



KIRKLAND FIRE DEPARTMENT 2013 ANNUAL REPORT



The City of Kirkland Fire Department has existed within the State of Washington since 1890.

The Kirkland Fire Department is legally established as a department through RCW 35A.01.01 and RCW 35A.11.020 and Kirkland Municipal Code 3.16.037.

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MESSAGE FROM THE CHIEF



I am proud to present the Kirkland Fire Department 2013 Annual Report. This report is one way we show our commitment to community involvement.

The Kirkland Fire Department's value to our community is measured by the service we provide. Twenty-four hours of each day, the women and men you have entrusted strive to provide the best fire, medical and rescue service possible to the citizens of Kirkland.

I ask that you, too, get involved in reducing risk in our community. You can make a difference if your family is prepared prior to the occurrence of an emergency or disaster. Learn first aid and CPR, install smoke detectors, practice EDITH (exit drill in the home), become CERT

(Community Emergency Response Team) certified and facilitate a "Map your Neighborhood" project. I also invite you to join our Fire Corps volunteer program to further assist us in our community risk reduction efforts.

Together we can make our community a safer place to live and work.

- *J Kevin Nalder, Director Fire and Building Department*

VISION, MISSION, VALUES

VISION

The Kirkland Fire Department is creating a safer community as a respected partner in our region and an innovative leader in the nation.

MISSION

Our City * Our People * Our Duty
Our Commitment to Serve



VALUES

- ▶ **Supportive** – Working together as a team toward a common goal.
- ▶ **Professionalism** – Upholding industry standards and honoring the expectations of a professional firefighter both on and off the job.
- ▶ **Integrity** – Maintaining consistency between actions and words at all times.
- ▶ **Respect** – Treating others with understanding and compassion. Acknowledging there is strength in diversity.
- ▶ **Innovation** – Providing a supportive work environment that encourages and empowers improvement through creativity.
- ▶ **Trust** – Being fair, truthful, competent and honorable; Confident that the actions of others are fair, truthful, competent and honorable.

DEPARTMENT INFORMATION



DEPARTMENT OVERVIEW

History:

The City of Kirkland Fire Department has existed within the State of Washington since 1890.

The first paid Fire Chief was hired in 1928 and the first paid firefighters for the City were hired in 1970.

The Current Fire Chief is J. Kevin Nalder. He was appointed Director of the Fire and Building Department in May 2009. Prior to his appointment with the City of Kirkland, Chief Nalder was Deputy Chief of the Salt Lake City Fire Department. Chief Nalder began his career as a firefighter in 1985, spent five years as a firefighter/paramedic, and gradually worked his way up through the department ranks to achieve his current position.

As Director of the Fire and Building Department, Chief Nalder oversees the offices of the Deputy Chief of Administration, the City Emergency Manager, the City Building Official and the Deputy Chief of Operations.

The City of Kirkland Fire Department provided fire service to King County Fire Protection District #41 by a contract agreement (Kirkland Municipal Code 3.24.010) from November 1969 to June 2011. In 2011 the City of Kirkland annexed all of Fire District 41 and a small portion of Fire Districts 34 and 36.

Services Provided:

The services provided to the community by the Fire Department include:

- ▶ Fire and emergency medical response (all response personnel are certified EMTs)
- ▶ Rescue operations including vehicle extrication and technical rescues including confined space, trench, structural collapse, and rope rescue
- ▶ Special operations including urban-wildland interface firefighting and near-shore water rescue
- ▶ Automatic response to surrounding jurisdictions
- ▶ Fire Prevention and permits

- ▶ Fire Investigation
- ▶ City Emergency Management

The Regional services provided to the community in partnership with neighboring Fire Departments include:

- ▶ Emergency dispatch and 911 services provided by North East King County Regional Public Safety Communication Agency (NORCOM) www.norcom.org.
- ▶ Hazardous Materials Response provided to the community by the Eastside HazMat Team. The Kirkland Fire Department is a member of this team and has 8 response personnel trained to the technical response level.
- ▶ Advanced life response + Medic response provided to Kirkland residents through a contract with the City of Redmond Fire Department. The Medic program is part of the King County Medic One Program.
- ▶ Training Division, part of the East Metro Training Group (EMTG). The EMTG is composed of the Bellevue, Kirkland, Northshore, Mercer Island and Redmond Fire Departments. Kirkland is one of the founding member agencies which make up this 500 plus member training group.

In 2013, The City of Kirkland was examined by the Washington State Survey and Ratings Bureau (WSRB). The WSRB collects information on municipal fire protection efforts in communities throughout the Washington State. In each of those communities, WSRB analyzes the relevant data on Water Supply systems, Fire Department apparatus, resources and training, Communications, (911 system) and Fire Prevention activities. It then, assigns a WSRB rating from 1 to 10. Class 1 represents superior property fire protection, and Class 10 indicates that the area's fire-suppression program doesn't meet WSRB's minimum criteria. Kirkland maintained its previous WSRB rating of class 4. The largest deficiencies were identified to be in its ability to deliver the full scope of fire prevention activities.

DEPARTMENT INFORMATION

DEPARTMENT OVERVIEW (Cont.)

By classifying communities' ability to suppress fires, WSRB helps the communities evaluate their public fire protection services. The program provides an objective, state wide standard that helps fire departments in planning and budgeting for facilities, equipment, and training and by securing lower fire insurance premiums for communities with better public protection.

Staffing Profile (2013)

Work Schedule

Emergency response staffing is done on a three shift platoon rotation. The schedule is a 48/96 rotation. Employees work 48 hours then are off 96 hours, working a total of a 48 hour work week.

Personnel

- ▶ Emergency response personnel – 90 Line personnel (not including Training, Admin or Prevention)
- ▶ Every day minimum on-duty strength – 19
- ▶ Prevention personnel – 4
- ▶ Training Officers – 2
- ▶ Emergency Medical Officer – 1
- ▶ Non-Uniformed (Civilian) Personnel – 5
- ▶ City Emergency Management – 1
- ▶ Command staff – 3

Minimum Staffing for Emergency Response

- ▶ Engine company = 3 crew members
- ▶ Aid car = 2 EMT crew members
- ▶ Ladder company = 3 crew members
- ▶ Battalion Chief = 1

Minimum Fire Station Staffing

- ▶ Forbes Creek Station 21 = 3 crew members; 1 aid car, 1 engine
- ▶ Houghton Station 22 = 3 crew members; 1 aid car, 1 engine
- ▶ Finn Hill Station 24 = EMT volunteers, minimum 2, 7pm – 5:30am
- ▶ Juanita Station 25 = 3 crew members; 1 aid car, 1 engine, 1 temporary firefighter
- ▶ Rose Hill Station 26 = 3 crew members, 1 Battalion Chief, 1 Battalion Aide Captain; 1 aid car, 1 engine, 1 Battalion Chief car
- ▶ Totem Lake Station 27 = 6 crew members; 2 aid cars, 1 engine, 1 Ladder





CITY OVERVIEW

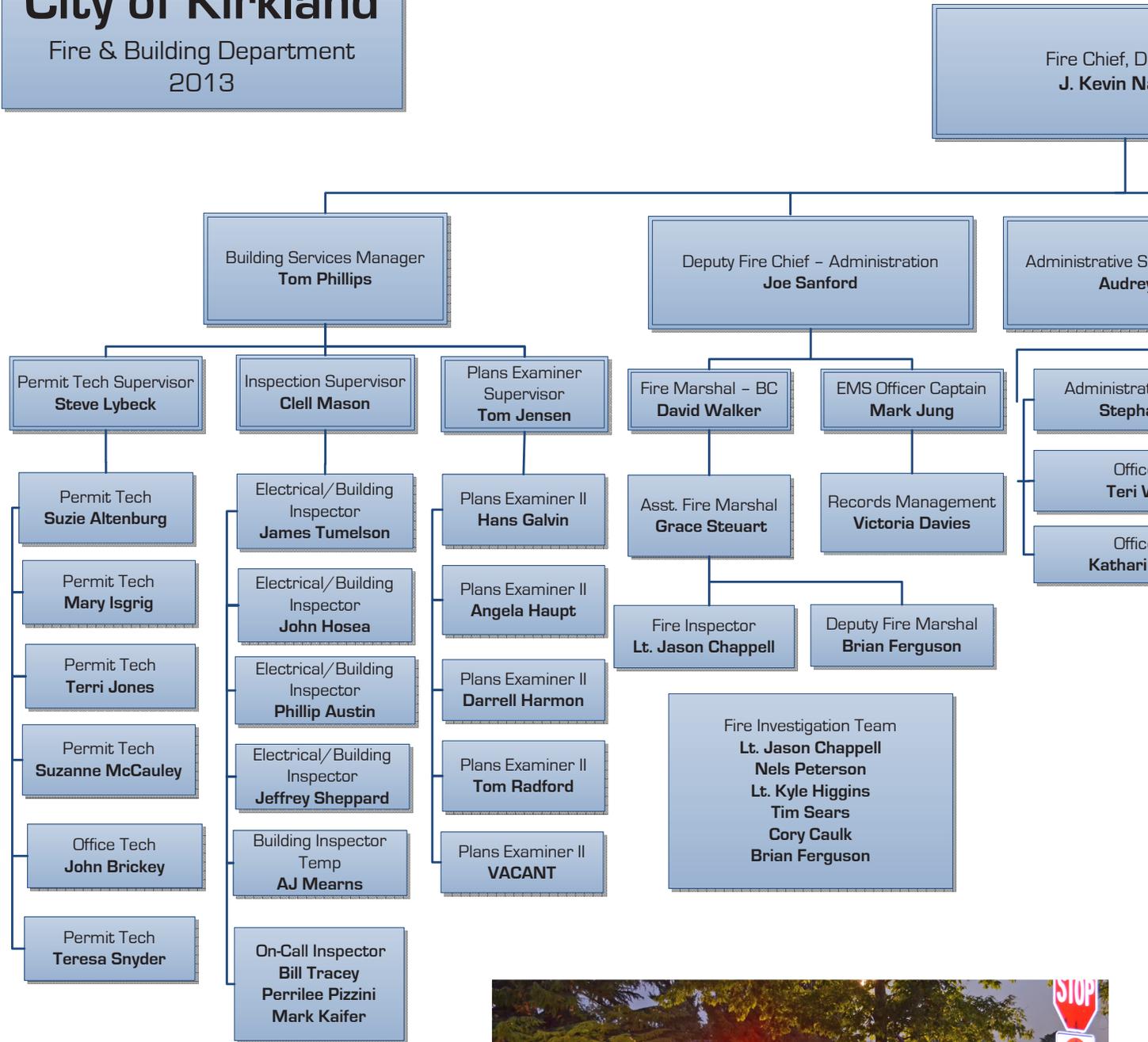
Founded	1888
Incorporated	1905
Consolidated with Town of Houghton	1968
Annexation of Finn Hill, North Juanita & Kingsgate**	June 1, 2011
Population*	
Pre-Annexation	48,787
Post-Annexation**	81,730
Land Area	
Pre-Annexation	11 square miles
Post-Annexation**	18.3 square miles
Fire Department Grading Class	4
Total City Budget (2011-2012 Final Budget)	\$543,708,911
City Operating Budget (2011-2012 Final Budget)	\$269,909,431
Full-Time City Employees	
Pre-Annexation	461.43 FTE
Post-Annexation**	541.93 FTE

