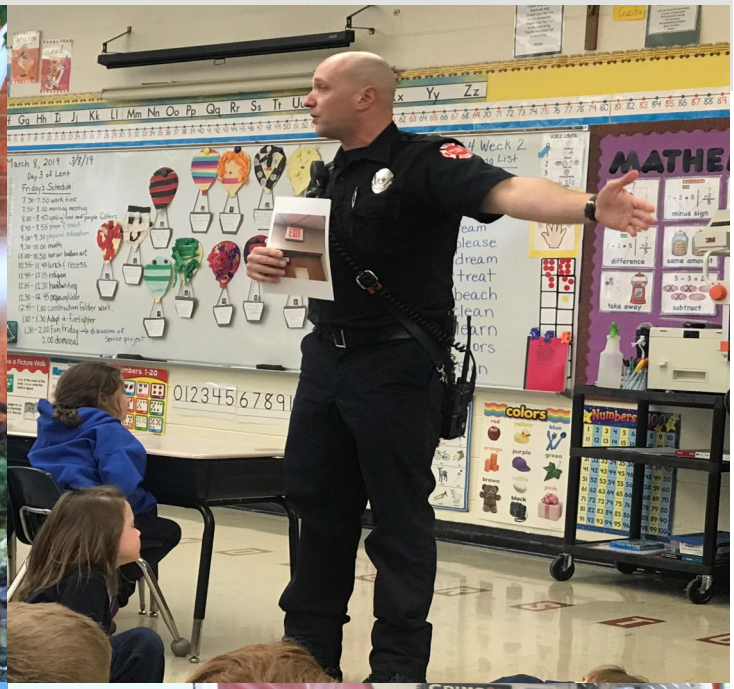
Crystal Lake Fire Rescue Department Annual Report 2019









SERVING WITH P.R.I.D.E.

Professional **R**eady **I**nnovative **D**edicated **E**mpowered

Gary J. Mayerhofer, City Manager

City of Crystal Lake

Dear Mr. Mayerhofer;

I present to you the 2019 Annual Report for the Crystal Lake Fire Rescue Department. This report outlines the efforts and accomplishments of the Department during the past year. I am pleased to provide this information to you, the City Council, the Trustees of the Crystal Lake Rural Fire Protection District, the Board Members of the Village of Lakewood, and the citizens of the Crystal Lake community. The support of each of these agencies leadership is key to our continued success in providing the professional services the Crystal Lake community has come to expect.

Listed below you will find highlights of the Department's accomplishments for 2019:

- Responded to 6,799 calls for service which represents the highest number of calls in a year for the Department.
- Purchased new dual band radios to operate on the State's Starcom 21 radio system that will provide improved quality and safety of radio communications for our day to day operations.
- Initiated a program to upgrade the radio communications to the City's 16 outdoor warning sirens.
- Purchased two new Stryker power load cot systems with assistance from an IRMA grant.
- Purchased two new ambulances and instituted a revised replacement program for future ambulances that will bring a better return on investment.
- Continued to maintain the Crystal Lake Wireless Alarm Network (CLWAN) and the installation of a redundant CLWAN system at Fire Station 3.
- Completed 595 Life Safety Inspections to occupancies within the community.
- Activated the automatic vehicle locators (AVL) to send the closest Fire Rescue unit to an incident.
- Continued our support to the community through participation in and donations to the Salvation Army, Crystal Lake Food Pantry, and Operation North Pole.

On behalf of the members of the Crystal Lake Fire Rescue Department, I thank you for the opportunity to serve the Crystal Lake community.

Sincerely,

Paul DeRaedt

Fire Rescue Chief

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Department Overview

The City of Crystal Lake is located in McHenry County, Illinois, approximately 45 miles northwest of the City of Chicago. The Crystal Lake Fire Rescue Department provides service for the City of Crystal Lake, the Crystal Lake Rural Fire Protection District, portions of Lake in the Hills, and the Village of Lakewood. The area served is approximately 51.2 square miles, with a resident population of nearly 56,000 based on the 2010 census. Services provided include fire protection, emergency medical care (Advanced Life Support), fire inspections, public education, and special team responses such as hazardous materials, dive rescue, trench, confined space, rope, and structural collapse. The City of Crystal Lake is the largest city in McHenry County, and the Crystal Lake Fire Rescue Department's service area includes four U.S. highways, a railroad (Union Pacific), three large lakes (Crystal Lake and Three Oaks Recreation Area), and McHenry County College. The Department also provides automatic aid to the Nunda Rural Fire Protection District, McHenry Township Fire Protection District, and the Algonquin / Lake in the Hills Fire Protection District. Mutual Aid is provided to communities in McHenry, Lake, and Kane Counties through the Mutual Aid Box Alarm System (MABAS).

The Fire Rescue Department provides 24-hour emergency response, operating out of three stations with 69 personnel. Staffing is provided by three shifts of full-time firefighters on a 24/48-hour schedule. Approved full-time positions include 3 Battalion Chiefs, 9 Lieutenants, and 48 firefighter/paramedics. Full-time firefighters and Lieutenants are members of the Crystal Lake Professional Firefighters Association, Local 3926, of the International Association of Firefighters. Emergency response minimum staffing is 15 personnel per shift. Administrative staffing positions include Fire Rescue Chief, Deputy Chief, Bureau Chief of Training, Bureau Chief of Fire Prevention, two Fire Inspectors, and two Administrative Assistants. In 2019, the Department responded to 6,799 incidents of which over 65% involved emergency medical care.

Year in Review

Deputy Fire Rescue Chief– Christopher Olsen

Polar Vortex

We began the year with unusually cold temperatures and wind chills not experienced in many of our lifetimes. Sub-zero wind chills dipped to –50° Fahrenheit for a three-day period at the end of January and beginning of February.

The Fire Rescue Department prepared by adding additional staffing of four personnel to assist on ambulance calls and miscellaneous investigations. This lessened the possibility of the fire engine's pumps freezing and causing damage to the vehicles.

Fortunately, there were no structure fires reported within the City or McHenry County during this deep freeze.

Outdoor Warning Sirens

The City initiated the process of upgrading the outdoor warning sirens to an digitally encrypted radio system that operates on the UHF wavelength.

There is also an integration with the National Weather Service (NWS) that will activate the sirens automatically when a polygon for a tornado warning is issued for our community. This allows for quicker notification to the public in these conditions.

The upgrade to the entire system is expected to be operational in early 2020.

