



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

February 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 - February 2021 Overview

The Department responded to **273 calls** for service in February, which averaged **10 calls per day** and required **436 individual vehicle responses** to provide the necessary personnel for each incident.

Thirty-two percent (**32%**) of the responses occurred while another call was in progress. Fifteen percent (**15%**) 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.



News Highlights - Lake Zurich Fire Department

[Lake Zurich, Barrington area firefighters receive COVID-19 vaccine; police officers now waiting to be inoculated, officials say - Chicago Tribune](#)

[Lake Zurich fire chief retires while on short leave of absence; deputy takes interim helm of department - Chicago Tribune](#)

Lake Zurich Significant Calls

Dryer Fire – January 13, 2021 (previous month)

Fire department crews responded to an appliance fire on the 1100 Block of Stratford Lane. On arrival, crews found a fire contained inside the dryer that had not extended into the residence. The fire was extinguished and the dryer removed from the home. The fire investigation determined that the dryer exhaust pipe was blocked, causing the dryer to overheat and start the clothes in the dryer on fire. Due to the smoke damage in the home, the insurance company set the loss at \$58,000.00.



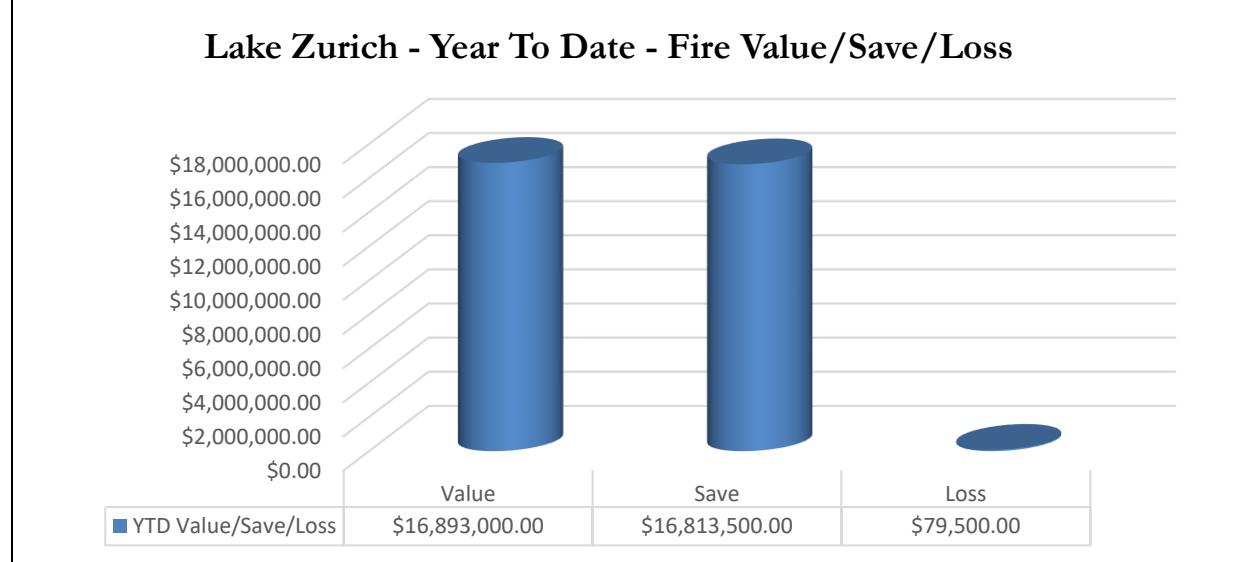
Motor Vehicle Crash - February 16, 2021

Ambulance 324, Engine 321, and Battalion 32 were called for a Motor Vehicle Crash in the area of Lake-Cook Road and Deer Park Boulevard. Crews found a single vehicle had collided with a snowbank. The vehicle sustained front-end damage, and the driver's door was unable to be opened. In the best interest of patient care, E321 utilized extrication equipment to remove the driver's door. The patient was then packaged, removed, and transported to the hospital for evaluation and treatment. (Pictured left)

Hazardous Investigation Call – February 25, 2021

Ambulance 323 was dispatched for a check-up on 2 residents who came in contact with an unknown substance from a suspicious package. The resident stated that they had received a package from an unknown sender and when they opened the package, the residents were exposed to reddish-brown dust. Battalion 32 and the on-duty Hazardous Material Technician responded to the incident to support in identifying the item. Additional efforts to identify the item with the resident and Hawthorn Woods Police Department determined the package to be non-hazardous and an item the resident had ordered some months prior.

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



Carbon Monoxide Call – February 20, 2021

Nicor requested fire department assistance for a Nicor service call at the Club House Apartments when they could not determine the location of carbon monoxide (CO) in the building. The scope of the incident required the response of Battalion 32, E322 and E321. Crews performed monitoring of the first floor level and found readings of approximately 8 parts-per-million (PPM) of CO. The second and third floors had levels of 48-PPM. Crews were able to narrow the source of CO to specific units. These units shared a common flue vent and the crews worked with Nicor to locate the source of the CO. After approximately an hour of investigation, the determined cause was a bad furnace in one of the units. The furnace was shut down, and the homeowner advised to have repairs made by a licensed contractor. Crews also vented the building areas involved to exhaust the CO. While this monitoring, ventilation and location of the source of the CO was performed, a few residents were moved to a safe area of the building until the CO was eliminated. Nicor assisted residents with relighting furnaces and monitored the building until the CO level was safe.



The crew also donated a CO detector to one of the residents. "We felt uneasy just leaving this resident without CO monitoring capabilities. She had an infant in her care which also weighed into our uneasiness." Lt. Ben Yee

Structure Fire – February 24, 2021

The Lake Zurich Fire Department and neighboring auto-aid fire departments responded to the 900 block of Honey Lake Road for a report of a fire in a residence. The initial arriving crews found a back-up battery charging system, electronics and shelving unit on fire. The fire was extinguished and the occupants of the residence accounted for. Smoke and gases from the fire were ventilated from the home and a fire investigation was completed to determine the fire's cause and origin. The responding Lake Zurich Fire Department units were able to handle the incident and the auto-aid units were returned. The home was uninhabitable due to the smoke, odor and gases released from the fire. A damage estimate from insurance is not yet available.

