

2011 Fire Prevention Annual Report



Personnel Changes



After 30 years as a Fire Prevention Officer, Lead Fire Prevention Officer Ron Tuininga retired. Ron was very passionate about his job. His institutional knowledge and leadership will be sorely missed. While he leaves us with some big shoes to fill, he can rest assured that he made a very positive difference during his long tenure with the department.



Travis Allen, Assistant Fire Marshal – Plan Review, left for the private sector as a Fire Protection Engineer with Aegis Engineering. During his tenure with Bellevue Fire (2006 – 2011), Travis was a key player in successfully managing the incredible building boom.



After a nationwide search to replace Travis Allen, Travis Ripley was promoted to the position of Assistant Fire Marshal – Plan Review. Travis was formerly a Fire Prevention Officer assigned to plan review.

Projects and Initiatives

King County Inspections. While fire departments throughout the County provide fire suppression and emergency medical services in unincorporated areas of the County, King County is responsible for inspection of existing buildings. The King County Fire Marshal's office has experienced significant staffing reductions that have all but eliminated their ability to perform annual inspections in unincorporated King County. The King County Fire Chiefs worked with King County DDES (Department of Development and Environmental Services) with the goal of identifying a mechanism that would allow fire departments throughout the County to conduct the annual inspections.

Bellevue Fire Department was one of two pilot agencies (Woodinville Fire & Rescue the other) that entered into an interlocal agreement authorizing us to conduct inspections in King County Fire District 14. The pilot project was considered a success, and other fire departments are now in the process of executing similar interlocal agreements with King County.



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Plan Review. We have taken this last year to review our permit review processes and analyze possible changes. As of late 2011, we moved from a model where plans were sent from one department to the next (linear review) and each review had to be completed before the next started, to a process where plans are distributed to each and every department at the same time (concurrent review). We have also worked on assigning plans to a reviewer within three days of permit application. These changes were made in response to customer feedback and to ensure that customers know early on who to contact if they had questions about their permit. These process changes have resulted in significant reductions in turnaround times and more satisfied customers.

Private Fire Hydrants. Fire hydrants spend most of their time unused and ignored, yet they are called upon in a moment's notice to provide fire flow for the protection of a business or home. They are an indispensable facet of the overall fire protection features of a building and the community. There are approximately 140 private fire hydrants within the Bellevue Fire Department's service area that are necessary for the fire protection of a building. These hydrants are useless unless regularly maintained.



We significantly enhanced the readiness of these private hydrants in 2011 by requiring that the hydrants be painted red to distinguish them from city-owned hydrants and requiring that owners of these hydrants conduct [annual confidence testing](#) of them.

HOME SAFETY SURVEY

City of Bellevue Fire Department
P.O. Box 50812
Bellevue, WA 98008 (206)453-4873

Address: _____ Resident Name: _____
 Business Contacted By: _____ Date: _____

OUTSIDE THE HOME

Yes No N/A Are house numbers visible from the street?

Yes No N/A Are combustible materials and overgrown vegetation kept away from the house?

SMOKE ALARMS and CARBON MONOXIDE DETECTORS

Yes No N/A Are smoke alarms installed in every room, including the bedrooms? (In each sleeping room, with outside of sleeping rooms? Smoke alarms should not be installed within 5 feet of air ducts or within 10 feet of ceiling or open protruding wires. See the manufacturer's instructions.)

Yes No N/A Are smoke alarms installed and maintained properly? (Batteries replaced at least annually and/or when device is "chirping," and the test procedure repeated? (Smoke alarms should be replaced with new ones if they are more than 10 years old.)

Yes No N/A Are carbon monoxide detectors installed in the house and functional equipment?

HEATING

Yes No N/A Are combustible materials and bedding kept at least 3 feet away from portable space heaters?

Yes No N/A Are gas furnaces, boilers, and hot water heaters at least one foot away from "combustible walls"?

Yes No N/A Are gas furnaces, boilers, and hot water heaters properly vented to the outside?

