The Fifth Needs Assessment of the US Fire Service

FACILITIES & APPARATUS

as part of

DECEMBER 2021
Fire departments are an essential part of public safety, responding to an ever-expanding list of hazards in our communities. While department members continue to fight fires and engage in activities to prevent fires from occurring, beyond these traditional roles fire departments work to mitigate other risks, from providing fall prevention education to addressing the opioid crisis. Firefighters provide emergency medical services, rescue people from a wide variety of dangerous situations, and mitigate incidents involving hazardous materials.

The needs assessment survey asked questions about fire department facilities and apparatus to see if departments in the US have what they need.

Facilities address a wide set of needs for fire departments; for example, fire stations may be strategically located to provide quick response to a community. A fire department facility might also include living quarters, training areas, and storage and maintenance areas. According to a 2019 NFPA report, *Renovation Needs of the US Fire Service*, the total renovation needs of US fire stations is estimated at between $70 billion and $100 billion.

Apparatus are an effective means of conveyance for firefighters and their tools, such as water, hoses, PPE, medical equipment, etc. Apparatus must be available and kept in good repair. As different types of apparatus may be necessary to mitigate different hazards, they are often specialized or address multiple risks.

Understanding the Survey
This Fifth Fire Service Needs Assessment Survey was conducted by NFPA beginning in 2020 and concluding in 2021. It follows earlier surveys completed in 2001, 2005, 2010, and 2015.

The goal of the survey was to identify the major needs of the US fire service by comparing what departments actually have with what existing consensus standards, government regulations, and other nationally recognized guidance documents state they need to have to be safe and effective.

Survey responses were received from 2,969 fire departments of all sizes. You can learn more about the survey’s structure and analysis in Appendix A.

All Report Sections:
- Staffing and Operations
- Community Risk Reduction
- Health and Wellness
- Facilities and Apparatus
- Wildland and WUI Firefighting
- Changes Across Five Studies
- Personal Protective Equipment
- Training and Certification
- Executive Summary
NFPA gratefully thanks the many fire departments that responded to the Fifth Fire Service Needs Assessment Survey for again providing us with the data necessary to make national estimates of fire department resources and capabilities. We also greatly appreciate the many contributions made by the following participants in our stakeholder advisory meetings and follow-ups:

Center for Public Safety Excellence: Debbie Sobotka  
Fire Department Safety Officers Association: Eric Valliere and Rich Marinucci  
International Association of Black Professional Firefighters: Malcolm Alston  
International Association of Fire Chiefs: Rob Brown  
International Association of Fire Fighters: Pat Morrison  
International Fire Marshals Association: David Lynam and Kevin Sehlmeyer  
International Association of Wildland Fire: Kelly Martin  
Metropolitan Fire Chiefs Association: Edward “Loy” Senter, Jr.  
National Association of State Fire Marshals: Philip Oakes  
National Association of State Foresters: Dan Smith  
National Fallen Firefighters Foundation: Allan Graves and Gamaliel Baer  
National Volunteer Fire Council: Dave Finger, Joe Maruca, and Kevin Quinn  
US Fire Administration/National Fire Data Center: Richard Patrick and Bill Troup  
Women in Fire: Amy Hanifan

Within NFPA, many people helped to make this report possible. Melissa Knight coordinated all stakeholder communication and feedback and was the key author of each module. Ben Evarts analyzed the data. Frank Deely, Jay Petrillo, and Steve Belski processed and entered data from the surveys, in addition to helping with questions from fire departments and contributing to the research questions. Nancy Schwartz provided invaluable support during the entire project from survey redesign to the final product. Doug Sternberg did the graphic design for the report covers. Maeghan Connor provided an editorial review of each module.

To learn more about research at NFPA, visit nfpa.org/research.  
Email: research@nfpa.org

NFPA No. USS120-Facilities/Apparatus
Survey Responses and Defining Unmet Need

The needs assessment study, as it has in the past, defines unmet need as not having the resources required to provide a service. For some questions, the survey asked about the extent of the need within the department. For example:

**Question:** How many of your emergency responders are equipped with wildland fire personal protective clothing?

<table>
<thead>
<tr>
<th>Answers</th>
<th>Percent of Fire Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (100%)</td>
<td>30%</td>
</tr>
<tr>
<td>Most (76–99%)</td>
<td>12%</td>
</tr>
<tr>
<td>Many (51–75%)</td>
<td>7%</td>
</tr>
<tr>
<td>Some (26–50%)</td>
<td>8%</td>
</tr>
<tr>
<td>Few (1–25%)</td>
<td>11%</td>
</tr>
<tr>
<td>None (0%)</td>
<td>20%</td>
</tr>
</tbody>
</table>
| Department does not perform wildland firefighting | 13% 

For this question, detailed information on the level of need is required. *Unmet need* is found by adding together the departments that perform wildland firefighting and cannot equip ALL their emergency responders with wildland firefighting equipment (in this case, a total of all the rows highlighted in yellow, or 57 percent). In some cases in this study, both the detailed survey responses and the aggregated unmet need numbers are shown to provide clarity to the reader. In other cases, detailed survey responses may be available in the accompanying Appendix.

