

# **Advancing Wildland Fire Training for Fire Departments Implementation Plan**

Specific Implementation Actions Resulting from the  
2003 Report to Congress titled:

**The Changing Role and Needs of Local, Rural and  
Volunteer Fire Departments in the Wildland Urban Interface**

**Implementation Actions 1a-1c  
Task Group Findings and Implementation Items**

**May 2006**



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## Executive Summary

This plan describes implementation actions 1a-1c from the 2002 report “Changing Role and Needs of Local, Rural and Volunteer Fire Departments in the Wildland Urban Interface” and subsequent findings of the 2004 task group report “Advancing Wildland Fire Training for Fire Departments” (AWFT). The initiatives and work products described cover a five year period between FY2006-FY2012.

*The goals* of this implementation plan are to:

- Ensure firefighter safety is of utmost importance throughout all fire service organizations and agencies, in every wildland firefighting suppression operation.
- Through enhanced training opportunities, technical and financial assistance, and interagency coordination, facilitate safe, effective and efficient wildland and wildland urban interface (WUI) response **within local areas**, and thereby increase the wildland firefighting suppression capabilities and capacity of rural and volunteer fire departments (hereafter referred to as RFDs).
- Facilitate increased use of trained and qualified rural and volunteer fire departments on local incidents by state and federal agencies. Enhance coordination and communication among these partners, recognizing that effective and ongoing communication, coordination, and cooperation is essential toward the goal of building of alliances and trust between the structural and wildland disciplines of the American fire service.
- Seek ways to facilitate cost-effective wildland fire suppression operations.

*The focus* of the implementation actions within this report is the facilitation of the development, delivery and accessibility of comprehensive, time-efficient wildland fire suppression training with attention to rural and volunteer departments protecting WUI communities.

Four points essential to this plan are:

- It applies to wildland fire training to meet the needs of local departments mobilized for **local area incidents**. “Local area,” for purposes of this implementation plan, is generally defined as the sub-state region, such as zone, countywide or multi-county areas, etc.
- Full compliance with standards of National Wildfire Coordinating Group (NWCG) Publication Management System (PMS) 310-1 is necessary for **national** mobilization of firefighting resources.
- The NWCG wildland fire positions selected for the training, and delivery and equivalency alternative described in this report are Firefighter 1 (FFT1), Firefighter 2 (FFT2), Engine Boss (ENGB), and Strike Team Leader Engine (STEN). **Other positions were not considered for this plan.**

- Training has implications in qualifications. The performance-based system embraced by NWCG and endorsed in this report requires demonstrated practice of competencies prior to certifying that an individual is qualified to function at a full performance level during a wildland fire event.
- RFDs seeking to “crosswalk” equivalent elements of their structural training using the United States Fire Administration “Training Equivalencies Crosswalk Project” methodology must either be compliant with National Fire Protection Standard 1001 or 1021 or must demonstrate equivalency of their certification / training process, relative to their degree of overall comprehensiveness and comparability.
- The Authorities Having Jurisdiction (AHJ) and RFD firefighters must assume responsibility for consistent, accurate and comprehensive documentation of training and experience.

*The foundations* of the implementation actions within this report are:

- NWCG core competencies are the nationally accepted standard for the skills needed for safe and effective wildland fire suppression operations.
- Personal and organizational accountability. “Every individual within the fire service has to accept a personal responsibility for health, wellness, fitness for duty, skills development, basic competencies and adherence to safe practices” (NFFF/USFA 2004).
- Recognition of state and local structural firefighting organizations as essential cooperating partners in wildland fire suppression, particularly in the wildland-urban interface.
- NWCG’s recognition of the “...ability of cooperating agencies **at the local level** to jointly define and accept each other’s qualifications for initial attack, extended attack, and large fire operations.” ( NWCG PMS 310-1, January 2006, pg. 9).
- The role of local AHJ having the authority, knowledge, and expertise to assess their workforce and determine those individuals qualified for wildfire suppression actions. The authority to designate an AHJ for wildland fire suppression is determined by State law and may include fire department chiefs, or those individuals similarly qualified and situated in managing a fire protection organization. AHJs are responsible for the training, evaluation, assessment, testing and qualification of the personnel he/she manages. Should the AHJ determine that wildland response actions are appropriate for their organization, NWCG and the USFA expect them to engage their resources safely.

The role of federal agency partners include facilitation of a competency-based qualification and training program, reflection of these concepts in policy and direction, and investment in the initiatives and projects identified in this report.

# Introduction

In 2001, the National Association of State Foresters (NASF) convened a group of local, state and national firefighting interests. Their task, as articulated in *A Ten Year Strategy for Reducing Wildland Fire Risks to Communities and the Environment* was to “assess the training, equipment, safety awareness and services provided by rural, volunteer, and other firefighters who work in the wildland-urban interface and report to Congress.” The subsequent report, *The Changing Role and Needs of Local, Rural and Volunteer Fire Departments in the Wildland-Urban Interface* (2003) identified several significant issues, including critical deficiencies in wildland fire training systems for RFDs.

To assess identified RFD training issues, a task group with representatives from the Department of Interior (DOI), United States Forest Service (USFS), United States Fire Administration (USFA), North American State Fire Training Directors (NASTFD), the National Association of State Foresters (NASF), and the International Association of Fire Chiefs (IAFC) assembled in early 2004. The group authored an issue paper titled “Advancing Wildland Fire Training for Fire Departments” (AWFT) in October, 2004. AWFT proposed a number of concepts to address issues and challenges specific to RFD wildland fire training. After review and acceptance of the document, NWCG directed the task group to develop an implementation plan describing specific tasks and associated time lines for implementation. A smaller sub-group of agency and organizational representatives was formed in early 2005 to formulate appropriate implementation actions. Florida and Arizona were established as the two pilot states to use in the assessment of project implementation effectiveness.

In the following months, several complimentary projects were initiated. The USFA began work on “USFA Training Equivalencies Crosswalk Project” and sample crosswalks for use at the state level. Florida, Arizona, Montana, Oregon, Pennsylvania, Arkansas, Texas, and New Jersey were designated as pilot states for this project. Subsequent site visits and conference calls to these states provided important information for both the crosswalk project and the AWFT implementation plan.

