



U.S. Fire Administration

Fiscal Year 2015 Report to Congress
May 3, 2016



Homeland
Security

Federal Emergency Management Agency

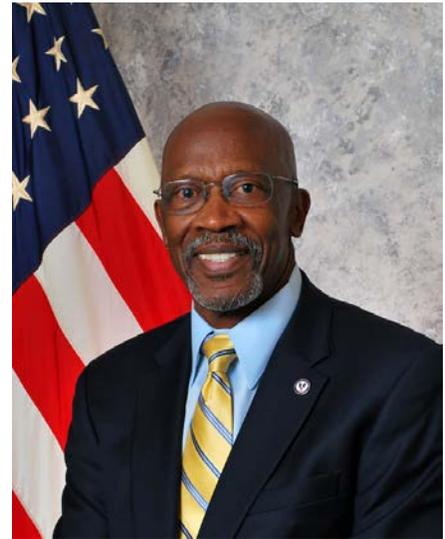
Message from the U.S. Fire Administrator

May 3, 2016

I am pleased to submit the U.S. Fire Administration's (USFA's) Annual Report for Fiscal Year (FY) 2015 as required by the Federal Fire Prevention and Control Act of 1974 (Public Law No. 93-498). The reporting requirement is codified at 15 United States Code (USC) § 2215.

This report highlights the achievements of the USFA's activities during the period of Oct. 1, 2014, to Sept. 30, 2015.

The accomplishments of the past year clearly demonstrate our commitment to fire and emergency services stakeholders through National Fire Academy (NFA) training activities, public education and awareness initiatives, research and technology development, and data collection and analysis.



This report can be found on USFA's website at www.usfa.fema.gov.

Pursuant to congressional requirements, this report is being provided to the following members of Congress:

The Honorable John Thune
Chairman, U.S. Senate Committee on Commerce, Science and Transportation

The Honorable Bill Nelson
Ranking Member, U.S. Senate Committee on Commerce, Science and Technology

The Honorable Lamar Smith
Chairman, U.S. House Committee on Science, Space and Technology

The Honorable Eddie Bernice Johnson
Ranking Member, U.S. House Committee on Science, Space and Technology

The Honorable Barbara Comstock
Chairwoman, Subcommittee on Research and Technology
U.S. House Committee on Science, Space and Technology

The Honorable Daniel Lipinski
Ranking Member, Subcommittee on Research and Technology
U.S. House Committee on Science, Space and Technology

The Honorable Bill Shuster
Chairman, U.S. House Committee on Transportation and Infrastructure

The Honorable Peter A. DeFazio
Ranking Member, U.S. House Committee on Transportation and Infrastructure

The Honorable Harold Rogers
Chairman, U.S. House Committee on Appropriations

The Honorable Nita M. Lowey
Ranking Member, U.S. House Committee on Appropriations

The Honorable John Carter
Chairman, Subcommittee on Homeland Security
U.S. House Committee on Appropriations

The Honorable Lucille Roybal-Allard
Ranking Member, Subcommittee on Homeland Security
U.S. House Committee on Appropriations

The Honorable Thad Cochran
Chairman, U.S. Senate Committee on Appropriations

The Honorable Barbara Mikulski
Ranking Member, U.S. Senate Committee on Appropriations

The Honorable Michael McCaul
Chairman, U.S. House Committee on Homeland Security

The Honorable Bennie Thompson
Ranking Member, U.S. House Committee on Homeland Security

The Honorable Ron Johnson
Chairman, U.S. Senate Committee on Homeland Security and Governmental Affairs

The Honorable Thomas R. Carper
Ranking Member, U.S. Senate Committee on Homeland Security and Governmental Affairs

If you have any questions regarding this report, please do not hesitate to contact the Federal Emergency Management Agency's (FEMA's) Congressional Affairs Division at 202-646-4500.

Sincerely,

A handwritten signature in black ink, appearing to read "Ernest Mitchell". The signature is fluid and cursive, with a large initial "E" and "M".

Ernest Mitchell
Fire Administrator
U.S. Fire Administration

Executive Summary

Background

In 1971, our Nation lost more than 9,000 residents and 250 firefighters to fire. Thanks to the hard work of many fire service organizations in cooperation with the USFA, America's fire losses today represent a dramatic improvement from more than 40 years ago, including a reduction in fatalities of more than sixty percent among both civilian and firefighters. The USFA recognizes the seriousness of the national fire problem and is committed to working with its partners to make America a safer place to live, work, play and visit.

From its beginning, the USFA focused on supplementing, not duplicating, existing programs of training, technology and research, data collections and analysis, and public education. Over the years, the USFA has adjusted to new developments and challenges facing the fire and emergency services community, always with the intention of providing leadership and support to stakeholders in the shared responsibility for public safety. Recognizing the evolving roles and expanding responsibilities of the American fire service, the National Fire Incident Reporting System (NFIRS) collects information on the full range of fire department response. The NFIRS is truly an all-hazards database, and firefighters are all-hazards responders. Of the approximately 23 million incidents reported to the NFIRS annually, a little over 1 million are fires. The largest percentage of reports are related to Emergency Medical Services (EMS). In addition, fire departments respond to an endless variety of calls for assistance including hazardous material spills, motor vehicle accidents, flood and water rescue, and explosions. Where there is a natural or man-made disaster, firefighters respond.

In FY 2015, the USFA continued providing national leadership for the fire and emergency services stakeholders in prevention, preparedness and response. As an integral part of the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA), the USFA embraces the whole community concept for emergency management and recognizes that it takes all aspects of a community to effectively prepare for, protect against, respond to, recover from, and mitigate all-hazards.

The U.S. Fire Administration Strategic Plan

In support of FEMA's Strategic Plan, the USFA developed its five-year Strategic Plan for Fiscal Years 2014-2018¹ providing both strategic and operational direction. The effectiveness of America's fire and emergency services relies on the USFA's efforts to lead on issues important to the Nation. The USFA partners with fire and emergency services and stakeholders to achieve the desired outcomes outlined in the USFA's strategic plan. The following performance goals provide the foundation for the USFA's strategic planning and desired future for a fire safe America:

- Reduce fire and life safety risk through prevention, preparedness and mitigation.
- Promote response, local planning and preparedness for all-hazards.
- Enhance the fire and emergency services' capabilities for response to and recovery from all-hazards.

¹ Available at http://www.usfa.fema.gov/downloads/pdf/publications/strategic_plan_2014-2018.pdf.

- Advance the professional development of fire service personnel and of other people engaged in fire prevention and control activities.
- Establish and sustain USFA as a dynamic organization.

