CRYSTAL LAKE FIRE RESCUE

Annual Report 2012



2012 Department Photo

Crystal Lake Fire Rescue Department
2012 Annual Report

Gary J. Mayerhofer, City Manager
City of Crystal Lake

Dear Mr. Mayerhofer,

It is my pleasure to present to you the 2012 Crystal Lake Fire Rescue Department Annual Report. The Crystal Lake Fire Rescue Department has created this narrative to provide an accounting to you, the City Council, the Fire District Trustees, and the community, of the management and guardianship 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.

As you review this report, the commitment of the men and women of the Crystal Lake Fire Rescue Department to live the values of our organization…. "Serving Crystal Lake with P.R.I.D.E." (Professionalism, Readiness, Innovation, Dedication and Empowerment) will be self-evident.

The Department's ability to provide service is interrelated with numerous factors. A key factor is the organizational support provided by you, the Mayor, the City Council, the Fire District Trustees and the community. The members of the Fire Rescue Department deeply appreciate this support and strive to be a "Benchmark Organization."

Listed below you will find highlights of the Department's accomplishments in 2012:

- Responded to a record amount of calls for service.
- Developed plans to construct a dedicated Emergency Operations Center in 2013.
- Commenced revitalization and constructed an addition to Fire Station Three.
- Developed plans for a comprehensive Master Address Repository (MAR).
- Completed the replacement and FCC required narrow banding of the Crystal Lake Fire Rescue public safety radio frequency.
- Continued Officer Development on a monthly basis.
- Maintained the Crystal Lake Wireless Alarm Network (CLWAN).
- Continued to focus on the training and professional development of all personnel.
- Conducted two days of table-top, large-scale disaster training with all City departments.
- Supported the public safety and customer service aspects of the Three Oaks Recreation Area via training with supervisors and the staffing of the Marine Monitor program.
- Completed Life Safety Inspections in over 480 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.
- Replaced Ladder Truck 381 with a cost effective 100' aerial platform.
- Trained all personnel on ladder truck operations with our new aerial platform.
- Continued to develop and train on fire ground operational policies.
- Reduced preventable accidents and personal injuries.
- Provided community support through active participation and donations to the Salvation Army and Crystal Lake Food Pantry.

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,

James P. Moore
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 and portions of Lake in the Hills. The area served is approximately 46.2 square miles, with a resident population of over 52,000 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 three 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 73 personnel. Staffing is provided by three shifts of full-time firefighters on a 24/48-hour schedule, and is supplemented with paid-on-premise firefighters. Approved full-time positions include 3 Battalion Chiefs, 9 Lieutenants, and 48 firefighter/paramedics. Full-time firefighters and Lieutenants are members of the Crystal Lake Professional Firefighters Association, Local 3926, of the International Association of Firefighters. Minimum staffing for emergency response is currently 15 firefighters per shift. Approved day positions (40-hour week) include Fire Rescue Chief, Deputy Chief, Bureau Chief of Training, Bureau Chief of Fire Prevention, Fire Inspector, and Administrative Assistant (2). In 2012, the Department responded to 5,475 incidents. 61% of the incidents involved emergency medical care.

Year in Review

Deputy Fire Rescue Chief – Paul DeRaedt

2012 brought improvements in service for the Fire Rescue Department. The Department is committed to providing an exemplary level of service which is accomplished by the dedication of the men and women of this Department and their commitment to the citizens of Crystal Lake.

Community Fundraising
Fire Rescue personnel participated in two, off-duty fundraising events this year.

- For the seventh year, fire rescue personnel participated in the Salvation Army's Red Kettle fundraising campaign. In 2012, the Crystal Lake Fire Rescue Department raised $11,895.45.

- In lieu of holiday gifts, the Officers of the Crystal Lake Fire Rescue Department donated $730.00 to the Crystal Lake Food Pantry as part of the Officers' holiday tradition.



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

New Aerial Platform
On February 7, 2012, our City Council approved the purchase of a new 100' Aerial Platform from Emergency One.



Radio Narrowbanding
The project to comply with the Federal Communications Commission's (FCC) requirement to narrowband our emergency radio frequencies was completed in mid 2012. Radio transmitters, repeaters, comparators, and radios were replaced and/or reprogrammed.

Fire Service Accreditation
The Commission on Fire Accreditation International (CFAI) has created a comprehensive self-assessment and evaluation model that enables fire and emergency service organizations to examine past, current, and future service levels and performance, and compare them to industry best practices. This process leads to improved service delivery by helping fire departments:

- Determine community risk and safety needs.
- Evaluate the performance of the department.
- Establish a method for achieving continuous organizational improvement.

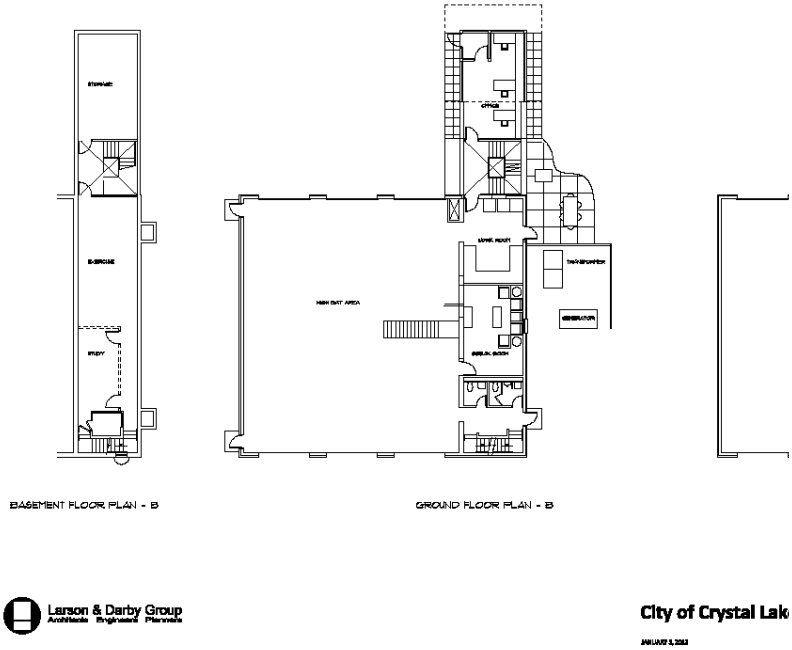
The Fire Rescue Department has taken the first step toward Fire Service Accreditation by becoming a “Registered Agency”. The Fire Service Accreditation process will require a critical evaluation the Fire Rescue Department in a full range of performance evaluation categories:

- Assessment and Planning
- Essential Resources
- External Systems Relations
- Financial Resources
- Goals and Objectives
- Governance and Administration
- Human Resources
- Physical Resources
- Programs
- Training and Competency

Each category includes a measure on which a judgment can be based, as well as indicators that define the desired level of ability to perform a particular task.

City-wide Emergency Operations Center Training
Forty-four personnel from the command staff of each City Department participated in two days of Emergency Operations Center Training. This training was intended to interface scene operations with the City’s Emergency Operations Center. The objectives of 1) Effective Communications, 2) Collaboration, and 3) Cooperation were met in each exercise.

Fire Station 3
The renovation of Fire Station 3 commenced in October. This project, once completed in the first quarter of 2013, will provide the City and Fire Rescue Department personnel with a greatly improved facility.



Commonwealth Edison – Joint Operations Center
During the past few years, the Chicagoland area, including McHenry County, has experienced various weather events that have resulted in lengthy power outages. As a result of the power outages, there was a strong push for greater protocol in regards to ComEd's communications with municipalities during restoration efforts. In an effort to streamline communications and coordination, ComEd has established a Joint Operations Center (JOC). The goal of this concept is to establish a more effective communications process and prioritization of critical municipality issues during severe weather or natural disasters.

The City of Crystal Lake, in cooperation with ComEd, McHenry County Emergency Management, and the McHenry County Coordinating Council, has brought the ComEd Joint Operation Center for McHenry County to the Crystal Lake Municipal Complex.

Marine Monitor
The position of Marine Monitor is intended to place a safety and support person on the lake during hours of operation at Three Oaks Recreation Area. Fire Rescue had another successful season promoting Three Oaks as a safe place to enjoy the warm days of summer.