To provide financial and technical resources to implement enhanced wildland fire training for RFDs, DOI established the FY06 “Ready-Reserve” and continued funding for the Rural Fire Assistance Program (RFA). The NASF, USFS, and Bureau of Land Management (BLM) committed additional funding for development of web-based, modularized NWCG wildland fire training.

This implementation plan describes implementation actions and resulting work products projected for the five year period between FY2006-FY2012.

## Roles and Responsibilities

The first of sixteen individual initiatives reported in the *Firefighter Life Safety Summit Initial Report* (Federal Emergency Management Agency (FEMA), National Fallen Firefighters Foundation, 2004) states “define and advocate the need for a cultural change within the fire service relating to safety, incorporating leadership, management, supervision, accountability and personal responsibility” (pg. 4). Implementation of the AWFT represents just such cultural change within the American fire service on a number of fronts.

Accountability and personal responsibility are two vital components of these changes. Everyone in the fire service has to accept a personal responsibility for health, wellness, fitness for duty, skills development, basic skills, and adherence to safe practices. The leaders and members of every fire department and fire organization must be accountable for the safety of their people, both collectively and individually. The members must also be accountable to each other. Therefore, it is necessary to delineate the important roles and responsibilities for the AHJ and RFD firefighters.

### Authorities Having Jurisdiction (AHJ)

The AHJ is defined as “an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installation or a procedure” (NFPA 1143, Standard of Wildland Fire Management, 2003 Edition pg. 1143-4). It is analogous to the “Home Unit/Certifying Official” as defined in the NWCG PMS 310-1. The authority to designate an AHJ for wildland fire suppression is determined by State law and implementation may include fire department chiefs, or those individuals similarly qualified and situated in managing a fire protection organization.

The local AHJ has a role in overseeing the training and assessing the qualifications of local RFDs. The AHJ has the authority, knowledge, and expertise to assess the workforce and determine those individuals qualified for wildfire suppression actions. AHJs are responsible for the training, evaluation, assessment, testing and qualification of the personnel he/she manages. Should the AHJ determine that wildland response actions are an appropriate activity for their organization, NWCG and the USFA expect the AHJ to assure safe and effective operations.

The AHJ is responsible for adequately testing and assessing the student’s ability to perform the skill(s) through on-the-job performance, simulations, drills and exercises, or a combination of like situations.

**The AHJ** has the authority to determine and issue approval that a firefighter has satisfied course objectives, demonstrated the ability to fully perform skills, and completely meets the qualifications for Firefighter 1 (FFT1), Firefighter 2 (FFT2), Single Resource Boss, Engines (ENGB), and Strike Team Leader Engines (STEN). Further, the AHJ is responsible for certifying and validating a firefighter’s qualifications through issuance of qualifications cards or other documentation of qualification, if applicable. **The AHJ is responsible for thoughtful and careful evaluation of a**

**firefighter's skills and overall suitability for all wildland firefighting positions, as such and assumes considerable professional responsibility in this determination.**

The AHJ is responsible for maintaining accurate and complete documentation of all training, fire assignments, and other information that supports his/her qualification and certification decisions.

## **The Firefighter**

Firefighters are responsible for thorough documentation of their training, certification and incident experience.

NWCG Position Task Books (PTBs) are *recommended* to document accomplishment of necessary skills and competencies by RFD firefighters training for wildland fire suppression incidents **at the local level only**. However, maintenance of an NWCG PTB is not mandatory for local-level mobilization, barring any local requirements.

Local jurisdictions may develop their own system of documentation, but these alternate record-keeping systems are expected to be comparable to NWCG PTBs in their level of detail and content.

**Firefighters seeking to be mobilized on *national incidents* will be required to fully comply with all requirements of the NWCG PMS 310-1, including maintenance of required NWCG PTBs.**

## **Federal and State Agencies**

The role of federal agency partners include facilitation of a competency-based qualification and training program, reflection of these concepts in policy and direction, and investment in the initiatives and projects identified in this report.

## **Clarification of the Application and Requirements of the NWCG PMS 310-1**

As a basis to begin a discussion about wildland fire training for RFDs responding to local-level incidents, it is essential to clarify the direction and intent of NWCG PMS 310-1.

With regard to the application of this qualification and certification standard to local, non-federal resources, particularly during initial actions, NWCG policy is summarized as follows:

The PMS 310-1 qualification/certification standards are mandatory only for national mobilization of wildland fire fighting resources. During initial action, all agencies (federal, state, local and tribal) accept each other's standards. Once jurisdiction is clearly established, *then the standards of the agency(s) with jurisdiction prevail*. (Emphasis added).

On a fire where a non-federal agency is also an agency with legal jurisdiction, the standards of that agency apply.

Prior to fire season, federal agencies should meet with their state, local and tribal agency partners to jointly determine the qualification/certification standards that will apply to the use of local, non-federal firefighters during initial action on fires on lands under the jurisdiction of a federal agency. The Geographic Area Coordinating Group should determine the application of PMS 310-1 qualification/certification standards for mobilization within the geographic area. NWCG memo dated March 22, 2004, issued by NWCG Chair Jim Stires. (Available on-line at [www.nwcg.gov/pms/docs/docs.html](http://www.nwcg.gov/pms/docs/docs.html)).

The NWCG PMS 310-1 states “The National Wildfire Coordinating Group (NWCG) recognizes the ability of cooperating agencies *at the local level* [emphasis added] to jointly define and accept each other’s qualifications for initial attack, extended attack, and large fire operations.” (NWCG PMS 310-1, January 2006, pg. 9). The entire NWCG PMS 310-1 may be downloaded from <http://nwcg.gov/pms/docs/docs.html>.

## **The NWCG PMS 901-1 Field Manager’s Course Guide (FMCG) Requirements**

Like the NWCG PMS 310-1, the NWCG FMCG (PMS 901-1) is an important document, as it provides “administrative information concerning the NWCG training curriculum” (FMCG, December, 2005, pg. 1). When assessing alternative course offerings or existing competencies gained from structural fire service training, it is essential to understand the direction and intent of this guide.

