



FIRE DEPARTMENT

MONTHLY INFORMATION REPORT

April 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 - April 2021 Overview

The Department responded to **319 calls** for service in April, which averaged **11** calls per day and required **505 individual vehicle responses** to provide the necessary personnel for each incident.

Forty-three percent (**43%**) of the responses occurred while another call was in progress. Twenty-four percent (**24%**) 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 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.



Lake Zurich Significant Calls



Extrication Vehicle Crash – April 8, 2021

Fire department crews responded about 9:35 a.m. on Thursday April 8, 2021 to Route 12 and Deer Park Boulevard, Deer Park, for a traffic crash with injuries. Upon arrival, crews located three vehicles with extensive damage. The driver of a minivan and a front-seat passenger were extricated and transported to Advocate Good Shepherd Hospital. The front-seat passenger succumbed to her injuries at the hospital. The crash remains under investigation by the Lake County Sheriff's Office Technical Crash Investigations Unit and Lake County Coroner's Office. *(Pictured left)*

Wildland Fire – April 26, 2021, 3:54 p.m. – 7:24 p.m.

Lake Zurich responded to the Cuba Marsh Forest Preserve for a report of black smoke coming from the marsh. Units arrived to find a large area of wind-driven brush and open fields on fire. The incident commander upgraded the response by requesting a MABAS wildland fire box alarm. A total of 31 different resources ranging from brush trucks, tenders, wildland technicians to the MESS Canteen from throughout Lake, McHenry, and Cook Counties responded to assemble an effective firefighting force to control the fire.

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



Mutual/Auto Aid Significant Fire Calls

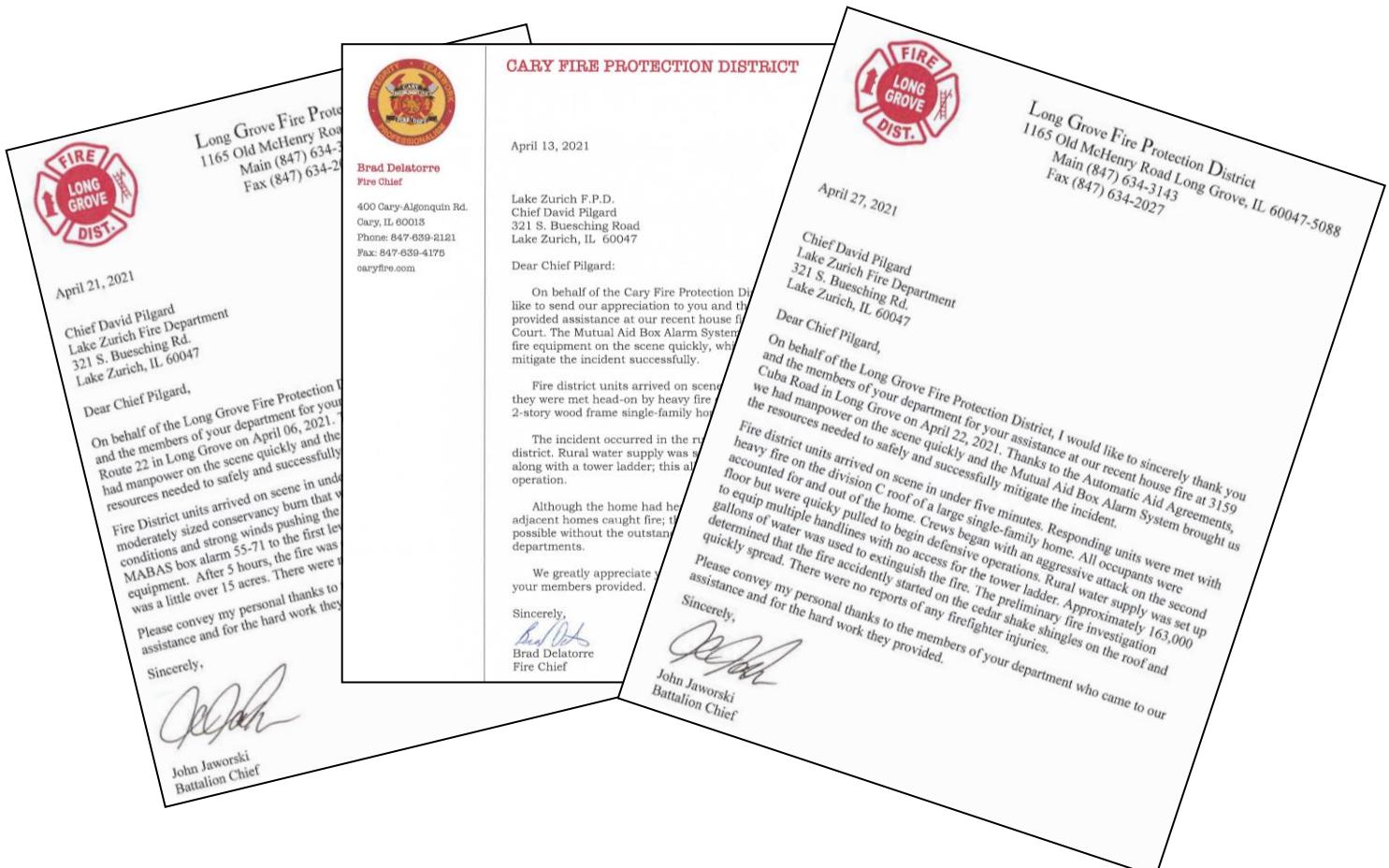
- Round Lake Fire Protection District – The Round Lake Fire Protection District had a residential structure fire on Sunday, April 18 that required the activation of a MABAS box for additional resources. Lake Zurich Engine 323 responded to the change of quarter's assignment to cover the Round Lake area. They responded to an indoor odor of natural gas call in the Round Lake community. This call demonstrated the importance of fire department auto-aid and mutual aid to assemble an effective firefighting force and ensure any additional incidents in the community are addressed.
- Long Grove Fire Protection District – *(pictured right)* On April 6, 2021, Deputy Chief Pilgard and Lt. David Reid – Wildland technician responded to the 20300 block of Route 22 between Old McHenry Road and South Krueger Road for a wildland fire. The fire burned approximately 15 acres and required a MABAS box alarm to provide the required wildland resources consisting of brush trucks, UTV's and wildland technicians to assist at the incident. The operational period of the incident lasted five hours and involved protection of homes and structures, fire containment, fire extinguishment, and confirmation that all hotspots were out.



- Long Grove Fire Protection District – Lake Zurich Engine 324 and Lake Zurich Deputy Chief Kelly responded mutual aid to Long Grove for a residential structure fire on April 22, 2021. When crews arrived, they found a large, two-story home with fire coming from the roof. The house was set back significantly from the road as the driveway was nearly 1,000ft long. Engine 324 dropped its entire bed (885ft) of 5" large diameter hose from Cuba Road up to Long Grove Tender 55. Engine 324 crew then deployed a hose line to the backyard to extinguish a grass fire that was started from falling embers and control the flames coming from the home. Crews remained on scene flowing water until the fire was under control, nearly two hours later. DC Kelly was assigned as the water supply division officer and established remote fill sites in both Lake Zurich and the Long Grove Fire Station. He coordinated multiple water dropoffs from 13 different mutual-aid tenders. Approximately 163,000 gallons of water were shuttled between the 3 fill sites and the scene of the fire. At the end of the operation, approximately 5-hours, all of the hose was drained, rolled, and re-bedded.

