



BELLEVUE FIRE PREVENTION ANNUAL REPORT 2017



OUR MISSION Serve the public by providing fire and life safety inspections, community education, and investigation services to help prevent fires, enhance public safety in all buildings, and improve emergency responder's ability to manage an incident. By doing this, we help achieve a safe, vibrant, and economically sustainable city.

OUR VISION A protected, prepared and healthy community

OUR VALUES Bellevue fire embraces the City of Bellevue's core values and is committed to upholding and embodying them in our policies, culture and daily actions.

CITY OF BELLEVUE Exceptional public service, stewardship, **CORE VALUES** commitment to employees, integrity, innovation

MESSAGE FROM THE FIRE MARSHAL



PLACE ONE SMOKE ALARM ON EVERY FLOOR AND SLEEPING ROOM





The most likely place that you will experience a fire is where you live. You can take some very simple steps to increase your chances of survival:

Make sure you have working smoke detectors:

- Every level of your home
- In every sleeping room
- In hallways leading to sleeping rooms

Sleep with your doors closed: https://fireservice.closeyourdoor.org/ wp-content/uploads/2017/10/CLOSED-DOORS-COULD-SAVE-YOUR-LIFE-SLOWING-THE-SPREAD-OF-SMOKE-HEAT-AND-FLAMES-IN-THE-EVENT-OF-A-FIRE.pdf

Your kitchen is the most likely place that a fire will start and typically that is a result of unattended cooking. Here are ten steps <u>http://www.redcross.org/news/article/Avoid-Kitchen-Fires-Use-Red-Cross-Tips</u> you can take to avoid becoming the next statistic.

If you do experience a fire, do you have a plan for escaping? If not, now is the time to plan and practice <u>https://www.usfa.fema.gov/downloads/</u>pdf/publications/two_ways_out_infographic.pdf. You may have less than 2 minutes to get out, could you?

How safe is your home? This checklist <u>https://www.usfa.fema.gov/</u> <u>downloads/pdf/home_safety_checklist.pdf</u> can help you make that assessment.

We must not become complacent with the risk of fire and we ask you to help us do our work. If we can do something for you, please contact us at 425-452-6872 and we'll do our very best to satisfy your request.

Sincerely,

Ken Carlson, Fire Marshal

DIVISION DIRECTORY

| General Information | Fire_Prevention@bellevuewa.gov | (425) 452-6872 |
|---|---------------------------------------|----------------|
| General Plan Review Questions | FireReview@bellevuewa.gov | (425) 452-4122 |
| Fire Prevention Construction Inspections | (New Construction Inspections) | (425) 452-4254 |
| Fire/Life Safety Systems Impairments | impairmentnotification@bellevuewa.gov | (425) 452-6872 |
| Construction Inspection Requests (IVR Line) | www.mybuildingpermit.com | (425) 452-6875 |

FIRE PREVENTION

| Ken Carlson | Fire Marshal | (425) 452-6874 |
|-------------|-------------------------|----------------|
| Erin Clarke | Senior Office Assistant | (425) 452-4561 |

FIRE PREVENTION – PLAN REVIEW

| FireReview@bellevuewa.gov | General Plan Review Questions | (425) 452-4122 |
|-------------------------------------|---------------------------------|----------------|
| FireConstructionInsp@bellevuewa.gov | New Construction Inspections | (425) 452-4254 |
| Travis Ripley | Asst Fire Marshal- Plans Review | (425) 452-6042 |
| Bill Lehner | Fire Plan Reviewer | (425) 452-2925 |
| Sean Nichols | Fire Prevention Officer | (425) 452-2926 |
| Derek Landis | Fire Prevention Officer | (425) 452-4112 |
| Glen Albright | Fire Prevention Officer | (425) 452-4270 |

