Adopting NFPA Standards for Firefighter Certification and Training in California

A White Paper

April 2003

California Fire Chiefs Association

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Executive Summary

Firefighter training and certification programs in California face serious challenges. Evidence suggests that, as currently organized, fire training programs are not keeping pace with national standards. Since 1935, California has developed its own curricula and programs to meet firefighter demands for professional development and certification. However, budget cuts, outdated curricula, and lack of unity among fire agencies have not allowed the state to keep up with contemporary program development and demand.

This analysis examines the feasibility of adopting National Fire Protection Association (NFPA) standards as the basis for firefighter certification in California. These voluntary standards have been identified as a benchmark in the industry and will allow for continual professional development. Unlike other policy analyses that compare several alternatives, this analysis focuses on only one alternative: should the California fire service adopt the National Fire Protection Associations (NFPA) firefighter and associated standards for training and certification?

On the basis of this evaluation it is recommended California should adopt NFPA standards as the basis for certification and professional development. In addition, commercially available programs and curricula will allow State Fire Training to focus on certification and not necessarily on program development. As the training needs for firefighters increase so does the need for professional, current, and relevant programs. California, the nation's most populous state, must now decide if the time is right to once again take the lead in fire service training. Letting the present trend of using outdated programs continue is not an appropriate alternative.

Adopting NFPA Standards for Firefighter Certification and Training in California

The State of California is at a crossroads when it comes to firefighter training and certification. Outdated programs, fiscal constraints, and increased training demand have all put a burden on state firefighter training. Since 1935, California has trained firefighters using its own curricula and training programs. Over the years thousands of firefighters have been through various training programs offered by State Fire Training with adequate results. Unfortunately, these training programs often have not been kept current enough to be considered professional development. However, faced with severe cutbacks, a lack of unity among fire agencies, and different standards for different agencies, firefighter training and certification needs a change.

National standards for firefighter training and certification currently exist and at least thirty states have adopted these standards. The National Fire Protection Association (NFPA) develops these standards through consensus and is considered a benchmark in the fire service. Standards are now available for Fire Fighter, Fire Officer, Chief Officer, Investigator, Fire Service Instructor, Rescue Technician and many more (See Table 4). In California, these standards are currently recognized by state fire training but not used. The NFPA mission is to reduce the worldwide burden of fire and other hazards on the quality of life by developing and advocating scientifically based consensus codes and standards, research, training, and education (National Fire Protection Association). Founded in 1898, this international, non-profit membership association has grown to over 75,000 individual and organizational members, both public and private.

NFPA's fire codes and standards have become the preeminent guideline for many industries to adopt including fire service and construction. NFPA's 300 safety codes and

standards influence every building process, service, design, and installation in the United States, as well as many of the ones used in other countries (National Fire Protection Association).

The terms standard, accreditation, and certification are related but must be clearly defined in order to have a comprehensive understanding of the concepts described in this paper (International Fire Service, 2003). In general, entities are accredited and people are certified.

Accredit: To give official authorization to or approval of. To provide with credentials; to recognize an educational institution as maintaining standards that qualifies its graduates for admission to higher or more specialized institutions or for professional practice.

Certify: To attest authoritatively, such as to attest as being true or as represented or as meeting a standard.

Standard: Something set up and established by authority as a rule for the measure of quantity, weight, extent, value, or quality.

1. Problem Identification

Chief Jeff Meston, of the Novato Fire Protection District, developed the following problem statement: "National standards for firefighter training are changing more rapidly than the delivered programs and curricula. The California system must adapt to provide current and contemporary training that reflects both state and federal legislation and mandates." This problem statement reflects the opinion of many in the California fire service and will be examined more closely in this paper.

California is made up of 58 counties and approximately 950 fire departments, both career and volunteer. In the aggregate some 30,000 men and women represent the fire service in the nations most populous state and demand for services keep growing. Although the number of fires has drastically decreased throughout the years to approximately 6% of total responses nationally, emergency medical calls have risen creating this increase in service demand. Added to a high attrition rate the fire service, in California, will see an approximately 21% workforce change in the next three years (Revere, 2003).[1] Due to the fact that so many new and existing firefighters demand services from fire training necessitates effective and current programs.