Department Size and Nomenclature

The 2020 needs assessment survey was sent to fire departments of all sizes, from those protecting very large communities (500,000 people or more) to those protecting very small communities (fewer than 2,500 people). Table A below shows the total number of survey responses by community size.

<table>
<thead>
<tr>
<th>Community Size</th>
<th>Number of Departments That Responded to the Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>24</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>18</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>81</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>171</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>299</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>571</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>464</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>453</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>888</td>
</tr>
<tr>
<td>Total</td>
<td>2,969</td>
</tr>
</tbody>
</table>

The survey results throughout this report are often broken out by community size, as departments of different sizes have different operational capacities and needs. In some cases, departments may be grouped together across these strata (i.e., departments protecting more than 25,000 people would include the top 5 tiers of community size).
## Contents

Key Takeaways: ................................................................................................................................. FA-5

Stations and Facilities ....................................................................................................................... FA-5

Apparatus ......................................................................................................................................... FA-7
  Apparatus aging and replacement ................................................................................................. FA-7

Additional Resources and Education about Facilities and Apparatus ............................................. FA-10

Appendix A: Survey Structure and Analysis .................................................................................. FA-11
  Survey Structure and Analysis ......................................................................................................... FA-11

Appendix B: Fifth Survey of the Needs of the US Fire Service ....................................................... FA-12
Survey Results: Facilities and Apparatus

**What we looked at:** The Fifth Fire Service Needs Assessment survey measured the availability and age of fire department facilities and apparatus, as well as the features of facilities. To see the changes in these categories from study to study, see the “Changes Over Five Studies” module.

**Key Takeaways:**
- Nearly half (44 percent) of fire stations in the departments surveyed are over 40 years old.
- More than half (52 percent) of fire stations do not have separate or private facilities for men and women.
- More than half (56 percent) of fire stations do not have exhaust emission control.
- Nearly half (49 percent) of the engines/pumpers in the departments surveyed are 15 or more years old.

**Stations and Facilities**

Table 1 shows the number of stations that are either over 40 years old or lacking in certain features, such as backup power, exhaust emission control, and private or separate facilities for men and women.

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>Stations Over 40 Years Old</th>
<th>Stations WITHOUT Backup Power</th>
<th>Stations WITHOUT Exhaust Emission Control (e.g., Diesel Exhaust Extraction)</th>
<th>Stations WITHOUT Private or Separate Facilities for Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>1,200</td>
<td>370</td>
<td>520</td>
<td>650</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>450</td>
<td>60</td>
<td>130</td>
<td>120</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>1,110</td>
<td>380</td>
<td>620</td>
<td>980</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>1,060</td>
<td>310</td>
<td>500</td>
<td>980</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>1,440</td>
<td>680</td>
<td>1,440</td>
<td>1,600</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>2,780</td>
<td>1,150</td>
<td>2,230</td>
<td>2,680</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>2,600</td>
<td>1,340</td>
<td>3,170</td>
<td>3,060</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>3,090</td>
<td>2,810</td>
<td>5,280</td>
<td>4,500</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>7,980</td>
<td>8,390</td>
<td>13,610</td>
<td>11,230</td>
</tr>
<tr>
<td>Total</td>
<td>21,710</td>
<td>15,490</td>
<td>27,500</td>
<td>25,800</td>
</tr>
</tbody>
</table>

These estimates are statistical projections to all fire departments with both emergency response and record-keeping responsibilities in the US based on the 2,969 departments that responded to the 2020 needs assessment survey.
Table 2 shows the percentage of stations that are either over 40 years old or lacking in certain features, such as backup power, exhaust emission control, and private or separate facilities for men and women.

An estimated 44 percent of fire stations are over 40 years old, a number that has grown slightly since 2015 (see the “Changes Over Five Studies” module for more information). Smaller departments are somewhat more likely to have older stations, but many larger departments have older stations as well. In addition, many older stations were not designed with health and safety priorities in mind, like a place to take off dirty gear before entering office and living spaces or laundry facilities for cleaning dirty gear.

Stations without backup power are much more common among smaller departments. Half of the stations for departments protecting communities of 2,500 or less lack backup power, while this number is under 25 percent in all the population strata above 5,000 people.

Most fire stations (56 percent) are not equipped for exhaust emission control. This problem is especially acute in very small departments (those protecting 2,500 people or less) where 82 percent of the stations do not have exhaust emission control.

Slightly more than half (52 percent) of fire stations do not have private or separate facilities for men and women. In general, these facilities are more likely to be available in departments protecting larger populations than in smaller departments.