The USFA actively supports the above goals in partnership with the fire and emergency services community to strive for continuous improvements and seek positive results in our programs and initiatives. This collaborative process will continue yielding benefits to the Nation.

Current State of Fire Problems

Analysis of various fire trends during the last three or more decades reveals remarkable progress in many aspects of the fire problem in the U.S. While structural fire loss in absolute terms, as well as per capita, has declined impressively — cut in half or better from the late 1970s and early 1980s — the per fire performance has not fared nearly as well. We have made great strides in preventing fires and detecting them in early stages; however, once a fire occurs that requires fire department response, we have similar or higher rates of firefighter fireground injuries and civilian casualties to those from over a decade earlier.

We celebrate significant efforts in attacking the American fire problem; however, there are still areas where efforts should be increased to reduce the adverse impacts of fire in America. One notable area is fire in the wildland urban interface (WUI). The conditions and trends are an increasing problem. Wildland fires threaten and destroy more homes as compared to a decade ago. According to the National Climate Assessment, climate change is contributing to an increase in wildfires across the western part of the U.S., with fires starting earlier in the spring, lasting later into the fall, and burning more acreage.² Recent climate conditions exacerbate the trend — the fire season is longer — and home building in and close to open areas is increasing both life and property risks and firefighting costs. The trend could be partially mitigated by state and local jurisdictions adopting the most current model building codes, including requirements for homeowner management of the immediate physical environment of homes and surrounding vegetation and other risks. Furthermore, the trend could be mitigated by advocating for public policy that communicates clear information that building in the WUI areas has inherent risks.

The long-standing traditional problem of fire deaths in residences, while substantially reduced since the creation of the USFA in 1974, remains the cause of approximately 80 percent of the total fire deaths each year. Fire prevention efforts are undertaken by many, and smoke detectors have a tremendous positive impact, but the oldest and most reliable defensive technology is automatic fire sprinklers. Automatic fire sprinklers are ubiquitous in businesses and institutions, but they are still not in widespread use in individual residential occupancies. Adoption of the most current model codes by local jurisdictions would lead to expanded use and more lives saved.

To further reduce the burden of fire in the U.S., the USFA is committed to continuing its efforts working with federal, state, local, tribal, and territorial partners and nongovernmental stakeholders in collecting and analyzing data, administering National Fire Programs, and operating the National Fire Academy.

² 2014 National Climate Assessment, U.S. Global Research Program, <http://nca2014.globalchange.gov/report/our-changing-climate/future-climate-change>.



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I. Legislative Requirement

This document responds to the reporting requirements set forth in the Federal Fire Prevention and Control Act of 1974 (Public Law No. 93-498), codified at 15 U.S.C. § 2215, which states:

The Director shall report to the Congress and the President not later than ninety calendar days following the year ending September 30, 1980 and similarly each year thereafter on all activities relating to fire prevention and control, and all measures taken to implement and carry out this chapter during the preceding calendar year. Such report shall include, but need not be limited to--

- (a) a thorough appraisal, including statistical analysis, estimates, and long-term projections of the human and economic losses due to fire;
- (b) a survey and summary, in such detail as is deemed advisable, of the research and technology program undertaken or sponsored pursuant to this chapter;
- (c) a summary of the activities of the Academy for the preceding 12 months, including, but not limited to--
 - (1) an explanation of the curriculum of study;
 - (2) a description of the standards of admission and performance;
 - (3) the criteria for the awarding of degrees and certificates; and
 - (4) a statistical compilation of the number of students attending the Academy and receiving degrees or certificates;
- (d) a summary of the activities undertaken to assist the Nation's fire services;
- (e) a summary of the public education programs undertaken;
- (f) an analysis of the extent of participation in preparing and submitting Fire Safety Effectiveness Statements;
- (g) a summary of outstanding problems confronting the administration of this chapter, in order of priority;
- (h) such recommendations for additional legislation as are deemed necessary or appropriate; and
- (i) a summary of reviews, evaluations, and suggested improvements in state and local fire prevention and building codes, fire services, and any relevant federal or private codes, regulations, and fire services.

II. Background

On May 4, 1973, the National Commission on Fire Prevention and Control issued a report, “America Burning,” which focused attention on the nation’s fire problem and the needs of the fire services and allied professions. Much of the subsequent fire prevention and response enabling legislation was developed to address issues raised in “America Burning.” Consequently, to help decrease tragic losses and to promote professional development of the fire and emergency response community, Congress passed the Federal Fire Prevention and Control Act of 1974 (Public Law No. 93-498), which, among other things, established the USFA.

Under section 9 of the U.S. Fire Administration Reauthorization Act of 2008 (Public Law No. 110-376), the Fire Administrator is required to “... provide liaison at an appropriate organizational level to assure coordination of the activities of the [USFA] Administrator related to emergency medical services provided by fire service-based systems with federal, state, and local government agencies and departments and nongovernmental organizations so concerned, as well as those entities concerned with emergency medical services generally” 15 U.S.C. § 2218(e)(3).

Under authorities of the FEMA Administrator, USFA is operating in support of FEMA strategic goals by: including all hazard community risk reduction in NFA curriculum; staffing select positions in the National Response Coordination Center; staffing the Fire Desk at the DHS National Operations Center; serving the Emergency Services Sector through the operation of the Emergency Management and Response Information Sharing and Analysis Center; taking a leadership role in Emergency Support Function 4 (Firefighting) under the National Response Framework; advocating “Whole Community” in all programs, and; active participation in the Joint Counter Terrorism Awareness Workshops to ensure fire service representation and collaboration with law enforcement.

III. The National Fire Problem (15 U.S.C. § 2215(a))

The USFA has contributed to remarkable progress during the last three decades in reducing the adverse effects of fire on the U.S. Most notably, civilian fire-related fatalities today are about two-fifths of what they were in the late 1970s, and total fires are less than half of what they were 38 years ago.³ Through partnership with other government and private organizations, children 0-4 years of age are no longer a statistically high risk group.

Even with these striking successes, there is still room for improvement. Though we have reduced the total number of all fires resulting in fire department response, and related casualties in absolute terms, we still have similar rates of casualties, both civilian and firefighters, per reported fire. Subsets within demographic groups remain at high risk, possibly driven by socioeconomic conditions. As the population of older adults increases, their risk of death by fire increases beyond age 65.⁴ Clearly, there is a lot of work to be done as “baby boomers” age.

This section provides a statistical portrait of the fire problem in the U.S., meeting the legislative requirement to provide a thorough appraisal, including statistical analysis, estimates, and long-term projections of the human and economic losses due to fire. Topics emphasized are the magnitude and trends of the fire problem, causes of fires, where they occur, and fire victims.