History

Through the California Health and Safety Code (Section 13157), the California Fire Service Training and Education Program has legislated authority to carry out fire training programs. Under the California Fire Service Training and Education Act, the California Fire Service and Education program was established in the Office of the State Fire Marshal. A consolidation of the Office of State Fire Marshal and the California Department of Forestry and Fire Protection (CDF) allowed CDF and State Fire Training programs to unite. California fire training and certification is currently under CDF and the California Fire Service Training and Education System (CFSTES).[2] This training system is comprised of staff from CDF and CFSTES whose primary focus is on developing and maintaining the training curricula (California State Fire Training). California firefighter training can be traced back to the 1920's and the same basic structure remain in place

[1] This attrition rate is partly due to new retirement programs being adopted statewide that allow firefighters to retire at an earlier age, 50 as opposed to 55.
[2] CFSTES is a system of course delivery and certification. CFSTES outlines certification tracks for both volunteer and professional firefighters. The certification tracks range from firefighter to chief officer.

today. Realizing the value of a statewide training program, in 1935 Chief Hugh Morris of San Mateo began working for the expansion of training. He spoke before a regular meeting of the Southern California Fire Chief's Club at Brawley, at which time a resolution was passed urging the State Department of Education and the State Fire Marshal's Office to provide additional itinerant instructions for fire training for the State of California (Coleman, 1994).

Fire Training Today

The State Fire Training Strategic Plan first recognized problems with curriculum currency in 1974. Over the years attempts have been made to effectively update curricula and programs some meeting with success, others not. In March of 2003, the California Fire Training Strategic Plan Committee drafted in its task force meeting the problems state fire training currently faces (personal communications, March 28, 2003). [3] When compared to the 1974 strategic plan the identified problems looked strikingly similar:

Table 1: Fire Training Strategic Plan Committee -Identified Problems

1. Lack of transportability: training is not necessarily recognized between agencies or states.
2. Training is complex to deliver and administer.
3. Curricula lack currency.
4. Funding issues: a continuous problem.
5. Lack of unity and cohesiveness statewide.
6. Lack of quality assurance.
7. Lack of reciprocity.

[3] This was a meeting the author attended in Sacramento, CA. to identify some existing problems with state firefighter training and certification.

In addition to identification of problems, the committee made some assumptions as well: The "ideal system" would be diversified and cohesive with a steady funding stream. The following outlines some of the committee's criteria for the future:

Table 2: Criteria for the Future

1. The system would be an integrated system that will continue to grow to consistently meet the demands of today's fire service and anticipate the needs of tomorrow.
2. The system would meet the needs of all firefighters and stakeholders.
3. The system would include a process for quality assurance in both products (curricula) and delivery of service (instructors) and infrastructure (equipment and facilities).
4. The system would include a fiscal mechanism to develop and maintain both product and delivery, as well as sustain itself for the future.
5. The system would have mutually unified governance.

Literature Review

In order to perform a comprehensive literature review many sources were queried for information. Governmental entities, libraries, colleges, magazine articles, journals and working papers were identified and evaluated for appropriate data and content specific to the identified problems. A comprehensive and interesting Needs Analysis was conducted for relevant information and provided pertinent data for this project. Research also involved a review of the literature from the California Department of Forestry and Fire Protection/ State Fire Marshal's Office and the National Fire Academy's Learning Resource Center. In addition the review included the examination of standards as drafted by the National Fire Protection Association (Table 4), specifically Standard 1000 Standard for Fire Service Professional Qualifications Accreditation and Certification

Systems. Finally, a review of federal and state regulations and mandates were conducted as they, too, can affect firefighter training and safety. Unfortunately there exists limited research on adopting NFPA firefighter standards.

Stakeholders

Many stakeholders can be identified that will be affected by any change in firefighter training and certification. It is important to note that each entity holds high regard for industry professionalism. The table provided below lists some of the organizations that will have input on firefighter training and certification in California. Even though an organization is not identified in this paper does not mean they will not have a say in, or be influential in, the final outcome(s).

