



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

July 2020

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

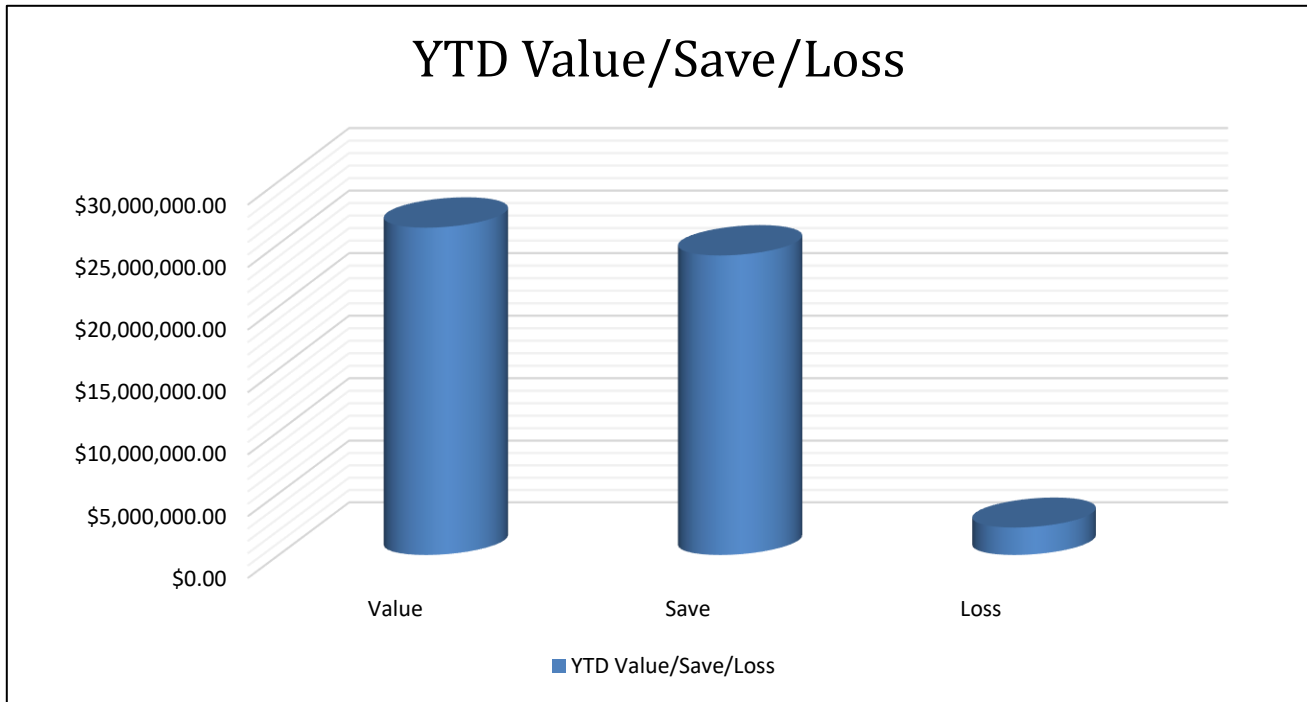
70 E. MAIN STREET
LAKE ZURICH, IL 60047

Departmental Narrative

General Operations:

The Department responded to **292** calls for service in July, which averaged **9** calls per day and required **482 separate vehicle responses** to provide the necessary number of personnel for each incident. Thirty percent (**30%**) of the responses occurred while another call was in progress. Thirteen (**13%**) of calls required a response from the non-primary engine, ambulance, or 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



Structure fire in Deer Park in the 21800 block of Talia Lane (pictured above-left)

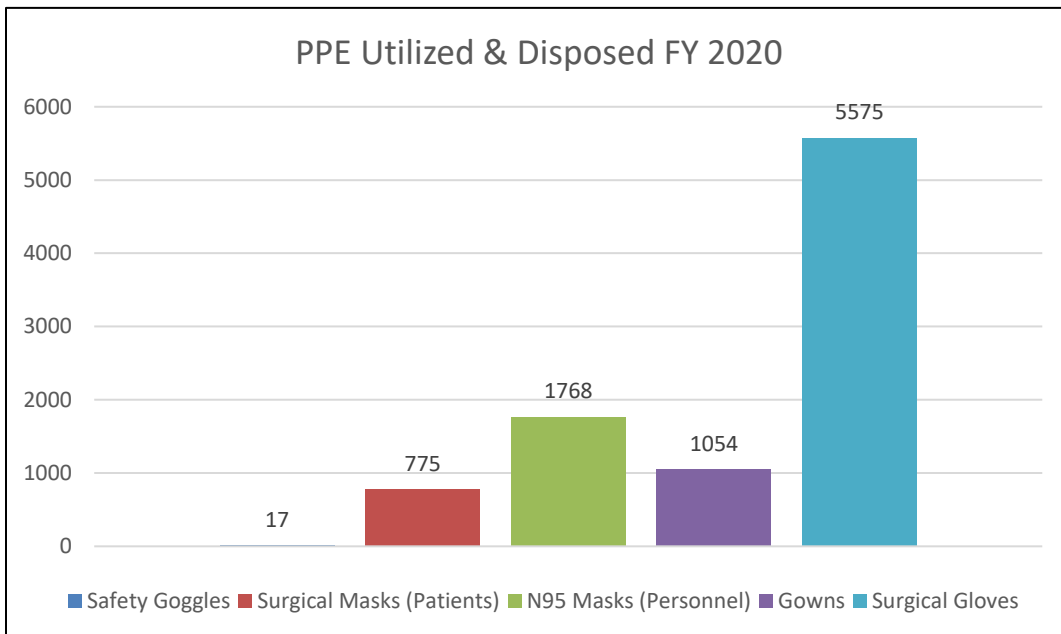
Structure fire in the 21000 block of W. Highland Drive (pictured above-right)

Department Updates:

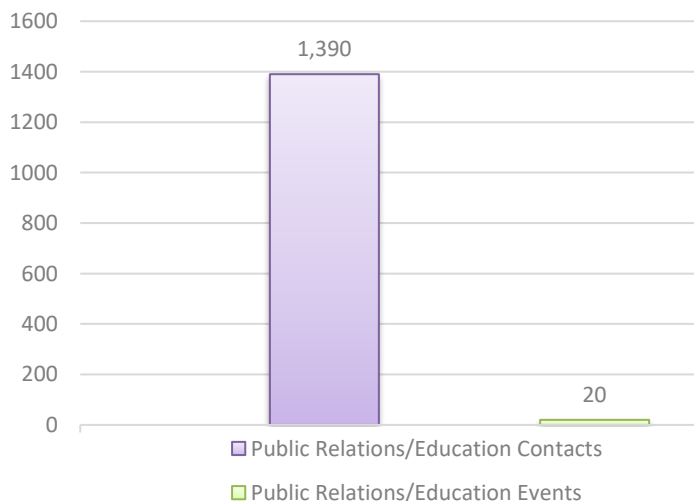
- During July, the following vehicles were out-of-service for a variety of reasons:
 - **Ambulances** – 180.50 hours
 - **Engines** – 71.50 hours
 - **Year-To-Date Hours:**
 - Ambulances: **662.75 hours**
 - Engines: **2,257.75 hours**
- As of July 31, 2020 – 88.86% of the overtime account (*all divisions*) has been spent.
 - Overtime Budgeted: \$394,812.00
 - Overtime Spent: \$350,840.01

COVID-19 Updates:

We are currently tracking the PPE that members are using and disposing of due to the COVID-19 pandemic. In July, we have issued 2 pair of safety goggles, used 147 surgical masks on patients, 313 N95 respirators for our personnel, 122 gowns, and about 982 pairs of surgical gloves. The below graph shows year-to-date.



Fire Safety Risk Reduction - Year-To-Date

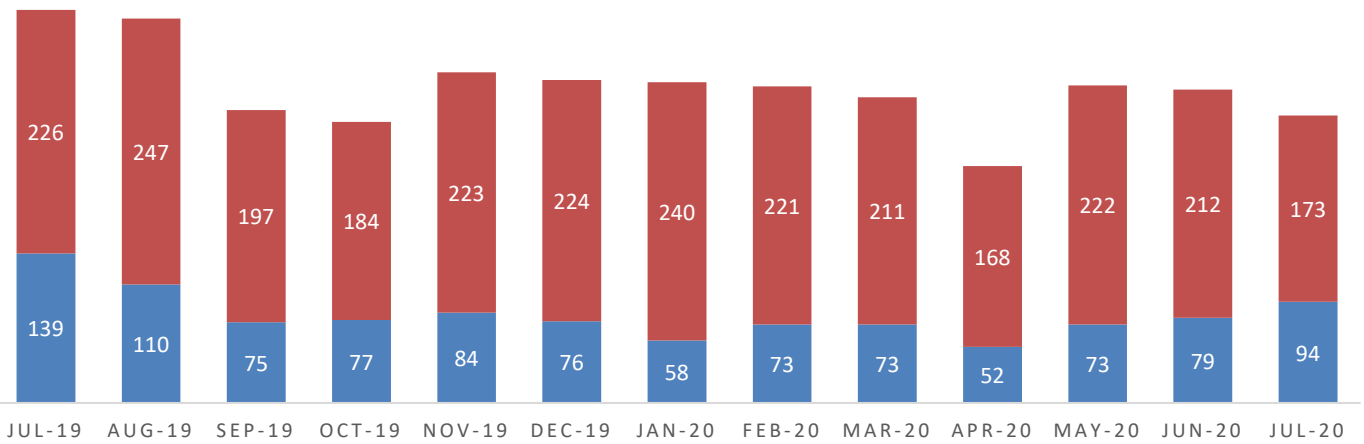


Community Access/Focus:
We want to express gratitude for the extra community-wide support shown to the department during this COVID-19 pandemic and give a shout out to all of the residents and businesses that have donated miscellaneous PPE, mailed us well wishes, or simply had food delivered to the stations.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

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

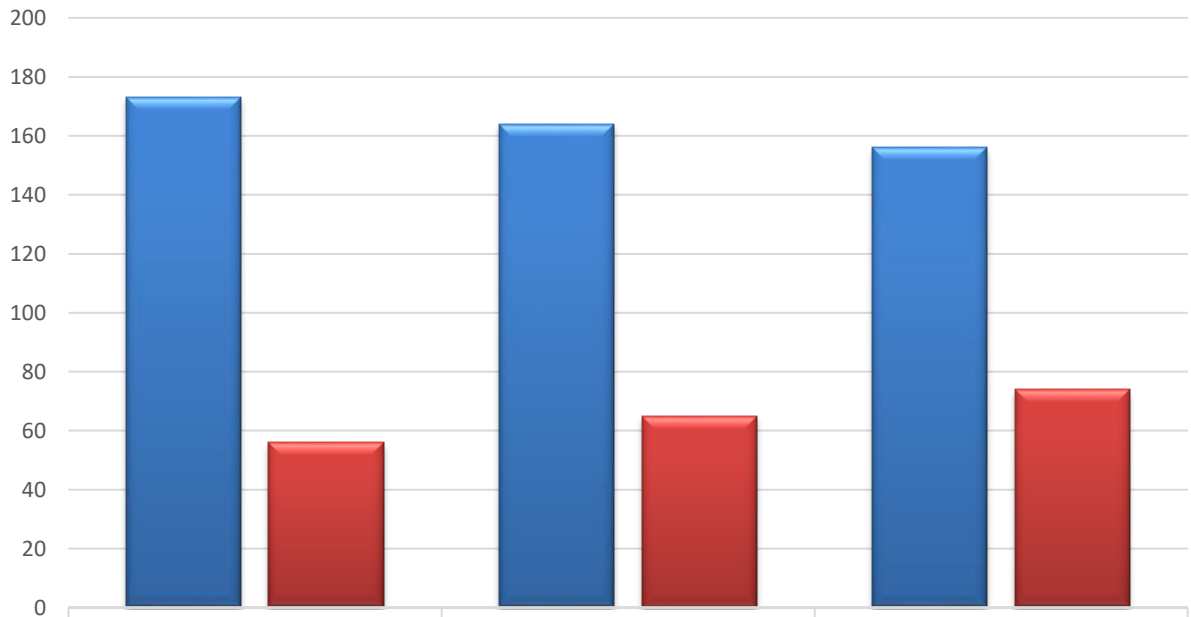
FIRE RESCUE DEPARTMENT - MONTHLY CALLS BY TYPE (MINUS AID GIVEN)