Annual Department Awards

Annual awards were presented to Fire Rescue personnel on December 11th-13th. Members were recognized in 3 award categories: Department Service Awards, EMS Service Awards, and Department Recognition Awards.

Service Awards:

Kirk Kiermas	25 years
Casey Cork	20 years
Dan Grischow	20 years
Dave Kaltenbach	20 years
Jerry Larsen	20 years
Chris Olsen	20 years
Bryan Kauke	10 years
Tim Kerley	10 years
Matt Leuck	10 years
Mike Lucas	10 years
Brian Marino	10 years
John Volenec	10 years
Mike Hurley	5 years
Kevin Kownacki	5 years

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

Kirk Kiermas	35 years
Joyce Stevenson	30 years
Tim Butler	25 years
Bob Lutherus	25 years
Tom Pollnow	25 years
Matt Thuma	25 years
Dave Kaltenbach	20 years
Patrick Rozhon	20 years
Ray Jakubowicz	15 years
Chris Kopera	15 years
Bob Brechbiel	10 years
Bryan Kauke	10 years
Mike Lucas	10 years
Palmer Pace	10 years
Kim Schmitt	10 years
Amanda Gundlach	5 years
James Gauldoni	5 years
Scott Hagen	5 years
Rich Kreher	5 years
Martin Pireh	5 years

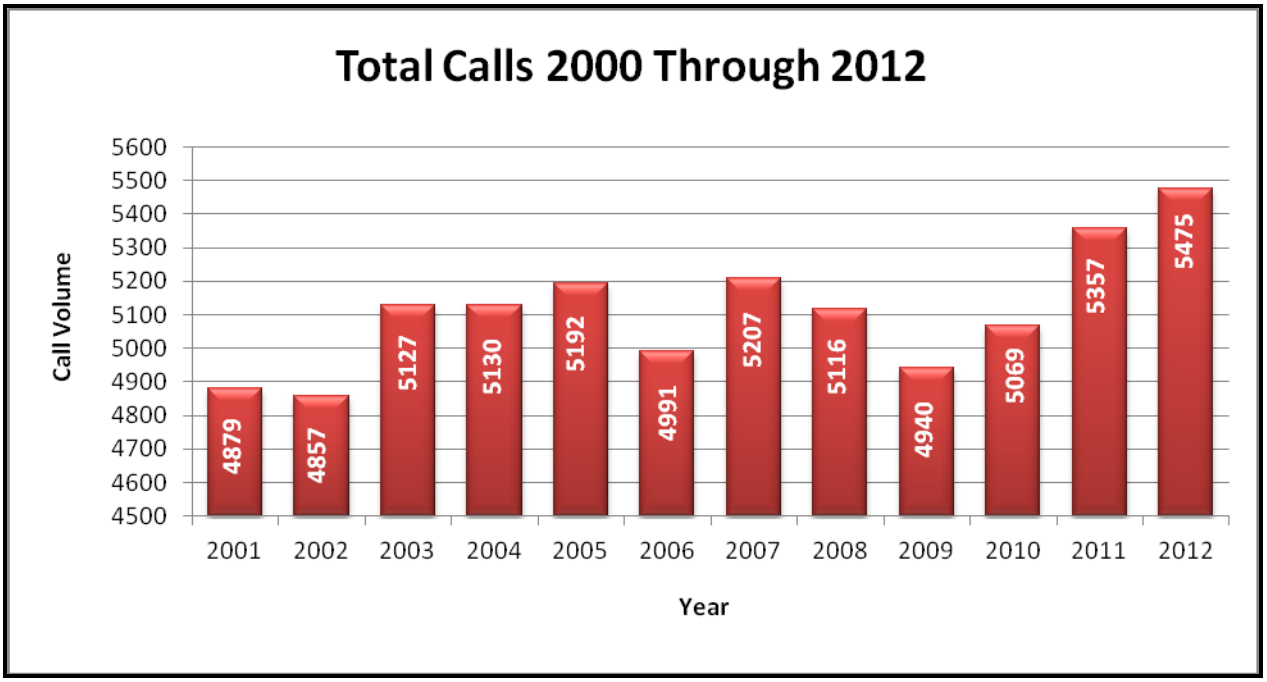
Department Recognition Awards

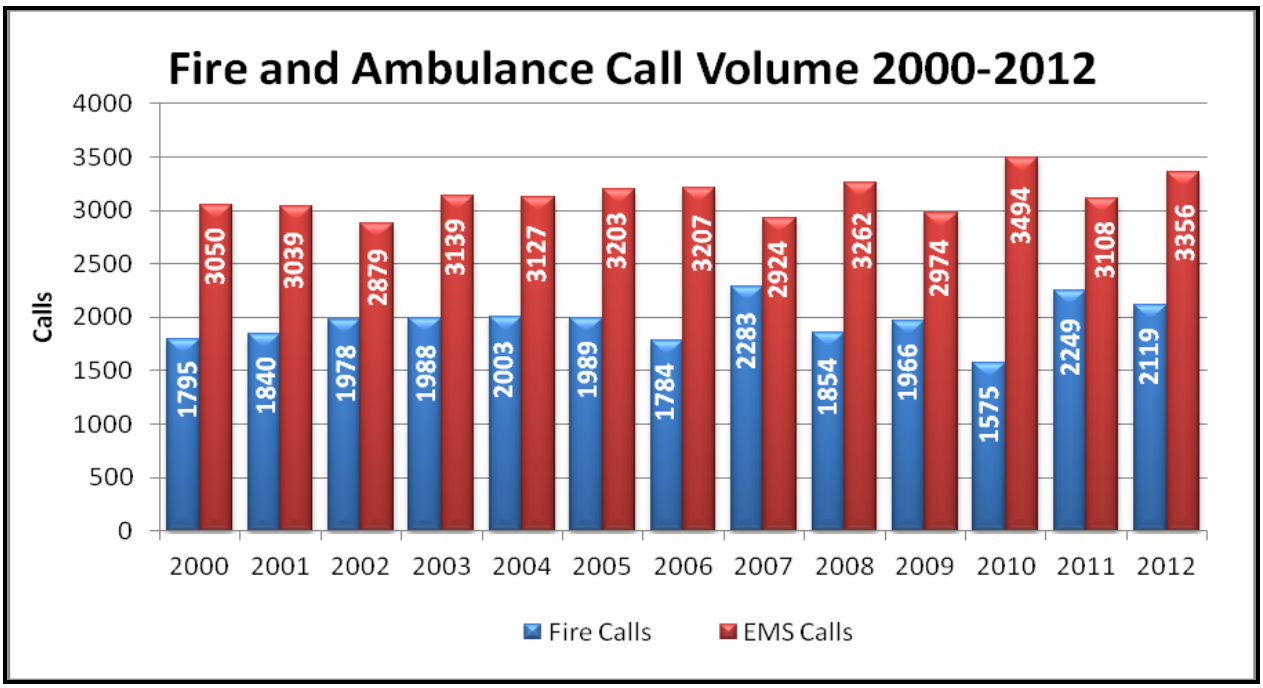
Type of Award	Date of Incident	Description	Crew Receiving Award
Unit Performance Award	3/15/12	Apartment building fire with several rescues	Chief Moore, BC's Kohley and Olsen, Lt's Kopera and Volenec, FF/PM's Bedore, Borst, Havemann, Gualdoni, Hurley, Kownacki, Kreher, Laufer, LeClercq, Linneman, Lucas, Rozhon, Schmitt and Sustek
Unit Performance Award	5/3/12	Plane crash in difficult terrain	BC Pollnow, Lt Kaiser, FF/PM's Aiello, Brechbiel, Fowles, Kerley, Marino, Pace, Pireh and Szatkowski
Award of Recognition	5/3/12	Recognition and reporting of a patient in a life-threatening situation.	Admin. Asst. Olszak
Unit Performance Award	5/24/12	Townhome fire in high wind conditions	Chief Moore, DC DeRaedt, BC Pollnow, Lt's Butler, Kaiser and Kopera, FF/PM's Brechbiel, Bucheger, Cook, Fowles, Gundlach, Kaltenbach, Kerley, Kauke, Marino, Muscavitch, Pace, Pireh, Ryan and Schmitt, and FF/EMT C. Williams
Award of Recognition	5/27/12	Annual Memorial Day flag placement at the graves of Crystal Lake firefighters.	Lt. Stevenson, FF/PM's Colucci, Cook, Hurley, Lucas and Rozhon
Award of Recognition	5/28/12	Full arrest with successful resuscitation	Lt Butler, FF/PM's Kaltenbach, Kauke and Muscavitch
Award of Recognition	8/1/12	Full arrest with successful resuscitation	FF/PM's Aiello, Brechbiel, Marino and Ryan
Award of Recognition	8/31/12	Full arrest with successful resuscitation	FF/PM's Brechbiel, Marino and Ryan