Table 3: A partial list of identified stakeholders

California Department of Forestry and Fire Protection	Office of State Fire Marshal	Fire Technology Directors	Northern California Training Officers Association
Southern California Training Officers Association	California Fire Chief's Association	League of Fire Chief's Division	California State Firefighter Association
California Professional Firefighters	Chancellor's Office, California Community Colleges	California Conference of Arson Investigators	Fire Prevention Officers North
Fire Prevention Officers South	California Joint Apprenticeship Committee	California Governors Office of Emergency Services	California Metro Chief's Association

This paper will recommend a solution to the current training concerns for the California Fire Chief's Association through the analysis of the research. The California Fire Chief's Association will use this information to help formulate a training and certification program for the future. Regardless of what has occurred in the past the

future is key. One important aspect of policy analysis revolves around the concept that, "Policy is about the future, not about the past or present (Bardach, 2000 p. 27)," and the future must always hold promise regardless of current or perceived shortfalls.

2. Methodology

The research for this analysis has been divided into three primary sections: (1) Review of the literature (2) Review *smart practices* in the industry examining efficient systems, and (3) Survey a cross section of fire service professionals as to their perceptions of fire training in California. This research allows for a well-rounded look into firefighter training and certification needs in California.

Smart Practices

Smart practices, or some might call best practices, allow for a review of efficient training systems in the industry. As with many programs someone or some agency has already tried to produce a specific outcome and the analyst has just to match the desired program with the desired outcome. Reinventing established programs can be time consuming and expensive only to find out that the desired outcome being sought had already been achieved elsewhere. According to Bardach (2000), it is only sensible to see what kinds of solutions have been tried in other jurisdictions, agencies, or locals. He advises analysts to look for those solutions that appear to have worked pretty well, tries to understand exactly how and why they might have worked and evaluates their applicability to one's own situation.

Firefighter Training Survey

The survey method was chosen for primary research as it allows a quick look into the opinions of others. O'Sullivan and Rassel (1999), in their book *Research Methods for Public Administrators* argue that agencies should use questionnaires to monitor and review services when needed. The survey titled, *Firefighter Training Survey*, was sent via email to 250 fire service professionals in California. The intent of this survey is to learn more about current perceptions of firefighter training in California, and determine if adopting National Fire Protection Association firefighter standards would be appropriate.

Survey Sample

A survey was sent to a sample of 250 California fire training officers and fire chiefs. This survey used a six-point Likert –scale to measure perceptions (See Appendix B). The respondents had a choice of either sending back the surveys via email or fax. The survey responses were kept completely confidential by eliminating any reference to the identity of the respondent prior to any tabulation. The comprehensive data were compiled into a table that did not identify any personal information (See Appendix C).

Sampling Parameters

***Population*:** All California fire training officers and fire chiefs.

***Sampling frame*:** All training officers and fire chiefs on California Fire Chiefs Associations Listserv.

***Sampling design*:** Nonprobability/Purposive sampling.

***Sample*:** 250 units picked from sampling frame.

***Unit of analysis*:** California Fire Training

3. Research Results

Review of the Literature

NFPA Standards

The National Fire Protection Association (NFPA) is an international nonprofit organization founded in 1896. It encourages the broadest possible participation in code development and recruits more than 6,000 volunteers from diverse professional backgrounds. For over one hundred years model codes and standards developed through a full, open, consensus-based process has been the hallmark of the fire service in the United States. NFPA offers the opportunity for all interested parties to participate fully and offer insight and expertise when developing these codes and standards. The NFPA process is unique in the level of public participation allowed in the development of its codes and standards. For example, NFPA 1000 (The Standard for Fire Service Professional Qualifications Accreditation and Certification Systems-2000 Edition) has members on the technical committee from the U.S., Canada, and from both public and private sectors.

