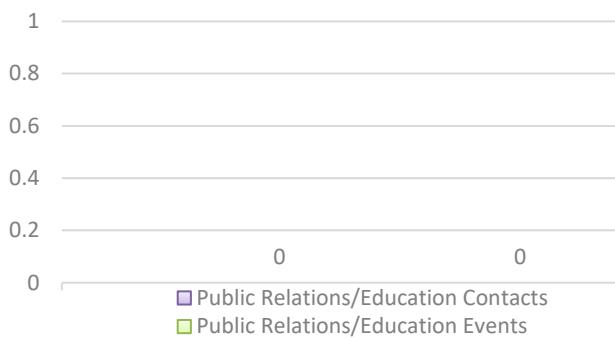
COVID-19 Vaccine

Currently, 34 of the 52 members (65%) of the fire department have received the COVID-19 vaccination. All village employees and residents are encouraged to register for vaccination at the Lake County Health Department:

https://allvax.lakecohealth.org/s/?language=en_US

In cooperation with the Lake County Fire Chiefs and Lake County Health Department, the fire department is exploring ways to assist in distributing and administering vaccines to the communities we serve, including village staff.

Fire Safety Risk Reduction - Year-To-Date



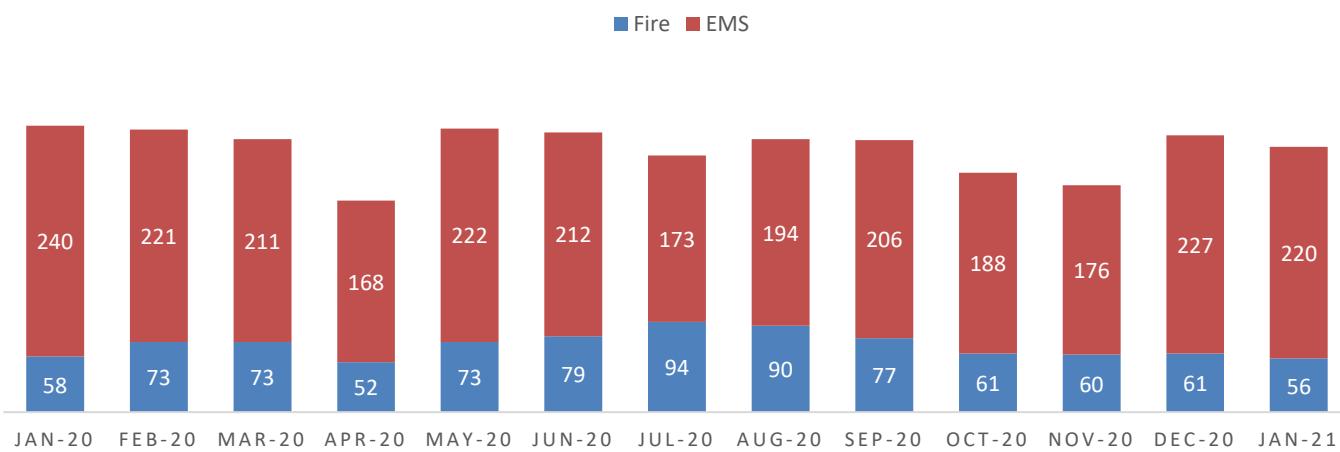
Community Access/Focus:

We want to express gratitude for the extra community-wide support shown to the department during this COVID-19 pandemic and give a shout out to all of the residents and businesses that have donated miscellaneous PPE, mailed us well wishes, or had food delivered to the stations. We genuinely appreciate it.

There were no Public Relations/Education Events in January 2021 (pictured above). However, we hope to be able to be more active in the communities in the upcoming months.

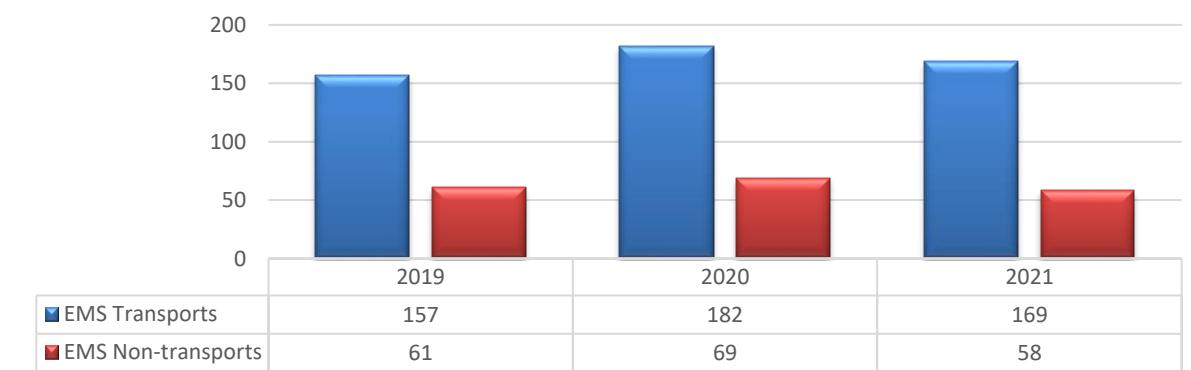
Below is the breakdown of Fire versus EMS incidents – minus aid given. Our fire calls include structure fires, car fires, grass fires, dumpster fires, wires down, and other types of service calls.

