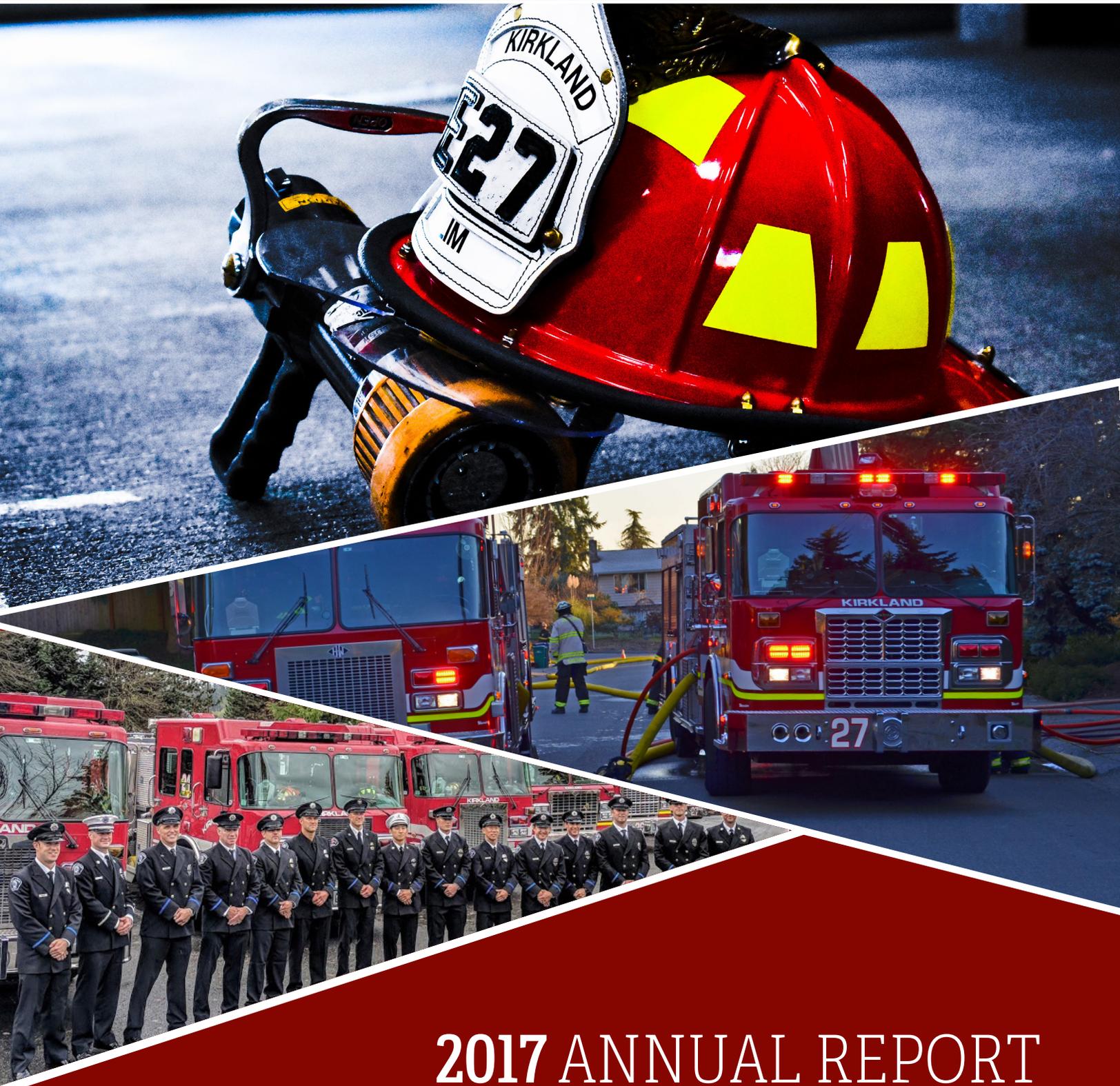




# CITY OF KIRKLAND FIRE DEPARTMENT



2017 ANNUAL REPORT

# MESSAGE FROM THE CHIEF



Chief Joseph Sanford



**Since 1890**, the courageous men and women of the Kirkland Fire Department have been working to provide emergency care to those who live, work and play in Kirkland. Much has changed since the beginnings of our Fire Department, but one thing that hasn't changed is our commitment to serve others.

Over the years, our citizens and elected leaders have remained committed to making investments in providing top notch fire engines, aid units, protective equipment, facilities and training to ensure that our commitment to serve can be carried out quickly and safely. Our community is safer today because of the cumulative dedication and foresight of those decisions both past and present. Today, 106 firefighters wear a patch on their shoulder that reminds them of the faith and trust that has been bestowed upon each one of us. It's a symbol of our commitment to excellence that we take very seriously.

With City Council support, that commitment continues into 2018 with the renovation of aging Fire Station 25 on Finn Hill, in the acquisition of land for a new Fire Station on 100th Avenue NE and NE 132nd Street, and the plans to relocate

Fire Station 27 in Totem Lake east of I-405. In addition, the department is looking at the renovation of Fire Station 22 in Houghton, Fire Station 26 on Rose Hill, and Fire Station 21 in Forbes Creek. When complete, these and other system enhancements will help ensure that the Kirkland Fire Department can withstand a natural disaster and maintain a deployment model that effectively serves all portions of our growing community.

The dedicated professionals of the Kirkland Fire Department are devoted to your safety and wellbeing. Whether assigned to work in administrative support, Emergency Medical Services, Training or the Fire Prevention Office; on a fire truck or within the Office of Emergency Management, the men and women of the Kirkland Fire Department are here, always, to serve you.

- **Joseph Sanford**, Fire Chief, Kirkland Fire Dept.

# KFD MISSION

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.



## MISSION STATEMENT

**OUR CITY \* OUR PEOPLE \* OUR DUTY  
OUR COMMITMENT TO SERVE**

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

## VALUES

- **SUPPORTIVE** – Working together as a team toward a common goal.
- **PROFESSIONAL** – 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.
- **INNOVATIVE** – 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.

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# DEPARTMENT INFORMATION



# 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. Our fire chief is currently Chief Joe Sanford. As director of the fire department, Chief Sanford oversees the offices of the Deputy Chief of Administration, the Deputy Chief of Operations, and the City Emergency Manager.

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 surface water rescue
- Automatic response to surrounding jurisdictions
- Fire Prevention and permits
- Fire Investigation
- City Emergency Management
- Water Rescue

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](http://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 support + 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 Kirkland, Northshore, Mercer Island, Bothell, Shoreline, Woodenville, Bellevue, Eastside Fire & Rescue and Redmond Fire Departments. Kirkland is one of the founding member agencies which make up this 700 plus member training group.

# STAFFING PROFILE (2017)

## 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 – 95 Line personnel (not including Training, Admin or Prevention)
- Every day minimum on-duty strength – 22
- Prevention personnel – 5
- Training Officers – 2
- Emergency Medical Services Officer – 1
- Non-Uniformed (Civilian) personnel – 5
- City Emergency Management – 2
- Command staff – 3

