

CRYSTAL LAKE FIRE RESCUE



ANNUAL REPORT 2016



Crystal Lake Fire Rescue Department Annual Report 2016



Gary J. Mayerhofer, City Manager
City of Crystal Lake

Dear Mr. Mayerhofer,

I would like to present the 2016 Crystal Lake Fire Rescue Department Annual Report. Contained in this report is an accounting of the Department's efforts, challenges and accomplishments in the past year. I am pleased to provide a full accounting to you, the City Council, the Fire District Trustees, the Lakewood Village Board, and the community of the management and resources entrusted to the Fire Rescue Department.

Our personnel continue to provide professional and dedicated service to the people we serve that is second to none. This could not be possible without the unyielding support of the Crystal Lake City Council and Mayor, Fire District Trustees, Lakewood Village Board, and City Staff.

Listed below you will find highlights of the Department's accomplishments in 2016:

- Completed year one of the agreement with the Village of Lakewood for fire, rescue, and EMS services.
- Responded to over 6,000 calls for service.
- Continued Officer Development on a monthly basis.
- Continued focus on training and professional development of all personnel.
- Maintained the Crystal Lake Wireless Alarm Network (CLWAN).
- Continued the partnership with ComEd in hosting the Joint Operations Center.
- Completed Life Safety Inspections for over 710 occupancies in the Crystal Lake community.
- Updated the Department's comprehensive Policy and Procedure Manual to provide consistent direction to our emergency response personnel.
- Continued to develop and train on fire ground operational policies.
- Provided community support through active participation in and donations to the Salvation Army, Crystal Lake Food Pantry, Muscular Dystrophy Association, and Operation North Pole.
- Took delivery of a new pumper, staff vehicle, and shift commander vehicle.
- Replaced one aging tender with the funding of the Crystal Lake Rural Fire Protection District.
- Placed in service a new ambulance to replace an aging one.
- Ordered a new ambulance for continuity of operations.
- Hired two firefighter/paramedics to bring the Department to full staffing.
- Received a \$1,000 grant from the Enbridge Safe Community Program.



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On behalf of the men and women of the Crystal Lake Fire Rescue Department, thank you for the opportunity to serve the Crystal Lake community.

Sincerely,

Paul G. 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, hazardous material response, water rescue, and special team responses such as trench, confined space, rope, and dive rescue. 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 47 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 currently 15 firefighters per shift. Administrative staffing positions include Fire Rescue Chief, Deputy Chief, Bureau Chief of Training, Bureau Chief of Fire Prevention, two Fire Inspectors (one part-time), and two Administrative Assistants. In 2016, the Department responded to 6,061 incidents of which 72% involved emergency medical care.



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Year in Review

Deputy Fire Rescue Chief – Christopher Olsen

The members of the Crystal Lake Fire Rescue Department continue to hold true to our Vision, Mission, and Values. Our members relentlessly give back to the community in many different ways and display compassion and professionalism to those we serve. The level of commitment that the Fire Rescue members display is unsurpassed by other fire departments and is exemplified below:

Community Participation

Fire Rescue personnel supported several community events this year.

- Members of the Crystal Lake Fire Rescue Department Administrative Staff and Crystal Lake Firefighters Local 3926 participated off duty in the Salvation Army's Red Kettle fundraising campaign. In 2016, the Crystal Lake Fire Rescue Department raised \$11,362. Members have contributed to this worthy cause for 11 years.
- The members of Crystal Lake Firefighters Local 3926 collected \$6,491.46 for the Muscular Dystrophy Association through the annual "Fill the Boot" campaign and Winter Formal.
- In lieu of holiday gifts, the Officers of the Crystal Lake Fire Rescue Department personally donated \$600 to the Crystal Lake Food Pantry as part of the Officers' holiday tradition. This donation equated to \$4,800 of buying power the Food Pantry has through the Northern Illinois Food Bank.
- The members of the Crystal Lake Fire Rescue Department once again participated in Operation North Pole to provide holiday cheer to children with life-threatening illnesses and their families.





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Promotions

In 2016, the Department celebrated the promotions of Bureau Chief Rick Kaiser and Lieutenant Brian Tamason. BC Kaiser has served the Department for 21 years and has been active in the use and maintenance of the Departments self contained breathing apparatus and air monitoring devices. Lt. Tamason has served the Department since 2006 and is a member of the Fire Investigation Team.



BC Rick Kaiser



Lt. Brian Tamason

New Members

Kamil Chociej, David Syzdek and Ramon Vega were hired as Probationary Firefighter/Paramedics this year. We look forward to long and prosperous careers with these three individuals and welcome them to our family.



FF/PM Kamil Chociej



FF/PM David Syzdek



FF/PM Ramon Vega



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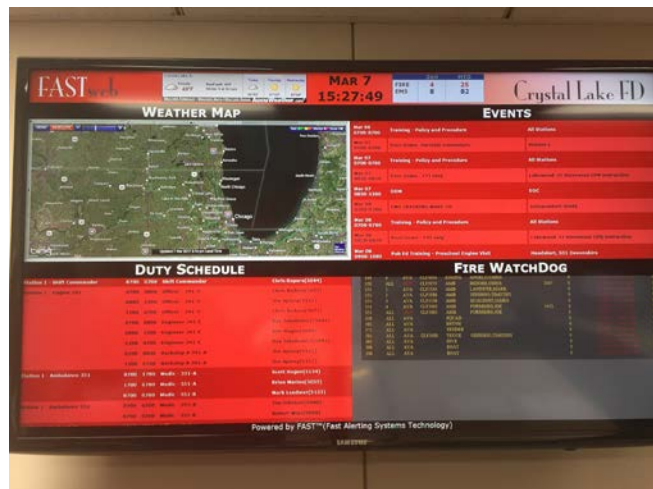


Lakewood Fire Rescue Service Addition

January 1, 2016 was the start of a new era with the Crystal Lake Rescue Department providing fire rescue services to the Village of Lakewood. The fire crews and administrative staff worked to create a seamless transition of service to the benefit of all parties. The first call for service in Lakewood came almost 48 hours into the New Year and was located a few short blocks from Fire Station 4 on Bard Road. The year ended with a total of 222 calls for service in the Village.

Fire Station Alerting System

After several years of investigating, developing, and eventually awarding a contract with a vendor, the Department's Fire Station Alerting System was activated. We continue to fine tune the look of the idle screens, as well as the incident screens and ramping tones with our vendor. In the end, we hope to improve our turnout times and soften the notification to our personnel for a call for service. In the coming year, we will look to expand this system into individual station tones, where only the crews that are due will be notified instead of everyone.



ISO Rating Improvement

Effective October 1, 2016, the Insurance Services Office (ISO) upgraded the Public Protection Classification (PPC) for the residents of the City of Crystal Lake, Village of Lakewood, and the Crystal Lake Rural Fire Protection District. Previously, the areas with fire hydrants were rated at 3 out of 10 and the areas without fire hydrants at 6 out of 10. The new improved rating is a 2 regardless if city or rural. This new designation places Crystal Lake Fire Rescue Department in the top 2.17% of fire departments in the nation for fire suppression services.