Yes No N/A Are the furnaces/boilers/water heaters properly vented to the outside?

Yes No N/A Does the furnace have a metal vent pipe?

Yes No N/A Are the chimneys kept unobstructed or cleaned regularly?

KITCHEN

Yes No N/A Are stove tops and counter tops free of clutter (toys and clutter)?

Yes No N/A Can the resident move the stove to a fire in the microwave? (Keep the door closed and turn off the heat.)

Yes No N/A Can the resident move the stove to a fire in the oven? (Keep the door closed and turn off the heat.)

Yes No N/A When cooking, does the resident always stay in the kitchen and not leave food on the stove unattended? (The number on side of resident's phone is unattended cooking.)

Yes No N/A Can the resident move the stove to a grease fire in the stove? (Put a lid on it, and turn off the heat! Keep oven mitts or pot holders handy.)

ELECTRICAL

Yes No N/A Are electrical outlets used appropriately without over-loaded conditions?

Yes No N/A Are electrical cords maintained free of frayed or worn areas?

Yes No N/A Are extension cords used appropriately? (Cords should extend under rugs, through doors?)

Yes No N/A Electrical panels - Are circuit breakers properly labeled?

Yes No N/A Electrical boxes - Are junction boxes properly capped or covered?

SMOKEING

Yes No N/A Are ash trays emptied into a metal container?

Yes No N/A Does the resident have house rules of not smoking in bed or when using a stove?

Home Safety Surveys. According to the National Fire Protection Association, in 2010 home¹ structure fires accounted for 85% of civilian fire deaths and 75% of civilian fire injuries. Beginning in 2011 in an effort to positively impact this fire problem, we targeted high risk neighborhoods of our service area and offered residents free home safety surveys. Our goal is to continue expanding this program in an effort to significantly reduce residential structure fires.

Re-inspection Fees. In 2009, more than 622 businesses required 3 or more visits to verify corrections to Fire Code

Year	2010	2011
Annual Inspections	8,364	8,384
Attempts to gain compliance		
2nd	536	481
3rd	103	104
4th	49	48
5th	28	31
6 or more	18	22
Total attempts	734	686

violations. Beginning January 1, 2011, the City of

¹ Homes include one- and two-family homes, apartments, townhouses, row houses, and manufactured homes.

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Bellevue adopted an ordinance that allows re-inspection fees to be assessed when corrections were not completed after the first re-inspection. This allows the Fire Department to achieve compliance, reduce the number of visits, and recover costs of inspecting occupancies multiple times.

Even though the total number of inspections increased slightly, the number of re-inspections dropped by nearly 7%, which is directly attributed to the new re-inspection fee.

Homeless Shelters

Housing the homeless has been a challenge throughout the region. Potential solutions range from temporary to permanent, and require collaboration by all stakeholders in order to find solutions. While the Washington State Building Code Act ([RCW 19.27.042](#)) offers some regulatory relief for housing of the indigent, the relief is limited to those buildings owned or administered by a public agency or nonprofit corporations and lacks clarity about what relief is appropriate. Together with staff from the Building Department and ARCH (A Regional Coalition for Housing), we authorized the opening of two shelters in the Crossroads area from November 2011 through April 15, 2012.

Microsoft Haunted House

Staff from both the Building Department and Fire Prevention worked with Microsoft on an annual haunted house for the second year in a row. The haunted house was set up in the upper four floors of Microsoft's Advanta A Building in the Eastgate area. The large number of Microsoft employees that work or live in Bellevue and the high quality of the event itself attracted over 7,000 individuals, even though the event was only for staff and their families

Transportation Projects. The new 520 bridge



project is moving forward as witnessed by new overpasses in the Points Communities. The pontoons are being constructed and will soon make their way to Lake Washington.



Now that the **East Link** alignment issues have been mostly sorted out, staffs from Sound Transit and Bellevue have been sifting through International Fire & Building Codes and NFPA 130 (Standard for Fixed Guideway Transit and Passenger Rail) as a precursor in developing recommendations for City Council adoption in 2012.

