Seattle Fire Department

2017 ANNUAL REPORT

INTEGRITY  TEAMWORK  COMPASSION  COURAGE  DIVERSITY
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MESSAGE FROM FIRE CHIEF

Consult not your fears but your hopes and your dreams. Think not about your frustrations, but about your unfulfilled potential. Concern yourself not with what you tried and failed in, but with what it is still possible for you to do.

- Pope John XXIII
MESSAGE FROM THE CHIEF

What an exciting year! We faced lots of challenges and yet, had many successes along the way. This year, we launched numerous new initiatives and programs, including the Rescue Swimmer Program, Brycer Systems Testing Program, High Rise Inspection Program, ESO Electronic Health Records, a peak-time aid unit (Aid 4), decentralized training and expanded many Low Acuity efforts. Internally, we completed a Payroll Performance Audit, reviewed our hiring practices and completed more than 600 firefighter medical exams.

For the first time in many years, we finished the year with about a .2% decrease in responses, with 96,822 incidents. This shows that our many efforts – Low Acuity, evaluating dispatching protocols and community education are paying off. One of our units, Aid 2, was the busiest unit in the entire country in 2016 with 8,138 responses. They also experienced a decrease in 2017 with 7,088 responses, in part due to the addition of the peak-time aid unit, Aid 4. Aid 4 responded 3,462 times, after being stood up in April 2017. Station 2 and Station 10 remain the busiest stations.

Throughout 2017, we sent our members around the world to train and assist in disaster management. Personnel were deployed to Texas, Florida and other wildland incidents throughout the region. Each of these deployments were an opportunity for us to assist our neighbors during very difficult times, I am proud that we could answer the call.

Back in November 2003, the community approved the Fire and Facilities Emergency Response Levy to renovate and upgrade, or replace 32 neighborhood fire stations; construct a new training facility and a new Fire Alarm Center; establish emergency preparedness facilities and disaster response equipment that includes a modern, seismically safe Emergency Operations Center, emergency community supplies, emergency shelter power generators, and emergency water supply capacity for firefighting in the event the city’s fire hydrants are disabled; and build a new large fire boat, a new small fireboat, and renovate the Chief Seattle fireboat. In 2017, we completed and moved into the last two stations – Station 32 and Station 22. Thanks to our city partners and the community for your support and assistance in completing these projects throughout the last 14 years.

One of the biggest challenges that we continue to face in 2018 is trying to keep pace with our daily staffing levels. We went many years without keeping pace with the retirements and it will take us a few years to catch up. As we move forward in 2018, we will continue to focus on deploying new technologies and systems with a goal of improving processes and efficiency across the department.

I’m proud of the impact we make each day, whether it’s taking the time to participate in an event, providing life-saving care or protecting someone’s home. We are helping our community when they need it most. I am incredibly excited about our future and where we are headed.

Sincerely,

Fire Chief Harold D. Scoggins
Seattle Fire Department
ABOUT US

The Seattle Fire Department strives to provide the best service possible by putting the community and its needs first. It is the department’s goal to actively engage Seattle’s residents. The Seattle Fire Department values and respects diverse internal and external cultures, constantly working to improve service delivery to all community members. Through feedback and other cooperative communication processes, the department works to ensure the community is informed of and able to access programs and services.

The Seattle Fire Department has existed as a fire department within the State of Washington since October 17, 1889, when the Seattle City Council passed Ordinance No. 1212. The services provided by the Seattle Fire Department include:

- Critical fire suppression services and emergency medical care
- Technical teams, including technical and heavy rescue, dive rescue, tunnel rescue, marine fire response, and hazardous materials (HazMat) response
- Fire prevention and public education
- Fire investigation
- Mutual aid response to neighboring jurisdictions

OUR VISION

The Seattle Fire Department: a national leader in responding to and preventing emergencies with a commitment to excellence and teamwork.

OUR MISSION

The mission of the Seattle Fire Department is to save lives and protect property through emergency medical service, fire and rescue response and fire prevention. We respond immediately when any member of our community needs help with professional, effective and compassionate service.

OUR VALUES

Integrity—We are honest, trustworthy and accountable. Honor guides our actions.

Teamwork—We each bring our own skills and experience, yet we recognize that we are better together. We support and depend on each other to achieve our goals.

Compassion—Caring is part of our job. We could not do what we do without a deep and motivating empathy for those we serve.

Courage—We show fortitude and determination in a crisis.

Diversity—We respect the different identities, experiences, and perspectives of those that we work with and the community we serve.
STATIONS, MAP AND APPARATUS PROFILE

- 33 Fire Stations
- Medic One at Harborview Medical Center
- 33 Engines
- 11 Ladder Trucks
- 5 Aid Units (Basic Life Support)
- 1 Peak-time Aid Unit
- 7 Medic Units (Advanced Life Support)
- 2 Air Trucks
- 2 Hose Wagons
- 4 Fire Boats
- Additional specialized apparatus
TIERED RESPONSE SYSTEM

The Seattle Fire Department provides emergency response through five battalions, consisting of 33 fire stations (plus the Battalion 3/Medic One at Harborview Medical Center) strategically placed around the city in order to maximize coverage and minimize response time.