## Minimum Staffing for Emergency Response

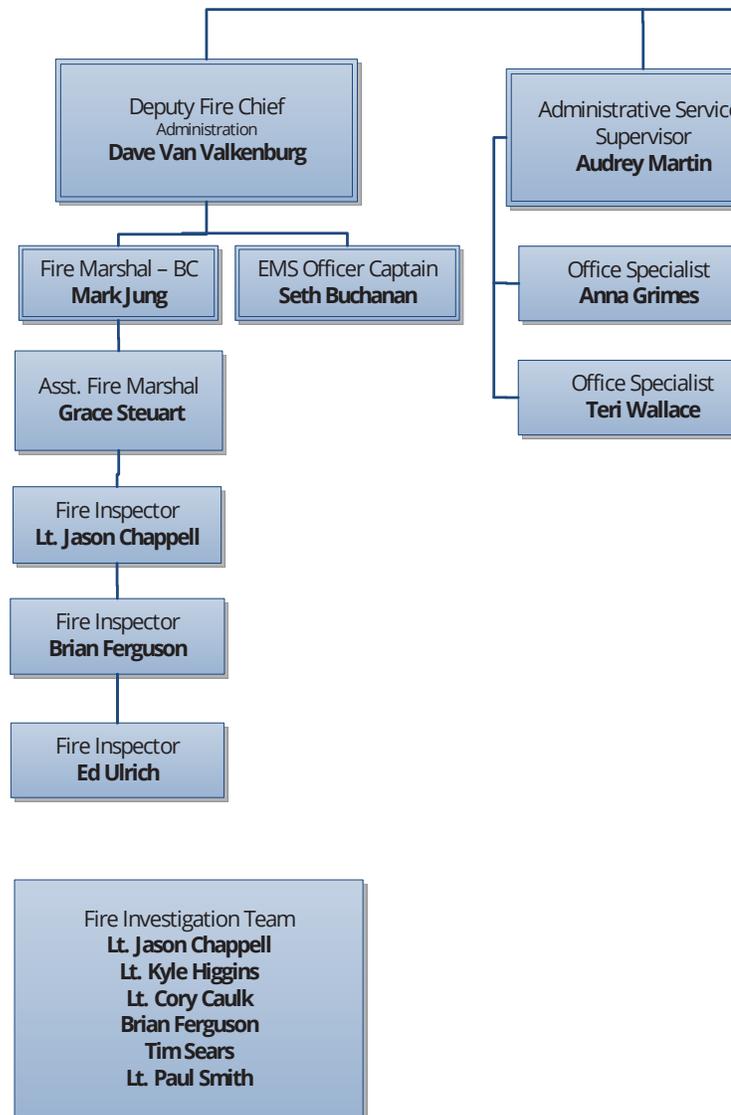
- Engine company = 3 crew members
- Aid car = 2 EMT crew members
- Ladder company = 3 crew members
- Battalion Chief = 1

## Fire Station Staffing

Stations 21, 22, 26, 27 are cross-staffed stations. A cross-staffed station has more than one type of apparatus, usually an aid car and fire engine. The on-duty Firefighters respond in whichever unit is dispatched. As an example, if Aid 26 is dispatched for an aid response, the engine is unavailable for subsequent responses until the aid car returns to the station.

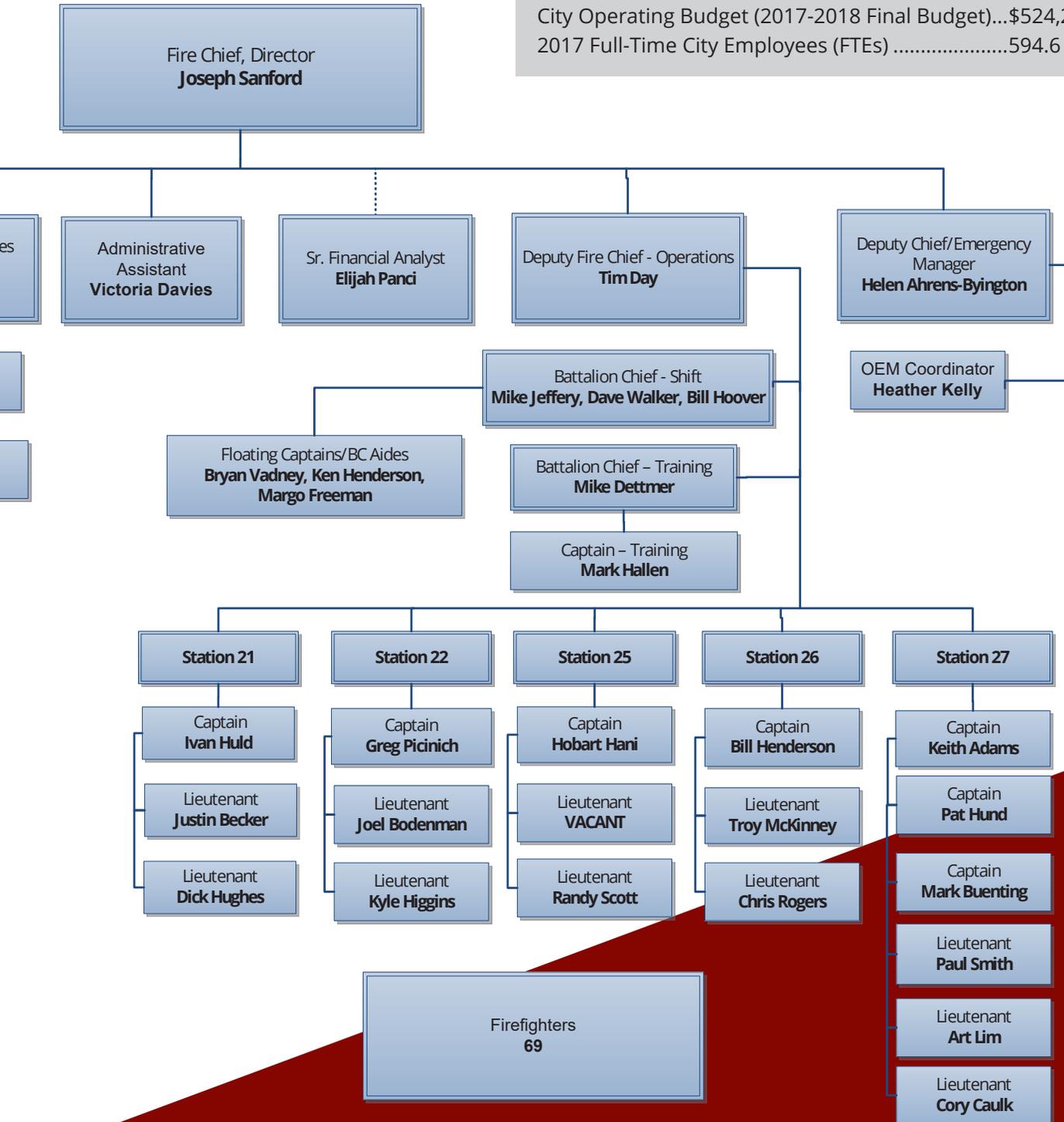
- Forbes Creek Station 21 = 3 crew members; 1 aid car, 1 engine
- Houghton Station 22 = 3 crew members; 1 aid car, 1 engine
- Finn Hill Station 25 = 4 crew members; 1 aid car, 1 engine
- Rose Hill Station 26 = 3 crew members; 1 Battalion Chief, 1 Battalion Aide Captain; 1 aid car, 1 engine, 1 Battalion Chief car
- Totem Lake Station 27 = 6 crew members; 2 aid cars, 1 engine, 1 ladder

## City of Kirkland Fire Department Organizational Chart December 2017



# KIRKLAND AT A GLANCE

Founded ..... 1888  
 Incorporated..... 1905  
 Consolidated with Town of Houghton ..... 1968  
 Annexation of Finn Hill, N Juanita & Kingsgate ..... June 1, 2011  
 2017 Population ..... 86,080  
 Land Area ..... 17.81 sq. miles  
 Fire Department Grading Class..... 4  
 Total City Budget (2017-2018 Final Budget) ..... \$743,996,631  
 City Operating Budget (2017-2018 Final Budget)... \$524,271,142  
 2017 Full-Time City Employees (FTEs) ..... 594.6 FTE



# STATION INFORMATION

## Fire Department Headquarters

Kirkland City Hall · 123 5th Avenue · Kirkland, WA  
 98033 (Mailing address) · 425-587-3650 (Dept. Main-line)  
[http://www.kirklandwa.gov/depart/Fire\\_and\\_Building.htm](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 29** 1999 Spartan Pumper (reserve)

**STATION 22 – Houghton**..... 6602 108th Ave. NE  
 Date Built: 1980 (9,071 sq. ft.)

### APPARATUS:

- **Aid 22** 2014 Ford F450 Road Rescue (front line)
- **Engine 22** 2015 Spartan / EVR Pumper (front line)
- **Air Unit 21** 2006 Spartan / H&W Special Ops Unit (front line)
- **Engine 28** 2003 Spartan / H&W Pumper (reserve)
- **1926 American LaFrance Pumper** (antique)

**STATION 25 – Finn Hill**..... 12033 76th PL NE  
 Date Built: 1973 (6,488 sq. ft.) / Currently under renovation

### APPARATUS:

- **Aid 25** 2016 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.)