FIRE RESCUE DEPARTMENT - MONTHLY CALLS BY TYPE (MINUS AID GIVEN)



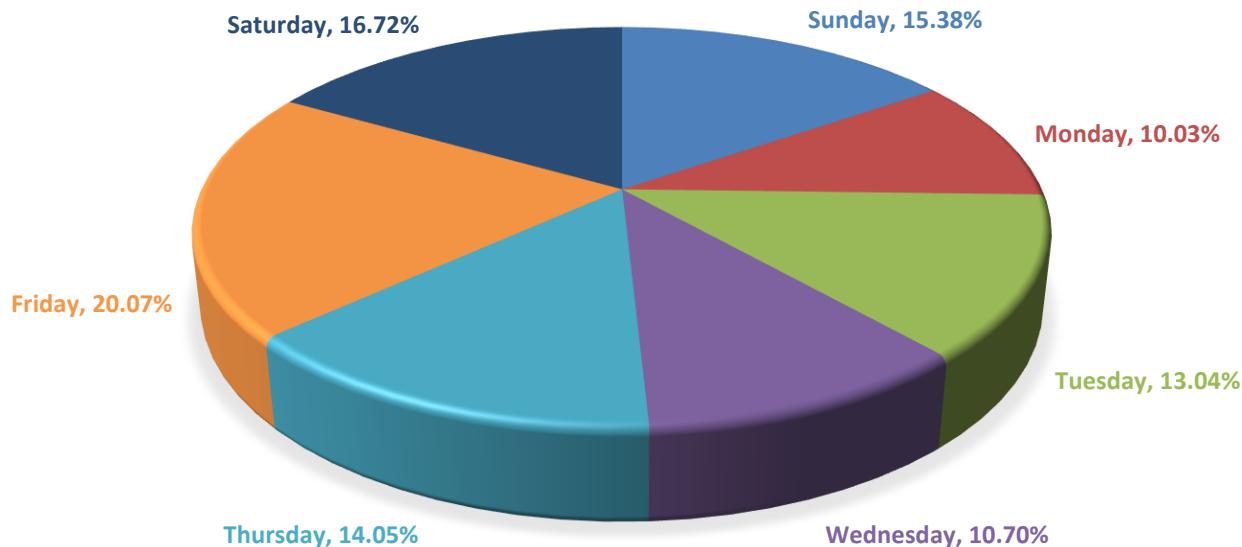
This next chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call results in transport. A prime example of this is an automobile accident where several victims refuse transport. EMS transports always outpace refusals. This chart compares the month of January 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

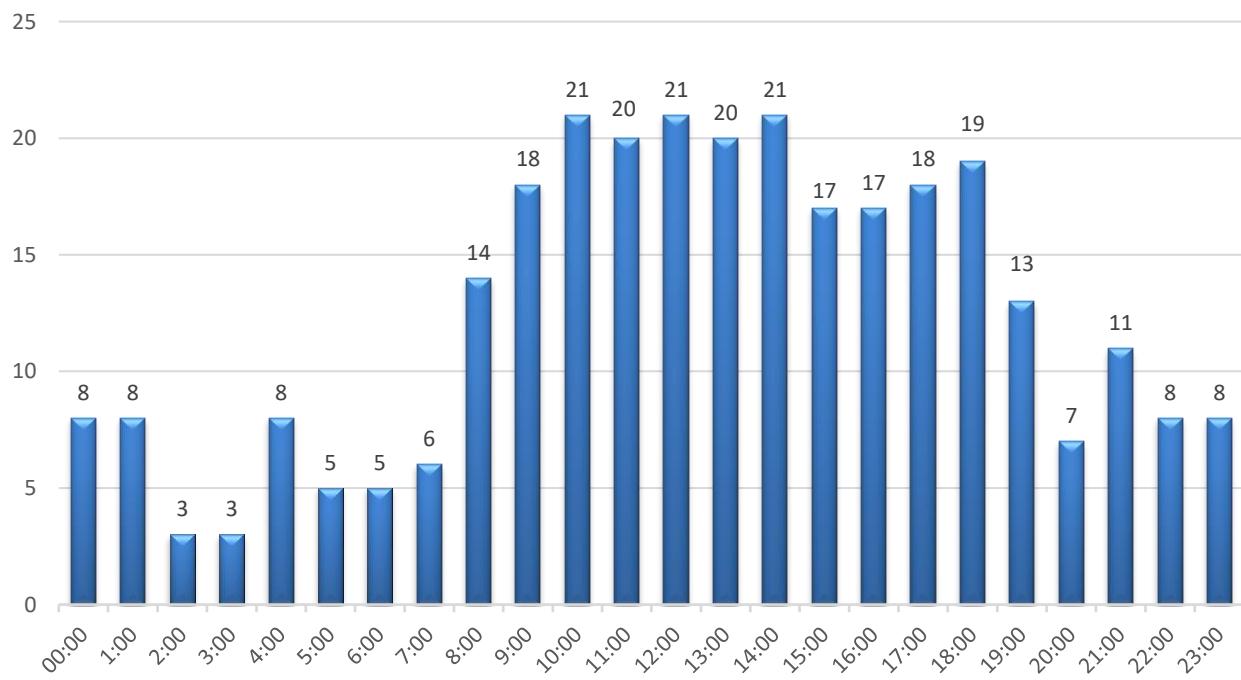


The next two charts breakdown calls by the day-of-week and hour-of-day. Overall, requests distribute evenly across the week.

