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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: 

Abstract

The problem was that an Incident Command System (ICS) developed by wildland firefighting agencies has been imposed on a myriad of organizations with widely divergent missions, bringing organizations unfamiliar and apparently uncomfortable operating within the ICS into Unified Command. The purpose of this research was to determine the utility of ICS, to identify points of resistance, and to find ways to overcome them. Questions used to guide this study were: (a) What are the origins of the current ICS? (b) What challenges are experienced during implementation? (c) Are there any differences in the way various agencies implement ICS? (d) What changes are necessary to ensure the success of a universal ICS? Descriptive research, interviews, surveys, and personal observations, were used. Our current ICS originated in southern California's wildland firefighting community around 1914. The challenges experienced during implementation frequently involve training, resistance to change, and possibly cultural incompatibilities. Even here in California, there are differences in the way various agencies implement ICS. Organizations often have to be enticed or forced into cooperative arrangements, which begs for a federative approach. The need to improve training in ICS and incorporate team dynamics were identified as necessary to ensure the success of a universal ICS. The history and evolution of ICS must be documented. The DHS must seek more proactive approaches to ICS adoption and implementation. The DHS must involve the dissenters in efforts to improve the functionality of ICS. The DHS must involve experts in the field of change management in efforts to improve ICS implementation and adoption. The DHS must ensure compliance with required training and certification – and that all participants receive high quality training consistent with established standards. The DHS must implement continuing education requirements, and a refresher training series.

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Examining the utility of ICS

Introduction

The problem was that an Incident Command System (ICS) developed and refined by wildland firefighting agencies has been imposed on a myriad of organizations with widely divergent missions. As a result, CAL FIRE frequently engages in Unified Command with organizations unfamiliar and apparently uncomfortable operating within the ICS. The purpose of this research was to determine the utility of ICS as a general purpose tool, to identify points of resistance to full implementation, and to find ways to overcome these obstacles. Questions used to guide this study were: (a) What are the origins of the current ICS? (b) What challenges are experienced during implementation by non-firefighting agencies? (c) Are there any differences in the way various states and agencies implement ICS? (d) What changes are necessary to ensure the success of a universal ICS? Descriptive research, interviews, surveys, and personal observations, were the specific procedures used for data collection.

Background and Significance

CAL FIRE is the largest fire department in California and third largest in the United States. Because of the department's size and experience, it is often called to assist with or manage major disasters. (CAL FIRE, 2002; *CAL FIRE*, 2011; CDF Firefighters, n.d.)

This project relates to Units 2, 3, 4, 7, 8, and 12, in the Executive Leadership course offered at the National Fire Academy (NFA) as the year four component of the Executive Fire Officer Program. *Unit Two* addressed the necessity of conducting difficult conversations during adaptive challenges: specifically, when issues are so complex that no clear solution is apparent. *Unit Three* introduced the concept of systems thinking to identify and diagnose adaptive challenges. *Unit Four* discussed the importance of thinking politically when addressing adaptive challenges. *Unit Seven* explored matters of politics and public policy. *Unit Eight* provided an overview of influence and persuasion. *Unit Twelve* identified many of the different roles that may be employed by those in leadership positions. (Federal Emergency Management Agency, 2011)

This project also relates to two of the five stated goals in the United States Fire Administration (2011) *Strategic Plan*. Specifically, numbers *Two* and *Three*, as this research is intended to: (a) Improve local planning and preparedness and (b) Improve the fire and emergency services' capability for response to and recovery from all hazards (United States Fire Administration, 2011).

The Incident Command System (ICS) has substantially influenced emergency management, although there are indications of resistance to the universal implementation of a management system originally developed by and for the fire service. Resistance to ICS may adversely impact the management of large scale emergency incidents (Templeton, 2005).

Literature Review

Heifetz, Grashow, and Linsky (2009) wrote extensively about managing change. Their book was the foundation of the Executive Leadership course developed as the fourth and final component of the Executive Fire Officer Program at the NFA.

Pyne (1984) wrote extensively about the history and evolution of wildland firefighting in the United States and Schoen (2008) documented the influences of the United States Forest Service (USFS) Large Fire Organization (LFO) on our current Incident Command System (ICS). Clayton (1979) and Hawkins (1990) identified the circumstances that made southern California the ideal location to develop, test, and refine, ICS.

Southern California fire agencies were exploring ways to improve the coordination and utilization of emergency resources during multi-agency incident response at least by the mid-1960s. Cusack, Haney, Flint, Swavely, & Gibbons (1966) reported on an experimental precursor to the modern Emergency Operations Center. Haney, Irwin, Kelly, Rosenthal, & Coale (1970) made recommendations that would later become the foundation of southern California's Multi-Agency Command System (MACS). Cowardin (1985), Emergency Management Institute (1993) documents, Hawkins (1990), McFadden (1991), Teie (2005), Neamy & Neville (2011), Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE, 1988) documents, and Rowley (2008) described the chain of events that finally launched the development of ICS.

Halton (2009), Neamy & Neville (2011), Pyne (1984), Schoen (2008), Stanley (2003), and Templeton (2005) identified the founders of FIRESCOPE and the influences they brought to the project. Federal Emergency Management Agency (FEMA, 1989), FIRESCOPE (1990), and McFadden (1991), described the research and development stages of ICS. Documents from the

Emergency Management Institute (1998), FIRESCOPE (1988), and FEMA (2010), provided a detailed explanation of the issues ICS was intended to correct and practices it established.

Collectively, CAL FIRE (n.d.), Cowardin (1985), FIRESCOPE (1990), McFadden (1991), and Pyne (1984), depicted the 1970's as a renaissance period for the United States fire service. Significant events from that decade included the establishment of the United States Fire Administration (USFA), the Federal Emergency Management Agency (FEMA), the National Wildfire Coordinating Group (NWCG), and FIRESCOPE.

Chandler (2008), Cowardin (1984 & 1985), Elliott (2003), Emergency Management Institute (1993), FIRESCOPE (1990 & n.d.), Halton (2009), Hannestad (2005), Hawkins (1990), National Fire Service Incident Management System Consortium Model Procedures Committee (2000), Perry (1989), Pyne (1984), Rowley (2008), University Research Corporation (1987), and Wenger, Quarentelli, & Dynes (1990), chronicled the expansion of ICS from a regional system used to organize wildland fire responses in southern California to a nationwide all-risk incident management system known as the National Interagency Incident Command System (NIIMS). Elliott (2003), Federal Emergency Management Agency (2007) documents, Halton (2009), Tagliento (2011), and Templeton (2005) detailed the sequence of events that led to the development and implementation of the National Incident Management System (NIMS).

In a 2005 press release, FEMA reported that over 1 million people had completed the on-line NIMS training, including introductory ICS courses. Chandler (2008), Leifeld (2007), and Tagliento (2011), discussed the availability of this training and also identified the need to improve the training to support better field implementation. McKay (2010) and White (2011) echoed these concerns after the Deepwater Horizon disaster.

Procedures

Email and telephone interviews were conducted with the following people:

William Neville, one of the original members of the FIRESCOPE Task Force, former Superintendant of the National Fire Academy, former VP for Fire Service Affairs with NFPA, retired Chief of the Hayward, CA FD, and retired Asst. Chief, Chief of Staff, LAFD. (Appendix A)

George Haddow, Research Scientist and Adjunct Professor at the Institute for Crisis, Disaster and Risk Management at George Washington University, and former Deputy Chief of Staff to James Lee Witt during his tenure as Director of FEMA. (Appendix B)

Edward Hawthorne, Health and Safety Manager for Shell Oil Company, and member of the NIMS Consortium Model Procedures Committee. (Appendix C)

Steven Pyne, Professor at Arizona State University, fire service historian, and author of *Introduction to Wildland Fire*. (Appendix D)

Charles Bailey, a Battalion Chief in Montgomery County, Maryland, a vocal NIMS critic, and frequent contributor to *Fire Rescue* magazine. (Appendix E)

Dale Rowley, an Emergency Management Agency Director from Waldo County, Maine, and author of *The Fires That Created an Incident Management System*. (Appendix F)

Robert Neamy, retired Deputy Chief of Operations, LAFD, member of the NFPA 1500 Standard Committee, 20 year member of the FIRESCOPE Operations team, Vice-president of the NIMS Consortium, and past chair of the FEMA Incident Management Working Group. (Appendix G)

John Hawkins, CAL FIRE Riverside Ranger Unit Chief, 48-year veteran of CAL FIRE, and EFO graduate. (Appendix H)

Connie Malamed, an eLearning, Information and instructional designer, and author of Visual Language for Designers. She also maintains the eLearningcoach website. (Appendix I)

Surveys were distributed nationwide between 09/02/2012 and 10/15/12 through a series of formal and informal networks in an effort to obtain a broad, multi-disciplinary view of NIMS ICS. A total of 118 completed surveys were collected anonymously using Survey Gizmo. Survey questions were developed from current NIMS compliance document matrices, with comment areas added to obtain additional feedback from participants. (Appendix J)

A total of 118 surveys were collected over a six week period. Roughly 73% of respondents claimed an affiliation with the fire service, almost 9% with law enforcement, and about 4% were affiliated with health care. The remainder affiliated themselves with government/military, emergency medical services, agriculture/forestry, communications, construction, education, public works, or other. The majority – around 87% - worked for organizations that had between 20 and 499 employees, and nearly 60% of those organizations had a full-time career workforce. Participants belonged to organizations that served areas ranging from *rural* or *unincorporated* to *County* and *State* level, with the majority – around 70% - serving towns and cities with populations ranging from 10,001 to over 100,000. Participants were from 38 different states in the US, with the largest representations from California, New York, Illinois, Texas, Pennsylvania, and Washington. (Appendix J)

Limitations

The survey results were based on a small sample of convenience and should not be considered statistically significant. The information gathered was included in this study only as a reference.

Results

The first question for the study was: (a) What are the origins of the current ICS? As much as 40% of ICS may have evolved from the LFO. The modern LFO coincided with the arrival of the Civilian Conservation Corps in 1933 although several of the principles were being taught 20 years earlier. Published in the *Fireline Handbook* as early as 1937, LFO was the most common command structure used in the United States for many years. (CAL FIRE; Cermak, 2005; Civilian Conservation Corps; DuBois, 1914; Pyne, 1984; Pyne, personal communication, 8/29/2012; Schoen, 2008; United States Department of Agriculture, Forest Service, 1919)

Southern California's unique blend of urban sprawl, complex jurisdictional boundaries, and fast burning fuels, created an ideal environment for the development and refinement of LFO, and later ICS. Efforts initiated in the 1950s and 1960s in California effectively primed the pump for the sweeping changes of the 1970s. (CAL FIRE; Cermak, 2005; Clayton, 1979; Cusack, et al, 1966; Haney, et al, 1970; Hawkins, 1990; Pyne, 1984)

A disastrous two week period in 1970 clearly demonstrated the need for a standardized incident management structure in the fire service: nearly 20,000 firefighters from 500 separate agencies worked together to combat a series of wildland fires that claimed 16 lives, 722 homes, and more than 900 square miles of southern California. (Cowardin, 1985; Emergency Management Institute, 1993; FIRESCOPE, 1988; Hawkins, 1990; McFadden, 1991; Neamy & Neville, 2011; Rowley, 2008; Teie, 2005)

In the wake of this disaster, the Los Angeles City and County fire departments obtained a grant to improve resource coordination, and the United States Congress charted a separate project to help standardize terminology, management structure, communications, and resource status. The USFS was directed to assist, and in 1972 the agency now known as CAL FIRE joined

with the Los Angeles County and City Fire Departments, and the Ventura County Fire Departments: the earlier grant project was combined with this latter one in a project that became known as FIRESCOPE. (Cowardin, 1985; FIRESCOPE, 1990 & n.d.; Hawkins, 1990; Neamy & Neville, 2011)

Several of these agencies were using some derivative of LFO at the time, and the USFS was the glue that held the group together. ICS was a merger of fire experience and the US military's much older system of command and control known as C2. Initial funding came from USFS research funds and congressional appropriations, with the partner agencies providing experienced personnel to staff committees. Research was conducted at the USFS Riverside Fire Lab. (Department of the Army, 1997; FEMA, 1989; FIRESCOPE, 1990; Halton, 2009; Hawkins, personal communications, 08/24/2012; Neamy & Neville, 2011; Neville, personal communications, 08/24/12; McFadden, 1991; Pyne, 1984; Schoen, 2008; Stanley, 2003; Templeton, 2005)

The United States fire service made significant advances during the 1970's. FIRESCOPE established its first technical team in 1973 – the same year that *America Burning* was published. The United States Fire Administration was established in 1974, and FIRESCOPE started publishing information and training materials for general distribution in 1975. California's wildland fires became the proving grounds for this new system because they occur with much greater frequency than any other type of disaster. In 1976, the Operations Coordination Center was established in Riverside for Multi-Agency Coordination of the FIRESCOPE region – the same year that the National Wildfire Coordinating Group (NWCG) was established. System-wide implementation of ICS occurred between 1977 and 1979. During these years, the partner agencies trained southern California fire agencies, using federal funding to support the initial

implementation. FEMA was established in 1979. (CAL FIRE, n.d.; Cowardin, 1985; FEMA, 1983; FIRESCOPE, 1990; Hawkins, personal communication, 08/24/2012; McFadden, 1991; Pyne, 1984)

Pyne (1984) credited the forestry firefighting agencies and FIRESCOPE with the fire services' transition into all-risk emergency response. In 1980, Governor Brown recommended statewide implementation of the FIRESCOPE system. Many California fire departments had adopted ICS by 1981, and the original FIRESCOPE agencies were already using ICS on all incidents. The first major adaptation was an ICS system for use during high rise incidents. (Cowardin, 1985; FIRESCOPE, 1990; Hawkins, 1990; Neville, personal communications, 08/24/2012)

In the first real move toward a nation-wide all-risk incident management system, the U.S. Fire Administration and the NFA began developing what would become the National Interagency Incident Command System (NIIMS), with encouragement from the NWCG, ICS became the foundation for this new system. In 1983, FEMA presented a multi-agency and multi-jurisdictional emergency preparedness plan that would improve capabilities of agencies at the national, state, and local levels. FEMA's Integrated Emergency Management System was designed to enhance the performance of agencies using ICS by integrating political, private and normally non-emergency entities into a cohesive team. The USFS implemented NIIMS ICS nationwide between 1983 and 1985. (Cowardin, 1985; Hawkins, personal communication, 08/24/2012 ; University Research Corporation, 1987)

In 1984, the FIRESCOPE partner agencies recognized that ICS needed to be a statewide effort with more emphasis on all-risk responses. Under the coordination of the agency now known as Cal EMA, FIRESCOPE spread to all of portions of California. In the same year, the

Orange County Fire Department became a FIRESCOPE partner agency and Los Angeles, CA hosted the Olympic Games. For the law enforcement community, the Olympic Games represented the first large scale implementation of ICS, and work began on an adaptation for law enforcement agencies. (FIRESCOPE, 1990; Hannestad, 2005; University Research Corporation, 1987)

FIRESCOPE ICS established a standardized decision-making process, a standardized organization, common terminology and compatible communications systems, shared procedures, standardized training and certification, and the support systems necessary to manage the tremendous challenges of the 1985, 1987, and 1988, California fire seasons. (Perry, 1989; Pyne, 1984; Hawkins, 1990)

In 1986, the FIRESCOPE program was awarded an *exemplary practices* honor in emergency management by FEMA at the Emergency Management Institute, and ICS was adopted by the NFA. Later that year, FIRESCOPE expanded to include representation from nearly every fire agency operating in California. A name change in 1987 indicated the shift in mindset: the FIRESCOPE acronym shifted from *Firefighting Resources of Southern California Organized for Potential Emergencies* to become *Firefighting Resources of California Organized for Potential Emergencies* (FIRESCOPE, 1990; University Research Corporation, 1987).

While the California fire service was developing ICS, Chief Brunacini of the Phoenix, AZ Fire Department was developing *Fire Ground Command*. In 1990 and 1991, representatives from the Phoenix Fire Department and FIRESCOPE met to work on combining their systems. Staff from the NFA also attended. As these meetings continued, other fire service organizations became involved. The National Curriculum Advisory Committee on the Incident Command Systems/Emergency Operations Management Systems recommended the adoption of ICS as an

all-risk/all-agency system. In 1993, FEMA began work on what would become the Federal Response Plan, and NIIMS ICS was modified to reflect an all-hazards perspective. (Chandler, 2008; Elliott, 2003; Emergency Management Institute, 1993; National Fire Service Incident Management System Consortium Model Procedures Committee, 2000)

In 1988, Governor Deukmejian directed the agencies now known as Cal EMA , CAL FIRE, and the State Fire Marshal's Office, to provide basic ICS training to key field managers of all State agencies. In response to the 1989 Exxon Valdez disaster, the U.S. Coast Guard became one of the first federal agencies to adopt ICS. (FIRESCOPE, 1990; Halton, 2009; Hawkins, 1990; National Fire Service Incident Management System Consortium Model Procedures Committee, 2000; Rowley, 2008)

In response to the terrorist attacks of 2001, President George W. Bush issued Homeland Security Presidential Directive 5 (HSPD5) in 2003, directing the Secretary of Homeland Security (DHS) to develop and administer a National Incident Management System (NIMS). NIMS and its predecessor NIIMS were both based on the FIRESCOPE ICS. HSPD5 required all Federal agencies to adopt NIMS, and made adoption by State, tribal, and local organizations, a condition for Federal assistance beginning in 2005. The 2004 and 2005 hurricane seasons highlighted the need for all participating organizations to practice NIMS. (Elliott, 2003; FEMA, 2007; Halton, 2009; Tagliento, 2011; Templeton, 2005)

About 94% of survey respondents confirmed that their organizations had adopted NIMS, yet less than 70% confirmed that their organizations were compliant with NIMS requirements. About 81% confirmed that their organizations used NIMS exclusively for incident management and 11% reported that they used another ICS system for routine incidents. About 80% reported

that their organizations had adopted NFPA 1561, and nearly 63% reported that their organizations had adopted NFPA 1600. (Appendix A)

FEMA offers the following courses related to NIMS via its free online independent study program: IS700 and ICS100, ICS200, ICS300, and ICS400. All courses are taught in a classroom setting as well (Tagliento, 2011). In a 2005 press release, FEMA reported that over 1 million people had completed the on line National Incident Management System (NIMS) training, including introductory ICS courses: the same year, Hurricane Katrina demonstrated a need for improvement in NIMS training and implementation at all levels of government. In 2008, the NIC released its *5 year NIMS training plan* to help state, tribal and local governments build and strengthen their respective NIMS training programs. (Chandler, 2008; Leifeld, 2007; Tagliento, 2011)

Seventy-two percent of survey respondents confirmed that someone within their organizations had been assigned as NIMS coordinator, and about half could confirm that their NIMS coordinator had reviewed the *5 year NIMS training plan*. Roughly 21% answered NO to these two questions. Ninety-three respondents – just over 86% - reported that their organizations had incorporated NIMS into Emergency Operations Plans, while 62% to 64% reported that their organizations had incorporated NIMS into their SOPs and SOGs. (Appendix J)

The 2010 Deepwater Horizon disaster sparked a renewed interest in the topic of Incident Command. Many of the people and agencies involved in the incident were not familiar with NIMS (McKay, 2010; White, 2011).