Emergency Operations Training

In May, training was held with City staff on changes to the Emergency Operations Center (EOC) Call Log system. This system allows staff to more efficiently address both emergency and non-emergency calls for service during high call volume such as a severe weather event.

In October, City staff participated in a simulated opening of a ComEd Joint Operations Center (JOC). The JOC is activated when an electrical outage affecting a significant number of customers in the Com Ed service area in McHenry County exceeds set parameters.

Automatic Vehicle Locators (AVL's)

Each of the computers in our ambulances and pumpers are equipped with an automatic vehicle locator. This means the computer is capable of providing the location of these vehicles to our dispatching software. The benefit is that the closest unit to the call is recommended rather than which fire station is assigned to that area.

Turning this feature on should improve response times, as well as ensuring the closest available vehicle is dispatched each time. This feature was turned on in May of 2019.

Community Participation

Operation North Pole (ONP)

Once again, the Fire Rescue Department participated in Operation North Pole (ONP) at the Pingree Road Train Station. ONP provides for one day where chronically or terminally ill children and their families spend a day at the "North Pole".

As part of the activities ONP provides, each child receives $300 worth of toys. The toys are purchased by ONP donations received from various sponsors. This is always well-received and other local fire departments attended and assisted as well.

Salvation Army Red Kettle Fundraising Campaign

Members of the Crystal Lake Fire Rescue Department again participated off duty in the Salvation Army's Red Kettle fundraising campaign during the holiday season. This year, a fundraising challenge amongst the McHenry County fire departments was held on December 21st. On this one day challenge, Crystal Lake firefighters raised $3,282.27. The total raised by the McHenry County fire departments on this one day was $23,180.63.

Crystal Lake Food Pantry Donation

In lieu of holiday gifts, the members of the Crystal Lake Fire Rescue Department personally donated $1,000.73 to the Crystal Lake Food Pantry. This donation equated to just over $8,000 of buying power the Food Pantry has through the Northern Illinois Food Bank.

Starcom 21 Radio Network

The Fire Rescue Department began the process of switching over from the City's VHF radio system to the State of Illinois Starcom 21 UHF radio system. This system provides for improved clarity in radio transmission at greater distances. The UHF radio signal is able to penetrate buildings better, therefore improving communications and safety for our firefighters.



Safety House Revitalization

In 1994, the Crystal Lake Fire Rescue Association purchased the Safety House for public education events. This has been a vital tool in delivering our fire safety message to many children throughout those years.

After years of use, this vehicle was in need of revitalization. Through funding received from the Wal-Mart Safe Communities Grant, we were able to revitalize the exterior of the Safety House. Work included a fresh coat of paint and graphics. Refurbishment of the interior will commence in the next year.





Annual Department Awards

Annual awards were presented to Fire Rescue personnel. Members were recognized in three award categories: Department Service Awards, EMS Service Awards, and Department Recognition Awards.

Service Awards

BC Richard J. Kaiser Jr.	25 years
Lt. Chris Angelo	15 years
Lt. Darrell Cook	15 years
Lt. Jim Sustek	15 years
FF/PM Brian Marino	15 years
FF/PM Mike Lucas	15 years
FF/PM Palmer Pace	10 years
FF/PM Sergio Delgado	5 years
FF/PM Megan Miller	5 years

EMS Service Awards (years certified with IL Dept. of Public Health)

Lt. Darrell Cook	20 years
Lt. Brian Tamason	20 years
Lt. John Volenec	20 years
FF/PM Joe Forsberg	15 years
FF/PM Adam Fowles	15 years
FF/PM Mike Hurley	15 years
FF/PM Tim Kerley	15 years
FF/PM Tom Linneman	15 years
FF/PM John Ryan	15 years
FF/PM Jim Spivey	15 years
FF/PM Dane Szatkowski	15 years
FF/PM Matt Klug	10 years

Annual Department Awards

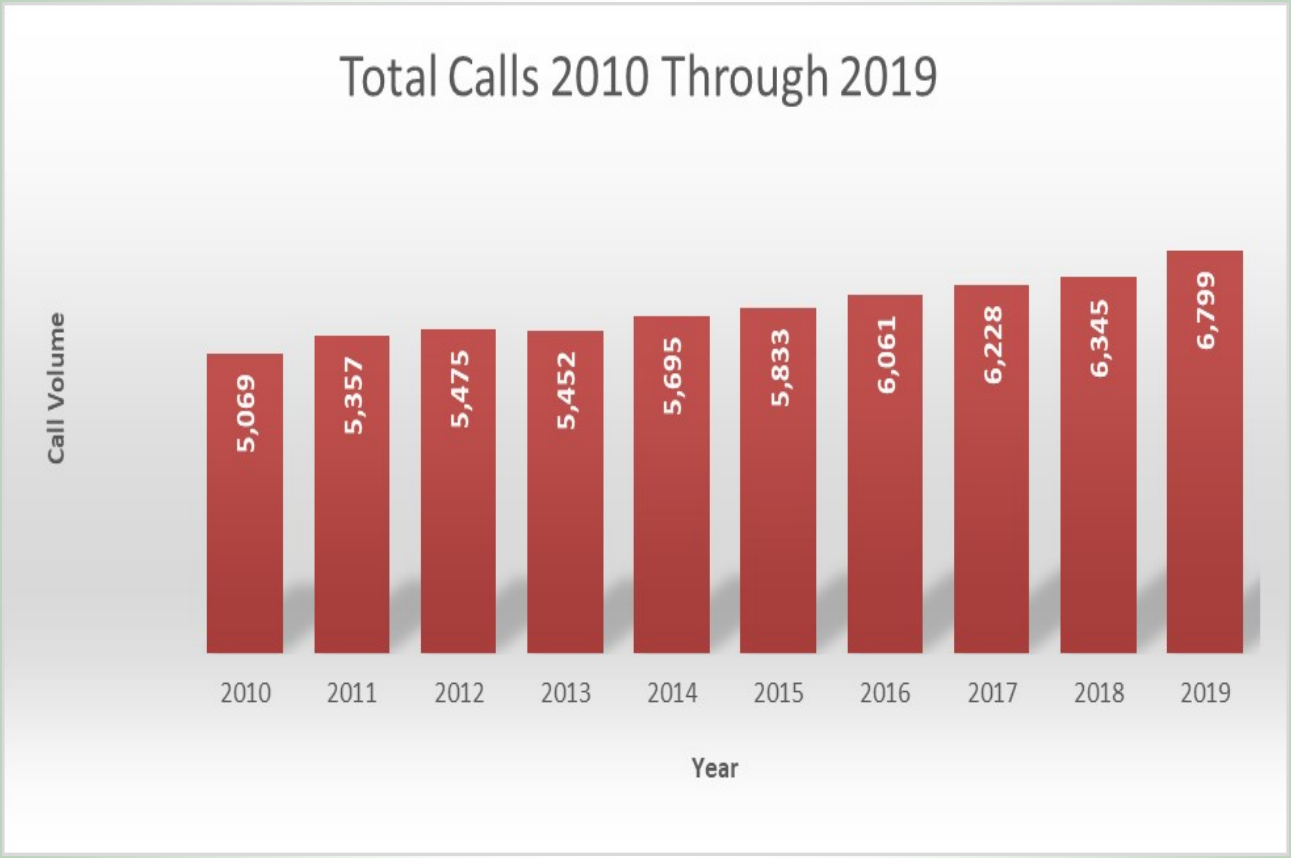
Type of Award	Date of Incident	Description	Crew Receiving Award
Life Saving Recognition	5/16/2019	Actions taken at a medical call that led to the successful resuscitation of the patient.	Lt. Sustek, FF/PMs Brechbiel, K. Hagen, and Kownacki
Unit Performance Award	10/1/2019	Actions taken at a structure fire with a high degree of life safety hazard.	DC Olsen, BC Kaiser, Lts Bedore, Grischow, and Volenec, FF/PMs Chociej, Delgado, S. Hagen, Jakubowicz, Kaltenbach, Kempe, Landwer, Leuck, Marino, Menzimer, Miller, and Wisz

