



# FIRE DEPARTMENT

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## MONTHLY INFORMATION REPORT

**December 2021**

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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 - December 2021 Overview

In December, the Department responded to **380** calls for service, averaged **12** calls per day and required **610 individual vehicle responses** to provide the necessary personnel for each incident.

Forty-four percent (**44%**) of the service area responses occurred while another call was in progress. Twenty-one (**21%**) 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



## Significant Calls

### First Snow of the Season

On 12/28/2021 at approximately 11:30 a.m., Lake Zurich Fire Department was dispatched to the intersection of Route 22 and Quentin Road for a vehicle into a utility pole. Upon arrival we noted that a single vehicle had struck a utility pole at the intersection, East bound on Route 22. The utility pole supported traffic lights and wires however, once struck it snapped the pole in half causing the traffic lights and wires to drape across Route 22 causing the East and West bound lanes to be shut down for the prolong period of time. LZ Engine 323 Ambulance 322, and Battalion 32 responded. Lake Zurich Engine 323 identified hazards,



established a safe working area for police and EMS, and assisted with traffic control. LZ Ambulance 322 assessed a total of 6 patients on scene. No patients were transported to the hospital for further evaluation or treatment. The Lake Zurich Fire Department, Lake Zurich Police Department, Kildeer Police Department, Hawthorn Woods Police Department and the Citizens Emergency Response Team worked cohesively and collaboratively together to assess all the patients on scene, quickly identify hazards and keep traffic moving.



Structure fire in the 21000 block of Meadowlark Drive on December 1 – pictured above.

Motor vehicle accident with extrication December 3 – pictured left.

## Administration Division

- The Board of Fire and Police Commissioners has 33 eligible candidates to sit for the entry-level exam scheduled in January.
- The promotional exam process has begun. The Board of Fire and Police Commission received 12 applicants for promotional testing for fire lieutenant and 3 applicants for promotional testing for fire captain.
- In 2021, the LZFD responded to 4,169 calls - marking one of the busiest years ever for the department. It is not uncommon to see an increase in calls on a year-to-year basis. But after a reduction in runs of 450+ in 2020 attributed to COVID-19, the fire department saw calls back on the upswing just a year later. We are ahead of every other year except for 2018. The increased call volume and the ongoing COVID-19 Pandemic created a unique year for the fire department.
- The FD staff is working on completing operational projects based on the 2022 budget. 2022 has a new engine and ambulance on order, extrication equipment replacement, and rehabilitation projects for station 1.

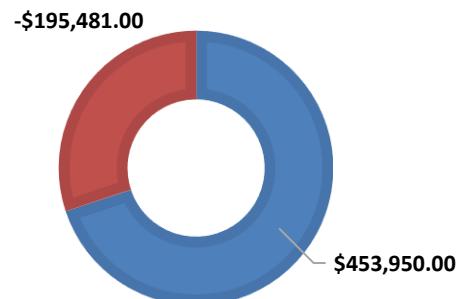
### **FIRE DEPARTMENT BUDGET**

■ Overall Budget w/ Amendment      ■ Available Balance



### **OVERTIME ACCOUNTS**

■ Overtime Budget      ■ Negative Balance



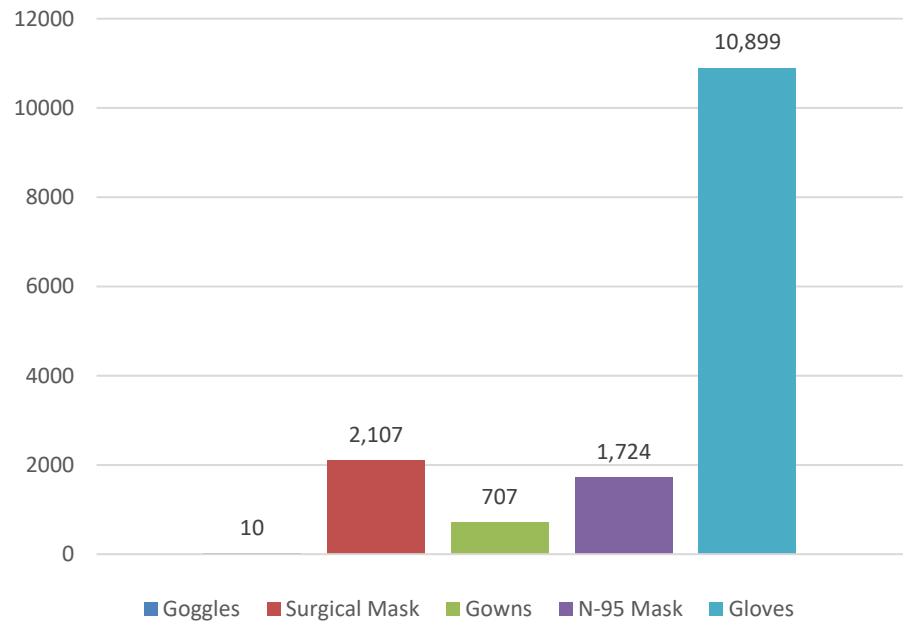
### **COVID-19 Updates**

We are currently tracking the Personal Protective Equipment (PPE) that members use and dispose of due to the COVID-19 pandemic.

In December, we issued **0 pairs of safety goggles** and used **245 surgical masks** on patients, **162 - N95 respirators** for our personnel, **54 gowns**, and approximately **924 surgical gloves**.

The graph pictured to the right shows year-to-date (2021).

