













TABLE OF CONTENTS

Message From The Fire Marshal
Bellevue Fire Prevention Division Directory
Where Do We Spend Our Time?
Annual Open House
2016 Fire & Building Codes
Confidence Testing
East Link Light Rail
Fire Investigations
Notable Fires
Personnel Changes
Fire Department Employee of The Year

AT A GLANCE:

Yearly Inspections completed:

Buildings:	1,344
Occupancies:	4,285
New Construction:	5,344
Fire Reviews:	4,351
Fire Investigations:	39
Fire Prevention Staff:	15
Fire Marshal:	1
Senior Office Assistant:	1
Assistant Fire Marshals:	2
Fire Plan Reviewer:	1
Fire Prevention Officers:	10



MESSAGE FROM THE FIRE MARSHAL

The unfortunate reality is that the places we call home are also where the majority of fire deaths and fire injuries occur. U.S. fire departments responded to an estimated average of 358,300 home structure fires per year during 2010-2014. These fires caused an annual average of

- 2,520 civilian fire deaths,
- 12,720 CIVILIAN fire injuries, and
- **\$6.7** BILLION in direct damage.
- **93% oF** all structure fire deaths resulted from home fires.
- **ON AVERAGE, 7 PEOPLE** died in U.S. home fires per day.



The Oakland Fire: What Happened Inside the Ghost Ship

The death toll now stands at 36 from the <u>"Ghost Ship" Fire</u> in Oakland California. The fire was the deadliest structure fire in California in more than 100

years and the worst in the United States since The Station Nightclub Fire killed 100 people in West Warwick, Rhode Island on February 20, 2003.

Two residents of the <u>Chimney Condominiums</u> in Bellevue perished in late October from a 2-alarm fire.

Both incidents underscore the need for all of us to be vigilant about our surroundings. It is all too easy to become complacent and assume that you or your home won't become the next fire statistic.

There are some very basic steps you can take that will decrease your chances of experiencing a fire. I encourage you to inspect your home using this <u>checklist</u> prepared by the U.S. Fire Administration. It won't cost you anything but a few minutes of your time. Another simple step

A closed door may slow the spread of smoke, heat and fire.

you can take is to sleep with your bedroom door shut. That simple step can buy you time in the event you do experience a fire.

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

Sincerely

antoon

Ken Carlson Fire Marshal

BELLEVUE FIRE PREVENTION DIVISION DIRECTORY

General Information <u>Fire_Prevention@bellevuewa.gov</u>
Fire Prevention Plan Review (General Plan Review Questions)
Fire Prevention Construction Inspections (New Construction Inspections)
Fire/Life Safety Systems Impairments impairmentnotification@bellevuewa.gov 425-452-2050
Construction Inspection Requests <u>www.mybuildingpermit.com</u> 425-452-6875 (IVR Line)

FIRE PREVENTION

Ken Carlson	Fire Marshal	.425-452-6874
Lt. Bryan Gomez	Public Information Officer	.425-452-6995
Erin Clarke	Senior Office Assistant	.425-452-4561

FIRE PREVENTION - PLAN REVIEW

General Plan Review Questions <u>FireReview@bellevuewa.gov</u> 425-452- 4122
New Construction Inspections FireConstructionInsp@bellevuewa.gov 425-452-4254
Travis Ripley Assistant Fire Marshal-Plans Review
Bill Lehner
Sean Nichols Fire Prevention Officer
Derek Landis Fire Prevention Officer
Glen Albright Fire Prevention Officer

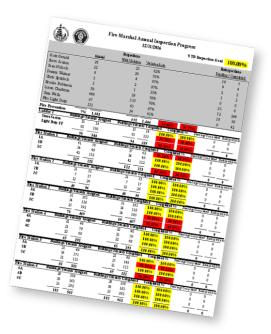
FIRE PREVENTION - INSPECTION STAFF

Kevin Carolan Assistant Fire Marshal-Inspections/Investigations
Scott Gerard Fire Prevention Officer
Steve Sexton Fire Prevention Officer
Dennis Warner
Brooke Robinson Fire Prevention Officer
Loren Charlston Fire Prevention Officer
Sam Wells
Dane Waisanen Fire Prevention Officer

WHERE DO WE SPEND OUR TIME?