The results of the ISO evaluation confirmed the Crystal Lake Fire Rescue Department, Crystal Lake and Lakewood Public Works Water Divisions, and the City's regional dispatch center SEECOM, perform at a high level each day to protect its citizens.

Many insurers use the PPC for underwriting and calculating premiums for residential, commercial, and industrial properties. In general, the price for fire insurance in a community with a good PPC is substantially lower than in a community with a poor PPC. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.



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Specialized Rescue Services Governance Change

During the last decade, the City has subscribed to the Lake/McHenry Counties Fire Departments Specialized Rescue Teams as our specialized response team in the event we experienced a confined space, trench, structural collapse, or dive rescue incident in our service area. While the Fire Rescue Department has several members trained in the various disciplines, no one fire department could support the high number of personnel needed to safely mitigate a specialized rescue incident.

During the previous year, the Lake/McHenry County teams had been working through a governance change where the Lake/McHenry County teams were dissolved and the assets were turned over to the Mutual Aid Box Alarm System (MABAS) on January 1, 2016.

EOC/Command Center Training

On February 9th, severe weather training was conducted by Crystal Lake Fire Rescue for Crystal Lake Police supervisors. The training focused on opening of the City's Command Center, which is a precursor for the City's Emergency Operations Center (EOC) activation.

Attendees were presented with simulated calls for service that are typical for a severe weather event. The attendees prioritized the calls for service based upon available resources. Attendees also became familiar with preparing for additional operating periods and how the EOC supports the activities of the crews in the field.

In December, members of the City's Police, Public Works, Community Development, Fire Rescue, and Finance Departments participated in an Emergency Operations Center (EOC) opening review.

The session focused on the different levels of opening the EOC starting with the City's Command Center and progressed to a simulation of calls for service coming into the 911 center and the City's business phone system. The Call Log System the City implemented two years ago for logging and tracking calls for service was reviewed by the City's designated call takers and those department supervisors who would prioritize the calls for service and track their progress towards completion.

Emergency Operations and GIS

On May 12th, members of the Fire Command Staff along with representatives from each of the City's departments, met with the City's Geographic Information System (GIS) representatives to discuss the role of GIS in the Emergency Operations Center.

The discussions ranged from incorporating real time incident tracking to logging non-emergent calls for service in the software used by our City staff. The goal of GIS



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support is to improve our situational awareness of resource allocation during a high call volume event, as well as improving customer service to restore the City to its normal state after an event.

History Committee

In September of 2014, the City and the Fire Rescue Department celebrated their centennial. To recognize the efforts of those firefighters that came before us, our History Committee was tasked with creating a series of boards that recognized all those members from the past 100 years who served the Crystal Lake community. We are happy to announce that the boards are complete and are proudly displayed at Fire Station One. Thank you to Lt. Chuck Gumprecht (Ret.) for being the inspiration to revive this project.





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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 William Whyte	20 years
BC Chris Kopera	15 years
FF/PM Ray Jakubowicz	15 years
Lt. Brian Tamason	10 years
Lt. Chris Bedore	10 years
FF/PM Tom Linneman	10 years
FF/PM Adam Fowles	10 years
FF/PM John Ryan	10 years
FF/PM Ryan Muscavitch	5 years
FF/PM James Gualdoni	5 years
Admin Asst. Annette Kunes	5 years

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

DC Christopher Olsen	25 years
BC Bob Kohley	20 years
Lt. Heidi Olsen	15 years
Lt. Jim Sustek	15 years
FF/PM Dan Williams	15 years
FF/PM Matt Leuck	15 years
Lt. Chris Bedore	10 years
FF/PM Drew Sypura	10 years
FF/PM Nick Borst	10 years
FF/PM Adam Bucheger	10 years
FF/PM Mike Geyman	10 years

Department Recognition Awards

Type of Award	Date of Incident	Description	Crew Receiving Award
Unit Performance Award	12/16/2016	Actions in a water rescue incident	DC Olsen, BC Kaiser, Lts. Angelo & Bedore, FF/PM's Jakubowicz, Sypura, Odishoo, Borst, Gualdoni, Marino, Kempe, Kownacki, FF/EMT C. Williams
Award of Recognition	10/08/2016	Promoting the Dept's Dive Team	FF/PM Kownacki



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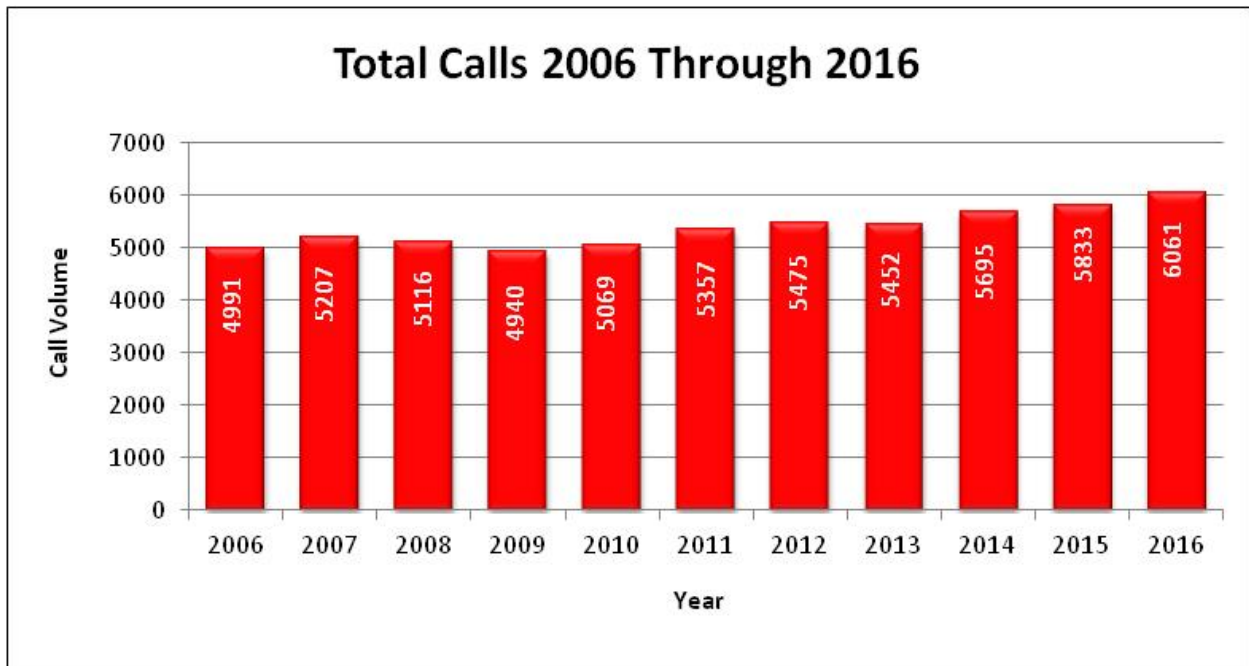