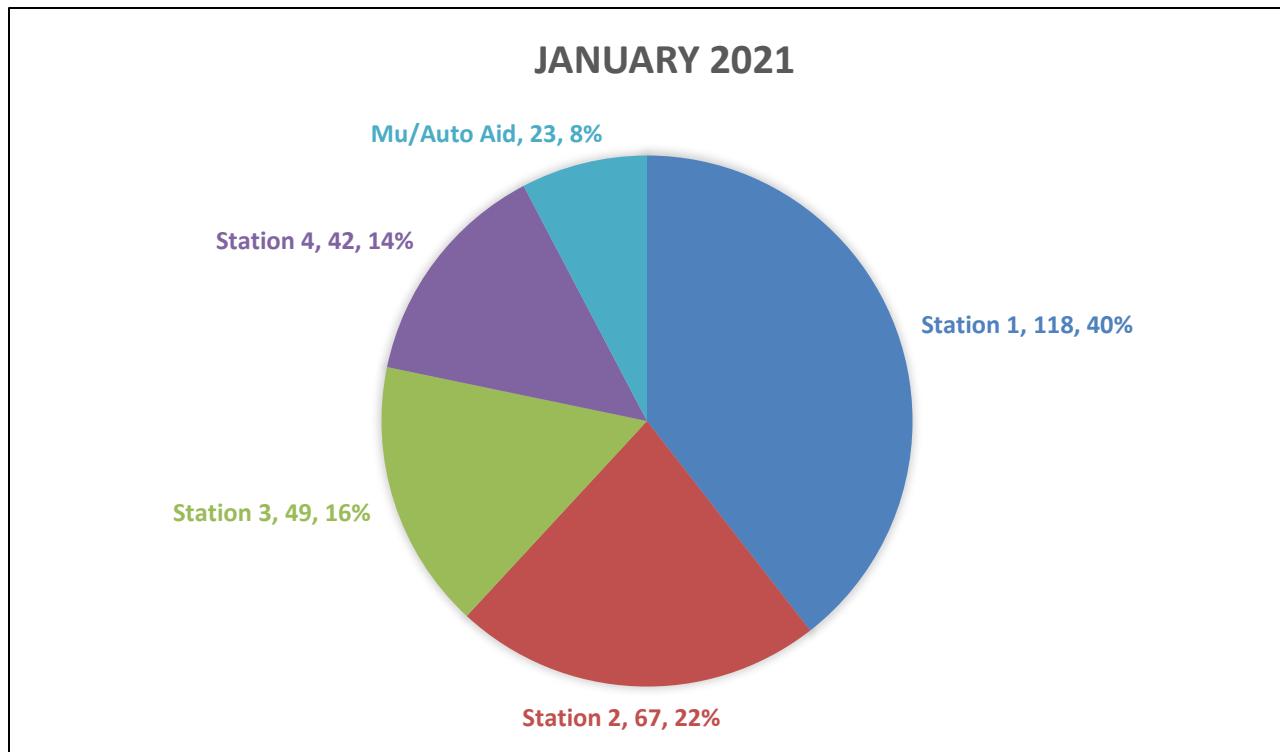
RESPONSE BY DAY OF WEEK - JANUARY 2021



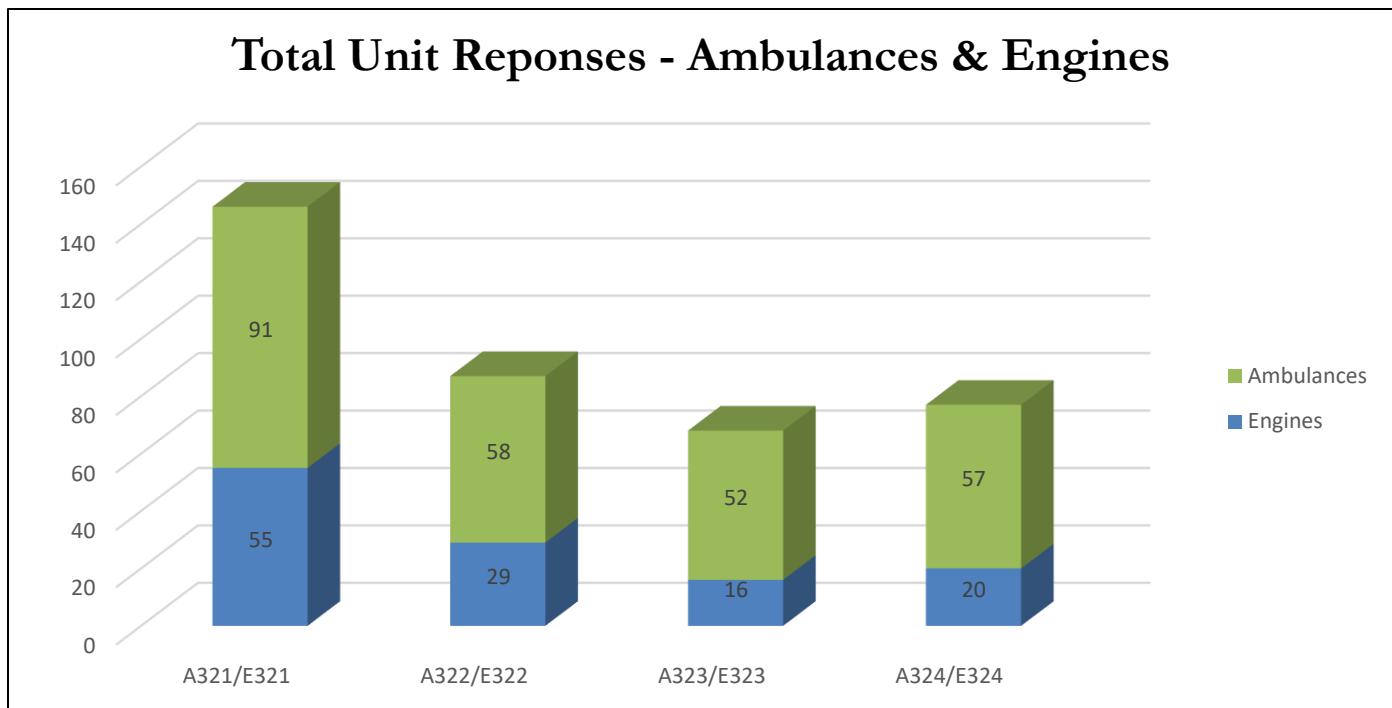
RESPONSE BY HOUR OF DAY - JANUARY 2021



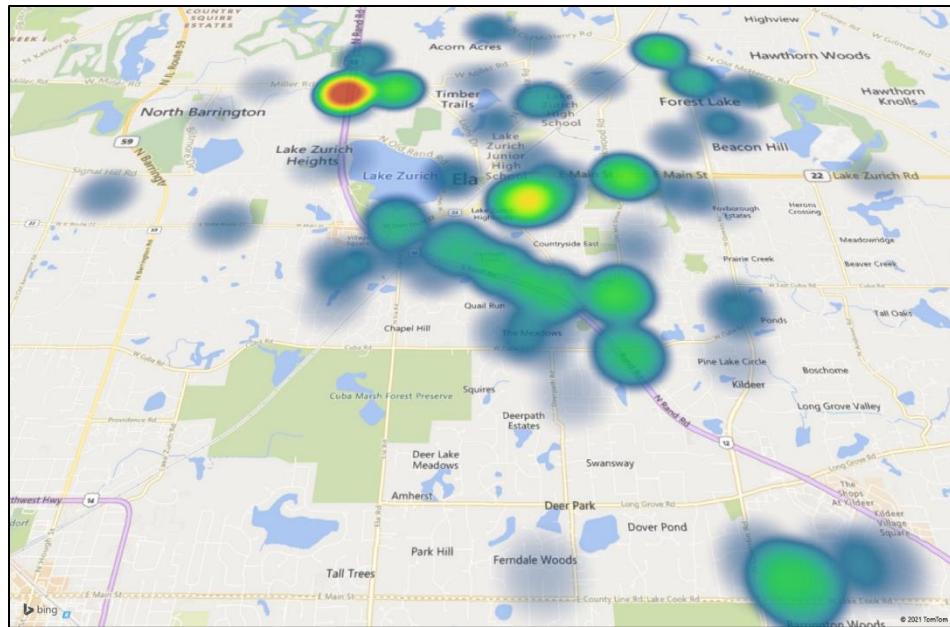
The Lake Zurich Fire Department's service area contains the Village of Lake Zurich and the Lake Zurich Fire Protection District. The placement of the four fire stations allows division of the service area into first response areas. The graph below represents the percentage of calls by each station and mutual/auto aid for January 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.



The graph below shows the responses by each unit – Ambulances & Engines – in January 2021.



The next graphic is a visual representation of call distribution for January. 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.



