

January 2014

A National System of Reciprocity in the Fire Service

Bill Hicks

Eastern Kentucky University

Follow this and additional works at: <https://encompass.eku.edu/etd>



Part of the [Education Commons](#), and the [Training and Development Commons](#)

Recommended Citation

Hicks, Bill, "A National System of Reciprocity in the Fire Service" (2014). *Online Theses and Dissertations*. 273.
<https://encompass.eku.edu/etd/273>

This Open Access Dissertation is brought to you for free and open access by the Student Scholarship at Encompass. It has been accepted for inclusion in Online Theses and Dissertations by an authorized administrator of Encompass. For more information, please contact Linda.Sizemore@eku.edu.

A National System of Reciprocity in the Fire Service

By

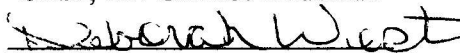
William D. Hicks Jr.

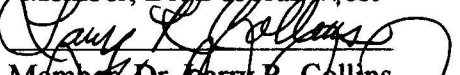
Eastern Kentucky University

Ed. D. Educational Leadership and Policy Studies

Dissertation Approved:


Chair, Dr. Charles Hausman


Member, Dr. Deborah West


Member, Dr. Larry R. Collins


Member, Dr. Thomas Schneid


Dean, Graduate School

STATEMENT OF PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirements for a doctoral degree at Eastern Kentucky University, I agree that the Library shall make it available to borrowers under the rules of the Library. Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgment of the source is made.

Permission for extensive quotation from or reproduction of this dissertation may be granted by my major professor, or in his absence, by the Head of the Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this dissertation for financial gain shall not be allowed without my written permission.

Signature



Date

12-10-14

A NATIONAL SYSTEM OF RECIPROCITY IN THE FIRE SERVICE

By

William D. Hicks Jr.

Master of Science Loss Prevention and Safety
Eastern Kentucky University
Richmond, Kentucky
2003

Graduate of the Executive Fire Officer Program
U.S. Fire Administration National Fire Academy
2002

Bachelor of Science Fire and Safety Engineering Technology
Eastern Kentucky University
Richmond, Kentucky
2001

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
In partial fulfillment of the requirements
For the degree of
Ed.D. Educational Leadership and Policy Studies
December, 2014

Copyright © William D. Hicks Jr., 2014
All Rights Reserved

DEDICATION

This dissertation is dedicated to my wife Samantha B. Hicks who without these many years of support and sacrifice given I would not be where I am today. Also, for my mother Retha P. Hicks and my late father William D. Hicks, who have always supported me and pushed me forward. Finally for everyone who ever doubted me or did their best to hold me back, I wish to thank you most of all for motivating me to achieve what I have to date, and what I will achieve in the future.

ACKNOWLEDGEMENTS

I would like to thank my dissertation chair, Dr. Charles Hausman for his selfless devotion to his students, his patience and guidance. I would also like to thank the other committee members, Dr. Thomas Schneid, Dr. Deborah West, Dr. Larry Collins, and Mr. James Phar for their assistance and patience over the course of this project. Each one of these individuals have also played a role in first educating me, then mentoring me as I moved forward in my career and professional development to this point. I would like to express my appreciation to ECU's Fire Protection and Safety Engineering Technology program for their support. I also want to thank my cohort members who took the time and answered my questions or helped when I needed it.

To my wife, who understood my moods after many nights of frustration and exhaustion, and is my true partner in life and my best friend, I thank you and love you always.

Finally, I would be remiss without recognizing the unwavering support of my mother, Retha P. Hicks, who even after I dropped out of High School, pushed me gently and consistently towards my GED and then college. As a teacher herself, she never let me forget the need for and power held by the educated in shaping their own destiny. Thank you for your love and support.

Abstract

This paper reviews literature from on line, research papers, dissertations, conference proceedings, and monthly periodical sources discussing firefighter certifications to identify the current status of reciprocity in the U.S. Fire Service, as well as the components that make up the necessary steps to achieve a national system of reciprocity for fire service professionals. Accreditation (NFPA, 2011), programs, and agencies (IFSAC, 2012), (ProBoard, 2012) already exists to insure the levels of training set by nationally accepted standards (NFPA, 2013) are being met by training providers, and are possessed by fire service professional. A model system that the fire service is already familiar with (NREMT) exists. All that is left is for the fire service to develop a united front and agreement on such a system.

Table of Contents

CHAPTER 11
INTRODUCTION1
 The Fire Service Profession 6
CHAPTER 212
LITERATURE REVIEW12
 Recognition of the Problem 12
 Organizing to Fix the Issues 14
 The Current System 15
 NFPA Standards 18
 Accrediting Bodies..... 19
CHAPTER 322
METHODS22
 IRB Approval..... 23
 Data Collection 23
 Interview and Survey Populations 25
Conclusion27
CHAPTER 428
FINDINGS AND RESULTS28
 Certification and Reciprocity-Interviews..... 28
 AHJ's and Reciprocity 50
 Identifying the Current System of Reciprocity 57
 Regulators 58
 Administrators 61
 Reciprocity Seekers 65
 A Model System Exists?..... 70
CHAPTER 575
 Discussion..... 75
 Research Question 1: 76
 Research Question 2: 78
 Research Questions 3:..... 79
 Table 1: 80

State by State Comparisons	80
Research Question 4:	81
Conclusion	84
References	86
Appendix I	89
Regulators Survey Questions	89
Appendix I	90
Regulators Survey Questions	90
Appendix II	96
Administrators Survey Questions	96
Appendix II	97
Administrators Survey Questions	97
Appendix III	104
End Users Survey Questions	104
Appendix III	105
End Users Survey Questions	105
Appendix IV	111
NOTICE OF IRB EXEMPTION STATUS	112

CHAPTER 1

INTRODUCTION

As an 18 veteran of the U.S. fire service in Kentucky and holder of multiple certification levels, I am all too familiar with the process and challenges in first obtaining certifications and then achieving recognition for such achievements. The fire service has identified many levels of achievements beginning with basics firefighter certifications, referred to as firefighter I and II, which are the corner stone or baseline for all other certifications and serve as the basic entry level. From there, one may seek certification in technical rescue topics such as vehicle extrication, rope rescue, and water rescue. Other topics covered for additional certification include responding to hazardous materials, emergency medical technician, and other specialty certification necessary to meet the needs of the public. All of these have levels of necessary knowledge, skills and abilities identified in professional qualification standards authored by the National Fire Protection Association (NFPA), the standards-setting body for the U.S. fire service. The NFPA serves as the singular source of the standard outlining the necessary knowledge, skills and abilities required for certification as firefighter I and II.

A majority (87%) of departments in the U.S. fire service utilize volunteer members for their entire staffing (volunteer department) or to supplement it (combination department) (Academy, 2014). The other 13% consist of paid members (career department). Employees of career departments are paid during their training period, while volunteers receive no compensation. Hence, the time

constraints on a volunteer can be tremendous. If reciprocity is not an option, all of this training is for nothing. Kentucky, for example, requires 150 hours for a volunteer firefighter certification (Commission, 2014). With no incentive or funding, there is little to motivate volunteers to undergo a second training course other than the love of the job. A lack of reciprocity serves as a road block to otherwise perfectly acceptable, experienced, and certified individuals.

The current problem experienced in both volunteer and combination departments is the struggle to get able bodies to first commit to the fire service, and subsequently agree to the many hours required for this type of commitment. For example, Fire Chief Mike Chihuly describes his rural Alaskan town as full of talent, yet recruiting people to donate such talent is challenging (Chihuly, 2013). Chihuly points out that seeking a family, job, education and many of life's other ambitions leaves limited time available for potential members to learn the profession of firefighting. Professional roadblocks such as trouble in transferring certification, only serve to hinder hiring otherwise certified experienced personnel.

Nelson (2004) echo's the same issues in his article on firefighting recruitment , indicating that life styles are changing with both husbands and wives working, sharing duties when they can, leaving little time for training and the demands of the fire service. While the same training is required for volunteer and paid firefighters, lack of reciprocity forces volunteers to retrain should they move to a new state, and presents a significant challenge.

This study will incorporate both qualitative and quantitative methods, and will document the U.S. state's Firefighting certification reciprocity policies and investigate why some states do not recognize others state certifications. The impact of such polices on a profession is substantial. For example, just as an individual may not be equipped with practical skills or even mentally capable to be a doctor or lawyer, the same is true of the fire service. We answer the call for help on arguably what will be the worst day of an individual's life, and not everyone is physically or mentally able to enter a burning building. Those who select to work in the fire service profession and seek out the necessary training and certifications are few. It is unfortunate that when it is necessary for a firefighter to move to another state, he or she is faced with yet another hurdle; the choice of enduring hundreds of hours of retraining or finding another profession.

The importance of certification and reciprocity cannot be overlooked for many reasons. Given the choice, certification allows for one to move up in a profession and demonstrates that they have a tested level of knowledge, skills and abilities and have met the professional qualifications standards. Certification also brings several important implications, such as having met each certification standard and provides some liability in civil court (Balsamo, 2009). "If the firefighter can validate their actions at the scene of an incident by showing they followed their training, they should be afforded some protection from liability".

Background of the Problem

Sir Eyre Massey-Shaw, Chief of the London England Fire Brigade, once said "The business of fire, if properly studied, is worth being regarded as a

profession” (Massey-Shaw, 1876, p. xxi). The most notable professions in the world all have the same basic traits as firefighting (O’Neal D. , 2003), such as standards of training, certification systems, and professional organizations. Fire service personnel (paid or volunteer) have one singular set of training standards consisting of requisites of knowledge and skills that are recognized and applied in the field. There are certification tests and licensure processes in all 50 states, yet no clear path for reciprocity exists, leaving one to wonder why a firefighter cannot go from state to state, seek licensure, and practice their trade just as a physician or other professional.

A firefighter from Kentucky will not receive direct reciprocity for their certification, accredited or not, in the state of Illinois, although both states follow the one universally recognized training standard in the United States. This particular standard is utilized by essentially all in the fire service in America, and certification based upon any other source would be unacceptable in the field. Yet once a firefighter crosses a state line, previous training might have been for not, as acceptance is based on the laws in place of the receiving state, who may or may not recognize that person’s achievements and may even require them to be fully retrained. Currently, there is not an exact way to achieve fire service certification that is acceptable to all 50 states.

One of the major factors in why firefighting certification is not recognized from state-to-state may be due to the wide variety of training entities that train and certify firefighters under their state’s regulations. Training can be provided by local fire departments in house or in the form of a fire department academy.

Academies can be administered by a state training authority or state academy, local college or pay-to-attend private academy, or the Department of Defense. With many sources for training, one may question which training is better and serves the needs of those hiring the firefighter. As all firefighters ultimately train to one standard, these state-to-state retraining concerns should be eliminated, however, these policies persist.

Each state contains legislation that promulgates and enforces the requirements for certification of fire service personnel. This places the power for certification on either a state entity or the Authority Having Jurisdiction (AHJ), typically the fire chiefs themselves. These two approaches can leave one to pause when determining what is necessary to work as a firefighter in a certain state, and what certifications will be accepted and to what level (whole, in part or not at all).

In states where certification is controlled with state level agencies, the authority is vested in a public safety-related entity, such as a state fire commission, state fire marshal's office, or the state police. These entities are responsible for registration of all fire service personnel in their state, and in addition to other regulatory responsibility, insuring that they all meet the training and recertification requirements. When new employees or new volunteers are hired, they are given a time frame to achieve compliance with the training standards, and if any reciprocity exists in that state, this is reviewed for approval.

In an AHJ state, the fire chief decides what training will be accepted and how much retraining is required. AHJ states may decide to accept nothing and fully retrain a new employee upon hire. They may also decide to partially accept

a certification, or accept certification but work to orient the employee to the process specific to that department. Those firefighters with prior certifications may submit them to the AHJ or state authority for reciprocity under the regulations in place. If prior certifications are denied, the firefighter may decide to either endure the entire process of retraining to remain in the profession, or to begin a new profession. This inevitably may cost the fire service the departure of veteran personnel, as some may choose not to endure 16-20 weeks of retraining.

The Fire Service Profession

The Merriam Webster dictionary (2013) defines a profession as “A type of job that requires special education, training or skill”. Further, a profession is described as “a calling requiring specialized knowledge and often long and intensive academic preparation” (p. 1134). The fire service is a job that few can do, and the term “calling” could not be more spot on as it is a task, regardless of proper training and physical preparedness, not everyone can do. It involves many physical, psychological, and emotional strains that not every person can bear. Firefighters are expected to handle the worst possible situation with a professional attitude and demeanor. Those that work on the job build up relationships that most always transcend the firehouse into personal life. Much like the bond between soldiers formed in battle, so is the bond forged in the fire service when one’s own life depends on their partner. Alternatively, vocation is defined differently from a vocation--a vocation is defined “as the work that a person does or should be doing” (Merriam-Webster, 2013, p. 1590). The definition of vocation contains no

mention of special education, training or skills. A vocation is simply a job or activity that requires no licensure or track of learning outside of on the job training.

The requirements of special education, training and skill certainly fit the fire service profession as many undergo 16 weeks or more of training, which include lecture, skills, specialized topics and eventual testing necessary to advance into the profession. Such standards are developed by a professional standards organization for each profession. From there, licensure occurs in order to practice in all 50 states, and varies greatly in the processes required.

Research Problem Statement

Similar to other professionals, fire service personnel are required to have acceptable levels of prerequisite knowledge, skills, and abilities in order to perform their job functions. Licensing and certification is achieved through many assessments and courses (NFPA, 2013). However, the approach to certification is as varied as the number of states in the union. A doctor who wishes to practice in a given state must only submit documentation of a degree from any number of institutions and file the paperwork and fees to practice medicine (AMA, 2013). Initial licensure requirements for domestic and international medical graduates differ somewhat among states. In essence all states will ask for proof of prior education and training and proof of the completion of a rigorous licensure examination approved by the board. All physicians must submit proof of

successful completion of all three steps of the United States Medical Licensing Examination.

The procedure described above set forth a clearly outlined process for reciprocity. The same is true of Emergency Medical Technicians, and many other professional trades, in that a process is in place to have prior education, knowledge and training assessed and accepted. Yet a fire service professional certified in the State of Kentucky has no standing in any other state in the union. The fire service profession is no different from a doctor, lawyer, or any other profession where universal acceptance of qualifications is in place, except we have no universally accepted system of reciprocity.

The purpose of this study will be to explore the system of reciprocity of fire service certifications currently in place in the United States. This study will also identify a model or models that can be used to establish a system to allow certified personnel to move from state to state--once certified--without having to complete each state's entire separate certification program. The fire service, much like the medical professions, has a nationally accepted standard of care for the knowledge, skills and abilities required to meet the title of firefighter (NFPA, 2013).

The National Fire Protection Association (NFPA) Standard 1001-Standard for Firefighter Professional Qualifications mandates the training and competencies for fire service personnel. This is a consensus driven document, meaning that it has been founded on input from professionals working in the field. The NFPA 1001 document is universally accepted in the United States with every

known training agency following the requirements of training topics listed in the NFPA 1001. Nearly every local, state and federal fire department in the US requires those who are certified to be trained under NFPA 1001. All of the available teaching texts on Firefighter training follow NFPA 1001, which makes the certification process essentially universal. Yet states will not universally accept the other's determination of this certification, making moving from state to state a challenge at best.

Most professions enjoy some kind of system of reciprocity, which outlines a process for a properly trained individual to come into a state and begin practicing without having to endure retraining under some authority in that state. The problem with firefighters is that often they must undergo complete retraining because there is no reciprocity that exists in this field. Two entities have attempted to bridge this reciprocity gap with little success. The first entity is the National Board on Fire Service Professional Qualifications (ProBoard), which provides its mission statement on the first page of its website as “to establish an internationally recognized means of acknowledging professional achievement in the fire service and related fields” (ProBoard, 1990). The ProBoard accredits several state programs, as well as regional and private fire academies. The second entity is the International Fire Service Accreditation Congress (IFSAC), which identifies its purpose as “a peer driven, self-governing system that accredits both public fire service certification programs and higher education fire-related degree programs” (IFSAC, 2012). Much like the ProBoard, IFSAC also accredits many local, state and regional fire service training programs.

