



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

April 2020

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

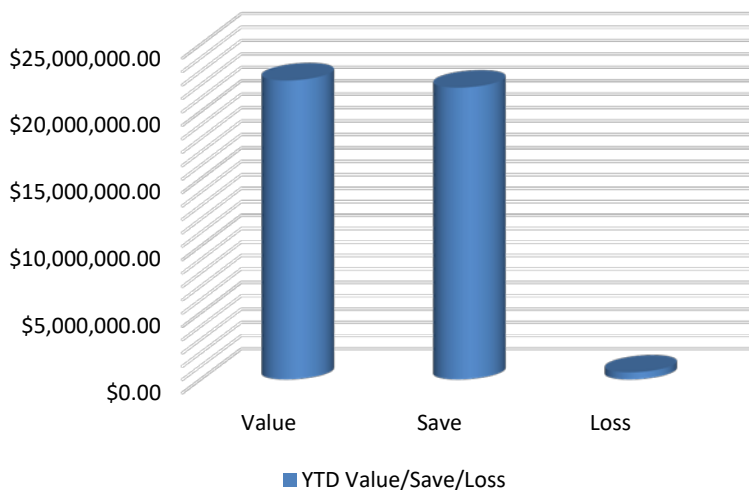
70 E. MAIN STREET
LAKE ZURICH, IL 60047

Departmental Narrative

General Operations:

The Department responded to **236** calls for service in April, which averaged **8** calls per day and required **340 separate vehicle responses** to provide the required number of personnel for each incident. Twenty-eight percent (**28%**) 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 jump on the ambulance, and if it is a fire call, the personnel jump on 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 is committed on a call, the next call for service requires another station or mutual aid to handle the incident.

YTD Value/Save/Loss



W. Lake Cook Road in Deer Park for a reported structure fire (*pictured above/right*)
22000 block of N. IL Route 59 in North Barrington for a structure fire (*pictured below*)



Department Updates:

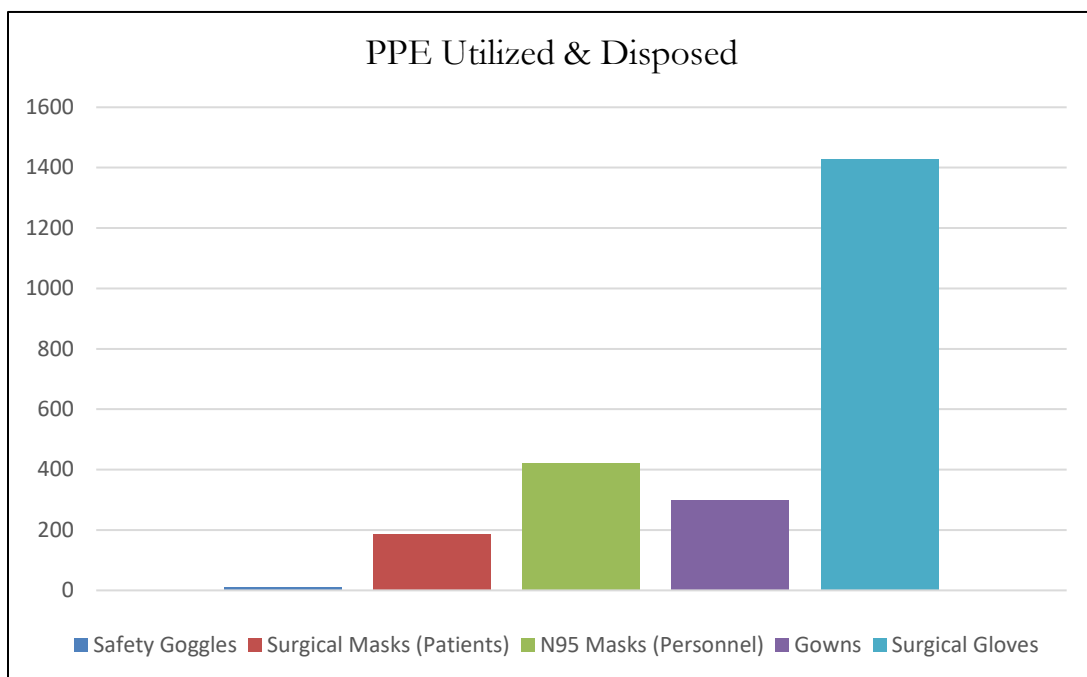
- During April, the following vehicles were out-of-service for a variety of reasons:
 - **Ambulances** – 81.50 hours
 - **Engines** – 20.5 hours
 - **YTD**–
 - Ambulances: **154.50 hours**
 - Engines: **1,160.50 hours**
- As of April 30, 2020 – 45.88 % of the overtime account (*all divisions*) has been spent.
 - Overtime Budgeted: \$394,812.00
 - Overtime Spent: \$181,156.77

COVID-19

Along with the rest of the world, The Lake Zurich Fire Department has had to adapt and change our procedures and daily routines due to the COVID-19 pandemic.

The Department is the Emergency Management Agency (EMA) lead and have coordinated Personal Protective Equipment (PPE) with other village departments and the County. We have provided the Lake Zurich Police Department with N95 masks and gloves. We continue as the liaison with the Lake County EMA working to secure additional supplies. Also, we are assisting long term care facilities to slow down the spread of the pandemic, by finding them resources and partnering with them and other agencies like the Lake County Health Department and Ela Township social services. Assistance provided includes, backstopping shortages in PPE to work on slowing the spread of the disease in our communities.

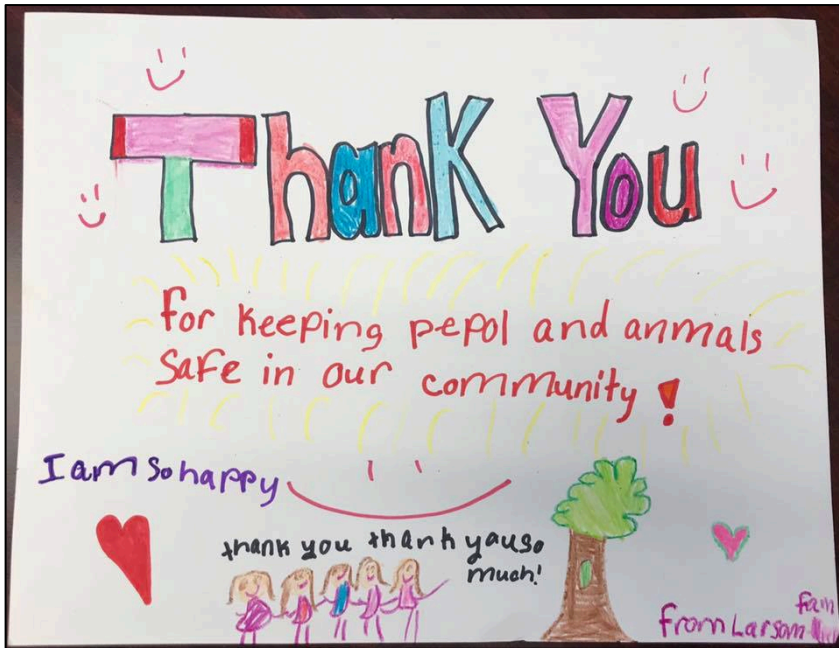
We are currently tracking the PPE that members are using and disposing of due to this pandemic. In April, we have issued 11 pairs of safety goggles, used 185 surgical masks on patients, 422 N95 mask for our personnel, 298 gowns, and about 1427 pairs of surgical gloves.