³ Data sources: USFA’s NFIRS; National Fire Protection Association’s (NFPA’s) annual Fire Experience survey; U.S. Census Bureau; Centers for Disease Control and Prevention’s National Center for Health Statistics; National Interagency Fire Center (NIFC); and various National Fire Data Center (NFDC) staff analyses and reports.

⁴ “U.S. fire deaths, fire death rates, and risk of dying in a fire,” http://www.usfa.fema.gov/data/statistics/fire_death_rates.html.

The primary source of data is the NFIRS; however, the publication lags behind the date of the data collection due to the challenges of receiving input from the states. Data are collected on a calendar year (CY) basis, and they must be released by the states prior to analysis. Therefore, some of the data elements collected in the NFIRS are not yet available for 2015, which explains why the most current statistical information contained in this report represents CY 2014. The NFIRS individual state profiles for fire loss are available at <https://www.usfa.fema.gov/data/statistics/states/>.

The following are summaries of the Nation's fire problem:⁵

Total Fires: The estimate for total fires during 2014 is 1,298,000, a 60 percent reduction from the number of fires in 1977 (3,264,000). During the last 10 years (2005-2014), the U.S. has averaged 1.42 million fires per year. In 1977, there were 14,820 fires per million population. In 2014, there were 4,070 fires per million population. From 1977-2014, there was a 73-percent reduction in the number of fires per million population.

Residential Structure Fires: The estimate for residential structure fires during 2014 is 386,500, a 48 percent reduction in residence fires from 1977 (750,000). During the last 10 years (2005-2014), the U.S. has averaged 392,700 residential structure fires per year. In 1977, there were 3,405 residential structure fires per million population. In 2014, there were 1,210 residential structure fires per million population. From 1977-2014, there was a 64 percent reduction in the number of residential structure fires per million population.

Civilian Fire Fatalities: The estimate for total civilian fire fatalities during 2014 is 3,275, a 56 percent reduction in fatalities since 1977 (7,395). During the last 10 years (2005-2014), the U.S. has averaged 3,220 civilian fire fatalities per year. In 1977, there were 33.6 civilian fire fatalities per million population. In 2014, there were 10.3 civilian fire fatalities per million population. From 1977-2014, there was a 69 percent reduction in the number of civilian fire fatalities per million population.

Civilian Fire Injuries: The estimate for total civilian fire injuries during 2014 is 15,775, a 49-percent reduction in injuries since 1977 (31,190). During the last 10 years (2005-2014), the average is 16,925 civilian fire injuries per year. In 1977, there were 141.6 civilian fire injuries per million population. In 2014, there were 49.5 civilian fire injuries per million population. From 1977-2014, there was a 65 percent reduction in the number of civilian fire injuries per million population.

Civilian Casualties (Fatalities + Injuries) per 1,000 Fires: The estimate for civilian casualties (fatalities + injuries) per 1,000 fires in 2014 is 14.7, an increase of 24 percent over 1977 (11.8). During the last 10 years (2005-2014), the average is 14.2 civilian casualties per 1,000 fires.

Firefighter Fatalities: Ninety-one firefighters died while on duty in 2014. On average during the last 10 years (2005-2014), 86 firefighters died on-duty per year.

Fire Risk to Children: With the general population indexed at 1.0, the relative risk for child fire deaths (0-4 years of age) in 1983 was 2.0, twice the general population. In 2013, the relative risk for child fire deaths (0-4 years of age) was 0.7. Although the fire death risk for children in this age group has declined, when compared to children in older age groups (i.e., ages 5-9 and ages 10-14), children age 4 and under are still at greater risk of dying from fire.

⁵ Source for statistics gathered in this section was taken from references noted in footnote 3.

Fire Risk to Older Adults: With the general population indexed at 1.0, the relative risk for adults 65 years of age and older who died in fires in 1983 was 2.5. In 2013, that relative risk remains unchanged at 2.5.

Property Damage — Dollar Loss: The estimate for total dollar loss during 2014 was \$11.6 billion, a reduction of 37 percent from 1977 (\$18.4 billion, adjusted to 2014 dollars). During the last 10 years (2005-2014), the average was \$13.5 billion per year in 2014 dollars.

Wildland Fires and Homes: Wildland fires are a serious threat to lives and property in the U.S. The combination of drought, warmer temperatures, high winds, and expanding development in WUI zones has made fire seasons progressively worse over the past 50 years. According to the United States Forest Service (USFS) 2013 Senate testimony, “The length of the fire season has increased by over two months since the 1970s.” As U.S. Forest Service (USFS) Chief Tom Tidwell noted in testimony in front of Congress in October 2015, “Over the past two decades, fires have increased in severity, intensity and cost as fire seasons have lasted more than 70 days longer, drought and increased temperatures contribute to dangerous conditions, and as more people have moved into fire-prone areas.” In 2015, there were over 68,000 fires, which burned a record 10,125,149 acres.[1] 2015 was the most expensive fire season in USFS history, costing more than \$2.6 billion on fire alone. Within the next decade, wildland fire costs are expected to rise to over two-thirds of the USFS budget. The National Association of State Foresters cites more than 72,000 U.S. communities that are now at risk from wildfire. The National Climate Assessment notes that water deficits give rise to wildfire risk by increasing tree stress and mortality, tree vulnerability to insects, and fuel flammability.

Emergency Medical Services: While not generally considered part of the Nation’s fire problem, the growth of fire service-based EMS has had a significant impact on local fire departments. According to the latest data, more than two-thirds of the Nation’s fire departments provide some level of EMS.⁶ These emergency operations put additional stress on the ability to meet public service expectations.

Overall Summary: While structural fire loss in absolute terms as well as per capita has seen a significant decrease— cut in half or better from the late 1970s and early 1980s — the per fire performance is not faring nearly as well. We have made great strides in preventing fires and detecting them in early stages; however, once a fire occurs that requires a fire department response, we have similar or higher rates of firefighter fireground injuries and civilian casualties to those from decades earlier.

The USFA serves as a valuable catalyst for great progress in overcoming the fire problem across the Nation. However, we recognize the need to increase efforts to further reduce the adverse impacts of fire in America, such as problems with the WUI. To further reduce the burden of fire in the U.S., the USFA is committed to continuing its efforts in working with federal, state, local, tribal, and territorial partners and nongovernmental stakeholders in collecting and analyzing incident data, administering National Fire Programs, and operating the National Fire Academy.

⁶ “Four Years Later — A Second Needs Assessment of the U.S. Fire Service,” (2006), USFA Report FA-303.