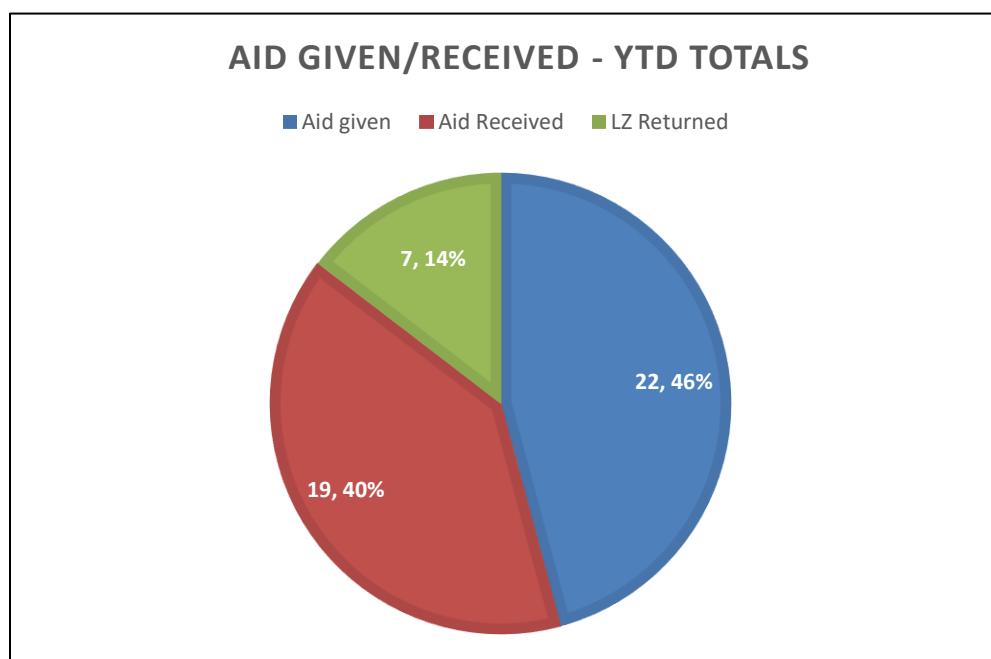
Frequent Call Locations:

- 795 N. Rand Road – Azpira Place Assisted Living – 20 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 8 responses
- 21840 Lake Cook Road – Solana Senior Living – 8 responses
- 777 Church Street – Cedar Lake Assisted Living & Memory Care – 6 responses
- 900 Rand Road – Lexington of Lake Zurich – 4 responses