Firefighters holding certificates from an IFSAC- or ProBoard-accredited program enjoy reciprocity only with organizations and states that accept or recognize the entity providing accreditation, but no system is universally accepted (O'Neal D. , 2003). There is no system in place to equate the accredited certificate to a state or organization-run certification system. Another conflict with reciprocity exists in a lack of a cross-walk, or equivalency matrix, between the organizations. Unfortunately, states and organizations that recognize one accrediting body, seldom recognize both IFSAC and ProBoard, and are hesitant to institute a cross walk reciprocity between the accrediting bodies or other organizations. As there is only one standard outlining training requirements, one could perceive that no difference actually exists between any system that follows NFPA 1001 (NFPA, 2013).

It is universally recognized that some form of orientation will always be required to orientate a new employee to the methods and equipment differences that may exist, but much like any other profession, a system needs to be identified for reciprocity (O'Neal D. , 2003). As different approaches to professional certification are discovered, a better understanding of the different approaches to educating and certifying professionals in any field will occur. In addition, this study can bring useful information for the fire service communities that will help streamline the process of training and reciprocity between states. This study will include interviews of both IFSAC and ProBoard representatives to identify how each entity perceives the reciprocity process, as they have achieved a limited

model on the subject. Additionally, a review of the literature and an analysis will conclude how each of the nation's 50 states handles firefighter certification.

Research Questions

1. How is firefighter certification achieved in each of the 50 states?
2. What reciprocity processes exist for other professions to practice in each of the 50 states?
3. What is the firefighter reciprocity process for each of the 50 states?
4. What is the effect of the policies of the 50 states on employers and certificate holders?

CHAPTER 2

LITERATURE REVIEW

Recognition of the Problem

Identification of the need for a system of reciprocity has not gone unrecognized. As early as 1966, discussions began regarding the need to enhance fire service education and certification systems nationwide (Foundation, 1966). During the first Wingspread Conference on Fire Service Administration, Education and Research in 1966, several critical areas were identified in the reports “Statements of National Significance” (p. 3). Relating to the topic at hand, the need to examine the scope, degree and depth of the educational requirements for efficient functioning of the fire service was listed. Additionally, The Wingspread Conference recommended that fire service labor, management, municipal officers and administrators should work to develop a nationwide system to bring the vision of true professional status to reality (Foundation, 1966). Attendees also noted that the lack of mobility in the fire service was handicapping attempts at professionalization.

The Wingspread conferences persevered and were held every ten years after the initial startup event, where education, training and certification was one of the statements of “National Significance” after every conference in the proceedings. In 1976 the Wingspread conference recognized that “The firefighter had been depressed by narrow education and confining experiences on the job” (Clark, 1976, p. 12). Conference delegates described that development of

education and certification systems since the 1966 conference had been non-systematic and non-directional, adding that intervention at the federal level, which had just begun, was showing promise.

The 1986 conference noted that in 1966, professional development had been in an “embryonic state”, (p. 14) but great strides had been made in terms of the creation of the NPGGB, as well as the implementation of departmental and state based systems of formal certification programs based on the authored standards (The Johnson Foundation, 1986). In the 1986 conference proceedings the attendees authored two statements of significance concerning training, one being that Professional Status begins with education, and secondly noting that increased mobility is important in achieving status as a profession.

The 1996 meeting of wingspread provided 13 “Ongoing issues of National Importance” (IAFC, 1996). Once again, the conference participants addressed the issue of education and certification mobility by stating “This profession should be grounded firmly in an integrated system of nationally recognized and/or certified education and training” (IAFC, 1996, p. 11). Conference attendees went on to state that fire service management should encourage certification through either or both of the International Fire Service Accreditation Congress or National Board of Fire Service Professional Qualifications.

The 2006 Wingspread conference reiterated the call for the fire service to be grounded firmly in an integrated system of nationally recognized and/or certified education and training. Conference delegates identified the need for a national, standardized and simple system of credentialing of qualified fire service

members, stating that it was not only necessary as a profession, but in case of disasters of regional or national consequence (IAFC, 2006).

Organizing to Fix the Issues

In 1971 the Joint Council of National Fire Service Organizations (Joint Council) was formed by 11 of the fire service professional organizations, including NFPA. Seven goals were established for the Joint Council, with the first being the need to develop a national system of fire service certification. The first step taken after organizing the Joint Council was to identify the need for, and establishment of, a technical committee to develop standards of professional competency for the fire fighters. Secondly, the group created a separate, independent body to oversee the national system of certification. This independent body was called the National Professional Qualifications Board (NPQB), which evolved into what is currently known as the ProBoard. After four years in development, the fire service professional qualifications standard was adopted by the NPQD (Walker, 1998).

In 1982 the Joint Council published 14 national goals for the betterment of the fire service. One of these goals was a call for all fire service personnel and agencies to participate in the certification provisions under the professional qualifications standard and the NPQD. By 1984 over 7,000 fire service personnel held NPQB certificates, and in 1988 they held their first national conference on fire service certifications. After assessment of the success of its identified goals, accompanied with the realizations that the rest could be accomplished by other

entities and organizations, the Joint Council voted to disband. This left the NPQB in somewhat of free floating position, with an uncertain future.

As a result, the fire service lacked forward momentum towards the original goals, and attention was drawn to the lack of a national system (Walker, 1998). In 1990 the National Association of State Directors of Fire Training and Education held a conference to address this concern. Those in attendance unanimously supported a national accreditation system for fire service certification programs. “As a result” says Walker, “IFSAC was formed”. Shortly thereafter, the modern ProBoard was formed from the NPQB (ProBoard, 1990, p. 76).

The Current System

Dr. Denis O’Neal, superintendent of the National Fire Academy in Emmitsburg, MD, has authored the only series of articles addressing the problem directly. First, he points out that many professions, such as architects, nurses, engineers and accountants all enjoy a system of some kind of reciprocity where they are at a minimum required to take refresher course work, or challenge a test, to become licensed to operate in a given state (O’Neal D. , 2003). For example you can learn to do surgery in Texas, and practice in Minnesota.

However, the fire service currently lacks what those professions now take for granted; a system of acquiring knowledge and skills that is reciprocal among all states. This was not always the case explains O’Neal, describing that in 1910 an education reformer named Abraham Flexner exposed inadequacies in the

training methods at most medical schools in the US at the time. This prompted the American Medical Association and the American Medical Colleges to establish standards for course content, qualifications, licensing, and requiring private medical schools to hold affiliations with teaching hospitals. “One the principle challenges we have is that aspiring fire service professionals are staggered by the number of independent systems of training and education,” explains O’Neal, “and there is no one way to determine which one is the most appropriate” (O’Neal D. , 2003, p. 3)

Dr. O’Neal identifies that such a unification of curriculum, as described above, has been attempted at the college level. More than 100 two- and four-year colleges participated in developing the Fire and Emergency Service Higher Education (FESHE) National Fire Science Model Curriculum in attempt to bring uniformity to the higher education part of fire service training, focusing on reciprocity between programs. Having common agreement and understanding of course content, commonality of textbook content, syllabi and content of specific course descriptions will help students understand exactly what each course entails, regardless of the FESHE institution they are attending or are transferring into (O’Neal D. , 2003).

A unified reciprocity system presents many benefits according to O’Neal. Such a system would serve as the next logical step in a profession that is already well founded in civilization, allowing for those that practice their trade to be able to move from state to state for employment (O’Neal D. , 2003, p. 3). A global reciprocity system would also provide a cost savings to those currently requiring

full retraining of even the most experienced personnel upon hire. Additionally, new hires would already have the minimum prerequisite knowledge, skills and abilities, and could be instead provided training on specific areas unique to each community served--allowing for them to go in service faster.

Whitley (2002) in his research project submission to the National Fire Academy's Executive Fire Officer Program addresses the fire service as a profession. He points out that the fire service lacks mobility between departments and jurisdictions below the level of Fire Chief, something not found in many other professions. Another issue is a lack of emphasis on education and licensing. One source of that is found in many other professions that enjoy reciprocity is through the formation of organizations or guilds. Whitley explains that once established, the guilds can exercise powers. These include membership requirements that mandate certifications and licensure for membership as well requiring hiring bodies to accept specific certification in the terms of contracts negotiated. Additionally, with numbers come power to influence legislation and enforcement of licensing requirements.

Unfortunately, two major hurdles are facing the fire service in regards to reciprocity. First, the number of departments, over 26,000 in the U.S., makes unification at a national level daunting. The fire service enjoys a decentralized system of professional representation, making unification even more challenging (O'Neal D. , 2003, p. 1). There are more than a dozen professional fire service organizations, including the International Association of Fire Fighters, The

National Volunteer Fire Council, and International Association of Fire Chiefs, all working to represent specific populations (Whitley, 2002).

Ultimately, the fire service itself holds no power over its practice through a licensing or regulatory system that is accepted nationwide. Where other professions require licensing, many states require nothing to become a firefighter (Whitley, 2002). The existence of accrediting agencies, although intended to make fire fighter certification portable, has fallen short. Whitley (2002) recommends “Empowering an overarching regulatory body, such as the United States Fire Administration, and developing licensing for firefighters and officers” (p. 2) as the next step in bringing the fire service around to a profession in status.

Balsamo (2009) muses that having a national system of training, certification and recognition would ensure that fire service personnel are trained and certified under the same system, providing uniformity in the profession. In Pennsylvania Balsamo (2009) points out that one side of the state uses a system that is accredited, while the other uses a state certification, making the process of reciprocity confusing at best. “If a uniform policy were adopted across the country, consistency would follow” say Balsamo, “This would make it easier for firefighters to move from one part of the country to another and (not) worry about reciprocity”(p. 84)

NFPA Standards

The fire service has a source of unified education needs found in the NFPA 1001: *Standard for Fire Fighter Professional Qualifications* document (NFPA, 2013). This document contains the knowledge, skills and abilities that are

required learning for those involved in structural fire suppression. The NFPA 1001 standard is the only standard that is recognized in the United States and is universally recognized as the source for curriculum development. The NFPA 1001 requires that instruction include lecture and skills demonstration using rubric skill sheets to ensure required learning outcomes, followed by written exams and skill tests to prove that the information has been retained. NFPA also produces a document intent on guiding the fire service towards an accreditation style system. NFPA 1000: Standard For Fire Service Professional Qualifications Accreditation and Certification Systems (NFPA, 2011) sets out a system for accrediting firefighter training, and for the assessment and validation of the process used by a training entity to certify fire and related emergency response personnel to professional qualifications standards. This document sets a framework for which a national system could be developed.

Accrediting Bodies

Two accrediting bodies exist in the fire service profession. They are: International Fire Service Accreditation Congress (IFSAC), founded in February 1991; and the Professional Board for Fire Service Qualifications (ProBoard).

Interestingly, the ProBoard was originally founded in 1971 by the NFPA to author and manage the professional qualifications standards, but then later disbanded by the NFPA when they took back control of the NFPA 1001 standard. The ProBoard was reincorporated in 1990, with an updated mission statement:

The purpose of the ProBoard is to establish an internationally recognized means of acknowledging professional achievement in the fire service and related fields. The accreditation of organizations that certify uniform members of public fire departments both career and volunteer is the primary goal. However, other organizations with fire protection interests may also be considered for participation. Accreditation is generally provided at the State or Provincial level to the empowered certifying authority of that jurisdiction (ProBoard, 1990).

There are currently 37 accredited states, 29 accredited entities--such as emergency services agencies and academies--and one accredited international company (ProBoard, 2012). The ProBoard also consists of peer volunteers from the organizations that are accredited or who are seeking accreditation. Unlike IFSAC which elects its Board of Governors, the Board of Directors of the ProBoard consists of one member from each of the following important peer organizations in the fire services field.: one member appointed from the International Association of Arson Investigators, Inc. (IAAI), the International Association of Fire Chiefs (IAFC), the National Association of State Fire Marshals (NASFM), the National Fire Protection Association (NFPA), the North American Fire Training Directors (NAFTD), one member At-Large, and the Chair of the Pro Board Advisory Committee.

The next accrediting body is the International Fire Service Accreditation Congress (IFSAC) which has the adopted the following mission statement:

To increase the level of professionalism of the fire service through accreditation of those entities who work with Assemblies within the Congress, for the

accreditation of fire service training and/or education, by increasing the coordination of efforts between the Assemblies of the Congress and serve as a mechanism of arbitration on issues of debate between Assemblies. (IFSAC, 1991)

As stated in its mission, IFSAC (2012) consists of two separate congress assemblies, or certifying bodies. The degree assembly focuses on degree granting entities, such as Eastern Kentucky University's Fire and Safety Engineering Technology program, which has been awarded IFSAC accreditation. The degree assembly focuses on academic degree granting two-year and four-year programs around the world, with its main body consisting of peers from accredited and accreditation seeking programs who volunteer with the organizations. There are currently 23 U.S. based accredited degree programs and one international program accredited under this assembly. The second IFSAC (2012) assembly is the certificate assembly, which focuses on those entities certifying fire service professionals under NFPA 1001. The certificate assembly also accredits programs around the world, with the governing standard varying from country to country. These entities are usually limited to some governmental agency that oversees training statewide. Such authority can be delegated to others in the state, including fire academies both public and private, universities who offer such training, and even fire departments. The certificate assembly currently accredits firefighter certification programs in 37 states, 2 Indian Nations, and the Department of Defense.

CHAPTER 3

METHODS

A mixed methods study was conducted using several methods to identify the current state of certification and reciprocity in the 50 U.S. states. The originally intent was to perform a qualitative study but as it became apparent that limited literature existed, other qualitative methods would need to be utilized, including surveys and interviews. The surveys were done in such a way that qualitative data analysis was then necessary to show the results in a logical display.

Three surveys were administered to identify populations, along with interviews of leaders in the field who work within national organizations associated with the certification process in the US, as well as certificate holders who have been impacted by reciprocity differences between states.

Surveys were developed using Qualtrics, a web based survey tool. Questions were vetted by a professional statistician, who reviewed the initial questions for biased wording and implication. Secondly, each survey was vetted by using a Delphi study consisting of committee members and professionals in the field. The questions asked in each survey are included in this study as Appendices I through III.

Populations were identified during discussions with committee members and other professionals in the field. Those identified were state level regulators, fire service hiring officials, and certificate holders. Web searches were conducted to develop a pool or recipients. Regulator participants were identified by web

searching for employees of each states regulating body. Administrative participants were identified in essentially in the same manner, with one administrator chosen from a career department and a volunteer department for all 50 states.

Those interviewed included representatives from each of these populations and were chosen for their knowledge and leadership positions in the fire service. They were interviewed during professional conferences, by phone, or during arranged meetings.

Additionally, searches were performed on line, in fire service related profession periodicals and journals, through google scholar, and EbscoHost to identify available literature. The Learning Resource Center of the U. S. Fire Administration was also searched. Additionally, the database of Applied Research Projects authored by students in the U. S. Fire Administration's Executive Fire Officer Program.

IRB Approval

IRB approval was sought and received to perform all data collection for this study. This included the three surveys and interviews of identified individuals. A copy of the approval is included in Appendix IV.

Data Collection

All surveys were conducted utilizing the Qualtrics (<http://www.qualtrics.com/>) survey software suite licensed to Eastern Kentucky

University. This software allows users to develop professional surveys and has tools to assist in data collection and analysis. Once a survey is developed, the software produces an internet link that can be placed inside an email for distribution to a population. Populations for surveys were identified from conversations with fire service personnel from various levels and ideas gleaned from the literature review.

Reviews of available literature were conducted by searching numerous industry publications and search performed through the data bases accessible within EKU's Library system. Google searches were performed on both the standard google system and google scholar. Searches were also performed within the learning resource center of the National Fire Academy.