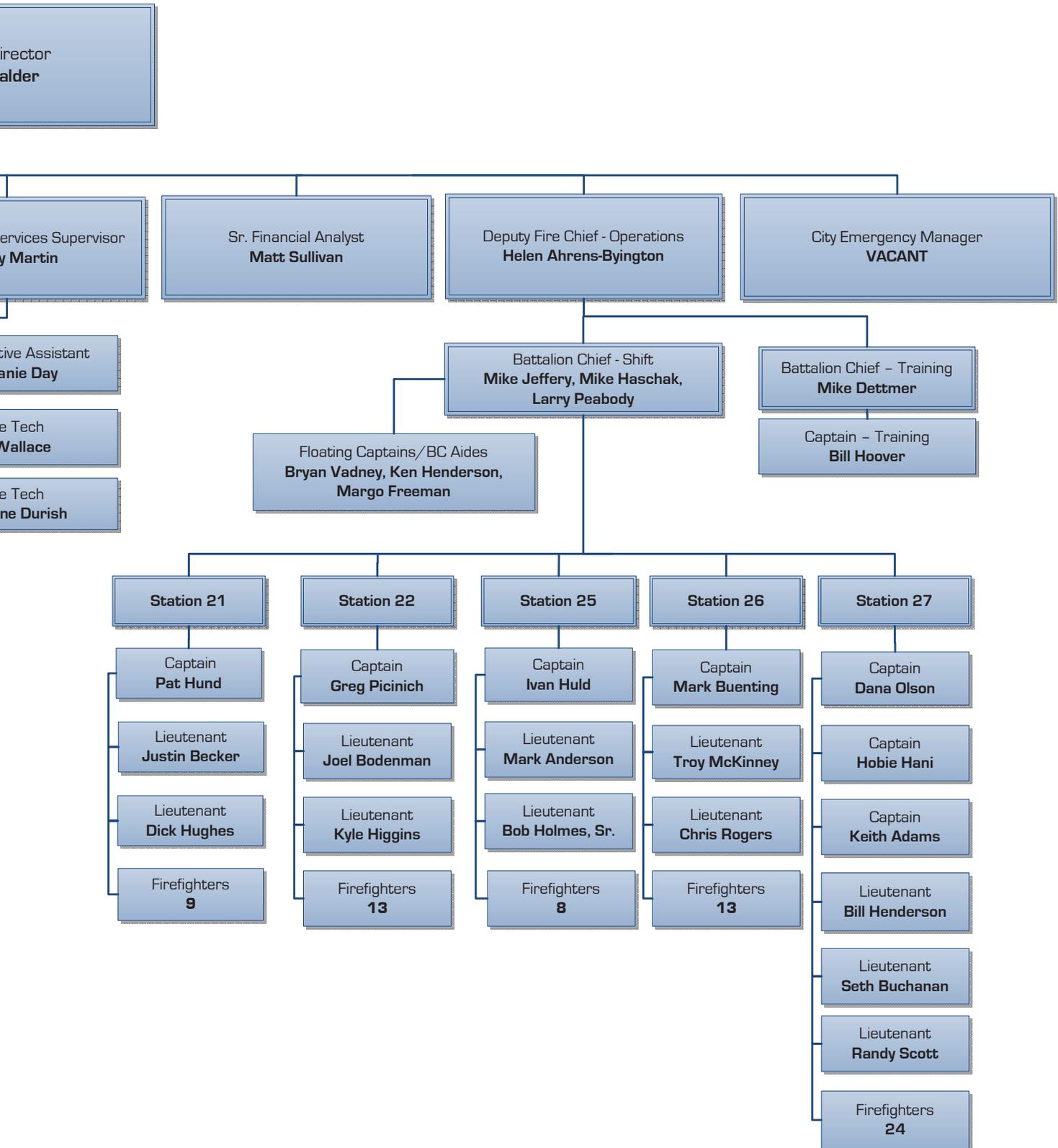


DEPARTMENT INFORMATION

City of Kirkland

Fire & Building Department
2013





DEPARTMENT INFORMATION

STATION INFORMATION

Fire Department Headquarters

Kirkland City Hall · 123 5th Avenue · Kirkland, WA 98033

(Mailing address) · 425-587-3650 (Department Main-line)

http://www.kirklandwa.gov/depart/Fire_and_Building.htm

STATION 21 – Forbes Creek..... 9816 Forbes Creek Drive

Date Built: 1997 (8,541 sq. ft.)

APPARATUS:

- ▶ Aid 21 2010 Ford Road Rescue Aid Vehicle 4x4 (front line);
- ▶ Engine 21 2005 Spartan / H&W Pumper (front line);
- ▶ Engine 28 1995 Seagrave Pumper (reserve).

STATION 22 – Houghton.....6602 108th Ave. NE

Date Built: 1980 (9,071 sq. ft.)

APPARATUS:

- ▶ Aid 22 2006 Ford Road Rescue Aid Vehicle (front line);
- ▶ Engine 22 2003 Spartan / H&W Pumper (front line);
- ▶ Air Unit 21 2006 Spartan / H&W Special Ops Unit (front line);
- ▶ Engine 29 1992 Seagraves Pumper (reserve);
- ▶ 1926 American LaFrance Pumper (antique)

STATION 24 – North Finn Hill.....8411 Ne 141st St.

★ (Part-time volunteer staffing only)

Date Built: 1993 (3,748 sq. ft.)

APPARATUS:

- ▶ Aid 24 2001 Ford Road Rescue Aid Vehicle (front line);
- ▶ SV-1 1999 Grumman Routestar Utility Van (Disaster Response Vehicle)

STATION 25 – Juanita..... 12033 76th PL NE

Date Built: 1973 (6,488 sq. ft.)

APPARATUS:

- ▶ Aid 25 2008 Ford Road Rescue Aid Vehicle 4x4 (front line);
- ▶ Engine 25 2003 Spartan / H&W Pumper (front line).

STATION 26 – North Rose Hill.....9930 124th Ave NE

Date Built: 1994 (9,795 sq. ft.)

APPARATUS

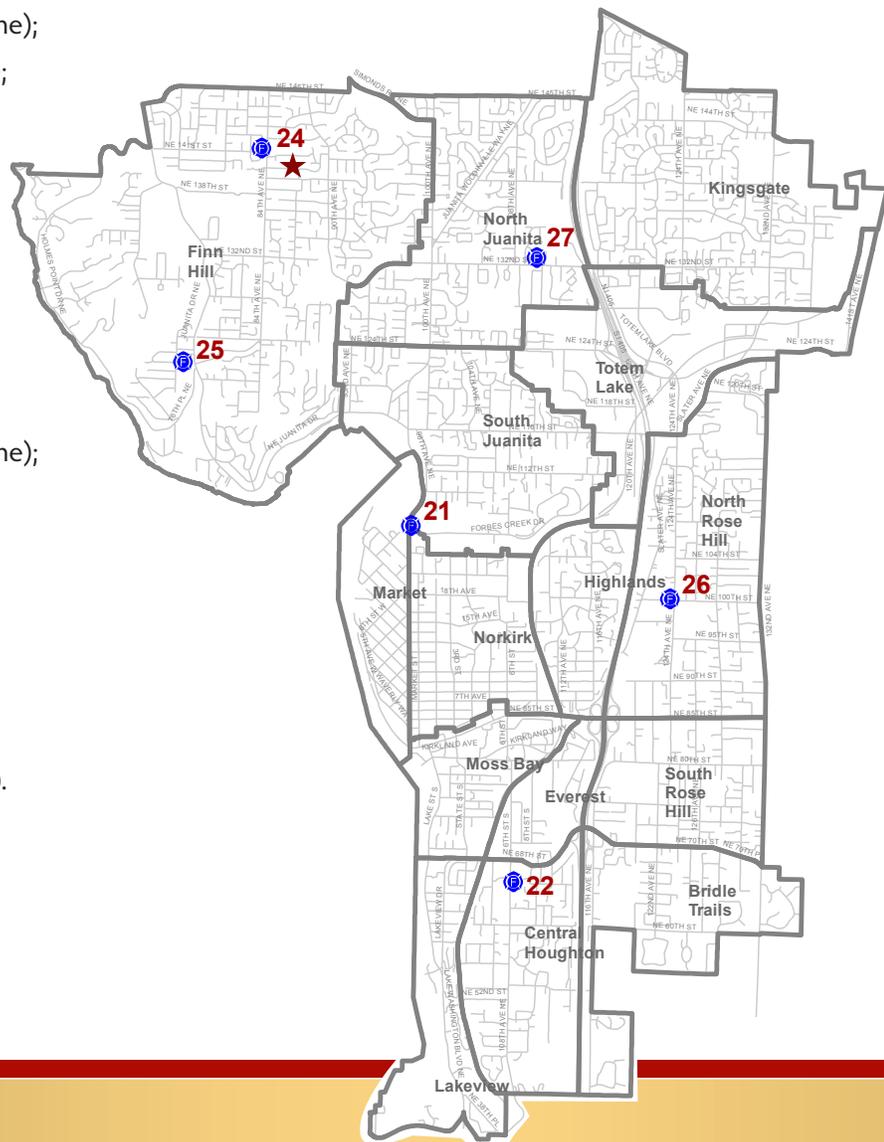
- ▶ Aid 26 2002 Ford Road Rescue Aid Vehicle (front line);
- ▶ Engine 26 2013 Spartan Pumper (front line);
- ▶ Battalion 21 2008 Chevrolet Suburban (front line);
- ▶ Battalion 21 2006 Chevrolet Suburban (front line);
- ▶ Aid 28 2006 Ford Road Rescue Aid Vehicle (reserve);
- ▶ 2000 Ford Road Rescue Aid Vehicle (reserve)

STATION 27 – Totem Lake 11210 Ne 132nd St.

