



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

July 2022

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 - July 2022 Overview

In July, the Department responded to **430** calls for service, averaged **14** calls per day and required **660 individual vehicle responses** to provide the necessary personnel for each incident.

Forty-eight **(48%)** percent of the service area responses occurred while another call was in progress. Eighteen **(18%)** percent of the service area needs to the community required an apparatus from a Lake Zurich Fire Department non-primary engine or ambulance; or a mutual aid department due to multiple calls. This leads to a service area without a primary engine or ambulance and increased response times.

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

Vernon Hills Structure Fire -

On the morning of July 25, 2022 – Ambulance 323 responded to 333 Corporate Woods Parkway in Vernon Hills to assist Lincolnshire Fire Department. Lincolnshire responded to an activated fire alarm at a large manufacturing warehouse. When they arrived the building was filled with smoke and several sprinkler heads were flowing. Ambulance 323 responded when the call was upgraded to a structure fire. After their arrival on scene, the crew stood by to render medical aid to anyone that might have been injured while mitigating the incident. No civilians or firefighters were injured.

To all the troops, Command support, fire investigator team, callback personnel, oncoming shift personnel and RED Center Dispatch Operators that responded and assisted at the incident this morning at 633 Hickory Hills Drive (Vernon Hills), I wanted to express our utmost gratitude for the job everyone did. The crews overcome many challenges with professionalism and skill. Every time an obstacle presented itself, it was handled quickly and efficiently. This is where all of our training proves itself time and time again.

What was a "routine" AFA, became a full working fire response, plus two (2) other simultaneous incidents occurring.

As stated above thanks to our neighbors for assisting us and getting the job done! Everyone "made a difference" this AM.

Respectfully,

Tom Krueger

Fire Chief

Lincolnshire-Riverwoods Fire Protection District



FF/PM Alex Tanner administered oxygen using a pet O2 mask to a furry friend who was pulled from a burning home in Mundelein. Shortly afterward, the dog and owner were reunited. (Pictured left)

Automobile Accident – 2000 Block of North Rand Road - Kildeer

The Lake Zurich Fire Department responded to an auto accident in the 20000 block of North Rand Rd in Kildeer at 3:51 AM. First units arrived and found a single vehicle off the roadway which had collided with a utility pole. The crews identified energized power lines on the car and ground during initial operations. The two occupants from the vehicle were outside the car and ambulatory. Police units closed Route 12 in both directions while Com Ed responded. The two occupants were assessed and one was transported to Good Shepherd hospital in stable condition. Route 12 was closed for the duration of the utility pole repairs. The immediate area suffered a power outage during the incident. The incident is under investigation.

Residential Structure Fire – 21000 Block of Kepwick Lane - Kildeer

The Lake Zurich Fire Department responded to a residential structure fire in the 21000 block of Kepwick Lane in Kildeer at 13:37 hours. The first arriving Lake Zurich Fire units found a single-family residence with smoke coming from the structure and fire out of the garage roof. Crews quickly stretched hose lines to the structure and began extinguishing the fire. The neighbors informed the crews the family pets were still inside the home. A Lake Zurich engine crew made their way inside the residence, found two dogs and brought them outside to safety. The pets appeared to be unharmed and were turned over to neighbors. The resident was not home at the time of the fire. The residence suffered significant damage and is uninhabitable. The fire is under investigation at this time and there were not any casualties or injuries reported. The Lake Zurich Fire Department received assistance from Barrington, Long Grove, Wauconda, Countryside, Fox River Grove, Lincolnshire, Buffalo Grove, Mount Prospect, Grayslake, and Streamwood.

