

Buffalo Grove Fire Department 2022 Annual Report



**Providing Professional Services with
Commitment, Loyalty, Integrity, and Pride**

Table of Contents

03 | MESSAGE FROM THE FIRE CHIEF

04 | ABOUT THE BUFFALO GROVE
FIRE DEPARTMENT

05 | 2022 BY THE NUMBERS:
Call Volume

06 | 2022 BY THE NUMBERS:
Response Performance

07 | FIRE OPERATIONS

08 | EMS OPERATIONS

09 | EMERGENCY MANAGEMENT

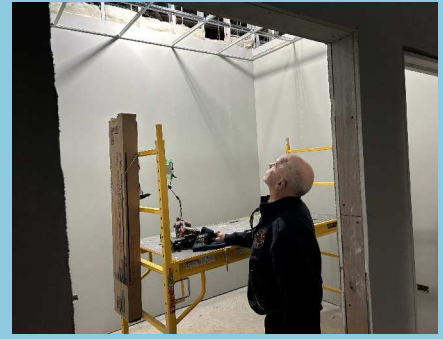
10 | FIRE PREVENTION BUREAU

11 | WATER RESCUE TEAM

12 | TECHNICAL RESCUE TEAM

13 | FIRE INVESTIGATIONS TEAM

14 | PUBLIC EDUCATION TEAM



Message From The Fire Chief



Mike Baker

Fire Chief / Emergency
Management Director

It is my pleasure to present the Buffalo Grove Fire Department Annual Report. 2022 proved to be a busy year with both internal and external challenges. Call volumes climbed up 5% year over year and reached a record high, a significant number of retirements occurred amongst the upper levels of the Department's command staff, and variants of the COVID-19 virus continued to add additional stress to the lives of the Department's emergency response personnel. Despite these hurdles, the men and women of the Buffalo Grove Fire Department made considerable strides not only towards meeting those challenges, but for also to preparing the Department for the future.

The Department's personnel made substantial progress towards several of its long-term goals in 2022 including the selection of an architect who will be analyzing options for the replacement or remodel of Station 25 and undergoing an organizational review by an outside accreditation assessment team. Additionally, the Department welcomed Deputy Fire Chief Larry Kane who was sworn in following the retirement of Deputy Chief Bill Wagner after 32 years of service to the Village of Buffalo Grove. The accomplishments of 2022 will lay the foundation for future improvements and success for the Department.

I continue to be amazed by the dedication of the Department's personnel to the community of Buffalo Grove. In one example from early 2022, Department personnel performed a bold ice rescue after a driver crashed their vehicle into a local pond on a chilly snowy morning. Due to the actions of the emergency personnel, the driver made a full recovery. While there are other numerous examples of on-scene excellence, the personnel's commitment to high quality service provision was not limited to emergency incidents. In recognition of their devotion to personal development, two of the Department's firefighters were awarded scholarships by the Illinois Fire Chiefs Association.

Because of examples like these, the residents of Buffalo Grove can rest assured that the personnel of the Buffalo Grove Fire Department are fully prepared for what the future may bring.

About the Buffalo Grove Fire Department

The Buffalo Grove Fire Department is a full-service public safety agency with the responsibility of responding to and mitigating incidents involving fires, medical emergencies, hazardous materials, technical rescues, and for providing public fire safety education and fire safety inspection services. The Department operates out of three fire stations from which it equips and deploys one engine company, two truck companies and three Advanced Life Support (ALS) ambulances. All fire suppression companies are ALS equipped and staffed with a minimum of three personnel. The Department's 54 shift personnel respond to roughly 4,900 calls each year and provide service to nearly 42,000 residents and over 800 businesses located in the Village of Buffalo Grove. In addition, the Buffalo Grove Fire Department is a member of the Mutual Aid Box Alarm System (MABAS), which is a regional and multi-state agreement that ensures access to a wide variety of resources from other fire departments.

Our Guiding Principles:



MISSION

Provide professional services with Commitment, Loyalty, Integrity, and Pride.