The wide government use of voluntary consensus codes and standards developed by private, non-profit organizations is a practice somewhat unique to the United States. These codes and standards provide an effective and cost effective means for government to draw on the experience of a broad spectrum of knowledgeable professionals. All NFPA codes and standards are revised and updated every three to five years, in revision cycles that generally take 104 weeks to complete (NFPA, 2003). These revision cycles generally include a public comment period in which anyone may submit a response to the proposed standard. Consensus codes and standards have been widely adopted by state, local and federal governments in large numbers including California. The federal government

through federal legislation has mandated that federal agencies use consensus-based standards when they meet agency needs (NFPA, 2003).

NFPA has many standards that affect firefighter training and development (See Table 4), many more standards exist which affect the fire service in general. Adopting standards that are recognized internationally and training to those standards provides a basis for professional development.

Table 4: 1000 Series NFPA Fire Fighter Standards:

1000	Standard for Fire Service Professional Qualifications Accreditation and Certification System
1001	Standard for Fire Fighter Professional Qualifications
1002	Standard for Fire Apparatus Driver/Operator Professional Qualifications
1003	Standard for Airport Fire Fighter Professional Qualifications
1006	Standard for Rescue Technician Professional Qualifications
1021	Standard for Fire Officer Qualifications
1031	Standard for Professional Qualifications for Fire Inspector and Plan Examiner
1033	Standard for Professional Qualifications for Fire Investigator
1035	Standard for Professional Qualifications for Public Fire and Life Safety Educator
1041	Standard for Fire Service Instructor Professional Qualifications
1051	Standard for Wild Land Fire Fighter Professional Qualifications
1061	Standard for Professional Qualifications for Public Safety Communicator
1071	Standard for Emergency Vehicle Technician Professional Qualifications
1081	Standard for Industrial Fire Brigade Member Professional Qualifications
1521	Standard for Fire Department Safety Officer

National Accreditation and Certification

Professionalism has long been a goal sought by fire service personnel, but it has only been within the last 25 years that a system has evolved to produce national professional qualifications standards for the fire rescue service. Standards are now available for many firefighter and associated positions (Pro Board, 2003). NFPA is the credentialing body for the fire service as it has developed numerous standards for the firefighting profession. Of particular interest is The NFPA 1000 Standard for Fire Service Professional

Qualifications Accreditation and Certification System. This standard establishes the minimum criteria for accrediting bodies and the minimum criteria for the assessment and validation used to certify fire and related emergency response personnel. NFPA 1000 also governs certification requirements for individual firefighters that include precisely what must be done for certification at each level (U.S. Department of Labor, 2003).

Two agencies exist which accredit fire protection related programs for national certification: The International Fire Service Accreditation Congress (IFASAC) and the National Board on Fire Service Professional Qualifications (NBFSPQ). These agencies have several things in common as they both:

1. **Accredit** a state or province that in turn **certifies** a candidate in a particular area (i.e. Firefighter, Fire Officer etc.).
2. Use NFPA standards exclusively for certification (updated every 3-5 years).
3. Maintain a national registry database.

These two accrediting agencies have promoted national certification for the following reasons:

1. Recognition of demonstrated proficiency and an ability to do the job in accordance with nationally recognized peer-developed standards.
2. Provides a yardstick to measure performance abilities.
3. Allow credibility and fire service organization enhancement.

Department of Defense

Currently 30 states and provinces are accredited to certify firefighter and associated ranks. This includes the Department of Defense (DoD), which certifies all military firefighters to NFPA standards. The base for DoD fire protection training is the Louis F.

Garland Fire Academy in Texas, which certifies over 1,000 firefighters annually from all branches of the military. The International Fire Service Accreditation Congress (IFSAC) has accredited the academy as compliant for using NFPA standards. Firefighters leaving the military posses national certification allowing them to be certified in a state that recognizes this certification. However, California currently does not recognize this certification and offers no automatic reciprocity, as the candidate must pass an examination.