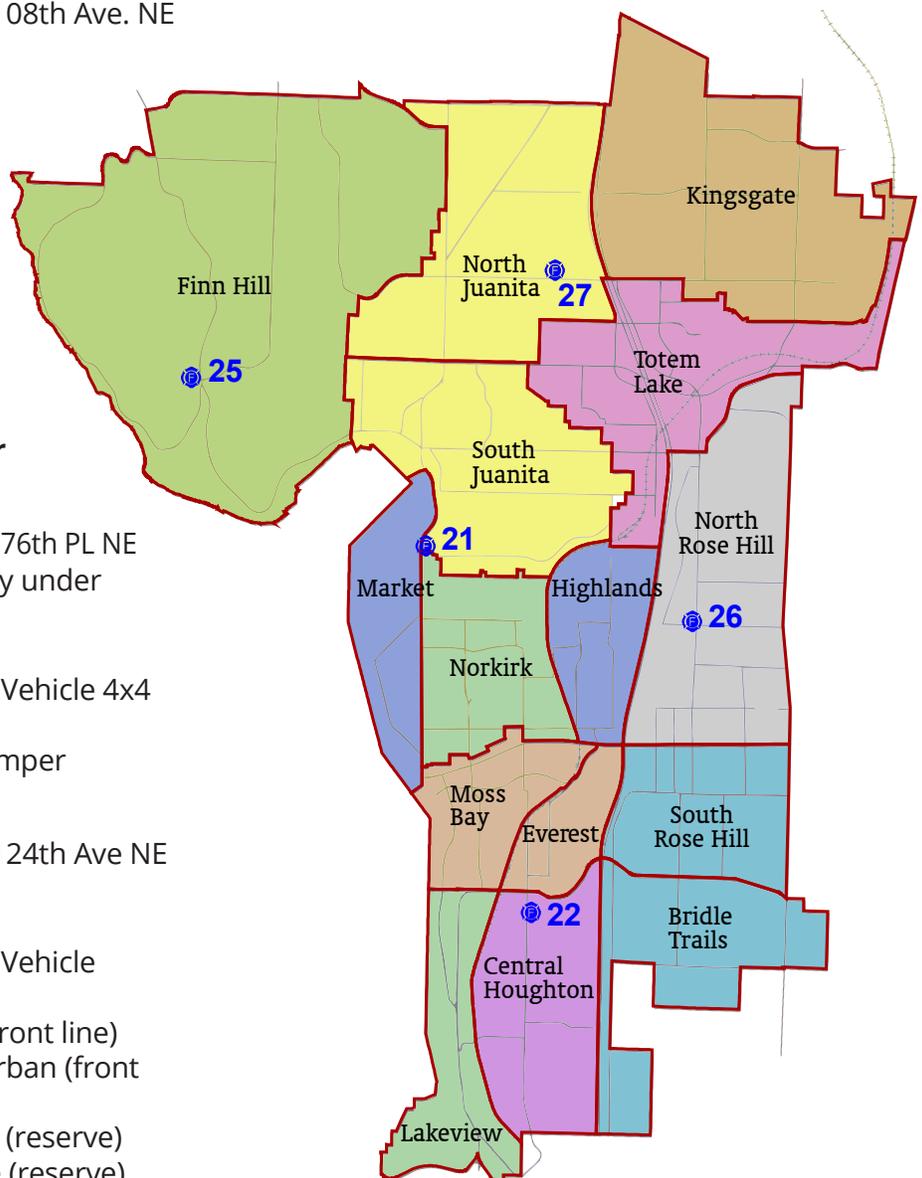
### APPARATUS

- **Aid 26** 2014 Ford Road Rescue Aid Vehicle (front line)
- **Engine 26** 2013 Spartan Pumper (front line)
- **Battalion 21** 2008 Chevrolet Suburban (front line)
- **Aid 28** 2008 Ford Road Rescue 4x4 (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** 2016 Ford Road Rescue Aid Vehicle 4x4 (front line)
- **Aid 29** 2012 Ford Road Rescue Aid Vehicle (front line)
- **Engine 27** 2010 Spartan / H&W Pumper (front line)
- **Ladder 27** 2016 Spartan / Crimson Aerial TDA (front line)



# STATION 25 REMODEL

In October of 2017 the City of Kirkland began to remodel Station 25. Crews were temporarily relocated to Station 24 at 8411 N.E. 141st Street. The City of Kirkland allocated \$4 million for Station 25 improvements.

Station 25, built in 1973, and was not constructed to current seismic standards. The station has been upgraded to add bracing and reinforcing to better withstand an earthquake.

As the risk to firefighters from pathogens and carcinogens has become better understood, new ideas for storage of dirty firefighting gear, vehicle exhaust systems, and isolation areas have become industry standards. The new Station 25 embraces these new standards and will help protect our firefighters' health and well being.

The remodel expands the footprint of the building to accommodate improved travel paths with the crew's working and living areas. The remodel replaces all electrical, plumbing, and HVAC systems and provides durable, long-lasting finishes.

- Crews are expected to re-occupy Station 25 in August of 2018.



# 2017 FIRE DEPARTMENT BUDGET

## EXPENDITURES:

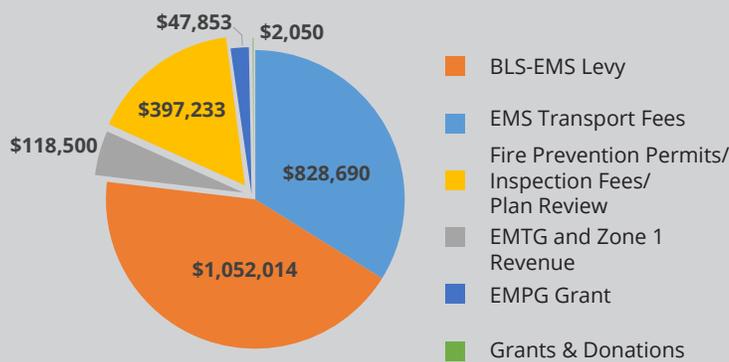
Department	Total	Personnel*	Internal Charges**	Other***
Fire Operations	\$18,860,968	\$15,640,530	\$2,424,657	\$795,781
Training	\$724,056	\$619,157	\$39,537	\$65,362
Administration	\$1,743,841	\$1,239,533	\$252,393	\$251,914
Fire Prevention	\$1,064,013	\$904,347	\$105,719	\$53,946
Office of Emergency Management (OEM)	\$176,633	\$99,802	\$28,615	\$48,216
<b>TOTAL</b>	<b>\$22,569,510</b>	<b>\$18,503,369</b>	<b>\$2,850,922</b>	<b>\$1,215,219</b>

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

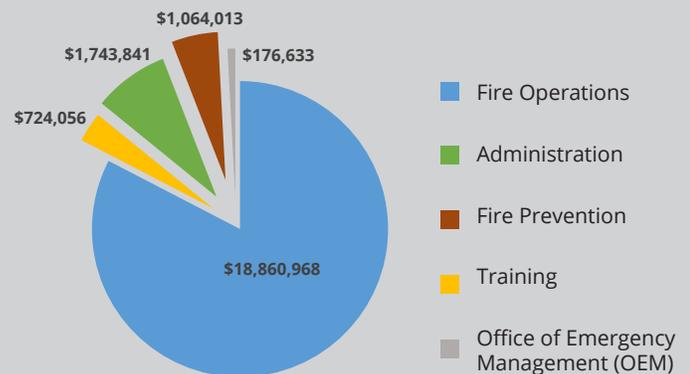
\*\*Internal Charges includes: Fleet, Information Technology, liability insurance and Facility charges

\*\*\*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

### 2017 Actual Revenues



### 2017 Budgeted Expenditures



## 2017 FIRE DEPARTMENT REVENUES:

	Budget	Actuals
EMS Transport Fees	\$952,306	\$846,200
BLS-EMS Levy	\$939,657	\$1,052,014
EMTG and Zone 1 Revenue	\$100,150	\$118,500
Fire Prevention Permits/Inspection Fees/Plan Review	\$336,886	\$397,233
EMPG Grant	\$0	\$47,853
Grants & Donations	<b>\$2,300</b>	<b>\$2,050</b>
<b>TOTAL</b>	<b>\$2,331,299</b>	<b>\$2,446,340</b>

## 2017 Active Capital Improvement Projects

- Disaster Supply Storage Units
- Disaster Care Response Vehicle
- Defibrillator Unit Replacement
- Disaster Response Portable Generators
- Dive Rescue Equipment
- Personal Protective Equipment Replacement
- Self-Contained Breathing Apparatus (SCBA) Replacement
- Hose Replacement

## Basic Life Support (BLS) Transport User Fee Program

The BLS 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 needed 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.