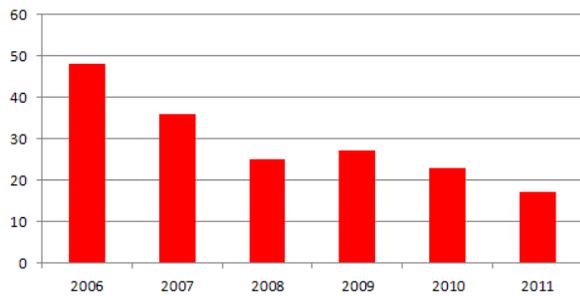
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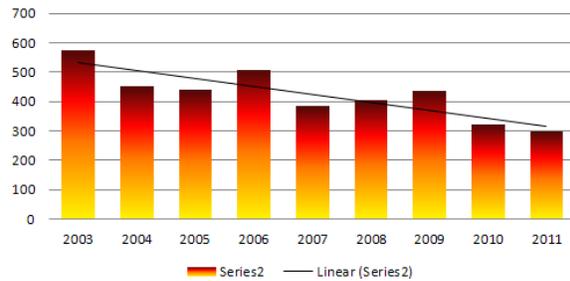
Fire Investigation

The number of fire incidents continued to trend downward and the fires investigated followed the same trend. Due to two significant large-loss fires however, the dollar loss attributed to our fire incidents spiked upward.

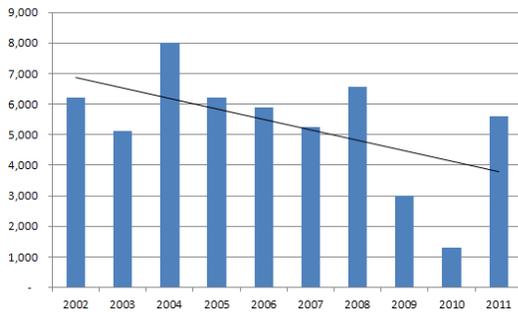
Fires Investigated



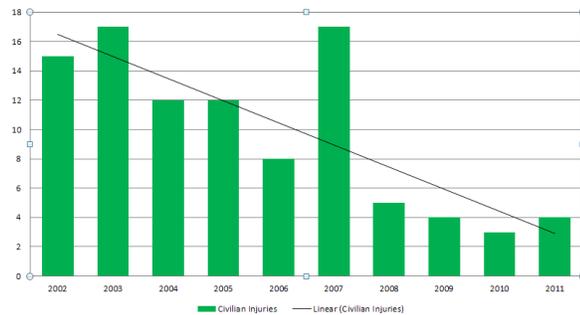
Fire Incidents



Dollar Loss (\$000)



Fire Injuries



Notable Fires in 2011



12/26/2011 – Forum West, 12501 Bel-Red Road. This fire was called in by a passerby in the early morning hours. The fire was determined to have started above the ceiling located in an unoccupied suite. Due to the extent of damage, no cause was identified. Estimated loss was \$2,750,000, which contributed significantly to the spike in our fire loss for the year.

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8/11/2011 – Single family, 3232 112th Ave. S.E. This fire was called in by a neighbor in the early morning hours. Firefighters arrived 6 minutes and 40 seconds later to find a fully involved structure fire. Investigators determined that the fire started in the family room on the first floor but were unable to determine a cause. Estimated loss was \$700,000.



1/19/2011 – This van fire occurred in the early afternoon hours and resulted in extensive injuries to the three occupants. The occupants were pouring gasoline from a water bottle directly into the carburetor when the engine backfired resulting in an explosion.



6/28/2011 – The most probable cause of this single family fire was spontaneous combustion of the linseed oil soaked rags deposited in a cardboard box, resulting in an estimated loss of \$325,000.



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7/31/2011 – This single family home is also the site of a biodiesel manufacturing facility. This fire resulted in an estimated loss of \$400,000 and originated in the vicinity of the biodiesel reactor.