A little more than 91% of survey respondents confirmed that their organizations used NIMS on emergency incidents, 80% confirmed that they used NIMS in training and drills, and

73% reported that they used NIMS for planned events, although nearly 92% confirmed that NIMS principles are incorporated into their organization's training and exercises. (Appendix J)

About 91% of survey respondents confirmed that they had mutual aid agreements with neighboring agencies. Roughly 61% reported that they had mutual aid agreements at a statewide or regional level. Only 48% had mutual aid agreements with similar agencies, and less than 44% had mutual aid agreements with supporting agencies. (Appendix J)

Only two-thirds of survey respondents reported that 90% or more of their personnel had completed the NIMS IS-700 training. Roughly 75% of them had completed the course on-line. The results for ICS-200 were strikingly similar: almost two-thirds reported that 90% or more of their personnel had completed this training. Just over two-thirds had completed the on-line course. (Appendix J)

Less than two-thirds of survey respondents reported that all of their personnel had completed the ICS-100 training, with just over 21% more reported that 90% of their personnel had completed the course. More than three-fourths had taken the course on-line. (Appendix J)

Roughly 47% of survey respondents reported that 10% to 30% of their personnel had completed ICS-300 training, with another 11% reporting that half of their personnel had completed the course. More than half reported the same 10% to 30% for ICS-400, with another 10% reporting that half of their personnel had completed the course, and nearly 8% reporting that none of their personnel had completed the course. (Appendix J)

Approximately 22% of survey respondents reported that only 1-4 of their personnel had completed the NIMS IS-800 training. 29% of respondents reported that none of their personnel had completed NIMS credentialing. (Appendix J)

Eighty-six percent of survey respondents reported that their agencies had participated in a disaster response exercise, with an average of 33 personnel from each agency. Only 71% reported that their agencies were planning to participate in a disaster response exercise, with 76% preparing for an exercise in the coming year. (Appendix J)

Just over 93% of survey respondents reported that their agencies used plain language communications, but less than two-thirds reported that their communications systems were fully compatible with those in surrounding areas. (Appendix J)

Only 61% of survey respondents reported that their agencies had inventoried their resources to make sure that they meet current National Resource Typing definitions. Sixty percent of respondents reported that their agencies participated in a MACS. Over 77% reported that their agencies had a designated PIO. A little more than half – 54% - of survey respondents reported that their organizations had experienced some challenges during NIMS implementation. Fourty-five percent of survey respondents reported that their agencies had modified NIMS ICS to meet local needs. (Appendix J)

The second research question for this study was: (b) What challenges are experienced during implementation by non-firefighting agencies? In disaster simulations conducted in the mid-1960s, participants were uncomfortable working in a decentralized organization and resisted Unified Command (Cusack, et al, 1966). Comments from the survey (Appendix J) indicated that these problems persist more than 40 years later: a) establishing Unified Command is nearly impossible, b) non-emergency agencies usually don't follow NIMS, and c) Difficulty getting other cooperating agencies to comply. Others reported challenges involving training and exercises with non-safety employees and elected/appointed officials.

ICS appears to be a perishable skill: in cases where it is not used frequently, it is not used effectively. The challenges of introducing players from multiple and typically autonomous organizations into a Unified Command structure have been well documented. Preexisting cultural conflicts may be aggravated by the event that brought them together, detracting from the skills and abilities of those in command. (Cowardin, 1987 & 1988; Deal, Bettencourt, Deal, Merrick, & Mills, 2010; Ditch, 1999; Templeton, 2005)

Chandler (2008) noted that emergency management in rural America is often a part-time job involving volunteer responders and limited resources. These organizations often have established significant power bases and may be able to block NIMS implementation. Many volunteers are also unwilling or unable to participate in training beyond their agency boundaries.

Comments from the survey supported Chandler's (2008) assertions: a) members were asked to complete required courses - many have not taken the time to do so, b) membership is not currently fluent in NIMS terminology, c) difficulty getting membership buy-in on new terminology and procedures, d) we are approaching it with baby steps, e) members threatening to quit if required to comply, f) NIMS has unrealistic and difficult to measure matrices for the average VFD, g) most typed resources don't exist, and h) we are using a NIMS-lite modification to ease the transition (Appendix J).

Despite these observations, comments from the survey indicate that the majority of respondants view NIMS as a benefit to operations: a) Effective use of mutual aid, b) Better interoperability, c) Standardization, d) A defined command presence at all incidents, e) A national standard that is recognized and validated, f) Functional management program, g) Relatively intuitive means of managing incidents, h) Applies to large and small incidents and is

in common use which makes command situations easier, and i) Accommodates our needs and requirements (Appendix J).

The US Coast Guard and the petrochemical industries are large and long-time users of ICS, but Public Works and Public Transportation have struggled to integrate. EMS agencies often rely on the fire department to organize an ICS and include them, although most adapt well within an ICS environment. Public health is the latest player: their leaders are steeped in leadership theory, group dynamics, and consensus building. The concern is that these leaders will struggle to keep up with those who are comfortable making rapid decisions during emergencies and implementing ICS. Worse, some agencies only pretend to use ICS: many of the important elements are completely overlooked in prior planning. The scope of this latter problem is likely much worse than anticipated. (Chandler, 2008; Halton, 2009; Hawthorne, personal communication, 08/24/2012; Rowley, personal communication, 08/24/2012; Stanley, 2003; Wenger, Quarentelli, & Dynes, 1990)

Some agencies have difficulty because of their resistance or over-reaction to change: the larger the agency, the more likely this is to occur (Cowardin, 1988). Others may simply resist being driven toward a fire-focused ICS or claim that the para-military structure is in direct conflict with their organizational culture or ethos (Bailey, personal communication, 08/28/2012; Hawkins, personal communication, 08/24/2012). Comments from the survey included: a) Trouble getting the Chiefs to buy in, b) Easy to over-apply ICS by inexperienced members, c) We need continuing education and structured training, d) Old heads don't like to change, and e) Tough to get everyone on board (Appendix J).

Comments from the survey supported the assertions of Cowardin, Bailey, and Hawkins: a) Difficulty getting membership buy-in on new terminology and procedures, b) Non-emergency

agencies usually don't follow NIMS, c) Resistance to change, d) Difficulty getting other cooperating agencies to comply, and e) Most will not use the forms (Appendix J).

Comments from the survey also indicate that many organizations are modifying NIMS or that they intend to switch to a NIMS ICS structure only on large incidents: a) NIMS applications are hit or miss, b) Not practical for most bread-and-butter incidents, c) We use a variation of NIMS, d) Our organization makes sure we can transition to NIMS on large scale incidents, and e) I don't think a universal ICS is realistic (Appendix J). ICS can be adapted to fit the special needs of an organization – as long as those changes don't conflict with the basic principles of ICS - but switching management systems when working with other agencies is truly a design for disaster (Neville, personal communication, 08/24/2012).

Some struggle with ICS terminology and communications requirements, reluctant to replace a system that they had not considered broken. Local emergency managers will do what works for them and tolerate NIMS in order to qualify for Federal Funds. Most of these people will never interact with State and Federal agencies because large-scale disasters are extremely rare events. (Haddow, personal communication, 09/04/2012)

This sentiment was also evident in the survey comments: a) Forced to comply, b) State and County mandate, c) To become compliant with Federal requirements, d) Mandated by public law, e) Grant requirement, f) For FEMA reimbursement, g) Due to the Federal government's threat to withhold grant funding, h) Feds/States must bribe agencies (Appendix J).

The third research question for this study was: (b) Are there any differences in the way various states and agencies implement ICS? There are slight but important differences between the NWCG and CWGC Field Operations Guides. Some agencies believe ICS is only implemented at a certain stage in an incident and others have a tendency to modify ICS without

governing body approval. Even here in California, there are differences: CalEMA uses an entirely separate system than the remainder of response agencies within the state to order and track resources. With the exception of fire agencies in Southern California, each fire department has a slightly different approach to ICS implementation. (Avila, personal communication, 09/12/2012; Hawkins, personal communication, 08/24/2012; Neville, personal communication, 08/24/2012)

East coast firefighters tend to favor Fireground Command over ICS. Large, older firefighting agencies from the east coast had well established incident command systems of their own and were slow to adopt ICS. They were already speaking a relatively common language in the metropolitan centers: it just wasn't NIMS. (Bailey, personal communication, 08/28/2012; Hawthorne, personal communication, 08/24/2012)

NIMS is not fundamentally different on the east coast than it is on the west coast, but geography may play a significant role in its application. The large wildland fire problem on the west coast, and densely populated urban environments across the US, create a system of insulated micro-cultures: mutual aid is inherently different in high-density urban environments than it is in rural areas, and so is the mechanism for managing each. (Bailey, personal communication, 08/28/2012)

It is not possible to implement ICS the same way in a town of 400 as in a city of 4 million: smaller communities don't have the same opportunities to train, exercise, or implement ICS in real world emergencies. Also, some states have laws and practices which force them to implement NIMS differently. (Rowley, personal communication, 08/24/2012)

The fourth research question for this study was: (b) What changes are necessary to ensure the success of a universal ICS? Without specific goals and objectives, it is impossible to measure

the success of emergency management policy. A lack of clarity can lead to unproductive arguments and an inability to agree on necessary improvements. There needs to be a feedback loop. (Bailey, personal communication, 08/28/2012; Chandler, 2008; Eburn & Dovers, 2012)

Comments from the survey suggested the following: a) All neighbors being on the same NIMS page, b) All parties working together and on the same goal, c) Continual training, d) Flexibility, e) Convincing non-users that the system is far better than most other systems, f) Continually evaluate and grow as needed, g) Release the FEMA Emergency Operations Field Ops Guide and the Area Command Guide, h) Time, i) Require participation, j) Streamlining the overall process, k) Have all personnel that use NIMS credentialed, l) Make it practical, and m) Keep local agencies from modifying ICS. (Appendix J)

Templeton (2005), Hawthorne (personal communication, 08/24/2012) and Neville (personal communication, 08/24/2012), noted that organizations often have to be enticed or forced into cooperative arrangements such as NIMS, which begs for a federative approach. Some of each approach can be observed already, but as Elliott (2003) observed, federal influence on local affairs is thorny.

Comments from the survey also indicated the need for practical training: a) Stop counting useless “IS” course completions as a measure of success, b) IS700 teaches the average firefighter NOTHING!, c) Folks going on to I300 need to be re-taught the material they were SUPPOSED to learn in IS200, d) Teach front-line personnel how to implement NIMS and how their actions set the stage for an incident, e) I’d rather see them studying something more appropriate! (Appendix J)

The need to improve training in ICS has been discussed and debated for nearly 30 years (Cowardin, 1989; Brewster, 1990; Dimmick, 1990). The survey results (Appendix J) indicate

that these observations are still valid: roughly a third of respondants reported that less than 90% of their personnel had completed the most basic required ICS training and 20% reported that their organizations did not routinely incorporate NIMS into training and drills.

Chandler (2008), Goldfarb (2009), and Halton (2009), noted that NIMS training is focused on the urban and suburban responder, with little consideration for the rural community, and that included scenarios are devoted to large-scale disasters that most students are unlikely to face. As a result, many may view ICS as something they will never use.

Tagliento (2011) asserted that successful implementation of NIMS depends on exercises that integrate all personnel, teams and resources identified in state or local plans. However, most disaster drills do not follow the FEMA exercise design process which diminishes learning. Chandler (2008) and Halton (2009) also raised questions about the quality and validity of on-line NIMS training and certification, identifying issues that included: open book tests, cheat sheets, widespread *pencil whipping* of the program, and a lack of refresher courses.

From the survey, those who selected the on-line course format for training often did so because: a) Ease of access, b) No need for personnel to travel for training, c) Ease of delivery, d) Ease of instruction, e) Simplicity and consistency, f) Cost effective, g) Accommodates the needs of the agency, h) Convenience, and i) Ease of administration and quality of course material. Those who selected a classroom format for training often did so because: a) Better training, b) Knowledge is better retained, c) Quality of training materials, d) More effective, e) Many still don't use computers, f) To ensure the training was understood, g) Importance of course, and h) Human interaction. (Appendix J)

A comparison of the classroom and on-line course offerings for ICS100 and NIMS700 indicated 8 hours to complete the classroom version and an estimated 3 hours to complete the on-

line version. With ICS 200, the differences were more pronounced: the classroom version requires 16 hours while the on-line course is estimated at 3 hours.

Connie Malamed (Telephone conversation, 10/03/12) stated that class time can often be cut in half when training is delivered in an on-line format: even good classroom instructors will lose 1 to 2 hours of an 8 hour day to introductions, breaks, and sidebar discussion. However, Malamed (Telephone conversation, 10/03/12) also stated that reducing an 8 hour course by more than 4 hours was potentially suspect, and that the absence of on-line refresher training and lack of discourse with other students would substantially limit a student's learning.

Cercone (2008) made several recommendations on on-line course development, including: a) require students to synthesize and problem-solve, b) develop peer learning groups, c) provide support after the initial training, d) allow students to learn by watching others perform in *best practice* models, e) provide examples of complete problems, f) provide multiple scenarios, events, and perspectives, g) include tasks that allow students to use their knowledge and experience, h) incorporate activities that students can relate to, and i) explain why the information is important and how it will be of use to the student. Cercone (2008) placed heavy emphasis on the importance of peer learning and collaboration to reinforce new concepts and master new skills.

The training omits skills needed for healthy team dynamics. The DHS should formalize a portion of the curriculum to include team dynamics. Unless trained in the soft skills, cultural differences and local agency history may jeopardize IMT effectiveness. These differences may lie quietly until a critical incident thrusts responders into a stressful environment with shared command and control responsibilities. The goal should be to develop a curriculum for skills such

as collaboration, consensus decision-making, power sharing, and conflict management (Templeton, 2005).

Discussion

The development, adoption, and expansion of ICS, into its present state has been an adaptive challenge: one that can only be addressed through changes in priorities, beliefs, habits, and loyalties (Heifetz, Grashow, & Linsky, 2009). Adaptation takes time (Heifetz, Grashow, & Linsky, 2009, p. 16). Our current ICS system has evolved - through a series of fits and starts - over nearly a century. Born in the wildland firefighting community, the origins can be traced back to USFS strategies developed in response to the unique challenges posed by wildland fires in southern California (Cermak, 2005; DuBois, 1914; United States Department of Agriculture, Forest Service, 1919). Early 20th century wildland firefighting relied on *ad hoc* firefighting crews drawn from logging camps, railroad construction crews, and similar labor pools: maintaining familiar lines of authority would have been a logical and practical way to organize and manage their efforts (Pyne, personal communication, 08/29/2012).

Although it may be common knowledge that ICS originated in southern California to address the unique challenges of wildland firefighting in that region (Cermak, 2005; Clayton, 1979; Hawkins, 1990; Pyne, 1984), this author was surprised to discover the depth of knowledge and experience involved in its development. From its humble beginnings, ICS was developed out of necessity and refined through experience. Urban agencies involved in FIRESCOPE were adamant that ICS become an all-risk system – one useful in their day-today operations.

Efforts and advancements in the 1950s and 1960s California fire service (CAL FIRE; Cusack, et al, 1966; Haney, et al, 1970; Pyne, 1984) were organizational responses to identified needs. Disasters experienced during the period forced specific issues to *ripen* across all or part of the system: an issue is ripe when the urgency to deal with it has become generalized (Heifetz, Grashow, & Linsky, 2009, p 126).

The September 1970 wildland fire seige was a catalyst for a more generalized ripening: the southern California fire service recognized the need for a more standardized incident management structure (Cowardin, 1985; Emergency Management Institute, 1993; FIRESCOPE, 1988; Hawkins, 1990; McFadden, 1991; Neamy & Neville, 2011; Rowley; Teie, 2005). A more dramatic ripening occurred after the terrorist attacks of 2001. President George W. Bush ordered the development and administration of the National Incident Management System (NIMS), and required all Federal agencies to adopt NIMS and use it in their individual incident management programs and activities, with the adoption by State, tribal, and local organizations, a condition for Federal preparedness assistance. NIMS and NIIMS before it both relied on FIRESCOPE ICS. (Elliott, 2003; FEMA, 2007; Halton, 2009; Tagliento, 2011; Templeton, 2005)

Shared language is important in leading adaptive change (Heifetz, Grashow, & Linsky, 2009, p. 9). Several of original the FIRESCOPE partner agencies were already using some variation of the LFO – their common experiences and shared language certainly attributed to the early successes of this venture. The US Forest service provided the bond that held the group together, and the agencies now known as Cal EMA and CAL FIRE served as the network for widespread distribution of FIRESCOPE products. (Hawkins, personal communication, 08/24/2012; Neville, personal communication, 08/24/2012)

While the California fire service was developing ICS, Chief Brunacini of the Phoenix, AZ Fire Department was developing *Fire Ground Command*: discussions about merging the two systems began in 1989 (Halton, 2009; National Fire Service Incident Management System Consortium Model Procedures Committee, 2000; Rowley, 2008). These efforts were not successful and Chief Brunacini is still promoting an alternative to ICS. His efforts add to the confusion and are in conflict with the very intent of FIRESCOPE, ICS, and NIMS integration.