These stations are staffed 24 hours a day, seven days a week, by four separate shifts. To meet the needs of the city and provide emergency response services to the residents of Seattle, the department has 990 uniformed personnel, 37 department chiefs, 924 firefighter/EMTs, 66 firefighter/paramedics and 72 civilian personnel.

Every day, there are 209 members responding to emergencies across the city. Depending on the type of emergency, the Fire Alarm Center will dispatch the appropriate resources to provide fire suppression, Basic Life Support (BLS), Advanced Life Support (ALS) and technical operations. All Seattle firefighters are certified Emergency Medical Technicians, in a BLS incident, a fire engine, aid car and/or ladder truck will be the first responders. If a medical emergency requires ALS, one of the seven medic units will also be dispatched to the scene. Certain type of emergencies require multiple units, for example, an individual experiencing sudden cardiac arrest will have three units come to their aid. Similarly for fires and other emergencies, the dispatcher will assign the appropriate resources to protect life and property.

2017 Quick Facts

- Aid 2 (located at Station 2) responded to 7,088 incidents in 2017. This is a decrease from 2016, largely due to the addition of a peak time aid unit (Aid 4), which went in-service April, 2017.
- Engine 31 (located at Station 31) responded to 3,551 incidents in 2017. Engine 17 (located at Station 17) followed closely behind with a total of 3,457 responses.
EVERY SECOND COUNTS

Photo Credit: John Odegard
CASCADE OF EVENTS
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 imperative to keep in mind that certain intervals described, such as turnout and travel time, can be 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 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 five and 10 minutes after ignition, turning a typical “room and contents” fire into a structural fire of some magnitude.

CARDIAC ARREST SURVIVAL RATE
In communities where the fire service is the principal provider of Emergency Medical Services (EMS) first response, the goal is for basic life support (CPR and defibrillation) to be available to the victim of a cardiac arrest within four minutes of the event, and that advanced life support (paramedic service) should be available within eight minutes or less 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.
The Fire Alarm Center (FAC) is staffed 24/7 by firefighter/EMTs who have completed more than 1,000 hours of additional training to become certified dispatchers.

The FAC dispatched resources to 96,822 incidents in 2017. Total calls coming into the FAC, emergency and administrative, have increased by 52% since 2012. In 2017, the FAC received 191,476 calls.

FAC personnel are working to increase the efficiency of the Emergency Medical Dispatch program by revisiting medical protocols and exploring how the application itself could be changed and/or replaced. Improvements will result in better dispatcher workflow, decreasing the amount of time taken to dispatch appropriate resources to incidents. Dispatchers continue to use the Quality Enhancement Program which allows them to review each other’s calls to learn best practices and make necessary adjustments to more effectively process calls.

### CALL PROCESSING TIME

*Phone pickup to first unit assigned*

Seattle Fire Department call processing time standard is 60 seconds, 80% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of time call processing standard met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>80%</td>
</tr>
<tr>
<td>2016</td>
<td>85%</td>
</tr>
<tr>
<td>2015</td>
<td>81%</td>
</tr>
<tr>
<td>2014</td>
<td>79%</td>
</tr>
<tr>
<td>2013</td>
<td>78%</td>
</tr>
</tbody>
</table>

### CALL VOLUME

*Seattle Fire Department calls come from two sources: emergency 911 dispatch and administrative phone lines.*

<table>
<thead>
<tr>
<th>Year</th>
<th>Emergency Calls</th>
<th>% Increase</th>
<th>Administrative Calls</th>
<th>Total Calls Received</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>150,919</td>
<td>-1%</td>
<td>40,557</td>
<td>191,476</td>
<td>2%</td>
</tr>
<tr>
<td>2016</td>
<td>151,912</td>
<td>8.7%</td>
<td>32,329</td>
<td>187,709</td>
<td>6.2%</td>
</tr>
<tr>
<td>2015</td>
<td>145,189</td>
<td>9.9%</td>
<td>31,578</td>
<td>176,767</td>
<td>10.9%</td>
</tr>
<tr>
<td>2014</td>
<td>132,071</td>
<td>4.3%</td>
<td>27,185</td>
<td>159,256</td>
<td>6.0%</td>
</tr>
<tr>
<td>2013</td>
<td>126,610</td>
<td>4.2%</td>
<td>23,558</td>
<td>150,168</td>
<td>7.4%</td>
</tr>
</tbody>
</table>
SEATTLE FIRE DEPARTMENT RESPONSE STANDARDS

The Seattle Fire Department Response Standards specify the criteria needed to most effectively and efficiently deliver fire suppression, technical rescue response, and emergency medical services. These Response Standards protect the community and the occupational safety and health of Seattle Fire Department employees. National Fire Protection Association Standard 1710 – the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Technical Rescue to the Public by Career Fire Departments, was used as a guideline in the development of these Response Standards.