Table 2: Percent of fire stations that are over 40 years old or lacking certain features (by population stratum and total)

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>Average Number of Stations</th>
<th>Stations Over 40 Years Old</th>
<th>Stations WITHOUT Backup Power</th>
<th>Stations WITHOUT Exhaust Emission Control (e.g., Diesel Exhaust Extraction)</th>
<th>Stations WITHOUT Private or Separate Facilities for Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>41.5</td>
<td>47%</td>
<td>15%</td>
<td>21%</td>
<td>26%</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>19.1</td>
<td>38%</td>
<td>5%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>11.0</td>
<td>38%</td>
<td>13%</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>5.5</td>
<td>39%</td>
<td>11%</td>
<td>18%</td>
<td>36%</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>3.7</td>
<td>35%</td>
<td>17%</td>
<td>35%</td>
<td>39%</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>2.2</td>
<td>44%</td>
<td>18%</td>
<td>35%</td>
<td>42%</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>1.5</td>
<td>47%</td>
<td>24%</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>1.5</td>
<td>43%</td>
<td>39%</td>
<td>73%</td>
<td>62%</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>1.3</td>
<td>48%</td>
<td>51%</td>
<td>82%</td>
<td>68%</td>
</tr>
<tr>
<td>Total</td>
<td>NA</td>
<td>44%</td>
<td>31%</td>
<td>56%</td>
<td>52%</td>
</tr>
</tbody>
</table>
Apparatus

Because different departments respond to different incident types, a variety of apparatus and vehicle types are necessary to effectively respond to emergencies. The number and type of apparatus vary by community size. Table 3 shows the average number of engines/pumpers, ladders, tankers, and ambulances/other transport vehicles in service by the population protected.

Table 3: Average number of apparatus in service by population protected

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>Engines/Pumpers in Service</th>
<th>Ladders/Aerials in Service</th>
<th>Tankers/Tenders in Service</th>
<th>Ambulances or Other Transport Vehicles in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>44.0</td>
<td>13.0</td>
<td>4.2</td>
<td>28.2</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>18.6</td>
<td>4.7</td>
<td>2.5</td>
<td>8.8</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>11.0</td>
<td>3.2</td>
<td>1.4</td>
<td>4.7</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>5.0</td>
<td>1.7</td>
<td>0.4</td>
<td>2.5</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>3.7</td>
<td>1.2</td>
<td>0.8</td>
<td>1.8</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>2.7</td>
<td>0.9</td>
<td>0.8</td>
<td>1.6</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>2.4</td>
<td>0.5</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>2.3</td>
<td>0.3</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>2.1</td>
<td>0.1</td>
<td>1.2</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Apparatus aging and replacement

Even if departments have apparatus, they may be out of date or unreliable. Tables 4 through 7 show the breakdown of apparatus by age and community size. Table 4 shows that about half (49 percent) of engines/pumpers overall are 15 or more years old. This issue is more pronounced in smaller departments. Nearly two-thirds (64 percent) of the engines/pumpers in the smallest communities are at least 15 years old, while among departments that protect at least 50,000 people, 13 to 14 percent of the engines/pumpers are 15 years or older.

Table 4: Engines/pumpers in service by age of apparatus and community size

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>0–14 Years Old</th>
<th>15–19 Years Old</th>
<th>20–29 Years Old</th>
<th>30+ Years Old</th>
<th>Unknown Age</th>
<th>Total 15+ Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>86%</td>
<td>8%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>87%</td>
<td>4%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>87%</td>
<td>6%</td>
<td>3%</td>
<td>3%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>86%</td>
<td>10%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>73%</td>
<td>13%</td>
<td>11%</td>
<td>2%</td>
<td>0%</td>
<td>26%</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>64%</td>
<td>17%</td>
<td>15%</td>
<td>4%</td>
<td>0%</td>
<td>36%</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>52%</td>
<td>20%</td>
<td>24%</td>
<td>5%</td>
<td>0%</td>
<td>48%</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>43%</td>
<td>21%</td>
<td>26%</td>
<td>9%</td>
<td>0%</td>
<td>57%</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>35%</td>
<td>22%</td>
<td>26%</td>
<td>16%</td>
<td>0%</td>
<td>64%</td>
</tr>
<tr>
<td>Total</td>
<td>51%</td>
<td>19%</td>
<td>21%</td>
<td>9%</td>
<td>0%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Table 5 shows that 41 percent of ladders/aerials in service overall are more than 15 years old, with 25 percent being over 20 years old. Older ladder trucks are particularly prevalent in smaller communities.