## 2017 TRANSPORTS

**TRANSPORT FEES: \$846,200**

**TOTAL REVENUE: \$2,446,340**

Resident	1787	75.2%
Non-Resident	538	22.6%
Employee at Work	+ 46	1.9%

# 2371

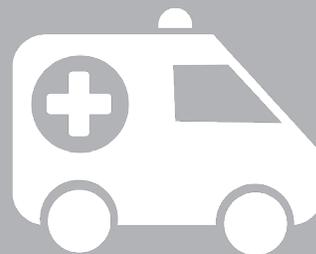
**TRANSPORTS BILLED**

# 43

**TRANSPORTS NOT BILLED  
(out of jurisdiction)**

# 2414

**TOTAL # OF TRANSPORTS:**



# RECOGNITION AND SERVICE

The Kirkland Fire Department recognizes our employees for their years of service to our community. The following members have reached important milestones in their careers.

## YEARS OF SERVICE:

Ulrich, Ed	40	Brownlee, Steven	20
Hoover, Bill	25	Chappelle, Jason	20
Sears, Tim	25	Barnes, Bill	15
Jung, Mark	25	Nelson, David	15
Darnell, Will	25	Bailey, Chris	10
Rogers, Greg	25	Hernandez, Jon	10
Petersen, Nels	25	Heichel, Andrew	10
Rogers, Chris	20	Lilleness, David	5
Buenting, Mark	20	Sheaffer, Ryan	5
Freeman, Margo	20	Forslin, Eric	5
Martin, Chris	20		

## 2017 PROMOTIONS:

**Deputy Chief:** 1/17/17 Tim Day 9/6/17 Dave Van Valkenburg

## 2017 RETIREMENTS:

**Steve Karthas**, Firefighter, March 2017 after 37 years of service

## Graduating Class 5:

1/17/17 Pattillo, Keelin 1/17/17 Schaeffer, Nathan

## Graduating Class 6:

12/17/17 Ishmael, Jonathan 12/17/17 Venera, Anthony



# 2017 AT A GLANCE



# EMERGENCY RESPONSE



# OPERATIONS OVERVIEW

## **Kirkland Fire's Operations Division**

is responsible for ensuring that our people and equipment are ready to safely and effectively respond to 911 calls. This response capability is maintained by a minimum of 20 Firefighter/Emergency Medical Technicians who are on-duty around the clock, responding from five fire stations within the City of Kirkland.

The Kirkland Fire Department (KFD) is part of King County Zone 1, one of three fire zones defined in King County's Comprehensive Emergency Management Plan (the other two fire zones include Zone 3, which encompasses communities in south King County, and Zone 5 which encompasses the City of Seattle). In addition to training together, Zone 1 agencies work seamlessly across municipal boundaries to provide service to the region's citizens. This cooperation is supported through our interaction with NORCOM, the 911 dispatch center for Zone 1 located in Bellevue.

Calls for emergency medical services (EMS) continued to account for the largest percentage of KFD emergency responses in 2017. Our EMS capabilities, which in 2017 included the deployment of Naloxone (Narcan) to counter the effects of opioid overdoses, are enhanced by King County's Medic One paramedic providers in Redmond, Shoreline, and Bellevue. In addition to EMS, Kirkland Fire maintains "all-hazards" response capabilities that match the risks in our community. In addition to fire suppression, these capabilities include technical rescue disciplines such as high angle rope rescue; confined space, trench, motor vehicle, and collapse rescue; hazardous materials response; and water rescue.

# TRAINING OVERVIEW

The Kirkland Fire Department Training Division is staffed by a Battalion Chief, a Captain and an Office Specialist. KFD Training is responsible for all training activities: scheduling, coordinating, delivery and record keeping for fire suppression, rescue, and Emergency Medical Technician (EMT).

In support of our training goals, Kirkland is an active member of the East Metro Training Group (EMTG). EMTG consists of nine local fire departments: Kirkland, Bellevue, Redmond, Mercer Island, Northshore, Woodinville, Shoreline, Bothell and Eastside Fire & Rescue. Participation in regional training creates efficiencies and cost savings in the delivery of training for our firefighters. Together, the combined departments of the EMTG provide safety and training to over seven hundred firefighters across the Eastside.

Kirkland firefighters fill many different roles to protect the community. Firefighters are cross-trained in emergency medicine, auto extrication techniques, rescue disciplines, fire control and suppression, safe responses to hazardous materials spills, water rescue and many other techniques in order to meet the needs of the community. Training all Kirkland firefighters for numerous emergencies is ongoing and challenging. As changes to current standards by the Washington Administrative Code (WAC), the National Fire Protection Association (NFPA) and the Code of Federal Regulations (CFR) are constantly altering training requirements, training staff are continuously revising and updating training programs to meet new standards.

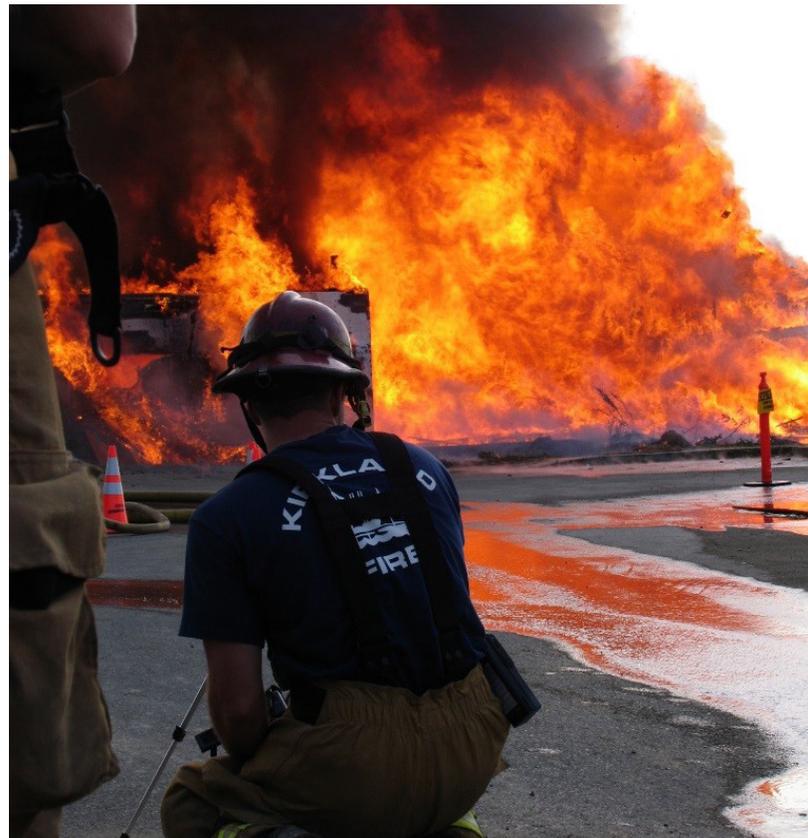
The steady growth of the city of Kirkland presents numerous challenges for operations and training alike. New building designs, new construction methods, and increasing density combine to present unique problems for our firefighters. Staff will be making recommendations in 2018 for improvements in the delivery of training and training facilities.

A majority of our training is conducted as part of the firefighter's normal work day. Much of this training is overseen by the company officer assigned to a crew or station. Training Division staff provide training in specialty topics or high risk, low frequency training such as live fire or auto extrication.

These topics are taught in formal courses conducted locally and regionally throughout the year. This number does not represent the mandated quarterly training or individual shift/crew training, which is scheduled automatically. Each month firefighters complete state and federal mandated training which is assigned by the Training Division using shared websites. Much of this training is done together with the EMTG departments.

Kirkland continues to be a leader in specialized technical training. This training includes Confined Space Rescue, Trench Rescue, Rope Rescue, and Water Rescue including rapid diver qualifications. In addition, Kirkland's Hazardous Materials Response Team members complete a minimum of forty hours of required ongoing training per year.

All Kirkland firefighters are required to maintain



their EMT license. This is done through in-house training utilizing trained CBT (Competency Based Training) instructors, online lessons, and practical evaluations. In 2017, twenty firefighters attended the required instructor workshops. These instructors were selected from all three shifts, seven per shift. In 2017 all firefighters whose EMT licenses were up for renewal were successfully re-licensed.

Kirkland conducted its fourth annual fire officer academy in 2017. This academy provides leadership training our officers who are required to be successful while handling emergency situations and day-to-day problem solving. The academy runs for three months and includes NFPA Fire Officer I qualifications, simulated tactics labs, personnel management, communications, presentations, and customer service. Each academy culminates in a lieutenant level assessment center which serves as their final exam.

