



Virginia Fire Service Needs Assessment

*An annual profile of critical needs as
identified by Virginia's Fire Service*

Volume XIII – January 2017

Preface

Background

At the request of the Virginia General Assembly (VGA), the Secretary of Public Safety directed the Virginia Department of Fire Programs (VDFP) to conduct a comprehensive needs assessment of Virginia's fire service in 2003. The intent of the needs assessment is to provide members of the VGA with adequate information to make informed decisions with regard to fire service funding issues.

The first needs assessment supplement was published in 2004 and laid the ground work to assist in the legislative decision-making process. This report, Volume XIII, published in January, 2017 was produced from survey results collected from fire departments in 2016.

The 2016 Needs Assessment continued to focus on the efforts of Virginia's Fire Service to identify specific needs in the areas of apparatus, equipment, facilities, personnel and training and also analyzed the ability of fire departments to adequately perform the duties of the Emergency First Responder.

Survey Team

The 2016 Fire Service Needs Assessment Survey team consisted of the following VDFP staff: **Rob Magnotti, Information and Statistics Manager**, and **Bailey Martin, Program Support Technician**.

Acknowledgements

The survey team gratefully acknowledges the contributions of the following management within the Virginia Department of Fire Programs (VDFP) for assistance with survey development and report assistance during the 2016 Fiscal Period.

- Melvin Carter, Executive Director
- Brook Pittinger, Deputy Executive Director and Acting Branch Chief - Technical Services
- Brenda Scaife, Director of Administration and Finance
- Tim Hansbrough, Branch Chief - Training and Operations
- Brian McGraw, State Fire Marshal
- David Jolly, Program Chief - Curriculum, Quality Assurance and Logistical Services
- Mark Buff, Marketing and Communications Manager

The following VDFP Division Chiefs greatly helped to encourage completion of the needs assessment survey with fire departments and publicized the importance of the needs assessment in their areas.

- John Fugman, Division Chief - Division 2 Office - Orange
- Tom Berry, Interim Division Chief - Division 3 Office - Farmville
- Michael Parris, Division Chief - Division 4 Office - Chilhowie
- Dennis Price, Division Chief - Division 6 Office - Roanoke
- Dereck Baker, Division Chief - Division 7 Office - Fairfax

We also want to thank all the members of the Virginia Fire Services Board for their continued support, as well as, all County Administrators, and City and Town Managers in Virginia for their promotion of the survey.

Finally, we would like to thank all the fire departments in Virginia for their efforts in responding to the 2016 Needs Assessment Survey. The assessment could not be successful without their valuable support and contribution.

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Executive Summary

The information presented in this report is the product of an extensive, continuing effort to provide a current and comprehensive assessment of the challenges facing Virginia's fire and emergency services.

It provides an overview of Virginia's fire service by providing current needs assessment survey data annually along with updated information on reported incidents, training, and funding.

Top Needs

To complete the assessment, fire departments were asked to rank their top needs for FY 2017 from #1 to #5 with #1 being the most important need and #5 being the least important need. Overall, **Personnel** was selected as the **#1 Top Need** with Virginia's fire service. (See Table 1.) The overall top need for Virginia did not vary from last year's survey. However, the need for **Apparatus** is now the second most top need followed by Training, Facilities, and Equipment.

Table 1. Top Fire Service Needs

Rank	Fire Service Need
#1 Top Need	Personnel
#2 Top Need	Apparatus
#3 Top Need	Training
#4 Top Need	Facilities
#5 Top Need	Equipment

Current Funding

Fire departments also completed information on their current operating budget for FY 2017. The total funding that fire departments anticipated receiving for FY 2017 was reported as **\$1.2 billion**. (See Table 2.) The amount of their funding for FY 2017 was reduced by **\$28.6 million** from FY2016 to FY 2017.

Table 2. Budget Funding Summary By Funding Source for FY2017

Funding Source	Funding Anticipated to Received for FY 2017	Funding Amount Reduced for FY 2017
Locality Funding	\$1,137,889,140	\$23,416,857
Fund Raising / Donations	\$6,902,315	\$3,803,700
Grant Funding	\$27,820,219	\$1,423,501
Grand Total	\$1,172,611,674	\$28,644,058

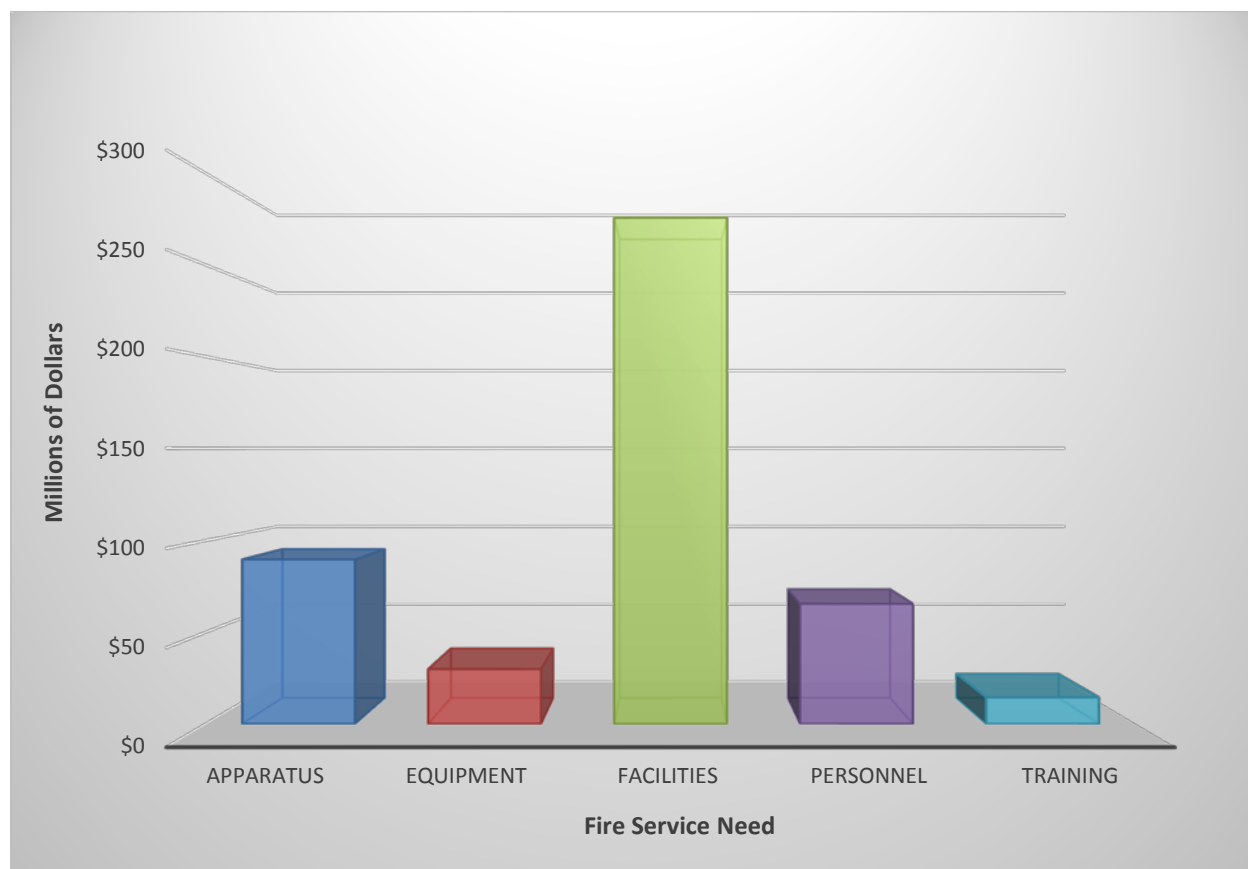
Additional Funding Needed

Reporting departments also provided their total estimated amount of additional funding needed for FY 2017 for the five specific fire service need categories. The results were compiled and the total of additional funding with Virginia's fire service is estimated at more than **\$475 million**. (See Table 3.) The estimated costs reported with last year's survey were nearly \$654 million, suggesting that funding shortages continue to be present within Virginia's fire service.

Table 3. Additional Funding Needed By Specific Need for FY2017

Fire Service Need	Additional Funding Needed for FY 2017
Apparatus	\$89,657,974
Equipment	\$29,886,348
Facilities	\$275,717,000
Personnel	\$65,470,902
Training	\$14,499,010
Grand Total	\$475,231,234

Figure 1. Additional Funding Needed for FY 2017



Apparatus

Fire apparatus are becoming increasingly complex and expensive to purchase, maintain, repair, and replace. Fire departments reported owning an average of one (1) aerial apparatus, five (5) ambulances/other patient transport, one (1) command support unit, three (3) command vehicles (SUV), six (6) engines/pumpers, one (1) fire bike, one (1) fire/rescue boat, one (1) hazardous materials (HAZMAT) vehicle, one (1) heavy technical rescue vehicle, three (3) logistical support apparatus, two (2) tankers, and two (2) wildland brush trucks.

The total reported estimated additional funding needed for FY 2017 with apparatus is nearly **\$90 million**. Fifty percent (50%) of departments showed that they need an engine/pumper. Twenty-seven percent (27%) of respondents expressed the need for a tanker. Twenty-four percent (24%) of fire departments reported a need for a command vehicle (SUV) and twenty-two percent (22%) indicated a need for an aerial apparatus.

Equipment

Fire departments implement many different specialized types of equipment when responding to an incident call. Departments responded that they currently own an average of seven (7) 4-gas monitors, eleven (11) map coordinate GPS devices, twelve (12) mobile data terminals, 19 personal alert safety systems (PASS), 147 sets of personal protective equipment (PPE), 95 radios w/an emergency alert button, 9 radios w/o an emergency alert button, 67 self-contained breathing apparatus (SCBA) w/ integrated PASS, one (1) self-contained breathing apparatus (SCBA) w/o integrated PASS, and six (6) thermal imaging cameras.

The total reported estimated additional funds needed for FY 2017 with equipment is about **\$30 million**. Forty-eight percent (48%) of departments requested a need for thermal imaging cameras. 4-gas monitors were selected by 40 percent (40%) of departments. Self-contained breathing apparatus (SCBA) were selected by 45 percent (45%) of departments. Personal protective equipment (PPE) was selected as a need by 41 percent (41%) of departments.

Facilities

Departments reported that 54 percent (54%) of their fire stations are 30 years of age or older. Seventeen percent (17%) of the stations have no backup power during an emergency. Forty percent (40%) of the departments responded that they needed improvements/remodeling to the existing stations. The total reported estimated additional funding needed for FY 2017 with facilities is nearly **\$276 million**.

Personnel

Personnel was the overall #1 picked top need with fire departments. Maintaining enough staff to respond to calls is an important part of managing a fire department. Forty-nine percent (49%) of departments do not have a personnel recruitment program and 59 percent (59%) have no retention program for their staff. Fifty percent (50%) of fire service personnel are volunteer firefighters and 48 percent (48%) are paid career firefighters. Fire departments have on average 23 firefighters on duty and available to respond to a call.

The total reported estimated additional funding needed for FY 2017 with personnel is **\$65 million**. Sixty-seven percent (67%) of all departments responded that they need volunteer firefighters and 33 percent (33%) showed a need for paid career firefighters.

Training

Training was selected as the overall #3 top need with fire departments. Having adequately trained personnel greatly affects how well a department can respond to different types of incidents. Overall, fire departments responded that 89 percent (89%) are trained in Fire Fighter (NFPA 1001) - Level I and 91 percent (91%) of their personnel are trained in Hazardous Materials (NFPA 472) - Awareness. Fire departments reported overall that 3,283 firefighters in Virginia, the largest amount, need Rapid Intervention Team/Crew (RIT/RIC) training, and 2,734 firefighters need Mayday Firefighter Down training.

The total reported estimated additional funding needed for training costs for FY 2017 is more than **\$14 million**. Forty-one percent (41%) of fire departments requested Fire Fighter - Level I training as their #1 top priority. Twenty-six percent (26%) of fire departments requested Vehicle - Level I training as their #1 top priority with technical rescue.

Even though Training was not ranked as the top overall need in the state, departments in Division 4 - Chilhowie ranked Training as their #1 top need, suggesting that there is a greater need for training in the southwestern area of the state.

Communications

More than ninety-nine percent (99%) of fire departments responded that they can communicate by radio with local agencies at an incident scene, while 51 percent (51%) could communicate with state agencies and 20 percent (20%) could communicate with federal agencies. The largest number of departments (51%) are operating on a frequency spectrum of high band (147 - 174 MHz).

Forty-eight percent (48%) of fire departments have no GPS map coordinate system to help navigate during emergency response. Sixty-six percent (66%) of respondents reported that none of their apparatus are equipped with mobile data terminals.

2016 Fire Service Needs Assessment Quick Facts

- The overall survey response for the Needs Assessment was **55%**.
- **Personnel** was the #1 Top Need reported by fire departments; **Apparatus** was the second highest need.
- Overall, fire departments reported that their total estimated amount of additional funding needed for FY 2017 would be **\$1.2 billion**.
- **50%** of fire departments reported that they need an engine / pumper.
- For equipment, thermal imaging cameras (**485%**) are most needed by fire departments; self-contained breathing apparatus (SCBA) (**45%**) ranked second.
- **40%** of respondents reported that they need improvements or remodeling of their existing stations.
- **67%** of all fire departments responded that they need more volunteer firefighters; **33%** showed a need for paid firefighters.
- **41%** of departments reported that Fire Fighter - Level I training was their #1 top priority. **26%** responded that Vehicle - Level I training was their #1 top priority with technical rescue.
- **54%** of fire departments funding comes from local government funding (not including ATL); **17%** from fundraising /donations.
- Fire departments anticipate having their funding reduced by **\$28.6 million** in FY 2017.
- **64%** of respondents plan to apply for a grant through the Assistance to Firefighters Grant (AFG) program.
- Fire departments reported that 37 of their stations have **no computer** available for incident reporting and 23 stations have **no internet** service.

Chapter 1 - Introduction

Survey Methodology

Sample

All municipal fire departments in Virginia that are eligible to receive Aid-to-Localities (ATL) Funding were selected for the survey and were invited to participate in the 2016 Fire Service Needs Assessment Survey. The sample population was based on the different needs of fire service at the career local government level and at the volunteer fire department level. The goal was to ensure that all types of fire departments were represented. Industrial Fire Brigades, Airport Fire Departments, and Military Fire Departments were not included since they do not receive ATL funding from VDFP for their fire service activities.

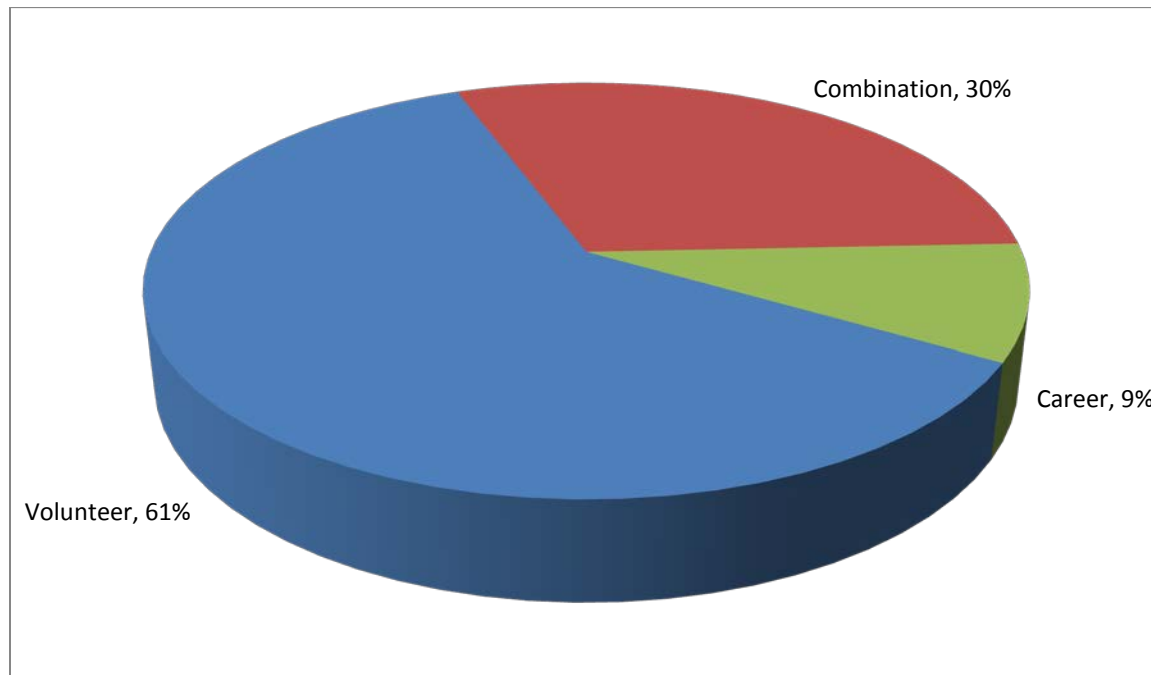
A total of 402 fire departments made up the survey sample of eligible participants. The fire departments were selected from records from the Fire Service Training Record System (FSTRS), maintained by the Virginia Department of Fire Programs. A majority of the fire departments (60%) were classified as Volunteer Departments, 30 percent (30%) were Combination Departments, and 9 percent (9%) were Career Departments. (See Table 4 and Figure 2.) Primary fire departments are the main fire departments that provide fire service response in an area and may include additional fire stations. Fire administration units are local government level fire service organizations that are normally made up of career fire service employees only.

Table 4. Fire Service Needs Assessment Sample Population, Virginia, 2016

Fire Department Type	Career	Combination	Volunteer	Grand Total
Primary Fire Department	17	41	300	358
Fire Administration Department	14	24	3	41
Grand Total	31	65	303	399

Prior to the startup of data collection for this survey, fire department contact information was updated based on contact information submitted with the 2015 Needs Assessment Survey. Information such as Addresses, Phone/Fax Numbers, Email Addresses, and Current Fire Chief's Name were updated to verify that the most up-to-date contact information was being used for the Needs Assessment Survey. Ninety-five (95%) of fire departments listed department email addresses, which contributed to contacting departments electronically with the survey. In addition, fire department status (career, volunteer, combination) was updated with fire departments based on last year's survey response. All information was updated in the Fire Service Training Records System (FSTRS) and the fire department's information was exported from the database for use with the survey sample collection.

Figure 2. Fire Service Needs Assessment Sample By Fire Department Status, Virginia, 2016



Survey Design

The survey questions were designed to accurately measure the overall needs of Virginia's Fire Service. The questions were also drafted clearly and accurately, therefore, providing easy-to-understand questions for respondents. Every effort was made to ensure the collection of reliable survey data as well as to provide a survey questionnaire that is simple to complete and less time intensive.

The questionnaire was adapted from the instrument used by the United States Fire Administration (USFA) and the National Fire Protection Agency (NFPA) in *A Needs Assessment of the U.S. Fire Service*, a national study of fire service needs.

The 2016 Needs Assessment Survey contained the following sections that contained questions that captured detailed information from fire departments.

Contact Information

Section I - General Department Information

Section II - Department Personnel

Section III - Facilities & Apparatus

Section IV - Operating Budget Information

Section V - Communications

Section VI - Fire Department Roles / Training

Section VII - Fire Prevention & Code Enforcement

Section VIII - Your Fire Department's Top Needs Final Comments

The actual survey questions used can be found in Appendix II.

Data Collection

The survey was collected on-line using the survey collection website, <http://www.keysurvey.com/>. Fire departments could access the survey from links placed directly in email correspondence.

Survey Procedures/Mailouts

The collection of responses from fire departments with the needs assessment started with the Phase I collection period on October 17, 2016. Fire departments with known email addresses were sent an email message inviting them to participate in the survey. Fire departments were given a deadline of December 18, 2016 to submit their completed responses.

Reminder emails and phone calls/voicemails were sent out to non-respondents prior to the survey deadline reminding them to complete their response.

Final Survey Response

The final overall survey response after the collection closeout on December 18, 2016 was 55 percent (55%). Response with the survey was similar to last year. (See Table 5).

Table 5. Fire Service Needs Assessment Survey Response, Virginia, 2015-2016

Year	Survey Response
2015	55%
2016	55%

Collaborative Effort

Managers and Instructors with the Virginia Department of Fire Programs helped promote the completion of the survey with fire departments in Virginia.

Other Data Sources

Virginia Fire Incident Reporting System (VFIRS) Data - Data from the Virginia Fire Incident Reporting System (VFIRS) was used to provide detailed information about the incident calls from Virginia's fire service.

Training Data - Data from the Fire Service Training Record System (FSTRS) was used to provide information on students and training courses supported by VDFP.

Budget Data - Data from the Virginia Aid-to-Localities (ATL) Program was used to show the level of funding provided by the Commonwealth via the Fire Programs Fund (a special revenue fund) to Virginia's localities to support their municipal fire departments. Information about the Assistance to Firefighter's Grant (AFG), Assistance to Firefighters Fire Station Construction Grants (SCG), Staffing for Adequate Fire and Emergency Response (SAFER), and Fire Prevention and Safety (FP&S) Grants was used to identify additional funding sources to fire departments.

Limitations

Like most research of this nature, this Needs Assessment had several limitations.

Survey Response Rate

The final response rate for the Needs Assessment Survey was 55 percent (55%). As with all such surveys, caution must be exercised when generalizing the results of this survey to individual fire departments. Because information was entered by fire chiefs or department personnel, the possibility of human error must be considered in interpreting all results.

Organizational Structure of Virginia's Fire Service

Because of the organizational structure of Virginia's fire service, the sample was updated in 2011 to remove any possible duplication from the data. Duplication occurred when fire administration departments reported for all departments in the locality and then the volunteer fire department responded as well. In 2011, fire administration departments were asked to report for all fire departments in their locality. They were not given an option to report for career staff only. Their survey would reflect both career and volunteer personnel. The volunteer fire departments in the locality were

not included in the survey. The update to the sample helped to produce more reliable and accurate statistics in this report. Starting in 2012, fire administration departments were contacted and asked how they wanted to respond to the survey. They could report for all fire department in the locality or for career personnel only. The results were used in finalizing the sample.

Fire departments were all given a survey reporting description. The description with volunteer fire departments was their fire department name which designates to report for their fire department only. Fire administration departments were given a survey reporting description to report for all fire departments in their locality. (See Table 7.) Some fire departments were given custom reporting specific to their department.

Table 6. Fire Administration Departments By Survey Reporting

FDID	Fire Department	Survey Reporting
00100	Accomack Co. Dept. of Public Safety	All Fire Departments in Accomack County (Career and Volunteer)
00300	Albemarle Co. Fire & Rescue	All Fire Departments in Albemarle County (Career and Volunteer)
00700	Amelia Co. Dept. of Emerg. Mgmt.	All Fire Departments in Amelia County (Career and Volunteer)
00900	Amherst Co. Dept. of Public Safety	Amherst Co. Dept. of Public Safety - Career Personnel Only
01500	Augusta Co. Fire & Rescue	All Fire Departments in Augusta County (Career and Volunteer)
01900	Bedford Co. Dept. of Fire & Rescue	Bedford Co. Dept. of Fire & Rescue - Career Personnel Only
02300	Botetourt Co. Emergency Services	All Fire Departments in Botetourt County (Career and Volunteer)
03199	Campbell Co. Dept. of Public Safety	Campbell Co. Dept. of Public Safety - Career Personnel Only
03300	Caroline Co. Fire & Rescue	All Fire Departments in Caroline County (Career and Volunteer)
03500	Carroll Co. Fire & Rescue	Carroll Co. Fire & Rescue - Career Personnel Only
04300	Clarke Co. Emergency Services	Clarke Co. Emergency Services - Career Personnel Only
05300	Dinwiddie Co. Fire & EMS	All Fire Departments in Dinwiddie County (Career and Volunteer)
05700	Essex County EMS	Essex County EMS - Career Personnel Only
06100	Fauquier Co. Dept. of Fire, Rescue and Emerg. Mgmt.	Fauquier Co. Dept. of Fire, Rescue and Emerg. Mgmt. - Career Personnel Only
06300	Floyd Co. Dept. of Emerg. Mgmt.	All Fire Departments in Floyd County (Career and Volunteer)
06500	Fluvanna Co. Vol. Fire Dept.	All Fire Departments in Fluvanna County, Except Lake Monticello Fire Dept. & Rescue Squad
06700	Franklin Co. Dept. of Public Safety	All Fire Departments in Franklin County (Career and Volunteer)
06900	Frederick Co. Fire & Rescue Dept.	All Fire Departments in Frederick County (Career and Volunteer)
08300	Halifax Co. Emergency Services	Halifax Co. Emergency Services - Career Personnel Only
08500	Hanover Co. Fire & EMS	All Fire Departments in Hanover County (Career and Volunteer)
08900	Henry Co. Dept. of Public Safety	All Fire Departments in Henry County (Career and Volunteer)
09390	Isle of Wight Co. Dept. of Emerg. Svcs.	Isle of Wight Co. Dept. of Emerg. Svcs. - Career Personnel Only
09700	King & Queen Co. Dept. of Emerg. Svcs.	King & Queen Co. Dept. of Emerg. Svcs. - Career Personnel Only
10100	King William Co. Emergency Services	All Fire Departments in King William County (Career and Volunteer)
10700	Loudoun Co. Fire, Rescue & Emerg. Mgmt.	All Fire Departments in Loudoun County (Career and Volunteer)
10900	Louisa Co. Dept. of Fire & Emerg. Svcs.	All Fire Departments in Louisa County (Career and Volunteer)

Table 6. Fire Administration Departments By Survey Reporting (cont.)