Table 5. Ladders/aerials in service by age of apparatus and community size

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>0–14 Years Old</th>
<th>15–19 Years Old</th>
<th>20–29 Years Old</th>
<th>30+ Years Old</th>
<th>Unknown Age</th>
<th>More Than 15 Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>81%</td>
<td>9%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>19%</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>86%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>85%</td>
<td>9%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>85%</td>
<td>8%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>68%</td>
<td>17%</td>
<td>14%</td>
<td>2%</td>
<td>0%</td>
<td>32%</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>56%</td>
<td>17%</td>
<td>22%</td>
<td>4%</td>
<td>0%</td>
<td>43%</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>46%</td>
<td>21%</td>
<td>25%</td>
<td>7%</td>
<td>0%</td>
<td>53%</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>34%</td>
<td>16%</td>
<td>32%</td>
<td>18%</td>
<td>0%</td>
<td>66%</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>45%</td>
<td>22%</td>
<td>21%</td>
<td>12%</td>
<td>0%</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>58%</td>
<td>16%</td>
<td>19%</td>
<td>6%</td>
<td>0%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Most (58 percent) tankers/tenders in service are at least 15 years old, including two-thirds (65 percent) of the tankers/tenders in departments protecting less than 2,500 people.

Table 6: Tankers/tenders in service by age of apparatus and community size

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>0–14 Years Old</th>
<th>15–19 Years Old</th>
<th>20–29 Years Old</th>
<th>30+ Years Old</th>
<th>Unknown Age</th>
<th>More Than 15 Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>73%</td>
<td>19%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>63%</td>
<td>31%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>38%</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>69%</td>
<td>15%</td>
<td>13%</td>
<td>3%</td>
<td>0%</td>
<td>31%</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>58%</td>
<td>16%</td>
<td>21%</td>
<td>5%</td>
<td>0%</td>
<td>42%</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>48%</td>
<td>19%</td>
<td>24%</td>
<td>11%</td>
<td>0%</td>
<td>53%</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>50%</td>
<td>22%</td>
<td>21%</td>
<td>8%</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>52%</td>
<td>21%</td>
<td>20%</td>
<td>7%</td>
<td>0%</td>
<td>48%</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>44%</td>
<td>18%</td>
<td>23%</td>
<td>13%</td>
<td>1%</td>
<td>55%</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>35%</td>
<td>21%</td>
<td>22%</td>
<td>22%</td>
<td>0%</td>
<td>65%</td>
</tr>
<tr>
<td>Total</td>
<td>42%</td>
<td>20%</td>
<td>22%</td>
<td>16%</td>
<td>0%</td>
<td>58%</td>
</tr>
</tbody>
</table>

One-quarter (26 percent) of all ambulances are over 15 years old. Newer ambulances are more common in larger departments.

Table 6: Ambulances or other transport vehicles in service by age and population protected

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>0–14 Years Old</th>
<th>15–19 Years Old</th>
<th>20–29 Years Old</th>
<th>30+ Years Old</th>
<th>Unknown Age</th>
<th>More Than 15 Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>250,000 to 499,999</td>
<td>98%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>98%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>94%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>92%</td>
<td>6%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>87%</td>
<td>9%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>79%</td>
<td>14%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
<td>21%</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>69%</td>
<td>16%</td>
<td>11%</td>
<td>4%</td>
<td>0%</td>
<td>31%</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>49%</td>
<td>21%</td>
<td>20%</td>
<td>10%</td>
<td>0%</td>
<td>51%</td>
</tr>
<tr>
<td>Total</td>
<td>73%</td>
<td>13%</td>
<td>9%</td>
<td>4%</td>
<td>0%</td>
<td>26%</td>
</tr>
</tbody>
</table>
Many departments also have some apparatus in reserve. Table 8 shows the average number of apparatus in reserve for each department by type of apparatus and population protected.

Table 8: Average number of apparatus in reserve by type and population protected

<table>
<thead>
<tr>
<th>Population Protected</th>
<th>Engines/Pumpers in Reserve</th>
<th>Ladders/Aerials in Reserve</th>
<th>Tankers/Tenders in Reserve</th>
<th>Ambulances or Other Transport Vehicles in Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 or More</td>
<td>16.6</td>
<td>5.3</td>
<td>0.7</td>
<td>13.8</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td>7.9</td>
<td>2.3</td>
<td>0.1</td>
<td>3.7</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td>4.4</td>
<td>1.4</td>
<td>0.1</td>
<td>2.2</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>2.4</td>
<td>0.7</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>1.3</td>
<td>0.3</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>10,000 to 24,999</td>
<td>0.7</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>5,000 to 9,999</td>
<td>0.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>2,500 to 4,999</td>
<td>0.2</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Fewer than 2,500</td>
<td>0.2</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Figure 1 shows that only 38 percent of all fire departments plan and budget for apparatus replacement on a regular schedule, while 31 percent have a plan but no budget. Larger departments are more likely to have a plan and budget. Among the smallest departments, 45 percent have no plan or budget.