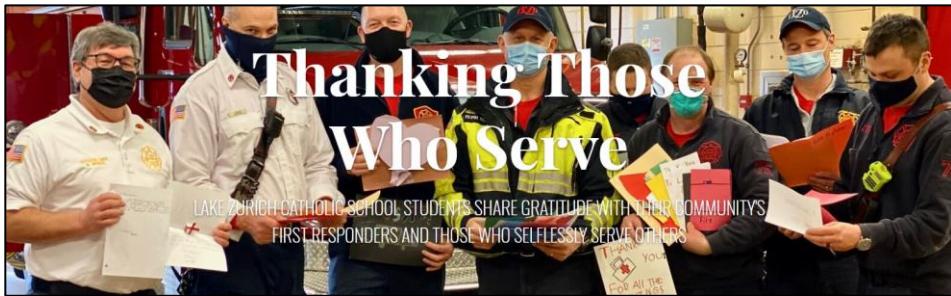
Mutual Aid – Thank You Letters

Long Grove Fire Protection District – April 6, 2021 – Brush Fire at 20365 Route 22
 Cary Fire Protection District – April 13, 2021 – Residential Fire on Holly Lynn Court
 Long Grove Fire Protection District – April 22, 2021 – Residential Fire at 3159 Cuba Road



News Highlights - Lake Zurich Fire Department

[SW Lake Lifestyle May 2021 \(citylifestyle.com\)](http://SW Lake Lifestyle May 2021 (citylifestyle.com))



Welcome New Members Firefighter / Paramedics Chandler Boyd & Gilberto Villa



Member Spotlights

Firefighter/Paramedic & IAFF Local 3191 Union President – Shaun Stapleton



Congratulations to Firefighter / Paramedic Shaun Stapleton for completing his Master's Degree in Public Safety and Homeland Security Management from Southern Illinois University. Since coming to Lake Zurich, Shaun enrolled in the bachelor program at SIU for Public Safety Management and then continued onto the master's program. Shaun has become the third member of the Department to complete their master's degree, including Deputy Chief Rick Johnson (*retired*) and Captain Joe Christopherson. Shaun has been an exemplary model to his fellow firefighters and has inspired others to pursue their formal education. In recent history, 20 fire department members have pursued higher education since coming to Lake Zurich. FF/PM Stapleton has a long career ahead of him, and Lake Zurich Fire is fortunate to have him help elevate the department to the next era.



**Lieutenant
Brian Blaauw**

Humanitarian Service Medal and
Award for the 2019 Mississippi
and Illinois River Flood
Response and Relief Effort



**Firefighter / Paramedic
Jeremiah Johnson**

Rope Technician certification and
10 years of service with the Lake
Zurich Fire Department

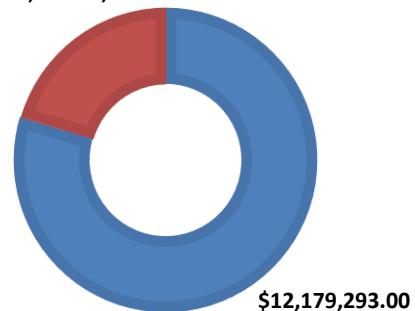
Administration Division

Budget Update

FIRE DEPARTMENT BUDGET

■ Overall Budget ■ Amount Spent

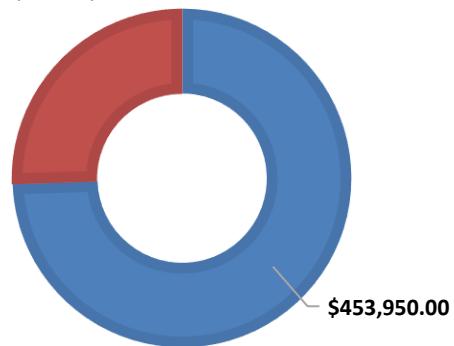
\$3,127,450.31, 26%



OVERTIME ACCOUNTS

■ Overtime Budget ■ Overtime Spent

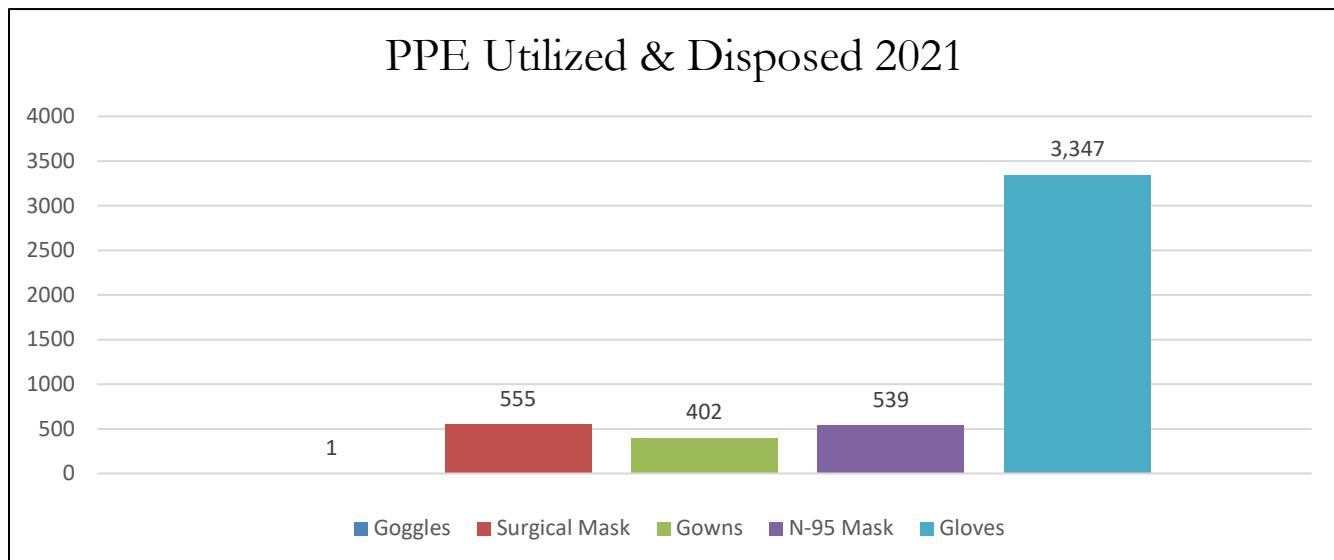
\$155,346.46, 34%



COVID-19 Updates

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 and mailed us well wishes. We genuinely appreciate it.