■ Fire ■ EMS



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 July 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

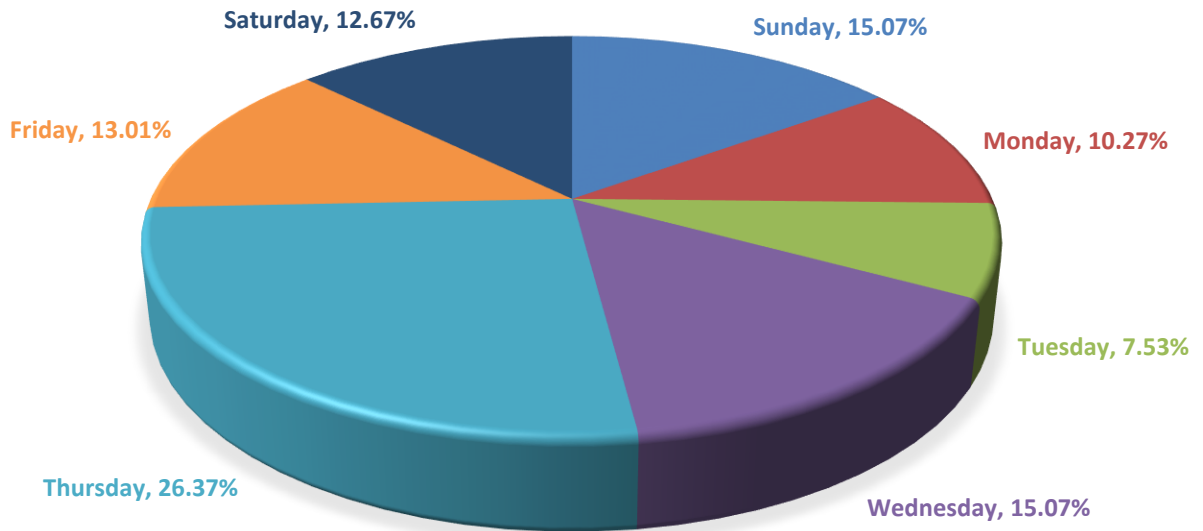


■ EMS Transports
■ EMS Non-transports

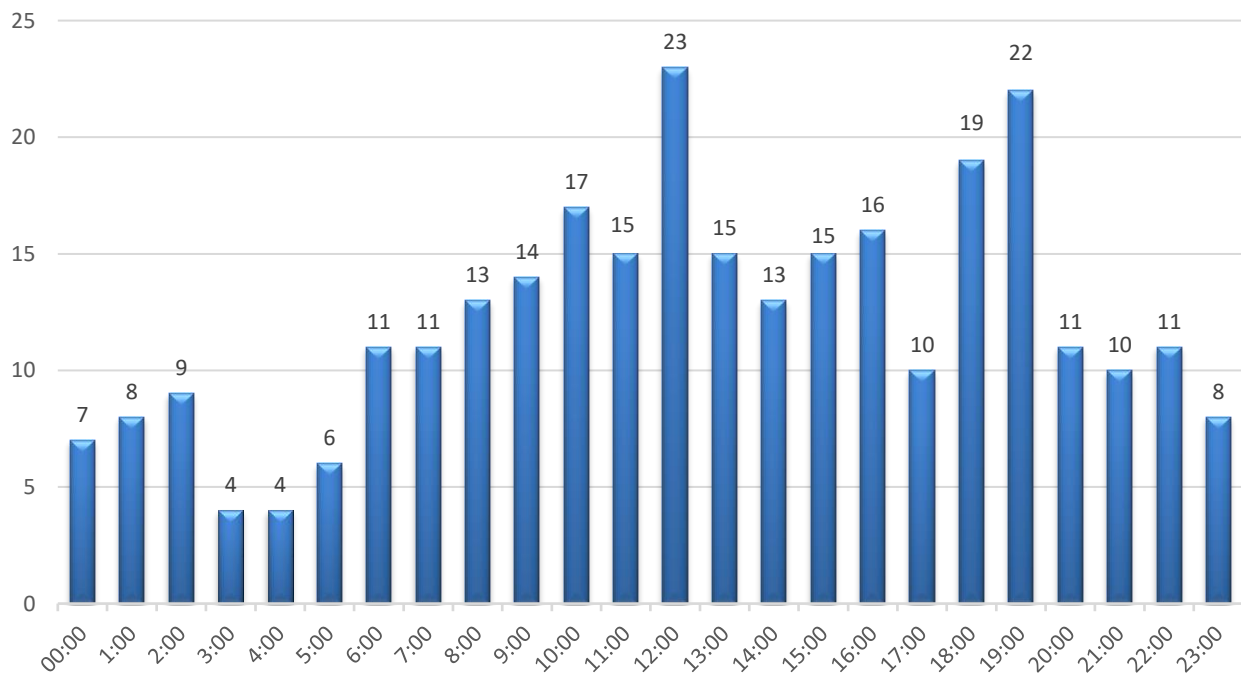
2018	173	56
2019	164	65
2020	156	74

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

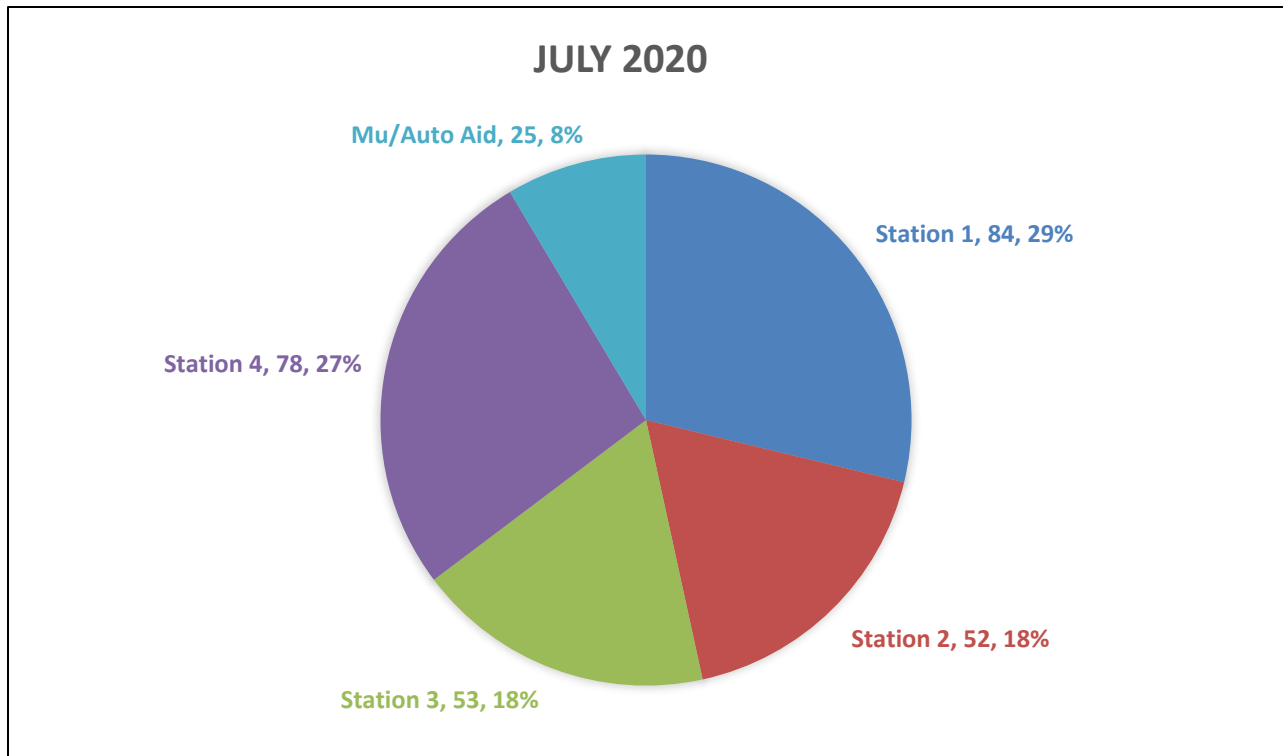
RESPONSE BY DAY OF WEEK - JULY 2020



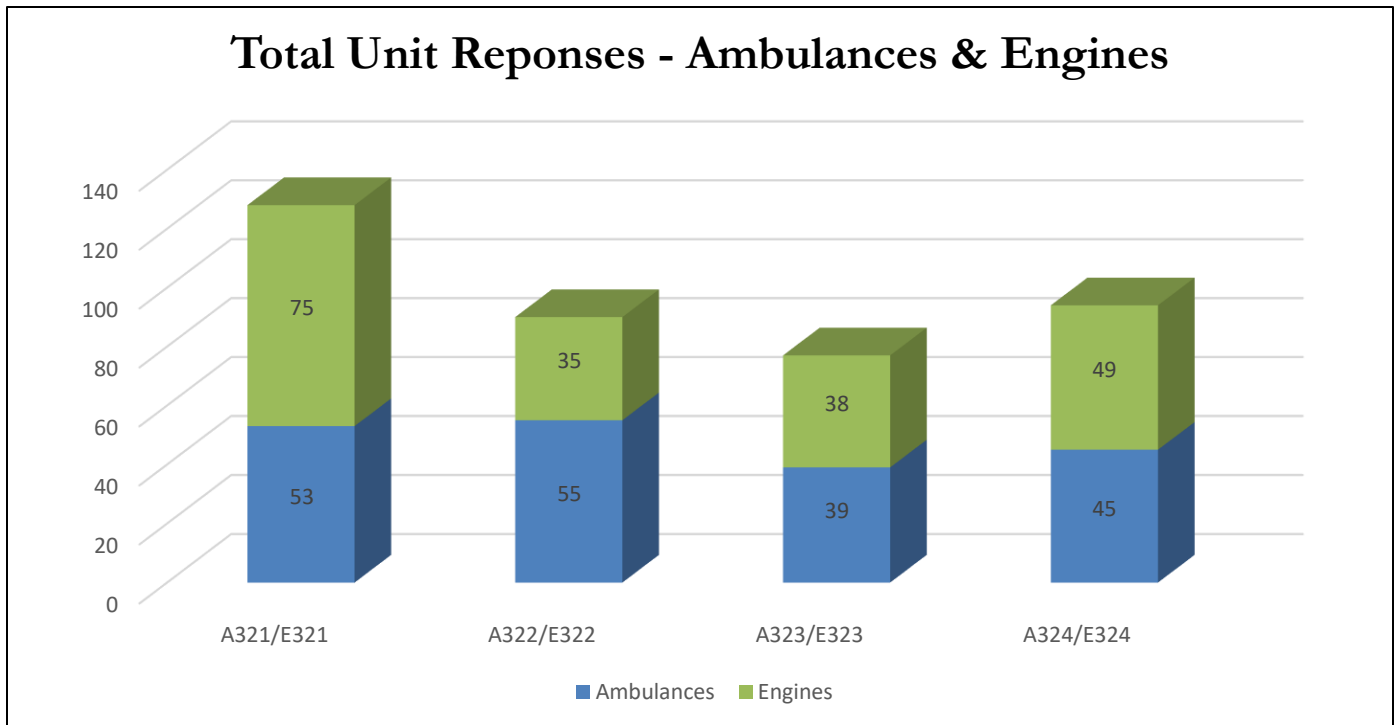
RESPONSE BY HOUR OF DAY - JULY 2020



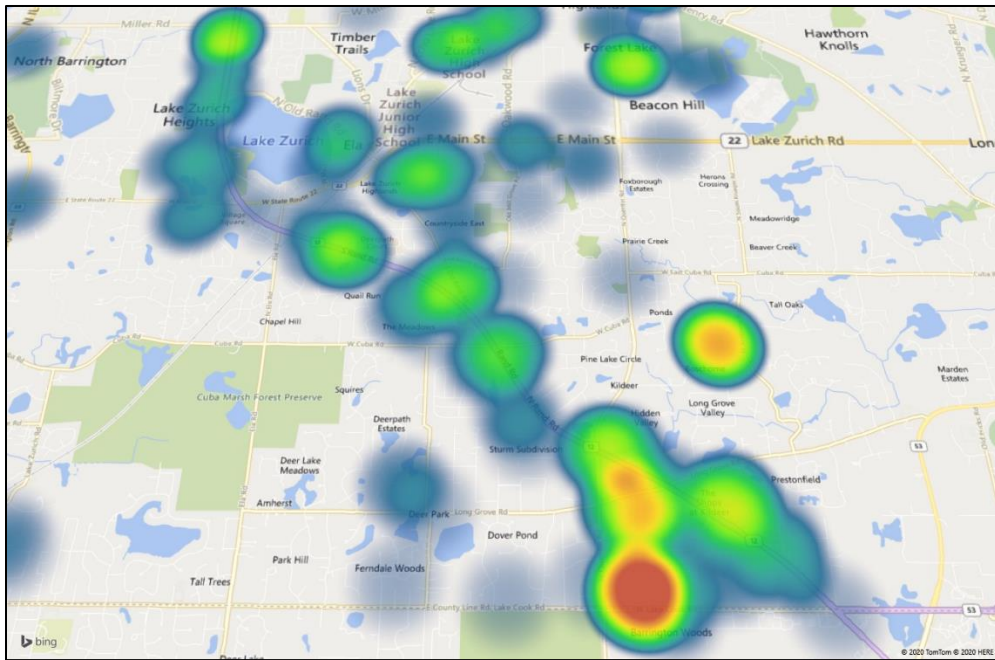