Firefighter health continues to be a major topic of discussion industry-wide. Kirkland continues to put emphasis on firefighter fitness training. The department realizes that fit firefighters can work more safely, recover more quickly, and are more efficient when working at an emergency scene. Furthermore, firefighters suffering injuries are apt to heal more quickly, thereby returning to work sooner.

The Battalion Chief of Training also fills the role of department Health and Safety Officer. As the Safety Officer he/she is responsible for managing the Safety Committee. All accidents and near misses are reviewed for areas of possible improvement or alteration of operations to minimize the chance of accident or injury. Additionally, the Safety Officer is dispatched to working structure fires and significant incidents when crews are working in dangerous situations or atmospheres.

## TRAINING FACTS



490.0

**Hazardous Materials**

1,200.0

**Emergency Medical Services**

1,462

**Firefighter Suppression**

**2017 TOTAL  
TRAINING HOURS**

**5,385**

# ADDITIONAL TRAINING HIGHLIGHTS



- Participated in EMTG regional multi-company operations (MCO) drills
- Provided program oversight for regional technical and water rescue training programs
- Participated in “Active Shooter” training with regional fire and police departments.
- Scheduled hearing tests, flu shots, and TB Quantiferon Gold Testing (Blood Draws)
- Fire Officer Academy
- Driver Operator Academy



# TECHNICAL RESCUE

## TECHNICAL RESCUE 2017

Kirkland Fire Department has been the lead agency for the Zone 1 Technical Rescue Operations Group since 1999. This group was formed by an Inter Local Agreement (ILA) to coordinate resources and responses between nine fire departments in North East King County. Battalion Chief Bill Hoover has been the training and coordination lead for the group since 2016.

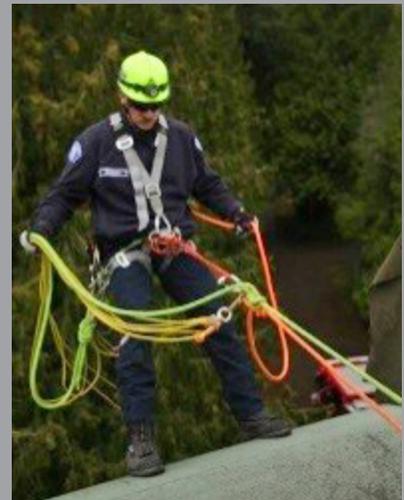
The Technical Rescue Operations Group coordinates the instruction and scheduling of training in each of the following disciplines: Rope Rescue; Confined Space Rescue; Trench Rescue; Structural Collapse Rescue; and Vehicle & Machinery Rescue, all of which have been provided to the residents of Kirkland for decades.

Classes are held at various locations on the Eastside and attended by firefighters from as far away as Alaska and Montana. Each discipline requires a 40 hour class that is both physically and mentally challenging.

In addition to the initial training, all rescue technicians attend annual refresher training in each level of certification. Annual refresher training is required by both the Washington State Administrative Code (WAC) and the National Fire Protection Association (NFPA).



Kirkland Fire has 32 technicians who respond to calls for service primarily while assigned to Ladder 27 in the city's Totem Lake Station (Station 27). Also housed at this station is "Collapse 27," a trailer-based tool and equipment cache that is specifically suited for structural collapse response due to earthquakes, explosions, or other physical damage to a structure that necessitates an emergency response.



# ADVANCED LIFE SUPPORT

Kirkland Fire Department, in partnership with King County EMS and Redmond Fire Department, provides Basic Life Support (BLS) and Advanced Life Support (ALS) medical care city-wide. Redmond Fire Department paramedics are the primary ALS providers for the City of Kirkland. Supported by the King County Medic One levy, King County EMS provides countywide Paramedic services.

Kirkland firefighters are cross trained as Washington State Emergency Medical Technicians (EMTs). Kirkland EMTs respond to less urgent, or BLS calls, such as a fractured leg or diabetic emergency.

In life-threatening situations, such as cardiac arrest, paramedics from Redmond Fire Department respond alongside our Firefighter/EMTs to provide ALS services.

A core service of KFD is transporting patients to area hospitals. Once a patient is stabilized by the firefighter/EMT and paramedics, and further medical attention is needed, patients are transported by either Paramedics, a private ambulance service or by Kirkland Fire aid units.

Kirkland firefighter/EMTs complete Competency Based Training (CBT) annually. Training topics range from high performance CPR skills to administering of Epinephrine, splinting broken bones, or complex rescue and medical based simulations.



## Eastside Hazardous Materials Response Team

The Eastside Hazardous Materials Response Team (EHMT) is part of the Eastside Hazardous Materials Consortium. The Consortium consists of hazardous materials technicians from Eastside Fire & Rescue, Bellevue, Redmond, Woodinville, Kirkland, Duvall, and Bothell fire departments and maintains equipment and personnel to staff two hazardous materials units in King County Zone 1: the northeast section of King County, Washington.

The training and skills acquired by the Hazardous Materials Team Technicians provide expertise in several hazmat areas such as hazard pre-planning, chemistry, event mitigation, hazard analysis, and decontamination. The technicians train to the

National Fire Protection Association 472 Standard and are proficient in recognizing chemical, biological, nuclear, radiological, and explosives events, in addition to a variety of fixed-use facility and transportation hazards.

**Each jurisdiction trains its Hazardous Materials Technicians, and in addition, the entire team trains on a quarterly basis.**



# HAZARDOUS MATERIALS

Training is provided by local jurisdictions' Subject Matter Experts (SME's), regional training partners, federal agencies, and through public-private partnerships with the communities we serve. Some of the training partners with the Eastside Hazmat Team are:

- Federal Bureau of Investigation (FBI), Seattle Office
- WA State Department of Ecology
- US Army National Guard, 10th Civil Support Team (CST)
- East Metro Training Group (EMTG)
- Dave Kummerlowe, CADRE, Inc.

Training consists of a variety of topics which completes required objectives mandated by CFR 1910.120 for Hazardous Materials Response, Technician level. Some of the required training topics include, but are not limited to:

- Chemical Emergencies
- Biological Emergencies
- Clandestine Laboratories
- Hazardous Materials Transportation Incidents
- Hazard Pre-planning
- Tier 2 Reporting
- Chemistry
- Event Mitigation
- Hazard Analysis
- Decontamination

## Work Plan Development

The 5-year Zone 1 Hazardous Materials Work Plan is based on strategies and objectives identified in the following:

- Zone 1 Hazardous Materials Strategic Plan 2017-2022
- Zone 1 Hazmat Capital Expenditures Plan 2012-2031

The work plan reflects progress of goals and objectives from the Zone 1 Hazmat Strategic Plan as well as forecasting strategic priorities within the Zone 1 Hazmat Capital Plan.

The Zone 1 Hazmat Fire Chiefs unanimously approved the 2017 amended budget. They also unanimously approved the 5 year Strategic Plan and agreed to the addition of two F550 Hazmat Units, new SCBA's and new IMS instrumentation.

Kirkland Hazmat team members also conduct a variety of services for the Kirkland Fire Department. These include:

1. Operations Training for all fire department personnel
2. Maintenance of KFD hazard monitoring equipment.
  - 5 gas monitors
  - Radiation monitors
  - CO monitors
3. Coordination between the KFD and the Kirkland Public Works Spill Response Unit
4. Active Shooter Training, and Mass Casualty Incident/terrorism training
5. Special events monitoring
6. Providing Zone 1 recruit academy hazardous materials operations training

The Eastside Hazmat team in 2017 made great strides forward, making improvements to its response capabilities, replacing equipment, conducting specialized training in a variety of areas, and developing relationships with our federal and state partners that conduct hazmat operations.



# WATER RESCUE

In 2017, the Water Rescue Team responded to over 43 water-related emergencies ranging from swimmers in distress, sinking vessels, and boating accidents to water-related emergency mutual aid requests from neighboring jurisdictions. For the third year in a row, the Kirkland Fire Department did not have a single water-related fatality. Five victims saved were perilously close to death but, due to the quick actions by responding crews along with top-of-the-line equipment, they are alive today. Kirkland continues to be the regional leader for water rescue, providing Operations level as well as Rescue Swimmer-level courses to fire departments across the state. Over one hundred forty individuals took part in these classes taught by Kirkland Fire's twelve water rescue instructors.

A special thanks to our water rescue instructors. These personnel were responsible for writing policies, developing and delivering training, creating response plans, and ensuring that the water rescue craft and equipment were appropriately maintained and operationally ready.