Date Built: 1974 (8,159 sq. ft.)

APPARATUS:

- ▶ Aid 27 2012 Ford Road Rescue Aid Vehicle 4x4 (front line);
- ▶ Aid 29 2007 Ford Road Rescue Aid Vehicle (front line);
- ▶ Engine 27 2010 Spartan / H&W Pumper (front line);
- ▶ Ladder 27 1997 Simon-LTI Tiller Aerial Ladder (front line).





2013 FIRE DEPARTMENT BUDGET

Expenditures:

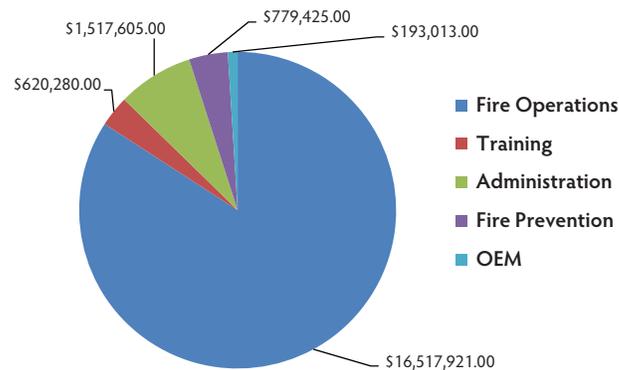
Department	Total Budget	Personnel	Internal Charges	Other
Fire Operations	\$16,517,921.00	\$13,565,634.21	\$2,062,277.09	\$890,009.70
Training	\$620,280.00	\$476,227.02	\$33,008.10	\$111,044.88
Administration	\$1,517,605.00	\$1,190,343.78	\$123,193.20	\$204,068.02
Fire Prevention	\$779,425.00	\$682,879.86	\$76,086.20	\$20,458.94
Office of Emergency Management	\$193,013.00	\$52,907.01	\$13,034.50	\$127,071.49
Total	\$19,628,244.00	\$15,967,991.88	\$2,307,599.09	\$1,352,653.03

*Personnel includes: benefits, overtime, and hourly wages, uniforms, and protective equipment

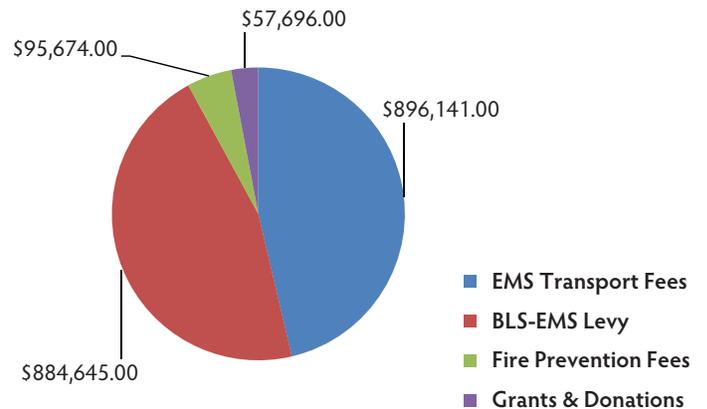
**Internal Charges includes: Fleet, Information Technology, liability insurance and Facility charges

***Other includes: safety gear, medical supplies, tools and supplies for fire stations and apparatus, office supplies, professional services/contracts, and all supplies in training, prevention, and administration

2013 Budgeted Expenditures



2013 Actual Revenues



Revenue:

EMS Transport	\$896,141.00
BLS-EMS Levy	\$884,645.00
Fire Permits	\$95,674.00
Grants and Donations	\$57,696.00
Total	\$1,934,156.00

DEPARTMENT INFORMATION

BUDGET (continued)

2013 Active Capital Improvement Projects

- ▶ Emergency Operations Center (EOC) Upgrade
- ▶ Disaster Supply Storage Units
- ▶ Disaster Response Vehicle
- ▶ Defibrillator Unit Replacement
- ▶ Disaster Response Portable Generators
- ▶ Self-Contained Breathing Apparatus (SCBA) Replacement
- ▶ Hose Replacement

Grants and Donations

- ▶ \$4,000.00 - Regional Approach to Municipal Public AED Registry and Training (RAMPART)
- ▶ \$1,500.00 – Washington Pre-hospital Participation Grant
- ▶ \$44,421.00 – Emergency Management Performance Grant (EMPG)
- ▶ \$7,775.00 – Private Donations

Total Grants and Donation Income: \$57,696

- ▶ 1.) Regional Approach to Municipal Public AED Registry and Training (RAMPART), the \$4,000 grant is used to training City employees in AED use, to place a new AED at the Municipal Court, and to purchase batteries and AED pads to replace expiring supplies for AED's located in police patrol vehicles.
- ▶ 2.) Washington Pre-hospital Participation Grant: this is a \$1,700 zero-match grant from the Washington State Department of Health. The grant is used to purchase AED supplies and new equipment bags.
- ▶ 3.) Emergency Management Performance Grant (EMPG): this grant for \$44,421 will be used to pay the part time salary of the Emergency Preparedness Coordinator position in the office of Emergency Management. It is anticipated this position will be refilled in 2014.
- ▶ 4.) The Department received a \$2,000 donation to go toward increasing the Departments water rescue capability.

Basic Life Support (BLS) Transport User Fee Program

On March 1, 2011 the Kirkland Fire Department began its Basic Life Support (BLS) Transport User Fee Program. The Program was established to create a sustainable revenue source to support essential emergency medical services. Revenue from the BLS transport user fee has helped cover the cost of providing emergency medical service to the Kirkland community. Without this new revenue the Fire Department would have had to reduce service levels. The user fees are currently used to maintain service levels; in the future, fees will be used to improve service, reduce response times, and provide greater EMS resources to the community.

2013 TRANSPORTS		
Total Revenue = \$896,141.70		
TRANSPORTS BILLED	2397	
Resident	1876	78.3%
Non-Resident	483	20.2%
Employee at Work	19	1.6%
	2521	
TRANSPORTS NOT BILLED	141	5.6%
Total # of Transports	2538	



RECOGNITION AND SERVICE

The Kirkland Fire and Building Department recognizes those employees who have performed above the call of duty in an outstanding manner consistently, shown initiative and made significant contributions to our community and organization during the past year. Recipients are nominated by their peers and based on the department's core values and operating principles.

RECIPIENTS OF THE 2013 SERVICE RECOGNITION AWARDS:

Firefighter of the Year	Cory Caulk		
Officer of the Year	Captain Mark Jung		
Chief of the Year	Battalion Chief Dave Walker		
Crew of the Year	Station 27A Shift	Station 27B Shift	Station 27C Shift
	Capt. Pat Hund	Capt. Keith Adams	Capt. Dana Olson
	Lt. Bill Henderson	Lt. Justin Becker	Lt. Randy Scott
	Cliff Oleszko	Joe Ruljancich	Tim Sears
	Marc Hallen	Chris Martin	Travis Braddock
	Dave Nelson	Mark Crickmore	Eric Peterson
	Josh Pratt	Jesse Disch	Steve Suyama
	Chris Bailey	Megan Keyes	Terry Russell
	Jesse Martindale	Peter Hirst	Moe Kelsey
	Tyrel Koistinen	David Lilleness	Andrew Heichel
	Ryan Sheaffer	Eric Forslin	Darren Broekhuis

Retirements:

Jim Crowe	22 yrs of service	Deputy Fire Marshal
Jack Henderson	12 yrs of service	Deputy Chief

Promotions:

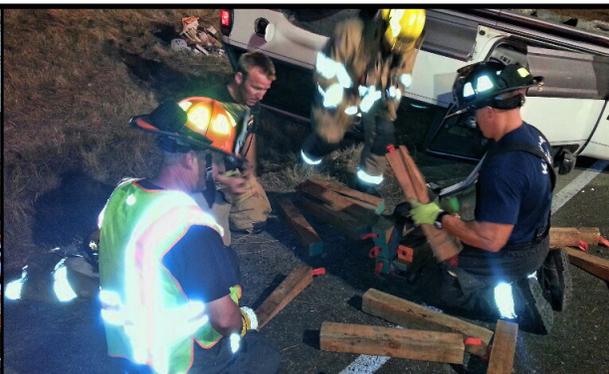
Joe Sanford	Deputy Chief
Larry Peabody	Battalion Chief
Hobart Hani	Captain
Justin Becker	Lieutenant

Years of Service:

Larry Peabody	35
Grace Steuart	25
Helen Ahrens-Byington	20
Hobart Hani	20
Mike Aguilar Varela	20



KIRKLAND FIRE DEPARTMENT





EMERGENCY RESPONSE

OPERATIONS OVERVIEW

The Operations Division oversees the department's response to all emergency incidents. This division is also responsible for the training and safety of response personnel in order to provide an effective response to emergencies in the community.

In 2013:

- ▶ The Department, in working with other NORCOM member agencies, implemented a much needed upgrade to the Computer Aided Dispatching (CAD) system. This upgrade will improve communication from dispatch to the responding units and will improve records management for future evaluation. Both these items will improve service to the community.
- ▶ The Kirkland Fire Department took ownership of a four-wheel ATV response vehicle with funding from a regional federal grant. This vehicle has the capability of responding and transporting patients out of the remote areas of several local parks and areas where a full size Aid Unit is too large to travel. In addition, its smaller profile allows it to move through dense crowds during popular events such as the 4th of July and Summerfest.
- ▶ One of Kirkland's two Deputy Fire Chief's retired after 12 years with Kirkland and 35 years in the fire service. This produced several promotions; a Battalion Chief to Deputy Chief, a Captain to Battalion Chief, a Lieutenant to Captain and a Firefighter to Lieutenant.
- ▶ In 2013, the department had several simultaneous calls and some very good outcomes. The Fire Department responded to two cardiac arrests within hours of each other and successfully resuscitated them both. The patients were pulseless upon Fire Department arrival, but were revived on scene and transported to the hospital. In addition,

Kirkland Fire units responded to a multi-family apartment fire in Kingsgate and a residential structure fire in the Finn Hill neighborhood within minutes of each other. Automatic Aid from neighboring jurisdictions assisted in the extinguishment of these two fires. Finally, crews responded to two car vs pedestrian accidents within minutes of each other. One was on Market Street and the other on N.E. 124th Street. Both patients were stabilized and taken to local hospitals.

