



CRYSTAL LAKE FIRE RESCUE

ANNUAL REPORT 2015





Crystal Lake Fire Rescue Department Annual Report 2015



Gary J. Mayerhofer, City Manager
City of Crystal Lake

Dear Mr. Mayerhofer,

It is my pleasure to present to you the 2015 Crystal Lake Fire Rescue Department Annual Report. The Crystal Lake Fire Rescue Department continues to produce this document to provide an accounting to you, the City Council, the Fire District Trustees, and the community, of the management and responsibility of the mission and resources entrusted to the Fire Rescue Department. Its contents detail the Department's efforts, challenges and accomplishments in the past year.

The dedication and professionalism of our personnel continues to prove that the Crystal Lake Fire Rescue Department is the "Benchmark Organization" in emergency services. This could not be possible without the unyielding support of the City Council and Mayor, Fire District Trustees and City Staff.

Listed below you will find highlights of the Department's accomplishments in 2015:

- Signed a ten year agreement with the Village of Lakewood for fire, rescue, and EMS services.
- Upgraded from Registered Agency to Applicant Agency status in the accreditation process.
- Responded to over 5,800 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 and conducting cooperative drills with the Joint Operations Center.
- Completed Life Safety Inspections for over 532 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 the Department's Observed Behavior Safety Training Program to place an increased focus on the safety of personnel, and be the model for the restructuring of the City's Executive Safety Committee.
- Continued to develop and train on fire ground operational policies.
- Provided community support through active participation in and donations to the Salvation Army and Crystal Lake Food Pantry.
- Purchased and installed a new breathing air compressor.
- Conducted a Strategic Medication Distribution exercise for City employees and other identified government agencies.
- Implemented Fire Recovery Billing for special rescue incidents, as well as motor vehicle accidents.



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- Replaced two aging bureau cars.
- Ordered a new ambulance, engine and tender for continuity of operations.

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 as of January 1, 2016, 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 and support from part-time personnel. 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 Fire Fighters Association, Local 3926, of the International Association of Firefighters. Emergency response minimum staffing is currently 15 firefighters per shift. Administrative staffing positions (40-hour week) include Fire Rescue Chief, Deputy Chief, Bureau Chief of Training, Bureau Chief of Fire Prevention, Fire Inspector, and two Administrative Assistants. In 2015, the Department responded to 5,833 incidents of which 73% involved emergency medical care.



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Year in Review

Deputy Fire Rescue Chief – Christopher Olsen

The Mission, Vision, and Values Statement continues to be the driving force behind the members of the Crystal Lake Fire Rescue Department. It is this foundation that enables our highly motivated and skilled team to be the benchmark in emergency services while serving with P.R.I.D.E. The level of commitment that the Fire Rescue members display is unsurpassed by other fire departments and is exemplified below:

Community Fundraising

Once again, Fire Rescue personnel participated in three, off-duty fundraising events this year.

- Members of the Crystal Lake Fire Rescue Department Administrative Staff and Crystal Lake Firefighters Local 3926 participated in the Salvation Army's Red Kettle fundraising campaign. In 2015, the Crystal Lake Fire Rescue Department raised \$17,653. This accounted for over 8% of the total money raised by The Salvation Army of McHenry County in their annual campaign. This is the tenth year we have participated in this worthwhile cause.
- The members of Crystal Lake Firefighters Local 3926 collected \$3,432 for the Muscular Dystrophy Association through the annual "Fill the Boot" campaign.
- 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.



Crystal Lake Fire Rescue
Department Officers present
a check to the Crystal Lake
Food Pantry.



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Promotions

In 2015, the Department celebrated the promotions of Lieutenant Dan Grischow and Lieutenant Chris Bedore. Both of these individuals have served the Department for many years and will continue the forward momentum of the Crystal Lake Fire Rescue Department.



Lt. Dan Grischow



Lt. Chris Bedore

New Member

Curt Walker was hired as a Probationary Firefighter/Paramedic in January, 2015 and came to us from the Carol Stream Fire Protection District. FF/PM Walker has been raised in a firefighting family and understands the camaraderie that comes with the fire service. We welcome Curt to our family and look forward to a long and prosperous career for him.



FF/PM Curt Walker



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ComEd Joint Operations Center Exercises

The Fire Rescue Department hosted two training and tabletop exercises for the Commonwealth Edison Joint Operations Center (ComEd JOC). The ComEd JOC is activated in the Crystal Lake Municipal Complex when a power outage affects greater than 20% of the Crystal Lake service area for more than three hours. The Joint Operations Center allows for greater communication, as well as coordination of efforts by bringing representatives from ComEd and the various municipalities together in the same location. This year's training included improvements to the municipal portal used by ComEd and the municipalities during power outages.

Com Ed Service Outage Pilot Program

Com Ed is restructuring their municipal portal program, which will improve information access to municipalities via a secured website during a power outage. Based on our active involvement with ComEd on other initiatives, Crystal Lake Fire Rescue was one of several municipalities chosen to participate in the pilot program. The new system was up and running in May 2015.

GIS and Fire Rescue

Members of the Command Staff attended an informational meeting on the use of Geographic Information System (GIS) for the Fire Rescue Department. The City's GIS consultant, who also works with the City of Des Plaines through a GIS consortium, met with our staff and the Fire Chief of the Des Plaines Fire Department for an overview of how GIS can support our Department in daily operations, planning, and emergency management to name a few.

As the City brings GIS to the next level through our participation in a GIS consortium, many of the completed GIS mapping/data layers used by other fire departments are now available to our Department.

Accreditation Status

On August 25th, the Fire Rescue Department entered into an agreement with the Center for Public Safety Excellence (CPSE) to change our status from "Registered Agency" to "Applicant Agency". This move starts an 18-month clock for our Department to have a site survey team come to Crystal Lake and evaluate our readiness to go before the Accreditation Commission and request that our Department be recognized as an accredited agency.