### **PPE Utilized & Disposed 2021**



## EMS Division

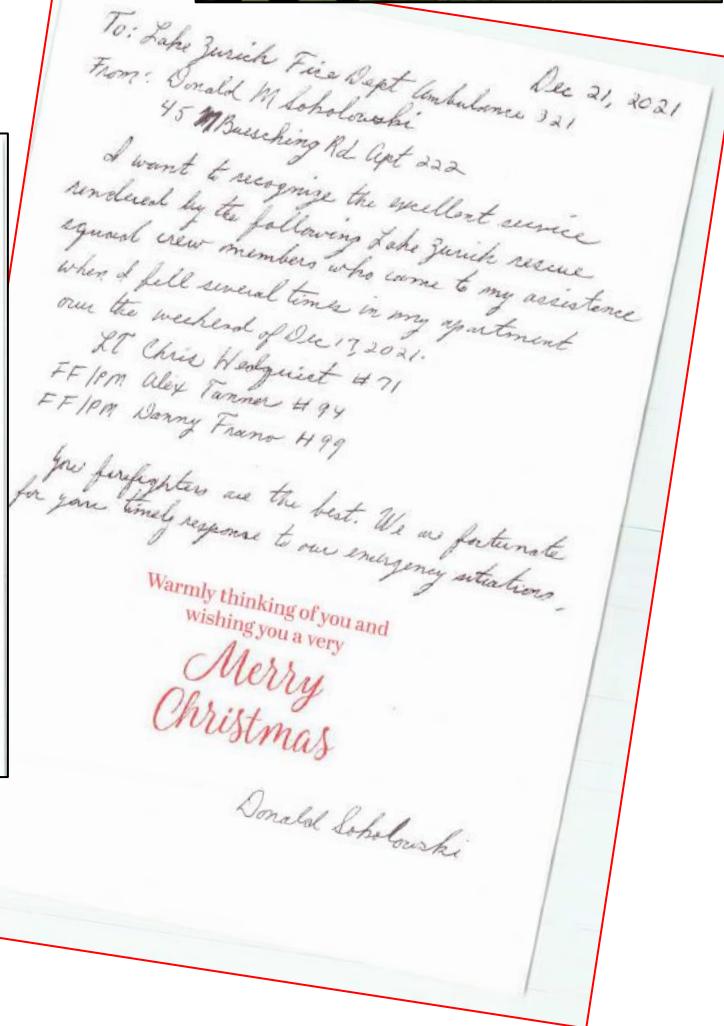
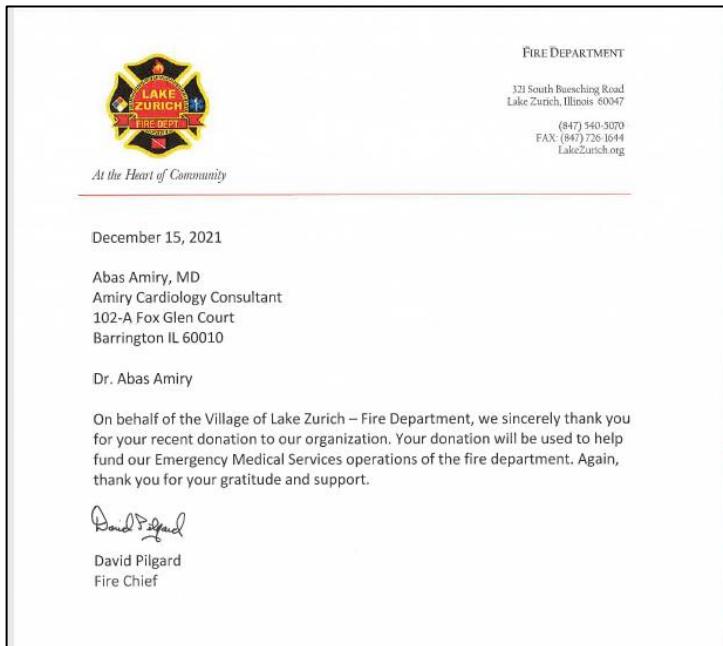
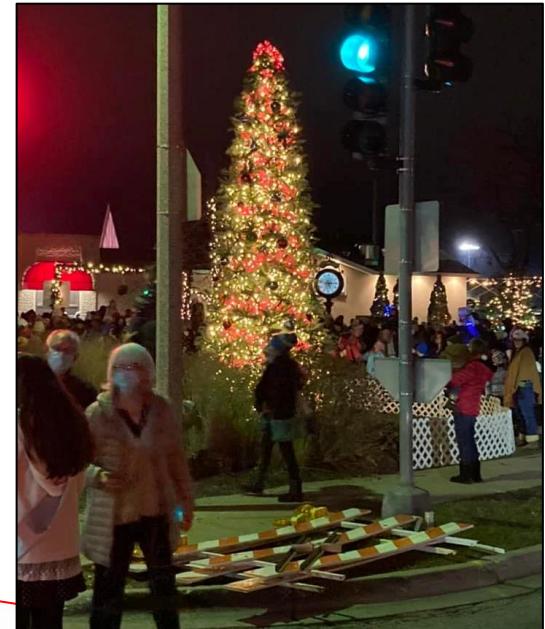
With mutual aid ambulance billing and enrollment in the Ground Emergency Medical Transport (GEMT) in 2021, revenue has exceeded projections. Through 11/30/2021, the ambulance fees received stood at \$890,840.00, \$206,000.00 over 2021 original projections, with December amounts not yet recorded. EMS/Rescue call volume rose by 391 calls for service over 2020.

## 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 **90 events** and interacted with approximately **26,350 people** in public education.