Award of Recognition	9/17/12	Full arrest with successful resuscitation	Lt. Volenec, FF/PM's Colucci, Hagen and Wisz
Award of Recognition	9/19/12	Full arrest with successful resuscitation	Lt. Volenec, FF/PM's Geyman, Kownacki, Sustek and Williams
Award of Recognition	10/30/12	Full arrest with successful resuscitation	FF/PM's Cook, Kaltenbach, Muscavitch and Spivey
Award of Recognition	11/17/12	Operation North Pole	Chief Moore, DC DeRaedt, BC's Larsen and Pollnow, Admin Asst. Olszak, Lt's Cork, Kaiser, Kiermas, Kopera, Lutherus, Stevenson and Volenec, FF/PM's Aiello, Bedore, Bucheger, Cook, Fowles, Gundlach, Hurley, Kerley, Kownacki, Kreher, Leuck, Muscavitch, Pireh Szatkowski and D. Williams

Incident Statistics

Battalion Chief William Whyte

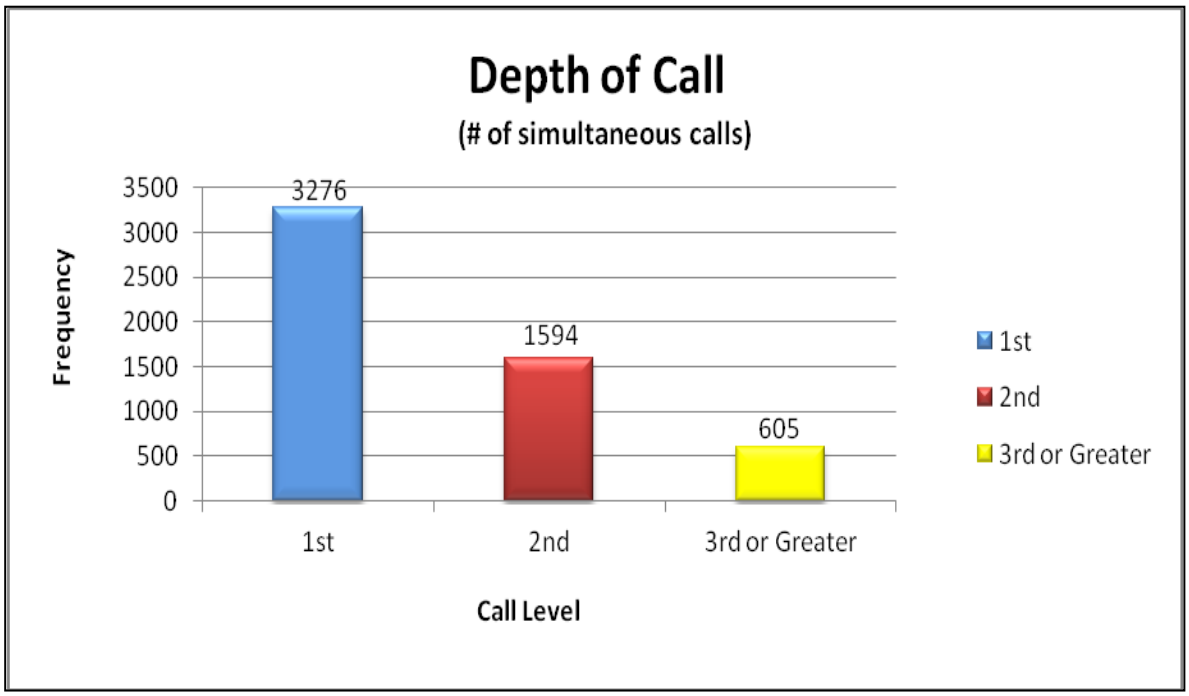


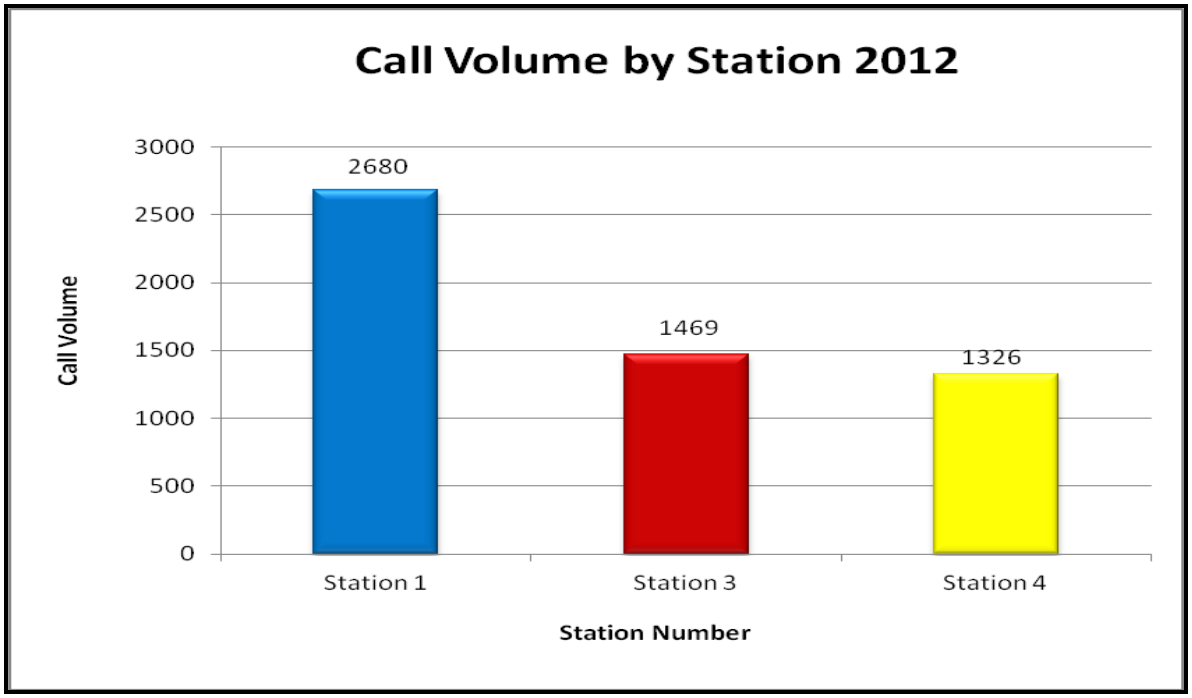


Fire Rescue Department Calls for Service 2010-2012

Incident Type	#2010	% 2010	#2011	%2011	#2012	%2012
Fire	65	1.28%	75	1.40%	110	2.01%
Rescue and EMS Incidents	3,503	69.11%	3,502	65.37%	3,768	68.82%
Hazardous Conditions (No Fire)	204	4.02%	345	6.44%	218	3.98%
Service Call	440	8.68%	456	8.51%	509	9.30%
Good Intent Call	136	2.68%	190	3.55%	188	3.43%
Fire Alarms	721	14.09%	789	14.73%	682	12.46%
Total	5,069	100.00%	5,357	100.00%	5,475	100.00%

Jurisdiction	# 2010	% 2010	#2011	%2011	#2012	%2012
City of Crystal Lake	4,432	87.43%	4,622	86.28%	4,807	87.80%
CL Rural FPD	541	10.67%	616	11.50%	550	10.05%
Out of District	96	1.89%	119	2.22%	118	2.16%
Total	5,069	100.00%	5,357	100.00%	5,475	100.00%


Depth of Call
(# of simultaneous calls)
Frequency
3500
3000
2500
2000
1500
1000
500
0
3276
1594
605
1st
2nd
3rd or Greater
Call Level
1st
2nd
3rd or Greater


Call Volume by Station 2012
Call Volume
3000
2500
2000
1500
1000
500
0
2680
1469
1326
Station 1
Station 3
Station 4
Station Number

Crystal Lake Fire Rescue Department Fire Suppression Response Times Within Each Response District			
	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:46	1:40	1:56
Average Turn Out Time	0:55	0:58	0:51
Average Travel Time	4:23	4:19	5:21
Average Alarm To Scene Time	7:04	6:57	8:08

Crystal Lake Fire Rescue Department EMS Response Times Within Each Response District			
	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:56	1:56	1:57
Average Turn Out Time	0:35	0:34	0:32
Average Travel Time	3:48	3:50	4:44
Average Alarm To Scene Time	6:19	6:20	7:13

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Public Education

Coordinator- Lieutenant Joyce Stevenson

Public Education is a section of the Crystal Lake Fire Rescue Department's Fire Prevention Bureau. It supports the Fire Prevention Bureau by informing all age groups about fire prevention with the goal of reducing fires, fire injuries, and fire deaths. The Fire Rescue Department receives many requests each year to conduct tours and fire safety talks for school groups, scouts, senior groups, businesses, and other organizations. In 2012, 140 events were presented to approximately 8,960 people. The Fire Rescue Department also conducted observed fire drills which involved 14,227 children.