New Construction Activity

A total of 1,878 plans were reviewed and 2,589 inspections were conducted on projects ranging from high-rise buildings to small tenant improvements. The most significant project completed this year was the Overlake Medical Office Pavilion, a 7-story office building with over five stories of parking. The office pavilion is expected to attract multiple doctors and specialists to the building in conjunction with Overlake Hospital. Currently, only property management and a new Starbucks are occupying the building; however, by summer of 2012, at least two new medical offices are expected to occupy the building.



The **Kelsey Creek** project involves four lots totaling 664,500 sq. ft. and includes an all new water service



underground, underground retention reservoirs, and upgrades to the covered Kelsey Creek. The structural upgrades include a major remodel of the existing 106,200 sq. ft. Kmart building built in 1967 (vacant since 2002), remodeling of the existing 75,700 sq. ft. strip mall built in 1968, new construction of a 6,000 sq. ft. building, and the demolition of an auto fueling station that was badly damaged by fire. This work represents a major improvement for the City of Bellevue.

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A significant portion of the existing **Tyee Middle School** campus (pictured at left) was demolished and replaced with a new building. Work on this \$24,700,000 project began in 2010 and was completed in 2011. The most significant remaining portion of the original campus is the gymnasium. Work began in 2010 and was completed in 2011. During construction, students attended Ringdall Middle School.



A \$60,331,218 renovation and addition to **Bellevue High School** (above right) started in 2010 and is expected to be completed in the summer of 2012. Originally constructed in 1950, the interior of the existing building is being remodeled to match the level of the new addition. In addition to the building construction, work also includes new underground water mains, fire hydrants, and fire department access.

Quicker Access to Inspection Notices

Inspections		
700 Fire-Precon/Jobcon		
City Staff: Steve Sexton-(425) 452-2803	Status: Approved	Date: Feb 13, 2012
Notes: IVR CONFIRM #=060567-03		
705 Fire-Hydrostatic		
City Staff: Sean Nichols-(425) 452-2926	Status: Partial Approval	Date: Oct 20, 2011
Notes: IVR CONFIRM #=040685-07		
705 Fire-Hydrostatic		
City Staff: Dwight Altenburg-(425) 452-4112	Status: Approved	Date: Feb 17, 2012
Notes: IVR CONFIRM #=061409-01		
710 Fire-Cover		
City Staff: Sean Nichols-(425) 452-2926	Status: Inspection Canceled	Date: Oct 18, 2011
Notes: IVR CONFIRM #=040044-06		
710 Fire-Cover		
City Staff: Sean Nichols-(425) 452-2926	Status: Partial Approval	Date: Oct 19, 2011
Notes: See Attachment 11122295_710_101911.tif		
710 Fire-Cover		
City Staff: Scott Gerard-(425) 452-6808	Status: Partial Approval	Date: Oct 21, 2011
Notes: See Attachment 11122295_710_102111.tif		
710 Fire-Cover		
City Staff: Scott Gerard-(425) 452-6808	Status: Partial Approval	Date: Feb 15, 2012
Notes: See Attachment 11122295_710_021512.tif		
710 Fire-Cover		

At the conclusion of a construction inspection, inspectors will write a correction notice if the work does not comply with the approved plans, applicable codes or standards, or the work is not yet ready for inspection. Prior to 2011, these notices were re-entered by hand into a database. Beginning in 2011, these notices are now scanned and available for our customers at the end of each business day via www.mybuildingpermit.com, saving considerable staff time and providing more readily available access to

information for our customers. To view a correction notice associated with your inspection; just click on the hyperlink in the "notes" field.

