

## **[JURISDICTION NAME] NEEDS TO REVIEW NEW STUDY ON HIGH-RISE FIRES** **Groundbreaking Government Study Brings into Question Whether [Jurisdiction name] has** **Large Enough Fire Crews Responding in areas with High-Rise Buildings**

[CITY, COUNTY NAME, STATE] – Public officials in **[ADD YOUR CITY HERE]** contemplating cuts to public safety resources should think twice before slashing our municipality’s fire fighting capabilities in light of a new federal government study by the National Institute of Standards and Technology (NIST) – an arm of the U.S. Department of Commerce – that documents the effects of crew size in lives saved and property protected.

High-rise fires pose unique and potentially catastrophic risks to both fire fighters and civilians. Having the right sized fire crews on each piece of fire apparatus provides a critical tactical advantage in responding to high-rise fires, according to the government report.

“Everybody knows a bigger fire is more dangerous,” says IAFF **[LOCAL NAME]** **[LOCAL PRESIDENT NAME]**. “This study shows that current crew sizes in **[JURISDICTION]** put fire fighters at a disadvantage in a high-rise fire, which allows fires to get bigger and more dangerous to building occupants and fire personnel simply because we don’t have enough fire fighters on each rig now – and they are thinking of cutting back even further? That’s a dangerous proposition – they cannot ignore this new evidence and just make those cuts.”

On average, a fire fighting crew of six fire fighters is able to rescue trapped victims and extinguish a fire nearly twice as fast as a three-person crew in high-rise buildings, the report shows. The groundbreaking new research follows a 2010 NIST report showing that increasing the size of fire fighting crews also has a substantial effect on the ability of fire fighters to protect lives and property in residential fires.

“Elected officials need to read this report and consider it before making decisions that affect public safety,” **[NAME OF LOCAL PRESIDENT OR SPOKESPERSON HERE]** said. This research makes clear that having too few fire fighters on each piece of apparatus has consequences. Fire fighters have always known this anecdotally, but now this report puts the facts in the hands of policy makers, and it can’t be ignored.”

“It is no longer acceptable for a department to say that if it needs more fire fighters to fight a fire they will just send more units,” said **[LOCAL PRESIDENT NAME]**. “NIST has proven that this “just send more trucks” strategy increases the amount of time it takes to conduct search and rescue operations and to get water on a fire, and that means bigger fires and more lives lost.”

For example, when a crew of three or four fire fighters responds on a ladder truck to a high rise fire, one crew member must ensure that the stairwell remains a safe exit for evacuating occupants while the others ascend to the fire area to begin search and rescue activity. With only two or three on a search crew, only one search pattern can be initiated because fire fighters must remain in groups of at least two when they enter a burning structure. However, if five or six fire fighters arrive on that first truck – even when one remains in the lobby to attend to the stairwells – two search teams can be formed from

the remaining crew ascending to the fire area and both can engage separate but simultaneous searches to find trapped occupants.

The National Fire Protection Association (NFPA) defines high-rises as buildings that are seven stories or taller, the height that exceeds most types of fire service ladders. These include office and apartment buildings, as well as hospitals, senior living facilities and hotels, where occupants are generally physically unable or too unfamiliar with the building to exit quickly in an emergency.

On average, approximately 43 high-rise fires occur every day. Between 2005 and 2009, according to the National Fire Protection Association (NFPA), high-rise structure fires averaged 15,700 annually. Average annual losses totaled 53 civilian deaths, 546 civilian injuries and \$235 million in property damage.

In most U.S. communities, new high rises are required to have automated sprinkler systems, which are designed to control the spread of fires, not to extinguish them. But, according to NFPA, 41 percent of U.S. high-rise office buildings, 45 percent of high-rise hotels, and 54 percent of high-rise apartment buildings are not equipped with sprinklers, as compared with 25 percent of hospitals and related facilities. Moreover, even in sprinklered buildings, sprinkler systems fail in about one in 14 fires.

The study from NIST clearly outlines the difficulty of fighting fires in high-rise structures by quantifying the time it takes for fire fighters to conduct search and rescue operations and put out the fire.

Researchers measured 13 “critical tasks” required when potential risks to building occupants and fire fighters are greatest, and found that three-member crews took almost 12 minutes longer than crews of four, 21 minutes longer than crews of five, and 23 minutes longer than crews of six to complete all tasks.

Four-person crews took 9 minutes and 11 minutes longer than five and six-member crews, respectively. Having more fire fighters respond to high-rise building fires results in a measurably faster, safer and more efficient emergency response, according to the report, and that has a direct impact on the safety of the public.

The study, funded by the Federal Emergency Management Agency (FEMA) Assistance to Firefighters (FIRE Act) grants and conducted in a 13-story vacant high-rise office building in Crystal City, Virginia, involved 48 separate controlled experiments, as well as 48 fire-modeling simulations, which evaluated three types of fires – from slow to fast growing.

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