The majority of the Public Education events were directed to school children from ages 3 to 9 years old. All children are taught to STOP, DROP, and ROLL in the event of their clothes catching on fire and to know that a firefighter is a friend who will help them. Older children are encouraged to make and practice a fire escape plan with their family. All children are encouraged to know the emergency number 911, as well as their name, address, and telephone number. Also, the Fire Rescue Department's Life Safety Trailer, which simulates a single-family home, is an excellent tool for teaching families about fire escape and the importance of practicing exit plans.



In 2012, 11 public fire extinguisher classes were conducted with a total of 263 students participating. The classes were conducted utilizing the Bullex Fire Extinguisher Training System.

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

- The Crystal Lake Expo - emphasis is placed on emergency preparedness in case of disaster. Brochures, such as the Crystal Lake Preparedness Guide, were developed to encourage people to be prepared at home or work in case of a blizzard or severe summer storm.
- McHenry County Children's Health Fair – The Department's Safety Trailer is featured at this county-wide event.

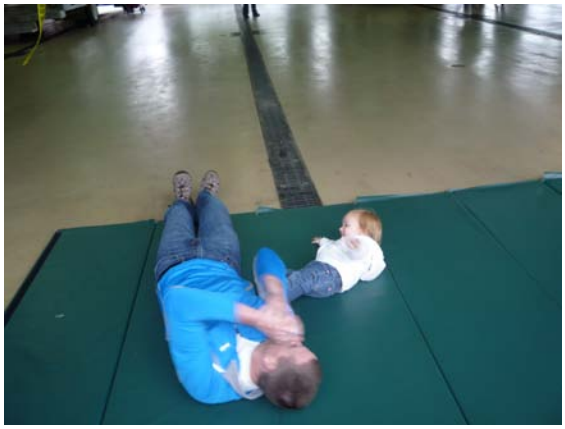
- National Night Out - Sponsored by the Crystal Lake Police Department, this nationally recognized event provides an opportunity to showcase the Fire Rescue Department's equipment and talk to families about fire safety.

- 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 "Ask the Firefighter". Everyone is welcome to view the Fire Rescue Department's vehicles, tour the fire station, and participate in an escape drill in the Fire Rescue Department's Safety Trailer.



Children going through the obstacle course



Practicing STOP, DROP and ROLL.

CPR Coordinator – Lieutenant Joyce Stevenson

Cardiopulmonary Resuscitation (CPR) classes continue to be in demand as more businesses, churches, and non-profit agencies are purchasing Automatic External Defibrillators (AED). The Crystal Lake Fire Rescue Department offers American Heart Association (AHA) certification for the following classes:

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

Crystal Lake Fire Rescue Department
2012 Annual Report

The Department offers regularly scheduled classes each month and will schedule classes for organizations such as schools, churches, scouts, sporting groups, and social service organizations. Listed below is the breakdown of the classes taught in 2012:

Group	Number of Students	Number of Classes
City of Crystal Lake Staff		
• Police	64	7
• Public Works	57	10
• Fire Rescue	61	10
• Three Oaks Recreation Area	29	4
Scheduled classes	90	22
School District 47	112	13
Businesses/organizations	43	7
Non-certification/scouts	40	3
Total	**496**	**76**

In addition to the above classes, 11 people were certified after completing an online class (www.onlineaha.org) through the American Heart Association. After completing the online course, students are given a certificate to bring to an instructor who tests their hands-on skills.



CPR being demonstrated by Lt. Stevenson at Open House.



Two students practice “Hands On” CPR.

Information regarding CPR training classes can be found at:

- www.crystallake.org
- The City of Crystal Lake Public Access Channel 17
- The City of Crystal Lake Newsletter

Fire Prevention Bureau

Bureau Chief of Fire Prevention - Jerry Larsen

Fire Prevention Programs focus on the three E's of Fire Prevention - Education, Enforcement, and Engineering. 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. Plan review is part of this process. The Crystal Lake Fire Prevention Bureau's continued focus on the three E's of Fire Prevention is a critical step in helping ensure the safety of the Crystal Lake community.

Plan Reviews
During the calendar year of 2012, the Fire Prevention Bureau completed 428 plan reviews. Plans are for any type of structure, system, or event that is reviewed by the Fire Prevention Bureau for code compliance. The approved plans are then used for construction in the field or set up for an event. The Fire Prevention Bureau strives to complete reviews within the established City deadlines of 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 the calendar year of 2012, 97.90 percent of the reviews were completed within the time frames. Listed below are the types and amounts completed:

Type of Review	2011	2012
Building Permit	114	126
Building Permit Occupancy	39	10
Sprinkler System	67	69
Fire Alarm System	84	89
Wet Chemical	11	9
PUD	7	17
SUP	4	12
TUP	39	21
Variation	13	16
Façade Grant	4	8
Cursory	15	15
FOIA	39	35
County-Residential	2	1
Total	**438**	**428**

Inspections / Code Enforcement

The Fire Prevention Bureau completed 1,077 inspections in calendar year 2012. Inspections of this type are for system acceptance, occupancy approval, or code compliance. Listed below are the types and amounts completed:

Inspection Type	Number of Inspections 2011	Number of Inspections 2012
Construction / Status	126	139
Fire Alarm	114	133
Sprinkler System	143	144
Hood or Other Suppression	17	25
Life Safety Follow Up / Target Hazard	148	156
Occupancy	256	284
Concerns / Condition Report	172	196
Total	**976**	**1,077**

Life Safety Inspections

During calendar year 2012, the Fire Rescue Department conducted 701 Life Safety Inspections. Life Safety Inspections are conducted by on-duty fire crews and are limited to life safety features such as exiting, emergency lighting, storage, and other items that could cause a fire to start.

Life Safety Inspections	Calendar Year 2011	Calendar Year 2012
Initial Inspections	679	481
Re-Inspections	285	220
Total	**964**	**701**



Fire Inspector Art Lutherus conducts a plan review.

Specialized Rescue Teams

Divemaster - Lieutenant Kirk Kiermas

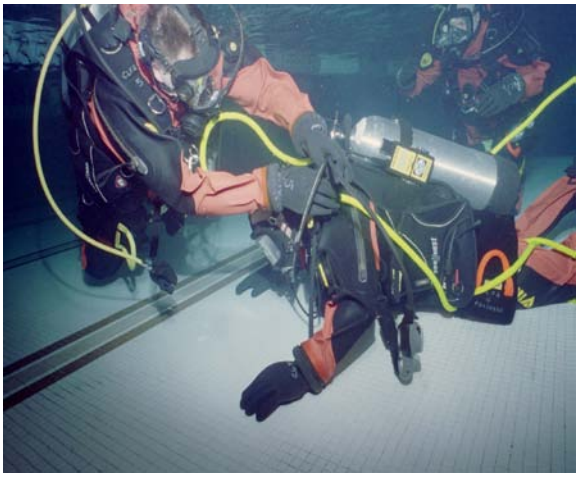
During 2012, the Crystal Lake Fire Rescue Dive Rescue Team (DRT) continued to be active in training and incident response. DRT personnel regularly train on basic and advanced dive techniques. Team training is essential for the safe and efficient performance of all DRT members. Additionally, all Fire Rescue personnel have been trained to assist in dive operations, boat operations, surface water rescue, and communications. Total Fire Rescue Department coordination is paramount to successful mitigation of emergency responses.