TRAINING OVERVIEW

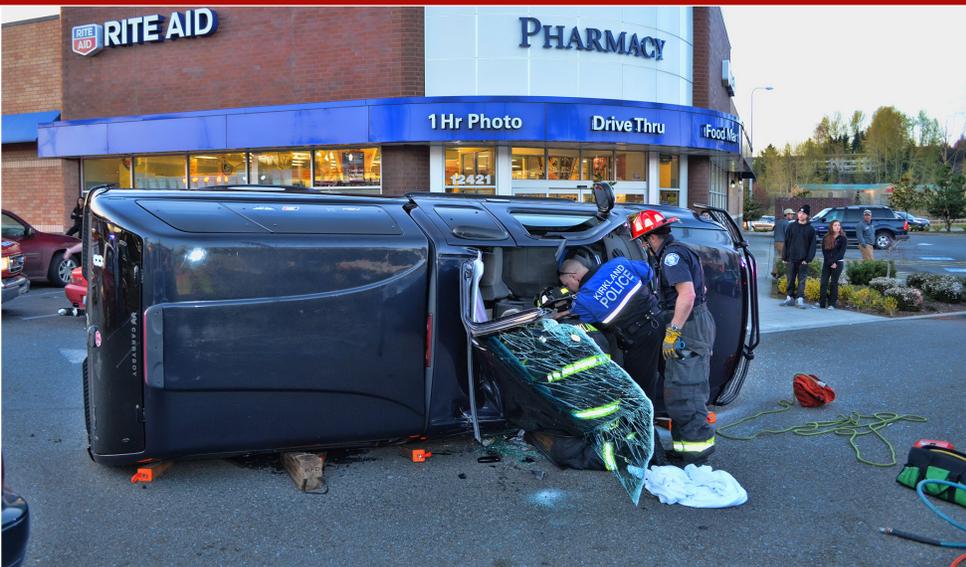
Kirkland Fire Training Division is responsible for the competency of the firefighters that serve the residents of Kirkland and the safety of the residents and firefighters. All actions taken by the training division relates directly to these responsibilities.

The training of Kirkland Firefighters never stops, firefighters constantly participate in company level training, shift level training and Chief Officer training. These training events are given by the training division to the crews for completion on a quarterly basis.

In 2013, the Kirkland Fire Department along with the fire departments of Bellevue, Redmond, Mercer Island and Northshore formally formed the East Metro Training Group (EMTG). This training group had been functioning informally for two years. The formal signing of an inter-local agreement solidifies the commitment to joint training between partner agencies.

THE EAST METRO TRAINING GROUP is a 500 plus member training group. The benefits of this cooperative effort are numerous and significant. Interoperability is increased and as a result the efficiency and the safety at emergency scene is improved. When jurisdictions that respond together, train together, skill levels improve, safety is increased





and efficient scene management is obtained.

The 2013 version of EMTG Best Practices was also adopted by member departments. This document is reviewed annually and any necessary modifications made. A focus on constant improvement is embraced in the maintenance of these practices. The Fire Departments of Bellevue, Kirkland, Mercer Island, Northshore, and Redmond have historically had excellent working relationships, both on and off the fire ground. Each has had limited exposure to each other from a policy formation perspective. The creation of "Best Practices for Offensive Fire Attack" continues to refine and improve the cooperation between these agencies.

Required areas of responsibility are divided amongst the EMTG member agencies are:

- ▶ Health and Safety
- ▶ Special Operations
- ▶ Fire Suppression
- ▶ Emergency Medical Services
- ▶ Career Development

2013 training activities:

Additional inter-jurisdictional training included: Providing training simulations for Mass Casualty responses. These are incidents where multiple patients require triage, treatment and transportation. An example of this type of training would include "active shooter" scenarios, motor vehicle accidents involving buses and fires in adult living facilities.

Command Post Training for Incident Commanders. This Chief Officer level training involves overall emergency scene management and scene safety.

Live Fire training at the burn facility.

Crews enter concrete structures designed to withstand continual burning and fight live fires. Fire behavior and firefighting techniques are studied and strategies developed and practiced.

Heavy Rescue training using concrete slabs, crushed vehicles and simulated trapped patients. Firefighters receive valuable training with equipment designed to free trapped patients in a safe and efficient manner.

Technical Rescue Training is conducted annually refreshing skills and training new firefighters to the challenges of rescuing people from these technically complicated incidents. Kirkland Fire trains all members to be a part of a coordinated response; some members are trained to a support role and other to the technician level.

Firefighters from each jurisdiction were allowed to train in "confined spaces" such as the Mercer Island floating bridge spaces beneath the roadway.

Kirkland and Redmond firefighters completed both operations level and technician level training for water rescue. Firefighters train in both a pool environment and in Lake Washington. Hundreds of hours of training and rehearsal scenarios were conducted during 2013. This training has been conducted annually or almost 2 decades. Kirkland Fire is a regional leader in the training of firefighters for Near Shore Water Rescue.

Each member of the Hazardous Materials team receives 48 hours of specialized training each year.

The following have completed the company level training to be qualified for a new duty position in 2013:

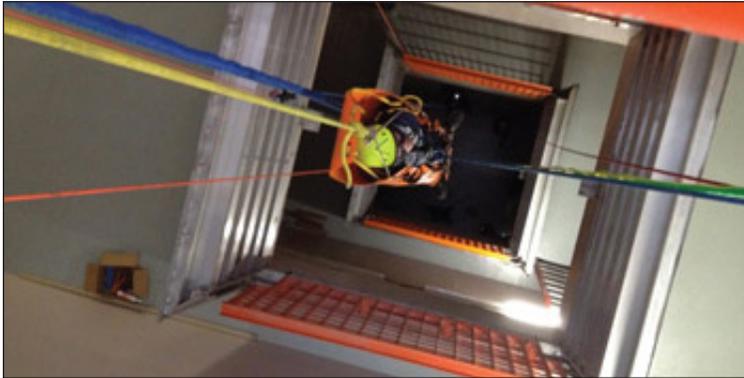
New Ladder Drivers: Darren Broekhuis

New Acting Officers: Renee Lirette, Art Lim, Darren DeBoer and Doug Tomczak

New Engine Operator/Driver: Kyrel Koistinen and Jesse Martindale

EMERGENCY RESPONSE

TECHNICAL RESCUE 2013



Kirkland Fire is the lead agency in the region on Technical Rescue Operations. Kirkland continues to shape the response, training and equipment policies of the response partners in Northeast King County, known as Zone One. In 2013, Rescue Technicians conducted training in Structural Collapse Rescue, Trench Rescue, Confined Space Rescue, Water Rescue and Rope Rescue.

Every year firefighters from across the northwest are trained in Technical Rescue by programs that are managed by Kirkland Fire. In 2013, 105 Northwest firefighters were trained and certified in Trench Collapse Rescue, Rope Rescue, Confined Space Rescue and Rescue Systems. All of this training was coordinated and facilitated by Kirkland Firefighters.

There are 28 Kirkland Firefighters that are trained as Rescue Technicians. All other Firefighters are trained to the Operations (support) level in specialized rescue. The technicians are assigned to Kirkland's Ladder Company and respond from Fire Station 27 in the Totem Lake area.

Kirkland Rescue Technicians are training in the following disciplines:

- ▶ Rope Rescue, high and low angle
- ▶ Confined Space Rescue

- ▶ Trench Rescue
- ▶ Structural Collapse Rescue
- ▶ Vehicle & Machinery Rescue

In 2013, Kirkland was able to complete the placing in service of a rescue trailer that was outfitted with equipment and supplies specifically for structural collapse incidents. This unit was funded by a Federal Grant. The trailer is equipped with Urban Search and Rescue (USAR) equipment for breaching, breaking and shoring of destabilized structures. A structure may become destabilized and/or collapsed due to earthquakes, explosions, impact by vehicles and construction defects. Kirkland personnel also participated in an eight (8) county effort to deliver the lessons developed on response to structural collapse incidents.

Kirkland also had several calls where structural collapse was involved.

During 2013, Rescue personnel responded to several incidents within the City of Kirkland and the region that required specialized rescue training and equipment.

There were a number of vehicle collisions that required specialized equipment to stabilize the vehicle to prevent further injury and to quickly remove the patients from the vehicle.

There were also rope rescue, industrial, machinery and trench incidents.

In addition, Kirkland has a near shore water rescue program which is a model in the region. Kirkland Fire Department has 62 trained rescue swimmers and all other personnel are trained to support a water rescue. Kirkland had several water rescue related incidents in 2013. All aid units, the ladder and the battalion car carry water rescue equipment.