Accreditation is a comprehensive self-assessment and evaluation model that enables organizations to examine past, current, and future service levels and internal performance and compare them to industry best practices. This process leads to improved service delivery. Achieving accreditation would satisfy the City's vision that our Department be recognized as an agency that operates at a standard that is recognized to be in the top 1% percent of fire departments nationally.



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Officer Development

As part of our Officer Development meeting in October, the Officers had the opportunity to speak with Dr. Denis Onieal, Superintendent of the National Fire Academy in Emmitsburg, MD. Dr. Onieal presented via video conference, current trends in professional development, along with discussing our perspective of development, and answering questions from our group.

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

Strategic Medication Distribution Exercise

On May 21st, the City conducted a Strategic Medication Distribution exercise for City employees and their families and other identified government agencies. The exercise allowed us the opportunity to test our plan for distributing medication for our first responders and essential personnel in the event of a medical outbreak. The McHenry County Department of Health releases the medication from the Strategic National Stockpile to Crystal Lake and other communities for distribution prior to medication being released to the general population.

This exercise simulated an anthrax outbreak. In a three-hour period, the Fire Rescue Department distributed the following:

Total number of City employees participating:	105
Total number of doses of medication delivered:	344

Air Monitoring Equipment

During 2015, the Department purchased new carbon monoxide (CO) monitors for all ambulances, engines, and ladder truck. The monitors were placed on the "first-in" EMS equipment bags. When the EMS crews enter an occupancy, the monitors allow the crew to potential hazards and give insight into why someone is ill.



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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:

Lt. Joyce Stevenson	35 years
Ed Havemann	15 years
Dave Kaltenbach	15 years
BC Robert Kohley	15 years
Brian Menzimer	15 years
Robert Brechbiel	10 years
Joe Forsberg	10 years
Tim Kerley	10 years
Linda Olszak	10 years
Dan Williams	10 years

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

Lt. Casey Cork	20 years
BC Bill Whyte	20 years
Brian Marino	15 years
Tim Odishoo	10 years
Rob Wisz	10 years

Department Recognition Awards

Type of Award	Date of Incident	Description	Crew Receiving Award
Life Saving Recognition Award	3/16/2015	Life Saving Actions in a Cardiac Event	BC Pollnow, Lt. Angelo, FF/PM's Tamason, Wisz, Odishoo, Rosner
Life Saving Recognition Award	8/11/2015	Life Saving Actions in a Cardiac Event	Lt. Volenec, FF/PM's Rosner, D. Williams
Award of Recognition	5/31/2015	Memorial Day Grave Markers	Lt's. Cook, Sustek, Volenec, FF/PM's Geyman, Linneman

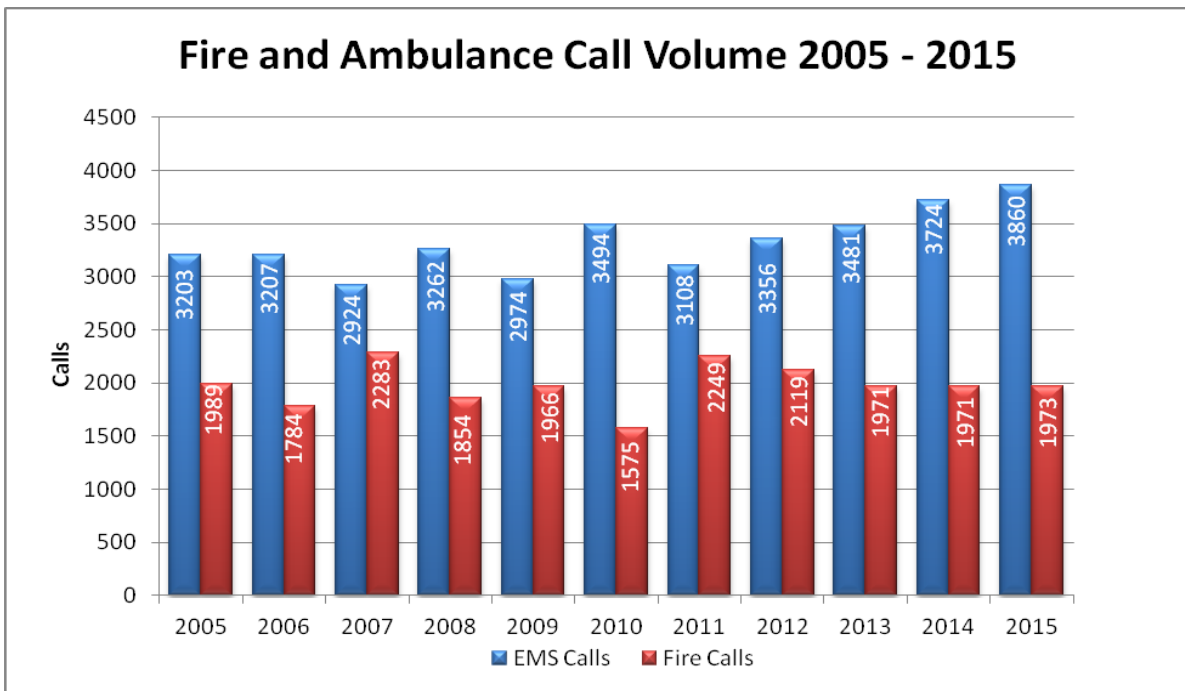
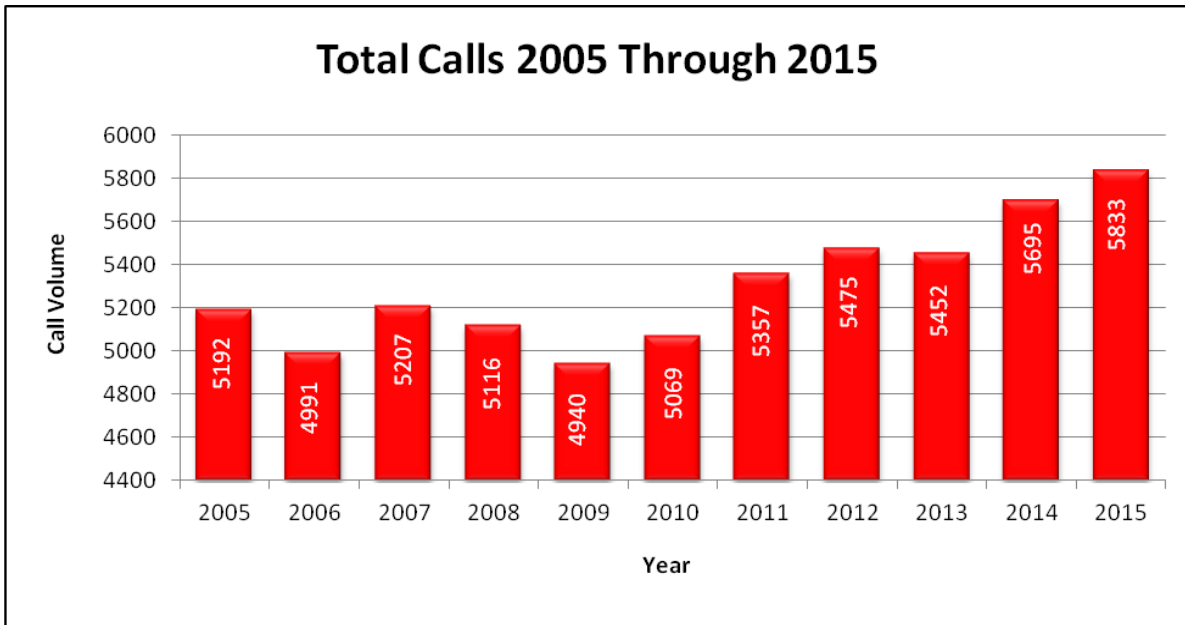