Several of the training areas the DRT focused on during the year are as follows:

- Annual basic skills refresher
- Boat operations
- Compass navigation
- Underwater hardwire communication
- Underwater wireless communication
- Rope signal communication
- Search and recovery techniques
- Ice diving
- Sonar operations
- Surface water rescue

All DRT personnel are required to achieve minimum training certifications in order to meet Fire Rescue Department standards. Minimum certification requirements are as follows:

- Public Safety Diver I
- Dive Rescue I
- Ice Rescue Diver



Divers work in the pool at the YMCA.



Divers work on buddy breathing.

The Crystal Lake Fire Rescue Department is a member of the Mutual Aid Box Alarm System (MABAS) and the Lake / McHenry Counties Specialized Rescue Team (SRT) and, as such, can be requested to assist other departments with water-related incidents. To maintain these memberships, all DRT personnel must complete a minimum number of training dives each year, including open water, ice dive and annual basic skills.

During 2012, the DRT performed their training dives at the Three Oaks Recreation Area. Both shore-based and boat-based dives were conducted.



A diver works with a search rope.



A diver prepares to enter the water at Three Oaks Recreation Area.

The Crystal Lake Fire Rescue Department responds to water related incidents, initially utilizing one of three modes:

- **Surface Water Rescue:** Initial response for any victims on the surface of the water. All Fire Rescue Department personnel are trained to perform these procedures.

- **Rescue Mode:** The first 90 minutes of a victim submerged under water. This is the time frame when saving a life has the greatest potential. DRT personnel are required for this type of incident.

- **Recovery Mode:** Initiated when the victim has been underwater for greater than 90 minutes. Sonar and additional resources will be considered.

Each year, the DRT assists the Three Oaks Recreation Area staff with the set up and take down of the water areas. Buoys need to be placed in both the North and South lakes for swimmer and boater safety. Divers, assisted by staffed boats utilizing underwater communications, place multiple buoys during training drills that require skills not normally used during most dive drills. Divers have to use hand tools and manipulate fasteners with gloves on in low visibility conditions. Boats assist with the removal of the buoys and returning them to shore.



Crystal Lake Dive Vehicle 391



Divers search the swim area at Three Oaks Recreation Area.

Each year, the Crystal Lake Fire Rescue DRT participates in duel training with the staff of both the Three Oaks Recreation Area and the Crystal Lake Park District. This training allows the personnel from the Fire Rescue Department, Three Oaks Recreation Area, and the Park District to become familiar with the operations of each entity.

In any incident the Crystal Lake Fire Rescue DRT performs in a professional and expedient manner. The DRT is ready to respond to any incident when requested, whether emergency or non-emergency in order to provide their specific level of expertise.

SRT Coordinator - Lieutenant Dan Grischow

The Crystal Lake Fire Rescue Specialized Rescue Team (SRT) stayed very active in 2012. The Crystal Lake SRT is also a part of the larger Lake / McHenry Counties Specialized Response Team, which prepares for high risk, low frequency incidents. As no one department can have all of the equipment and manpower necessary to handle these events, the combined manpower and specialized equipment from Lake and McHenry Counties are able to handle these specialized calls for service.

Team members train in four major specialties:

- Structural Collapse
- Trench Rescue
- Confined Space Rescue
- High Angle Rescue

Training

Crystal Lake technicians attended over 140 hours of additional rescue training this year. Along with hosting an equipment familiarization drill in February and Slope Evacuation drill in September, Crystal Lake technicians provided manpower and equipment for several other drills around McHenry County. Annually, Crystal Lake technicians attend drills throughout Lake and McHenry Counties and must complete at least eight drills and one update each year. Trainings included structural collapse rescue, slope evacuation, trench rescue, and confined space rescue.

Three Crystal Lake Firefighters began their training to become SRT technicians with the Lake / McHenry Counties team this past year. A commitment of four 40-hour training classes is needed to obtain operations-level certification and four additional 40-hour training classes are needed to reach technician-level certification, as required by the office of the Illinois State Fire Marshal.

Equipment
Crystal Lake Fire Rescue continues to house the Lake / McHenry Counties Urban Search and Rescue (USAR) truck and two roll-off containers at Fire Station Three. This year, with the remodeling of Station 3, the canisters were given a new concrete pad to be staged on. These USAR containers house tools and specialized equipment that team members can use to handle almost any type of specialized rescue incident. One canister contains the equipment needed for high angle rescue, confined space, and structural collapse rescue (SRT 5). The other canister has been designated as the trench canister (Trench 5) because it is larger and can hold the large amount of equipment and lumber needed for a trench collapse incident. This past year, a second set of pneumatic Raker shores was added along with additional fittings for vacuum truck utilization during trench operations. All Crystal Lake Fire Rescue members are trained to drive and load canisters on the vehicle in case they are needed to respond to an incident with a canister in either Lake or McHenry Counties.





Pictured L-R is roll-off containers SRT 5 and Trench 5.

Haz Mat Team Coordinator - Lieutenant Dan Grischow

Crystal Lake Hazardous Materials (Haz Mat) Team members, like the SRT Team members, are part of the larger Lake / McHenry Counties Hazardous Materials Team. Crystal Lake has five team members who are certified to the Hazardous Materials Technician B level (highest level of certification). This involves an annual commitment of at least 40 extra hours of hazardous materials training. Technicians train with specialized monitors, fully encapsulated suits, and a host of other specialized equipment.

Training
Crystal Lake technicians attended over 140 hours of continuing education during 2012, including monthly drills and seminars in hazardous materials identification, incident management, and chemical process industries.

Emergency Medical Services (EMS)

EMS Coordinator – Lieutenant Chris Kopera

EMS Statistics

EMS Incident Outcome	Number of Patients	% of Patients
Hospital Transport	2,838	72.51%
Non-Transport	1,053	26.90%
Other Agency Transport	23	0.59%
Total	**3,914**	**100%**

Transport Services Provided	Number of Patients	% of Patients
Advanced Life Support	1,886	48.19%
Basic Life Support	952	24.32%
Non-Transport	1,076	27.49%
Total	**3,914**	**100%**

Transport Destination	Number of Patients	% of Patients
Centegra-McHenry	1,006	35.47%
Centegra-Woodstock	1,248	43.96%
Good Shepherd	386	13.60%
Sherman	198	6.97%
Non-Transport	1,076	N/A
Total	**3,914**	**100%**

Training Bureau

Bureau Chief of Training – Christopher Olsen

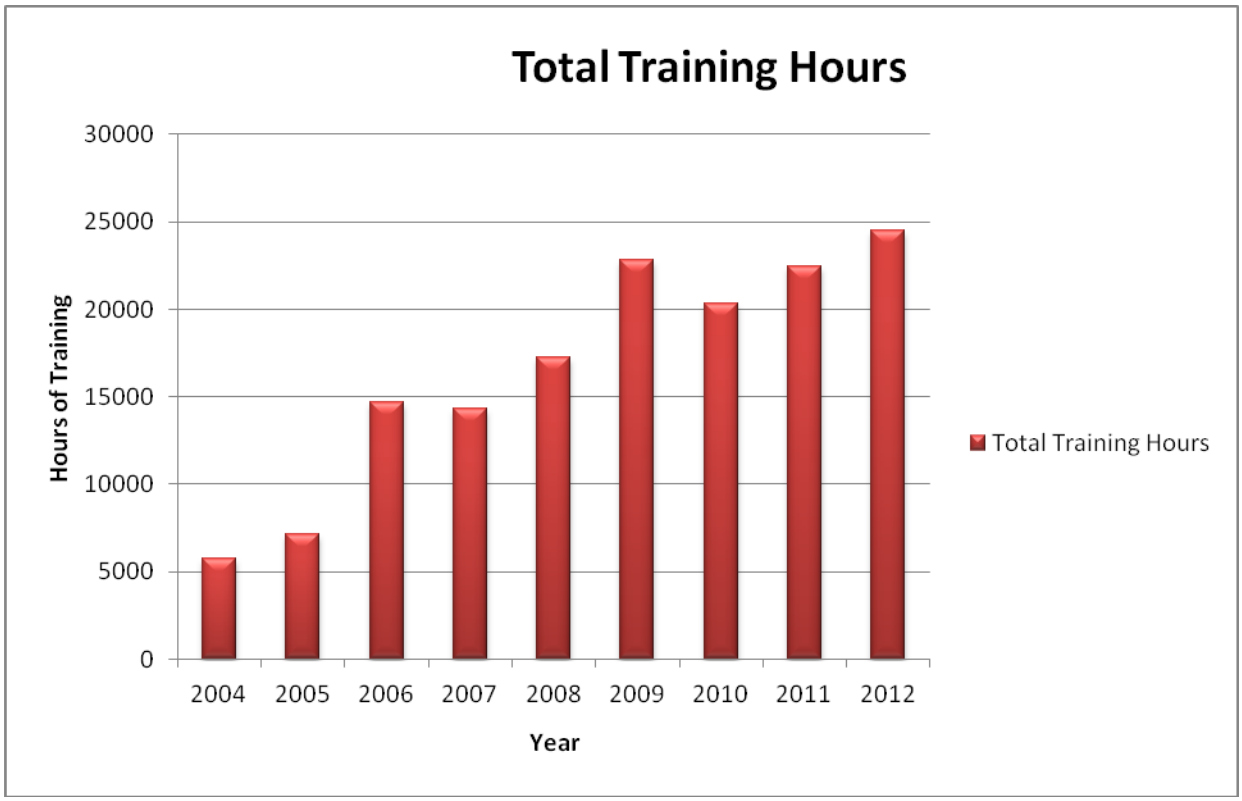
Training has been a high priority for the Fire Rescue Department for many years. This is a key element in ensuring the Department's vision of continuing to be the benchmark organization for emergency services. Training requirements are outlined by several organizations, such as the Occupational Safety 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 24,000 hours of training in order to learn new skills and remain proficient in all areas of emergency operations.