Successful adaptive changes build on the past (Heifetz, Grashow, & Linsky, 2009, p.15). ICS was a merger of wildland fire experience and the US military's much older system of command and control known as C2: it is possible that as much as 40% of our current ICS was derived from the LFO (Department of the Army, 1997; Halton, 2009; Hawkins, personal communication, 08/24/2012; Neamy & Neville, 2011; Neville, personal communication, 08/24/12; Pyne, 1984; Schoen, 2008; Stanley, 2003; Templeton, 2005). FIRESCOPE also capitalized on earlier efforts and recommendations including California's Master Mutual Aid Agreement, *Operation Firestop*, and the works of others including Cusack, et al (1966) and Haney, et al (1970). This process continued in the 1980's with the developments of NIIMS and IEMS, the USFS implementation of NIIMS ICS nationwide, and the first large-scale law enforcement implementation of ICS. (Cowardin, 1985; FIRESCOPE, 1990; Hannestad, 2005; Hawkins, personal communication, 08/24/2012).

Organizational adaptation occurs through experimentation (Heifetz, Grashow, & Linsky, 2009, p.15). FIRESCOPE research was conducted at the USFS Riverside Fire Lab, and ICS was developed over a 5 year period (FEMA, 1989; FIRESCOPE, 1990; McFadden, 1991; Pyne, 1984). California's wildland fires became the proving grounds for this new system because they occur with much greater frequency than any other type of disaster. ICS was first implemented during an emergency response in 1975. FIRESCOPE agencies agreed on ICS common terminology and procedures and conducted early field testing in 1976, and the southern California FIRESCOPE partner agencies began system-wide implementation of ICS in 1977. (CAL FIRE, n.d.; Cowardin, 1985; FEMA, 1983; FIRESCOPE, 1990; Hawkins, personal communication, 08/24/2012; McFadden, 1991; Pyne, 1984). It is important to note that although ICS proved its worth to this author's agency on large wildland fires, the original FIRESCOPE

partner agencies were using this system on every incident as early as 1975. Further, the emphasis on ICS as a wildland firefighting system appears to be a detriment to its adoption by non-wildland firefighting agencies, and also a reason used to market alternatives to ICS.

Many California fire departments had adopted ICS by 1981, the original FIRESCOPE partner agencies were using the system on every incident as early as 1975 (Cowardin, 1985; FIRESCOPE, 1990; Hawkins, 1990; Neville, personal communication, 08/24/2012). In 1982, a system-wide test was held in Riverside under the name *Top Hat*, simulating multiple major wildland fires burning under peak fire conditions (FIRESCOPE, 1990). ICS had taken an all-risk approach during its initial development, and adaptations continued: 1984 saw early ICS adaptations for law enforcement and the first large scale implementation of ICS in the law enforcement community (FIRESCOPE, 1990; Hannestad, 2005; University Research Corporation, 1987).

Adaptation relies on diversity (Heifetz, Grashow, & Linsky, 2009, p. 15). The original FIRESCOPE Task Force members were reasonably experienced officers within their respective agencies, but were unfamiliar with the other agencies represented. The county agencies were using some variation on the LAFD or LACO models, the urban fire agency did not have a formal incident management system in place, and the agency now known as CAL FIRE was using a derivative of the LFO. All members were instructed to start with a clean slate. (Department of the Army, 1997; Halton, 2009; Hawkins, personal communication, 08/24/2012; Neamy & Neville, 2011; Neville, personal communication, 08/24/12; Pyne, 1984; Schoen, 2008; Stanley, 2003; Templeton, 2005).

While the California fire service was developing ICS, Chief Brunacini of the Phoenix, AZ Fire Department was developing *Fire Ground Command* based on his exposure to

FIRESCOPE. In 1990 and 1991, representatives from the Phoenix Fire Department and FIRESCOPE met to work on combining their systems. Staff from the NFA also attended. It is important to note that the NFA had already adopted ICS. As these meetings continued, other fire service organizations became involved. The National Curriculum Advisory Committee on the Incident Command Systems/Emergency Operations Management Systems recommended the adoption of ICS as an all-risk/all-agency system. In 1993, FEMA began work on what would become the Federal Response Plan, and the NIIMS ICS was modified to reflect an all-hazards perspective. (Chandler, 2008; Elliott, 2003; Emergency Management Institute, 1993; Halton, 2009; National Fire Service Incident Management System Consortium Model Procedures Committee, 2000; Rowley, 2008)

When change involves real or potential loss, people hold on to what have they have and resist the change (Heifetz, Grashow, & Linsky, 2009, p. 22). In disaster simulations, participants from local government were uncomfortable working in a decentralized organization and resisted Unified Command (Cusack, et al, 1966). Comments from the survey (Appendix J) indicated that these problems persist more than 40 years later. Challenges range from oft-cited training deficiencies and inexperience to interagency conflicts and resistance to change.

People will confer authority or follow when they expect solutions within the terms that they understand the situation (Heifetz, Grashow, & Linsky, 2009, p. 24). ICS has been described as elaborate and complex, bureaucratic, heirarchical, and also as a rigid paramilitary fire-focused system. Without the confidence earned through actual and frequent implementations of ICS, even well-trained participants are often unable to function effectively. For the uninitiated or inexperienced participant, entering Unified Command and working within the ICS framework forces them out of their comfort zone. Ironically, while the newly formed team desperately needs

the expertise that each member has to provide, feelings of uncertainty or mistrust, coupled with individual fears of failure or loss of power, may significantly diminish the contributions of each. (Brewster, 1990; Cowardin, ICS and Unified Command, 1987; Chandler, 2008; Ditch, 1999; Wenger, Quarentelli, & Dynes, 1990)

Adaptive challenges can only be addressed through changes in priorities, beliefs, habits, and loyalties (Heifetz, Grashow, & Linsky, 2009, p. 19). Some agencies have problems with ICS implementation because not all of their personnel have been trained, others because the skills are not frequently exercised; an agency that has not become proficient in ICS within the confines of their own organization cannot be expected to perform effectively in Unified Command (Cowardin, 1989; Stanley, 2003). The survey results (Appendix J) echoed these assertions. In addition, critics have identified problems with the content, quality, and rigor, of current ICS training, and also called for refresher courses and improved relevance of material (Chandler, 2008; Goldfarb, 2009; Halton, 2009).

Organizations are highly complex systems, and the structures, culture, and defaults that define and maintain them prove tenacious (Heifetz, Grashow, & Linsky, 2009, p. 50). Templeton (2005) highlighed the problems of interagency conflict in Unified Command, calling for the development of ICS training in team building skills such as collaboration, consensus decision-making, power sharing, and conflict management, to counteract these challenges.

Change and introduction to a new command system are often the greatest challenge: typically, an organization will prefer its current situation to trying something new or replacing systems they had not considered broken (Hawkins, personal communication, 08/24/2012; Haddow, personal communication, 09/04/2012; Heifetz, Grashow, & Linsky, 2009, p. 18).

Chandler (2008) pointed out pockets of resistance in smaller communities, while Cowardin (1988) observed that the larger an agency is, the more difficult any change becomes.

Persistent reasons cited for resistance to ICS involve assertions that it was a west-coast wildland fire system and therefore inferior. Ironically, other critics argue that the current NIMS training is too focused on urban and suburban responders, with little consideration for the rural community (Chandler, 2008; Goldfarb, 2009; Halton, 2009). These two themes continue to be used in support of alternatives to ICS – threatening to return us to a pre-FIRESCOPE era.

Heifetz, Grashow, & Linsky (2009) cautioned against a cycle of failure and a persistent dependence on authority (p. 71). Both can be observed in the NIMS implementation, which is heavily dependent on a supra-organizational authority that controls and monitors independent activities (Templeton, 2005). Many agencies only comply with NIMS requirements in order to qualify for Federal funding (Chandler, 2008; Halton, 2009; Haddow, personal communication, 09/04/2012; Wenger, Quarentelli, & Dynes, 1990). Survey responses (Appendix J) validated these statements and observations. The scope of this false compliance may be much greater than anticipated, and possibly a factor in several large-scale failures of ICS implementation.

Eburn & Dovers (2012) and Haney (1990) noted that applying ICS to all emergency situations may or may not be appropriate and warrants further research and development. Some critics assert that ICS is inherently incompatible with some organizational cultures or is not appropriate for the management of routine incidents (Bailey, personal communication, 08/28/2012; Bailey, 2009; Goldfarb, 2009). The original FIRESCOPE partener agencies have consistently disproven these assertions, as well as the following: part of the problem is the emphasis on the management of large incidents during ICS training. Many of these same critics also advocate for a two-system approach to incident management, while others strongly caution

against this practice (Bailey, 2009; Brewster, 1990; Dimmick, 1990; Goldfarb, 2009; Neville, personal communication, 08/24/2012). Both of these arguments deserve further attention, but are beyond the scope of this paper.

Although most agencies are interfacing better today because of NIMS, the disturbing reality is that with the exception of the Southern California fire departments, each agency appears to have a slightly different approach to ICS implementation. Differences range from minor to significant, even among state agencies in California: CalEMA uses an entirely unique system to order and track resources, and several Federal agencies are trying to reinvent NIMS their way. On a broader spectrum, there are also differences between the NWCG and CWGC Field Operations Guides. (Avila, personal communication, 09/12/2012; Hawkins, personal communication, 08/24/2012; Neamy, personal communication, 08/20/2012; Neville, personal communication, 08/24/2012)

Bailey (2009) and Goldfarb (2009) argued for a two-system approach to ICS: one for routine incidents and a separate system for use during extraordinary events, while Neville (personal communication, 08/24/2012), Neamy (personal communication, 08/20/2012), and Hawkins (personal communication, 08/24/2012), strongly opposed the idea. Comments from the survey (Appendix J) indicate that many organizations are modifying NIMS or that they intend to switch to a NIMS ICS structure only on large incidents.

This author sides with Neville, Neamy, and Hawkins in opposing a two-system approach to incident command. Switching command structures is a recipe for disaster: the more a default continues to work, the more it gets repeated, and the harder it is to change (Heifetz, Grashow, & Linsky, 2009, p. 64).

Bailey (personal communication, 08/28/2012), Hawkins (personal communication, 08/24/2012), and Rowley (personal communication, 08/24/2012) identified several sociological and geographical factors that contribute to variations in NIMS implementation across the US. In keeping with Chandler (2008) and Conway's (2012) observations that flexibility was essential in Incident Command, Neville (personal communication, 08/24/2012) noted that NIMS could be modified as long as the changes were not in conflict with the basic principles of ICS.

Organizations with separate and distinct missions do not typically cooperate unless they are faced with resource scarcity, there is some perceived benefit, or a powerful external force demands it (Templeton, 2005). Heifetz, Grashow, & Linsky (2009) noted that common organizational responses to conflict include resistance, inaction, and appeals to authority (p. 150). Hawthorne (personal communication, 08/24/2012) observed that many nations rely on a police state approach to manage emergency response, and Rowley (personal communication, 08/24/2012) asserted that the only time this might be appropriate was for a nationwide disaster. Neville (personal communication, 08/24/2012) noted that some European countries encourage cooperation by providing fire apparatus to agencies that meet their national criteria, but warned that this approach would necessitate an ICS audit agency. This author agrees with Elliott (2003), who cautioned that the prospects of a police state or ICS audit agency were not viable options in the US.

Comments from the survey suggested the following: a) All neighbors being on the same NIMS page, b) All parties working together and on the same goal, c) Continual training, d) Flexibility, e) Convincing non-users that the system is far better than most other systems, f) Continually evaluate and grow as needed, g) Release the FEMA Emergency Operations Field Ops Guide and the Area Command Guide, h) Time, i) Require participation, j) Streamlining the

overall process, k) Have all personnel that use NIMS credentialed, l) Make it practical, and m) Keep local agencies from modifying ICS. These are all examples of common resistance tactics: diversion and displacement of responsibility (Heifetz, Grashow, & Linsky, 2009, p. 71).

The DHS would be wise to view dissenters as an early warning system (Heifetz, Grashow, & Linsky, 2009, p. 145). Bailey (personal communication, 08/28/2012) argued that the more important question is how to measure the success of an ICS, and Rowley (personal communication, 08/24/2012) asserted that a universal ICS was not practical or possible. The dramatic expansions of ICS chronicled in the paper were all precipitated by ripening events: this nation may not withstand an event large enough to make universal ICS a reality. Despite this grim fact, there are obvious points of weakness in NIMS implementation that can be addressed.

Recommendations

The history and evolution of ICS has not been well documented. Many members of the original FIRESCOPE task force are already gone, taking a wealth of knowledge and experience with them. During research for this paper, several documented facts about the development of FIRESCOPE ICS were found to be questionable - or even disputable. It is difficult to prepare for, or modify, the possible future of ICS without a clear understanding of its origins and evolution. The Department of Homeland Security (DHS) must accurately capture and document this rich and colorful history.

In consideration of the most commonly cited reason for resistance, it may be necessary to downplay the wildland influences on ICS development in training. The DSH should rework ICS courses to emphasize the work of a diverse group of cooperating agencies to develop a system that has been thoroughly vetted, and listing the original FIRESCOPE goals.

Since its inception, all significant advances in ICS have followed major disasters. The emergency services industry is notably reactive – resistant to change until external pressures demand it. An event large enough to ripen the issue of consistent nationwide NIMS standards and implementation may threaten the continuity of government. The DHS must press for – and encourage – more proactive approaches to ICS adoption and implementation.

With great respect for its advocates, the two-system argument poses a real threat to effective emergency response. ICS has been developed and refined over nearly 100 years: this debate only serves as a distraction from true progress in implementation. The DHS must involve the dissenters in efforts to improve the functionality of ICS. Its concurrent funding of Chief Brunacini's system is in clear conflict with the earliest intents of FIRESCOPE, ICS, and NIMS.

Further progress in ICS implementation and adoption will require effective change management techniques. Empirical evidence proves that simply mandating change is ineffective, and offering financial incentives to those who comply is only as effective as the auditing system used to verify compliance. The DHS must involve experts in the field of change management in efforts to improve ICS implementation and adoption.

The DHS must ensure compliance with required training and certification – and that all participants receive high quality training consistent with established standards. The on-line courses must be revamped to address deficits in rigor, to increase student involvement, and to reduce the possibility of false documentation. The curriculum must also be reviewed for relevance to student needs and modified to ensure practicality and synthesis.

In order to improve the effectiveness of ICS implementations during major events, full scale drills and training scenarios must occur frequently and involve all major players. The DHS must implement continuing education requirements, and a refresher training series. Participants in full scale drills should earn credits toward continuing education and credentialing requirements.

In order to make ICS more relevant to the new user, the DHS must shift the focus of ICS training to emphasize the development of an initial ICS structure by a first-due entity, and its use on the routine incidents handled by most agencies on a day-to-day basis.

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APPENDIX A

Summary of email communications with William Neville. Page 1 of 4.

From: Bill Neville Friday, August 24, 2012

Question: What were LA City and County using before ICS? What were the other players in so cal using at the time? Who brought what to the table?

• The City did not have a formal incident management system other than the day-to-day rank structure. This resulted in varying approaches depending on the officer in charge. For instance in one Division I worked in as a BC, two of the Division Commanders (different shifts) had very different ideas on managing high-rise fires. As a BC one had to remember which shift he was working on. As Bob pointed out, the City had some basic concepts they were instituting (e.g. Sectors) but they were not uniformly applied throughout the Department.

• I believe the County was more unified as far as wildland fire management, I believe it was loosely based on the USFS model. In my somewhat limited experience in working with County units (mostly in and around Watts) prior to FIRESCOPE, I found that each of their chief officers had their own approach. My experience with them was primarily limited to small commercial and residential occupancies. In the single brush fire I worked with County resources, I found them better organized than we in the City were.

• As far as the other SoCal agencies, they tended to follow either City or County approaches. I suppose this was the result of mutual-aid operations. All those agencies tended to give command to the City when we came in. I even found this to be true when working with LA County on structure fires: probably because we generally had more resources on scene than they did and were typically more aggressive (sometimes stupidly so). Orange County at that time was, you'll recall, a CDF operation but I never worked with Orange County or any city within that County so I am not a good resource there. I will tell you that I am personally aware that Orange County was the first agency to attempt ICS at a high-rise training exercise. I know this because Bill Teie (who I think was the #2 guy in CDF-Orange County at the time) came to me for counsel prior to running the drill. I gave him copies of our incomplete efforts and talked him through what I thought were some of the issues we on the Task Force had not fully resolved.

• As to who brought what to the table: with the exception of the USFS representative, we were all fairly young but reasonably experienced BC level (Jim Major from CDF-Boulder Creek area was the primary CDF representative). The USFS rep. was a recently retired FPO (I think that what they were calling their Forest fire chief at that time). He was a jewel. He was the glue that kept the Task Force together. We were told to start with a clean slate and we did. We did closely examine US Army field manuals and military officers tell me they can see the influence. With the possible exception of the CDF and USFS personnel, we didn't know a lot about other agencies. I hate to admit this, but I didn't know what the initials "CDF" stood for. All my experience, training and education

APPENDIX A

Summary of email communications with William Neville, cont'd. Page 2 of 4.

was within the confines of the City. We were not encouraged to look outside our Department for "new ideas".

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

•I'm certainly not an expert here, but, one of my sons is an LAPD Sergeant and has experienced a significant amount of ICS training and a few major incidents working with the LAFD (including Metrolink Commuter wreck). In that Incident he was the first LAPD supervisor on scene. He often uses that incident to congratulate the LAFD on their ability to manage a chaotic situation. He tells me that most PD Sergeants are sufficiently versed in ICS to work within the system with the LAFD. But he says the PD although improving, has not reached the same level of incident management skills when functioning only within their own Department. He believes this is primarily because senior fire officers work emergency incidents fairly often, whereas it is a rarity to have senior PD management functioning as an IC. He points out that it is relatively rare to have more than a dozen police officers working an incident whereas that number is quite commonly exceeded on the FD. He also points out to me that some issues facing law enforcement were not addressed in the early ICS models. One I recall is the need to deal with mass arrests.

• I'm sure that Public Works supervisors/managers could give you more examples. I suspect most large non-fire agencies suffer from the same problem as the LAPD, they don't get to exercise ICS very often.

•I am aware that some independent EMS agencies have complained that ICS didn't exactly fit their operations. I have however managed multi-casualty events without undue stress using ICS and I have discussed the Metrolink incident with LAFD-EMS personnel and was not made aware of any ICS short-comings.