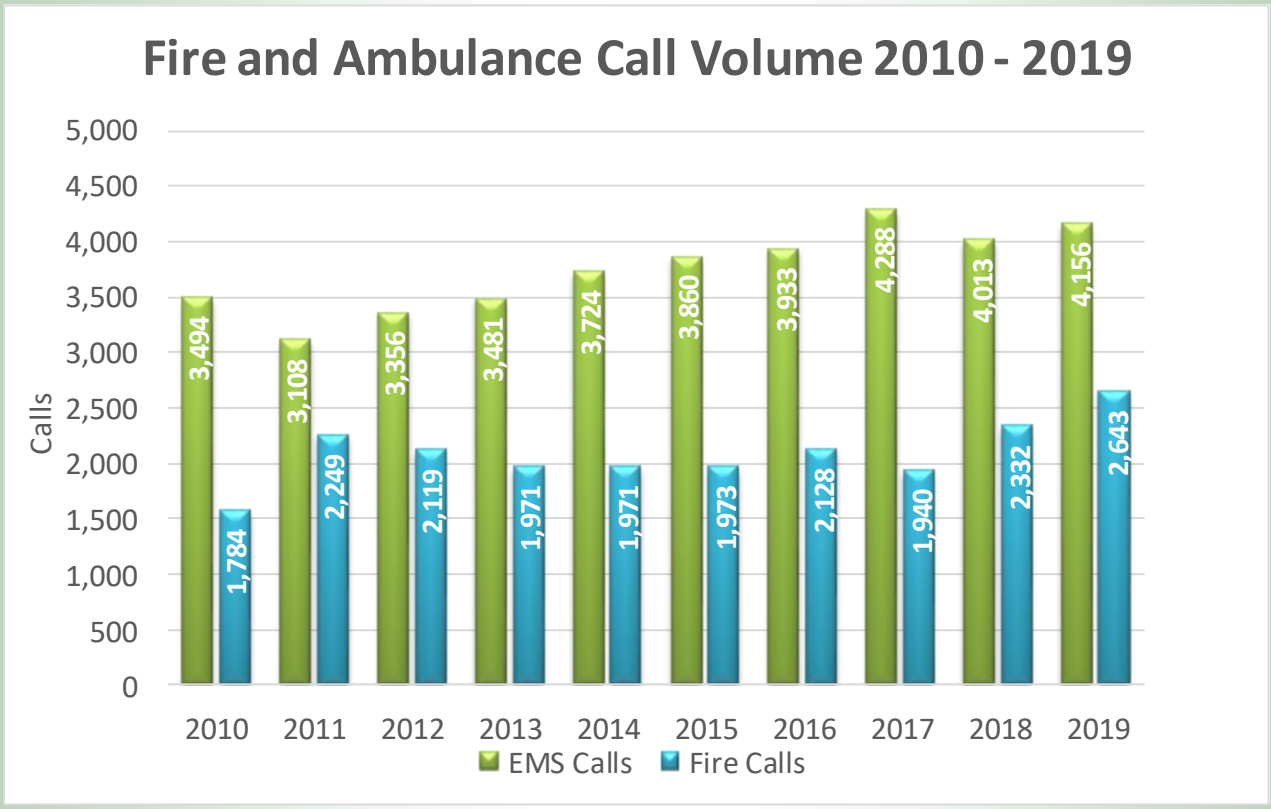


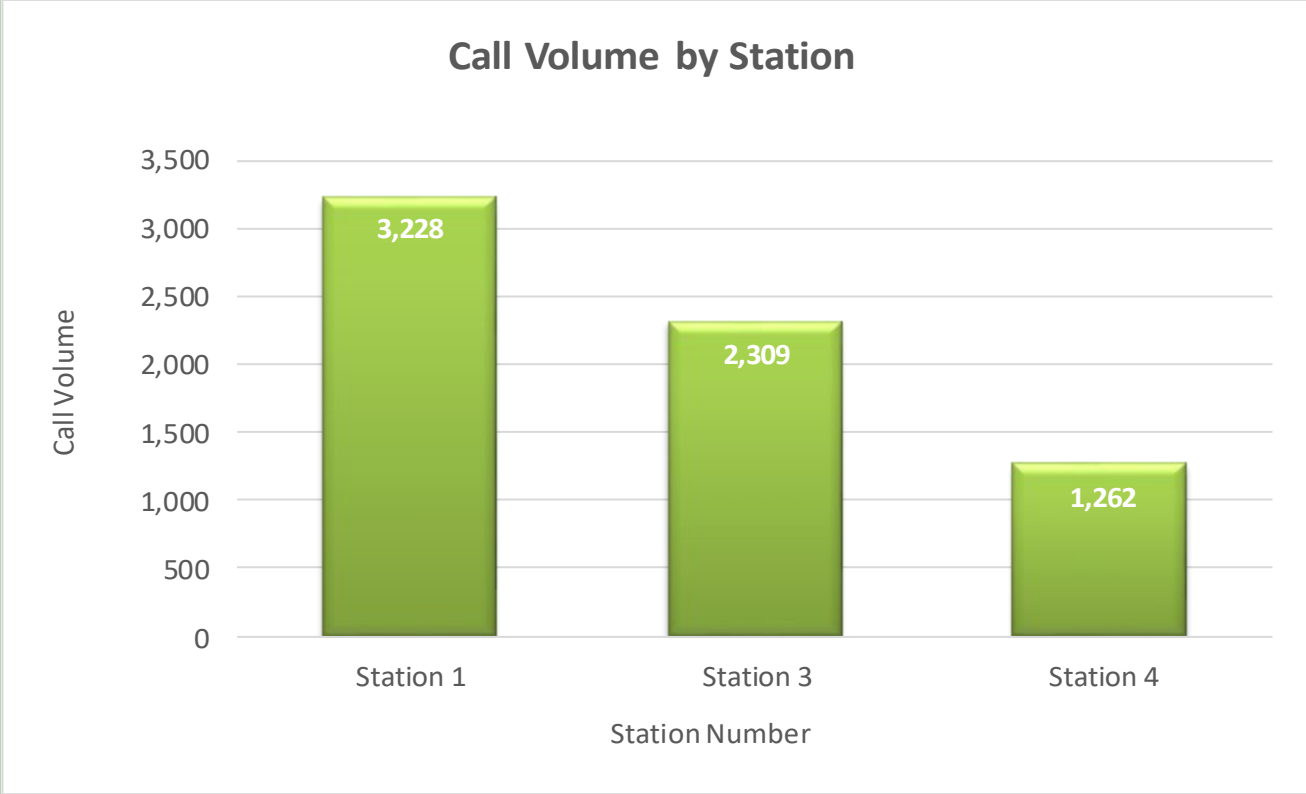
Incident Statistics

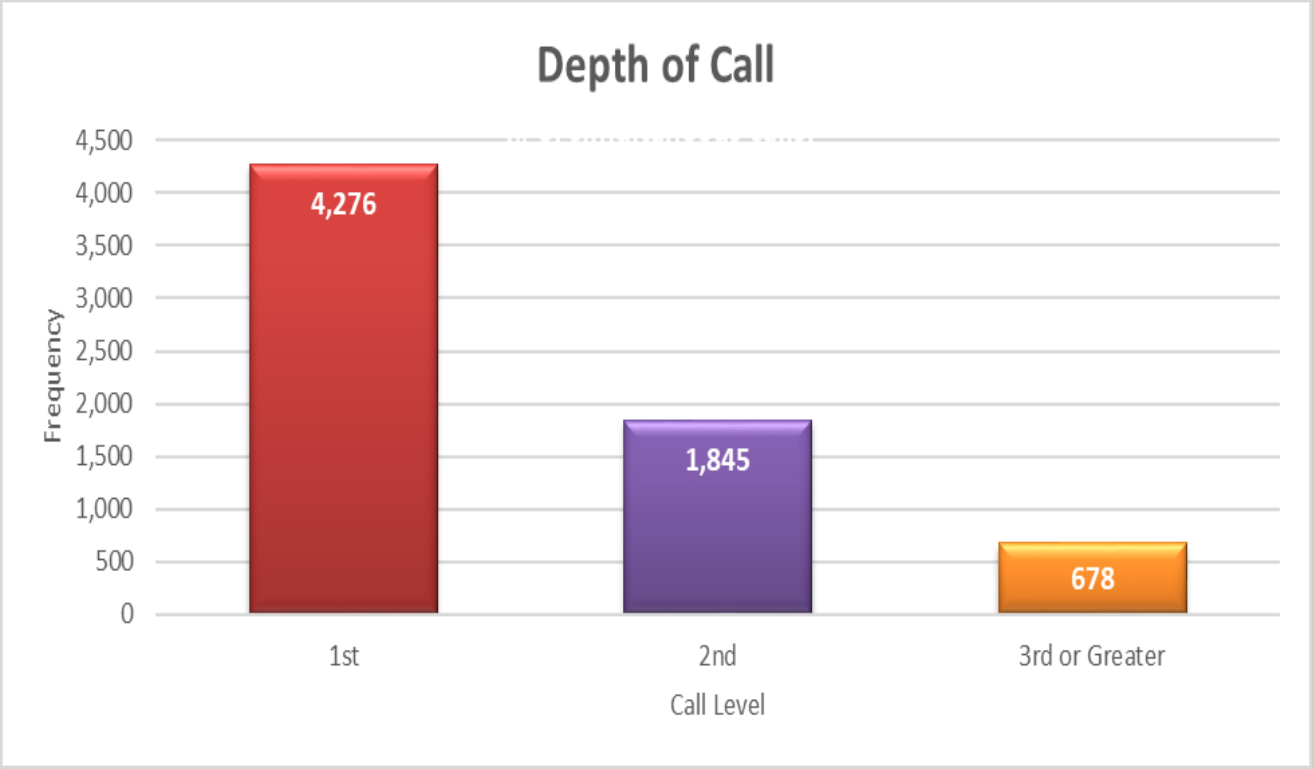
Battalion Chief – William Whyte

Incident Type	#2017	%2017	#2018	%2018	#2019	%2019
Fire	71	1.14%	91	1.43%	59	0.87%
Over Pressure, Rupture, Explosion	2	0.03%	0	0.0%	2	0.03%
Rescue and EMS Incidents	4,288	68.85%	4,400	69.35%	4,556	67.00%
Hazardous Conditions (No Fire)	298	34.79%	206	3.25%	231	3.40%
Service Call	550	8.83%	562	8.86%	564	8.30%
Good Intent Call	240	3.85%	342	5.39%	342	5.03%
Fire Alarms	759	12.19%	732	11.54%	1,032	15.18%
Special Incident Type	20	0.32%	12	0.18%	13	0.19%
Total	**6,228**	**100.00%**	**6,345**	**100.00%**	**6,799**	**100.00%**
Jurisdiction	**#2017**	**%2017**	**#2018**	**%2018**	**#2019**	**%2019**
City of Crystal Lake	5,152	82.72%	5,194	81.86%	5,604	82.42%
Crystal Lake Rural FPD	683	10.97%	676	10.65%	743	10.93%
Lakewood	264	4.24%	284	4.48%	285	4.19%
Out of District	129	2.07%	191	3.01%	167	2.46%
Total	**6,228**	**100%**	**6,345**	**100%**	**6,799**	**100%**


Total Calls 2010 Through 2019
Call Volume
5,069
5,357
5,475
5,452
5,695
5,833
6,061
6,228
6,345
6,799
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Year


Fire and Ambulance Call Volume 2010 - 2019
Calls
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
3,494
1,784
3,108
2,249
3,356
2,119
3,481
1,971
3,724
1,971
3,860
1,973
3,933
2,128
4,288
1,940
4,013
2,332
4,156
2,643
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
EMS Calls
Fire Calls


Call Volume by Station
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Call Volume
3,228
2,309
1,262
Station 1
Station 3
Station 4
Station Number


Depth of Call
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Frequency
4,276
1,845
678
1st
2nd
3rd or Greater
Call Level

Crystal Lake Fire Rescue utilizes automatic aid agreements with specific neighboring departments in order to support responses to structure fires. These fires require many tasks to be accomplished in order to safely and effectively extinguish the fire. Automatic aid units are dispatched at the same time as Crystal Lake units, unlike mutual aid where Crystal Lake requests the assistance after confirmation of a working fire.