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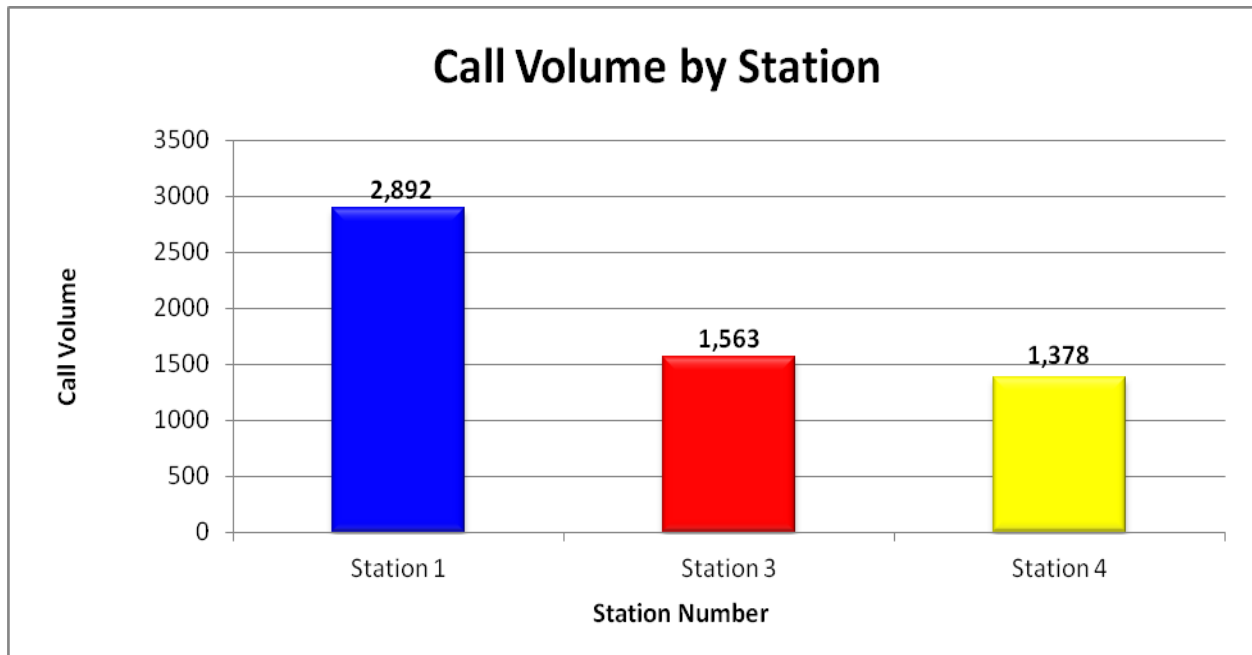
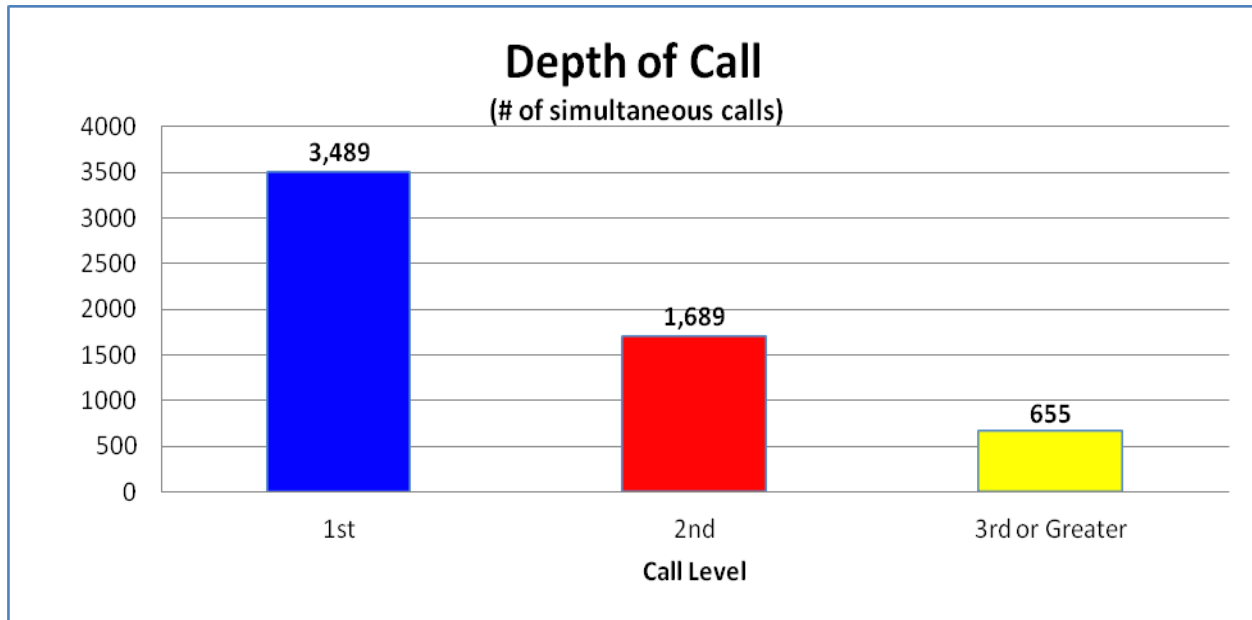
Incident Statistics