12700	New Kent Fire - Rescue	All Fire Departments in New Kent County (Career and Volunteer)
13700	Orange Co. Fire & EMS	All Fire Departments in Orange County (Career and Volunteer)
13900	Page Co. Fire & EMS	Page Co. Fire & EMS - Career Personnel Only
14100	Patrick Co. Dept. of Emerg. Mgmt.	Patrick Co. Dept. of Emerg. Mgmt. - Career Personnel Only
14500	Powhatan Co. Fire Dept.	All Fire Departments in Powhatan County (Career and Volunteer)
14900	Prince George Fire, EMS & Emerg. Mgmt.	All Fire Departments in Prince George County (Career and Volunteer)
15300	Prince William Co. Dept. of Fire & Rescue	All Fire Departments in Prince William County (Career and Volunteer)
15500	Pulaski Co. Emergency Services	All Fire Departments in Pulaski County, Except Pulaski Fire Dept.
15900	Richmond Co. Dept. of Emerg. Svcs.	Richmond Co. Dept. of Emerg. Svcs. - Career Personnel Only
16100	Roanoke Co. Fire & Rescue	All Fire Departments in Roanoke County, Except Vinton Vol. Fire Dept.
16500	Rockingham Co. Dept. of Fire & Rescue	All Fire Departments in Rockingham County (Career and Volunteer)
17100	Shenandoah Co. Dept. of Fire & Rescue	All Fire Departments in Shenandoah County (Career and Volunteer)
17700	Spotsylvania Co. Fire, Rescue & Emerg. Mgmt.	All Fire Departments in Spotsylvania County (Career and Volunteer)
17900	Stafford Co. Fire & Rescue Dept.	All Fire Departments in Stafford County (Career and Volunteer)
18700	Warren Co. Fire & Rescue Services	All Fire Departments in Warren County (Career and Volunteer)
59500	Emporia Fire Admin.	All Fire Departments in Emporia City (Career and Volunteer)
62000	Franklin Fire & Rescue Dept.	All Fire Departments in Franklin City (Career and Volunteer)
68300	Manassas Fire & Rescue	All Fire Departments in Manassas City (Career and Volunteer)
80000	Suffolk Dept. of Fire & Rescue	All Fire Departments in Suffolk City (Career and Volunteer)

VFIRS Response Rate

Participation in the Virginia Fire Incident Reporting System (VFIRS) is not mandatory, which somewhat limits the generalizability of this data.

Local Use

This report was designed so that individuals and organizations could look up information for specific localities and areas in Virginia. Data was shown using the seven VDFP Division regions in Virginia. Please refer to the reference found in Appendix I for more information on the designated divisions.

Average

When calculating the average in this document, the arithmetic mean was used.

Chapter 2 - Survey Results

Survey Section II - Department Personnel

Fire departments require sufficient staffing in order to respond at anytime to different types of emergency situations.

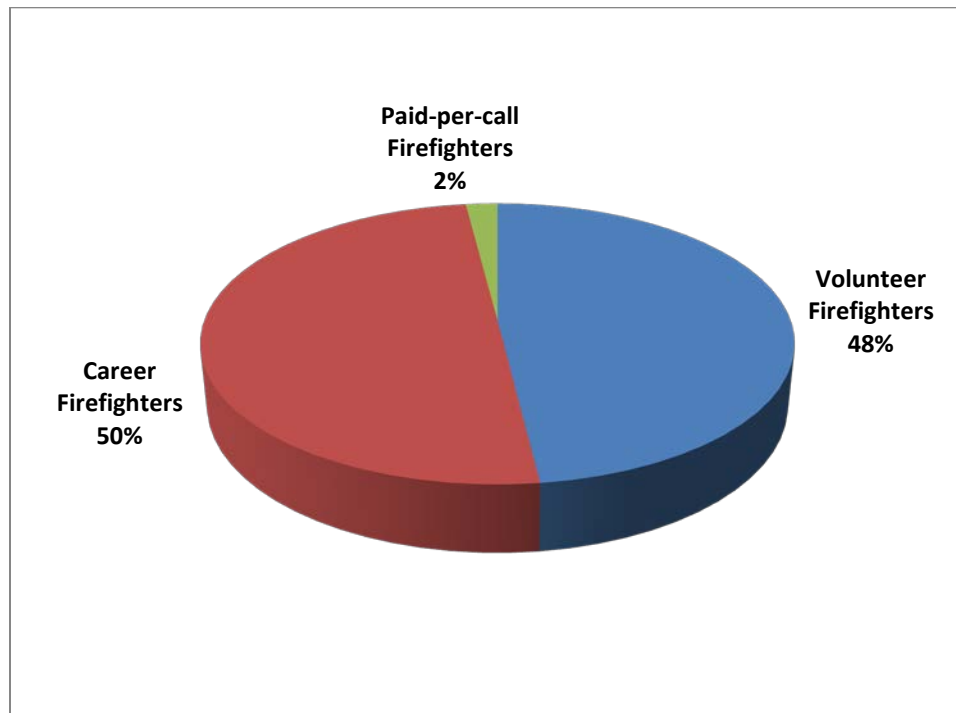
Firefighters By Status

Fire departments are staffed by career firefighters (full-time paid), volunteer firefighters (receive no paid financial compensation for services), and paid-per-call firefighters. Fifty percent (50%) of all active firefighters were reported as being classified as volunteer firefighters. Career firefighters accounted for 48 percent (48%) of the active personnel, while paid-per-call firefighters made up the remaining 2 percent (2%). (See Figure 3.)

Average Firefighters on Duty

The state's overall average number of firefighters on duty and available to respond to a call is 23. (See Table 7.) For volunteer fire departments, the average number on duty is 12, while combination fire departments reported an average of 36 firefighters on duty and career fire departments reported an average amount of 42.

Figure 3. Active Firefighters By Status



Civilian Personnel By Type

Volunteer civilian personnel accounted for 65 percent (65%) of the non-fire service workers, while 35 percent (35%) were paid civilian employees. (See Figure 4.) Civilian personnel are an important part of fire departments since they provide support for the many different required administrative duties as well as providing assistance in implementing fundraising activities.

Figure 4. Civilian Personnel By Type

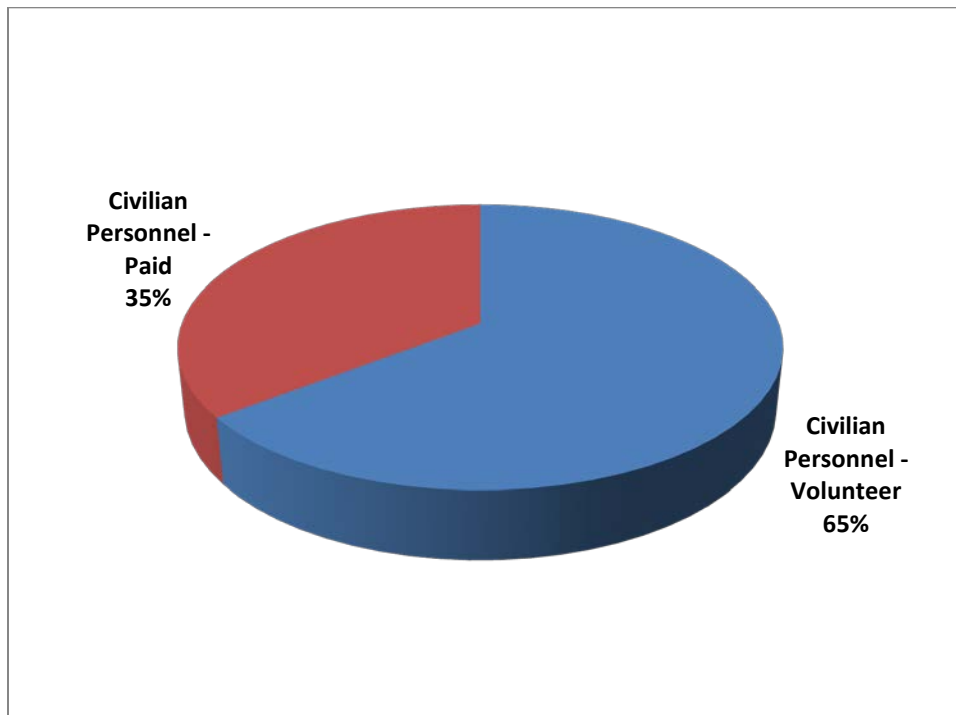


Table 7. Fire Department Personnel Data Reported By VDFP Division

VDFP Division	Career Firefighters	Volunteer Firefighters	Paid-per-call Firefighters	Total Firefighters	Average Firefighters on Duty and Available	Civilian Personnel - Paid	Civilian Personnel - Volunteer	Total Civilian Personnel
Division 1 - Richmond	2,008	2,036	0	4,044	27	133	341	474
Division 2 - Orange	647	1,388	0	2,035	17	63	317	380
Division 3 - Farmville	447	1,318	20	1,785	15	40	422	462
Division 4 - Chilhowie	124	946	141	1,211	12	4	191	195
Division 5 - Hampton	2,358	1,586	0	3,944	37	138	94	232
Division 6 - Roanoke	881	1,484	247	2,612	16	128	229	357
Division 7 - Fairfax	3,246	1,332	0	4,578	87	380	18	398
Grand Total	9,711	10,090	408	20,209	23	886	1,612	2,498

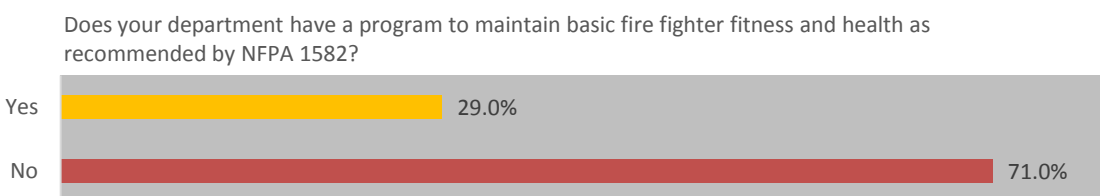
An additional report on personnel reported can be found under Supplemental Table 1 at the end of this chapter.

Fitness Program

Firefighters need to be prepared for severe environmental conditions involving extreme physical and mental stress. Participation in a fitness and health program will help ensure fire service personnel are ready for any incident.

The data indicates that only 29 percent (29%) of reporting Virginia fire departments are maintaining a basic firefighter fitness and health program as required by NFPA 1582. (See Figure 5.) Virginia's figures are similar to national estimates, which indicate that only 27 percent of all fire departments nationwide have fitness and health programs.¹

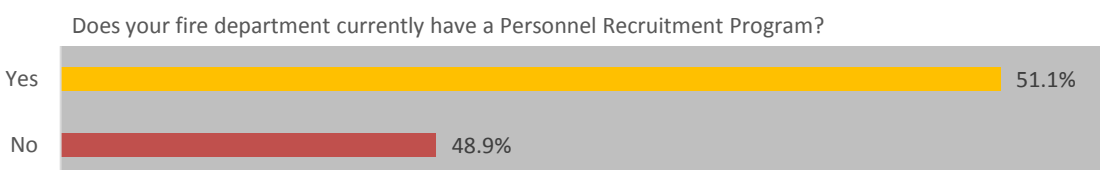
Figure 5. Program to Maintain Basic Firefighter Fitness and Health



Personnel Programs

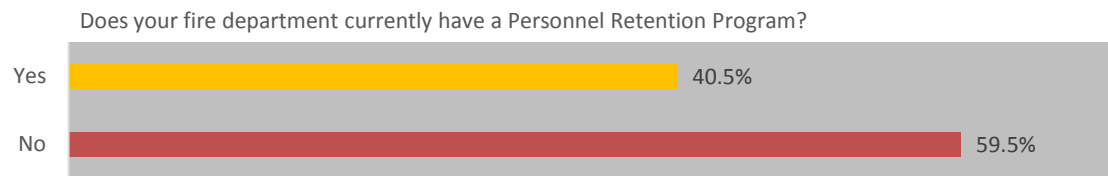
Managing the recruitment and retention of fire service staff is essential to the operation of a fire department and ensures an effective department response. Fifty-one percent (51%) of fire departments responded on the survey that they currently have a recruitment program and only 41 percent (41%) of departments have a retention program, suggesting a need for more implementation of personnel programs. (See Figure 6. and 7.)

Figure 6. Fire Department Personnel Recruitment Program



¹ USFA/NFPA (2016). *Fourth Needs Assessment of the U.S. Fire Service*, <http://www.nfpa.org/~media/files/news-and-research/fire-statistics/fire-service/osfourthneedsassessment.pdf?la=enand-research/fire-statistics/fire-service/osfourthneedsassessment.pdf?la=en>.

Figure 7. Fire Department Personnel Retention Program



Fire departments constantly need to promote for the recruitment of new personnel for their organizations. Eighty-eight percent (88%) of departments reported that they use word of mouth or member recruitment to promote recruitment. (See Figure 8.)

To maintain current levels of personnel, fire departments offer incentives and rewards to their members. Seventy-four percent (74%) of fire departments provide department clothing such as shirts and hats, while 55% provide paid education/training for their members. (See Figure 9.)

Figure 8. Promotion of the Recruitment of New Personnel with Department

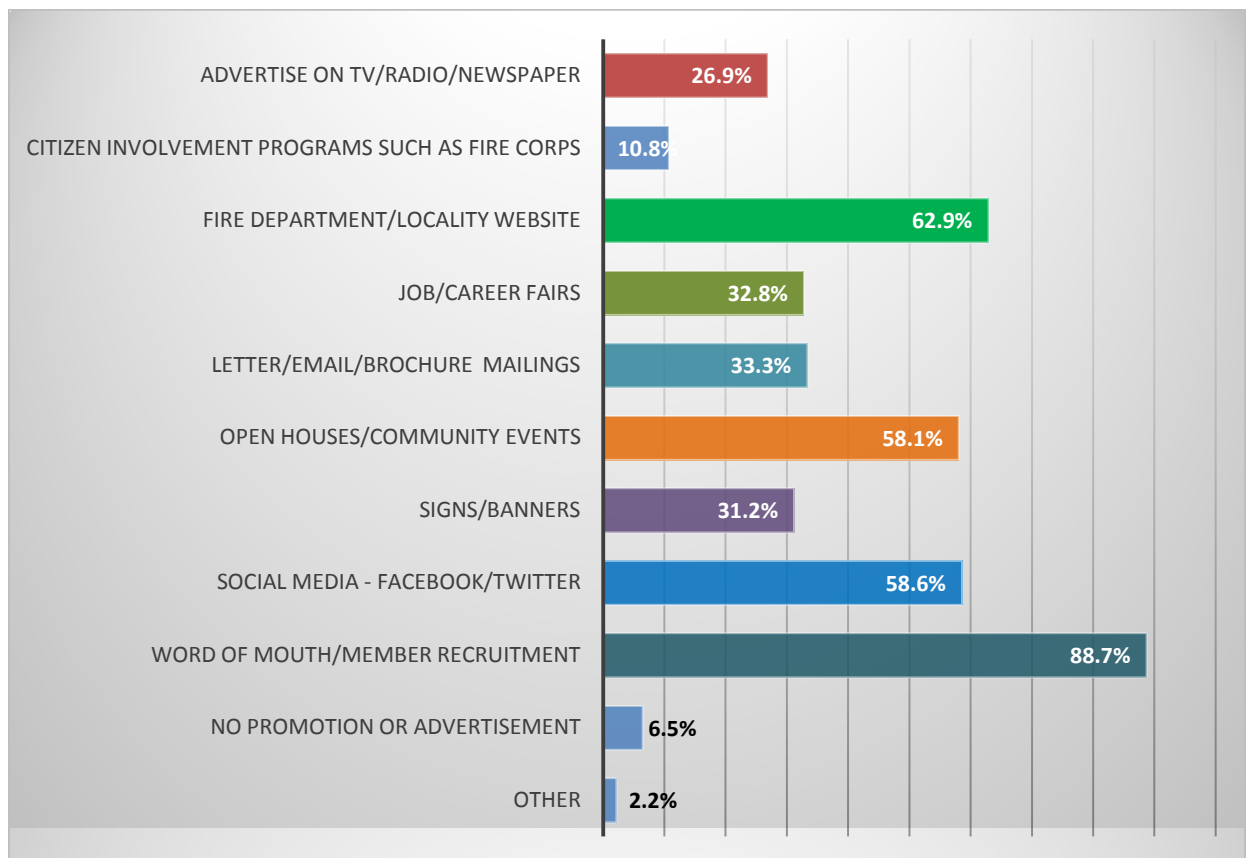
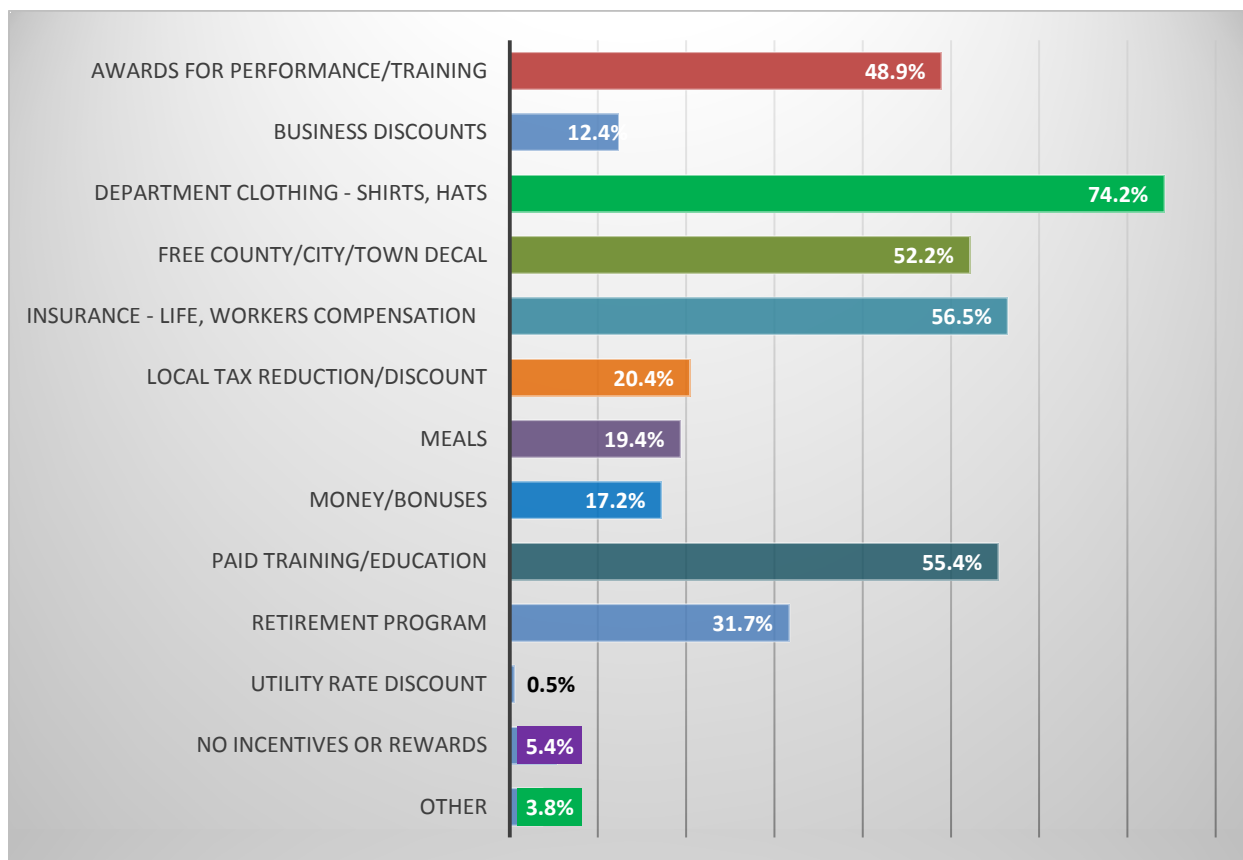


Figure 9. Incentives or Rewards Offered to Members of Department



Survey Section III - Facilities & Apparatus

Fire department facilities need to be constructed so that all apparatus, equipment and personnel are properly housed and organized, so that fire service can efficiently respond as soon as possible to an event.

Age of Fire Stations

It is imperative that fire stations are maintained, especially for those with buildings that are older in age. Forty-seven percent (47%) of department fire stations are 30 years of age or older. (See Figure 10.)

Figure 10. Age of Fire Stations

What is the age of the fire stations with your department? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)		Response Percent	Response Total
0 to 4 Years		8.9%	70
5 to 9 Years		7.8%	61
10 to 19 Years		13.4%	105
20 to 29 Years		16.1%	126
30 to 39 Years		14.4%	113
40 to 49 Years		14.9%	117
More than 50 Years		24.4%	191

Fire Stations with Backup Power

All fire stations, regardless of age and staffing, must remain fully operational during emergency conditions, as demonstrated during extreme weather conditions. Having backup electrical power is very important in maintaining full fire protection for a community during an emergency. Fire departments reported that 83 percent (83%) of their fire stations have backup power during an emergency. Seventeen percent (17%) of their stations have no backup power available.

Figure 11. Fire Stations with Backup Power

How many of your fire stations have backup power? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)		Response Percent	Response Total
Have Backup Power		83.4%	563
Do Not Have Backup Power		16.6%	112

Apparatus Currently Owned

Engines/pumpers are the primary apparatus used by fire departments to respond to a situation. However, many different types of specialized incidents require different types of fire service apparatus. Aerial apparatus are used for high elevation emergency situations, technical rescue vehicles are used for extreme rescue conditions and wildland brush trucks provide support for outside vegetation fires. Each piece of apparatus provides the unique resources needed for all different types of response.

Fire departments reported owning an average of one (1) aerial apparatus, five (5) ambulances / other patient transport, one (1) command support unit, three (3) command vehicles (SUV), six (6) engines/pumpers, one (1) fire bike, one (1) fire/rescue boat, one (1) hazardous materials (HAZMAT) vehicle, one (1) heavy technical rescue vehicle, three (3) logistical support apparatus, two (2) tankers, and two (2) wildland brush trucks. (See Table 10.)

Table 8. Total Number of Reported Apparatus Owned By VDFP Division

VDFP Division	Aerial Apparatus	Aircraft Rescue and Fire Fighting (ARFF) Vehicle	Ambulance / Other Patient Transport	Command Support Unit	Command Vehicle (SUV)	Engine / Pumper	Fire Bike	Fire / Rescue Boat	Hazardous Materials (HAZMAT) Vehicle	Heavy Technical Rescue Vehicle	Logistical Support Apparatus	Mobile Air Utility	Rehab Unit	Quint Combination Vehicle	Tanker	Wildland Brush Truck	Other Apparatus
Division 1 - Richmond	30	2	156	34	107	196	31	26	16	29	56	16	10	26	82	92	76
Division 2 - Orange	23	0	113	9	78	121	6	9	7	13	14	4	3	4	35	56	21
Division 3 - Farmville	13	0	45	55	73	111	0	5	11	9	2	8	3	2	45	56	19
Division 4 - Chilhowie	9	0	19	17	33	99	2	12	13	10	9	4	2	5	39	41	25
Division 5 - Hampton	47	0	132	22	42	202	16	33	14	23	82	14	10	8	33	56	40
Division 6 - Roanoke	25	1	111	21	105	172	2	7	13	15	16	13	3	10	68	81	45
Division 7 - Fairfax	48	3	200	5	119	204	14	37	13	35	226	11	7	2	30	35	41
Grand Total	195	6	776	163	557	1,105	71	129	87	134	405	70	38	57	332	417	267

Table 9. Average Number of Reported Apparatus Owned By VDFP Division

VDFP Division	Aerial Apparatus	Aircraft Rescue and Fire Fighting (ARFF) Vehicle	Ambulance / Other Patient Transport	Command Support Unit	Command Vehicle (SUV)	Engine / Pumper	Fire Bike	Fire / Rescue Boat	Hazardous Materials (HAZMAT) Vehicle	Heavy Technical Rescue Vehicle	Logistical Support Apparatus	Mobile Air Utility	Rehab Unit	Quint Combination Vehicle	Tanker	Wildland Brush Truck	Other Apparatus
Division 1 - Richmond	1.2	0.1	6.0	1.3	4.1	7.5	1.2	1.0	0.6	1.1	2.2	0.6	0.4	1.0	3.2	3.5	2.9
Division 2 - Orange	1.4	0.0	6.6	0.5	4.6	7.1	0.4	0.5	0.4	0.8	0.8	0.2	0.2	0.2	2.1	3.3	1.2
Division 3 - Farmville	0.5	0.0	1.9	2.3	3.0	4.6	0.0	0.2	0.5	0.4	0.1	0.3	0.1	0.1	1.9	2.3	0.8
Division 4 - Chilhowie	0.2	0.0	0.4	0.4	0.7	2.2	0.0	0.3	0.3	0.2	0.2	0.1	0.0	0.1	0.9	0.9	0.6
Division 5 - Hampton	2.0	0.0	5.7	1.0	1.8	8.8	0.7	1.4	0.6	1.0	3.6	0.6	0.4	0.3	1.4	2.4	1.7
Division 6 - Roanoke	0.6	0.0	2.6	0.5	2.5	4.1	0.0	0.2	0.3	0.4	0.4	0.3	0.1	0.2	1.6	1.9	1.1
Division 7 - Fairfax	5.3	0.3	22.2	0.6	13.2	22.7	1.6	4.1	1.4	3.9	25.1	1.2	0.8	0.2	3.3	3.9	4.6
Grand Total	1.0	0.0	4.2	0.9	3.0	5.9	0.4	0.7	0.5	0.7	2.2	0.4	0.2	0.3	1.8	2.2	1.4

Equipment Currently Owned

Fire service equipment helps protect firefighters during a situation and also aids the management of their duties. Having adequate equipment in good condition and ready helps departments respond to emergency responses.

Departments responded that they currently own an average of seven (7) 4-gas monitors, eleven (11) map coordinate GPS devices, twelve (12) mobile data terminals, 19 personal alert safety systems (PASS), 146 sets of personal protective equipment (PPE), 95 radios w/ an emergency alert button, 9 radios w/o an emergency alert button, 67 self-contained breathing apparatus (SCBA) w/ integrated PASS, one (1) self-contained breathing apparatus (SCBA) w/o integrated PASS, and six (6) thermal imaging cameras. (See Table 12.)

Table 10. Total Number of Reported Equipment Owned By VDFP Division *

VDFP Division	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/ Emergency Alert Button	Radios w/o Emergency Alert Button	Self-Contained Breathing Apparatus (SCBA) w/ Integrated PASS	Self-Contained Breathing Apparatus (SCBA) w/o Integrated PASS	Thermal Imaging Cameras	Other
Division 1 - Richmond	217	374	490	705	5,466	3,253	148	2,291	0	222	0
Division 2 - Orange	159	67	112	539	2,099	1,257	79	1,207	41	141	0
Division 3 - Farmville	121	95	57	579	2,076	1,865	174	1,189	20	133	0
Division 4 - Chilhowie	60	34	13	386	1,292	561	456	719	31	79	0
Division 5 - Hampton	152	183	358	263	3,628	2,471	17	2,021	17	202	0
Division 6 - Roanoke	160	134	137	523	2,524	2,373	465	1,494	74	149	0
Division 7 - Fairfax	384	842	841	84	9,874	4,402	40	3,265	17	249	48
Grand Total	1,253	1,729	2,008	3,079	26,959	16,182	1,379	12,186	200	1,175	48

Table 11. Average Number of Equipment Owned By VDFP Division *

VDFP Division	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/ Emergency Alert Button	Radios w/o Emergency Alert Button	Self-Contained Breathing Apparatus (SCBA) w/ Integrated PASS	Self-Contained Breathing Apparatus (SCBA) w/o Integrated PASS	Thermal Imaging Cameras	Other
Division 1 - Richmond	8.3	14.4	18.8	27.1	210.2	125.1	5.7	88.1	0.0	8.5	0.0
Division 2 - Orange	9.4	3.9	6.6	31.7	123.5	73.9	4.6	71.0	2.4	8.3	0.0
Division 3 - Farmville	5.0	4.0	2.4	24.1	86.5	77.7	7.3	49.5	0.8	5.5	0.0
Division 4 - Chilhowie	1.3	0.8	0.3	8.6	28.7	12.5	10.1	16.0	0.7	1.8	0.0
Division 5 - Hampton	6.6	8.0	15.6	11.4	157.7	107.4	0.7	87.9	0.7	8.8	0.0
Division 6 - Roanoke	3.8	3.2	3.3	12.5	60.1	56.5	11.1	35.6	1.8	3.5	0.0
Division 7 - Fairfax	42.7	93.6	93.4	9.3	1,097.1	489.1	4.4	362.8	1.9	27.7	5.3
Grand Total	6.7	9.3	10.8	16.6	144.9	87.0	7.4	65.5	1.1	6.3	0.3

Additional reports on apparatus owned and equipment owned can be found under Supplemental Table 2 and Supplemental Table 3 at the end of this chapter.