Figure 1: Apparatus replacement plans and budget (by size of community protected)
Additional Resources and Education about Facilities and Apparatus

- Fire Industry Education Resource Organization (FIERO): fieroonline.org

Previous studies are available at nfpa.org/needsassessment, as well as through NFPA’s Library (nfpa.org/library).
Appendix A: Survey Structure and Analysis

Survey Structure and Analysis

The survey used in the first four studies was developed by NFPA in collaboration with an ad hoc technical advisory group consisting of representatives from national organizations associated with the management of fire and related hazards and risks in the US. For the 2020 cycle, parts of the survey were redesigned to better reflect the current roles and responsibilities of the fire service. The content was revised based on input from representatives from the following organizations:

- Center for Public Safety Excellence
- Fire Department Safety Officers Association
- International Association of Black Professional Firefighters
- International Association of Fire Chiefs
- International Association of Fire Fighters
- International Fire Marshals Association
- International Association of Wildland Fire
- Metropolitan Fire Chiefs Association
- National Association of State Fire Marshals
- National Association of State Foresters
- National Fallen Firefighters Foundation
- National Volunteer Fire Council
- US Fire Administration/National Fire Data Center
- Women in Fire

While new questions were added, many of the original survey questions did not change, enabling responses to be compared across the years. Any comparison where the question was changed is noted in the text. A copy of the survey is included in Appendix B.

The survey was sent out as a census, meaning that it was sent to all the US fire departments with administrative and fire response responsibilities who were listed in the NFPA fire service inventory. In 2020, 26,258 fire departments were sent the survey. In addition to mailing out a paper version of the questionnaire, the survey was offered online for the first time.

A total of 2,969 fire departments responded to the survey, with approximately 75 percent responding online and 25 percent filling out the paper version. Overall, the response rate was 11 percent, ranging from a 7 percent response from fire departments protecting populations of less than 2,500 to a 39 percent response from fire departments protecting populations of 500,000 or more. Some fire departments that responded in 2020 had not responded in previous years, while some that did respond in past years did not. Consequently, this report estimates overall fire department needs, but not the needs of an identical group over time, as the survey responses did not come from exactly the same fire departments for each of the four surveys.
PART I. BASIC INFORMATION

Name of person completing form: _________________________________

Rank/Title: ____________________________________________________

NFIRS/FDID: ___________________________________________________

E-mail address: ____________________________ Phone: (_______)

1. Population (permanent residents) your department has primary responsibility to protect (exclude mutual aid areas): __________

2. Area (in square miles) your department has primary responsibility to protect (exclude mutual aid areas): __________

3. Number of buildings in community that are 3 or more stories in height (check one):

   - None
   - 1–4
   - 5–10
   - 11–24
   - 25–49
   - 50 or more

4. What share (%) of your budgeted revenue is from (total 100%)?

   - Taxes: __________ %
   - Fundraising: __________ %
   - Payment per call/Contract services: __________ %
   - Ambulance Billing: __________ %
   - Fees: __________ %
   - Insurance: __________%
   - SAFER/AFG or similar grants: __________%
   - Other: (specify) __________%

PART II. PERSONNEL AND THEIR CAPABILITIES

5. What was the change in total full-time positions or full-time equivalents (FTE) in each of the following categories for your department since 2016? (Use a negative number for losses, '0' for no change, and a positive number for gains.)

   - Firefighters: __________
   - Enforcement: __________
   - Education: __________
   - Risk Reduction: __________
   - Administration: __________

6. Does your department have a program to ensure diversity and inclusion in your hiring (or volunteer recruiting) and retention practices?  
   - Yes  
   - No

7. Total number of full-time (career) uniformed firefighters: __________ (If none, go to Question 12):

   How many are female? __________

   Average number of full-time career / paid firefighters on duty available to respond to emergencies: __________

8. Minimum number of on-duty career / paid personnel ASSIGNED to an engine / pumper (check one):

   - 1
   - 2
   - 3
   - 4
   - 5+
   - Not applicable

9. Number of on-duty career / paid personnel TYPICALLY STAFFING an engine / pumper (may be the same as the number assigned) (check one):

   - 1
   - 2
   - 3
   - 4
   - 5+
   - Not applicable

10. Minimum number of on-duty career / paid personnel ASSIGNED to a ladder truck / aerial (check one):

    - 1
    - 2
    - 3
    - 4
    - 5+
    - Not applicable

11. Number of on-duty career / paid personnel TYPICALLY STAFFING a ladder truck / aerial (may be the same as the number assigned) (check one):

    - 1
    - 2
    - 3
    - 4
    - 5+
    - Not applicable
12. Total number of active part-time (including call or volunteer) firefighters: ______
   How many are female? ______
   Average number of call / volunteer personnel available who respond to emergencies:
   During weekdays: Days ______ Nights ______ During weekends: Days ______ Nights ______

13. How many active members of your fire department only fill support or auxiliary roles and have no direct firefighting activities?
   If any, fill only those roles. Check all that apply.
   - First aid
   - Directing traffic
   - Command post ops
   - Rehab
   - Water supply
   - Communications
   - Logistics
   - Other (specify): ____________________________

   A. Is this a role your fire department performs? (check one), (If no, go to Question 15)  
      - Yes
      - No
   B. What percentage of the personnel who perform this duty have received formal training (for example, in a classroom or online that meet the qualifications of NFPA 1001) at the local, regional, or state level (not just on-the-job training)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)
   C. What percentage of department personnel who perform this duty are certified to Firefighter Level I (NFPA 1001)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)
   D. What percentage of your fire department’s firefighters are restricted to exterior firefighting only?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)