**EMS TURNOUT TIME**

*Time unit assigned to en route*

Seattle Fire Department turnout time standard is 60 seconds, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% turnout time met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>47.7%</td>
</tr>
<tr>
<td>2016</td>
<td>50%</td>
</tr>
<tr>
<td>2015</td>
<td>54%</td>
</tr>
<tr>
<td>2014</td>
<td>51%</td>
</tr>
<tr>
<td>2013</td>
<td>51%</td>
</tr>
</tbody>
</table>

**FIRE TURNOUT TIME**

*Time unit assigned to en route*

Seattle Fire Department turnout time standard is 80 seconds, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% turnout time met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>42%</td>
</tr>
<tr>
<td>2016</td>
<td>46%</td>
</tr>
<tr>
<td>2015</td>
<td>52%</td>
</tr>
<tr>
<td>2014</td>
<td>51%</td>
</tr>
<tr>
<td>2013</td>
<td>47%</td>
</tr>
</tbody>
</table>
FIRST ARRIVING ENGINE AT FIRE

En route to on-scene

Seattle Fire Department response time standard for the first arriving engine at a fire response is 4 minutes, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of response time objective met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>77%</td>
</tr>
<tr>
<td>2016</td>
<td>84%</td>
</tr>
<tr>
<td>2015</td>
<td>83%</td>
</tr>
<tr>
<td>2014</td>
<td>86%</td>
</tr>
<tr>
<td>2013</td>
<td>83%</td>
</tr>
</tbody>
</table>

FULL FIRST ALARM ASSIGNMENT AT FIRE

Time unit assigned to en route

Seattle Fire Department response time standard for full first alarm assignment (15 firefighters) when responding to a fire is 8 minutes, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% turnout time met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>71%</td>
</tr>
<tr>
<td>2016</td>
<td>86%</td>
</tr>
<tr>
<td>2015</td>
<td>86%</td>
</tr>
<tr>
<td>2014</td>
<td>89%</td>
</tr>
<tr>
<td>2013</td>
<td>80%</td>
</tr>
</tbody>
</table>
**BASIC LIFE SUPPORT UNIT**

*En route to on-scene*

Seattle Fire Department response time standard for the arrival of the first unit is 4 minutes, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of response time objective met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>79%</td>
</tr>
<tr>
<td>2016</td>
<td>84%</td>
</tr>
<tr>
<td>2015</td>
<td>84%</td>
</tr>
<tr>
<td>2014</td>
<td>84%</td>
</tr>
<tr>
<td>2013</td>
<td>85%</td>
</tr>
</tbody>
</table>

**ADVANCED LIFE SUPPORT UNIT**

*En route to on-scene*

Seattle Fire Department response time standard for the arrival of an advanced life support unit with two firefighter/paramedics is 8 minutes, 90% of the time.

<table>
<thead>
<tr>
<th>Year</th>
<th>% turnout time met</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>86%</td>
</tr>
<tr>
<td>2016</td>
<td>89%</td>
</tr>
<tr>
<td>2015</td>
<td>89%</td>
</tr>
<tr>
<td>2014</td>
<td>87%</td>
</tr>
<tr>
<td>2013</td>
<td>85%</td>
</tr>
</tbody>
</table>
FIREFIGHTING

Significant Incidents
SIGNIFICANT INCIDENTS

Jan. 5

1st Ave. Historic Building Fire
A fire occurred on the top floor of a historic building near Pike Place Market that could be seen for miles around the city. Crews battled high heat as they extinguished the fire and saved a popular restaurant on the ground floor.

Feb. 27

Interstate-5 Tanker Truck Rollover
A 10,000 gallon propane tanker truck was involved in a collision and overturned on I-5, near downtown Seattle. The Hazardous Materials Team and Technical Rescue Team conducted a delicate operation of pumping propane to another tanker truck before moving the overturned truck.

May 17

Salmon Bay Marina Boat House Fire
A fire occurred in a floating boat house located in the Salmon Bay Marina, destroying two classic wooden yachts and three other boats. The fire was caused by spontaneous combustion of oil staining rags.

July 16

South Seattle Vacant Warehouse Fire
Crews arrived on-scene to find a large amount of smoke and fire coming from a vacant warehouse. Firefighters applied 3,000 gallons of water per minute throughout the night to fully extinguish the fire.

Aug. 4

Denny Way Apartment Fire
Multiple people called 911 reporting a fire in an apartment building with a possible trapped patient. First arriving crews saw heavy black smoke and flames from floor three and quickly ascended to enter the burning room and search for the patient. The patient was pulled from the room by a firefighter, and transported to Harborview.

Aug. 5

3-Alarm Meridian Apartment Fire
A fast-moving fire spread to the attic of a three-story apartment building in the North end of the City. Firefighters rescued several occupants from their balconies and ensured everyone was out of the building before being forced out of the structure due to deteriorating fire conditions. The building sustained $6 million in damage.

Nov. 4

Yesler Terrace Apartment Fire
Units fought a vacant apartment fire defensively from the exterior, and successfully prevented the fire from spreading to other units within the complex. Fire investigators ruled the cause of the fire as undetermined.
MEDIC ONE

The Medic One program was conceived by Dr. Leonard Cobb in 1968, when he asked the question: “Can firefighters be trained to do what a physician would do in a (prehospital) medical emergency given the same circumstances?” He addressed this question within the evidence-based world of medicine in partnership with the University of Washington.

The Seattle Fire Department Medical Director, Dr. Michael Sayre, continues this tradition. In 2017, with an emphasis on bougie use in endotracheal intubation – one of the doctor skills Dr. Cobb incorporated – there has been a downward trend in the number of attempts required for intubation success.