Specific to the determination of course equivalency, the FMCG provides clear direction:

Awarding course equivalency is an agency specific responsibility. Only agencies have the authority to certify their employees meet NWCG training requirements when alternative course offerings are used. Individual agencies will set guidelines for equivalency determination and may grant credit for courses they deem equivalent.

Courses being reviewed for equivalency must have:

A reason the alternative course was used or developed  
A benefit gained through awarding equivalency, such as:

1. Cost savings
2. Broadened target audience
3. Enhanced learning experience for students

When determining course equivalency, the AHJ should conduct a thorough analysis and document findings in accordance with his/her organization’s policy.

When conducting this analysis, the following guidelines apply:

- All learning and performance guidelines are met or exceeded in the equivalent course;
- Course prerequisites have not been altered;
- The equivalent course does not conflict or contradict established NWCG guidelines or standards; and,
- The equivalent is not numbered using the NWCG course numbering system.

A new analysis must be completed when the equivalent NWCG course is revised to ensure course equivalency continues” (NWCG Field Manager’s Course Guide, December 2005, pg. 3). The NWCG Field Manager’s Course Guide may be downloaded from <http://www.nwcg.gov/pms/training/fmccg.pdf>.

## **Training Materials and “Other Training Which Supports Development of Knowledge and Skills”**

NWCG course materials have been developed by subject matter experts and are readily available through the Great Basin Cache at the National Interagency Fire Center at a reasonable cost. Member agencies are encouraged to use these materials when possible.

Alternate training and training support materials are widely available through private-sector vendors. These include packaged CD-ROM course formats, textbooks, instructor guides, simulation programs, etc. The AHJ has the authority to determine such materials as equivalent to, or exceeding NWCG standards, and may use these materials in place of available NWCG course materials if desired.

Locally - delivered training that is not customary NWCG curriculum (i.e. vendor-provided curriculum) may be determined as equivalent to an NWCG course by an evaluator, the AHJ, or his/her designee.

The NWCG PMS 310-1 also speaks to alternate training and on-the job experiences as accepted alternatives for “other training which supports development of knowledge and skills.”

Personnel are not required to complete NWCG courses referenced under “Other Training Which Supports Development of Knowledge and Skills” in order to qualify for an NWCG position – unless specific agency policy dictates otherwise.

Personnel may learn skills from other sources (structural fire, law enforcement, search and rescue, or other agency specific training programs) rather than through actual performance on a wildland fire or in NWCG curricula.

Although training referenced here is not “required” the training provided in the identified courses or Job Aids, or knowledge and skills acquired through on-the-job training, work experience, or training determined by one’s agency, is the primary means by which personnel can prepare for position performance evaluation by obtaining specific knowledge and skills to perform tasks identified in the PTB. (NWCG PMS 310-1, January 2006 pg. 14)

The above statement is important on three fronts:

1. It acknowledges that critical skills and competencies can be gained by structural fire personnel through non-wildland fire work and training experience.
2. In the context of local-level wildland incident qualifications, it underscores the importance of accurate and thorough documentation of on-the-job experience and training. This is particularly significant if a firefighter is seeking to have his/her experience count toward qualifications for local-level deployment.
3. If a firefighter wishes to fulfill the requirements of NWCG PMS 310-1 and become qualified for national deployment, these experiences are valid to prepare him/her for performance evaluations in the NWCG PTB. Thorough documentation of all training and experience, in the format prescribed, is mandatory to meet the requirements of the NWCG PMS 310-1.

## **Implementation Tasks, Discussions and Timelines**

*The Changing Role and Needs of Local, Rural and Volunteer Fire Departments in the Wildland-Urban Interface* (2003) set forth a number of recommendations to “...improve these local forces’ ability to safely and effectively carry out their roles – particularly in the rapidly growing Wildland-Urban Interface.” The following implementation tasks and accompanying actions provide specific detail on the implementation of concepts proposed in the October, 2004 AWFT preliminary report to NWCG.

**Task 1 (a): Federal wildland fire agencies should work with local, state and national fire organizations to develop a performance-based wildland fire training “delivery package” that targets volunteer and rural fire departments (RFDs).**

**Implementation Action 1a (1): Pilot, and subsequently distribute USFA Training Equivalencies Crosswalk Project instructions for federal, state and local use.**

### **Alternative Training Concept**

No system has been established to recognize existing structural firefighter skills, qualifications and competencies. Members of RFDs possess core fire suppression operations, incident management and leadership competencies obtained in other areas of fire service training, including the National Fire Protection Association (NFPA) and National Fire Academy (NFA) courses, as well as through fire service curriculum offered at the state level. Analysis indicates the NWCG qualification system reflects a number these core competencies. In other words, there are important competencies shared between the structural and wildland fire disciplines.

This alternative training concept seeks to capitalize on those shared competencies in order to facilitate increased wildland fire suppression training at the local level, with the goal of increased safety and more efficient use of local firefighting resources.

Recent surveys indicate the majority of RFDs need wildland fire suppression training in order to safely and effectively carry out their duties. However, due to the expense and logistics required for attendance of traditional 32- to 40-hour NWCG courses, RFD firefighters often cannot participate in essential training. Additionally, RFD firefighters and fire officers must complete a *minimum* of 40 hours of state-required annual training for basic structural fire suppression, rescue, and emergency medical services (EMS) training. Wildland firefighting training adds to this yearly commitment. Consequently, it is essential to ensure time-efficiency in the development of any wildland fire training program.

By understanding and leveraging existing structural firefighting skills through careful analysis by wildland and structural fire training experts, effective wildland fire training can be developed, delivered and presented in alternative formats. Reduced redundancy in lesson plans accompanied by hands-on training experiences increase time efficiency.

Although time efficiency is important, firefighter safety is the foremost priority. The same competency analysis also identifies critical “gaps.” Critical wildland-fire specific knowledge and skills identified not addressed in traditional structural standards training will be delivered to RFDs in appropriate formats. For certain course sections, CD-ROM, web-based or other self-study formats may be deemed appropriate. Many other subject areas will require facilitated instruction in a classroom setting, field exercises, simulations, and other types of hands-on experience. “Shadowing,” mentoring and appropriately supervised experience at local incidents are also components of this learning system.