In 2012, the Training Bureau has accomplished the following:

- Provided live fire training utilizing the Department's agreement with the Huntley Fire Protection District to use their training facility.
- Prepared and presented a Fire Officer Development seminar with FDNY Lt. Mike Wilbur on Ladder Truck Operations at McHenry County College.
- Acquired one vacant residential and one vacant commercial structure to utilize practical "hands-on" training.
- Hosted an Incident Safety Officer Class in conjunction with the Illinois Society of Fire Service Instructors.
- Completed online Autism Awareness training for all personnel through the University of Illinois Fire Service Institute.
- Completed aerial ladder operations training in coordination with the new aerial platform.
- Participated in practical training on fireground operations with neighboring fire departments.
- Worked cooperatively with Martin Chevrolet in educating the Department's personnel regarding how to work with vehicles, such as the Chevy Volt and the hazards associated with electric vehicles.
- Worked with the City's Water Division in gaining a better knowledge of the City's water system.
- Completed residential fireground operation training for day and night sessions with the Woodstock, Marengo, and Union Fire Departments.

- Worked cooperatively with the Crystal Lake Police Department in discussing and reviewing evidence and scene handling procedures, as well as Joint Command Staff meetings/trainings.
- Completed a safety in-service training with Flight for Life.
- Completed a "Pig Lab" training with Flight for Life personnel to gain hands-on knowledge and practical training with the cardiac and respiratory anatomy of a pig, which closely resembles that of a human.

2012 Training Bureau Statistics



In 2012, Crystal Lake Fire Rescue Department personnel logged 24,517 hours of training. On average, each firefighter/paramedic participated in approximately 377 hours of training annually, or 31.42 hours of training monthly.

Professional Development and Certifications
Many classes, seminars and trainings were attended with a large amount of those being State certification courses. Some of the certification courses attended by our personnel are as follows:

- Instructor I and II
- Tactics & Strategy I and II
- Management I,II, III, and IV
- Fire Prevention Principles I
- Vehicle Machinery Operations
- Rope Operations
- Advanced Technician Firefighter
- Trench Operations
- Structural Collapse Operations
- Confined Space Operations
- Advanced Cardiac Life Support
- Fire Investigator
- Incident Safety Officer

Our personnel have spent many hours both in the classroom and on the training ground. The following list reflects some of the types of educational opportunities that have been made available to the Fire Rescue Department's personnel both in-house and at outside locations:

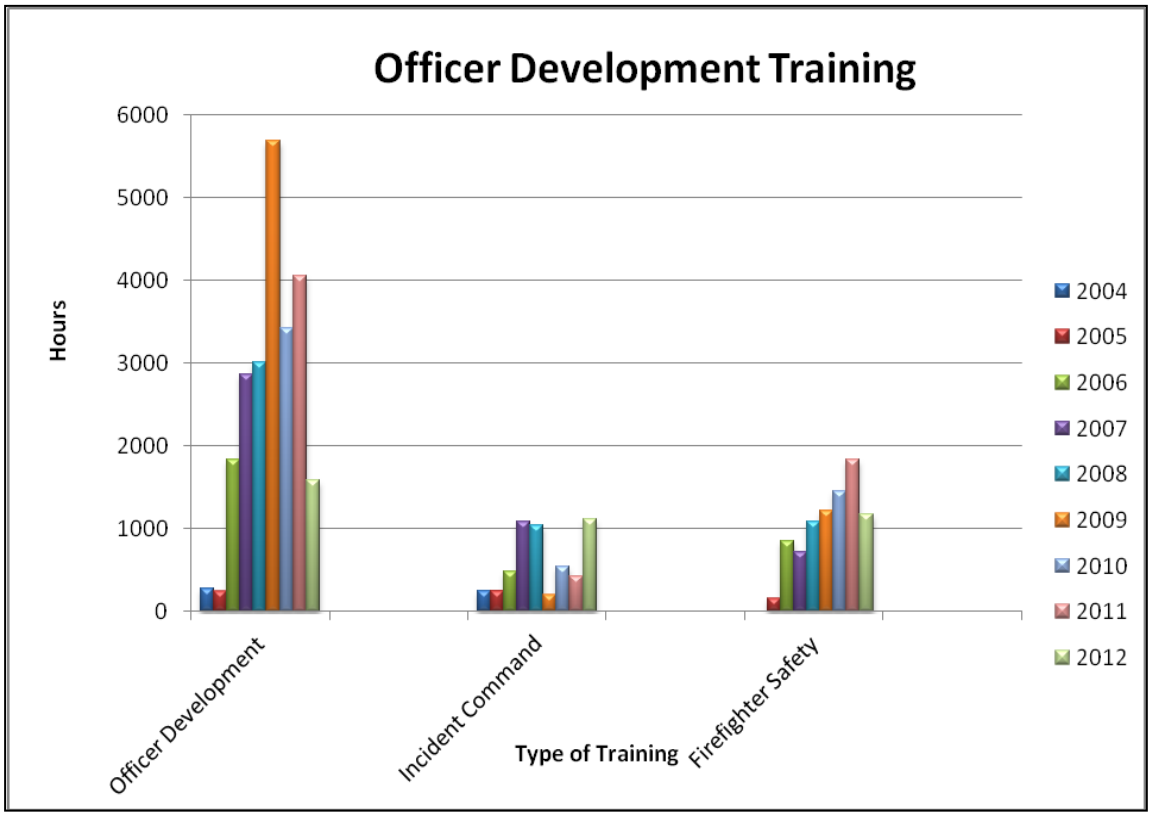
- Live fire suppression drills
- Water supply drills
- Forcible entry/exit drills
- Ventilation drills
- Building tours/Pre-plans
- Building construction training
- Auto-aid training with neighboring fire departments
- Aerial operations drills
- Ladder drills
- Incident Command training
- Officer level training
- Specialty rescue
- Rapid Intervention training
- Fireground Command and Company Officer training

Fire Officer Training

The Fire Rescue Department's commitment to officer development training has helped to ensure the officers of the Department remain focused on safe and efficient fireground operations. By developing the knowledge and abilities of our officers, they in turn can better instruct and lead our firefighter/paramedics. Each officer is required to attend outside training classes that will educate, enhance, or supplement their own knowledge and experience levels. In 2012, Fire Rescue Department officers logged over 2,600 hours of Officer Development training. The Department also provides officer type training to our firefighter/paramedics who occasionally work in supervisory positions.