BATTALION 3 - PARAMEDICS

Paramedic School
Nine Seattle Firefighters enrolled in the Michael K. Copass, MD Paramedic Training Program at the University of Washington. The students completed a competitive selection process that included a written and practical exam followed by two rounds of oral boards. The students will spend 10 months in this rigorous training program along with 24 peers from King, Snohomish, Jefferson and San Juan Counties.

Advanced Life Support Training
Battalion 3 began providing in-service Advanced Life Support training for paramedics in 2017. Topics included a continued emphasis on airway management with Rapid Sequence Intubation drugs, using checklists and Cardiac Arrest Plan A review.

Fellowship
The department’s partnership with the University of Washington continues to be enhanced. Medic One added a second pre-hospital emergency medicine fellow in 2017.

New Cardiac Arrest Reporting Procedure
For years, paramedics have filled out a paper-copy “Green Form” after a cardiac arrest event. The Green Form was last updated in 2012, and in 2017, was transitioned to a fully online format. A pilot was first conducted at Stations 25 and 28 before being implemented city-wide. This online portal submits the data directly to the Seattle Medic One Research and QI team in a secure manner, while also allowing for an immediate alert system that was previously unavailable.

Visitors
In 2017, Battalion 3 had visitors from Denmark, Japan, Norway, Canada, Australia, England, Ecuador, Israel, China, New Zealand, Saudi Arabia and Germany, as well as from across the United States.

EMS RESPONSES

Total number of Basic Life Support (BLS) and Advanced Life Support (ALS) responses by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # of BLS responses</th>
<th>Total # of ALS responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>60,168</td>
<td>18,590</td>
</tr>
<tr>
<td>2016</td>
<td>60,152</td>
<td>19,303</td>
</tr>
<tr>
<td>2015</td>
<td>57,876</td>
<td>19,897</td>
</tr>
<tr>
<td>2014</td>
<td>56,442</td>
<td>19,247</td>
</tr>
<tr>
<td>2013</td>
<td>53,029</td>
<td>18,911</td>
</tr>
</tbody>
</table>

7.4 Daily average number of responses per medic unit

5,776 Number of Advanced Life Support transports.
FIRE FACILITIES & EMERGENCY RESPONSE LEVY

In 2003, 69 percent of people voting in Seattle approved the Fire Facilities and Emergency Response Levy. As part of this levy, 32 Seattle fire stations were to be upgraded, renovated or replaced.

In 2017, the Department of Finance and Administrative Services (FAS) reached a huge milestone - construction was completed on the final fire station included in the levy (Fire Station 22). Also in 2017, crews moved in to the new Fire Station 32 in West Seattle.

PEAK TIME AID CAR

Belltown’s Aid Unit (Aid 2) was the second busiest unit in the United States in 2016, running an average of 22.3 calls per day. To help relieve the run volume, a peak time aid unit (Aid 4) was implemented at Station 2 in April 2017. Aid 4 is now operational from 9 a.m. to 9 p.m. daily.

MEDIC UNITS

A new and improved medic unit was implemented in 2017, with plans to continue replacing the older medic units in 2018. The new medic unit is currently located at Station 32 in West Seattle. Features of the new medic unit design include:

• Compliance with new Society of Automotive Engineers Ambulance Standards
• Patient compartment side entry door
• Rotating attendant seats in the patient compartment
• Power operated stretcher and loading system
• New safety standard compliant equipment mounting
• Revised Equipment storage
• Crash tested body design

Photo Credit: Steve Baer
In 2017, the department transitioned from using Carbon Copy Paper Forms to Electronic Health Records (eHR). Firefighters are now utilizing Microsoft Surface Tablets in the field and desktop computers at the station to access a new internet based cloud application, through ESO Solutions. eHR has greatly improved data tracking, patient overview and quality management. Previously, after a medical incident, a paper copy was sent via interoffice mail to the department’s headquarters where the paper form was manually digitized. With nearly 80,000 emergency medical incidents a year, the backlog of processing these forms has been substantial, averaging nearly 12 months. That meant that if an engine company responded to an individual one week, and another crew responded a few days later, and then another crew responded again the following week – no one was the wiser. The department was unable to correlate these events until approximately six months later. With the implementation of eHR, firefighters now have real time access to previous patient information. By entering a name and date of birth, the responding crew can view previous incidents with the individual and pertinent medical history. This has also been instrumental in the department’s efforts in addressing low acuity, or non-critical calls. These are incidents where there is not a medical emergency and/or more appropriate patient care could be provided by a different entity. The Low Acuity Alarm Program has been working to address high-utilizing individuals, people that call 911 frequently. ESO has allowed the program to better identify these individuals because of access to real-time patient centered data.

Alcohol Contacts from ESO, 2017

<table>
<thead>
<tr>
<th>Month</th>
<th>Alcohol Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>796</td>
</tr>
<tr>
<td>August</td>
<td>858</td>
</tr>
<tr>
<td>September</td>
<td>803</td>
</tr>
<tr>
<td>October</td>
<td>868</td>
</tr>
<tr>
<td>November</td>
<td>815</td>
</tr>
<tr>
<td>December</td>
<td>833</td>
</tr>
</tbody>
</table>

From July - December, there were nearly 5,000 records related to alcohol.