Lake Zurich Engine 324 escorted Santa to the Miracle on Main Street  
(Pictured right)



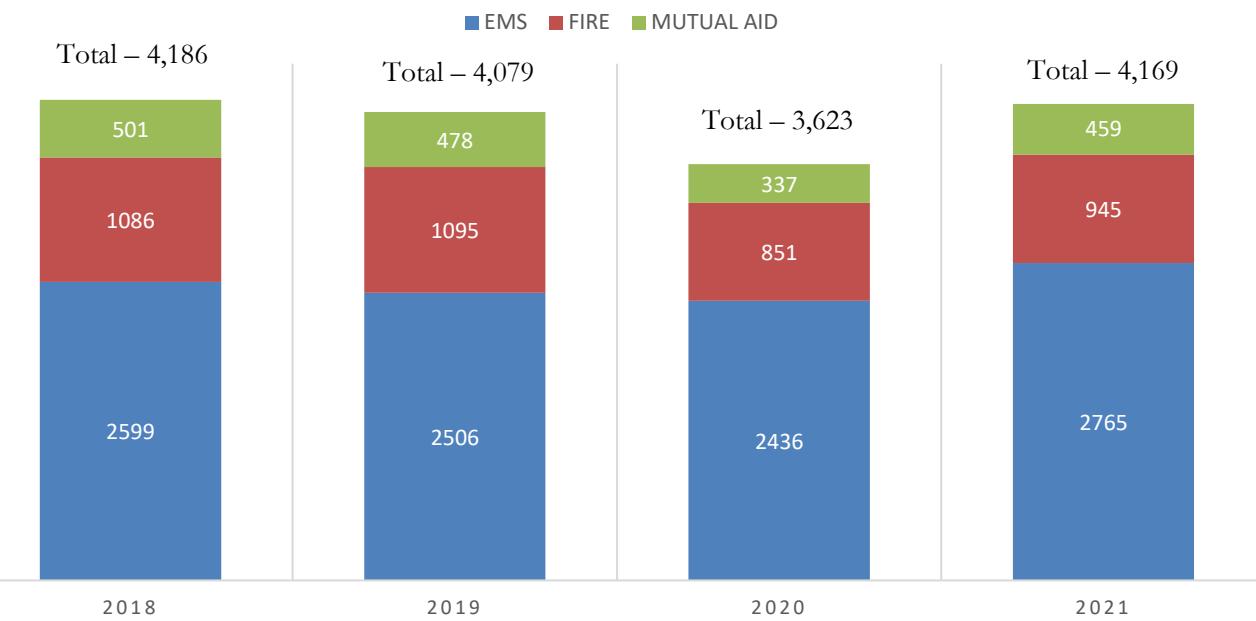
# Operations Division

## Vehicles Out of Service

- During December, the following vehicles were out of service due to maintenance, repairs, or breakdowns:
  - Ambulances – 54.57 hours
  - Engines – 137 hours
  - Year-To-Date Hours:

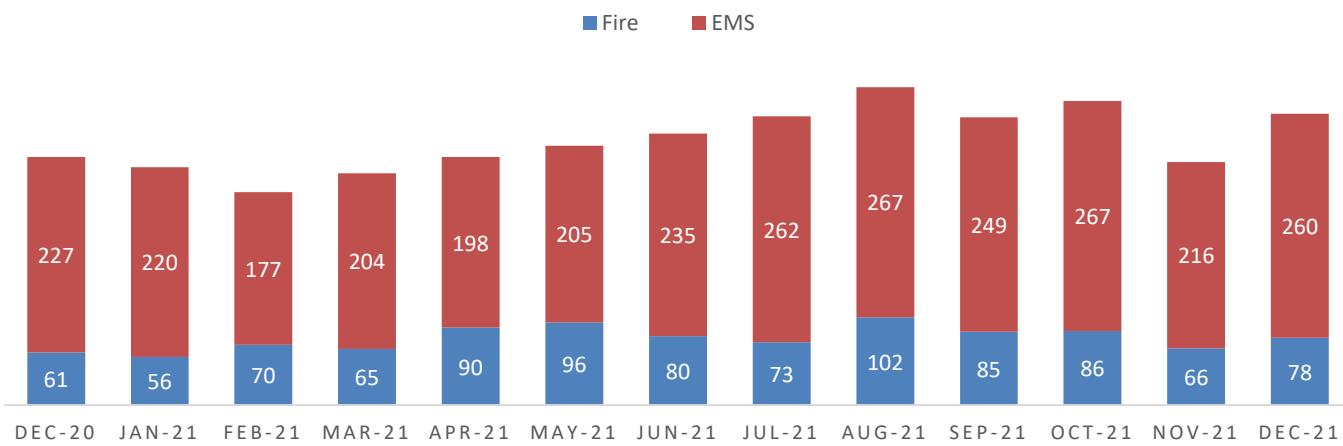
Ambulances: 1,047 hours | Engines: 2,943 hours

## TOTAL CALLS - YTD



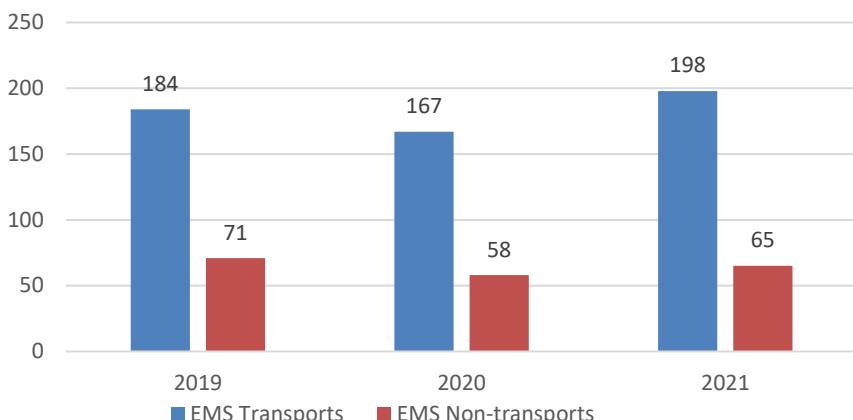
Below is the breakdown of Fire versus EMS incidents in Lake Zurich – minus aid given. Our fire calls include structure fires, car fires, grass fires, dumpster fires, wires down, and other types of service calls.