VISION

The Buffalo Grove Fire Department will aspire to be the premier emergency services provider, delivering exceptional service and value to our community.



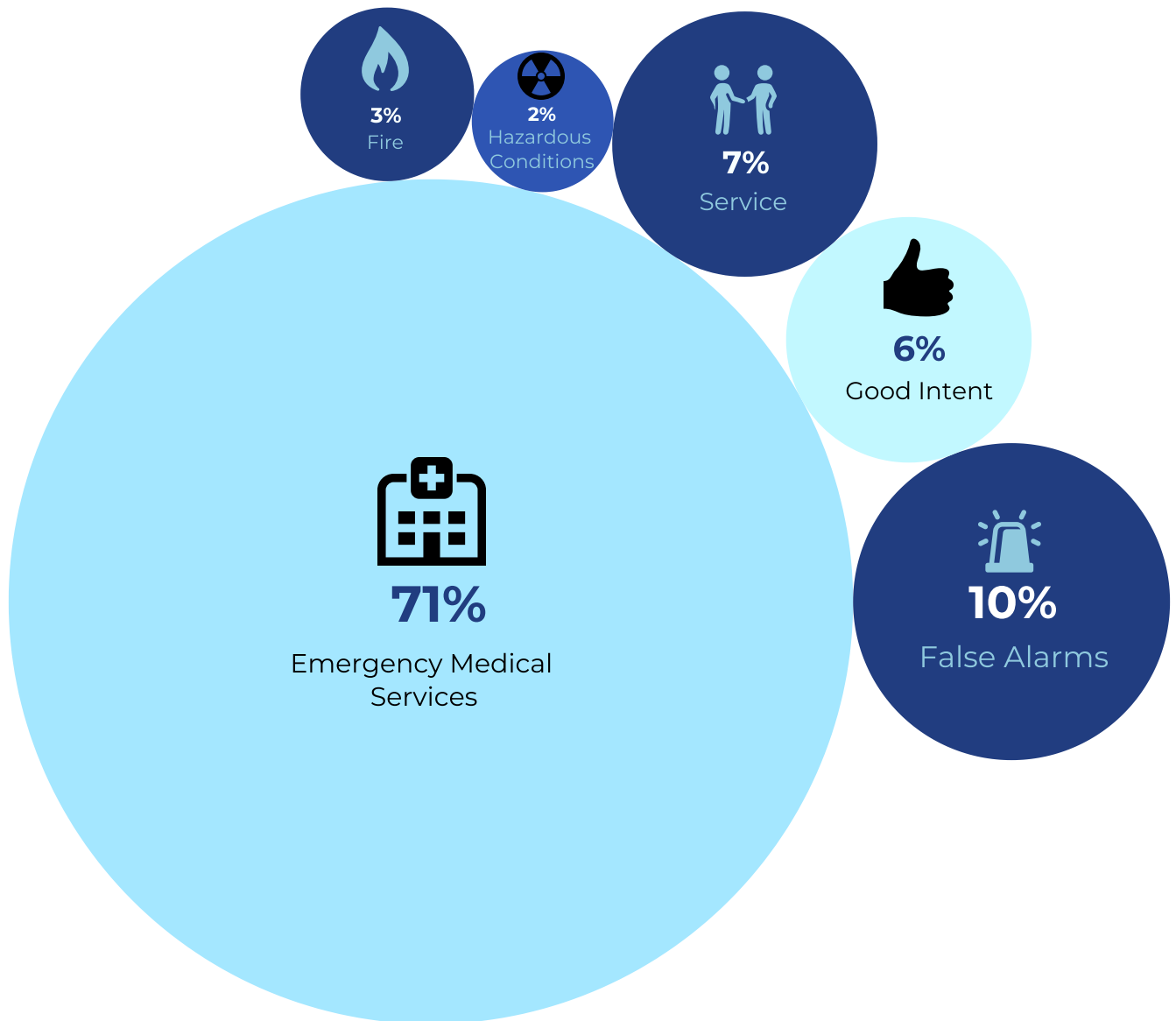
VALUES

The Buffalo Grove Fire Department will endlessly strive to achieve our mission based on these values: Service, Adaptability, Fairness, Empowerment, and Respect.