• I believe it is reasonable to adjust ICS to fit specific needs of different organizations, AS LONG AS THOSE ADJUSTMENTS DO NOT CONFLICT WITH BASIC ICS, (E.G., POSITION TITLES AND THEIR FUNCTIONS SHOULD REMAIN IN CONCERT WITH NIMS-ICS).

Question: Are there any differences in the way various states and agencies implement ICS?

• As a consultant I have worked with fire agencies from Boston to Honolulu and from Miami to Seattle. l think every agency, with the possible exception of fire agencies in Southern California, has at least a slightly different approach to ICS implementation, ranging from simply using the term of IC to full-scale implementation on every incident. I

APPENDIX A

Summary of email communications with William Neville, cont'd. Page 3 of 4.

have a couple of personal stories regarding this I will share, but not "on the record". I will support Bob's point that the idea of using one system daily and switching to ICS for major incidents is a very bad idea. I also believe the idea of switching management systems when working with other agencies is truly a design for disaster.

Question: What changes are necessary to ensure the success of a universal ICS?

• *In Europe some countries "buy" multi-agency cooperation by providing fire apparatus to those agencies meeting the national criteria. I don't see any other means and that would require an "ICS audit agency". I don't see that happening in my life-time.*

Question: The military C2 influences are also obvious, not well documented, and probably beyond the scope of this project, but if you could provide me with any information on those influences, I would appreciate it. Surely someone has documented the influences of returning military veterans on fire service command and control.

• *The military influence on early ICS was entirely the result of reviewing US Army field manuals. Our Task Force did not enjoy the presence or input of any supervisory level military personnel. As to modifications and revisions taking place after the early 1980s, I think Bob would be a better source.*

APPENDIX A

Summary of email communications with William Neville, cont'd. Page 4 of 4.

Bill Neville Sep 18, 2012

Question: FIRESCOPE documents credit Orange County with the development of ICS for Highrise, but the dates indicate that it occurred a few years after LAFD did it. I'm not sure it is a critical detail, but can you provide any explanation? Were they testing and refining an earlier system (that's what it sounds like)?

- *I can assure you that Orange County began working on ICS Hi-Rise prior to LAFD formally adopting ICS for hi-rise operations. I was the first LAFD-FIRESCOPE Task Force representative and Bill Teie (Orange County-CDF AC) came by my office at Batt. 10 (FS 39) to discuss ICS prior to the time my work with the LAFD Hi-Rise Committee was complete. He was preparing for a multi-agency hi-rise exercise (to include VFDs) somewhere in Orange County. While the OC exercise may have occurred after LAFD began ICS-Hi-Rise training, I doubt it and it certainly would NOT have been years after.*

- *It could be that after learning of the LAFD development, OC/Teie "re-modeled" and formalized the OC program to take advantage of LAFD's experience at actual fires and training exercises.*

- *I can also tell you that the LAFD Hi-Rise Committee (Blair, Booth, Burns) did NOT confer with OC during their development of LAFD-ICS-Hi-Rise because I was part of the LAFD-HI-RISE team during their work to adopt ICS for LAFD hi-rise operations. After the design was complete it took several months to complete the hi-rise ICS training.*

Question: What happened to Terence Haney? His name pops up in pre-FIRESCOPE documents (consultant groups), and he has a website. I have not been able to reach him.

- *I'm sorry to say I believe Terry died within the last few months. Terry was not personally involved with the development Task Force in the initial stages. I don't remember exactly when he became involved or precisely what his focus was.*

APPENDIX B

Summary of email communications with George Haddow

George Haddow Sep 4, 2012

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *New terminology and communications requirements. Biggest problem is using it to replace the way business was done in the past especially if organizations were successful in the past. Reluctance to fix what is perceived as not broken.*

Question: What changes are necessary to ensure the success of a universal ICS?

- *NIMS is not the answer and maybe a universal ICS is not the answer either. Local emergency managers will do what works for them and try to adapt if they have to interact with state and feds. But most locals never interact with state and feds because they never have an event that requires that type of interaction. They likely perceive NIMS as something that have to tolerate in order to qualify for Federal funds but I have no empirical evidence to prove that theory.*

APPENDIX C

Summary of email communications with Edward Hawthorne

edward.hawthorne@shell.com Aug 29, 2012

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *Non-firefighting agencies have varied levels of challenge with NIMS/ICS. For example, the US Coast Guard is generally an Oil Spill non-fire organization and they use ICS as well and as often as any fire organization in the US. Private Industry, particularly, the petrochemical industry is a large and long time user of ICS for emergency management. On the other side, public works and public transportation have worked hard to integrate ICS into the emergency management with difficulty. The biggest non-fire fighting agency (law enforcement) has had significant challenge because of a number of reasons: a) It was invented by those fire guys, b) they tend to arrive at incidents in groups of 1-2 and do not have a first alarm nor fire crew command structure normally. It is a very large incident that brings 10 police officers to an incident, but a first alarm structure fire does it every day.*

Question: Are there any differences in the way various states and agencies implement ICS?

- *I would suggest to you that my experience is that East Coast fire agencies tend to be Fire Ground Command based instead of ICS based because Chief B was a much better marketer of Fire Ground Command through NFPA. The state with large city organizations like NY, Chicago and Phila had a long history of incident command that they created and were slow to adopt ICS. Smaller departments tended to be able to make a change easier and have been at the forefront of that change.*

Question: What changes are necessary to ensure the success of a universal ICS?

- *US - Law Enforcement has not crossed the tipping point to make it their Incident Management system yet. Public Health and US agencies - FBI, EPA, etc are still trying to reinvent it to their way. Homeland Security and the National Integration System are moving so slow implementing nationally that we are going backwards.*

- *Many Federal organizations now believe that the structure that was used for Deep Water Horizon was ICS and that we should do it as they did that even when it was wrong.*

- *I am working on trying to sell ICS as a global standard worldwide and it is a uphill challenge. In many countries the military or police manage all emergencies regardless of who is responding.*

APPENDIX D

Summary of email communications with Steven Pyne

Steve Pyne Aug 29, 2012

Question: I am trying to determine how old the Large Fire Organization (LFO) actually is. It was published in the Fire Control Handbooks at least by 1937. When was the first Fire Control Handbook published and when was the LFO introduced?

- *The earliest account I can think of is Coert duBois' Systematic Fire Protection in the California Forests (1914). As the title suggests, this was the first attempt to describe a system of protection. Its emphasis was initial attack, but duBois explains how to organize larger groups - gangs of workers, volunteers, etc. - and describes a half dozen positions. The military, as you suggest, is one model, but firefighting relied on work gangs drawn from logging camps, railroad construction crews, and so on, and they would have kept their familiar lines of authority, which would only in a general sense mimic a military chain of command. I don't recall if the 1921 Mather Field Conference - the first fire convocation by the Forest Service - included a section on large fires. But almost certainly the modern LFO began with the arrival of the CCC, which also stimulated organized crews.*

APPENDIX E

Summary of email communications with Charles Bailey. Page 1 of 2.

charles bailey Aug 28, 2012

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *NIMS fundamentally represents and bureaucratic and hierarchical approach to incident management. Its top-down rigidity fits nicely with the primary militaristic metaphors of the fire service organizations. It works for the fire department because it relies heavily on small ad-hoc teams that are subordinate to a centralized command structure.*

- *You start to experience problems when these two conditions; militaristic metaphors and small ad-hoc teams, are not met. For example, the police also use a militaristic metaphor but they tend to act as individual entities and even when they operate as teams e.g., two people per car, the teams are more or less fixed and their organization is inherently decentralized. You will start to see issues when you try to squeeze the police into rigid NIMS structures. It is not impossible to get the police to use NIMS. But their resistance is less a product of aversion or philosophical dislike, it is more the result of an inherent incompatibility with their sub-culture.*

- *When you move away from public safety completely the problems are exacerbated. People in non-public safety settings don't, I think, resist NIMS because it doesn't work, they resist it because it doesn't work for them. Non-militaristic organizations have cultures, while bureaucratic in many cases, are none-the-less based on a much different ethos, that values team building and/or individual contribution much more than the artificial constructs of NIMS.*

Question: Are there any differences in the way various states and agencies implement ICS? Does it work differently on the east coast than it does on the west coast?

- *If NIMS has a designed utility it is the fact that is should allow users to apply a universal framework to incident management. In other words there is no East Coast NIMS that is somehow fundamentally different from West Coast NIMS. But I suspect that geography plays a significant role in application.*

- *The East Coast, in general, has more densely populated, resource rich public safety entities. What I mean is that in the core of the East Coast from about Boston south to Miami, you will find large municipal fire departments with enormous capabilities. This leads to a self-sufficiency not found in many places west of the Appalachian Mountains.*

APPENDIX E

Summary of email communications with Charles Bailey, cont'd. Page 2 of 2.

- *Another piece of geography is that the East Coast does not experience the large fire problem that the West Coast does. We don't do a lot of large wildland fires east of the Mississippi River.*

- *So geography in terms of resource size and location and a greater concentration on the more prevalent structure fire problems creates a system of insulated micro-cultures centered around urban cores. The amount type of mutual aide is inherently different and so the mechanism for managing e.g., incident management is different. These East Coasters were already speaking a relatively common language in the metropolitan centers, it just wasn't NIMS.*

Question: What changes are necessary to ensure the success of a universal ICS? How would a two-model command system work?

- *The bigger question is how you measure the success of an incident command system. When we talk about what works and what doesn't work in reference to incident command systems what we are really talking about are political considerations.*

- *Without being flip, all fires go out eventually. Sometimes they go out faster with an incident command system, sometimes not, but they all go out. If that is true, and it is, incident command systems do not put fires out. One could argue that NIMS makes firefighting safer, more accountable or whatever. I disagree.*

- *There is no point in talking about universal command and control modalities without tearing about whether command and control deserves to be the dominant model of incident management in the first place.*

- *Imagine that NIMS was never created, would New Orleans still be under water? Of course not. NIMS is a political tool that applies the veneer of control over two main types of situations for which it is inherently ill-suited: very small emergencies and very large emergencies. For all the things in the middle I am convinced that NIMS is a great thing. For the large wildland fire NIMS works in that it provides an operational superstructure that maximizes effort via centralized coordination. Where I think it fails-perhaps fails is too harsh- where it is less than optimal are the two situations I keep going back to, the very small and the very large.*

- *For very small events NIMS becomes the focus, assigning groups and divisions on a 1200 sq foot house fire is overkill. For very large events, Katrina, you can never provide centralized control because the needs and demands of the incident are such that there is not a single incident but rather hundreds, thousands of smaller incidents, perhaps all outside the scope of centralized control.*

APPENDIX F

Summary of email communications with Dale Rowley. Page 1 of 2.

Dale Rowley Aug 24, 2012

Question: I am trying to reach the author of a report entitled Fires that created an Incident Command System. When was this written?

- *I am the author of the paper you referenced. I think I wrote it in 2008.*

Question: What were we using before ICS? What were the other players in so cal using at the time? Who brought what to the table?

- *Depends. The USAF was using an IMS called the On-Scene Disaster Control Group (OSDCG). There were no Multi-Agency Coordination Systems (MACS) in place that I know of, except for mutual aid agreements between individual agencies and EOC s between State and Local CD offices. There were probably hundreds of different IMSs.*

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *Law Enforcement agencies in my neck of the woods still don't understand or practice ICS. EMS relies on the FDs to organize an ICS and include them. Public Works are not sure what ICS stands for. Many first responders are still trying to figure out what EMA does.*

Question: Are there any differences in the way various states and agencies implement ICS?

- *Yes. You can't implement ICS the same way in a town of 400 people as you would in a city of 4 million. The small towns don't have many opportunities to train, exercise or implement ICs in real world emergencies. I was the Fire Chief for a small town that averaged one structure fire every two years. The only time we had a multi-functional response was for a car accident and that might happen once or twice a year. Our town had 8 volunteer firefighters, no EMTs and no police. Various states have differing state laws and practices which forces each state to implement NIMS differently.*

Question: What changes are necessary to ensure the success of a universal ICS?

- *I don't believe a Universal ICS is practical or possible. 99.999% of all emergency responses are completely local. The only reason to implement a Universal ICS is for national emergencies. Many responders are not credentialed to respond outside their state and they would never respond to a national emergency. We struggle to prepare for local emergencies: we certainly don't have the free time to prepare for national emergencies.*

APPENDIX F

Summary of email communications with Dale Rowley, cont'd. Page 2 of 2.

Question: The military C2 influences are also obvious, not well documented, and probably beyond the scope of this project, but if you could provide me with any information on those influences, I would appreciate it. Surely someone has documented the influences of returning military veterans on fire service command and control.

- *Having served for 22 years in the USAF and ANG and having spent most of that in the Disaster Preparedness career field (AF precursor to the Emergency Management program), I see some aspects of ICS influence from the military, however, I don't believe that it has been a major influence. The military does not practice Unified Command in its military operations. There is a single commander in any Combatant Command, Major Command or Unit Command, never a Unified Command structure. They do practice Unity of Command. Typically rank has more control in who is in charge during a incident and not who is more qualified. Planning, Operations, Logistics and Finance are used in the military, but not in the same way or composition.*

Dale Rowley Aug 27, 2012

Question: In your response, you wrote "Various states have differing state laws and practices which forces each state to implement NIMS differently." Can you provide examples or direct me to a good resource? This was something I had not anticipated.

- *I can't quote specific states without doing some fact checking, but I have noticed that some states have statutes dealing with who has command of an incident during certain situations. Some states have no verbiage. For example, in Maine:*

- *The Maine State Police have command during aircraft searches. Once the plane is found, unless there is a criminal investigation, they lose jurisdiction. The Maine Warden Service has command of all ground searches in the woodlands of Maine. The Maine Forest Service has command during all wildfires in the unincorporated lands of Maine. Each Town Fire Warden has command of all wildfires in their assigned towns; except that a Mane Forest Ranger can relieve the Warden at their discretion. Fire Chiefs have command of all non-wildfire fires in their town. There is nothing in Maine law that gives them authority for anything else, but everyone assume that the Fire Chief has command for all local emergencies, excluding criminal acts. We have found that there are a number of emergencies that no one really can really figure out, who actually has authority. Usually the "Alpha Male" in the group assumes command…*

APPENDIX G

Summary of email communications with Robert Neamy.

Question: What were LA City and County using before ICS? What were the other players in so cal using at the time? Who brought what to the table?

- *I can tell you that when I came on in 1970, LAFD was using Sectors vs. than Divisions and Groups. I don't know what LA County was using but …the problems agencies were having in the early 1970's …drove the federal grant to improve fireground operations.*

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *[Some agencies have been reluctant] to embrace NIMS which is a large disappointment to me. They take federal grants and give lip regarding how they will shift to NIMS when they have a large scale incident. This will not happen without major problems. My experience is that most departments including law, public works and fire across the country are interfacing better today because of NIMS.*

Question: The military C2 influences are also obvious, not well documented, and probably beyond the scope of this project, but if you could provide me with any information on those influences, I would appreciate it.

- *I can tell you the US Coast Guard is a leader in using NIMS. They have their own Field Operations Guide and utilize the FEMA forms. LAFD has conducted joint exercises with the Navy involving the Port of LA and Long Beach and they worked within NIMS ICS. I don't believe they use it in military operations.*

APPENDIX H

Summary of email communications with John Hawkins. Page 1 of 2.

Hawkins, John Aug 24, 2012

Question: What were we using before ICS?

- *CAL FIRE used a derivation of the USFS Large Fire Management Organization. The system was spelled out in the then CDF Handbook 5600. CAL FIRE along with other agencies statewide transitioned to ICS during 1983. Considerable cross over training was given during the winter/spring 1983 to introduce ICS. I believe ICS might have been used in SoCal by CAL FIRE and the USFS about 1977 or so. About 1985 to 1987 or maybe even later, Governor Deukmejian directed all State agencies would use ICS. Later with the Petris Act, reimbursement was dependent on agencies using ICS.*

Question: What were the other players in so cal using at the time?

- *Same as CAL FIRE.*

Question: Who brought what to the table?

- *ICS originated following the devastating 1970 Fire Season. The USFS commissioned a consultant who helped develop the ICS concept. I believe CAL FIRE had a contract with the USFS to develop ICS courses.*

Question: What challenges are experienced during NIMS/ICS implementation by non-firefighting agencies?

- *Change and introduction to a new command system probably presents the most challenge. This would be followed by turf issues by non-fire agencies being driven to ICS which originated with fire agencies.*

Question: Are there any differences in the way various states and agencies implement ICS?

- *Yes, a difference exists between the NWCG Field Operations Guide (FOG) and CWCG FOG. The differences are slight but important. One of the differences has been with Crew Typing. Some agencies believe ICS is only implemented at a certain stage of an incident. When in reality, ICS is like a computer operating system and always running in the background. Some agencies have a tendency to change ICS without governing body approvals. One particular law enforcement agency believes they own the highways and do not subscribe to ICS such as should be done with unified command.*

APPENDIX H

Summary of email communications with John Hawkins. Page 2 of 2.

Question: What changes are necessary to ensure the success of a universal ICS?

- *Clear understanding, agency commitment to use, leader's commitment, etc. are changes necessary to full ICS effectiveness.*

APPENDIX I

Summary of telephone interview with Connie Malamed, 10/03/12.

Question: There are a few problems with the NIMS implementation, and one of the common criticisms is that the training is inadequate. The training was mandated and courses can be completed in an on-line self paced format (about 3 hours per class) or in a classroom setting (8 to 16 hours, depending on the specific course). I am not an expert in the field of education, but the time difference alone raises red flags for me. Can we really justify the on-line shortcut? How do we consider the two comparable?

- *On-line education can be a much more efficient medium than the traditional classroom. Class time can often be cut in half when training is delivered in an on-line format: even good classroom instructors will lose 1 to 2 hours of an 8 hour day to introductions, breaks, lunch, sidebar discussions, and icebreakers. However, reducing an 8 hour course by more than 4 hours is potentially suspect. The on-line format is also more convenient, allowing students work class time in around their otherwise busy schedules.*

Question: NIMS is based on the FIRESCOPE ICS that is more-or-less less ingrained in the fire service culture. The discipline is still foreign to many other public and private institutions so the training may be a bit too abstract for retention. How can the training be improved?