### **Establishment of Baseline Standard**

In order to ensure a true classroom training equivalency standard, the establishment of a baseline quality in training goals was necessary. Such a baseline would use an existing knowledge base and be derived from structural fire training. NFPA 1001 and 1021 were selected by the group to provide performance objectives for comparison to NWCG learning and performance objectives. Through this process, redundancies and gaps between required competencies and knowledge for wildland and structural firefighting disciplines were identified.

NWCG and the USFA entered into an agreement to develop a “crosswalk” of equivalent training or potential reciprocity structural fire and NWCG wildland fire training. This agreement will provide substantive assistance to local, federal and state cooperators in the determination of training equivalencies.

The crosswalk and matrix titled *USFA Training Equivalencies Crosswalk Project* was developed using the NWCG task books for four NWCG wildland firefighter positions: Firefighter 2 (FFT2);

Firefighter 1 (FFT1); Single Resource Boss, Engines (ENGB); and Strike Team Leader (STEN). The tasks were cross-referenced to the two National Fire Protection Association (NFPA) standards, 1001 and 1021, Firefighter 1 & 2, and Fire Officer, respectively. FFT2, FFT1, ENGB and STEN are the only NWCG positions considered for comparison in the *USFA Training Equivalencies Crosswalk Project*.

The *USFA Training Equivalencies Crosswalk Project* is an essential complimentary project to the AWFT. It will serve as an important tool to bridge structural and wildland firefighting competencies and training. This comparison facilitates future design and development of appropriate “gap” courses or learning modules, providing critical wildland fire skills to augment existing structural firefighting skills. It enables jurisdictions to appropriately weigh and assess existing training and skills sets to determine equivalencies and identify deficiencies.

**Neither the AWFT task group nor the USFA Crosswalk initiative requires or endorses the adoption of NFPA 1001 or 1021 standards by any fire department.** However, structural fire departments seeking to utilize the *USFA Training Equivalencies Crosswalk Project* must demonstrate a level of structural training gained through compliance to a recognized and comparably equivalent structural standard, meeting the spirit and intent of NFPA 1001 and 1021 standards.

Subsequent to NWCG acceptance of the crosswalk and matrix, USFA will distribute instructional materials and information on how the crosswalk is to be used. The crosswalk will then be evaluated by the USFA and structural partners in a number of diverse high-risk states, where there is a high degree of WUI fire potential and extensive cooperation between both the wildland and structural fire community in the management of wildland fires. The Crosswalk will then be refined appropriately, and USFA will distribute crosswalk packets and will be made available through USFA offerings.

**Implementation Action 1a (2): Development of modular, web-based / CD-ROM NWCG training courses, beginning with S-130 and S-190. Explore the use of a “gap” curriculum.**

### **New Delivery Methods, Formats and Timelines for Courses**

Generally, weekend and evening sessions of two or three hours is the standard venue for RFD training. The completion of a course requires several weeks time. Required training for wildland suppression training adds to this yearly commitment. Consequently, it is essential to ensure time-efficiency in the development of any training concept, while also ensuring critical training objectives are met.

The *USFA Training Equivalencies Crosswalk Project* identified shared skills between the structural and wildland fire disciplines, and, critical competency gaps were found as well. These gaps in wildland competencies will be addressed fully and in an appropriate instructional format, as described in the “Training Package Development.”

The AWFT task group also recognized that any training concept developed must meet the needs of a diverse fire service audience characterized by a wide range in variability of academic backgrounds, skills and experience. Many RFD members have completed extensive academic coursework and field exercises in structural firefighting, meeting NFPA or other recognized standards; use of the *USFA Training Equivalencies Crosswalk Project*. Other RFD members have minimal training in either wildland or structural fire suppression operations.

The task group sought solutions for rural fire training in order to:

- Facilitate local delivery of courses, reducing or eliminating need for travel to receive training, and minimizing related costs.
- Capitalize on existing fire suppression and emergency incident management skills, whether structural or wildland.
- Reduce required classroom time, when appropriate, by minimizing redundancy in curriculum, focusing on competency gaps between structural and wildland disciplines.
- Accommodate logistical needs of the rural fire service by packaging training into two or three hour modules.
- Create a training package that would have practical utility for a structural fire service audience with various degrees of training and experience, and is also practical for wildland firefighters.

## **Training Package Development**

Funding for analysis and repackaging of NWCG courses for modularized, web-based and CD-ROM format was made available through contributions from DOI, the USFS, and NASF. Additionally, staffing was provided to manage the project.

Design, development and implementation of web-based NWCG courses are initiated with a careful analysis of the specific course, as it is currently formatted and presented. NWCG development group personnel and other wildland and structural fire training subject matter experts determine which portions of the course are appropriate for self-study or pre-work, and those units which are only suitable as an instructor-facilitated, interactive classroom session. No classes planned for development are fully web-based, and instructors/course coordinators will be available to provide assistance to students.

Certain portions of the NWCG curriculum must be presented by skilled, experienced and properly qualified instructors. These include units on wildland-specific fire safety, fire behavior, wildland suppression tactics, and other critical discipline-specific areas. Quality field exercises, where indicated as a necessary component of the learning objectives, must also be included in the delivery of the course, even if other portions are delivered through alternate means.

Course analysis was completed for S-130 and S-190 in October 2005. Course development began in February 2006, should be completed in early 2007. The NWCG Training Group will continue the analysis and repackaging process for courses required for positions through STEN, as funding and

workload priorities allow. The timeline for this process will follow a revision schedule established by the NWCG Training Working Team (TWT).

Course segments will be modularized to facilitate three-hour blocks of instruction for maximum flexibility in presentation and content. Utilizing equivalencies identified in the NWCG Crosswalk, modules can be presented separately, if desired, to fill training gaps and augment existing structural competencies applicable for wildland firefighting. The course can also be used in its entirety for firefighters requiring all modules.

Another concept under consideration is the identification of a “gap” curriculum containing only the modules identified to address competency shortfalls in the NWCG/USFA Crosswalk project. As courses are developed and revised into modular formats, assembly of the “gap” curriculum, once identified, would be fairly straightforward.