EMERGENCY RESPONSE

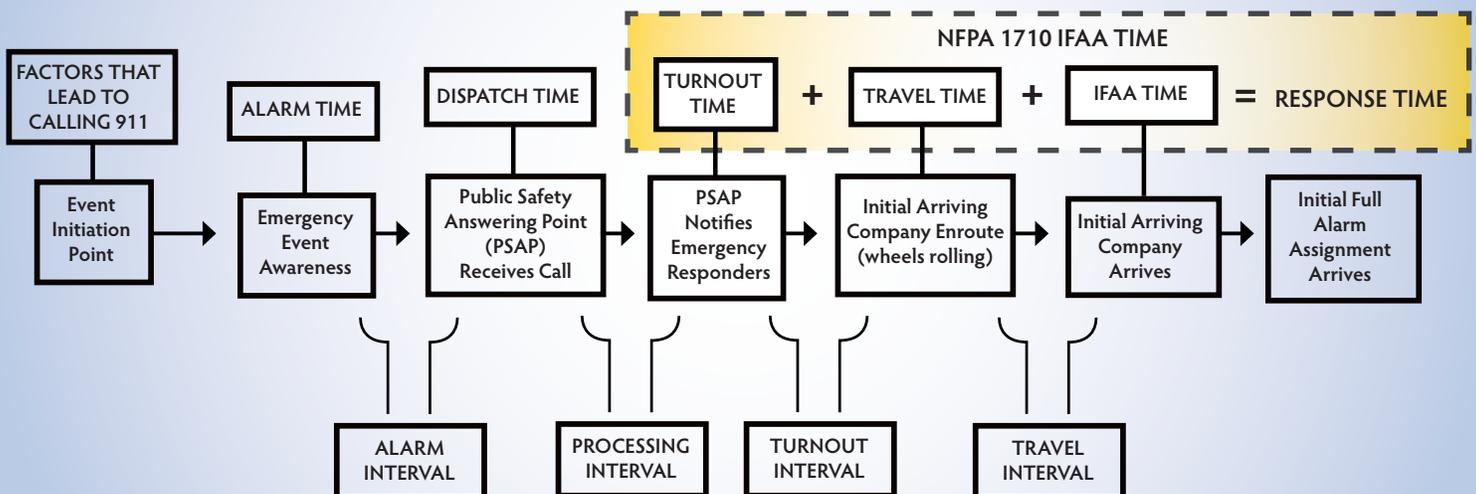
INTENT OF RCW CHAPTER 35A.92

The legislature intends for code cities to set standards for addressing the reporting and accountability of substantially career fire departments, and to specify performance measures applicable to response time objectives for certain major services. The legislature acknowledges the efforts of the international city/county management association, the international association of fire chiefs, and the national fire protection association for the organization and deployment of resources for fire departments. The arrival of first responders with automatic external defibrillator capability before the onset of brain death, and the arrival of adequate fire suppression resources before flash-over is a critical event during the mitigation of an emergency, and is in the public's best interest. For these reasons, this chapter contains performance measures, comparable to that research, relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations by substantially career fire departments. This chapter does not, and is not intended to, in any way modify or limit the authority of code cities to set levels of service.

WHY RESPONSE TIMES?

The Commission on Fire Accreditation International (CFAI) has defined response time elements as a cascade of events. This cascade is similar to that used by the medical community to describe the events leading up to the initiation, mitigation and ultimate outcome of a cardiac arrest. It is directly influenced by the fire service via station locations and design, staffing levels, as well as local rules and procedures for response. Other factors, such as the alarm interval, can be influenced indirectly through public education and engineering initiatives. The fire service can also influence the call-processing interval through its ability to define standards and compel performance by its dispatch centers.

CASCADE OF EVENTS - GENERAL OVERVIEW



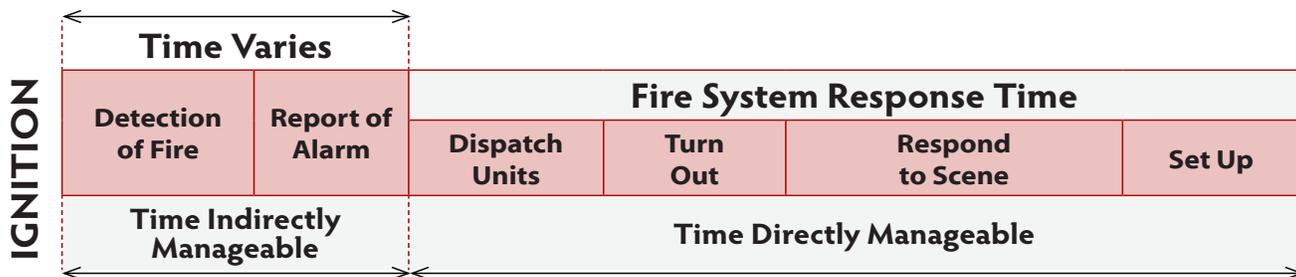
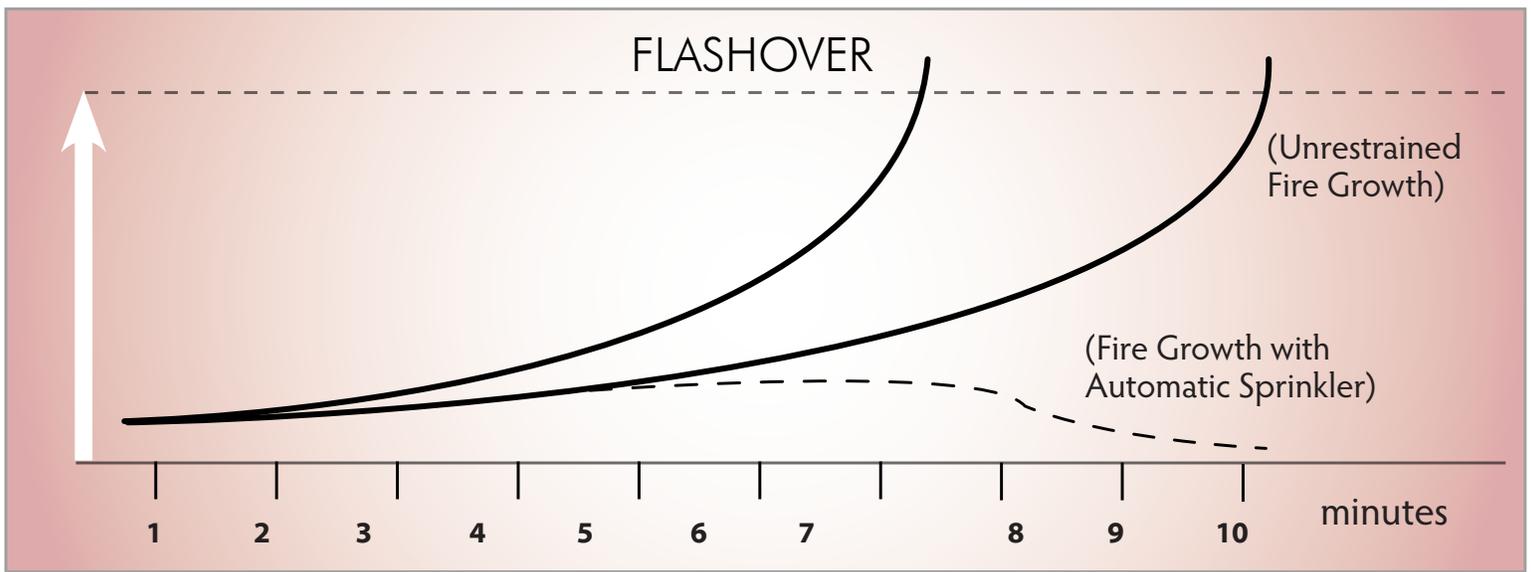


Time Temperature Standard

The “time-temperature curve” standard in the figure below is based on data from the National Fire Protection Association (NFPA) and the Insurance Services Organization (ISO), which have established that a typical point source of

ignition in a residential house will “flash over” at some time between 5 and 10 minutes after ignition, turning a typical “room and contents” fire into a structural fire of some magnitude.

TIME TEMPERATURE STANDARD



Time Temperature Curve

The utility of the time-temperature curve for fire station placement is limited to a number of factors, including but not limited to the following:

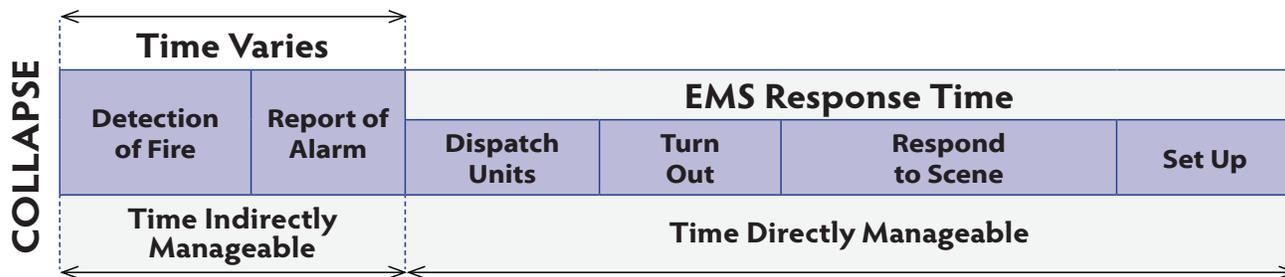
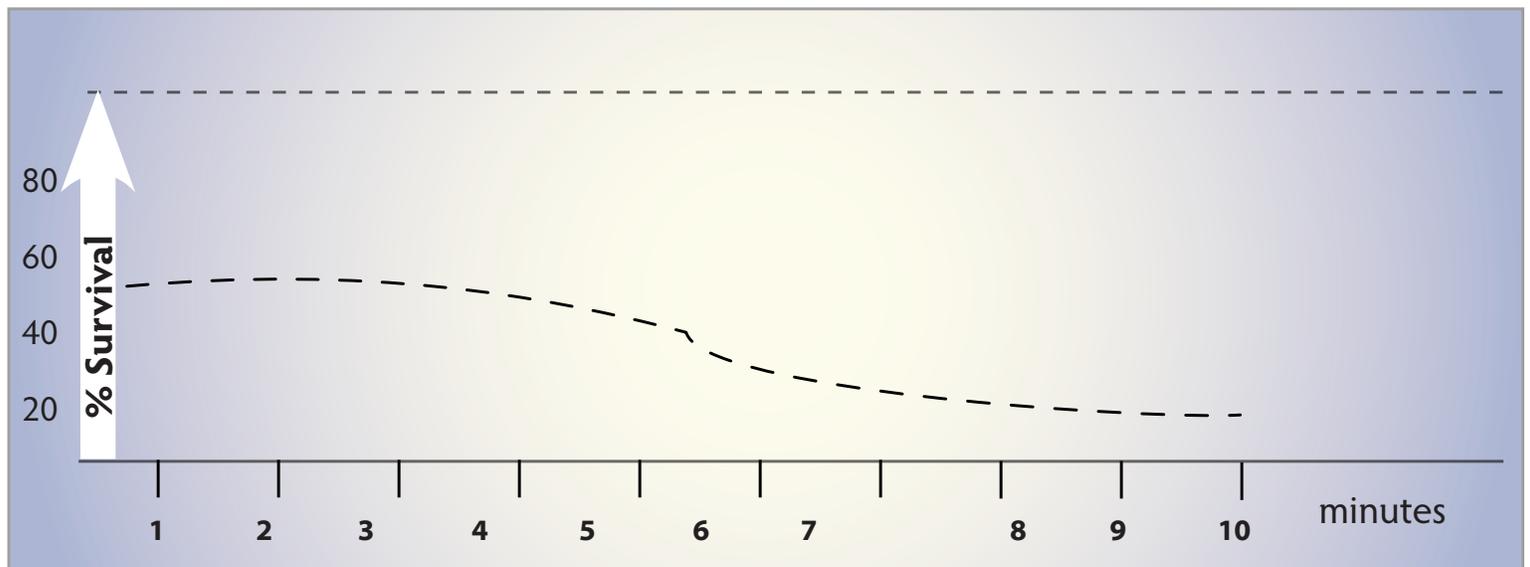
- ▶ It does not account for the time required for the existence of a fire to be “discovered” and reported to the fire department via the 911 system.
- ▶ The time from ignition to flashover varies widely (5-30 minutes depending on building characteristics); thus it cannot provide a valid basis for the allocation of resources.
- ▶ The curve is constantly shifting, given the numerous changes in building construction, built in suppression systems, the increased use of fire resistive materials for furniture and other items typically found in the interior of occupied buildings.