FIRE PREVENTION – INSPECTION STAFF

| Kevin Carolan | Asst Fire Marshal-Inspections & Investigations | (425) 452-7832 |
|-----------------|--|----------------|
| Scott Gerard | Fire Prevention Officer | (425) 452-6808 |
| Steve Sexton | Fire Prevention Officer | (425) 452-2803 |
| Dennis Warner | Fire Prevention Officer | (425) 452-6011 |
| Brooke Robinson | Fire Prevention Officer | (425) 452-5231 |
| Loren Charlston | Fire Prevention Officer | (425) 452-4376 |
| Dane Waisanen | Fire Prevention Officer | (425) 452-4256 |
| Keith Gordon | Fire Prevention Officer | (425) 452-6034 |

MAJOR PROJECTS COMPLETED THIS YEAR

Our staff were responsible for conducting 6,573 inspections on construction projects and had a hand in seeing 2,001,726 square feet of major projects obtaining either a Temporary Certificate of Occupancy or a Certificate of Occupancy. Following are some of the more notable projects:



Bennett Elementary School 17900 NE 16th Street

This 82,000-square foot new school was built on the same property as the existing and opened in the fall.



Ford of Bellevue Reconstruction

Following a devastating multi-million-dollar fire in April 2015, a completely reconstructed facility opened this year.



Center 425 415 106th Avenue N.E. • 16 Stories

- 355,362 Gross SF
- 8 levels of Underground Parking
- Amazon is a major tenant



Lincoln Square Expansion 410 Bellevue Way NE

- 120 Room Hotel
- 200 Condominiums
- 545,000 SF Office Space
- 392,000 SF Retail space



Spring District Buildings A, B, C, D, & E

- 5 buildings ranging in height from 5 to 9 stories
- 309 housing units
- 463,350 s.f. which includes 14,000 s.f. of retail



Newcastle Commons

This 53-acre project is being developed on the site of the old Mutual Materials Brick Plant. When completed the site will include apartments, townhouses and retail.

The following buildings were completed this year:

- Block 2 Buildings A, B, C, D, E, F & G
- Block 3 Building A
- Block 5 Buildings A, B, C, D & E



GIX 12280 NE District Way

GIX is a global partnership between the University of Washington and Tsinghua University (China).

A grand experiment in educating entrepreneurs, to be run by two universities on opposite sides of the Pacific. The University of Washington and China's Tsinghua University opened the doors to a graduate institute in Bellevue.

The Global Innovation Exchange, or GIX, marks the first time a Chinese research university has established a physical presence in the United States.

The building, in the Spring District of Bellevue, was funded through a \$40 million donation from Microsoft, and it features one of the largest and most advanced "maker spaces" in the region for prototyping new technologies. Its founders expect the new students to tackle some of the world's most pressing problems in areas like health and climate change.

Renton Risdon Middle School 6928 116th Avenue S.E., Newcastle

This 119,000-square foot new elementary school opened in the fall after nearly 2 years of construction at a cost of approximately \$46,000,000.

ANNUAL OPEN HOUSE

Every year the Fire Department opens the doors to every one of our 9 stations and invites the citizens of Bellevue and our 6 contract cities in. The Prevention Division is an active participant in the Open House as are all the Divisions of the Fire Department.

The Open House allow us an opportunity to answer questions, explain how the Fire Department operates and steps that our citizens can take to minimize the likelihood they will experience a fire. If they do experience a fire, we demonstrate wrong ways to attempt to extinguish a fire and the correct way.







The Open House coincides with Fire Prevention week, an event designed to raise awareness of Fire Prevention. This year's theme is "Every Second Counts" "Plan 2 Ways Out".

In a fire, seconds count. Seconds can mean the difference between residents of our community escaping safely from a fire or having their lives end in tragedy. Some key points:

- Have an escape plan
- Practice your home fire drill twice a year. Conduct one at night and one during the day with everyone in your home, and practice using different ways out.
- Teach children how to escape on their own in case you can't help them.
- Make sure the address of your home is clearly marked and easy for the fire department to find.
- Close doors behind you as you leave—this may slow the spread of smoke, heat, and fire.
- Once you get outside, stay outside. Never go back inside a burning building.