### **Implementation Action 1a (3): Establishment of an interagency “AWFT” communications plan.**

Improved and integrated communications with the rural and volunteer fire service, and within federal and state agencies, is needed to ensure understanding of reciprocity issues, provide guidance in the interpretation of the NWCG PMS 310-1, publicize training opportunities and other implementation actions resulting from the *Changing Role and Needs of Local, Rural and Volunteer Fire Departments Suppressing Wildland Fires in the Wildland Urban Interface* report and the NWCG/USFA crosswalk project, a comprehensive communications plan is essential. An interagency task group will formulate and manage an ongoing communications program. Avenues of communication will include trade journals, organization web sites, and other resources.

### **Implementation Action 1a (4): Interagency Attendance at FY06 TRADE Conference**

Federal wildland fire training officials, NASF, NWCG TWT members, and organizations such as IAFC will meet semi-annually with the NASFTD at the annual USFA Training Resources and Data Exchange (TRADE) conference. The TRADE program is a regionally-based network designed to foster the exchange of fire and emergency-services related training information and resources among the federal, state and local levels of government. TRADE consists of the directors of the 50 state fire service training systems (NASFTD) and senior executive training officers from the nation’s largest fire departments. The National Fire Academy hosts the TRADE conference semi-annually in Emmitsburg, MD. The next TRADE conference is scheduled for fall, FY07.

**Table 1: Implementation Actions Summary: Task 1a**

Description	Product/ Outcome	Owner	Internal Due Date	External Due Date	Status
<b>1a(1) Review, accept and pilot /USFA crosswalk project</b>	Crosswalk distributed to users	NWCG USFA	05-07	09-07	Crosswalk accepted 15/09/06 IAFC and USFA to pilot / refine/ distribute in FY06-FY07
<b>1a(2) Develop modular, web-based NWCG courses</b>	Modular courses available online, CD-Rom formats	NWCG Training Development		S-130 and S-190 to be released 01-07	S-130 and S-190 storyboards developed. Add'l courses revised as scheduled.
<b>1a(3) Develop AWFT Communications plan</b>	Comprehensive communications plan, web site	Hawk DOI Davis USFS	Internal draft by 07/06	09/06	Implementation Plan accepted 05/05/06.
<b>1a(4) Interagency attendance at FY06 TRADE Conference</b>	Workshop/presentation at conference	USFA/Staff TBD		Fall 06	Details to be determined

**Implementation Task 1(b): Federal and state wildland fire agencies should work cooperatively to identify and establish a sufficient number of skilled wildland fire trainers in each state or region. This effort should include “train-the-trainer” programs that would build a cadre of locally-based training resources.**

**Implementation Action 1b (1): Conduct an Instructor Qualifications Workshop.**

There are an insufficient number of wildland fire instructor/trainers working at the local level. Consequently, firefighters in rural areas often must travel to state or regional facilities to obtain more than very basic wildland fire training, adding to the expense and logistical impacts of participating in training sessions. State representatives have expressed that many of their instructors are highly skilled (i.e. possessing teaching credentials, advanced state-approved instructor credentials or advanced degrees) and are fully capable of teaching NWCG courses. However, their credentials and experience do not meet NWCG instructor qualifications as articulated in current revisions of PMS 901-1, the *NWCG Field Managers Course Guide*. Many states uphold rigorous internal standards for their wildland fire instructors. Several state representatives believe there is a need for a dialogue regarding the issues pertaining to NWCG equivalency for instructors providing specific training courses for rural fire departments.

Representatives from the NWCG TWT, the North American State Fire Training Directors (NASFTD), NASF, IAFC, and other organizations will convene for a two- to four-day session in FY 06 to discuss and reconcile issues relating to wildland fire instructor qualification and equivalency issues for specified courses. The task group recommends consideration of a crosswalk-type of skills analysis to determine methods to recognize existing qualifications and an evaluation of position currency requirements for these discrete positions. This general discussion and issue clarification would facilitate avenues for development of local “train the trainer” programs.

### **Implementation Action 1b (2): Establish and perpetuate funding support for instructor training**

Ensure federal wildland fire training funding programs include opportunities for local RFD firefighters to receive instructor training. Most training sessions funded by existing rural fire service assistance programs emphasize wildland fire suppression training. Appropriate instructor training, or “train the trainer” classes should be a component of training opportunities currently funded.

**Table 2: Implementation Actions Summary: Task 1b**

Task	Product / Outcome	Owner	Internal Due Date	External Due Date	Status
<b>1b (1) Conduct instructor qualifications workshop</b>	Reconcile instructor qual. Issues for discrete courses.	NWCG TWT NASFTD IAFC USFA	FY 06	03/07	Pending
<b>1b (2) Establish and perpetuate funding support for instructor training</b>	Appropriate coordination and prioritization of funding	DOI USFS	FY 06-FY12	FY 06- FY12	Reconciliation of instructor quals. issues needed to develop “train the trainer” programs

**Implementation Task 1(c): State and federal agencies should expand and promote training opportunities that facilitate the formation of local Type 3 Incident Management Organizations (IMOs). State and federal assistance should be offered to help RFD firefighters attend training and gain experience needed to safely and effectively manage this responsibility within their jurisdictions.**

Several significant reports endorse the establishment of local Type 3 organizations to enhance initial and extended attack capabilities. These include: *Cost Containment on Large Fires: Efficient Utilization of Wildland Fire Suppression Resources* (NASF, 2000); the report to Congress *Changing Role and Needs of Local, Rural and Volunteer Fire Departments Suppressing Wildland Fires in the Wildland Urban Interface*, ( NASF, et al., 2002); *Large Fire Suppression Costs: Strategies for Management* (Wildland Fire Leadership Council, 2004); The 2003 National Academy of Public Administration (NAPA) report and *Containing Wildland Fire Costs: Utilizing Local Firefighting Forces* (NAPA, 2003).

A properly trained local Type 3 IMO enhances a community's ability to independently manage fires and other incidents. The ability to quickly deploy a local-level cadre of trained firefighters to manage small, less complex incidents enhances safety to firefighters and the community. Expedient and effective initial attack improves odds small fires will not increase in complexity, necessitating mobilization of a costly Type 2 or Type 1 Incident Management Team (IMT).