- *This is a subject or skill set that would benefit from periodic review. An on-line refresher training would be helpful. Because the on-line coursework is carried out without interaction and as an individual, students lose out on the traditional classroom benefits of peer support and discourse: both substantially boost subject retention and understanding.*

APPENDIX J

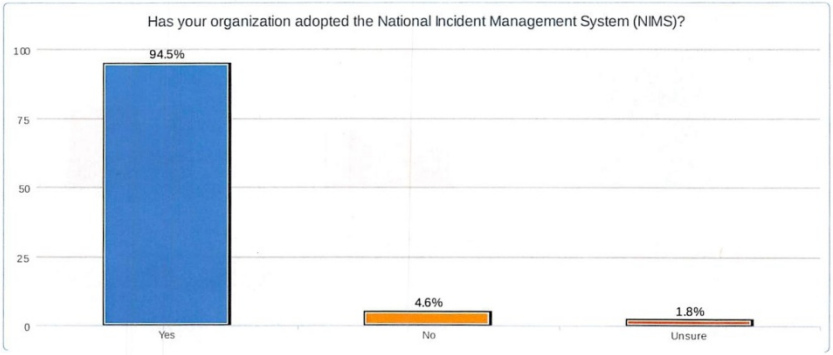
Survey Results, page 1 of 39

surveygizmo

Online Surveys. Data Collection and Integration
www.SurveyGizmo.com

Summary Report - Sep 19, 2012

Survey: NIMS



1. Has your organization adopted the National Incident Management System (NIMS)?

Value	Count	Percent %
Yes	103	94.5%
No	5	4.6%
Unsure	2	1.8%

Statistics	
Total Responses	109

Why or why not?

Count	Response
1	1. because it works. 2. because it's fed and state law
1	Accountability and span of control.
1	Adopted by city ordinance
1	As a requirement to recieve federal grants.
1	Because it was required by the Federal Govt so we could still receive Federal grant money
1	Because it works!
1	Compliance and, It's proven to be a good tool for incident management.
1	Due to PDD #5
1	Federal Mandate
1	Finally the Federal gov. has given direction for one ICS.
1	For Federal Grant Funds and Common management system for all responders
1	For better interoperability
1	Forced to by Goverment regulations
1	Grant money
1	Grant requirement.
1	If you follow it, you can get reimbursed from the feds. Why not use it?
1	In order to establish uniformity in the region.
1	It is a National Requirement
1	It is a mandate and it works for us.
1	It is a requirement for grants and we work with the USCG.
1	It is essential in managing incidents safely, efficiently and effectively.
1	It is important to ensure a defined command presence at all incidents.
1	It is similar to what we used before NIMS was instated.
1	It is the Law and similar to FIRESCOPE ICS used by California fire agencies for years.
1	It is tied to grant funding.
1	It makes it much more managable to control scenes of all sizes.

APPENDIX J

Survey Results, page 2 of 39.
Question 1 comments, cont'd

1	It was a National Directive
1	It's the "New" standard
1	Mandate by Feds, tied to grant funding, it's a decent management system & accreditation
1	Mandated by Virginia Govenor's Executive Order
1	Mostly based on requirements to remain in Federal programs.
1	Mostly because it is mandatory to be eligiel for some grants
1	National compliance and best practice for dealing with large scale events.
1	National standard designed to maintain consistency of IM on large scale incidents
1	No major incident has occurred to justify use.
1	Not much choice.
1	Not sure
1	Part of the Federal response group
1	Presidental Directive 5
1	Required
1	Required by different federal programs, grants, etc.
1	Required for DHS grants.
1	Required under NIMSCAST
1	Requirement by various AHJ's and grants.
1	Requirement for grant funding; measured by NIMSCAST
1	So we can apply for FEMA Assistance to Firefighter Grants.
1	Standardization
1	State and County mandate
1	The county required them too
1	They try to stay proactive in all areas, even reporting
1	This a requirement of receiving grants.
1	To be in compliance
1	To be in compliance with this for grant purposes.
1	To become federally compliant
1	To better manage incident command at medium to large scale incidents
1	To comply with grant requirements
1	To get on board with the US standard of operation.
1	To produce uniformity in command structure & terminology, mutual aid.
1	Uncertain
1	We are a Federal entity, Civil Air Patrol
1	We are currently using ICS Structure
1	We are required to use NIMS for our state licensing
1	We have adopted HICS
1	We have adopted many of the standards but not fully implemented as of yet.
1	We have been doing NIMS for several years now. And have no problems with it.
1	We like to establish command
1	Yes, for grant purposes but more importantly firefighter safety and accountablity.
1	accomodates our needs and requirements for FEMA reimbursement as well
1	at the time was part of grant program requirement if applying for federal grants
1	because of federal, state and local regulations and mandates
1	confirm to federal standards
1	it works
2	mandated
1	n/a
1	required for fed grants
1	sate mandate, and it works
1	support it and was required to meet federal goals

APPENDIX J

Survey Results, page 3 of 39.
Question 1 comments, cont'd

1	to get grants
1	To be in Compliance with the Home Land Security request for private Sector and to work in same language as the Fire and Police Dept
1	I work in the private security management field; while my response above is "yes," my actual reply is "sort of." In some contexts I've worked in, I've had very thorough implementation of NIMS/ICS, and not in others. It really depends on the client (property management firm) I'm working with, whether they want to use it completely, partially, or not at all. When I have been in a context where it was used, I appreciated it greatly - I believe it provides a format that is second-to-none for effective management of incidents.
1	To ensure maximum understanding by multiple agencies. It's a national standard that is recognized and validated.
1	We have not adopted it formally. Members were asked to get 100 & 200 and many have not taken the time to do so. It is currently not mandatory for our membership.
1	We agree with FEMA'S mission: to lead America to prepare for, prevent, respond to and recover from disasters with a vision of "A Nation Prepared."
1	It's part of the requirements in receiving Federal aid plus it helps in unifying incident happenings and aids makes good, sound judgments.
1	Been implemented to establish uniformity while operating on scene and for use with mutual aide to provide command and control
1	It is required per FAA regulations on Airport Emergency Planning and is strongly encouraged by the state.
1	Federal "mandate". We had been using an ICS system previously so there was no real change in operations.
1	Do to the threat by the federal government not grant fund muncipalities if they aren't NIMS compliant that is a big reason why we have adopted NIMS
1	To comply with federal standards and get reimbursed in the event of large scale disaster incidents.
1	NOT IN ORDER OF IMPORT: 1) It allows for effective use of mutual-aid as ICS has been adopted by all surrounding agencies, indeed the vast majority of the State has adopted ICS. 2) It is a Federal requirement 3) Our resources are often used on very large wildland fires where knowing ICS offers greater safety when working with so many other agencies.
1	Federal Mandate, and also is a very functional management program. It also ties directly to our federal grant applications.
1	In conjunction with FIRESCOPE the USFS has been involved from the inception of a single interagency, interoperating system. WE went from ICS to NIMS
1	While it is mandated by public law in accordance with HSPD and it is required for organizations receiving any federal grant funds, we were using FGC, then NIIMS back in the early 80's. Relatively intuitive means of managing incident staffing.
1	Law enforcement is slow adopting the NIMS / ICS model. They use the typical paramilitary structure and people understand that on scenes, but bigger scenes have break downs in various areas.
1	Applies to large and small incidents and is in common use which makes command situations easier when working with other depts.
1	To comply with Federal Grant application requirements and to standardize operationaol use of ICS.

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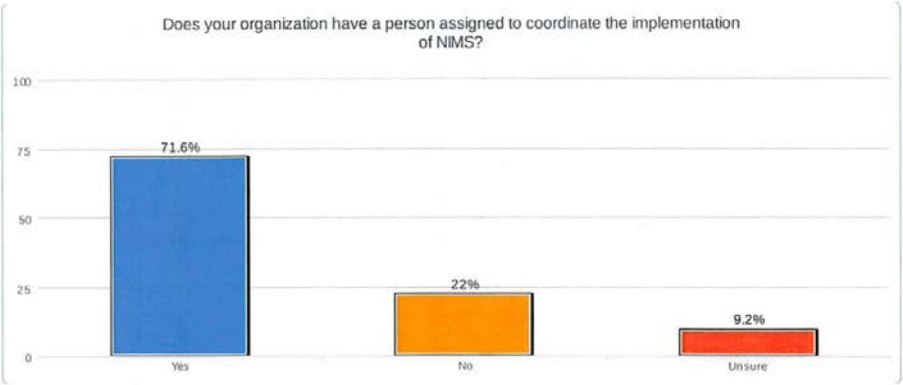
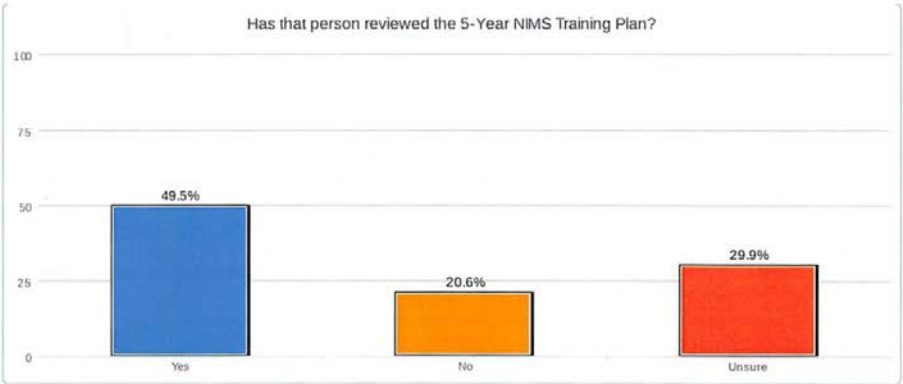


2. Does your organization have a person assigned to coordinate the implementation of NIMS?

Value	Count	Percent %
Yes	78	71.6%
No	24	22.0%
Unsure	10	9.2%

Statistics	
Total Responses	109



Has that person reviewed the 5-Year NIMS Training Plan?

Value	Count	Percent %
Yes	53	49.5%
No	22	20.6%
Unsure	32	29.9%

Statistics	
Total Responses	107

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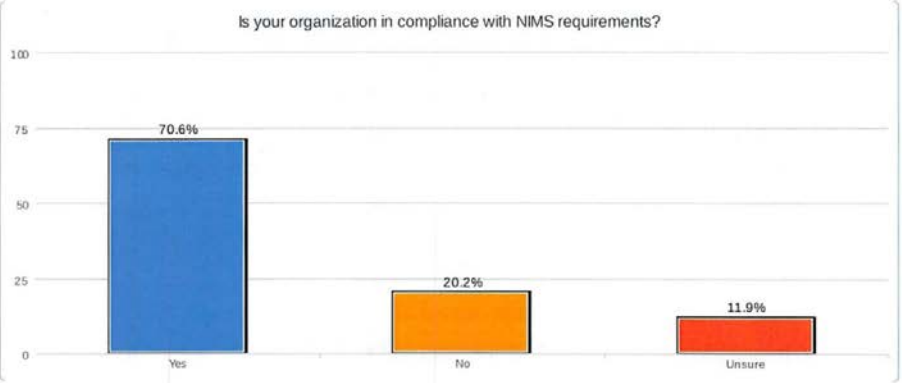


3. Is your organization in compliance with NIMS requirements?

Value	Count	Percent %
Yes	77	70.6%
No	22	20.2%
Unsure	13	11.9%

Statistics	
Total Responses	109

If not, what steps remain?

Count	Response
1	Am not sure if 100% compliant. If not will do so.
1	Chief Officers having 300 and 400
1	Communications interoperability
1	Documentation. Some individuals need required NIMS training.
1	Don't know
1	Full compliance with courses for officers.
1	Higher level courses such as ICS 300 and above.
1	MOST BUT NOT ALL - FOLLOW COMMAND STRUCTURE BUT NOT ALL DOCUMENTATION AND UNITS
1	Members have not completed all required training modules
1	Minimum certification of membership.
1	NA
1	Na
1	PIO classes are still needed. Ours is a small department and those were lowest priority.
1	Police and Fire are compliant but non-safety personnel are only 60 to 80 percent compliant
1	Some member still lack 100 and 700
1	Training members. It seems to be a long process.
1	Training staff Reformatting hospital plans Implementing ICS Reformatting exercise evaluations
1	Unknown.
1	Was 100% compliant when first pushed, 2007? but with promotions /hires there are some gaps
1	We are fully in compliance.
1	We are in the process of making all of our Command Staff Officers NIMS complaint
1	We have newer members who need to take the NIMS course work.
1	all
1	ensure all employees have completed required NIMS classes
1	n/a
2	none

APPENDIX J

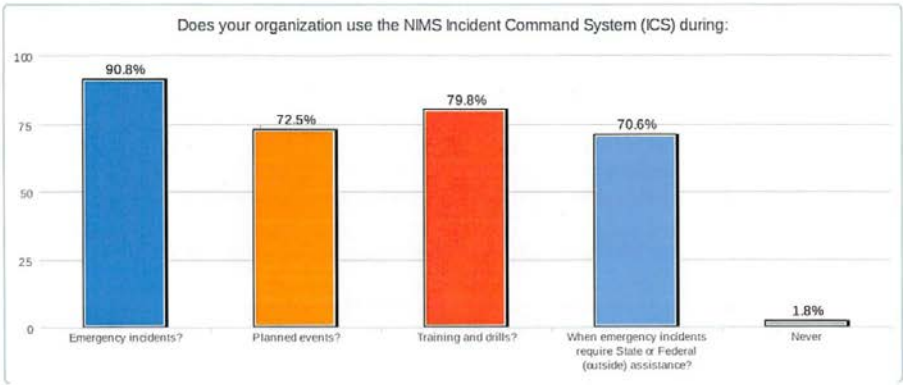
Survey Results, page 6 of 39.

1	they need to make people take the classes
1	we are close but with new members it takes time to get them trained with all the other requirements.
1	We have 4 recently promoted personnel that need to take ICS 300 and 400 to get back to full compliance.
1	The training requirements are the only measurable deliverable. The remaining requirements are a bit too nebulus to measure.
1	Typing is what we currently are doing now. But this is more of a statewide problem and departments are waiting for something to happen either at the state level or the 'golden nugget' so to speak. We've typed internally and state has a type system but needs to be integrated better.
1	As I mentioned before, it's used sporadically, and I'm aware of no requirement from any governing agency that the private security industry must use NIMS.

4. Does your organization plan to complete those steps?

Value	Count	Percent %
Yes	79	72.5%
No	6	5.5%
Unsure	24	22.0%

Statistics	
Total Responses	109



5. Does your organization use the NIMS Incident Command System (ICS) during:

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Question 5 comments, cont'd

Value	Count	Percent %
Emergency incidents?	99	90.8%
Planned events?	79	72.5%
Training and drills?	87	79.8%
When emergency incidents require State or Federal (outside) assistance?	77	70.6%
Never	2	1.8%

Statistics	
Total Responses	109

Why or why not?

Count	Response
1	.
1	Again we implement the command structure at all events.
1	All events NIMS is used to the appropriate degree.
1	Consistency and repetitiveness
1	Easily understood and accepted
1	ICS is the common language and best means of interoperability, role sorting.
1	If we use the NIMS on the small stuff we will be prepared for it on the big stuff.
1	It is a good planning system.
1	It is a requirement of our qualification system.
1	It works.
1	It works; provides common language and frame of reference
1	It's our standard. Federal law mandates for some incidents and events.
1	Keeps incidents organized and works well with PD on events
1	Makes organziation sense
1	Mandated first reason; makes management easier second
1	NIMS is how we operate on all incidents. Because it works.
1	Not all training and exercises, but everything else
1	Part of our culture
1	Practice daily to become better prepared for the large disaster.
1	Practice makes for better management of an incident... There are no perfect incidents
1	Practice makes perfect.
1	Practice makes perfect.
1	Repetition is the best teacher. We use it on all calls...really, even EMS calls.
1	See #1
1	Sensible approach
1	Sometimes deliberately, sometimes by accident.
1	To be prepared for incidents to escalate and get assistance from state or federal resources.
1	To ensure that the recovery process requirements are met.
1	To provide a structured and safe management of the incident.
1	To standardize operations and efficiently exercise command and control.
1	Train like you work and work like you train
1	Use ICS
1	Use it at all times. Ensures maximum experience and skill.
1	Used it for many years. It is institutionalized.
1	Using the NIMS in training helps for a easy transition during an actual event
1	W
1	We always use NIMS ICS, it keeps us in practice and the system works.
1	We establish command on everything, except going to the grocery store
1	We feel it does bring a sense of order to situations.