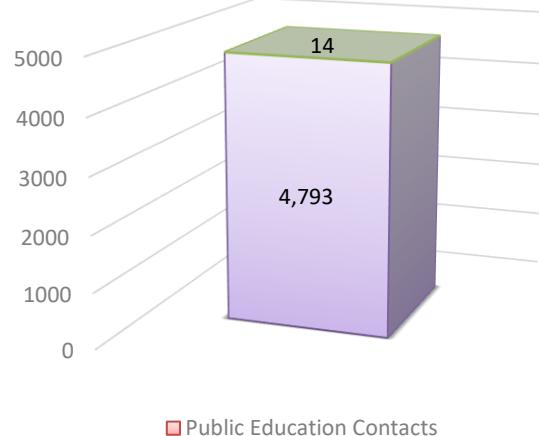
We are currently tracking the Personal Protective Equipment (PPE) that members are using and disposing of due to the COVID-19 pandemic. In April, we have issued 0 pairs of safety goggles, used 52 surgical masks on patients, 47 N95 respirators for our personnel, 20 gowns, and approximately 333 pairs of surgical gloves. The graph pictured below shows year-to-date.



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 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 as well as provide CPR/First-Aid training.

Community Focus / Risk Reduction / Public Education | Year-To-Date



CPR classes
Lake Zurich Parks
& Recreation
(above)
Deer Park
Dental Ltd.
(left)

EMS Division

Northwest Community EMS System Provider Based Performance Improvement – April Procedures Administered

Procedure Performed Description And Code (eProcedures .03)	Number of Times Procedure Administered	Percent of Total Procedures Administered
Surgical face mask applied to patient (465635009)	179	58.31%
Cervical Spine Motion Restriction (398041008)	36	11.73%
IV - Peripheral (392230005)	28	9.12%
Cold pack application (229585002)	12	3.91%
Wound - Application of bandage (182555002)	9	2.93%
Splinting - General (79321009)	6	1.95%
Wound Care - General (225358003)	3	0.98%
Assisted Ventilation - CPAP (47545007)	2	0.65%
CPR - Manual (89666000)	2	0.65%
IO - Intraosseous Access (430824005)	2	0.65%
Airway - Clear / Suction (230040009)	1	0.33%
Assist Ventilation - BVM (425447009)	1	0.33%
CPR - Mechanical Device (429283006)	1	0.33%
Nasopharyngeal Insertion (182692007)	1	0.33%
Orotracheal Intubation (232674004)	1	0.33%
Orotracheal intubation Video + Bougie (398128007)	1	0.33%
Wound - Tourniquet (20655006)	1	0.33%
Z-Hemostatic Agent Application (372045002)	1	0.33%

As of April 2021, the following is true for some of our most at-risk COVID-19 patients in the Lake Zurich Fire Protection area:

Azpira Place of Lake Zurich: 795 N. Rand Road - 95-100% residents have been vaccinated. Residents are still tested regularly. Staff wears surgical masks and gloves throughout their entire workday.

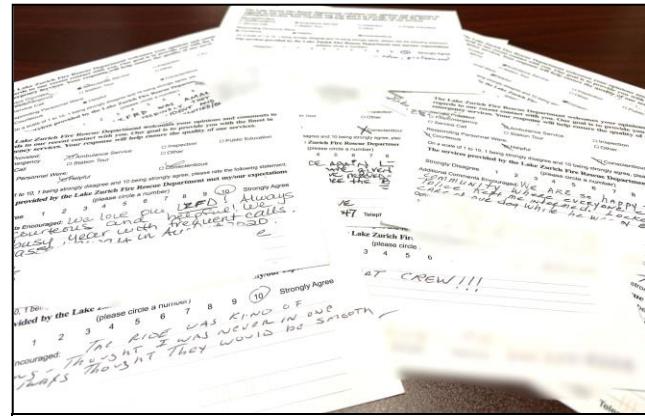
The Auberge at Lake Zurich: 555 America Court - All residents have been vaccinated. Residents are still tested regularly. Staff wears surgical masks and gloves throughout their entire workday.

Cedar Lake Assisted Living & Memory Care: 777 Church Street - All residents have been vaccinated. Residents are still tested regularly. Staff wears surgical mask and gloves throughout their entire workday.

Lexington Health Care Center of Lake Zurich: 900 S. Rand Road - The last report was that 95-100% of their residents were vaccinated and being tested regularly.

Zurich Meadows Senior Apartments: 250 Mohawk Trail - 95% of the residents have been vaccinated. Surgical masks and gloves are being worn at all times by staff.

Deer Park Village Senior Living: 21840 W. Lake Cook Road - 98% of residents have been vaccinated. Residents are being tested regularly. Staff wears surgical masks and gloves throughout their entire workday.



EMS Survey Cards received in April 2021 (various examples below)

"Fantastic crew – calm, professional and friendly. Thank you!"

"We are so happy we live in a community where everyone comes together."

"We love our LZFD! Always kind, courteous and helpful!"

"LZFD was amazing! Very professional & friendly"