Survey Section IV - Operating Budget Information

Anticipated Funding

Fire departments can anticipate their future budgets based on amounts they expect to receive from their localities, from fund raising events and donations and from grant funding. Fire departments anticipate receiving a total of \$1.2 billion for their budgets for FY 2017; \$1.1 billion from their locality, \$6.9 million from funding raising / donations and \$27.8 million from grant sources. (See Table 12.) Fire service anticipates receiving on average a total of \$6,304,364 for their budget funding. (See Table 13.)

Table 12. Total Funding Anticipated to Receive for FY2017

VDFP Division	Locality Funding	Fund Raising / Donations	Grant Funding	Grand Total
Division 1 - Richmond	\$206,623,942	\$465,500	\$4,130,634	\$211,220,076
Division 2 - Orange	\$68,241,544	\$2,592,000	\$2,672,000	\$73,505,544
Division 3 - Farmville	\$45,608,609	\$1,062,060	\$1,238,515	\$47,909,184
Division 4 - Chilhowie	\$8,428,412	\$511,750	\$1,010,470	\$9,950,632
Division 5 - Hampton	\$237,003,709	\$1,601,000	\$5,451,163	\$244,055,872
Division 6 - Roanoke	\$76,028,807	\$607,505	\$2,825,392	\$79,461,704
Division 7 - Fairfax	\$495,954,117	\$62,500	\$10,492,045	\$506,508,662
Grand Total	\$1,137,889,140	\$6,902,315	\$27,820,219	\$1,172,611,674

Table 13. Average Funding Anticipated to Receive for FY2017

VDFP Division	Locality Funding	Fund Raising / Donations	Grant Funding	Grand Total
Division 1 - Richmond	\$7,947,075	\$17,904	\$158,871	\$8,123,849
Division 2 - Orange	\$4,014,208	\$152,471	\$157,176	\$4,323,856
Division 3 - Farmville	\$1,900,359	\$44,253	\$51,605	\$1,996,216
Division 4 - Chilhowie	\$187,298	\$11,372	\$22,455	\$221,125
Division 5 - Hampton	\$10,304,509	\$69,609	\$237,007	\$10,611,125
Division 6 - Roanoke	\$1,810,210	\$14,464	\$67,271	\$1,891,945
Division 7 - Fairfax	\$55,106,013	\$6,944	\$1,165,783	\$56,278,740
Grand Total	\$6,117,684	\$37,109	\$149,571	\$6,304,364

Funding Reduction

Fire departments also reported that they will have a reduction of funding for FY 2017 that totals \$28.6 million. (See Table 14.) The anticipated reduction with locality funding was reported as \$23.4 million. Fire service also expect a reduction of funding with fund raising / donations of \$3,803,700 and with grant funding \$1,423,501.

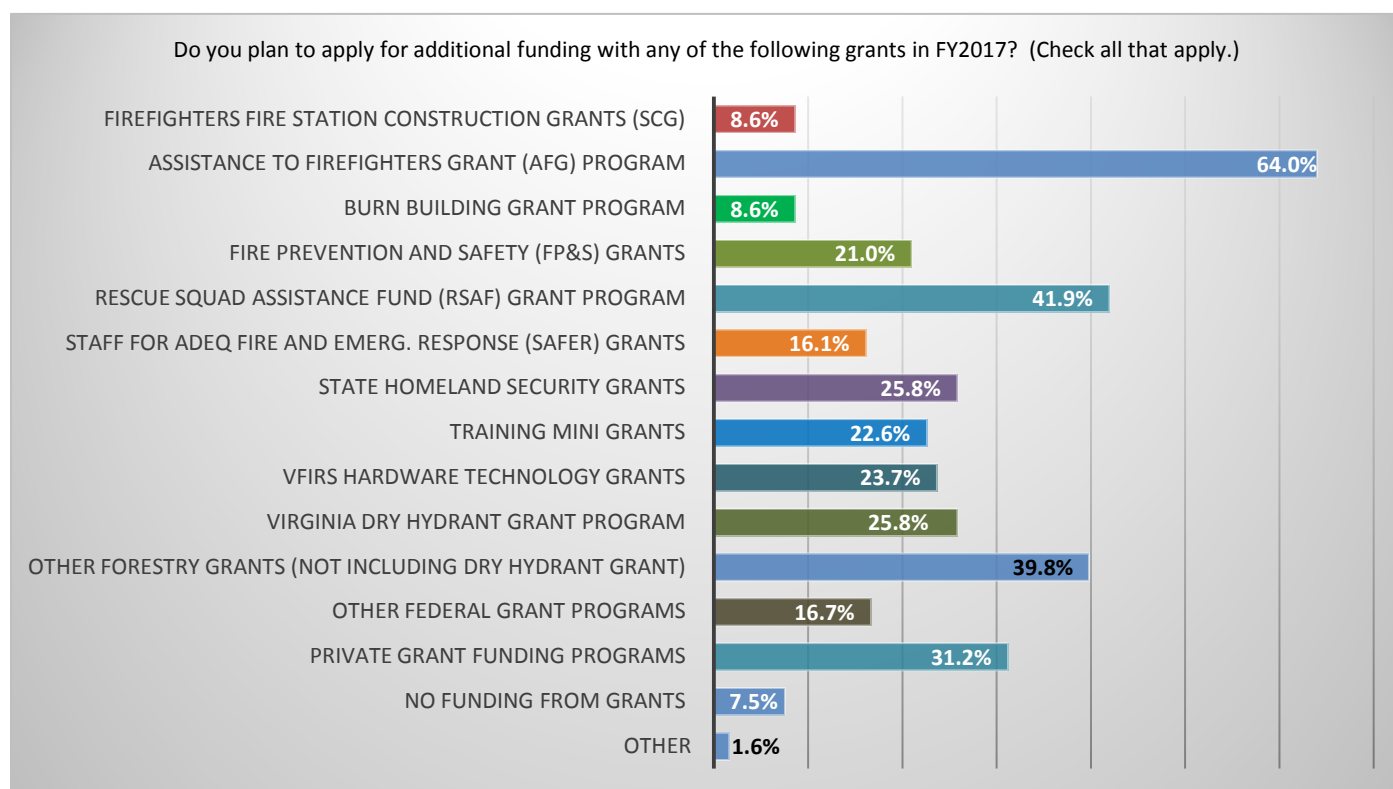
Table 14. Total Amount of Anticipated Funding Reduced for FY2017

VDFP Division	Locality Funding	Fund Raising / Donations	Grant Funding	Grand Total
Division 1 - Richmond	\$310,000	\$7,000	\$117,691	\$434,691
Division 2 - Orange	\$90,000	\$2,005,000	\$1,100,000	\$3,195,000
Division 3 - Farmville	\$0	\$4,000	\$0	\$4,000
Division 4 - Chilhowie	\$233,500	\$6,500	\$17,000	\$257,000
Division 5 - Hampton	\$1,913,347	\$1,747,000	\$150,310	\$3,810,657
Division 6 - Roanoke	\$20,830,010	\$34,200	\$38,500	\$20,902,710
Division 7 - Fairfax	\$40,000	\$0	\$0	\$40,000
Grand Total	\$23,416,857	\$3,803,700	\$1,423,501	\$28,644,058

Grant Funding

To help offset their upcoming budget, fire departments can apply for additional funding through grant funding programs. Sixty-four percent (64%) of departments responded that they plan to apply for a grant with the Assistance to Firefighters Grant (AFG) Program. (See Figure 12.)

Figure 12. Grant Funding Planned to Apply for in FY2017



Please see Chapter 5 for more information on grant funding awarded to fire departments.

Budget Funding

Fire departments obtain funding for their operating expenses from many different sources such as fire district taxes, payments per call, local government funding, state government funding, fundraising, and other sources.

The largest part of the funding sources for fire departments is from local government funding (not including ATL) which accounted for an average of 54 percent (54%) of department's budgets. (See Figure 13.) Fundraising generated on average 17 percent (17%) of the income for fire departments.

Figure 13. Fire Department Budget Funding

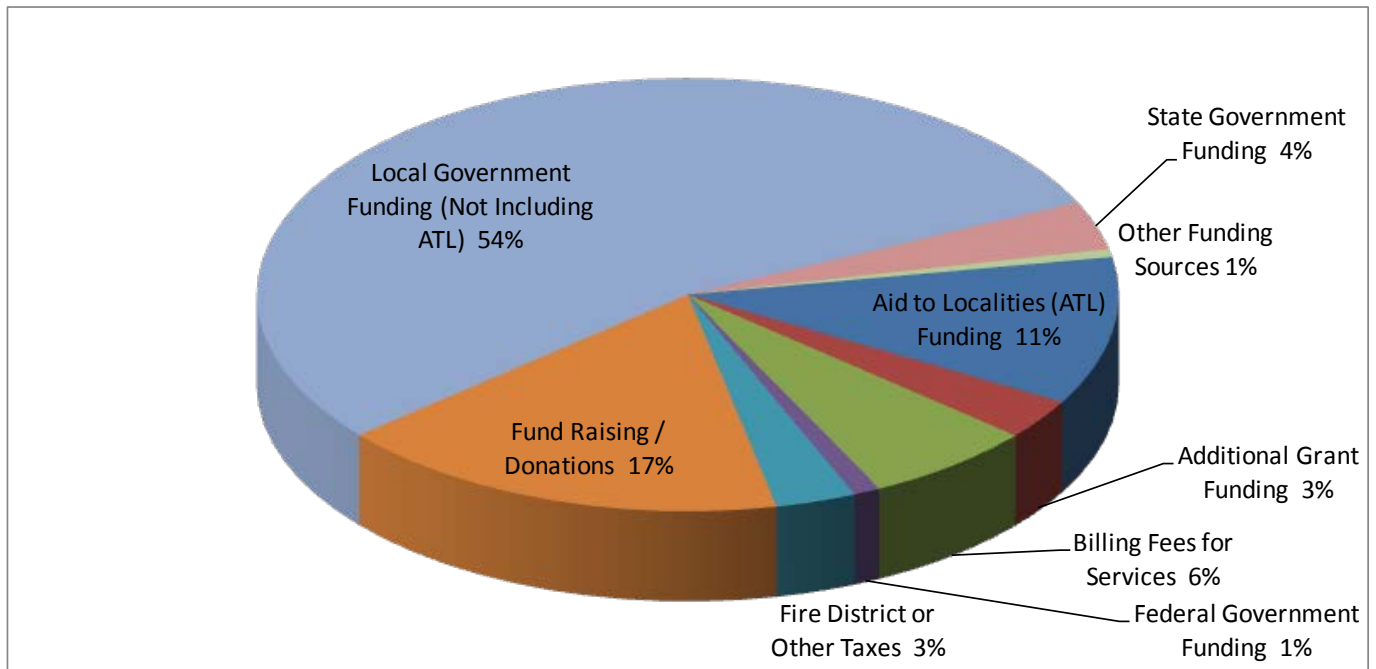


Table 15. Average Percent of Fire Department Budget Funding By VDFP Division

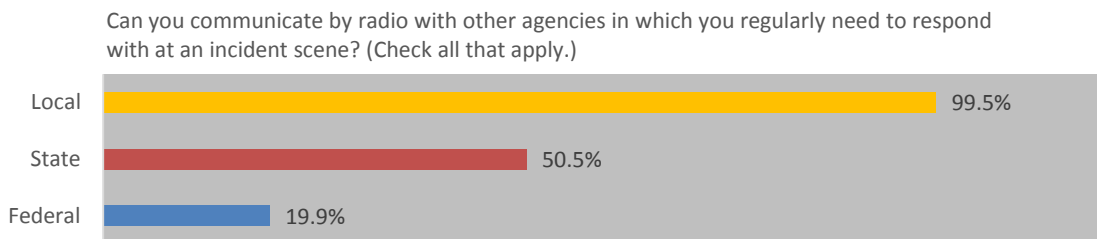
VDFP Division	Aid to Localities (ATL) Funding	Additional Grant Funding	Billing Fees for Services	Federal Government Funding	Fire District or Other Taxes	Fund Raising / Donations	Local Government Funding (Not Including ATL)	State Government Funding	Other Funding Sources
Division 1 - Richmond	6.3	5.3	10.7	0.1	0.6	10.3	57.5	8.9	0.3
Division 2 - Orange	11.5	2.5	7.1	1.2	9.4	18.1	41.1	4.0	0.6
Division 3 - Farmville	9.6	2.7	5.2	0.0	0.0	22.9	53.4	0.5	1.0
Division 4 - Chilhowie	20.4	2.0	4.3	2.0	2.3	13.7	46.0	4.9	4.3
Division 5 - Hampton	5.9	2.6	5.2	0.1	2.6	15.9	59.2	4.3	0.0
Division 6 - Roanoke	9.6	2.3	7.2	0.8	0.4	25.5	48.0	2.7	0.4
Division 7 - Fairfax	1.3	1.9	5.8	0.0	14.1	7.8	68.7	0.1	0.3
Grand Total	11.1	2.7	6.4	0.8	2.6	17.5	51.3	4.0	1.4

Survey Section V - Communications

The ability of fire departments to establish and maintain effective and reliable communications through all phases of an emergency incident (i.e., notification, dispatch, response, operations, and termination) is critical.

Reports from Virginia fire departments show that the vast majority of departments (99%) can communicate with local emergency response partners by radio on an incident scene. (See Figure 14.) Fifty percent (50%) can communicate with state responders and only twenty percent (20%) can communicate with federal responders, suggesting that communications interoperability is still a challenge for many fire departments.

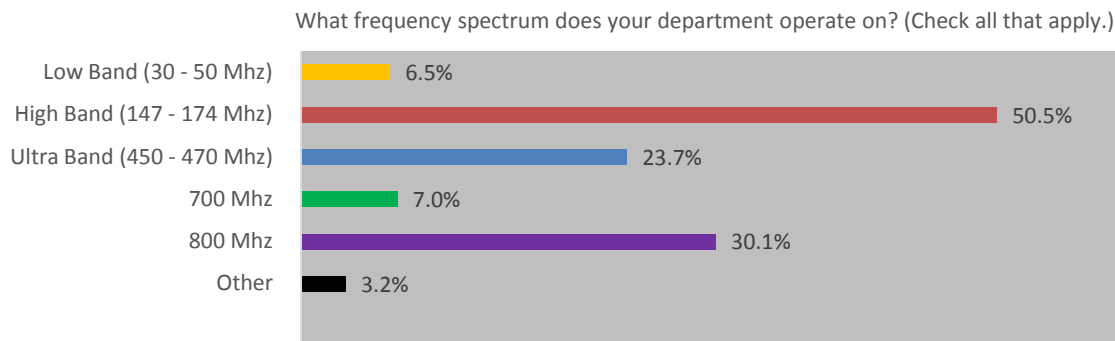
Figure 14. Communication By Radio with Other Agencies



Frequency Spectrum

The frequency in which fire departments operate can greatly affect how they communicate with other agencies. Fifty-one percent (51%) of departments operate using High Band (147-174 MHz) frequency, while 30 percent of departments use 800 MHz and 24 percent (24%) of departments use Ultra Band (450-470 MHz). (See Figure 15.)

Figure 15. Department Radio Frequency



GPS Map Coordinate System

Almost forty-eight percent (48%) of fire departments have no GPS map coordinate system to help navigate during emergency response. (See Figure 16.) The USFA/NFPA national study estimates that 48 percent of departments have no map coordinate system.²

Figure 16. Apparatus Equipped with a GPS Map Coordinate System

What percentage (%) of your apparatus are equipped with a GPS Map Coordinate System?		Response Percent	Response Total
All Apparatus (100%)		13.44%	25
Most (75% to 95%)		12.91%	24
More than Half (50% to 70%)		6.99%	13
Some (25% to 45%)		7.52%	14
Few (5% to 20%)		11.29%	21
None		47.85%	89

NOTE: Due to rounding error, response percents may not add to 100.

Mobile Data Terminals

Mobile data terminals in apparatus during an incident are a valuable source for information and also allow fire service to record information in real-time at the scene. Sixty-six percent (66%) of respondents reported that none of their apparatus are equipped with mobile data terminals. (See Figure 17.)

Figure 17. Apparatus Equipped with Mobile Data Terminals

What percentages (%) of your apparatus are equipped with Mobile Data Terminals?		Response Percent	Response Total
All Apparatus (100%)		10.22%	19
Most (75% to 95%)		9.13%	17
More than Half (50% to 70%)		2.70%	5
Some (25% to 45%)		3.23%	6
Few (5% to 20%)		8.60%	16
None		66.13%	123

NOTE: Due to rounding error, response percents may not add to 100.

² USFA/NFPA (2006). *Four Years Later – A Second Needs Assessment of the U.S. Fire Service*, p.91.

Tablets/iPads

Fire departments are increasingly using newer computer technology such as tablets/iPads to assist with incident response. Nearly sixty-one percent (61%) of respondents reported that none of their apparatus are equipped with tablets/iPads. (See Figure 18.)

Figure 18. Apparatus Equipped with Tablets/iPads

What percentage (%) of your apparatus are equipped with Tablets/iPads?		Response Percent	Response Total
All Apparatus (100%)		4.30%	8
Most (75% to 95%)		6.99%	13
More than Half (50% to 70%)		5.91%	11
Some (25% to 45%)		8.61%	16
Few (5% to 20%)		13.45%	25
None		60.75%	113

NOTE: Due to rounding error, response percents do not add to 100.

Computers/Internet Access

Fire departments use computers and the internet for a wide variety of purposes, such as accessing information, submitting incident reports, and participating in online training activities. Some departments make extensive use of email and other productivity-related software to manage routine daily business.

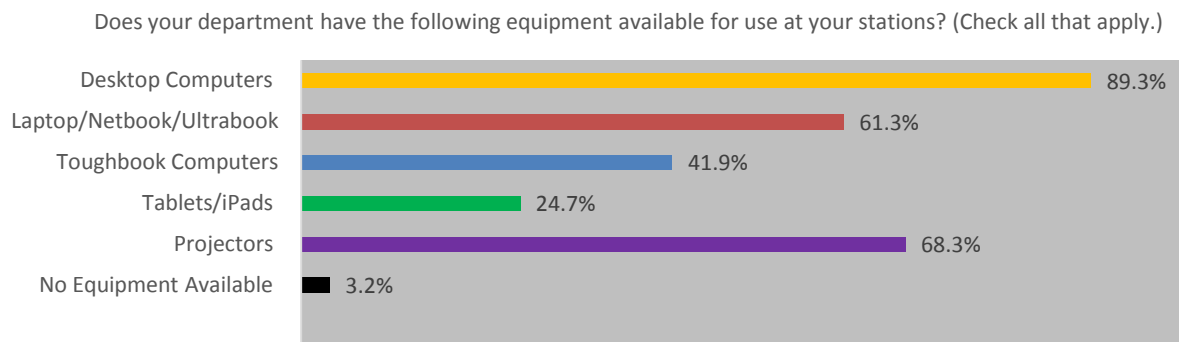
Ninety-five percent (95%) of respondents reported that their stations have a computer available for incident reporting. (See Figure 19.) Eighty-nine percent (89%) of departments reported that they have desktop computers available for use at their stations. (See Figure 20.) Sixty-one (61%) reported that they have laptop/netbook/ultrabook computers and nearly 42 percent (42%) reported that they have toughbook computers.

Figure 19. Stations with a Computer for Incident Reporting

Does each of your stations have a computer available for incident reporting? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)		Response Sum	Response Percent
Computer at Station		735	95.2%
No Computer Available		37	4.8%

NOTE: Due to rounding error, response percents do not add to 100.

Figure 20. Department Have Equipment Available for Use



A majority of fire departments have internet access (97.3%) at their organization. (See Figure 21.) High speed internet accounted for close to 63 percent (62.8%) of the internet access, wireless internet made up about 24 percent (23.7%), and satellite internet accounted for 1 percent (1.2%) of the internet service used in the state. A little more than two percent (2.5%) of fire departments reported having only dial-up internet. Slow internet speeds can inhibit the productivity of departments when managing activities on-line. Switching over to higher speed internet would help the efficiency with a department's internet communication. Close to three percent (2.7%) of departments reported that they had no internet service.

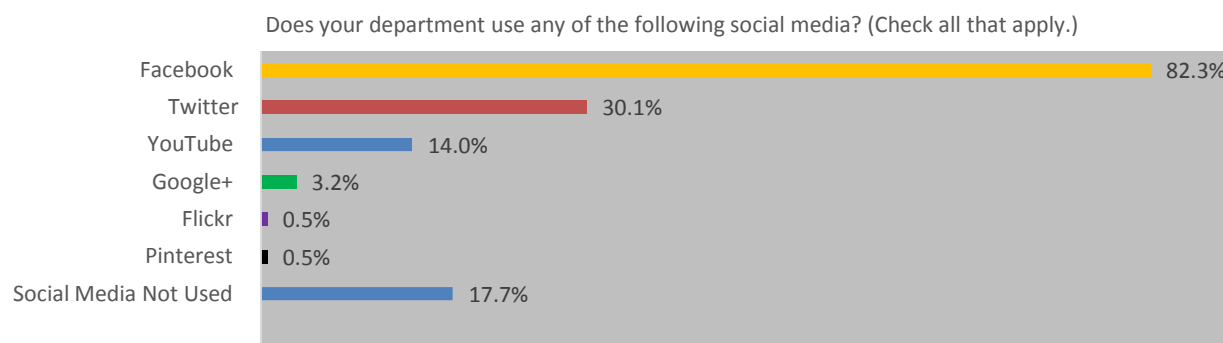
Figure 21. Stations with Internet Service

What type of internet does each of your stations have? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)		Response Sum	Response Percent
Dial-Up Internet		21	2.5%
High Speed Internet		537	62.8%
Wireless Internet		203	23.7%
Satellite Internet		10	1.2%
Cable TV (No Internet)		61	7.1%
No Internet Service		23	2.7%

Social Media

Fire departments are using social media as a new resource to increase communication. More than eighty-two percent (82.3%) of fire departments are using Facebook. (See Figure 22.) About thirty percent (30.1%) are using Twitter and fourteen percent (14%) are using YouTube.

Figure 22. Department Use of Social Media



Web Pages

Nearly sixty-three percent (62.6%) of fire departments reported that they maintain a department webpage. Almost, seventy-four percent (73.7%) maintain a fire department Facebook page. (See Figure 23. and 24.)

Figure 23. Fire Department Maintain Webpage

Does your fire department have and maintain a Department Webpage?		Response Percent	Response Total
Yes		62.6%	112
No		37.4%	67

Figure 24. Fire Department Maintain Facebook Page

Does your fire department have and maintain a Facebook Page?		Response Percent	Response Total
Yes		73.7%	132
No		26.3%	47

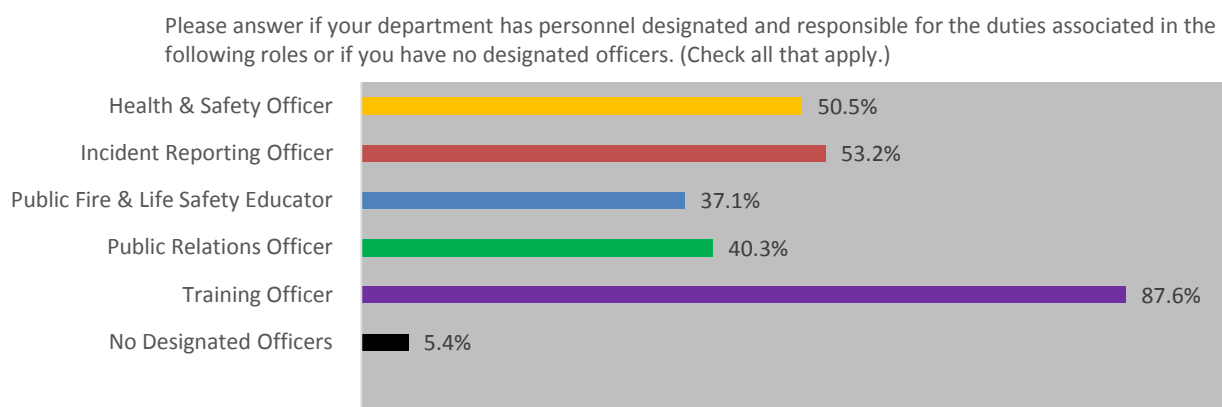
Survey Section VI - Fire Department Roles / Training

Fire departments have specific roles in which they perform in responding to an incident. Fire service personnel are trained in different specialized fields that enable them to take action during situations where they are needed.

Personnel Designated

When departments responded if they had personnel designated and responsible for the specific fire service duties, almost eighty-eight percent (87.6%) had training officers, about fifty-three percent (53.2%) had designated incident reporting officers, and more than fifty percent (50.5%) had health and safety officers. (See Figure 25.)

Figure 25. Personnel Designated and Responsible for Specific Duties



Minimum Level of Training

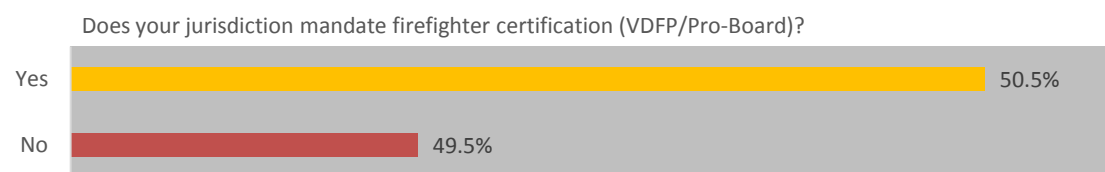
Fire departments have training requirements for their members. Nearly seventy-six percent (75.7%) of the departments responded that they have a minimum level of training required to remain an active member. (See Figure 26.) For the departments that have a minimum level of training standard, about 62 percent (62.1%) have members certified at the Fire Fighter I and HazMat Operations level and nearly 30 percent (29.7%) have members certified at Fire Fighter II and HazMat Operations. In addition, departments reported that about 46 percent (45.7%) have to become certified in 12 months.