Incident Statistics

Battalion Chief William Whyte

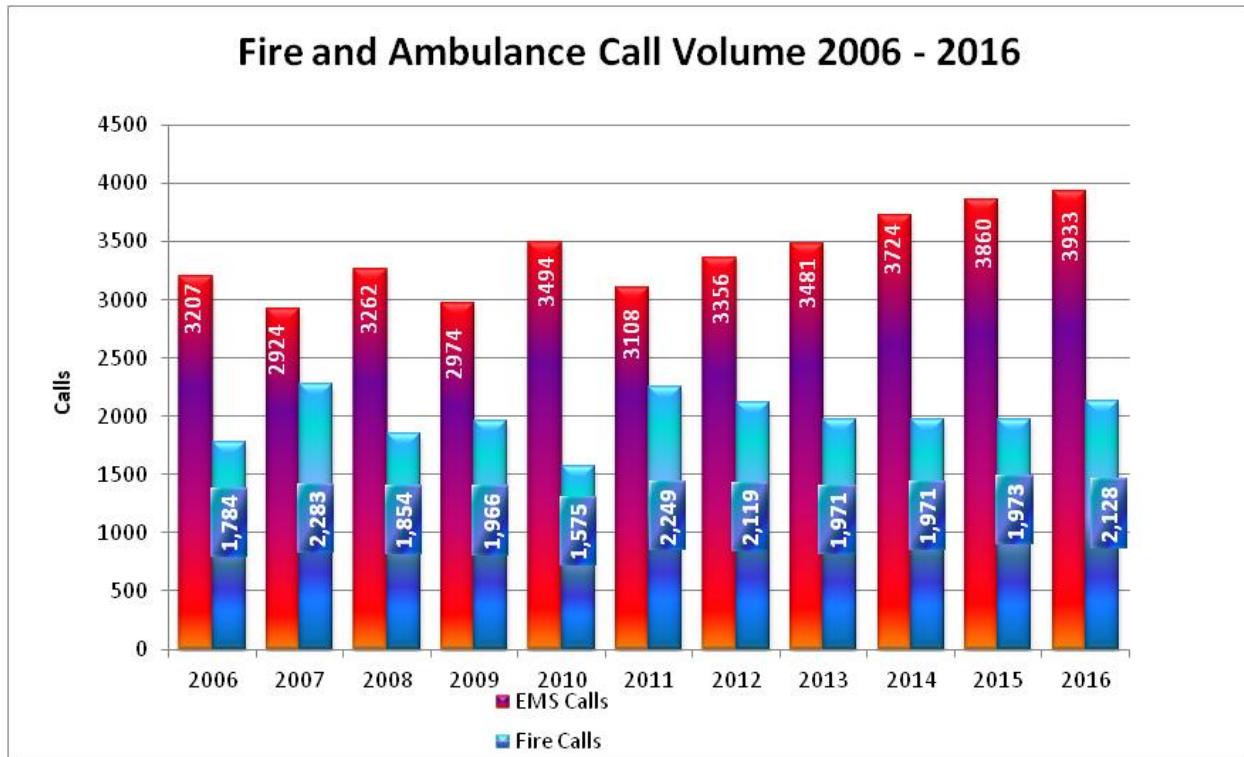
Incident Type	#2014	% 2014	#2015	% 2015	#2016	%2016
Fire	56	.98%	45	0.77%	50	0.82%
Over Pressure, Rupture, Explosion	N/A	N/A	2	0.03%	3	0.05%
Rescue and EMS Incidents	4,135	72.61%	4283	73.43%	4,371	72.12%
Hazardous Conditions (No Fire)	188	3.30%	184	3.15%	197	3.25%
Service Call	391	6.87%	334	5.73%	428	7.06%
Good Intent Call	188	3.30%	210	3.60%	216	3.56%
Fire Alarms	737	12.94%	758	13.00%	783	12.92%
Special Incident Type	N/A	N/A	17	0.29%	13	0.22%
Total	5,695	100.00%	5,833	100.00%	6,061	100.00%

Jurisdiction	#2014	% 2014	#2015	% 2015	#2016	%2016
City of Crystal Lake	4,974	87.34%	5,081	87.11%	5,135	84.72%
CL Rural FPD	550	9.66%	580	9.94%	573	9.46%
Lakewood	N/A	N/A	N/A	N/A	222	3.66%
Out of District	171	3.00%	172	2.95%	131	2.16%
Total	5,695	100.00%	5,833	100.00%	6,061	100.00%





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Crystal Lake Fire Rescue Department Fire Suppression Response Times Within Each Response District