Interviews were performed in person or by phone at the convenience of the interviewee. All interviews were recorded with the permission of the interviewee, and then transcribed for inclusion. Eight interviews were performed lasting approximately 45 minutes each. Open ended questions were asked, with follow up questions identified as each interviewee brought different ideas to light. Interviews were performed during various professional conferences I attended within the schedule availability of the subject.

Some interviews were set up in advance by email, while others were set up face to face due to communication issues. Prior to each interview, I located an available quiet space where we could talk. I also prepared a set of base questions to help start the conversation and to help provide some uniformity, although each interview took on its own direction on the topic.

Qualitative study was a very important approach as this information has not been gathered or studied in any depth and as such, no hard data was able to be located. Therefore, the experiences of those in the field operating at various levels was key to identifying the current status and policies in place across the United States.

Interview and Survey Populations

The first survey population (titled Regulators) identified consisted of government regulators; these individuals are charged with the approval of and regulation of certification and reciprocity issues at a state level. These persons work for a state fire marshal's office, state fire commission, or other authoritative agency required by law to enforce the various regulations promulgated in their own states. The title "Regulators" responsibilities include approving certification processes for fire service personnel, as well as review and approve the reciprocity of out-of-state certification, if allowed. This population was chosen to help identify the characteristics of the Title Regulators' process as it is related to reciprocity and certification in their respective states.

Regulators were asked to identify if they were accredited by either IFSAC or ProBoard, what types of certificates they recognized, and if complete or partial reciprocity was granted. Survey responses were sought from a representative from all 50 states. A copy of this survey is included in Appendix I.

The second population, titled Administrators, included those who are involved in the hiring of certification holders; the title administrators refer to this

in positions in agencies seeking to hire fire service personnel. This includes those with various titles of fire chief and other ranks, human resources personnel, and hiring boards working to fill firefighter vacancies in emergency agencies.

Typically, people in this group are in charge of reviewing the qualifications of those applying for positions. Additionally they are knowledgeable of the effects of each state's policy on certification and reciprocity upon these agencies.

Questions posed to the Administrator's group focused on the hiring process, what level of reciprocity the agency could or would grant, and what would be required of new employees to meet full certification status (if full reciprocity was not granted upon hiring. Participant survey responses were pursued from a representative from a career (paid) department as well as a volunteer (non-paid) department operating in each of the 50 states. A copy of this survey is included in Appendix II.

The third population of participants for this study survey was the end user, or those firefighters certified by either a state or an accredited agency. This population will include fire service personnel who have experienced a reciprocity process with any other state, or lack of reciprocity. In other words, persons who held certification in one state, and then sought to take that certification to another state and sought recognition of their certification, regardless of whether they were successful. A population of firefighters was reached out to through online postings on profession websites, such as periodicals, professional organization conferences listings, through professional contacts and, networking, and online searches. A copy of this survey is included in Appendix III.

The participants interviewed were chosen due to their primary responsibilities including regulating certification laws, managing certification systems and the issuing and tracking of certified individuals. Some participants were involved at the state level as a regulator in the fire service certifying entity in their respective states, as well as being involved in a state that was accredited or that had not received accreditation. Other interviewed for this study had served as fire chiefs (Administrators) who were involved in the hiring process of a fire department.

Conclusion

Although this started out as a qualitative methods approach, once survey information was gathered and reviewed, the approach was changed to mix methods. Also, to avoid any biases in the interviews and surveys I sought out Delphi testers to review questions for leading or biased tone.

CHAPTER 4

FINDINGS AND RESULTS

This chapter will present the results of the interviews and surveys that were conducted. The interviews are presented first, and then the survey results. The only item not in this order is an interview with Dr. Sandy Hunter, Educator at Large on the Board of Directors NREMT. This is due to the overwhelming recognition of the NREMT as a model system for reciprocity.

Certification and Reciprocity-Interviews

To examine the history of certification and reciprocity in the American fire service, I interviewed Mr. Kevin O’Connell (O’Connell, 2014), a 30 year veteran of the Louisville, KY Fire department with over 20 years of service on the ProBoard. Mr. O’Connell provided a vital history of the fire service’s attempts to bring professional qualifications into existence.

In 1970, the Joint Council was founded, consisting of representatives from unions, fire chiefs and other leaders, with a mission to reach an agreement on training standards and move toward a national standard of professional qualifications. In 1972 The Joint Council formed a committee called the National Professional Qualifications System (NPQS), commonly referred to as the ProBoard. The ProBoard also identified the need for professional qualification standards for other technical training topics. The ProBoard in its original form was put in charge of developing the first professional qualification standards for not only firefighter training, but various technical levels, in conjunction with the NFPA. The overall vision was a universal acceptance. One barrier to this vision

of reciprocity was that the members of the Joint Council held veto power over the ProBoard.

The goal of the ProBoard was to develop national standards to allow the same training and testing nationwide, to be done in GA and AL for example. “The states couldn’t agree and there was a lack of trust, coupled with different number of hours being taught on the same subject, so they asked how do I know that they are doing what they say?” explains O’Connell. The ProBoard recognized that if you use a valid and reliable test with appropriate methodology, such as a validated outcome or a criterion referenced exam, then there could be an equivalency in assessment of the nation’s fire service. O’Connell states that the idea was to get an even playing field, with assessment being performed along an appropriate methodology, including skills testing of topics where needed, that was overseen by administrative controls. The first NFPA 1001 Fire Service Professional Qualifications standard came out in 1974.

O’Connell recalls that in the early 1990’s the Joint Council dissolved, leading the fire service to believe that the ProBoard was also going to dissolve. It was at this time IFSAC was formed. The ProBoard did not dissolve and with some funds left, reformed and incorporated as a standalone entity, with help from the International Association of Fire Chiefs (ICHIERS), International Association of Arson Investigators (IAAI), the National Fire Protection Association (NFPA) and entities who became charged with appointing representatives to the ProBoard Board of Directors. This is the organization that is in place today to serve and provide accreditation. “The NFPA took over the development of the professional

qualifications standards,” explains O’Connell, “The process now under NFPA to develop standards is recognized by the American National Standards Institute (ANSI)”.

Mr. O’Connell explains that the system of reciprocity acceptance is really a spectrum, and while every state has a Firefighter I & II, they are not universally accepted across state lines, or even departments. Also, while some states have just a few certification levels, states like Texas have 40+ levels. This allows the issue of a state certificate that is accredited by ProBoard, to accept ProBoard and be accepted by other ProBoard States should they choose to. “What if the certification is not accredited? You might not see full acceptance, you might not see any recognition at all.” O’Connell states. Another concern identified by Mr. O’Connell is if certification is even required by law or controlled by the AHJ. “Why go through the process and expenditures? Some states accept it across the board, while others require you to challenge their testing, and then others require you to take a bridge test that covers the states specific info” explains O’Connell. “In some states, bringing in a certificate gets you nothing. The original goal was that the certifications would be accepted outright, and that is a goal that was never reached”.

The arguments and reasons are spread “across the board” as to how states approach reciprocity. “It could be law, ego, pride, even a difference in the hours taught. Another issue is that we really do not have continuing education or recertification required in the NFPA 1001 standard” O’Connell pondered. Some states will require that the certification to be within the last two editions of the

standard, or require you to have continued your education. This leaves many questions as to the acceptance of older certifications.

O'Connell stated that across the board reciprocity is a long way off, but the answer may lay in a model we are all familiar with in the fire service, that being the Emergency Medical Services model of the National Registry of Emergency Medical Technicians (NREMT). The NREMT have adopted a test bank for knowledge and skills that has been validated, covers the requisite body of knowledge and skills, and has the appropriate administrative controls. Such a system allows one to teach how they want to teach; provided skills and knowledge are taught, and the student in Georgia should be just as successful as the student in Alabama. Students from both states should be able to pass the test and skills checks.

The interviewee was then asked to describe the necessary steps to bring the fire service to a system of reciprocity. "Again, we need to streamline to one testing system, much like the NREMT. This would breed a lot more trust and acceptance...it would help alleviate the same challenges we face now." It would take the actual agencies (fire departments) to push it, but in turn this would take a lot of work off the agencies (state) that issue certification in terms of administration, test development, skills and knowledge validation as only one staff would be needed to run such a testing system instead of each of the 50 states having their own staffs. O'Connell closes by saying "Going to a NREMT Model would equalize the playing field, and get us back on the path to the original vision". There is a sense in the fire service that some programs teach at higher

levels and others at a lower level, but a universal assessment would allow one to measure that in a valid methodology.

Accreditation in Action

During the 2014 Spring Meeting of IFSAC held in Tulsa, OK, I interviewed Mr. Clayton Mormon (Mormon, 2014). In addition to serving as Department Head for the Oklahoma State University (OSU) in the Professional Development Department, Mr. Mormon also manages IFSAC as a unit within OSU's Professional Development Department.

During our interview, Mr. Mormon explained that the certificate assembly's primary role is to accredit certifying entities within a specific jurisdiction for credit for certification. To be eligible, they must present a letter of empowerment from an appropriate governmental agency. The IFSAC certificate assembly accredits entities which in turn issue certification to the individual continuing the IFSAC seals. This can encompass many levels and topics of training he explained, but also includes basic firefighter certification. All of these levels must be based upon NFPA standards for entities operating inside the US. Internationally, they may have their own standards or could also adopt NFPA.

Mr. Mormon stated that to become accredited the entity must submit their application for accreditation along with several documents including a comprehensive self-study and organizational charts. These charts provide the group that will actually assess the entity, called the site team, with the answers to questions on everything from the testing process, to facilities, and even staff. Once we have a site team leader, he or she reviews the documents and gives them

a brief overview concurring that the entity appears to be ready for a site visit. At that point IFSAC selects the other two members, forming a three member site team.

The next step he explains is to schedule a site visit for a minimum of three days on site reviewing the correlation sheets, the test banks, the policies and procedures. Additionally they will witness a written exam and a skills exam. This is all done to make sure you are covering 100% of the standard and that you are doing it appropriately with appropriate test security and all that per the criteria. Once they go through the site visit, then a written report is received back at the IFSAC headquarters. It is then forwarded to the Certificate Assembly Board of Governors. They review the site visit report, and during the next meeting of the Certificate Assembly Board of Governors they will do a final cursory review and the site team leader will typically give a presentation and a recommendation. That recommendation can be to grant accreditation, not to accredit, or a conditional accreditation. At that point, the board will vote. Depending on any recommendations or requirements depending they will hold off on giving accreditation, grant a conditional accreditation or they will grant full accreditation.

Mr. Mormon was next asked what role accreditation plays in reciprocity. He stated that with IFSAC and our process, you know that the minimum has been met. You know that the candidate down at the ground level has completed an exam appropriately and has passed an exam to the minimum standards. Now some states, providences, and countries require training above the minimum

contained in NFPA 1001 but at least the entity knows where they are at when they do complete and receive a certificate with an IFSAC seal. It sets a base line that is really important, he explains. He gives the example of two entities out there: Florida and California.

They have become members and are looking at becoming accredited and working on the paperwork at this point but I would say a good 20-30% of the phone calls we get from the individuals are from California or Florida saying 'Hey I've got this certificate and I am moving from California to say Idaho or North Carolina or something like that and I don't know what to do. I have been in the fire service for 25 years and I have all of these Cal fire certificates and they mean nothing in another state.' This person may or may not get any credit despite maybe having obtained that baseline and holding IFSAC certificates.

As for the challenges that exist in reciprocity, he explains that this previous example represents the challenge.

It is my state; I do what I decide is best for my state. I will give you an example: the state of Colorado. In order to stay current as a firefighter, you are required to do so many hours of continuing education a year. The state of Oklahoma does not have that requirement. So if you move from Oklahoma to Colorado you may or may not be able to get hired on as a firefighter because of the continuing educations requirements. Just because I had my FF1 in 1997 does not mean that I am still qualified to

work in a fire department, as the NFPA 1001 changes every 3-5 years.

That is the way that Colorado sees it.

Who points out and reinforces that each entity has the ability but IFSAC does not force reciprocity. “However, with an IFSAC seal on a certificate, you know the minimum they have been trained to and what standard they have been trained to because of the way the system is set up, and the edition of the standard is listed on their certificate”. So as an entity when you see Joe Firefighter come in to the State of Kentucky you can look at his certificate and know he went through training and was certified in North Carolina. We can pull up North Carolina’s program and we can see exactly what he did. You know as a director there in Kentucky that yes this firefighter’s training is good, or you know that his training is a few editions of the standard old.”

As for a fix to reciprocity, given the level of autonomy states currently have, he does not know that there is a good fix for it. “For example, New Jersey just became accredited. The way you fight fire in the State of New Jersey or the training you have to go through in the State of New Jersey is significantly different than the training you go through and the emphasis they put in training in say Idaho. There are a lot of variables. I don’t know that certain states, I wouldn’t say all of them, but certain states wouldn’t like that because they would have to give up that autonomy.”

This is where the autonomy for each individual state is a good thing, and knowing they have met that baseline will give them the ability to move from state to state in the same breath if we had a national system like the EMTs or Nursing.

He gives an example that he experienced firsthand to explain this, explaining that his wife is a nurse and they moved from Missouri, where she was practicing, to Oklahoma. She still had to go in and show what she did as far as her exams in Missouri to get the additional license in Oklahoma. “It is the same thing with a professional engineer. You test in each state that you want to work in. Some states give reciprocity and some states don’t. This is also like engineers in that if you are going to put that stamp on your plans, you have to look at the state you will be working at.”

State Regulation of Reciprocity

Mr. Shane Ray (Ray, 2014), State Fire Marshal for the State of South Carolina which oversees the South Carolina Fire Academy, was interviewed about state-level certification reciprocity. Mr. Ray formally moved up the ranks to achieve the position of firefighter with the Pleasant View, TN Fire Department.

Mr. Ray explains his experience with reciprocity by first explaining he had no real experience with it while he was working in Tennessee. However, when moving to South Carolina, as Tennessee was an IFSAC state, he suddenly found his certification challenged. He explains that as he began the process to move, he had several questions,

So then when I go to South Carolina it’s like what will they give you credit for? Will they give you credit for or will they allow you to take a retest? So if I was certified to Fire Officer 2 because that was as high as Tennessee went, they didn’t have Fire Officer 3 or 4, will South Carolina give me reciprocity and grant that and say that it is good? What about

firefighter? I didn't have FF1 or FF2. I had FF3. That was when NFPA 1001 had three levels of certification. So I started with FF3 because I had the years in the service and I could challenge the test and so I did states Ray.

But in going to South Carolina, Ray found that they have a different approach to reciprocity. This includes taking a test that will let you test out of the level that they determine is equivalent. He states that this was certainly a challenge for him personally and "to be honest with you I didn't do it. I didn't go in, I didn't schedule, and I didn't take the test." He states that his original position was to be the superintendent of the South Carolina Fire Academy, and saw no chance to make extra time for those things. It was really a convenience issue to Mr. Ray. The other piece he explains is that in South Carolina is that if the local government (AHJ) has the opportunity to say we have hired Shane Ray and they know he is qualified, there is no requirement for that.

Reciprocity, for that matter certification, lay in the hands of the AHJ in South Carolina states Mr. Ray. If the local government is good with it then the South Carolina has no say in the matter. Eventually, he states, if you are going to get into that state's system you will need to comply with the rules at the state level.

Speaking as a state agency, at the state level we deal with reciprocity issues daily, not only from people coming from out of state but people in state" explains Ray. He explains that first, somebody took a class. Was it

good enough? If they took a driver's class from one of the insurance companies, will we see that as an equivalency? Will we give them reciprocity for our own driver curriculums? There is a whole host of issues. We set prerequisites for classes. Do they have some sort of equivalency training to that? What do they want credit for? We see it on a daily basis, with the main challenge being how do we make those things work for reciprocity.