EMERGENCY RESPONSE

Cardiac Arrest Survival Standard

In communities where the fire service is the principal provider of Emergency Medical Services (EMS) first response, the "chain of survival" standard shown in the figure below was developed by the American Heart Association and is often used to provide guidance for distribution of resources. The chain of survival suggests that basic life support (CPR and defibrillation) should be available to the victim of a cardiac arrest within 4 minutes of the event. Early notification, distribution and concentration of emergency response services are thus paramount to successful resuscitation efforts.

CARDIAC ARREST SURVIVAL



The Golden Hour Standard

In trauma events, the golden hour is the historic benchmark applied to victims with significant critical traumatic injuries. The golden hour reflects the concept that survivability decreases significantly if the patient isn't in the operating room within one hour of receiving a critical traumatic injury.





TOTAL CALL LOG

Total emergency responses in 2013

CALL TYPES (listed according to station reporting)	STATIONS							
	Other	21	22	24	25	26	27	ALL
TOTAL FIRES	9	40	99	0	25	47	113	334
EMS/RESCUE	143	814	1135	34	424	871	2356	5777
HAZARDOUS CONDITION	1	24	31	0	14	32	51	153
SERVICE CALL	8	35	51	0	31	35	90	250
False Calls	32	73	168	1	55	106	271	706
OTHER¹	82	59	183	0	47	159	283	813
TOTAL CALLS	275	1045	1667	35	596	1250	3164	8033

¹ Other Station include Battalion 21 only and errant dispatches

Total emergency responses in 2012

CALL TYPES (listed according to station reporting)	STATIONS							
	Other	21	22	24	25	26	27	ALL
TOTAL FIRES	12	43	58	0	15	57	111	296
EMS/RESCUE	221	763	1149	30	474	943	2354	5934
HAZARDOUS CONDITION	3	22	33	0	20	24	43	145
SERVICE CALL	6	31	48	0	23	40	86	234
False Calls	48	74	151	0	51	98	243	665
OTHER¹	88	51	159	0	43	130	237	708
TOTAL CALLS	378	984	1598	30	626	1292	3074	7982

EMERGENCY RESPONSE

2013 RESPONSE TIME GOALS AND OBJECTIVES

Kirkland Fire Department Response Goals

The Kirkland Fire Department has set extremely aggressive goals for response times, call processing and turnout times. These response goals are established to effectively and efficiently deliver fire suppression, special operations response, and emergency medical services to the citizens of Kirkland. Always striving to improve service to the community by meeting or exceeding these goals will insure that the Kirkland Fire Department continues to provide the best service possible to people it serves.

1) CALL PROCESSING TIME**

(Phone pickup to first unit assigned)

Kirkland Fire Department's call processing time standard is 60 seconds, 90% of the time.

Year	Percentage of time call processing time goal was met
2013	88%
2012	86%
2011	85%
2010	*
2009	*

*Call processing time not available from NORCOM for these years

**Call processing is handled through NORCOM 911 system.

2) TURNOUT TIME (Time Unit assigned to enroute)

Kirkland Fire Department's turnout goal standard is 60 seconds, 90% of the time.

Year	Percentage of time turnout time goal was met	Turnout times were less than this time 90% of the time
2013	31%	2:08
2012	32%	2:08
2011	30%	2:12
2010	26%	2:17
2009	23%	2:20

3) TOTAL RESPONSE TIME FIRST ARRIVING ENGINE AT A FIRE (911 call received to arrival of 1st Engine)

Kirkland Fire Department's response time goals for the first arriving engine at a fire response is 5 minutes, 30 seconds, 90% of the time

Year	Percentage of time response time goal was met	1 ST engine arrival times were less than this time 90% of the time
2013	43%	7:41
2012	47%	8:28
2011	47%	8:17
2010	43%	7:59
2009	40%	8:07

4) EFFECTIVE RESPONSE FORCE ARRIVAL AT FIRE

The Kirkland Fire Department has established a response time goal for the entire Effective Response Force (EFR). The response time goal is 10 minutes from the time of a 911 call to the arrival of the entire EFR.

An EFR is the number of firefighters and apparatus needed to effectively extinguish a structure fire, establish Incident Command and accountability, provide search and rescue, protect exposures, establish a Rapid Intervention Team and other needed tasks. The EFR includes 20 firefighters arriving on a minimum of four (4) Engine companies, one (1) Ladder Truck, one (1) Aid Unit, one (1) Medical Services Officer and two (2) Battalion Chiefs.

Year	Percentage of time response time goal was met	EFR arrival times were less than this time 90% of the time
2013	35%	13:05
2012	21%	14:39
2011	15%	14:24
2010	17%	17:54
2009	36%	15:52

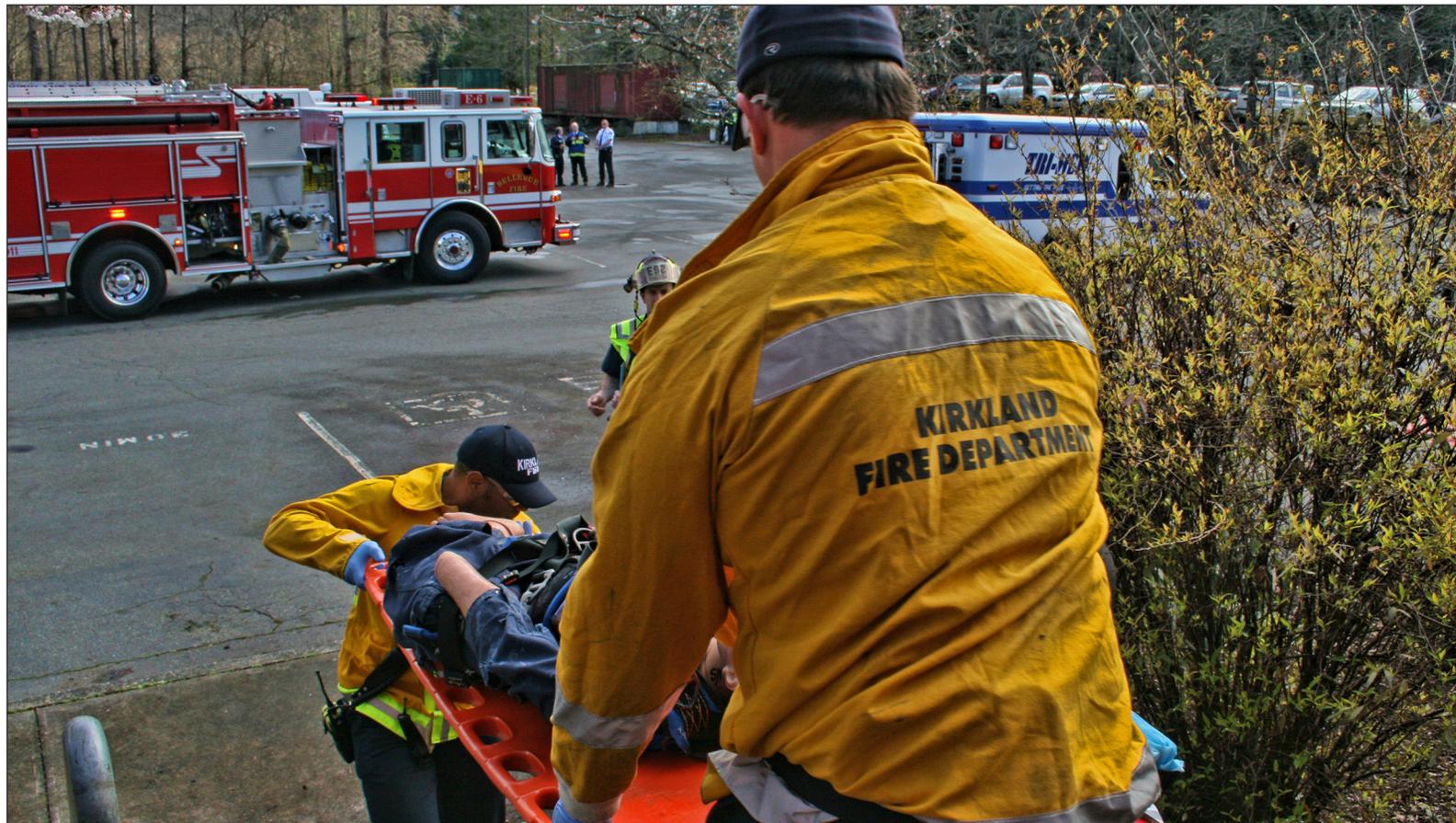


3) TOTAL RESPONSE TIME FIRST ARRIVING EMS

UNIT (911 call received to arrival of first Aid Unit)

Kirkland Fire Department's response time goals for the first arriving Aid Unit with 2 EMT's at an emergency medical incident is 5 minutes, 0 seconds, 90% of the time.

Year	Percentage of time response time goal was met	1st Aid Unit arrival times were less than this time 90% of the time
2013	51%	7:26
2012	50%	7:38
2011	51%	7:31
2010	50%	7:30
2009	51%	7:26



EMERGENCY RESPONSE

ADVANCED LIFE SUPPORT RESPONSE

Advanced Life Support response is provided in Kirkland by King County EMS through a contract with the City of Redmond Fire Department.

Medic response time standards are established by King County Medic One.

Medic Response time standard

The King County Medic response time objective is average unit response times less than 10 minutes, and 80% of calls in less than or equal to 14 minutes.

