KIRKLAND FIRE DEPARTMENT
2012 ANNUAL REPORT

OUR CITY ✱ OUR PEOPLE ✱ OUR DUTY

OUR COMMITMENT TO SERVE

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.

TABLE OF **CONTENTS**

MESSAGE FROM THE CHIEF **4**

VISION, MISSION, VALUES **4**

DEPARTMENT INFORMATION **5-15**

- Department Overview 6
- City Overview 7
- Org Chart 8-9
- Station Map 10
- Budget 11-12
- Recognition and Service 13

EMERGENCY RESPONSE **16-17**

- Operations Overview 16-17
- Training Overview 18
- Technical Rescue Overview 18-19
- Intent of RCW Chapter 35A.92 20
- Why Response Times 20
- Total Call Log 23
  - 2012 23
  - 2011 23
- Response Time Objectives 24-25
- Advanced Life Support Response 26-27
- Dispatch Response Times 26-27
- Predictable Consequences 28
- Plan of Action 29

Community Risk Reduction (Prevention Bureau) **30-31**

Office of Emergency Management (OEM) **32-33**

Definitions **34-35**

MESSAGE FROM THE CHIEF

I am proud to present the Kirkland Fire Department 2012 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

- **Service** – Demonstrated innovation and understanding of our internal and external customers' needs.
- **Professionalism** – Upholding industry standards and honoring the expectation of a professional firefighter both on and off the job.
- **Integrity** – Maintaining consistency between actions and words at all times.
- **Respect** – Being accountable and demonstrating mutual trust and respect.
- **Innovation** – Providing a supportive work environment that encourages and empowers innovation and risk taking within the norms of the department and the City.
- **Trust** – trusting others and being trustworthy.
- **Teamwork** – Finding strength in diversity and working together for a common goal.

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 and City Emergency Management, 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 EMT)
- 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 in 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.

The City of Kirkland has an ISO rating of 4. The Insurance Service Office (ISO) collects information on municipal fire-protection efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data using our Fire Suppression Rating Schedule (FSRS). Then, assigns a Public Protection Classification from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's fire-suppression program doesn't meet ISO's minimum criteria.

By classifying communities' ability to suppress fires, ISO helps the communities evaluate their public fire-protection services. The program provides an objective, countrywide

DEPARTMENT OVERVIEW (Cont.)

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 (2012)

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 – 88 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 – 3.5
- City Emergency Management – 1.5 (½ grant supported ½ temporary funded; ½ of the Administrative Deputy Chief)
- Command staff – 2.5 (½ of Administrative deputy Chief is responsible for Emergency Management)

Minimum Staffing of 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
- Rose Hill Station 26 = 3 crew members, 1 Battalion Chief, 1 Battalion Aid Captain; 1 aid car, 1 engine, 1 Battalion chief car
- Totem Lake Station 27 = 6 crew members; 2 aid cars, 1 engine, 1 Ladder

2013 Staffing Projections:

Kirkland anticipates hiring a fulltime permanent Emergency Manager, a temporary fulltime Senior Financial Analyst. The Department will also be converting a previous fulltime permanent Administrative Assistant position to an Administrative Supervisor position and ending the temporary funding of the Emergency Preparedness Coordinator position.

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**	80,505
Land Area	
Pre-Annexation	11 square miles
Post-Annexation**	18 square miles
Fire Department Grading Class	4
Total City Budget (2011-2012 Final Budget)	$449,372,936
City Operating Budget (2011-2012 Final Budget)	$231,510,089
Full-Time City Employees	
Pre-Annexation	461.43 FTE
Post-Annexation**	541.93 FTE

Kirkland Fire & Building Department · 2012 Org Chart

Building Services Manager
Thomas Phillips

- **Permit Tech Supervisor**
  - 2.28 Permit Techs
  - 1 Office Tech
- **Plans Examiner Supervisor**
  - 3 Plans Examiner II
  - 1 Plans Examiner I
- **Inspection Supervisor**
  - 3 Electrical/Building Inspectors
  - 1 Building Inspector

- 2 Administrative Assistants
- 1.5 Office Techs
- **Emergency Preparedness Coordinator** (Temporary)

Fire Investigation Team:
6 Investigators

Director, Fire Chief
J. Kevin Nalder

nistrative Deputy Fire Chief/
ity Emergency Manager
Helen Ahrens-Byington

Fire Marshal

Assistant Fire Marshal

uty arshal

Fire Inspector

EMS Officer

.3 Records Management

Operations Deputy Fire Chief
Jack Henderson

Training Battalion Chief

Training Captain

Shift Battalion Chief's
A — B — C

3 — Captains
BC Aid Position

Station 21

Station 22

Station 25

Station 26

Station 27

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:

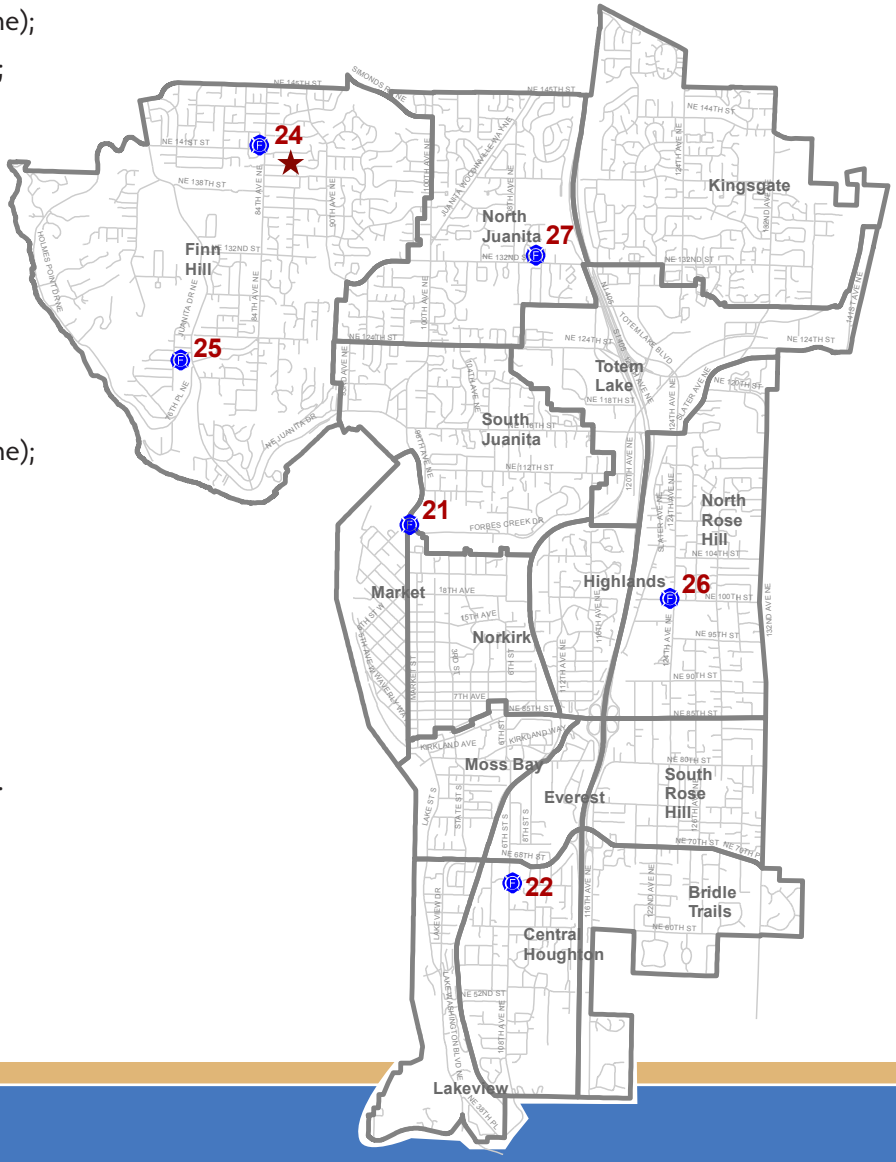
- **Aid 25** 2008 Ford Road Rescue Aid Vehicle 4x4 (front line);
- **Engine 25** 2003 Spartan / H&W Pumper (front line).