Under automatic aid, Crystal Lake Fire Rescue responds to each jurisdiction and we receive automatic aid in return. Below is listed the number of times in 2019 Crystal Lake received or provided automatic aid:

Agency	Received Automatic Aid from Crystal Lake	Provided Automatic Aid to Crystal Lake
Algonquin/Lake in the Hills FPD	21	23
McHenry Township FPD	9	19
Nunda Rural FPD	2	6

Crystal Lake Fire Rescue Department Fire Suppression Response Times For Each Station

	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:02	0:56	1:11
Average Turn Out Time	1:08	1:08	1:00
Average Travel Time	5:03	5:04	5:31
Average Alarm To Scene Time	6:18	6:15	6:34

Crystal Lake Fire Rescue Department EMS Response Times For Each Station

	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:00	1:05	0:52
Average Turn Out Time	1:06	1:08	1:02
Average Travel Time	5:16	5:02	4:37
Average Alarm To Scene Time	6:30	6:10	5:39

Fire Prevention Bureau

Bureau Chief of Fire Prevention– Chris Kopera

The Fire Prevention Bureau is a critical component of the Crystal Lake Fire Rescue Department's effort to protect the citizens and visitors in Crystal Lake against the loss of life and property through its enforcement of adopted building and fire codes. The goal of the Fire Prevention Bureau is to provide effective service delivery in the areas of public education, fire protection systems installation and use, construction project plan reviews and inspections, and fire code compliance. The Fire Prevention Bureau ensures code compliance through the thorough examination of building plans, inspection of buildings, structures, and facilities, and application of fire and life safety codes and standards.

Providing education to building designers, contractors, business owners and their employees about fire prevention practices can reduce the chance of fire in their buildings. The goal of enforcement is to reduce fire hazards, as well as mandating the proper installation and maintenance of a building's fire and life safety features. Two major functions of the Fire Prevention Bureau are:

- Review of engineered building plans for all life safety systems.
- Inspection and testing to any fire alarm, sprinkler, or engineered suppression system.

Plan Reviews

During calendar year 2019, the Fire Prevention Bureau completed 540 plan reviews. The Fire Prevention Bureau strives to complete reviews within the following timelines for the requesting department or contractor; within 10 business days for 1st reviews and within 5 business days for re-submittals. The annual goal is to have 98 percent of the reviews completed within the timeframes. For the calendar year 2019, 99.45% of the reviews were completed within the timeframes. Listed on the following page are the types and amounts completed.

Type of Review	Number of Reviews 2017	Number of Reviews 2018	Number of Reviews 2019
Building Permit	206	235	301
Sprinkler System	41	64	51
Fire Alarm System	64	73	61
Wet Chemical/Clean Agent	9	9	5
PUD	9	20	7
SUP	17	4	6
Special Event	30	30	42
TUP	0	0	0
Variation	1	2	0
Cursory	39	37	24
FOIA	49	68	40
County-Resident./Commercial	16	10	2
Annexations	0	0	1
Total	**481**	**552**	**540**

Inspections / Code Enforcement

The Fire Prevention Bureau completed 853 inspections in calendar year 2019. Listed below are the type and total number of inspections completed:

Inspection Type	Number of Inspections 2017	Number of Inspections 2018	Number of Inspections 2019
Construction/Status	375	351	374
Fire Alarm	90	94	81
Sprinkler System	118	114	123
Hood or Other Suppression	16	49	16
Life Safety Follow Up/Target Hazard	156	136	99
Occupancy	99	116	127
Special Event	15	12	20
Mobile Food Truck	10	12	13
Total	**879**	**884**	**853**

Life Safety Inspections

During calendar year 2019, the Fire Rescue Department conducted 595 Life Safety Inspections.

Life Safety Inspections	Calendar Year 2017	Calendar Year 2018	Calendar Year 2019
Initial Inspections	765	892	444
Re-Inspections	321	285	151
Total	**1,086**	**1,177**	**595**

Public Education

Public Education Coordinator – Karyn Dorfman

As part of our Fire Prevention Bureau, the Crystal Lake Fire Rescue Department co-ordinates public education visits, events, and lessons throughout the year to teach the public about fire and health safety. We have implemented a variety of lesson plans to educate all age groups, as well as customized lessons for special needs or circumstances. These events include station tours, classroom safety lessons, senior groups, Girl and Boy Scout troops, observed fire drills, fire extinguisher trainings, and more.

In 2019, the Crystal Lake Fire Rescue Department expanded our "Adopt-A-Firefighter" program into some of the public elementary schools. After a successful inaugural year in two private schools, we met with District 47 and asked if they would consider working with us to expand the program. The partnership was well received as it met a need within the District's adopted curriculum.

Eight of our firefighters participated with first grade students at Woods Creek, Glacier Ridge, St. Thomas, and Immanuel Lutheran schools. The firefighters coordinate with the teachers to schedule five visits each lasting 20-30 minutes throughout the school year, each time teaching a different safety lesson. This program has been extremely well-received by the teachers, firefighters, and students alike.

Our annual Fire Prevention Week Open House was held on October 12, 2019. Despite the unseasonably cold temperatures, we still had approximately 350 people bundled up to come learn about fire safety. The fashion show was a big hit again this year, and the children loved spending the morning with 'Marshall'. We had volunteers from the Crystal Lake Police Department, SEECOM, Nicor, ComEd, McHenry County Substance Abuse Coalition, Crystal Lake Food Pantry, and the Salvation Army all come out to help make the event a success.