FIRE PREVENTION TRAINING FOR FIREFIGHTERS

The Bellevue Fire Department strives to inspect every building in our service area except single family homes every other year and multi-family buildings that lack a fire alarm or fire sprinkler system annually. To achieve that goal inspections are divided between Fire Prevention staff who work during business hours Monday—Friday and firefighters who work 24-hour shifts. Firefighters inspect buildings near their station that are 3 stories or less in height and are businesses, stores and apartments or condominiums. Fire Prevention staff inspect all other structures.

One of the challenges that we have is to provide firefighters the appropriate training to competently perform the inspections. Firefighters are shift workers and when working they can be called away from the fire station at any time to respond to an emergency call which can make training delivery a challenge.

Many of our more tenured firefighters were provided a week of fire prevention training as part of their recruit academy which provided a solid foundation for them throughout their career. Because of additional required training, there has not been an opportunity to provide any fire prevention training during the recruit academy for well over a decade. In the years since, many methods have been attempted to fill the need ranging from a Fire Prevention Officer dedicated to providing the training in person as their sole focus to videos produced on a variety of topics.

This year a different approach was taken where focus topics were highlighted in narrated power point presentations that firefighters can watch as they have an opportunity and if they have additional questions they are encouraged to schedule time with their District Inspector. These required trainings are delivered on a quarterly basis and must be logged into a data base to document they have been completed.

The modules that were delivered this year:

- Inspection Basics
- Inspecting the Outside
- Scene Preservation







FIRE INVESTIGATION PROGRAM



WE MADE A NUMBER OF CHANGES RELATED TO OUR FIRE INVESTIGATION PROGRAM:

Personal Protective Equipment (PPE). Fire investigators typically spend much more time on a fire scene investigating the origin and cause of the fire than do the firefighters who extinguish the fires. The scene needs to be documented, witness interviewed, evidence collected and often times a lot of "digging" or "sifting" through the ruble. Fire Investigators as a group have a significantly higher incidence of cancer attributed to being exposed to the chemicals associated with fires.

To decrease the investigators exposure to these chemicals we have moved away from cotton coveralls and now utilize "TyChem" disposable coveralls; latex gloves are used under the more durable working gloves and the investigators are required to undergo a "gross" decontamination prior to leaving the fire scene so that carcinogens are not carried with them to other locations. Prior to entering a fire scene fire, the environment is evaluated to ensure that it is less than 200° F, that any gases present are below threshold limits and the area has been properly ventilated. To aid in the evaluation, the investigators utilize an "app" installed on their smart phones that also records the conditions that can be recalled when the investigation report is being prepared. The investigators also utilize full face respirators with disposable cartridges that are fit tested annually.

There is always an investigator on call 365 days a year 24 hours/day. The investigators are required to arrive on a fire scene within one hour and are assisted by firefighters or other investigators. For safety reasons, they never work alone.

This year we were also very fortunate to acquire a new fire investigation vehicle that is fully equipped with all the equipment needed to conduct fire investigations.

TALLER BUILDINGS

In October, City Council raised the allowable height of buildings in the Central Business District from 450' to 600' as part of the Downtown Livability Initiative.

The change in allowable building height has compelled the Fire Department to re-evaluate our ability to adequately respond to emergencies in our high-rise buildings and have identified the need for two changes that we will be discussing with the City Council in the near future.



1. Qualified Building Representative

No one knows a building better than those who own and manage the building. In an emergency, a Qualified Building Representative would be an invaluable asset to the Incident Commander in all of the following areas and more:

- Fire/life safety system impairments
- Operation of the fire alarm system, smoke control system and public-address system.
- Sprinkler system floor control valves, fire pumps and pressure reducing valves.
- Building Management System
- Elevators
- Hazardous materials (quantities, locations and containments)
- Emergency evacuation procedures.

The Fire Department will be asking that these individuals be available via phone within ten minutes and on site within one hour upon request for all highrise buildings.

2. Firefighter Air Systems

In order to maximize the time that firefighters can stay in a building during a fire, we will be asking for the ability to require Firefighter Air Systems in all new highrise buildings and underground transportation tunnels that exceed 300' in length. These systems provide the ability to refill SCBA bottles in the building by use of an "air standpipe" rather than having SCBA bottles transported in and out of the building.