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** 1999 Spartan / H&W 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).



2012 FIRE DEPARTMENT BUDGET

Expenditures:

Department	Total Budget	Personnel	Internal Charges	Other
Fire Operations	$15,240,355.00	$12,262,232.00	$2,012,306.00	$965,817.00
Training	$548,426.00	$456,693.00	$34,084.00	$57,649.00
Administration	$1,339,703.00	$1,019,071.00	$228,483.00	$92,149.00
Fire Prevention	$709,801.00	$601,432.00	$74,598.00	$33,771.00
Office of Emegency Management	$213,757.00	$122,259.00	$10,097.00	$81,401.00
Total	$ 18,052,042.00	$14,461,687.00	$2,359,568.00	$1,230,787.00

**Personnel includes benefits, overtime, and hourly wages, uniforms, and protective equipment.*
**Internal charges include fleet, Information Technology, liability insurance and facility charges.*
**Other is to purchase safety gear, medical supplies, tools and supplies for fire stations and apparatus, office supplies, all supplies for Training, Prevention and Administration.*

Revenue:

EMS Transport	$895,578.22
BLS-EMS Levy	$840,146.00
Fire Permits	$36,872.56
Grants and Donations	$128,363.00
Total	**$1,900,959.70**

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.

2012 TRANSPORTS
(March - December)
Total Revenue = $895,578.22

TRANSPORTS BILLED	2521	
Resident	1950	77.4%
Non-Resident	515	20.4%
Employee at Work	56	2.2%
	1853	
TRANSPORTS NOT BILLED	138	5.2%
Total # of Transports	**2659**	

BUDGET (continued)

2012 Active Capital Improvement Projects

Emergency Response Operations

- Mobile Data Computer Replacement
- Breathing Air Fill Station Replacement
- Regional training Office changes
- Thermal Imaging Cameras

Prevention Bureau

- Fire Investigation Equipment

Office of Emergency Management

- Emergency Operations Center equipment
- Disaster Supply Storage Units
- Disaster Response Vehicle and supplies
- Critical Ham Radio Equipment upgrade

Grants and Donations (Total 2012 Grant and Donation Income: $128,363)

- Medic One Foundation, $5,000 to purchase pediatric transport equipment to enhance safe transportation of pediatric patients. This equipment includes adjustable transport seats and backboards that will enhance safe and secure transport of patients from newborn to young adult.
- Regional Approach to Municipal Public AED Registry and Training (RAMPART), the $4,000 grant was used to train City employees in AED use, to place a new AED at the Municipal Court, and purchase batteries and AED pads to replace expiring supplies for AEDs located in police patrol vehicles.
- Washington Pre-hospital Participation Grant: This is a $1,700 zero-match grant from the Washington State Department of Health. The grant was used to purchase AED supplies and new equipment bags.
- King County EMS Division—Small Grants for EMS Agencies: $1,300 for partial reimbursement for the cost of epinephrine auto injectors.
- Emergency Management Performance Grant (EMPG): $39,852 this grant was used to pay part of the salary of the Emergency Preparedness coordinator position in the Office of Emergency Management.
- King County Community Emergency Response Team (CERT) equipment grant: $560 for equipment associated with the CERT program. Kirkland was eligible because the program is registered with the Federal Emergency Management Agency (FEMA).
- Donation: $1,500 was donated by the Kirkland Seventh-Day Adventist Church to support the CERT program and pay the cost of the instructor for the Fall class.
- Federal Department of Justice COPS Grant to purchase structural collapse rescue equipment and storage trailer. Total $ 74,451

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 2012 Service Recognition Awards:

Civilian Employee of the Year	**Jeff Sheppard**
Rookie of the Year	**Ryan Schaeffer**
Firefighter of the Year	**Moe (Ryan) Kelsey**
Officer of the Year	**Captain Larry Peabody**
Chief of the Year	**Battalion Chief Joe Sanford**
Inter-Departmental Award	**City GIS Team**

Retirements:

David Kryger	32 yrs of service	Battalion Chief

Promotions:

Mike Jeffery	Battalion Chief
Ivan Huld	Captain
Jason Chappell	Lieutenant
Dick Hughes	Lieutenant

New Hires:

Eric Forslin,	Firefighter
David Lilleness	Firefighter
Ryan Sheaffer	Firefighter

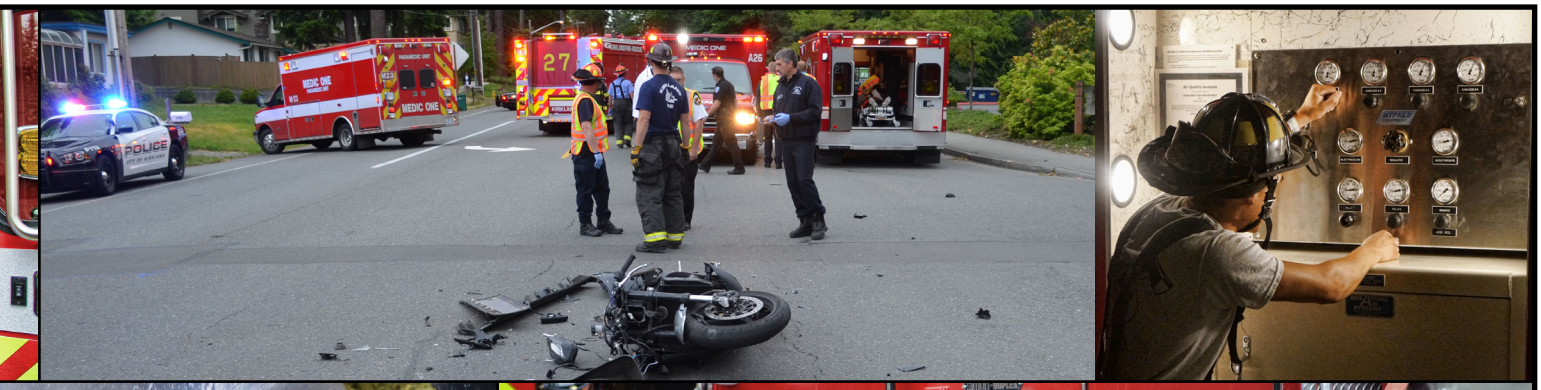
Years of Service:

Ed Ulrich	35
Jim Crowe	20
Will Darnell	20
Bill Hoover	20
Mark Jung	20
Audrey Martin	20
Nels Petersen	20
Greg Rogers	20
Tim Sears	20
Dave Young	20

Recently promoted Battalion Chief Mike Jeffery

APPARATUS

GATEWAY THEATRE

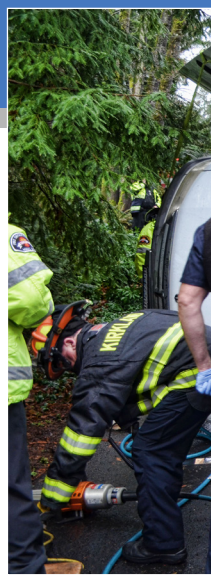

MEDIC ONE
POLICE
27

KIRKLAND
FIRE · RESCUE

KIRKLAND FIRE-RESCUE

KIRKLAND
25
KIRKLAND FIRE-RESCUE

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 2012:

- The Department is continued to work with other regional departments to implement a new dispatching and records management system with the NORCOM to improve service to the community by reducing the amount of time it takes for a unit to be dispatched to a call, to improve communication from dispatch to the unit that is responding and to improve the record management system.
- Kirkland Fire Department and Redmond Fire Department received a Federal Grant to purchase electronic tablets. Kirkland received 16 tablets to allow Emergency Medical Patient forms to be completed faster, with more information and enhance communication between emergency response units and the hospital. Kirkland Fire also received a Federal Grant to purchase shoring & breaking equipment and a trailer to transport equipment to a building collapse incident. The department also purchased a new Aid car in its normal replacement cycle.
- One of the senior Battalion Chiefs retired with 32 years of service. This produced a promotion of a Captain to Battalion Chief, a Lieutenant to Captain, and a Firefighter to Lieutenant. The Department also hired three new Firefighters to replace this retirement and two previous retirements. The new hires attended a regional Firefighter Academy with the assistance of the other four agencies of the East Metro Training Group.
- In 2012 the department had some challenging calls and some very good out comes. There was an evacuation of a large four story retirement/assisted living home due to a very smoky roof fire. There were 20 units that responded including Kirkland Police and Kirkland Building Inspectors. 120 residents were evacuated and then returned into their facility without any injuries after the fire crews were able to ensure the fire was extinguished and remove the smoke from the building.
- E-25 responded to a cardiac arrest in Saint Edwards Park in which two park rangers quickly responded, called 911 and initiated CPR. This patient regained consciousness and was transported to the hospital.
- Kirkland Fire Department assisted in a technical rescue in Redmond where there was a collapse of the second floor of a building under construction as the wet concrete was being poured. All the workers were extricated safely some with serious injuries.

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 shifts Chief Officer training. These

training events follow the outline given by the training division to the shifts for completion on a quarterly basis.

In addition to required quarterly training, large scale training events are coordinated and conducted by 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 of the East Metro Training Group. Kirkland Firefighters train as part of a 500 plus member training group. The benefits of this effort are numerous. Interoperability is increased and as a result the efficiency and the safety at emergency scene is improved.

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

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

EAST METRO TRAINING GROUP:

Mission:

The East Metro Training Group is dedicated to safe, innovative and progressive training excellence. Member agencies are committed to enhance cooperation and standardization providing an efficient and comprehensive training program.

Core Values: Cooperation ◆ Excellence ◆ Safety

2012 training activities:

The 2012 version of EMTG Best Practices is 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 the 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 training and policy formation perspective.

The creation of Best Practices for Offensive Fire Attack has signaled a new era of cooperation between these agencies.

Kirkland Firefighters train constantly on emergency medical skills. As a part of this training CPR / Defibrillation are of primary concern. After decades of improvement and effort Kirkland Firefighters were part of the milestone 50% plus witnessed arrest save rate realized in King County. Nationally the save rate is 5%.

This year the training division coordinated multiple company operations (MCO) focusing on single family residence fires. These fires are by far the most common fire responded to. The benefit of this training was that EMTG crews removed several minutes from the arrival time to the application of water on the fire.

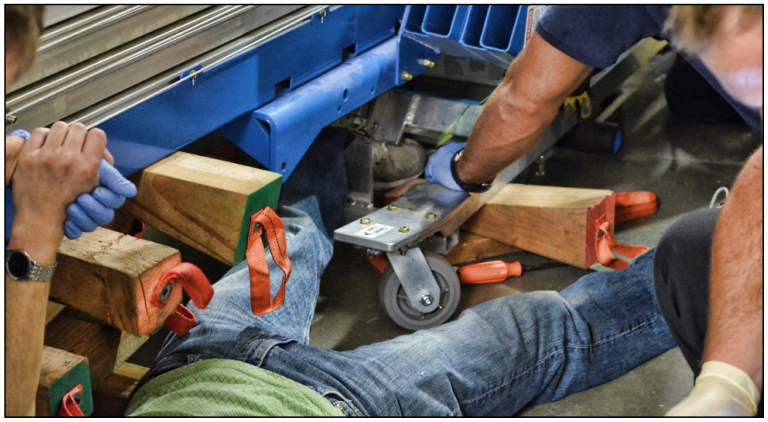
New Kirkland Fire Recruits completed the initial training academy at the Bellevue Training Center. Kirkland Fire personnel supplemented by EMTG staff provided a high quality training environment and at the end of the 3 month academy all Kirkland Recruits passed an Internationally Accredited examination receiving the certification of Firefighter 2.