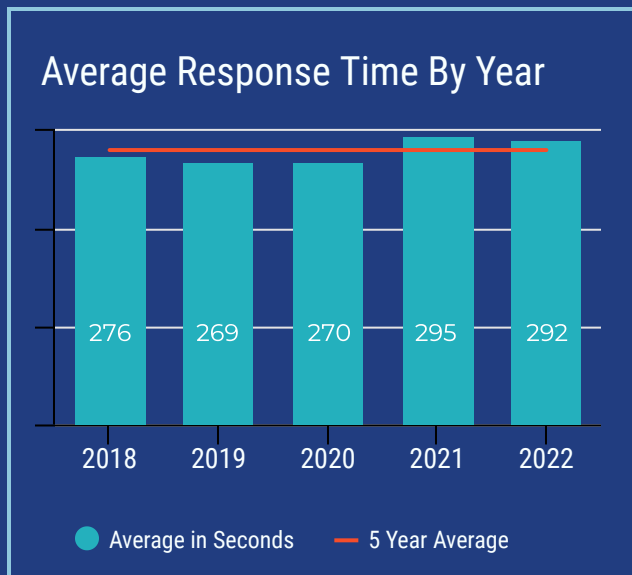
2022 By the Numbers

Call Volume

In 2022, the Buffalo Grove Fire Department responded to a record high of 5,164 calls. As in years past, emergency medical incidents made up the vast majority of the Department's call volume with 71% of calls being EMS related. District 25, located in the southern portion of Buffalo Grove, again led the Department in total number of dispatches with over 2,000 dispatches occurring in this part of the Village.



Response Time Performance



Fire Operations

The Department responded to 156 fire related calls in 2022, resulting in the dispatch of 483 emergency vehicles. The arrival of fire department personnel and their actions on the scene of building fires resulted in approximately 2 million dollars in saved property in 2022. Through the Department's mutual aid relationships, Buffalo Grove could rely on a significant number of outside fire suppression resources, allowing the Department to quickly contain and extinguish the fires.

In 2022, the Department began several efforts to enhance its fire response capabilities including reevaluating and revising its dispatching protocols for major fire incidents to incorporate an additional unit upon confirmation of a fire. Additionally, the Department is in the process of revising how replacement fire companies are shifted from Buffalo Grove fire stations to the scene of the fire. The Department's Small Tools and Equipment Committee, in conjunction with the Training Division, also began the process of evaluating the types and uses of the nozzles and hoses that are carried on the fire apparatus. The proposed changes will not only enhance the effectiveness and efficiency of the emergency response, but also enhance firefighter safety. Both projects were begun in 2022, but are anticipated to be completed in 2023.



18 different area fire agencies responded to the 2022 fire pictured above.

Causes of Buffalo Grove Fires - 2022	Percentage
Cooking	24%
Mulch	15%
Car Engines	9%
Cigarettes	6%
Electrical Failure	6%
Equipment Malfunction	6%
Lightning	6%
Fireworks	3%
Candles	3%
Clothes Dryers	3%
Plumbing Torch	3%

EMS Operations

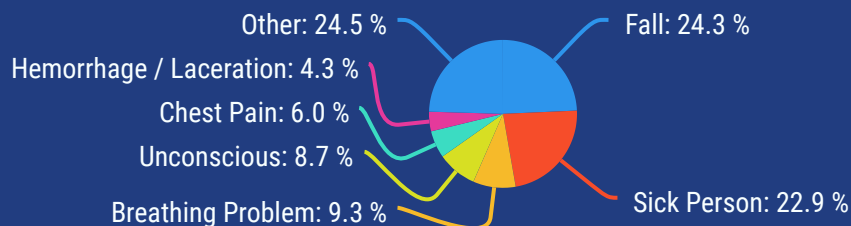
Last year, the Department's paramedics responded to 3,656 emergency medical calls, resulting in 2,443 transports. The Department's Emergency Medical Services program continued to strive to make significant improvements in its capabilities including the deployment of new burn kits and improved pediatric capabilities for its IV pumps. Additionally, the Department secured funding for an additional external CPR device, to be purchased in 2023. In addition, last year the Department's hospital system, the Northwest Community Hospital Emergency Medical Services System (NCHEMSS), celebrated 50 years of paramedic service in the northwest suburbs.