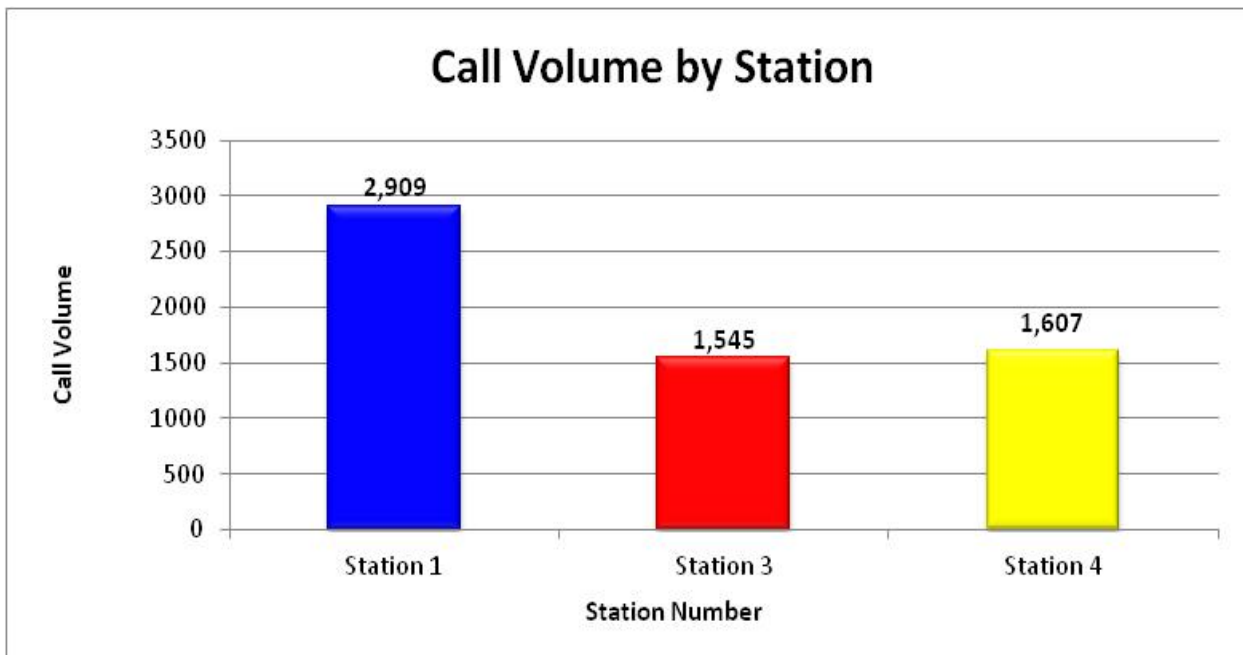
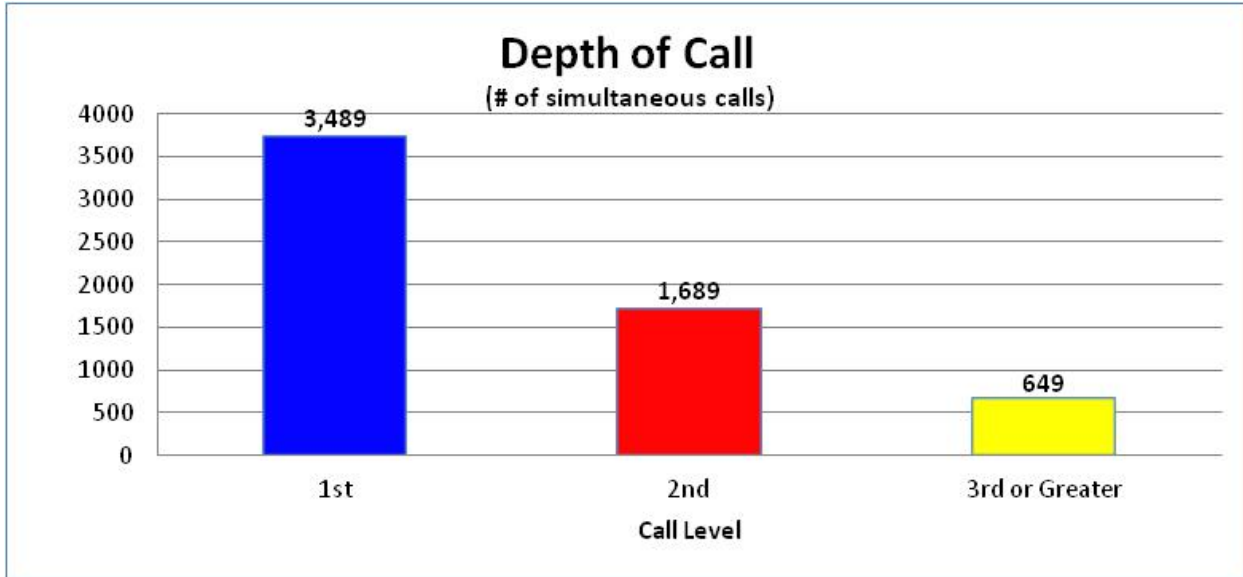
	Station 1	Station 3	Station 4
Average Alarm Processing Time	01:39	01:36	01:51
Average Turn Out Time	00:52	00:53	00:51
Average Travel Time	04:30	04:36	05:23
Average Alarm To Scene time	07:08	07:10	08:06

Crystal Lake Fire Rescue Department EMS Response Times Within Each Response District

	Station 1	Station 3	Station 4
Average Alarm Processing Time	01:53	01:49	01:51
Average Turn Out Time	00:32	00:28	00:28
Average Travel Time	04:00	04:03	04:52
Average Alarm To Scene time	06:25	06:20	07:11



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Fire Prevention Bureau

Bureau Chief of Fire Prevention – Bob Kohley

The statement *a fire that does not occur is the one that is most easily controlled* accurately describes the ultimate goal of any fire and life safety inspection program. The Fire Prevention Bureau programs focus on the three E's of Fire Prevention: Education, Enforcement, and Engineering. The Fire Prevention Bureau utilizes the three E's of Fire Prevention to help reduce fire-related deaths, ensure that fire and life safety standards are adhered to, and ensure that structural safety components are not compromised.

Providing education to building designers, contractors, and business owners and their employees about safe practices can reduce the chance of fire in their buildings. Enforcement is aimed at reducing fire hazards, as well as mandating the proper installation and maintenance of a building's fire and life safety features. Engineering is about designing buildings properly with respect to fire and life safety. The Crystal Lake Fire Prevention Bureau's continued focus on the three E's of Fire Prevention is a critical step in helping to ensure the safety of the Crystal Lake community.

Plan Reviews

During 2016, the Fire Prevention Bureau completed 548 plan reviews. The Fire Prevention Bureau strives to complete reviews within the requested deadline: 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 time frames. For 2016, 99.72 percent of the reviews were completed within the time frames. Listed below are the types and amounts completed.

Type of Review	2015	2016
Building Permit	162	258
Sprinkler System	58	41
Fire Alarm System	58	62
Wet Chemical/Clean Agent	3	2
Planned Unit Development	11	8
Special Use Permit	28	48
Special Event Permit	0	1
Temporary Use Permit	49	26
Variation	10	2
Cursory	42	23
FOIA	84	58
County-Residential/Commercial	7	7
Annexation	7	12
Total	519	548



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Inspections / Code Enforcement

The Fire Prevention Bureau completed 969 inspections in the calendar year of 2016. Listed below are the type and total number of inspections completed:

Inspection Type	Number of Inspections 2015	Number of Inspections 2016
Construction / Status	137	315
Fire Alarm	107	111
Sprinkler System	69	109
Hood or Other Suppression	6	11
Life Safety Follow Up / Target Hazard	161	111
Occupancy	230	162
Concerns / Condition Report	123	132
Special Event	0	15
Mobile Food Truck	0	3
Total	833	969

Life Safety Inspections

During calendar year 2016, the Fire Rescue Department conducted 1,141 Life Safety Inspections.

Life Safety Inspections	Calendar Year 2015	Calendar Year 2016
Initial Inspections	398	710
Re-Inspections	134	431
Total	532	1,141

Public Education

Coordinator- Annette Kunes

Public Education is a component of the Crystal Lake Fire Rescue Department's Fire Prevention Bureau. Public Education supports the Fire Prevention Bureau by educating our citizens about fire prevention and fire safety. The goal of public education is to reduce fires, fire related injuries, and fire deaths. The Fire Rescue Department conducts station tours and fire safety talks for school groups, senior groups, scout groups, businesses, and other organizations. Fire Rescue personnel observe fire exit drills from schools and businesses throughout the year. In 2016, the Crystal Lake Fire Rescue Department conducted 30 observed fire drills with 14,510 participants.



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The Department's public education focus is directed to school children from the ages of 3 to 9 years old.

Our safety messages include teaching children not to touch matches and lighters, to "stay low and go" during a fire, and to "stop, drop and roll" in the event their clothing catches on fire.

We encourage older children to create and practice a fire escape plan with their family. All children and their families are encouraged to know how and when to dial 911.

The Crystal Lake Fire Rescue Department has five major events that provide opportunities to teach children and adults about fire safety.