Liability

Consensus standards, the type developed by the National Fire Protection Association (NFPA), are developed by specific industries to set accepted standards of care and operations for certain practices. Standards are an attempt by the industry or profession to self-regulate by establishing minimal operating, performance, or safety standards, as they establish a recognized standard of care (National Volunteer Council, 2003). Because NFPA is not a governmental body with enforcement powers most of its standards are voluntary. However, many of these voluntary standards become mandatory when federal or state governments adopt them through legislation, generally submitted through agencies such as the Occupational Health and Safety Administration (OSHA).[4]

In 1970, legislation created the Occupational Health and Safety Act that led to the creation of OSHA. This legislation's intent was to ensure that employers and employees took reasonable precautions to keep their workplace safe for workers. Regardless of whether compliance with a NFPA standard is voluntary or mandatory, fire and rescue

[4] Occupational Safety and Health Administration is a federal agency. Some states, California included, have their own state agency to regulate state and federal mandates. California has CAL OSHA. State agencies may add regulations to required federal mandates.

departments must consider the impact of "voluntary" standards on private litigation (National Volunteer Council, 2003).

In California, government entities may be liable for the negligent performance of employees. Supervisors and managers may be liable as well. AB-1127, which Governor Davis signed into law in October 1999, became effective January 1, 2000. This far-reaching legislation increases occupational health and safety penalties to unprecedented levels. Supervisors and managers are now exposed to individual liability up to $250,000 and imprisonment of up to four years for violations of occupational safety or health standards that cause severe injury or death to an employee. These individual criminal sanctions are part of a trend that has developed in the last ten years of legislation intended to discourage managers from hiding or failing to report serious dangers in the workplace.

Essentially, negligence involves the violation of a standard of care that results in injury or loss of life. In establishing the standard of care for rescue operations, the courts will frequently look to the "voluntary" standards issued by NFPA and other organizations. Although voluntary in name, these standards can become, in effect, the legally enforceable standard for fire or rescue departments.

Competency and Performance in Training

In a study conducted on fire safety and awareness, one of the highest priorities identified was that of improving the experience level, training, and physical fitness of individual firefighters (Tridata, 1996). In 1994, lack of current fire training in the wild land fire environment created a need to develop a NFPA standard. This standard (NFPA 1051) identifies the minimum job performance requirements for firefighters and supervisors working on a wildfire incident. Public fire departments and other private,

governmental, industrial, or military organizations that respond to wild land fires use this standard. The intent of this professional qualification standard is to ensure safety through competency and performance (NWCG, 2000).

Competency and performance based testing has been a hallmark of NFPA certification. In other words, you not only have to pass a written test for certification you generally must pass a skills/performance test as well. The National Wildfire Coordinating Group (NWCG) developed a qualifications system (310-1) that is performance based. In this system, the primary criterion for qualification is individual performance as observed by an evaluator certified in that position. Individuals meeting the established standards are qualified for mobilization beyond their geographic area (NWCG, 2000). NFPA Standard 1051 has incorporated many of the components found in NWCG 310-1 and therefore the two remain intertwined. California now has a voluntary requirement that all fire personnel who respond to a wild land fire on the states Master Mutual Aid Plan be trained to NWCG 310-1 qualifications. This system, while not mandated, is an important step in providing unity in wild land firefighter certification. In a sense, California, has already adopted a national standard for training.

Smart Practice

This section contains information gathered from several telephone interviews conducted for this project. The two people referenced in this paper work for the Oregon Department of Public Safety and Standards Training (DPSST). Even though they are employed by the agency being discussed they were both forthcoming in regards to the positives and negatives of their program. Their responses to the questions asked for this project appeared balanced as opposed to biased.

After reviewing several training systems the State of Oregon was chosen as a primary research model. It recently went through a NFPA standard adoption process for similar reasons that currently concern California. One of the primary goals identified by Oregon through various surveys and meetings was the need to update the standards currently in place to train and certify fire service personnel. Just as in California, outdated curricula, fiscal constraints, and limited personnel, were cited as major reasons for change. Jamison (personal communication, March 10, 2003)[5] indicated that in 1998-1999 the State of Oregon adopted National Fire Protection Association (NFPA) standards to certify its firefighters. This certification process, using NFPA standards, is voluntary not mandatory and currently around 85% of Oregon fire agencies use this process, both professional and volunteer. After writing its own curricula and developing programs for over thirty years, Oregon decided to standardize its programs throughout the state. This standardization was also felt to decrease the exposure to liability by adopting recognized, national standards. NFPA standards became the benchmark for firefighter training and are currently used on a voluntary basis throughout the state.