15. Emergency medical service (EMS).
   A. Is this a service your fire department provides? (check one)  
      - Yes
      - No (skip to 15C)
   B. If yes to 15A, what percentage of department personnel performing this duty are certified to the following levels? (For all that apply, include percentages for highest level. Total must equal 100%)
      a. No certification _____ %  
      b. EMR: Emergency Medical Responder _____ %  
      c. EMT: Emergency Medical Technician _____ %  
      d. AEMT: Advanced Emergency Medical Technician _____ %  
      e. Paramedic _____ %
   C. Does your community provide ambulance services?  
      - Yes: Fire Department Based Service
      - Yes: Government or Third Service
      - Yes: Hospital Based
      - Yes: Private
      - Yes: Other (specify) __________  
      - No ambulance service
   D. Does your fire department provide Tactical EMS for law enforcement operations?  
      - Yes  
      - No

   A. Is this a service your fire department provides? (check one)  
      - Yes
      - No (If no, go to Question 17)
   B. What percentage of department personnel performing this duty are certified to the following levels? (For all that apply, include percentages for highest level. Total must equal 100%)
      a. No certification _____ %  
      b. Awareness _____ %  
      c. Operational _____ %  
      d. Technician _____ %

17. Wildland-Urban Interface (WUI)/Wildland (brush, grass, forest) firefighting.
   A. Is this a role your fire department performs? (check one)  
      - Yes
      - No (If no, go to Question 18)
   B. What percentage of the personnel who perform this duty have received formal training (for example, in a classroom or online that meet the qualifications of NFPA 1051) at the local, regional, or state level (not just on-the-job training)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)
   C. Does this training include specialized Wildland-Urban Interface firefighting operations training?  
      - Yes  
      - No
   D. How many of your emergency responders are equipped with wildland fire personal protective clothing?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)

18. Fire prevention (preparedness & mitigation).
   A. Is this a role your fire department performs? (check one)  
      - Yes
      - No (If no, go to Question 17)
   B. If yes, what percentage of the personnel who perform this duty have received formal training (for example, in a classroom or online that meet the qualifications of NFPA 1031) at the local, regional, or state level (not just on-the-job training)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)
   A. Is this a role your fire department performs? (check one)  
      - Yes  
      - No
   B. If yes, what percentage of the personnel who perform this duty have received formal training (for example, in a classroom or online that meet the qualifications of NFPA 1031 and 1033) at the local, regional, or state level (not just on-the-job training)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)  

20. Active shooter response.
   A. Is this a role your fire department performs? (check one)  
      - Yes  
      - No (If no, go to Question 21)
   B. If yes, does your department have SOPs (Standard Operating Procedures) / SOGs (Standard Operating Guidelines) in place addressing proper response and action taken at an active shooter event? (check one)  
      - Yes  
      - No
   C. Have your department’s personnel received multi-agency training (police, fire, EMS, Sheriffs, etc.) and been tested on the training and special equipment required? (check one)  
      - Yes  
      - No

21. Traffic control.
   A. Is this a role your department performs? (check one)  
      - Yes  
      - No
   B. If yes, what percentage of the personnel who perform this duty have received formal training (for example, in a classroom or online that meet the qualifications of NFPA 1091) at the local, regional, or state level (not just on-the-job training)?
      - None (0%)  
      - Few (1–25%)  
      - Some (26–50%)  
      - Many (51–75%)  
      - Most (76–99%)  
      - All (100%)  

22. Basic firefighter fitness and health.
   A. Does your department have a program to maintain basic firefighter fitness and health (e.g., NFPA 1500)? (check one)  
      - Yes  
      - No (If no, go to Question 22C)
   B. Is the program associated with the IAFC / IAFF Wellness-Fitness Initiative (WFI)?  
      - Yes  
      - No
   C. Do you provide medical and physical evaluations meeting NFPA 1582 for all firefighters?  
      - Yes  
      - No (If no, skip to Question 23)
   D. How often?  
      - New firefighters only  
      - Every six months or annually  
      - Every two years  
      - Every three years  
      - Other ______
   E. Does this program include a fitness assessment for all firefighters?  
      - Yes  
      - No (if no, skip to question 23)
   F. How often?  
      - New firefighters only  
      - Every six months or annually  
      - Every two years  
      - Every three years  
      - Other ______

23. Does your department have a Behavioral Health Program?  
   - Yes  
   - No (If no, go to Question 25)

24. Which of the following are included in your behavioral health program (check all that apply)?
   - Fitness for duty evaluation  
   - Cancer prevention education  
   - Physical health education  
   - Heart attack prevention education  
   - Post-Traumatic Stress support  
   - Trained behavioral peer support  
   - Behavioral health education  
   - Suicide prevention education  
   - Relationship with a Behavior Specialist  
   - Volunteer clinical interventions  
   - Wellness preventative education  
   - Other (please specify): _____________