Figure 26. Department Minimum Level of Training Required

Does your department currently have a minimum level of training required to be an active member?		Response Percent	Response Total
Yes		75.7%	140
No		24.3%	45

More than fifty percent (50.5%) of departments reported that their jurisdiction mandates firefighter certification (VDFP / Pro-Board).

Figure 27. Jurisdiction Mandate Firefighter Certification



Training

NFPA Standards

Fire service personnel are trained in many different areas and levels based on the National Fire Protection Association (NFPA) standards (See Table 16.)

Based on the reported number of firefighters that need training and the reported number of fire service personnel, 1,738 firefighters in Virginia, the largest amount, need Rapid Intervention Team/Crew (RIT/RIC) training and 1,536 firefighters need Mayday Firefighter Down training. (See Table 16.)

Even if a department is prepared for certain fire service roles, all personnel may not have received formal training in a specialized field. Having all personnel trained in a particular area will guarantee proper response during an emergency situation as well as ensure their safety.

Table 16. Fire Department Reported Training Based on NFPA Standards

Training Area and Level	Number of Firefighters Trained	Number of Firefighters In Need of Training
Hazardous Materials (NFPA 472) - Awareness	13,855	547
Hazardous Materials (NFPA 472) - Operations	13,732	788
Fire Fighter (NFPA 1001) - Level I	13,900	762
Fire Fighter (NFPA 1001) - Level II	12,917	1,007
Fire Apparatus Driver/Operator (NFPA 1002) - Driver/Pump Operator	7,136	1,401
Fire Apparatus Driver/Operator (NFPA 1002) - Aerial Operator	3,229	1,161
Airport Fire Fighter (NFPA 1003)	576	172
Fire Officer (NFPA 1021) - Level I	5,233	1,015
Fire Officer (NFPA 1021) - Level II	3,098	1,132
Fire Officer (NFPA 1021) - Level III	1,144	563
Fire Officer (NFPA 1021) - Level IV	291	358
Fire Inspector (NFPA 1031) - Level I/II	673	187
Fire Investigator (NFPA 1033)	493	230
Fire Service Instructor (NFPA 1041) - Level I	5,786	773
Fire Service Instructor (NFPA 1041) - Level II	2,806	488
Fire Service Instructor (NFPA 1041) - Level III	663	302
Public Fire and Life Safety Educator (NFPA 1035) - Level I	391	268
Public Fire and Life Safety Educator (NFPA 1035) - Level II	170	271
Juvenile Firesetter Intervention Specialist (NFPA 1035) - Level I	203	224
Juvenile Firesetter Intervention Specialist (NFPA 1035) - Level II	149	202
Farm Machinery Extrication	1,501	915
Mayday Firefighter Down	8,197	1,536
Rapid Intervention Team/Crew (RIT/RIC)	5,935	1,738

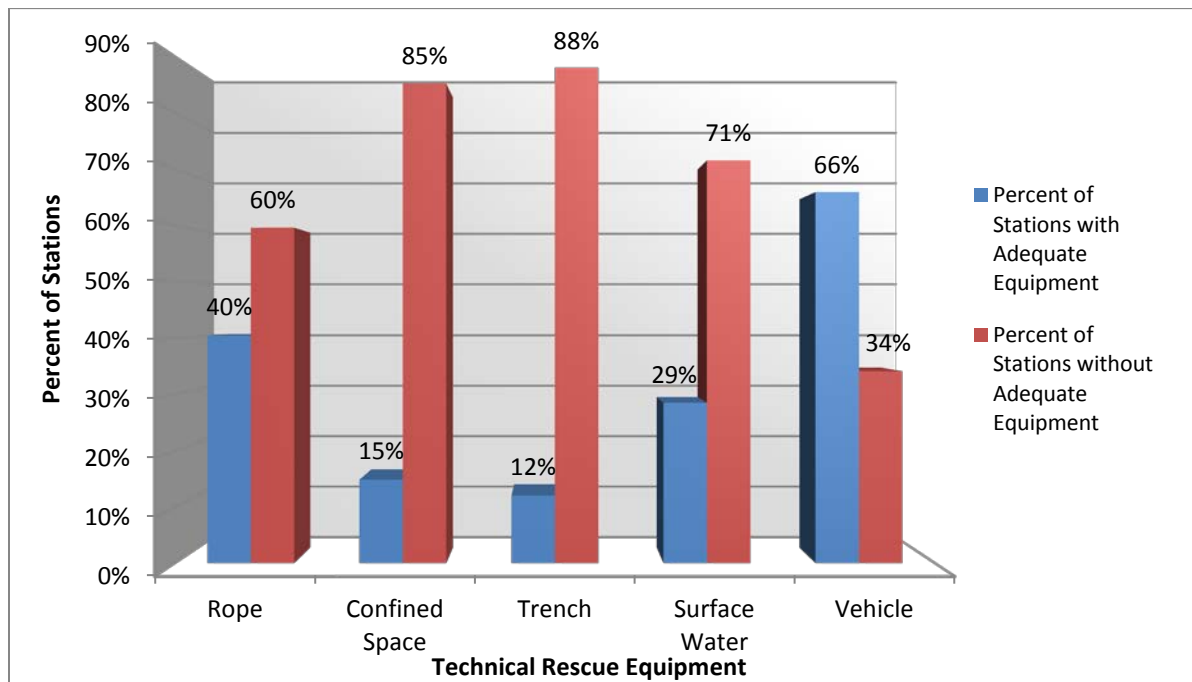
Technical Rescue

Respondents also replied with how many personnel are trained in specific technical rescue areas and levels. Based on the reported number of firefighters that need training and the reported number of fire service personnel, 3,555 firefighters in Virginia, the largest amount, need Introduction to Technical Rescue - Module II and 3,168 firefighters need Vehicle - Level.

Table 17. Fire Department Reported Training with Technical Rescue

Training Area and Level	Number of Firefighters Trained	Number of Firefighters Need Training
Introduction to Technical Rescue - Module I	6,169	3,140
Introduction to Technical Rescue - Module II	4,155	3,555
Rope - Level I	4,119	2,440
Rope - Level II	2,101	1,990
Confined Space - Level I	2,751	2,099
Confined Space - Level II	1,510	1,875
Trench - Level I	2,281	1,878
Trench - Level II	1,476	1,726
Surface Water - Level I	1,280	2,089
Surface Water - Level II	796	1,575
Vehicle - Level I	6,272	3,168
Vehicle - Level II	2,686	2,587

Figure 28. Adequacy of Technical Rescue Equipment By Type



Fire departments reported that their stations do not have adequate technical rescue equipment in the following areas; Rope (60%), Confined Space (85%), Trench (88%), and Surface Water (71%). (See Figure 28.) Sixty-six percent (66%) of their stations have adequate vehicle technical rescue equipment.

Emergency Medical Services (EMS)

Fire service reported that 8,775 firefighters (87%) are trained at the EMT - Basic level and that 1,300 (13%) need additional training at the EMT- Basic level to meet training goals with their department. (See Table 19).

Table 18. Fire Department Reported Training with EMS

Training Area and Level	Number of Firefighters Trained	Percent of Firefighters Trained	Number of Firefighters Needing Training	Percent of Firefighters Needing Training
EMS First Responder	782	47%	898	53%
EMT - Basic	8,775	87%	1,300	13%
EMT - Advanced	1,088	65%	587	35%
EMT - Intermediate	1,652	73%	626	27%
EMT - Paramedic	2,915	74%	1,045	26%

Fire departments that are licensed by the Virginia Department of Health, Office of Emergency Medical Services accounted for nearly 58 percent (57.8%) of the survey respondents. Since emergency medical services (EMS) incidents make up a large part of the overall calls, fire service departments would benefit from being licensed as an EMS agency.

Figure 29. Department Licensed as an EMS Agency

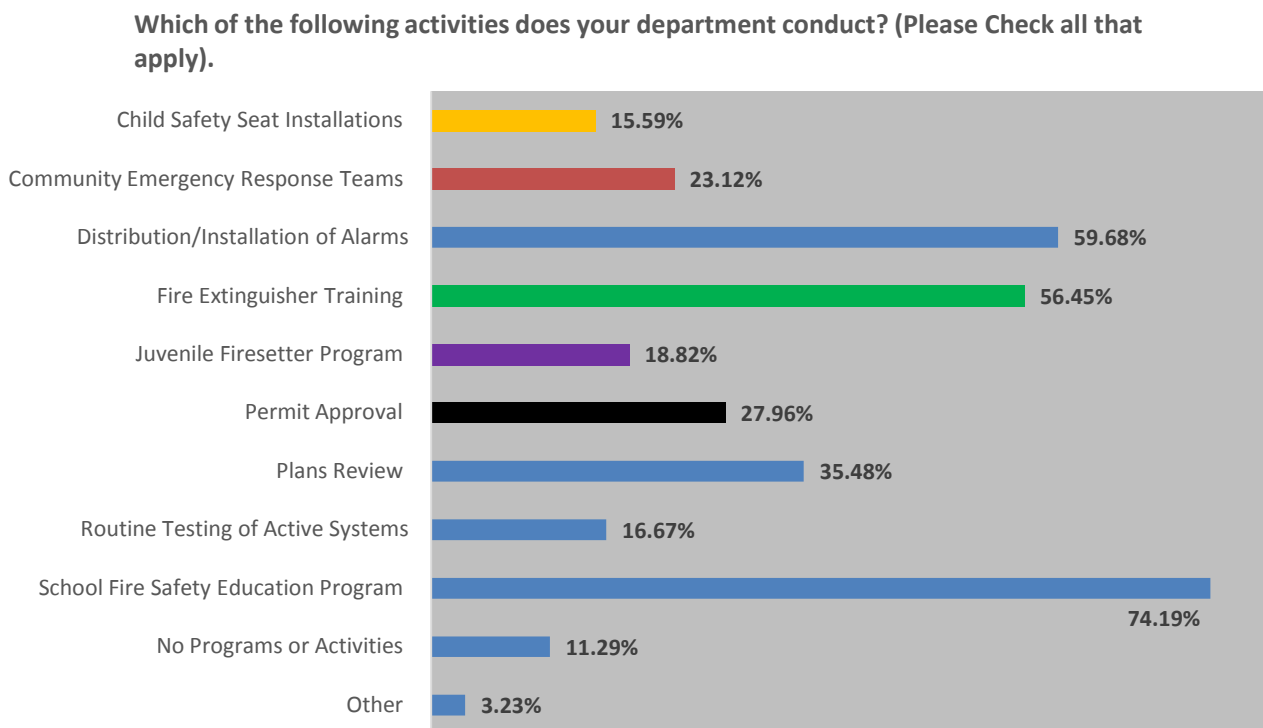
Is your department licensed by the Virginia Department of Health, Office of Emergency Medical Services as an EMS agency?		Response Percent	Response Total
Yes		57.8%	107
No		42.2%	78

Survey Section VII - Fire Prevention & Code Enforcement

Programs / Activities

Fire departments provide services to the public concerning prevention activities that can help preclude the occurrence of many fire service incidents in the future. These programs are usually conducted by public fire & life safety educators and follow the NFPA 1035 guidelines. Seventy four percent (74.19%) of departments reported that they conducted school fire safety education programs and fifty-nine percent (59.68%) participated in the distribution / installation of home smoke / heat / CO alarms. Fifty-six percent (54.84%) conducted fire extinguisher training. (See Figure 30.)

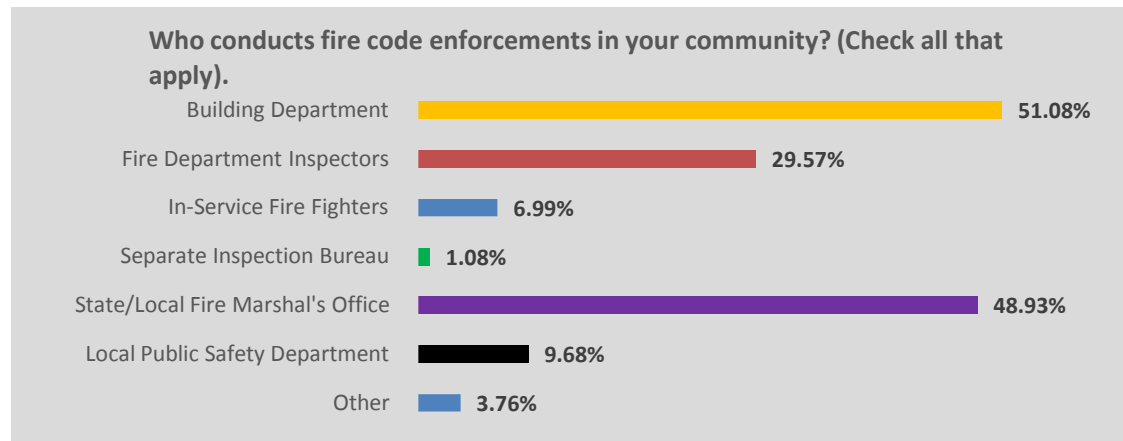
Figure 30. Departments that Conduct Specific Programs or Activities



Fire Code Inspections

Fire code inspections are conducted by different organizations and the availability of resources affects the amount of code enforcement in an area. The largest number of fire departments reported that building departments (51.08%) handle inspections in their community, while forty-eight percent (48.93%) indicated that the state / local fire marshal's office provides the inspections. (See Figure 31.)

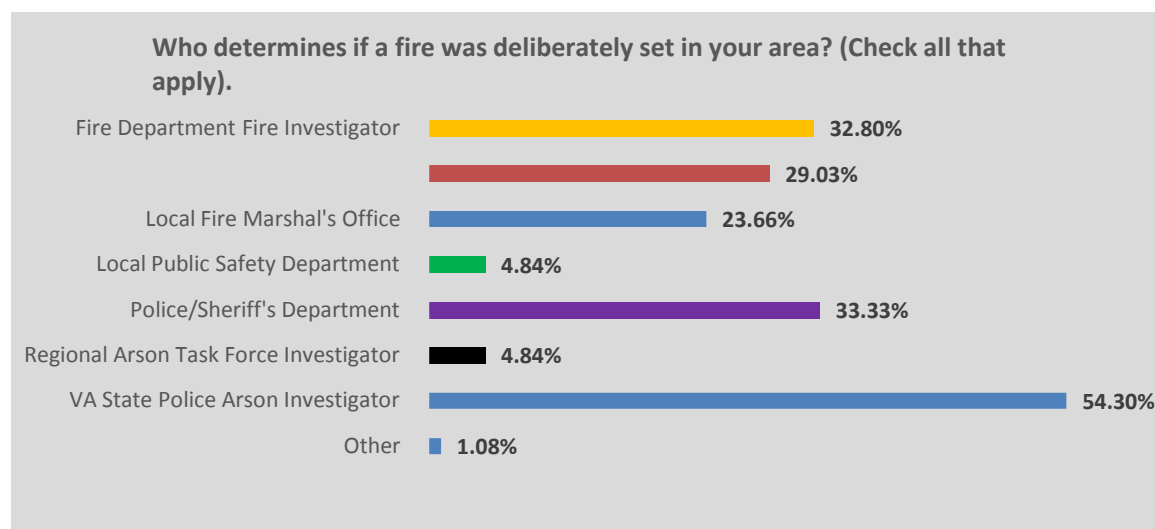
Figure 31. Organizations that Conduct Fire Code Inspections



Fire Investigation

Several types of investigators will determine if a suspicious fire was deliberately set in an area. Fifty-four percent (54.30%) of the departments reported that state arson investigators analyze fires to conclude the cause of ignition. (See Figure 32.)

Figure 32. Investigators Who Determine that a Fire Was Deliberately Set



Survey Section VIII - Your Fire Department's Top Needs

Top Needs

Survey respondents were asked to rank their department's top needs from 1 to 5 in order of importance. The most important need would be ranked #1, the next important need would be ranked #2, etc. and the least important need would be #5. The five ranking categories were apparatus, equipment, facilities, personnel, and training.

Overall, in Virginia, the top need generated from the response was (#1) Personnel. Forty-one percent (37%) of fire departments replied that personnel was their most important need at their department. The second most important need among reporting Virginia fire departments was (#2) Training which was selected by 29 percent (29%) of the departments. Facilities was ranked the least important need among fire departments. (See Table 19.)

Table 19. Top Fire Service Needs Reported By VDFP Division

VDFP Division	#1 Top Need	#2 Top Need	#3 Top Need	#4 Top Need	#5 Top Need
Division 1 - Richmond	Personnel	Training	Facilities	Equipment	Apparatus
Division 2 - Orange	Personnel	Apparatus	Training	Equipment	Facilities
Division 3 - Farmville	Personnel	Training	Equipment	Apparatus	Facilities
Division 4 - Chilhowie	Training	Equipment	Personnel	Apparatus	Facilities
Division 5 - Hampton	Personnel	Equipment	Training	Apparatus	Facilities
Division 6 - Roanoke	Personnel	Training	Equipment	Apparatus	Facilities
Division 7 - Fairfax	Personnel	Training	Apparatus	Equipment	Facilities
Virginia	Personnel	Training	Equipment	Apparatus	Facilities

When comparing how different divisions in Virginia ranked their top needs, fire departments in the Division 4 - Chilhowie area selected training for their #1 top need. This suggests that there is a greater need for training in the western area of the state. Division 1 was the only division which didn't have facilities as their #5 need. It was their #3 top need indicating a stronger need for new facilities and upgrades than other parts of the state.

Additional Funding

Fire departments were also surveyed concerning the estimated amount of additional funding needed with each specific need for FY 2017. Overall, fire departments reported that their additional funding needed for FY 2017 would be \$475 million. (See Table 20.)

The additional funding for fire departments to maintain their facilities (\$275 million) accounted for the highest amount of funding needed in Virginia. Apparatus had the second highest funding amounts, \$89 million, while Personnel funding ranked third with \$65 million. Their ranks, as funding amounts needed, was unchanged from last year's survey.

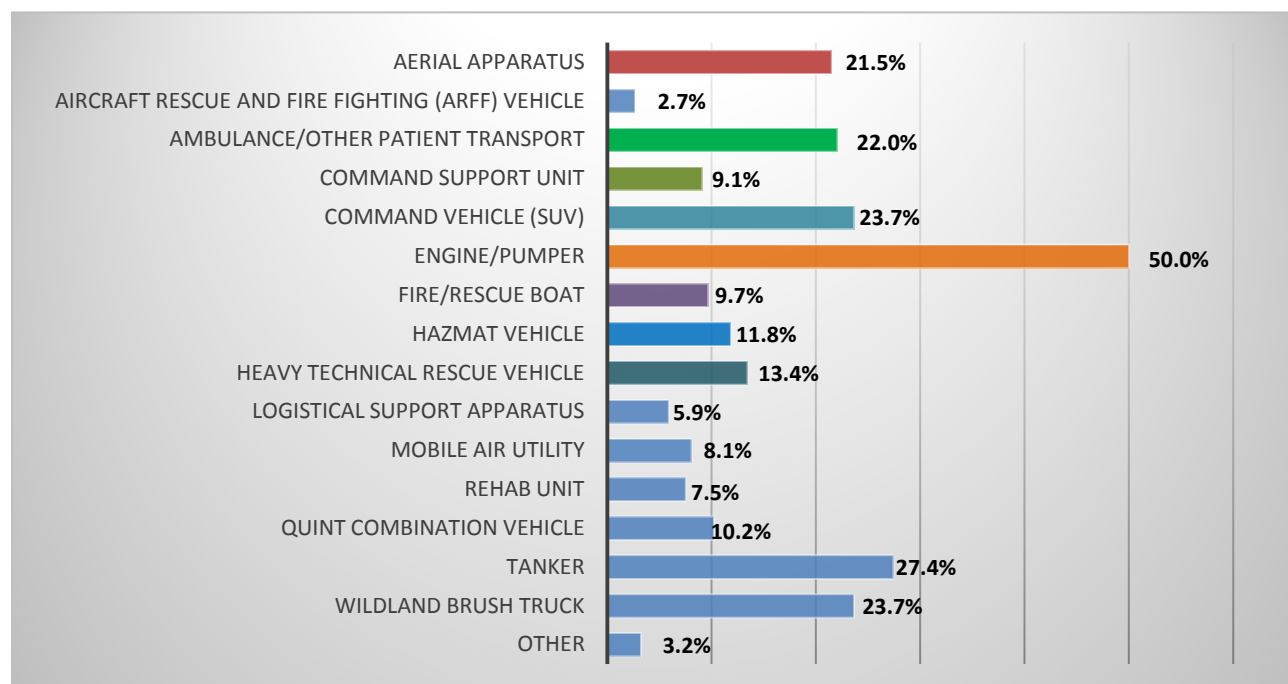
Table 20. Total Additional Funding Needed Reported By VDFP Division

VDFP Division	Apparatus	Equipment	Facilities	Personnel	Training	Grand Total
Division 1 - Richmond	\$15,235,000	\$5,323,500	\$52,160,000	\$12,568,456	\$3,540,500	\$88,827,456
Division 2 - Orange	\$6,600,600	\$2,720,030	\$11,816,000	\$3,685,010	\$636,010	\$25,457,650
Division 3 - Farmville	\$8,120,000	\$2,955,450	\$16,864,000	\$3,456,000	\$335,000	\$31,790,450
Division 4 - Chilhowie	\$18,036,000	\$2,693,200	\$15,721,000	\$1,959,000	\$928,500	\$39,337,700
Division 5 - Hampton	\$16,625,000	\$4,675,000	\$65,685,000	\$16,102,000	\$4,370,000	\$107,457,000
Division 6 - Roanoke	\$14,666,374	\$4,014,000	\$34,386,000	\$6,298,500	\$868,000	\$60,232,874
Division 7 - Fairfax	\$10,375,000	\$7,505,168	\$79,085,000	\$21,401,936	\$3,761,000	\$122,128,104
Grand Total	\$89,657,974	\$29,886,348	\$275,717,000	\$65,470,902	\$14,499,010	\$475,231,234

Supplemental Table 4 located at the end of this chapter shows how each locality rank their #1 top need and also show their total estimated additional funding needs.

Apparatus Needed

Apparatus are needed when fire departments dispatch to different types of situations. Forty-five percent (50%) of all responding departments noted that they require an engine/pumper. (See Figure 42.) Fire departments also reported that they needed tankers (27.4%), and command vehicles (SUV) (23.7%), and Wildland Brush Truck (23.7%).

Figure 33. Types of Apparatus Needed

A table containing additional data on the apparatus needed can be found under Supplemental Table 5 at the end of this chapter.

Equipment Needed

Fire service personnel rely on adequate equipment to perform their duties as a firefighter. Departments showed their largest equipment need was for thermal imaging cameras (47.9%), SCBA

with integrated PASS devices (43.6), personal protective equipment (40.9%), and 4-gas monitors (39.8%). (See Figure 34.)

Please see Supplemental Table 6 for more detailed information on the type of equipment needed.