Public Education Event	Number of Participants
Block Parties	838
Blood Pressure Checks	76
Career Talks	281
Classroom Readings	18
Community Events	2,220
Fire Extinguisher Demonstrations	368
Fire Drills	12,631
First-Aid Talks	45
Make-A-Wish	12
Open House	350
Preschool Talks	963
Safety House	170
Safety Talks	466
Senior Safety Talks	6
Station Tours	967
Total	**19,411**







In 2019, the Crystal Lake Fire Rescue Department participated in four major events that provided an opportunity to teach children and adults about fire safety.

National Night Out—Sponsored by the Crystal Lake Police Department, this nationally recognized event provides a great opportunity to showcase the Fire Department's equipment and talk to families about fire safety.

Johnny Appleseed Festival—This popular and highly attended family event features the Fire Department's Fire Safety Trailer and Aerial Ladder Truck.

Crystal Lake Fire Rescue Open House—Fire equipment and Station One are on display with activities for adults and children. Children have the opportunity to spray an actual fire hose, participate in a firefighting obstacle course, and learn how to escape a fire in our safety trailer. Everyone is welcome to view the Department's apparatus, tour the fire station, and witness a landing by Flight for Life.

Trucks and Kites Festival—Organized by the Crystal Lake Park District, a fire engine is brought to Lippold Park, where children and families can come to see the fire engine and receive information on how to plan and practice fire escapes at home.







Specialized Rescue Teams

Dive Rescue Team Coordinator – Lieutenant Christopher Bedore

Training

In 2019, the Crystal Lake Fire Rescue Dive Rescue team members met or exceeded all annual required training by the MABAS Division 4 & 5 Special Rescue Teams (SRT). The Crystal Lake Dive Rescue Team trains a minimum of once a month. The team currently has six divers with two openings to be filled in 2020.

- In January, the Dive Rescue team began their annual SCUBA skills assessments. These include: ascent, descent, clearing the mask, buddy breathing, buoyancy and swimming skills. These skills are requirements for membership on the MABAS 4 & 5 Dive Team.
- Dive drills were conducted at Three Oaks Recreation Area during the months of February and May through November.
- In February and March, the team conducted ice dives in accordance with SRT guidelines. This involved a simulated and submerged victim under the ice.
- Each Spring and Fall, the divers assist staff at Three Oaks Recreation Area in the placement and retrieval of buoys in the swimming areas. This is integrated into the regular dive drills in May and October.
- Various other drills included members of other fire departments and involved search patterns and other equipment and skills confidence building.
- The Dive Rescue Team participated in becoming swift water certified this year.





Technical Rescue Team Coordinator – Lieutenant Dan Grischow

Incidents

During 2019, the Technical Rescue Team (TRT) had one callout for service. In May, the TRT responded to Algonquin to assist with a person trapped under a large piece of equipment. This was a complicated extrication taking an extended amount time to free the victim.

Equipment

Crystal Lake Fire Rescue continues to house the MABAS 4 & 5 hook truck and two roll off containers at Station 3. These containers contain tools and specialized equipment that team members can use to handle almost any type of specialized rescue incident. One container has the equipment needed for vertical, confined space, and structural collapse rescues (TRT 5). The other container is specifically designated for trench rescues (Trench 5). It contains equipment and a lumber cache. All Crystal Lake Fire Rescue members are trained to drive and load canisters on the hook truck.

Training

Crystal Lake Fire Rescue TRT technicians attended multiple drills in 2019 including the following disciplines:

- Rope Rescue
- Confined Space Rescue
- Trench Rescue
- Structural Collapse

Crystal Lake's eight TRT technicians attended over 300 hours of rescue training this year. Crystal Lake hosted a confined space drill in January, structural collapse training in July, and in October, three rope rescue drills at DeLong Grain in Ridgefield.



Haz Mat Team Coordinator – Lieutenant Dan Grischow

Crystal Lake Hazardous Materials Team members, like the TRT members, are part of the MABAS Divisions 4 & 5 Specialized Response Teams. This involves a minimum commitment of 40 hours of hazardous materials training each year. Technicians train with specialized monitors, fully encapsulated Level A suits, and a host of other specialized equipment. The Haz Mat Team is responsible for controlling and mitigating hazardous materials incidents, including: identification, assessment, containment/confinement, and decontamination.

Incidents

The Crystal Lake Hazardous Materials Team responded to five incidents in 2019.

- In April, technicians responded to Beach Park in the early morning hours for an anhydrous ammonia leak.
- On May 3rd, a silicone factory exploded in Waukegan. Technicians assisted throughout the night with decontamination of firefighters due to the chemicals present.
- In August, our personnel responded to Barrington on two occasions for a chlorine cylinder leak.
- Technicians responded in November to Round Lake for an ammonium nitrate spill at a railroad yard.

Training

Crystal Lake has four hazardous material technicians. Crystal Lake technicians attended over 160 hours of continuing education in 2019. Crystal Lake technicians are also used to train Department personnel on hazardous materials awareness and operations.





Emergency Medical Services (EMS)

EMS Coordinator – Lieutenant Heidi Olsen

EMS Statistics – 2019

Transport Destination	Number of Patients	% of Patients
Northwestern McHenry	1,170	24.60%
Northwestern Woodstock	645	13.56%
Northwestern Huntley	1,187	24.95%
Advocate Good Shepherd	339	7.12%
Advocate Sherman	74	1.56%
Other	2	0.04%
Non-Transport	1,340	28.17%
Total	**4,757**	**100%**

Services Provided	Number of Patients	% of Patients
Advanced Life Support	2,156	45.32%
Basic Life Support	2,601	54.68%
Total	**4,757**	**100%**

EMS Incident Outcome	Number of Patients	% of Patients
Hospital Transport	3,417	71.83%
Non-Transport	1,340	28.17%
Total	**4,757**	**100%**



Regulatory Compliance

Crystal Lake Fire Rescue Department operates a total of 6 ambulances, 3 engines, and 1 ladder truck that carry basic and advanced life support equipment. This equipment is regulated by the Illinois Department of Public Health (IDPH). IDPH inspects each vehicle on an annual basis. In 2019, all of the Department's vehicles once again successfully passed inspection.

Equipment

The Crystal Lake Fire Rescue Department purchased a fourth power cot this year; the Stryker Power-Pro XT. All four front line ambulances are now equipped with these cots. To enhance the benefits of the power cot, the Department took delivery of its first Stryker Power Load system. This system allows for the patients to be loaded into and out of the ambulance without the employee repeatedly lifting the weight of the cot and the patient. This allows for additional safety to the patient and the crew. Power cots combined with the power load system reduce workers' compensation costs, injuries, and lost and modified workdays. With another year of increase in hospital transports, this equipment is beneficial to the Department, the City, and the citizens we serve.