Battalion Chief William Whyte





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Fire Rescue Department Calls for Service 2013-2015

Incident Type	#2013	% 2013	#2014	% 2014	#2015	% 2015
Fire	75	1.37%	62	1.09%	45	0.77%
Over Pressure, Rupture, Explosion	1	0.02%	2	0.04%	2	0.03%
Rescue and EMS Incidents	3861	70.64%	4130	72.38%	4283	73.43%
Hazardous Conditions (No Fire)	171	3.13%	171	3.00%	184	3.15%
Service Call	397	7.26%	389	6.82%	334	5.73%
Good Intent Call	196	3.59%	188	3.29%	210	3.60%
Fire Alarms	732	13.39%	731	12.81%	758	13.00%
Special Incident Type	33	0.60%	33	0.58%	17	0.29%
Total	5466	100.00%	5706	100.00%	5833	100.00%

Jurisdiction	#2013	% 2013	#2014	% 2014	#2015	% 2015
City of Crystal Lake	4774	87.34%	4971	87.39%	5081	87.11%
CL Rural FPD	574	10.50%	548	9.63%	580	9.94%
Out of District	118	2.16%	169	2.97%	172	2.95%
Total	5466	100.00%	5688	100.00%	5833	100.00%



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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 occurring 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 the calendar year of 2015, the Fire Prevention Bureau completed 519 plan reviews. The Fire Prevention Bureau strives to complete reviews within the established period: 10 business days for 1st reviews and within five business days for re-submittals. The annual goal is to have 98% of the reviews completed within the established time frames. For the calendar year of 2015, 99.41% of the reviews were completed within the established time frames. Listed below are the types and total number of reviews completed:

Type of Review	2014	2015
Building Permit	124	162
Sprinkler System	45	58
Fire Alarm System	68	58
Wet Chemical/Clean Agent	4	3
Planned Unit Development	7	11
Special Use Permit	11	28
Temporary Use Permit	38	49
Variation	11	10
Cursory	14	42
FOIA	73	84
County-Residential/Commercial	2	7
Annexation	2	7
Total	399	519



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Inspections / Code Enforcement

The Fire Prevention Bureau completed 833 inspections in the calendar year of 2015. Listed below are the type and total number of inspections completed:

Inspection Type	Number of Inspections 2014	Number of Inspections 2015
Construction / Status	149	137
Fire Alarm	117	107
Sprinkler System	153	69
Hood or Other Suppression	12	6
Life Safety Follow Up / Target Hazard	177	161
Occupancy	330	230
Concerns / Condition Report	166	123
Total	1,104	833

Life Safety Inspections

During calendar year 2015, the Fire Rescue Department conducted 532 Life Safety Inspections.

Life Safety Inspections	Calendar Year 2014	Calendar Year 2015
Initial Inspections	355	398
Re-Inspections	121	134
Total	476	532

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 Crystal Lake's citizens of all age groups 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 2015, the Crystal Lake Fire Rescue Department conducted 24 observed fire drills with 12,813 participants.

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



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and lighters, to “stay low and go” during a fire and to “stop, drop and roll” in the event their clothing catches on fire.

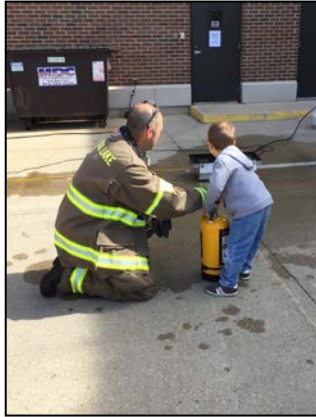
We encourage older children to create and practice a fire escape plan with their family. All children and their families are encouraged to know how and when to dial 911.

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.