Total 2013 Medic calls in Kirkland: 1,565



RESPONSE ANALYSIS*

	INCIDENT YEAR						
	2007	2008	2009	2010	2011	2012	2013
Call Volume	1,839	1,751	1,871	1,774	1,581	1,613	1,565
Total Response Time**	9.2	9.2	9.2	9.2	9.5	10.55	10.50

*Responses for Primary Units Only, excluding Dispatch Time (Dispatch Notified to Unit Dispatched) AND Unit Response Time (Unit Dispatched to On Scene) are < 0 and > 60 Minutes (Unit Dispatched to On Scene) are < 0 and > 60 Minutes

**Total Response Time = Dispatch Time + Unit Response Time

***Excluding Responses Requested by BLS from Scene

ALS RESPONSES TO KIRKLAND FD

	2007	2008	2009	2010	2011	2012	2013
Responses	1,839	1,751	1,871	1,774	1,581	1613	1565
Bellevue Medic 1	9.0%	6.2%	6.8%	6.4%	5.3%		
Redmond Medic 19	11.5%	9.5%	11.0%	8.4%	8.0%	8.3%	8.5%
Redmond Medic 23	72.2%	75.5%	72.6%	74.4%	77.7%	77%	74%
Redmond Medic 35	0.5%	0.3%	0.4%	1.4%	0.5%	.4%	.3%
Shoreline Medic 47	4.8%	5.8%	6.0%	5.7%	5.0%		
Shoreline Medic 65	1.8%	2.3%	2.9%	3.1%	3.3%		
Other Medics (Bellevue Medic 1, Shoreline Medic 47 and 65)						14%	15%



MEDIC UNIT LOCATIONS

Bellevue Medic 1	Overlake Hospital Medical Center: 1035 116th Ave. NE, Bellevue, WA 98004
Redmond Medic 19	Housed at Redmond Fire Station 11: 8450 161 Ave NE, Redmond, WA 98052
Redmond Medic 23	Housed at Evergreen Hospital Medical Center: 12040 NE 128th Street, Kirkland, WA 98034
Redmond Medic 35	Housed at Woodinville Fire Station 35: 17825 Avondale Rd NE, Woodinville, WA 98077
Shoreline Medic 47	Housed at Station 42: 10726 Beardslee Boulevard, Bothell, WA 98011
Shoreline Medic 65	Housed at Station 57: 17020 Brookside Boulevard NE, Lake Forest Park, WA 98155

NORCOM 2013 Data

The core mission of the North East King County Regional Public Safety Communication Agency (NORCOM) is to provide high quality emergency service communication to the public for emergency medical services, fire and police. We will carry out this mission by receiving calls for service; dispatching resources in response to such calls; tracking and coordinating information flow and resources to assist responders; initiating records for all emergency events; and enhancing effectiveness, efficiency, coordination and interoperability of emergency service providers.

www.norcom.org

- ▶ The City of Kirkland is represented on the executive board of NORCOM by the City Manager.
- ▶ Kirkland police and fire serve on the NORCOM operations board.
- ▶ In 2013 NORCOM received a total of 152,095 emergency 911 calls.

NORCOM dispatch 2013 performance measures:

90% of 9-1-1 telephone calls will be answered within 10 seconds or less during each hour of a calendar quarter (barring major disasters or other extraordinary events)

- ▶ Quarter 1: 99.12%
- ▶ Quarter 2: 98.99%
- ▶ Quarter 3: 98.29%
- ▶ Quarter 4: 97.77%

Goal: 90% of emergency fire/Medical (EMS) calls are dispatched within 60 seconds

NORCOM is at 88% of time within 60 seconds (2013 average of monthly percentages).

Standard: 90% of emergency fire/ Medical (EMS) calls are dispatched within 75 seconds.

NORCOM is at 90% of time within 75 seconds



EMERGENCY RESPONSE

PREDICTABLE CONSEQUENCES

There are a sequence of events involved with a fire in a structure and with cardiac arrest, and a significant medical emergency. These explain the importance of response time in creating an effective outcome to an emergency and the predictable consequences if response is delayed.

Response Performance and Outcomes

The ultimate goal of any emergency service delivery system is to provide sufficient resources (personnel, apparatus, and equipment) to the scene of an emergency in time to take effective action to minimize the impacts of the emergency. This applies to fires, medical emergencies, and any other emergency situation to which the fire department responds. A number of things must happen quickly to make it possible to mitigate the emergency.

Factors - People, Tools and Time

Time matters a great deal in the achievement of an effective outcome to an emergency event. Time, however, isn't the only factor. Delivering sufficient numbers of properly trained and appropriately equipped personnel within the critical time period completes the equation.

For medical emergencies, this will vary based on the nature of the emergency. Most medical emergencies are not as time critical as structure fires. However, for serious trauma, cardiac arrest, or conditions that may lead to cardiac arrest, response time can be very critical. Equally critical is delivering a sufficient complement of personnel to the scene to perform all concurrent tasks required to deliver quality emergency care.

- ▶ **For example** to effectively treat a cardiac arrest patient it can take up to 9 emergency response personnel: one crew of 2-3 perform CPR and operate the defibrillator, two medics to set up and operate advanced medical equipment, one to record the actions taken by emergency care workers, and another crew to assist in transporting the patient. Thus, for a medical emergency the real test of performance is the time it takes to provide the personnel and equipment needed to deal effectively with the patient's condition, not just the time it takes

for the crew to arrive. The first crew initiates treatment, preventing the situations from getting worse.

Fire emergencies are even more resource critical. Again, the true test of performance is the time it takes to deliver sufficient personnel to initiate rescue and apply water on the fire. Effective operations at the scene of fire emergencies depend on the arrival of sufficient trained and equipped personnel to perform all of the duties and tasks required to control a fire event. Tasks that must be performed can be broken down into two key components, life safety and fire control.

- ▶ Life safety tasks are based on the number of building occupants, their location, status, and ability to take self-preservation action. Life safety tasks involve the search, rescue, and evacuation of victims. These activities are also required to be safe for the rescuers, meaning that there must be a team in place to rescue the rescuers if they enter a structure.
- ▶ The fire control component involves delivering sufficient quantities of water to extinguish the fire and creating an environment within the building that allows entry by firefighters.

The number and types of tasks needing simultaneous action will dictate the minimum number of firefighters required to combat different types of fires. In the absence of adequate personnel to perform concurrent action, the command officer must prioritize the tasks, completing some in chronological order rather than at the same time, reducing overall fire emergency effectiveness.





2014 PLAN OF ACTION:

To meet response time objectives the Kirkland Fire Department will continue to insure that all internal efficiencies are being identified and evaluated. Regularly evaluating response data to determine how to best improve reliability and efficiency in order to meet our response time goals will continue. In 2012, the department conducted a Fire

tion along with other neighborhoods using GIS data, call volumes, estimated travel times from Fire Stations, population growth projections and several other variables. The department will be evaluating these recommendations at the conclusion of the SOC study.

In 2013, the Computer Aided Dispatching (CAD) system at NORCOM was upgraded. With that upgrade, Kirkland will be upgrading its mobile data computers that are on each emergency response vehicle. This allows responders to communicate their status changes with the dispatch center without using radio "air" time. This leaves the radio free to be used for emergency messages providing faster response and increased safety to responders. It also gives a more accurate picture of response times as data can be sent without waiting for other units to finish voice communications....

The department did not hire any new firefighters in 2013 but does anticipate hiring 4-6 firefighters in 2014 due to retirements.



Department Strategic Plan which listed 95 recommendations for improvement. The department began working on those recommendations in 2013 and will be continuing in 2014. As of the printing of the report, 66 of the 95 recommendations have been completed or are in progress.

One of those recommendations was to conduct a Standard of Cover (SOC) Study for the City. This is an extremely detailed analysis to evaluate response times and how to improve them. Among other things, this study will look at possible fire station relocations of the Finn Hill Fire Sta-

COMMUNITY RISK REDUCTION

FIRE PREVENTION BUREAU HIGHLIGHTS

The Kirkland Bureau of Fire Prevention currently has 4 staff members: The Fire Marshal, one Assistant Fire Marshal and two Fire Inspector/Investigators. The Fire Investigation Team is also part of the Fire Prevention Bureau. Headed by the Fire Marshal, the Fire Investigation Team consists of 7 dual role investigators (5 from the Fire Department and 2 from the Police Department).

Our mission is to create a safe environment for our residents and our business community. We strive to prevent injury and loss of life and property through the following activities:

- ▶ Plan review and permit issuance for new construction and fire protection systems
- ▶ Inspections of new construction and fire protection systems
- ▶ Issuance of operational permits for activities regulated by the International Fire Code
- ▶ Annual fire safety inspections in existing buildings
- ▶ Investigation of fires to determine origin and cause
- ▶ Code and policy development and interpretation
- ▶ Publication of operating policies and fire safety information bulletins
- ▶ Adult Education - inactive
- ▶ Safe Child Education – inactive

In 2013 Grace Steuart was recognized for 25 years of service with the City of Kirkland. Grace Steuart has served in a variety of roles in fire prevention over those years and is recognized as a regional expert on code adoption and application. She currently serves as the Assistant Fire Marshal.

Fire Plan Review of New Construction

Fire Prevention personnel check plans to determine compliance with the International Fire and Building Codes as well as all local codes, ordinances, standards and regulations. This includes plan review of building sites for adequate fire department access, hydrant locations, and adequate fire flow, as well as fire protection systems such as fire sprinkler and alarm systems. With Fire and Building

in the same department, Fire Prevention personnel work closely with the Kirkland Building Services Division, as well as other City Departments, to ensure comprehensive and consistent enforcement of the International Codes and the Kirkland Municipal Code.

Year	Plan review SFR new and additions	Plan Review Commercial	Plan Review Grading (LSM)	Plan Review Short Plats
2011	150	36	33	15
2012	287	20	45	35
2013	371	43	60	40
Year	Plan Review Zoning and Design	Plan Review Mechanical	Pre application conferences	
2011	NA	NA	NA	
2012	15	4	110	
2013	17	4	160	

Fire Inspections of New Construction

Once permits are issued, fire prevention personnel perform inspections to ensure that the required fire protection features are installed correctly and as designed. Just as during the plan review process, we work cooperatively with the Building Division and other City departments such as Public Works to ensure a seamless inspection process for the developers and contractors.