Maintenance Inspections: Our goal is to inspect buildings every other year, except multi-family buildings that lack a fire alarm or fire sprinkler system which we aspire to inspect annually. This represents 1,436 buildings and 4,758 occupancies. In 2016 we inspected 1,344 buildings and 4,285 occupancies – 93.59% and 90.06% of our goal, respectively.

The significant increase in fire investigations and development activity were primary drivers that diverted our resources and led to falling short of our goal. Based on the increase in development activity, we will be hiring an additional Fire Prevention Officer in January 2017.



New Construction Inspections: In addition

to the maintenance inspections described

above, the Bellevue Fire Department, in conjunction with other departments in Bellevue and our contract cities, inspects fire/life safety systems, new buildings and structures and alterations to the same. In 2016, we performed 5,344 of these inspections.

FIRE REVIEW: We have a staff that is co-located with other Development Services staff to review fire/life safety systems and access to buildings to ensure that they meet applicable codes and standards. In 2016, we completed 4,351 such reviews.

FIRE INVESTIGATIONS: 2016 was a particularly busy year for our fire investigators as we were dispatched to 39 fire scenes, a 95% increase over our average dispatch rate of approximately 20 per year.

Aside from what has been mentioned already, our staff also spends a myriad of time on various activities such as responding to complaints, special events, fireworks displays and professional training.



ANNUAL OPEN HOUSE



OPEN HOUSE: Every year, Bellevue Fire opens each of our nine fire stations to the public to show them where we live and work, answer their questions, demonstrate hands-only CPR and cooking Do's & Don'ts. The annual Open House is typically scheduled to occur during National Fire Prevention Week (the Sunday to Saturday

week in which October 9th falls). That date proved to be a challenge this year due to the forecast of significant high winds and rain. Consequently, the Open House had to be rescheduled from Saturday, October 15th to Saturday, November 5th.

FIRE PREVENTION WEEK: Fire Prevention Week commemorates the Great Chicago Fire of 1911. On the 40th Anniversary of that fire, the Fire Marshals Association of North America (FMANA), the oldest membership section of the National Fire Protection Association (NFPA), sponsored the first National Fire Prevention Day, deciding to observe the anniversary as a way to keep the public informed about the importance of fire prevention. In May of 1919, when the NFPA held its 23rd Annual Meeting in Ottawa at the invitation of the Dominion Fire Prevention Association (DFPA), the NFPA both passed resolutions urging governments in the United States and Canada to support the



campaign for a common Fire Prevention Day. This was expanded to Fire Prevention Week in 1922. The non-profit NFPA, which has officially sponsored Fire Prevention Week since its inception, selects the annual theme for Fire Prevention Week. The chosen theme for 2016 was: *"Don't Wait, Check the Date! Replace Smoke Alarms Every 10 years"*.

FIRE PREVENTION WEEK HISTORY: When President Calvin Coolidge proclaimed the first National Fire Prevention Week on October 4–10, 1925, he noted that in the previous year some 15,000 lives were lost to fire in the United States. Calling the loss "startling", Coolidge's proclamation stated: "This waste results from the conditions which justify a sense of shame and horror; for the greater part of it could and ought to be prevented... It





is highly desirable that every effort be made to reform the conditions which have made possible so vast a destruction of the national wealth".

Fire Prevention Staff worked along with members of every division in the department in a variety of roles, collectively pulling off another very successful, well attended Open House!

CLICK 2 ENTER

With the adoption of the 2015 International Fire Code, Bellevue Fire is now requiring the use of Click 2 Enter or other authorized devices on automated gates. Previously, the use of a Knox switch was allowed.

Click 2 Enter allows first responders to open the gate as they are approaching, rather than stopping to dismount their vehicle, release the switch and re-entering the vehicle, all of which adds precious time to our response.

The Click 2 Enter system is only required on new installations, particularly gate permit applications received after July 1, 2016.