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Listed below is a breakdown of events and participants for the 2015 year:

Type of Education Event	Number of Events	Total Participants
Block Parties	6	212
Blood Pressure Checks	12	76
Career Presentations	1	600
Community Events	7	4,525
CPR Classes	36	195
Extinguisher Demos	9	290
Observed Fire Drills	24	12,813
Open House	1	500
Preschool Presentations	17	673
Safety House	3	247
Safety Presentations	26	1,437
Senior Safety	1	19
Station Tours	34	1,131
Total	177	22,718



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CPR Coordinator – Lieutenant Joyce Stevenson

The Crystal Lake Fire Rescue Department offers American Heart Association (AHA) certification for the following classes:

- Healthcare Provider
- Healthcare Provider Recertification
- Heartsaver AED
- Heartsaver/First Aid

The Department offers classes for organizations such as schools, churches, scouts, and social service organizations. The 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 the breakdown of the classes taught in 2015:

Group	Number of Students	Number of Classes
Online Recertification	8	5
Community Private Classes	43	6
Crystal Lake City Employees	17	4
Crystal Lake Fire Rescue Employees	68	15
Three Oaks Recreation Employees	57	5
SEECOM Employees	2	1
Total	195	36



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Specialized Rescue Teams

Dive Rescue Team Coordinator – Lieutenant Chris Bedore

In 2015, we welcomed a new diver, FF/PM/Diver Robert Seyl to the dive rescue team. There are eight divers on the team, all public safety and ice dive certified.

Training

In 2015, the Crystal Lake Fire Rescue Dive Rescue team met or exceeded all annual required training by the Lake and McHenry counties 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 by the Lake & McHenry Counties Specialized Response Team 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.

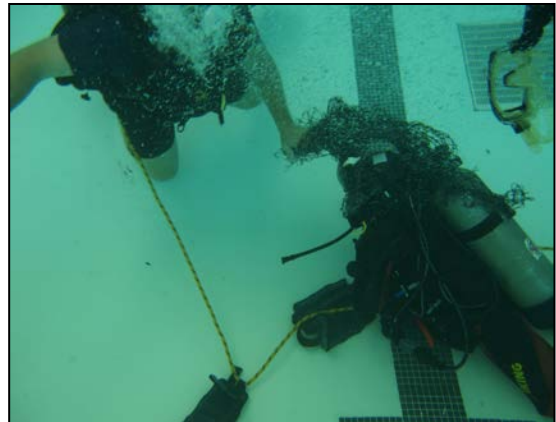
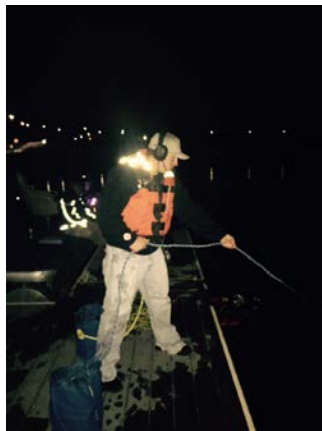
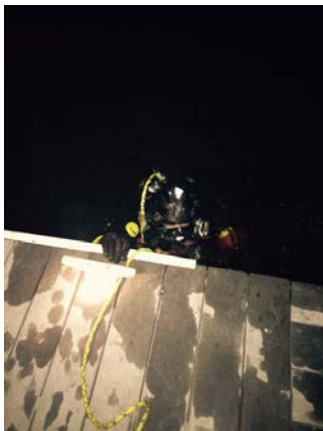


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To simulate a rescue, the Dive Team deployed outside of the swim area simulating a last seen point. Divers also attended Dive Rescue II & Public Safety Scuba Instructor classes in June.

- In October, the Dive Rescue Team participated in open water night dive training at Three Oaks Recreation Area. The Dive 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. Divers reported 15-20' of visibility at a depth of approximately 40'. Water conditions were clear with a temperature of approximately 38 degrees.



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.

TRT Coordinator – Lieutenant Dan Grischow

The Crystal Lake Fire Rescue Department's Technical Rescue Team (TRT) is a part of MABAS Division 5 Specialized Response Team, which prepares for high risk, low frequency incidents. The combined manpower and specialized equipment from MABAS Division 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



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Incidents

TRT technicians from Crystal Lake along with other area departments were dispatched to Wildwood Presbyterian Church in Grayslake for a structural collapse. Technicians assembled shores to stabilize the building after a car crashed into the church. Technicians were able to create a safe environment for rescuers and prevent further loss of the structure.

Training

Crystal Lake's six TRT technicians attended over 240 hours of rescue training in 2015. Crystal Lake hosted a trench drill in January and a confined space drill in July. These trainings attempt to create real life incidents so that technicians will react appropriately when faced with an actual situation. Technicians provided manpower and equipment for ten drills held in different communities throughout McHenry County. Crystal Lake technicians attend drills throughout Lake and McHenry Counties and must complete at least eight drills a year which include trainings such as Structural Collapse Rescue, Slope Evacuation, High Angle Rescue, and Trench Rescue.

Lt. John Volenec completed the initial Operations Training and joined the team this year. It takes a commitment of four 40-hour training classes to attain the operations level certification and four additional 40-hour training classes to reach the technician level certification.

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 Division 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

Crystal Lake Hazardous Materials (Haz Mat) Team members responded to five incidents in 2015. In Lake Forest in March, Hazardous Materials Technicians were called out for a suspicious substance leaking from an envelope.



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Technicians determined the substance was a nonhazardous powder and turned the envelope over to the Lake County Sheriff. In July, the Hazardous Materials team responded to Barrington for a building filled with a chemical haze. Technicians were able to ventilate the building and isolate a refrigerant leak. Also in July, the team responded to Wonder Lake for a driveway sealant that was seeping into the lake. Crews were able to minimize contamination and contain the leak. In August, technicians responded to Grayslake to contain a carbon monoxide leak and also responded to Richmond to contain a large diesel spill. Each incident had a positive solution.

Training

In 2015, FF/PM Matthew Newton completed his Hazardous Materials Technician A and B training which brings the team's roster to three. Crystal Lake Technicians train the Department's members on hazardous materials awareness and operations. Crystal Lake technicians attended over 160 hours of continuing education during 2015. The team attended monthly drills, seminars, and classes on hazardous materials identification and incident management.