37,014
Electronic records inputed in second half of 2017.
TECHNICAL OPERATIONS
TECHNICAL OPERATIONS

The Seattle Fire Department has developed technical operations response Policies and Operating Guidelines (POG) that specify the roles and responsibilities of the fire department and the authorized functions of members responding to incidents that meet the definition of “technical operations” in accordance with NFPA 1710, which reads as follows:

- Those emergency incidents to which the fire department responds that require specific and advanced training and specialized tools and equipment.

- These types of incidents include but are not limited to hazardous materials, technical and heavy rescue, marine fire response and rescue, dive rescue, wildland firefighting, and CBRNE response. However, in all cases, the fire department is limited to performing only those specific technical operations functions for which responding personnel have been trained and are correctly equipped.

- Firefighters are trained to operations level response to technical operations incidents. The Seattle Fire Department’s response time standard for operations level firefighters is the same as a fire suppression call. Arrival of technical or special operations level trained response teams has not historically been tracked.
PILOT PROGRAM OVERVIEW

In July 2017, a Rescue Swimmer Pilot Program was implemented. The new resource provides highly-skilled surface water rescue swimmers to all areas of Seattle on a 24-hour basis. This was an improvement on the former capabilities, as it decentralizes the single response location and spreads these skills to multiple stations throughout the city, while also increasing the number of trained rescue swimmers. The Rescue Swimmer Program builds on other water rescue programs including the Marine Emergency Response Team and the Technical Dive Team.

The new Rescue Swimmer Program was announced to the public and media during an event at Alki Beach on July 25. Leaders of the program provided statements, and media captured the rescue swimmers in action during the drill.

TRAINING

Thirty-eight firefighters completed a rigorous week-long Professional Association of Diving Instructors (PADI) Rapid-Entry Rescue Swimmer (RERS) course, taught by West Pierce Fire and Rescue (Pierce County, WA). During this mentally and physically challenging course, participants developed skills for water rescue on dry land, in a swimming pool, and in open water. After completing the RERS training course, firefighters participated in Seattle-specific training to become comfortable with responding to all bodies of water in the city.

RESCUE SWIMMERS IN ACTION

Ideally, there are nine rescue swimmers on each of the four platoons at any given time, dispersed strategically throughout the five battalions. Rescue swimmers responded to several water rescue incidents in 2017 to include events on Lake Washington and South Lake Union. The new resource continues to provide coverage for the 193 miles of waterfront in the city.

The department continues to evaluate the pilot program on a regular basis, and plans to continue the program if budget allows.
LOW ACUITY ALARM PROGRAM
ABOUT THE PROGRAM

The Low Acuity Alarm Program is working to reduce the burden of low acuity alarms and to provide improved service and care to individuals with non-emergent needs. The program, created in 2016, grew and expanded in 2017. Currently, core activities are high utilizer intervention (individuals and locations), low acuity data and trend analysis, establishment of referral partnerships and alternate treatment/transportation development. Projects in 2017 included:

- Participating in the homelessness activation of the city’s Emergency Operation Center. This long-term, multi-agency effort provided new tools to report high-hazard encampments and liaise with the city’s Navigation Team.

- Assisting with and supporting the department’s transition to electronic healthcare records, which has resulted in real-time information on high utilizers.

- Participating in the King County Mobile Integrated Healthcare Advisory Group, to share best practices, develop common strategies and advocate for low acuity programs throughout the county.

664 Number of individuals with more than three 911 responses in the second half of 2017.

6 The average decrease in calls per quarter of high-utilizing individuals enrolled in the program.
HIGH UTILIZING INDIVIDUALS

The High Utilizer Program continues to expand and grow, with more than 90 high utilizers of 911 being identified from data or referred by firefighters and connected to the program in 2017.

From homeless individuals with substance use disorders to elderly homeowners with mobility issues, the Low Acuity Case Manager engaged social services, reached out to medical providers and provided feedback to responders. A joint analysis with Medic One found that for enrolled clients, social worker outreach decreased their reliance on the 911 system.

CASE MANAGER TESTIMONIALS

One client in north Seattle called 911, 22 times in the three months prior to enrollment. This middle-aged man has a history of traumatic brain injury and alcohol abuse and most calls were for non-emergent issues, usually late at night. The client also walked into his local fire station to get checked out. The Low Acuity Case Manager met with the client and his family. He was counseled on appropriate use of 911 and given large printouts of the King County Crisis Line number and the direct number for AMR. This client is isolated and needed resources for communication and support. The Low Acuity Case Manager currently talks with this client multiple times per week and has coordinated with his doctor’s office and the mental health and social worker there.

911 use after engagement dropped from 22 calls to 14 to 10 to five in the three subsequent quarters after enrollment.

A high utilizer in Rainier Valley was calling 911 post-seizure, including seven times in the quarter prior to enrollment. The client’s seizure disorder was new to him and he believed he needed to go to the ER after every seizure. This client is in the Long-Term Care System and has a case manager for in-home care though Aging and Disability Services. The Low Acuity Case Manager coordinated with his other case manager. They worked with the client’s physician to get needed equipment and educate the client on seizure aftercare.

911 calls were reduced from seven to two in the third quarter of enrollment.