EMTG developed and coordinated high rise firefighting training. Kirkland firefighters prepared to operate in high rise buildings as well as safely work with neighboring agencies at these high risk calls.

EMERGENCY RESPONSE

TRAINING OVERVIEW (Cont.)

Water Rescue Training commenced at the Peter Kirk Pool and at Marina Park. Hundreds of hours of training and rehearsal scenarios were conducted during the month of May. This training has been conducted annually for almost 2 decades now. Kirkland has led the way in the training of firefighters for Near Shore Water Rescue.



Confined Space Rescue Training is conducted annually refreshing skills and indoctrinating new firefighters to the challenges of rescuing people from these 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.

Kirkland Firefighters completed training on responding to Hazardous Materials incidents. The training focused on a review of equipment carried on the response vehicles and preparing technicians for entry into high hazard environments. Capt. Ken Henderson, Kirkland Fire Hazardous Materials Team Leader, attained certifications in Bomb Incident Training, Transportation Emergencies and Advanced Chemical/ Biological and WMD agent Mitigation.

Mass Casualty Incident training included the presentation of a county wide curriculum which prepared Kirkland Firefighters for dealing with events arising from events like; large motor vehicle accidents, mass shooting events and weapons of mass destruction scenarios.

Structural Collapse Incidents was the focus for Kirkland Firefighters in drills where firefighters worked to access patients in a simulated collapsed of concrete buildings. Training firefighters to respond to possible events brought about by earthquake or structural collapse.

Kirkland Firefighters participated in training with all EMTG members focusing on fire ground communications and how to increase safety and efficacy through better radio communications. Effective communications are central to a successful outcome to any emergency response. Kirkland Firefighters reviewed effective communication practices.

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

New Ladder Drivers - Steve Suyama, Moe Kelsey, Andrew Heichel, Terry Russell, Josh Pratt, Mark Crickmore, Chris Bailey

New Acting Officers - Ryan Riedl, Brent Anderson, Robby Holmes, Kyle Jacobson, Jon Hernandez, Jeff Childs, Steve Suyama

New Engine Operator/Driver - Darren Broekhuis

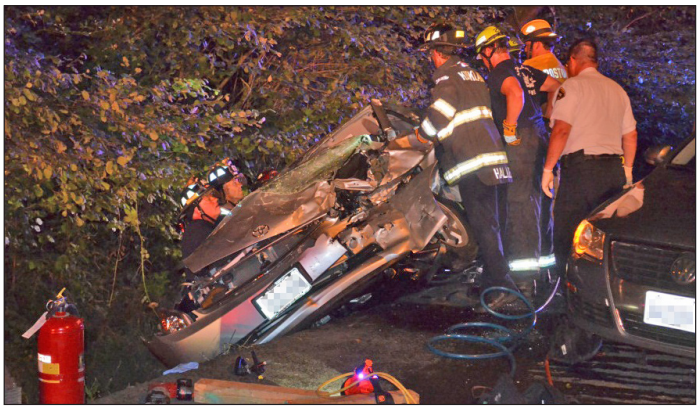
TECHNICAL RESCUE OVERVIEW

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 2012 the 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 2012, 60 Northwest firefighters were trained and certified in Trench Collapse Rescue, Rope Rescue, Confined Space Rescue and Rescue Systems 1. All of the training was coordinated and facilitated by Kirkland Firefighters.

There are 28 Kirkland Firefighters that are trained as Rescue Technicians. These technicians are assigned to Kirkland's Ladder Company and respond from Fire Station 27 in the Totem Lake area. Kirkland Rescue Technicians are trained in the following disciplines:



- Rope Rescue, high and low angle
- Confined Space Rescue
- Trench Rescue
- Structural Collapse Rescue
- Vehicle & Machinery Rescue

In 2012, Kirkland was able to complete the purchase a rescue trailer that was outfitted with equipment and supplies specifically for structural collapse incidents. This was funded by a Federal Grant. The trailer is equipped with Urban Search and Rescue (USAR) equipment for breeching, breaking and shoring of destabilized structures.

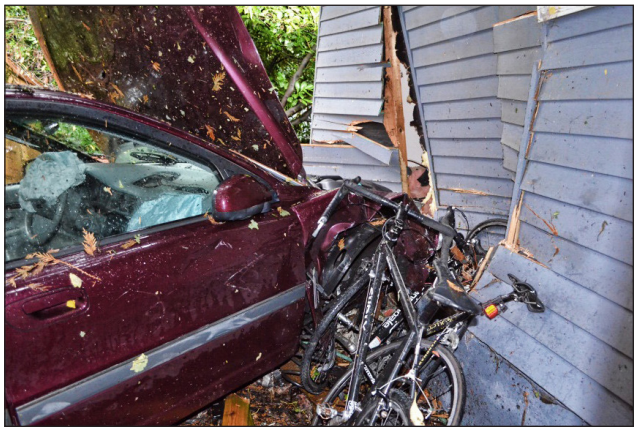
A structure may become destabilized and/or collapsed due to earthquakes, explosions, impact by vehicles and construction defects. Kirkland personnel participated in an eight (8) county effort to identify and create an emergency response, management and mitigation of Structural Collapse Rescue events can occur in the region. This was a year's long process and resulted in State Legislation that recognizes "Collapse Rescue" as a statewide mobilization need.

Kirkland also had several calls where structural were involved.

During 2012, Rescue personnel responded to several to 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 rescues, industrial accidents, structural collapse of building under construction and a trench rescue.

In addition, Kirkland has a near shore water rescue program which is a model in the region. Kirkland Fire Department has 54 trained rescue swimmers and all other personnel are trained to support a water rescue. Kirkland had several water rescue related incidents in 2012. All aid units, the ladder and the battalion car carry water rescue equipment.