Rays continues stating that Another challenge to this approach is that it is very time consuming and labor intensive on both people's parts to do that. We have certain things that say we know this course, we have evaluated it and we will go ahead and give you credit for that up front. From his point of view, there is a need to streamline the process. The one thing with IFSAC and Pro-Board (which South Carolina is moving towards Pro-Board accreditation) is they want the students graduating to be able to go anywhere and not have to face these issues. South Carolina also wants to give the opportunity to people coming in to be recognized with fewer challenges. "I think we have to revisit the need. What is the need? Is there a better way? We just had a local fire chief hired come from California. He is a Fire Officer 4. Well what if it is not IFSAC or Pro-Board. Do we trust that system enough to give credit?" questions Mr. Ray. "Under the current system, we would have to go back and check everything this person has had for the last 30 years. Then do they have to be retested? Will they take the time to retest? This is one of the things we are concerned with in South Carolina." One of his major concerns is the effect on recruitment and retention. "How many

people come in and take the time to go through it and how many walk away?”
ponders Ray.

Mr. Ray was asked what challenges he had witnessed or experienced with regard to reciprocity. Mr. Ray explains that it has made a challenge on us up front taking people from out of state. He has witnessed this more in South Carolina more than in Tennessee as a Fire Chief. There he had some people from out of state that successfully worked through the process, but in South Carolina “We get a lot of people from out of state that come to our state to become firefighters, whether it is Charleston or other cities along the coast. Naturally they attract a lot of people and they face a lot of challenges to participate in state certification” defines Ray.

Another concern that has been brought to light in this process is that of continuing education. Fire Commissioner Ray was asked about his experience with continuing education He explained that Tennessee had 40 hours of training per year consisting of topics approved by the commission yearly. This was tied to the employee being eligible to get the state salary supplement. There are other driving forces, but having that tied monetarily results in a higher success rate. If not he states, “In our system, in the bureaucracy of it, I would assume people would just avoid it. I don’t need it. My local government doesn’t require it.”

Overall, Mr. Ray believes the problem with reciprocity lies in the process, or lack thereof. That is what makes it so complicated, labor and time intensive for the state. The other piece, he explains, is the need to look at the value of the process in place. “Is there an easier way, or a better way, to get them into our

system? How do we recognize that someone coming from Kentucky, if you left Kentucky and came to South Carolina, how do we say your certificates are good or not without looking through curriculum and what year of the standard you were trained on? There is a whole host of challenges that goes along with that, and an imperative need to improve the process.”

Mr. Ray thinks that some of that should be worked through between the National Fire Academy and the North American Training Directors. “Prior to 1974 we didn’t have professional standards. So then as we have evolved, have we added to the process that is counterproductive?” Ponders Ray, “I think in some ways we have. I don’t think we are diverse enough to be inclusive of everybody. The particular challenge I see with that more than anything is with the volunteer fire service, the one size fits all is a huge challenge”. That challenge being with showing proof of meeting the standards, giving them reciprocity for what they have done somewhere else, or even assessing what they have accomplished through their own needs.

John McPhee (McPhee, 2014) is the Accreditation and Certification Manager for the State of Iowa under the Department of Public Safety, State Fire Marshall’s Division in Iowa. Iowa is accredited to 14 levels currently for both IFSAC and Pro-Board. Mr. McPhee explains that they have several different paths to certification. The State of Iowa is a challenge system so many courses don’t have any course requirements. They are also a challenge system and some of the certification levels do have requirements. For example, fire investigator, fire inspector, and fire instructor courses are required to meet adopted

prerequisites according to administrative law. You have to be 18 years old and a member of a fire department or an emergency services responding unit. They must fill out an application or an eligibility form to be eligible to test.

They have two different modes of testing right now in the State of Iowa. Traditional paper and pencil and computer based testing at testing centers. The testing also includes skill testing as well where applicable. All of these certification processes result in either an IFSAC or ProBoard accredited certificate.

As for reciprocity, it is quite simple between accredited certifications, but not as simple with state certifications as Mr. McPhee explains. “We do have a reciprocity issue. Basically if it is IFSAC or Pro-Board we except it straight across as long as it is not over two NFPA cycles”. If not, they have to take the written test again to make sure that the knowledge base is there. They look at the skills, and coming from another state there is an application process and review of the certificates and background checks on those certificates.

Coming in with a state certification that is not one of those two, Iowa would do a lot of background checks. They do accept it from the standpoint of meeting prerequisite knowledge or skills but Iowa policy is that they have to take the written exam to make sure the knowledge base is there. “As there are a few states that don’t test skills, we will test to confirm skills” explains McPhee, who refers to these as “computer tests”, meaning they don’t do any skills yet they get a certification. What that gives them is the right to test in the State of Iowa. As far as reciprocity, they don’t issue new certificates with the seal. We actually just put

them in our permanent database as a reciprocity accepted so they are able to test for future levels. “If the education is there we don’t want them to go back, for instance, and take FF1 for the third time just because they switched states. We know it is there” states McPhee. From there, Iowa requires 24 hours of continuing education yearly.

Iowa is an AHJ state. “It’s administration rules are promulgated through the legislature. It is state level. It is voluntary. There is no requirement for certification in the State of Iowa. It is just that we are the certifying entity. Certification is voluntary” explained McPhee. A current department can bring them in at whatever level they want to. If State certification is sought, then they will look at their reciprocity if they have it from another state or entity. They have to be trained to the FF1 level, but they do not have to be certified for entry into the hazardous atmospheres. “In Iowa it is really up the AHJs as to what their requirements are for entry level. Most departments require FF1 and FF2. The AHJ requires it. There is nothing from the state side that makes them do that” expounded McPhee.

When asked how he thinks reciprocity affects recruitment and retention, he responds “I think we have to look at our students or customers right now. I feel that other generations are not as mobile and right now we are facing ones that, and I think studies have shown that, this is not a direct quote, but they will change jobs three or four times. We are dealing with a very mobile tech organization and it’s not going to be there for 20 or 25 years”. McPhee goes on to explain “They want upward mobility as far as if a chief’s position or a captain’s position opens

up. Most of them aren't laterally bumping up the line. They will be outside looking for the best candidates and I think that reciprocity gives us the best opportunity for that best candidate to come in from that organization."

Another challenge faced in reciprocity was somewhat surprising. He has seen some issues with people who are supposedly certified and then have gone to one of the larger metro departments that force's them to retain and they don't have any of the supposed skill sets that they need to pass. "We have had that come up in the last couple of months. But as far as failure rates on testing and stuff like that, we are at the 84th percentile passing on at the first try". Iowa gives those persons three tries should it be necessary, as Iowa relies largely on volunteers. This type of system helps if they go out and do a very rural type of fire service, or "if they go to another state to get training, and with all the bordering states, most of them are IFSAC", McPhee explains "So we know the process of testing and evaluation that they have gone through. It is not an issue for us to bring them back in our system and get them on our database".

McPhee also provided additional observations on the challenges faced. For instance, he states he is aware of some states that will not allow any reciprocity. "You have to do their system. Some are run with a mindset that our system is better or they want you to be trained our way or no way type of thinking." One of the issues is the curriculum and testing mechanisms. "I don't think the training side of it is the same because you may be able to offer a course in 40 hours where another area or region requires 6 prerequisite courses even to sit for say the Fire Officer 1 exam" he explains. "So the state will require you to

have to have X number of hours. He states he doesn't know if it's an actual curriculum or testing thing. I think it is more of a pride and ownership thing" says McPhee.

McPhee closes the interview by explaining "You just have to understand that each individual group or organization has a way of doing it. He states you are probably going to get 60 or 70 different ways of doing this so as far as a set reciprocity definition or things like that, I think the best way is to look at it is to say here is what can be done for reciprocity instead of saying here is the issue we are facing. Here are some basic levels. You can accept it whole heartedly, accept it with some basic testing, or you can accept it not at all. You will have to go through it". He explains that we need to make sure we are not hurting the end user by our little turf wars. "If they can do it and they can do the training it shouldn't matter where they got it from. I think that is the key."

Another person involved in the regulation of certification and reciprocity at the state level is Mr. Scott Hacker (Hacker, 2014), who is the Accreditation Manager for the North Carolina State Fire Marshall's Office.

Mr. Hacker states that sometimes reciprocity is simple. North Carolina is accredited for 46 levels in IFSAC and 9 levels in Pro-Board. "We will go IFSAC for IFSAC or Pro-Board for Pro-Board whenever possible" explains Hacker. "One example of where things are not that simple is the State of Virginia. It is only Pro-Board firefighter. North Carolina is not Pro-Board firefighter. We are Pro-Board Instructor, Officer, and Fire and Life Safety Educator. So technically

no one from the State of Virginia can come in and get certification as a firefighter.”

Transfers in are not automatic, however. As of April 8th 2014 IFSAC “seal” holders (firefighters) have to go to a regional testing session and take a test which is basically a cognitive knowledge test. Once you make an 80 on that test they will give you your North Carolina certification. While there is testing of the knowledge of the professional standard, North Carolina accepts the skills test that you passed in your original state. This is due to limited staffing in his office, which numbers 3. “We want to test skills but we did not have the staff to go full board testing of everything. There are only three of us who do certification in the State of North Carolina” explains Hacker.

There is no reciprocity for non-accredited training certifications. North Carolina, however, is an AHJ state, meaning fire chiefs can take anything that they want. “We tell them that just because they do not have a North Carolina firefighter I certification, if they show you they have a Virginia firefighter, they have met the requirements of 1001”. Participation in the state level accredited program requires them to start at firefighter 1, and from there they can go on to take more advanced levels of certification that is accredited.

As North Carolina’s process has progressed, some unexpected challenges have occurred. Some states have experience requirements, while others do not. “For example, in many states, if you want to take Officer 1 you must have your firefighter for three years and you must be an Instructor 1. Our requirement for Officer 1 is three years as a firefighter and our requirement for Instructor 1 is

three years as a firefighter” Hacker states. In essence, they will allow you to sit in the instructor class with no experience requirement, where in North Carolina they would have to have three years. You could bring your out of state certificates to meet the prerequisites for our system, and by pass the mandatory three years. He describes that this would be for a prerequisite only, and would not result in the firefighter receiving certification for that level (the prerequisite). They would simply be allowed to attend the class or test, and then would receive a certification for the newly achieved level or standard.

Mr. Hacker proclaims to be a “very big supporter of reciprocity’, and provides a real life example of the benefits of reciprocity. A fellow fire service member who lived in North Carolina was a paramedic and a volunteer firefighter, and held certification as Firefighter 2, Apparatus Driver/Operator, and other certifications. His wife was transferred to Northwest Arkansas and because he was a National Registry of Emergency Medical Technicians (NREMT) certified paramedic and was IFSAC certified in fire service topics, he was able to walk into the State of Arkansas, lay down his certificate for paramedic, and they said yes. He then laid down his FF1 and they laid down their FF1 all the way through the list of everything he had. Luckily he did not have to start over in the Arkansas system, and was able to go to work helping to support his family.

Mr. Hacker then described several challenges to the system. First, the IFSAC and Pro-Board made it very clear a couple of years ago that they will not accept the other certificate. He does not think there is an overt resistance to reciprocity; especially the programs that are able to be measured content wise.

When you get accredited by either IFSAC and Pro-Board, all they are measuring is how somebody took a test. It is not on the number of hours or on the course content. The numbers of hours in a course are not as important as the course content. However some situations require a closer look. For example he explains “When we are developing a Fire Officer program that we are providing 78 to 80 hours and then someone comes up and says they can develop a Fire Officer program that is 27 hours, where is the equivalency? We actually have addressed this in some of our meetings and the decision was made to just test them. If they pass, they pass. If they fail, they fail. If they took a 27 hour class and all the objectives were met and they can pass the practical’s and the test, then have they met the standard.”

In regards to the effect of reciprocity or a lack there of, in recruitment or retention, Mr. Hacker does not see it on the baseline level. Where we are going to run into problems he theorizes with reciprocity is on the executive level. Fire chiefs from out of state trying to move into North Carolina are required by the AHJ to be Fire Officer 3. Say for example they have a Maryland IFSAC and/or Pro-Board Fire Officer 3 and we are not going to give reciprocity for it. What is it going to do to the pool of North Carolina applicants? It is going to draw it really, really small. People who hold that Officer 3 accredited certificate are going to be able to ask for money and basically hold the city managers hostage because the pool of applicants is going to be so small in the State of North Carolina that they can basically name their own salary.”

Also involved at the state level of policy making is Kelly Cavanaugh (Cavanaugh, 2014), Fire Certification Specialist with the Office of the State Fire Marshal's (OSFM) Office of Illinois in the Division of Personal Standards and Education.

Mr. Cavanaugh first explains that Illinois does not particularly recognize accredited certifications. "However, if a firefighter from another state comes to Illinois and wants to become certified or exercise for reciprocity, the current process that became effective April 1st 2014 is to first provide a certificate from your home state that identifies that you have been trained and certified by some entity to an NFPA standard, for example 1001. If that is acceptable, then the next step is that you will be granted the opportunity to challenge our written exam for certification. You get one chance, and must pass with a 70%. Next, you then have to complete the practical defined by the State Fire Marshal's Office of Illinois, for whatever certification you are applying for reciprocity in. For example, for firefighters you would have to complete all of the practical skills. If you have the certificate, that certificate essentially says you are trained to the NFPA standard which is the minimum standard for the State of Illinois. Since Illinois often times exceeds that minimum NFPA standard, that is the reason why you have to take our written exam and pass it and then take our practical exam and pass those as well."

Mr. Cavanaugh explains that participation in the state certification program is optional. "The Office of the State Fire Marshal does not mandate that you become certified through their program. We typically defer to the AHJ. What

we do in the State of Illinois is we provide a service that is an independent verification that people have met a standard” explains Cavanaugh. That is the standard of the State Fire Marshal. The AHJ, or fire protection district, municipal fire department, be it whatever it may, have the option. He concludes by stating “Most fire department entities in Illinois utilize our program. If there is ever an issue then they pull out the certificate from our office and say here is the proof that the fire service member met the standard.”

“Legally, in Illinois, the AHJ has the authority to define their training standards and what they require. Most of the fire departments I have encountered utilize our certification process because it provides them a little liability umbrella. Otherwise, if they were to go outside of our process and something unfortunate were to happen to someone and there was an investigation, their proof of the quality of their training program would be all on their shoulders whereas if they have that certificate in a file with our name on it that we issued it that gives them a little bit of protection if you will.”

“The state program publishes a mandated subject list with a certain number of hours required in different categories that is available on the OSFM web site. The Office of State Fire Marshal’s Office of Illinois and the personnel standards and education and if you go to certification you can pull up all of our objectives for every program. You can’t get the lesson plans that easily but you can get the objectives for every program.”

Mr. Cavanaugh thinks that a system of reciprocity should be easy but nothing in the fire service is ever that easy. “Everybody says the same thing that

they are training to the NFPA 1001 standard as a minimum. There are too many kingdoms and too many individuals. The other thing is that in the State of Illinois we take the NFPA standard as a minimum and all of our programs have additional objectives both cognitive and psychomotor. We look at what does a firefighter needs to know to be able to do this job safely and what does he need to be able to do”. He explains that the NFPA guidelines are a starting point, like a baseline. We add to them which does make reciprocity difficult because in Kentucky you may have a different idea of what a firefighter needs to know above and beyond than what we do. There is always going to be differences. Illinois did participate in the IFSAC process at one time. I can’t speak as to why that was discontinued but it was that it just wasn’t working. It never went nationwide so it was of limited value to the people and it was cumbersome to change a program.

AHJ’s and Reciprocity

In addition to those involved at the state level of regulating fire service reciprocity, the impact of reciprocity policies at the hiring level within fire departments was explored. Chief Mike Jackson has (Jackson, 2014) held executive positions in two fire service organizations. He was formerly the Assistant Chief in Astoria, OR that consisted of 12 full time and approximately 20 volunteers. It is a small community with about 10,000 people along the coast of Oregon. He currently serves as a Division Chief with the Clark County, Washington Fire Department. Their district covers four cities in two counties, with a combined district of about 165 square miles, some rural and some

suburban. They employ approximately 70 full time and approximately 40 to 50 volunteers currently.