### **Standardized Requirements for Type 3 Incident Management Organizations**

In response to direction given by the Wildland Fire Leadership Council's report "*Strategic Issues Panel on Fire Suppression Costs*" NWCG tasked the Incident and Operations Standards Working Team (IOSWT) to develop standardized requirements for Type 3 IMOs.

Six assumptions or guiding principles were adopted to facilitate the development of these requirements:

- Emphasize the development of Type 3 complexity IMO capability rather than Incident management teams.
- Emphasize flexibility in organizational structure in order to utilize local capabilities and meet local needs.
- Establish minimum standards and qualifications for Type 3 complexity IMO functional areas.
- Emphasize the ability of the Incident Management System (ICS) to expand and contract based on incident complexity and need while maintaining span of control.
- Emphasize the Type 3 complexity organizational structures may differ in response to local needs.
- Utilize existing charts for Type 3 complexity IMO functional areas found in the *Interagency Standards for Fire and Fire Aviation Operations* and the Extended Attack Chart found in the *Fireline Handbook*.

The IOSWT identified functional responsibilities within a Type 3 complexity organization, but “... **not** recommend a national minimum Type 3 IMT structure. This allows maximum flexibility for local agencies to form Type 3 complexity organization from local qualified and available personnel but does not limit local agencies from establishing standing Type 3 organizations if they choose.”(*Consolidated Issue Paper*, Incident and Operations Standards Working Team, May 2005)

Table 3 illustrates minimum qualifications required for individuals performing Type 3 complexity functions, as prescribed by the IOSWT:

**Table 3: Type 3 Organization Minimum Qualifications\***

Type 3 Functional Responsibility	Specific NWCG or Equivalent Qualification Standards Required to Perform ICS Functions at Type 3 Level.
Incident Command	Incident Commander Type 3
Safety	Safety Officer, Line
Information	Public Information Officer
Operations	Strike Team Leader or Task Force Leader
Division (geographic portion of line)	Single Resource Boss
Aviation	Appropriate aviation management level
Logistics	Local entities establish level of skill needed to perform in function (food, sleep, sanitation etc.)
Planning	Local entities establish level of skill needed to perform in function (IAP, maps etc.)
Finance	Local entities establish level of skill needed to perform in function (timekeeping, contracts, agreements etc.)

\*Excerpt from *Interagency Standards for Fire and Aviation Operations*. Chapter 11, pg. 11-4. (Fire and Fire Aviation Operations Task Group, National Interagency Fire Center. January, 2006)

Specific discussion of Type 3 incident command, Type 3 incident characteristics, functional responsibilities, and qualifications standards required are found in the *Interagency Standards for Fire and Aviation Operations*. (Fire and Fire Aviation Operations Task Group, National Interagency Fire Center. January, 2006 Chapter 11, pg. 11-4).

### **Critical Requirements and other Considerations for Type 3 Incident Management Organizations**

Type 3 Incidents must be managed by a qualified Type 3 Incident Commander (ICT3). ICT3s must meet NWCG or equivalent qualifications standards. ICT3s “must not have concurrent responsibilities that are not associated with the incident, and they must not concurrently perform single resource boss duties” (Fire and Fire Aviation Operations Task Group, National Interagency Fire Center. January, 2006 Chapter 11, pg. 11-3).

The ICT3 has the latitude to establish the appropriate organizational structure, within this standard, required to manage incidents. The ICT3 is “expected to exercise their authority and establish appropriate organizational structure for each incident based on complexity, and span of control” (Fire and Fire Aviation Operations Task Group, National Interagency Fire Center. January, 2006 Chapter 11, pg. 11-3). If an incident escalates beyond the capability levels established for the Type 3 organization, another complexity analysis must be completed to validate the need for a higher level of incident management (IMT2 or IMT1).

To establish a suitable structure for their Type 3 IMOs, local governmental entities must jointly identify the skill levels required for incident personnel to meet their particular needs, beyond the minimums established. Additional qualifications levels may be required locally, at the discretion of the AHJ.

It is important to note that with needed technical support and financial assistance, Type 3 IMOs can be formed in regions having the personnel, infrastructure and resources to facilitate their establishment. However, these organizations are not appropriate or practical in other areas. Small, dispersed communities with poor social cohesion, difficult regional economic conditions, or rural areas with transient or older populations may have difficulty maintaining a consistent roster of RFD staff.

The first of sixteen individual initiatives reported in the *Firefighter Life Safety Summit Initial Report* (FEMA, National Fallen Firefighters Foundation, 2004) states “define and advocate the need for a cultural change within the fire service relating to safety, incorporating leadership, management, supervision, accountability and personal responsibility” (pg. 4). High standards for leadership, management, supervision and accountability are essential for the establishment and development of safe and effective local Type 3 IMOs. Type 3 wildland fires are statistically among the most hazardous to firefighters. **Support and assistance for the establishment, development and perpetuation of these teams is endorsed here, but local jurisdictions must make a full and robust commitment to ensure Type 3 IMO activities are safe and appropriate for their organizations, given their level of training, experience and qualifications.**

### **Implementation Action 1c (1): Establish a baseline national inventory, by geographic area, of existing Type 3 organizations.**

Using the NWCG standard for Type 3 organizations, GACCs and State Foresters will be queried to determine current Type 3 capacity across the country. This survey will assist in determination of:

Geographic gaps in Type 3 organizational capacity.

- Levels of training, technical support, and financial assistance necessary to bolster capacity of existing teams, or to establish new teams, where appropriate and feasible.
- The most effective methods to prioritize and leverage Rural Fire Assistance (RFA), Volunteer Fire Assistance (VFA), Ready-Reserve, and other fire service funding opportunities.

- Efficacy, cost-effectiveness, and cost-saving benefits of state and federal efforts, over time, in building Type 3 IMO capacity.

The results of the survey will provide information to help focus efforts on increasing the number of Type 3 IMOs and assist agencies in the development of effective programs to augment and sustain existing organizations.