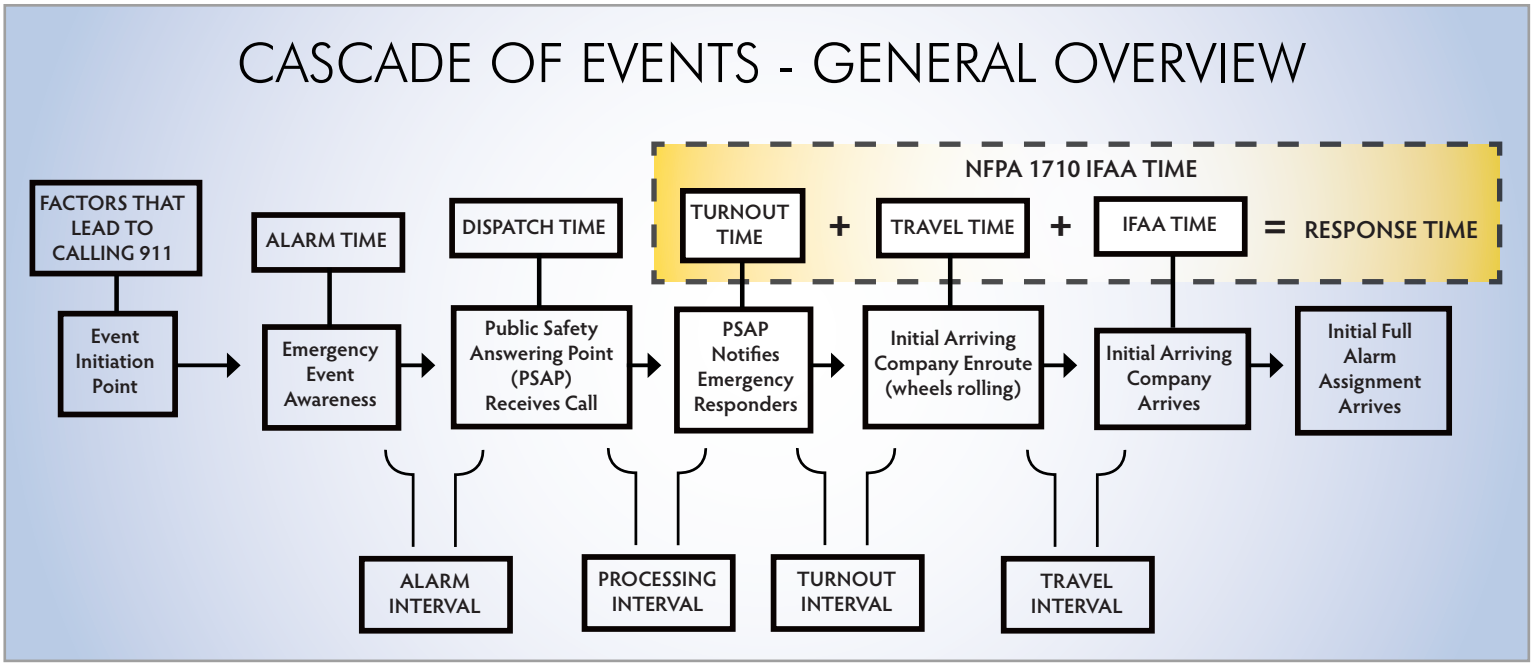
EMERGENCY RESPONSE

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.

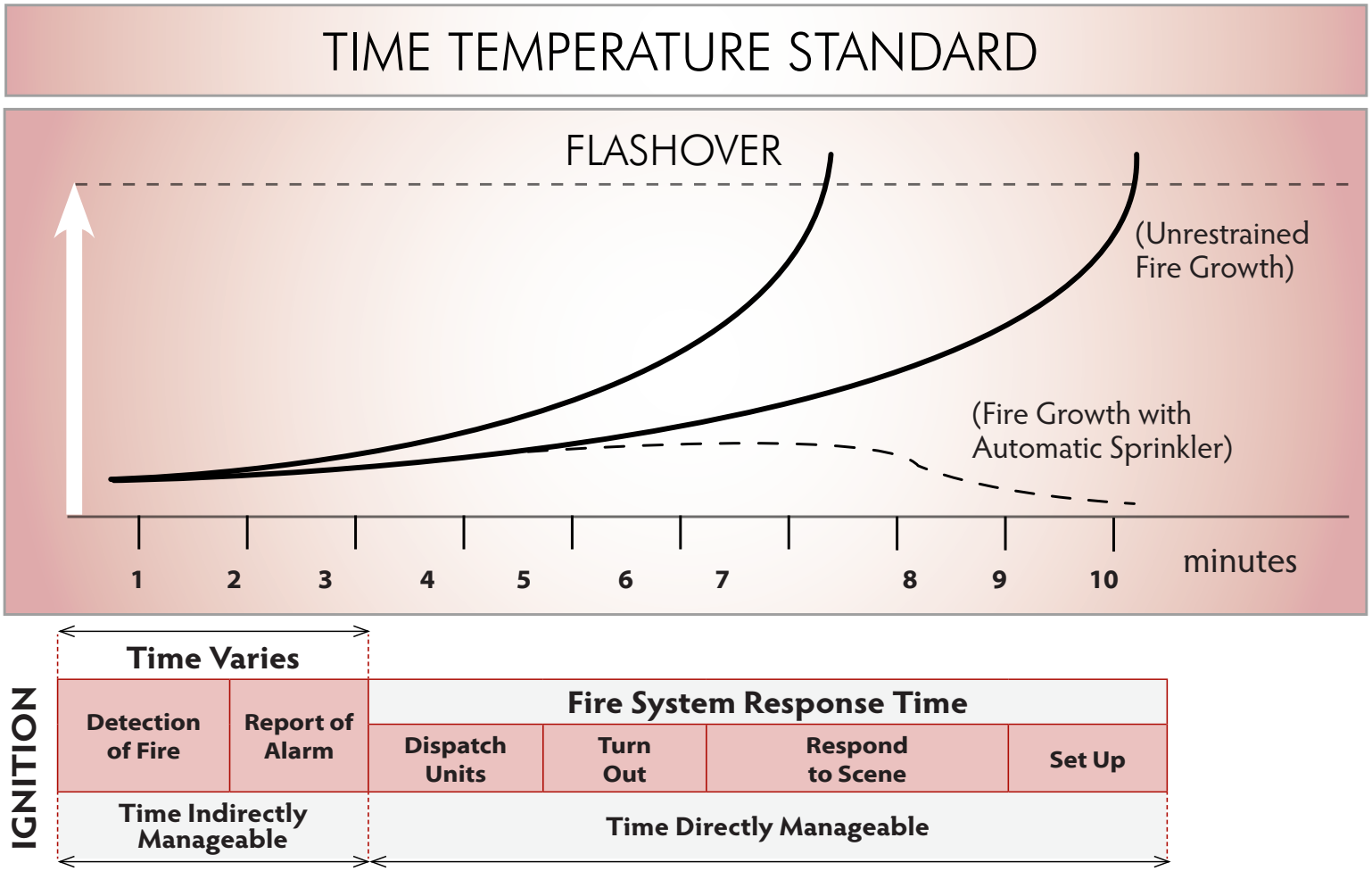
WHY RESPONSE TIMES?