Buffalo Grove firefighter/paramedics strive to provide the highest quality of emergency medical care.

The Department has continued to be a leading paramedic service within both its hospital system and the northwest Chicago suburbs. Most recently, Buffalo Grove became the model department to launch its Continuous Quality Improvement (CQI) model for patient care reports throughout NCHEMSS. The Department's CQI process, involving an in depth review of all EMS reports, ensures quality care and identifies potential training opportunities. As a result of the efforts such as the CQI program, expanded training, and equipment upgrades, the Department's IV success rate improved from 65.9% in 2021 to 68.6% in 2022. The EMS program also worked to become better integrated with the Police Department's Family and Social Services program. Multiple referrals were made to the Police Department Social Worker to assist community members with nonemergency medical, food, and habitat needs. These efforts help to prevent emergencies by ensuring Buffalo Grove's most vulnerable residents have access to the resources they need.

Top Reasons for 2022 EMS Calls



Emergency Management

The Buffalo Grove Fire Department is home to the Village's Emergency Management Agency (EMA), with the Fire Chief acting as the Director of Emergency Management. EMA is responsible for preparing for and responding to a wide range of natural or man-made disasters that could occur in the Village. The EMA program's two volunteer teams, the Community Emergency Response Team (CERT) and MobileComm, expand the ability of the Village to respond to emergency and disaster events, as well as to host various community events. Combined, these volunteer teams provided nearly 2,400 hours of service to the Buffalo Grove and the surrounding communities in 2022.

CERT participated in a wide range of events and responses in 2022 including 13 community events and 2 emergency incidents. Additionally, CERT provided 18 volunteers to staff the Family Assistance Center after the July 2022 Highland Park July 4th parade shooting. In 2022, EMA received grant funding through the Buffalo Grove Rotary Club for the purchase of the National CERT Association's Disasterville Activity Kit, an interactive hands-on activity kit that will aid in training of both Village personnel and volunteers in disaster response.

MobileComm, the Department's mobile communications vehicle staffed by a highly skilled volunteer team, provided support to a wide range of public safety agencies in 2022. In total, MobileComm provided support on the scene of 7 fire incidents and 3 police incidents in Buffalo Grove, 4 NIPAS Mobile Field Force incidents, and 3 other Lake/Cook County incidents. Additionally, the Team provided invaluable support to various community events within Buffalo Grove. The volunteer team also coordinated significant improvements to the MobileComm vehicle including an upgraded video management system, phone lines, printer systems, and monitors. Finally, the team also upgraded the Village's Emergency Operation Center's radios and printing capabilities.



Fire Prevention Bureau

The Buffalo Grove Fire Prevention Bureau is responsible for enforcing state and local building codes through the inspection of commercial, industrial, mercantile, multi-family and other occupancy type buildings. The Bureau also reviews plans that include new building construction, remodel on existing buildings, fire alarm systems, sprinkler systems and other plans. In 2022, the Bureau conducted 240 plan reviews, resulting in 192 plan review letters.