Mutual/Auto Aid Significant Fire Calls

- Palatine Rural Fire Protection District – Engine 321 responded to a mutual aid request from Palatine Rural FPD for a residential structure fire that had two fatalities.
- Barrington Fire Department – Engine 322 responded to Barrington for a residential fire and assisted with fire extinguishment and overhaul. The incident required ten fire and ems units to provide an effective firefighting force to bring the fire under control.
- Wauconda Fire Protection District – Engine 323 responded to and handled a transformer fire for Wauconda FPD while Wauconda was committed to a residential structure fire.
- Lake Forest Fire Department – Engine 324 responded to Lake Forest for a large home under construction on fire. Winter conditions presented a challenge to fire fighting efforts. E324 was on the scene for more than three hours.



Chief,

Please pass on my sincere thanks to your crews that assisted us last night for a structure fire. We faced challenging weather conditions and some stubborn hidden fires in the basement area. The home was about 90% complete and was 10,000+ square feet. I feel like we put everybody to work last night, some crews recycling multiple times. We utilized several COQ units, and had a few rescue calls in town during the fire un by out of town companies. We all rely on each other on these types of calls, and I appreciate the help.

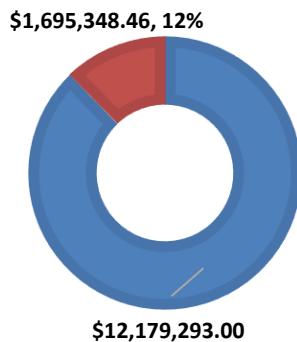
Fire Chief Pete Siebert | Lake Forest Fire Department

Administration Division

Budget Update – As of February 28, 2021

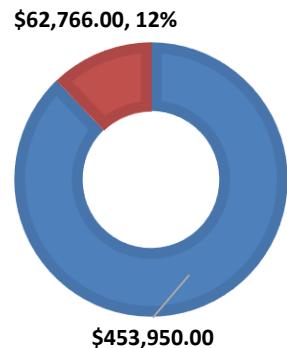
FIRE DEPARTMENT BUDGET

■ Overall Budget ■ Amount Spent



OVERTIME ACCOUNTS

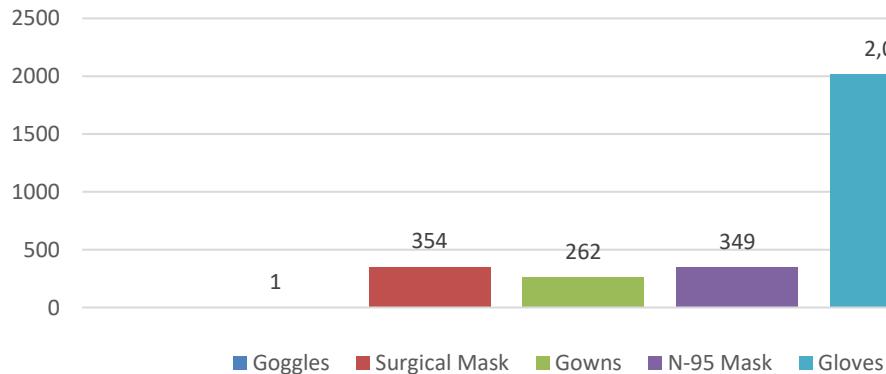
■ Overtime Budget ■ Overtime Spent



COVID-19 Updates

We are currently tracking the Personal Protective Equipment (PPE) that members are using and disposing of due to the COVID-19 pandemic. In February, we have issued 1 pair of safety goggles, used 145 surgical masks on patients, 136 N95 respirators for our personnel, 104 gowns, and about 861 pairs of surgical gloves. The graph pictured below shows year-to-date.

PPE Utilized & Disposed 2021



Community Focus and Risk Reduction

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.

Pictured right are members with thank-you letters from St. Francis de Sales students.



Operations Division

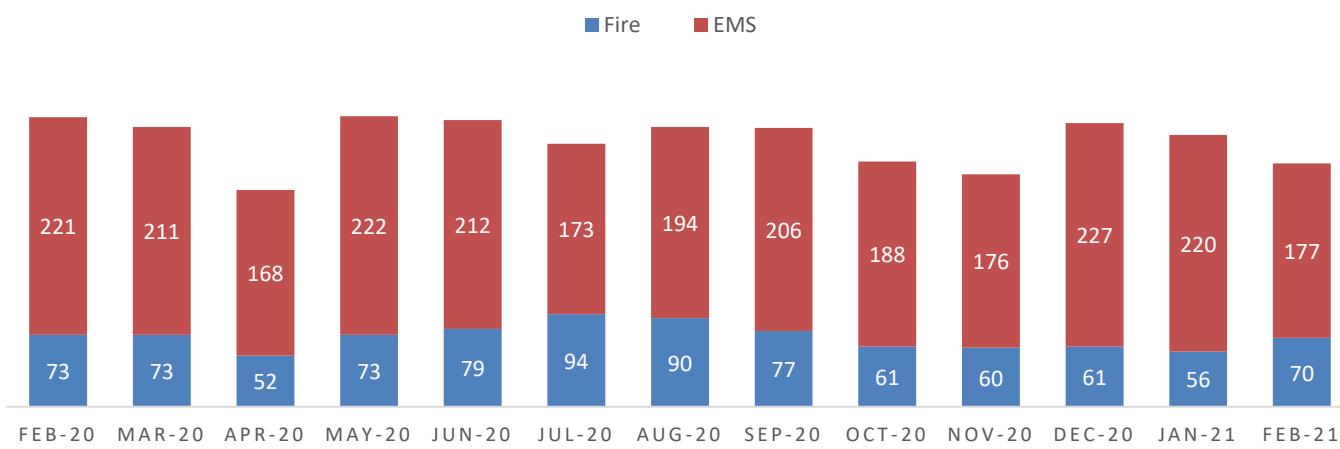
Vehicles Out of Service

- During February, the following vehicles were out-of-service due to maintenance, repairs, or breakdowns:
 - Ambulances – 17.58 hours
 - Engines – 105.50 hours
 - Year-To-Date Hours:

Ambulances: **194.08 hours** | Engines: **125 hours**

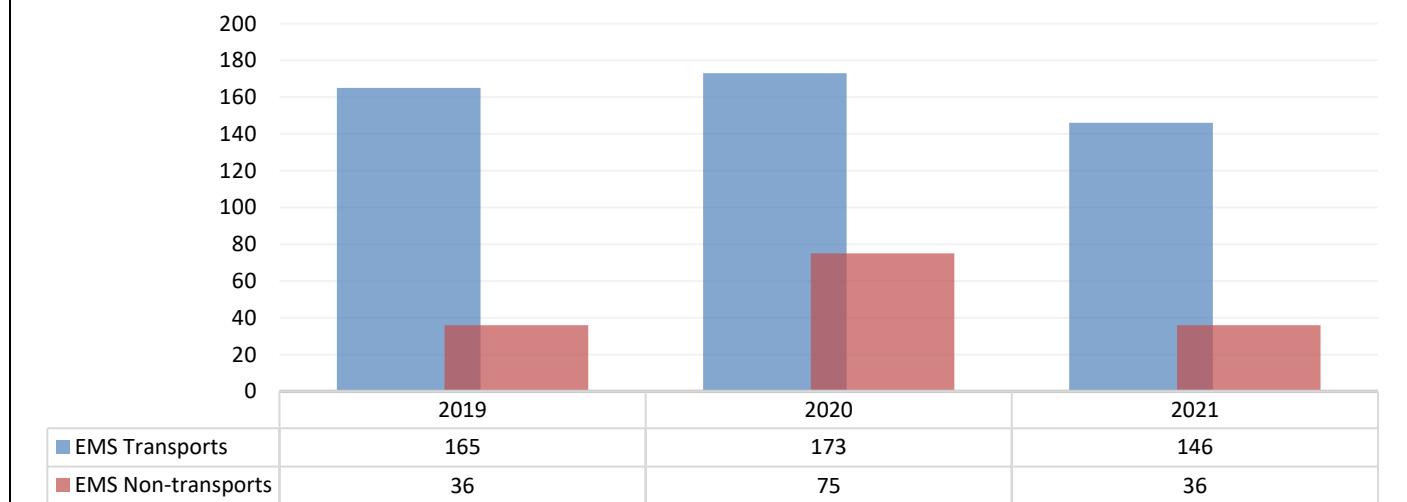
Below is the breakdown of Fire versus EMS incidents in Lake Zurich – minus aid given. Our fire calls include structure fires, car fires, grass fires, dumpster fires, wires down, and other types of service calls.

FEBRUARY 2021 - EMS V. FIRE CALLS (NO MUTUAL/AUTO AID)



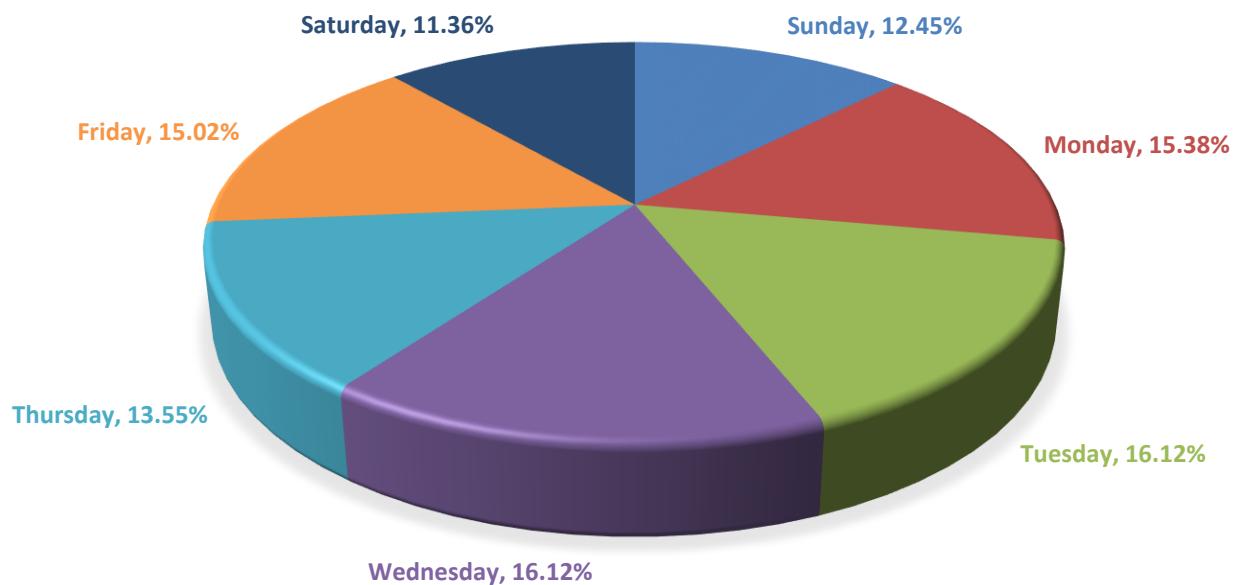
This next chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call results in transport. A prime example of this is an automobile accident where several victims refuse transport. EMS transports always outpace refusals. This chart compares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