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.



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.



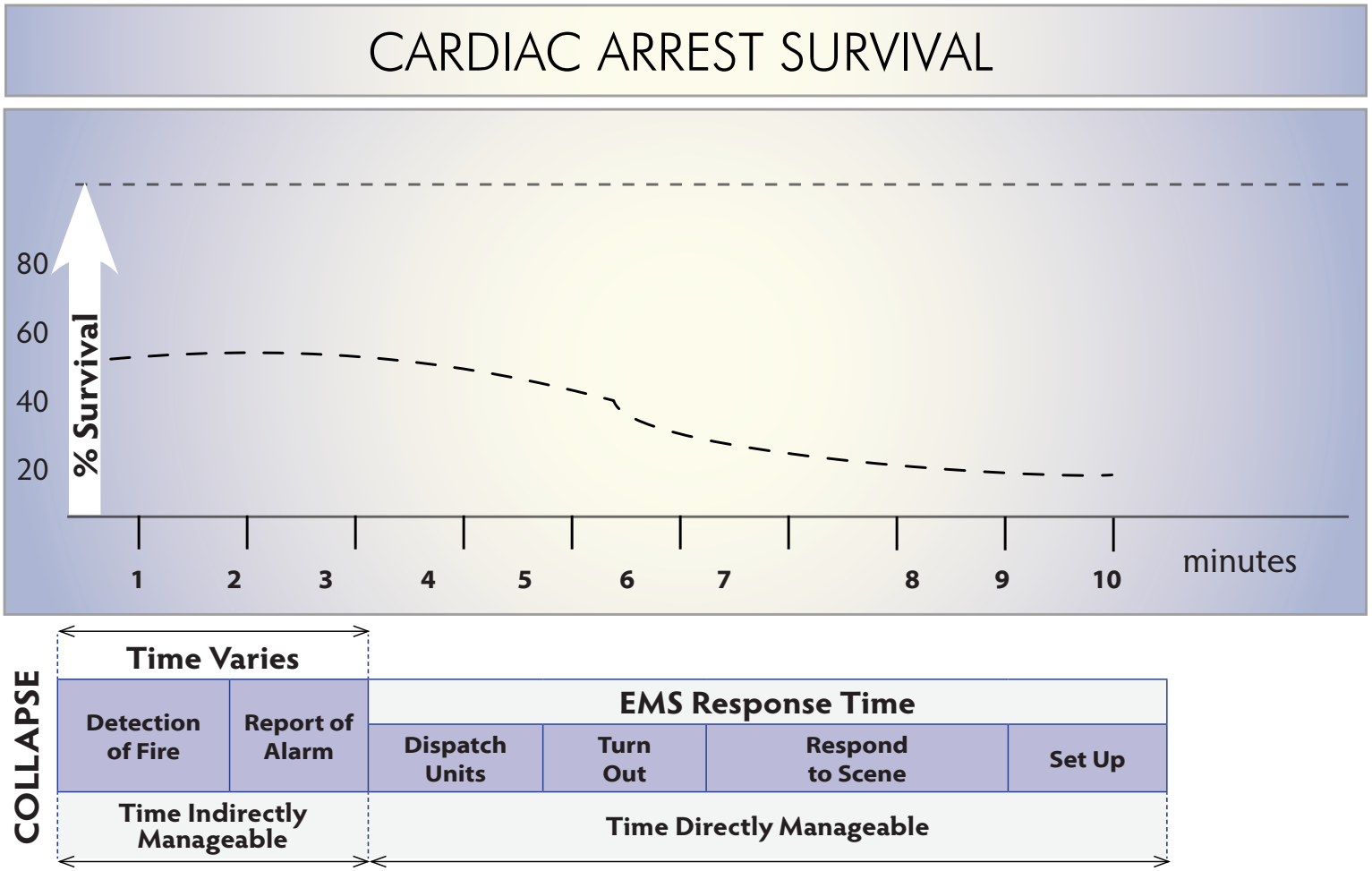
Time Temperature Curve

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.

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.



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 2012

CALL TYPES (listed according to station reporting)	STATIONS							
	[3]Other	21	22	24	25	26	27	ALL
TOTAL FIRES	12	43	58	0	15	57	111	296
Building Fires in area	2	3	3	0	1	0	12	21
Building Fires in OJ[1]	5	0	7	0	0	6	7	25
All Vehicle Fires	1	3	2	0	0	13	12	31
Other Fires	4	37	46	0	14	38	80	219
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
OTHER[2]-	88	51	159	0	43	130	237	708
TOTAL CALLS	**378**	**984**	**1598**	**30**	**626**	**1292**	**3074**	**7982**

[1]OJ includes calls where Kirkland units responded to outside Jurisdictions.
[2]"Other" Call Types - include good intent calls & OJ calls alone
[3] Other Station include Battalion 21 only and errant dispatches

Total emergency responses in 2011

CALL TYPES (listed according to station reporting)	STATIONS						
	21	22	24	25	26	27	ALL
TOTAL FIRES	46	66	3	23	54	105	301
Building Fires in area	2	7	0	4	6	11	30
Building Fires in OJ[1]	0	5	3	0	8	12	29
All Vehicle Fires	4	10	0	2	7	10	33
Other Fires	40	44	0	17	33	72	209
EMS/RESCUE	823	1145	48	441	736	1733	5140
HAZARDOUS CONDITION	23	23	0	14	20	27	108
SERVICE CALL	46	67	0	40	44	65	271
Automatic Fire Alarms	90	204	1	31	111	250	733
OTHER[2]	72	153	5	54	159	245	767
TOTAL CALLS	1100	1658	57	603	1124	2425	7320

[1]OJ includes calls where Kirkland units responded to outside Jurisdictions.
[2]"Other" - mostly include good intent calls & OJ calls alone

EMERGENCY RESPONSE

2012 RESPONSE TIME OBJECTIVES

1) TURNOUT TIME

- Turnout Time Objective:

  The City of Kirkland Fire Department has adopted a turnout time objective of sixty (60) seconds, ninety percent (90%) of the time.