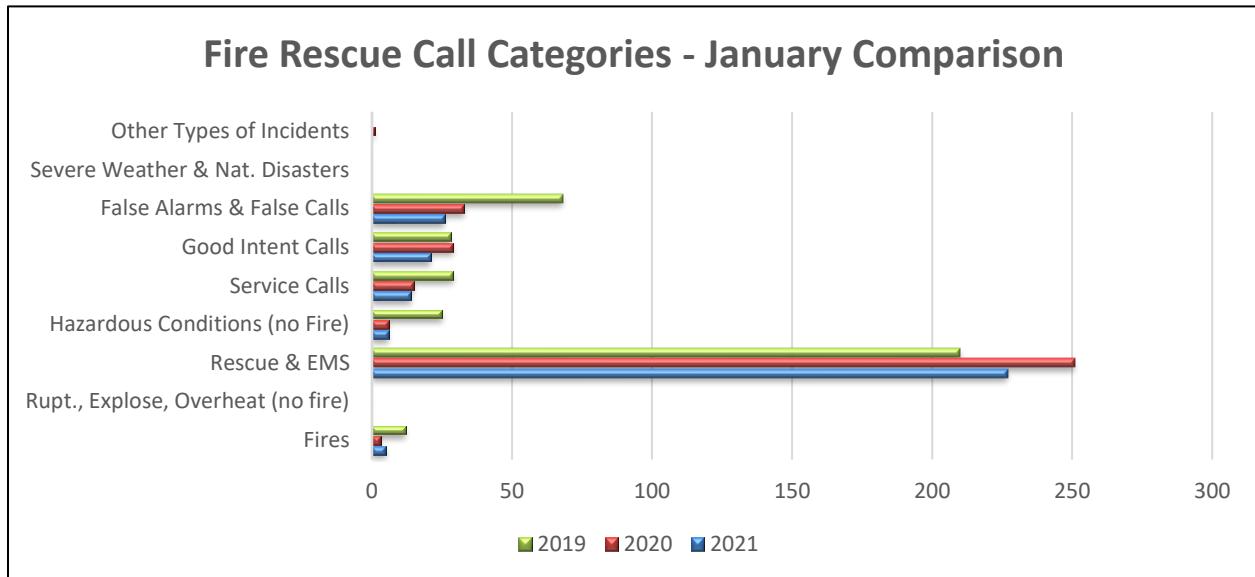
Mutual/Auto Aid Response

Year to Date –

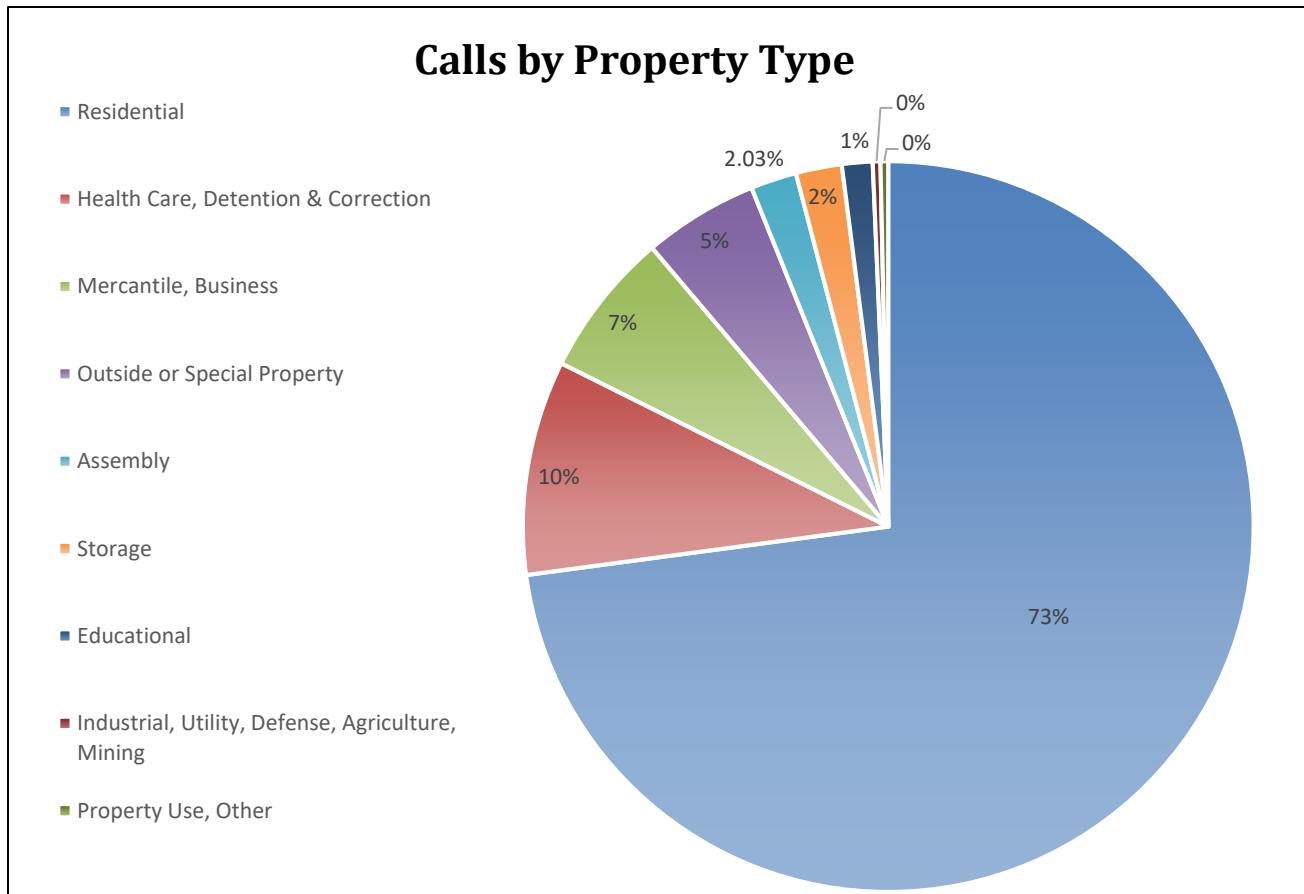
The mutual aid agreements are designed not to overburden any one agency and are looked at carefully for any necessary adjustments. Run cards for the department have changed, and our partners are responding to assist us more often. In January, we responded to **22 calls** for mutual-aid and were **returned 7 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 the majority of calls we respond to and continue to increase, as indicated below.

