



# 2021 Fireground Civilian Rescue Research Project

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To date, the American fire service has not officially collected the number of or means of which civilians are rescued at fires. The result of this information gap is a service unable to quantify if or how, presence, actions, or operations result in saving lives. For the fire service to deliberately improve outcomes and not just reduce loss, the mission (saving lives) must match the metrics (lives saved). Until then, the operational impact of the American fire service will remain unknown.

The purpose of this graduate research project is to demonstrate the scope and value of fireground civilian rescue reporting using qualitative survey methods. The results will support an improved understanding of fireground operational influence on outcomes. A clearer vision of the nation's fire problem for the future includes the knowledge of both the parameters of our problem (loss) and the dimensions of our success (saves). The results presented demonstrate the first 90 days of 2021.

## 2021 1<sup>st</sup> Quarter Report

**454** Residential structure fire incidents with fireground civilian rescues by fire departments were reported in U.S. news media or by department press releases.

**881** Civilians were rescued from residential structure fires and transferred to emergency medical evaluation by the direct actions of U.S. firefighters in during the 1<sup>st</sup> Quarter of 2021. This represents an average of **9.8 rescues per day**.

**247** Follow up *Firefighter Rescue Surveys* were completed by the firefighters or departments involved in the rescue operation. This is a **28%** response rate to the direct contact collection method. For the first quarter of 2020, **59** *Firefighter Rescue Surveys* were collected under the voluntary system with no direct outreach request. Using the direct method for 2021 yielded more than four times the data over the same time period.

**74%** Incident survival rate for civilians who were rescued from residential structure fires and transferred to emergency medical through the direct actions of U.S. firefighters. The survival rate is calculated from the **247** direct follow up *Firefighter Rescue Surveys*.

**652** Estimated civilian lives saved from residential structure fires through the direct actions of U.S. firefighters and emergency medical personnel. This is determined by applying the survival rate percentage to the total reported rescue population.

**293** Single family dwelling and mobile home fire incidents had fireground civilian rescues yielding a total of **461** victims. For single family dwelling and mobile home fires with rescues, it can be anticipated that there will be more than one potential victim.

**161** Apartment and multi-family dwelling structure fires had fireground civilian rescues yielding a total of **420** victims. For apartment and multi-family dwelling incidents with rescues, the average is **2.6** victims per incident.

**2021 1<sup>st</sup> Quarter Fireground Civilian Rescues by State:**

Alaska - 4	Delaware – 2	Kansas – 21	Mississippi - 1	New Mexico – 2	Pennsylvania - 71	Vermont - 3
Alabama – 7	Florida – 28	Kentucky – 3	Missouri – 30	New York – 73	Rhode Island - 4	Virginia - 19
Arkansas – 5	Georgia – 12	Louisiana – 7	Montana – 2	North Carolina - 32	South Carolina - 9	Washington - 23
Arizona - 3	Iowa – 6	Massachusetts - 28	Nebraska - 4	North Dakota - 4	South Dakota - 3	Washington DC - 4
California – 53	Idaho – 7	Maryland - 47	Nevada – 6	Ohio - 47	Tennessee - 14	West Virginia – 5
Colorado -7	Illinois - 68	Michigan – 15	New Hampshire - 19	Oklahoma - 9	Texas - 37	Wisconsin - 31
Connecticut – 31	Indiana – 23	Minnesota – 20	New Jersey – 22	Oregon - 3	Utah - 7	

**Departments With 5 Or More Fireground Civilian Rescue Incidents In 2021 1<sup>st</sup> Quarter:**

Municipality	Number of Fire Incidents with Rescues Q1 2021	Total number of civilians rescued
New York, NY	11	22
Chicago, IL	8	22
Philadelphia, PA	8	19
Charlotte, NC	6	15
Minneapolis, MN	5	11
Wichita, KS	5	10
Cincinnati, OH	5	8
Fort Worth, TX	5	7
Cleveland, OH	5	6
Jacksonville, FL	5	5