FIRE ALARM SYSTEMS



When the State of Washington adopted the 2015 International Fire Code effective July 1, 2016, a new requirement provided that all fire alarm system designs must be reviewed by a NICET III or licensed professional engineer and all inspection, testing, maintenance and programming not defined a "electrical construction trade" by RCW 19.28 must be completed by a NICET II beginning July 1, 2017.

The Washington State Building Code Council subsequently modified the start date to July 1, 2018 due to concerns that there would be an inadequate number of personnel meeting the NICET requirements by July 2017 thereby affording the industry more time.





KNOX BOX PROGRAM



The Bellevue Fire Department, like many fire departments, utilizes a secure box (Knox Box) that allows our firefighter to gain immediate access into secure buildings, campuses, residences and commercial properties when it matters most. Removing barriers to entry reduces injuries to responders and minimizes property damage.

The integrity of our Knox Box program is something that we take very seriously and we continually evaluate steps that we can take to improve. We recently have entered into a beta testing for a new product that the Knox Company is working on along with several other fire departments. If the beta testing demonstrates that the integrity of the Knox Box program will be enhanced, we will likely move to implement the changes as budget and time allows.



CONFIDENCE TESTING

January 1, 2018, we implemented a new program to proactively manage the oversight of confidence testing in the City of Bellevue and our contract cities. All contractors performing confidence testing must now submit their testing reports online via <u>www.</u> <u>TheComplianceEngine.com</u>. With this new program, building owners/managers are notified 30 days in advance of when their fire/life safety systems are due for testing with follow up if the reports are not submitted.

There has been a learning curve for our staff and customers as we all grow accustomed to the new program. Brycer who owns and manages the web site has been very responsive to any questions or concerns that either our customers or we have raised and overall, implementation has gone very smooth. There are a number of cities in the region that implemented at the same time as Bellevue (Mercer Island, Redmond and Shoreline) or shortly thereafter (Bothell and Seattle) with a number of other cities considering implementation in the near future.

Anyone in the Bellevue Fire Department can log into the site and see the status of any fire/life safety system and can access up to date contact information for building owners/managers which can be a very useful tool for our staff.

Every fire/life safety system is required to be tested when it is first commissioned and thereafter at regular intervals to ensure that the system will still operate as designed. In an ideal world, our involvement is not necessary to ensure that the maintenance, testing and repairs occur. In fact, the various National Fire Protection Association (NFPA)



standards make it clear that it is the responsibility of the property owner or designee to ensure that these systems are properly maintained, tested and repaired if deficiencies are found. There are a lot of building owners/managers that don't need us to tell them to test, inspect, or repair their fire/life safety systems, but unfortunately there are some that do.

Nationally and locally, it is estimated that between 30 and 50% of all fire and life safety systems go without mandatory inspection, testing and maintenance. One year after implementing this program, 93.6% of all fire/life safety systems in Bellevue are up-to-date with the required inspections. There is significant room for improvement with Kitchen hood suppression systems—as a group, only 43% of these systems are current whereas, most every other fire/life safety system is 100% current.

SOUND TRANSIT

Construction is progressing on every segment of the East Link Extension. Construction will continue through 2022 followed by testing and Pre-revenue Operation in 2023. The six East Link stations as well as the downtown tunnel in Bellevue will be constructed in separate segments:

Tunnel:

(Under Construction) Half mile of tunnel from Main Street to NE 6th Street. Work began March 2016; tunnel excavation began Feb. 2017. Heavy (civil) construction to end 2nd Quarter 2020.

• Watch time lapse video of tunnel excavation (Aug. 2017) <u>https://www.soundtransit.org/blog/</u> platform/dig-it-bellevue-light-rail-tunnel-update

South Bellevue Segment:

(Under construction) I-90 East Channel Bridge to SE 4th Street on 112th Ave SE. Work began Spring 2017; expected to end 4th Quarter 2020 and includes construction of the South Bellevue Station including a new parking garage and work on Bellevue Way and 112th Avenue SE to build the guideway and other infrastructure.