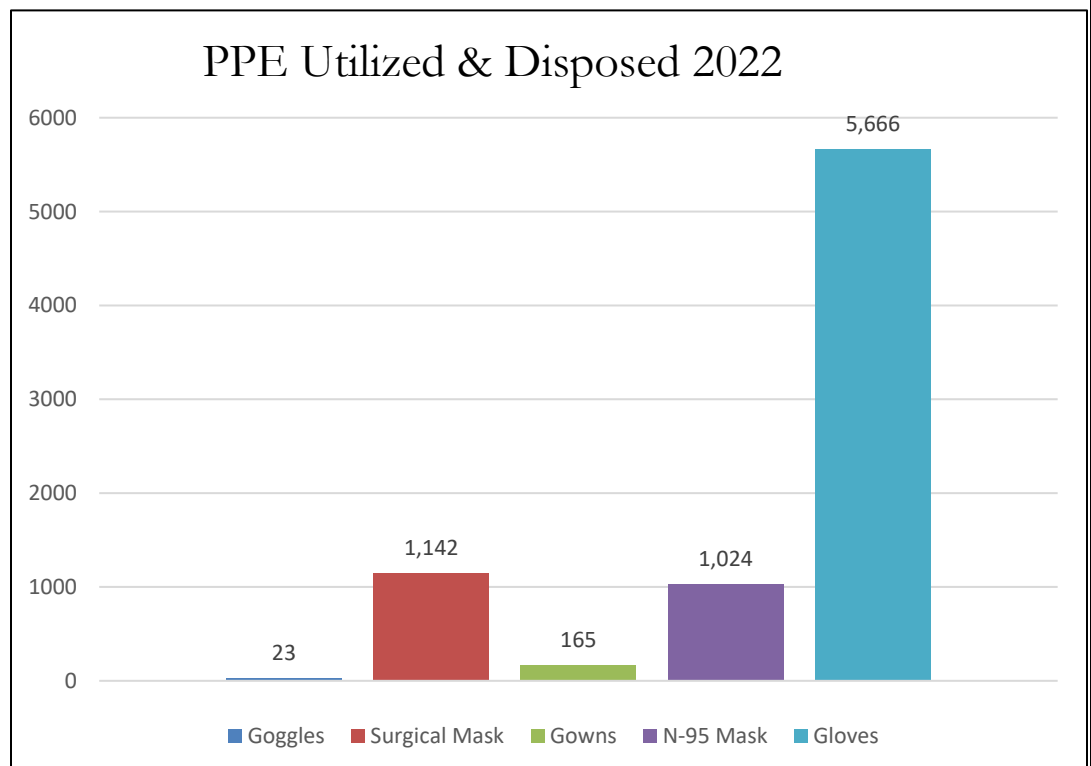
Administration Division

COVID-19 Updates

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

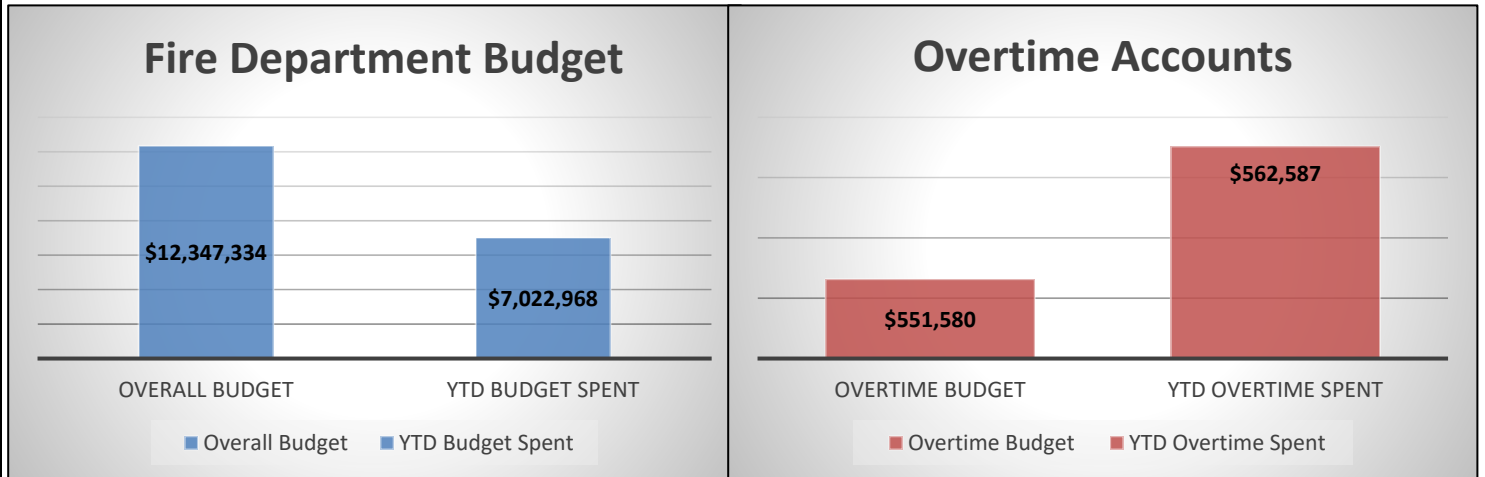
In July, we issued **3 pairs of safety goggles** and used **122 surgical masks** on patients, **175 - N95 respirators** for our personnel, **17 gowns**, and approximately **842 surgical gloves**.

The graph pictured to the right shows the year-to-date (2022).

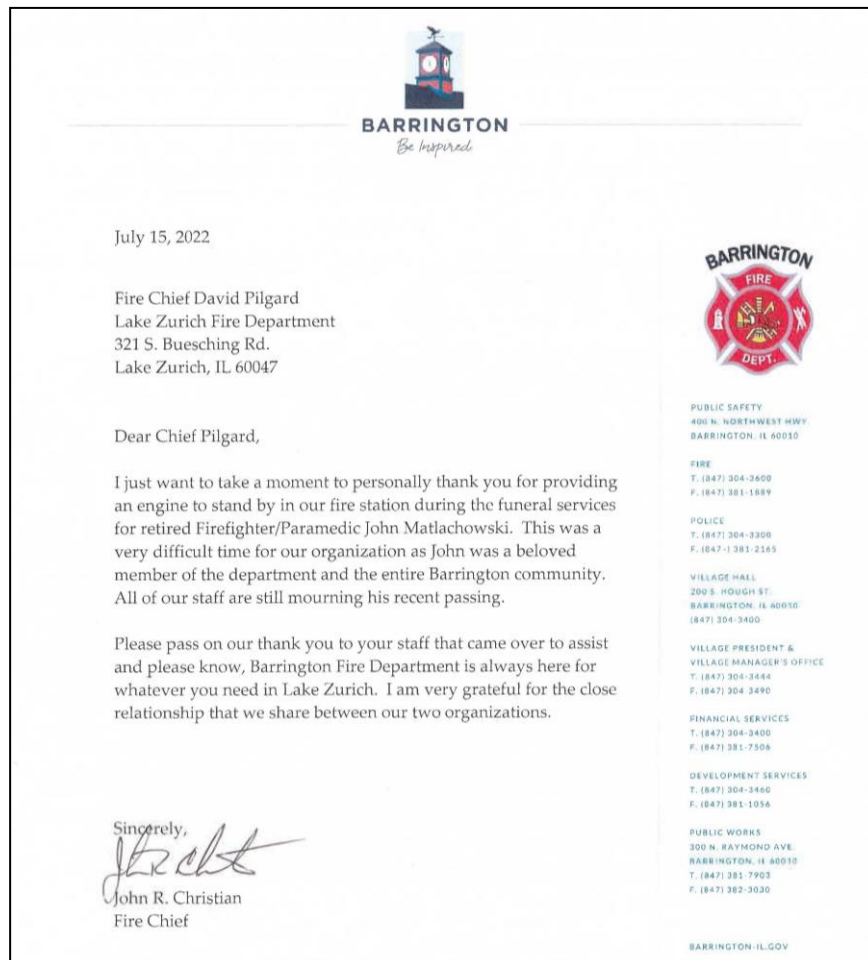


Overtime Accounts

The department continues to work with the Board of Fire and Police Commission (BOFPC) on screening new hire candidates for the final open position in the department and administering entry-level testing. The screening process requires many hours, including a background interview, follow-up phone calls, neighborhood canvas, and medical and psychological exams. The department anticipates exhausting our budgeted overtime costs but costs decrease once we can bring the new hires on board and have them assigned to shift.



Communications Received



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.

Pictured below is a public education visit with children from the Kidde Academy.