Actual Department Turnout Time For 2012:

90% of the time emergency units had a turnout time of 2 minutes and 8 seconds. The 60 second turnout time objective was met 32% of the time.

90% Turnout time	2 minutes and 8 seconds
Meet objective (60 seconds)	32%

2) ARRIVAL OF 1ST ARRIVING ENGINE COMPANY AT FIRE SUPPRESSION INCIDENT

- Response Time Objective From Dispatch Time:

  The City of Kirkland Fire Department has adopted a response time objective of four (4) minutes and forty-five (45) seconds for the first fire engine to arrive when responding to a fire suppression incident ninety percent (90%) of the time.

- Total Response Time Objective, from the time of 911 call to arrival at scene:

  Kirkland established a total response time objective of five (5) minutes and thirty (30) seconds for the first fire engine to arrive when responding to a fire suppression incident ninety percent (90%) of the time. This is from the time the incident is identified and someone calls 911.

Actual Department Response Time For 2012:

Actual Response Time Objective From Dispatch Time:
90% of the time the first fire engine had a response time of less than 7 minutes and 22 seconds to a fire emergency from the time of dispatch. Fire units met the established objective 50% of the time.

90% Arrival of first fire engine	7 minutes and 22 seconds
Meet objective (4 min 45 sec)	50%

Actual Total Response Time Objective from the time of 911 call to arrival at scene:
From the time 911 is called for a fire emergency the fire unit had a response time of less than 8 minutes and 28 seconds 90% of the time. Fire units met the Kirkland specific objective 47% of the time.

90% Arrival of first fire engine	8 minutes and 28 seconds
Meet objective (4 min 45 sec)	47%

3) ARRIVAL OF FIRST UNIT AT AN EMERGENCY MEDICAL INCIDENT

- Response Time Objective From Dispatch Time:

  The City of Kirkland Fire Department has adopted a response/travel time objective of four (4) minutes and thirty (30) seconds for the arrival of the first emergency medical unit with at least two (2) Emergency Medical Technicians ninety percent (90%) of the time.

- Total Response Time Objective from the time of 911 call to arrival at scene:

  Kirkland established the total response time objective as five (5) minutes for the first unit to arrive when responding to an emergency medical incident ninety percent (90%) of the time. This is from the time the incident is identified and someone calls 911.

Actual Department Response Time For 2012:

Actual Response Time Objective From Dispatch Time:
90% of the time the first unit had a response time of less than 6 minutes and 39 seconds to a medical emergency from the time of dispatch. The Fire department met the established objective 57% of the time.

90% Arrival of first unit	6 minutes and 39 seconds
Meet objective (4 min 30 sec)	57%

Actual Total Response Time Objective from the time of 911 call to arrival at scene:

From the time 911 is called for a medical emergency the unit has a response time of less than 7 minutes and 38 seconds 90% of the time. The Fire department has met the Kirkland specific objective 50% of the time.

90% Arrival of first unit	7 minutes and 38 seconds
Meet objective (4 min 30 sec)	50%

4) DEPLOYMENT OF FULL FIRST ALARM ASSIGNMENT AT A FIRE SUPPRESSION INCIDENT

- Response Time Objective for Full First (1st) Alarm Response:

The City of Kirkland Fire Department has adopted a response time objective of ten (10) minutes for the first full alarm assignment when responding to a fire suppression incident ninety percent (90%) of the time. *A first full alarm assignment to a fire suppression incident is: four (4) Engine companies, one (1) Ladder company , one (1) Aid car, one (1) Medical Services Officer, and two (2) Battalion Chiefs or a total of twenty (20) firefighting personnel.*

Actual Department Response Time For 2012:

Kirkland Fire Department established that there needs to be 20 firefighting personnel on a scene to safely handle a structure fire. 90% of the time it took 14 minutes and 39 seconds for all units to arrive. The department is met the established objective 21% of the time.

90% Arrival of first unit	14 minutes and 39 seconds
Meet objective (10 min)	21%

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.

The 2012 data is not provided by King County until late July 2013. ALS response time data is the most current data available for this report as supplied by King County.

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 2011 Medic calls in Kirkland: 1,581

RESPONSE ANALYSIS*

		INCIDENT YEAR				
		2007	2008	2009	2010	2011
Call Volume		1,839	1,751	1,871	1,774	1,581
Total Response Time**		9.2	9.2	9.2	9.2	9.5
Dispatch Processing Time***		2.2	2.1	2.3	2.4	2.4
Unit Response Time		7.0	7.1	6.9	6.8	7.0
	Fractiles:					
	% < 08 min.	71.0%	72.9%	68.6%	70.3%	69.5%
	% < 10 min.	87.4%	89.4%	88.2%	88.4%	88.8%
	% < 12 min.	95.0%	95.2%	95.2%	94.9%	95.6%
	% < 14 min.	96.7%	96.8%	97.9%	97.4%	97.4%

*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
Responses	**1,839**	**1,751**	**1,871**	**1,774**	**1,581**
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%
Redmond Medic 23	72.2%	75.5%	72.6%	74.4%	77.7%
Redmond Medic 35	0.5%	0.3%	0.4%	1.4%	0.5%
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%

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 2012 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 2012 NORCOM received a total of 153,330 emergency 911 calls.

NORCOM dispatch 2012 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: 96.57%
- Quarter 2: 99.14%
- Quarter 3: 98.87%
- Quarter 4: 98.74%

90% of emergency fire/Medical (EMS) calls are dispatched within 60 seconds | NORCOM is at 86% (2012 average of monthly percentages).

99% of emergency fire/ Medical (EMS) calls are dispatched within 90 seconds | NORCOM is at 95% (no change – 2012 average of monthly percentages).

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.

2013 PLAN OF ACTION:

To meet the response time objectives the Kirkland Fire Department will continue to insure that all internal efficiencies are being indentified and evaluated. Continually evaluating response data to determine how to best improve reliability and look at what actions may improve the ability to accomplish the established response time standards.

The department is evaluating the recommendation in the department strategic plan. The possible relocation of the station on North Finn Hill area as well as discussing partnerships with other Fire Departments to enhance coverage for the citizens was not completed in 2012 and will continue to be evaluated in 2013. The department will also work to finalize the development of a regional training group.