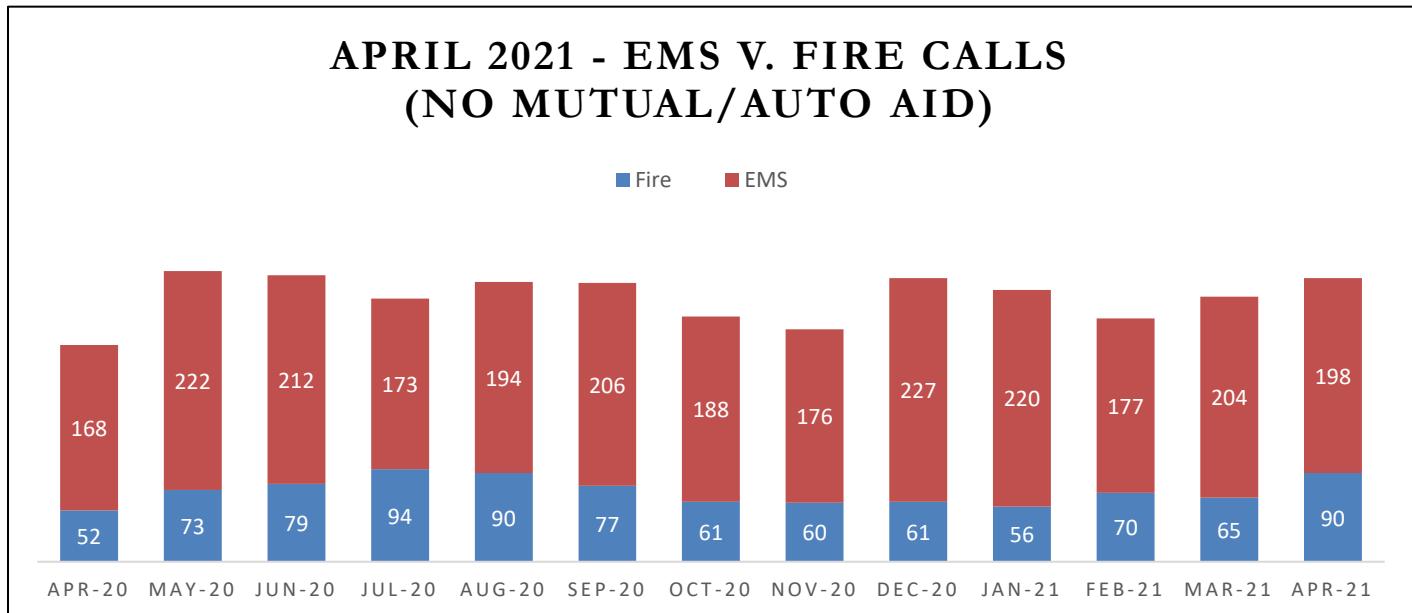
Operations Division

Vehicles Out of Service

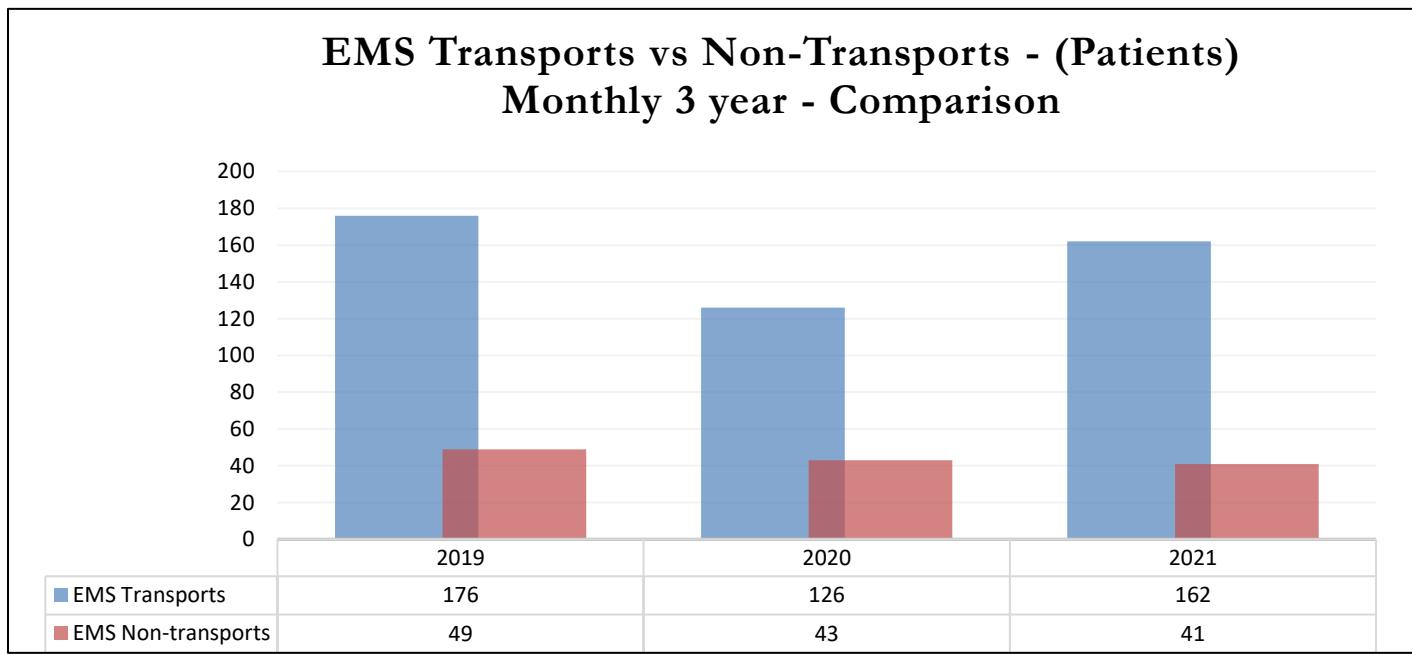
- During April, the following vehicles were out of service due to maintenance, repairs, or breakdowns:
 - Ambulances – 15.50 hours
 - Engines – 387 hours
 - Year-To-Date Hours:**

Ambulances: **225.58 hours** | Engines: **631.50 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.

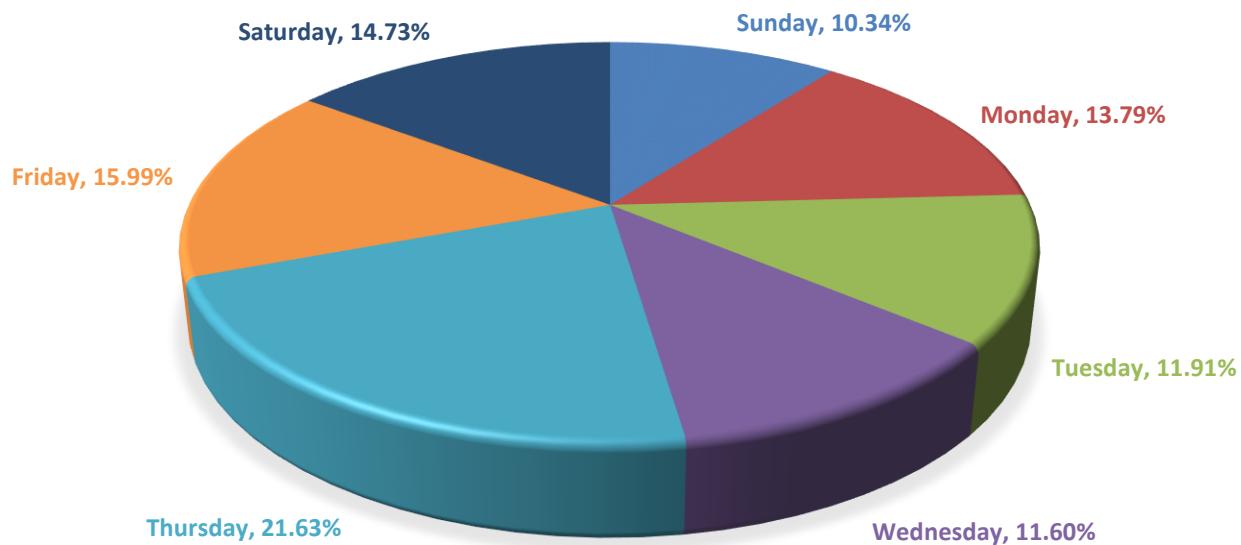


This next chart reflects activity related to emergency medical services, a core function of the fire department — not every EMS call results in transport. A prime example of this is an automobile accident where several victims refuse transport. EMS transports always outpace refusals. This chart compares the month of April across 3 years. The trend is consistent with the data period. These numbers represent the patients seen.