- Visit the South Bellevue Station Frequently Asked Questions webpage. http://www.soundtransit.org/node/10376
- Information on construction activities/sequencing (May 2017) https://transportation.bellevuewa.gov/ projects/east-link-light-rail/station-frequently-askedquestions/south-bellevue-station-faqs/

Central Bellevue Segment:

(Under construction) SE 4th Street on 112th Ave SE to 124th Ave NE. Work began Spring 2017; expected to end 4th Quarter 2020 and includes:

• East Main Station

https://www.soundtransit.org/Projects-and-Plans/ East-Link-Extension/Stations/East-Main-Station

- Bellevue Downtown Station
 https://www.soundtransit.org/Projects-and-Plans/
 East-Link-Extension/Stations/Bellevue-Downtown Station
- Wilburton Station
 <u>https://www.soundtransit.org/Projects-and-Plans/</u>
 East-Link-Extension/Stations/Wilburton-Station
- Spring District/120th Station
 https://www.soundtransit.org/Projects-and-Plans/
 East-Link-Extension/Stations/Spring-District-120th-
 Station
- Information on construction activities/sequencing (June 2017)

https://www.soundtransit.org/sites/default/files/ project-documents/east-link-central-bellevue-openhouse-display-boards-06062017.pdf

BelRed Segment:

(Under construction) 124th Ave NE to intersection of NE 20th St and 136th Ave NE. Work began Spring 2017; expected to end 3rd Quarter 2020.

- Visit the BelRed/130th Station webpage for more information about design and construction: <u>https://www.soundtransit.org/Projects-and-Plans/</u> East-Link-Extension/Stations/Bel-Red-130th-Station
- Information on construction activities/sequencing (June 2017):

https://www.soundtransit.org/sites/default/files/ project-documents/east-link-belred-constructionkickoff-open-house-display-boards.pdf

Operations & Maintenance Facility:

Demolition of a half dozen buildings started in December to make way for the new \$449 million Operations and Maintenance Facility (East) that is scheduled to be completed in December 2020.

MAJOR PROJECTS ISSUED





Our staff were responsible for reviewing 2,987,267 square feet of new major projects this year. Following are some of the more notable projects:

Stevenson Elementary

14220 NE 8th Street

This 106,000-square foot new school was built on the same property as the existing and is expected to open in next fall. When completed, the new school will be the largest elementary school in the Bellevue School District.

Bellevue College Student Housing 3000 Landerholm Cir SE O

A new 132,725-square foot 350 bed apartment-style student housing building (147 units).

Crossroads Senior Living 1390 158th Pl NE

New six story mixed use building containing 185 apartment units for seniors, commercial lease space and structured parking.

Crossroads Village

15751 N.E. 15th Street

The development will offer 176 units, with 15,680 square feet of non-residential, amenity and commercial space, for a total of 350,000 square feet. The 7.75-acre site is significant in part because it borders Crossroads Bellevue Mall to the south and Crossroads Park to the east, two large markers of Northeast Bellevue. It is located on the site formerly occupied by Haggen/Top Foods.

One88

188 Bellevue Way

104 unit, 21 story condominium project is the first new high-rise condominium project in the downtown core to be built since the Washington Square and Bellevue Towers were constructed nearly a decade ago.



Wilburton Elementary 12300 Main Street

A new \$37,000,000 two story elementary school that is approximately 83,760 square feet. The school will support about 650 future students from the downtown Bellevue and Wilburton neighborhoods, which will help overcrowding at Enatai, Woodridge and Clyde Hill elementary schools.

Wilburton marks the first new elementary school that's been built since 1972 when Somerset Elementary was built.

Spring District Projects:

- AMLI 1375 121st Ave NE 17
 6 story, 104 unit residential building
- Building 16 1288 123rd Ave NE 11 story office building
- Building A 12258 NE 12th Ln
 9 story, 118 unit residential building
- Building B 12288 NE 12th Ln 6 story, 110 unit residential building
- Building C 12269 NE 12th Ln 6 story, 60 unit residential building

B2

10625 Main St

163-unit apartment building. 5 levels of wood frame construction over a concrete podium.