IV. Summary of Initiatives/Activities (15 U.S.C. § 2215)

Section 4.1 — Research and Technology

(15 U.S.C. § 2215(b))

The USFA provides federal fire focus for applied research and technology. Actual studies and research are accomplished in partnership with a wide range of organizations that share the USFA's mission in reducing the Nation's fire loss. The following activities are brief summaries of USFA's significant initiatives in research and technology for FY 2015. Additional details are available online at www.usfa.fema.gov.

Cancer Among Firefighters Study: The USFA published findings of the second phase and supported the National Institute of Occupational Safety and Health's study of "Cancer Among Fire Fighters," which examined exposure-response relationships of firefighters and suggested that firefighters are more likely to develop certain cancers than the general population.⁷

Study of Emergent Health and Safety Issues in the Volunteer Fire Service: The USFA continued to partner with the National Volunteer Fire Council (NVFC) to create strategies to reduce on-duty casualties in the volunteer fire service, which represents approximately 70 percent of firefighters in the U.S. The findings are expected to be released in a USFA/NVFC report in mid FY 2016.

Fire Service Communications Study: The USFA completed a study in partnership with the DHS Science and Technology First Responders Group Office for Interoperability and Compatibility on current issues in fire service communications to update the USFA's "Voice Radio Communications Guide for the Fire Service" (2008). The new guide developed from this study is expected to be released in early FY 2016 and will address radio spectrum availability and changes to communications operations, as well as new legislation impacting fire and emergency services communications.

National Safety Culture Change Initiative: The USFA partnered with the International Association of Fire Chiefs (IAFC) on a project to identify and develop strategies on individual and organizational behaviors that adversely impact firefighter health and safety.⁸ This study supports the first Life Safety Initiative of the National Fallen Firefighters Foundation.⁹

Roadway Safety: The USFA, through the support of the U.S. Department of Justice's National Institute of Justice, initiated a new project to continue its partnership with the Cumberland Valley Volunteer Firemen's Association (CVVFA) Emergency Responder Safety Institute. Partnership effort is to support the development and dissemination of best practices for law enforcement and the fire service in roadway operations safety, including the Responder Safety website at <http://www.respondersafety.com>. During FY 2015, under the previous project with USFA, CVVFA developed a new training module available from the website — Sobriety Checkpoint Safety — which describes a team approach designed to protect the public and first responders while they are helping reduce the number of intoxicated and chemically impaired drivers on the roadway.

⁷ "Exposure-response relationships for select cancer and non-cancer health outcomes in a cohort of US firefighters from San Francisco, Chicago and Philadelphia" (1950-2009) at <http://oem.bmj.com/content/early/2015/02/11/oemed-2014-102671>.

⁸ "National Safety Culture Change Initiative" report released in April 2015, http://www.usfa.fema.gov/downloads/pdf/publications/fa_342.pdf.

⁹ <http://www.lifesafetyinitiatives.net/>.

Study of Violence to Firefighter and Emergency Medical Services Responders: The USFA began a study with the International Association of Fire Fighters to conduct research on mitigating the incidence of violence to firefighters and EMS responders. There are several recent incidents of violence that have caused on-duty responder injuries and death. This project shall research both technological and operational mitigation of workplace/on-duty incidents of violence.

Smoke Alarms: The USFA’s research on home smoke alarms has led to the development of a new and improved technique to combine the signals from multiple sensors to provide a smoke alarm that is more resistant to nuisance alarms and uses the low-frequency tone that improves alertness in younger and older occupants. Underwriters Laboratories successfully tested the prototype smoke alarms, and negotiations between Oak Ridge National Laboratory and manufacturers are currently underway to license the technology to manufacturers pursuant to the Technology Transfer Commercialization Act of 2000 (Public Law 106-404). The USFA released the findings in January 2015 titled “Smart Smoke Alarm Using Linear Discriminant Analysis.”¹⁰

First Responder Safety Tools: The USFA initiated a new project to develop electrical safety tools for first responders. The first responder community is not properly equipped to address potentially hazardous conditions inherent to the use of electric vehicles, solar panels and other green energy technology. This project seeks to develop tools to alert first responders on the presence of hazardous direct current electric energy.

Fire Safety in Manufactured Housing Units: The USFA provided expertise to FEMA staff on the installation of residential fire sprinklers in FEMA Manufactured Housing Units. The USFA staff, with experience in sprinklers and engineering, assisted FEMA with design and technical support for this program. FEMA is moving forward to provide residential fire sprinklers in new purchases.

Section 4.2 — The National Fire Academy

(15 U.S.C. § 2215(c))

In FY 2015, the NFA provided 3,077 course offerings, reaching 81,505 students and providing 186,153 student days of instruction. This was accomplished through the delivery of NFA-sponsored courses in residence at the National Emergency Training Center (NETC) and off campus at state and local sites, state and local partner-sponsored courses, technology-based (instructor led and self-study) courses, and higher education courses delivered in cooperation with 81 colleges and universities.

As fire incidents continue to decline, the Nation’s fire service is emerging as the leader in whole community risk reduction. In response to the Affordable Care Act, fire department activities expanded from emergency response to include maintenance care for an aging and disabled population. The NFA’s Risk Reduction Programs recognize the impacts of changing demographics and provide fire department leaders with the perspectives and tools to lead and manage risk management programs in their communities. The NFA Board of Visitors is charged with defining and clarifying future fire service roles in the whole community risk-reduction area.

¹⁰ “Smart Smoke Alarm Using Linear Discriminant Analysis,” January 2015 at http://www.usfa.fema.gov/downloads/pdf/publications/smart_smoke_alarm_lda.pdf.

Course Delivery Methods and Significant Activities/Initiatives in FY 2015

NFA-Sponsored Courses: The NFA delivered courses at the NETC and throughout the country accounting for 954 course offerings to 15,901 students resulting in 71,127 student days of instruction. These deliveries include all NFA-sponsored on- and off-campus programs.

State and Local Partner-Sponsored Courses: The NFA delivered 2,353 state and local partner-sponsored courses nationwide to 35,137 students resulting in 97,982 student days of instruction.

Technology-Based Self-Study Program Courses: This program offered 83 courses in a variety of subjects delivered through NFA Online. In FY 2015, 35,318 students completed Self-Study Programs resulting in 25,630 student days of instruction.

Technology-Based Mediated-Study Program Courses: This program offered a variety of subjects delivered online through NFA Online with asynchronous instructor-led student interaction. In FY 2015, 82 students completed Mediated-Study Programs. The NFA successfully implemented the new online platform (Desire2Learn) that provides additional functionality and tools to support the delivery of its mediated courses. The NFA plans to increase the number of mediated study course offerings.