Emergency Medical Services (EMS)

EMS Coordinator – Lieutenant Heidi Olsen

EMS Statistics – 2015

EMS Incident Outcome	Number of Patients	% of Patients
Hospital Transport	3,148	69.12%
Non-Transport	1,405	30.86%
Other Agency Transport	1	0.02%
Total	4,554	100%
Transport Services Provided	Number of Patients	% of Patients
Advanced Life Support	1,952	42.87%
Basic Life Support	1,197	26.27%
Non-Transport	1,405	30.86%
Total	4,554	100%

Transport Destination	Number of Patients	% of Patients
Centegra-McHenry	1,087	30.13%
Centegra-Woodstock	1,372	23.85%
Good Shepherd	433	9.51%
Sherman	256	5.62%
St. Joseph	1	.02%
Non-Transport	1,405	30.86%
Total	4,554	100%



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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 six new Phillips MRX cardiac monitors/defibrillators. The Department conducted extensive research and product evaluation prior to purchase. The cardiac monitors allow crews to properly assess, monitor and care for our patients.





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Training Bureau

Bureau Chief of Training – Christopher Kopera

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 18,000 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 Department and City personnel.

In 2015, 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 two automatic aid trainings with neighboring fire departments: McHenry Township Fire Protection District and Algonquin/Lake in the Hills Fire Protection District.
- Completed classroom and practical exercises in progressive incident command for Type 4 & 5 National Incident Management System (NIMS) incidents.
- Hosted the Illinois Fire Service Institute's Command and General Staff class for NIMS 300 and 400 certifications. City of Crystal Lake's new supervisors attended to address their needs for certification.
- 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.
- Further developed and implemented a Lieutenant Orientation Program for newly promoted supervisors.
- Reconstructed the Department's Probationary Firefighter/Paramedic Program through collaboration via the Department's Training Committee.

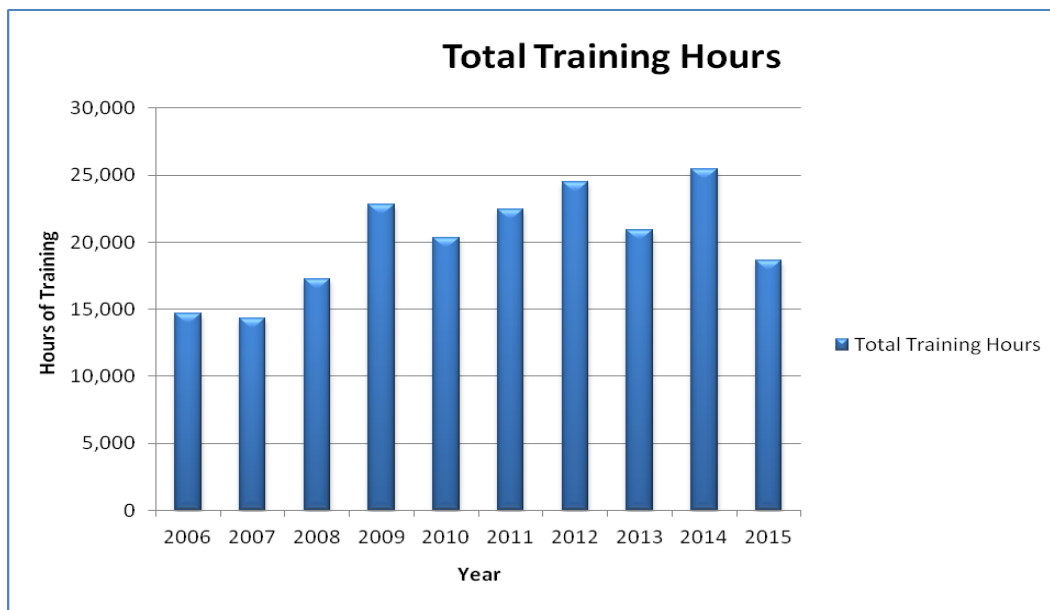


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- Sponsored several personnel as part of two (2) pilot fire officer programs through the Illinois Office of the State Fire Marshal: Company Officer Pilot (four personnel) and Advanced Fire Officer Pilot (two personnel).
- Completed Kinder Morgan pipeline safety and awareness training.
- Hosted an Illinois Fire Service Institute class: Crude Oil by Rail.

2015 Training Bureau Statistics



In 2015, Crystal Lake Fire Rescue Department personnel logged 18,404 hours of training. 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.

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 2015 are as follows:

- Advanced Cardiac Life Support
- Advanced Technician Firefighter
- Command & General Staff Functions
- Confined Space Operations
- CPR Instructor
- Dive Rescue I & II



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- 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
- EMS protocol, procedures and pharmacology
- Accreditation seminars
- 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
- Mechanical and Type I hood code updates
- Orland Park ICS Remote Program