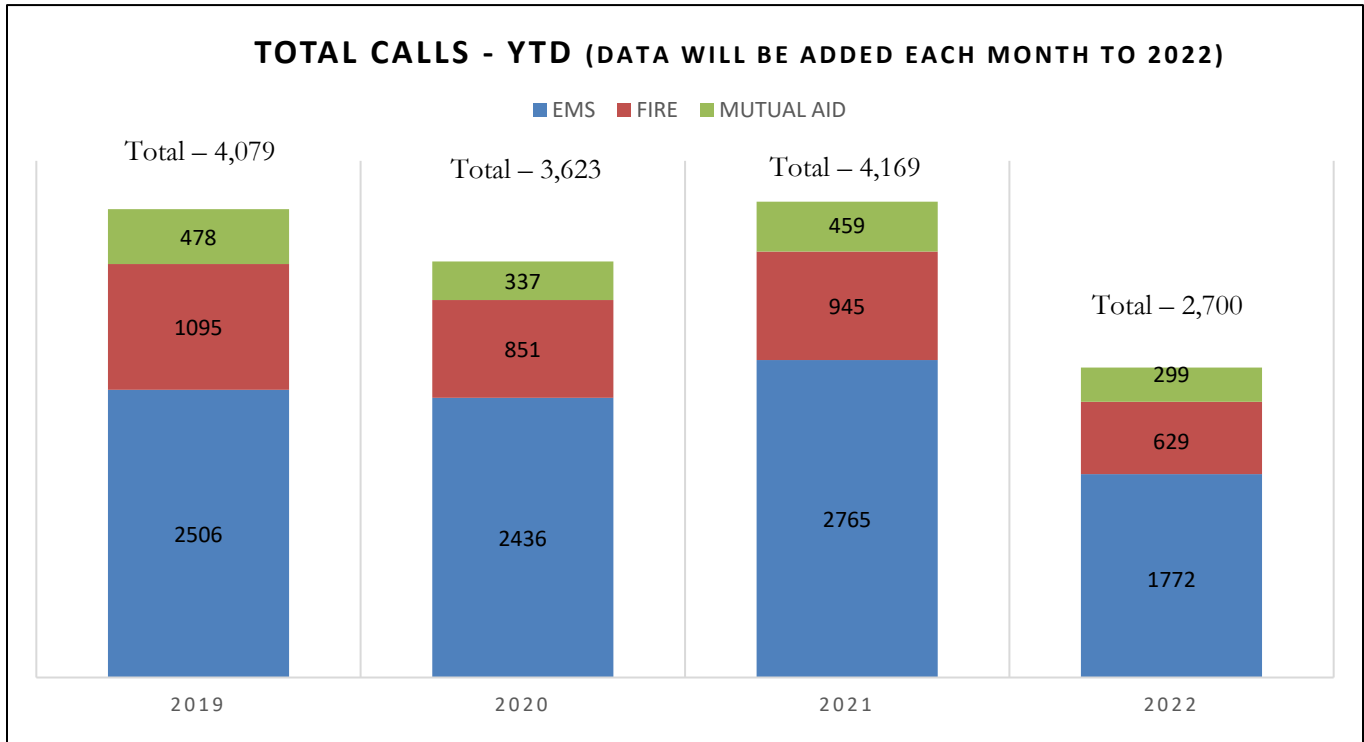


Operations Division

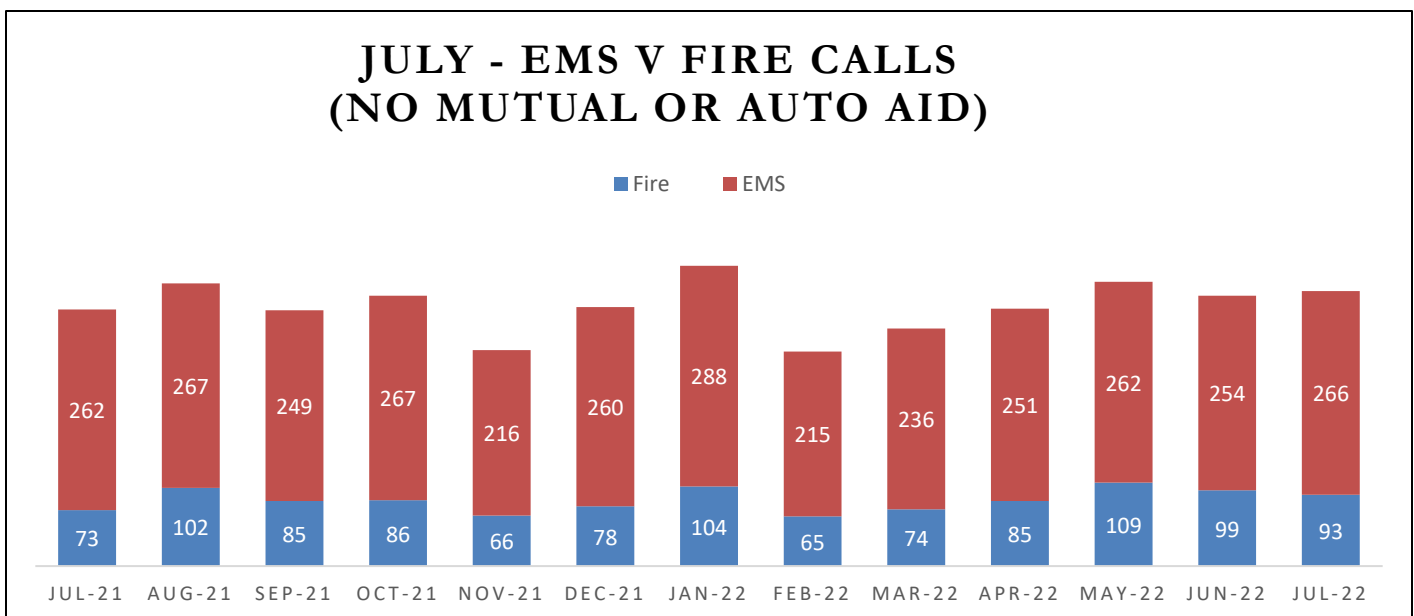
Vehicles Out of Service

- During July, the following vehicles were out of service due to maintenance, repairs, or breakdowns:
 - Ambulances – 83.50 hours
 - Engines – 11.5 hours
 - Year-To-Date Hours:

Ambulances: 766.68 hours | Engines: 1,031.58 hours

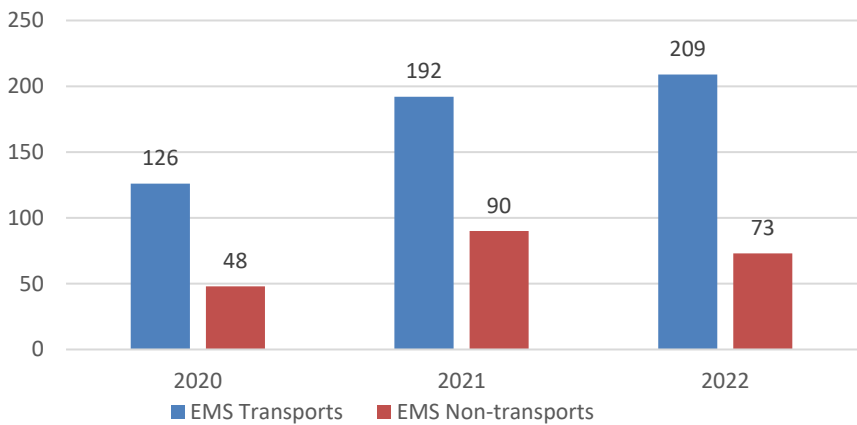


Below is the breakdown of Fire versus EMS incidents in Lake Zurich – minus aid given. Our fire calls include structure fires, car fires, grass fires, dumpster fires, wires down, and other types of service calls.