Technology-Based Noncredit Subscription Learning: Our most popular learning venue, “Coffee Break Training” (CBT), delivers short, one-topic training messages directly to students through listserv technology. The NFA delivered 4,552,185 noncredit subscription learning opportunities.

NFA-Approved State Courses: Through a cooperative effort and a peer-review process, the NFA adds state-developed courses to its curriculum, thereby reducing some development costs and adding curriculum that is otherwise unavailable to other state and local training partners. The NFA delivered 643 courses to 9,825 students resulting in 43,555 student days of instruction.

State Training Data: The FY 2015 training data by individual states is available at <https://www.usfa.fema.gov/training/nfa/about/profiles>.

Executive Fire Officer Program: The Executive Fire Officer (EFO) Program is a four-year executive education program for senior fire executives and other midlevel managers. At any given time, there are over 800 students in one of the four phases of the EFO. In FY 2015, the EFO had 120 graduates.

Each year, the NFA holds an EFO symposium, which is a two-day seminar on cutting-edge topics for fire service leaders. Over 200 leaders attended this year’s symposium. The theme focused on the importance, impact, collection, and other issues related to fire service use and application of “Big Data.” The NFA recognized Outstanding Research Award recipients who represented each group within the EFO; and recognized recipients to the EFO Honor Roll for achieving a 4.0 in each of their applied research papers. The event included technology, entertainment and design talks and an honors program recognizing the past year’s EFO graduates and research paper awardees.

Managing Officer Program: The Managing Officer (MO) Program is a new two-year program that introduces first-level or mid-level officers/supervisors to personal and professional skills in change management, risk reduction, safety and adaptive leadership. The purpose of the program is to engage emergency services leaders in professional development earlier in their careers and

to instill in them the whole community risk-reduction model. In FY 2015, the program had 208 students enrolled.

National Professional Development Conference: The NFA held the second National Professional Development Conference, attended by 216 resident and 104 virtual participants. The conference was held at the NETC and eight of the 26 agenda sessions were delivered to the Nation via Adobe Connect. The focus of the event was to open discussions regarding a professional development doctrine for emergency services. A work group, made up of training and higher education attendees, was formed after a general training session. The work group will have a draft document prepared for consensus approval at the 2016 symposium.

Fire and Emergency Services Higher Education: The Fire and Emergency Services Higher Education (FESHE) Program is an acknowledgment that a collegiate emergency services degree program meets the minimum standards of excellence established by FESHE professional development committees and the NFA.

These regionally or nationally accredited colleges and universities deliver standard curriculum using standard syllabi and course titles, which eases credit transfer when students change schools. It is a competency-based curriculum that standardizes what a “fire degree” means to the student and employer. As a result of the FEHSE Program, all fire textbook publishers produce texts that comport with the syllabi and curriculum. The standard degree program concentrates on fire prevention and mitigation, emergency response, fire administration and EMS management. There are currently 81 colleges/universities from 31 states recognized through this program. In FY 2015, the NFA offered 318 courses to 2,470 students.

State Training Assistance: Each of the 50 state fire training systems is eligible to receive state fire training assistance to deliver NFA courses. A total of 46 of the 50 states participated in the program, each receiving a reduced amount of \$20,000. In this fiscal year, distributions totaled \$920,000.

Training Evaluation Center: The NFA continually evaluates the outcome of its training. This is a systematic study of resident courses, soliciting anonymous feedback from students and their supervisors to determine long-term training effectiveness. During FY 2015, 448 students and 401 supervisors responded. As with responses from previous years, students indicated that they were able to transfer the training skills and learning to their jobs, and supervisors reported improved performance as follows:

Long-Term Evaluation Reporting Elements	2014	2015
Students reporting that they were able to apply NFA training at home	96.6%	95.9%
Students reporting that NFA training improved their job performance	95.1%	96.2%
Students reporting that they shared NFA training with their peers	96.1%	97.9%
Students reporting that they conducted formal courses with NFA material	26.7%	27.4%
Students reporting that they established new policies and procedures based on NFA training	73.3%	84.4%
Supervisors reporting improved performance from NFA training	87.2%	90.5%
Supervisors reporting improved departmental performance	87.9%	88.5%
Supervisors who say that they will recommend NFA training to others	94.8%	97.2%
Supervisors reporting that NFA benefits outweigh costs	92.8%	92.2%

Note: Reported data were derived from NFA Long-Term Evaluation forms sent to both students and their supervisors four to six months after the NFA training class ended.

NFA Online: The online training site includes 83 Web-based self-study courses. The NFA released eight new courses, including three mediated courses in executive development.

American Council on Education: The FY 2015 annual review included 30 courses. The preliminary results indicate 29 of the 30 courses will receive credit recommendations.

Continuing Education Units: The Continuing Education Units (CEUs) continued to be awarded for all 10-, six-, and two-day on-and off-campus and online courses.

Bring-Your-Own-Device: NFA continued to use Bring-Your-Own-Device (BYOD) to provide electronic/downloadable Student Manuals in NFA's residential classes. By the end of the FY, the NFA converted 44 courses to a BYOD format, reducing printing costs and the environmental impact of paper and ink.

Significant Curriculum Enhancements: The NFA reviewed and updated curriculum to address students' needs and emerging issues. Accomplishments are listed by curriculum area.

Emergency Medical Services Curriculum: The NFA continued the evaluation and revision of coursework at NFA to identify and update content to appropriately reflect EMS relationships and the impacts on our fire service. The CBT series continued with topics specific to EMS-specific planning, implementation and resources for Mass Casualty Incidents within the Incident Command System of the National Incident Management System.

Fire/Arson and Explosion Investigation Curriculum: In cooperation with the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), USFA continued to lead the Nation in content delivery of best practices fire investigation, forensic and fire science, arson mitigation, interviewing and courtroom testimony. These programs feature extensive hands-on participation, live burns, scene processing, mock testimony, and an instructor student interaction that is unparalleled and consistently results in positive feedback from the students. USFA training, in cooperation with the ATF, pushed the fire investigation training community to new levels of accountability and training excellence. Over 660 students attended fire investigation-related training.

Fire Prevention — Management Curriculum: The NFA developed two new courses to address risk-reduction challenges in local communities. In addition, the NFA revised the EFO course titled "Executive Analysis of Community Risk Reduction."

Fire Prevention — Public Education Curriculum: The NFA developed a new six-day risk-reduction program titled "Applications of Community Risk Reduction." This course is part of the MO Program.