25. Does your department actively track exposures or have a mechanism for individual exposure tracking (including carcinogens, hazardous materials, and infectious diseases)?  
   - Yes—Department actively tracks  
   - Yes—Mechanism for individuals  
   - Yes—Both  
   - No—None of these

26. Does your department have an Infection Control / PPE Decontamination Program (infectious and communicable disease hazards)? (check one)  
   - Yes  
   - No

27. Does your department have an Exposure Control / PPE Decontamination Program (carcinogen and other toxic hazards)? (check one)  
   - Yes  
   - No

28. Which of the following air quality measures does your department monitor at the fireground? (check all that apply)
   - 02 (Oxygen)  
   - HCN (Cyanide)  
   - CO (Carbon Monoxide)  
   - Volatile Organic Compound (VOC)  
   - Other (please specify) _____________  
   - Do not monitor

29. Which of the following cancer prevention best practices apply to your department? (check all that apply)
   - Cancer screening program  
   - Second set of structural firefighter gear for all firefighters  
   - SOPs/SOGs for cleaning gear after a fire  
   - Gross decontamination of gear at the fireground  
   - Provide cleaning wipes for use on face/neck/hands  
   - Training to ‘shower within an hour’ after a fire  
   - Prohibit structural firefighter gear in living quarters of fire stations  
   - Other (please specify) ________  
   - None of these
PART III. COMMUNITY RISK REDUCTION ACTIVITIES

30. Which of the following engineering programs or activities does your department conduct? (check all that apply)
   - Construction plans review
   - Permit approval
   - Permit inspections (for new construction)
   - Certificate of occupancy
   - Fire-preincident planning
   - Routine testing of active automatic systems (e.g., fire sprinkler, detection/alarm, smoke control)
   - Hazard Mitigation Planning Assessment

   If you have a Hazard Mitigation Planning Risk Assessment program, does your plan include:
   - Natural disasters (hurricanes, wildfire, tornadoes, floods, earthquakes)
   - Industrial chemical disasters
   - Transportation disasters
   - No such engineering programs

31. Who conducts the fire code inspections in your community? (check all that apply)
   - Full-time fire department inspectors
   - In-service (on duty) firefighters
   - Separate inspection bureau
   - Building department
   - State department/fire prevention bureau
   - No one
   - Other (please specify) ________________

32. What percentage of commercial or inspectable properties are inspected once a year?
   - None (0%)
   - Few (1–25%)
   - Some (26–50%)
   - Many (51–75%)
   - Most (76–99%)
   - All (100%)
   - Not responsible for conducting inspections

33. Who determines that a fire was deliberately set? (check all that apply)
   - Fire department fire investigator
   - Regional/state fire task force investigator
   - Incident command or other front line or company fire officer
   - Police department
   - Contract investigator
   - Insurance investigator
   - Other (please specify) ________________

34. Which of the following education programs or activities does your department conduct? (check all that apply)
   - Youth fire-safety program
   - School fire safety education program based on a national model curriculum
   - Car seat installation
   - Fire-prevention education visits
   - Cardiopulmonary Resuscitation (CPR) instruction
   - Wildfire safety program based on a national model program
   - Older adult fire safety program based on a national model program
   - Free distribution of home smoke alarms
   - Free installation of home smoke alarms
   - Other prevention program (please specify) ________________
   - No education program

35. Which of the following apply to the education programs or activities your department conducts? (check all that apply)
   - Based on a Community Risk Assessment
   - Ensure diversity & inclusion based on your community’s demographics
   - Collect data on number of people reached
   - Measure impact over time
   - None of these

PART IV. FACILITIES, APPARATUS, AND EQUIPMENT

36. Number of fire stations: _______ Number of stations over 40 years old: _______
   Number of stations having backup power: _______
   Number of stations equipped for exhaust emission control (e.g., diesel exhaust extraction): _______
   Number of stations with private or separate facilities for men and women: _______

37. Number of each type of apparatus in service and reserves (numbers by age should sum to total):

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Engines / Pumpers</th>
<th>Ladders / Aerials</th>
<th>Tankers / Tenders</th>
<th>Ambulances or Other Transport Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Service</td>
<td>Reserve</td>
<td>In Service</td>
<td>Reserve</td>
</tr>
<tr>
<td>0–14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15–19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20–29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

38. Does your fire department have a plan for apparatus replacement on a regular schedule?
   - Yes, plan and budget
   - Plan only
   - No plan or budget
39. Which of the following does your department require prior to a member driving an emergency vehicle?
(check all that apply)  ☐ Certification or specific training  ☐ Hands-on training using the actual vehicle
☐ Demonstration of competency at least once a year  ☐ Formal driver’s training at least twice a year
☐ None of these

40. Portable radios.
A. What percentage of your on-duty emergency responders can be equipped with portable radios?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)