## DECEMBER - EMS V FIRE CALLS (NO MUTUAL OR AUTO AID)



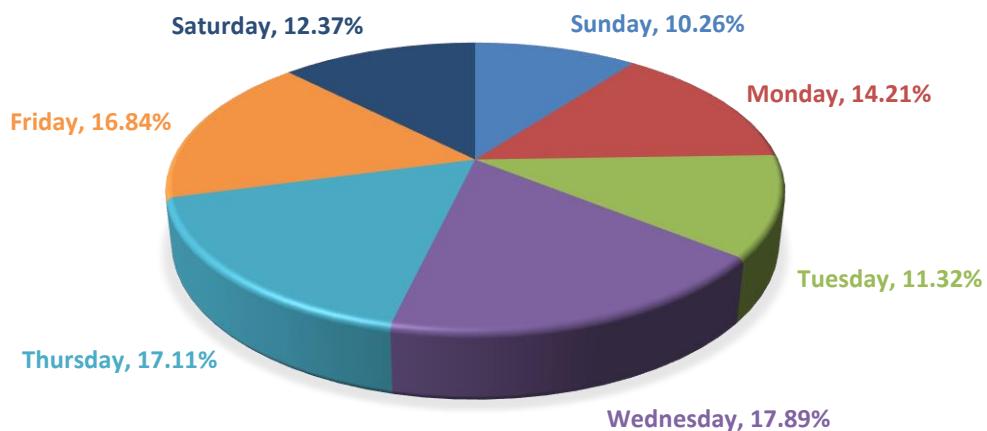
The following chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call result in transport. A prime example of this is an automobile accident where several victims refuses transport. EMS transports always outpace refusals. This chart compares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

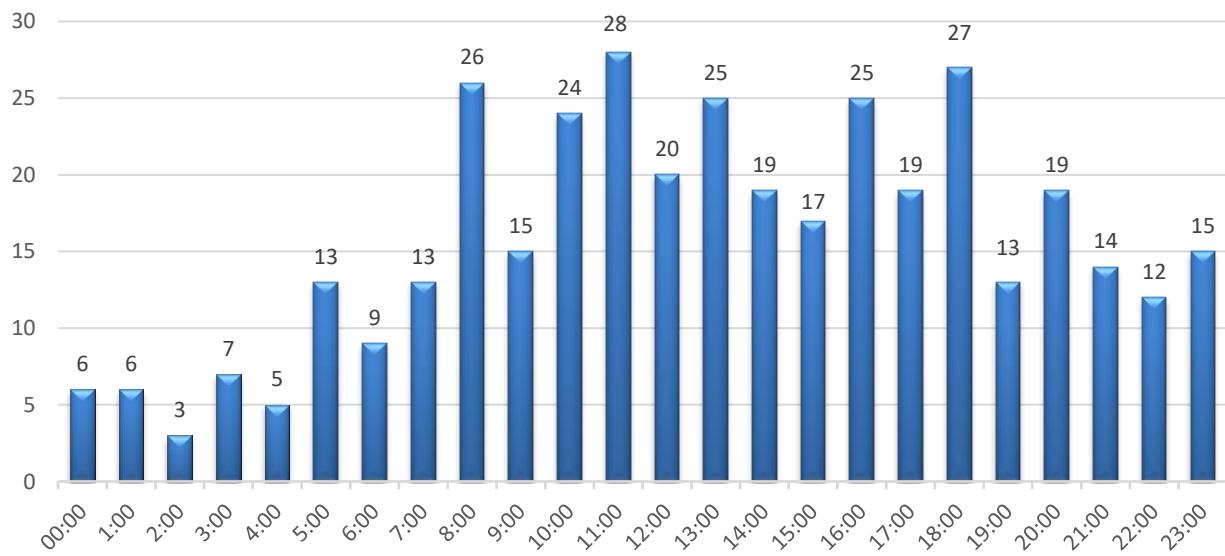


The following two charts break down calls by the day-of-week and hour-of-day.