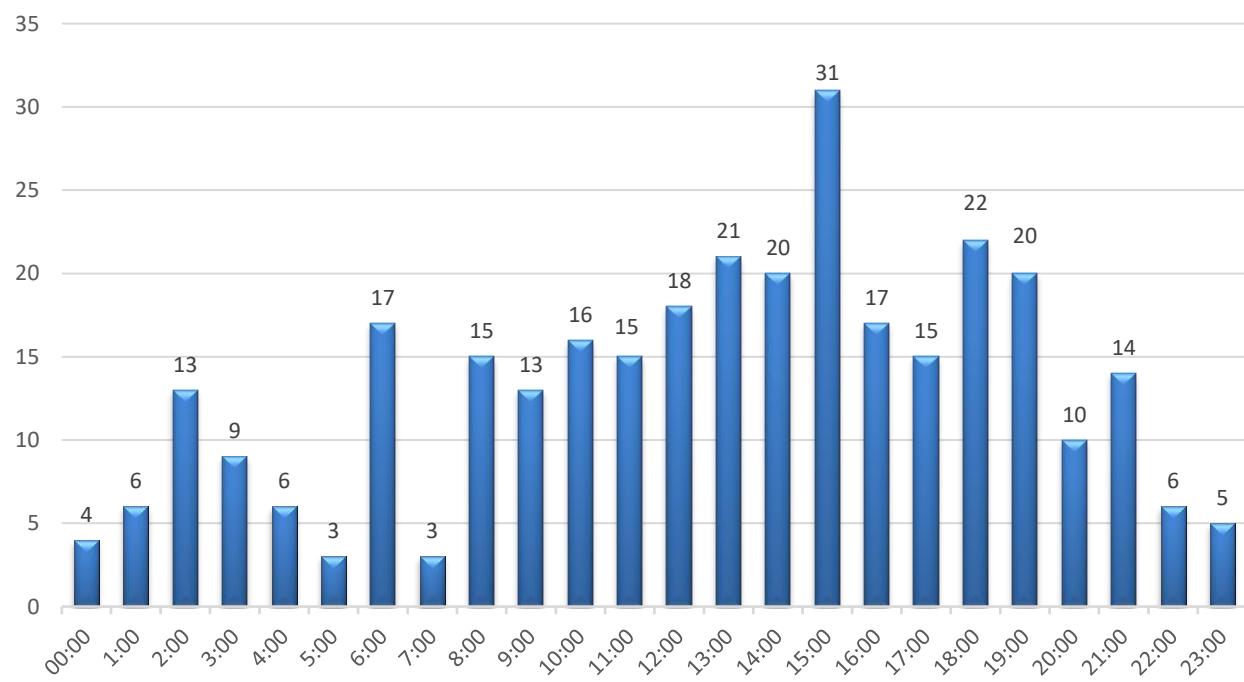


The following two charts break down calls by the day-of-week and hour-of-day.

RESPONSE BY DAY OF WEEK - APRIL 2021



RESPONSE BY HOUR OF DAY - APRIL 2021



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

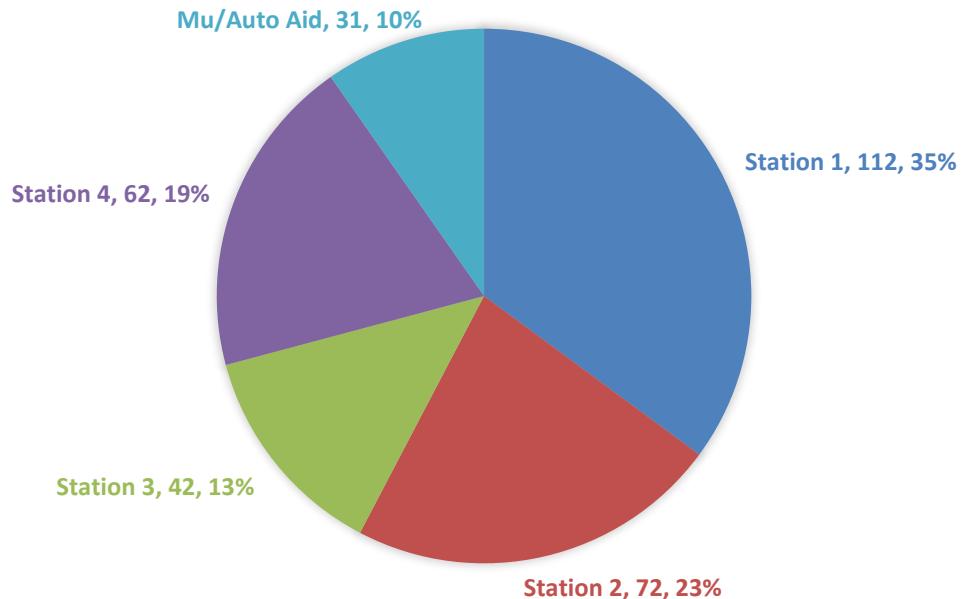
APPARATUS & STAFFING

ENGINE 324
AMBULANCE 324



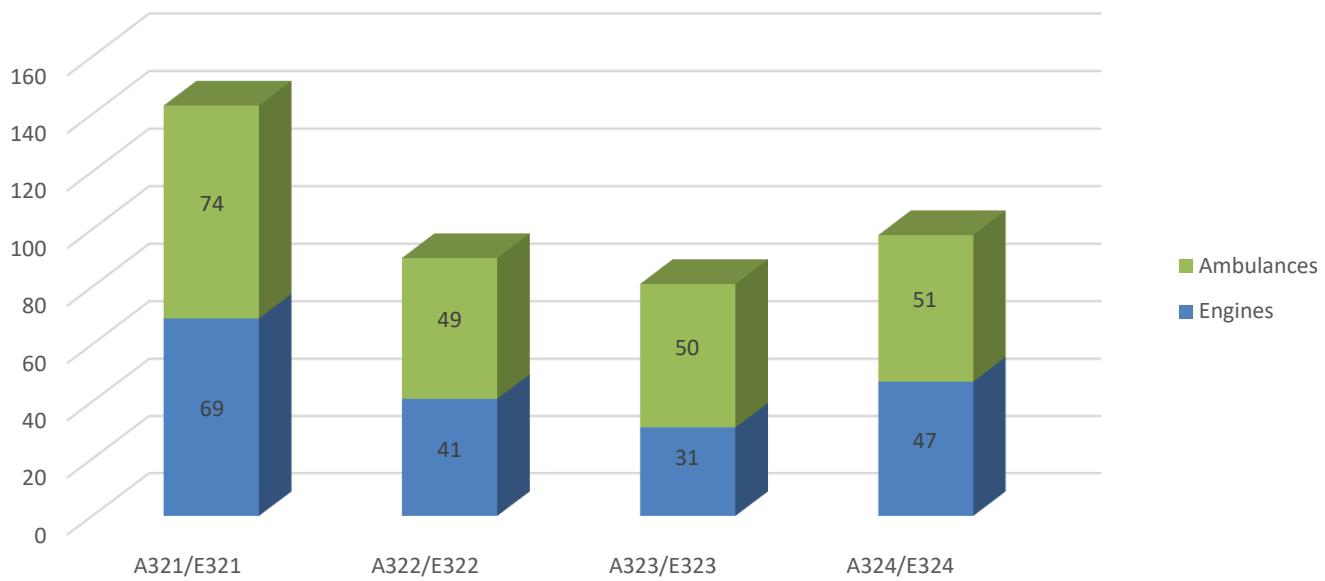
The graph below represents the percentage of calls by each station and mutual/auto aid for April 2021. The chart does **not** represent the station that responded as the primary resource to the area – it means where the call originated. Station 1 is historically the busiest district.

ORIGIN OF CALLS - APRIL 2021

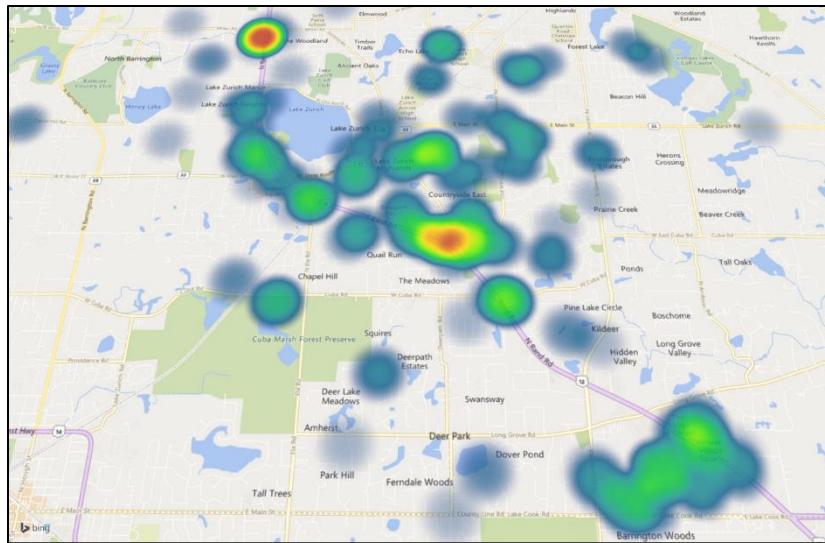


The graph below shows the responses by each unit – Ambulances & Engines – in April 2021.

