Archived: Friday, January 22, 2021 3:10:32 PM

From: Ray Allshouse

Sent: Thursday, January 14, 2021 3:41:13 PM

To: Heidi Costello

Cc: John Norris; Rachael Markle; Debbie Tarry

Subject: FW: [EXTERNAL] RE: January 25 Agenda Comments: Pam Cross - Sprinkler Requirement

Response requested: Yes Sensitivity: Normal

Heidi... Here is Derek's response to questions provided by Pamela Cross. Please forward to Council. Thanks, Ray

From: LaFontaine, Derek (FM)

Sent: Thursday, January 14, 2021 3:08 PM

To: Ray Allshouse < rallshouse@shorelinewa.gov>

Subject: RE: January 25 Agenda Comments: Pam Cross - Sprinkler Requirement

Hello Ray,

Here is my response to Ms. Cross's Comments:

7.

The SPD fire report states there were 22 structure fires in 2019. I assume that included commercial structures. How many fires were there in new homes in Shoreline?

I may have mis-spoke during the council meeting. I don't remember saying there were 22 structures fires in 2019. The City of Shoreline had 59 structure fires in 2019, of which 47 were residential. I don't have "age" of home as a data point, but the majority of our fires are in older home's because the majority of the homes in Shoreline are older. The majority of Shorelines residential fires are accidental human caused fires; kitchen fires, bedroom fires started by portable heaters, candles, cell phone chargers, dryer fires, appliance fires, and several other random causes. These types of fires will start regardless of the age or even size of the home.

I would think the bigger fire risk is an older home that may have inadequate egress, substandard electric, multiple extension cords due to insufficient number of outlets, and/or electric baseboard heat. Older homes often have narrower halls and stairways, and smaller rooms that get crowded with furniture making it more difficult for those with mobility challenges to exit to safety.

As stated above fires happen for several reasons, electrical fires are not our main cause of accidental fires. With the fires we see, smoke and toxic gases spread just as rapidly in larger hallways and larger rooms as it does in narrow hallways and smaller rooms. It has been proven that the best way to ensure the best outcome is water on the fire fast. And we've also seen big rooms with high fuel loads just as we've seen small rooms with high fuel loads.

Just because it's affordable, should it be required?

One comment that I hear is: "If they can afford to build a \$1M+ home, then they can afford (fill in the blank)." Kind of a snide remark. I certainly won't be building a \$1M home anytime soon, but just because some people have more money, should the construction of their home have a different building code? Assuming they can afford a sprinkler system, they can make the judgement whether to have one installed or not.

Cost Vs benefit is a good discussion. We at the Shoreline Fire Department, after years and years of responding to every structure fire in Shoreline, believe the 1-1.5% cost of a fire protection system is worth the benefit it provides to the occupants and community. One 13 gpm sprinkler head puts a fire out in the insipient phase (earliest) and leaves the home owner with a water clean-up issue. Fires that grow past the incipient phase require large amounts of fire department resources, using fire hoses with a minimum flow rate of 150 gpm, leave the home un-inhabitable, destroys property, releases large amounts of toxic smoke into the environment, and has the potential to injure or kill occupants and firefighters. Our goal is change the next generation of homes in Shoreline so that over time residential structure fires will become a water clean up issue instead of a devastating event.

The code change would also apply to more modest homes like a DADU. This form of affordable housing will be less affordable if the cost to build it increases by requiring sprinklers.

Because the stand alone ADU's we see are 1000 sq ft or less, the sprinkler systems usually are very small systems. They are part of the domestic plumbing system and at 2-2.50 per square foot they would cost \$2-\$3000. They are also built in back yards that are usually harder to get to and harder to find.

Which brings up the question of equity.

A comment was made that renting affordable housing is more costly because code requires multifamily housing to be sprinklered. That without requiring sprinklers in single family homes, we are "giving a break" to those who can afford to build a new home.

Rent includes a lot of costs in addition to the initial construction: shared amenities, occasionally some utilities, maintenance of the common areas, maintenance of the building, management costs, and so forth. And multifamily housing is a different exposure: a fire in a single unit can displace 20 families. Evacuation of several units on multiple floors requires more time than running out the front door of your home. Sprinkler systems protect you from the carelessness of your neighbors, and protect your neighbors from your carelessness.

Having a code that treats everyone the same is equity.

A sprinkler system can save lives.

Please don't tell me one life lost is one too many. I know that. But this phrase has been so overused during the COVID pandemic that it has no meaning at all. Life has risks. As stated during the discussion of speed limits and car safety, we can all stay home all of the time or, we can drive but have a 5mph speed limit on every street and road or, we can design a car with all the safeguards of a professional race car at an unaffordable price. Or we can assume the risk of living a life and exercise reasonable precautions.

Although "saving lives" is a primary concern it is not the only objective, in-fact most of our fires do not result in a death. Many of them do result in injuries, or "close calls". The repercussions of a fire to the family and community have a longer effect even if no one is hurt. And most of them result in un-inhabitable homes for extended amounts of time. As far as the speed limit analogy, I wouldn't compare a sprinkler head to a speed limit, I would compare it to a seat belt or an airbag. Seatbelts and airbags became law because of the high number of deaths and injuries. Per the NFPA's 2020 Home Structure Fire study, there were 339,000 reported residential fires in 2019 with 2770 deaths, and 12,200 injuries, and 7.7 billion in property damage. Smoke detectors (seatbelts), are ok but don't put the fire out, so the combination of smoke detectors and sprinklers (airbags) is now the gold standard in fire and life safety. All research has proven it, and we now have a vast amount of experience with the effectiveness of a sprinkler head.