**We ask that everyone remember - we are all in this together.
You stay home, so we can work. One Team, One Fight!**

Community Access/Focus:

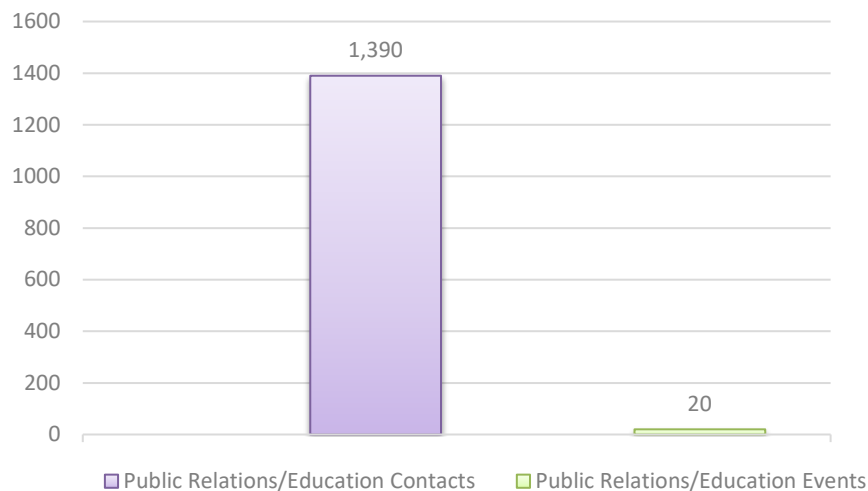
We want to express gratitude for the extra community-wide support shown to the department during this COVID-19 pandemic and give a shout out to all of the residents and businesses that have donated miscellaneous PPE, mailed us well wishes, or simply had food delivered to the stations. We truly appreciate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



Be sure to **“Like Us”** on Facebook at [@LakeZurichFire](#) and **“Follow Us”** on Twitter and Instagram at [@LakeZurichFD](#)

Fire safety and risk reduction education visits are both public relations and public education. Public relations events are primarily events where the fire department has a presence to answer general questions from the public and to explain or demonstrate our capabilities. A public education event has a fire safety or other educational message as the prime objective. Examples of public education include; school talks and station tours where a safety message such as stop, drop, and roll is covered. We 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.

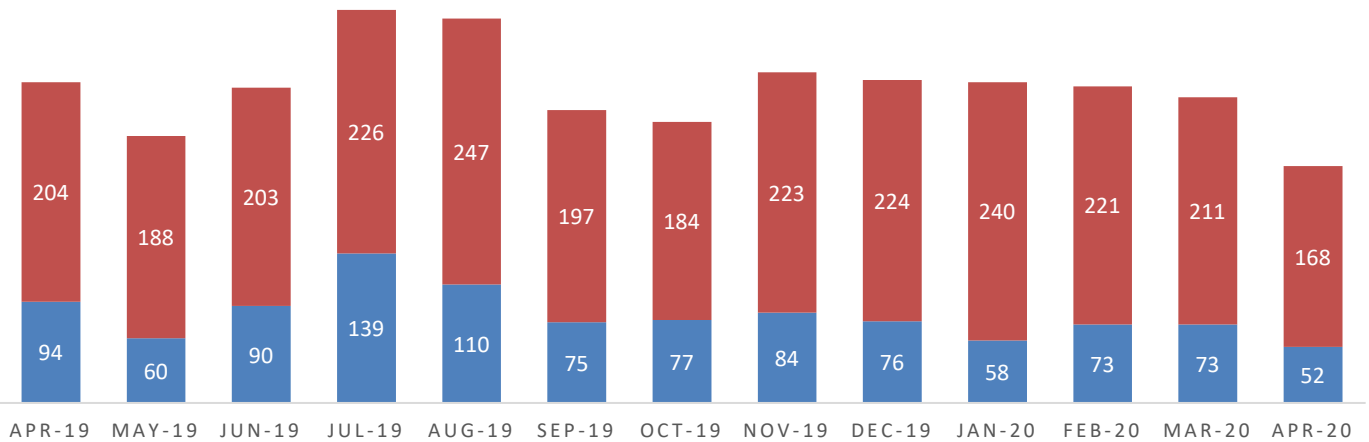
Fire Safety Risk Reduction - Year-To-Date



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.