More detailed information can be found online at:

<u>http://www.ci.bellevue.wa.us/pdf/Development%20Services/codes_2015IFC_read-only.pdf</u>

See Section 503.6 "Security Gates"

• <u>www.click2enter.net</u>

2016 FIRE & BUILDING CODES

IBC AMENDMENTS: Beginning July 1st, 2016 the International Building Codes went into effect throughout the State of Washington. The State of Washington makes certain amendments to the codes and allows cities and counties to further amend the codes provided the amendments do not diminish the performance standards of the State Code.



Prior to advancing any proposed amendments, we reached out to our stakeholders to seek their input. Their input centered on these issues:

- Sprinklers in single family homes
- Impacts of the new Washington State Energy Code
- Requirements for retro-active luminous markings in high-rise stairs
- Elevator hoistway pressurization in lieu of lobbies for fire service elevators
- Requirements for existing high-rise buildings to be equipped with emergency responder radio systems
- Current standpipe design pressures are not achievable.
- Structural cantilevered design for buildings taller than 240'
- Fire pump room requirements should be located in IBC, as well as the IFC

On April 25, 2016 Bellevue City Council was briefed in an extended study session on the significant state or national changes in the new codes:

- Beginning July 1, 2017 in the State of Washington:
 - Fire alarm systems must be reviewed by an individual certified in fire alarms or a licensed professional engineer prior to application for permits
 - All inspection, testing, maintenance and programing shall be completed by an individual certified in fire alarms
- 5-story wood frame buildings are now allowed over 2 stories of concrete construction the total height not exceeding 70'
- All building code provisions for existing buildings are now located in the IEBC

• New requirements for carbon dioxide use in beverage dispensing and marijuana production and processing

City Council was also briefed on a number of significant proposed changes in Bellevue's amendments to the Building and Fire Codes:

- Evaluation of mobile repeaters that would enhance radio communication in existing buildings and provide developers of some new buildings a lower cost option than installing in-building radio systems.
- New regulations for mobile food vending
- Construction mitigation measures for large wood-framed buildings under construction
- Outsourcing the oversight of the Confidence Testing Program

Bellevue City Council approved amendments to the 2015 International Fire & Building Codes on June 6, 2016 with an effective date of July 1, 2016. The entire set of codes can be viewed online at <u>www.bellevuewa.gov/12408.htm.</u>

ON-DEMAND FUELING

The traditional way to fuel your boat has been at a dockside fuel station or via portable containers. You likely fill your car at a gas station. This summer, we encountered a marine craft fueling operation on Lake Sammamish. The Bay Area and Los Angeles began to see curbside fueling operations, as well.

The International Fire Code only allows diesel fueling to occur from marine vessels and mobile fueling is primarily limited to construction sites and farming operations.

Currently, the 2015 edition of the International Fire Code is in effect throughout the State of Washington and is updated every three years. It is likely that the 2018 edition of the International Fire Code will address these services and, if not, the State of Washington may.

International Fire Code Section 2306.2.5 Portable tanks.



"Where approved by the fire code official, portable tanks are allowed to be temporarily used in conjunction with the dispensing of Class I, II or III liquids into the fuel tanks of motor vehicles or motorized equipment on premises not normally accessible to the public. The approval shall include a definite time limit."

CONFIDENCE TESTING



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 30-50% of all fire and life safety systems go without mandatory inspection, testing and maintenance. To correct this problem, we have contracted with The Compliance Engine (TCE), a cloud-based service to efficiently manage the process by streamlining and standardizing the reporting process. TCE will help us towards our goal of obtaining 100% compliance with our adopted codes, improving our departmental efficiencies and delivering on the goal we all share of improving public safety. Beginning January 1, 2017, Bellevue, along with the cities of Mercer Island, Redmond and Shoreline, will be requiring contractors performing confidence testing to submit their testing reports to TCE.

Brycer, who owns TCE, will create and manage a database of all the fire/life safety systems in Bellevue and our contract communities. They will proactively notify building owners when testing of their systems is required and follow-up if testing reports are not submitted. We will have access to this database, as well, and can quickly determine which buildings and systems are in compliance and which are not. Brycer will also provide us access to analytical reports that will help us to identify any trends for which we should be paying attention.

On October 12th and 13th, town hall meetings were held in Redmond and Shoreline for contractors performing confidence testing to explain why the four cities are implementing TCE and to afford them the opportunity to ask any questions they may have.

