

March 4, 2025

Maine Committee on HOUSING AND ECONOMIC DEVELOPMENT Cross Office Building, Room 206 111 Sewall St, Augusta, ME 04330

Testimony In Opposition to LD 659/HP427 An Act to Reduce Housing Costs by Not Requiring Fire Sprinkler Systems for Single-family Homes and Duplexes

Honorable Members of the Housing and Economic Development Committee:

I am providing this letter in opposition of the proposal to exclude residential sprinkler protection in oneand two-family dwellings outlined in LD 659. The National Fire Protection Association (NFPA) is a staunch advocate of home fire sprinklers for very simple reasons. Sprinklers have been saving lives of citizens and first responders for more than a century. With today's dangerous home fire problem, every new home should be built with this proven technology to further reduce fire loss for decades to come. The reality is that if you have a reported home fire today, you are more likely to die than you were in 1980.

Here are the key facts to support this proposal.

Each year, close to 3,000 people die in home fires. A house fire can become deadly in as little as two minutes because of common synthetic furnishings that burn fast producing toxic smoke, lightweight construction material and open designs used in today's construction, and emerging technology such as lithium-ion batteries.

The likelihood of dying in a home fire decrease by about 89 percent if sprinklers are present. Two minutes is not a lot of time to escape. People at highest risk are those who may have challenges escaping such as young children, older adults, people with disabilities, even family pets.

Home fires, which number over 300,000 every year, result in billions of dollars of direct property damage. Fire sprinklers are the only technology that stops a fire from spreading and becoming deadly. Sprinkler protection has long been mandated in many types of buildings. The presence of sprinklers plays a significant role in limiting life and property loss when a fire occurs, reducing property damage by over 50%. Communities nationwide that have enacted home fire sprinkler requirement show significant achievement in reducing destruction from fire when compared to communities with no sprinkler requirements.

The requirement for the installation of home fire sprinklers in one- and two-family dwellings has been in NFPA and International Code Council (ICC) International Residential Codes for more than 15 years.

Chances are you will hear testimony claiming that fire sprinklers are too costly and affect affordable housing. Removing fire sprinklers from the codes allows substandard homes to be built, impacting community risk reduction.

Studies conducted by the Fire Protection Research Foundation and various case studies in communities that require fire sprinkler protection reveal that the cost of installing home fire sprinklers is less than \$1.50 per square foot for new construction. In fact, Las Vegas has required sprinklers since 2019. More than 11,000 homes have been built with fire sprinklers at a cost of less than \$1 square foot. The real question is what is the cost to the community when homes are built without sprinklers? There is significant personal, property, and economic loss to a community when a home fire occurs as well as the expenditure of valuable fire department resources that could be deployed against additional safety needs. There are also indirect costs that include the mental health toll it takes on both the people who lose their home as well as neighbors as well as the long-term care costs for those who suffer burn injuries.

Another study has shown no impact on housing starts in counties with residential sprinkler ordnances when compared to those counties without such ordnances. The State of California has required all new homes to be equipped with residential sprinklers since 2011. The housing market in that state has certainly not collapsed, just the opposite. Residential sprinklers have been required by county code in Maryland for many years with no impact on their housing market.

Fire sprinklers respond quickly to a fire, giving residents valuable time to escape, while also suppressing and in many cases extinguishing the fire. The heat from a fire activates the sprinkler closest to the fire, not the entire system. Up to 76% of the time, fires are contained by the operation of just one sprinkler.

Fire sprinklers protect firefighters. If a fire is not suppressed or controlled upon the arrival of fire department and fire fighters enter the building to search for residents, they run the risk of being injured or killed in a building collapse or rapid fire development. In addition. the cancer and other health concerns due to smoke and fire exposure is of grave concern – one that is mitigated with sprinklers.

You will also hear the arguments that smoke alarms provide enough protection without sprinklers. While smoke alarms provide the early warning and are an essential part of fire safety, they do not control the fire or to reduce the amount of toxic smoke and gases. In today's fast moving home fires, it is essential to have both smoke alarms and the ability to suppress fires or keep them small with sprinklers, allowing more time to escape.

Home builders, developers and realtors will testify that consumers do not want sprinklers. The fact is the average consumer is not aware of the lifesaving benefits of having sprinklers in their homes. Once educated on the benefits many want the protection.

Opponents will use potential water damage as an excuse for not installing sprinklers. Sprinklers use approximately 90% less water on a fire than a fire department hose line would. Frozen pipes are also used as a scare tactic to dissuade people from considering sprinklers. If the temperatures drop low

enough to freeze pipes in a home, it will not only be the sprinkler piping but all of the other domestic water pipes that will be exposed as well. Sprinkler pipe is no more susceptible to freezing than the other piping in a home.

If municipal water use is not viable, the option of a self-contained pump/tank unit is an alternative. The unit amounts to a one-time cost at the time of installation and does not carry a "tap fee" and monthly "stand-by fees sometimes charged by the water authority.

Home fire sprinkler trade-ups can also be used when planning developments that result in cost-savings. These include higher density, increased hydrant spacing, eliminating the expansion of existing water supply among a few options that can be considered based on other factors of the development

NPFA is committed to working with your office and the fire and building stakeholders of the State of Maine to establish viable options for residential sprinkler protection in one and two family dwellings.

Thank you for the opportunity to submit this letter of support.

Sincerely,

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Robert F Duval Northeast Regional Director/Fire Investigator NFPA