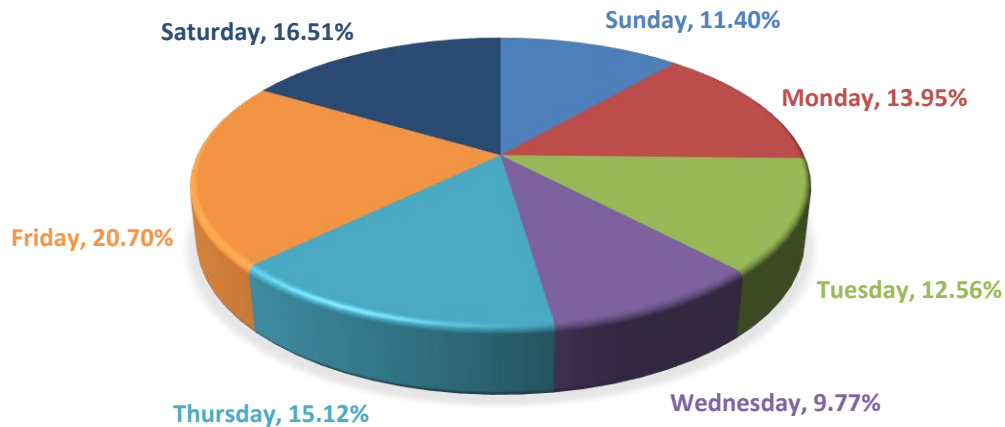
The following chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call results in transport. A prime example of this is an automobile accident where several victims refuse transport. EMS transports always outpace refusals. This chart compares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

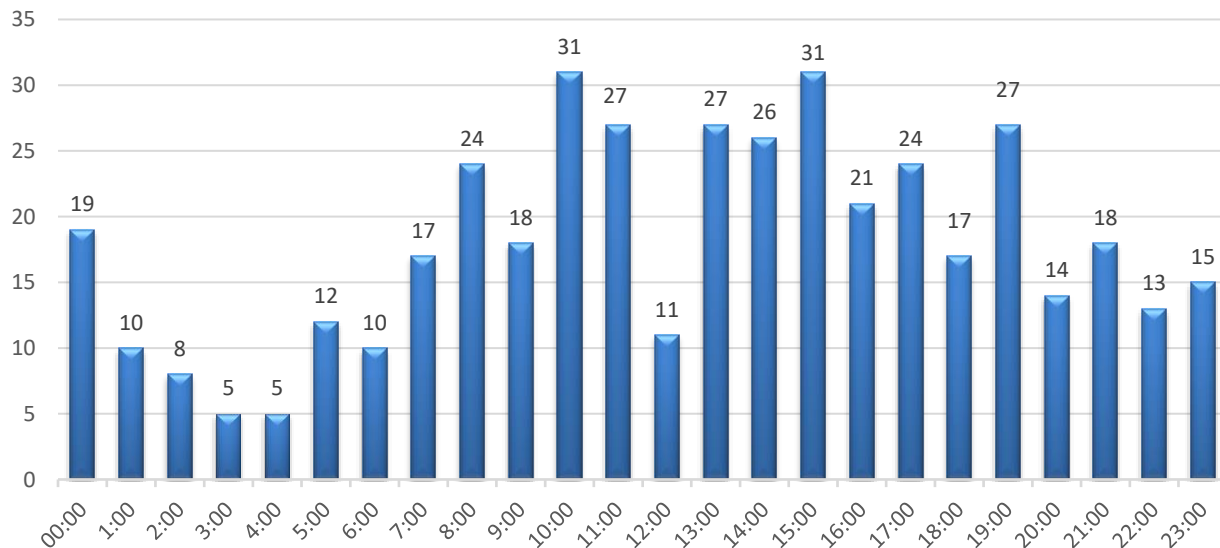


The following two charts break down calls by the day of the week and hour of the day.