In Oregon, they had their own state system through the Department of Public Safety Standards and Training, (DPSST), which is an independent state agency that did police and fire training certifications. They did use the NFPA 1001 training standard but had their own means of testing it. They did have some reciprocal agreements and some reciprocity but were not bound to IFSAC or Pro-Board. They would also recognize many states programs as well.

Certification and reciprocity was controlled at the state level. For example, they would review information then allow folks to test with the states that they had agreements with. They would also allow IFSAC accredited certificates, but the applicant would still have to test in their system. This included both skills and written testing, as well as a review of documentation of curriculum and delivery classroom time.

In particular, this would involve the collection and submission of documentation of the applicants training hours completed for certification towards NFPA 1001 and then submitting that to the state to the DPSST. The next step he explains would be authorization for delivering that test or to get the documentation approved as training credit in the state. Chief Jackson states that “Getting into Oregon wasn’t terrible.” The DPSST had a common structure for managing documentation flow through the state that was helpful and it was a clear record system where those applying and those reviewing could capture whatever was needed. Any agency could get records anywhere from the state of OR.

Chief Jackson was asked about his experiences with reciprocity and hiring. “Astoria essentially did set criteria on our hiring with points given for different certification levels. They would get a higher point for an Oregon certification or a lower point for a non-OR or IFSAC accredited certification. That combined, with education, and those that had multiple certifications could actually acquire more points than through education specifically. We required some basic levels with FF1 and EMT, that sort of thing, with higher points to Apparatus Driver/Operators, Firefighter II, and certifications like that.”

“New hires for example were expected to be able to document that firefighter I to the point where we could get that approved through the state. Oregon had a basic firefighter level and some accepted levels, lower than NFPA 1001, mainly for the volunteer force. We did not accept those from the career force. Volunteers we would bring in and train, but not in a formalized academy. This was accomplished by more of a task book format to accomplish the NFPA 1001 training.”

“New hires that were certified would not undergo retraining. They would do approximately one week of 8 hour days for orientation. Being a small agency hiring a single person at a time, we would build an individualized training program for that person based off what they were coming in with and then getting familiarization with our equipment procedures and that sort of thing. They were essentially probationary employees that would hopefully be additional staffing until we got through that task book type process of documenting training,

familiarization, procedural tactical things, and operating guidelines. Again, they would have to come in with FF1 training as a minimum.”

”Reciprocity had a big impact on recruitment and strategies looking for people with prior training that you could count in the OR system,” said Chief Jackson. During the time he was there, all new hires either came from intern or volunteer status from their own organization with training or other OR agencies. “We did not select any candidates from outside the State of OR. Administratively I had been selected from outside the State of OR, but firefighter certification wasn’t as big of an issue. I was able to pursue reciprocity coming from Indiana. In Oregon, reciprocity did not present a challenge due to the processes in place.” Chief Jackson states he is aware of others that have tested around and had some issues with it. “From the fire side for my time in Oregon, specifically no, it did not hinder any candidate hires or anything.”

In regards to his experiences in the state of Washington, Chief Jackson describes the state as “a little unique”. It is an IFSAC state, and they do accept IFSAC and will issue state certifications with direct reciprocity for comparable IFSAC certifications. They will issue state certifications as well, although there is no requirement to be state certified. It is local prerogative (AHJ) driven. The state will certify and accept reciprocity and issue a Washington State certified IFSAC and when you take a Washington State test it is IFSAC. Washington State certifications meet the IFSAC requirement.

It is very much regulated as far as training centers and IFSAC evaluators and that was in place before they had the resources to provide it successfully. It is

a challenge to pull off an IFSAC test to get adequate outside evaluators required to maintain integrity of the process. That has left several agencies to not pursue IFSAC. Being a home rule state there are liability ramifications with AHJ driven certification, but it truly is up to the chief. There is also Labor and Industries (LNI) which is affectively our state OSHA (Occupational Safety and Health). LNI does set standards for firefighter training but it is not specific to certification. You have to be able to document the appropriate training which they have a level less than FF1 and they recognize FF1 which obviously IFSAC fits that requirement of meeting NFPA 1001. Essentially the AHJ system allows a lot of flexibility. That is true reciprocity in a sense just as long as there is no prejudice towards one process or another state; should the AHJ choose to take it, up to them. “But then the reverse is true, meaning a Firefighter II in Walla Walla has nothing to show outside of that agency”.

”I would say a lot of agencies have gone to or will be a setting policy regarding it. As far as our agency, our policy is IFSAC. So we only accept IFSAC certifications and the only certifications we recognize are IFSAC. We don’t mind if it is Washington’s or not; however, if you are IFSAC it is easy enough to get Washington so that is kind of our preference. All of our training we do to the current IFSAC (edition of NFPA 1001) standard with the intention to prepare them to test. Even when we bring in volunteers, we will do a volunteer academy and we will do IFSAC testing at the end. If you don’t meet the IFSAC standard, you can’t stay on as a responder.”

“New hires are expected to have IFSAC Firefighter I but when you come in then we will pay to send you to a state run academy that is run by the State Fire Marshal’s Office that covers FF1 and FF2 IFSAC inclusive of HazMat Ops and Awareness. This essentially is a retraining on the current Firefighter I and II standard. There has been a perceived value of that training and relationship building with fellow new hires through the state academy. That has actually been pushed by our labor union to do that and our hiring is actually done similar to other trades where we hire someone through apprentice and they go through a series of steps to become a journeyman firefighter. So our new hires are hired as apprentice firefighters and then there are five compensation steps that get them through apprentice to journeyman firefighter.”

“The costs, however, are substantial. The academy is approximately 14 weeks that we send them up there. It includes lodging and meals on site. It is a substantial cost, several thousand per candidate that goes up there. It is out of the training budget so I haven’t been too involved in that. Part of our responsibility is to conduct a probationary evaluation for performance evaluations. We send them up there with specific criteria and measurements and we keep in contact with academy instructors on progression, performance, and those sorts of things for probationary evaluation.”

Chief Jackson was then queried if his department granted reciprocity for any other certifications, accredited or otherwise. He explains that while they don’t have a clear policy on it, from a lateral volunteer standpoint, they give consideration for those things but try to set them up to complete the IFSAC

challenge test or whatever they needed to meet the IFSAC requirements. “For new hires, because we send them to an academy, there is a little bit of flexibility there, but most of our new hires come from our part time program. This is a pool consisting of participants in their volunteer program. Chief Jackson describes the certification level of this pool as ‘Not exclusively IFSAC’, but with that, most of those folks have received IFSAC certification either prior to or through agency training or challenge testing through our agency. So certainly there is a heavy weight for IFSAC certifications but some consideration is given to non-IFSAC certifications”.

In regards to obstacles to reciprocity Chief Jackson calls it as “Being interesting as they are a bordering state from Oregon and having more people seeking reciprocity from Oregon than any other state. There is a challenge because OR is not IFSAC”. “The population in Washington is more than double the population of Oregon. So with that even if you look at community colleges from the Western part of the state to the middle of the state North, the community colleges and their training programs target IFSAC. There are actually two IFSAC training facilities in the state of OR but not with any state affiliation. They do that to try to provide a more marketable candidate upon graduating the Associate’s programs.”

“Other than that reciprocity between Washington and Oregon is a challenge because there is certainly an incentive and a push to move towards IFSAC. Mid-size agencies look at that. Larger metro (cities with over a 100,000 population) agencies typically have their own recruit academy. Because it is home

rule, they don't really worry about certification. They just document training and move forward with it that way. If you are looking at Seattle, Tacoma, Buchan, Vancouver, they will not seek IFSAC training. They will do in-house training that is non-certificated, doesn't provide a certificate and that is that. Those folks don't really care what you come in with because you are going through their recruit class anyway."

With regards to Oregon, Chief Jackson identifies their challenges for reciprocity as the cost of logistics associated with IFSAC testing where they already have a system in place that they feel suits their needs. Their system is standards based. It has good testing and measurements of outcomes and those sorts of things. It is a well-respected system. "But I certainly think there is a benefit from the state moving towards IFSAC for the bigger picture of reciprocity" explains Mr. Jackson. "Because of that you don't see a whole lot of people from other states moving into Oregon and achieve reciprocity or move out of Oregon without IFSAC".

In closing Chief Jackson states the "Biggest challenge is not having a national standardized system for reciprocity, certification and recognition of certifications that is uniformly accepted is what keeps us from being professional".

Identifying the Current System of Reciprocity

A set of three surveys were distributed to various populations identified in the fire service. Population types were chosen to better survey the fire service as a whole to identify the state of reciprocity in the United States. These surveys are

described in detail in the methodology section, and copies of the surveys are included as Appendices. We will now discuss the results of the surveys.

Regulators

The first survey was sent to individuals involved at the state level with firefighter certification and reciprocity. A copy of the questions is provided in appendix I. A representative of each state's authoritative body was identified with a total of 51 surveys being sent out by email. 33 responses were received back, with one of those declining to participate. Please recognize that it is noted below that no response was received for a question; this was scattered among those surveyed and does not include the subject who declined.

The first question asked if the states certification system was based upon NFPA 1001, the nationally recognized training standard for Firefighter I & II in the U.S. Thirty respondents (97%) responded affirmatively. One response was received as no (3%). There was single participant who did not respond to this question. There was one respondent who did not answer this question.

The next question sought to identify if the agency represented would grant reciprocity to other state's certifications that were not accredited. 18 respondents (59%) reported they granted some form of reciprocity when presented with a non-accredited certificate. 13 (41%) represented that their state did not grant reciprocity to other state's certification. There was one respondent who did not answer this question.

The survey then sought to identify the states that were accredited by IFSAC. 18 (59%) responded that they issued IFSAC certificates, with 13 (42%) stating they were not accredited by IFSAC. There was one respondent who did not answer this question. In regards to IFSAC, the participants were then asked if they would grant reciprocity into their system for IFSAC accredited certificates. 27 (88%) responded they granted recognition of IFSAC certificates, with 4 (12%) stating they did not. There was one respondent who did not answer this question.

The same set of questions was asked in regards to ProBoard. 21 (68%) of respondents acknowledged they issued ProBoard certificates, with 10 (12%) stating they were not accredited by ProBoard. There was one respondent who did not answer this question. Next it was inquired if they granted reciprocity to ProBoard training. 23 (80%) stated they did accept ProBoard, while six (20%) stated they would not recognize them. There were three respondents who did not answer this question.

The survey next sought to determine if full reciprocity resulted in full certification in the accepting state. 16 (56%) acknowledged full reciprocity was granted for accredited certificates. 13 (44%) stated that full certification was not granted. There were two respondents who did not answer this question.

The final question in a yes/no nature asked if any agency being surveyed did not grant any reciprocity. One (3%) respondent acknowledged that no reciprocity was granted, leaving 28 (97%) that grant some form of reciprocity. There were two respondents who did not answer this question.

Next these participants were asked to identify the steps taken to achieve full reciprocity (n16). Based on the participant's responses, they fell into three clear approaches. First, 3 (20%) agencies identified that full reciprocity was granted with equivalent levels provided that the training meet NFPA 1001 with no other requirements except membership in a fire department in that particular state granting recognition. The next approach was identified by 5 (31%) and involved allowing the individual to challenge the testing process of the state. This involves both written and skills testing.

The most popular approach (8 respondents, 49%) involved the auditing of the training records provided for reciprocity, including documentation such as class outlines, skills that were tested, and tests that were given. After this audit was performed, the subject would then be allowed to test out in whole, or partially on skills and knowledge that was deemed necessary by the state. Each of these states had additional requirements that looked at the number of (cycles) between editions of the NFPA 1001 standard in question, as well as membership and residency in the state granting reciprocity.

Participants were asked to provide additional information on the topic of reciprocity in the fire service. One concern identified among respondents was the issuing of duplicate certificate, with states stating they would not issue a new "state" issued certificate, but would document the level achieved. This was to avoid attempts by firefighters to "flip" certificates, or work around and into one state's system by receiving another state's certificate which is easily transferable into the desired state. There were recommendations that the fire service should

move towards a national registry (NREMT), including some type of nationally recognized testing process. Respondents identified several challenges to reciprocity, including that not all states or AHJ's adhere to the NFPA 1001 standard, and the lack of uniformity in fire service training and the number of hours in each category, skills required and test contents and validity.

Administrators

The next survey was sent by email to individuals involved in the hiring processes of fire service organizations, called administrators. A copy of the survey is included in Appendix II. Identified as the second level in the series of those effected by reciprocity issues, these participants were selected due to their role in the hiring process to ascertain their views on reciprocity and any effects upon hiring it has. In brief, two participants were chosen from each of the 50 states and Washington D.C., with one representing career departments and other from a combination/volunteer department. A total of 23 respondents participated.

Initial questions gathered information that was demographic in nature. First the respondent was asked to identify their state. The first information sought was who (state or AHJ) held the decision making authority on certification acceptability. 11 (48%) of fire service leaders identified that certification was state mandated by a state authority. 12 (52%) identified that in their state, the AHJ had control over accepting certification. 23 responses were recorded.

Next a demographic of the responding department was sought to identify the department types represented. 12 (53%) were career departments, with paid

employees. 10 (44%) represented combination departments which employed both paid and volunteer members. 1 (4%) identified as being all volunteer. 23 responses were recorded.

The influence of holding certification prior to hiring was then assessed. The requirement to be certified to apply for employment was identified by 7 (32%) of the respondents, with 15 (68%) having no requirement. One participant did not answer this question.

Each employer was next asked if they required previously certified firefighters to undergo full retraining under the NFPA 1001 standard upon hire. 15 (68%) do not require retraining of previously certified employees, with 7 (32%) stating they did. One participant did not respond. The surveyed population was next inquired the influence or weight of being certified on starting salary. 17 (81%) stated that previous certification did not affect starting salary. Only 1 (5%) respondent stated it did influence starting salary. 3 (14%) selected this as not applicable. Two participants did not respond.

Finally, they were questioned in regards to the retraining of those that held accredited certificates. 13 (62%) do not require retraining of NFPA 1001 knowledge and skills, with 8 (38%) require retraining of new hires regardless of holding accredited certificates. Two participants gave no response.

Participants were asked to explain the process and provide the costs (if possible) associated with retraining new hires when required. These were coded and three models became apparent. The first model is best described as on the job training, where training is provided daily to reach the requirements of the AHJ or

state regulations. The second is a separate, budgeted process that focuses on providing a formal academy for training a new hire or hires. The third approach is to send the new hire to a training academy or college to receive the training. 17 statements were recorded in this survey of this area.

In more detail, the first model involves training provided while the firefighter is on shift. This training is provided by a company officer or instructor in addition to their other duties and responsibilities. One explanation of this involves a probationary period at \$8.00 per hour and 40 hours per week, for up to 18 months in order for the new hire to achieve their certification. Another Fire Chief describes a similar process of 40 hour per week with an instructor till certified, with additional assistance when needed by paid overtime to other department members. A third department also makes use again of dedicated instructors working normal shifts to provide an 11 week academy. 6 (35%) fell under this category.

Process type two involves a budgeted process where staff is reassigned to provide training academies to new members. One example is a career department. In order to provide training and verification for new hires, a respondent provided the following Budget:

- 1 Battalion Chief for In-House 7 week course \$11,375
- First step firefighters pay for in-house 7 week course (per student)
\$8,659
- Materials, books, props, rental burn building ECT for class (per student) \$420

The firefighter is then assigned to the state Fire Academy for 9 weeks to finish firefighter certifications. The costs of this include:

- First step firefighter pay for 9 week MFA recruit class \$12,113
- Certification for each fire recruit at MFA \$40
- Travel to MFA 9 week recruit course \$450

Another career department that runs a full time academy provided the following example of their budget:

- Four full time training employees (3x Captain and 1 Deputy Chief) at a payroll of \$370,000.
- One administrative assistant at \$50,000 and
- Miscellaneous academy expenses at \$12,000

Yet another example provided gives an estimate of \$33,000 per recruit for a four month program. This includes recruit salary, instructor salary, and equipment. The final budget for a training academy held by a department that provides a full academy in house included the following costs:

- 1 Lieutenant for 12 weeks \$7,587 per month
- 1 Captain for 12 weeks \$8,666.00 per month
- Recruit pay for 12 weeks \$3,246.00 per month

Seven (41%) of the survey contributors fell under this category.