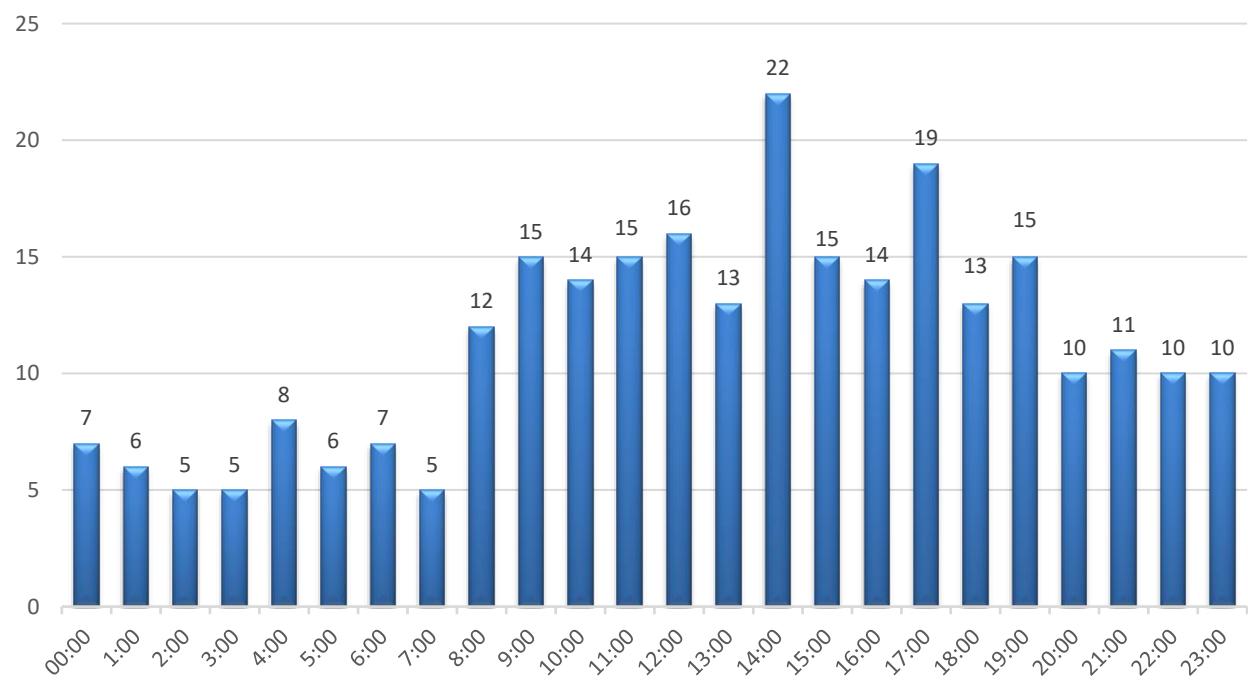


The next two charts breakdown calls by the day-of-week and hour-of-day. Overall, requests distribute evenly across the week.

RESPONSE BY DAY OF WEEK - FEBRUARY 2021



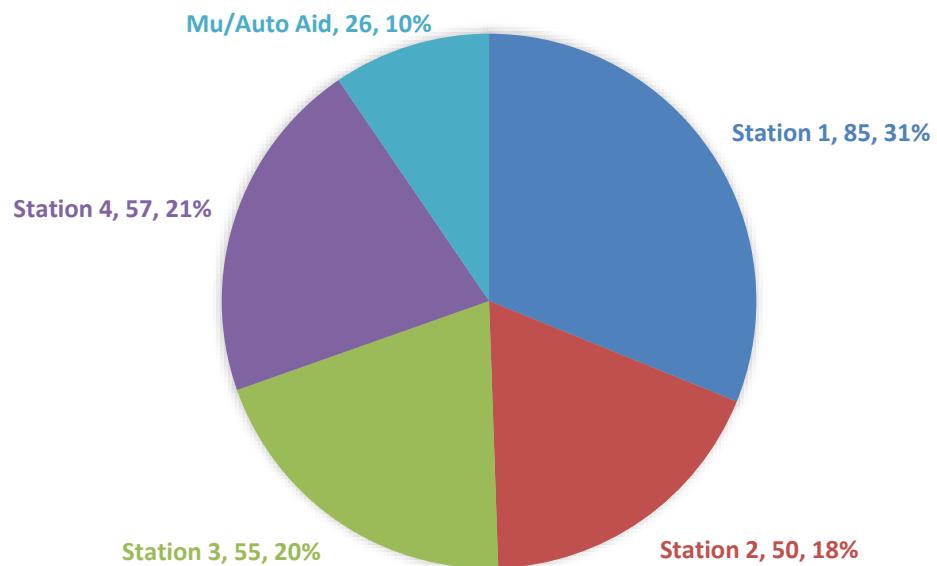
RESPONSE BY HOUR OF DAY - FEBRUARY 2021



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.

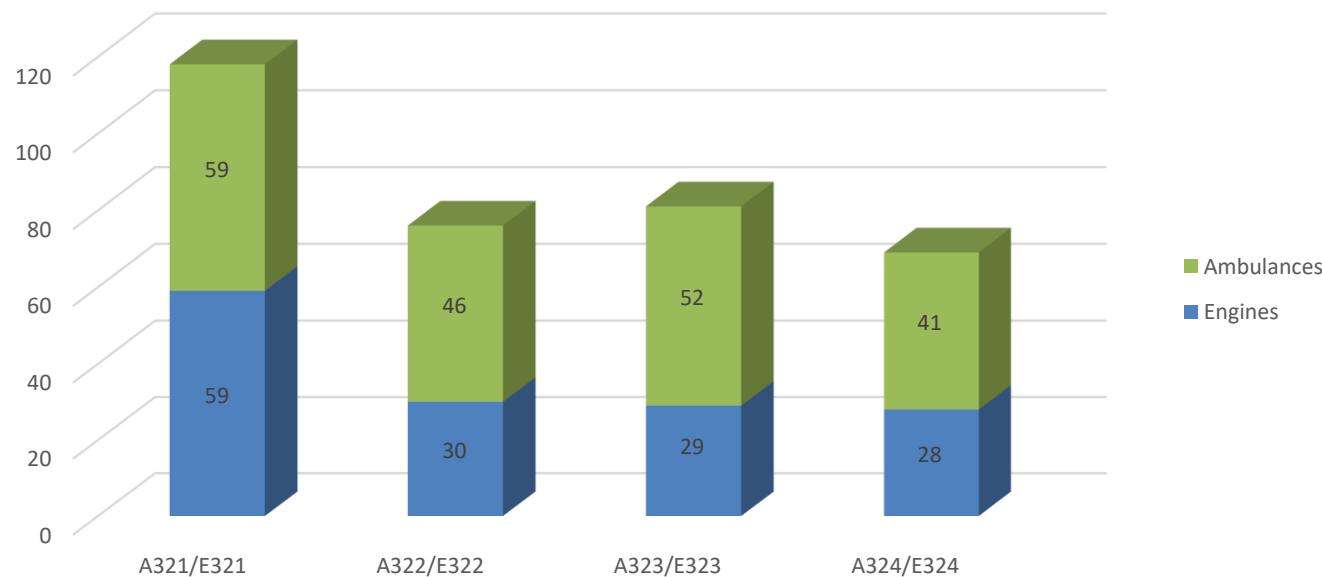
The graph below represents the percentage of calls by each station and mutual/auto aid for February 2021. The chart does not represent the station that responded as the primary resource to the area – it means where the call originated. Station 1 is historically the busiest district.

