SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

70.01.00 CALCULATING FIRE LOSS AND DOLLARS SAVED



Adopted: 11/14/17
Reviewed: 11/18/21
Revised: 11/18/21
Approved: 11/18/21

Purpose: To establish a procedure for calculating dollar loss, property loss, and dollars saved for property and contents.

References: NFIRS Calculating Fire Loss, ICC Building Validation Data Guide.

Key points for calculating fire loss and property saved.

- 1. Determining fire loss is only an <u>estimation</u> of the loss to a structure/building and its contents in terms of replacement of like kind and quantity.
- 2. Fire loss includes contents broken or damaged by fire, smoke, and water.
- 3. Fire loss does not include indirect loss, such as business interruption.
- 4. It is just as important to calculate and list the dollars saved in property and contents.
- 5. The U.S. Fire Administration (USFA) recommends the use of the International Code Council's (ICC) Building Valuation Data (BVD) formula to help fire departments determine dollar loss from fires. The current per square foot construction costs table is located at *iccsafe.org*
- 6. When a value is not known, it is preferable to leave the fields blank. Clicking the "None" box means that there was no loss at all.
- 7. When fire loss is encountered on a neighboring property, and that loss does not require the completion of a separate exposure report, then the loss should be included in the remarks section of the original incident report.

Definition of Fire Loss.

1. Fire loss is an estimation of the total loss to the structure and contents in terms of replacement of like kind and quantity. This estimation of fire loss includes contents broken or damaged by fire, smoke, and water. It does not include indirect loss, such as business interruption

Procedure:

- 1. Square Foot Multiplier.
 - a) To determine the total Sq. Ft.
 - b) Using outside dimensions, Length X Width = Sq. Ft.
 - c) $40^{\circ} \text{ X } 50^{\circ} = 2,000 \text{ Sq. Ft.}$

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- 2. Square Footage Loss or Saved.
 - a) To determine property loss and property saved.
 - b) Type of structure, "single family dwelling" (August 2021 \$149 from BVD table).
 - c) Three rooms received heavy fire damage, each room is $20 \times 20 = 400 \text{ sq. ft.}$
 - d) 400 sq. ft. x 3 = 1200 Sq. Ft.
 - e) Another 4 rooms received no damage = 800 Sq. Ft.
 - i. 1200 sq. ft. X \$149 = \$178,800 is the dollar loss at the fire.
 - ii. 800 sq. ft. X \$149 = \$119,200 is the dollars saved at the fire.
- 3. You may also use Zillow.com to help you determine square foot and last known sale price for value per square foot.
- 4. NFIRS and NFPA will only have a place to list dollars lost, but it is also important to list dollars saved. In the fire report narrative section, you will list the dollars saved at the bottom of your narrative.
- 5. The percentage of the building damaged by fire and percentage of the building not damaged should equal 100%.

Example:

Type of Construction: 1 or 2 story, Single Family Dwelling

Area: 1st story = 3,000 sq. ft. 2nd story = 2,500 sq. ft.

Height: 2 stories

BVD Multiplier = \$149.00

Use Group: 1A

1. Gross area:

SFD = 2 stories = 5,500 sq. ft.

2. Square Foot Construction Cost:

. \$149.00/sq. ft.

SFD = 5,500 sq. ft. x \$149.00/sq. ft. = \$819,500

- 6. Fire Report.
 - a) Information related to dollar loss and dollars saved shall be included in the Fire Report.
- 7. Important Points.

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- a) The BVD is not intended to apply to alterations or repairs to existing buildings. However, the square foot construction costs table can be used to determine the cost of an addition that is basically a stand-alone building which happens to be attached to an existing building. In the case of such additions, the only alterations to the existing building would involve the attachment of the addition to the existing building and the openings between the addition and the existing building.
- b) The square foot construction cost does not include the price of the land on which the building is built. The square foot construction cost takes into account everything from foundation work to the roof structure and coverings but does not include the price of the land. The cost of the land does not affect the cost of related code enforcement activities and is not included in the square foot construction cost.
- c) Use Kelly Blue Book (KBB) for vehicles that are lost due to fire. If the garage area is saved and the property in the garage is not damaged, KBB would be used to calculate dollars lost and saved on the vehicles.
- d) Value of the contents will be an average between 20% and 25% of the total value of the home. Unless there are specific items that are identified as having a recordable value, i.e. expensive jewelry, paintings, pottery, etc.

Examples:

\$786,000 house is a total loss along with all the contents. Loss on House is \$786,000 Loss of Contents is \$\$157,200

\$150,000 house is a total loss along with all the contents. Loss on House is \$150,000 Loss on Contents is \$30,000

- a) Private Garages use Utility, MISC
- b) Unfinished Basements = \$23.20 per sq. ft.
- c) For shell only buildings deduct 20%
- d) NP = Not permitted