A senior living in a supported housing unit in the downtown core with substance use disorders and a history of mental illness called 911 seven times in the quarter prior to enrollment. This client uses a walker, has frequent falls, and fractured his hip in the past. This client has DSHS long-term care and an Aging and Disability Services case manager. The Low Acuity Case Manager went to the client’s residence and met with him, his housing case manager and his caregiver. They discussed 911 use and alternatives to calling. The AMR direct line was programmed into his phone. Ongoing coordination ensured that the client’s needs were met.

911 calls were reduced from seven to one in the most recent quarter.
MOBILE CRISIS TEAM

In 2017, referral resource training on utilizing the King County Mobile Crisis Team expanded to fire stations throughout the downtown core, including Capitol Hill, the University District, Lake City, Beacon Hill and Northgate. The MCT continues to provide a higher level of response capabilities for individuals experiencing homelessness, in substance abuse crisis or behavioral emergency. Training will be provided department-wide in 2018.

MOBILE CRISIS TEAM REFERRAL REPORTS

“On November 5, we were referred to see a client who had lost his wallet, had been struggling with methamphetamine addiction and has suicidal tendencies. MCT staff outreached to him in the community and he appeared tired and hopeless. He had considered hurting himself and was feeling guilt after using methamphetamines. He was in need of respite and connection to services. MCT staff referred him to the Crisis Solutions Center which he was interested in and we transported him there.”

“A passerby called 911 out of concern for a client who was requesting detox and substance use services. Fire reported no acute medical issues. MCT staff outreached the client where he was sitting on the ground with his belongings around him. The client appeared to have some shakiness due to withdrawal and some slurred speech, but was cooperative and provided insight into his alcohol use. The client reported drinking “a fifth a day and some tall boys” for the past 8 years and said he has been homeless since he was about 18. Due to client’s drinking it was difficult for him to eat and he was experiencing hopelessness. MCT staff coordinated with Seadrunar Detox and were able to get him set up with a same-day bed. The client was pleasantly surprised by this and accepted these services. MCT staff then transported client to Seadrunar with a plan for him to discharge to the Crisis Solutions Center.”

HIGH UTILIZING LOCATION OUTREACH

Throughout Seattle, locations such as homeless shelters, medical clinics, assisted living facilities and skilled nursing facilities place a disproportionate number of 911 calls, including many low acuity responses. The Low Acuity Alarm Program engages these locations, working collaboratively with staff and leadership to identify issues, deliver training and provide education.
**Recruit Academy**
The 15.5-week Recruit Academy is based on testing and evaluative criteria established by the International Fire Service Accreditation Committee (IFSAC). The Seattle Fire Department’s Training Division is an IFSAC accredited training academy. In 2017, two recruit classes were held (Recruit Class 106 and 107), and 45 recruits graduated.

**Pre-Lieutenant Academy**
Twenty-five officer candidates attended the Pre-Lieutenant Academy to gain skills on being a leader of the department and learn about challenges of holding the rank of a Lieutenant. Candidates were given 40-hours of instruction to prepare them in the areas of leadership, tactical skills, fire code knowledge and public affairs.

**Mayday Training**
Firefighters use the Mayday call when they are disoriented, lost, injured, out of or low on air, trapped, or whenever they have an emergency and need assistance or rescue. In 2017, the department implemented a new Mayday procedure, and held training with all members of Operations. Chief officers initially received 12-hours of classroom time for content and scenarios. Following the initial training, all firefighters received 6-hours of Mayday training. Mayday training will be conducted twice annually as a primary tool for lowering risk of line of duty deaths and injuries.

**Natural Gas Training**
In 2017, the department developed a Standard Operating Guideline for responding to a natural gas emergency. The training was adopted and presented to the King County Fire Chiefs Association.

**Pumper/Operator Academy**
The first Pumper/Operator Academy, which was developed by the department’s training cadre, was held in December 2017. The class is the result of a three-year effort. The inaugural students were members of the Driver’s Training Cadre that did not participate in the development of the curriculum. They provided fresh perspective and their feedback is helping to finalize the program prior to the class being delivered to Operations.
The Fire Prevention Division is responsible for the implementation, administration and enforcement of the Seattle Fire Code (SFC). The SFC provides fire and life safety standards for buildings, helping to protect people and property from the hazards of fire, explosion or dangerous conditions in new and existing buildings and ensure firefighter and emergency responder safety during emergency operations.

**PLAN REVIEW**

Fire protection engineers received and reviewed 1,432 architectural plans, completing 10% within 2 days; and 1,454 Fire alarm/Fire sprinkler systems, completing 30% of these within four weeks.

**FIRE INVESTIGATION UNIT**

In 2017, the FIU investigated the origin and cause of 399 incidents; of these investigations 208 were determined to be accidental, 138 incendiary/arson and 53 were left undetermined.

**SPECIAL HAZARDS**

Nearly 2,075 special hazard inspections took place in 2017; 1,725 were performed for hazardous materials permits and 350 were storage tank related inspections. More than 6,000 hazmat permits were issued and renewed.

**RECORDS**

The records team processed 2,154 Public Disclosure Requests and 275 complaints regarding fire and life safety.

**ENGINEERING**

Inspected 4,981 new construction sites, focusing on the installation and inspection of fire protection systems.

**SPECIAL EVENTS**

Conducted approximately 2,479 inspections and issued 1,614 special event permits.