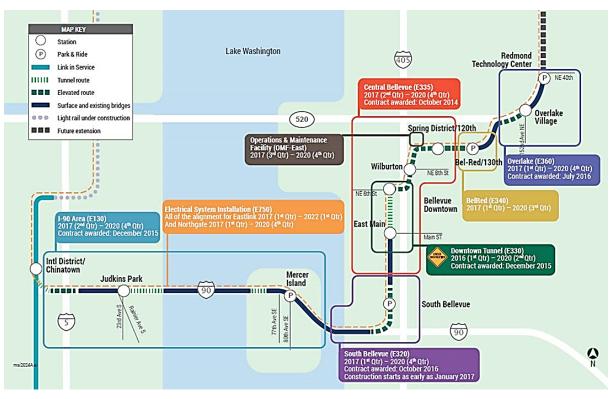
We anticipate that implementation of this program will generate an increase in workload for the Fire Prevention Division and, as a result, we are planning on moving our current part-time Office Assistant position to a full-time position to assist with the oversight of this program.

EAST LINK LIGHT RAIL

East Link light rail started construction in 2016. Walls to what would appear like a major compound were constructed at the corner of 112th Ave NE and Main St. These are sound barriers to mask construction noise of the south portal construction. This is the beginning of the tunnel excavation which will start early 2017. This excavation coincides with work that was done on 110th Ave NE, between NE 4th St. and NE 6th St., to shore up utilities and prepare for the north tunnel portal.

Many of the remaining East Link construction contracts will start portions of work in 2017 as the contracts were awarded in either 2015 or 2016. The permitting of these has also been in full steam with building permits for all the stations being reviewed this year.

Another worthy note to 2016 was the Sound Transit Boards ST3 plan, approved for the November ballot, which led to voters approving the measure. This will produce future work in Bellevue with a plan to extend light rail to Issaquah.



EAST LINK LIGHT RAIL CONSTRUCTION



Temporary Sound Walls being created at the South Tunnel Portal



Advance Soil remediation work near the North Tunnel Portal

FIRE INVESTIGATIONS

BREAKDOWN OF FIRES: 2016 was a particularly busy year for our fire investigators as we were dispatched to 39 fire scenes whereas typically we are dispatched to approximately 20 fires per year. In 2015, we investigated 20 fires.

- 33 of the fires were in residential occupancies
- 12 of the fires originated on the exterior (3 related to use of barbeques)
- 6 of the fires started in garages
- 3 of the fires were related to illegal grow operations
- 1 of the fires was attributed to arson

The Bellevue Fire Department is responsible to investigate all fires in order to determine the origin and cause of the fire. However, a fire investigator is only requested to respond to the fire scene when the following criteria are met:

- All known or suspected incendiary (arson) fires.
- A fire-related injury or fatality has occurred.
- All fires with a significant (\$10,000 or more) fire loss, except vehicle fires, or
- If the complexity of the fire is beyond the Incident Commander's capabilities to determine the origin and cause.



NOTABLE FIRES

JANUARY 26, 2016

January 26- Attempted murder/suicide resulted in a fatality. The suicide victim started a fire in their residence of a multifamily building prior to committing suicide.

APRIL 14, 2016

This fire occurred when a new driver failed



an attempted u turn and ended up striking a natural gas meter and the house.

APRIL 27, 2016

Embers from an unattended recreational fire was the most likely cause of this fire that extended to the exterior of the home and into the attic.



JULY 26, 2016

The cargo portion of this truck was partially consumed as a result of this gas-powered attic vacuum operating in the truck in close proximity to plastic wall sheathing.



SEPTEMBER 27, 2015

This fire originated on the lower exterior deck of the dwelling and was most probably the result of discarded smoking materials. The fire extended to the dwelling, attached elevated deck and neighboring fence before it was extinguished.



JULY 30, 2016

This fire occurred after the barbeque was inadvertently left on "high" for nearly 6 hours. Radiant heat ignited the enclosure and extended to the house. The barbeque did not appear to have been installed in accordance with the manufacturer's installation instructions.



ILLEGAL GROW OPERATIONS

We have had three fires in illegal marijuana grow operations; the cause of each fire was related to overloaded electrical wiring or circuits.