- The Crystal Lake Expo - emphasis is placed on emergency preparedness in a disaster. Brochures, such as the Crystal Lake Preparedness Guide, were developed to encourage people to be prepared at home or work in the event of severe weather.
- McHenry County Children's Health Fair – The Department's Safety Trailer is featured at this county-wide event. The trailer is designed to give children the experience of being in a room that fills with smoke and allows children to practice Get Low and Go; Stop, Drop and Roll; as well as exiting a fire safely. Department personnel teach children what to do in the event of a fire and how to escape safely.
- National Night Out - Sponsored by the Crystal Lake Police Department, this is a nationally recognized event and provides an opportunity to showcase the Fire Rescue Department's equipment and talk to families about fire safety.
- Johnny Appleseed Festival – This popular and highly attended family event features the Department's Fire Safety Trailer and Aerial Ladder Truck.
- Crystal Lake Fire Rescue Open House - Fire equipment and Fire Station One are on display with activities for adults and children. Children have an opportunity to spray an actual fire hose, participate in a firefighting obstacle course, and participate in an escape drill in the Fire Rescue Department's Safety Trailer. Everyone is welcome to view the Fire Rescue Department's vehicles, participate in Hands Only CPR, and watch various demonstrations of Department equipment.

The Crystal Lake Fire Rescue Department offers American Heart Association (AHA) CPR certification for Basic Life Support and Heartsaver AED classes to the public. The



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Department also demonstrates Hands Only CPR for individuals who want to administer aid, but have not had a CPR class.

An online course is offered for healthcare providers through the American Heart Association. After completing the online course, a Department CPR instructor tests their hands-on skills for final certification.



Listed below is a breakdown of events and participants for the 2016 year:

Type of Education Event	Number of Events	Total Participants
Block Parties	8	350
Blood Pressure Checks	12	69
Career Presentations	5	342
Classroom Reading	7	91
Community Events	9	3,443
CPR Classes	35	243
Extinguisher Demos	13	404
Health Fairs	1	425
Observed Fire Drills	30	14,510
Open House	1	350
Preschool Presentations	15	311
Safety Presentations	18	1,916
Senior Safety	1	19
Station Tours	50	1,472
Total	204	23,945



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Specialized Rescue Teams

Dive Rescue Team Coordinator – Lieutenant Chris Bedore

In 2016, we welcomed a new diver, FF/PM Robert Seyl to the dive rescue team. There are eight divers on the team, all public safety and ice dive certified.

Training

In 2016, the Crystal Lake Fire Rescue Dive Rescue team met or exceeded all annual required training by the MABAS Divisions 4 & 5 specialized response teams. The Crystal Lake Dive Rescue Team trains a minimum of once a month.

- Each diver on the team is required to perform annual skills evaluation including a continuous 500 yard swim, 15 minutes tread with hands out of the water for the last two minutes without assistance, 800 yard snorkel swim, and a 100 yard inert diver tow in full gear. They are also tested on various underwater SCUBA skills. The evaluations are required under the team's standard operating guidelines, and are necessary to remain on the team as an active diver.
- In March, the Crystal Lake Fire Rescue Dive Rescue Team completed open water/ice training at Three Oaks Recreation Area. Dive team members deployed in the north lake. The team practiced underwater search patterns using tethered communication lines. Visibility was 35' and the divers dove to a depth of 38'. Water temperature was approximately 32 degrees. Although there was significant ice still on the lake, the aerators under the piers provided the team with open water for entry.
- In April, the Dive Rescue Team completed open water dive training at Three Oaks Recreation Area. The Dive Team members deployed in the south lake to assist the staff at Three Oaks Recreation Area with anchoring the swim and no wake buoys in the lake. The Crystal Lake Dive Rescue Team members in conjunction with other MABAS teams were deployed. These divers performed search patterns off of the new recreational dive pier in the south lake searching for mock evidence. Divers reported visibility of 15-20' at a depth of approximately 40'. Water conditions were clear with a temperature of 38 degrees.
- During June, the Dive Rescue Team completed open water dive training at Crystal Lake Main Beach. The Dive Team members worked with the lifeguard staff from the beach to discuss actions to be taken in the event of a lost swimmer.



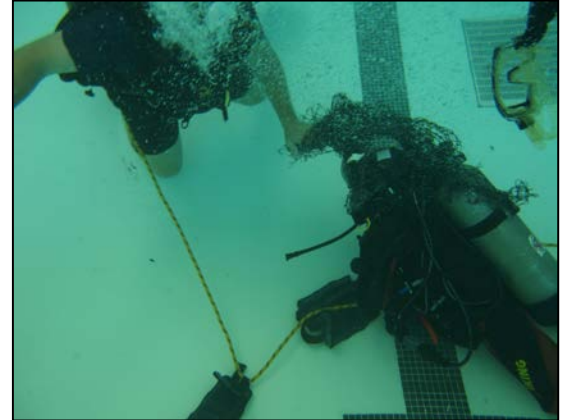
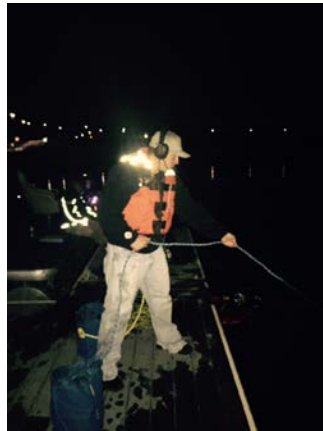
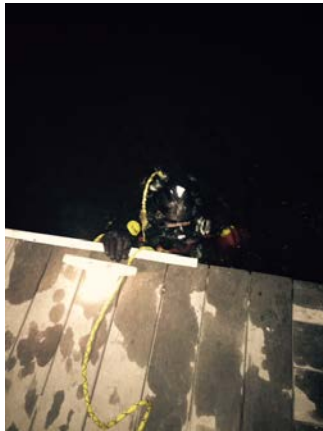
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To simulate a rescue, the Dive Team deployed outside of the swim area simulating a last seen point.

Divers also attended Dive Rescue II & Public Safety Scuba Instructor classes in June.

- In October, the Dive Rescue Team participated in open water night dive training at Three Oaks Recreation Area. Team members deployed in the north lake and performed sweep patterns from the pier. This training is a requirement to stay in compliance with MABAS for each diver.



Left: Dive Rescue Team during an open water night dive. One diver emerges from the water and another person tends the communications and safety line.

Right: Dive Rescue Team practicing watermanship skills at the Sage YMCA pool.

TRT Coordinator – Lieutenant Dan Grischow

The Crystal Lake Fire Rescue Department's Technical Rescue Team (TRT) is a part of MABAS Divisions 4 & 5 Specialized Response Teams, which prepares for high risk, low frequency incidents. The combined manpower and specialized equipment from MABAS Divisions 4 & 5 allows for more efficient management during these complex calls for service.

Team members train in four major specialties:

- Structural Collapse
- Trench Rescue
- Confined Space Rescue
- Vertical Rescue

Incidents

During 2016 the Technical Rescue (TRT) Team had three callouts for service. On July 19th the TRT team was called out for a rope rescue for workers stuck in a construction



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elevator 120 feet up on the side of a building. Crews were able to access the workers and bring them to the ground.

In August, TRT technicians were dispatched to Round Lake Beach for a tow truck that had accidentally slipped out of park went down a slope through the neighbor's garage taking out structural supports for the house. TRT technicians assembled shores to stabilize the house so residents were able to enter and gather belongings before the house was permanently repaired.