The department will continues to upgrade equipment to more efficiently and effectively serve the citizens of Kirkland. The City of Kirkland, in partnership with the Redmond Fire Department, received a grant to purchase electronic tablets to be able to improve service to the community on medical calls. The report will be completed in the field and in the future will be sent to the hospital before the patient arrives. Kirkland is in the process of working with NORCOM to upgrade the current dispatch system to be able to use these tablets prior to completing the implementation of the New World system.

The department continues to work with NORCOM to implement a complete dispatching and records management system, New World, which will improve service to the community.

The department does not plan on any new firefighter positions in 2013 but there are plans to hire a full time permanent emergency manager, reclassify an administrative assistant to an administrative supervisor and hire a temporary senior financial analyst.

COMMUNITY RISK REDUCTION

FIRE PREVENTION BUREAU

The Kirkland Bureau of Fire Prevention currently has 4 staff members: The Fire Marshal, one Assistant Fire Marshal, one Deputy Fire Marshal, and one Fire Inspector/Investigator.

The Fire Investigation Team is also part of the Fire Prevention Bureau. The Fire Investigation Team consists of 8 investigators (6 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

Milestones

In 2012 DFM Jim Crowe celebrated 20 years of service with the City of Kirkland. Lieutenant Jason Chappell gained distinction as an ICC certified Fire Code Official. Assistant Fire Marshal, Captain Dave Walker, became an ICC certified Fire Marshal and Building Official. In the State of Washington there are only 9 people that have both certifications. In 2012 upgrades were successfully made to the record keeping software, moving to Energov record modules that cross coordinate all various types of activities and permits for every project.

Fire Plan Review of New Construction

Fire Prevention personnel review 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.

In 2012, the Bureau conducted design plan review on approximately 208 fire system permits and completed construction plan review on approximately 287 new homes and additions to existing homes; 20 new commercial buildings; 45 grading permits; 35 short plats; 15 zoning and design review application; 4 mechanical permits. The Prevention Bureau also conducted 110 pre-application conferences.

These numbers all represent significant increases over 2011 and likely reflect both improving economic activity and the first full year of responsibility for the area annexed in June of 2011.

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

In 2012, there were approximately 380 inspections associated with fire systems completed.

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.

In 2012, there were approximately 14 inspections completed associated with operational permits.

Annual Fire Safety Inspection Program

Fire Prevention Bureau personnel are responsible for managing the annual fire safety inspections program for existing buildings. Firefighters as well as fire inspectors conduct

these inspections, in order to discover and correct any conditions that pose a fire or life safety hazard.

In 2012, fire inspection personnel and firefighters conducted approximately 1400 annual fire inspections on existing buildings. This is an increase of over 600 inspections over what was completed in 2011. Businesses that have a fire inspection are less likely to have a fire.

False Alarms

In 2012 Kirkland Fire emergency response personnel responded to 665 false fire alarms. While the number of false alarms has reduced in recent years, the department recognizes that continuing to attempt to reduce unnecessary calls is an area that continues to need improvement. False calls take fire response units out of service and extend response times for real medical and fire emergencies.

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.

In 2012, Kirkland fire personnel responded to 183 fire related events. 104 fires were investigated at the company officer level; 61 fires involved financial loss; 16 were forwarded to Fire Investigators for comprehensive review. The direct total dollar loss of these fires in 2012 was approximately $1.36 million.

Code and Policy Development and Publication

The Fire Marshal is responsible for developing and publishing policies related to established fire prevention goals.

In 2012, Kirkland finalized the over the counter permits for sprinkler system replacements and transmitter replacements to allow them to be completed in a quick and easy format. Work also began on preparing the City's amendments for the adoption of the 2012 International Fire Code; formal adoption will take place in 2013.

Fire Safety Information Bulletins

Information bulletins consist of fire safety information which business owners or the general public may find helpful.

Fire Sprinklers save lives and dollars.

While it has been known that residents who live in buildings with fire sprinklers are far more likely to survive a fire than those that live in non sprinklered ones, it is often forgotten that sprinklers have a financial impact directly and indirectly when they stop a fire. It is often hard to quantify this savings since many residential occurrences of fire sprinkler activation are "non-events" and often go unreported.

On one particular day in Kirkland this year fire crews captured this cost difference when two fires occurred. Both residents were cooking when the oil they were using ignited and the meal caught fire. One fire was quickly extinguished by an overhead sprinkler and the family was able to stay in their home where cleanup was done with a mop. The second fire grew, destroying the kitchen, the living unit and the two other apartments units adjoining it. The fire displaced 3 families, cost hundreds of thousands of dollars and required a fire response of more than 40 firefighters and 14 apparatus to bring it under control, stopping its spread.

The photos below show each kitchen; if you look close you can still see a drop of water on the ceiling in the picture on the left.

Kitchen fires started with cooking oil on the same day in the same city

With sprinklers and without sprinklers

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** (ARES) 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 has been a group of CERT graduates that have stepped forward to support this program. In 2012 they managed to raise funds to support the cost of two classes. They also coordinate all aspects of the class form registrations to the final drill. Two volunteers have become trained instructors and co-teach with the lead firefighter instructor. There is also a leadership team that meets monthly with the City Emergency Manager to coordinate public outreach events, CERT classes, and building neighborhood CERT teams.
- **Fire Corps**
  Fire Corps is a new volunteer group and is just getting going and the Department is looking forward to new members joining this team and helping to move it forward. There is a great vision of how this group of volunteers can support the community by partnering with the Fire Department and Emergency Management to create a safer community. Volunteers support the Fire Department in a variety of non-emergency activities such as fire and injury prevention education, incident support, emergency management, community relations, and administrative support.
- **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.

In 2012 Kirkland OEM coordinated the following training and exercises:

- Operations, Logistics, Finance, Planning Section Tabletop Exercises
- Command and General staff Tabletop Exercise
- Shelter Team Workshops
- EOC Set up Drill
- Evergreen Quake Functional Exercise which included other regional jurisdictions, the County, State and FEMA.

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

Dispatch Time – Is 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.

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. The 25 calls for a single day in the table have been put into rank order, running from the shortest at the top to the longest at the bottom.

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. 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.

ISO – Insurance Service Office

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. *Measured component known as "Response Time" required by RCW Chapter 35A.92* CFAI recognizes the need to categorize each emergency response zone into relevant categories (urban, suburban, rural and wilderness) and measure appropriate travel times for each category. CFAI's method for clarification is more precise than what HB1756 specifically requires.

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*

KIRKLAND
FIRE

KIRKLAND FIRE DEPARTMENT
2012 ANNUAL REPORT