The third type is the use of academies provided by supplemented sources, such as universities or state funded academies. 4 (24%) stated that they solely

utilized out of house academies. One department responded that the costs included \$4,500.00 in tuition plus hourly pay for 12 weeks. Another stated that they have a county academy and the costs are \$100.00 in tuition plus hourly pay. They pointed out that not only is the tuition extremely inexpensive, this saves money by not requiring staff reassignment or overtime. A third fire chief states career members are required to possess certification to be eligible to be hired, while they send volunteers to a county wide academy which costs \$1,000.00 per attendee.

Reciprocity Seekers

The third level survey was sent to individuals involved in seeking certification reciprocity. A copy of the questions is provided in appendix III. 42 responses were received back, with all agreeing to participate. Please recognize that it was noted below if no response was received for a question; this was scattered among those surveyed and does not include the subject who declined.

The first question asked if they had sought reciprocity for a state issued certificate based upon NFPA 1001, the nationally recognized training standard for Firefighter I & II in the U.S. Thirty respondents (75%) responded affirmatively, with ten (25%) replying they had not.

The next question sought to identify if the certification was ProBoard accredited. 12 respondents (40%) reported it was, with 18 (60%) stating it was not accredited by ProBoard.

It was then sought to identify how many were successful with their ProBoard reciprocity attempt. 8 (67%) responded that they were granted reciprocity, with 4 (33%) stating they were not.

Next those who were not successful were asked to explain why their reciprocity was denied. One stated the department they were applying had a policy that required retraining of all members by a department run academy. Another identified that the state they sought reciprocity in only accepted IFSAC accredited certificates. A third stated that the issuing state was not accredited by either entity, and hence their certifications received no reciprocity.

In regards to IFSAC accredited certifications, the participants were then asked if they their certificate was IFSAC accredited. 15 (54%) responded they granted recognition of IFSAC certificates, with 13 (46%) stating they did not.

The survey then asked them about their success with IFSAC certificates. Of those with IFSAC certificates 9 (60%) of respondents acknowledged they were successful, with 6 (40%) stating they were not. It then asked why those who were not granted reciprocity if they knew why. One replied that the administration felt it was easier to send them to the state training academy then try and seek reciprocity. Another stated as they were not an IFSAC state, no reciprocity would be granted while another identified the lack of proof of continuing education as the reason their certification did not receive reciprocity.

Each respondent was then asked if they had sought reciprocity with a non-accredited certifications. 10 (34% stated yes, with 29 (66%) stating no. Next it I inquired if they received reciprocity for one states non-accredited certificate in a

different state. 3 (30%) stated they did, while 7 (70%) stated they would not recognize them. I received several explanations from those that did not receive reciprocity. First, the time from initial certification that had elapsed was the deciding factor. Secondly, one state that was applied to did not take any other certifications, accredited or otherwise, while others only took IFSAC or ProBoard certificates.

This author next sought to determine if full reciprocity resulted in full certification in the accepting state. 16 (57%) acknowledged full reciprocity was granted for their certificates. 12 (44%) stated that full certification was not granted.

Respondents were asked how this impacted them professionally and received many comments both positive and negative. Some of the challenges experienced are listed as described below:

“Regardless of holding both IFSAC and ProBoard certs, it seems just about anywhere you want to go will put you through an academy. I have completed 1 volunteer academy and 2 career academies. I am ready and willing to complete a third upon an offer from the city of Philadelphia.”

“Someday there will be a straight up system nationwide. How in the world do states not do grant reciprocity, such as the national registry in EMS. Fix it all.”

“It was good to go through the academy again even though I had taught the academy in my previous state. But overall it was a waste of city funds for overtime as well as class cost for the department.”

“I wish I could have spent that time learning new skills instead of repeating old ones.”

“I believe that, much like EMS certifications, fire certifications should easily transfer. Departments lose the opportunity to hire highly qualified fire candidates from out of state simply because the certificate does not have the right letters on it.”

“It took me two years to schedule, challenge test, and wait for approvals so I could get the DOD/IFSAC certifications that I needed for the military.”

“Professionally I felt it was not quite a step backwards, but froze my career for longer than it should have.”

“I was in danger of losing my job.”

“Upon moving to Florida, none of my certifications were recognized. I was told by the Florida State Fire Marshal's Office that they only recognize ProBoard certifications issued by agencies located in the state of Florida. I felt as though this runs contrary to the purpose of ProBoard certifications.”

Also provided were a wide range of effects when Reciprocity was granted and included the following comments:

“Let me start immediately without having to go thru an academy and also increased my pay by having FFII already.”

“Once I was granted Full Reciprocity, my pay increased \$2,000.”

“Easy transition, zero cost.”

“I was able to secure a full-time firefighter position in the new state where I lived.”

“When I moved from NY to MD, all of my ProBoard certifications were recognized without issue.”

They were next asked to identify any personal impacts that their experiences with reciprocity had on them. I received several informative responses as to the good and bad effects experienced. In regards to those perceived as negative, they included:

“Challenging tests and dealing with state hypocrisy can be taxing on a young person or even someone who may be moving their family for god knows what reasons. I had a couple arguments with our state board.”

“Challenging to stay focused and to stay positive.”

“I became more restricted on departments that I could apply for. It also limited me moving to areas that I wanted to move to.”

“It was frustrating at first because I had prior full-time experience after receiving my initial firefighter training and even though both states used the IFSAC certification it did not transfer as easy as I thought it should.”

“Having to pay extra money to keep certs up.”

“Time away from my family to retake classes I already have.”

“Having to repeat Firefighter I & II in Florida created a slight personal hardship, as I was forced to self-sponsor myself through the fire academy and to live off of savings during that time. Although Florida does have a challenge mechanism in place for out of state firefighters, the eligibility qualification is based solely upon the number of hours in your original certifying course. Upon my rejected application, I was told that they recognize certifications obtained in fewer than 5 states, with ProBoard or IFSAC being a non-factor.”

“Yes I was frustrated that just because my certifications were not pro board or IFSAC an equivalency certification could not even be issued.”

“I often found myself frustrated as my peers would talk down to me as if my knowledge level was not the same as theirs.”

Additionally, positive effects were also noted and comments were provided. They included:

“There was very limited effect, if any on me personally.”

“No real personal effects except increase in pay making it easier on my budget.”

“It was a refresher on going back to the basics and training in FFI. If I failed though, I would've lost my job and had to start over even though I have already earned the certificate through a Fire Academy previously.”

“It was a relief to know I didn't have to go through another recruit class. Time was extremely tight after just moving and it was nice to know that my certifications were accepted in another State. I of course have to keep up with my training, just like everyone else, but not having to go through another Recruit Class saved me a bit of time to get settled in a new State.”

“In Maryland, recognition of my ProBoard certification allowed me to readily integrate into a new system after quickly learning minor local variations in practice.”

“Upon my repeating the fire academy, I was class valedictorian and scored in the mid 90's on the state exam with extremely minimal studying. The reason for this was that I had already covered the material ad nauseam prior to moving to the state.”

“I would personally support a state instituting their own competency verification for certifications obtained out of state. However, I would suggest that the assessment be based upon that individual's skills and knowledge, as opposed to the number of hours in their original training program, provided that program's hours meet or exceed national standards.”

Their final question asked them to provide thoughts or concerns over reciprocity issues. It was overwhelmingly agreed that reciprocity should be across the board in all 50 states and based upon NFPA 1001, based upon accredited certificates, or a system much like the National Registry of Emergency Medical Technicians.

A Model System Exists?

As several interview and responses to surveys have identified the National Registry of Emergency Medical Technicians as a model system, I then sought to make contact with the NREMT. Dr. Sandy Hunter (Hunter, 2014), a Professor in the Emergency Medical Care Program at Eastern Kentucky University, holds the seat of educator-at-large on the board of directors at the NREMT. He has been involved with them for “many years” first as a practicing paramedic, and now as a member of their Board of Directors.

Dr. Hunter explains that the NREMT is the national testing and certifying body for Emergency Medical Services in the U.S., serving as the recognized national certification body. He explains that the NREMT is different from an accrediting body, in that it actually validates the knowledge of an individual similarly to the way a state would license or certify an individual, through written tests and skills assessment, but on a national level or scope; it takes over that responsibility from a state. He identifies Kentucky as an example for the way the state certifies firefighters or police officers according to a set standard, stating that instead of the state issuing certifications, the NREMT becomes responsible. They provide the written and skills testing, once someone has learned a body of knowledge and skills.

“Somewhere, they then go take a test that experts have agreed upon that validates that on that day they have mastered that knowledge of a particular standard” explains Hunter. He describes that at some time, in the certification program’s development, some experts in the field have agreed that a certain bank of questions and skills represents the expected level of competence for that certification level. “Of course,” Dr. Hunter continues, “that body of knowledge, those questions sometimes depend on the profession, and that body of knowledge and skills will validate to the world that they are safe to practice in that field at a particular level”.

For EMS it involves taking multiple choice questions and demonstrating skills for giving meds, delivering babies and even oral exam questions before a physician or other medical expert. The registry exam is a way to demonstrate, and

to let experts in EMS know that if you pass that test with a level of proficiency, then you met the minimum level of competency to be safe and practice medicine in the public arena.

The NREMT is a non-profit organization and has been working to the benefit of the public for the past 50 years. The advantages, as described by Dr. Hunter, to a state or agency is that the registry is taking over the liability of the certification process, the workload, and provides the real grunt process of having to validate the testing and making sure testing is performed correctly.

Administratively, testing is very expensive and very time consuming. “It’s very hard to make sure that psychometrically, it’s a good process in both written test and the hands on skills” says Hunter. Registry provides a streamlined process, and insures the testing is not only valid but kept secure.

Registry has taken over that process so states don’t have to do that anymore for the 42 states that use it exclusively. However, acceptance takes many forms. For some states, it is their sole testing model, while other states use it partly as their testing model. However, almost all of the 50 states accept it as their certification and grant reciprocity. “Of the ones that don’t use it and don’t use it as their test, you can still show up and still get some level of reciprocity for it” said Hunter. “There are one or two states that don’t except it, but that is still the rarity.”

National acceptance was born out of identified need. Approximately ten years ago professionals in medicine in general and primarily emergency medicine were recognizing on the federal level that the system of EMS in particular was

lacking a central guidance. With the worry of another major terrorist attack or large scale disaster pushing the cause, there was worry about how to bring some sort of focused approach to EMS. Experts in the field wrote a report titled *“Emergency Medical Services at the Crossroads”* (Academies, 2006) identified the need to have one certification or licenser for pre hospital or out of hospital emergency care.

“At that time, and still today, there is really only one player in the country that has the expertise and the infrastructure, and that's registry,” explains Hunter. “They bring to the table a track record of doing it well. For example, when you work in Virginia and are registered you can go to work in say Tennessee or Florida with minimal delay.”

Secondly, it has helped unify the industry, meaning that the person who is a patient in Virginia or Tennessee understands what it means when you use the term paramedic. “In the year 2000 when you worked in Nebraska for example there was more than 3 levels of EMT’s and paramedic. There were states that had 4 levels of EMT’s. Unfortunately they would call them the same thing, and no one knew what the difference was. This was another item the report said that we need to fix to make sure that the public knows what they are getting.”

“The registry also requires continuing education to keep up to date in the field. Currently, for example, EMT-Basic requires 24 hours in predetermined topical areas, and 48 hours of electives. This allows the person to select topics which actually are within their job description. For example, an EMT in a men’s high security prison has little chance of delivering a baby, and needs little

continuing education in that topic. Soon, the NREMT will be going to a performance based system where you will take a test, and from that test it will identify the areas that need emphasis based on your weaknesses.”

Inclosing, Dr. Hunter feels the NREMT system provides a uniform certification process that is widely accepted in the field, and allows EMS professionals a unified model to all aspects of certification and creates nearly universal reciprocity in the field of emergency medicine.

CHAPTER 5

DISCUSSION

Overview

This chapter shall review the findings of the research questions that guided this study, will summarize the study, discuss the results, and identify the implications to the fire service profession. This information brought to light in this study will provide the necessary information to help advance the profession by identifying the current policies and factors affecting reciprocity in the fire service, in turn helping to identify the factors that are necessary to bring the fire service system of certification under one national system of recognition.

Summary of the Study

The purpose of this study was to identify the current standards, entities, laws and professional practices in place influencing policies controlling certification reciprocity. The study was designed to identify factors influencing and controlling reciprocity, and identify any current systems that could support national recognition of fire service certification. This includes how each state approaches firefighter certification, the process of reciprocity, and the effect on fire service agencies and professionals of current policies and procedures. Of great interest is the effect upon the fire service professionals, especially the nation's volunteer fire service which makes up 87% of all fire departments (Academy, 2014). Additionally, the effects of reciprocity policies on fire

departments, in terms of economic impact, as well as the influence of these policies on the recruitment and retention of members are of great importance.

Additionally, the identification of existing system, standards and agencies which are a part of, or outline, polices for a system of reciprocity is very important if I am to provide a recommendation on how to improve the current system. The identification of other professions' systems of certification recognition is an important step in determining the model which best serve the fire service.

Research Question 1:

Two certification models were identified during this study. The first is driven at the state level by state mandated laws that outline the steps necessary to achieve certification. This system is controlled by a state agency empowered by legislative action to administer the system for all fire service professionals working in that state. Examples are Virginia and Oregon, both of which have certification laws in place to prescribe what is required to be a firefighter in their respective states (Jackson 2014, Ray 2014). These states prescribed entities manage records, issues certificates, making them a one stop shop for certification in that state.

Kentucky also follows this model with legislative actions in place that dictate the training categories required to be a firefighter. Having been involved in the fire service in Kentucky for 18 years, this kind of system is very straight forward and user friendly in terms of knowing what categories of training is

required and how many numbers of hours meets one must receive in each. The expectations of these types of systems are clearly outlined, identified and published many time on the agencies website.

Of particular importance to the questions at hand was the basis used for deterring certification requirements, which in turn could provide a basis for reciprocity. Based upon my survey of state agencies, thirty respondents (97%) reported that the requirements of their state were based upon NFPA 1001, the NFPA's Professional Qualifications Standard. Only one responded that their system was not based upon NFPA 1001. Using NFPA 1001 as the basis makes the process of recognizing other NFPA 1001 based certificates less complicated from a content point of view, as the knowledge, skills and abilities should be the same.

The second type of system empowers AHJ's to make decisions on what is acceptable for their agency (McPhee 2014, Jackson 2014, Hacker 2014, Cavanaugh, 2014). This places the decisions on certification and reciprocity of employees and volunteers in the hands of the fire chief. Although each of these "voluntary" system states has state level certification programs, they are voluntary. Examples include South Carolina, Illinois, Iowa, and Washington. In this system the requirements for certification vary from one department or another even with in the same state, with no rhyme or reason.

With nothing mandated, an agency could develop its own criteria with little concern for what is occurring next door or even nationally. Reciprocity could be easy in some instances, and non-existent in other. One fire chief may

elect to accept a certification in whole or in part, while another may grant no reciprocity, and only recognize his or her own departments training program, regardless of any certificate and the basis of the program they were issued by.

The lack of consistent requirements found in an AHJ based system would not be supportive to reciprocity. If the fire service ever hoped for a national system of reciprocity, fire service certification must have some common source from which to build. NFPA 1001 provides such a standard of care, but with AHJ states having no requirements to look to NFPA 1001 for the knowledge, skills and abilities, there would be little uniformity in their systems. Comparing an apple to a peach, each with good attributes, leaves little in common. Such is the same in this situation.