- Lieutenant Justin Becker
- Lieutenant Joel Bodenman
- Lieutenant Cory Caulk
- FF Cliff Oleszko
- FF Travis Braddock
- FF Bill Barnes
- FF Ryan Riedl
- FF Moe Kelsey
- FF Jon Hernandez
- FF Brett Christiansen
- FF David Lilleness
- FF Doug Tomczak

## 2017 TRAINING SYNOPSIS

- Operations Level – All Personnel
- Rescue Swimmers – 62
- Rapid Divers – 34
- WRC Driver Operators - 58



# PERSONAL PROTECTIVE EQUIPMENT

## PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM:

Kirkland Fire is currently only one of two fire departments in the United States that holds an NFPA Independent Service Provider (ISP) certification, which allows trained personnel to perform any inspection or repair to the 3,400+ pieces of Fire Department Personal Protective Equipment. Over four thousand repairs to zippers, vapor barriers, Kevlar shells, etc., were performed in 2017. The cost savings for these inspections and repairs had a net total of over \$103,000 for the City of Kirkland. Additionally, the PPE team continued the tradition of repairing bunker gear during new recruit academies for surrounding jurisdictions. These outside agencies were then billed for the services provided. This helped keep our recruit academy flowing while also generating additional revenue for the City of Kirkland.

Two PPE specialists who were brought onto the team in 2016, Firefighters Jesse Disch and Kent Moffitt, completed their yearlong training in 2017. Part of this

training included a 5-day class taught by the gear manufacturers which took place in Georgia, New Hampshire and Maine, and was attended by PPE Specialists Lieutenant Justin Becker and Firefighters Cliff Oleszko, Jesse Disch and Kent Moffitt. In October, one repair specialist, Jesse Disch, was flown back to the Globe manufacturing plant in New Hampshire to receive additional repair training for new fabrics being introduced in 2018.

The PPE team's two advanced sewing specialists (Firefighters Cliff Oleszko and Jesse Disch) created SCBA bottle carrying straps, custom Bunker Gear flashlight holders, rescue saw webbing slings, Large Diameter Hose (LDH) securing straps for frontline apparatus, and SCBA mask bags to better protect our breathing apparatus. All of these items were made using recycled fire hose, pockets from decommissioned bunker gear and OOS backboard strap webbing.



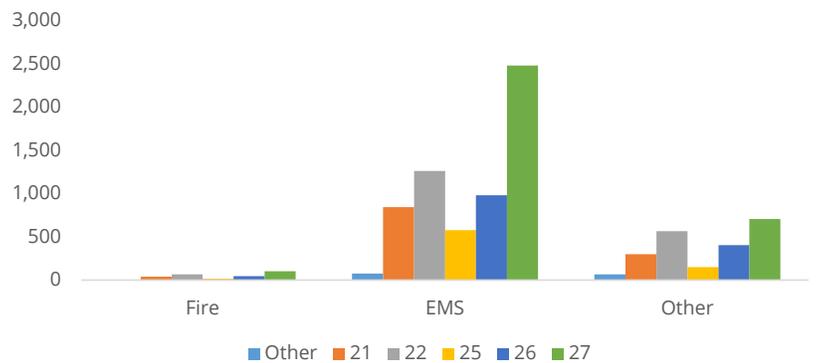
# TOTAL CALL LOG

## 2016 Total Emergency Incidents

CALL TYPE	STATIONS						Total
	Other*	21	22	25	26	27	
Fire	0	40	66	16	46	101	269
EMS	76	844	1,262	578	981	2,479	6,220
Other	67	299	565	149	403	706	2,189
<b>Total</b>	<b>143</b>	<b>1,183</b>	<b>1,893</b>	<b>743</b>	<b>1,430</b>	<b>3,286</b>	<b>8,678</b>

\*'Other' includes responses where no Station location was recorded in KFD's database.

### 2016 Total Emergencies by Station

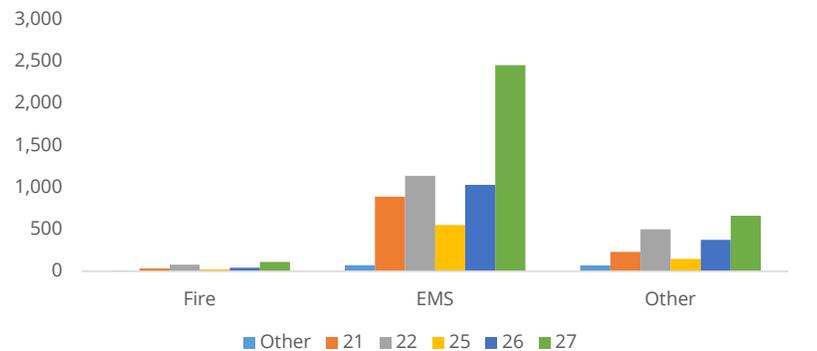


## 2017 Total Emergency Incidents

CALL TYPE	STATIONS						Total
	Other*	21	22	25	26	27	
Fire	1	34	79	21	42	111	288
EMS	72	888	1,134	551	1,027	2,451	6,123
Other	69	231	500	146	373	661	1,980
<b>Total</b>	<b>142</b>	<b>1,153</b>	<b>1,713</b>	<b>718</b>	<b>1,442</b>	<b>3,223</b>	<b>8,391</b>

\*'Other' includes responses where no Station location was recorded in KFD's database.

### 2017 Total Emergencies by Station



#### **Station B21:**

EMS:3  
Fire: 4  
Other: 19

## Emergency Response Totals by Unit

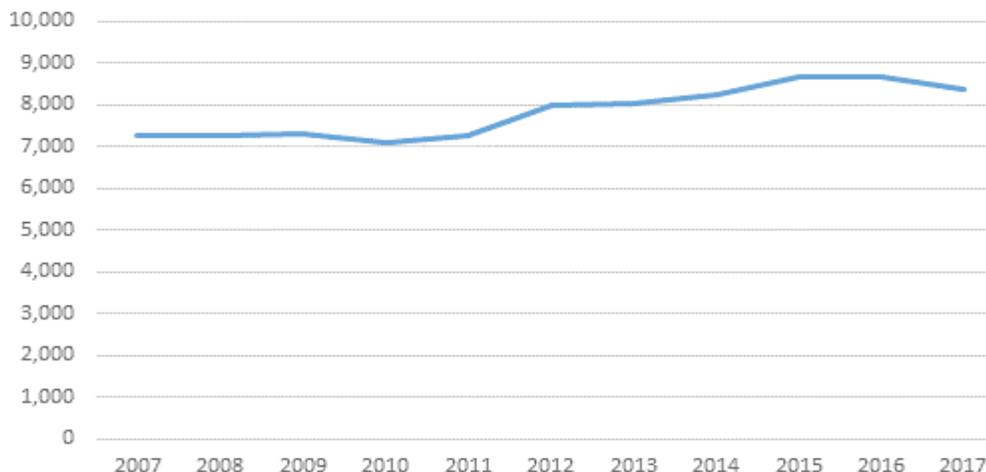
	2013	2014	2015	2016	2017
Aid 21	905	892	890	951	970
Aid 22	1181	1216	1286	1320	1182
Aid 24	135	124	*	*	*
Aid 25	498	533	609	606	588
Aid 26	936	959	1074	1071	1120
Aid 27	2039	2033	2223	2011	1511
Aid 29	406	447	483	659	1105
Engine 21	357	388	449	460	428
Engine 22	628	729	727	785	755
Engine 25	193	206	214	190	188
Engine 26	512	601	626	652	578
Engine 27	700	730	726	679	642
Engine 28	28	6	7	*	*
Ladder 27	670	798	914	903	460
Battalion 21	478	570	582	642	550
Air Unit 21	37	55	38	57	53
<b>Totals</b>	<b>9703</b>	<b>10287</b>	<b>10848</b>	<b>10986</b>	<b>10130</b>

\*Ladder 26 was moved to Station 27 in June of 2011. This eliminated L26 and created L27. In addition, Station 27 went from one dedicated Aid Unit to two cross staffed Aid units.