### **Implementation Action 1c (2): Assessment of long-standing Type 3 IMOs to determine factors favorable to their success.**

A task group will be formed to focus on Type 3 IMO development. The group will select and assess known long-standing Type 3 IMOs to determine the factors contributing to their success, needs for continued sustainability, and challenges to training and development. The findings will augment information collected from the Type 3 baseline survey.

### **Implementation Action 1c (3): Leverage available funding resources for training focused on Type 3 IMO Development.**

Utilizing information from the GACC surveys and the Type 3 IMO assessment, leverage RFA, Ready Reserve, and VFA funds, as well as federal preparedness dollars to emphasize training and technical support activities to facilitate the organization of local Type 3 organizations. DOI bureaus, USFS, and the NASF will coordinate funding priorities and leverage funds through means of an established interagency work group.

### **Implementation Action 1c (4): Assess the level of available federal financial assistance programs for RFDs, particularly those that serve populations of 10,000 or less. Step up efforts to coordinate and leverage federal and state assistance programs.**

As cited in the 2003 report *Changing Role and Needs of Local, Rural and Volunteer Fire Departments in the Wildland Urban Interface* RFDs are often poorly funded for the breadth of their responsibilities (pg. 19). The 2005 NASF Fire Department Survey indicated that the top issue of concern relating to the management and administration issue of more than 15,000 fire departments surveyed is “funding.” The 2002 *Needs Assessment of the U.S. Fire Service Report* indicated that rural fire departments serving populations of fewer than 5,000 are dependent on local revenue and taxing districts for operating funds. For communities of less than 2,500 residents, RFDs commonly reported that donations and fundraisers as an important source of operating funds. Insufficient personal safety equipment, aging firefighting vehicles, inadequate training, and sub-par communications equipment were also cited, reflecting findings of previous RFD surveys.

To address these issues, Congress authorized and funded several fire service grant programs; these include the Volunteer Fire Assistance (VFA), overseen by the USFS and administered by each state's forestry agency. The DOI Rural Fire Assistance program (RFA) is administered by the BLM, National Park Service, US Fish and Wildlife Service, and the Bureau of Indian Affairs. The Department of Homeland Security/FEMA administers the Assistance to Firefighters grant program. Through the Federal Excess Property Program (FEPP), the USDA acquires excess property, such as firefighting vehicles, suppression equipment, aircraft, and firefighting vehicles from various federal agencies, and loans the property to the State Forester. Most recently, the DOI "Ready Reserve" program provides funds for wildland fire suppression and leadership training. These programs have helped RFDs acquire resources needed to perform their duties.

Some efforts to coordinate these programs have been successful, but work remains to maximize their level of service to RFDs, especially those that serve smaller populations of 10,000 or less. Several factors appear to serve as barriers, at least to some departments, in securing competitive funding assistance:

- Differing eligibility requirements, administrative timelines and procedures, and requirements for cost sharing or matching continue to confuse applicants.
- Smaller RFDs report difficulty in applying for or receiving larger grants, such as the Department of Homeland Security/FEMA Assistance to Firefighter program, because they have difficulty understanding or completing the application process, cannot afford to meet match requirements, or were unsuccessful in the evaluation and award process.
- Future federally-based funding for most fire service programs is forecasted to decline to varying levels, and some programs are proposed for elimination.

An interagency panel, including representatives from the rural fire service, would assess and compare federal fire service assistance grant programs in order to:

- Analyze grant program statistics to determine which sectors of the fire service (i.e., urban departments vs. rural) receive grants, from which programs assistance was received, and the types of requests approved. Determine if gaps in assistance exist for RFDs, with special attention to those RFDs serving populations of less than 10,000.
- Determine current RFD needs through available grant application and survey data, and determine if these needs are being serviced adequately through fire service funding programs, as they are currently structured.
- Determine how existing funding can best be leveraged and coordinated.
- Establish increased dialogue and communication between funding program administrators, and improve program information flow to customers.
- Determine how to coordinate and improve technical assistance to RFDs that report difficulty in securing funding.

## **Implementation Action 1c (5): Provide opportunities for state and local firefighters to attend NWCG Leadership Training Courses.**

Leadership, or problems associated with its practice on the fireline, has been cited as a factor contributing to wildland fire accidents for many years. In addition to general wildland fire suppression training, leadership training is particularly critical to improve RFD firefighter safety and effectiveness. Not only is leadership essential in firefighting operations, but in all public safety operational areas, especially as RFDs continue to assume expanded all-hazard responsibilities locally. Numerous studies and reports have stressed the importance of leadership development in the fire service. The Final Report of the Interagency Review Team on the South Canyon Fire advised “attitudes and leadership are universal factors that influence safe fire suppression.”

The Leadership Task Group to the NWCG TWT established a distinct Leadership curriculum path designed to provide leadership skills training at all stages of an individual’s career. This program consists of formal instruction sessions as well as non-traditional leadership development opportunities through self-directed continuous learning.

A two-year pilot offering of the classroom sessions would be conducted in the seven identified pilot states. For the first year (FY07) each pilot state would receive two sessions each of L-180, “Human Factors” and L-280 “Followership to Leadership.” These two sessions are particularly important for “leaders of people” at the entry-level to the single resource boss/engine captain level. The sessions would be conducted free of charge, aside from travel expenses, and the two sessions would accommodate about 104 students per state.

In year two (FY08) each pilot state would receive one session each of L-380, “Fireline Leadership” L-381 “Incident Leadership.” These courses are targeted to “leaders of leaders” such as those at the structural battalion chief level, and ICT3s. In addition, each state would receive scholarships for one or two slots for L-480. L-480 is targeted to those personnel qualified through NWCG PMS 310-1 to advance to various positions within Type 2 IMTs. Additionally, an L-180 and L-280 session would be held in each state. The sessions would be conducted free of charge, aside from travel expenses, and would accommodate about 72 students per state. Another session of L-180 and L-280 would also be hosted for each state in FY08.

## **Implementation Action 1c (6): Pilot use of the 3-D Simulation Program (SIMS)**

In 1995, the Forest Service National Training Office forged a partnership with USFA in order to accelerate development of a useful and realistic wildland fire simulation program suitable for use with agency computer systems. In early 2002, the three-dimensional wildfire simulation program (SIMS) was released, and recent program and technology enhancements have improved the program. The program is now ready for release and is available to fire departments and other users free of charge.