Just a few residential fire examples over the last few years:

- Improperly discarded ashes in a kitchen garbage can resulted in the loss of an entire home on 5th NE. After a year the home is still vacant.
- On 189th NE a space heater to close to combustibles resulted in the loss of an entire home for an elderly lady. Not only did she have to run out of the house in pajamas, she lost her home, all of her belongings, and both of her cats.
- In Richmond Beach an improperly dis-carded cigarette ignited a chair resulting in the loss of the entire home. The spread of this particular fire was very rapid. The occupant suffered facial and extremity burns and 3 firefighters were electrocuted.
- On Forest Park Drive a family left food on the stove and left the home. Resulting in total kitchen and living room loss and massive amounts of smoke/carbon staining throughout the house. The parents were living in the basement, the house was un-inhabitable for an extended amount of time.
- In Richmond Beach a family watching the Seahawk game in a downstairs family room left oil on the stove in the kitchen upstairs. It ignited extending through the kitchen, living room and attic. Extensive smoke damage to bedrooms.
- Improperly discarded cigarette at a home on 185th. Caught couch on fire, then extended throughout living room, dining room, kitchen down hallway into bedrooms. Occupant had to dive out a widow.
- Minor playing with lighter caught bedroom in a group home on fire. Entire first floor fire damaged. House un-inhabitable fore months.
- Improperly discarded cigarette caught basement on fire extending up to main floor where 3 people were sleeping, extending down hallway. They had to run through heat and smoke to get out.
- Just off of Meridian, during a teenagers party, a sauna was accidentally turned on in a basement bathroom. The sauna was used as a storage space. It ignited the surrounding combustibles, extended out of bathroom and up the stairs where the party was. The occupants only way out was through smoke and heat.

There are several more examples. Again, our hope is to change the next generation of homes in Shoreline so that these types of accidental fires turn in to water issues.

Maybe this isn't an area of safety that requires micro-managing. Current building codes provide a lot of protection. Insurance inspections, regulations, and premium credits for safety encourage homeowners to make wise choices in protecting their home and, as a result, their lives.

I would argue current building codes do not provide protection from accidental human caused fires. The only successful examples we have of accidental human caused fires is in buildings where the code required sprinkler systems. They hold the fire at the point of origin which, if you've ever seen an out of control fire, you'd understand the importance of. And insurance companies give a minimum 10% credit for sprinkler systems and there is talk of increasing it.

Respectfully,

Derek LaFontaine

Fire Marshal Shoreline Fire Department Desk: 206-533-6571 Prevention: 206-533-6565



From: Ray Allshouse < rallshouse@shorelinewa.gov >

Sent: Tuesday, January 12, 2021 8:45 AM

To: LaFontaine, Derek (FM) < dlafontaine@shorelinefire.com >

Subject: FW: January 25 Agenda Comments: Pam Cross - Sprinkler Requirement

External Email Alert! Use caution before clicking links or opening attachments.

Hi Derek... I recommend a response to Pamela's comments

From: agenda comments agendacomments@shorelinewa.gov>

Sent: Tuesday, January 12, 2021 8:40 AM

To: Betsy Robertson < brobertson@shorelinewa.gov >; Chris Roberts < croberts@shorelinewa.gov >; Debbie Tarry < dtarry@shorelinewa.gov >; Doris McConnell < dmcconnell@shorelinewa.gov >; John Norris < jnorris@shorelinewa.gov >; Keith McGlashan < kmcglashan@shorelinewa.gov >; Keith Scully < kscully@shorelinewa.gov >; Pollie McCloskey < pmccloskey@shorelinewa.gov >; Susan Chang < schang@shorelinewa.gov >; Will Hall

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<whall@shorelinewa.gov>

Cc: Ray Allshouse < rallshouse@shorelinewa.gov >

Subject: January 25 Agenda Comments: Pam Cross - Sprinkler Requirement

This correspondence will be added to public comment for the January 25 meeting.

Heidi C.

From: webmaster@shorelinewa.gov <webmaster@shorelinewa.gov>

Sent: Monday, January 11, 2021 3:18 PM

To: agenda comments agendacomments@shorelinewa.gov>

Subject: [EXTERNAL] Agenda Comments

A new entry to a form/survey has been submitted.

Form Name: Comment on Agenda Items

Date & Time: 01/11/2021 3:17 pm

 Response #:
 842

 Submitter ID:
 40463

 IP address:
 50.35.109.124

Time to complete: 13 min., 20 sec.

Survey Details: Answers Only

Page 1

- 1. Pamela Cross
- 2. Shoreline
- 3. (o) Hillwood
- 4. pcross3001@gmail.com
- **5.** 01/25/2021
- 6. On Consent Calendar
- 7. Mayor Hall and Councilmembers,

Regarding mandatory sprinklers for new homes in Shoreline.

This is scheduled for the Consent Calendar on January 25.

I followed the January 4th Council discussion with interest, but I was left with a few questions that I hope Council has considered.

The SPD fire report states there were 22 structure fires in 2019. I assume that included commercial structures. How many fires were there in new homes in Shoreline?

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8. (o) Neutral

Thank you, **City of Shoreline**

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