Year	Fire system Permits issued	Fire Protection System Inspections	(IFC) Permits issued	(IFC) Inspections
2011	200	350	25	50
2012	208	380	16	14
2013	375	748	32	31

Issuance of Operational (IFC) Permits

Some activities have the potential to create a hazard to the public, and therefore require an Operational Permit to be issued. Typically, operational permits are required for fireworks displays, tents, bonfires, and other hazardous activities.

Annual Fire Safety Inspection Program

Fire Prevention Bureau personnel are responsible for managing the annual fire safety inspections program for existing buildings. You will see firefighters in Kirkland conducting these inspections, in order to discover and correct any conditions liable to cause a fire or life safety hazard. The recognized standard for inspection frequency is an-



nual inspection of all business and hazardous occupancies. Currently our goal is to meet a two year cycle. Alternate programs such as self inspection programs for low risk occupancies are being examined for applicability.

Year	Company Level Fire inspections	Company Officer Investigations reviewed	Investigator reports
2011	680	NA	26
2012	1380	104	16
2013	1594	103	47

Fire Investigations

The Fire Prevention Bureau is mandated to conduct fire investigations to determine origin and cause of all fires, which occur within the City of Kirkland. Fire Investigators work closely with the Kirkland Police Department in the event that a fire is suspicious or is determined to be arson.

All investigators are trained to national standards, attending the National Fire Academy in Emmitsburg MD, gaining certification through the Washington State Patrol and Accreditation from the International Association of Arson Investigators (IAAI)

Regional opportunities to improve Investigations have been recommended in the recent Fire Department Strategic plan. These opportunities are being explored with other municipalities and with the Federal Department of Alcohol Tabaco and Firearms.

Code and Policy Development and Publication

The Fire Marshal is responsible for developing and publishing policies related to established fire prevention goals. These policies are technical in nature and geared towards assisting developers and contractors in site and system design. In addition, the Fire Marshal is responsible for code and policy interpretations. The Fire Marshal also coordinates with Fire Marshals in neighboring jurisdictions so that, as much as possible, code interpretations and requirements are standardized throughout the region.

In 2013, the process of adopting and implementing the 2012 International Fire Code was

completed. Items still in process include implementing key components of the IRC to include residential sprinklers and new components such as photovoltaic (solar) power systems for residential occupancies.

Fire Safety Information Bulletins

Information bulletins consist of fire safety information which business owners or the general public may find helpful. These publications will be readily available online with the implementation of Kirkland's new webpage platform.

GOALS for the Future

- ▶ Two recent evaluations of the department outline the value of routine fire and life safety inspections in businesses and hazardous occupancies. **Goal: Meet recognized inspection frequency standards.**
- ▶ Sprinklers in single family homes are found to save lives and reduce the tax and insurance burden on communities. The cost of these systems have consistently dropped year over year. **Goal: Adopt ordinance requiring residential fire sprinklers in all new single-family homes.**
- ▶ In 2010, funding was cut to several educational programs. **Goal: Find funding to reestablish child safety and education priorities.**



OFFICE OF EMERGENCY MANAGEMENT

OFFICE OF EMERGENCY MANAGEMENT

The Kirkland Office of Emergency Management (OEM) is the focal point for emergency management planning in the city. OEM is the lead agency for facilitating the coordination of emergency management activities among local, state, federal, and private sector agencies within the City of Kirkland. Every city department takes an active role in emergency management and works closely with OEM staff to train, exercise, plan, and respond.

Vision:

The City of Kirkland's Office of Emergency Management (OEM) will provide leadership in promoting a community that is resilient in the event of a disaster.

Mission:

To create and sustain partnerships that support disaster prevention, preparedness, response and recovery to become a resilient community.

Preparedness and Community Partnerships

Community partnerships are critical to creating a resilient community. The City partners with organizations locally and regionally and is developing partnership with community members that are willing to volunteer in programs that help share the preparedness message throughout the community.

Volunteer Programs

- ▶ **Amateur Radio Emergency Services** Volunteers operate HAM radio communication centers during and after a disaster when other forms of communication may be down or overloaded. The City has a team of 26 actively involved volunteers supporting all aspects of this program. This team meets and drills monthly.



- ▶ **Community Emergency Response Team (CERT)** There were two CERT classes offered this year with 50 CERTs graduated in 2013. The CERT leadership volunteer team was also working on building neighborhood CERT teams. They planned and hosted a meeting connect to connect CERTs by neighborhood. There were 80 people that came to the meeting to designate a lead person and a meeting location. There are now only 3 neighborhoods without a contact person, Lakeview, Market and Central Houghton. The CERT Leadership team also organized a special continuing education event that 25 people attended; an animal CERT module presented by WASART.
- ▶ **Fire Corps** (this volunteer group is still looking for volunteers). The current group are taking photos at incidents and doing support activities for the Fire Department. There is a great vision of more activities this group of volunteers can be involved in to support the community by partnering with the Fire Department

and Emergency Management to create a safer community.

- ▶ **Map Your Neighborhood (MYN)** is a state-wide disaster preparedness program that empowers neighborhoods to prepare for emergencies and disaster situations. Kirkland has adopted this program to help create a resilient community.

The program helps save lives, reduces the severity of injuries and trauma, and reduces property damage by connecting neighbors together before the disaster so they can help each other after.



Ready to Respond

Emergency Operations Center (EOC)

The mission of the Emergency Operations Center (EOC) is to provide centralized coordination of the City's emergency response personnel, resources, facilities, and mutual aid assistance. The EOC may be activated anytime there is an incident that overwhelms resources or a planned event that requires additional support beyond day-to-day response/recovery capabilities. The Office of Emergency Management is responsible for ensuring that the EOC is fully equipped at all times, and that staff are sufficiently and adequately trained and prepared, day or night. The EOC has three levels of activations; monitoring, elevated, and full. The level of activation will be determined by the nature and extent of the disaster.



Training and Exercises

To ensure City staff is in a mission-ready state, various levels of training are coordinated and facilitated by OEM, throughout the year. Drills and exercises allow us to test equipment and procedures and to identify areas of improvement.

Planning

The Office of Emergency Management works on developing plans so when there is a need to respond there is a plan in place and partnership have already been developed. In 2013 the City of Kirkland has been working with King County Office of Emergency Management is developing a regional Hazard Mitigation plan. Kirkland hosted a community meeting in the planning stage and encouraged community members to participate in the survey. This plan is scheduled to be completed in 2014.

DEFINITIONS

Alarm Interval – Measured time between emergency event awareness and the alarm time.

Alarm Time – The point of receipt of the emergency event at the public safety answering point (PSAP) to the point where sufficient information is known to the dispatcher to deploy applicable units to the emergency. (Time-stamp)

Advanced Life Support (ALS) – Training is an intensive 3,000 hour program. Paramedic trainees receive training including, but not limited to: cardiology, pharmacology, general acute medicine, advanced airway and respiratory therapies, trauma including burns, orthopedic injuries, triage and extrication, and fluid resuscitation. Trainees acquire knowledge and skill through clinical rotations in local hospitals, primarily Harborview Medical Center, and while riding on Seattle Fire Department Medic Units under the direct supervision of Senior Seattle Paramedics.

Basic Life Support (BLS) – Certified Emergency Medical Technicians (EMT). EMT classes are 120 hours of classroom and practical work with 10 hours of hospital observation time.

Call Processing Interval – The first ring of the 911 telephones at the dispatch center and the time the CAD operator activates station and/or company alerting devices. This can, if necessary, be broken down into two additional parameters: “call taker interval” (the interval from the first ring of the 911 telephone until the call taker transfers the call to the dispatcher) and “dispatcher interval” (the interval from the time when the call taker transfers the call to the dispatcher until the dispatcher (CAD operator) acti-

vates station and/or company alerting devices). Sixty (60) seconds is an industry standard. (Measured time between alarm time and dispatch time).

Dispatch Time – The time when the dispatcher, having selected appropriate units for response with assistance from the CAD system, initiates the notification of response units. (Time-stamp)

Emergency Event Awareness – The point at which a human being or technologic “sentinel” (i.e., smoke detector, infrared heat detector, etc.) becomes aware that conditions exist requiring an activation of the emergency response



system. This is considered the emergency event awareness.

EMT – Emergency Medical Technician. Certification includes 120 hours of classroom and practical work with 10 hours of hospital observation time. In order to maintain EMT certifications, firefighters are required to attend monthly classes, pass written tests and demonstrate practical skills.

Event Initiation Point – The point at which factors occur



that may ultimately result in an activation of the emergency response system. Precipitating factors can occur seconds, minutes, hours, or even days before emergency event awareness is reached. An example is the patient who ignores chest discomfort for days until it reaches a critical point at which he/she makes the decision to seek assistance (emergency event awareness). It is rarely possible to quantify the point at which event initiation occurs.

Fractile - The 90th fractile is the response interval for the call that falls on or above the point where 90 percent of the responses are less than or equal to it.

Initial Company Time – The time at which the initial company arrives on scene.

Initial Full Alarm Assignment – Time when all of the personnel, equipment, and resources ordinarily dispatched upon alarm arrives on the scene. Beginning in 2009, a full alarm assignment was four Engine companies, one Ladder company, one Aid car, one MSO (Medical Services Officer), and two Battalion Chiefs or firefighting staff equaling 20.

Measured component required by RCW Chapter 35A.92 for fire suppression responses

Initial Full Alarm Assignment Interval – Measured time between initial company on scene time and Initial Full Alarm Assignment is completed.

Response Time – The combined measured time from dispatch time and includes turnout and travel intervals to initial company arrival time.

Total Response Time Objective - The City of Kirkland Fire District has historically adopted the response time from the time of the 911 call to the time the first arriving unit was on the scene. Dispatch time + turnout time + Travel Interval = Total Response time.

Travel Interval – measured time between turnout time and on scene time of initial company. *This is a measured component known as “Response Time” required by RCW Chapter 35A.92*

Turnout Interval – Measured time between dispatch time and turnout time.

Turnout Time – When units acknowledge notification of the event to the beginning point of response time (wheels rolling). *Measured component known as “Turnout Time” required by RCW Chapter 35A.92*

WSRB – Washington State Survey and Ratings Bureau





KIRKLAND FIRE DEPARTMENT 2013 ANNUAL REPORT