In addition to attending Fire Officer I and II courses, other courses and seminars attended by Fire Rescue officers training included:

- Fireground Command Officer class at the University of Illinois Fire Service Institute
- Leadership at Private Dwelling Fires
- "Blue Card" Command Class Series
- Incident Safety Officer
- Health and Safety Officer
- Monthly Officer Development Company Drills



Probationary Training
The Crystal Lake Fire Rescue Department welcomed three new personnel to the Department's ranks in 2012. The probationary members will each complete 240 hours of orientation training. This comprehensive training far surpasses the orientation programs of most other fire departments. The probationary members are trained in Department policies and procedures and EMS System protocol knowledge, as well as many different firefighting skills. At the end of this probationary period, the probationary members are tested on the "Essential Firefighter Skills" and complete a comprehensive EMS testing of protocol knowledge and skills. This rigorous training helps ensure the Department continues to be the benchmark organization in emergency services.

SCBA Training Trailer
The Self-Contained Breathing Apparatus (SCBA) trailer is owned by the Crystal Lake Fire Rescue Department and continues to be utilized by the following McHenry County fire departments through a cooperative agreement:

- Cary Fire Protection District
- Richmond Fire Protection District
- Woodstock Fire/Rescue District

Throughout the year, Crystal Lake Fire Rescue personnel have the opportunity to drill in the trailer. The trailer provides a confidence course for members wearing SCBA and is also used to practice various rescue scenarios.

Validation Training
At various times of the year, validation drills were completed amongst all the shifts. Validation drills are an essential part of any training program to ensure that the skills being taught are accomplishing proficiency by all personnel.

The validation drills consist of numerous areas of job function that are randomly chosen for the crews to perform. The station assigned to perform the validation drill then gathers the equipment necessary to perform the drill, relocating to a specific training site, if necessary. The Department has expanded the validation drills in 2012 to include the operation of additional equipment, including two-way radios, as extensive changes have taken place with the Department's radio system this past year. Most of the validation drills have a time standard in which the drill must be completed.

Safety Committee

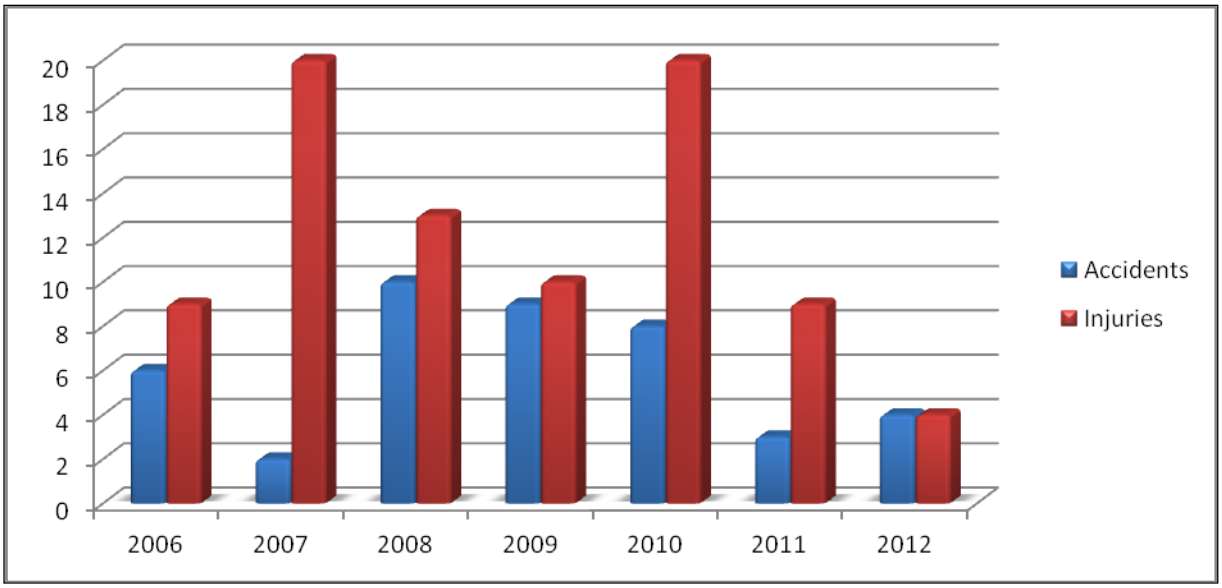
Chairman – Bureau Chief Christopher Olsen

The Crystal Lake Fire Rescue Department Safety Committee continues to be an integral part of the City of Crystal Lake's overall risk management plan and program. Through the Safety Committee, all levels of employees can communicate safety concerns and ideas to promote a safe work environment for Department employees.

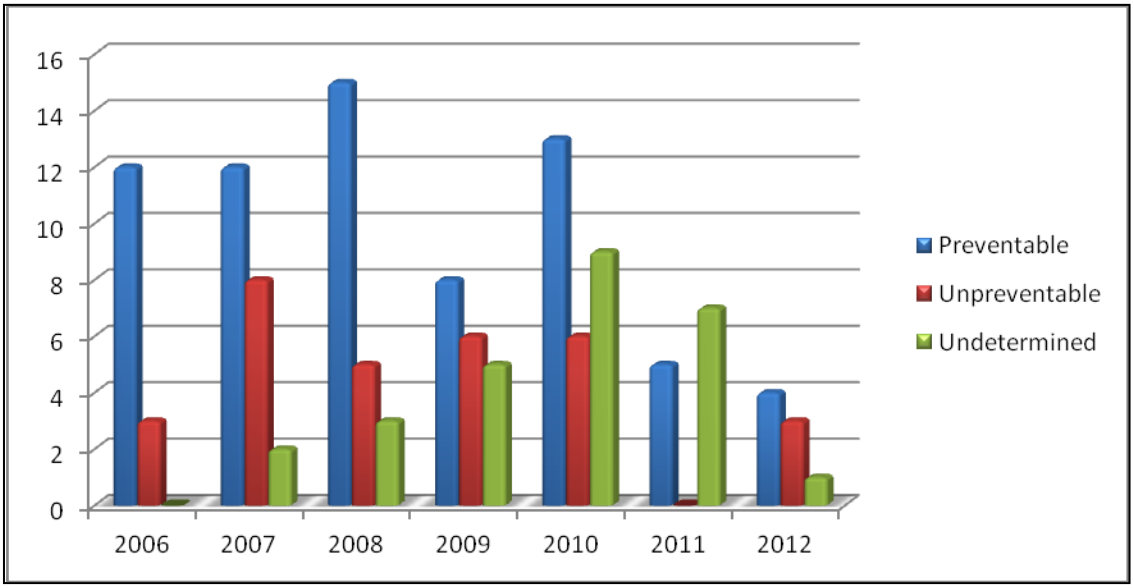
Following are several of the Crystal Lake Fire Rescue Department's accomplishments during the past year:

- Reduced the total number of preventable vehicle accidents by over 20%.
- Continued quarterly driver education training.
- Continued to promote the Department's Observed Behavior Program.
- Promoted the use of physical fitness equipment to improve personal strength and health.
- Continued the warm-up routine for multi-company practical evolutions.

Accident/Injury Investigations
The Fire Rescue Department Safety Committee conducted a total of eight accident/injury investigations for the year 2012. The following graph shows a comparison between previous years' accident/injury investigations:



Reducing the number of preventable accidents was a major focus for the Safety Committee during 2012 and will continue to be a priority for years to come. The following graph shows a comparison between preventable, unpreventable, and undetermined accident/injury investigations from 2006 to 2012:



Fire Investigation Program

Lead Investigator - Bureau Chief Christopher Olsen

Fire investigation is an important part of the fire prevention process. By investigating the cause and origin of fires, the fire service is better able to identify trends and motives related to arson, as well as defects in products that cause fires and then work to prevent future fires. Many of the fires the Department responds to are deemed to be accidental in nature.

The Crystal Lake Fire Rescue Department has eight personnel trained in cause and origin fire investigations. Of these personnel, one is a certified arson investigator, which involves a police background. 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.

In 2011, the Department investigated seven fires. In 2012, investigators responded to and investigated 17 fires. Of the fires investigated, four were suspicious or intentionally set and 13 were due to other reasons that were not suspicious or intentional.

Significant Investigations

The McHenry County Sheriff's Department, along with several other neighboring counties, experienced a number of barn fires that were intentionally set. One of these fires was within the Crystal Lake Fire Rescue Department's jurisdiction. Through diligent cooperation from fire and law enforcement, it was possible to collectively investigate these fires and close out these incidents with the arrest of two area youths.