Figure 34. Types of Equipment Needed

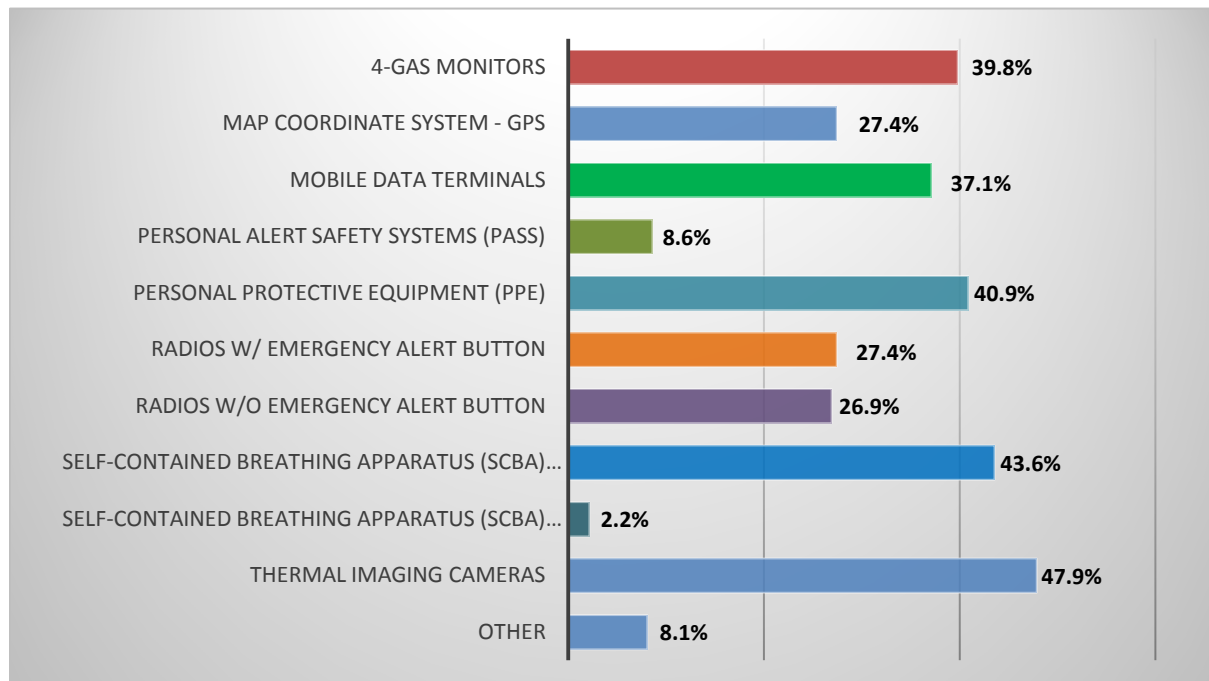


Table 21. Number of Apparatus Needed Reported By VDFP Division

Column1	Aerial Apparatus (Mid-Mount, Rear-Mount, Tiller, Tower)	Aircraft Rescue and Fire Fighting (ARFF) Vehicle	Ambulance/Other Patient Transport	Command Support Unit	Command Vehicle (SUV)	Engine/Pumper	Fire Bike (Bicycle for Response)	Fire/Rescue Boat	Hazardous Materials (HAZMAT) Vehicle	Heavy Technical Rescue Vehicle	Logistical Support Apparatus	Mobile Air Utility	Rehab Unit	Quint Combination Vehicle	Tanker	Wildland Brush Truck	Other
Division 1 - Richmond	9	2	19	3	13	20	0	7	6	4	2	2	2	4	9	7	0
Division 2 - Orange	4	0	9	1	6	16	0	2	2	2	1	4	2	2	2	3	0
Division 3 - Farmville	4	0	2	1	6	9	0	2	0	1	0	2	0	1	3	2	0
Division 4 - Chilhowie	6	1	6	5	11	27	0	4	3	7	0	1	2	5	15	11	2
Division 5 - Hampton	10	0	16	2	6	23	6	4	4	2	5	2	3	1	8	7	3
Division 6 - Roanoke	8	1	11	3	13	24	2	2	3	4	1	6	5	4	12	15	0
Division 7 - Fairfax	8	0	18	1	7	19	0	0	4	3	4	0	0	0	4	0	6
Grand Total	49	4	81	16	62	138	8	21	22	23	13	17	14	17	53	45	11

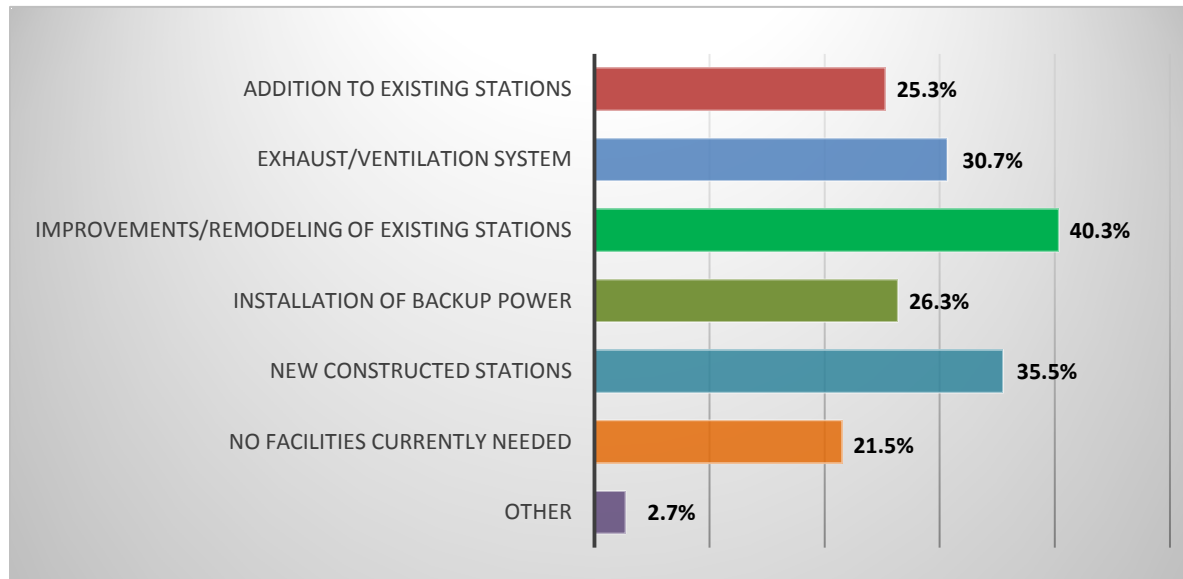
Table 22. Number of Equipment Needed Reported By VDFP Division

Column1	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/ Emergency Alert Button	Radios w/o Emergency Alert Button	Self-Contained Breathing Apparatus (SCBA) w/ Integrated PASS	Self-Contained Breathing Apparatus (SCBA) w/o Integrated PASS	Thermal Imaging Cameras	No Equipment Currently Needed	Other
Division 1 - Richmond	28	23	98	11	422	156	0	894	0	42	4	50
Division 2 - Orange	28	23	98	11	422	156	0	894	0	42	4	50
Division 3 - Farmville	20	22	80	10	93	60	10	530	0	29	0	53
Division 4 - Chilhowie	56	79	79	115	328	300	20	347	5	45	0	22
Division 5 - Hampton	19	11	71	20	454	12	20	226	0	68	0	0
Division 6 - Roanoke	40	35	58	26	360	273	0	1113	28	53	0	4
Division 7 - Fairfax	48	10	48	0	530	16	0	38	0	56	0	4
Grand Total	239	203	532	193	2609	973	50	4042	33	335	8	183

Facilities Needed

Facilities was the most common #5 need. Thirty-seven percent (40%) of the departments responded that they needed improvements /remodeling to the existing stations. (See Figure 35.) Twenty-One (21.5%) of departments showed no current need with their facilities.

Figure 35. Facility Needs with Fire Departments



Personnel Needed

Personnel was the overall (#1) top need in the state for fire departments. Seventy-four percent (74%) of all departments responded that they need volunteer firefighters and 30 percent (30%) showed a need for paid firefighters. (See Figure 36.) Ten percent (10%) of departments reported that they have no personnel currently needed.

An additional table on personnel needed by locality is located in the end of this chapter under Supplemental Table 7.

Figure 36. Type of Personnel Needed with Fire Departments

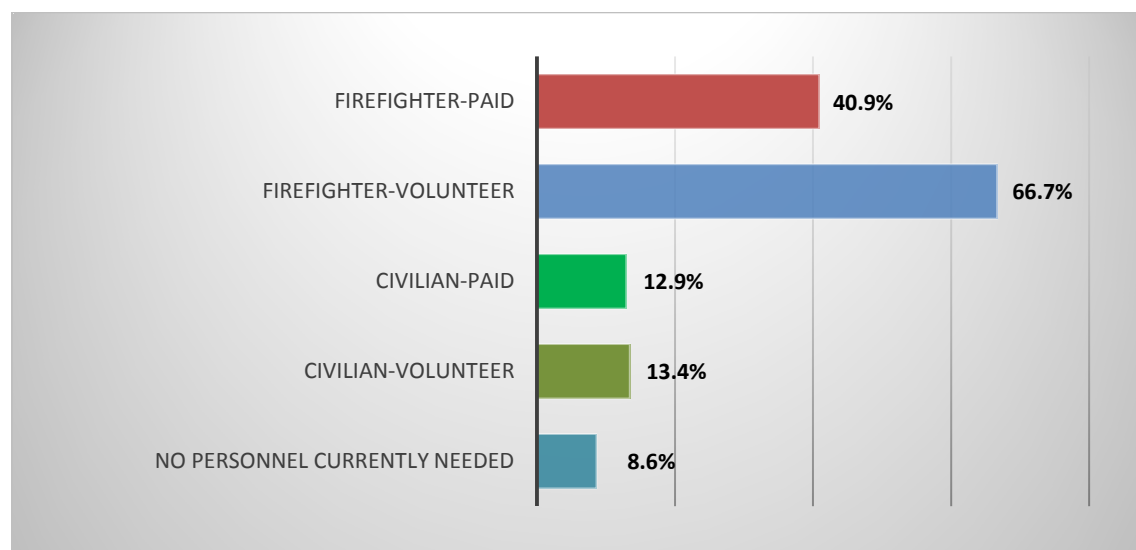


Table 23. Number of Personnel Needed Reported By VDFP Division

	Firefighter - Paid	Firefighter - Volunteer	Civilian - Paid	Civilian - Volunteer	Other
Division 1 - Richmond	275	432	17	4	0
Division 2 - Orange	120	338	1	55	0
Division 3 - Farmville	60	369	2	43	0
Division 4 - Chilhowie	82	266	1	49	2
Division 5 - Hampton	265	270	24	26	0
Division 6 - Roanoke	139	553	2	25	0
Division 7 - Fairfax	125	25	40	0	0
Grand Total	1066	2253	87	202	2

Training Needed

NFPA Standards

Training is essential in keeping firefighters prepared for an emergency crisis. Forty percent (40.86%) of fire departments requested Fire Fighter - Level I training as their #1 top priority. (See Table 24.) Fire Fighter - Level II was the #2 top training priority selected by fire departments and Fire Apparatus Driver / Operator - Driver / Pump Operator and Mayday tied for the #3 top priority. Since fire service personnel have to be trained in many different areas, an added supply of training resources would help support the need in the state.

Table 24. Top Priority Training Needs Reported By Fire Department

Training Area and Level Needed	# 1 Top Training Priority	#2 Top Training Priority	#3 Top Training Priority
Hazardous Materials (NFPA 472) - Awareness	1.61%	6.99%	1.61%
Hazardous Materials (NFPA 472) - Operations	2.69%	8.60%	10.22%
Fire Fighter (NFPA 1001) - Level I	40.86%	6.99%	2.69%
Fire Fighter (NFPA 1001) - Level II	8.60%	16.13%	5.91%
Fire Apparatus Driver/Operator (NFPA 1002) - Driver/Pump Operator	10.22%	11.29%	10.75%
Fire Apparatus Driver/Operator (NFPA 1002) - Aerial Operator	4.30%	5.38%	3.76%
Airport Fire Fighter (NFPA 1003)	0.54%	0%	0%
Fire Officer (NFPA 1021) - Level I	9.68%	6.45%	9.14%
Fire Officer (NFPA 1021) - Level II	2.69%	4.30%	4.84%
Fire Officer (NFPA 1021) - Level III	2.69%	0.54%	2.15%
Fire Officer (NFPA 1021) - Level IV	0%	0%	0.54%
Fire Inspector (NFPA 1031) - Level I/II	0%	0%	1.08%
Fire Investigator (NFPA 1033)	0%	0.54%	1.61%
Fire Service Instructor (NFPA 1041) - Level I	1.08%	4.84%	6.45%
Fire Service Instructor (NFPA 1041) - Level II	0%	3.23%	1.61%
Fire Service Instructor (NFPA 1041) - Level III	0.54%	0%	0.54%
Public Fire and Life Safety Educator (NFPA 1035) - Level I	1.08%	1.61%	1.61%
Public Fire and Life Safety Educator (NFPA 1035) - Level II	0%	0%	0.54%
National Incident Management System (NIMS)	0%	1.61%	1.08%
Virginia Fire Incident Reporting System (VFIRS)	0%	0.54%	3.23%
Wildland Firefighting	0%	3.23%	4.84%
Farm Machinery Extrication	3.76%	4.30%	6.99%
Mayday Firefighter Down	5.38%	6.99%	10.75%
Rapid Intervention Team/Crew (RIT/RIC)	3.76%	5.91%	6.99%
No Training Currently Needed	0%	0.54%	1.08%

Technical Rescue

Twenty-five percent (25.81%) of fire departments requested Vehicle - Level I training as their #1 top priority for technical rescue training. (See Table 25.) Introduction to Technical Rescue-Module 1 was second as the #1 technical rescue training priority for departments.

Table 25. Top Priority Technical Rescue Training Needs Reported By Fire Department

Technical Rescue Training Area and Level	#1 Top Training Priority	#2 Top Training Priority	#3 Top Training Priority
Introduction to Technical Rescue - Module I	18.82%	3.76%	10.75%
Introduction to Technical Rescue - Module II	15.05%	11.83%	5.91%
Rope - Level I	13.44%	12.90%	13.98%
Rope - Level II	2.15%	5.91%	3.76%
Confined Space - Level I	4.30%	6.99%	9.14%
Confined Space - Level II	1.08%	2.15%	1.08%
Trench - Level I	2.15%	1.08%	4.30%
Trench - Level II	0%	1.08%	2.69%
Surface Water - Level I	4.84%	6.45%	7.53%
Surface Water - Level II	0%	2.15%	0%
Swift Water - Level I	2.69%	4.30%	5.38%
Swift Water - Level II	1.08%	1.61%	1.61%
Vehicle - Level I	25.81%	14.52%	15.05%
Vehicle - Level II	4.30%	19.89%	12.90%
No Technical Rescue Training Currently Needed	4.30%	5.38%	5.91%

Note: Data was compiled from a total of 186 survey responses submitted by fire departments in Virginia. Percentages shown may not add to totals due to rounding.

Supplemental Table 1. Fire Department Personnel Data Reported By Locality

FIPS	Locality	Career Firefighters	Volunteer Firefighters	Paid-per-call Firefighters	Total Firefighters	Average Firefighters on Duty and Available	Civilian Personnel - Paid	Civilian Personnel - Volunteer	Total Civilian Personnel
001	Accomack County	52	500	0	552	150.0	0	0	0
003	Albemarle County	104	250	0	354	30.0	6	40	46
005	Alleghany County	45	72	0	117	12.7	0	0	0
007	Amelia County	0	141	0	141	12.0	0	0	0
009	Amherst County	22	106	0	128	13.0	1	1	2
011	Appomattox County	0	0	0	0	0.0	0	0	0
013	Arlington County	330	0	0	330	77.0	23	0	23
015	Augusta County	105	350	0	455	50.0	1	350	351
017	Bath County	0	0	0	0	0.0	0	0	0
019	Bedford County	40	100	0	140	10.0	2	34	36
021	Bland County	0	40	0	40	6.7	0	12	12
023	Botetourt County	60	215	0	275	22.0	1	27	28
025	Brunswick County	0	28	0	28	28.0	0	28	28
027	Buchanan County	0	56	0	56	21.5	0	5	5
029	Buckingham County	0	25	0	25	30.0	0	0	0
031	Campbell County	37	83	0	120	7.3	27	0	27
033	Caroline County	48	187	0	235	12.0	10	19	29
035	Carroll County	34	0	0	34	6.0	2	0	2
036	Charles City County	0	21	0	21	5.0	0	0	0
037	Charlotte County	0	25	0	25	25.0	0	0	0
041	Chesterfield County	450	46	0	496	114.0	45	1	46
043	Clarke County	0	0	0	0	0.0	0	0	0
045	Craig County	0	58	0	58	7.3	0	2	2
047	Culpeper County	0	189	0	189	8.3	0	20	20
049	Cumberland County	0	0	0	0	0.0	0	0	0
051	Dickenson County	0	0	0	0	0.0	0	0	0
053	Dinwiddie County	2	183	0	185	10.0	1	0	1
057	Essex County	0	50	0	50	10.0	1	0	1
059	Fairfax County	1,399	369	0	1,768	356.0	177	0	177
061	Fauquier County	2	110	0	112	12.0	0	0	0
063	Floyd County	0	20	0	20	20.0	0	19	19
065	Fluvanna County	0	140	0	140	22.5	0	3	3
067	Franklin County	73	0	246	319	156.0	8	0	8
069	Frederick County	0	0	0	0	0.0	0	0	0
071	Giles County	0	153	0	153	10.3	0	41	41

Supplemental Table 1. Fire Department Personnel Data Reported By Locality

FIPS	Locality	Career Firefighters	Volunteer Firefighters	Paid-per-call Firefighters	Total Firefighters	Average Firefighters on Duty and Available	Civilian Personnel - Paid	Civilian Personnel - Volunteer	Total Civilian Personnel
073	Gloucester County	0	87	0	87	0.0	0	0	0
075	Goochland County	32	166	0	198	10.0	0	30	30
077	Grayson County	0	68	0	68	13.5	0	8	8
079	Greene County	0	0	0	0	0.0	0	0	0
081	Greensville County*	-	-	-	-	-	-	-	-
083	Halifax County	0	75	0	75	5.0	0	10	10
085	Hanover County	178	353	0	531	45.0	8	161	169
087	Henrico County	546	0	0	546	122.0	26	0	26
089	Henry County	31	174	0	205	8.0	1	59	60
091	Highland County	0	0	0	0	0.0	0	0	0
093	Isle of Wight County	19	360	0	379	10.0	4	0	4
095	James City County	113	60	0	173	35.0	6	1	7
097	King and Queen County	16	70	0	86	9.0	0	85	85
099	King George County	41	40	0	81	11.0	2	0	2
101	King William County	0	0	0	0	0.0	0	0	0
103	Lancaster County	1	90	0	91	27.0	0	10	10
105	Lee County	0	24	0	24	10.5	0	0	0
107	Loudoun County	495	850	0	1,345	118.0	71	0	71
109	Louisa County	46	306	0	352	18.0	0	0	0
111	Lunenburg County	0	69	0	69	15.5	1	0	1
113	Madison County	0	0	0	0	0.0	0	0	0
115	Mathews County	0	90	0	90	30.0	0	0	0
117	Mecklenburg County	0	68	0	68	10.0	0	3	3
119	Middlesex County	0	24	0	24	5.0	0	24	24
121	Montgomery County	4	163	0	167	13.5	1	0	1
125	Nelson County	19	35	0	54	9.0	0	15	15
127	New Kent County	43	6	0	49	9.0	1	0	1
131	Northampton County	0	40	0	40	3.0	0	3	3
133	Northumberland County	0	41	0	41	12.0	0	0	0
135	Nottoway County	2	28	0	30	4.0	0	1	1
137	Orange County	33	0	0	33	10.0	33	0	33
139	Page County	0	110	0	110	13.7	0	20	20
141	Patrick County	1	157	1	159	9.0	0	15	15
143	Pittsylvania County	0	130	0	130	4.6	0	54	54
145	Powhatan County	3	90	0	93	5.0	1	16	17

*Since Greensville County (FIPS 081) does not currently have fire service in their locality, no fire departments were included in the sample. Emergency response for their area is handled by Emporia Fire Dept. (FDID 59500) and Jarrett Vol. Fire Dept. (FDID 18301).

Supplemental Table 1. Fire Department Personnel Data Reported By Locality

FIPS	Locality	Career Firefighters	Volunteer Firefighters	Paid-per-call Firefighters	Total Firefighters	Average Firefighters on Duty and Available	Civilian Personnel - Paid	Civilian Personnel - Volunteer	Total Civilian Personnel
147	Prince Edward County	0	44	0	44	5.0	0	0	0
149	Prince George County	44	125	0	169	8.0	4	3	7
153	Prince William County	597	0	0	597	135.0	58	0	58
155	Pulaski County	11	32	23	66	24.0	0	32	32
157	Rappahannock County	0	29	0	29	7.0	0	15	15
159	Richmond County	25	65	0	90	34.5	0	10	10
161	Roanoke County	168	200	0	368	26.5	5	0	5
163	Rockbridge County	0	125	0	125	5.8	0	19	19
165	Rockingham County	75	200	0	275	50.0	2	0	2
167	Russell County	0	111	0	111	12.6	0	0	0
169	Scott County	0	40	0	40	8.0	0	40	40
171	Shenandoah County	46	250	0	296	12.0	3	200	203
173	Smyth County	3	71	56	130	7.6	0	0	0
175	Southampton County	0	83	0	83	7.0	0	16	16
177	Spotsylvania County	200	350	0	550	60.0	9	10	19
179	Stafford County	135	150	0	285	35.0	6	25	31
181	Surry County	0	0	0	0	0.0	0	0	0
183	Sussex County	0	30	0	30	20.0	0	0	0
185	Tazewell County	0	57	26	83	12.6	0	25	25
187	Warren County	0	0	0	0	0.0	0	0	0
191	Washington County	1	28	36	65	11.0	0	0	0
193	Westmoreland County	0	0	0	0	0.0	0	0	0
195	Wise County	11	16	0	27	3.0	1	0	1
197	Wythe County	6	130	0	136	17.0	0	28	28
199	York County	135	6	0	141	34.0	5	13	18
510	Alexandria	261	0	0	261	52.0	38	0	38
520	Bristol	45	0	0	45	10.0	1	0	1
530	Buena Vista	0	0	0	0	0.0	0	0	0
540	Charlottesville	91	15	0	106	19.0	3	0	3
550	Chesapeake	420	0	0	420	100.0	18	2	20
570	Colonial Heights	45	28	0	73	13.0	3	5	8
580	Covington	0	45	0	45	13.0	1	0	1
590	Danville	120	0	0	120	33.0	3	0	3

Supplemental Table 1. Fire Department Personnel Data Reported By Locality

FIPS	Locality	Career Firefighters	Volunteer Firefighters	Paid-per-call Firefighters	Total Firefighters	Average Firefighters on Duty and Available	Civilian Personnel - Paid	Civilian Personnel - Volunteer	Total Civilian Personnel
595	Emporia	0	0	0	0	0.0	0	0	0
600	Fairfax	74	15	0	89	21.0	10	0	10
610	Falls Church	0	48	0	48	2.0	0	8	8
620	Franklin	27	20	0	47	8.0	1	0	1
630	Fredericksburg	0	0	0	0	0.0	0	0	0
640	Galax	0	45	0	45	20.0	0	0	0
650	Hampton	240	100	0	340	65.0	12	0	12
660	Harrisonburg	87	0	0	87	17.0	6	2	8
670	Hopewell	0	0	0	0	0.0	0	0	0
678	Lexington	21	25	0	46	5.0	0	0	0
680	Lynchburg	0	0	0	0	0.0	0	0	0
683	Manassas	63	50	0	113	12.0	2	10	12
685	Manassas Park	27	0	0	27	7.0	1	0	1
690	Martinsville	0	0	0	0	0.0	0	0	0
700	Newport News	359	0	0	359	86.0	23	1	24
710	Norfolk	0	0	0	0	0.0	0	0	0
720	Norton	0	0	0	0	0.0	0	0	0
730	Petersburg	80	0	0	80	19.0	14	0	14
735	Poquoson	30	9	0	39	8.0	1	0	1
740	Portsmouth	197	0	0	197	44.0	26	0	26
750	Radford	13	25	0	38	20.0	0	0	0
760	Richmond	406	0	0	406	101.0	17	0	17
770	Roanoke	255	0	0	255	63.0	43	0	43
775	Salem	63	0	0	63	19.0	63	0	63
790	Staunton	30	3	20	53	16.0	0	0	0
800	Suffolk	250	94	0	344	69.0	4	6	10
810	Virginia Beach	478	30	0	508	135.0	36	0	36
820	Waynesboro	30	8	0	38	8.0	1	0	1
830	Williamsburg	38	25	0	63	8.0	2	0	2
840	Winchester	69	0	0	69	12.0	4	25	29
Grand Total		9,711	10,090	408	20,209	22.6	886	1,612	2,498

Supplemental Table 2. Number of Apparatus Owned Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
001	Accomack County	2	0	20	9	1	23	0	0	2	2	0	1	1	1	11	12	0
003	Albemarle County	3	0	18	34	23	19	0	3	2	3	0	3	1	0	11	10	0
005	Alleghany County	1	0	3	1	2	6	0	0	0	1	0	0	0	0	3	3	3
007	Amelia County	0	0	0	1	1	6	0	0	0	1	0	1	0	0	5	5	0
009	Amherst County	1	0	4	1	5	10	0	1	0	0	0	0	0	0	3	4	2
011	Appomattox County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
013	Arlington County	4	0	14	1	17	13	8	2	3	2	8	1	1	0	0	0	30
015	Augusta County	1	0	10	14	10	30	0	0	1	1	0	1	1	1	11	15	0
017	Bath County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
019	Bedford County	1	0	7	3	10	9	0	0	1	2	2	1	0	0	3	7	1
021	Bland County	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	2	1
023	Botetourt County	0	0	14	1	20	15	0	0	0	3	1	1	0	1	5	7	10
025	Brunswick County	0	0	0	1	0	2	0	0	0	0	0	0	0	0	1	1	0
027	Buchanan County	1	0	0	1	0	4	0	0	1	1	0	0	0	0	1	1	1
029	Buckingham County	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	3	0
031	Campbell County	1	0	6	2	7	5	0	0	0	1	0	1	0	0	3	4	1
033	Caroline County	0	0	12	1	7	7	0	1	0	3	5	1	0	0	4	7	0
035	Carroll County	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0
036	Charles City County	0	0	3	0	0	5	0	0	0	0	0	1	0	0	2	1	0
037	Charlotte County	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0
041	Chesterfield County	8	1	25	2	27	33	4	7	2	3	10	1	1	0	6	10	3
043	Clarke County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
045	Craig County	0	0	2	1	0	8	0	0	0	0	0	0	0	1	2	3	0
047	Culpeper County	1	0	4	2	3	8	0	0	0	3	0	0	0	0	3	4	6
049	Cumberland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
051	Dickenson County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
053	Dinwiddie County	1	0	6	1	7	7	0	2	1	2	10	1	0	0	5	5	5
057	Essex County	0	0	0	0	1	3	0	0	0	1	0	0	0	0	2	3	1
059	Fairfax County	18	2	70	2	20	78	0	18	3	16	200	4	1	0	7	11	0
061	Fauquier County	1	0	3	0	2	3	0	0	0	2	2	0	0	0	1	1	2
063	Floyd County	0	0	0	0	1	1	0	0	1	0	0	0	0	0	2	3	1
065	Fluvanna County	1	0	0	1	5	9	0	0	2	1	0	0	0	0	4	4	5
067	Franklin County	2	0	19	4	12	14	0	2	1	0	1	4	1	2	12	10	2
069	Frederick County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
071	Giles County	0	0	0	2	1	12	0	0	0	0	2	0	0	0	2	6	3

Supplemental Table 2. Number of Apparatus Owned Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
073	Gloucester County	1	0	4	1	2	5	0	1	0	1	0	0	1	1	1	2	0
075	Goochland County	2	0	10	0	7	8	0	3	1	5	1	0	1	0	6	6	0
077	Grayson County	0	0	2	1	1	5	0	3	1	1	0	1	0	0	4	3	2
079	Greene County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
081	Greenville County*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
083	Halifax County	0	0	3	0	3	6	0	0	0	0	0	0	0	0	1	4	4
085	Hanover County	3	1	22	8	3	21	0	2	3	2	2	2	2	0	8	14	12
087	Henrico County	6	0	19	0	8	25	8	1	2	2	3	1	1	0	5	4	3
089	Henry County	2	0	20	1	14	24	0	3	1	3	2	1	1	0	8	9	4
091	Highland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
093	Isle of Wight County	3	0	12	5	0	15	0	5	0	2	0	1	1	1	5	5	0
095	James City County	2	0	8	0	5	8	4	3	0	2	5	0	0	1	1	3	0
097	King and Queen County	0	0	3	0	5	5	0	0	0	1	0	0	1	0	3	2	0
099	King George County	0	0	7	1	5	4	0	2	0	1	1	0	0	0	3	2	2
101	King William County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	Lancaster County	0	0	0	0	1	5	0	0	0	0	0	1	0	0	4	2	1
105	Lee County	1	0	1	0	0	2	0	0	0	1	0	0	0	0	3	2	0
107	Loudoun County	10	0	47	0	20	50	0	7	3	7	8	1	2	2	17	13	8
109	Louisa County	3	0	16	7	7	15	0	2	1	1	4	1	1	3	7	7	0
111	Lunenburg County	0	0	3	1	0	4	0	0	0	1	1	0	0	0	4	2	1
113	Madison County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	Mathews County	0	0	0	0	0	8	0	0	0	0	0	1	0	0	0	1	0
117	Mecklenburg County	1	0	0	0	1	4	0	0	2	0	0	1	0	0	2	2	4
119	Middlesex County	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	1	0
121	Montgomery County	3	1	0	4	19	16	0	2	2	1	1	2	0	1	6	11	5
125	Nelson County	0	0	0	0	6	6	0	0	0	1	0	0	0	1	2	4	1
127	New Kent County	0	0	9	0	4	4	5	0	1	1	6	1	0	1	2	3	2
131	Northampton County	1	0	1	1	0	3	0	0	0	0	0	1	0	0	2	2	1
133	Northumberland Count	0	0	0	0	1	4	0	0	0	0	0	1	0	1	2	1	0
135	Nottoway County	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	1	0
137	Orange County	2	0	10	0	4	0	0	0	0	0	0	0	0	0	0	0	0
139	Page County	1	0	0	2	2	9	0	1	0	1	0	0	0	0	5	5	3
141	Patrick County	0	0	0	1	5	12	0	0	1	2	0	1	0	1	6	7	1
143	Pittsylvania County	0	0	5	1	1	7	0	0	0	0	0	0	0	1	6	4	1
145	Powhatan County	1	0	6	1	6	5	0	0	0	1	2	0	0	0	5	4	1

