



FIRE FIGHTING WATER SUPPLY

IFC 507.1 An approved water supply capable of supplying the required fire flow for fire protection shall be provided...

Current Fire code (2012 IFC 507.1) requires homes being built to be able to provide firefighting water supply. Typically water lines (and hydrants) are extended to new subdivisions.

1. Extend public water utility supply (IFC 507 & Appendix B)
2. Provide an NFPA 1142 compliant private water supply system such as a reservoir, drafting site, or private hydrant system (IFC Appendix B103.3)
3. Construct homes in accordance with the Wildland Urban Interface Code (WUI) which involves defensible space and ignition resistant construction (IFC Appendix B103.3)

Under the proposed code adoptions, homes built in areas where adequate and reliable firefighting water supply is NOT available another option has been proposed

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2. Provide an NFPA 1142 compliant private water supply system such as a reservoir, drafting site, or private hydrant system (IFC Appendix B103.3)
3. Construct homes in accordance with the Wildland Urban Interface Code (WUI) which involves defensible space and ignition resistant construction (IFC Appendix B103.3)
4. Provide automatic sprinkler system

COMMUNITY COUNCIL CONCERNS

Our neighborhood of large lots and limited access is particularly concerned about the requirement for sprinklers on new construction, likely raising costs thousands of dollars/home.

-What is the data on saving lives and property to justify sprinklers for single family homes?

-How will the sprinklers work if the electricity goes out? If it is also below freezing? Are there other cold climate cities with similar requirements? What is their effectiveness?

COMMUNITY COUNCIL CONCERNS

-What alternatives have been considered? E.g. communal water tanks, we have long been concerned about new subdivisions that lack two egress routes – guarantee such access for Fire Department and other emergency vehicles to improve fire prevention/mitigation

COMMUNITY COUNCIL CONCERNS

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12200 W. Skyline Dr

E11 - flames visible from E R Loop Road. On arrival, structure fully involved on main floor, occupant standing at end of driveway - except for garage, home was a total loss