The Oregon fire service asked that national fire service standards (NFPA) be evaluated and considered for adoption when Oregon standards were being reviewed. As a result, the Department of Public Safety and Standards Training (DPSST) began to update all of the fire service training and certifications standards to National Fire Protection Association (NFPA) standards. Olson (personal communication, March 22, 2003)[6]

[5] George Jamison is an Assistant Training Director for the Oregon Department of Public Safety and Standards and this was taken from a telephone interview.
[6] Julie Olson is a Program Coordinator for the Oregon Department of Public Safety and Standards and this was taken from a telephone interview.

stated, "The program seems to work in Oregon and has created a high level of professionalism that had previously been lost."

Olson also discussed that the Oregon Department of Public Standards and Training (DPSST) realized early on that in order to make training changes it could not, and would not, dictate to local government on how it should train its firefighters. For example, if the state wanted to use NFPA standards it would have to create a more flexible environment to achieve this goal. Specific training requirements would be left to the individual fire agency as long as the end result remained the same—state certification through NFPA standards.

Curricula that match NFPA requirements are commercially available which helps direct DPSST away from program development and concentrate on the certification process. For example, DPSST has been working with the Fire & Rescue Training Institute at the University of Missouri and the South Carolina Fire Academy on curricula that meet NFPA standards for Fire Service Instructor (Oregon Fire Service Instructors).[7] The Maryland Fire & Rescue Institute also has a complete Fire Instructor I curriculum available for a fee through the International Fire Service Training Association (IFSTA). In addition fire training programs are available to authorized personnel through a resource library located at DPSST, in Monmouth, Oregon and are developed based on the DPSST competencies, the National Fire Academy programs, and other professionally developed curricula (Oregon Fire Service Instructors). This certification program is not nationally accredited by either IFSAC or NBFSPQ; however the State of Oregon may pursue this option in the future.

[7] Oregon Fire Service Instructors: September 15, 2000 Minutes

Firefighter Training Survey

An email survey was sent out to approximately 250 training officers and fire chiefs in California (See Appendix B). Fifty-seven respondents returned the survey for a response rate of 23 percent. This Likert-scale survey asked questions regarding current training perceptions and about adopting NFPA firefighter standards in California. These data have been separated into several tables and the interpretations follow (See Appendix C for comprehensive survey data).

One point to realize when evaluating Likert-scale type survey questions (i.e. Strongly agree = 1, Strongly disagree=6) is that the scale (in this case 1-6) is ordinal in nature. In other words, there is no guarantee that the difference between a 5 and 3 for one respondent is the same as that for another respondent.

Table 5: Responses for State Fire Training (in %)

	Likert-Scale Rating					
	1	2	3	4	5	6
Question	(%)	(%)	(%)	(%)	(%)	(%)
1. Provides current information	5	30	28	12	11	14
2. Satisfied with quality	5	21	32	14	12	16
3.Certification at state level	39	25	16	11	0	10
13. Training remain the same	0	14	18	33	9	26

Likert Scale- 1= Strongly agree 2= Moderately agree 3= Mildly agree 4= Mildly disagree 5= Moderately disagree 6= Strongly disagree

Interpretation- (1) Although the respondents are divided in their opinion on currency of state fire training information many are not satisfied with the quality. (2) A majority of

respondents feel that certification should remain at the state level. (3) A majority also expressed a strong desire that if they had the power they would change the training for California firefighters.