Also in Round Lake Beach on September 24th, TRT Technicians were called out to stabilize a house after a pickup truck drove into a house. Technicians were able to create a safe environment for rescuers and prevent further loss of the structure.

Training

Training is very important to stay current with our skills. As no one department can have all the equipment and manpower to handle these events, the combined manpower and specialized equipment from MABAS Divisions 4 & 5 are able to handle these infrequent calls for service.

Crystal Lake TRT Technicians attended over 400 hours of additional rescue training this year. Crystal Lake hosted three consecutive Confined Space drills in June and two Canister Inventories in December. Technicians also provided manpower and equipment for numerous other drills held in different communities around McHenry County. Crystal Lake Technicians attend drills throughout Lake and McHenry Counties and must complete at least 8 drills a year.

Equipment

Crystal Lake Fire Rescue houses a hook truck and two roll off canisters at Fire Station 3. These canisters contain tools and specialized equipment that team members use to mitigate TRT incidents. One canister contains equipment needed for vertical rescue, confined space, and structural collapse rescue (TRT 5). The other canister contains the trench rescue equipment (Trench 5) and it can accommodate the large amount of equipment and lumber needed for this type of incident.

Haz Mat Team Coordinator – Lieutenant Dan Grischow

Crystal Lake Hazardous Materials (Haz Mat) Team members, like the TRT Team members, are part of the MABAS Divisions 4 & 5 Specialized Response Team. Crystal Lake's team members are certified to the Hazardous Materials Technician B level (highest level of certification). This involves an annual commitment of at least 40 hours of hazardous materials training. Technicians train with specialized monitors, fully encapsulated suits, and a host of other specialized equipment.

Incidents

On February 18th three of our Crystal Lake Hazardous Materials Technicians responded to Wauconda for a hazardous materials incident in Island Lake. Public works personnel



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had discovered a chlorine leak at their facility on Waterford Way and called the fire department for containment of the leak. Hazardous materials technicians from 21 departments responded with 27 technicians.

Training

Crystal Lake Technicians attended over 160 hours of continuing education during 2016. Along with monthly drills we attended seminars and classes in Hazardous Materials Identification and Incident Management.

In June, technicians participated in a statewide deployment drill. At four different sites in Illinois, hazardous materials technicians were deployed with Technical Rescue Technicians and USAR (Urban Search and Rescue) teams to see how well a small group of different technicians could work at an incident to accomplish the same goals. Teams worked together though two, 8-hour work cycles during the night.

Emergency Medical Services (EMS)

EMS Coordinator – Lieutenant Heidi Olsen

EMS Statistics – 2016

EMS Incident Outcome	Number of Patients	% of Patients
Hospital Transport	3,238	69.81%
Non-Transport	1,400	30.19%
Other Agency Transport	0	0.00%
Total	4,638	100%
Transport Services Provided	Number of Patients	% of Patients
Advanced Life Support	2,013	43.40%
Basic Life Support	1,225	26.41%
Non-Transport	1,400	30.19%
Total	4,638	100%

Transport Destination	Number of Patients	% of Patients
Centegra-McHenry	1,091	23.52%
Centegra-Woodstock	1,190	25.66%
Centegra-Huntley*	304	6.55%
Good Shepherd	463	9.98%
Sherman	190	4.10%
Non-Transport	1,400	30.19%
Total	4,638	100%

*Opened in August 2016



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State Regulations

The Crystal Lake Fire Rescue Department has six Advanced Life Support (ALS) ambulances, three ALS engines, one ladder truck, and one engine that carry basic and advanced life support equipment. The Illinois Department of Public Health inspects each vehicle on an annual basis. All of the Department's vehicles continue to successfully pass these State inspections.

Training

The Crystal Lake Fire Rescue Department strives to be a benchmark organization and is highly regarded as an accomplished Department for our EMS skill sets. Each new employee completes rigorous testing on emergency medical skills prior to shift assignment. Crystal Lake Fire Rescue personnel are trained as State certified Paramedics which requires certification through the Illinois Department of Public Health. IDPH licenses people in the State of Illinois to assure that they are competent and keep current in the practice of Emergency Medical Services. This requires 120 hours/person of approved continuing education hours.

Equipment

Crystal Lake Fire Rescue Department purchased five new Phillips MRX cardiac monitors/defibrillators to complete a two-year replacement of outdated heart monitors. The Department also purchased a power stretcher to assist in moving patients. This device will help reduce back injuries associated with lifting of patients several times in a day.





Crystal Lake Fire Rescue Department Annual Report 2016



Training Bureau

Bureau Chief of Training – Rick Kaiser

Training is crucial to ensuring benchmark emergency service delivery to our community. Training requirements 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 (CLFRD) personnel participated in over 17,530 hours of training in order to learn new skills and remain proficient in all areas of emergency operations. Each member participated in approximately 263 hours of training for the year, or 21.90 hours of training monthly. The Insurance Services Office (ISO) recommends each firefighter complete 20 hours of training per month.

The following trainings were accomplished through the ongoing commitment, hard work, and support from Crystal Lake Fire Rescue Department and City staff.

In 2016, the Training Bureau accomplished the following:

- Provided live fire training utilizing an intergovernmental agreement with the Huntley Fire Protection District for the use of their training facility.
- Completed three automatic aid trainings with neighboring fire departments: McHenry Township Fire Protection District, Algonquin/Lake in the Hills Fire Protection District, and Nunda Fire Protection District.
- Reintroduced “Flow Paths and the Impact of Ventilation” training to Fire Rescue personnel as an important, progressive safety and suppression topic affecting the fire service nationwide.
- Completed hands-on auto extrication training with help from Whitey’s Towing.
- Hosted an Illinois Fire Service Institute Vehicle and Machinery Operations Class with assistance from Whitey’s Towing.
- Four personnel completed courses in National Incident Management System (NIMS) compliance training.
- Further developed and implemented a Lieutenant Orientation Program for newly promoted supervisors.
- Sponsored five personnel as part of a pilot fire officer program through the Illinois Office of the State Fire Marshal: Company Officer Pilot and Advanced Officer Pilot



Crystal Lake Fire Rescue Department Annual Report 2016



Professional Development and Certifications

Many classes, seminars, and trainings were attended by our staff, including a large number of State certification courses. Some of the certification courses attended by Department personnel in 2016 are as follows:

- Advanced Cardiac Life Support
- Advanced Technician Firefighter
- Command & General Staff Functions
- Confined Space Operations
- CPR Instructor
- Dive Rescue I & II
- Fireground Command Officer
- Fireground Company Officer
- Full Face Mask and Dry Suit Diver
- Hazardous Materials Incident Command
- Hazardous Materials Technician, A & B
- Incident Safety Officer
- Fire Inspector I
- Instructor I
- Leadership II
- Public Fire & Life Safety Educator I
- Public Safety Diver
- Rope Operations & Technician Level
- Structural Collapse Operations
- Tactics & Strategy II
- Trench Operations & Technician Level
- Vehicle Machinery Operations & Technician Level

Department personnel have spent many hours both in the classroom and on the training ground. The following list reflects additional educational opportunities that have been made available to Department personnel both in-house and at offsite locations:

- Advanced Breathing Apparatus Specialist
- Company & Advanced Fire Officer Pilot Classes
- Live fire suppression drills
- Blue Card Incident Command Online & Certification
- Fireground Operational drills (ladders, water supply, hose, etc.)
- Building tours/Pre-plans/Target hazard identification
- District familiarization
- Extrication drills (automobile and cutting torch)
- Officer level training, including orientation programs
- Specialty rescue



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- EMS protocol, procedures and pharmacology
- Accreditation seminars
- Computer software webinars
- Various NFPA and fire prevention classes
- Incident Command for Technical Rescue Incidents
- Self-Contained Breathing Apparatus competency drills
- Engine and Truck Operations
- Fire & Arson Investigation Continuing Education
- Mechanical and Type I hood code updates
- Orland Park ICS Remote Program
- Public Safety Media Relations
- Fireworks for Fire Inspectors

Fire Officer Training

A safe and effective fireground operation, as well as efficient leadership, depends upon the commitment of our Officers to professional development. Each officer attends training classes that educate, enhance, or supplement their personal development. In 2016, several Fire Rescue Department officers attended valuable, practical training at the Illinois Fire Service Institute (IFSI). IFSI provides two courses, Fireground Company Officer and Fireground Command Officer that continue to provide our officer corps exceptional opportunities for evaluating and developing critical practical skills. One of our members participated in a Lieutenant Orientation Program providing the officer a better transition from Firefighter/Paramedic to Lieutenant. Two of our members participated in a Fire-ground Command Officer class that enhances the knowledge and capabilities of the command structure on a large scale incident.

Probationary Training

Three probationary members completed extensive orientation training. This training far surpasses other fire department's orientation programs, and compliments the Crystal Lake Fire Rescue Department's dedication to providing an unsurpassed level of service. The Department's probationary members are trained in Department policies and procedures, EMS system protocol knowledge, as well as many different firefighting skills.

Validation Training

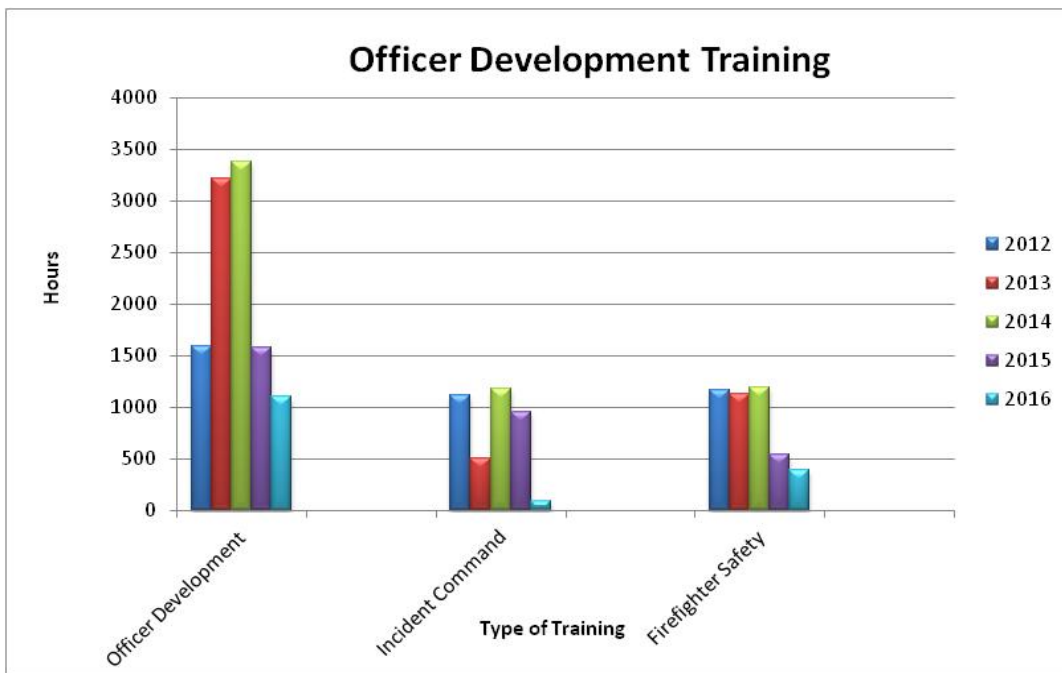
Validation drills are completed amongst all the shifts. Validation drills are an essential part of any training program to ensure that the skills being taught are demonstrated by the proficiency of all personnel.



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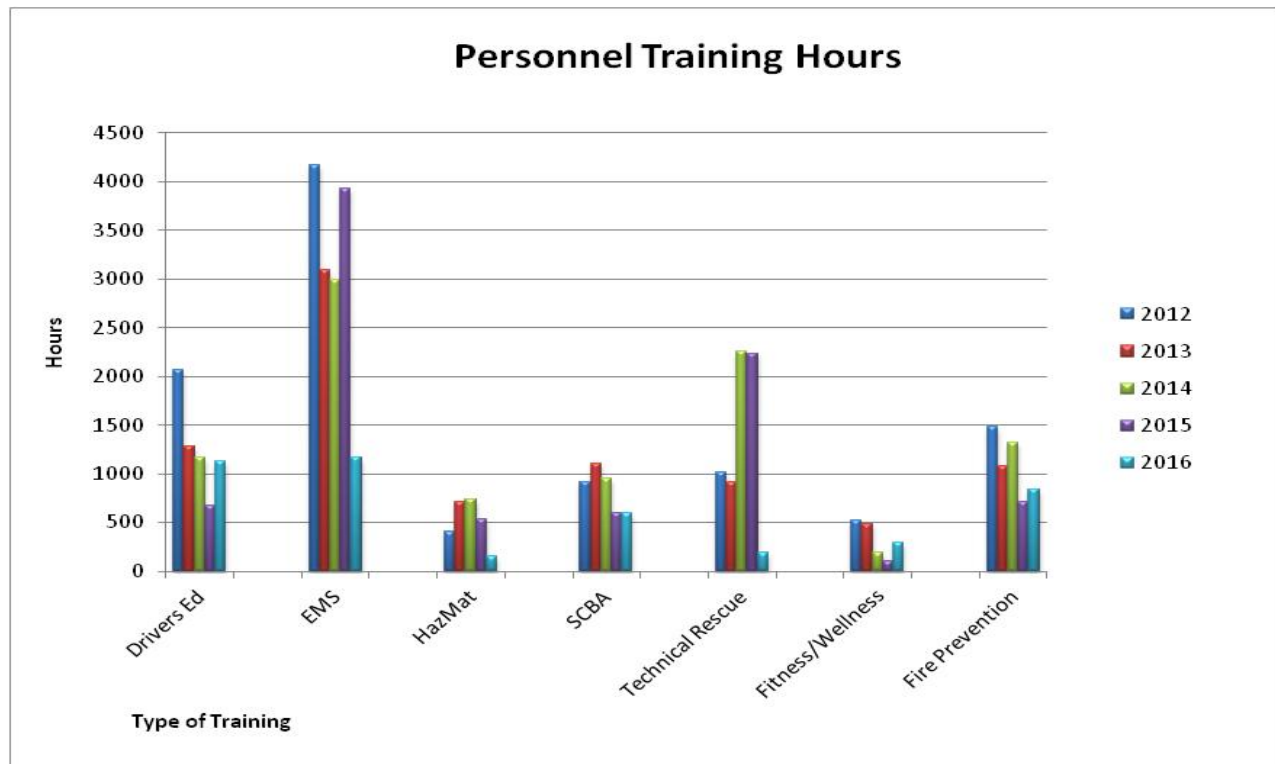


2016 Training Bureau Statistics





Crystal Lake Fire Rescue Department Annual Report 2016



Safety Committee Chairman – Bureau Chief Rick Kaiser

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 accomplishments 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, frequently addressing identified problem areas.
- Provided supervisor training for accident investigations.