ORIGIN OF CALLS - FEBRUARY 2021

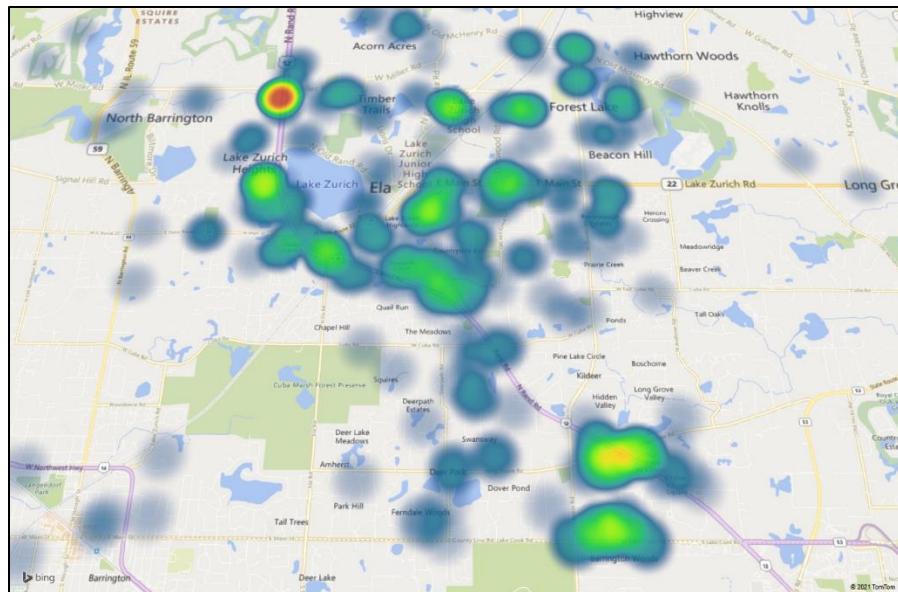


The graph below shows the responses by each unit – Ambulances & Engines – in February 2021.

Total Unit Responses - Ambulances & Engines



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

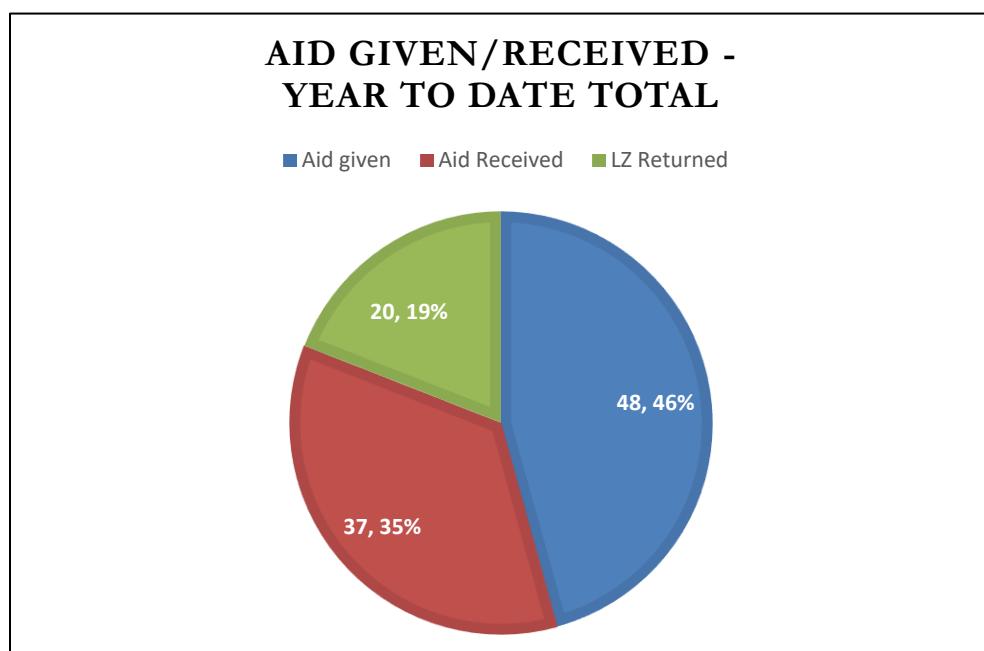


Frequent Call Locations:

- 795 N. Rand Road – Azpira Place Assisted Living – 18 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 – 3 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 2 responses

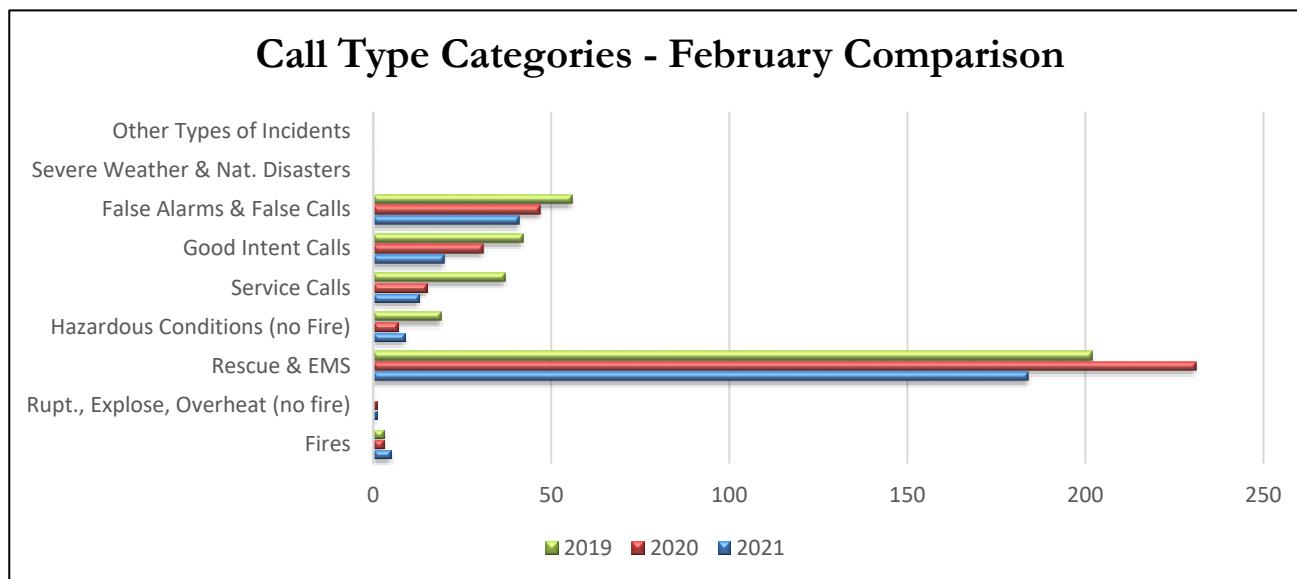
Mutual/Auto Aid Response Year to Date –

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 February, we responded to **26 calls** for mutual-aid and were **returned 13 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.