Total Unit Responses - Ambulances & Engines



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 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.



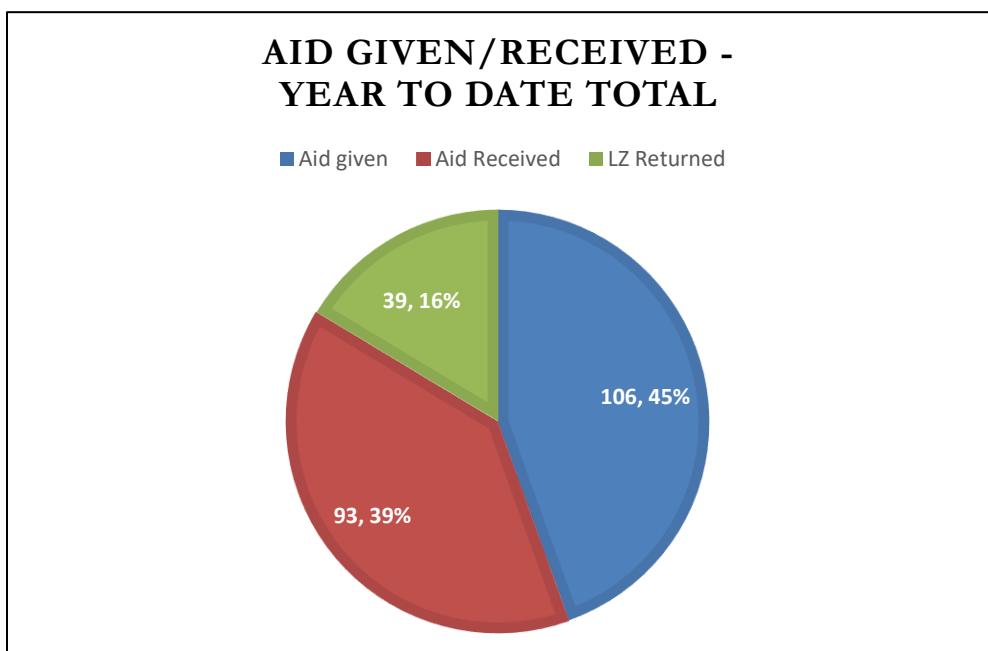
Frequent Call Locations:

- 795 N. Rand Road – Azpira Place of Lake Zurich – 23 responses
- 900 S. Rand Road – Lexington Health Care Center of Lake Zurich – 10 responses
- 21481 N. Rand Road – Northwest Community Healthcare – 9 responses
- 777 Church Street – Cedar Lake Assisted Living & Memory Care – 6 responses
- 555 America Court – The Auberge at Lake Zurich – 5 responses
- 21840 Lake Cook Road – Deer Park Village Senior Living – 4 responses

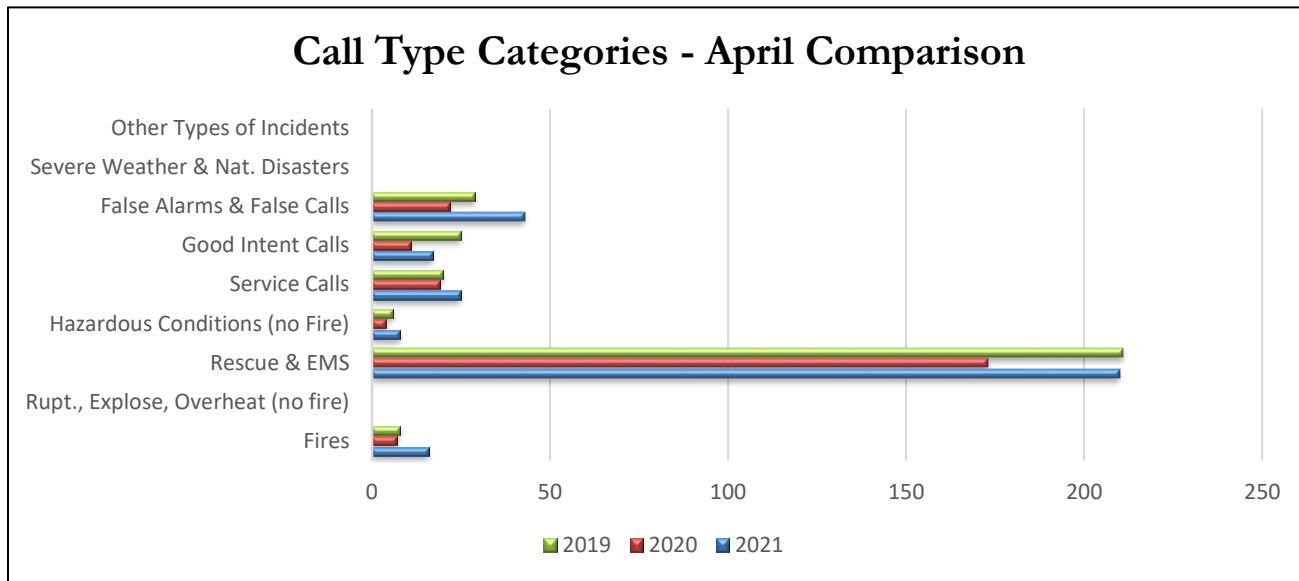
Mutual/Auto Aid Response Year to Date –

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 April, we responded to **32 calls** for mutual aid and were **returned 8 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