Research Question 2:

Other professions, as mentioned, enjoy a national system of reciprocity, allowing swift transfer of certifications and licensure from state to state. A continuing theme throughout the interviews and surveys was the identification of the need for a national system of reciprocity. Consistently, the NREMT system was mentioned by name. One reason for such familiarity is the fact that a large majority of fire service personnel are also NREMT certification holders as Emergency Medical Technicians (EMT's) at various levels.

There are many positives to this system. The NREMT system enjoys national recognition and acceptance in the field of emergency medical care, and provides a system of knowledge and skills verification vetted by professionals in

the field and based upon one national standard of professional trainings. This system provides uniformed testing of both skills and knowledge that is used as a base line certification and licensing benchmark. The fire service is also very familiar with it processes, as many fire service personnel also serve their communities as EMT's. Coupled with existing accrediting bodies, and NFPA 1001, such a system could either serve as a model for a standalone entity, a confederation, or even a new branch of the NREMT organization.

Research Questions 3:

As part of this study, the author sought to make a complete overview of the reciprocity processes of all 50 states (See table 1). Although some of this data was collected during interviews and surveys, many states were left unanswered. As such, the author attempted contact by phone with each of the state agencies responsible for fire and emergency services to identify the characteristics for states that were missing information. Despite numerous try's, several states did not respond to information requests. Please note that where an asterisk is entered in table 1, information requested was not provided by the agency responsible for regulating certification in that state.

At some point, one must simply shake their head when looking at how different the states are. For example, the states of Florida and California accept nothing from outside of their respective jurisdictions. 25 will accept other states non-accredited certifications. 42 states grant some reciprocity to IFSAC, and 36 accept ProBoard. Illinois will only accept other states certificates, regardless of

accreditations status. 15 states have state mandated certifications programs requiring all fire service personnel to be state certified, with 24 leaving it up to the AHJ. Also of note, 4 states have mandatory state certification systems for career department employees, but leave certification of volunteer's to the AHJ. 20 states will recognize reciprocity across the board, including non-accredited state certificates, as well as IFSAC and ProBoard certifications.

Table 1:

State by State Comparisons

State	State Reciprocity	IFSAC Rec.	ProBoard Rec	State or AHJ
Alabama	Yes	Yes	Yes	State
Alaska	*	Yes	Yes	State
Arizona	Yes	Yes	Yes	AHJ
Arkansas	Yes	Yes	*	State
California	No	No	No	State
Colorado	No	Yes	Yes	State
Connecticut	No	Yes	Yes	AHJ
Delaware	Yes	Yes	Yes	AHJ
Florida	No	No	No	State
Georgia	Yes	Yes	Yes	State
Hawaii	Yes	Yes	Yes	AHJ
Idaho	No	Yes	No	AHJ
Illinois	Yes	No	No	AHJ
Indiana	Yes	Yes	Yes	AHJ
Iowa	No	Yes	Yes	AHJ
Kansas	No	Yes	Yes	AHJ
Kentucky	No	Yes	Yes	State
Louisiana	No	Yes	Yes	AHJ
Maine	Yes	Yes	Yes	AHJ
Maryland	Yes	Yes	Yes	*
Massachusetts	No	Yes	Yes	AHJ
Michigan	Yes	Yes	Yes	State
Minnesota	No	Yes	Yes	Paid=state, Vol=AHJ
Mississippi	Yes	Yes	Yes	Paid=state, Vol=AHJ
Missouri	Yes	Yes	Yes	AHJ
Montana	Yes	Yes	Yes	AHJ
Nebraska	No	Yes	Yes	AHJ
Nevada	Yes	Yes	No	AHJ
New Hampshire	Yes	Yes	Yes	State
New Jersey	Yes	Yes	Yes	State

Table 1 (Continued):

State	State Reciprocity	IFSAC Rec.	ProBoard Rec	State or AHJ
New Mexico	No	Yes	No	AHJ
New York	Yes	Yes	Yes	Paid=state, Vol=AHJ
North Carolina	No	Yes	No	AHJ
North Dakota	No	Yes	Yes	AHJ
Ohio	Yes	Yes	Yes	Paid=state, Vol=AHJ
Oklahoma	No	Yes	Yes	State
Oregon	Yes	Yes	Yes	State
Pennsylvania	No	Yes	Yes	AHJ
Rhode Island	*	*	Yes	*
South Carolina	No	Yes	Yes	AHJ
South Dakota	*	*	*	State
Tennessee	*	*	*	AHJ
Texas	Yes	Yes	No	*
Utah	Yes	Yes	Yes	*
Vermont	Yes	Yes	Yes	*
Virginia	No	Yes	Yes	AHJ
Washington	*	Yes	No	AHJ
West Virginia	*	*	*	State
Wisconsin	Yes	Yes	Yes	*
Wyoming	Yes	No	Yes	AHJ

Research Question 4:

Research question 4 revolved around the impact of the current state of reciprocity in their jurisdiction. In situations where retraining was required (no or partial reciprocity granted), administrators identified payroll costs, reassignment of personnel to training duties, tuition and equipment costs for academies outside the agency, and delayed use of new employees due to retraining.

Specifically, payroll cost involved salaries of training staff, and salaries paid to new employees while in an academy and not able to work. Some agencies employed full time training staff due to the frequency of training necessary for new hires. Traditionally, the continuing education is handled at the station level, in-house, by an officer. The salaries paid to new employees while undergoing

training is essential lost to them sitting attending basic firefighting courses for which they already held a certification. One department that ran a fulltime academy reported a total cost of 432,000.00 annually just to administer the academy. This is nearly the cost of a new fire apparatus, 100 sets of protective equipment, or 40 new firefighters hired. The only reason this cost is incurred is due to a lack of a system of reciprocity

In cases where the department had no full time training staff, they were forced to pull members from other duties to provide such training, requiring backfilling of the now temporarily vacant positions. This means other personnel had to work overtime or take on additional responsibilities to help cover any duties not being performed. Training a fire fighter is a 10-12 hour a day process which not only encompasses the actual educating of the firefighter in the class room and with hands on activities but also includes equipment set up and break down, and maintenance necessary to putting such equipment back into use able condition. Additionally live burns and activities where things are cut, chopped or otherwise damaged, cleanup is also necessary. One survey respondent provided a budget totaling \$33,057.00 for an in-house academy provided to any new hire, regardless of prior certification. The reassigning of personnel takes them away from their jobs they know and do well, such as code enforcement, command and other positions critical to the safety of the district they serve.

For those agencies utilizing outside academies for retraining, the tuition and equipment costs are out of pocket again unnecessarily. Tuitions varied greatly as reported, with one placing the costs varied from \$4,500.00, to \$1,000.00, to

\$100.00, for tuition, plus books, salary, and living expense. Again, this is money spent to retrain a certified individual, who should be on a truck or assigned in their district doing what they are trained to do.

ALL of these costs as reported are not necessary if the individual has been already trained to the NFPA 1001 level. The lack of a system of reciprocity is costing the U.S. fire service valuable dollars that could go to other vital needs in a department.

End users were also asked about the impacts of the current system of reciprocity on them professionally and personally. As far as professionally, several reported that even when they had accredited certification, their reciprocity was unsuccessful for many reasons. One reason stated was that the state they applied to didn't recognize one accrediting body, but recognized the other, while others reported that they attempted reciprocity with a non-accredited certificate and were denied based upon that alone. One respondent reported that even though he held both ProBoard and IFSAC, he has been required to attend 1 volunteer academy and 2 for career departments, while another described the experience as freezing their career. Simply put this is time wasted if no new skills are being received by the individual who can show competency in the topic.

Those who were denied were queried to see if they knew the reason. One responded that their department felt it was much easier to simply send them to the academy than try and seek reciprocity. Another stated that due to the time frame since certification, he was asked if he could provide proof of continuing education, which he was unable to do. It was also reported that one state accepted

no other certifications what so ever. The U.S. fire service must develop one game plan in regards to reciprocity, and take the next step towards what other professions have established for their members.

None of these experiences are positive in any sense and only serve to make challenges to those in the fire service that would be easily avoided if a system of reciprocity was developed. There is only one fire fighter training standard in the U.S. and it must be recognized through a system of national reciprocity.

Conclusion

“Multilateral recognition of graduates across accredited organizations was always the goal of the old NPQB” explains Walker (Walker, 1998). Unfortunately this goal was never achieved. In fact one might describe the current system as convoluted at best, and chaos in reality. We have the same things as other professions that have very successful systems of reciprocity. We have one recognized training standard, NFPA 1001. We have a standard on fire service program accreditation, NFPA 1000. We have two accrediting bodies in the U.S. who by the way will not accredit a fire service program in the U.S. if it is not based upon NFPA 1001. We have professional organizations that recognize NFPA standards, although the part of the problem is simply have too many with their own agendas and areas of concern. I am not saying that is necessarily a bad thing in some aspects, but they must all come together and agree to fix the

problem of a lack of a national system of reciprocity in the U.S., or a new organization should take the lead.

A model system exists in the NREMT as identified by numerous survey respondents, interviewees, and in the literature review. They employ testing for each level that test each level equally and with consistency, which is one complaint voiced concerning the training in the U.S. fire service. They have vetted teaching objectives, knowledge and skills requirements which are based upon nationally recognized standard of EMT training.

The fire service must develop a system of national reciprocity for basic fire fighter certification. The system must be based upon several important principles. The first is a national recognized standard of professional qualifications, NFPA 1001. Secondly, it should adopt a universal testing methodology such as the one found in the NREMT system. This includes a common test back, and skill verifications requirements vetted and review by professionals in the field. Such a test, once taken, would then serve as verification of fire fighter knowledge and skills the same way the NREMT system does. Third it must be supported at a national level by the fire service. This should ideally be accomplished by a coalition of the accrediting agencies, the NFPA, and the fire service. Without this system, the fire service professionals are essentially many times stuck in place, with limited capabilities to seek higher paying jobs, positions with better chance of advancement, better benefits, and better environments for their families and futures.

References

- NFPA. (2013). Retrieved November 25, 2013, from About the National Fire Protection Association: <http://www.nfpa.org/about-nfpa>
- Academies, I. o. (2006). *Emergency Medical Services at the Crossroads*. Washington, D.C.: National Academies Press.
- Academy, N. F. (2014, July 17). *National Fire Department Census Quick Facts*. Retrieved July 17, 2014, from FEMA: <http://apps.usfa.fema.gov/census/summary.cfm>
- AMA. (2013). *Medical Licensure*. Retrieved 12 1, 2013, from American Medical Association: <http://www.ama-assn.org/ama/pub/education-careers/becoming-physician/medical-licensure.page>
- Balsamo, R. (2009). *Exploring a Policy of Mandatory Fire Fighter Certification in Pennsylvania*. Saratoga Springs: Empire State College.
- Cavanaugh, K. (2014, April 11). Fire Certification Specialist, Illinois Office of State Fire Marshal. (W. D. Jr., Interviewer)
- Chihuly, M. (2013, 01 30). *Firehouse Engineering*. Retrieved 03 18, 2013, from <http://www.fireengineering.com>:
<http://www.fireengineering.com/articles/2013/01/don-t-forget-the-rural-fire-service.html>
- Clark, W. E. (1976). *Wingspread II: Statements of National Significance to the Fire Problem in America*. Racine: The Johnson Foundation.
- Commission, K. S. (2014). *Fire Commission Programs-Training Records*. Retrieved July 17, 2014, from Kentucky Community & Technical College System: http://kyfirecommission.kctcs.edu/Fire_Commission_Programs/Training_Records.aspx
- DHS. (2013). *U.S. Fire Administration*. Retrieved November 11, 2013, from U.S. Fire Administration: <http://www.usfa.fema.gov/about/>
- Foundation, T. J. (1966). *Wingspread Conference on Fire Service Administration, Education and Research*. Racine: The Johnson Foundation.
- Hacker, S. (2014, April 24). Accreditation Manager, North Carolina State Fire Marshalls Office. (W. D. Jr., Interviewer)
- Hunter, S. (2014, May 12). Educator at Large, Board of Director, NREMT. (W. D. Jr., Interviewer)

- IAFC. (1996). *Wingspread IV: Statements of Critical Issues to The Fire and Emergency Services in the United States*. Dothan: The International Association of Fire Chiefs Foundation.
- IAFC. (2006). *Wingspread V: Statements of National Significance to the Fire Service and to those Served*. Atlanta: International Association of Fire Chiefs Foundation.
- IFSAC. (1991). Retrieved September 27th, 2012, from <http://www.ifsac.org/mission.html>
- IFSAC. (2012, May 5th). Retrieved September 27th, 2012, from http://www.ifsac.org/Handbook/ACCREDITED_LEVELS.pdf
- IFSAC. (2012, May 9th). Retrieved September 27th, 2012, from http://www.ifsac.org/Handbook/Accredited_Programs.pdf
- Jackson, M. (2014, April 9). Division Chief, Clark County, WA Fire and Rescue. (W. D. Jr., Interviewer)
- Massey-Shaw, E. (1876). *A complete Manual of the Organization, Machinery, Discipline, and General Workings of the Fire Brigade of London*. London, England: C & E Leighton.
- McPhee, J. (2014, April 23). Accreditation and Certification Manager, Iowa Department of Public Safety, State Marshall's Division. (W. D. Jr., Interviewer)
- Merriam-Webster. (2013). Retrieved December 1, 2013, from Merriam-Webster Dictionary: <http://www.merriam-webster.com/dictionary/profession>
- Mormon, C. (2014, April 23). Department Head for the Oklahoma State University (OSU) Professional Development Department. (W. D. Jr., Interviewer)
- Nelson, S. (2004, 07 07). *Fire Engineering*. Retrieved 03 18, 2013, from www.fireengineering.com: <http://www.firehouse.com/news/10513899/rural-fire-departments-look-for-a-few-good-volunteers>
- NFPA. (2011). NFPA 1000: Standard for Fire Service Professional Qualifications Accreditation and Certification Systems. Quincy, MA: NFPA.
- NFPA. (2013). NFPA 1001: Standard for Fire Fighter Professional Qualifications. Quincy, MA: NFPA.
- O'Connell, K. (2014, May 9). Board of Directors, ProBoard. (W. D. Jr., Interviewer)
- O'Neal, D. (2003, August 3rd). *Fire Engineering*. Retrieved September 28th, 2012, from <http://www.fireengineering.com/articles/2003/08/professional-status-the-future-of-fire-service-training-and-education.html>

- O'Neal, D. (2003, November 3rd). *Fire Engineering*. Retrieved September 28th, 2012, from <http://www.fireengineering.com/articles/2003/11/professional-status-the-future-of-fire-service-training-and-education-part-four-combining-the-systems-independent-assessment-of-skills-reciprocity-2.html>
- ProBoard. (1990). Retrieved September 27th, 2012, from <http://www.theproboard.org/default.htm>
- ProBoard. (2012). Retrieved September 27th, 2012, from <http://www.theproboard.org/agencies.htm>
- Ray, S. (2014, April 11). State Fire Marshal South Carolina . (W. D. Jr., Interviewer)
- The Johnson Foundation. (1986). *Winspread III: Statements of National Significance to The Fire Problem in the United States*. Racine: The Johnson Foundation.
- Walker, A. (1998). *The Development of a National Specialized Accreditation System in the Field of Fire Science: The International Fire Service Accreditation Congress*. Lawrence: University of Kansas.
- Whitley, W. (2002). *The American Fire Service: A Profession?* Emitsburg: National Fire Academy EFO Program.

Appendix I
Regulators Survey Questions

Appendix I

Regulators Survey Questions

Consent to Participate in a Research Study on Firefighter Certification Reciprocity in the Fire Service

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the reciprocity between states of fire service certifications. You are being invited to participate in this research study because you are currently either taking part in or knowledgeable of the regulation of fire service certification at a state level, the hiring/recruiting processes at the department level, or as an end user/certificate holder.

Who is doing the study?