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Question 5 comments, cont'd

1	We say we do all the time and most of the time we try to.
1	We train with and use it on all calls
1	We try our best.
1	We use ICS as a way to track resources and for command/control.
1	We use NIMS all of the time except for single unit responses
1	We use NIMS for better interagency operability
1	We use a NIMS-like structure. It is getting closer to NIMS all the time.
1	We use it because it works
1	Wildland heavy area
1	You play the way you practice.
1	accomodates our needs and requirements for FEMA reimbursement as well
1	continuity
1	ease of ensuring tasks are completed
1	it works
1	it works, brings up leaders
1	it's the nature of the beast and helps in the management of the incident.
1	n/a
1	no system in place
1	not practical for most Bread and Butter incidents. Actually makes some incidents more dangerous
1	required
1	same response as question one.
1	they dont feel the need to
1	we need to use it more for planned events.
1	we use it every day, work great
1	we utilize the system repetively so that it is easily implemented without delay or confusion.
1	We are part of the state wide task force TIFMAS and in the local area we do alit of mutual aid. NIMS ISC allows is all to be on the same page.
1	Its mandated and we make sure our incidents can transition into larger elements of NIMS if need be
1	Fo incidents it's required and best practice. For planned events and training it just makes sense and exercises the system.
1	Best practice to handle major events, expecially when multiple public safety/EMS responders are involved.
1	I personally use methods from ICS training in the management of emergency incidents, even if the client I'm working for as a security manager doesn't officially use it.
1	Because it is required by the State and Federal Govt and they were told that if they dont do it they will not receive State and federal money
1	The basis of NIMS grew out of the fire services old incident command system in my opinion. We have always utilized the IC system
1	Firefighter safety and community continuity with police, public works, finance. If NIMS is used, it's like all other training; muscle memory and mental awareness becomes habit.
1	We have trained to use ICS during all events and it depends upon the event the scope of positions used
1	Most Fire dept officers really don't understand the Incident Command system, only that they have command and they are in charge.
1	State and Federal incidents are very infrequent. However, the bread and butter operations each day it works for us so we are ready when an incident becomes large.
1	We agree wiht FEMA's mission: to lead America to prepare for, prevent, respond to and recover from disasters with a vision of "A Nation Prepared."
1	Our organization requires all personnel to be cetified in 100.PW ICS and Mgr's to be certified in level 200 ICS
1	Hospital's disaster plan mentions healthcare's HEICS or HICS, which adapts ICS to hospital facilities. However, in everyday reality, hospital leadership continues to make decisions during emergencies.
1	We find it easier to stick with one system. The NIMS is required (beyond Federal requirements) by our State mutual aid.
1	ICS is a proven and effective means of managing resources. The more practice, the better personnel will utilize the system in an emergency.
1	In order to provide safety for those that are involved in the emergency incident. To provide a way for cooperation

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Survey Results, page 9 of 39.
Question 5 comments, cont'd

	between jurisdiction.
1	Our organization implemented FGC, then NIIMS, and then NIMS into our culture a long time ago; it is an everyday occurrence for us to use ICS on all scenes.
1	NIMS is not designed for Type4/5 incidents. The AHJ is allowed to use an incident management system that meets their local needs.
1	As the departments Training Officer I just recently started using ICS during training including filling out ICS forms for all mutual aid and multi company training drills. My hopes are that this will catch on and become part of the norm.
1	It is designed for large scale incidents so we train on its use. We also have used it on wildland incidents, HM incidents, and during planned events.
1	As a common practice NIMS is utilized for emergency events. The city department in charge of planned events only completes the 201 forms for the event, but to my knowledge, they do not set up a command system for the actual event.
1	The system is often to cumbersome for most of our incidents and would add too much to manage for the typical incident.
1	because it works, and using it during events we coudl get by without it makes it easier to utilize during crisis situations.
1	we try to use it for all events to some scale, but not always to the large scale like you practice in classoom. very rarely do we fill out all the nims forms.
1	Police officers are slow adopting the NIMS system. They believe it is necessary on bigger incidents, but do not practice it on smaller incidents, so it is very confusing on the larger ones.

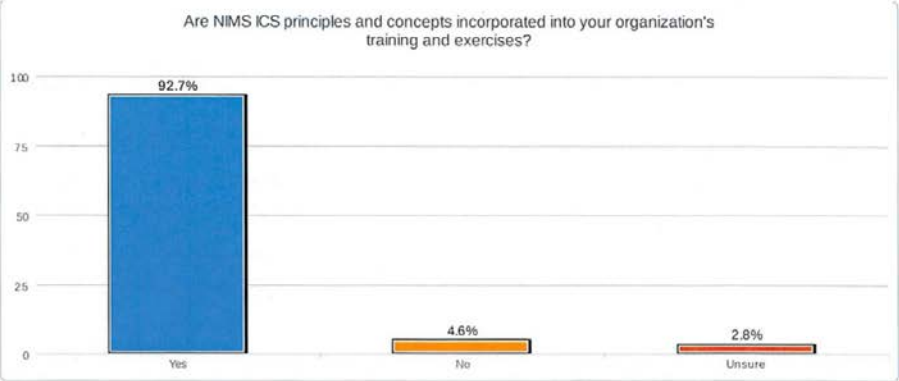
If not, what system is routinely used – and why?

Count	Response
2	.
1	Hit or miss.
3	ICS
1	Individual based assignments and responsibilities via organizational chart.
8	N/A
1	NA
2	NIMS
1	Nims
1	No other system is used
1	Primarily the Blue Card based system for incidents, trainings and drills.
1	W
1	We use NIMS ICS.
1	We use NIMS for all incidents as well as severe weather emergencies.
1	We use a local incident management system based on Fire Ground Command.
1	We utilize the command structure.
3	n/a
1	na
1	none
1	some training is too small to use it
1	the reason for not using all of the forms and postions is because of low man power available.
1	typical para military system and command.
1	we do use
1	we use NIMS
1	x
1	xx
1	Our membership is not currently fluent in the NIMS terminology, so we are approaching it with baby steps.
1	It is a variation of the NIMS but Company Officers do not take command at most incidents. They remain with their crews and operate to get 1 line stretched and in operation

APPENDIX J

Survey Results, page 10 of 39.

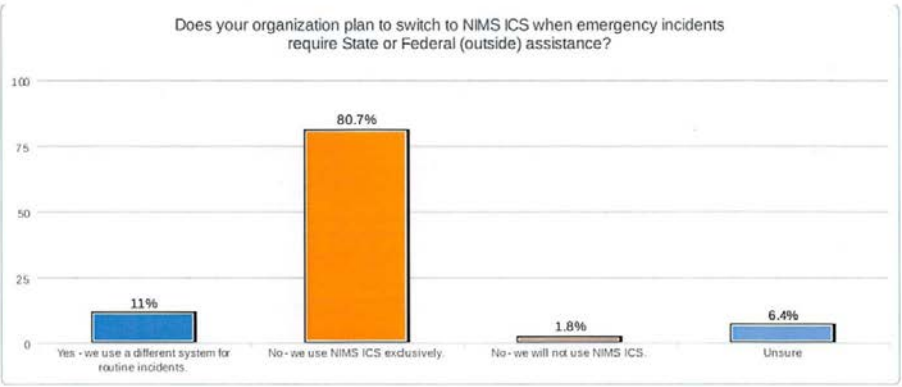
1	Hospital leadership makes their own gut-instinct decisions, based upon the staffing present, materials available on site, etc.
1	In my current position with my current client, there is no specific system used for the management of incidents, although I have been advocating for use of specific emergency plans that would use ICS to a certain extent.



6. Are NIMS ICS principles and concepts incorporated into your organization's training and exercises?

Value	Count	Percent %
Yes	101	92.7%
No	5	4.6%
Unsure	3	2.8%

Statistics	
Total Responses	109



7. Does your organization plan to switch to NIMS ICS when emergency incidents require State or Federal (outside) assistance?

Value	Count	Percent %
Yes - we use a different system for routine incidents.	12	11.0%
No - we use NIMS ICS exclusively.	88	80.7%
No - we will not use NIMS ICS.	2	1.8%

Statistics	
Total Responses	109

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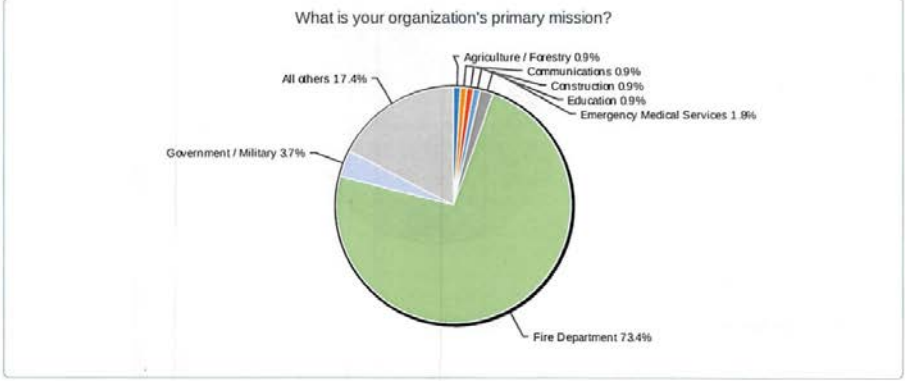
Unsure	7	6.4%



8. What is your organization's primary mission?

Value	Count	Percent %
Aerospace / Aviation	0	0.0%
Agriculture / Forestry	1	0.9%
Communications	1	0.9%
Construction	1	0.9%
Consulting	0	0.0%
Education	1	0.9%
Emergency Medical Services	2	1.8%
Engineering / Architecture	0	0.0%
Fire Department	80	73.4%
Government / Military	4	3.7%
Healthcare / Medical	5	4.6%
Humanitarian Aid	0	0.0%
Law Enforcement	9	8.3%
Non-Governmental	0	0.0%
Non-Profit	0	0.0%
Other	4	3.7%
Public Works	1	0.9%

Statistics	
Total Responses	109

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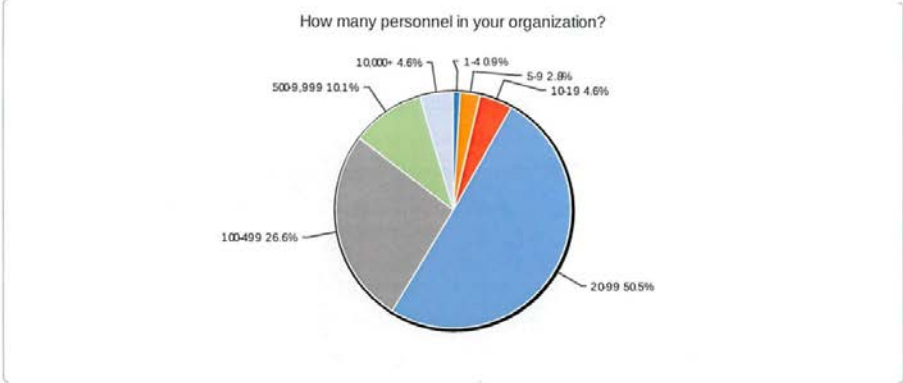

9. How many personnel in your organization?

Value	Count	Percent %
1-4	1	0.9%
5-9	3	2.8%
10-19	5	4.6%
20-99	55	50.5%
100-499	29	26.6%
500-9,999	11	10.1%
10,000+	5	4.6%
N/A	0	0.0%

Statistics	
Total Responses	109
Sum	9,616.0
Avg.	88.2
StdDev	142.5
Max	500.0

Describe your organization's staffing.

Value	Count	Percent %
Full-time career workforce?	63	58.3%
Part-time or Volunteer workforce?	16	14.8%
A combination of the two?	30	27.8%

Statistics	
Total Responses	108

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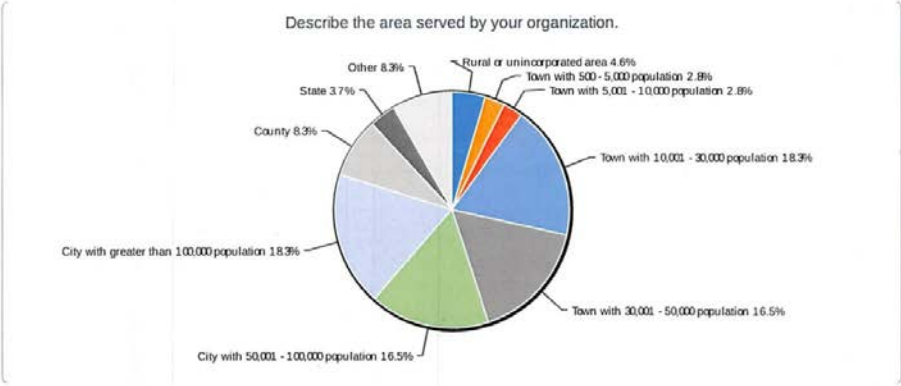
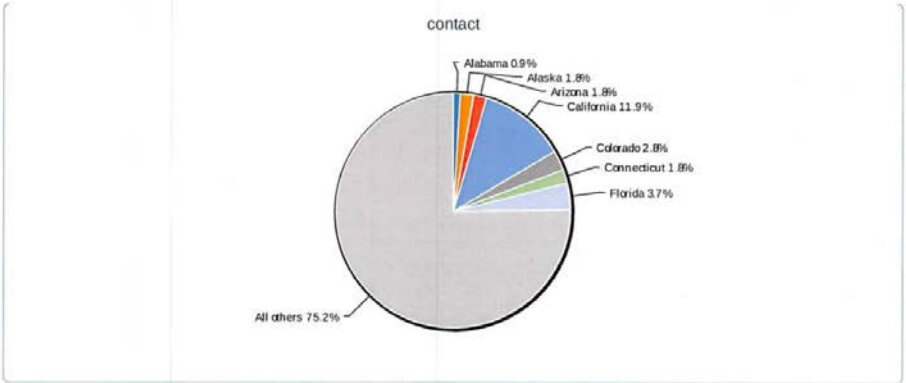


10. Describe the area served by your organization.

Value	Count	Percent %
Rural or unincorporated area	5	4.6%
Town with 500 - 5,000 population	3	2.8%
Town with 5,001 - 10,000 population	3	2.8%
Town with 10,001 - 30,000 population	20	18.4%
Town with 30,001 - 50,000 population	18	16.5%
City with 50,001 - 100,000 population	18	16.5%
City with greater than 100,000 population	20	18.4%
County	9	8.3%
State	4	3.7%
Other	9	8.3%

Statistics	
Total Responses	109



11. contact

Value	Count	Percent %
Alabama	1	0.9%
Alaska	2	1.8%
Arizona	2	1.8%
Arkansas	0	0.0%

Statistics	
Total Responses	109

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Question 10 results, detail.

California	13	11.9%
Colorado	3	2.8%
Connecticut	2	1.8%
Delaware	0	0.0%
Florida	4	3.7%
Georgia	2	1.8%
Hawaii	0	0.0%
Idaho	2	1.8%
Illinois	8	7.3%
Indiana	1	0.9%
Iowa	0	0.0%
Kansas	1	0.9%
Kentucky	0	0.0%
Louisiana	0	0.0%
Maine	2	1.8%
Maryland	1	0.9%
Massachusetts	3	2.8%
Michigan	0	0.0%
Minnesota	4	3.7%
Mississippi	0	0.0%
Missouri	1	0.9%
Montana	1	0.9%
Nebraska	3	2.8%
Nevada	0	0.0%
New Hampshire	0	0.0%
New Jersey	1	0.9%
New Mexico	2	1.8%
New York	9	8.3%
North Carolina	3	2.8%
North Dakota	1	0.9%
Ohio	3	2.8%
Oklahoma	1	0.9%
Oregon	4	3.7%
Pennsylvania	6	5.5%
Rhode Island	1	0.9%
South Carolina	2	1.8%
South Dakota	1	0.9%
Tennessee	3	2.8%
Texas	8	7.3%
Utah	0	0.0%
Vermont	0	0.0%
Virginia	2	1.8%
Washington	6	5.5%
West Virginia	0	0.0%
Wisconsin	0	0.0%
Wyoming	0	0.0%
District of Columbia	0	0.0%

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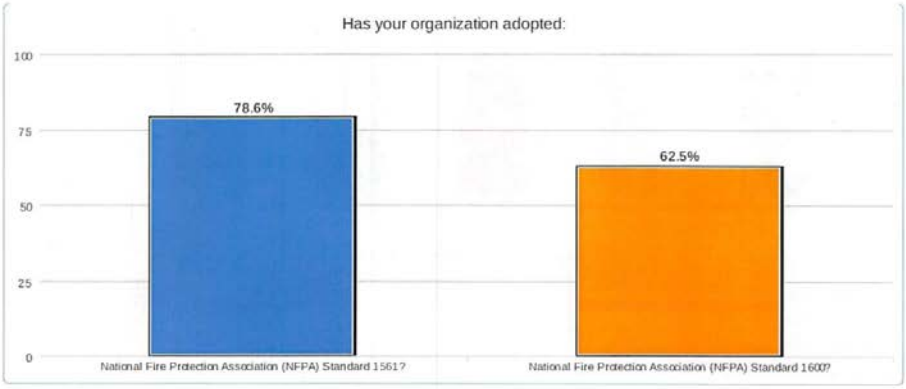
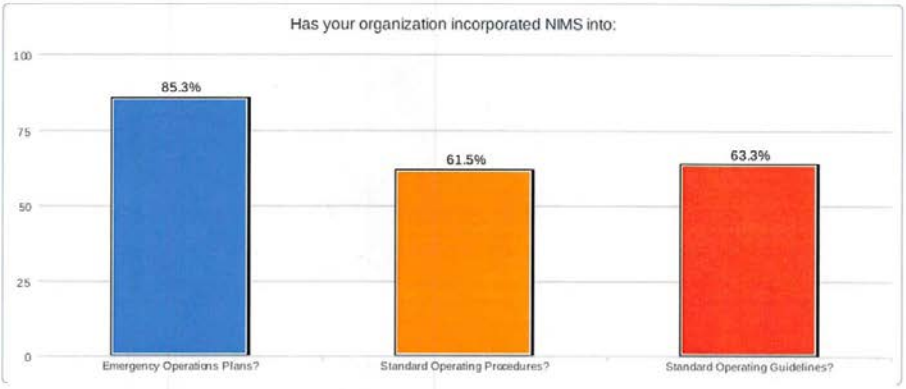
1	98406
1	99694
1	99801



12. Has your organization adopted:

Value	Count	Percent %
National Fire Protection Association (NFPA) Standard 1561?	44	78.6%
National Fire Protection Association (NFPA) Standard 1600?	35	62.5%

Statistics	
Total Responses	56



13. Has your organization incorporated NIMS into:

Value	Count	Percent %
Emergency Operations Plans?	93	85.3%
Standard Operating Procedures?	67	61.5%
Standard Operating Guidelines?	69	63.3%

Statistics	
Total Responses	109

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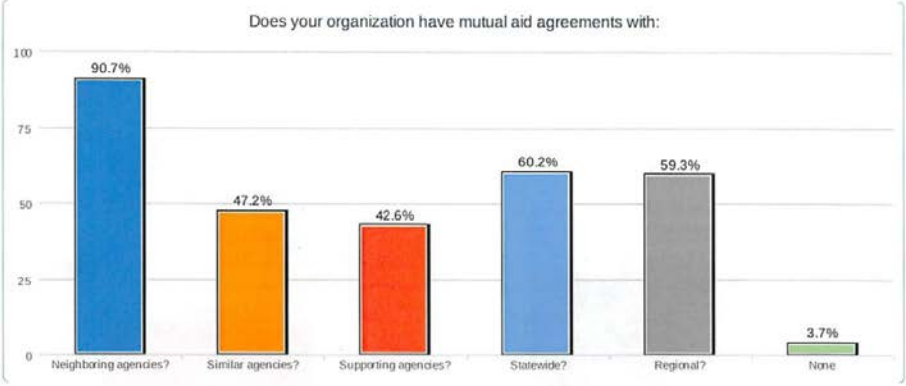
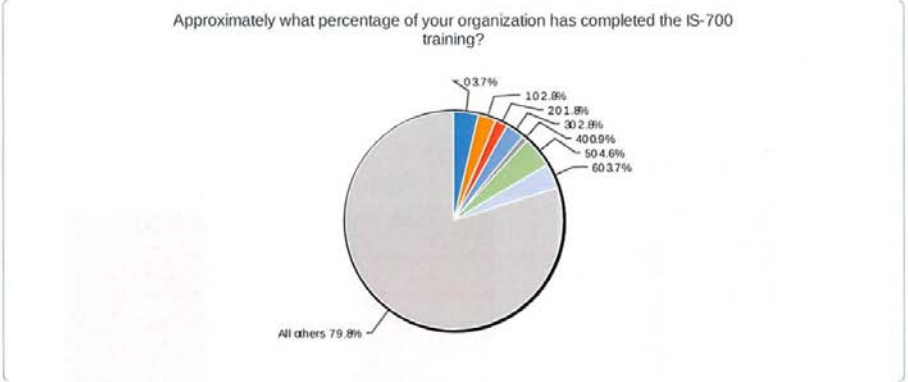