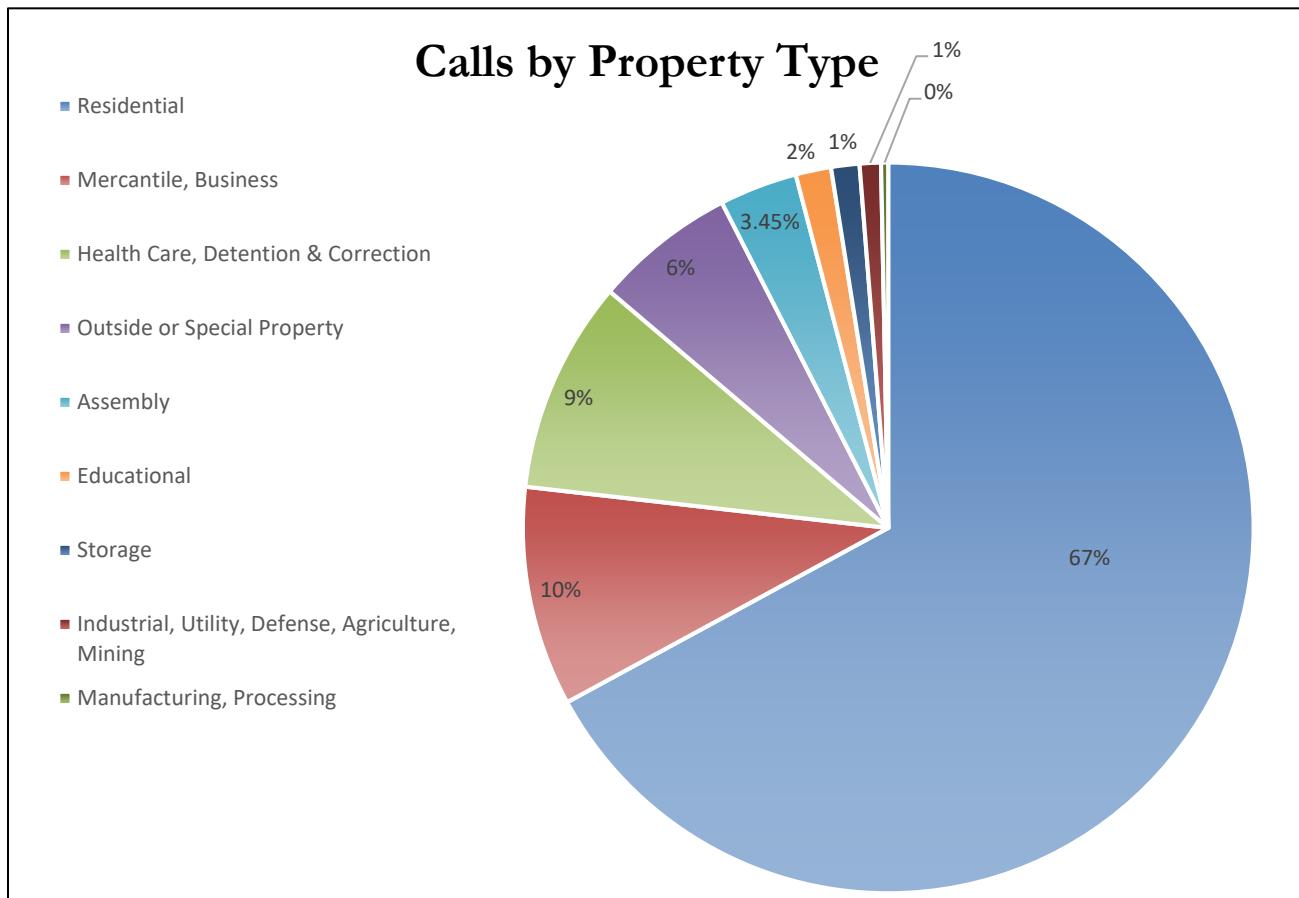
intervention from the LZPD 911 center through automated dispatching and resource sharing. They are entirely handled by the agency requesting our response — direct cost savings to our budget and an added benefit of the automated dispatch system.



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.

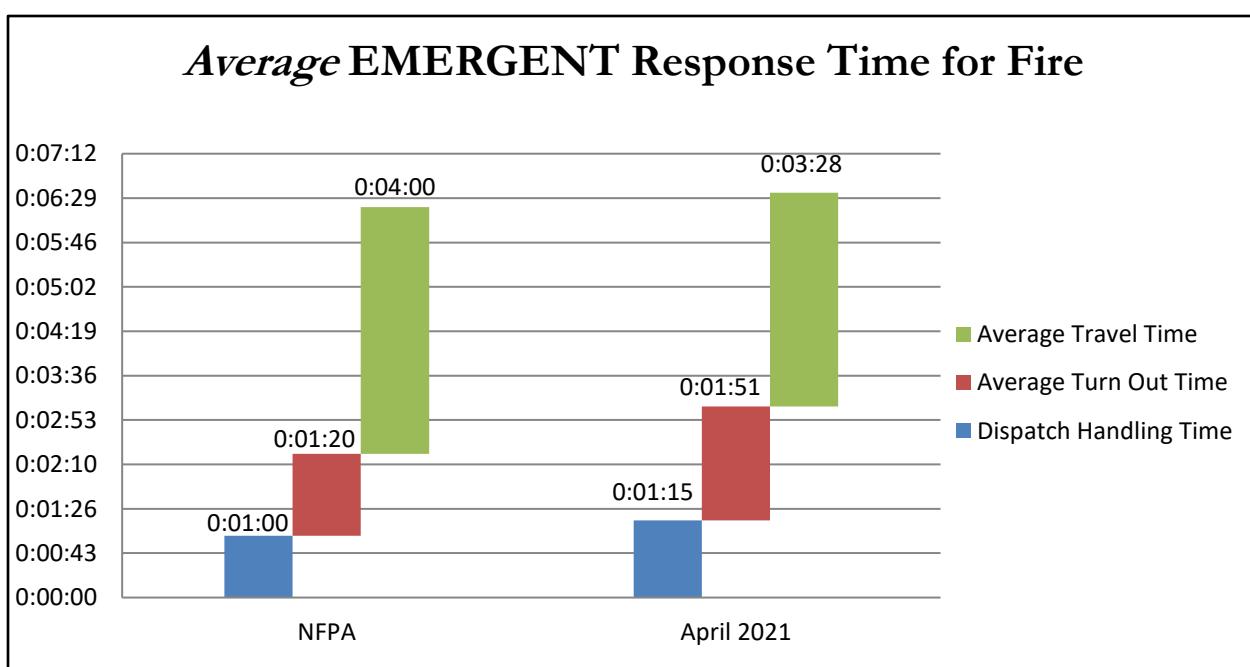
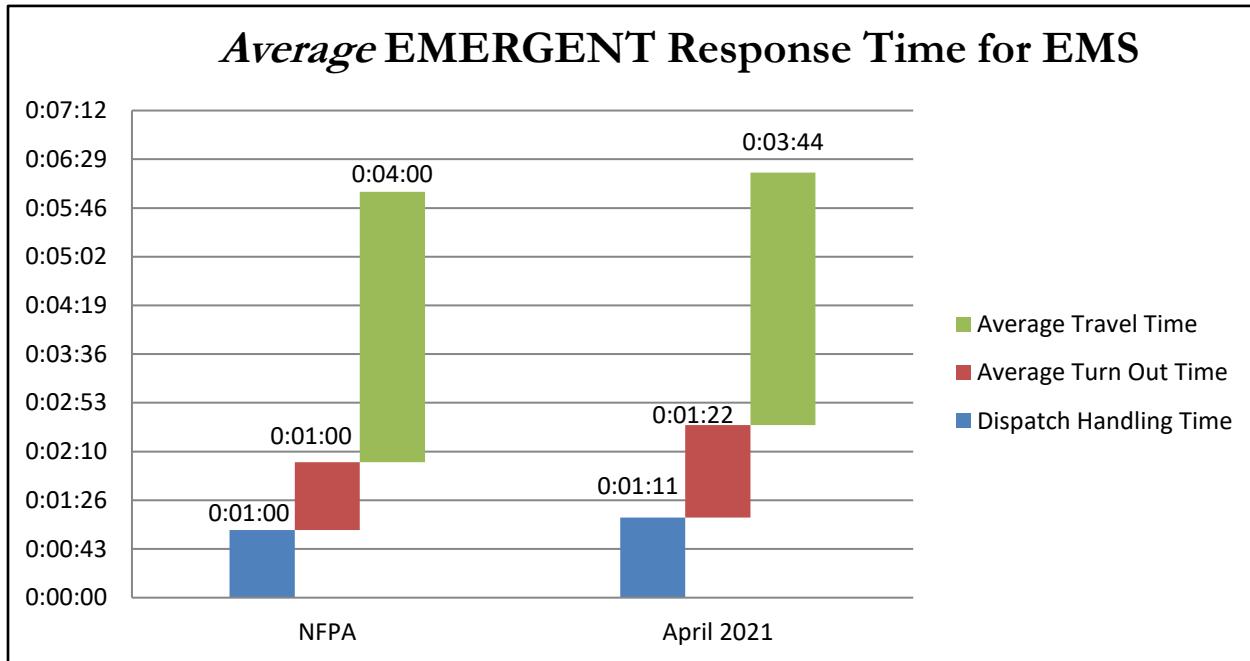