41. Self-contained breathing apparatus (SCBA).
A. What percentage of your on-duty emergency responders can be equipped with SCBA?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)
B. What percentage of your SCBA are 10 years old or older?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know

42. Personal alert safety system (PASS) devices.
A. How many responding firefighters who work in immediately dangerous to life or health (IDLH) environment are equipped with a PASS device?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know

43. Personal protective clothing.
A. How many of your emergency responders are equipped with personal protective clothing?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know
B. How many of your department’s personal protective clothing is 10 years of age or older?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know
C. Do you have reserve personal protective clothing sufficient to equip 10% of your emergency responders? (check one)
☐ Yes  ☐ No  ☐ Don’t know
D. Is your personal protective ensemble inspected and tested each year?
☐ Inspected only  ☐ Tested only  ☐ Inspected and tested  ☐ None of these
E. Does your department have laundering facilities or provide services (external) to clean contaminated personal protective clothing?
☐ We have laundering facilities  ☐ We utilize an outside service  ☐ We have our own facilities and use an outside service  ☐ Neither facilities nor outside service

44. For what percentage of fireground incidents do you have a thermal imager / thermal imaging cameras available?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know

PART V. COMMUNICATIONS AND COMMUNICATIONS EQUIPMENT

45. Multi-agency communication.
A. Can you communicate by radio on an incident scene with your local/state/federal emergency response partners (includes frequency compatibility)? (check one)  ☐ Yes  ☐ No  ☐ Don’t know
B. If yes to 45A, how many of your partners (agencies/departments) can you communicate with at an incident scene?
☐ None (0%)  ☐ Few (1–25%)  ☐ Some (26–50%)  ☐ Many (51–75%)  ☐ Most (76–99%)  ☐ All (100%)  ☐ Don’t know

46. Dispatch.
A. Who has the primary responsibilities [i.e., public safety answering point (PSAP)] of answering 911 calls?
☐ PSAP that answers police, fire, and EMS calls  ☐ PSAP that answers fire and EMS calls  ☐ Police department
☐ Fire department  ☐ Private company
B. If the 911 call is determined to be a fire call, is that call processed by the same center that answered the initial 911 call?
☐ Yes  ☐ No, the call is transferred to another center to be processed
C. Does the 911 center that processes the fire call typically have one person that processes and dispatch the same fire call?
☐ Yes  ☐ No, we typically have call takers and separate dispatchers.
D. If no to 46C, does the 911 center that processes the fire call typically have at least 2 people on duty at all times?
☐ Yes  ☐ No, sometimes we cut back to one person on duty  ☐ No, we never have two persons on duty
E. Do you also have a backup dispatch facility? (check one)  ☐ Yes  ☐ No
PART VI. ABILITY TO HANDLE UNUSUALLY CHALLENGING INCIDENTS

47. Wildland-Urban Interface (WUI) fire affecting structures.
   A. Is protecting structures in the Wildland-Urban Interface (WUI) a role your fire department performs? (check one)
      □ Yes □ No (If no, go to Question 48.)
   B. What is the maximum number of involved structures during a wildfire event your department could handle alone?
      □ 1 □ 2–5 □ 6–20 □ 21+
   C. What is the maximum area of a wildfire (acres) your department could handle alone?
      □ Less than 1 acre □ 1–10 acres □ 11–50 acres □ 51–100 acres □ Greater than 100 acres
   D. If you had a wildfire incident affecting 2–5 structures how far would you have to go to obtain enough people with specialized training and equipment for this incident? (check one)
      □ Local would be enough □ Regional □ State □ National
   E. If you had a wildfire incident affecting 6–20 structures how far would you have to go to obtain enough people with specialized training and equipment for this incident? (check one)
      □ Local would be enough □ Regional □ State □ National
   F. If you had a wildfire incident affecting more than 20 structures how far would you have to go to obtain enough people with specialized training and equipment for this incident? (check one)
      □ Local would be enough □ Regional □ State □ National
   G. Do you have a plan for obtaining assistance from others for a wildfire? (check one)
      □ Yes, written agreement □ Yes, informal □ Yes, other (specify) __________________________ □ No

48. At the start of the COVID-19 outbreak, did your department have an infection control program that meets the qualifications of NFPA 1581? □ Yes □ No

49. Does your department currently have an infection control program that meets the qualifications of NFPA 1581? □ Yes □ No

50. At the start of the COVID-19 outbreak, what percent of your emergency responders could you outfit with medical PPE?
      □ None (0%) □ Few (1–25%) □ Some (26–50%) □ Many (51–75%) □ Most (76–99%) □ All (100%) □ Don’t know

51. What percent of your emergency responders can you currently outfit with medical PPE?
      □ None (0%) □ Few (1–25%) □ Some (26–50%) □ Many (51–75%) □ Most (76–99%) □ All (100%) □ Don’t know

PART VIII. YOUR TOP 3 NEEDS IN YOUR WORDS:

1. ____________________________________________

2. ____________________________________________

3. ____________________________________________