14. Does your organization have mutual aid agreements with:

Value	Count	Percent %
Neighboring agencies?	98	90.7%
Similar agencies?	51	47.2%
Supporting agencies?	46	42.6%
Statewide?	65	60.2%
Regional?	64	59.3%
None	4	3.7%

Statistics	
Total Responses	108



15. Approximately what percentage of your organization has completed the IS-700 training?

Value	Count	Percent %
0	4	3.7%
10	3	2.8%
20	2	1.8%
30	3	2.8%
40	1	0.9%
50	5	4.6%
60	4	3.7%
70	7	6.4%

Statistics	
Total Responses	109
Sum	8,800.0
Avg.	80.7
StdDev	28.0
Max	100.0

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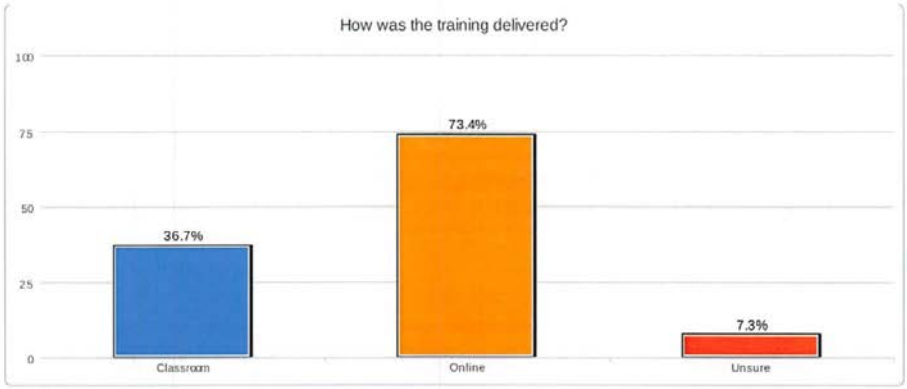
80	8	7.3%
90	22	20.2%
100	50	45.9%



How was the training delivered?

Value	Count	Percent %
Classroom	40	36.7%
Online	80	73.4%
Unsure	8	7.3%

Statistics	
Total Responses	109

Why was this method chosen?

Count	Response
1	.
1	Best fit to varying schedules
1	Best for our volunteers to do on their schedule.
1	Beter match for what we do
1	Better training.
1	Class room for recruit training. On line for other staff.
1	Classroom originally and then online when it became available
1	Classroom originally as it was the only option, online now for most employees.
1	Companies did not have to travel to obtain training.
1	Depended upon staff availability.
3	Ease of access
1	Ease of access.
1	Ease of delivery
1	Ease of delivery
1	Ease of ensurong all personnel recieve the same training
1	Ease of instruction.
1	Ease of training and quality of training materials.
1	Ease of use
1	Ease.
1	Easier for members who live over large distances
1	Easier to assure completion

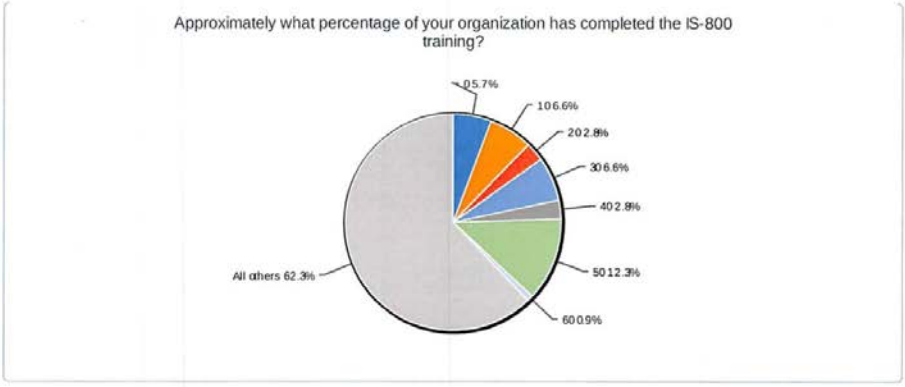
APPENDIX J

Survey Results, page 18 of 39.
Question 15 comments, cont'd.

1	Easiest
1	Easiest for this class
2	Easiest.
1	Easy
1	Easy and cheap
1	Easy of presentation
1	Its on-line...
1	Knowledge is better retained
1	Least expensive
1	Many still don't use computers
1	Most cost effective method.
1	On-line less expensive but Classroom more effective
1	Option was the best for our personnel to utilize
1	Shift schedule and easier to deliver.
1	Simplicity and consistency
1	So everyone would have it done together
1	That's what was provided
1	Time - a stand alone required class
1	To ensure the training was understood/
1	Training provided online
1	Unsure
1	Versital
1	We have in house training classroom on a yearly bases during the winter month's.
1	accomodates our needs for the amount of personnel we had to certify
1	budgetary restraints
1	consistency
1	convenience
1	costs
1	custom, habit and tradition
1	dont like the internet training, no face to face exchange
1	ease of use
1	easier for volunteers
1	easier than scheduling times for shift personnel.
1	easiest
1	easiest for everyone to complete
1	easiest for members to get it done on their own time
1	easiest for volunteers to complete on their own time and schedule
1	easiest to accomplish
1	easiest way to complete the project
1	easiest way to get everyone without interrupting regular scheduled activities
1	easy
1	easy to do
1	easy to do during down time.
1	encouraged by the system
1	flexibility of scheduling
1	large department and easier to track (and free)
1	online is better for healthcare professionals
1	simple and cost-effective
1	taught to fire crews and all city during initial training
1	unsure
1	Make sure they do it, online is a joke, one person does it and gives the answers to all the other slugs in the fire station.

APPENDIX J
Survey Results, page 19 of 39.
Question 15 comments, cont'd.

1	IS 700 was chosen online along with ICS 100 because the number of hours required to teach it in a classroom is longer than required online. We choose to have them complete these classes online and we hold training to bring it down to a simpler level of understanding.
1	Classroom used initially when NIMS was rolled out because the department could be brought up to speed at once. Online to continue with members that have gotten on since.
1	For many the classroom was a better learning environment. The online was used by those who wanted to learn at their own pace.
1	Most of it was done in the classroom setting but each member was to log online and complete the test and get the certification, A county certification was also issued.
1	speed as the Training Officer I wish we had done this in a classroom setting. I've included basic ICS questions in prootional testing and am not happy nor is the Fire Chief with the results.
1	Ease of management; all personnel were given direction to have the training completed in a certain timeframe. No alternatives were given.
1	Easiest, and ours is a small department that only his 2-3 people annually so it isn't cost effective or time effective to teach it direct.
1	IS-700 teaches the average firefighter NOTHING! I'd much rather see them studying something more appropriate!
1	I have personally completed levels of ICS training lower than IS-700, and did so Online due to budgetary restrictions and convenience.
1	Prior to 2007, all was done by classroom method. Since then, online has been the method of choice
1	Easier, avoid OT, less costly Question 12 - I checked one of the boxes because I was required to so that I could continue the survey. There should have been a yes and no choice. My agency has not adopted any NFPA standards as we are law enforcement.
1	The majority of the firefighters have had the training, so it is on an individual bases now. As a firefighter is hired, they receive on line training for IS-100,200, 700, and 800.
1	easiest, free, flexible scheduling. All new members must complete IS-100, 200 and 700 prior to completing probation.
1	Offsite classroom training means uninterrupted focus without constant emergencies, walk-in requests, telephone calls, pages, etc.



16. Approximately what percentage of your organization has completed the IS-800 training?

Value	Count	Percent %
0	6	5.7%
10	7	6.6%
20	3	2.8%
30	7	6.6%
40	3	2.8%
50	13	12.3%

Statistics	
Total Responses	106
Sum	7,250.0
Avg.	68.4
StdDev	33.7
Max	100.0

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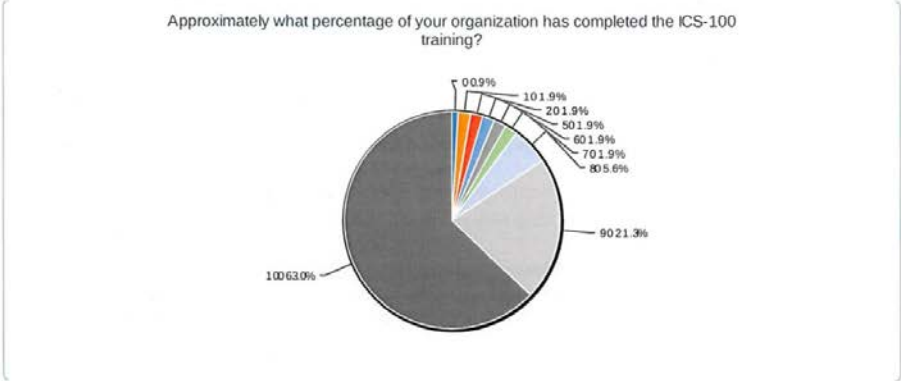
Survey Results, page 20 of 39.

60	1	0.9%
70	7	6.6%
80	8	7.6%
90	15	14.2%
100	36	34.0%



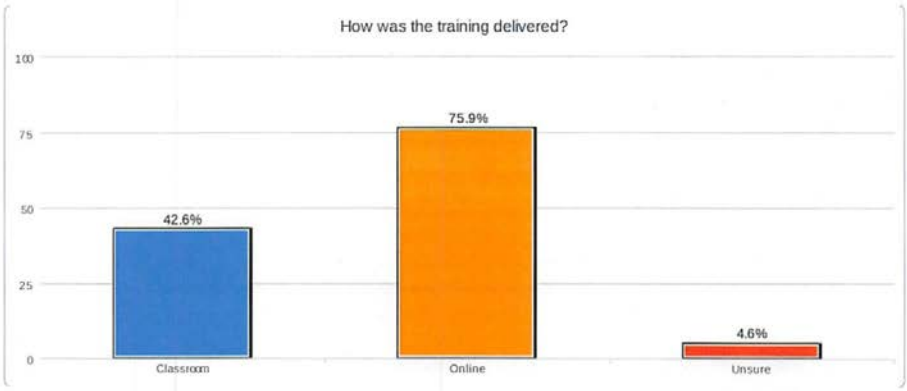
17. Approximately what percentage of your organization has completed the ICS-100 training?

Value	Count	Percent %
0	1	0.9%
10	2	1.9%
20	2	1.9%
30	0	0.0%
40	0	0.0%
50	2	1.9%
60	2	1.9%
70	2	1.9%
80	6	5.6%
90	23	21.3%
100	68	63.0%

Statistics	
Total Responses	108
Sum	9,770.0
Avg.	90.5
StdDev	20.2
Max	100.0

APPENDIX J

Survey Results, page 21 of 39.



How was the training delivered?

Value	Count	Percent %
Classroom	46	42.6%
Online	82	75.9%
Unsure	5	4.6%

Statistics	
Total Responses	108

Why was this method chosen?

Count	Response
1	Best fit to varying schedules
1	Best option for our personnel
1	Better training.
1	Budgetary restrictions and convenience.
1	Classroom first, but online now.
1	Classroom originally and then online when it became available.
1	Cost effective.
1	Depended upon staff availability.
2	Ease
1	Ease and self study
2	Ease of access
1	Ease of access.
1	Ease of administration and quality of course material.
1	Ease of delivery
1	Ease of management.
1	Ease of use and shift schedule
1	Easier to assure everyone completed
2	Easiest
1	Easiest access. Cheap.
1	Grant requirement.
1	Importance of course.
1	Lays foundation of all levels of ICS.
1	Least expensive
1	Members live over larges distances
1	Not cost effective for direct delivery annually when we only hire 2-3 people annually.
1	Part of State classes

APPENDIX J

Survey Results, page 22 of 39.
Question 17 comments, cont'd.

1	Prior to 2007, classroom was done. After that time, online was done
1	Reach most quickly
1	Same answer as before
1	Same answer as the 700 question. It is all done at the same sitting.
1	Same as 700
1	Same as above
1	Same as before, easy to track and free
1	Same reason as for the ICS-700 training
1	Simplicity and consistency
1	So everyone would complete it together
1	Speed and simplicity. See previous answer to how 700 was delivered, applies here just as much.
1	Standardization from FEMA
1	That's what was provided for no fee to the organization
1	The classroom training was combined with the IS-700 training.
1	Time - a stand alone class
1	To make sure it was understood.
1	Training provided online
1	Versital
1	We did this in house as a drill for all the members and staff
1	accomodates our needs for the amount of personnel we had to certify
1	budgetary restraints
1	consistency
2	convenience
1	ease
2	ease of delivery
1	ease of use
1	easier for volunteers
1	easiest
1	easiest for everyone to complete
1	easiest lethod
1	easiest to accomplish
1	easy
1	easy for each member to do at their home or complete own their own
1	easy of delivery
1	easy to do
1	easyto access
1	encouraged by the system
1	flexibility of scheduling
1	like face to face training
1	most convenient and cost effective
1	online
1	same
1	same as previous question
1	they are on-line courses
1	unsure
1	easy, free, flexible scheduling. All members must complete 100, 200 and 700 to complete their probation.
1	We use in house traing during the winter month's when it is to cold to take equipment out in the weather
1	Same as before, lots of dumb firemen and women rely on one person to complete the online course to get the answers.
1	Approximately 50% attended classroom and the remained accomplished it online. Those that attend classes there was no online training available and the remainder that accomplished it online it was because of ease of access to the

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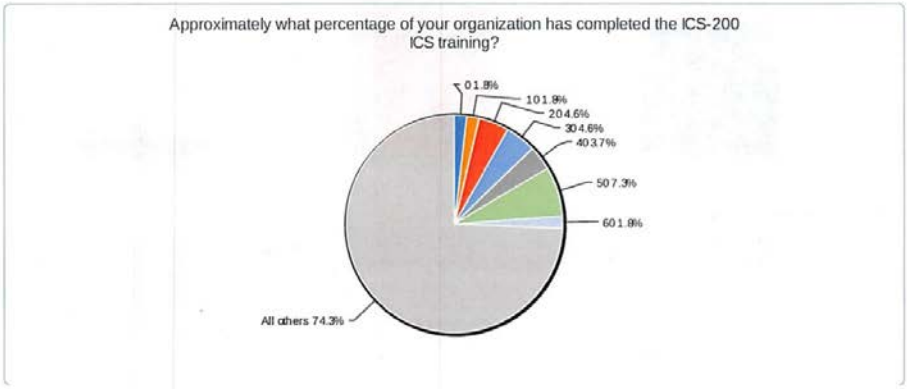
Survey Results, page 23 of 39

	training.
1	Majority of the firefighters have had this training, so it is required for the new employed firefighter to receive this training. It is convenient for the individual to study at their on pace.
1	We use 100 and 200 in the classroom for new recruits. For the grandfathered personnel we used online to gain compliance.



18. Approximately what percentage of your organization has completed the ICS-200 ICS training?

Value	Count	Percent %
0	2	1.8%
10	2	1.8%
20	5	4.6%
30	5	4.6%
40	4	3.7%
50	8	7.3%
60	2	1.8%
70	7	6.4%
80	4	3.7%
90	14	12.8%
100	56	51.4%

Statistics	
Total Responses	109
Sum	8,620.0
Avg.	79.1
StdDev	29.0
Max	100.0

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Survey Results, page 24 of 39

How was the training delivered?

Value	Count	Percent %
Classroom	49	45.0%
Online	75	68.8%
Unsure	6	5.5%

Statistics	
Total Responses	109

Why was this method chosen?

Count	Response
1	200 is required for the bosses and it was taken before the online training was available.
1	Access
1	Best
1	Best delivery method
1	Best fit to varying schedules
1	Best option
1	Better training.
1	Classroom originially and then online when it became available
1	Convenience
1	Cost effective.
1	Depended upon staff availabitliy.
2	Ease
1	Ease of access.
1	Ease of administration and quality of course material.
1	Ease of delivery
1	Ease of management.
1	Ease of use and schedule
1	Easier to assure everyone completed
1	Easier to take course
1	Easiest access. Affordable.
1	Easiest.
1	For interaction
1	Fundamentals require an instructor led discussion.
1	Interactive environment
1	Least expensive
1	Not cost effective for direct delivery when we only hire 2-3 people annually.

APPENDIX J
Survey Results, page 25 of 39.
Question 18 comments, cont'd.

1	On going class room training during the winter months
1	Online
1	Part of State classes
1	Same
1	Same as IS-700 and 100.
1	Same as others
2	Same as others.
1	Same reason as in the previous answers
1	So everyone would complete it together
1	Standardization from FEMA
1	T o make sure it was understood.
1	This is the only way the State of New Jersey will except it.
1	Time - a stand alone class
1	Training provided online
1	Very few classroom training sessions were available.
1	What was offered
1	X
1	accomodates our needs for the amount of personnel we had to certify
1	better delivery method
1	budgetary restraints
1	consistency
2	convenience
1	costs
1	ease
2	ease of delivery
1	easier for volunteers
1	easiest
1	easiest and cost effective
1	easiest for everyone to complete
1	easiest method
1	easiest to accomplish
1	easy
1	easy of delivery
1	easy to access
1	easy to do.
1	easy to track
1	face to face
1	flexibility
1	its an on-line course
1	readly avaialble
1	same
1	same as above
1	same as before
1	same as previous answers
1	same reason as the 100 series
1	simplicity.
1	unsure
1	volunteers - let them to complete on their own.
1	IS-200 is meaningless. Folks going on to I-300 need to be retaught the material that they were SUPPOSED to learn in IS-200.
1	Everything from IS 700, IS 100, and IS 200 are all completed at the same times and an overall review is done in a

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Survey Results, page 26 of 39.

	classroom setting to help make sense of it.
1	Online is a joke, same as before. Even if it requires each person to log in and it is time looped, the lazy ones allow the online courses to play in the background, then when it is test time they use the answers that were given to them. This goes for online degrees from colleges too, they are a joke as well.
1	easy, free, flexible scheduling. all members must complete 100, 200 and 700 to finish their probation.
1	Approximately 50% attended classroom and the remained accomplished it online. Those that attend classes there was no online training available and the remainder that accomplished it online it was because of ease of access to the training.