The service area of the Lake Zurich Fire Department contains the Village of Lake Zurich and the Lake Zurich Fire Protection District. The placement of the four fire stations allows division of the service area into first response areas. The graph below represents the percentage of calls by each station along with mutual/auto aid for July 2020. The graph does not represent the station that responded as the primary resource to the area – it represents **where** the call originated. Station 1 is historically the busiest district.



The graph below shows the responses by each unit – Ambulances & Engines – in July 2020.



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

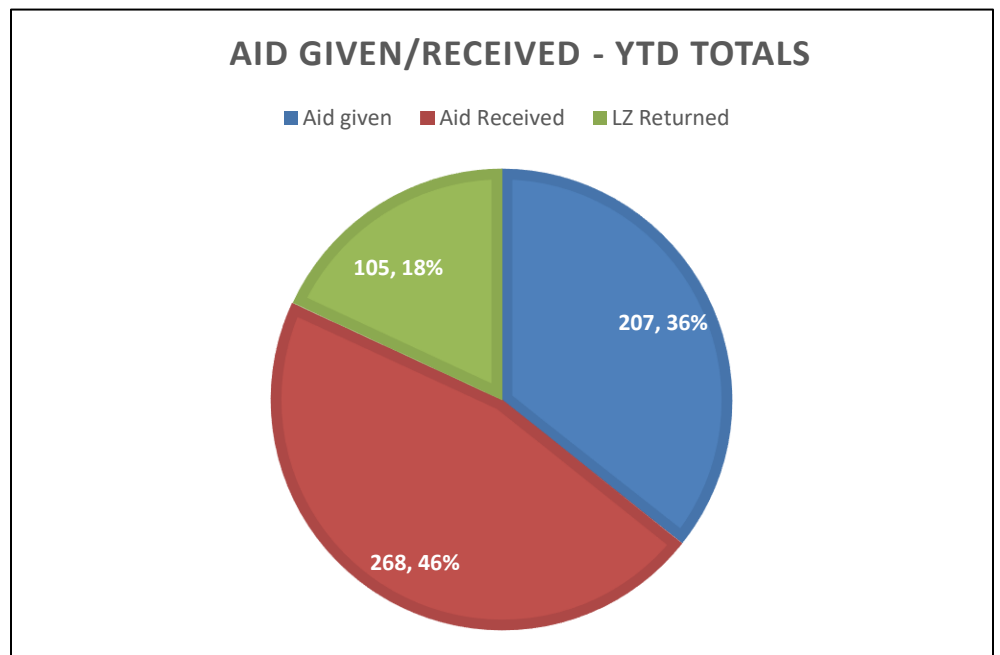


Frequent Call Locations:

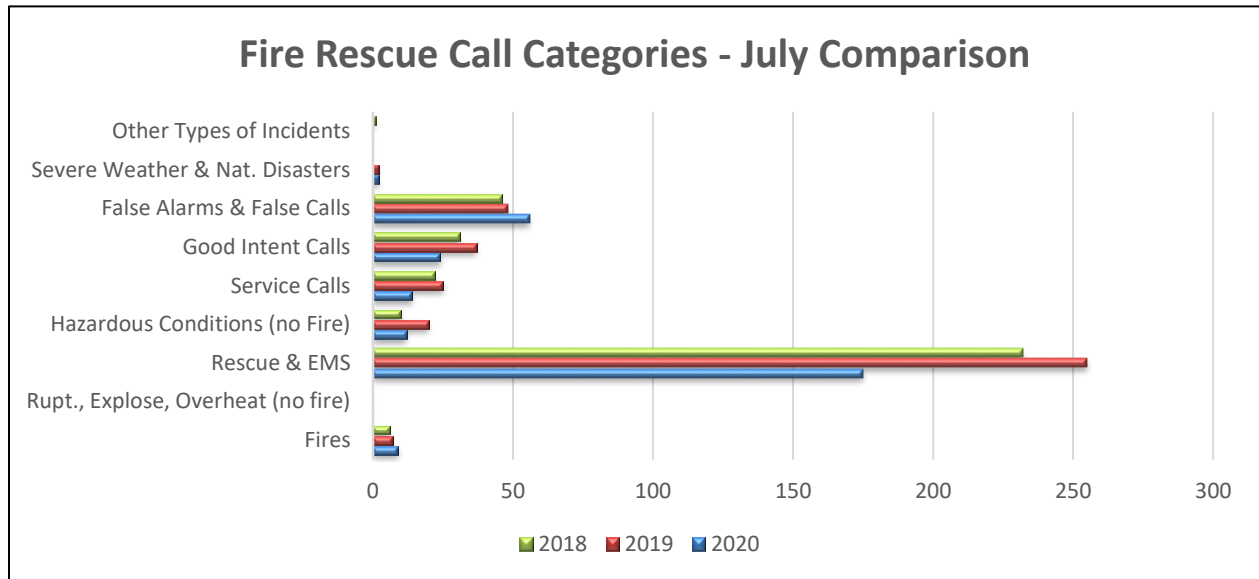
- 21840 Lake Cook Road – Solana Senior Living – 13 responses
- 795 N. Rand Road – Azpira Place Assisted Living – 9 responses
- 777 Church Street – Cedar Lake Assisted Living & Memory Care – 5 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 6 responses
- 900 S. Rand Road – Lexington Healthcare – 4 responses