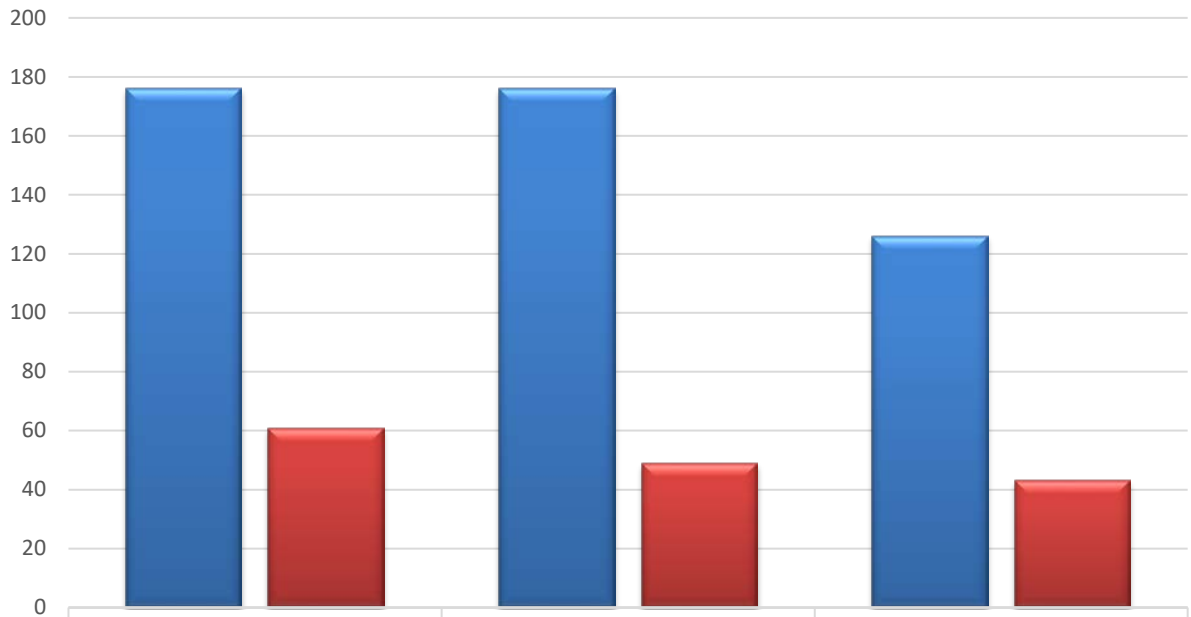
FIRE RESCUE DEPARTMENT - MONTHLY CALLS BY TYPE (MINUS AID GIVEN)

■ 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 April 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