RESPONSE BY DAY OF WEEK - JULY



RESPONSE BY HOUR OF DAY - JULY



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

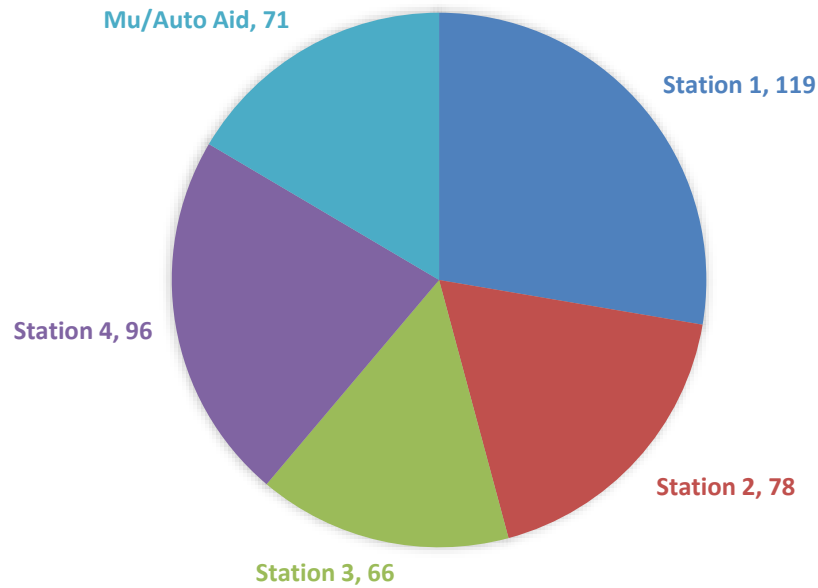
APPARATUS & STAFFING

ENGINE 324
AMBULANCE 324



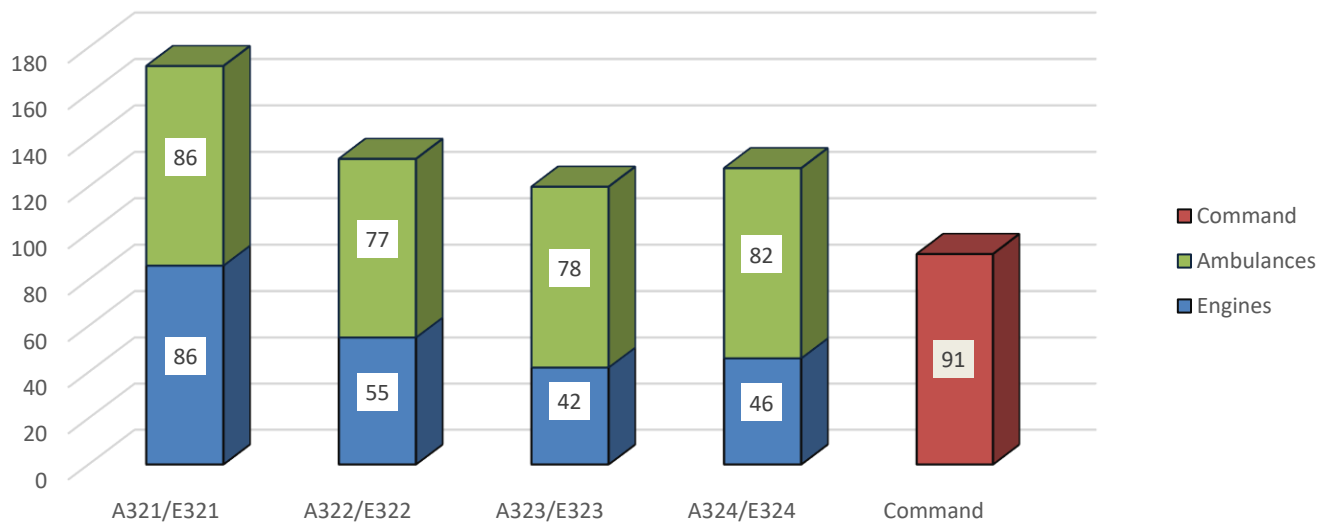
The graph below represents the percentage of calls by each station and mutual/auto aid for July 2022. The chart does **not** represent the station that responded as the primary resource to the area – it means where the call originated. Station 1 is historically the busiest district.

ORIGIN OF CALLS - JULY, 2022

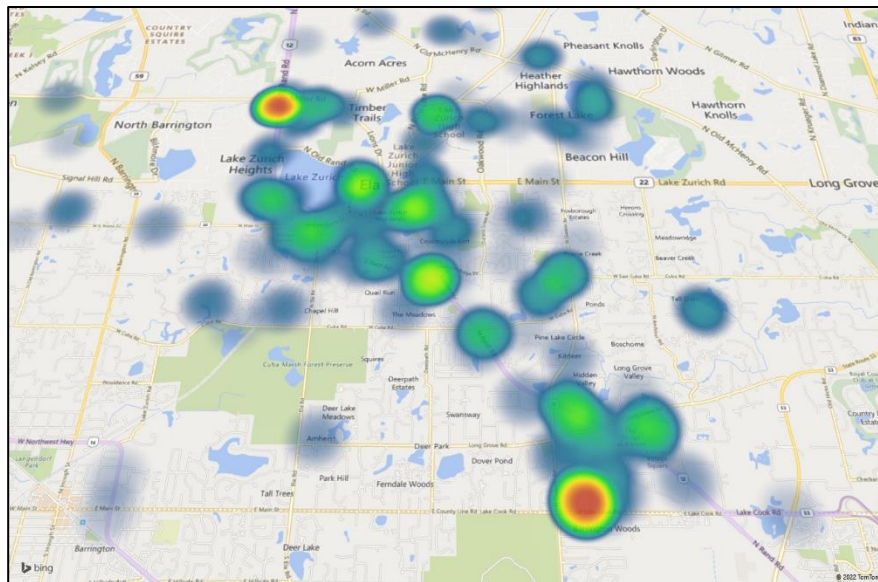


The graph below shows the responses by each unit – Ambulances, Engines, and Command Officer – in July

Total Unit Responses - Ambulances, Engines, & Command Officer



The following graphic is a visual representation of call distribution for July. 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, health clinics, and automobile accidents near the Route 12 corridor.

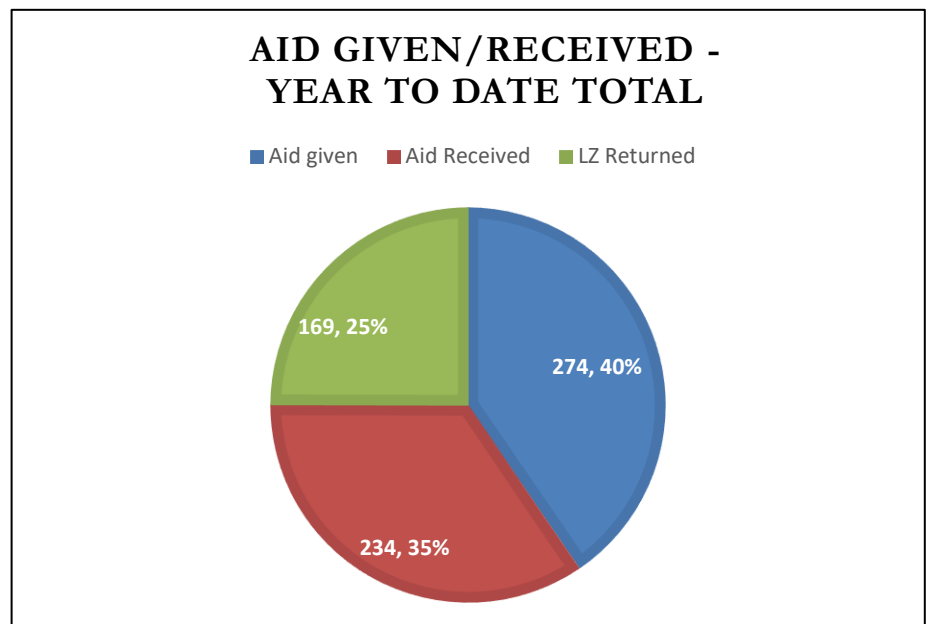


Frequent Call Locations:

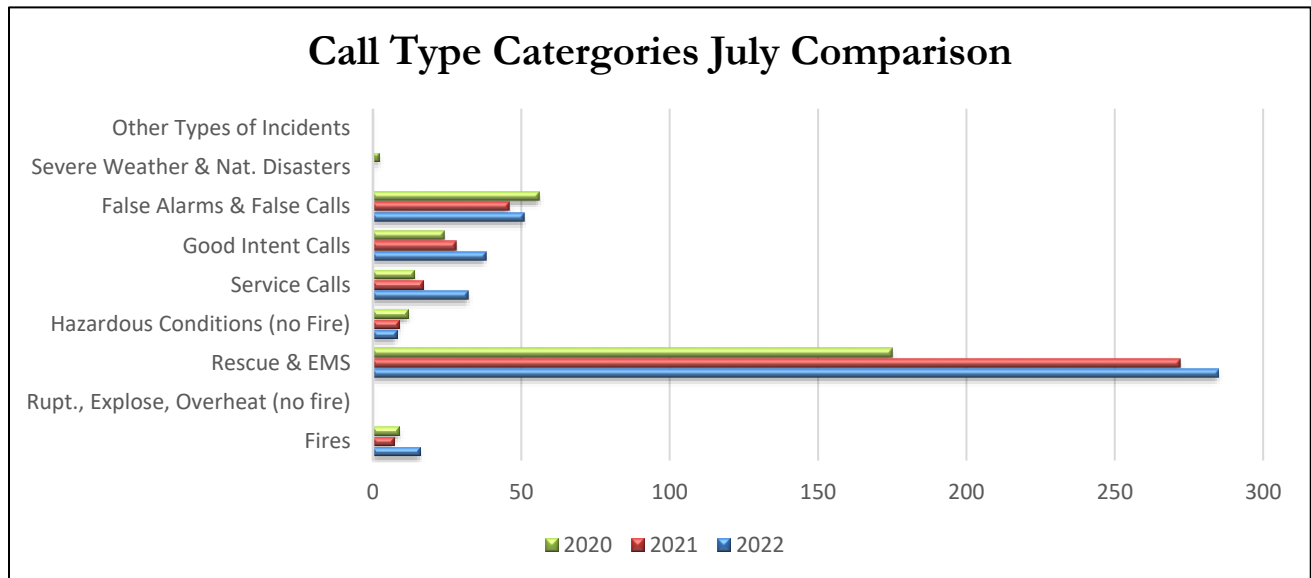
- 795 N. Rand Road – Azpira Place of Lake Zurich – 25 responses
- 21840 Lake Cook Road – Deer Park Village Senior Living – 24 responses
- 900 S. Rand Road – Avantara Health Care Center of Lake Zurich – 12 responses
- 777 Church Street - Cedar Lake Assistant Living - 9 Responses
- 21481 Rand Road – Northwest Community Healthcare – 6 responses

Mutual/Auto Aid Response Year to Date –

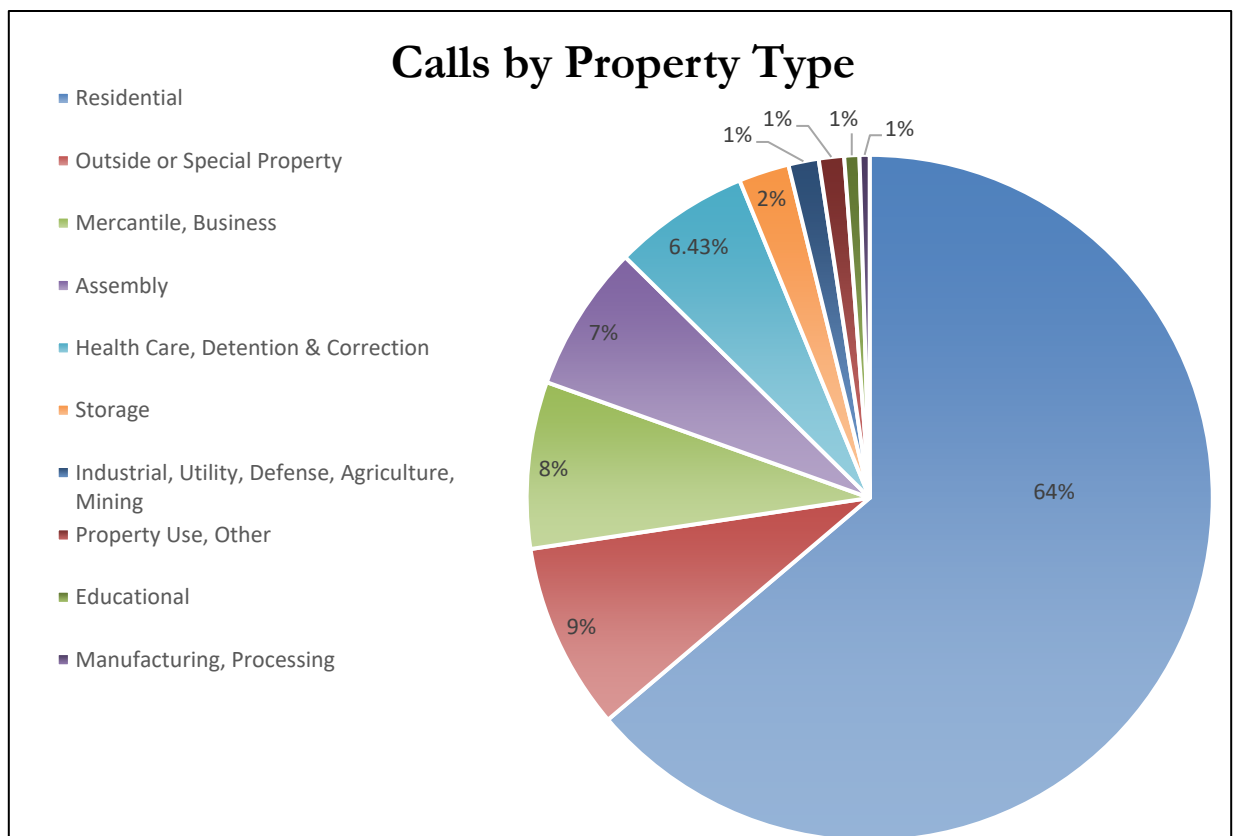
The mutual aid agreements are designed not to overburden any agency and are looked at carefully for necessary adjustments. Run cards for the Department have changed, and our partners respond to assist us more often. In July, we responded to **70 mutual aid calls and returned 27 times** before arrival. 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 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 that the trends remain mostly the same across the three years. As shown below, rescue and EMS incidents account for most calls we respond to and continue to increase.