Supplemental Table 2. Number of Apparatus Owned Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
147	Prince Edward County	1	0	0	1	1	2	0	0	1	0	0	0	0	0	1	0	0
149	Prince George County	3	0	7	0	3	10	0	1	1	1	7	2	1	2	5	10	0
153	Prince William County	9	0	45	1	40	40	0	7	3	6	5	2	2	0	6	10	0
155	Pulaski County	0	0	0	1	2	5	0	0	1	0	1	0	0	0	1	2	2
157	Rappahannock County	0	0	3	0	1	3	0	0	0	0	0	0	0	0	1	3	1
159	Richmond County	0	0	3	3	2	3	0	0	1	0	1	0	2	0	4	1	0
161	Roanoke County	5	0	21	1	6	17	0	0	0	1	0	1	0	0	6	9	0
163	Rockbridge County	0	0	0	1	4	10	0	0	0	0	1	0	0	0	5	5	3
165	Rockingham County	3	0	28	1	16	24	0	1	1	3	5	1	0	0	11	11	0
167	Russell County	0	0	0	3	3	11	0	0	2	0	0	0	0	0	7	5	1
169	Scott County	0	0	0	0	1	3	0	0	0	0	1	0	0	1	1	1	0
171	Shenandoah County	3	0	19	1	20	21	0	2	1	0	0	0	0	0	2	9	0
173	Smyth County	0	0	7	0	6	11	2	3	0	3	1	1	0	3	5	5	2
175	Southampton County	0	0	0	0	1	5	0	0	0	1	0	0	0	0	2	2	1
177	Spotsylvania County	5	0	25	0	15	21	0	2	1	3	3	2	2	3	7	8	0
179	Stafford County	3	0	15	1	5	20	6	3	1	0	2	1	1	1	5	14	0
181	Surry County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
183	Sussex County	0	0	0	1	0	2	0	0	0	1	0	0	0	0	1	2	0
185	Tazewell County	1	0	0	0	5	11	0	0	1	0	0	0	0	0	4	1	5
187	Warren County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Washington County	1	0	1	0	3	5	0	0	0	0	3	1	1	0	2	2	2
193	Westmoreland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	Wise County	1	0	2	1	1	2	0	2	0	1	0	1	0	0	0	1	1
197	Wythe County	1	0	0	3	3	15	0	0	1	1	1	0	1	0	5	7	2
199	York County	2	0	10	1	2	9	4	2	1	1	0	0	0	0	2	2	23
510	Alexandria	5	0	12	0	10	13	0	1	1	1	2	1	1	0	0	0	0
520	Bristol	1	0	0	0	2	3	0	0	3	1	0	0	0	1	0	0	3
530	Buena Vista	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
540	Charlottesville	2	0	1	1	4	7	0	1	1	0	0	0	1	0	0	2	1
550	Chesapeake	4	0	14	1	3	19	0	1	2	2	4	2	1	0	0	4	7
570	Colonial Heights	0	0	5	3	5	3	2	1	1	1	2	0	0	1	0	1	0
580	Covington	1	0	0	1	2	2	0	0	1	0	2	0	0	0	1	1	1
590	Danville	1	0	0	1	1	9	0	0	2	0	0	1	0	2	1	1	0

Supplemental Table 2. Number of Apparatus Owned Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
595	Emporia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
600	Fairfax	1	0	4	1	2	4	4	2	0	2	0	0	0	0	0	0	0
610	Falls Church	0	0	2	0	2	1	2	0	0	0	0	1	0	0	0	0	0
620	Franklin	0	0	4	0	2	3	0	1	0	1	0	0	0	1	0	1	0
630	Fredericksburg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
640	Galax	1	0	1	1	1	4	0	2	1	1	0	0	0	0	1	2	0
650	Hampton	5	0	15	1	5	17	0	2	2	0	63	4	1	0	0	1	0
660	Harrisonburg	2	0	0	1	4	7	0	0	1	1	2	0	0	0	0	1	0
670	Hopewell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
678	Lexington	1	0	3	0	2	3	0	0	0	0	1	0	0	0	0	1	3
680	Lynchburg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
683	Manassas	1	1	4	0	6	3	0	0	0	1	3	1	0	0	0	1	0
685	Manassas Park	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	3
690	Martinsville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700	Newport News	8	0	17	0	6	16	0	2	2	4	2	0	1	0	0	2	0
710	Norfolk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
720	Norton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
730	Petersburg	1	0	2	0	1	5	0	1	0	1	0	1	0	1	0	1	11
735	Poquoson	1	0	4	0	1	3	0	4	0	0	1	0	0	0	0	1	0
740	Portsmouth	2	0	8	0	2	12	2	2	2	1	0	0	1	2	0	1	1
750	Radford	1	0	0	3	3	2	0	2	2	0	0	0	0	0	0	1	0
760	Richmond	2	0	0	5	6	16	12	3	2	2	2	1	0	17	3	2	35
770	Roanoke	6	0	13	0	4	14	0	0	1	1	5	1	1	1	2	0	0
775	Salem	2	0	4	0	2	5	2	0	2	1	0	0	0	0	0	0	10
790	Staunton	1	0	0	0	3	3	0	0	1	1	1	1	0	0	0	1	0
800	Suffolk	4	0	12	0	2	18	0	4	0	1	0	1	1	0	3	4	0
810	Virginia Beach	11	0	0	1	8	29	0	5	2	4	3	3	1	1	3	9	0
820	Waynesboro	1	0	0	0	4	4	0	0	1	0	0	1	0	0	0	0	0
830	Williamsburg	1	0	3	0	1	3	6	1	1	0	4	0	1	0	0	0	7
840	Winchester	2	0	6	1	6	5	0	0	2	0	0	0	0	0	0	0	9
Grand Total		195	6	776	163	557	1,105	71	129	87	134	405	70	38	57	332	417	267

Supplemental Table 3. Number of Equipment Owned Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
001	Accomack County	10	0	3	0	400	165	0	145	10	10	0
003	Albemarle County	30	6	20	0	400	200	0	270	0	30	0
005	Alleghany County	1	0	0	22	127	0	28	36	16	5	0
007	Amelia County	6	0	5	0	141	30	0	30	0	5	0
009	Amherst County	10	1	0	15	140	145	0	80	0	8	0
011	Appomattox County	0	0	0	0	0	0	0	0	0	0	0
013	Arlington County	24	102	82	0	660	485	0	366	17	20	0
015	Augusta County	30	30	0	355	650	703	20	355	0	19	0
017	Bath County	0	0	0	0	0	0	0	0	0	0	0
019	Bedford County	41	7	7	51	145	919	0	99	0	10	0
021	Bland County	0	0	0	32	29	12	29	7	12	2	0
023	Botetourt County	25	20	0	0	215	325	15	175	0	8	0
025	Brunswick County	1	0	0	8	28	15	0	16	0	1	0
027	Buchanan County	1	0	0	0	48	40	5	35	0	2	0
029	Buckingham County	1	0	0	8	25	0	0	8	0	1	0
031	Campbell County	7	15	0	0	120	476	0	80	0	8	0
033	Caroline County	10	21	0	70	186	150	0	70	0	6	0
035	Carroll County	1	0	0	0	18	8	10	8	0	0	0
036	Charles City County	1	4	3	0	15	0	10	15	0	1	0
037	Charlotte County	1	0	0	0	20	20	0	12	0	1	0
041	Chesterfield County	44	75	152	0	1,200	732	0	350	0	45	0
043	Clarke County	0	0	0	0	0	0	0	0	0	0	0
045	Craig County	5	4	0	23	68	28	32	39	0	2	0
047	Culpeper County	17	13	6	20	205	123	0	120	0	11	0
049	Cumberland County	0	0	0	0	0	0	0	0	0	0	0
051	Dickenson County	0	0	0	0	0	0	0	0	0	0	0
053	Dinwiddie County	7	25	5	105	180	125	0	105	0	7	0
057	Essex County	5	0	0	0	60	0	20	32	0	3	0
059	Fairfax County	156	296	296	0	3,000	1,600	0	800	0	98	0
061	Fauquier County	4	5	8	0	100	38	0	40	0	5	0
063	Floyd County	1	0	0	15	19	19	0	15	0	2	0
065	Fluvanna County	10	8	12	50	130	30	100	74	0	11	0
067	Franklin County	4	20	22	0	360	400	0	147	0	16	0
069	Frederick County	0	0	0	0	0	0	0	0	0	0	0
071	Giles County	2	7	2	24	182	10	93	56	10	9	0

Supplemental Table 3. Number of Equipment Owned Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
073	Gloucester County	6	1	0	0	100	0	0	45	0	4	0
075	Goochland County	13	32	29	0	120	0	0	131	0	12	0
077	Grayson County	1	0	2	16	74	0	45	26	0	5	0
079	Greene County	0	0	0	0	0	0	0	0	0	0	0
081	Greensville County*	-	-	-	-	-	-	-	-	-	-	-
083	Halifax County	2	4	0	15	73	47	8	54	10	5	0
085	Hanover County	15	60	0	0	723	509	0	260	0	23	0
087	Henrico County	30	15	136	180	650	621	1	270	0	30	0
089	Henry County	8	0	0	0	171	96	0	127	44	9	0
091	Highland County	0	0	0	0	0	0	0	0	0	0	0
093	Isle of Wight County	0	0	0	0	0	0	0	100	0	0	0
095	James City County	14	6	30	105	215	185	0	105	0	8	0
097	King and Queen County	8	6	4	14	84	43	0	28	0	4	0
099	King George County	9	20	20	0	112	105	0	60	0	4	0
101	King William County	0	0	0	0	0	0	0	0	0	0	0
103	Lancaster County	3	2	0	30	44	21	15	46	0	3	0
105	Lee County	1	1	1	0	41	10	22	32	5	1	0
107	Loudoun County	60	150	140	0	2,700	860	0	589	0	35	48
109	Louisa County	21	12	12	166	166	166	30	166	0	16	0
111	Lunenburg County	2	1	0	35	90	48	0	40	0	3	0
113	Madison County	0	0	0	0	0	0	0	0	0	0	0
115	Mathews County	3	0	0	0	90	40	0	36	0	7	0
117	Mecklenburg County	3	4	0	18	68	6	20	18	0	3	0
119	Middlesex County	1	0	0	10	24	12	0	10	0	2	0
121	Montgomery County	11	7	4	100	160	40	155	150	0	20	0
125	Nelson County	4	2	2	10	70	40	10	56	10	5	0
127	New Kent County	12	17	23	0	100	96	0	87	0	6	0
131	Northampton County	2	0	0	0	45	17	2	23	0	2	0
133	Northumberland County	2	0	0	17	45	20	25	17	0	4	0
135	Nottoway County	0	0	1	0	0	0	35	16	0	2	0
137	Orange County	10	10	0	0	42	0	15	28	0	0	0
139	Page County	7	4	0	50	114	30	54	76	0	8	0
141	Patrick County	10	4	1	47	120	3	110	77	0	7	0
143	Pittsylvania County	8	6	4	30	111	127	16	81	0	8	0
145	Powhatan County	7	0	11	78	100	60	0	78	0	7	0

*Since Greensville County (FIPS 081) does not currently have fire service in their locality, no fire departments were included in the sample. Emergency response for their area is handled by Emporia Fire Dept. (FDID 59500) and Jarrett Vol. Fire Dept. (FDID 18301).

Supplemental Table 3. Number of Equipment Owned Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
147	Prince Edward County	3	3	0	0	40	20	0	19	0	4	0
149	Prince George County	10	0	7	0	200	250	0	120	0	15	0
153	Prince William County	100	245	245	0	2,500	1,200	0	1,100	0	64	0
155	Pulaski County	2	4	0	10	75	16	13	35	0	6	0
157	Rappahannock County	8	6	0	28	38	20	10	20	20	2	0
159	Richmond County	1	0	0	0	90	50	0	24	0	3	0
161	Roanoke County	4	27	11	0	238	117	0	198	0	13	0
163	Rockbridge County	7	5	8	24	136	1	79	48	14	10	0
165	Rockingham County	17	1	0	210	300	200	0	210	0	30	0
167	Russell County	8	0	0	44	103	41	50	62	4	8	0
169	Scott County	1	0	0	0	40	0	0	37	0	2	0
171	Shenandoah County	25	1	0	0	250	0	0	142	21	12	0
173	Smyth County	8	0	0	65	136	108	37	85	0	11	0
175	Southampton County	5	2	0	35	92	52	0	46	0	3	0
177	Spotsylvania County	28	0	10	225	400	300	0	225	0	20	0
179	Stafford County	24	12	76	0	400	370	0	216	0	24	0
181	Surry County	0	0	0	0	0	0	0	0	0	0	0
183	Sussex County	1	3	0	17	30	0	15	17	0	1	0
185	Tazewell County	3	2	0	33	112	69	4	61	0	6	0
187	Warren County	0	0	0	0	0	0	0	0	0	0	0
191	Washington County	6	2	2	0	97	44	30	49	0	3	0
193	Westmoreland County	0	0	0	0	0	0	0	0	0	0	0
195	Wise County	5	4	0	22	30	26	0	22	0	2	0
197	Wythe County	10	4	0	31	179	133	25	95	0	8	0
199	York County	12	5	5	0	141	197	0	118	0	15	0
510	Alexandria	22	30	40	0	550	130	40	250	0	18	0
520	Bristol	7	8	6	34	45	26	0	34	0	5	0
530	Buena Vista	0	0	0	0	0	0	0	0	0	0	0
540	Charlottesville	10	6	8	0	160	55	16	50	0	15	0
550	Chesapeake	8	4	45	0	0	400	0	300	0	20	0
570	Colonial Heights	5	12	12	0	73	34	0	36	0	5	0
580	Covington	2	0	0	37	45	2	30	37	0	2	0
590	Danville	9	12	12	0	114	50	0	56	0	8	0

Supplemental Table 3. Number of Equipment Owned Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
595	Emporia	0	0	0	0	0	0	0	0	0	0	0
600	Fairfax	5	4	12	60	170	35	0	60	0	7	0
610	Falls Church	2	0	0	0	40	6	0	10	0	0	0
620	Franklin	2	6	6	1	40	26	0	24	2	3	0
630	Fredericksburg	0	0	0	0	0	0	0	0	0	0	0
640	Galax	0	2	0	37	45	0	75	37	0	7	0
650	Hampton	21	61	68	0	559	359	0	175	0	22	0
660	Harrisonburg	9	15	12	6	100	108	0	60	0	25	0
670	Hopewell	0	0	0	0	0	0	0	0	0	0	0
678	Lexington	6	11	11	0	55	54	0	35	0	10	0
680	Lynchburg	0	0	0	0	0	0	0	0	0	0	0
683	Manassas	12	15	15	0	200	70	0	70	0	4	0
685	Manassas Park	3	0	11	24	54	16	0	20	0	3	0
690	Martinsville	0	0	0	0	0	0	0	0	0	0	0
700	Newport News	16	10	70	0	400	150	0	260	0	27	0
710	Norfolk	0	0	0	0	0	0	0	0	0	0	0
720	Norton	0	0	0	0	0	0	0	0	0	0	0
730	Petersburg	1	0	0	45	53	51	0	53	0	1	0
735	Poquoson	3	0	8	0	39	50	0	34	0	2	0
740	Portsmouth	13	0	25	0	197	88	0	70	0	13	0
750	Radford	4	0	0	38	38	18	18	38	0	2	0
760	Richmond	7	73	70	0	1,124	190	12	297	0	20	0
770	Roanoke	10	3	49	132	350	132	0	132	0	15	0
775	Salem	8	8	8	42	90	60	0	42	0	4	0
790	Staunton	4	9	9	33	50	35	0	33	0	14	0
800	Suffolk	19	0	20	0	344	35	0	80	0	16	0
810	Virginia Beach	12	78	78	51	809	625	0	381	5	42	0
820	Waynesboro	4	6	6	40	40	40	0	40	0	6	0
830	Williamsburg	3	7	0	36	75	55	0	36	0	4	0
840	Winchester	10	0	0	0	150	68	0	70	0	4	0
Grand Total		1,253	1,729	2,008	3,079	26,959	16,182	1,379	12,186	200	1,175	48

Supplemental Table 4. #1 Top Need / Total Additional Funding Needed Reported By Locality

FIPS	Locality	Apparatus	Equipment	Facilities	Personnel	Training	2015 Census Population	Total Additional Funding
001	Accomack County	0%	0%	0%	100%	0%	33,516	\$1,000,000
003	Albemarle County	0%	0%	0%	100%	0%	105,051	\$4,300,000
005	Alleghany County	0%	0%	33%	67%	0%	15,515	\$615,000
007	Amelia County	0%	0%	0%	100%	0%	12,909	\$550,000
009	Amherst County	0%	0%	0%	50%	50%	32,028	\$1,092,000
011	Appomattox County	0%	0%	0%	0%	0%	15,455	\$0
013	Arlington County	0%	0%	0%	0%	0%	234,678	\$812,104
015	Augusta County	100%	0%	0%	0%	0%	74,881	\$4,400,000
017	Bath County	0%	0%	0%	0%	0%	4,727	\$0
019	Bedford County	25%	25%	0%	50%	0%	77,575	\$4,500,000
021	Bland County	33%	0%	33%	0%	33%	6,684	\$215,000
023	Botetourt County	0%	0%	0%	100%	0%	33,486	\$8,375,000
025	Brunswick County	100%	0%	0%	0%	0%	16,930	\$455,000
027	Buchanan County	50%	0%	0%	0%	50%	22,983	\$740,000
029	Buckingham County	100%	0%	0%	0%	0%	16,988	\$431,000
031	Campbell County	0%	0%	0%	33%	66%	56,167	\$1,551,450
033	Caroline County	0%	0%	0%	100%	0%	29,792	\$5,811,856
035	Carroll County	0%	0%	100%	0%	0%	29,283	\$0
036	Charles City County	0%	0%	0%	100%	0%	7,331	\$828,000
037	Charlotte County	0%	0%	0%	100%	0%	12,454	\$75,000
041	Chesterfield County	0%	0%	0%	100%	0%	333,450	\$1,732,600
043	Clarke County	0%	0%	0%	0%	0%	14,206	\$0
045	Craig County	25%	25%	0%	50%	0%	5,192	\$1,288,000
047	Culpeper County	25%	0%	50%	25%	0%	48,908	\$5,820,650
049	Cumberland County	0%	0%	0%	0%	0%	9,989	\$0
051	Dickenson County	0%	0%	0%	0%	0%	15,339	\$0
053	Dinwiddie County	0%	0%	0%	100%	0%	28,753	\$2,125,000
057	Essex County	100%	0%	0%	0%	0%	10,914	\$1,033,000
059	Fairfax County	0%	0%	0%	100%	0%	1,129,330	\$8,309,000
061	Fauquier County	0%	0%	0%	100%	0%	67,898	\$185,000
063	Floyd County	0%	100%	0%	0%	0%	15,430	\$625,000
065	Fluvanna County	0%	50%	0%	50%	0%	26,162	\$515,000
067	Franklin County	0%	0%	0%	0%	100%	56,373	\$5,360,000
069	Frederick County	0%	0%	0%	0%	0%	82,623	\$0
071	Giles County	16%	16%	16%	0%	50%	17,179	\$2,888,000

Supplemental Table 4. #1 Top Need / Total Additional Funding Needed Reported By Locality

FIPS	Locality	Apparatus	Equipment	Facilities	Personnel	Training	2015 Census Population	Total Additional Funding
073	Gloucester County	0%	0%	0%	100%	0%	37,072	\$255,000
075	Goochland County	0%	0%	0%	100%	0%	22,277	\$26,310,000
077	Grayson County	0%	50%	0%	50%	0%	16,087	\$893,000
079	Greene County	0%	0%	0%	0%	0%	19,840	\$0
081	Greensville County*	-	-	-	-	-	11,804	-
083	Halifax County	0%	0%	0%	67%	33%	35,766	\$1,665,000
085	Hanover County	0%	0%	0%	100%	0%	104,013	\$3,955,000
087	Henrico County	0%	0%	0%	100%	0%	320,717	\$0
089	Henry County	0%	0%	0%	100%	0%	52,822	\$2,525,000
091	Highland County	0%	0%	0%	0%	0%	2,277	\$0
093	Isle of Wight County	0%	0%	0%	0%	100%	36,438	\$4,000,000
095	James City County	0%	0%	0%	100%	0%	73,325	\$820,000
097	King and Queen County	0%	0%	33%	67%	0%	7,190	\$2,305,000
099	King George County	0%	0%	0%	100%	0%	24,600	\$6,125,000
101	King William County	0%	0%	0%	0%	0%	16,253	\$0
103	Lancaster County	0%	50%	0%	0%	50%	11,297	\$990,000
105	Lee County	0%	0%	50%	0%	50%	25,182	\$875,000
107	Loudoun County	0%	0%	0%	100%	0%	374,451	\$9,800,000
109	Louisa County	0%	0%	0%	100%	0%	34,244	\$2,550,000
111	Lunenburg County	50%	0%	0%	50%	0%	12,435	\$962,000
113	Madison County	0%	0%	0%	0%	0%	13,099	\$0
115	Mathews County	0%	0%	100%	0%	0%	8,737	\$125,000
117	Mecklenburg County	50%	50%	0%	0%	0%	31,608	\$99,000
119	Middlesex County	100%	0%	0%	0%	0%	11,082	\$190,000
121	Montgomery County	50%	0%	0%	25%	25%	98,121	\$3,232,000
125	Nelson County	50%	0%	0%	50%	0%	14,993	\$3,300,000
127	New Kent County	0%	0%	0%	100%	0%	20,468	\$5,965,000
131	Northampton County	50%	0%	0%	50%	0%	12,176	\$35,000
133	Northumberland County	0%	0%	0%	0%	100%	12,220	\$170,000
135	Nottoway County	0%	0%	0%	0%	100%	16,261	\$0
137	Orange County	0%	100%	0%	0%	0%	34,015	\$1,940,000
139	Page County	67%	0%	0%	33%	0%	23,719	\$920,000
141	Patrick County	16%	0%	16%	67%	0%	18,450	\$1,740,000
143	Pittsylvania County	20%	20%	0%	20%	40%	63,255	\$1,468,500
145	Powhatan County	0%	0%	0%	100%	0%	28,442	\$564,000

Supplemental Table 4. #1 Top Need / Total Additional Funding Needed Reported By Locality

FIPS	Locality	Apparatus	Equipment	Facilities	Personnel	Training	2015 Census Population	Total Additional Funding
147	Prince Edward County	100%	0%	0%	0%	0%	23,631	\$165,000
149	Prince George County	0%	0%	0%	0%	100%	37,131	\$725,000
153	Prince William County	0%	0%	0%	100%	0%	443,463	\$61,000,000
155	Pulaski County	0%	0%	100%	0%	0%	34,841	\$6,200,000
157	Rappahannock County	0%	0%	50%	50%	0%	7,308	\$2,568,000
159	Richmond County	0%	50%	0%	50%	0%	9,119	\$1,630,000
161	Roanoke County	50%	0%	0%	50%	0%	93,775	\$3,347,374
163	Rockbridge County	20%	20%	20%	40%	0%	22,163	\$1,107,000
165	Rockingham County	0%	0%	0%	100%	0%	79,134	\$3,420,000
167	Russell County	20%	40%	0%	20%	20%	28,008	\$7,216,000
169	Scott County	0%	0%	0%	100%	0%	22,759	\$620,000
171	Shenandoah County	0%	0%	0%	100%	0%	42,228	\$1,224,000
173	Smyth County	20%	0%	20%	40%	20%	31,417	\$8,505,500
175	Southampton County	33%	0%	0%	33%	33%	18,551	\$965,000
177	Spotsylvania County	0%	0%	0%	0%	100%	128,998	\$1,380,000
179	Stafford County	0%	0%	0%	100%	0%	140,176	\$0
181	Surry County	0%	0%	0%	0%	0%	6,819	\$0
183	Sussex County	0%	0%	0%	0%	100%	11,887	\$550,000
185	Tazewell County	60%	20%	0%	20%	0%	44,051	\$2,438,000
187	Warren County	0%	0%	0%	0%	0%	38,829	\$0
191	Washington County	0%	0%	0%	50%	50%	54,130	\$1,480,000
193	Westmoreland County	0%	0%	0%	0%	0%	17,725	\$0
195	Wise County	0%	0%	0%	100%	0%	39,943	\$2,300,000
197	Wythe County	40%	0%	20%	0%	40%	28,743	\$1,665,200
199	York County	0%	0%	0%	100%	0%	69,466	\$23,175,000
510	Alexandria	0%	0%	0%	100%	0%	159,571	\$18,850,000
520	Bristol	0%	0%	0%	100%	0%	17,625	\$2,152,000
530	Buena Vista	0%	0%	0%	0%	0%	6,817	\$0
540	Charlottesville	0%	0%	0%	0%	100%	48,210	\$140,000
550	Chesapeake	0%	0%	0%	0%	100%	238,283	\$41,000,000
570	Colonial Heights	0%	0%	0%	100%	0%	17,215	\$608,000
580	Covington	0%	0%	0%	100%	0%	6,198	\$215,000
590	Danville	0%	0%	0%	100%	0%	42,544	\$320,000

Supplemental Table 4. #1 Top Need / Total Additional Funding Needed Reported By Locality