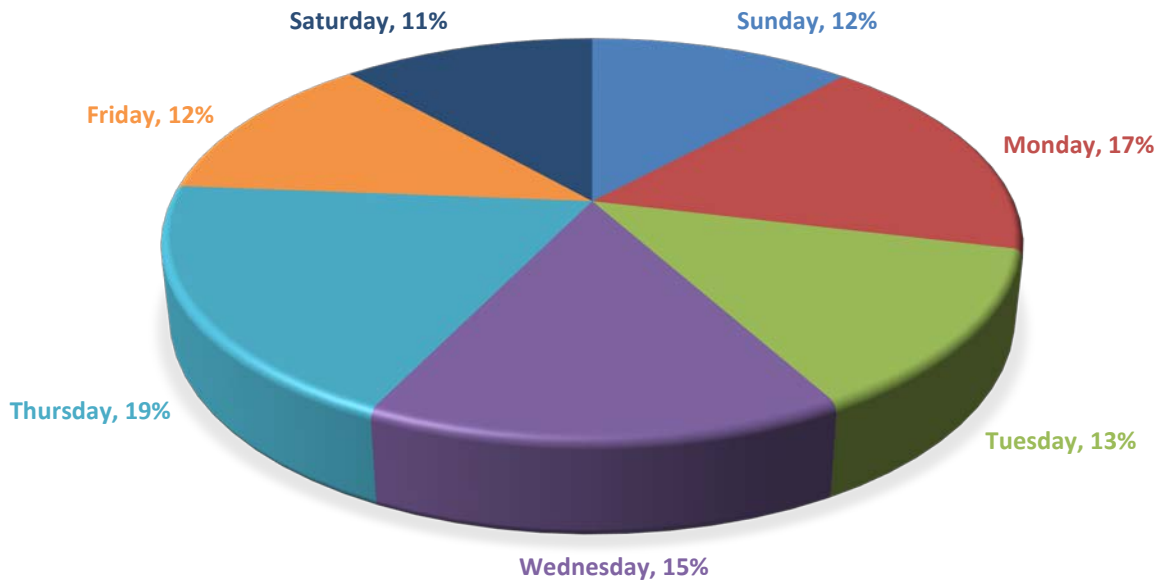


■ EMS Transports
■ EMS Non-transports

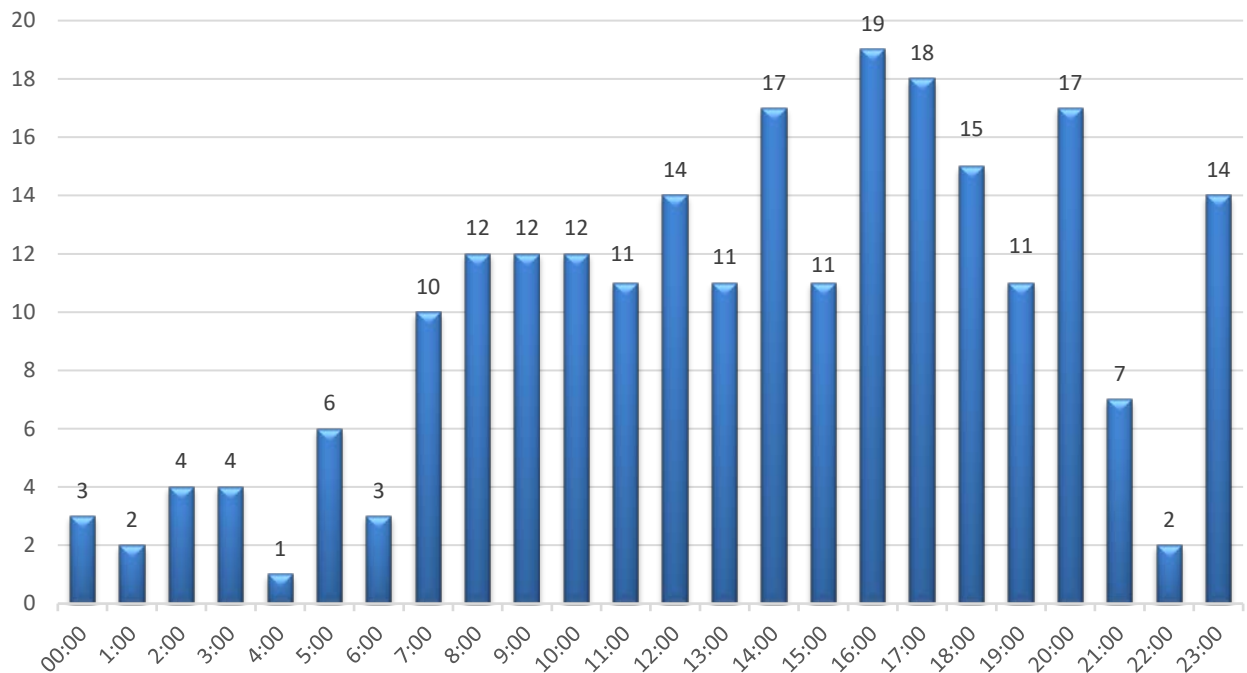
2018	176	61
2019	176	49
2020	126	43

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

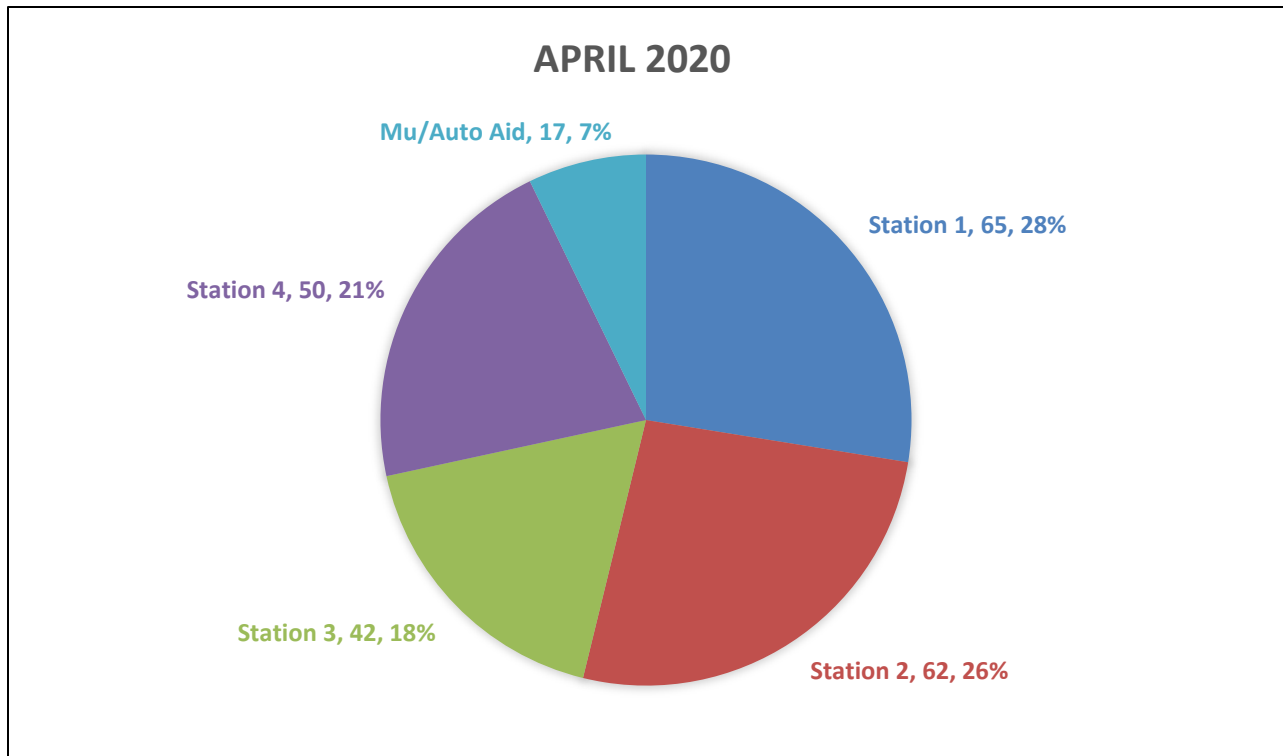
RESPONSE BY DAY OF WEEK - APRIL 2020



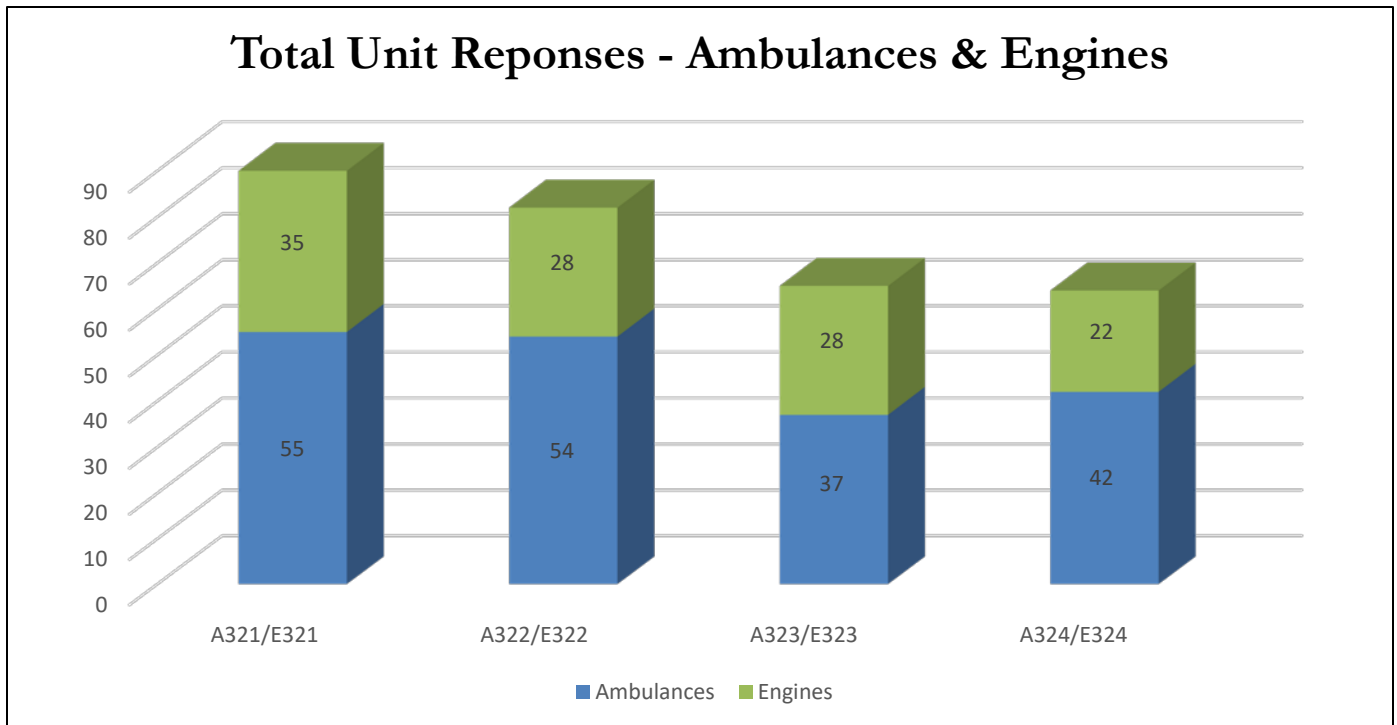
RESPONSE BY HOUR OF DAY - APRIL 2020



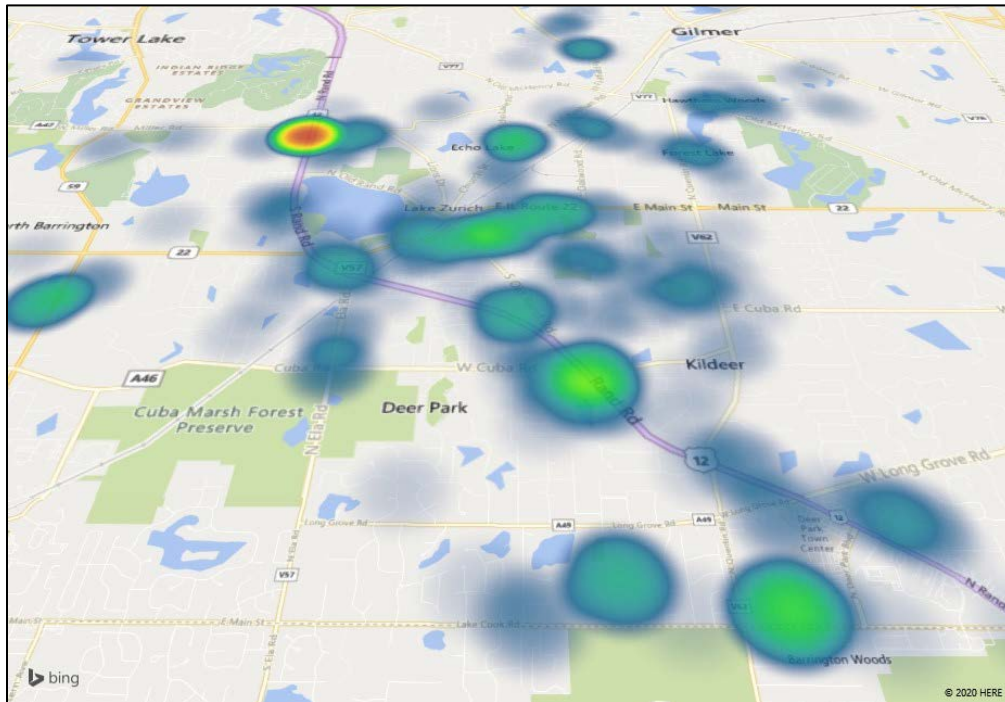
The service area of the Lake Zurich Fire Department contains the Village of Lake Zurich and the Lake Zurich Fire Protection District. The placement of the four fire stations allows division of the service area into first response areas. The graph below represents the percentage of calls by each station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