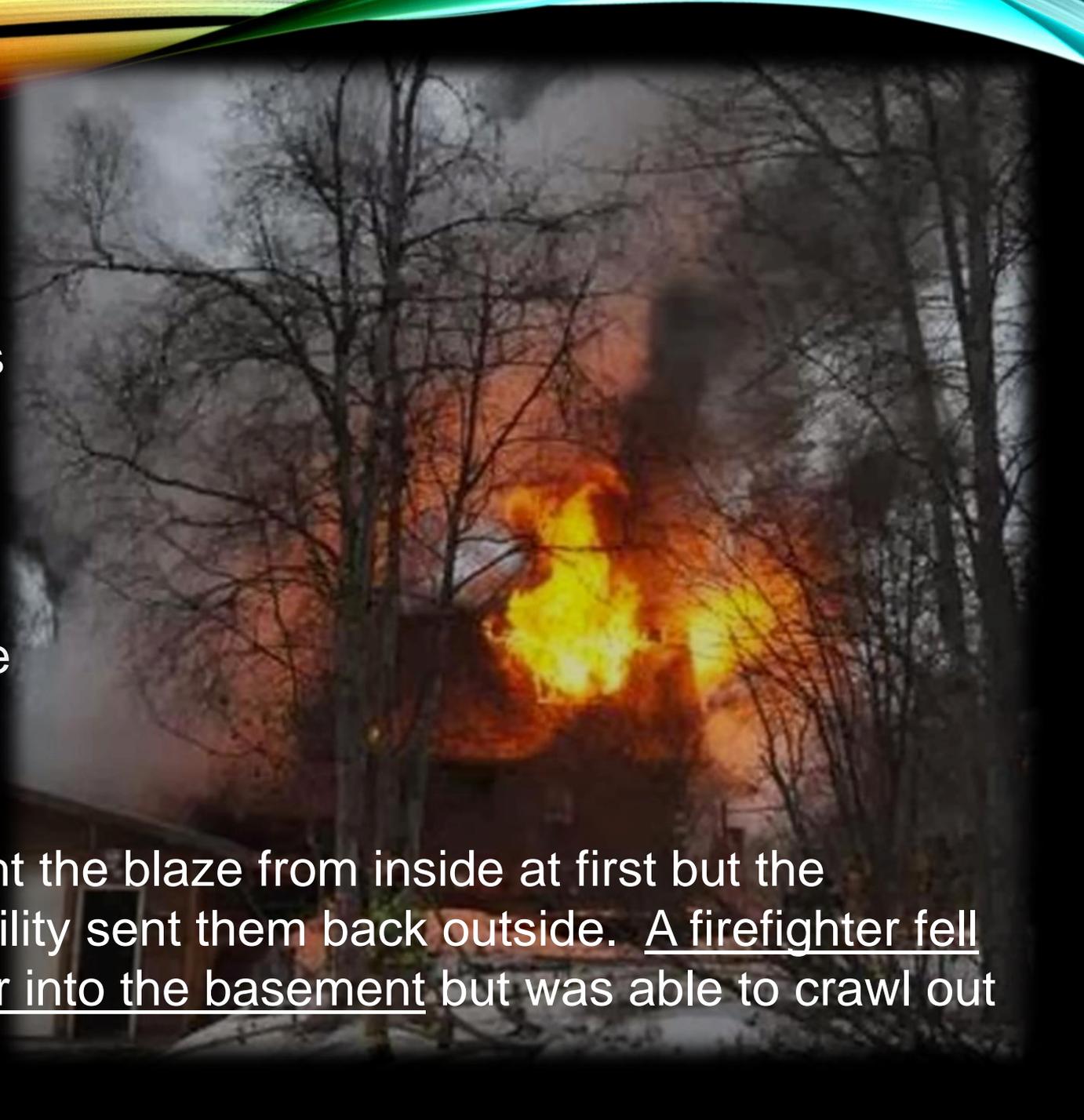


Large house fire in Eagle River brought under control

 Author: Annie Zak  Updated: December 10, 2016  Published December 10, 2016

ANCHORAGE,
Alaska (AP) -
Anchorage-area
fire officials say a
family of four was
driven from their
home after fire
crews battled a
blaze in a three-
story house in the
Eagle River area.

Firefighters fought the blaze from inside at first but the structure's instability sent them back outside. A firefighter fell from the first floor into the basement but was able to crawl out of a window.