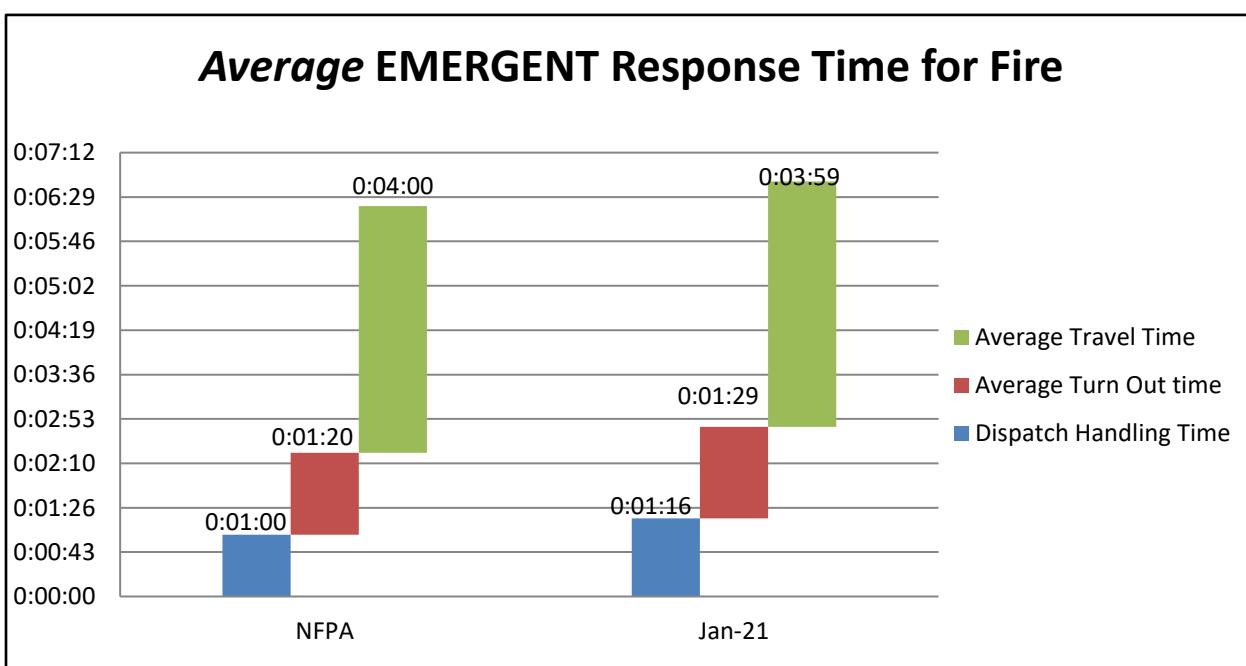
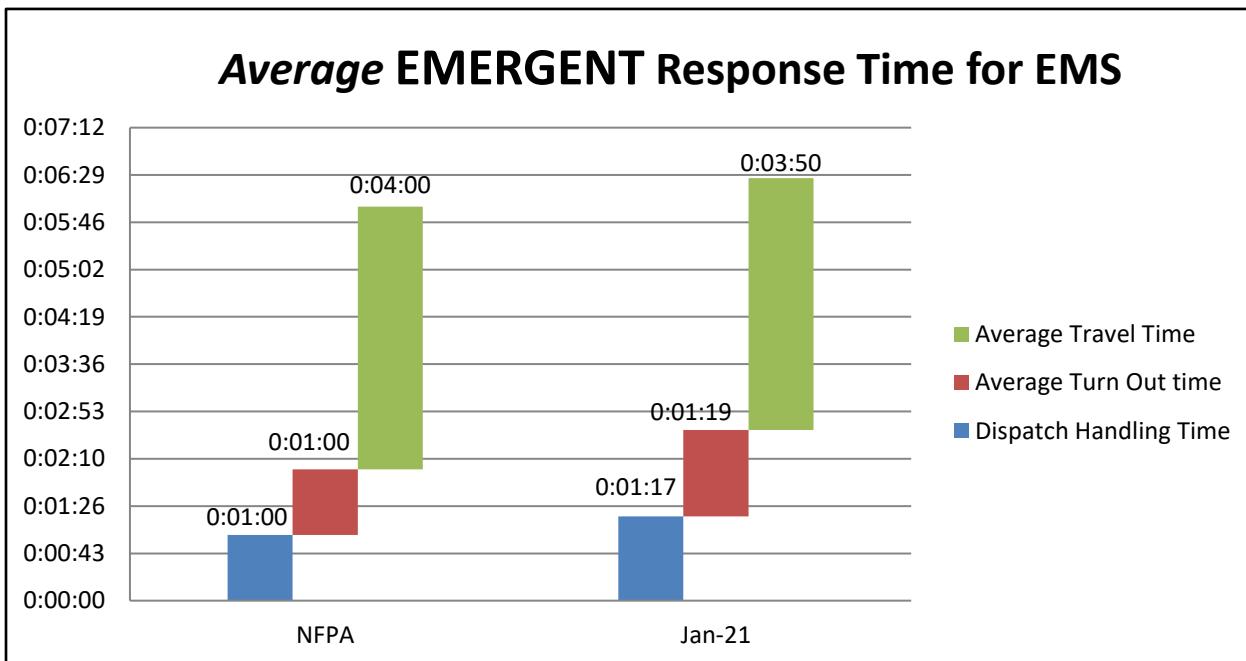


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes open. As shown below, we continue to respond to Residential Properties more than any other (73%), and Healthcare and Mercantile/Business were 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 en-route 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 next 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 on part on the first responding unit's location, multiple calls, weather, and 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.