**RESPONSE BY DAY OF WEEK - DECEMBER**



**RESPONSE BY HOUR OF DAY - DECEMBER**



**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

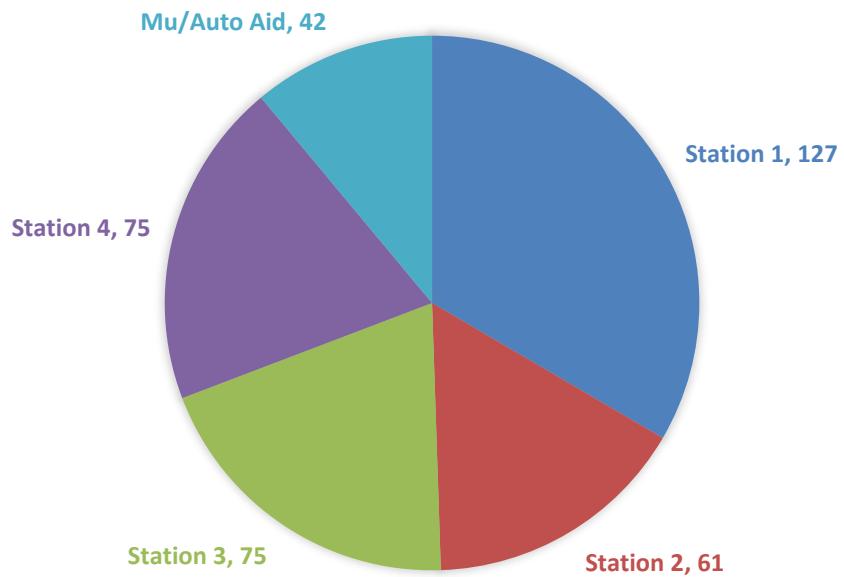
**APPARATUS & STAFFING**

ENGINE 324  
AMBULANCE 324



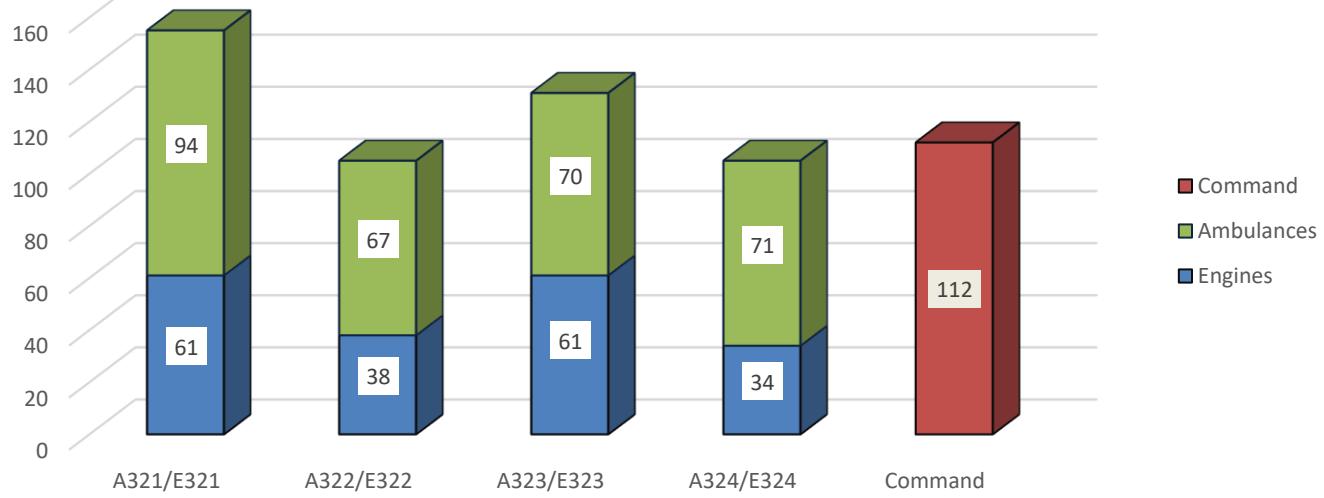
The graph below represents the percentage of calls by each station and mutual/auto aid for December, 2021. The chart does **not** represent the station that responded as the primary resource to the area – it means where the call originated. Station 1 is historically the busiest district.

### ORIGIN OF CALLS - DECEMBER, 2021

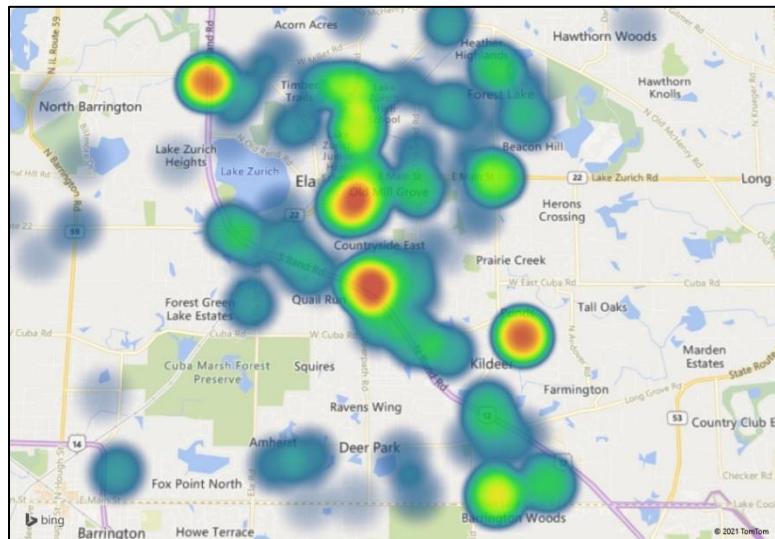


The graph below shows the responses by each unit – Ambulances, Engines, and Command Officer – in December

### Total Unit Responses - Ambulances, Engines, & Command Officer



The following graphic is a visual representation of call distribution for December. 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.



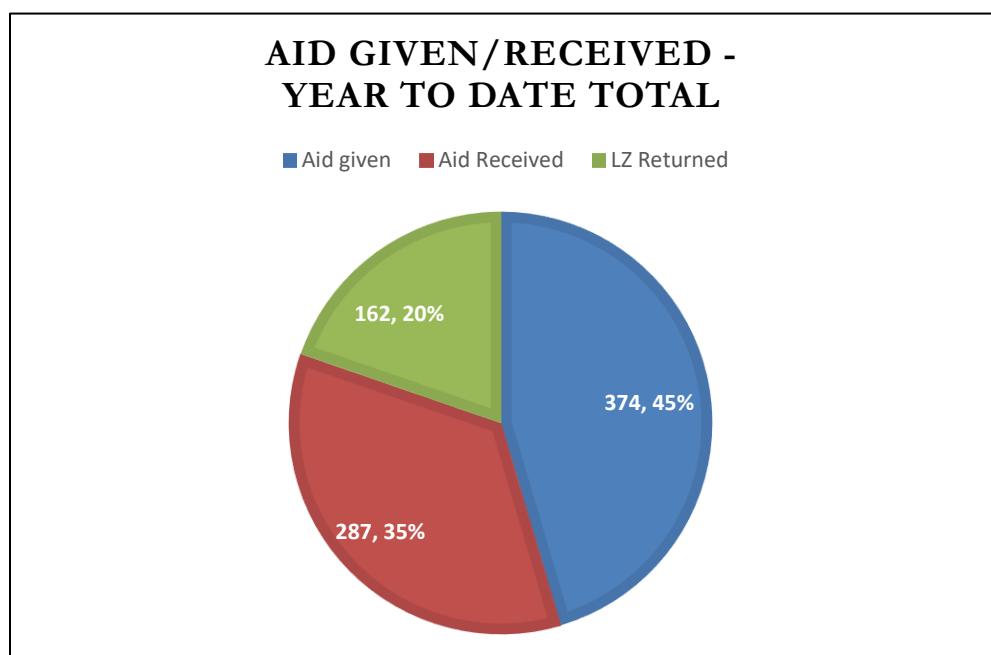
#### Frequent Call Locations:

- 795 N. Rand Road – Azpira Place of Lake Zurich – 15 responses
- 900 S. Rand Road – Avantara Health Care Center of Lake Zurich – 13 responses
- 21840 Lake Cook Road – Deer Park Village Senior Living – 13 responses
- 777 Church Street - Cedar Lake Assistant Living - 6 Responses
- 21481 N. Rand Road – Northwest Community Healthcare – 6 responses

#### Mutual/Auto Aid Response Year to Date –

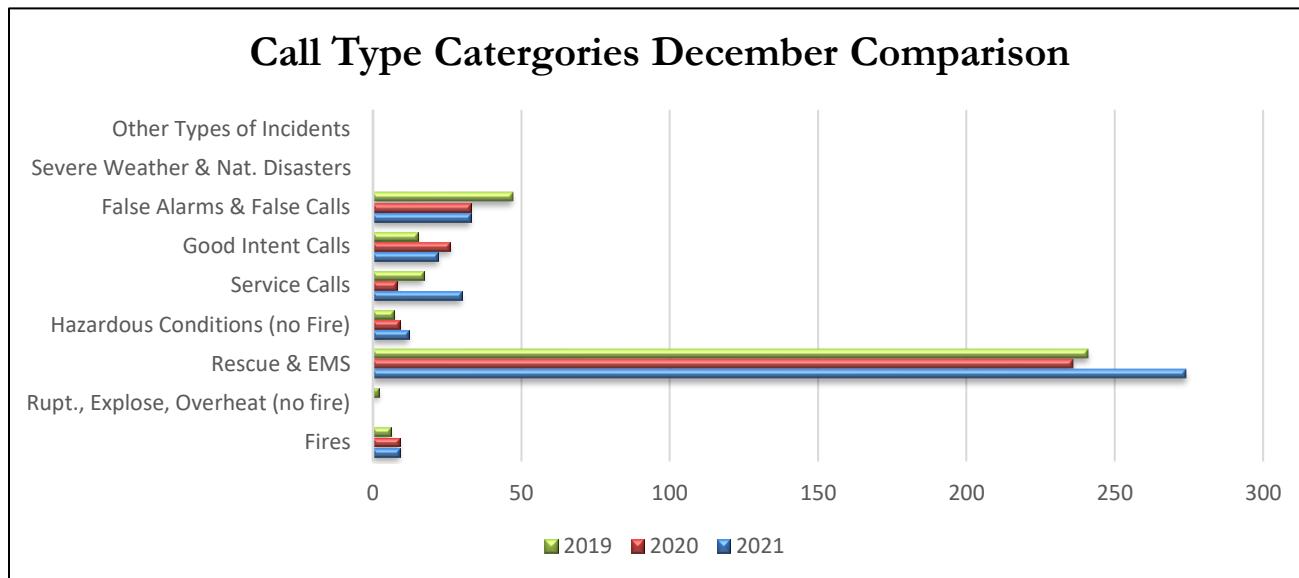
The mutual aid agreements are designed not to overburden any one agency and are looked at carefully for any necessary adjustments. Run cards for the Department have changed, and our partners are responding to assist us more often. In

December, we responded to **42 mutual aid calls and returned 17 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.