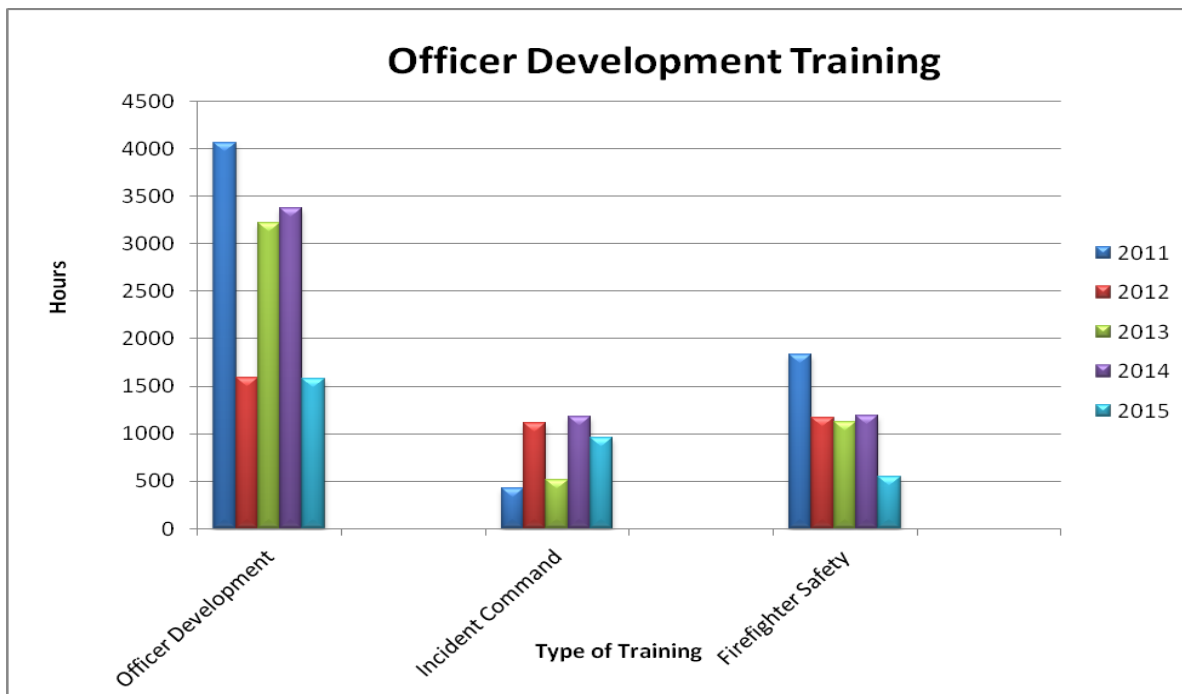
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- Public Safety Media Relations
- Fireworks for Fire Inspectors

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 2015, 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. Two of our members participated in a Lieutenant Orientation Program providing the officer a better transition from Firefighter/Paramedic to Lieutenant.



Probationary Training

Our probationary members complete 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 and EMS system protocol knowledge, as well as many different firefighting skills.

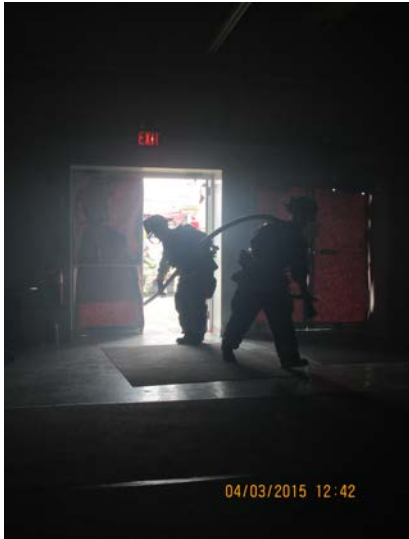


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Validation Training

Validation drills are completed amongst all the shifts on a regular basis. 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.



Left: Companies of Firefighter/Paramedics advance charged hoselines into a donated commercial building at 5831 Northwest Highway.
Right: A Firefighter/Paramedic ascends a ladder to make entry into a live fire training evolution at the Huntley Training Tower.



City employees are trained in safe and effective fire suppression using public education equipment.



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Safety Committee

Chairman – Bureau Chief Christopher Kopera

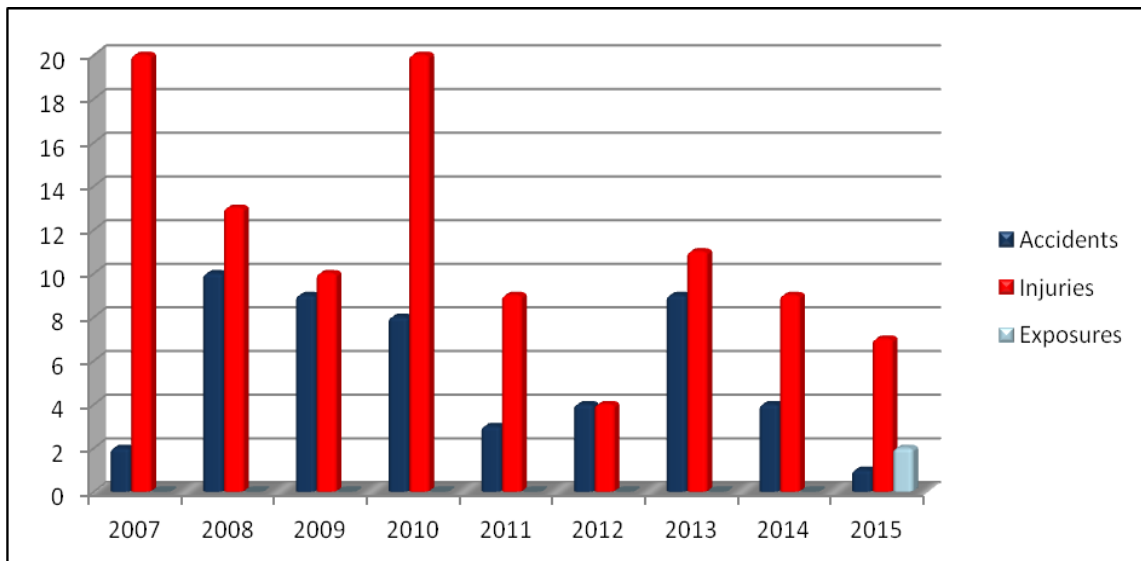
The Crystal Lake Fire Rescue Department continues to emphasize safety in our work practices and procedures. The health and safety of our personnel is paramount to be able to effectively perform our duties. The Department’s Safety Committee continues to be an integral part of the City’s risk management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

Accident/Injury Investigations

The Fire Rescue Department Safety Committee conducted a total of 10 accident/injury/exposure investigations for the year 2015. 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



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Behavior Observation Program

The Department's Behavior Observation Program continues to be a major aspect of our risk management plan. The program consists of monthly safety messages and requires Safety Committee participation. Each month, an officer prepares and presents a safety message for review. Areas of operational risk are identified from previous claims or observed behaviors with detailed solutions for implementation. Additionally, Safety Committee Meetings are now held in conjunction with Officer Development Meetings in order to review risk management. This affords an opportunity for the entire Officer Corps to meet at one time, review accident and injury reports, and collaborate on determinations and recommended solutions.