The person in charge of this study is William D. Hicks Jr., associate professor and Doctoral Student at Eastern Kentucky University. He is being guided in this study by Dr. Charles Hausman [Advisor]. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

By doing this study, we hope to learn the current status of reciprocity between states of both accredited (IFSAC & PRO BOARD) and non-accredited state issued firefighter NFPA 1001 certifications. This will look at policy implications, as well as impacts on both those hiring/recruiting fire fighters as well as the effects upon the professional lives of firefighters themselves.

Where is the study going to take place and how long will it last?

The research procedures will be conducted by on-line survey and by few select interviews. The survey will take a maximum of 30 minutes. The few select interviews will take approximately 1 hour, and will be chosen separate from those participating in on-line surveys.

What will I be asked to do?

As a regulator, you will be asked a series of questions concerning the status of reciprocity in your state and the status of both accredited and non-accredited NFPA 1001 certifications.

Are there reasons why I should not take part in this study?

There are no particular reasons to preclude participation in the study.

What are the possible risks and discomforts?

To the best of our knowledge, there should be no risks or discomfort. Participant's survey responses will be gathered with anonymity and as such cannot be traced back to an individual person.

Will I benefit from taking part in this study?

You will not get any personal benefit from taking part in this study.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you chose to do so freely. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?

If you do not want to be in the study, there are no other choices except non-participation.

What will it cost me to participate?

There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?

You will not receive any payment or reward for taking part in this study.

Who will see the information I give?

Your information will be combined with information from other participants taking part in the study. While reporting results, only aggregate data will be used. You will not be identified in these written materials.

This study is anonymous. That means that no one, not even members of the research team, will know that the information you give came from you.

Can my taking part in the study end early?

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of the survey, you should call William D. Hicks at 859-622-8477 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, William D. Hicks Jr. at 859-622-8477 william.hicks@eku.edu. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know?

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered and agree to participate in the research project.

- (1) I decline participation in this study.
- (2) If I decline participation in ... Is Selected, Then Skip To End of Survey

Q1 In what state are you involved in the regulation of fire service certifications?

Alabama (1)

Arizona (2)

California (4)

Alaska (51)

Arkansas (3)

Colorado (5)

Connecticut (6)	Michigan (21)	Puerto Rico (50)
Delaware (7)	Minnesota (22)	Rhode Island (38)
District of Columbia (8)	Mississippi (23)	South Carolina (39)
Florida (9)	Missouri (24)	South Dakota (40)
Georgia (10)	Montana (25)	Tennessee (41)
Hawaii (52)	Nebraska (26)	Texas (42)
Idaho (11)	Nevada (27)	Utah (43)
Illinois (12)	New Hampshire (28)	Vermont (44)
Indiana (13)	New Jersey (29)	Virginia (45)
Iowa (14)	New Mexico (30)	Washington (46)
Kansas (15)	New York (31)	West Virginia (47)
Kentucky (16)	North Carolina (32)	Wisconsin (48)
Louisiana (17)	North Dakota (33)	Wyoming (49)
Maine (18)	Ohio (34)	I do not reside in the United States (53)
Maryland (19)	Oklahoma (35)	
Massachusetts (20)	Oregon (36)	
	Pennsylvania (37)	

Q2 Is your state's firefighter certification based on NFPA 1001?

Yes (1)

No (2)

Q3 Do you have a system of reciprocity for other states training (non-accredited) NFPA 1001 certificates?

Yes (1)

No (2)

Q4 Does your State issue IFSAC accredited NFPA 1001 certificates?

Yes (1)

No (2)

Q5 Does your State grant reciprocity to IFSAC accredited NFPA 1001 certificates from other entities or states?

Yes (1)

No (2)

Q6 Does your State issue PROBROAD accredited NFPA 1001 certificates?

Yes (1)

No (2)

Q7 Does your State recognize PROBOARD accredited NFPA 1001 certificates from other entities or states?

Yes (1)

No (2)

Q8 Is full reciprocity granted for accredited certificates for NFPA 1001 certifications, resulting in full certification, in your state?

Yes (1)

No (2)

Q9 If full reciprocity is not granted, is some form of partial recognition granted?

Yes (1)

No (2)

Q10 What is the process for moving from partial recognition to full recognition?

Q11 Please briefly explain the process of applying for reciprocity of other states, IFSAC or PROBOARD NFPA 1001 Certificates into your states system:

Q12 Please provide any additional thoughts concerning reciprocity of fire service certification amongst states:

Appendix II
Administrators Survey Questions

Appendix II

Administrators Survey Questions

Consent to Participate in a Research Study on Firefighter Certification Reciprocity in the Fire Service

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the reciprocity between states of fire service certifications. You are being invited to participate in this research study because you are currently either taking part in or knowledgeable of the regulation of fire service certification at a state level, the hiring/recruiting processes at the department level, or as an end user/certificate holder.

Who is doing the study?

The person in charge of this study is William D. Hicks Jr., associate professor and Doctoral Student at Eastern Kentucky University. He is being guided in this study by Dr. Charles Hausman [Advisor]. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

By doing this study, we hope to learn the current status of reciprocity between states of both accredited (IFSAC & PRO BOARD) and non-accredited state issued firefighter NFPA 1001 certifications. This will look at policy implications, as well as impacts on both those hiring/recruiting fire fighters as well as the effects upon the professional lives of firefighters themselves.

Where is the study going to take place and how long will it last?

The research procedures will be conducted by on-line survey and by few select interviews. The survey will take a maximum of 15 minutes. Then a few select interviews will take approximately 1 hour, and will be chosen separate from those participating in on-line surveys.

What will I be asked to do?

Those involved in the hiring/recruiting process will be asked questions concerning the status of the acceptance or denial of reciprocity and its impact on their department.

Are there reasons why I should not take part in this study? There are no particular reasons to preclude participation in the study.

What are the possible risks and discomforts?

To the best of our knowledge, there should be no risks or discomfort. Participant's survey responses will be gathered with anonymity and as such cannot be traced back to an individual person.

Will I benefit from taking part in this study?

You will not get any personal benefit from taking part in this study.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you chose to do so freely. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?

If you do not want to be in the study, there are no other choices except non-participation.

What will it cost me to participate? There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?

You will not receive any payment or reward for taking part in this study.

Who will see the information I give?

Your information will be combined with information from other participants taking part in the study. While reporting results, only aggregate data will be used. You will not be identified in these written materials.

This study is anonymous. That means that no one, not even members of the research team, will know that the information you give came from you.

Can my taking part in the study end early?

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of the survey, you should call William D. Hicks at 859-622-8477 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, William D. Hicks Jr. at 859-622-8477 william.hicks@eku.edu. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know?

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered and agree to participate in the research project.

- (1) I decline participation in this study.
- (2) If I decline participation in ... Is Selected, Then Skip To End of Survey

Q1 In what state are you involved in the hiring/recruiting of career or volunteer fire service personnel?

Alabama (1)	Louisiana (17)	Oregon (36)
Alaska (51)	Maine (18)	Pennsylvania (37)
Arizona (2)	Maryland (19)	Puerto Rico (50)
Arkansas (3)	Massachusetts (20)	Rhode Island (38)
California (4)	Michigan (21)	South Carolina (39)
Colorado (5)	Minnesota (22)	South Dakota (40)
Connecticut (6)	Mississippi (23)	Tennessee (41)
Delaware (7)	Missouri (24)	Texas (42)
District of Columbia (8)	Montana (25)	Utah (43)
Florida (9)	Nebraska (26)	Vermont (44)
Georgia (10)	Nevada (27)	Virginia (45)
Hawaii (52)	New Hampshire (28)	Washington (46)
Idaho (11)	New Jersey (29)	West Virginia (47)
Illinois (12)	New Mexico (30)	Wisconsin (48)
Indiana (13)	New York (31)	Wyoming (49)
Iowa (14)	North Carolina (32)	I do not reside in the United States (53)
Kansas (15)	North Dakota (33)	
Kentucky (16)	Ohio (34)	
	Oklahoma (35)	

Q2 Is participation in a state mandated firefighter certification program mandatory in your state?

Yes (1)

No (2)

Q3 Please pick one of the following to describe your department:

Career (1)

Combination (2)

Volunteer (3)

Q4 Please list your position and duties related to certifying fire service personnel in your organization.

Q5 Is firefighter certification required to be eligible for applying for the position of firefighter in your organization?

Yes (1)

No (2)

Q6 Do you require previously certified firefighters to retake a full training course?

Yes (1)

No (2)

Q7 Is your training program based upon NFPA 1001?

Yes (1)

No (2)

Q8 During training academies do you reassign staff from their primary assignments to instruct new recruits?

Yes (1)

No (2)

Q9 If known, please list and briefly describe the general classifications of expenditures associated with holding a training program for new recruits. Please included dollar amounts if they are known (for example: 2 staff instructors, 40 hours per week, for 10 weeks \$X.XX.....salary for Newly hired firefighter for academy for 9 weeks at \$X.XX).

Q10 Do holders of Accredited NFPA 1001 certifications (PROBOARD or IFSAC) rank as more desirable in your application process?

Yes (1)

No (2)

Q11 Do holders of Accredited NFPA 1001 certifications (PROBOARD or IFSAC) receive a higher pay scale upon hire then those without?

Yes (1)

No (2)

Not Applicable (3)

Q12 Would you require a new firefighter who held a PROBOARD or IFSAC NFPA 1001 certification from another state to undergo a full retraining program based upon NFPA 1001, regardless of them receiving full reciprocity from your state training authority?

Yes (1)

No (2)

If No Is Selected, Then Skip To If the department would not require a...

Q13 If so, why is full retraining necessary?

If

Q14 If the department would not require a full retraining of certification holders, please describe the process they would undergo in terms of any training course or activities they would be required to complete before beginning normal shift duties.

Q15 Please provide any additional thoughts concerning reciprocity of fire service certification from a hiring department point of view:

Appendix III

End Users Survey Questions

Appendix III

End Users Survey Questions

Consent to Participate in a Research Study on Firefighter Certification Reciprocity in the Fire Service

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the reciprocity between states of fire service certifications. You are being invited to participate in this research study because you are currently either taking part in or knowledgeable of the regulation of fire service certification as an end user/certificate holder.

Who is doing the study?

The person in charge of this study is William D. Hicks Jr., associate professor and Doctoral Student at Eastern Kentucky University, and member of the White Hall Fire Department. He is being guided in this study by Dr. Charles Hausman [Advisor]. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

By doing this study, we hope to learn the current status of reciprocity between states of both accredited (IFSAC & PRO BOARD) and non-accredited state issued firefighter NFPA 1001 certifications. This will look at policy implications, as well as impacts on both those hiring/recruiting fire fighters as well as the effects upon the professional lives of firefighters themselves.

Where is the study going to take place and how long will it last?

The research procedures will be conducted by on-line survey and by few select interviews. The survey will take a maximum of 15 minutes. Then a few select interviews will take approximately 1 hour, and will be chosen separate from those participating in on-line surveys. Please contact me by email if you wish to share your experiences in an interview.

What will I be asked to do?

Those involved in the hiring/recruiting process will be asked questions concerning the status of the acceptance or denial of reciprocity and its impact on their department.

Are there reasons why I should not take part in this study?

There are no particular reasons to preclude participation in the study.

What are the possible risks and discomforts?

To the best of our knowledge, there should be no risks or discomfort. Participant's survey responses will be gathered with anonymity and as such cannot be traced back to an individual person.

Will I benefit from taking part in this study?

You will not get any personal benefit from taking part in this study.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you chose to do so freely. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?

If you do not want to be in the study, there are no other choices except non-participation.

What will it cost me to participate? There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?

You will not receive any payment or reward for taking part in this study.

Who will see the information I give?

Your information will be combined with information from other participants taking part in the study. While reporting results, only aggregate data will be used. You will not be identified in these written materials. This study is anonymous. That means that no one, not even members of the research team, will know that the information you give came from you.

Can my taking part in the study end early? If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study. The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of the survey, you should call William D. Hicks at 859-622-8477 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, William D. Hicks Jr. at 859-622-8477 william.hicks@eku.edu. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know? You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered and agree to participate in the research project. (1)

I decline participation in this study. (2)

If I have thoroughly read this... Is Selected, Then Skip To Have you sought reciprocity for a fir...If I decline participation in ... Is Selected, Then Skip To End of Survey

Q1 Have you sought reciprocity for a Firefighter I or Firefighter II certification in a different state from the one that issued the certification?

Yes (1)

No (2)

If No Is Selected, Then Skip To End of Survey

Q2 Was it a ProBoard accredited certificate?

Yes (1)

No (2)

Answer If Was it a ProBoard Certificate? Yes Is Selected

Q3 Were you successful?

Yes (1)

No (2)

Answer If Were you successful? No Is Selected

Q4 Please briefly explain why your reciprocity was denied.

Q5 Was it an IFSAC accredited certificate?

Yes (1)

No (2)

Answer If Was it an IFSAC accredited certificate? Yes Is Selected

Q6 Were you successful?

Yes (1)

No (2)

Answer If Were you successful? No Is Selected

Q7 Please briefly explain why your reciprocity was denied.

Q8 Was it a non-accredited certificate (state issued, but not ProBoard or IFSAC)?

Yes (1)

No (2)

Answer If Was it a non-accredited certificate (state issued, but not ProBoard or IFSAC)? Yes Is Selected

Q9 Were you successful?

Yes (1)

No (2)

Answer If Were you successful? No Is Selected

Q10 Please briefly explain why your reciprocity was denied.

Q11 Were you granted full reciprocity (meaning no retraining on NFPA 1001 firefighter skills and knowledge, do not include training on special topics or orientation to new department) or partial reciprocity (required to attend academy or training program involving retraining on NFPA 1001 firefighter skills and knowledge)?

Full Reciprocity (1)

Partial Reciprocity (2)

Answer If Were you granted full reciprocity (meaning no retraining on NFPA 1001 firefighter skills and knowledge, do not include training on special topics or orientation to new department) or part... Full Reciprocity Is Selected

Q12 Briefly describe the requirements for new members after full reciprocity was granted.

Answer If Were you granted full reciprocity; (meaning no retraining on NFPA 1001 firefighter skills and knowledge, do not include training on special topics or orientation to new department) or part... Partial Reciprocity Is Selected

Q13 Briefly describe the training you were required to complete for certification after partial reciprocity.

Q14 What was the effect on you professionally?

Q15 What was the effect on you personally?

Q16 Please discuss any other thoughts or concerns as a reciprocity seeker.

Appendix IV

IRB

Appendix IV

IRB

NOTICE OF IRB EXEMPTION STATUS

Protocol Number: 14-023

Institutional Review Board IRB00002836, DHHS FWA00003332

Principal Investigator: William D. Hicks Faculty Advisor: Dr. Charles Hausman

Project Title: Fire Service Reciprocity

Exemption Date: 09/04/2013

Approved by: Dr. Laura Newhart, IRB Chair

This document confirms that the Institutional Review Board (IRB) has granted exempt status for the above referenced research project as outlined in the application submitted for IRB review with an immediate effective date. Exempt status means that your research is exempt from further review for a period of three years from the original notification date if no changes are made to the original protocol. If you plan to continue the project beyond three years, you are required to reapply for exemption.

Principal Investigator Responsibilities: It is the responsibility of the principal investigator to ensure that all investigators and staff associated with this study meet the training requirements for conducting research involving human subjects and follow the approved protocol.

Adverse Events: Any adverse or unexpected events that occur in conjunction with this study must be reported to the IRB within ten calendar days of the occurrence.

Changes to Approved Research Protocol: If changes to the approved research protocol become necessary, a description of those changes must be submitted for IRB review and approval prior to implementation. If the changes result in a change in your project's exempt status, you will be required to submit an application for expedited or full IRB review. Changes include, but are not limited to, those involving study personnel, subjects, and procedures.

Other Provisions of Approval, if applicable: None

Please contact Sponsored Programs at 859-622-3636 or send email to tiffany.hamblin@eku.edu or lisa.royalty@eku.edu with questions.