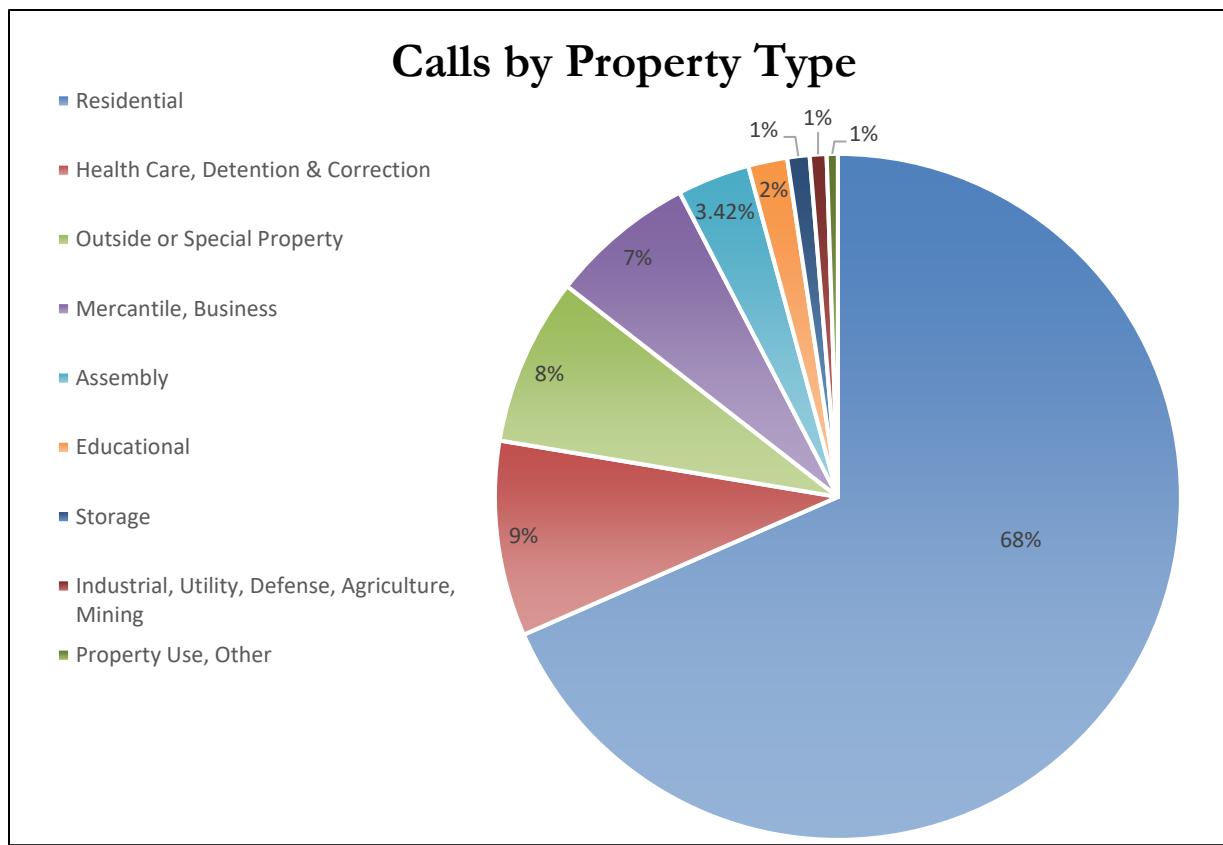


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All calls we code as a department within the National Fire Incident Reporting System (NFIRS). The codes all relate to the text categories noted in the chart below. As indicated below, you will see across the three years that the trends remain mostly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

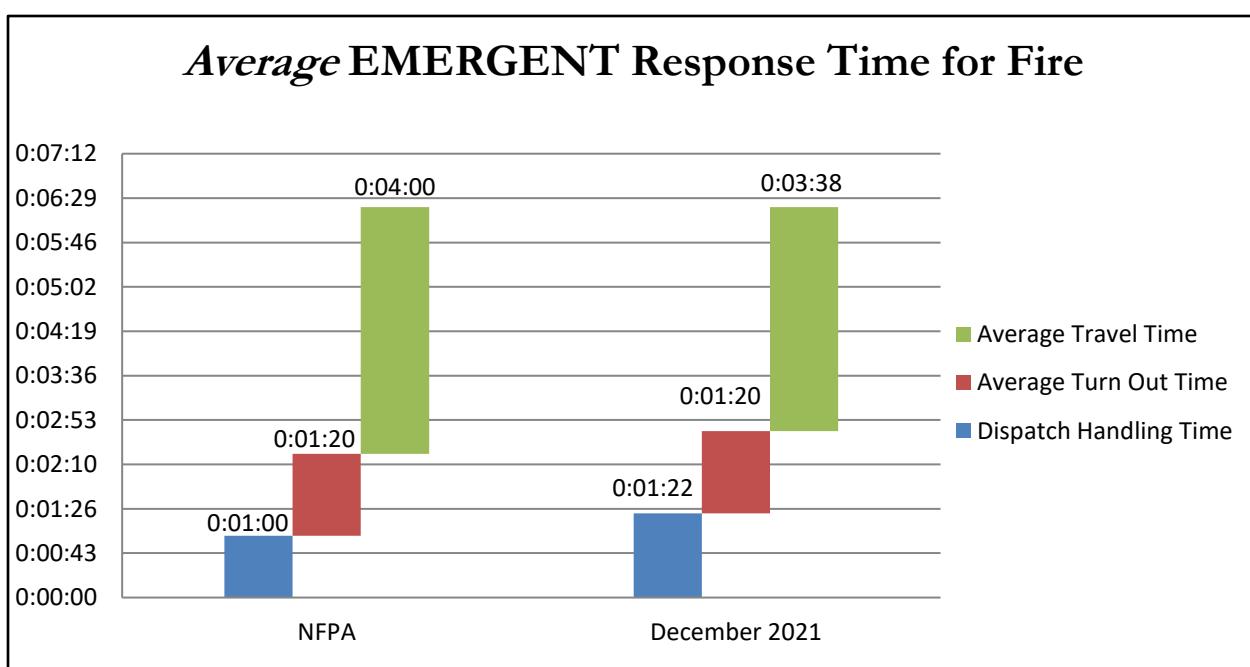
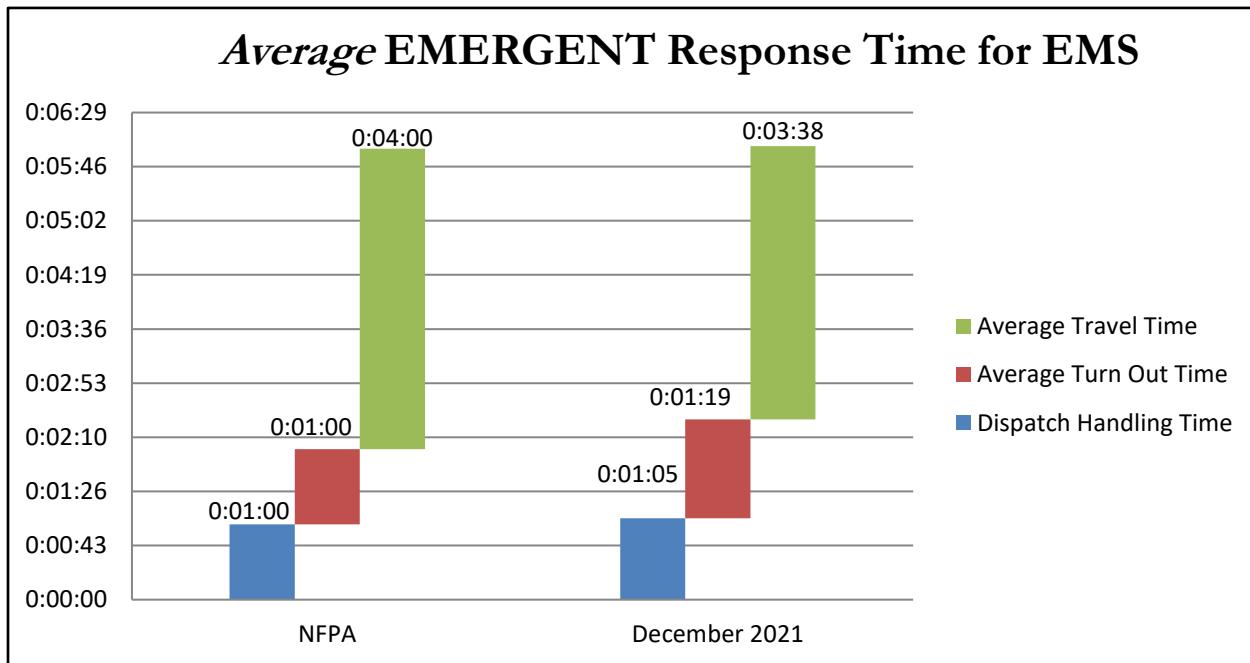