Table 6: Adopting National Standards (in %)

Likert-Scale Rating

	1	2	3	4	5	6
Question	(%)	(%)	(%)	(%)	(%)	(%)
5. NFPA standards have been beneficial	9	26	38	5	11	11
6. NFPA helps limit liability	11	31	33	9	6	11
7.Adopted NFPA 1500	16	18	10	8	12	36
8.Training should meet NFPA standards	48	21	20	5	2	4
12. NWCG qualifications	41	32	14	9	2	2
14. Reflect NFPA standards	7	31	32	15	6	9

Likert Scale- 1= Strongly agree 2= Moderately agree 3= Mildly agree 4= Mildly disagree 5= Moderately disagree 6= Strongly disagree

Interpretation- (*In response to questions 5&6 it is assumed that the responses reflect NFPA standards adopted by organizations for administration purposes (i.e. fire code, fire apparatus etc. and not firefighter training).* (1) A majority feel that NFPA standards have been beneficial to their organizations and help limit liability exposure to a certain degree. (2) NFPA 1500 standard has not been adopted by most respondents' organizations as a basis for their health and safety program. (3) Most respondents feel strongly that training

should meet or exceed NFPA standards; however, only mildly agree that training should be adopted to reflect NFPA standards. A majority agrees that NWCG 310-1 certification guidelines are important for wild land fire responses on the California Master Mutual Aid system.

Table 7: National Certification Opinions (in %)

Likert-Scale Rating

	1	2	3	4	5	6
Question	(%)	(%)	(%)	(%)	(%)	(%)
9.Certification beneficial/California	18	13	14	23	16	16
10. Beneficial to my organization	18	13	14	23	16	16
11. Provide greater flexibility	16	16	21	16	7	23

Likert Scale- 1= Strongly agree 2= Moderately agree 3= Mildly agree 4= Mildly disagree 5= Moderately disagree 6= Strongly disagree

Interpretation-Respondents were divided that national certification of firefighters would be beneficial for either California or for their respective organizations. National certification would provide a certain degree of flexibility in hiring and training new recruits had a divided response as well.

Table 8: Fire Department Operational Standards (in %)

Likert-Scale Rating

	1	2	3	4	5	6
Question	(%)	(%)	(%)	(%)	(%)	(%)
4. Curricula should reflect dept. operational standards	58	21	16	4	0	2

Likert Scale- 1= Strongly agree 2= Moderately agree 3= Mildly agree 4= Mildly disagree 5= Moderately disagree 6= Strongly disagree

Interpretation-A preponderance of respondents strongly agrees that firefighters should be trained with curricula that reflect their departments' operational standards.

Survey Summary

Strong Support

- Firefighter training standards should meet or exceed NFPA standards.
- Training should reflect departmental standards.
- Continue to use NWCG 310-1 certification.
- Firefighter certification should remain at the state level.
- Change the current training system.

Moderate Support

- National firefighter certification.
- Adoption of NFPA firefighter standards.
- State Fire Training offers the most current information.

Weak Support

Satisfaction with the quality of firefighter training in California.

Interview Trends

During the course of this research many people were contacted in regards to firefighter training and certification in California. The data collected for this project suggests that most would like California to meet or exceed national standards by adopting NFPA guidelines for firefighter training. The underlying trend noted in numerous interviews is that NFPA standards, although at times very stringent, remain the best alternative to fire service training and certification. The standards are updated by consensus committee every three to five years and curricula are available commercially that reflects these changes. Major changes do not necessarily occur every three to five years but the standard is revaluated for currency and appropriateness.

4. Conclusions

After an examination of the research a conclusion can be deduced that the adoption of NFPA firefighter standards would benefit California's firefighters. After a review of the literature, examination of a contemporary smart practice, and a firefighter training survey all indicate a need for change, and adoption of NFPA standards may be a vehicle for this change. NFPA offers many more firefighter certification tracks, through its standards, than currently offered in California fire training.

Outdated programs and lack of quality have become the basis for dissatisfaction for many years and no sign of change is imminent. As an efficient and cost saving measure, State Fire Training needs to focus more on firefighter certification and less on program and curricula development. If NFPA firefighter standards are adopted the use of commercially available curricula will eliminate this need for development. For example, several commercial organizations exist that develop curricula and training programs based on NFPA standards. The International Fire Service Training Association (IFSTA) develops books and materials specifically using consensus standards from NFPA. The current version of its primary publication, *The Essentials of Firefighting-4th Edition,* reflects current changes in NFPA Standard-1001 (The Standard for Firefighter Professional Qualifications). In the past, IFSTA would automatically revise its books when NFPA updated its standards every three to five years; however, it now updates its books only after any major revision. Many other entities exist, both public and private, which develop curricula that reflect NFPA standards and are widely available.