**COMPLIANCE**

Conducted 1,612 inspections.
NEW SYSTEMS TESTING PROGRAM

A new online fire and life safety systems testing oversight program or “confidence testing” program was implemented in July 2017. Fire protection systems including fire alarms, sprinklers and suppression are among the most important components in any building with regards to preserving lives, protecting property, and enhancing firefighter safety. A private company, Brycer, was selected to significantly improve the ability to track and drive code compliance through their online tool, The Compliance Engine. Accurate and timely inspection reporting, combined with this new tracking capacity, will reduce false alarms and expedite the repairs of fire protection systems.

HIGH-RISE INSPECTION PROGRAM

High-rise buildings present a unique risk to public safety and firefighters. They often contain large concentrations of people above the reach of aerial ladders therefore creating a physical demand on the firefighters as they must carry in their fire and lifesaving resources. To decrease these risks, high-rises are built with sophisticated fire protection systems that are designed to prevent the spread of fire and decrease smoke infiltration. The accurate functioning of these systems is critical to the safety of the public and therefore must be inspected regularly. In July 2017, a pilot inspection program was implemented in the downtown core, Pioneer Square and South Lake Union. Buildings were chosen for inclusion in the pilot based on their location as well as a desire to achieve a mix of different occupancy types and number of stories. Plans for 2018 are to extend the program throughout the city, completing detailed high-rise inspections of 530 buildings.
CAUSES OF FIRES

The Fire Investigation Unit responded to 399 fire incidents in 2017. Of those, three were fatality fires, and 15 fires resulted in injuries. There were 188 responses to fire in buildings, 64 to vehicle fires, and 37 to debris. Additional incident types are shown in the pie chart to the right.

Fires were caused by oil staining rags. Remember to properly dispose of staining rags by placing them in a metal container with a lid.

Fires were caused by non-food items placed on the stove. Remember to keep items away from the stove top.

HOMELESS RELATED FIRE RESPONSES

In 2017, SFD began relaying information regarding homeless responses to the Emergency Operations Center Navigation Team and the Department of Construction and Inspections. Responding to neglected structures poses a significant safety risk to firefighters due to the hazardous conditions, such as structure instability, modified floor plans and drug paraphernalia. Operations Division developed a Standard Operating Guideline in June 2017 regarding procedures for ‘derelict buildings’.

<table>
<thead>
<tr>
<th>Homeless Related Building and RV/Vehicle Fires</th>
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</thead>
<tbody>
<tr>
<td>Building Fires</td>
<td>30</td>
</tr>
<tr>
<td>Vehicle/RV Fires</td>
<td>21</td>
</tr>
</tbody>
</table>

*Campfires, brush and outside fires related to homelessness are not included in the chart above.
KEY COMMUNITY EVENTS

Kids Safety Day
Organized and participated in Kids Safety Day at the Museum of Flight where more than 300 participants had the opportunity to visit with 15 different fire, police and safety organizations.

Seattle Fire Day
With the Museum of History and Industry, hosted more than 650 attendees who participated in fire safety activities, firefighter story times, bunking gear demonstrations and tours of a fire engine, ladder truck and fireboat.

Fire Station 7 Opening Weekend at Seattle Children’s Theater
Public Affairs staff partnered with Seattle Children’s Theater to facilitate fire safety information for the production, Fire Station 7. Fire safety messages were included throughout the play script, within the post-play audience guide and on social media, reaching approximately 12,000 children and adults. Assistant Chief Cordova and Lt. Wyatt provided post-play fire safety information and demonstrated how to put on firefighter gear for the play’s opening night on April 14. Pre-show firefighter visits occurred at all weekend plays reaching approximately 3,000 children and parents.

Firefighter Story Times at Seattle Public Library
In partnership with the Seattle Public Library, 1,192 children and parents received critical fire safety information through a fire safety story, demonstrating home fire escape best practices and helping children to understand a firefighter is their friend. Children met a firefighter dressed in full turn out gear and explored a fire engine or ladder truck. Firefighters served as role models for early childhood literacy.

Station 32 Open House
As part of the Fire Facilities and Emergency Response Levy, Station 32 was remodeled and completed in 2017. More than 1,000 community members came to tour the station, learn fire safety information and meet their local firefighters.

Harborview Holiday Party
In partnership with Safe Kids Seattle and Harborview Medical Center, home fire safety education was provided to more than 600 children and adults. Most families were from Hispanic or East African communities.

Literacy Source Adult Classes
Public Affairs partnered with Literacy Source to provide fire safety vocabulary, handouts and presentations at four ESL parent literacy classes.
ACCOMPLISHMENTS

Senior Outreach with King County EMS
As part of the Vulnerable Populations Strategic Initiative, Public Affairs coordinated fire and life safety presentations with King County EMS and University of Washington Public Health Students. Seniors were trained on how and when to call 911, compression-only CPR and how to keep their homes fire safe.

NFPA Urban Fire & Life Safety Task Force
As members of the National Fire Protection Agency’s task force for urban cities, Public Affairs has been working on developing national recommendations for middle school curriculum and programming as well as best practices for community risk reduction.

New Department Website
Public Affairs coordinated a website redesign and migration to the City’s Content Management System.