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



The next graphic is a visual representation of call distribution for April. 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. In addition, we frequently respond to doctor offices and health clinics, along with automobile accidents near the Route 12 corridor.

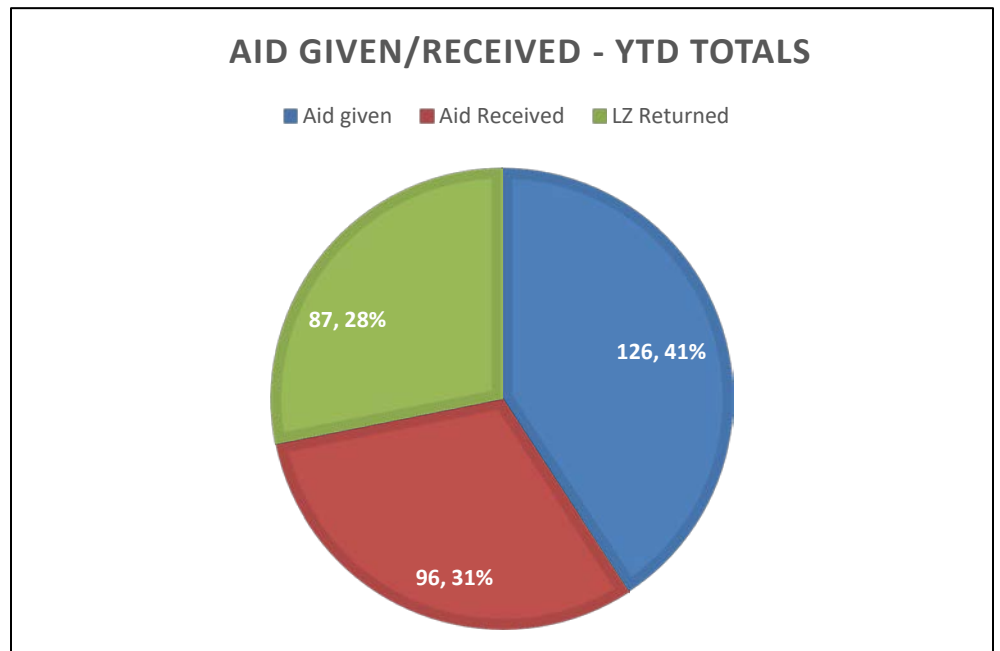


Frequent Call Locations:

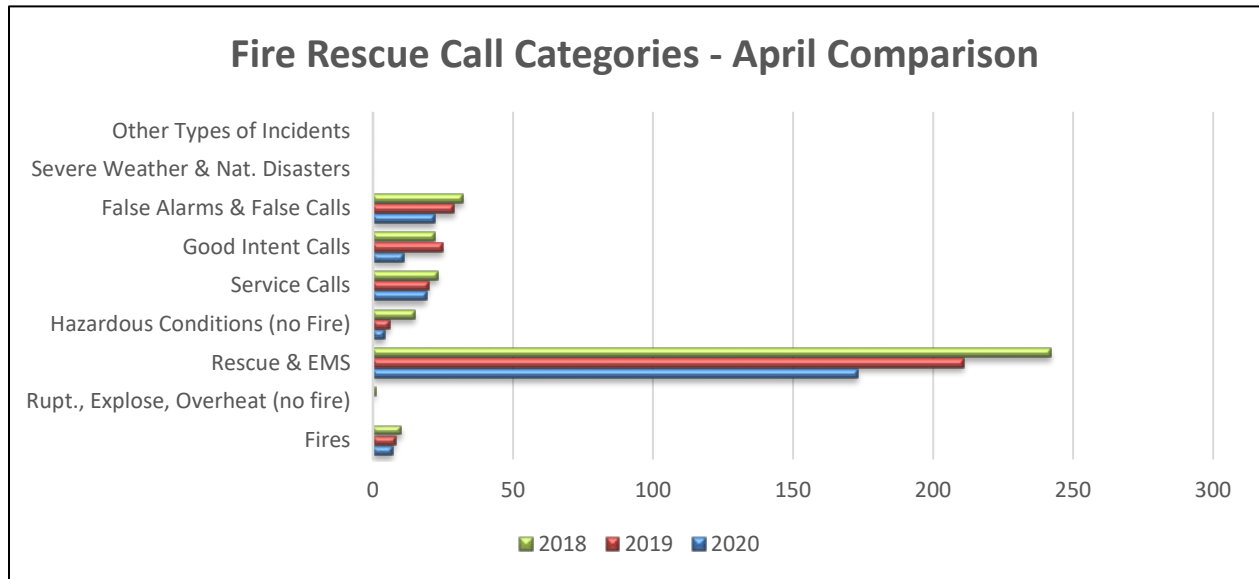
- 795 N. Rand Road – Azpira Place Assisted Living – 33 responses
- 21840 Lake Cook Road – Solana Senior Living – 14 responses
- 777 Church Street – Cedar Lake Assisted Living & Memory Care – 10 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 7 responses
- 250 Mohawk Trail – Zurich Meadows – 3 responses
- 900 S. Rand Road – Lexington Healthcare – 3 responses