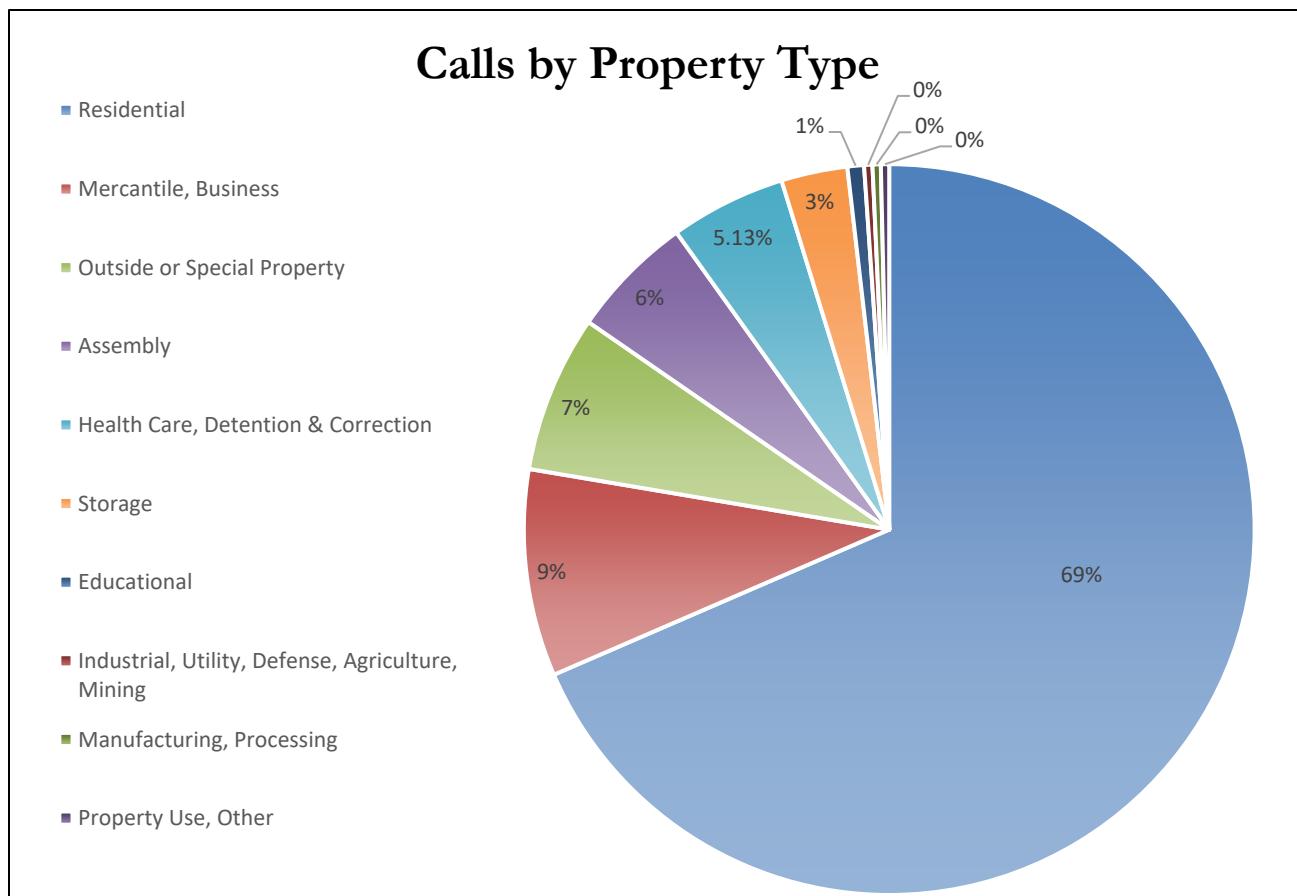


The next graphic is a visual representation of call distribution for February. As visually displayed, the assisted living/memory care facilities are a large portion of our department calls and are consistently within the top ten locations responded to each month. We frequently respond to doctor offices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

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.

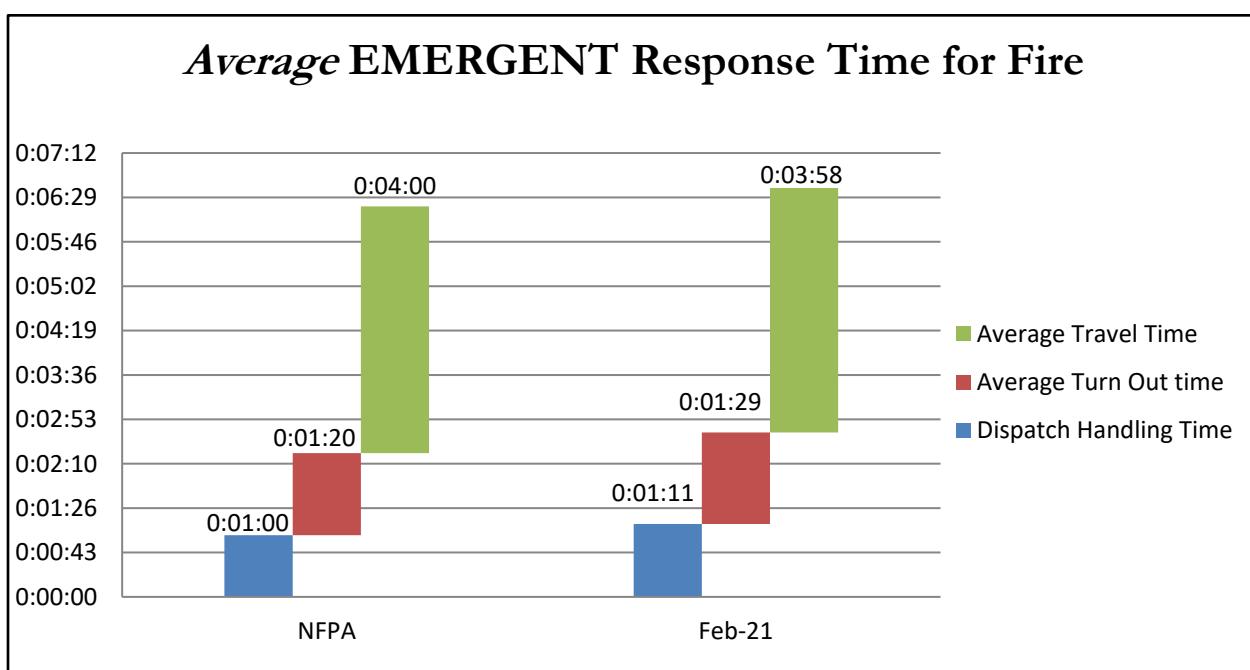
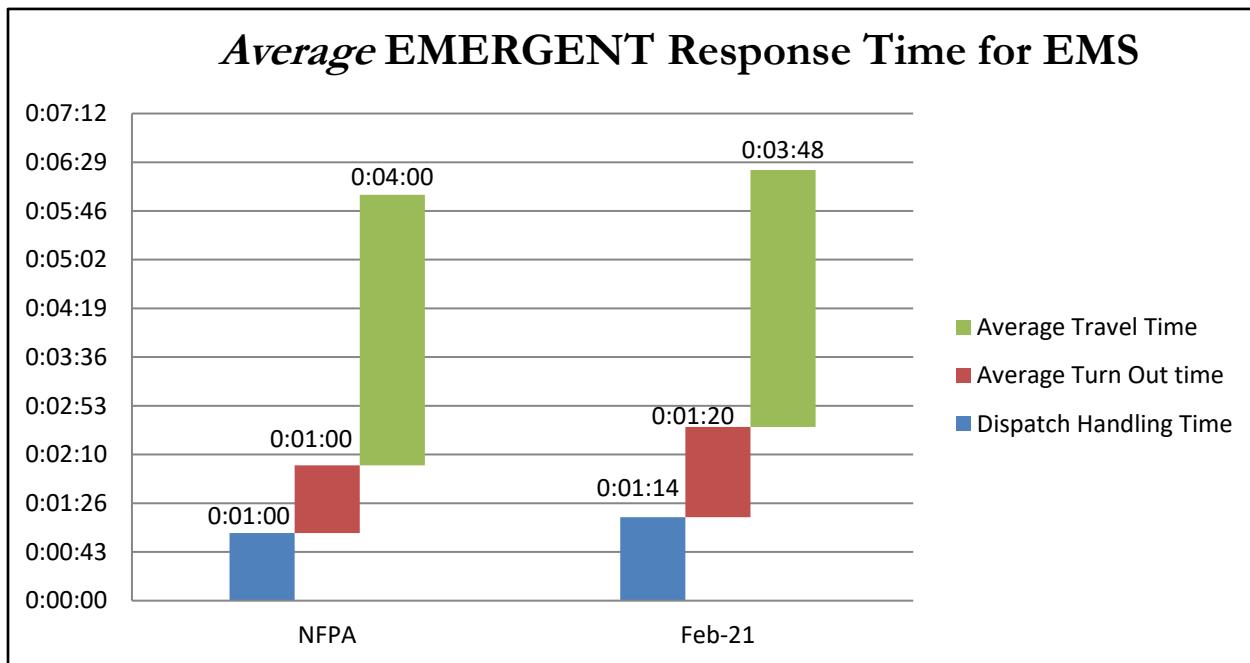