Mutual/Auto Aid Response Year to Date –

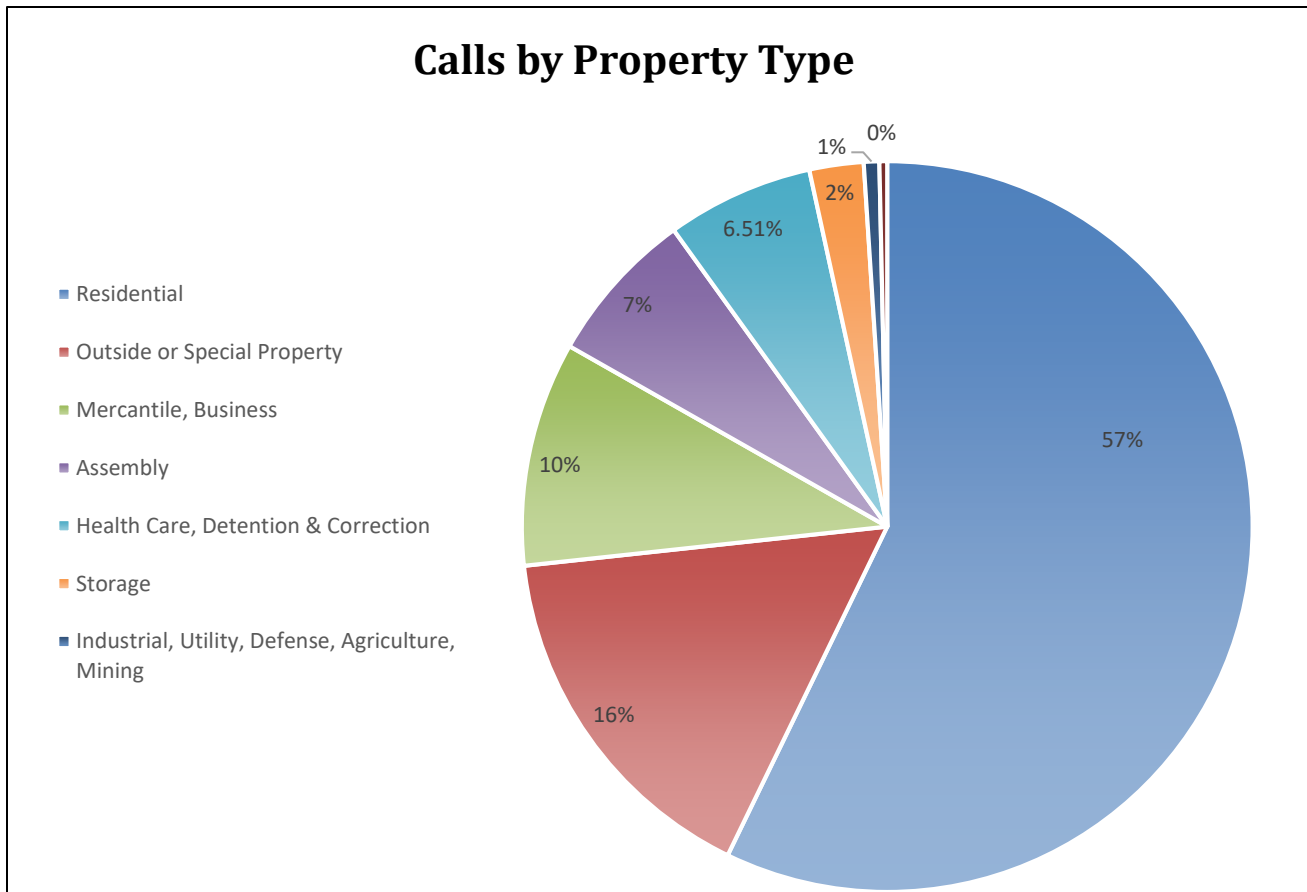
The mutual aid agreements are designed not to overburden any one agency and will be looked at carefully for any necessary adjustments. Run cards for the department have changed, and our partners are responding to assist us more often. In July, we responded to **26 calls** for mutual-aid and were **returned 16 times** before our arrival. The chart to the right shows YTD Aid Given/Received and how many times LZ returned before their arrival. Through the automated dispatching system and resource sharing, many of our response incidents do not require intervention from the LZPD 911 center. They are completely 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 guidelines of 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.