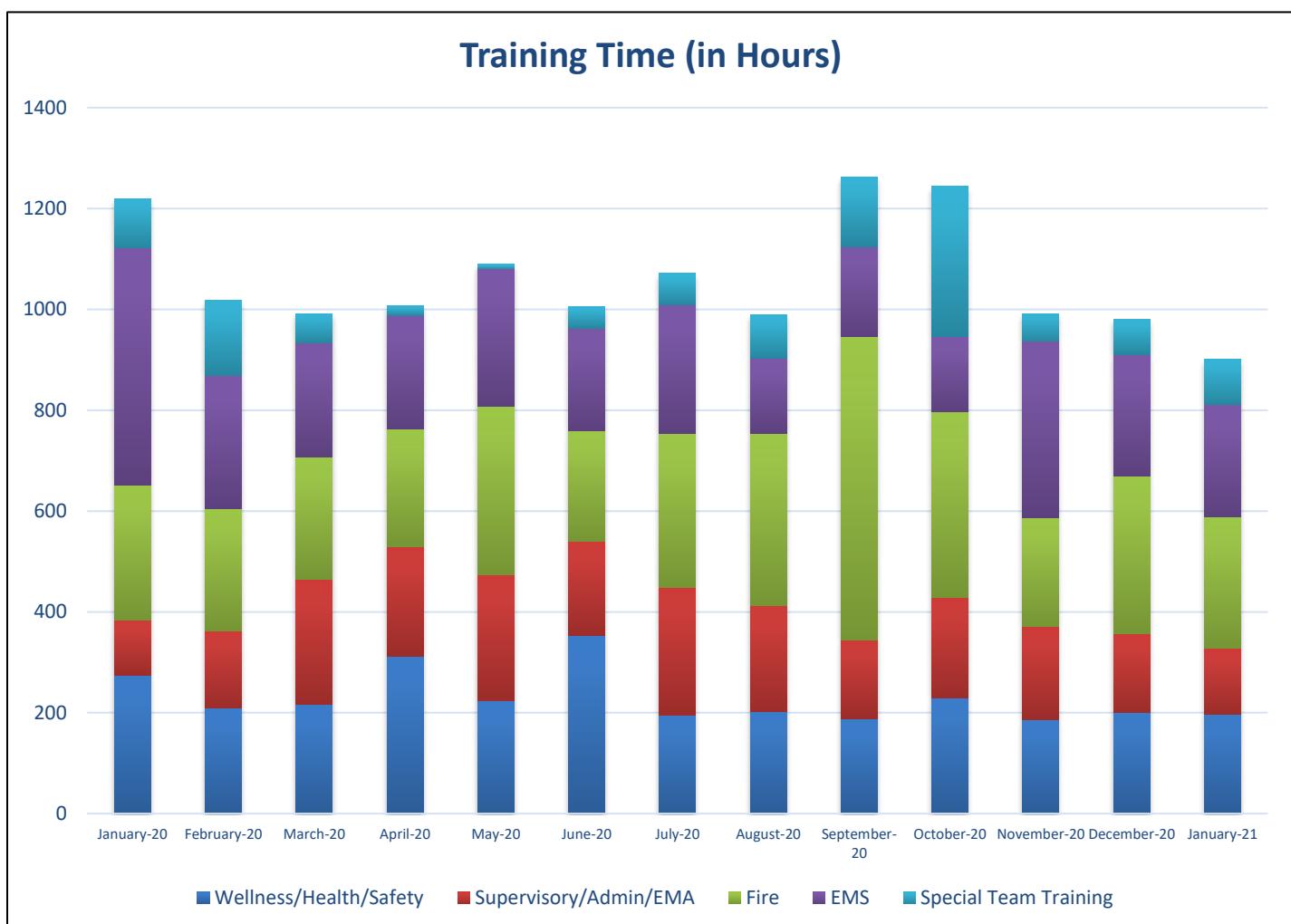
Training Initiatives:

During January, we completed the following shift training:

- Annual EMS Restraints Training
- Surface Ice Rescue
- 3rd Quarter Intubations
- EMS Instation – Respiratory Emergencies
- RIT – Moving a Down Firefighter
- Lexipol SOG & DTB Review
- Mandatory Training Make-up

Outside training during January consisted of the following:

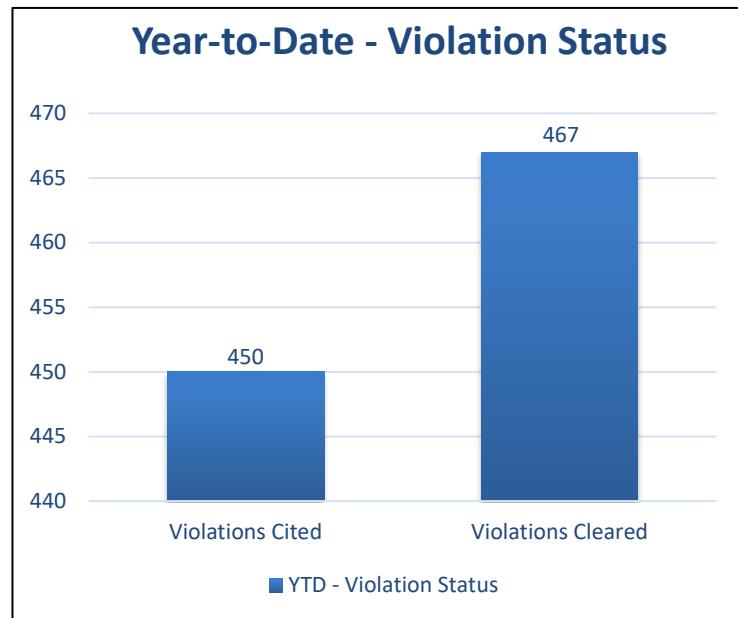
- FF/PM Campbell & FF/PM Penkava completed the 16 hr. Hazmat Incident Command Class
- Lt. Booth & Lt. Hohs started the Charmed Leadership Academy



Inspectional Services:

Fire Prevention personnel conduct annual fire inspections, special event inspections and review and monitor construction projects in the Village and the Lake Zurich Rural Fire Protection District (LZRFPD). During January, the Fire Prevention Bureau participated in the following:

- Mutual aid fire investigation to Wauconda – 1-2-21
- St. Matthew's fire follow-up
- 1119 Stratford dryer fire investigation
- 21511 West Field Court – follow-up on the car into the building breaking the sprinklers
- Chief Officers weekly update meeting
- NIFIA zoom board meeting
- Fire alarm meeting with Dispatch and F.S.S.
- Webinar on construction site fire safety
- Fire investigation training videos
- Construction meetings
 - Building Department for a project at Route 12 and North Old Rand
 - DRT Meeting
 - New Casey's gas station – Route 12 & Ela
 - Walmart
 - Lake Zurich High School remodel project
 - Costco rack storage



Data will be added to the below chart each month in the 2021 column to show growing Year – To – Date numbers