PERSONNEL CHANGES

ADRIAN JONES



Adrian Jones began his career at the Bellevue Fire Department as a Fire Plan Reviewer in May 2000 and retired in March. During Adrian's tenure in Bellevue, he reviewed plans for most of the high-rise buildings throughout Bellevue: Lincoln Square, Washington Square, The Bravern, Avalon Safeway, City Center East, Bellevue Towers, to name just a few.

Adrian was both witness to, and an active

participant in, a period of significant transformational issues. He had a large role in the Development Services Initiative (DSI) that started in 2001 which significantly reshaped the way Development Service is organized and how it delivers our services. Adrian was also instrumental in the transition from the Uniform Fire Code to the International Fire Code, and also from paper to paperless permitting. His significant experience and expertise leaves us with some large shoes to fill!

BILL LEHNER



Bill Lehner began his career with the Bellevue Fire Department as the Assistant Fire Marshal in January 1999, retired in September of 2006, and rejoined us in March as a Fire Plan Reviewer. He spent the last 10 years working on.a farm north of Spokane before deciding to relocate back to Western Washington.

You can count on Bill to be very thoughtful, energetic and quick to deliver a smile. He is well respected throughout the fire protection industry for his vast experience and exceptional customer service.

We are very fortunate to have Bill back with us.

SAM WELLS



Sam began his career with the Bellevue Fire Department on April 11. He has 7 years of experience performing inspections, testing and maintenance of fire sprinkler and alarm systems, fire pumps, fire extinguishers and backflow prevention devices.

Sam is a Bates graduate with an Associate of Arts Degree in Fire Science; he holds a number of certificates including Firefighter 1, NICET Level II Inspection and Testing of Water Based Systems, Washington State Fire Sprinkler Certificate of Competency and Specialty Plumber. Sam is also a former volunteer firefighter with Mountain View Fire and Rescue (Auburn).

Outside of work, Sam enjoys the outdoors, sports and spending time with his friends and family.



Chris resigned on November 23rd to take a position with the Pierce County Office of Emergency Management. Chris joined us in 2013 after relocating from Baton Rouge Louisiana with his wife and son. In the short period of time between jobs, Chris will be returning to Louisiana to complete the restoration of a home that he still owns in Baton Rouge, LA that was subject to historic flooding.

During Chris' three year tenure with Bellevue Fire, Chris served as a Fire Investigator, a member of the Department's Safety Committee and the District Inspector assigned to Stations 3 and 6 (an area that is experiencing significant development activity in the Spring District), the Bel-Red area and Crossroads. Chris's commute will go from 2 hours each way (Lakewood to Bellevue) to a mere 10 minutes each way! Best of luck, Chris!

CHRIS SPURLOCK

FIRE DEPARTMENT EMPLOYEE OF THE YEAR

SCOTT GERARD



As nominated by Fire Prevention Officer, Loren Charleston:

"I would like to nominate Scott Gerard for this year's non-uniformed position.

Reasons for the nomination include but are not limited to the following:

I believe Scott exemplifies our city mission of One City by his daily example of being a teacher, inspector, investigator, trainer, peer, lead and coworker. From my first day on the job, Scott has been a great adult teacher that allows me to be successful within the City. I can reach out to Scott at any time and he will assist me in finding the

right answer. That sometimes involves him only coaching and other times it is a learning process that allows me to see the answer in the code(s) and then put it in a real-life situation that helps me to retain and understand the answer.

Scott has stepped up and is documenting our processes for current and new employees. This will make sure we are consistent within the city. Scott's attention to detail and professionalism is something that I try to emulate daily with my internal and external customers. Scott is always patient with customers and doesn't just want compliance but also wants to educate and provide Nordstrom-level customer service. I see a great partnership growing between Scott and his supervisor. I feel like I'm learning every day since Scott is on our team."

Scott was nominated by one of his peers and voted on by the entire Fire Department as this years' non-uniformed employee of the year!

Congratulations Scott and thank you for all you bring to the department.



Thank you for taking the time to read about us. If you have any questions, please reach out to any of us.







CITY OF BELLEVUE FIRE DEPARTMENT 2016 FIRE PREVENTION ANNUAL REPORT