Last year, Crystal Lake Fire Rescue personnel conducted trials of automatic CPR devices. These devices provide high quality, continuous CPR. They provide CPR while the patient is being moved and during transport, while allowing the paramedics to provide ALS skills. We are excited to announce the purchase of four LUCAS automatic CPR devices, which are located on all front line ambulances. These devices have significantly increased the blood flow to the brain during a cardiac arrest allowing for an anticipated increase of patients achieving return of spontaneous circulation (ROSC) with a good neurological outcome.



Training Bureau

Bureau Chief of Training – Richard Kaiser Jr.

Training is crucial to ensuring benchmark emergency service delivery to our community. Training requirements for Crystal Lake Fire Rescue personnel are outlined by several organizations such as the Occupational Safety and Health Administration (OSHA), Illinois Department of Labor (IDOL), and National Fire Protection Association (NFPA). Crystal Lake Fire Rescue Department personnel participated in over 14,600 hours of training in order to learn new skills and remain proficient in all areas of emergency operations.

The following trainings were accomplished through the ongoing commitment, hard work, and support from Crystal Lake Fire Rescue personnel:

In 2019, each member of the Crystal Lake Fire Rescue Department participated in approximately 212 hours of training for the year, or 17.66 hours of training monthly.

- Seven personnel began the Fire Officer I program and three personnel began the Company Officer program (COFO) to further their training to prepare for advancement within the fire service.
- One member completed the Advanced Fire Officer program to further their education and to prepare for advancement within the fire service. A requirement of this certification is the successful completion of the Fire Department Incident Safety Officer course.
- Hosted a Resiliency Development for First Responders class. 28 members of our Department and several outside departments participated in this one day class.
- One fire investigator had the opportunity to attend a free class at New Mexico Technical University to learn about explosives, improvised explosive devices (IED), and fire investigations. Information learned was brought back and shared with our membership.
- All personnel completed a Flight for Life bi-annual in-service training. This training is required by Flight for Life to ensure the safety of our personnel at incidents when a helicopter is utilized for transport.
- All members have completed the required King Vision airway management training in all four quarters to comply with the McHenry/Western Lake County Emergency Medical Services System requirements. This training keeps personnel proficient in airway management procedures on EMS calls.
- Five personnel attended a 40-hour Fire-ground Company Officer class at the Illinois Fire Service Institute in Champaign, IL. This training provides knowledge on how to begin running an incident and organizing crews to complete tasks while keeping accountability of the members on the scene prior to a Command Officer arriving and transferring command responsibilities.
- Personnel trained on the functions and features of the new dual band radios as part of the Department's migration to the State's Starcom 21 radio network.
-

- The Department's Technical Rescue Team provided training on a new fall protection system to be used by all personnel operating in Ladder Truck 381. This is a safety device that will prevent an employee from falling to the ground while performing necessary duties from the aerial platform.
- Participated in the Com-Ed Joint Operations Center (JOC) Virtual Drill.

Fire Rescue personnel also conducted several trainings this year in support of our community:

- Hosted a MABAS TRT Drill at the Delong Grain storage facility on Ridgefield Road.
- Presented information to the Emergency Communications Registered Nurse (ECRN) Program. This class is hosted by Northwestern Medicine McHenry's EMS office. Crystal Lake has provided a positive experience in the past and Northwestern Medicine sends all of their nurses to Crystal Lake for the required 8 hours of ride time.
- The McHenry County College Fire Science Program offers an Introduction to Fire Science class for students interested in becoming a firefighter. The program uses the Crystal Lake Fire Department and SEECOM as one of the "stopping points" to talk to the Training Chief about how a fire station operates on a daily basis.
- A member of our Dive Rescue Team presented a water rescue basic operations talk to the new lifeguards at Three Oaks Recreation Area.



Department personnel have spent many hours both in the classroom and on the training ground. The following list reflects additional educational opportunities that were attended in 2019:

- Advanced Breathing Apparatus Specialist
- Advanced Rescue Skills Course – TRT Rope Training
- Advanced Rigging TRT – Rope Training
- Fireground Operational drills (ladders, water supply, hose, etc.)
- Gas Detection Class
- Human Trafficking in McHenry County Seminar
- International Fire Code Seminar
- Multi-Hazard Emergency Management for Higher Education
- School Fire Inspector Course
- Strategic Planning Workshop for Specialized Rescue Teams
- Fire Sprinkler Hydraulics
- Supervision of Public Safety Personnel
- Building tours/Pre-plans/Target Hazard Identification
- EMS Protocol, Procedures, and Pharmacology
- Various Computer Software Webinars
- Various NFPA and Fire Prevention Classes
- Kinder Morgan Pipeline Familiarization and Safety
- Incident Command for Technical Rescue Incidents
- Self-Contained Breathing Apparatus Competency Drills
- Engine and Truck Operations
- Fire & Arson Investigation Continuing Education
- Understanding Fire Alarm Basics/Plan Reviews/Sprinkler Plan Reviews

Professional Development and Certifications achieved by Fire Rescue personnel in 2019:

- Fire Department Safety Officer
- Instructor I and II
- NFA Command & Control of Incident Operations
- Rope Operations
- Structural Collapse Operations
- Swift water Technician
- Trench Operations
- Vehicle Machinery Operations
- IRMA Harassment Training
- Blue Card Command Training
- Chief Fire Officer
- NFA Decision Making for Initial Company Operations
- Severe Weather Spotters Class
- Water Operations & Technician Levels
- Confined Space Operations
- CPR Instructor Recertification
- Fire Inspector I and II
- Hazardous Materials Incident Command
- Hazardous Materials Technician

Safety Committee

Chairman — Bureau Chief Richard Kaiser Jr.