PERSONNEL



Glen Albright

Glen joined the Bellevue Fire Department in January and is assigned to conduct plan reviews in our Development Review Team. This is a new position created by the significant ongoing development activity.

Glen previously worked since 2001 for the Ventura CA Fire Department doing plan review, inspections, fire investigations and assisting with Public Information Officer duties. Prior to his tenure with Ventura Fire, Glen worked for the UCLA Fire Department doing plan review and inspections and was a member of the Hazardous Materials Response Team. He began his career with the Mount Prospect IL Fire Department doing plan review, inspections and fire investigations.

Glen has a Bachelor of Science Degree in Fire Protection Engineering and Safety Technology from Oklahoma State University. While at OSU, Glen worked for the International Fire Service Accreditation Congress assisting in the verification that fire training facilities were training to the most current nationally recognized training standards. Additionally, while at OSU, Glen assisted at the State Fire Training academy.

In his spare time, Glen likes to volunteer in ways that give back to the fire service and the community. He has served on four validation committees for the International Fire Service Training Association for training manuals related to prevention and investigation. Glen spent the last nine years as a member of the Ventura County Sheriff Department's Search and Rescue Dive Team.

For recreation Glen enjoys SCUBA diving and fishing along with spending time with his wonderful wife, four adult children, and beautiful granddaughter.



Erin Clarke

Erin joined the Bellevue Fire Department as our Senior Office Assistant in February as a result of implementation of a new program to increase our oversight and

management of our confidence testing program. Erin also provides support for the entire Fire Prevention Division and reports directly to the Fire Marshal.

Erin and her husband Keith recently moved to Kirkland from Hawaii following Keith's retirement from the military. While living in Hawaii, Erin was the Employee Relations Manager for Ganir & Company and brings a depth of skills and experience with her.

Erin recently obtained her certification as a Youth Fire Setter Intervention Specialist.





Dane Waisanen

Dane Waisanen joined the Bellevue Fire Department in January coming to us from Clackamas Fire District #1, bordering the City of Portland, Oregon where he worked as Fire Inspector

and Fire Investigator.

He was raised in Southcentral Alaska and began his public safety career in 2005 as a full-time paid Firefighter/EMT in Fairbanks, Alaska. In 2007, he was promoted to the rank of Fire Engineer and became a fire service instructor. He holds a degree in Emergency Services from the University of Alaska Fairbanks and many other fire service credentials.

In 2010 Dane was hired by the Office of the Alaska State Fire Marshal and assigned to Department Headquarters in Anchorage, Alaska. As a job requirement, he attended the Alaska Law Enforcement Training Academy in Sitka, Alaska. After receiving his police officer commission, his primary duties included fire and explosion investigation alongside the Alaska State Troopers and statewide fire code enforcement. He has attended the National Fire Academy on multiple occasions and received training and education on interviewing/interrogation techniques, courtroom testimony, and fire/arson investigations. He has also attended Basic Crime Scene Photography School, Field Training Officer (FTO) School, and Post Blast Investigator School, instructed by the Federal Bureau of Investigation—Anchorage Division. Additionally, he has been a member of the International Association of Arson Investigators (IAAI) since 2012.

Sam Wells

Sam joined the Bellevue Fire Department in April 2016 and resigned in September to pursue other career opportunities. Sam had extensive experience performing inspections,

testing and maintenance of fire sprinkler and alarm systems; fire pumps; fire extinguishers; and backflow prevention devices prior to joining the department and his expertise in these areas will be sorely missed.



Nannette Heye

Nannette joined the Bellevue Fire Department in September 2013 as a Senior Office Assistant. During Nannette's tenure with the department she immersed herself into process

improvement efforts to increase the efficiency and effectiveness of the Division.

She had a key role in the numerous activities surrounding the department's 50 year anniversary, she was a very active member of the Bellevue Firefighters Community Support Foundation and part of the committee taking on the restoration of "Miss Belle". Nannette took a similar position with Eastside Fire & Rescue which significantly reduced her commute time. Her can do attitude and warm smile will be missed!

BELLEVUE FIRE DEPARTMENT BELLEVUE, WASHINGTON