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Based on the number of significant projects currently in plan review, 2012 is shaping up to be a very busy year:



Soma Towers
(left)

Tateuchi
Performing Arts
Center (right)



Cherry Crest Elementary (below)



Bellevue Park Hotel



Lincoln Square Phase II

Annual Inspections

For the sixth consecutive year, the department inspected every structure in our service area except single family homes; a total of 2,589 buildings containing 8,352 tenants. This achievement is something very few fire departments are able to accomplish. Because of the continued economic challenges facing the City of Bellevue, the Fire Department was required to eliminate 8 Firefighters and 2 Fire Prevention Officers in 2011, which will make completing all of our inspections in 2012 a challenge. Additionally, the City expects to annex all of Fire District 14, adding to the number of buildings the Fire Department inspects.

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Every inspection affords us an opportunity to educate and inform our customers by identifying fire hazards. Some examples of code violations identified during our annual inspections in 2011:



A disconnected dryer vent led to lint accumulations in a storage room of a multi-family building. In the same building, smoke detectors were missing in the bedrooms and a number of smoke detectors in other locations lacked batteries.

Damaged light fixture



Combustible Storage under
exit stairs



Combustible storage in the electrical room



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Public Education & Outreach

While the entire Fire Department is involved in public education and outreach, our fire prevention efforts are coordinated by Kathy Barker. Through her coordination efforts, the department conducted 56 high-rise evacuation drills with 43,177 participants and 107 fire safety classes/drills with 11,643 participants.



By working collaboratively with Microsoft, we significantly improved employee participation in the four high-rise buildings Microsoft currently occupies. This collaboration is an excellent example of the kind of private - public partnerships that can actively enhance the public's safety.

We also worked with [UNICO](#), [WPS](#), and tenants at the Overlake Medical Tower to help improve the evacuation plan and participation in drills at Overlake Medical Tower and help resolve issues surrounding ambulatory surgery evacuations.

Kathy also coordinated fire safety evacuation classes/drills as requested in a variety of non-high rise buildings such as health care facilities, child care facilities, apartment/condominium buildings, and office buildings.

Like the rest of the country, our biggest fire problem is where people live. Except in an emergency, we rarely have an opportunity to work proactively with our citizens in their homes. Targeting two neighborhoods in Bellevue, we extended an offer to conduct home safety surveys. While there was not a huge response for the service, those that did accept our offer were very appreciative and allowed a rare opportunity to make a difference in the homes of our citizens. We installed smoke detectors in every sleeping room and every level of the homes and counseled the residents on fire prevention and fire safety.

Fire Prevention Month

October is Fire Prevention Month and in 2011, the Bellevue Fire Department redoubled our efforts in reaching out to the community and spreading fire safety messages. The fire stations held open houses during Fire Prevention Week, and community members were invited to visit the station and learn about the Bellevue Fire Department. Each station hosted a number of activities. The Fire Sprinkler Trailer showed how fire sprinklers can stop the spread of fires, the Fire Safety Trailer



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gave kids an opportunity to practice escaping from a home with smoke, and a live cooking fire demonstration showed the best way to put out a fire on the stove top. The response to these events was overwhelmingly positive, and we hope to do something similar again next year.

Things to Watch in 2012

Volunteers. The Fire Department will be working with the volunteer coordinator for the Police Department to help us explore new ways to utilize volunteers on a daily basis as well as for special events.

Over-the-Counter and Online Permitting. Working with other fire agencies in the area, we have developed an over-the-counter [sprinkler permit application](#) that can be utilized in 11 cities. The single application makes the process less complicated for our customers. For those cities participating in www.MyBuildingPermit.com, these same permits will be available online in the fall of 2012.

Online plan review. Staff from throughout Development Services, which includes the Fire Prevention Division, has been hard at work to make it possible for our customers to submit plans electronically. Instead of driving to City Hall to submit their plans and permit applications, our customers will be able to apply for their permits and file their plans electronically, saving countless hours and literally tons of paper. This service is expected to be available in the fall of 2012 via www.MyBuildingPermit.com.

Development Activity. As the economy continues to rebound, development activity is showing signs of recovery as well. In addition to the projects previously identified, the mothballed [Summit III](#) (320 108th Avenue N.E.) project is expected to resume construction, and a significant addition to Bellevue Square is being planned to accommodate a yet to be identified tenant.