Media Engagement
Incident, program and safety information information is provided to media daily. Three media availabilities were organized in 2017 including: Rescue Swimmer Program, Fireworks Safety and the Fill-the-Boot campaign.
- 13,259 children ages 3-5 received fire safety and injury prevention information through the preschool program.
- 5,567 elementary students received fire and life safety information through the school-age education program.
- Nine youth were referred to the Fire Stoppers Program, a fire setting intervention program.

- 25 fire safety presentations were provided to underserved communities with 1,296 attendees.
- Community Fire Safety Advocates worked 190 hours and reached 4,354 community members with culturally and linguistically appropriate fire safety messages.

- Smoke/Carbon Monoxide Alarms were installed

- People trained in CPR, AED, and first aid techniques for choking
NEW ASSISTANT CHIEFS

In November 2017, Fire Chief Harold Scoggins swore in two new assistant chiefs to oversee the Operations and Fire Prevention Divisions. Bryan Hastings and Timothy Munnis took the Oath of Office and were sworn in to the position of Assistant Chief, and now serve on the Chief’s Executive Leadership Team.

Bryan Hastings oversees the Operations Division. This is the department's largest division, responsible for emergency medical services, fire suppression, mitigation of disasters and rescue activities. Operations are spread across five battalions containing 33 stations with an on-duty staffing of 211 members. This position also has oversight of the Medic One Program and technical teams.

Timothy Munnis serves as the city’s Fire Marshal, overseeing the entire Fire Prevention Division. The FPD works together with businesses and the community to provide the standard of life safety expected by those who work, live and visit our City. Code compliance, fire investigations, inspection of high-rise buildings, permits, technician certification, new construction, systems testing and reporting, and special events falls under this division.

HONORING THE FALLEN

Firefighters, family, friends and community members gathered in front of the Seattle Fallen Firefighter Memorial to honor six Seattle firefighters that were added to the memorial in Occidental Square. Each of these firefighters are deeply missed by the department and community: Stephen Lohr, Jess Hernandez, Wallace F. Goulet, Joshua Milton, Tristan Smith and Scott Steed.

Gone but not forgotten.

PEER SUPPORT TEAM

The Critical Incident Stress Management (CISM) Peer Support Team helps employees, retirees and family members through incidents and in times of need. In 2017, Starbucks highlighted the important work of one of the CISM Peer Support Team members. Mike Washington, a Marine Veteran and firefighter, was featured in the Starbucks Upstanders Series, which tells the stories of ordinary people doing extraordinary things to create positive change in their communities. Watch the video online: starbucks.com/upstanders.
ANNUAL AWARDS

Through a partnership with the Seattle 4 Rotary Club, the department honored employees and members of the community for their exemplary service and dedication during an Awards Luncheon at the Sheraton Hotel. In total, 28 separate awards or recognitions were presented with nearly 500 people in attendance.

The 2017 luncheon was emceed by Deputy Chief Tom Walsh and King 5 Evening News Anchor/Seattle 4 Rotary Club President Mark Wright.

2016 Employees of the Year

- **Customer Service Award:**
  Roxanna Johnson

- **Civilian Employee of the Year:**
  Doug Coulbert

- **Firefighter of the Year:**
  Firefighter/Paramedic Miki Mann

- **Officer of the Year:**
  Lieutenant Jon Kimball

- **Chief of the Year:**
  Deputy Chief Tom Walsh

- **Lifetime Achievement Award:**
  Battalion Chief Mike Nakamichi

Photo Credit: Steve Baer
DEPLOYMENTS

Washington Task Force-1
Urban Search and Rescue (USAR)
SFD sent 24 personnel as part of a USAR Type 1 team to Hurricane Irma to assist with response efforts. Three members deployed to Hurricane Harvey as part of a ‘Water Mission Ready Package’ and two deployed as part of the Incident Support Team.

Wildland Team
Members of SFD’s Wildland Team deployed to at least 18 different Wildland Fire Incidents in 2017. SFD members were deployed in Washington, Oregon and California for an equivalent of over 340, 24-hour shift days. A few of the larger fires the Wildland Team responded to include the Scatter Creek Fire and Jolly Mountain Fire in WA, and the Central LNU Complex and Thomas Fire in CA.

SOCIAL MEDIA REACH

133k
Twitter Followers
@SeattleFire

11.4k
Facebook Page Likes
@SeattleFire

4.2k
Instagram Followers
@Seattle_Fire

46.6k Impressions on Facebook
Chapter 35.103 RCW: Revised Code of Washington Chapter 35.103 was passed into law during the 2005 legislative session (House Bill 1756). This law mandated certain response criteria be established and measured by fire departments across the State of Washington beginning in 2007 with an analysis of responses in 2006. The requirement was passed and is now the law for all substantially career fire departments. The purpose of this law is to report to the Governing Body of each fire jurisdiction, as well as to the residents of any given area, how the fire department is doing in meeting its established emergency response standards. These standards take into consideration a number of response types: A) Fire Suppression, B) Emergency Medical Services - Basic Life Support (BLS), C) Emergency Medical Services - Advanced Life Support (ALS), D) Special Operations (i.e. Hazardous Materials response and Technical Rescue response), E) Aircraft rescue and firefighting, F) Marine rescue and firefighting, G) Wildland firefighting.