Fire Prevention — Technical Curriculum: The NFA developed and delivered a "Wildland Urban Interface: Fire-Adapted Communities" course and is currently developing additional courses to support community planning efforts. In addition, the NFA developed campus fire and life safety courses for emergency planning, public education and facility fire protection. The NFA completed the development of an electronic job aid that enables jurisdictions to design and build their own fire protection equipment demonstration facilities, thereby increasing the number of students who can obtain this essential technical training.

Hazardous Materials Curriculum: The USFA entered into an interagency agreement with the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation. This partnership is to collaboratively develop the 2016 Guidelines for Public Sector Hazardous

Materials Training Guidelines and support the Hazardous Materials Emergency Planning Grant Process. The joint effort is in addition to collaborating on the response planning and training to High Hazard Flammable Liquid Trains and the Pipeline Safety initiative incorporating lessons learned into existing and future curriculum.

Incident Management Curriculum: The NFA completed revisions on two incident management courses. In addition, the NFA incorporated lessons learned from recent tornado and flood events into the “Command and Control of Fire Department Operations at Natural and Man-Made Disasters” course.

Leadership and Executive Development Curriculum: In FY 2015, the NFA merged the Management Science and Executive Development curriculum areas into an integrated curriculum focus — Leadership and Executive Development. This merge provides an alignment of curriculum and resources allowing greater continuity across 29 courses. The “Shaping the Future” course was revised, and contract was released to revise the Leadership I, II and III courses. These are stand-alone courses, but they are also required as prerequisites for the new MO Program. The “Executive Leadership” course was revised this year, and the “Executive Development” course is under revision with a projected pilot date of next year.

Planning and Information Management Curriculum: The NFA developed one new course and revised three courses to increase the focus on strategic planning, whole community planning, and organizational deployment analysis.

Responder Health and Safety Curriculum: The NFA developed a mobile application compatible across multiple platforms to allow responders and others to assess its wellness lifestyle in an effort to reduce responder injuries and premature deaths. Additionally, the NFA began a major revision of the “Incident Safety Officer” and “Health and Safety Officer” courses. The “Transitional Safety Leadership” course is in the final development stages and is part of the MO Program. The course has an electronic textbook that will be available on all mainstream electronic devices.

Training Programs Curriculum: The NFA began retooling the current “21st Century Training for Fire and EMS Training Officers” to become a new six-day course titled “Contemporary Training Issues for Fire and EMS.” This will be part of the NFA’s new MO Program.

Facilities and Support: The NETC Management, Operations and Support Services Division (MOSS) is responsible for managing, operating and providing administrative and emergency support services for all USFA and Emergency Management Institute activities located on the 107 acre campus in Emmitsburg, Maryland.

In FY 2015, the MOSS provided numerous facilities and support services for 240 federal employees, 200 federal contractors, and approximately 400 students weekly from across the Nation. Operations and support consisted of, but was not limited to, the following: Facility operations and maintenance; renovation and improvements; food services; information technology; and student admissions, housing and transportation.

Several specific project were completed, such as: Installation of a new campus water supply main; elevator upgrades; restroom renovations; American Disabilities Act (ADA) suite renovations; and roof replacements.

Section 4.3 — Activities to Assist Nation’s Fire Services

(15 U.S.C. § 2215(d))

(15 U.S.C. § 2206(n))

The USFA assisted our Nation’s fire services by providing support and assistance to operations and response for the following activities in FY 2015.

Federal Operations and National Response Framework: The USFA provided staff for the Emergency Services Group Supervisor and the Resources and Capability Branch Director positions during National Capstone Exercises and federal activations of the National Response Coordination Center. USFA represents FEMA as a co-coordinating agency for the Emergency Support Function-4 (ESF-4) — Firefighting and provides structural firefighting expertise for exercises and federal activations. The USFA contributed to the development of a new Technical Assistance Program for ESF-4 candidates for wildland, structural and administrative specialist positions.

National Preparedness and Exercise: The USFA provided staffing for the roles of planner, controller, player and evaluator in support of the FEMA Exercise and Evaluation Coordination Group. In FY 2015, staff participated in the National Capstone Exercise (Southern California Earthquake) and the Vigilant Shield National Exercise.

Wildland and Wildland Urban Interface Coordination: The USFA collaborated with the NFPA and various DHS and FEMA components to promote a Presidential Message on the Wildfire Community Preparedness Day event on May 2, 2015. The combined USFA/NFPA outreach efforts included social media avenues with tweets viewed by more than 1.5 million people, according to the NFPA Analytics Report. A “Wildfires: Protect Yourself and Your Community” publication was made available for electronic and customizable download for use by individuals and fire departments.

The USFA has full-time staffing at the National Interagency Fire Center (NIFC) in Boise, Idaho, which enhances the collaborative interagency functions that are critical to the allocation and prioritization of national resources use in wildland firefighting operations and firefighting resource management.

The USFA maintains membership with the following interagency groups: the National Wildfire Coordinating Group (NWCG), National Multiagency Coordination group, NWCG Executive Committee (Chair); Fire Management Board; Wildland Urban Interface Mitigation Committee, Fire Adapted Communities Coalition, Wildland Fire Leadership Council, National Cohesive Wildland Fire Management Strategy’s Regional Strategy Committee, Fire Executive Council, Federal Fire Partners Council, and the Subcommittee on Disaster Reduction of the Wildland Fire Science and Technology Task Force. Through these groups, the USFA represents the state and local structural fire and emergency services and encourages collaboration on how the federal land management agencies and departments manage existing resources, research, technical development, training, qualifications and mobilizations.

Critical Infrastructure Protection: The USFA’s Critical Infrastructure Protection (CIP) Program is an information and intelligence gathering and sharing process that collaborates with several related federal agencies, departments, working groups and task forces. The USFA manages the Emergency Management and Response-Information Sharing and Analysis Center, which is the only national clearinghouse for CIP and emergent threat information sharing specifically for the Nation’s emergency services sector. In 2015, distribution of the weekly

Infogram increased 10 percent to over 74,000 emergency services registrants. With an eye to emergent issues, InfoGrams have addressed the potential danger associated with the increased production and transportation of Bakken crude oil, the threat to first responders during incidents of civil unrest, and the challenge of responding during active shooter situations. The USFA emphasizes the critical areas in informational articles, updates on related regulations and procedures, and links to training and other resources. Through a USFA-managed community of interest within the Homeland Security Information Network for Emergency Services (HSIN-ES), emergency responders are provided with emerging threat information, situation reports, public health bulletins, terrorism updates and other critical For Official Use Only documents. The USFA adds more than 120 documents per month to the HSIN-ES site, which is reviewed by the 5,000 active end users as well as pushed nationally with over 23,000 emergency services officials, which is an increase of 5 percent from 2014. We continue to participate in the monthly Secure-Video Teleconference Calls among emergency service intelligence analysts functioning within the national fusion center network.