As previously mentioned, there is a national standard for coding the type of property use. How is this relevant? We see trends in various types of occupancies and use them to determine our service demand. For example, the healthcare category would increase if additional assisted living or nursing homes open. As shown below, we continue to respond to Residential Properties more than any other (67%), and Mercantile/Business was second with (10%) 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 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 on 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 April, we completed the following shift training:

- **EMS Continuing Education** – During April, the Department's paramedics trained on Cardiac Case Studies and EKG interpretation, which a nurse educator instructed.
- **Quarterly Intubations** – Quarterly, all paramedics are required by Northwest Community Hospital to train on advanced airways procedures.
- **Hose Advancement** – Firefighters practiced deploying, advancing, and rebedding the fire hose loads that we use. We also tested a new load to see if it would meet our needs.
- **Multiple Line Fire Attack** – Companies practiced advancing multiple fire attack hose lines into the training tower.
- **Multi-Company Fire Suppression** – During this training, all companies and the shift commander trained together at the training tower to conduct a coordinated fire attack.
- **Pediatric EMS Bag In-Service** – The EMS committee put together new EMS pediatric bags. The paramedics must review these bags before they are placed in service on the ambulances.
- **Department SOG Review** – All members must review and acknowledge the Lexipol SOG's when they are released.
- **Mandatory Training Make-up** – Members that needed to complete missed mandatory training worked on completing it.
- **After Action Review** – An After Action Review of the Burger King fire was completed to discuss what went well, what did not, & what changes we could make to improve our operations.

Outside Training Classes attended during April:

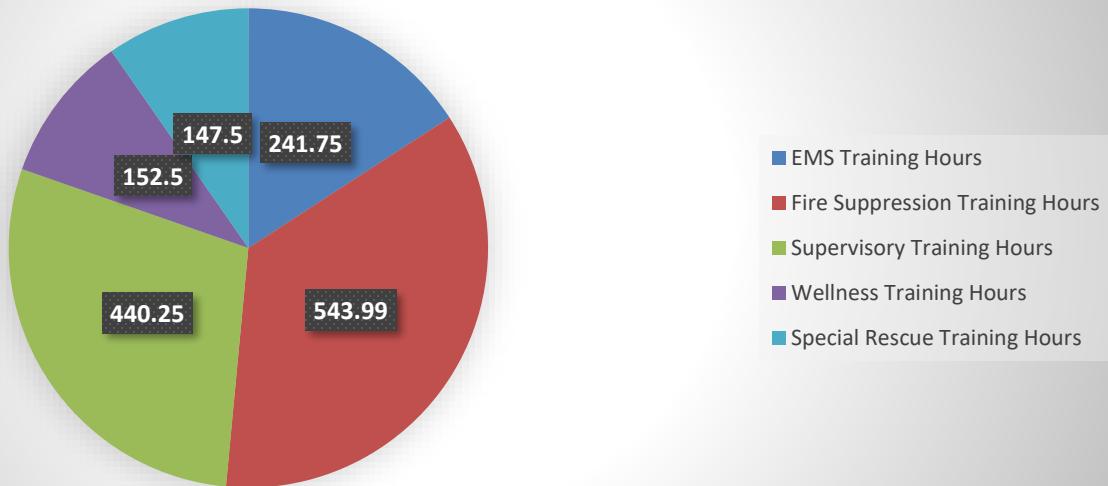
- **Leadership Development & Decision Making** – 40 hour class at the Illinois Fire Service Institute attended by Lt. Yee, FF/PM Cornell, FF/PM Michehl & FF/PM Stapleton. The typical cost for tuition for this class is \$1,000, but due to state grants, this training was tuition-free, which saved the Department \$4,000.
- **Fireground Company Officer School** – 45 hour class at the Illinois Fire Service Institute attended by FF/PM Bene & FF/PM Campbell. The standard cost for tuition for this class is \$1,150, but due to state grants, this training was tuition-free, saving the Department \$2,300.
- **Command Officer School** – 40 hour class at Romeoville Fire Academy attended by Lt. Santoyo & Lt. Yee.



The department also conducted a New Hire Orientation for Probationary Firefighter/Paramedics Boyd & Villa.

This is a four-week orientation during which FF/PM Boyd & FF/PM Villa completed all required regulatory training, learned the department's operations, and demonstrated their skills. (Pictured left). The final week of the orientation focuses on EMS skills and knowledge as the new hire work towards gaining entry into the Northwest Community Hospital EMS System.

April Training Hours - 1,525.99 Total



Fire Prevention Bureau Division

The Fire Prevention Bureau supported department operations during April by following up on numerous open burning issues. Due to the extremely dry conditions, multiple small mulch fires were reported. The Fire Prevention Bureau investigated the fires and then followed up with the property management companies. The department responded to a dozen outside fires during this period.

As open burning has been responsible for extensive field/grass fires, burn permits were banned until conditions improve. Some of these fires have caused property damage in our Fire Protection District. Numerous social media posts were placed asking residents to either not burn or take extra precautions while burning. For example, the picture on the right shows a recently discarded cigarette at a local business drive-through which had the potential for significant fire and loss to the community.



The Bureau has also been busy supporting the schools within our area by witnessing fire drills. Each school is required to have three exercises per year. Now that schools are back to full-day sessions, all three drills need to be completed by the end of May. In the month of April, the Fire Prevention Bureau conducted six drills for the school district.

Both residential and commercial construction has increased dramatically. Each new home constructed will need three sprinkler inspections by our office. Every commercial project can have two or more sprinkler inspections. An example is Walmart; almost 1,000 sprinklers were replaced during their remodel. These replacements required inspections before opening hours, so the store had protection while shoppers were present.

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

- Construction Meetings
 - First Watch
 - 65 Oakwood
 - Life Time
 - 540 Cortland
 - 133 W. Main
 - 650 Church
 - 800 Church
 - 570 Capital – Continental
- Two fire investigations
- Water main break at Tredegar
- NIFIA Board Meeting
- NIFIA General Meeting and Training
- Picked up PPE supplies at fairgrounds twice in April
- Staff meeting
- Fire Drills – 6 at Lake Zurich Schools