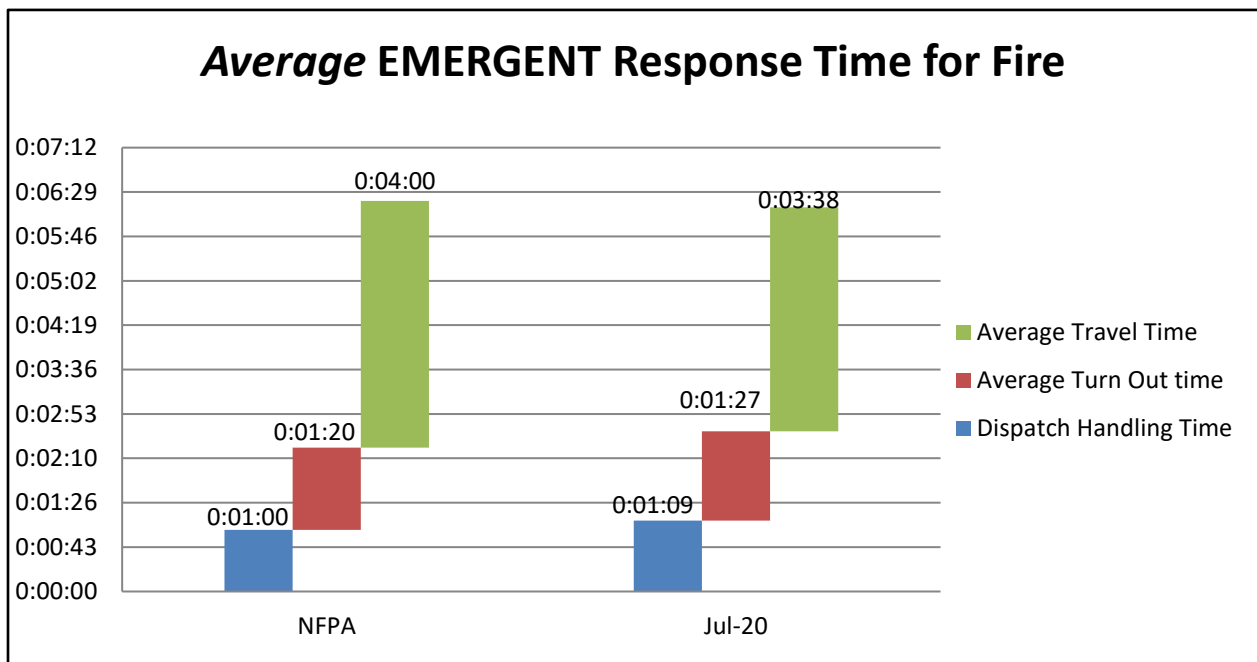
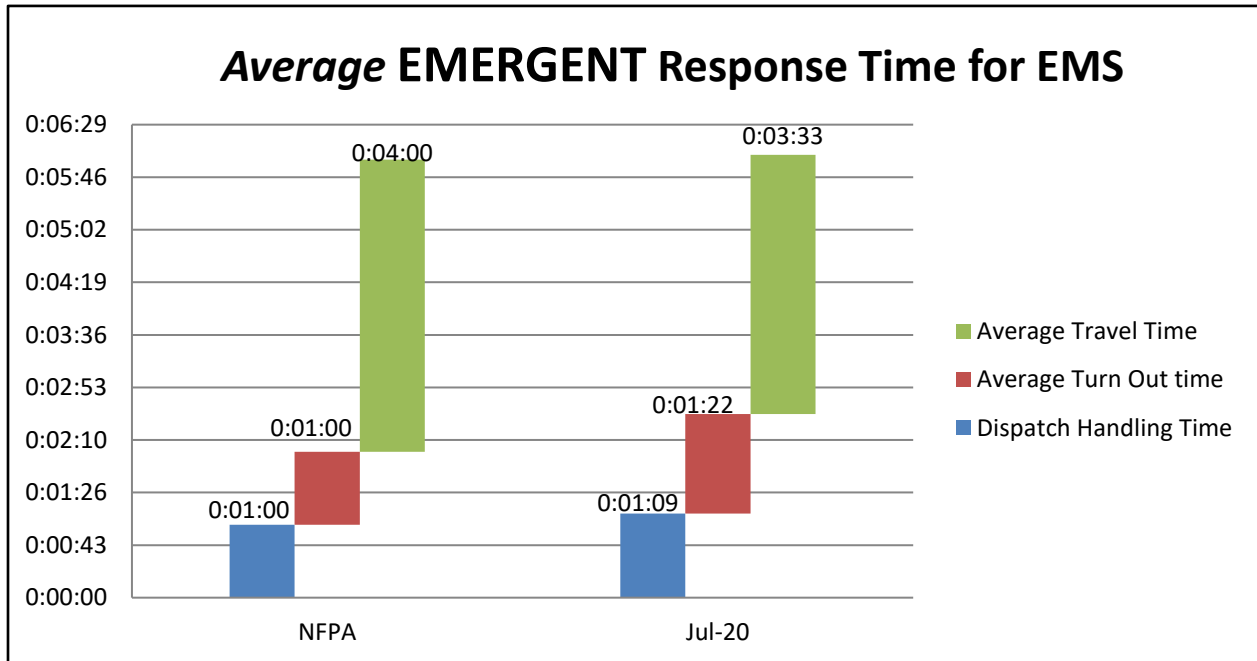


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use this to determine the impact on our service demand. As an example, the healthcare category would see an increase if additional assisted living or nursing homes open. As shown below, we continue to respond to Residential Properties more than any other (57%) and Outside or Special Property was second (16%) 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 the time 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 scene of the incident. 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 primary response area of the first arriving unit. These times will vary based in part on the location of the first responding unit, 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 the issue.



Training Initiatives:

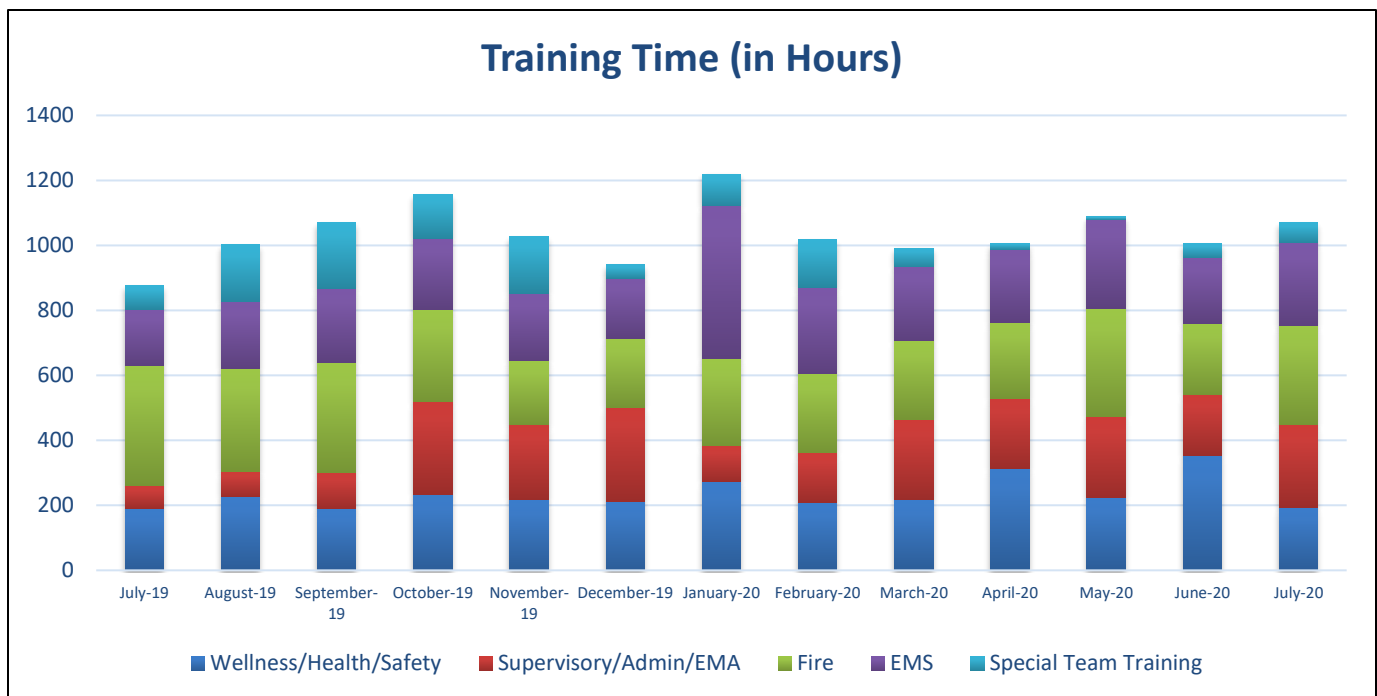
During July, we completed the following shift training:

- EMS Instation Pre-class study
- EMS Instation – Seizures & Stroke
- Fireground Ladders Practical
- Fire Apparatus Engineer – Hoseloads and Hydraulics
- Lexipol – Department SOG Review
- After Action Review – Brandon Road Fire
- After Action Review – Highland Drive Fire



Outside training during July consisted of the following few web-based pieces of instruction:

- Division Chief Wenzel completed the IRMA OSHA 101 Webinar – Part 2
- Deputy Chief Kelly completed an Employment Law Webinar

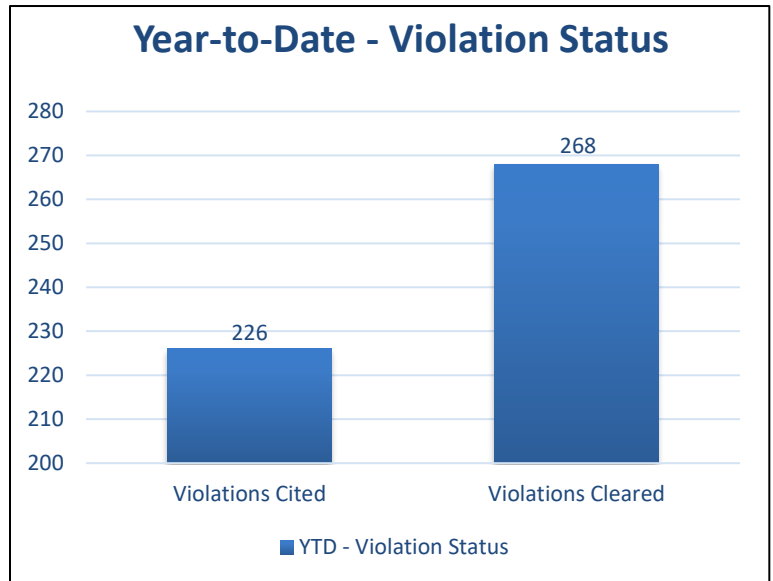


Pictured left is training with our Explorers. FF/PMs Anthony Campbell and Brian Stadola built this prop to simulate fire behavior and demonstrate flow path.

Inspectional Services:

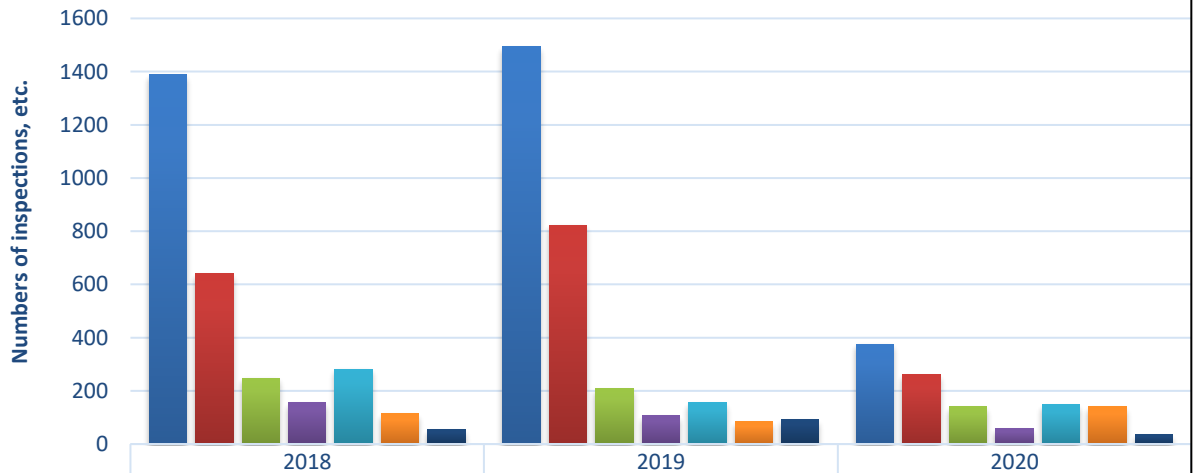
Fire Prevention personnel conduct annual fire inspections, special event inspections, and review and monitor construction projects in the Village and the Lake Zurich Rural Fire Protection District (LZRFPD). During July, the Fire Prevention Bureau participated in the following:

- Numerous alarm issues due to various power failures
- Hawthorn Woods Country Club Fireworks
- Paulus Park beach inspection for opening
- Numerous meetings at Paulus Park trailers to open offices
- Fire alarm meeting at Biltmore to replace pool system and radio
- Tent and patio inspections
- Assisted Barrington Fire with a plan review for a new motorcycle shop
- Covered for Wauconda Fire Marshal for the Island Lake fireworks
- Multiple days spent on fire investigations
- Construction meetings
 - May Whitney
 - Old Fifth/Third Bank
 - Seth Paine
- 130 Knox Boxes checked – this has resulted in numerous keys being updated, especially as stores were closing



Data will be added to the below chart each month in the 2020 column to show growing Year – To – Date numbers

Totals (Village and District)



	2018	2019	2020
■ Fire Inspections	1389	1494	376
■ Re-Inspections	642	823	260
■ Plan Reviews	248	207	140
■ New Business	155	107	58
■ Misc. Inspections/Follow-up	282	156	149
■ permits issued	113	84	141
■ Revenue in (thousands)*	55	93	35