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes open. As shown below, we continue to respond to Residential Properties more than any other (69%), and Healthcare and Mercantile/Business were second with (9%) 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.



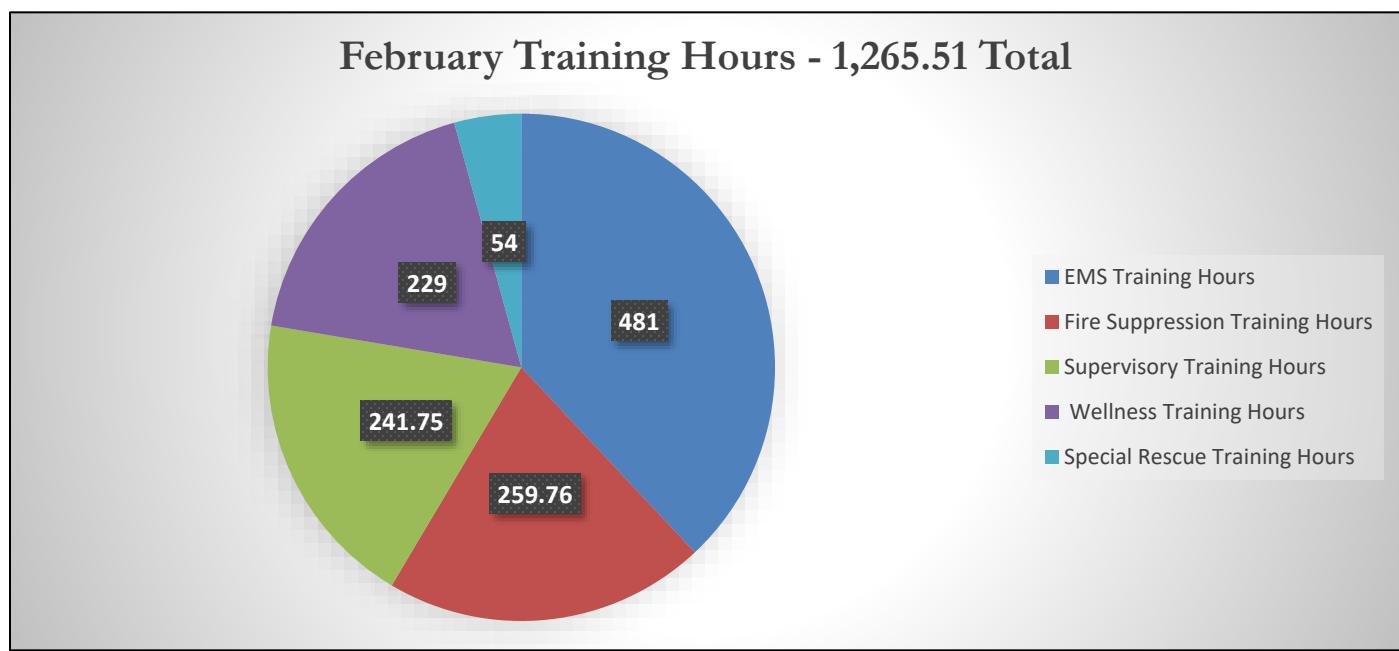
Training Division

During February, we completed the following shift training:

- **Modified Minuteman Hose Load** – Crews practiced deployment and re-bedding of the modified minuteman hose load. We are researching changing to this hose load due to a potential injury risk with our current hose load.
- **EMS In-station** – Pediatric Respiratory Emergencies
- **EMS SOG Review** – Paramedics reviewed the Adult Respiratory Emergencies SOG's
- **CPR Recertification** – Northwest Community Hospital requires all Paramedics to complete an annual CPR recertification class which is taught in-house by our CPR instructors
- **Department Updates** – Shift meetings gave department members information on the village and department updates.
- **Rig Checks** – Complete cleaning, inspection, and operating of all Fire and EMS equipment.
- **Ladder Inspections** – Monthly cleaning and inspection of all fire department ground ladders.
- **Bailout Bags Inservice** – Part 1 of a 2 part in-service training of personal bailout bags. The bailout bags are for trapped firefighters to self-rescue from elevated areas.
- **Vaccine Administration Part 1** – This is required training for our paramedics to administer the COVID-19 vaccine. We will be completing the 2nd part of this training at the beginning of March.
- **Mandatory Training Make-up** – Completion of required mandatory training by department members.