Type 3 All-Hazards Incident Management Teams: During 2015, the USFA supported 60 All-Hazards Incident Management Teams (AHIMT) training deliveries that produced 1,878 students for the nation's emergency services. Currently, the USFA has points of contact with 122 AHIMTs and coordinates with the USFS Program to provide mentoring/coaching opportunities for team members. The USFA promoted and supported the adoption of Position Task Books for All-Hazards Fire and Emergency Services Command and General Staff positions. The USFA delivered the All-Hazard Facilitator Development course with 54 enrolled students from 42 states and one tribal nation.

National Operations Center — Fire Desk: The USFA provides full-time staffing to the DHS National Operations Center for intelligence and information gathering and sharing. Through the Fire Desk, the leadership of DHS and USFA maintain operational readiness and situational awareness for the fire and emergency services on structural suppression, rescue, hazardous materials, emergency medical and wildland firefighting activities. Through a direct link to the NIFC, the Fire Desk is able to provide daily resource reports to leadership for wildland firefighting and support resources. During disaster activations, the Fire Desk directly works with the National Response Coordination Center to identify resources and gaps that may develop in the emergency services of firefighting, public health, urban search and rescue, oil spill and hazardous materials, and law enforcement.

Geospatial and Situational Readiness: The USFA created a technical report, "Operational Lessons Learned in Disaster Response." The report identifies gaps and needs in first responder training and resources as well as presenting solutions that serve to enhance preparedness of local-level fire services for all-hazard events and to interface with federal resources.

The USFA produced educational materials highlighting uses of geospatial information and Geographic Information System (GIS) software for disaster response and community risk reduction.

National Outreach: The USFA created and distributed to over 6,100 subscribers a daily National Operations Briefing that pulls together significant information, incidents/events and weather for a snapshot of what is occurring nationally.

National Fire Department Census: The number of fire departments registered with the USFA National Fire Department Census increased by 83 departments, from 27,110 in FY 2014 to 27,193 in FY 2015. This represents 90 percent of the NFPA-estimated 30,052 departments in the U.S. in 2013.

Section 4.4 — Public Education

(15 U.S.C. § 2215(e))

In FY 2015, the USFA led or participated in the following activities to deliver public education materials and messages that were easily understood by the general public and specific at-risk groups while emphasizing the whole community concept modeled by the Fire is Everyone's Fight™ initiative. Additional information is available at <http://www.usfa.fema.gov/prevention/outreach/>.

Arson Awareness Week: The 2015 theme for Arson Awareness Week was “Accelerant Detection Canines – Sniffing out Arson,” which focused on the value and contributions accelerant detection canines make to fire departments, law enforcement agencies, and their communities. Eleven states made formal Arson Awareness Proclamations and there were numerous media posts and announcements.

Learning Resource Center: The NETC Library added an additional 1,700 titles to the collection in 2015 and finalized a project involving the creation of catalog citations from some of the earliest NFPA and Fire Engineering journals dating from the early 20th century. The library now accommodates the delivery of information literacy classes to the NFA and Emergency Management Institute students during evening and weekend hours. To that end, library staff are developing a slate of mini-classes and Web guides on information literacy topics, as well as others on writing an argument essay, getting started on the research process, scholarly versus trade journals and American Psychological Association citation style resources. This is of particular value to the NFA students who are required to conduct research.

Prevention and Public Education Exchange: As of 2015, the USFA has a repository of 674 national, state and local fire prevention and public education resources available in the exchange, which is on the USFA website. This is a 15 percent increase since 2011.

Prevention Advocacy Resources and Data Exchange: The USFA held three educational webinars covering topics selected by the Prevention Advocacy Resources and Data Exchange (PARADE) representatives that included fires and explosions, hydrogen and fuel cell technologies, and food truck fire and life safety, e-cigarettes poisoning, fire and explosions. The PARADE was also part of the National Professional Development Symposium. The selected representatives received valuable training opportunities for state and local fire marshals and shared their successes as part of networking.

Hotel/Motel National Master List: The USFA added 1,310 new lodging properties to the list, bringing the total number of properties to 46,338. Staff completed the Office of Management and Budget Collection Package 1660-0068 for renewal of the Federal Hotel and Motel Fire Safety Declaration Form. The USFA partnered with the General Services Administration to assist in maintaining accurate property information by reducing redundancies and obsolete properties.

Digital Communications and Social Media: Over 35,600 people followed USFA's Twitter @usfire account, and 7,000 people liked our Facebook page in 2015 — significant increases over 2014. The USFA performed four Twitter chats in conjunction with national partners: IAFC, NFPA and DHS Science and Technology. In addition, staff sent 977 bulletins on community risk reduction, fire prevention and safety, and available USFA resources, including NFA, training to email subscribers. The total number of subscribers to one or more USFA email lists reached 267,000 which is a 7 percent increase over the previous reporting period.

U.S. Fire Administration’s Website: The USFA’s website received 2.2 million visits from 1.4 million visitors during the reporting period. The USFA upgraded the server operating systems and website applications to remain in compliance with FEMA information technology and security standards. Beginning in 2015, the individual state profiles application was added to the USFA’s website to improve efficiency in data reporting and to increase general public visibility. The data includes individual state fire loss, fallen firefighter fatalities, and NFA training profiles.

Fire is Everyone’s Fight: The USFA’s “Fire is Everyone’s Fight” initiative has 1,362 fire department and organization supporters, including 42 State Fire Marshals Offices. The initiative also partners with Canada, England, Australia, New Zealand, Mexico and South Africa. The USFA released updated prevention and fire safety materials for older adults, caregivers of babies and toddlers, and smokers. All materials are available in English and Spanish.

Outreach to Fire Service, Stakeholders and Constituents: Through 15 exhibits at national fire service and partner meetings, the USFA interacted one-on-one with over 45,000 fire service personnel, stakeholders and public constituents.

DHS Blue Campaign: The USFA supports the DHS program by providing a suite of materials to enhance first responder awareness of human trafficking. These materials are disseminated at the NETC campus and across the U.S. at various meetings where the USFA shares exhibits to first responders as well as the general public.

Section 4.5 — Fire Safety Effectiveness Statements

(15 U.S.C. § 2215(f))

Although initially a reporting requirement for the USFA, the authority for code enforcement remains at the state and local levels and is outside the federal purview. The codes development and compliance process has evolved since the 1970s and essentially meets the need of providing fire safety standards to which buildings should comply. The USFA continues to support the promotion of codes and compliance through training at the NFA and staff involvement in the consensus standards process.