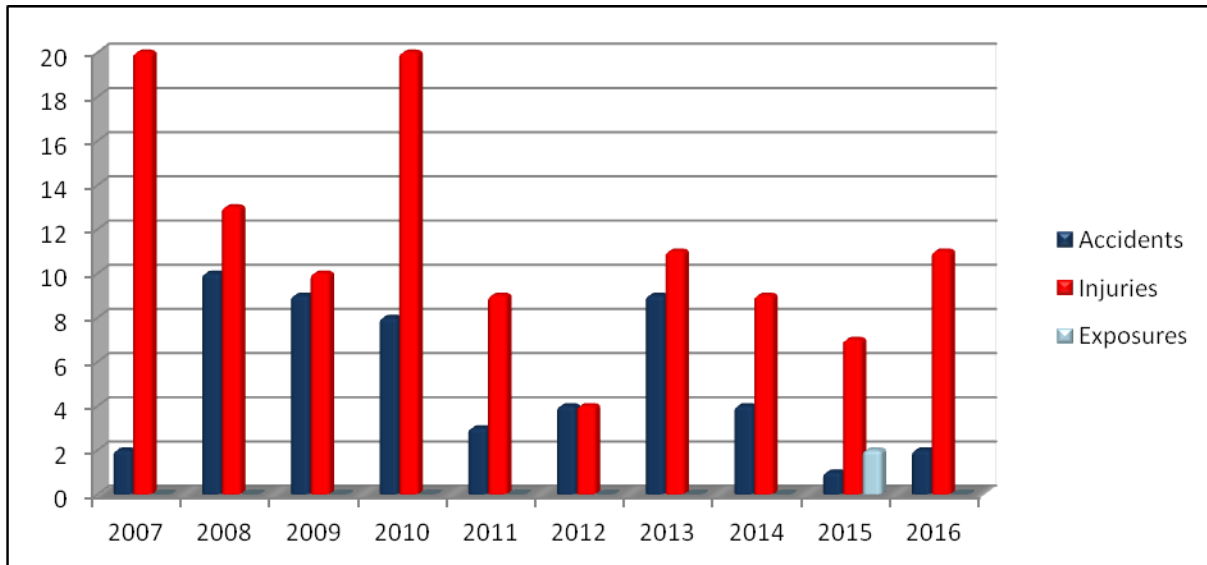


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Accident/Injury Investigations

The Fire Rescue Department Safety Committee conducted a total of 13 accident/injury/exposure investigations for the year 2016. The following graph shows a comparison between previous years' accident/injury/exposure incidents:



*2015 is the first year we began to track exposures separate from injuries

Fire Investigation Program

Lead Investigator - Deputy Chief Christopher Olsen

Illinois Compiled Statutes specify that the fire department is responsible for the determination of cause and origin for all fires. With this, the Crystal Lake Fire Rescue Department has eight trained and certified fire investigators. This function of a fire department remains an important aspect for ensuring the safety of the citizens of the Crystal Lake area through fire prevention activities.

The Crystal Lake Fire Rescue Department is a member of the Fire Investigation Strike Force in the greater Chicagoland area, which provides monthly training for our investigators. Many of our investigators are members of the International Association of Arson Investigators which provides valuable training and references for investigations. The Department has also worked closely with other neighboring fire departments within MABAS Division 5 with training and investigations.

In 2016, our investigators responded to and investigated five fires. None of these fires were deemed suspicious in nature and none involved injury or death to the occupants.



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Apparatus

Apparatus Coordinator - Lieutenant Jim Sustek

The Apparatus Committee exists to maintain the Department's Fleet of vehicles in a state of readiness by supporting the City's Fleet Services Division. These members are also responsible for developing order specifications for the Department, maintaining tools on the vehicles, and record-keeping of all necessary repairs. In 2016, the Apparatus Committee was able to accomplish the following:

- Research and evaluate a more efficient means of obtaining and flowing water on rural fire operations.
- Took delivery of a new 2016 Spartan pumper.
- Ordered a new bariatric ambulance.
- Equipped the reserve engines with toolboxes, flammable gas meters, and water rescue bags.
- Coordinated the research and purchase of new ventilation fans.
- Replaced older hand lights with new, brighter LED models.

Vehicle Inspections

All applicable apparatus passed their Department of Transportation inspections, Underwriters Laboratories (UL) ground and aerial ladder testing, State EMS inspection, and National Fire Protection Association (NFPA) pump testing.

Vehicle Maintenance

Through December 21, 2016 the department has generated 208 service tickets for maintenance issues related to our apparatus.

New Apparatus

- Ambulance 351 was placed into service.
- New Engine 344 was delivered in December.
- Took delivery of a new Shift Commander car.
- Took delivery of a new Deputy Chief's car. The previous vehicle was repurposed to Public Works.



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Above left: New Engine 344
Above right: Tender 371 was purchased by the Crystal Lake Rural Fire Protection District.



Above left: The new Shift Commander vehicle.
Above Right: New Deputy Chief Vehicle 303



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Retired Members

On September 11, 2016, Battalion Chief Tom Pollnow retired from the Fire Rescue Department after 30 years of service. Tom was assigned as the Shift Commander of Gold shift. Congratulations to BC Pollnow and we wish him the best in retirement.





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Station Locations



Fire Station One
100 W. Woodstock Street



Fire Station Three
844 Virginia Road



Fire Station Four
8705 Bard Road



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Department Roster

Officers

Paul DeRaedt	Fire Rescue Chief
Chris Olsen	Deputy Fire Rescue Chief
Robert Kohley	Bureau Chief of Fire Prevention
Rick Kaiser	Bureau Chief of Training
Jerry Larsen	Battalion Chief – Black Shift
Casey Cork	Lieutenant
John Volenec	Lieutenant
Brian Tamason	Lieutenant
Bill Whyte	Battalion Chief – Red Shift
Heidi Olsen	Lieutenant
Jim Sustek	Lieutenant
Darrell Cook	Lieutenant
Chris Kopera	Battalion Chief – Gold Shift
Dan Grischow	Lieutenant
Chris Angelo	Lieutenant
Chris Bedore	Lieutenant
Joyce Stevenson	Lieutenant
Linda Olszak	Administrative Assistant
Annette Kunes	Administrative Assistant

Members

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