



## Cumberland Fire Department

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### **Testimony in Opposition to Maine's LD 659/H.P. 427, "An Act to Reduce Housing Costs by Not Requiring Fire Sprinkler Systems for Single-Family Homes and Duplexes"**

Senator Curry, Representative Gere, and members of the Joint Standing Committee on Housing and Economic Development. My name is Andrew Turcotte, and I am the Deputy Fire Chief for the Cumberland Fire Department.

I am writing to express strong opposition to LD 659/H.P. 427, which if enacted, would prohibit a municipality from adopting or enforcing fire sprinkler requirements in single and multi-family homes, putting the lives of Mainers at unnecessary risk.

Automatic fire sprinkler systems have been commonplace in commercial structures for well over one hundred years. However, statistically, most fires occur in residential dwellings. In fact, in 2023, the National Fire Protection Agency (NFPA) reported an estimated 350,000 fires, which resulted in 2,890 deaths, 10,400 injuries, and over \$11,000,000,000 in fire losses. And in Maine, fire related deaths are on the rise. Decades ago, fire deaths were much more common across the nation, including here in Maine, however that all changed in the mid to late 1970's when new mandated changes to fire codes were implemented, including requiring smoke detectors. It is a fact that people in homes with automated sprinklers are significantly less likely to be injured or killed and that sprinklers reduce the average property loss by 71% per fire.

Residential sprinklers are designed based on NFPA 13, which is the *Standard for Installation of Sprinkler Systems in One-and Two-Family Dwellings and Manufactured Homes*. NFPA 13 was originally adopted as a standard back in 1975. This standard was created in response to the release of *America Burning* where the report stated, "where early warning detectors and automatic extinguisher systems are used in combination, the protection of lives and property is enhanced greatly over that afforded by detectors alone." It was for that reason the NFPA recommended that the proposed U.S. Fire Administration support the development of the necessary technology for improved automatic extinguishing systems be accessible to Americans in all kinds of dwelling units. It was also the NFPA's report that showed that savings in fire insurance and overall costs of fire protection were an added benefit.

Sprinkler systems have become more affordable due to the advancement of modern construction practices. The sprinkler industry has created multi-purpose sprinkler systems in single and multi-family construction, which has driven down the cost of these systems compared to the older, stand-alone systems. In fact, the average expense to install sprinkler systems in new homes is about \$1.35 per square foot while the average cost per square foot of building a new home is approximately \$150 per square foot. That is paying around 1% of a home's value for 24/7 fire protection.

Multipurpose sprinkler systems are incorporated into the regular domestic plumbing system, which increases the efficiency of the plumbing, reduces maintenance, and reduces susceptibility to freezing in cold temperatures. The NFPA completed a report titled "*Comparative Analysis of Housing Cost and Supply Impacts of Sprinkler Ordinance at the Community Level*." In this report, they researched the market effects on residential housing where sprinkler systems are required by ordinance. They utilized data from Prince Georges and Montgomery Counties in Maryland and Virginia, which has had a sprinkler ordinance since 1987. The data showed that after each update of these municipalities' sprinkler

requirements, there were no corresponding reductions in the number of single or multi-family homes built in either county, relative to their neighboring counties. In fact, these municipalities saw a larger relative increase in construction the year after the regulations became effective compared to their neighboring counties without a sprinkler ordinance.

The national fire service has taken steps to educate the various groups about residential fire sprinklers. Those attempts have had varying degrees of success. Through the efforts of the NFPA and the U.S. Fire Administration, several informational resources have been created. One such resource is the Fire Sprinkler Initiative by the NFPA, which is a website resource for all audiences. It hosts educational information with real life examples and resources and shows the facts about residential fire sprinklers. The NFPA has also begun an outreach program where they are traveling across the country to show side-by-side comparisons of dwelling fires and outcomes with and without residential sprinklers. The Office of the State Fire Marshal's Office here in Maine has also provided these demonstrations across all 16 counties. These resources have helped to educate the public, and other stakeholders, including our elected officials, building contractors, realtors, etc., about the pros and cons of residential fire sprinklers.

To me, it seems straightforward, fire sprinkler systems save lives and property. And, in a way, it is that simple. Commercial dwellings already have regulations in place with regards to fire safety and building codes. But, residential structures, particularly single-family homes, are bit more complicated.

With every incident and every study, the fire protection specialists and engineers learn valuable information on how to prevent and combat fires in the home. As a result, secondary to improved life safety codes and construction materials, buildings inevitably have grown safer over time. For many, the next steps are obvious, require sprinkler systems in all newly built residential structures as an added safety measure but not everyone agrees, and these policies have become a subject of much debate.

The basic argument here is completely driven by economics and the right to choose. The National Association of Home Builders (NAHB) will argue that single-family home sprinkler systems are not cost effective, and their main point is that homes have become fundamentally safer over the years, lessening the need for yet another costly safety measure. They also cite that mandates could discourage new construction, but in several studies, that has not been the case and in fact, we have continued to see rapid rates of new construction. The reality is that building materials and furnishings in new homes today are burning hotter and faster than ever. Forty years ago, furnishings were made of wood, paper, and cellulose based materials, also known as legacy materials, which burned much slower than the petroleum and synthetic based materials of today. In fact, in legacy homes, it took upwards of twenty minutes before you would get flashover whereas flashover in new homes today can occur in under two or three minutes.

On the other hand, firefighters, fire chiefs, and the fire protection industry will disagree with the NAHB as it relates to the cons of automated sprinkler systems. In terms of cost-effectiveness, the fire service points to the overall value of prevention as compared to loss of life and property and they point to the astronomical cost of large, destructive fires that could have been minimized by a functional sprinkler system. The initial investment is well worth the long-term advantages and as previously stated, the sprinkler companies have also been working to create lower cost options that are still very effective in combating fire loss. Most importantly, the fire industry is united in one profound truth, sprinklers DO save lives and preserve property. The data backs up this statement and for an industry whose primary job is to keep the public safe, there is no more critical bottom line.

Our lawmakers must reject this legislation and instead stand up for enhanced fire and life-safety initiatives that prioritize safety over profits. As public servants, we have a duty to support communities, serve others, and protect the rights and interests of the public. We work for the people, not political parties or special interest groups.

I strongly recommend that you vote ***OUGHT NOT TO PASS***.

Respectfully,



Andrew Turcotte