The SIMS software allows instructors to write their own scenario “scripts” and recreate desired scenes. Other features include:

- Vegetation types can be changed as needed.
- Digital Elevation Model (DEM) can be imported into the program, allowing instructors to create realistic looking specific local incident scenes using USGS quadrangles.
- Graphics including trees, shrubs, roads, structures, hydrants, lakes, and vehicles can be added to the scenes. Scenes can be saved for later use.
- Customized resource lists can be created in a CAD-type format
- Utilizes a basic BEHAVE spread model classed as low, moderate, or high for grass, brush or timber litter.
- Smoke and fire characteristics and the skyboxes that are the back drop panel for the scene. Editor can create a slash model.
- The model will run a fire up to 1200 acres in size. Memory upgrades will enhance performance and allow for larger incidents.
- All-risk scenarios (flood, Hazmat) can be created.
- Structure fire simulations can feature objects such as trash bins, cans of gasoline, vehicles allowing for modification of basic scenarios for structural incidents.
- The simulation can be sent to any number of student view stations on a LAN or WAN network, and each view can be different.
- The simulation can be saved and replayed for after action reviews. The instructor module has a time stamp function with instructor note and you can go back to these time stamped events and render play back to the students.

Federal, state and local training personnel from the 11 pilot states surveyed for the NWCG/USFA Crosswalk and AWFT implementation plan will have the opportunity receive the software and attend a training session within their state. Information obtained from the pilot exercise will be utilized to plan for full-scale distribution and accompanying training needs.

## **Implementation Action 1c (7): Pilot Trainee Assignment Program**

### **Local-Area Trainee Assignments**

Substantive training assignments are often difficult to secure for RFD firefighters. They usually hold paid jobs or own local businesses and cannot be mobilized for the customary 14-day assignment. Shorter, locally based assignments (within one day's drive) are needed to help RFD firefighters get essential on-the-ground incident management experience.

The task group proposes the establishment of a committee to initiate a trial RFD trainee assignment program within one of the existing pilot states (to be determined). Findings of the pilot study would be forwarded to the NASF fire committee and NWCG.

The most effective and flexible option for establishing local training assignments, maintaining a trainee roster and setting assignment priorities is appropriately based at the local level. Establishment of a trial program requires coordination between state, federal and local cooperators of the state of a geographic area; establishment of a memorandum of understanding or other administrative instrument. Procedures and program guidelines, delineation of roles and responsibilities, and establishment of appropriate dispatch and mobilization criteria can be collaboratively established between local, state and federal cooperators. Mentoring and shadowing programs are appropriate for training and instruction in this environment.

Documentation of experience, competencies and skills demonstrated is critical. Use of a NWCG PTB or a comparable, alternate document is needed if firefighters want to use a combination of experience and training to qualify for positions at the local level. In their role as a certifying official, the AHJ must secure appropriate documentation and have knowledge of a firefighter's ability in order to support qualifications he/she makes.

**Table 4: Implementation Actions Summary: Task 1c**

Task	Product	Owner	Internal Due Date	External Due Date	Status
<b>1c(1) Establish a baseline national inventory of Type 3 organizations</b>	Inventory/ Issue Paper	Hawk-DOI Dougherty USFA Artley- NASF	Survey issued 02/15/06	Reply due 06/15/06 Analysis complete 08/15/06	Pending
<b>1c (2) Assessment of successful Type 3 organizations</b>	Analysis/ Issue Paper	Hawk-DOI Dougherty USFA Artley- NASF	Teams selected for analysis 06/01/06	Analysis complete 10/01/06	Pending
<b>1c(3) Leverage Resources for Type 3 Org. Development</b>	Coordination of funding and priorities	DOI USFS	FY 06-FY12	N/A	Ready Reserve funding distributed 02/20/06
<b>1c (4) Assess and compare existing federal funding sources</b>	Analysis of program service to RFDs serving 10,000 or less	DOI USFS RFD Reps NASF DHS /FEMA	Q2, FY07	FY08	
<b>1c (5) Provide opportunities for NWCG Leadership Courses</b>	RFD members completing training	Sutton/Cook DOI USFS	FY07	FY08	Curriculum Developed Cadre available
<b>1c(6) Pilot use of SIMS</b>	Conduct SIMS sessions in pilot states	USFA USFS	FY 06		Schedule to be determined
<b>1c(7) Pilot trainee assignment program</b>	Options for trainee programs/ support assessed and tested in pilot states	NASF NASFTD	FY06-07		Pilot state selections to be determined

## Conclusion

It is important to note that the task of building capability and capacity of local, rural, and volunteer fire departments will undoubtedly extend far beyond 2012. Lack of basic wildland fire training and equipment has historically hindered the ability of RFDs to conduct safe, efficient and effective initial and extended attack of wildland fire. Recent fire service grant programs have helped many departments reach a basic level of wildland training and capability. However, RFDs continue to struggle with persistent staffing turnover, poor funding, changing rural demographics, and an increase in service areas categorized as “WUI.” Funding and technical assistance to maintain and improve rural fire department training and local wildland fire protection capability must be an ongoing priority for state, federal and local governments.

Subsequent to NWCG acceptance, member agencies should distribute this implementation plan with a letter of direction to field units articulating support for implementation of local and agency-level action items. Federal policies need to be adjusted to reflect the authority of local jurisdictions to serve as cooperating agencies and qualify their own personnel to NWCG standards, utilizing the guidelines and requirements provided in this implementation plan. Federal investments that support this shift will be necessary to facilitate a cost-effective, performance based approach to wildland fire suppression training and qualifications with an expanded interagency community.



# Appendices

## A. Group Participants

The Bureau of Land Management was assigned as Action Lead Organization. Kelly Hawk, Community Protection Specialist, BLM-NIFC, was designated as the Chairperson of the group. Listed below are the primary participants in this effort. Numerous other professionals from the interagency fire service community contributed time and expertise in the formulation of this plan, and we extend our appreciation and thanks.

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## B. References

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