California policy makers cannot let current trends continue and struggle with program development when contemporary programs exist to nationally recognized standards.

California State Fire Training should not spend the time and money duplicating what industry peers have already accomplished in other parts of the country. If NFPA standards are adopted local control can still be maintained as reflected in the strong desire of the survey respondents, and as illustrated in the Oregon case study (See survey, question #4).

This white paper is intended to be a first step in the process of change in firefighter certification and training in California. Further research should be conducted in a more comprehensive manner that reflects the desires of a broader range of industry professionals and policy makers. Since September 11, 2001 the fire service has taken a new direction and not by choice. In addition to the normal firefighting and emergency medical responses the challenge of domestic terrorism and weapons of mass destruction now exist. These challenges demand the development of new skills with an immediacy as has never been seen in the industry. In these uncertain times it is best to follow a proven course of contemporary training and instruction so that all firefighters are trained to the same level. This level of training will only come about if firefighters are all trained to national standards. Adoption of NFPA firefighter standards would fill this need.

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Appendix-A

Firefighter Training Survey

This survey is completely confidential and will help develop the future of firefighter training in California. Please answer the questions honestly.

Read items 1-16 carefully. There are no right or wrong answers. We're interested in your honest opinion. Use the 1-6 point scale in the box to indicate the extent to which you agree or disagree with the statement. Write your answer on the line beside each item. Remember, all surveys are confidential. Your name will not be associated with your answers in any way.

Rate:
1= Strongly Agree
2= Moderately Agree
3= Mildly Agree
4= Mildly Disagree
5= Moderately Disagree
6= Strongly Disagree

1. California State training provides the most current information on firefighting methods to firefighters. _____

2. I am satisfied with the quality of the California firefighter training. _____

3. In California, certification of firefighter training should remain at the state level. _____

4. As a fire chief, it is important that my firefighters are trained with curricula that reflect our department's operational standards. _____

5. Adopting NFPA standards has been professionally beneficial to my organization and community. _____

6. Adopting NFPA standards has helped limit liability exposure to my organization by following nationally recognized standards. _____

7. My organization has adopted the NFPA 1500 standard as a basis for our occupational health and safety program. _____

8. In California, firefighter training and certification should meet or exceed NFPA standards? _____

9. In California, national certification for firefighters would be beneficial. _____

10. Having nationally certified firefighters would be beneficial to my organization. _____

11. Having nationally certified firefighters would provide my organization with greater flexibility in hiring and training new recruits. _____

12. It is important for fire departments who respond to wild land fires on the Master Mutual Aid system to adopt NWCG 310-1 guidelines. _____

13. If I had the power, I would have training for California firefighters remain the same. _____

14. If I had the power, I would have training for California firefighters changed to reflect NFPA standards. _____

15. I currently work in Northern California. _____

16. I currently work in Southern California. _____

Thank you for your response!

Appendix B

Comprehensive Survey Data

N=57

Question	Rating	1	2	3	4	5	6	N	N/A
1		3	17	16	7	6	8	57	0
2		3	12	18	8	7	9	57	0
3		22	14	9	6	0	6	57	0
4		33	12	9	2	0	1	57	0
5		5	14	21	3	6	6	55	2
6		6	17	18	5	3	6	55	2
7		8	9	5	4	6	18	50	7
8		27	12	11	3	1	2	56	1
9		10	7	8	13	9	9	56	1
10		10	7	8	13	9	9	56	1
11		9	9	12	9	4	13	56	1
12		23	18	8	5	1	1	56	1
13		0	8	10	19	5	15	57	0
14		4	17	18	8	3	5	55	2
15		39	0	1	0	1	16	57	0
16		16	0	2	1	1	37	57	0