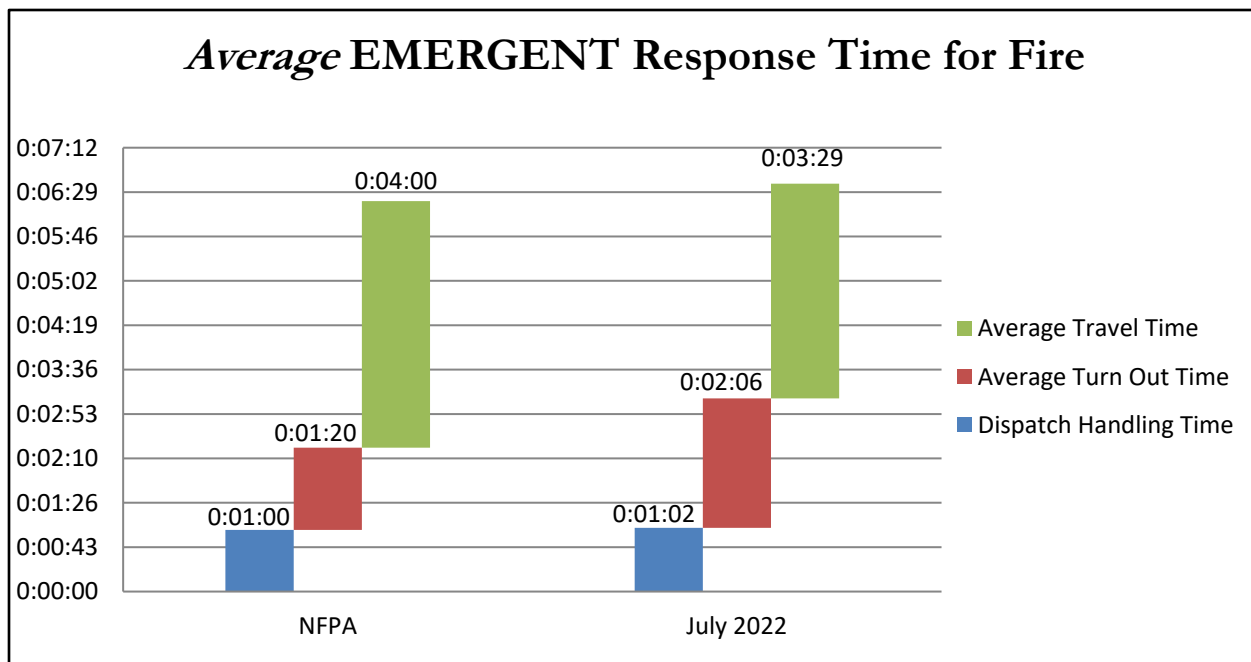
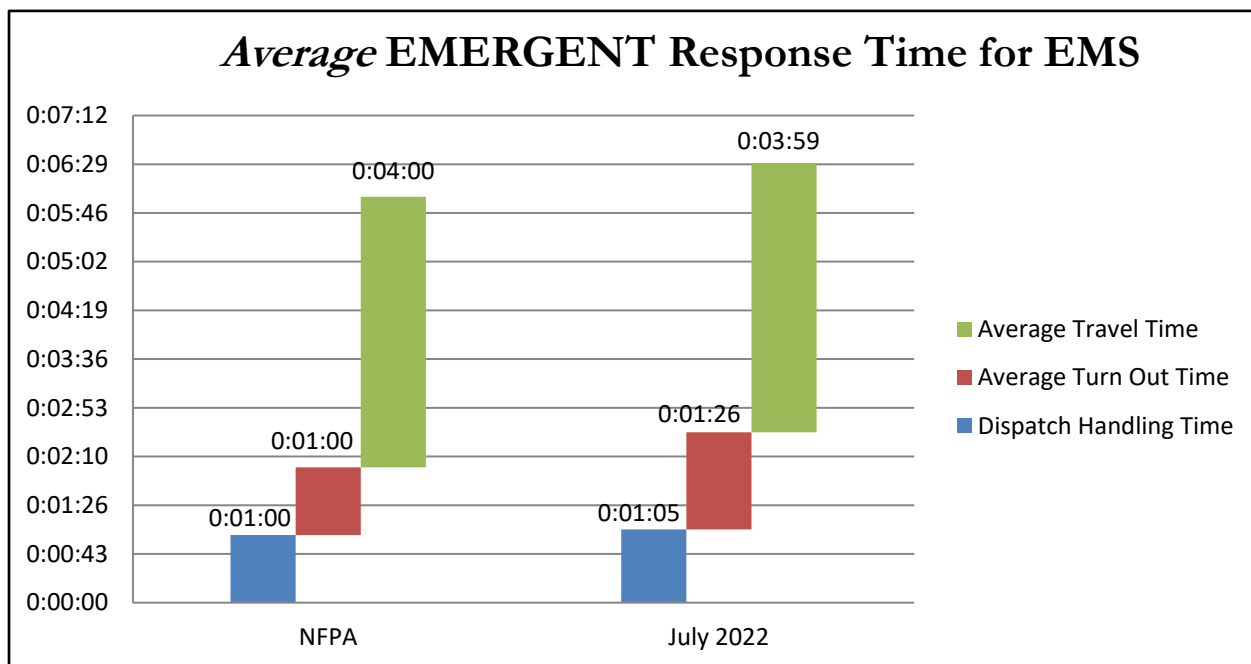


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes were open. As shown below, we continue to respond to Residential Properties more than any other (64%), and Outside/Special Property were second with (9%) of all calls.



Response time includes three key factors: dispatch handling, turnout, and travel time. Dispatch handling time is when dispatch takes 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 when 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 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 Fire and EMS calls within our first arriving unit's primary response area. These times will vary based 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 July, we completed the following shift training:

EMS Continued Education – Paramedics completed continuing education training covering Pharmacology: Routes and Dosing.

1st Quarter Intubations – Paramedics completed Mandatory Advanced Life Support Airway Management Training.