Fire Investigation Program

Lead Investigator - Deputy Chief Christopher Olsen

Fire investigation, and determining the cause and origin of a fire is often as important as responding to and extinguishing the fire. The more we learn how fires are started, the more we can work to prevent them from happening through education.

The Crystal Lake Fire Rescue Department has eight personnel trained in cause and origin fire investigations. The Department's personnel are required by the Office of the Illinois State Fire Marshal (OSFM) to maintain 100 hours for recertification every four years. These hours are accumulated in a variety of ways, including actual investigations, training sessions, and courtroom testimony. 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.

In 2015, our investigators responded to and investigated eight fires. None of these fires were deemed suspicious in nature and none involved injury or death to the occupants.

Fire investigations will continue to play a vital role in ensuring the safety of the citizens of the Crystal Lake area and the promotion of fire prevention activities.



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Juvenile Firesetter Program

Coordinator - Battalion Chief Thomas Pollnow

The Juvenile Firesetter Program is an educational program designed to assist juveniles in understanding the dangers and consequences of fire play. This program is voluntary and may also be assigned as part of a judgment by the juvenile court system.

The Department had one reported Juvenile Firesetter case in 2015. The case involved a 16 year old male who engaged in fire play with gasoline and matches setting a garage on fire. Juvenile firesetters are educated in the dangers of fire play with gasoline used as a medium to start the fire.

SCBA Program

SCBA Coordinator - Lieutenant Rick Kaiser

Self-Contained Breathing Apparatus (SCBA) is a vital piece of equipment to the firefighter and is used on a daily basis as part of their personal protective equipment. The technology that is used to operate this equipment requires an active preventative and regular maintenance program. As a cost-saving measure, several of the Department's firefighters are trained to make certain repairs to the SCBA.

Having an in-house repair center allows the Department members to diagnose potential problems with the SCBA, order parts, and then make the repairs and have the equipment back in service in an expedient manner.

The cylinders used on the SCBA air-packs are required to be hydrostatically tested every five years and have a life expectancy of 15 years. During 2015, all cylinders were successfully tested.

Fit Testing

Fit testing of face pieces used by employees in the Fire Rescue Department, Police Department, and certain Public Works employees, is conducted on an annual basis to meet OSHA standards and to ensure that the face piece an employee is wearing fits correctly and does not allow any contaminated air into their respiratory system. This in-house fit testing is a significant cost savings to the City.

SCBA Air Compressor

The Crystal Lake Fire Rescue Department has its own breathing air compressor that is used strictly for compressing air for the Department's SCBA and SCUBA tanks. This air



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is tested by an independent laboratory four times a year and is required to meet a grade “E” or better for the Department’s use as required by ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989.

The Fire Department took possession of a new SCBA air compressor during 2015. It is performing very well for the department. The compressor was designed to meet the new regulatory requirements regarding new pressure guidelines of 5500 psi.

Air Monitoring Equipment:

During 2015, the Department purchased new carbon monoxide (CO) monitors for all ambulances, engines, and ladder truck. The monitors were placed on the “first-in” EMS equipment bags. When the EMS crews enter an occupancy, they will be alerted to potential hazards and given insight into why someone is ill.

Apparatus

Apparatus Coordinator - Lieutenant Jim Sustek

In 2015, the Apparatus Committee implemented a paperless system to improve vehicle maintenance and inventory records.

Equipment

The reserve engines were outfitted with toolboxes, flammable gas monitors, water rescue bags, forcible entry bags, extrication bags, and CO detectors. This equipment will help to streamline vehicle change outs and will also be available for call back personnel. The Committee coordinated the purchase of four Blowhard ventilation fans to replace outdated equipment. These fans serve a dual purpose replacing the positive pressure fans and smoke ejector fans. The fans are battery operated for ease of deployment and are lighter to reduce risk of back injuries. New LED hand lights have been added to front line engines as others are retired. The Committee finalized specifications for a new tender, engine and ambulance this year.

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 Tickets

265 service tickets were generated for maintenance issues related to our apparatus. The City’s Fleet Division completes a majority of the service requests. Other requests are typically warranty issues addressed by the manufacturer.



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New Apparatus

Ambulance 353 was placed into service in July. The ambulance is on a heavy duty pickup truck chassis and has four wheel drive to assist in inclement weather.



Bureau Chief Vehicles 304 and 305 were purchased and replaced recycled police cruisers that no longer met the needs of the Department for functionality on the fireground and during inclement weather.





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Tender 371 was purchased by the Crystal Lake Rural Fire Protection District. Delivery is expected in early 2016.





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Retired Members

This past year brought the retirement of Lieutenant Robert Lutherus after 36 years of service with Crystal Lake Fire Rescue. We wish Lt. Lutherus the best in his retirement.



Mr. Bob Seegers, President of the Crystal Lake Rural Fire Protection District, retired from the board after 43 years of service. Mr. Seegers was the president of the board during his entire tenure. Mr. Seegers' business experience played a key part in his leadership style that resulted in many positive changes in the growth of our Department becoming a benchmark organization. We are very grateful for the service that Mr. Seegers provided to the Crystal Lake Rural Fire Protection District and wish him the best in his 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
Chris Kopera	Bureau Chief of Training
Jerry Larsen	Battalion Chief – Black Shift
Casey Cork	Lieutenant
Heidi Olsen	Lieutenant
Dan Grischow	Lieutenant
Bill Whyte	Battalion Chief – Red Shift
John Volenec	Lieutenant
Jim Sustek	Lieutenant
Darrell Cook	Lieutenant
Tom Pollnow	Battalion Chief – Gold Shift
Rick Kaiser	Lieutenant
Chris Angelo	Lieutenant
Chris Bedore	Lieutenant
Joyce Stevenson	Lieutenant

Members

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