## Mutual Aid Received 2013-2017

	2013	2014	2015	2016	2017
Bellevue	115	118	133	138	157
Bothell	40	40	46	41	40
Northshore	64	46	47	44	45
Redmond	93	84	101	128	92
Woodinville	63	56	78	70	72
Other	1	3	3	7	4
Medic	1,209	1,144	1,324	1,582	1,693
<b>Total</b>	<b>1,585</b>	<b>1,491</b>	<b>1,732</b>	<b>2,010</b>	<b>2,103</b>

## Total Emergencies 2007-2017



# 2017 RESPONSE TIME GOALS AND OBJECTIVES

## Kirkland Fire Department Response Goals

The Kirkland Fire Department response standards specify the criteria for response times to effectively deliver fire suppression and emergency medical services. KFD response times are designed to protect our community. The basis for our response time standard are the National Fire Protection Association's Standard 1710-The Standard for Organizing and Deployment of Fire Suppression Operations; the Kirkland Fire Department Strategic Plan; and Kirkland Standards of Coverage.

### Calls Meeting Travel Standard

	All Calls	In Response Area	Out of Response Area
<b>2013</b>	69%	78%	36%
<b>2014</b>	70%	78%	33%
<b>2015</b>	69%	76%	36%
<b>2016</b>	68%	77%	34%
<b>2017</b>	68%	76%	64%

### FIRE Calls Meeting Travel Standard

	All Calls	In Response Area	Out of Response Area
<b>2013</b>	57%	70%	24%
<b>2014</b>	59%	72%	25%
<b>2015</b>	58%	70%	27%
<b>2016</b>	58%	70%	27%
<b>2017</b>	57%	67%	53%

### EMS Calls Meeting Travel Standard

	All Calls	In Response Area	Out of Response Area
<b>2013</b>	72%	80%	41%
<b>2014</b>	72%	80%	36%
<b>2015</b>	71%	78%	40%
<b>2016</b>	71%	78%	37%
<b>2017</b>	71%	77%	67%

## 2017 Response Data

**Kirkland Fire Department Adopted Objective From 911 Call Pick-up to Arrival On Scene**

- **EMS: 5:00** We meet this 54% of emergency incidents
- **Fire: 5:30** We meet this 33% of emergency incidents

**Actual Total Response Time to EMS 90% of the Time – 7:31**

**Actual Total Response Time to Fires 90% of the Time – 8:59**



# ADVANCED LIFE SUPPORT (ALS) 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.

## RESPONSE ANALYSIS

Incident Year	Call Volume
2017	1,879
2016	1,644
2015	1,633
2014	1,547



TOTAL 2017 MEDIC  
CALLS IN KIRKLAND

1,879

## NORCOM 2017 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](http://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 2017 NORCOM received a total of 196,746 emergency 911 calls.

## NORCOM dispatch 2017 Performance Measures:

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

- NORCOM answered 911 calls within 10 seconds or less 98.00% of the time in 2017

**GOAL: 90% of emergency Fire/Medical (EMS) calls are dispatched within 60 seconds.**

**NORCOM processes Fire/EMS calls in under 60 seconds 86% of the time.**

# ONGOING INITIATIVES

- Continue the process for design and construction of a new fire station in Juanita as identified in the Strategic Plan in 2012.
- Investigate financial options for building of Station 27 in an area east of Interstate 405 and near Evergreen Health Medical Center.
- Explore funding mechanisms to hire additional Firefighters to staff two dedicated aid cars for the City of Kirkland.
- Evaluate current and future training needs for the department in support of developing a new training facility within city limits.
- Research and evaluate Mobile Integrated Health (MIH) programs for delivery of alternative service for at-risk and vulnerable populations.
- Continue efforts to support accreditation through the Center for Public Safety Excellence. In 2018, these efforts will focus on continued revision of the department's policy and procedures.
- Implement a new software tracking program for fire and life safety inspections in business and multi-family occupancies. Occupancy inspections will assist Fire Prevention in creating a risk assessment for the City.
- Training for city staff will be provided by Office of Emergency Management focusing on disaster response management. The OEM will also continue to nurture partnership with volunteer and other community groups.
- Recommendations will be provided by the Training Division for improving training options at Station 26.



# COMMUNITY RISK REDUCTION



# FIRE PREVENTION BUREAU HIGHLIGHTS

The Kirkland Bureau of Fire Prevention currently has five staff members: The Fire Marshal, one Assistant Fire Marshal and three Fire Inspector/Investigators.

The Bureau's 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.

Fire Prevention ensures that all development projects in the city meet the applicable life safety and City of Kirkland municipal codes. Kirkland Fire Department personnel strive to keep the community safe 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
- Code and policy development and interpretation

In addition to new construction activities, the Bureau supervises a Fire Investigation Team. Our team is comprised of the Fire Marshal, five Fire Investigators, and one Police Department Fire Investigator. The investigation team investigates fires within the city to determine the cause and origin.

In addition to working on construction projects citywide, Fire Prevention staff continue to work on two of the largest construction endeavors in Kirkland's history. Both the developments, Kirkland Urban and the Mall at Totem Lake, continue to progress. Lieutenant Jason Chappell leads the fire plan review team for the projects and is assisted by fire protection engineers from Aegis engineering. Work is expected to continue for several more years.

# FIRE PREVENTION BUREAU

## 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. 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 reviews SFR new and additions	Plan Reviews Commercial	Plan Reviews Grading (LSM)	Plan Reviews Short Plats
2013	371	43	60	40
2014	375	40	57	52
2015	438	39	57	58
2016	452	41	79	123
2017	454	18	69	31

Year	Plan Reviews Zoning and Design	Plan Reviews Mechanical	Pre application conferences	Solar (PV)
2013	17	4	160	NA
2014	15	2	150	17
2015	10	3	170	38
2016	12	2	173	3
2017	8	1	156	4

## 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
2013	375	748	32	31
2014	291	1157	26	28
2015	283	1966	48	91
2016	345	1193	65	87
2017	333	2034	48	71

## 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, hazardous materials, tents, bonfires, hot work and a variety of other hazardous activities.

Year	Company Level Fire inspections	Company Officer Investigations reviewed	Investigator reports
2013	1594	103	47
2014	1551	90	57
2015	1164	115	48
2016	0	131	22
2017	0	127	18



## Annual Fire Safety Inspection Program

Fire Prevention personnel are responsible for managing the annual fire safety inspections program. Occupancies in the City receive a fire and life safety inspection annually. Citizens will often see their firefighters around Kirkland conducting inspections. Firefighters focus on discovering and correcting conditions liable to cause a fire or life safety hazard. In 2016, Prevention paused normal inspections procedures to purchase and install new inspection software. The new software allows firefighters to more accurately track completed inspections, occupancy contact information and required corrections. With the efficiencies gained by implementing new software, our firefighters will be able to complete inspections faster and eliminate redundancy. Fire and life safety inspections will start again in 2018.

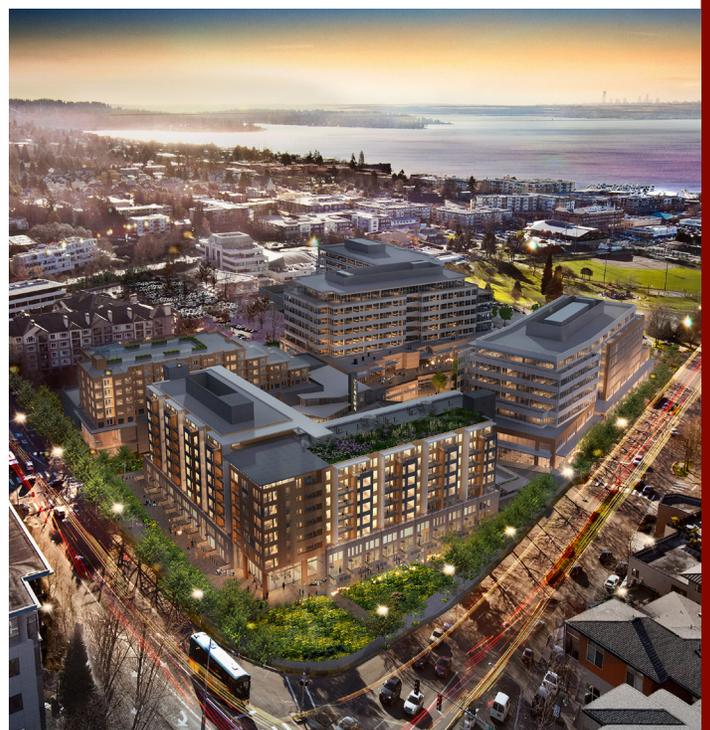
## Fire Investigations

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.