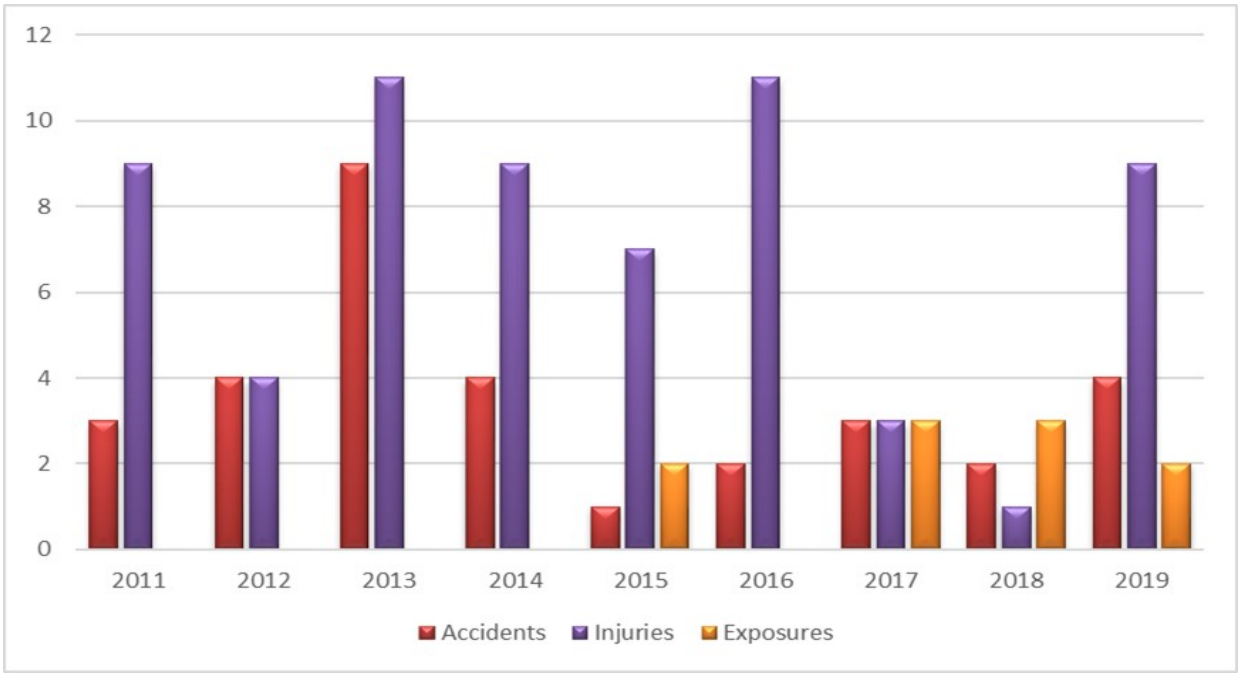
The Crystal Lake Fire Rescue Department continues to emphasize safety in our work practices and procedures. The health and safety of our personnel is paramount to be able to effectively perform our duties. The Department's Safety Committee continues to be an integral part of the City's risk management plan.

Following are several of the Crystal Lake Fire Rescue Department's activities during the past year in the promotion of a safe working environment:

- Continued driver education training.
- Continued promotion of the Department's Behavior Observation Program.
- Focused monthly safety messages

Accident/Injury Investigations

The Fire Rescue Department Safety Committee conducted a total of 10 accident/injury/exposure investigations for the year 2019. The following graph shows a comparison between previous years' accident/injury/exposure incidents:



Fire Investigation Program

Lead Investigator—Deputy Chief Christopher Olsen

In 2019, the Crystal Lake Fire Rescue Department investigated a total of 11 fires within our jurisdiction, and one investigation assisting the Marengo Fire Protection District. Throughout MABAS Division 5, fire investigators are able to assist each other in determining the origin and cause of fires. There were several significant fires in which the fire had caused major damage to the structures. One commercial building sustained irreparable damage while another fire involved a condominium building in which the entire 19 unit building sustained major damage. Fortunately, in all cases, there were no fatalities or injuries reported to the occupants of the structures.

Fires are classified in one of four categories including: Accidental, Incendiary, Natural, or Undetermined. Most of the fires we investigate fall into the accidental or undetermined categories. Although the investigator may be able to determine where the fire originated, it is not as easy to determine exactly what was the cause. Oftentimes, it takes more testing to determine the exact cause and this is primarily the responsibility of the insurance company's fire investigators.



This photo shows the area of origin for one fire. The fire started low and spread upward and into the attic area.



This fire originated with a vehicle parked in the garage and spread through the entire unit via the interior and exterior of the building.

New Members

On February 11th, Karyn Dorfman joined the staff of the Crystal Lake Fire Rescue Department as an Administrative Assistant. Karyn comes to us from the McHenry County State's Attorney's Office with many years of administrative experience.

Karyn resides in Carpentersville with her husband Zach. We welcome her to our family.



Station Locations



Fire Station One
100 W. Woodstock Street



Fire Station Three
844 Virginia Road



Fire Station Four
8705 Bard Road

Department Roster

Officers

Paul DeRaedt	Fire Rescue Chief
Christopher Olsen	Deputy Fire Rescue Chief
Christopher Kopera	Bureau Chief of Fire Prevention
Richard Kaiser	Bureau Chief of Training
Jerry Larsen	Battalion Chief – Black Shift
Casey Cork	Lieutenant
Brian Tamason	Lieutenant
John Volenec	Lieutenant
Bill Whyte	Battalion Chief – Red Shift
Darrell Cook	Lieutenant
Heidi Olsen	Lieutenant
James Sustek	Lieutenant
Bob Kohley	Battalion Chief – Gold Shift
Chris Angelo	Lieutenant
Chris Bedore	Lieutenant
Dan Grischow	Lieutenant
Joyce Stevenson	Lieutenant
Linda Olszak	Administrative Assistant
Karyn Dorfman	Administrative Assistant
Art Lutherus	Fire Inspector
Chris Williams	Fire Inspector

Department Roster

Members

Aiello, Mike
Bergstrom, Garret
Borst, Nick
Brechbiel, Bob
Bucheger, Adam
Chociej, Kamil
Delgado, Sergio
Forsberg, Joe
Fowles, Adam
Geyman, Michael
Gualdoni, James
Gundlach, Amanda
Hagen, Kim
Hagen, Scott
Havemann, Ed
Hurley, Mike
Jakubowicz, Ray
Kaltenbach, Dave
Kauke, Bryan
Kempe, Kyle
Kerley, Tim
Klug, Matt
Kownacki, Kevin
Kreher, Rich
Landwer, Mark
Leuck, Matt
Linneman, Tom
Lucas, Mike
Marino, Brian
Menzimer, Brian
Miller, Megan
Muscavitch, Ryan
Newton, Matt
Odishoo, Tim
Pace, Palmer
Pireh, Martin
Rosner, Joe
Ryan, John
Seyl, Robert
Smith, George
Spivey, Jim
Sypura, Andrew
Szatkowski, Dane
Thuma, Matt
Vega, Ramon
Walker, Curt
Williams, Dan
Wisz, Rob