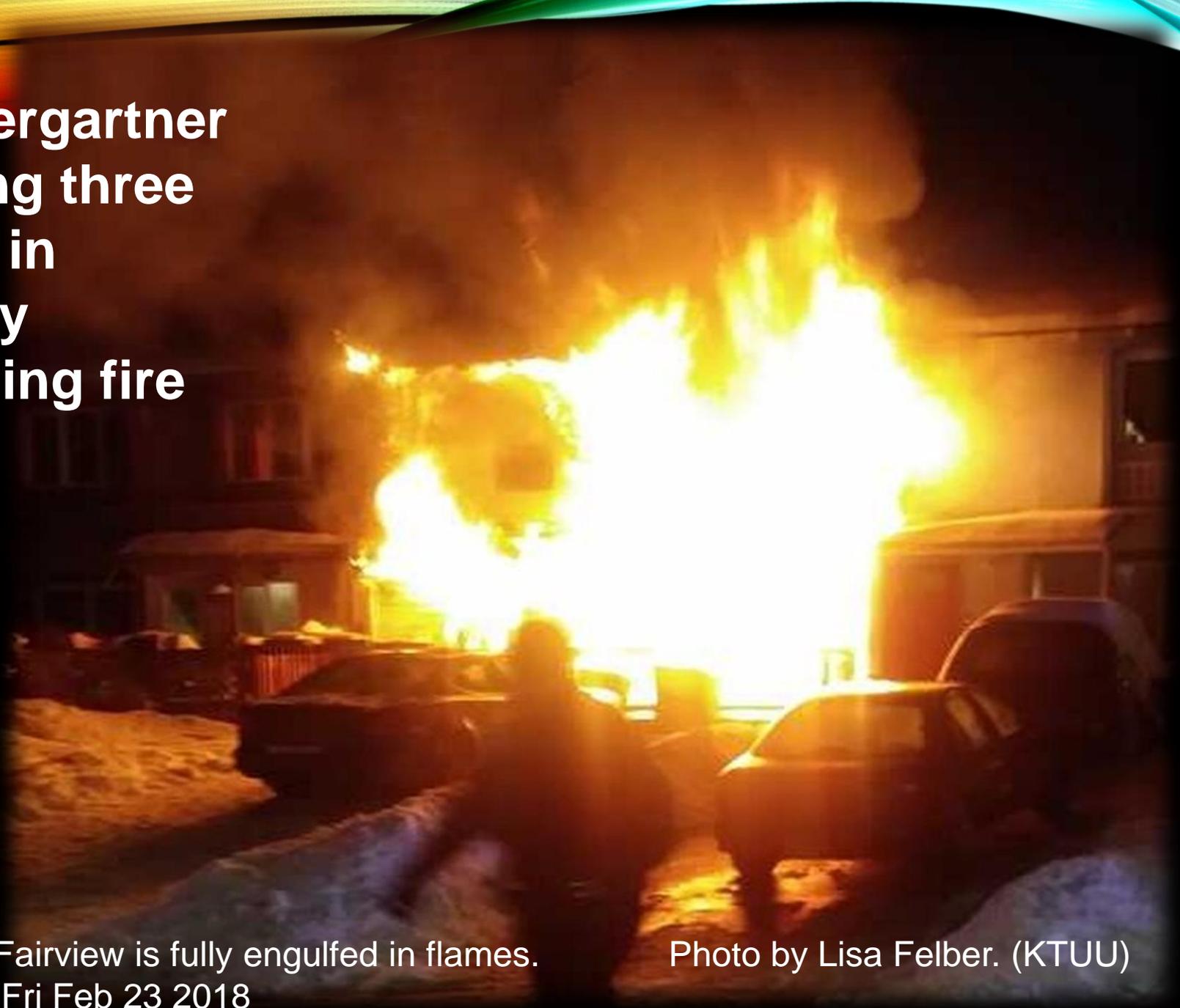


[Anchorage](#)

1 person dead, 2 injured after house fire in Anchorage

 Author: [Madeline McGee](#)  Updated: July 18, 2019  Published July 18, 2019

**Kindergartner
among three
dead in
Friday
morning fire**



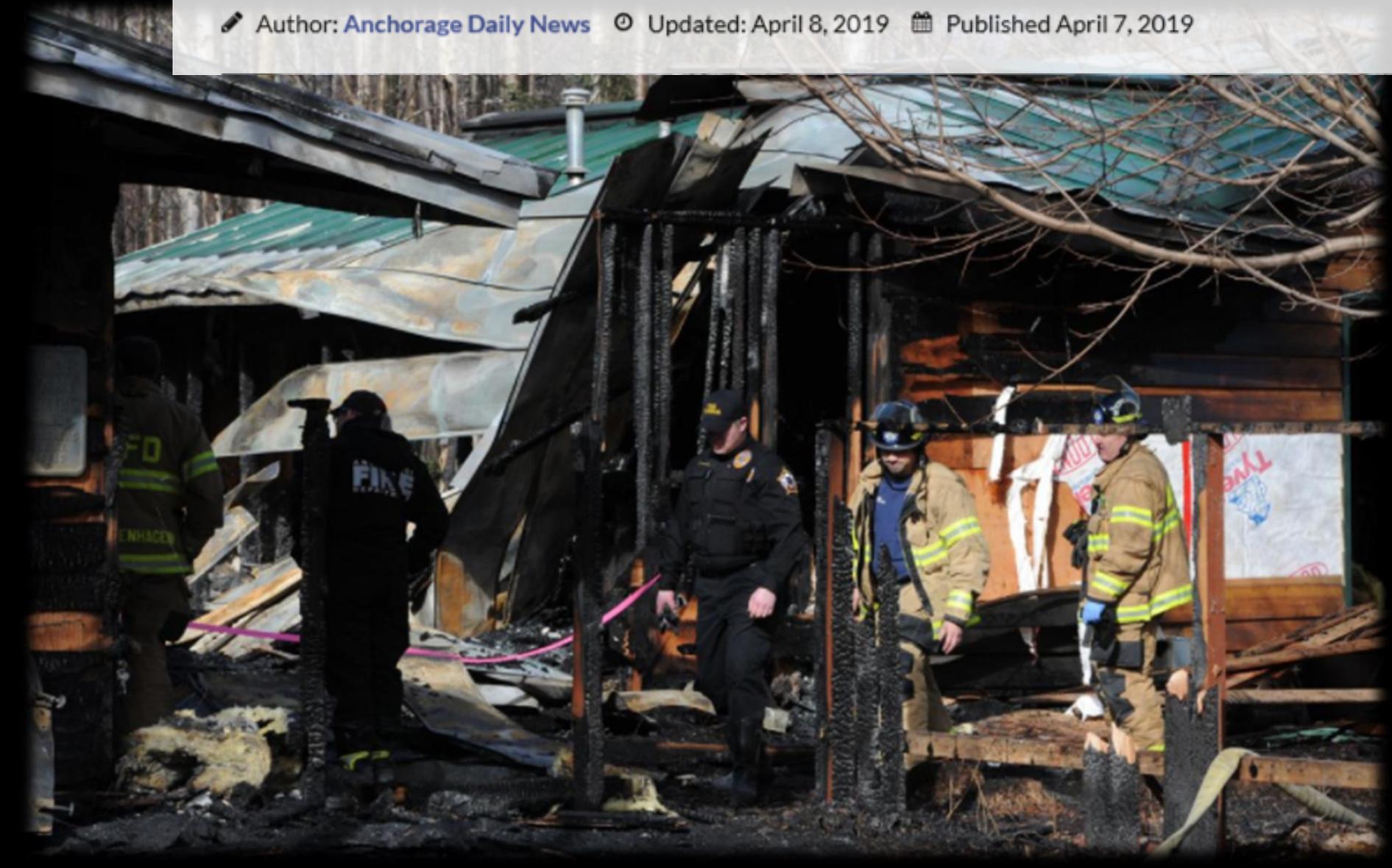
A home in Fairview is fully engulfed in flames.
Published: Fri Feb 23 2018