Section 4.6 — Outstanding Problems

(15 U.S.C. § 2215(g))

National Fire Incident Reporting System: Today, there is an increased demand for data/evidence-based decisions and solutions to complicated problems. The fire problem in the U.S. is one such problem. Accurate, comprehensive and current data is essential for pinpointing issues, forecasting trends, setting goals, and identifying actions and areas of focus. The data environment has changed much since creation of the National Fire Data Center (NFDC) and NFIRS. Many of the users of NFIRS from local fire departments to State Fire Marshals and national fire service organizations such as International Association of Fire Chiefs have noticed that the aging NFIRS system has become a DHS legacy expected to function in a high cyber security environment never envisioned when it was created and now requires repurposing resources from enhancements to fund data center fees and security upgrades.

NFIRS is the largest incident-based system in the Nation, an invaluable resource to local and state fire agencies, and serves as a leading platform for collecting and analyzing a wide range of data from the Nation’s fire and emergency services. Today, NFIRS receives about 23 million incident reports annually, of which about 1 million are fires, and the rest dominated with EMS, but including technical rescues, hazardous materials and even bomb disposals. NFIRS also

documents the intensity of service during disasters. Unfortunately, NFIRS was not created to handle and examine such large data sets, which could improve measuring national capacity and the operational effectiveness of enhancements and activities of states and locals, as well as support FEMA and DHS intelligence gathering on natural and man-made disasters.

On December 19, 2014, Fire Chief G. Keith Bryant, President and Chairman of the Board of the International Association of Fire Chiefs stated in his letter to USFA:

“Overall, NFIRS plays an important role in the national fire and emergency response system. It is the only nationwide tool for collecting data about fire incidents, and provides a comprehensive data set for analysis. However, in many ways, NFIRS still operates as it was first conceived in the 1970s. The IAFC believes that the USFA can take concrete steps to preserve NFIRS’ current strengths, while transforming it into a decision-making tool for local fire departments.”

State Fire Training Grants: One of the National Fire Academy’s most efficient outreach mechanisms is the State Fire Training Grants Program, which facilitates states’ deliver of state fire training as an arm of NFA. Through these grants, we delivered 2,353 classes to 35,137 students in 2015. This program is so successful because it leverages local resources (staff and facilities) and allows flexibility at the state level. The grants are non-competitive and each state must apply the 20 thousand dollar grant toward delivery of the NFA courses. In light of the success of this method of NFA course delivery, FEMA is considering whether a change to a contract or cooperative agreement approach may further improve delivery of these services to the states.

Section 4.7 — Recommendations for Additional Legislation

(15 U.S.C. § 2215(h))

None

Section 4.8 — Suggested Improvements to Fire Prevention and Building Codes

(15 U.S.C. § 2215(i))

Risk-Related Trend: According to the report to Congress, “Impact of an Aging Population on Fire and Emergency Medical Services,” published in May 2013, the growth of the population aged 65 and older affects every aspect of our society, presenting challenges to policymakers, families, businesses and health care providers, as well as fire and EMS.¹¹ These challenges require fire and EMS to find new and innovative methods to reach and serve people in this at-risk population. The fastest growing subgroup among older adults is the over 85 age group where the risks are even greater. All Americans, especially seniors and young people, remain at increased risk of injury or death in a home fire, a gap that could be narrowed by revision to existing federal programs and regulations.

Use of Most Current Model Codes to Enhance Built-In Fire Protection and Increase the Installation and Use of Residential Fire Sprinklers: While the responsibility for adoption and enforcement of building and fire codes is not a federal responsibility, USFA recommends that

¹¹ Annual Report to Congress, “Impact of an Aging Population on Fire and Emergency Medical Services,” FEMA, May 2013.

local jurisdictions adopt and enforce the latest edition of one of the model building and fire codes promulgated by the National Fire Protection Association and International Code Council.

USFA also recommends that smoke alarm requirements apply to both new and existing dwelling and sleeping units. The economic burden of such a requirement is estimated to be low, as smoke alarms are to be replaced every 10 years and batteries are to be tested at least twice a year and replaced as needed. In many jurisdictions, smoke alarms and replacement batteries are installed at no cost by fire departments or community service groups.

USFA further recommends that federal agencies involved in fire safety, home financial assistance, and construction (including mobile or modular construction) collaborate and implement guidelines that encourage current model building codes adoption (particularly installing residential fire sprinklers).

Wildfire threat and protection costs are escalating, particularly with increasing construction and projected impacts of drought upon the WUI . Using the whole community approach in the Presidential Policy Directive (No. 8) and encouraging the adoption and enforcement of the most current codes to state, local, tribal and territorial governments may assist in saving lives and property. The USFA is currently participating on a workgroup with other professionals to develop a process for the federal government to encourage adoption of codes and standards, including those that are related to the WUI.

As part of the whole community approach, a Fire Adapted Community acknowledges and takes responsibility for its wildfire risk, and implements appropriate actions at all levels. Actions address resident safety, homes, neighborhoods, businesses and infrastructure, forests, parks, open spaces and other community assets. These actions include supporting the adoption for consensus fire and building codes and standards.

V. Appendix

Section 5.1 — Acronyms

AFG	Assistance to Firefighters Grant
AHIMT	All-Hazards Incident Management Team
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
BYOD	Bring-Your-Own-Device
CBTs	Coffee Break Trainings
CEUs	Continuing Education Units
CIP	Critical Infrastructure Protection
CVVFA	Cumberland Valley Volunteer Firemen’s Association
CY	calendar year
DHS	Department of Homeland Security
EFO	Executive Fire Officer
EFOP	Executive Fire Officer Program
EMS	Emergency Medical Services
ESF-4	Emergency Support Function-4
FEMA	Federal Emergency Management Agency
FESHE	Fire and Emergency Services Higher Education
FY	fiscal year
GIS	Geographic Information System
HSIN-ES	Homeland Security Information Network for Emergency Services
MOSS	Management, Operations, and Support Services
NETC	National Emergency Training Center
NFA	National Fire Academy
NFDC	National Fire Data Center
NFIRS	National Fire Incident Reporting System

NFPA	National Fire Protection Association
NIFC	National Interagency Fire Center
NVFC	National Volunteer Fire Council
NWCG	National Wildfire Coordinating Group
PARADE	Prevention Advocacy Resources and Data Exchange
USC	United States Code
USFA	United States Fire Administration
USFS	United States Forest Service
WUI	wildland urban interface