Mutual/Auto Aid Response Year to Date –

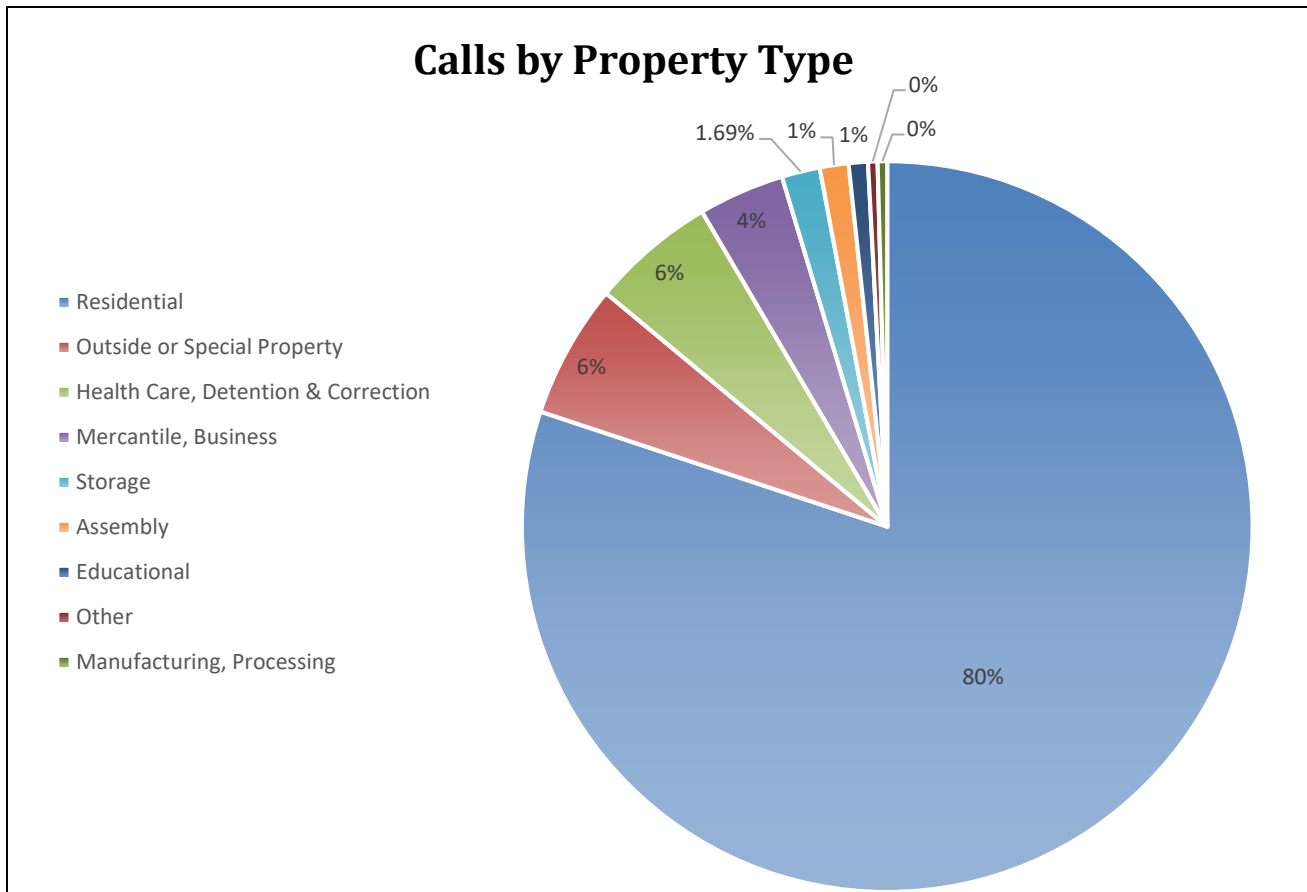
The mutual aid agreements are designed not to overburden any one agency and will be looked at closely for any necessary adjustments. Run cards for the department have changed and our partners are responding to assist us more often. In April, we responded to **17 calls** for mutual-aid and were **returned 6 times** prior to our arrival. The chart to the right shows YTD Aid Given/Received and how many times LZ was 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 respond to as a department are coded 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 essentially the same. Rescue and EMS incidents account for the majority of calls we respond to and continue to increase, as indicated below.