Photo by Lisa Felber. (KTUU)

Anchorage

One dead in South Anchorage house fire

✎ Author: [Anchorage Daily News](#) ⌚ Updated: April 8, 2019 📅 Published April 7, 2019



Child dies in 'suspicious' South Anchorage duplex fire

✍ Author: Tegan Hanlon, Megan Edge 🕒 Updated: September 28, 2016 📅 Published May 6, 2015





According to Underwriters Laboratory 30 years ago, you had up to 17 minutes to escape a house fire, but today's homes burn faster.

Why?

Open floor plans provide oxygen and don't provide barriers. Synthetic building materials and furnishings burn at a much faster rate than the natural products used decades ago.

UL videotaped [a dramatic side-by-side experiment](#) that showed how rapidly a modern living room went up in flames compared with a vintage one.

Comparison of Room Furnishings

Legacy Room

Modern Room



Underwriters Laboratories

04:03

ANCHORAGE STRUCTURE FIRE PROPERTY LOSS

\$11,000,000.00 in fire loss in 2018

\$12,000,000.00 in fire loss in 2019

\$8,000,000.00 in fire loss in 2020

(Through September)

SPRINKLERS SAVE LIVES & REDUCE PROPERTY DAMAGE

92% of all civilian structure fire deaths resulted from home fires

85% lower risk of dying where sprinklers are present (NFPA)

90% of the time a single sprinkler activation was sufficient to control the fire

97% of the time sprinklers contained the fire to the room of origin

71% reduction in property damage in structures with fire sprinklers

- Statistic sourced directly from the records of NFPA

WHAT ABOUT FIRE SPRINKLER WATER DAMAGE?

There is far less damage in a home fire with sprinklers than in an unsprinklered home fire. Sprinklers act fast, controlling the fire. Without sprinklers, fire, heat, smoke and the water from high-pressure fire department hoses cause greater damage.

With sprinklers, water flow is 10-26 gallons of water per minute, about 1/10th of fire hoses (100gpm – 250gpm)

HOME FIRE SPRINKLER



NO HOME FIRE SPRINKLER

SPRINKLER COSTS

A review of 14 residential sprinkler installations recently permitted and installed in Anchorage revealed the following:

The lowest install was \$7,747 on 2,786 square feet new construction
unit price = \$2.78 per sq. ft.

The highest install was \$38,000 on 5,524 square feet retrofit
unit price = \$6.87 per sq. ft.

The average square footage = 3,280 sq. ft.

The average install cost = \$15,824

The average unit price = \$4.80 sq. ft.

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*Calculate only with systems utilizing a tank & pump

The average unit price = \$4.89 sq ft.

WHAT IS THE COST?

Anchorage will continue to develop further away from infrastructure, ...and the AFD will still respond to fire emergencies

What will we find, and what will be left when we get there?

Fire fighting water supply is critical part of the development equation

-Where that supply is limited, home fire sprinklers are a reasonable option