Outside training during February consisted of the following:

- **Instructor I class at NIPSTA** – Jason Kraus & Peter Penkava completed this 40-hour class, which is a requirement for obtaining the Basic Company Officer Certification.



Fire Prevention Bureau Division

The month of February saw some of the coldest and snowiest weather since January 2018. Cold weather like this can present severe challenges for fire protection systems. When notified of potentially extreme temperatures, we sent cold weather warning notices to every property manager, building owner, and facility within our town and district. This letter reminds property owners to check that their heat is set correctly during the cold temperatures.

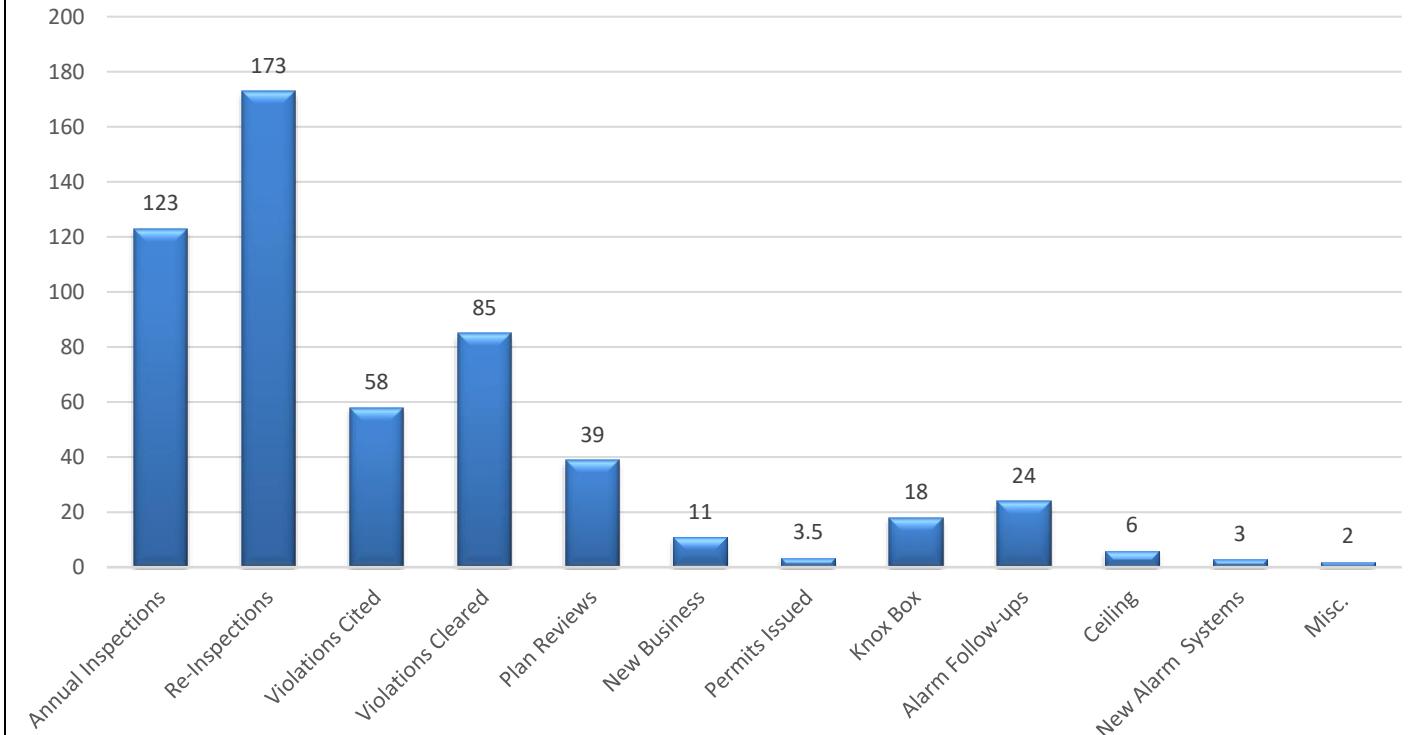
With hundreds of potential sprinkler freeze-ups, we were only made aware of four within our response district.

The four commercial freeze-ups were directly related to the failure of the heating units.

We focused our Community Risk Reduction (CRR) efforts on checking as many riser rooms as possible during this time. Countless hours were spent by both staff members checking not only sprinklers but also fire alarm problems. We utilized approximately 15-20 person-hours working on repairs or preventing systems from freezing.



Year-To-Date - February 2021



Throughout the month, the Fire Prevention Bureau conducted the following special duties:

- Worked with the property manager at Deer Park Estates to open roads, clear hydrants, and repair broke exterior sprinkler Post-Indicating-Valve (PIV) valve.
- Worked with the homeowner to reduce hazards and silence the local smoke detectors at 37 Red Tail from a severe water leak.
- Followed-up on broken Knox box key, repaired the Knox box, and replaced all keys, as needed.
- Followed-up on a residential garage collapse in Echo Lake notified Lake County and checked for hazards.
- While doing inspections, we assisted the owner of Johnny's Shoe Repair with changing his smoke detectors' batteries.
- Assisted a resident with installing new 10-year smoke detectors. Due to the detector locations, we spent 1.5 hours making sure she was safe!
- Worked with the following customers on alarm issues:
 - Gere Marie
 - One Golfview
 - 555 America Court
 - China Style Restaurant
 - 794 S. Rand
 - Walmart
 - Biaggi's
- Construction Meetings
 - Arlington Machinery
 - Costco
 - Echo - Solar
 - May Whitney School
 - Lake Zurich High School
- Meetings
 - Staff Meeting
 - RMS Demo at Wauconda
 - Meeting with Captain regarding Knox Box and alarm issues
 - Meeting with Division Chief Wenzel on investigation policies
- Responded to Wauconda Fire with two fire investigators on automatic aid – both were returned before arrival.
- Training
 - Investigation Training: 3 hours – Round Lake
 - National Fire Academy – 16 hours
 - Community Risk Reduction Class
- The Fire Prevention Bureau Clerk processed 26 plan reviews and processed and issued 38 Operational Permits.