Another significant event in the Crystal Lake community was the prosecution and sentencing of a female who intentionally set a fire in September of 2010 with the intent of murdering her live-in boyfriend. This was a major accomplishment for the Crystal Lake Fire Rescue Department, Crystal Lake Police Department, and the McHenry County State's Attorney was due to the uncompromising dedication of the investigative personnel of all agencies.

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.

Quartermaster Program

Quartermaster - Lieutenant Robert Lutherus

Crystal Lake Fire Rescue is committed to providing National Fire Protection Association (NFPA) compliant bunker coats, pants, boots, gloves, helmets, hoods, eye protection and Self-Contained Breathing Apparatus. The Department follows NFPA 1851, which outlines maintenance, inspections, and the recommended serviceable life of personal protective equipment (PPE).

In 2012, the following was achieved:

- Quarterly inspections of all PPE as outlined per NFPA 1851
- Quarterly maintenance of all PPE as outlined per NFPA 1851
- Replacement of eight sets of bunker gear that had reached their serviceable life.
- Replacement of 10 sets of reserve bunker gear (temporary use gear when a firefighter's primary gear is out of service for maintenance or repairs) that had exceeded their usable life.

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 can also be assigned as part of a judgment by the juvenile court system.

The Department had one Juvenile Firesetter case in 2012.

- Case was court appointed.
- Fire play in an abandoned house.
- Matches & natural materials used.

SCBA Program

SCBA Coordinator - Lieutenant Rick Kaiser

Self-Contained Breathing Apparatus (SCBA) are vital pieces of equipment to the firefighter and are 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 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.

Fit Testing
Fit testing of face pieces for employees in the Fire Rescue Department, Police Department, and certain Public Works employees, is conducted on an annual basis 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 air compressor that is used strictly for compressing air for the Department's SCBA and SCUBA tanks. This air 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.

Apparatus

Coordinator - Lieutenant John Volenec

2012 was a very positive and progressive year for the Crystal Lake Fire Rescue Department fire apparatus. All of the work that went into maintaining the Department's fleet of vehicles is attributed to a group effort by the City's Fleet Services Division and the Fire Rescue Apparatus Committee.

New Apparatus
Truck 381, a 2012 E-One 100-foot platform truck, was purchased, trained on, and placed into service in August 2012.

Car 303, a 2012 Ford Explorer assigned to the Deputy Fire Rescue Chief, was put into service in the summer of 2012.

Car 302, a 2012 Ford Explorer assigned to the Fire Rescue Chief, was purchased in November of 2012.

Inspections
All applicable apparatus passed their D.O.T inspections, Underwriters Laboratories ground and aerial ladder testing, State EMS inspection, and National Fire Protection Association (NFPA) pump testing.

Significant Repairs

- Engine 341 received paint warranty work and diesel engine warranty work in 2012.
- Ambulance 352 received paint warranty work.
- Engine 340 had all rims repainted, and rim welds were inspected and damage was repaired.

Fire Extinguishers

Coordinator – Lieutenant Tim Butler

Portable fire extinguishers are carried on every Crystal Lake Fire Rescue Department fire apparatus and ambulance. Additionally, fire extinguishers are strategically placed throughout each fire station in accordance with the adopted fire code of the City of Crystal Lake. The scheduling of recharging used fire extinguishers, as well as the annual inspection and testing of all fire extinguishers by the Department's fire extinguisher contractor is coordinated by Lt. Tim Butler with the assistance of FF/PM Martin Pireh.

Fire Department Ground Ladders

Coordinator – Lieutenant Tim Butler

Daily, each ground ladder on the front line fire apparatus are inspected by the assigned fire apparatus engineer. All other fire apparatus ground ladders are inspected weekly.

Annually, each ground ladder is tested and inspected by Underwriters Laboratories, following NFPA 1932, The Standard on Use, Maintenance and Service Testing of In-Service Fire Department Ground Ladders, 2010 edition. On May 21, 2012, Underwriters Laboratories conducted the testing and inspection of all of the ground ladders. All of the ladders passed the visual inspection and horizontal bending test, as well as a hardware test and roof hook test, when applicable.

In the months of April and October of 2012, shift personnel completed the bi-annual cleaning and inspection of all of the ground ladders carried on fire apparatus. During this operation, all ladders were thoroughly cleaned, lubricated, and visually inspected. Identified issues were addressed and repaired by Fire Rescue personnel. Every ground ladder is assigned a department number. The number is affixed to the ladder. This assists in tracking the maintenance issues and test results of each individual ladder.

Fire Hose

Coordinator – Lieutenant Heidi Olsen

Hose testing is conducted annually in accordance with NFPA 1962, Standard for the Care, Use and Service Testing of Fire Hose, including Couplings and Nozzles.

2012 Testing

- 325 lengths of hose were tested, including diameters of 1", 1 ¾'', 2 ½", and 5".
- 18 lengths of hose failed during these tests and were either repaired or retired.

Purchases

- 20 lengths of new hose were purchased to replace failed hose and for reserve.

New Equipment

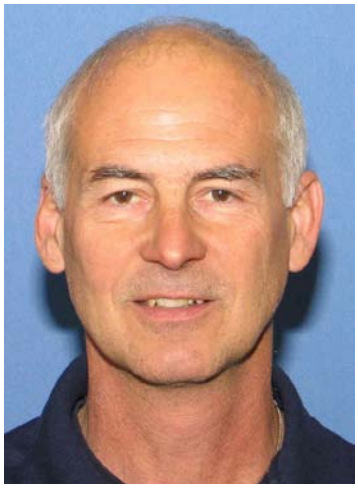
Two additional hose testing machines were purchased this year to increase hose testing efficiency. Hose-testing machines provide an added level of safety for Fire Rescue personnel while the hose is under pressure. Should a hose fail, there is no additional water or pressure continuing to be pumped into the hose.

Retired Members

In 2012, the following members of the Crystal Lake Fire Rescue Department retired after many years of dedicated service to the residents and business owners of the Crystal Lake community.



FF/PM Lloyd Laufer
26 Years



FF/PM Martin Perenchio
11 Years



FF/PM Toby Gabrielsen
4 Years



FF/PM John Buterbaugh
12 Years

Station Locations

Fire Station One
100 W. Woodstock Street





Fire Station Three
844 Virginia Road

Fire Station Four
8705 Bard Road



Department Roster

Officers

James Moore	Fire Rescue Chief
Paul DeRaedt	Deputy Fire Rescue Chief
Jerry Larsen	Bureau Chief of Fire Prevention
Chris Olsen	Bureau Chief of Training
Tom Pollnow	Battalion Chief
Robert Kohley	Battalion Chief
Bill Whyte	Battalion Chief
Rick Kaiser	Lieutenant
Kirk Kiermas	Lieutenant
Robert Lutherus	Lieutenant
Tim Butler	Lieutenant
Dan Grischow	Lieutenant
John Volenec	Lieutenant
Casey Cork	Lieutenant
Chris Kopera	Lieutenant
Heidi Olsen	Lieutenant
Joyce Stevenson	Lieutenant

Members

Aiello, Mike
Angelo, Chris
Bedore, Chris
Borst, Nick
Brechbiel, Bob
Bucheger, Adam
Buterbaugh, John
Cook, Darrell
Colucci, Gino
Forsberg, Joe
Fowles, Adam
Gabrielsen, Toby
Geyman, Michael
Gualdoni, James
Gundlach, Amanda
Hagen, Scott
Havemann, Ed
Howell, Todd
Hurley, Mike
Jakubowicz, Ray
Kaltenbach, Dave
Kauke, Bryan
Kerley, Tim
Kownacki, Kevin
Kreher, Rich
Kunes, Annette
Laufer, Lloyd
Landwer, Mark
LeClercq, Dave
Leuck, Matt
Linneman, Tom
Lucas, Mike
Lukas, Mike
Lutherus, Art
Marino, Brian
Menzimer, Brian
Muscavitch, Ryan
Odishoo, Tim
Olszak, Linda
Pace, Palmer
Perenchio, Marty
Pireh, Martin
Rozhon, Patrick
Ryan, John
Schmitt, Kim
Shipley, Carolyn
Spivey, Jim
Stoddard, Rick
Sustek, Jim
Sypura, Andrew
Szatkowski, Dane
Tamason, Brian
Thuma, Matt
Williams, Chris
Williams, Dan
Wisz, Rob