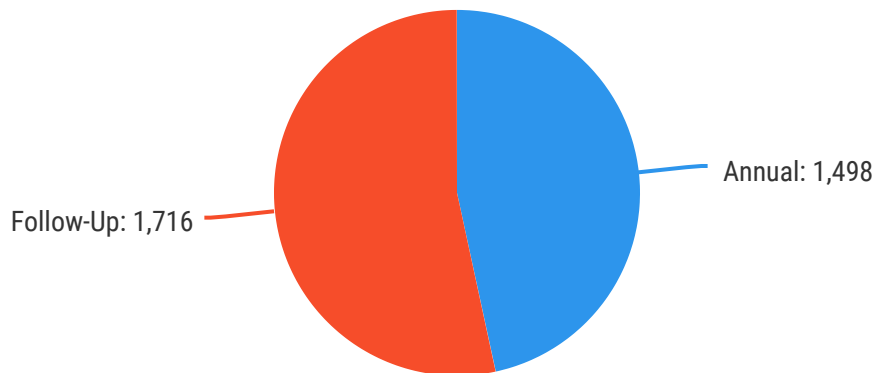
During the Bureau's annual inspections, inspectors look for conditions that may violate code requirements, lead to a fire or life safety issues such as unsafe construction practices, non-compliant

exiting situations, poor housekeeping, non-functioning exit or emergency lights and many other things. The Bureau regularly assesses risk levels for different businesses and bases its inspection frequencies on the fire risk level and life safety issues present within each building. Due to the return of the part time fire inspector position, the Bureau was able to reduce the frequency of inspection for all structures from 12-16 months in 2021, to 12-14 months in 2022. All high risk structures, including all Buffalo Grove schools, receive fire safety inspections on a 12 month cycle.



The Deputy Fire Marshal plays an important role in reviewing plans for new developments, including The Clove development pictured above.

2022 Inspections



Water Rescue Team

The Buffalo Grove Water Rescue Team has a wide range of capabilities including dive, sonar, swift water, and ice rescue. Through its regional memberships, the Team can be deployed to significant water rescue incidents throughout the Chicago suburbs and correspondingly, can call on resources from other area water rescue teams for incidents within Buffalo Grove. In order to maintain membership in the larger regional teams, each Buffalo Grove Water Rescue Team member must complete numerous hours of additional training.

In 2022, MABAS Division 4 obtained from Division 3 an underwater rover with sonar search capabilities, a fixed underwater camera, and a grab arm. This allows for searches in particularly deep bodies of water to take place without risk to in water divers. Under current team policy, the rover is utilized whenever possible for any searches taking place in waters 60 feet deep or greater. Buffalo Grove team members received training on the capabilities and use of the rover and can request it for use within Buffalo Grove.

Last year, the Water Rescue Team was dispatched to 4 incidents in Bristol, WI, Salem, WI, and McHenry, IL and completed over 200 hours of specialized training.



Dive team members regularly train at local ponds with other fire agency dive teams.



The underwater rover pictured above is a regional asset that assists with underwater search and rescue.

Technical Rescue Team

The Technical Rescue Team is made up of technicians from a variety of specialties including rope rescue, trench collapse, structure collapse, and confined space rescues. While these types of incidents can happen anywhere, they are most common in industrial or construction settings. To maintain their highly specialized skills and to ensure the Village has access to any needed resources in an emergency incident, the Department is a member of both Division 1 and Division 4 Technical Rescue Teams.

In 2022, the Team welcomed two new team members after they were fully certified in each of the Technical Rescue Team's four disciplines. With the addition of these two members, the Team now has a total of 5 members, with an additional firefighter in training. The pandemic's effects continued to be felt by the Technical Rescue Team as some trainings were canceled and others moved into a completely virtual environment. Despite these challenges, all members met the requirement of at least eight specialized trainings a year.

Team members were dispatched to 3 technical rescue incidents in 2022, including a structural collapse, a reported roof collapse, and a trench collapse. In nearly all technical rescue incidents, Buffalo Grove team members respond as part of a larger interagency technical rescue team.



One of the new team members undergoing rappelling training for high angle rescues.



Team members practice the use of a torch to cut steel in cases of structural collapses.