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes were open. As shown below, we continue to respond to Residential Properties more than any other (68%) and Health Care/Detention was 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 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 December, we completed the following shift training:

**EMS Cardiac Scenario** - Paramedics completed EMS cardiac full arrest 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 basis, crews review department equipment and ensure they can operate is properly and effectively.

**Officer Training** – Company Officers and Acting Officers practiced sizing up a building and issuing 1<sup>st</sup> 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.

**Annual Blood Borne Pathogen Review** - Paramedic completed mandatory BBP review and training

**EMS System Entry** - Probationary members worked on completing NCH EMS Entry

**Engine Placement on the Fire Scene** - Crews practiced proper engine placement on the fire scene

**Family Medical Leave Act** - Department members completed a review of the changes to the FMLA instructed by Cheryl Flannery

**N-95 Fit Testing** - Members completed annual mandatory N-95 mask fit testing

The following members attended outside training.

**Deputy Chief Christopherson** continued working on his Chief Officer Certification

**Captain Kammin** finished the 40-hour Incident Safety Officer class

**Lieutenant Cornell** completed the 40-hour Fire Attack and Suppression Technique class at IFSI

### December Training Hours - 1,152 Total



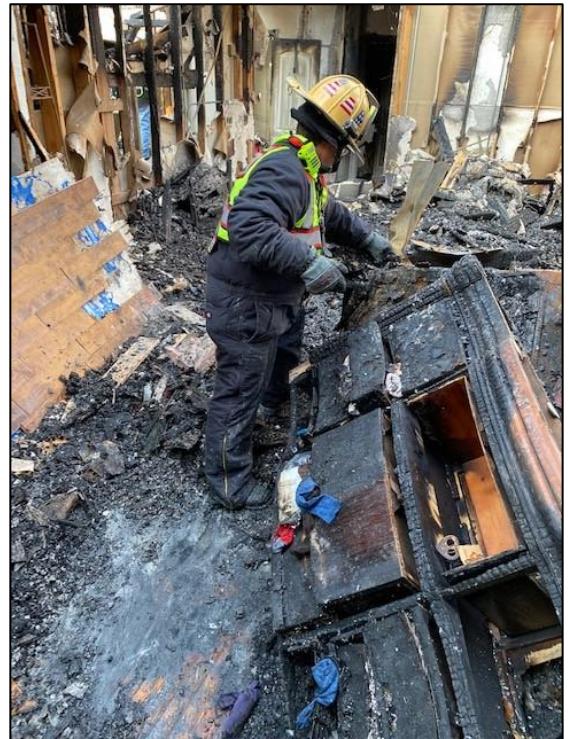
## Fire Prevention Bureau Division

While the month of December is usually quiet, this month was anything but that. The Fire Department began the first day of the month with a structure fire involving an over 5,000 square foot home.

This fire completely consumed the home in Kildeer and damaged the neighboring house. The initial damage estimates are well over \$1,000,000. The fire investigation team spent almost three full days on site digging out different areas along with the insurance investigators. Over ten hours were spent assisting the homeowner with recovery of their pets and valuables. *(Pictured right)*

This fire is a prime example of why fire sprinklers and smoke detection are so important to our CRR efforts. One sprinkler head activated in the room would have contained, if not, extinguished this fire.

Events like this should make our neighboring towns re-think their stance on residential fire sprinklers. This loss would have been much less and the family would not have suffered the loss of their pets.



The Bureau was requested to a box alarm fire in Countryside fire response area to assist with the fire investigation. A probable electrical issue in the garage destroyed the garage and a large section of the home. *(Pictured left)*

The Fire Prevention Bureau assisted with the Miracle on Main Street event. From inspecting food trucks to bringing in Santa, the Fire Department maintained a presence all day.

This was a record year for in-house plan reviews. The Bureau handled over 300 reviews in-house.

The Bureau currently does not have a part-time Fire Prevention Clerk. Without clerical help since October, the Bureau has faced challenges and some reviews and day to day operations have been delayed.

We wish everyone a Happy Fire Safe New Year!

## DECEMBER ACTIVITIES

- Construction Meetings
  - Life Time propane tanks
  - Deer Park – three new stores at the mall
  - Factor 75
  - 454 N. Old Rand – sprinklers
- NIFIA meeting
- Fire investigation – multiple days
- Mutual aid fire investigation to Countryside Fire Department
- RMS demo of ESO
- Miracle on Main Street – 12-4-21 – all day
- Wind storm caused multiple fire alarms due to power issues – all followed-up and cleared
- Residential Knox box – 2
- Met with homeowner of new house on Rue Jardin in Deer Park to discuss smoke detect