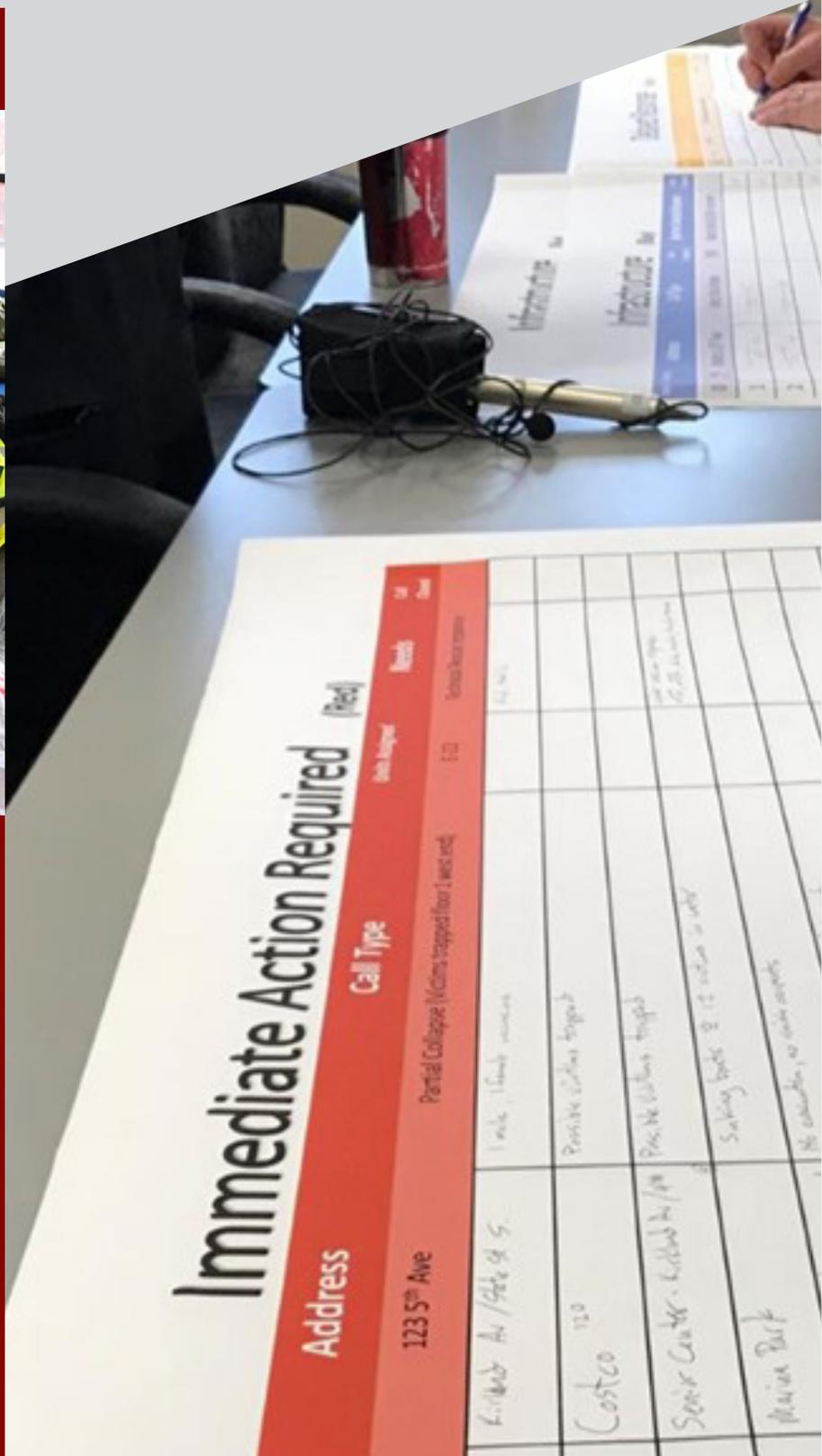
All investigators are trained to national standards, attending the National Fire Academy in Emmitsburg, Maryland, gaining certification through the Washington State Patrol, and Accreditation from the International Association of Arson Investigators (IAAI). Kirkland is an active member of Zone 1 Fire Investigators and Zone 1 Fire Marshals.

## 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.



# OFFICE OF EMERGENCY MANAGEMENT



# OEM

**2017 was a year of transition** for the Office of Emergency Management (OEM). Deputy Chief Helen Ahrens-Byington returned to the role of Emergency Manager in March and hired Heather Kelly as part of the emergency management team.

The Emergency Operations Center (EOC) was reorganized to establish a higher level of capability and in 2018 the focus will be on training of City staff to support EOC activation.

With input and support of all City Departments, the City's Continuity of Operations and Government Plan was created and approved by the City Council. This document will help the City maintain critical service delivery when disasters affect City operations.

The dedicated volunteers of Emergency Management have been busy in 2017 as well. The Community Emergency Response Team (CERT) program held two six-week long classes to add an additional 50 CERT volunteers to the team of over 425 already trained. The group facilitated over 15 public education sessions and staffed a preparedness booth at the Juanita Friday Market. The Map Your Neighborhood (MYN) program provided two training sessions,

adding 71 facilitators to the effort and now has 22 MYN locations in Kirkland. Great work and effort by volunteer community members.

The Kirkland Emergency Communications Team (KECT) held 6 Amateur Radio training classes, with 82 participants. In addition to basic classes, KECT also provided advanced level training opportunities. The team ended 2017 with 62 members of various skill levels, with a goal of reaching 100 members in 2018.

OEM promoted Preparedness Month in September, City and Community participation in the Great ShakeOut in October, and in November, OEM facilitated a real time test of the Windshield Survey process. During this test, Police, Fire, and Public Works crews drove critical routes within the City and reported simulated earthquake damage to the EOC through multiple communication methods, including the KECT. These projects are just some of the efforts the City is making to increase preparedness and response capability.

# CHAPLAIN'S REPORT

For 30 years the Chaplain's program in Kirkland has been a service to our citizens under unimaginable situations of pain and heartache.

**The role of your Chaplain is twofold.**

1. As requested by an on-scene commander, Chaplain Vince Armstead helps relatives and friends of people caught in crisis process the situation. The Chaplain takes care of these people and allows first responders to do their jobs with minimal distraction. The family is briefed on the protocols that are unfolding around them, offered comfort and help through what many times seems like chaos to them.
2. The Chaplain is a listening ear, a presence and a source of encouragement to first responders both on scene and at any time they need. Vince serves as a member of the Kirkland Police Dept. Peer Support Team.

Chaplain Armstead meets people where they are and provides care and assistance wherever needed.



Chaplain Vince Armfield

## DEPARTMENT DIRECTORY 2018

**GENERAL INFORMATION ..... 425-587-3650**

Headquarters - 123 Fifth Avenue, Kirkland 98033

**Fire Administration**

- Joe Sanford, Fire Chief ..... 425-587-3602
- Tim Day, Deputy Chief ..... 425-587-3601
- Dave Van Valkenburg, Deputy Chief..... 425-587-3605
- Seth Buchanan, EMS Captain..... 425-587-3663
- Audrey Martin, Administrative Services Supervisor..... 425-587-3658
- Victoria Davies, Administrative Assistant..... 425-587-3638
- Elijah Panci, Financial Analyst ..... 425-587-3425
- Jim Fink, Mechanic ..... 425-587-3880

**Fire Prevention**

- Mark Jung, Fire Marshal ..... 425-587-3623
- Grace Steuart, Assistant Fire Marshal..... 425-587-3660
- Jason Chappell, Fire Inspector..... 425-587-3655
- Brian Ferguson, Fire Inspector ..... 425-587-3653
- Todd Anderson, Fire Inspector..... 425-587-3639
- Teri Wallace, Office Specialist..... 425-587-3634

**Training**

- Bill Hoover, Battalion Chief ..... 425-587-3698
- Marc Hallen, Captain..... 425-587-3697
- Anna Grimes, Office Specialist ..... 425-587-3641

**Office of Emergency Management**

- Heather Kelly, Emergency Manager ..... 425-587-3670

thank you for giving us a tour of the fire station - Luke

Love Go in feeling  
 Thank you for showing us that fire trucks are fun!

Thank you for giving us a tour of the fire station from Agassiz

Thank you for an amazing visit to your fire station. We loved learning more about fire safety and your important role in our community!

Ben Franklin second graders  
 Love gear is so awesome - Hugo

Love Dan

Julissa

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 Love gear is so awesome - Hugo

Thank you so much

Thank you!

Thank you very much - Vaishvi

Thank you for helping our community

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**CITY OF KIRKLAND  
FIRE DEPARTMENT**