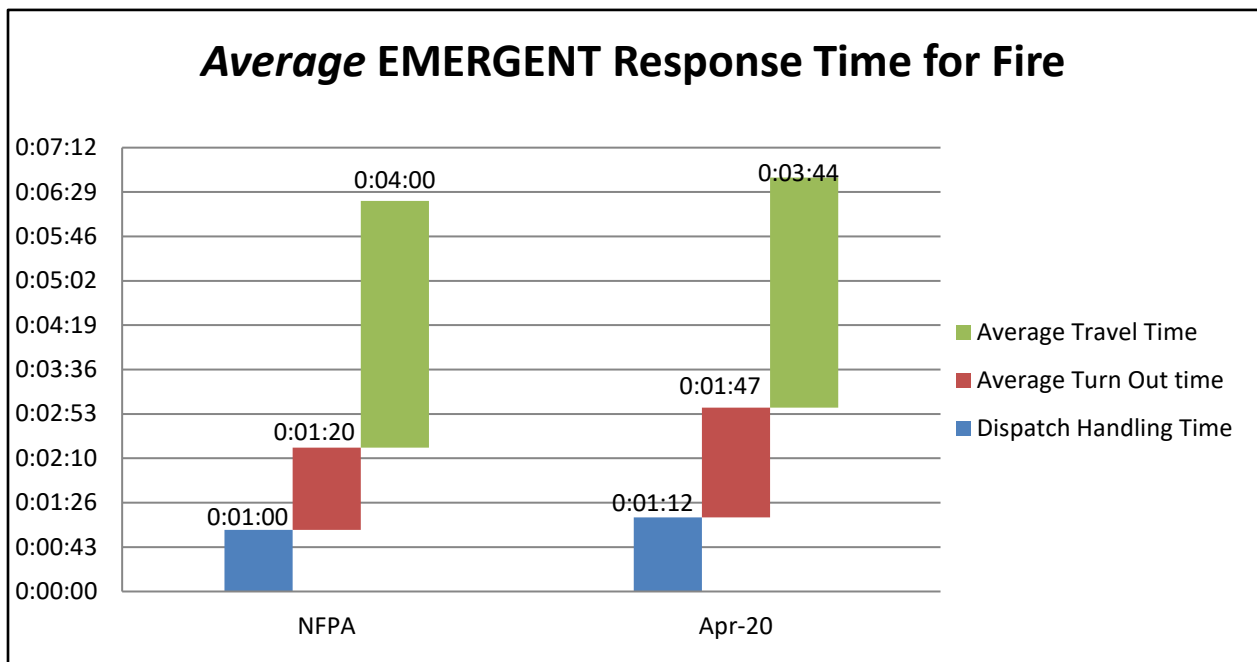
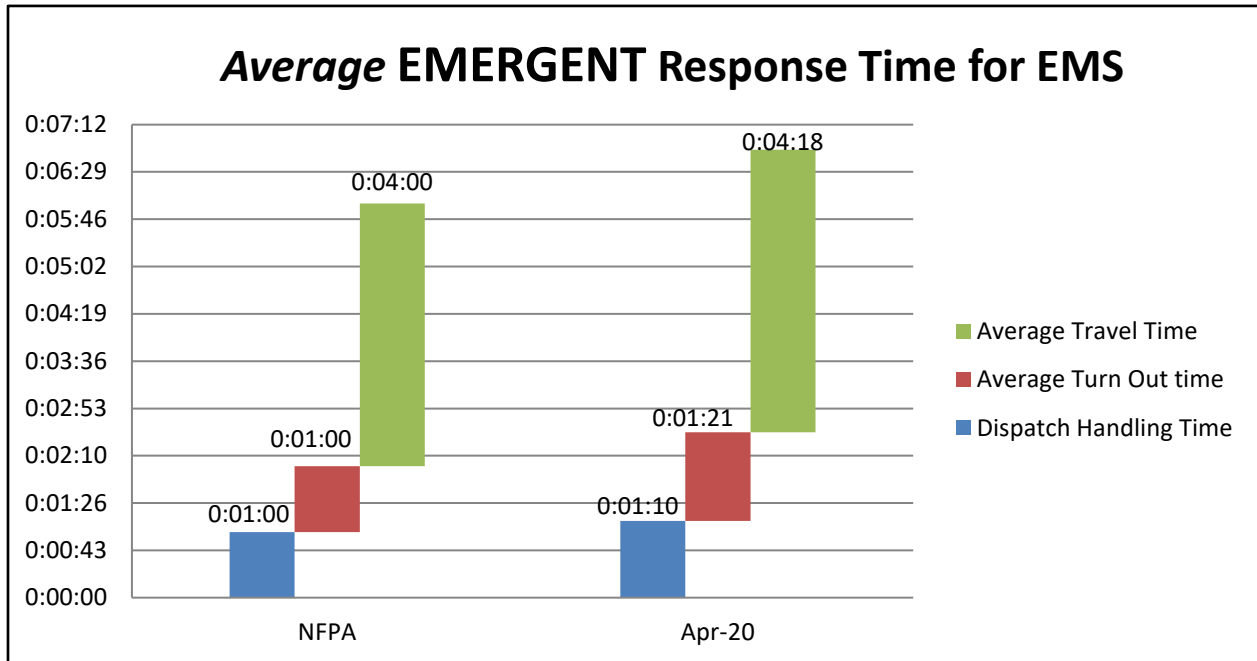


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use this to determine the impact on our service demand. As an example, the healthcare category would see an increase if additional assisted living or nursing homes open. As shown below, we continue to respond to Residential Properties more than any other (71%) and Mercantile, Business & Outside Properties were second (7%) of all calls.



Response time is made up of 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:

Our training hours were down this month due to canceling some of our in-house and all outside trainings due to the COVID-19 pandemic.

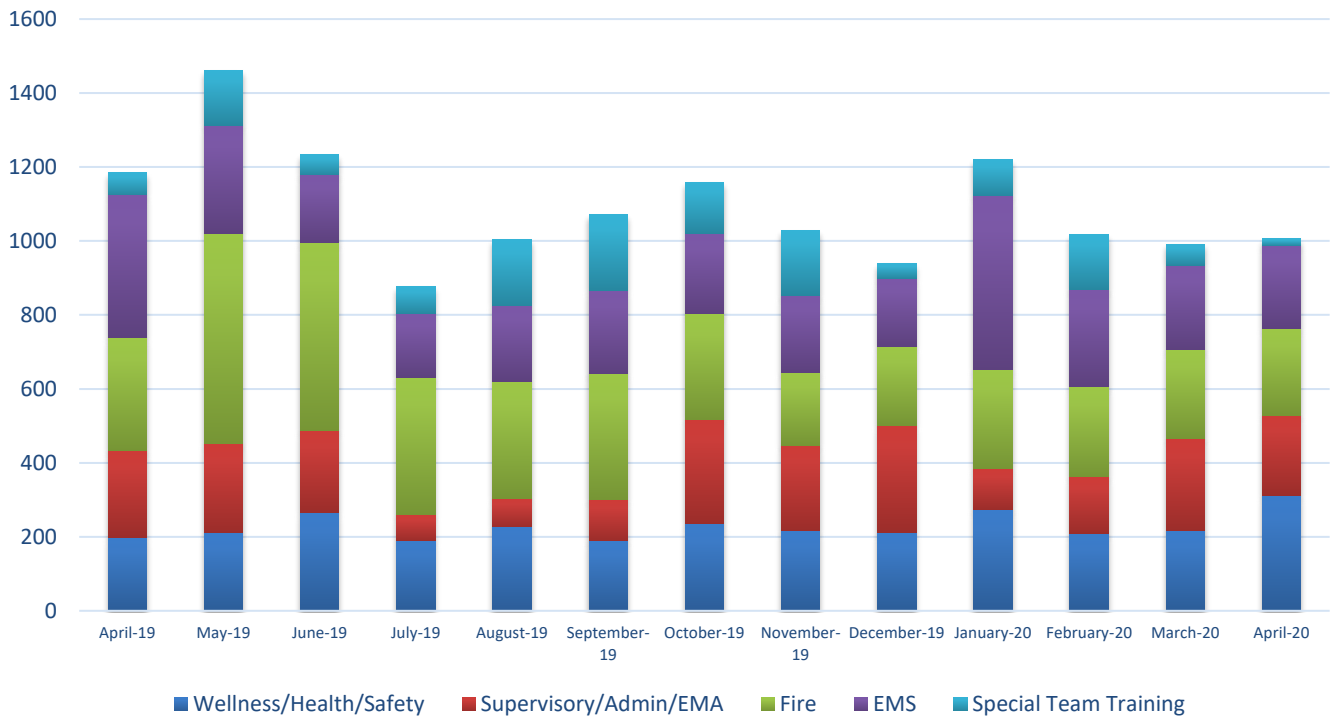
However, personnel still managed to train on the following:

- Flat Roof Operations,
- ECG Review and using weblink to NCH EMS,
- Lexipol Stress Webinar
- Quarterly Intubations
- Ladders
- Donning and Doffing EMS PPE – COVID-19
- Review of NCH memos 391 & 392 – COVID-19
- Vehicle Cribbing & Stabilization
- UV-C Light Sterilizer Safety and Use Inservice
- Dr. Steiner Zoom Meeting on Handling Stress.

Pictured right is Training at Station 1 while keep our social distancing during the pandemic.



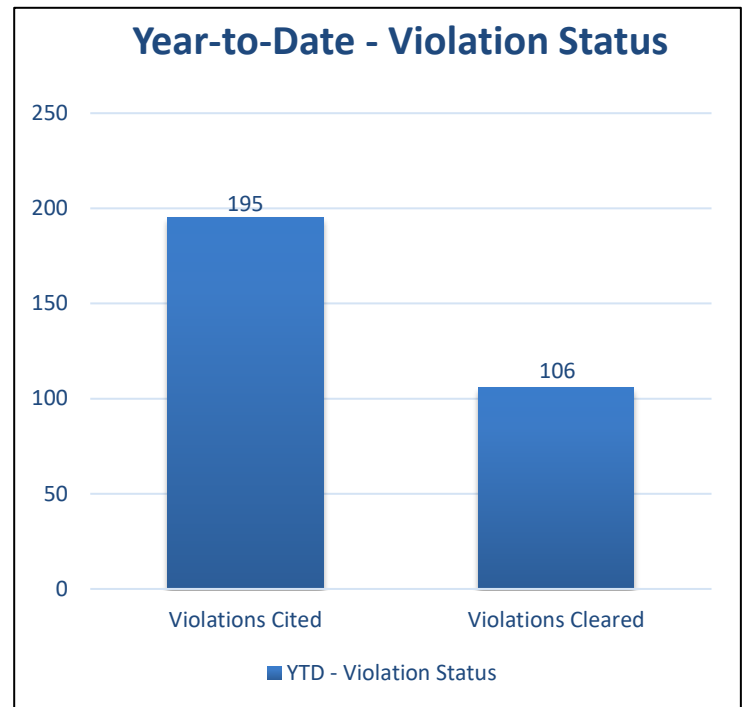
Training Time (in Hours)



Inspectional Services:

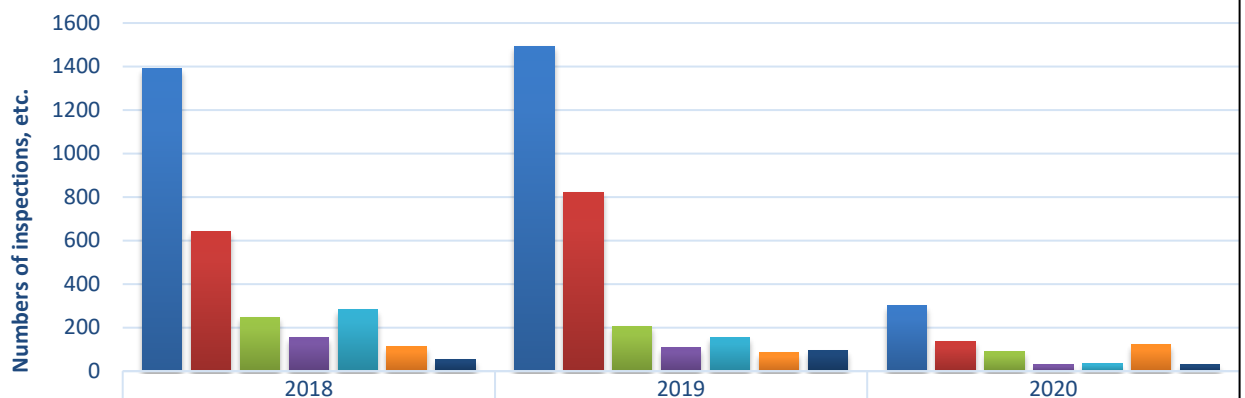
Fire Prevention personnel conduct annual fire inspections, special event inspections, and review and monitor construction projects in the Village and the Lake Zurich Rural Fire Protection District (LZRFPD). During April, the Fire Prevention Bureau participated in the following:

- Morning staff meetings on Zoom
- Cover for Lake Zurich Building Department for residential inspections
- McDonalds – flush
- Alarm follow-ups – 4
- Special inspection at Home Depot on temporary exits
- Knox Box – key replacements – 4
- Covered open burning complaints – various areas
- PPE pickup at Libertyville – 3 times
- Fire investigation – Route 59
- Fire investigation – Lake Cook Road
- Administrative work for Bureau
 - Return numerous phone calls – residential and contractor
 - Receive checks from contractors and drop off at Village Hall after they have been processed
 - Schedule appointments – inspections, etc.
 - Check in and log all new plan reviews/permits



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)



Category	2018	2019	2020
Fire Inspections	1389	1494	301
Re-Inspections	642	823	136
Plan Reviews	248	207	91
New Business	155	107	30
Misc. Inspections/Follow-up	282	156	36
permits issued	113	84	123
Revenue in (thousands)*	55	93	30