Hazardous Materials Team

Buffalo Grove's Hazardous Materials Team has the ability to respond to a wide variety of chemical spills and other industrial accidents. Each team member is trained to detect, identify, and contain or otherwise mitigate hazardous substance releases. High levels of awareness regarding personal protection gear and post-incident decontamination are necessary to ensure the safety of all team members. Due to their high level of knowledge regarding hazardous materials, team members are responsible for training all Department members on basic hazardous materials response and for regularly calibrating the Department's gas monitors. These monitors measure the quality of air within an area and identify levels of gases such as oxygen, carbon monoxide, and hydrogen sulfide. An exact calibration of these monitors ensures the safety of Department personnel during emergency incidents.

In 2022, the Team responded to one regional hazardous materials incident in a neighboring town. In that incident, a coolant line was cut in during the renovation of a commercial building. Buffalo Grove Hazardous Materials technicians assisted in providing technical assistance to the incident commander and helped to mitigate the incident. The Team added one new member in January 2022 and trained another team member to begin operations in January of 2023.



Pictured above, the Hazardous Materials Team participated in an anhydrous ammonia response training at the CAFT facility.



Decontamination after both trainings and incidents ensures any toxic chemicals do not remain in contact with the firefighter.

Fire Investigations Team

Each fire that occurs in the state of Illinois must result in a completed investigation by fire department staff. While small incidents can be investigated by on duty fire officers, significant fires require the presence of certified fire investigators. All investigations are based in the scientific method and utilize a seven step investigatory process.

Thorough fire investigations play an important role in preventing future fires by documenting product and vehicle issues that may be used to conduct recalls, evaluating codes and ordinances to determine if they are sufficient or need to be changed, determining if the criminal act of arson was committed and using the information gathered for possible prosecution, and informing affected residents of what steps they need to take after a fire to help them move forward. In 2022, there were 22 fires within the Village that required a fire investigation by a member of the fire investigation team.



After major fire incidents, investigators carefully photograph the scene to preserve evidence and aid in their investigation.

2022 marked a return to normal training procedures for the Team. Through MABAS Division 1, the Team had access to a variety of regional trainings and had the ability to call out additional fire investigators if needed for complex large scale fire incidents. Last year, all team members met their training requirements for the year. The team members are required to complete 100 hours of trainings and on-duty investigations every 4 years to maintain their fire investigation certifications through the Illinois Office of the State Fire Marshal. The Team currently has 8 certified fire investigators, with investigators present on all three of the Department's 24 hour shifts.

Public Education Team

While the Public Education Team's approach to community education and outreach will be forever altered by the pandemic, 2022 marked a return to in person events. Department members spoke at numerous events including at the Buffalo Grove Park District's Public Safety Breakfasts, a fire safety event at a local kindergarten, and a Touch-A-Truck styled event at a local daycare. The Department also participated in National Night Out, showing Engine 26 to attendees.

Last year, the Public Education Team worked to expand its collaboration with the Buffalo Grove Police Department. The Department's Open House returned in 2022 as a joint effort between the Fire and Police Departments. Thousands of residents visited Station 26 to see an extrication demonstration, a side by side burn display, and to learn about the Department's vehicles, equipment, and capabilities. After its inaugural success, the Halloween Drive Thru also returned in October 2022 as a joint effort between Fire and Police.

The Team also sought out additional training opportunities in 2022, with the Team Leader receiving a Fire & Life Safety Educator certification from the Illinois Office of State Fire Marshal.



As in years past, the Open House sprinkler demonstration was a community favorite in 2022.



Pictured above, a line out the door for the return of the Halloween Drive Thru at Station 26.

Contact Us



Postal Address:

Buffalo Grove

Fire Headquarters

1051 Highland Grove Drive
Buffalo Grove, Illinois 60089

Phone:

847-537-0995

Website:

www.vbg.org

Email:

fire@vbg.org

Acknowledgements

A special thanks is owed to photographer John Kleeman for the use of his photos in this and many of the Buffalo Grove Fire Department's publications. Many of the photos in this report were captured and prepared by John and his efforts have made a tremendous impact on the Department's ability to communicate effectively with the community it serves.