FIPS	Locality	Apparatus	Equipment	Facilities	Personnel	Training	2015 Census Population	Total Additional Funding
595	Emporia	0%	0%	0%	0%	0%	6,082	\$0
600	Fairfax	0%	0%	0%	0%	100%	23,193	\$12,130,000
610	Falls Church	0%	0%	0%	100%	0%	14,183	\$14,000
620	Franklin	0%	0%	0%	100%	0%	8,535	\$6,950,000
630	Fredericksburg	0%	0%	0%	0%	0%	26,969	\$0
640	Galax	100%	0%	0%	0%	0%	7,043	\$610,000
650	Hampton	0%	0%	0%	0%	100%	138,626	\$0
660	Harrisonburg	0%	100%	0%	0%	0%	53,875	\$3,700,000
670	Hopewell	0%	0%	0%	0%	0%	22,984	\$0
678	Lexington	0%	0%	0%	100%	0%	7,410	\$6,000,000
680	Lynchburg	0%	0%	0%	0%	0%	78,675	\$0
683	Manassas	0%	0%	100%	0%	0%	41,577	\$10,200,000
685	Manassas Park	0%	0%	0%	100%	0%	15,700	\$1,013,000
690	Martinsville	0%	0%	0%	0%	0%	13,474	\$0
700	Newport News	0%	0%	0%	0%	100%	183,454	\$5,000,000
710	Norfolk	0%	0%	0%	0%	0%	247,189	\$0
720	Norton	0%	0%	0%	0%	0%	3,946	\$0
730	Petersburg	100%	0%	0%	0%	0%	32,057	\$11,350,000
735	Poquoson	0%	0%	0%	100%	0%	12,359	\$620,000
740	Portsmouth	0%	0%	0%	100%	0%	96,874	\$6,875,000
750	Radford	0%	0%	0%	0%	100%	17,420	\$540,000
760	Richmond	100%	0%	0%	0%	0%	217,938	\$13,500,000
770	Roanoke	100%	0%	0%	0%	0%	99,681	\$15,310,000
775	Salem	0%	0%	100%	0%	0%	25,438	\$4,205,000
790	Staunton	0%	0%	0%	100%	0%	24,542	\$9,075,000
800	Suffolk	0%	0%	0%	100%	0%	90,426	\$0
810	Virginia Beach	0%	0%	0%	100%	0%	453,500	\$10,092,000
820	Waynesboro	0%	0%	0%	100%	0%	21,795	\$4,020,000
830	Williamsburg	0%	0%	0%	100%	0%	14,860	\$5,350,000
840	Winchester	100%	0%	0%	0%	0%	27,515	\$4,300,000
Grand Total		20%	8%	10%	44%	18%	8,382,993	\$475,231,234

Supplemental Table 5. Number of Apparatus Needed Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
001	Accomack County	0	0	0	0	2	0	0	0	1	1	0	0	1	0	0	0	0
003	Albemarle County	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
005	Alleghany County	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
007	Amelia County	1	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0	0
009	Amherst County	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
011	Appomattox County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
013	Arlington County	0	0	3	0	0	0	0	0	1	1	2	0	0	0	0	0	6
015	Augusta County	2	0	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0
017	Bath County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
019	Bedford County	0	0	0	0	0	2	0	0	0	0	0	1	0	0	1	2	0
021	Bland County	0	1	1	1	1	1	0	1	2	0	0	0	0	0	0	2	0
023	Botetourt County	1	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0
025	Brunswick County	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
027	Buchanan County	1	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0
029	Buckingham County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
031	Campbell County	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	1	0
033	Caroline County	0	0	5	0	0	2	0	0	0	0	0	0	0	0	0	0	0
035	Carroll County	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
036	Charles City County	0	0	0	2	2	0	0	0	0	1	0	0	0	1	2	3	0
037	Charlotte County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
041	Chesterfield County	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
043	Clarke County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
045	Craig County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
047	Culpeper County	0	0	2	0	1	6	0	0	0	1	0	1	0	0	0	2	0
049	Cumberland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
051	Dickenson County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
053	Dinwiddie County	1	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0
057	Essex County	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
059	Fairfax County	1	0	3	1	2	4	0	0	2	1	0	0	0	0	1	0	0
061	Fauquier County	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
063	Floyd County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
065	Fluvanna County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
067	Franklin County	0	0	2	0	2	1	0	0	1	1	1	0	1	1	1	1	0
069	Frederick County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
071	Giles County	0	0	0	0	3	4	0	1	0	0	0	0	0	0	3	4	1

Supplemental Table 5. Number of Apparatus Needed Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
073	Gloucester County	1	0	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0
075	Goochland County	1	0	2	0	1	2	0	0	1	0	0	0	0	0	1	0	0
077	Grayson County	1	0	1	0	0	2	0	0	0	0	0	0	0	0	2	0	0
079	Greene County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
081	Greensville County*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
083	Halifax County	0	0	0	0	1	1	0	0	0	0	0	1	0	0	1	0	0
085	Hanover County	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
087	Henrico County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
089	Henry County	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0
091	Highland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
093	Isle of Wight County	1	0	5	0	0	2	0	0	0	1	0	0	0	1	1	1	0
095	James City County	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
097	King and Queen County	0	1	2	0	0	1	0	1	0	0	0	0	0	0	1	0	0
099	King George County	1	0	2	0	0	1	0	0	0	0	1	0	1	0	0	0	0
101	King William County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	Lancaster County	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0
105	Lee County	0	0	0	0	1	1	0	0	0	2	0	0	0	1	0	1	0
107	Loudoun County	4	0	4	0	0	4	0	0	1	0	0	0	0	0	1	0	0
109	Louisa County	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0
111	Lunenburg County	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0
113	Madison County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	Mathews County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
117	Mecklenburg County	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	0	0
119	Middlesex County	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0
121	Montgomery County	0	1	0	0	3	1	0	0	0	1	0	0	0	0	0	2	0
125	Nelson County	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	0
127	New Kent County	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0
131	Northampton County	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
133	Northumberland Count	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
135	Nottoway County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	Orange County	0	0	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0
139	Page County	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0
141	Patrick County	1	0	1	0	1	3	0	0	0	1	0	0	0	0	1	1	0
143	Pittsylvania County	0	0	1	1	4	1	0	0	0	0	0	0	0	1	2	2	0
145	Powhatan County	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Supplemental Table 5. Number of Apparatus Needed Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
147	Prince Edward County	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
149	Prince George County	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0
153	Prince William County	2	0	5	0	0	10	0	0	0	0	0	0	0	0	2	0	0
155	Pulaski County	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0
157	Rappahannock County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
159	Richmond County	0	0	1	0	2	0	0	2	1	0	0	0	0	0	0	0	0
161	Roanoke County	2	0	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0
163	Rockbridge County	1	0	0	0	2	2	0	0	0	0	0	1	1	1	2	2	0
165	Rockingham County	0	0	1	0	2	0	0	0	0	0	0	1	0	1	0	0	0
167	Russell County	2	0	0	1	3	5	0	0	0	0	0	0	0	0	0	0	0
169	Scott County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	Shenandoah County	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
173	Smyth County	0	0	2	0	1	3	0	0	0	0	0	0	0	2	1	1	0
175	Southampton County	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
177	Spotsylvania County	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
179	Stafford County	1	0	3	1	2	2	0	1	1	1	1	1	1	0	0	0	0
181	Surry County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
183	Sussex County	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
185	Tazewell County	0	0	0	0	1	4	0	0	0	1	0	0	0	1	2	1	1
187	Warren County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Washington County	0	0	1	0	1	0	0	0	0	0	0	0	1	0	2	0	0
193	Westmoreland County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	Wise County	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
197	Wythe County	0	0	0	2	0	2	0	1	1	2	0	0	0	0	3	1	0
199	York County	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
510	Alexandria	1	0	2	0	4	1	0	0	0	1	2	0	0	0	0	0	0
520	Bristol	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
530	Buena Vista	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
540	Charlottesville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
550	Chesapeake	3	0	6	0	0	8	6	0	1	0	0	0	0	0	2	2	0
570	Colonial Heights	0	0	2	0	3	1	0	0	0	0	0	0	0	1	0	0	0
580	Covington	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
590	Danville	1	0	0	1	1	3	0	0	0	1	0	0	1	1	1	1	0

Supplemental Table 5. Number of Apparatus Needed Reported By Locality

FIPS	Locality	Aerial Apparatus	Aircraft Rescue	Ambulance/Patient Transport	Command Supp	Command SUV	Engine/Pumper	Fire Bike	Fire/Rescue Boat	HAZMAT Vehicle	Heavy Tech/Rescue	Logistic Support	Mobile Air Utility	Rehab Unit	Quint	Tanker	Wild Brush Truck	Other Apparatus
595	Emporia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
600	Fairfax	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
610	Falls Church	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
620	Franklin	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
630	Fredericksburg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
640	Galax	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
650	Hampton	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	2
660	Harrisonburg	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
670	Hopewell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
678	Lexington	0	0	0	1	0	0	2	2	1	0	0	1	1	0	0	0	0
680	Lynchburg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
683	Manassas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
685	Manassas Park	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
690	Martinsville	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0
700	Newport News	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Norfolk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
720	Norton	1	0	2	1	1	3	0	0	1	1	1	1	1	1	0	1	0
730	Petersburg	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0
735	Poquoson	1	0	1	0	0	2	0	3	0	0	3	1	0	0	0	0	0
740	Portsmouth	0	0	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0
750	Radford	1	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0
760	Richmond	1	0	1	0	0	3	0	0	1	0	0	1	0	0	0	0	0
770	Roanoke	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
775	Salem	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
790	Staunton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800	Suffolk	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0
810	Virginia Beach	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
820	Waynesboro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
830	Williamsburg	2	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0
840	Winchester	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total		49	4	81	16	62	139	8	21	22	23	13	17	14	17	53	45	11

Supplemental Table 6. Number of Equipment Needed Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
001	Accomack County	0	0	0	0	0	0	0	0	0	0	0
003	Albemarle County	0	0	20	0	0	0	0	0	0	10	0
005	Alleghany County	1	0	0	0	26	0	0	22	0	0	0
007	Amelia County	0	0	15	0	100	20	0	25	0	0	0
009	Amherst County	0	4	12	0	6	0	0	59	0	3	1
011	Appomattox County	0	0	0	0	0	0	0	0	0	0	0
013	Arlington County	0	0	0	0	150	0	0	0	0	19	0
015	Augusta County	0	0	0	0	15	0	0	200	0	3	0
017	Bath County	0	0	0	0	0	0	0	0	0	0	0
019	Bedford County	0	2	22	0	0	0	0	182	0	0	0
021	Bland County	3	4	5	13	6	12	5	11	5	2	0
023	Botetourt County	0	0	0	0	0	100	0	185	0	0	0
025	Brunswick County	0	1	0	0	0	8	0	0	0	1	0
027	Buchanan County	2	3	1	0	0	20	0	0	0	0	0
029	Buckingham County	0	0	0	0	0	0	0	0	0	0	0
031	Campbell County	4	0	3	0	0	10	0	193	0	6	0
033	Caroline County	0	0	0	0	0	0	0	50	0	0	0
035	Carroll County	0	0	0	0	10	0	0	0	0	1	0
036	Charles City County	2	6	5	0	0	25	0	20	0	2	0
037	Charlotte County	1	0	2	0	25	5	0	0	0	1	0
041	Chesterfield County	0	0	0	0	0	0	0	0	0	0	50
043	Clarke County	0	0	0	0	0	0	0	0	0	0	0
045	Craig County	6	8	6	6	10	28	0	10	0	4	0
047	Culpeper County	0	7	16	0	5	0	0	0	0	6	0
049	Cumberland County	0	0	0	0	0	0	0	0	0	0	0
051	Dickenson County	0	0	0	0	0	0	0	0	0	0	0
053	Dinwiddie County	0	0	10	0	0	0	0	105	0	0	0
057	Essex County	0	0	4	0	0	10	0	0	0	0	0
059	Fairfax County	30	0	0	0	150	0	0	0	0	15	0
061	Fauquier County	2	2	2	0	25	5	0	5	0	2	0
063	Floyd County	1	1	1	0	15	0	0	0	0	0	1
065	Fluvanna County	0	0	8	0	0	0	0	0	0	0	0
067	Franklin County	1	0	0	0	40	10	0	38	0	3	0
069	Frederick County	0	0	0	0	0	0	0	0	0	0	0
071	Giles County	10	3	1	20	85	55	0	55	0	3	0

Supplemental Table 6. Number of Equipment Needed Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
073	Gloucester County	0	0	10	0	0	0	0	0	0	0	0
075	Goochland County	6	0	0	0	0	0	0	140	0	6	0
077	Grayson County	2	4	3	0	0	12	0	20	0	0	0
079	Greene County	0	0	0	0	0	0	0	0	0	0	0
081	Greenville County*	-	-	-	-	-	-	-	-	-	-	-
083	Halifax County	6	2	5	10	22	20	0	43	0	1	0
085	Hanover County	0	0	0	0	0	0	0	200	0	0	0
087	Henrico County	0	0	0	0	0	0	0	0	0	0	0
089	Henry County	2	0	0	0	0	0	0	171	0	4	0
091	Highland County	0	0	0	0	0	0	0	0	0	0	0
093	Isle of Wight County	0	0	0	0	0	0	0	0	0	0	0
095	James City County	0	0	0	0	50	0	0	0	0	0	0
097	King and Queen County	1	2	6	0	30	10	0	4	0	5	0
099	King George County	10	0	0	0	30	0	0	0	0	3	0
101	King William County	0	0	0	0	0	0	0	0	0	0	0
103	Lancaster County	0	0	0	0	20	4	0	0	0	0	0
105	Lee County	2	4	0	4	12	6	0	37	0	6	0
107	Loudoun County	10	10	10	0	30	10	0	30	0	10	
109	Louisa County	0	0	0	0	0	0	0	0	0	0	0
111	Lunenburg County	6	8	8	0	20	0	0	10	0	0	0
113	Madison County	0	0	0	0	0	0	0	0	0	0	0
115	Mathews County	2	0	0	0	0	0	0	0	0	0	0
117	Mecklenburg County	1	2	1	0	0	15	0	0	0	1	0
119	Middlesex County	2	2	0	10	16	0	0	10	0	0	0
121	Montgomery County	7	6	0	0	90	40	0	0	0	3	0
125	Nelson County	2	0	8	0	5	10	0	25	0	1	0
127	New Kent County	0	6	5	0	14	0	0	0	0	0	0
131	Northampton County	0	2	2	0	11	4	0	0	0	1	0
133	Northumberland County	0	5	5	0	0	0	0	20	0	0	0
135	Nottoway County	0	0	0	0	0	0	0	0	0	0	0
137	Orange County	0	0	0	0	33	50	0	150	0	3	0
139	Page County	2	0	0	20	45	0	0	20	0	3	0
141	Patrick County	3	10	9	0	80	55	0	31	0	6	0
143	Pittsylvania County	5	5	3	20	32	15	0	52	28	1	0
145	Powhatan County	0	0	30	0	0	0	0	78	0	0	0

Supplemental Table 6. Number of Equipment Needed Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
147	Prince Edward County	0	0	4	0	0	0	10	0	0	1	0
149	Prince George County	0	0	7	0	0	50	0	10	0	0	0
153	Prince William County	0	0	0	0	200	0	0	0	0	0	0
155	Pulaski County	0	7	4	0	0	0	0	0	0	0	0
157	Rappahannock County	0	2	0	0	10	0	0	10	0	1	0
159	Richmond County	3	0	0	0	10	0	0	6	0	0	0
161	Roanoke County	5	0	0	0	0	0	0	180	0	5	1
163	Rockbridge County	5	0	5	0	17	19	0	55	0	4	0
165	Rockingham County	0	0	0	0	0	0	0	40	0	14	0
167	Russell County	3	9	5	0	12	32	0	33	0	6	1
169	Scott County	1	0	0	0	0	0	0	0	0	3	0
171	Shenandoah County	0	0	0	0	0	0	0	24	0	0	0
173	Smyth County	11	14	14	17	16	58	0	4	0	8	0
175	Southampton County	1	6	2	0	0	0	0	15	0	2	0
177	Spotsylvania County	0	0	55	0	0	0	0	0	0	0	0
179	Stafford County	0	0	0	0	0	0	0	0	0	0	0
181	Surry County	0	0	0	0	0	0	0	0	0	0	0
183	Sussex County	1	0	0	0	20	0	0	0	0	0	0
185	Tazewell County	7	10	3	25	51	20	0	47	0	7	5
187	Warren County	0	0	0	0	0	0	0	0	0	0	0
191	Washington County	10	11	13	0	20	0	15	47	0	3	0
193	Westmoreland County	0	0	0	0	0	0	0	0	0	0	0
195	Wise County	0	0	8	0	0	0	0	0	0	0	0
197	Wythe County	4	10	11	36	67	10	0	21	0	5	15
199	York County	0	0	25	0	0	0	0	120	0	15	0
510	Alexandria	0	0	32	0	0	0	0	0	0	8	0
520	Bristol	0	0	0	0	45	0	0	34	0	1	0
530	Buena Vista	0	0	0	0	0	0	0	0	0	0	0
540	Charlottesville	0	0	3	0	0	0	0	0	0	2	2
550	Chesapeake	8	0	0	0	100	0	0	0	0	0	0
570	Colonial Heights	2	0	0	0	18	12	0	36	0	2	0
580	Covington	2	0	9	0	0	0	0	10	0	2	0
590	Danville	0	0	0	0	0	0	0	0	0	0	0

Supplemental Table 6. Number of Equipment Needed Reported By Locality

FIPS	Locality	4-Gas Monitors	Map Coordinate System - GPS	Mobile Data Terminals	Personal Alert Safety Systems (PASS)	Personal Protective Equipment (PPE)	Radios w/Emergency Alert Button	Radios w/o Emergency Alert Button	Self Contained Breathing Apparatus (SCBA) w/ PASS	Self Contained Breathing Apparatus (SCBA) w/o PASS	Thermal Imaging Cameras	Other Equipment
595	Emporia	0	0	0	0	0	0	0	0	0	0	0
600	Fairfax	1	0	3	0	0	0	0	0	0	1	4
610	Falls Church	2	0	3	0	0	6	0	0	0	0	0
620	Franklin	0	0	0	10	10	0	0	24	0	1	0
630	Fredericksburg	0	0	0	0	0	0	0	0	0	0	0
640	Galax	1	0	3	0	4	75	0	0	0	0	1
650	Hampton	0	0	0	0	0	0	0	0	0	0	0
660	Harrisonburg	0	0	0	0	0	0	0	60	0	0	0
670	Hopewell	0	0	0	0	0	0	0	0	0	0	0
678	Lexington	0	3	3	0	40	0	0	35	0	5	2
680	Lynchburg	0	0	0	0	0	0	0	0	0	0	0
683	Manassas	5	0	0	0	0	0	0	0	0	1	0
685	Manassas Park	0	0	0	0	0	0	0	8	0	2	0
690	Martinsville	0	0	0	0	0	0	0	0	0	0	0
700	Newport News	5	0	20	0	50	0	20	25	0	5	0
710	Norfolk	0	0	0	0	0	0	0	0	0	0	0
720	Norton	0	0	0	0	0	0	0	0	0	0	0
730	Petersburg	4	4	11	11	0	25	0	0	0	0	0
735	Poquoson	0	0	2	0	0	0	0	0	0	0	0
740	Portsmouth	0	0	0	0	197	0	0	0	0	0	0
750	Radford	0	0	8	0	0	0	0	38	0	0	0
760	Richmond	0	0	0	0	200	0	0	200	0	24	0
770	Roanoke	0	0	0	0	0	0	0	132	0	10	0
775	Salem	0	0	0	0	0	0	0	0	0	4	0
790	Staunton	0	0	0	0	0	0	0	0	0	0	50
800	Suffolk	0	0	0	0	0	0	0	0	0	0	0
810	Virginia Beach	0	0	0	0	0	0	0	0	0	40	0
820	Waynesboro	0	6	6	0	0	0	0	0	0	0	0
830	Williamsburg	0	0	10	0	0	0	0	32	0	3	0
840	Winchester	0	0	0	0	0	30	0	50	0	6	0
Grand Total		215	191	507	202	2,305	902	50	3,507	33	328	133

Supplemental Table 7. Number of Personnel Needed Reported By Locality

FIPS	Locality	Firefighter - Paid	Firefighter - Volunteer	Civilian - Paid	Civilian - Volunteer	Other Personnel
001	Accomack County	30	100	0	0	0
003	Albemarle County	25	100	1	10	0
005	Alleghany County	0	25	0	0	0
007	Amelia County	20	0	0	0	0
009	Amherst County	0	25	0	0	0
011	Appomattox County	0	0	0	0	0
013	Arlington County	30	0	10	0	0
015	Augusta County	10	100	0	0	0
017	Bath County	0	0	0	0	0
019	Bedford County	11	25	0	0	0
021	Bland County	0	0	0	5	0
023	Botetourt County	6	35	0	0	0
025	Brunswick County	0	5	0	0	0
027	Buchanan County	8	15	0	0	0
029	Buckingham County	0	15	0	0	0
031	Campbell County	0	5	0	0	0
033	Caroline County	47	20	0	0	0
035	Carroll County	3	0	0	0	0
036	Charles City County	6	25	0	0	0
037	Charlotte County	0	5	0	0	0
041	Chesterfield County	30	24	3	4	0
043	Clarke County	0	0	0	0	0
045	Craig County	0	26	0	10	0
047	Culpeper County	0	45	0	25	0
049	Cumberland County	0	0	0	0	0
051	Dickenson County	0	0	0	0	0
053	Dinwiddie County	10	25	0	0	0
057	Essex County	0	10	0	0	0
059	Fairfax County	6	0	6	0	0
061	Fauquier County	3	25	0	0	0
063	Floyd County	0	0	0	0	0
065	Fluvanna County	0	35	0	5	0
067	Franklin County	10	100	0	0	0
069	Frederick County	0	0	0	0	0
071	Giles County	0	54	0	7	0
073	Gloucester County	2	25	0	10	0
075	Goochland County	12	24	0	0	0
077	Grayson County	1	20	0	0	0
079	Greene County	0	0	0	0	0
081	Greensville County*	0	0	0	0	0
083	Halifax County	6	23	0	18	0
085	Hanover County	11	50	1	0	0
087	Henrico County	0	0	0	0	0
089	Henry County	0	150	0	0	0
091	Highland County	0	0	0	0	0
093	Isle of Wight County	4	40	1	0	0
095	James City County	6	0	0	0	0
097	King and Queen County	12	44	0	0	0
099	King George County	15	20	3	0	0
101	King William County	0	0	0	0	0
103	Lancaster County	0	0	0	0	0
105	Lee County	0	20	0	0	0

Supplemental Table 7. Number of Personnel Needed Reported By Locality

FIPS	Locality	Firefighter - Paid	Firefighter - Volunteer	Civilian - Paid	Civilian - Volunteer	Other Personnel
107	Loudoun County	30	0	10	0	0
109	Louisa County	25	100	0	0	0
111	Lunenburg County	0	30	0	0	0
113	Madison County	0	0	0	0	0
115	Mathews County	0	20	0	0	0
117	Mecklenburg County	0	6	1	0	0
119	Middlesex County	0	10	0	0	0
121	Montgomery County	14	40	0	0	0
125	Nelson County	3	10	0	0	0
127	New Kent County	20	0	0	0	0
131	Northampton County	0	8	0	16	0
133	Northumberland County	0	10	0	0	0
135	Nottoway County	0	5	0	0	0
137	Orange County	10	30	0	0	0
139	Page County	0	20	0	0	0
141	Patrick County	16	52	0	0	0
143	Pittsylvania County	0	45	0	10	0
145	Powhatan County	20	50	2	0	0
147	Prince Edward County	0	5	0	0	0
149	Prince George County	6	0	0	0	0
153	Prince William County	50	0	10	0	0
155	Pulaski County	3	0	0	0	0
157	Rappahannock County	0	6	0	8	0
159	Richmond County	4	10	0	0	0
161	Roanoke County	15	10	0	0	0
163	Rockbridge County	15	30	0	0	0
165	Rockingham County	9	50	0	0	0
167	Russell County	0	29	0	25	0
169	Scott County	0	5	0	0	0
171	Shenandoah County	12	50	0	0	0
173	Smyth County	16	35	0	0	0
175	Southampton County	0	20	0	0	0
177	Spotsylvania County	5	50	1	10	0
179	Stafford County	50	50	0	0	0
181	Surry County	0	0	0	0	0
183	Sussex County	0	0	0	0	0
185	Tazewell County	12	30	0	2	0
187	Warren County	0	0	0	0	0
191	Washington County	20	10	0	0	2
193	Westmoreland County	0	0	0	0	0
195	Wise County	10	15	0	0	0
197	Wythe County	0	18	0	10	0
199	York County	39	30	2	0	0
510	Alexandria	0	0	4	0	0
520	Bristol	5	0	0	0	0
530	Buena Vista	0	0	0	0	0
540	Charlottesville	0	0	0	0	0
550	Chesapeake	16	0	4	0	0
570	Colonial Heights	9	15	3	0	0
580	Covington	0	10	1	0	0
590	Danville	0	0	0	0	0

Supplemental Table 7. Number of Personnel Needed Reported By Locality

FIPS	Locality	Firefighter - Paid	Firefighter - Volunteer	Civilian - Paid	Civilian - Volunteer	Other Personnel
600	Fairfax	3	0	0	0	0
610	Falls Church	0	10	0	0	0
620	Franklin	3	12	0	0	0
630	Fredericksburg	0	0	0	0	0
640	Galax	0	5	1	0	0
650	Hampton	0	0	0	0	0
660	Harrisonburg	13	0	0	0	0
670	Hopewell	0	0	0	0	0
678	Lexington	41	20	1	5	0
680	Lynchburg	0	0	0	0	0
683	Manassas	2	15	0	0	0
685	Manassas Park	4	0	0	0	0
690	Martinsville	0	0	0	0	0
700	Newport News	25	0	0	0	0
710	Norfolk	0	0	0	0	0
720	Norton	0	0	0	0	0
730	Petersburg	12	0	2	0	0
735	Poquoson	4	0	0	0	0
740	Portsmouth	40	0	12	0	0
750	Radford	4	10	0	0	0
760	Richmond	16	0	3	0	0
770	Roanoke	15	0	0	0	0
775	Salem	3	0	0	0	0
790	Staunton	7	0	0	0	0
800	Suffolk	0	0	0	0	0
810	Virginia Beach	90	0	5	0	0
820	Waynesboro	9	0	0	0	0
830	Williamsburg	6	0	0	0	0
840	Winchester	18	12	0	12	0
Grand Total		1,073	2,258	87	192	2

*Since Greenville County (FIPS 081) does not currently have fire service in their locality, no fire departments were included in the sample. Emergency response for their area is handled by Emporia Fire Dept. (FDID 59500) and Jarrett Vol. Fire Dept. (FDID 18301).

Appendix I

VDFP Divisions

The Virginia Department of Fire Programs has seven division offices covering different areas of Virginia.

Division 1 - Richmond includes the counties of Amelia, Caroline, Charles City, Chesterfield, Dinwiddie, Essex, Goochland, Hanover, Henrico, King and Queen, King George, King William, Lancaster, Louisa, New Kent, Northumberland, Nottoway, Powhatan, Prince George, Richmond, and Westmoreland; and the cities of Colonial Heights, Hopewell, Petersburg, and Richmond.

