

Developer Incentives Help Achieve Your Community Risk Reduction Goals



In most parts of the country, construction of single-family homes remains strong. This presents both a fire safety challenge and a life safety opportunity in most jurisdictions. Just 7% of new homes are estimated to be protected by installed home fire sprinklers (NFPA).

Home fires are the leading fire problem for residents, killing six people every day. According to the NFPA's *Fire Loss in the U.S. During 2020* report, home fires caused:

- 2,230 civilian fire deaths, 85% of all residential fire deaths.
- 8,600 injuries.
- \$6.8 billion in direct property damage.

By improving new construction in your jurisdiction with fire sprinklers, you will improve your community risk reduction work.

In communities that don't have codes requiring sprinklers in new construction, the fastest path to increased residential fire safety is to work with developers ahead of builds, offering something of value in exchange for installing fire sprinklers in all homes in new developments. Call them incentives or trade-ups – AHJs are increasingly using locally negotiated developer benefits to make their jurisdictions safer for all. You can too.



INSIDE: Learn how trade-ups are used in Camas, WA.

COMMON INCENTIVES:

- **Additional Units Permitted:** Development plans allow homes to be closer together.
- **Subdivision Single Access Point:** A fully sprinklered subdivision allows for a single public access road. This decreases infrastructure costs and significantly increases the number of single family dwellings allowed.
- **Street-Width Reduction:** Traffic lanes may be narrowed, substantially reducing the amount of pavement in every linear foot of street in the development.
- **Longer Dead-End Streets:** Dead-end streets may be increased in length, allowing additional house lots to be built.
- **Tee Turnarounds Permitted:** The permitted use of tee turnarounds in sprinklered developments can create at least one additional lot per cul-de-sac.
- **Increased Street Grades and Building Setbacks:** Steeper street grades and building locations are allowed further from where the homes' access leaves the main road.
- **Expansion of Existing Water Supply May Not Be Needed:** Required fire flows for fully sprinklered developments can be greatly reduced compared to non-sprinklered developments.
- **Increased Hydrant Spacing:** Supply mains may be reduced and hydrant spacing can be increased.
- **Gated Communities:** Gated communities delay fire department access. A fully sprinklered subdivision provides mitigation for this impact, allowing developers to utilize this security option when desired.
- **Reduced Basement Windows:** Fire sprinklers reduce the number of required rescue openings in every basement sleeping room.

Home Fire Sprinklers Are a Win-Win for Your Community

According to surveys of leading homebuilders and fire service members, most builder-developers don't know about incentives. Yet more than half the surveyed builders said they would be interested in installing home fire sprinklers if incentives were offered.

Regional and production homebuilders typically build 50 or more houses in each new development. Even if fire sprinklers are installed in just one new development in your jurisdiction, you'll be protecting hundreds of residents for decades to come.

Homebuyers Want Home Fire Sprinklers

In a survey of more than 2000 US adults of all ages about new-home preferences and fire safety, 86% of homeowners said fire safety was important as they look to buy a new home. 80% of millennials would prefer to buy a home with home fire sprinklers after learning how they work.

Building new developments with fire sprinklers makes homes more appealing to millennial homebuyers, driving sales. And by taking advantage of incentives offered by officials in many communities, developers can utilize land better, reduce infrastructure and other construction costs and increase profitability.



Fire service survey conducted by Firehouse Homebuilder survey conducted by Hanley Wood 2020 Opinion surveyed of 2,009 US adults

Visit HomeFireSprinkler.org/CRR for more information

Increased home fire sprinkler protection in Camas, WA started with a land-use challenge



Camas-Washougal Deputy Fire Marshal Randy Miller

Randy Miller's story began when the City Council asked the fire department to help improve local land use. Miller's home fire sprinkler incentive plan not only addressed land use challenges; it provided developers with valuable options that reduced costs and increased profits. Most importantly, it increased public safety by protecting thousands of new homes with fire sprinklers.

One example of the proactive and successful Camas incentive plan was a planned 60-house development along a steep hillside. The developer requested

approval to eliminate one of the development entrance roads, and Miller offered to allow a single entrance if the developer installed fire sprinklers in all 60 homes. The developer agreed and the result was \$1 million savings in infrastructure and material cost. Most importantly, the entire subdivision was protected with fire sprinklers.

Camas did not have an ordinance or a home fire sprinkler requirement at the time. Miller worked closely with planners, city officials, builder association leaders and developers in the pre-application phase to educate about the life-saving benefits of home fire sprinklers and the potential trade-ups, or incentives, that can be offered if entire developments are protected.

Today, more than 2,500 Camas homes are protected with fire sprinklers. The incentives developers were able to negotiate include fire hydrants spaced further apart, narrower roads, gated communities, steeper slopes, higher lot yield and higher density. These are common incentives that may work just as well in your jurisdiction.

To date, there have been four successful home fire sprinkler activations in Camas, preventing the fires from spreading and becoming deadly.

"You don't have to wait for sprinkler codes to change the future of fire safety in your community. But it's unlikely the homebuilders will come to you. It's incumbent on us in the fire service to reach out to our community stakeholders not just as fire safety resources; but also as home fire sprinkler activists."

– Chief Dennis Compton
Chairman of the National Fallen Firefighters Foundation (NFFF)

on how to increase fire sprinkler use in your community

Home Fire Sprinkler Environmental Benefits

FM Global partnered with HFSC to conduct full-scale fire tests comparing the environmental impact of sprinklered and non-sprinklered home fires. Research showed:

- Greenhouse gas emissions were cut by 97.8%.
- Water usage was reduced between 50% and 91%.
- Fewer persistent pollutants, such as heavy metals, were found in sprinkler wastewater versus fire hose water.
- The high pH level and pollutant load of non-sprinkler wastewater are an environmental concern.



2021 Environmental Impact of Residential Fires Review

Free Online Resources

Developers, homebuilders, planning and zoning board members, water purveyors and others involved in new home developments need to know the facts about new-home fire dangers and the unparalleled protection offered by home fire sprinklers so they can make informed decisions about the future of their communities.

HFSC offers free resources including case studies and tools to help determine which incentives are best for your community. The key is to make sure all stakeholders are informed at the pre-planning stage so that all can arrive at a mutually beneficial agreement that will result in homes protected with fire sprinklers.

Virtual Reality Video

Viewers can experience home fires without and with an installed sprinkler as if they were inside the burning house. They can watch flames and smoke from any angle and hear the fire crackle and smoke alarms activate.

When they watch the video with fire sprinkler, they'll learn how the high heat from the fire activates the water flow and see the sprinkler quickly control the blaze and minimize smoke spread.

The 360-degree video can be viewed on HFSC's website. It can also be viewed in 3D virtual reality using a headset or 3D glasses.

To view the video, visit HomeFireSprinkler.org/VR



Visit HomeFireSprinkler.org/CRR for free tools and resources that will help you keep your community safe.