Lithium Battery Safety – Crews completed training on the fire risks of lithium batteries.

Triple Layer Hose Load – Crews practiced pulling and rebidding the triple layer hose load prior to adding this hose load to all our engines.

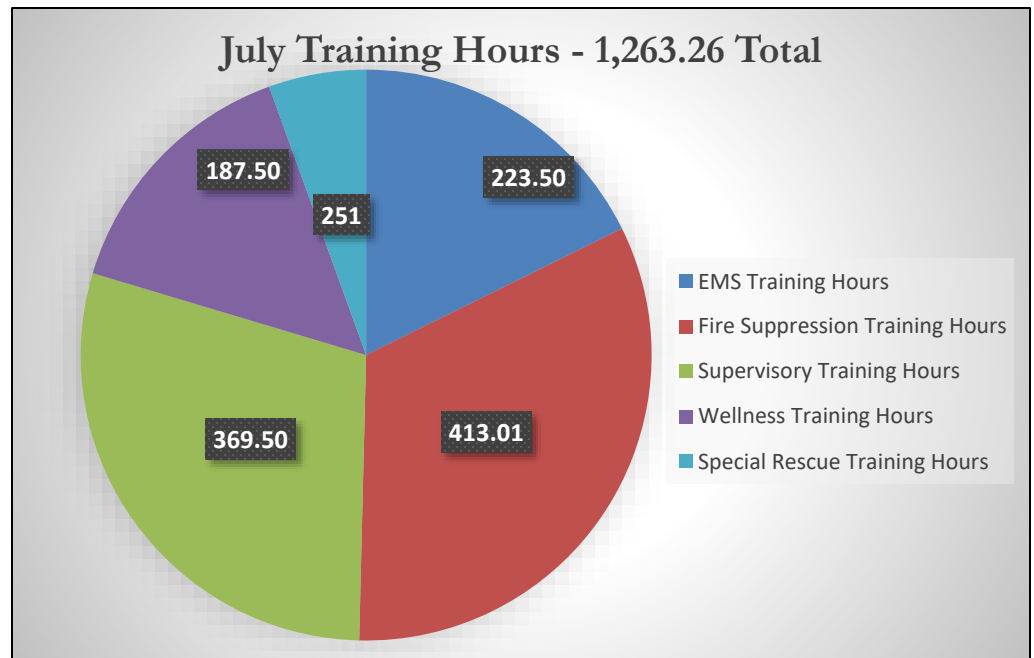
Dry Hydrant Testing – The dry hydrant at Biltmore was tested following repairs.

Officer Training – Crews completed the UL – Interior & Transitional Suppression Tactics.

Electrical Emergencies – Crews completed the ComEd on-line responding to electrical emergencies training.

Situational Awareness
– Crews completed training on methods that help firefighters to maintain their situational awareness.

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 bases crews review department equipment and ensure they can operate is properly and effectively.

Probationary Program - Probationary members worked on completing Probationary Program.

The following members attended Outside Training

Lieutenant Kempf attended the 8 hour Hydrant to Nozzles class.

FF/PM Murray attended the 4 hour Tesla electrical vehicle emergencies training class.

Fire Prevention Bureau Division

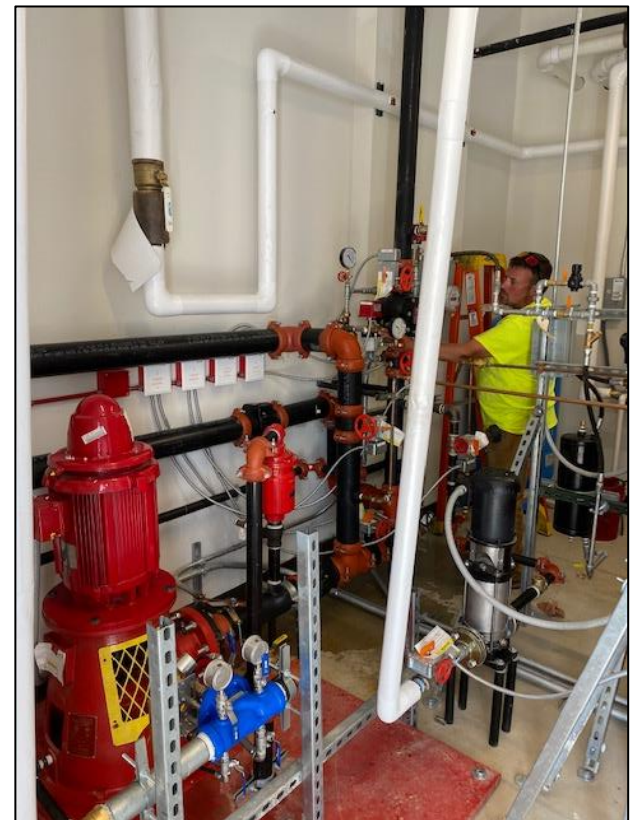
The Fire Prevention Bureau assisted with the Lake Zurich Fourth of July fireworks to ensure a safe and successful event for the community.

(Fireworks pictured right)

The Fire Department and Fire Prevention Bureau personnel performed dry hydrant testing at the Biltmore Country Club. Recently, divers had cleaned out the pond of debris around the area of the dry hydrant. Dry hydrants are a key piece of infrastructure in this rural area for a fire department water supply for the community. *(Pictured below)*



Below is a picture of when we were placing the Fire Systems in service at the new Higher Ground Day Care in Kildeer. *(Pictured below)*



During the final week of July, The Fire Prevention Bureau and the Investigation Team worked 2 structure fires in Kildeer - one in Lake Zurich's District and one in Long Grove's District. Pictures of each of these fires are featured on the following page.



JULY 2022 ACTIVITIES

- Fireworks Shows
 - Hawthorn Woods Country Club
 - Hawthorn Woods Village
 - Lake Zurich
- Alpine Days Inspections
- Construction Meetings
 - Biltmore
 - Lifetime numerous site meetings
 - The Reserve of Deer Park
 - 17 S. Old Rand
 - Deer Park Town Center
 - Cooper's Hawk
 - Numerous D-95 meetings
 - Volle's sprinkler meeting
 - 900 Winnetka buildout
- Fire
 - 7-26-22 - House Fire Kildeer
 - 7-30-22 – House Fire Kildeer mutual aid to Long Grove
 - Barn Fire Investigation to Wauconda

Year-To-Date - 2022 (Data will be added each month)