Division 2 - Orange includes the counties of Clarke, Culpeper, Fauquier, Frederick, Madison, Orange, Page, Rappahannock, Rockingham, Shenandoah, Spotsylvania, Stafford, and Warren; and the cities of Fredericksburg, Harrisonburg, and Winchester.

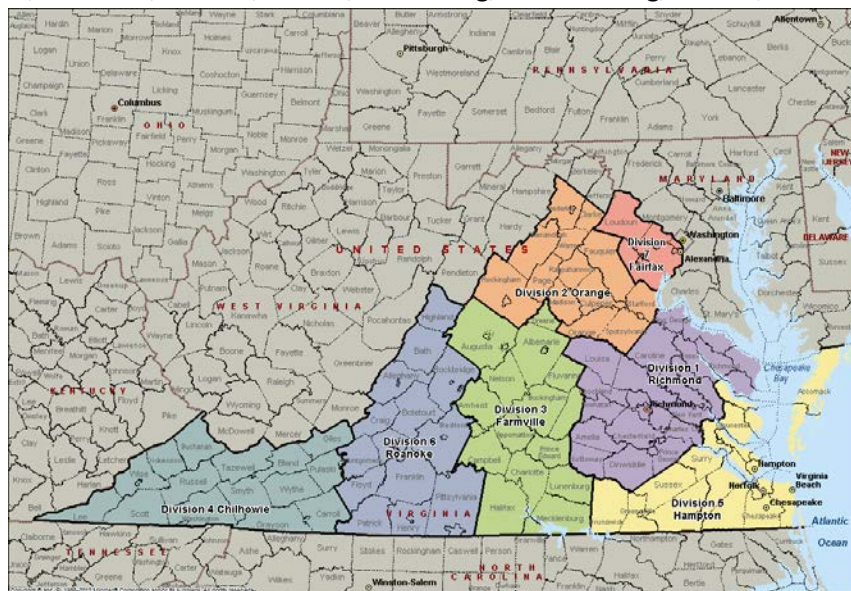
Division 3 - Farmville includes the counties of Albemarle, Amherst, Appomattox, Augusta, Buckingham, Campbell, Charlotte, Cumberland, Fluvanna, Greene, Halifax, Lunenburg, Mecklenburg, Nelson, and Prince Edward; and the cities of Charlottesville, Lynchburg, Staunton, and Waynesboro.

Division 4 - Chilhowie includes the counties of Bland, Buchanan, Carroll, Dickenson, Giles, Grayson, Lee, Pulaski, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe; and the cities of Bristol, Galax, Norton, and Radford.

Division 5 - Hampton includes the counties of Accomack, Brunswick, Gloucester, Greensville, Isle of Wight, James City, Mathews, Middlesex, Northampton, Southampton, Surry, Sussex, and York; and the cities of Chesapeake, Emporia, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg.

Division 6 - Roanoke includes the counties of Alleghany, Bath, Bedford, Botetourt, Craig, Floyd, Franklin, Henry, Highland, Montgomery, Patrick, Pittsylvania, Roanoke, and Rockbridge; and the cities of Buena Vista, Covington, Danville, Lexington, Martinsville, Roanoke, and Salem.

Division 7- Fairfax includes the counties of Arlington, Fairfax, Loudoun, Prince William; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park



FIPS	County/City	FIPS	County/City	FIPS	County/City
Division 1 - Richmond		Division 3 - Farmville (cont.)		Division 5 - Hampton (cont.)	
007	Amelia County	031	Campbell County	550	Chesapeake
033	Caroline County	037	Charlotte County	595	Emporia
036	Charles City County	049	Cumberland County	620	Franklin
041	Chesterfield County	065	Fluvanna County	650	Hampton
053	Dinwiddie County	079	Greene County	700	Newport News
057	Essex County	083	Halifax County	710	Norfolk
075	Goochland County	111	Lunenburg County	735	Poquoson
085	Hanover County	117	Mecklenburg County	740	Portsmouth
087	Henrico County	125	Nelson County	800	Suffolk
097	King and Queen County	147	Prince Edward County	810	Virginia Beach
099	King George County	540	Charlottesville	830	Williamsburg
101	King William County	680	Lynchburg	Division 6 - Roanoke	
103	Lancaster County	790	Staunton	005	Alleghany County
109	Louisa County	820	Waynesboro	017	Bath County
127	New Kent County	Division 4 - Chilhowie		019	Bedford County
133	Northumberland County	021	Bland County	023	Botetourt County
135	Nottoway County	027	Buchanan County	045	Craig County
145	Powhatan County	035	Carroll County	063	Floyd County
149	Prince George County	051	Dickenson County	067	Franklin County
159	Richmond County	071	Giles County	089	Henry County
193	Westmoreland County	077	Grayson County	091	Highland County
570	Colonial Heights	105	Lee County	121	Montgomery County
670	Hopewell	155	Pulaski County	141	Patrick County
730	Petersburg	167	Russell County	143	Pittsylvania County
760	Richmond	169	Scott County	161	Roanoke County
Division 2 - Orange		173	Smyth County	163	Rockbridge County
043	Clarke County	185	Tazewell County	515	Bedford
047	Culpeper County	191	Washington County	530	Buena Vista
061	Fauquier County	195	Wise County	580	Covington
069	Frederick County	197	Wythe County	590	Danville
113	Madison County	520	Bristol	678	Lexington
137	Orange County	640	Galax	690	Martinsville
139	Page County	720	Norton	770	Roanoke
157	Rappahannock County	750	Radford	775	Salem
165	Rockingham County	Division 5 - Hampton		Division 7 - Fairfax	
171	Shenandoah County	001	Accomack County	013	Arlington County
177	Spotsylvania County	025	Brunswick County	059	Fairfax County
179	Stafford County	073	Gloucester County	107	Loudoun County
187	Warren County	081	Greensville County	153	Prince William County
630	Fredericksburg	093	Isle of Wight County	510	Alexandria
660	Harrisonburg	095	James City County	600	Fairfax
840	Winchester	115	Mathews County	610	Falls Church
Division 3 - Farmville		119	Middlesex County	683	Manassas
003	Albemarle County	131	Northampton County	685	Manassas Park
009	Amherst County	175	Southampton County		
011	Appomattox County	181	Surry County		
015	Augusta County	183	Sussex County		
029	Buckingham County	199	York County		

Appendix II

Survey Questionnaire



2016 Virginia Fire Service Needs Assessment Survey

This survey will provide updated statistical information to state legislators on the overall needs of Virginia's fire service. It will also provide important resource and training information that will be used to plan and manage programs within the Virginia Department of Fire Programs. ** Review and consult with your Chief and Training Officer concerning your selections. ** All survey data will be compiled and the results will be published in January 2017 in Volume XIII of the Virginia Fire Service Needs Assessment.

The estimated time needed to complete the entire survey is approximately 45minutes. All questions require an answer. Also, anytime while you are completing your survey, you can exit and close, if needed, and then can return later to finish submitting your response. (Clicking "Next" on each page will save your answers.) When you logon again, the survey will bring you to your last page completed.

If you have any questions regarding the completion of this survey, please contact:

Rob Magnotti
Information and Statistics Manager
Virginia Department of Fire Programs
Ph: (804) 249-1989
Email: robert.magnotti@vdfp.virginia.gov

1. FDID:

2. Fire Department:

3. Please complete your contact information.

Name of Person Completing Survey
Title of Person Completing Survey
Contact Phone Number
Contact Email Address

Section I - General Department Information

4. Please review your fire department's contact information shown below.

Fire Department Name
Mailing Address
City, State, Zip (Mailing)
Street Address (If Not Same As Mailing Address)
City, State, Zip (Street)
Phone Number (Non-Emergency)
Fax Number
Fire Department Email Address
Current Fire Chief
Fire Chief Email Address
Current Training Officer
Training Officer Email Address

5. If changes are needed or if information is missing, please specify any updates to your fire department's contact information below.

Fire Department Name
Mailing Address
City, State, Zip (Mailing)
Street Address (If Not Same As Mailing Address)
City, State, Zip (Street)
Phone Number (Non-Emergency)
Fax Number
Fire Department Email Address
Current Fire Chief
Fire Chief Email Address
Current Training Officer
Training Officer Email Address

6. Please review your fire department's status (career, volunteer, or combination) shown below.

7. If changes are needed, please select from the following list to update your fire department's status. If your status is correct, please select 'No Update Needed'.

Please select one ...

8. If your fire department has additional station locations, please complete and list their information below. Enter the station name and street address for each station with your department. The station #'s do not correspond to actual station numbers. (The number of lines will expand each time you complete a line.)

Station Name	Street Address	City, State, Zip
Station #1		
Station #2		
Station #3		
Station #4		
Station #5		
Station #6		
Station #7		

#8
Station
#9
Station
#10
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#11
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#12
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#13
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#14
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#15
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#40
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#41
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#42
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#43
Station
#44
Station
#45
Station
#46
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#47
Station
#48
Station
#49
Station
#50

Section II - Department Personnel

9. Please indicate the total number of active fire service personnel by status with your department. (The total at the bottom should be the total number of active fire service personnel in your department.)

Career
Volunteer
Paid-per-call
Total

10. What is the average number of firefighters (career, volunteer, or paid-per-call) on duty and available to respond to a call?

Average Firefighters on Duty

11. Please indicate the total number of active fire service personnel by race and by gender with your department. ** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0. **

Male Female
White
Black
Hispanic
Asian and Asian American
American Indian
Other
Unknown or Not Reported

12. Please indicate the total number of active fire service personnel by age with your department. **
Enter the actual number of firefighters. Must complete all rows. If none, then enter 0. **

Male Female

16 - 18 Years

19 - 24

25 - 34

35 - 44

45 - 54

55 - 64

65 - 74

75 - 84

85 Years or Older

Unknown or Not Reported

13. Please indicate the total number of civilian (non-fire service) personnel by type with your department. (The total at the bottom should be the total number of civilian employees in your department.)

Civilian - Paid

Civilian - Volunteer

Total

14. Does your department have a program to maintain basic fire fighter fitness and health as recommended by NFPA 1582?

Yes

No

15. Does your fire department currently have the following personnel programs?

a. Does your department have the program?

b. If "Yes", do you have an individual assigned to coordinate the program?

Recruitment Program

Retention Program

16. How do you promote the recruitment of new personnel with your department? (Check all that apply.)

Advertise on TV/Radio/Newspaper

Citizen Involvement Programs such as Fire Corps

Fire Department/Locality Website

Job/Career Fairs

Letter/Email/Brochure Mailings

Open Houses/Community Events

Signs/Banners

Social Media - Facebook/Twitter

Word of Mouth/Member Recruitment

No Promotion or Advertisement

Other

17. What type of incentives or rewards do you offer to members of your department? (Check all that apply.)

Awards for Performance/Training
Business Discounts
Department Clothing - Shirts, Hats
Free County/City/Town Decal
Insurance - Life, Workers Compensation
Local Tax Reduction/Discount
Meals
Money/Bonuses
Paid Training/Education
Retirement Program
Utility Rate Discount
No Incentives or Rewards
Other

Section III - Facilities & Apparatus

18. What is the age of the fire stations with your department? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)

0 to 4 Years
5 to 9 Years
10 to 19 Years
20 to 29 Years
30 to 39 Years
40 to 49 Years
More than 50 Years
Total

19. How many of your fire stations have backup power? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)

Have Backup Power
Do Not Have Backup Power
Total

20. Please indicate the total number of each type of apparatus that your department owns. (Complete all that apply.)

Aerial Apparatus (Mid-Mount, Rear-Mount, Tiller, Tower)
Aircraft Rescue and Fire Fighting (ARFF) Vehicle
Ambulance/Other Patient Transport
Command Support Unit
Command Vehicle (SUV)
Engine/Pumper
Fire Bike (Bicycle for Response)
Fire/Rescue Boat
Hazardous Materials (HAZMAT) Vehicle
Heavy Technical Rescue Vehicle
Logistical Support Apparatus
Mobile Air Utility
Rehab Unit
Quint Combination Vehicle
Tanker
Wildland Brush Truck
Other

21. Please answer the following questions concerning the age of apparatus at your department. What is the apparatus type and age of your oldest first alarm/front line apparatus?

Type of Apparatus (ex. Engine/Pumper) Age of Apparatus (Years)
Age of Apparatus

22. Please indicate the total number of each type of equipment that your department owns. (Complete all that apply.)

4-Gas Monitors
Map Coordinate System - GPS
Mobile Data Terminals
Personal Alert Safety Systems (PASS)
Personal Protective Equipment (PPE)
Radios w/ Emergency Alert Button
Radios w/o Emergency Alert Button
Self-Contained Breathing Apparatus (SCBA) w/ Integrated PASS
Self-Contained Breathing Apparatus (SCBA) w/o Integrated PASS
Thermal Imaging Cameras
Other

Section IV - Operating Budget Information

**23. Please answer the following questions about your department's operating budget for FY2017. **
Enter the total amount of funding. Must complete all rows. If none, then enter 0. ****

a. How much funding do you anticipate receiving from the following sources for FY2017?

b. If you anticipate a reduction in funding from FY2016 to FY2017, how much is your funding going to be reduced?

Locality Funding
Fund Raising/Donations
Grant Funding

24. Do you plan to apply for additional funding with any of the following grants in FY2017? (Check all that apply.)

Assistance to Firefighters Fire Station Construction Grants (SCG)
Assistance to Firefighters Grant (AFG) Program
Burn Building Grant Program
Fire Prevention and Safety (FP&S) Grants
Rescue Squad Assistance Fund (RSAF) Grant Program
Staffing for Adequate Fire and Emergency Response (SAFER) Grants
State Homeland Security Grants
Training Mini Grants
VFIRS Hardware Technology Grants
Virginia Dry Hydrant Grant Program
Other Forestry Grants (Not Including Dry Hydrant Grant)
Other Federal Grant Programs
Private Grant Funding Programs
No Funding from Grants
Other

25. What percentage (%) of your FY2017 budget is from the following sources? (The total at the bottom should add to 100%.)

Aid to Localities (ATL) Funding
Additional Grant Funding
Billing Fees for Services
Federal Government Funding
Fire District or Other Taxes
Fund Raising/Donations
Local Government Funding (Not Including ATL)
State Government Funding
Other
Total

Section V – Communications

26. Can you communicate by radio with other agencies in which you regularly need to respond with at an incident scene?

(Check all that apply.)

Local
State
Federal

27. What frequency spectrum does your department operate on? (Check all that apply.)

Low Band (30 - 50 Mhz)
High Band (147 - 174 Mhz)
Ultra Band (450 - 470 Mhz)
700 Mhz
800 Mhz
Other

28. What percentage (%) of your apparatus are equipped with the following electronic equipment?

Percent of Apparatus
Map Coordinate System - GPS
Mobile Data Terminals
Tablets/iPads

29.

Does your department have the following equipment available for use at your stations? (Check all that apply.)

Desktop Computers
Laptop/Netbook/Ultrabook Computers
Toughbook Computers
Tablets/iPads
Projectors
No Equipment Available

30. Does each of your stations have a computer available for incident reporting? Please list the number of stations for each category shown below. (The total at the bottom should add to the total number of stations.)

Computer at Station
No Computer Available
Total

31. Please answer the questions concerning incident reporting at your department.

What reporting system does your department use to enter your NFIRS reports? (If you use the NFIRS System, enter NFIRS. If you use vendor software, enter the name.)

If VDFP provided a free license for the ImageTrend fire bridge for incident reporting, would your department be interested?

Incident Reporting

32. What type of internet does each of your stations have? Please list the number of stations for each category shown below.

(The total at the bottom should add to the total number of stations.)

Dial-Up Internet
High Speed Internet
Wireless Internet
Satellite Internet
Cable TV (No Internet)
No Internet Service
Total

33. Does your department use any of the following social media? (Check all that apply.)

Facebook
Twitter
YouTube
Google+
Flickr
Pinterest
Social Media Not Used

34.

Please answer the following questions concerning if your fire department has a website or Facebook page.

Does your department have and maintain the following websites?

If "Yes", please specify the website address. Department Webpage Facebook Page

35. VDFP has developed a fire safety application, FireSafe Family VA, that is now available as a free download on iPhones and Android phones. Please answer the following questions concerning mobile apps.

Is your department aware of the free App from VDFP? If "Yes", has your department been promoting the download and use of this mobile app in your community?

If "Yes", how has your department been promoting it?

Mobile Apps

Section VI - Fire Department Roles / Training

36. Please answer if your department has personnel designated and responsible for the duties associated in the following roles or if you have no designated officers. (Check all that apply.)

Health & Safety Officer
Incident Reporting Officer
Public Fire & Life Safety Educator
Public Relations Officer
Training Officer
No Designated Officers

37. Please answer the following questions concerning minimum levels of training required at your department.

- a. Does your department currently have a minimum level of training required to be an active member?
- b. If "Yes", what minimum level are your members certified?
- c. If "Yes", what period of time does a member have to become certified?

Minimum Training

38. Does your jurisdiction mandate firefighter certification (VDFP/Pro-Board)?

Yes

No

39. Please answer the following questions about your department's training based on the National Fire Protection Association (NFPA) standards. ** Review and consult with your Chief and Training Officer concerning your selections. **

- a. How many of your active firefighters are trained in the following fire service areas and levels? ** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0. **
- b. How many of your active firefighters are in need of this certification level to meet the requirements of your organization? ** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0. **

Hazardous Materials (NFPA 472) -
Awareness
Hazardous Materials (NFPA 472) -
Operations
Fire Fighter (NFPA 1001) - Level I
Fire Fighter (NFPA 1001) - Level II
Fire Apparatus Driver/Operator (NFPA
1002) - Driver/Pump Operator
Fire Apparatus Driver/Operator (NFPA
1002) - Aerial Operator
Airport Fire Fighter (NFPA 1003)
Fire Officer (NFPA 1021) - Level I
Fire Officer (NFPA 1021) - Level II
Fire Officer (NFPA 1021) - Level III
Fire Officer (NFPA 1021) - Level IV
Fire Inspector (NFPA 1031) - Level I/II
Fire Investigator (NFPA 1033)
Fire Service Instructor (NFPA 1041) -
Level I
Fire Service Instructor (NFPA 1041) -
Level II
Fire Service Instructor (NFPA 1041) -
Level III
Public Fire and Life Safety Educator (NFPA
1035) - Level I
Public Fire and Life Safety Educator (NFPA
1035) - Level II
Juvenile Firesetter Intervention Specialist
(NFPA 1035) - Level I
Juvenile Firesetter Intervention Specialist
(NFPA 1035) - Level II
Farm Machinery Extrication
Mayday Firefighter Down
Rapid Intervention Team/Crew (RIT/RIC)

40. Please answer the following questions about your department's technical rescue training based on the National Fire Protection Association (NFPA) standards. ** Review and consult with your Chief and Training Officer concerning your selections.**

a. How many of your active firefighters are trained in the following technical rescue areas and levels?

**** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0.**

* *

b. How many of your active firefighters need training at this level? **** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0.**

* *

Introduction to Technical Rescue - Module

I

Introduction to Technical Rescue - Module

II

Rope - Level I

Rope - Level II

Confined Space - Level I

Confined Space - Level II

Trench - Level I

Trench - Level II

Surface Water - Level I

Surface Water - Level II

Vehicle - Level I

Vehicle - Level II

41. How many of your stations have adequate technical rescue equipment? ** Enter the total number of stations for each category shown below. Must complete all rows. If none, then enter 0. **

Stations with adequate equipment to respond

Stations without adequate equipment to respond

Rope

Confined Space

Trench

Surface/Swift Water

Vehicle

42. Please answer the following questions regarding your department's Emergency Medical Services (EMS) license.

a. Is your department licensed by the Virginia Department of Health, Office of Emergency Medical Services as an EMS agency?

b. If "Yes", what classification of EMS license does your department hold?

EMS Classification

43. Please answer the following questions about your department's EMS training. ** Review and consult with your Chief and Training Officer concerning your selections. **

a. How many of your active firefighters are trained in the following EMS levels?

**** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0. ****

b. How many of your active firefighters need training at this level? **** Enter the actual number of firefighters. Must complete all rows. If none, then enter 0.**

*** ***

Emergency Medical Responder(EMR)/First Responder(FR)

Emergency Medical Technician (EMT)

Advanced EMT(AEMT)/EMT Enhanced (EMTEnh)

Intermediate (I)

Paramedic (P)

Section VII - Fire Prevention & Code Enforcement

44. Which of the following programs or activities does your department conduct? (Check all that apply.)

Child Safety Seat Installations

Community Emergency Response Teams (CERT)

Distribution/Installation of Home Smoke/Heat/CO Alarms

Fire Extinguisher Training

Juvenile Firesetter Program

Permit Approval

Plans Review

Routine Testing of Active Systems (Fire Sprinkler, Detection/Alarm, Smoke Control)

School Fire Safety Education Program

No Programs or Activities

Other

45. Who conducts fire code enforcements in your community? (Check all that apply.)

Building Department

Fire Department Inspectors

In-Service Fire Fighters

Separate Inspection Bureau

State/Local Fire Marshal's Office

Local Public Safety Department

Other

46. Who determines if a fire was deliberately set in your area? (Check all that apply.)

Fire Department Fire Investigator

Incident Commander Or Other First-In Fire Officer

Local Fire Marshal's Office

Local Public Safety Department

Police/Sheriff's Department

Regional Arson Task Force Investigator

VA State Police Arson Investigator

Other

Section VIII - Emergency Preparedness

47. Is your department adequately trained to recognize and report suspicious activity in your jurisdiction which may be indicative of pre-operational planning of a terrorist attack?

Yes No Unknown Comments

48. Is your department adequately prepared to respond to a terrorist event should it occur in your jurisdiction?

Yes No Unknown Comments

49. Are you aware of the Virginia Fusion Center and its role with the fire service in the Commonwealth of Virginia?

Yes No Unknown Comments

50. Has anyone in your department participated in the Virginia Fusion Center's Fusion Liaison Officer Training Program?

Yes No Unknown Comments

51. Would your department be interested in receiving information, training, or technical assistance from the Virginia Fusion Center on terrorism prevention and preparedness, threat and vulnerability assessments, or other fire service intelligence related areas?

Yes No Unknown Comments

Section IX - Your Fire Department's Top Needs

52. Please rank your department's Top Needs from 1 to 5 for FY2017. (1 - Most Important Need, 5 - Least Important Need)

Each row for Apparatus, Equipment, Facilities, Personnel and Training should only have 1 answer choice. Also, each column (#1 - #5) should be used only once.

(For Example, if Apparatus is the Most Important Need with your Fire Department, then select # 1. Then, select the next Top Need, such as Training, as your # 2 choice. Each number should only be used once. You cannot have more than one Top Need listed with #1.)

1 (Most
Important) # 2 # 3 # 4
5 (Least
Important)
Apparatus
Equipment
Facilities
Personnel
Training

53. Please indicate the amount of additional funding that your department needs in FY2017 for each type of specific department need. (Do not include current expected amounts of funding reported in Section IV.) ** Enter the total amount of additional funding. Must complete all rows. If none, then enter 0. **

Additional Funding
Apparatus
Equipment
Facilities
Personnel
Training

54. Please check the specific type of apparatus that your department needs for FY2017 and also indicate a quantity needed. Do not report current apparatus already budgeted for FY2017. (Check and complete all that apply.)

Apparatus Needed Quantity Needed
Aerial Apparatus (Mid-Mount, Rear-Mount, Tiller, Tower)
Aircraft Rescue and Fire Fighting (ARFF) Vehicle
Ambulance/Other Patient Transport
Command Support Unit
Command Vehicle (SUV)
Engine/Pumper
Fire Bike (Bicycle for Response)
Fire/Rescue Boat
Hazardous Materials (HAZMAT) Vehicle
Heavy Technical Rescue Vehicle
Logistical Support Apparatus
Mobile Air Utility
Rehab Unit
Quint Combination Vehicle
Tanker
Wildland Brush Truck
No Apparatus Currently Needed
Other

55. Please check the specific type of equipment that your department needs for FY2017 and also indicate the quantity needed. Do not report current equipment already budgeted for FY2017. (Check and complete all that apply.)

Equipment Needed Quantity Needed
4-Gas Monitors
Map Coordinate System - GPS
Mobile Data Terminals
Personal Alert Safety Systems (PASS)
Personal Protective Equipment (PPE)
Radios w/ Emergency Alert Button
Radios w/o Emergency Alert Button
Self-Contained Breathing Apparatus (SCBA) w/ Integrated PASS
Self-Contained Breathing Apparatus (SCBA) w/o Integrated PASS
Thermal Imaging Cameras
No Equipment Currently Needed
Other

56. Please check the specific type of facilities that your department needs for FY2017. Do not report current facility improvements/new construction already budgeted for FY2017. (Check all that apply.)

Addition to Existing Stations
Exhaust/Ventilation System
Improvements/Remodeling of Existing Stations
Installation of Backup Power
New Constructed Stations
No Facilities Currently Needed
Other

**57. Please check the specific type of personnel that your department needs for FY2017 and also indicate the quantity needed.
Do not report current personnel already budgeted for FY2017. (Check and complete all that apply.)**

Personnel Needed Quantity Needed
Firefighter - Paid
Firefighter - Volunteer
Civilian - Paid
Civilian - Volunteer
No Personnel Currently Needed
Other

58. Please select your top 3 priority types of training that your department needs for FY2017 from the following training areas and levels. ** Review and consult with your Chief and Training Officer concerning your selections. VDFP will be utilizing this information to develop FY2017 training delivery courses for your locality. **

Training Area and Level
#1 Top Training Priority
#2 Top Training Priority
#3 Top Training Priority

59. Please select your top 3 priority types of training that your department needs for FY2017 from the following technical rescue areas and levels. ** Review and consult with your Chief and Training Officer concerning your selections. VDFP will be utilizing this information to develop FY2017 training delivery courses for your locality. **

Technical Rescue Training Area and Level
#1 Top Training Priority
#2 Top Training Priority
#3 Top Training Priority

Final Comments

60. Do you feel that this survey addresses all of your department needs?

Yes
No

61. Do you think that this survey is beneficial to fire service in Virginia?

Yes
No

62. Please rate if you disagree/agree with the following statements on the overall performance of this survey.

Disagree Neutral Agree

Easy to Understand Questions

Simple to Complete Response On-line

63. Please complete any final comments to provide feedback to VDFP.

64. Please complete any final comments concerning your needs to Virginia legislators. Your department's comments may be included in the final report.

Before submitting your survey, [click here to review your survey response](#). You can print your answers from here, but you still need to return and click 'Submit' button to send you survey.