19. Approximately what percentage of your organization has completed the ICS-300 training?

Value	Count	Percent %
0	6	5.6%
10	18	16.8%
20	16	15.0%
30	15	14.0%
40	6	5.6%
50	13	12.2%
60	5	4.7%
70	7	6.5%
80	5	4.7%
90	6	5.6%
100	10	9.4%

Statistics	
Total Responses	107
Sum	4,570.0
Avg.	42.7
StdDev	30.8
Max	100.0

APPENDIX J

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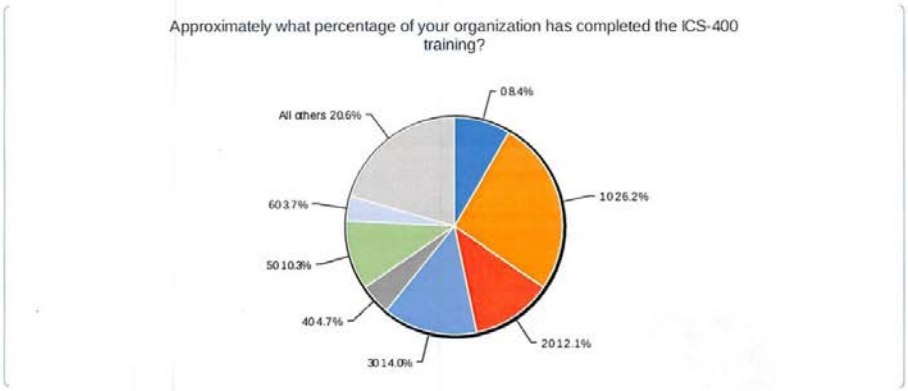
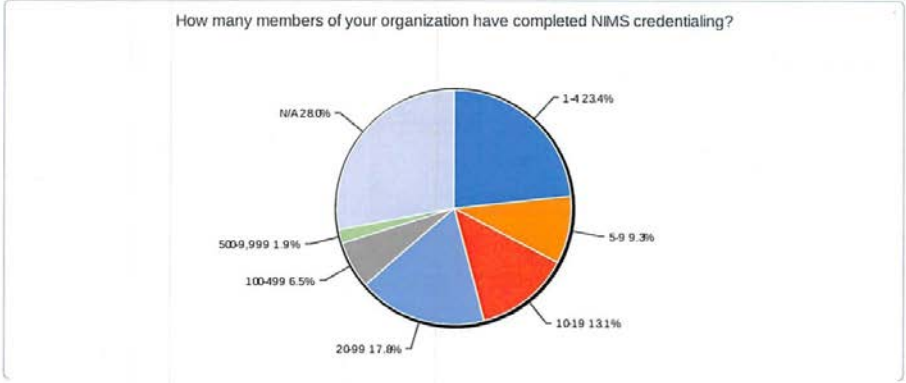


20. Approximately what percentage of your organization has completed the ICS-400 training?

Value	Count	Percent %
0	9	8.4%
10	28	26.2%
20	13	12.2%
30	15	14.0%
40	5	4.7%
50	11	10.3%
60	4	3.7%
70	6	5.6%
80	4	3.7%
90	5	4.7%
100	7	6.5%

Statistics	
Total Responses	107
Sum	3,870.0
Avg.	36.2
StdDev	30.1
Max	100.0



21. How many members of your organization have completed NIMS credentialing?

Value	Count	Percent %
1-4	25	23.4%
5-9	10	9.4%
10-19	14	13.1%

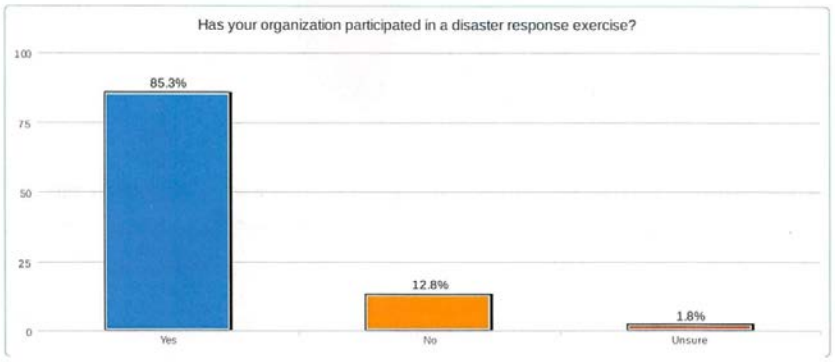
Statistics	
Total Responses	107
Sum	2,295.0

APPENDIX J

Survey Results, page 28 of 39.

20-99	19	17.8%
100-499	7	6.5%
500-9,999	2	1.9%
10,000+	0	0.0%
N/A	0	0.0%
N/A	30	28.0%

Avg.	29.8
StdDev	81.5
Max	500.0



22. Has your organization participated in a disaster response exercise?

Value	Count	Percent %
Yes	93	85.3%
No	14	12.8%
Unsure	2	1.8%

Statistics	
Total Responses	109

When?

Count	Response	Count	Response	Count	Response	Count	Response
1	2/11/2011	1	6/12/2011	1	9/18/2010	3	2012
1	3/3/2010	1	6/12/2012	2	9/23/2012	1	6/15/2012
1	3/6/2012	1	6/19/2012	1	9/25/2012	1	??/??/?? many
1	4/1/2013	1	6/5/2012	2	9/26/2012	1	Annually
1	4/15/2012	1	7/4/2012	1	9/29/2012	1	Annually at a minimum
2	4/17/2012	1	7/16/2011	1	10/1/2011	1	12/?/2011
1	4/19/2012	1	7/18/2012	1	10/6/2012	1	7/?/2012
1	4/?/2012	1	7/24/2012	1	10/8/2012	2	6/?/2012
1	4/28/2012	1	7/26/2012	1	10/10/2012	1	Many times a year
1	5/2/2012	1	7/28/2012	1	10/12/2011	1	N/A
1	5/7/2012	1	7/30/2012	1	10/14/2012	1	None have been planned in this area
1	5/10/2005	1	8/9/2012	1	10/18/2012 regularly	1	Within the past year
1	5/10/2011	1	8/22/2012	1	10/28/2010	1	All the time
1	5/14/2011	1	8/23/2011	1	10/28/2011	1	Annually since 1994
2	5/15/2011	1	8/23/2012	1	11/1/2004	1	Continually
1	5/17/2011	1	8/24/2011	1	2001, 2012	1	5/?/2011
1	5/18/2011	1	8/27/2011	1	2004	1	Summer 2012
1	5/19/2012	1	9/1/2012	1	2006, 2007, 2008, 2010, 2011	1	Unknown
1	5/22/2012	1	9/13/2012	1	2008	1	We have done several, mostly in June 2012
1	6/1/2012	1	9/17/2011	1	2010		

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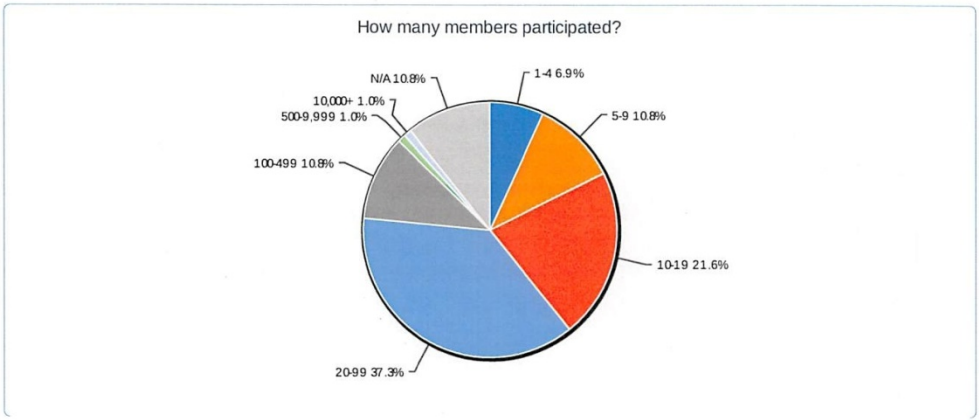

How many members participated?

Value	Count	Percent %
1-4	7	6.9%
5-9	11	10.8%
10-19	22	21.6%
20-99	38	37.3%
100-499	11	10.8%
500-9,999	1	1.0%
10,000+	1	1.0%
N/A	0	0.0%
N/A	11	10.8%

Statistics	
Total Responses	102
Sum	2,652.0
Avg.	29.1
StdDev	57.5
Max	500.0

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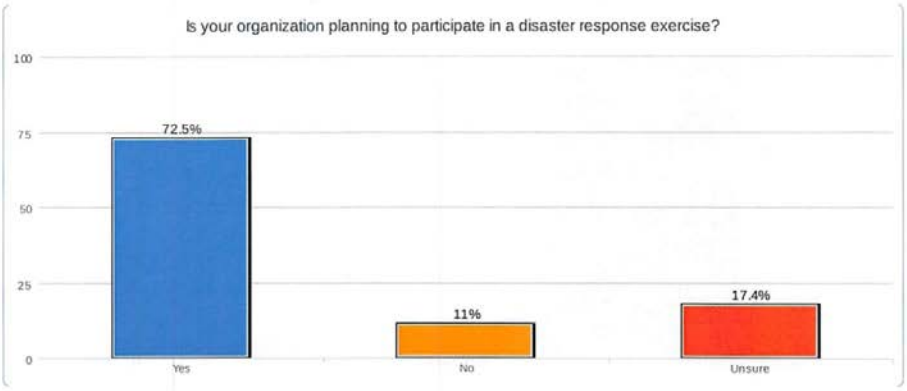
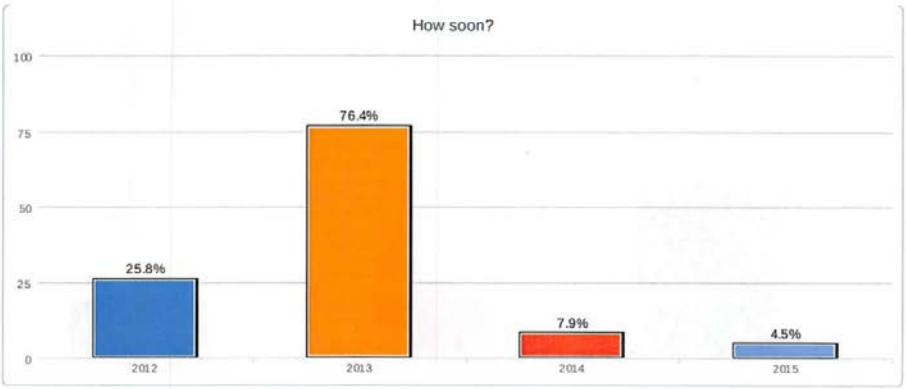


23. Is your organization planning to participate in a disaster response exercise?

Value	Count	Percent %
Yes	79	72.5%
No	12	11.0%
Unsure	19	17.4%

Statistics	
Total Responses	109



How soon?

Value	Count	Percent %
2012	23	25.8%
2013	68	76.4%
2014	7	7.9%
2015	4	4.5%

Statistics	
Total Responses	89
Sum	205,318.0
Avg.	2,012.9
StdDev	0.7
Max	2,015.0

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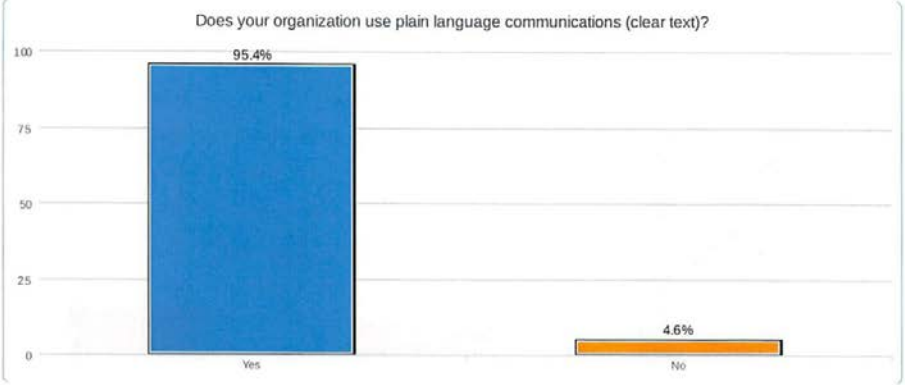
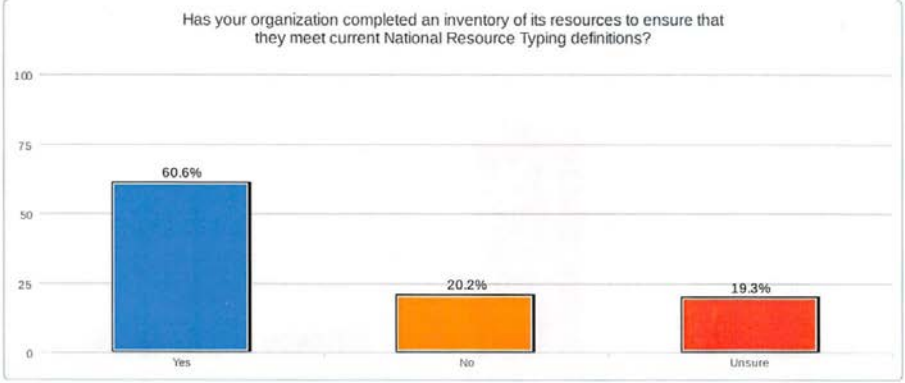


24. Does your organization use plain language communications (clear text)?

Value	Count	Percent %
Yes	104	95.4%
No	5	4.6%
Unsure	0	0.0%

Statistics	
Total Responses	109



25. Has your organization completed an inventory of its resources to ensure that they meet current National Resource Typing definitions?

Value	Count	Percent %
Yes	66	60.6%
No	22	20.2%
Unsure	21	19.3%

Statistics	
Total Responses	109

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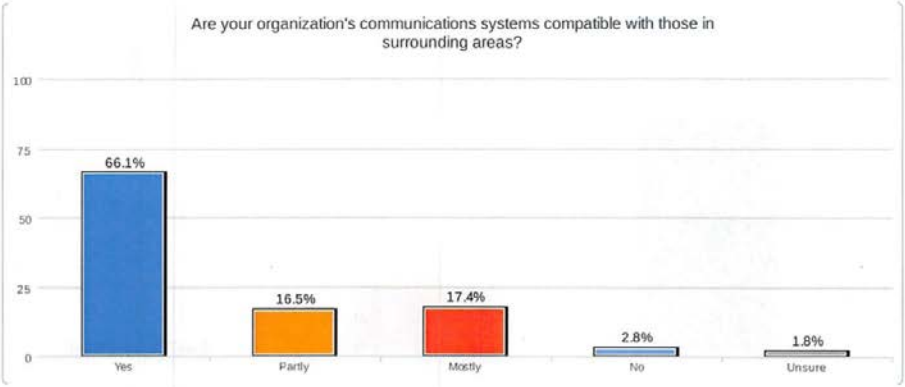
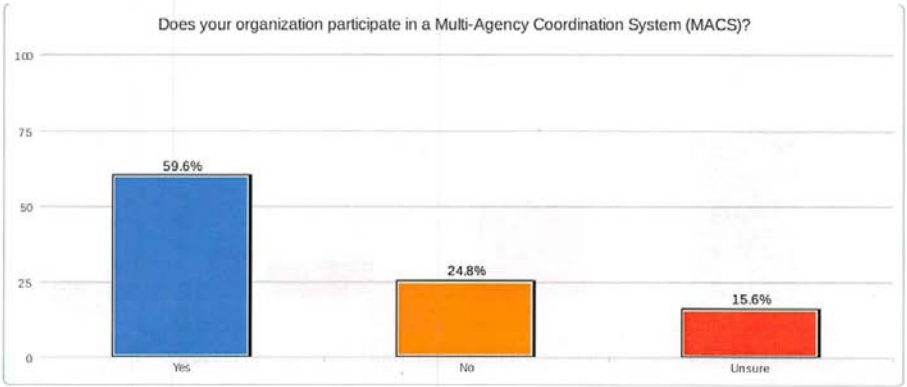


26. Are your organization's communications systems compatible with those in surrounding areas?

Value	Count	Percent %
Yes	72	66.1%
Partly	18	16.5%
Mostly	19	17.4%
No	3	2.8%
Unsure	2	1.8%

Statistics	
Total Responses	109



27. Does your organization participate in a Multi-Agency Coordination System (MACS)?

Value	Count	Percent %
Yes	65	59.6%
No	27	24.8%
Unsure	17	15.6%

Statistics	
Total Responses	109

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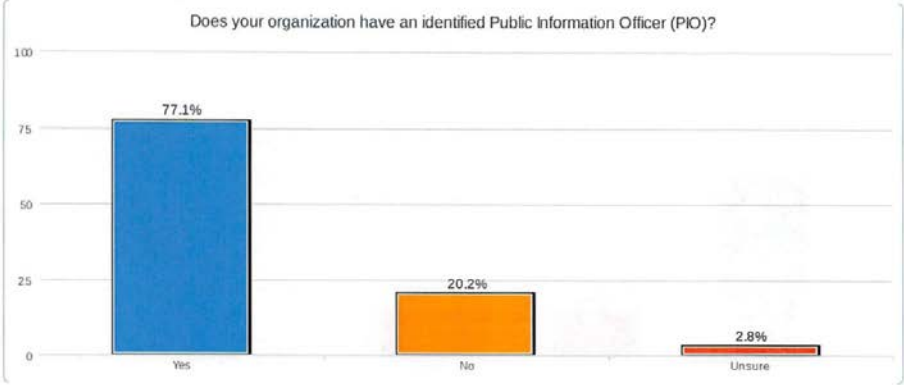
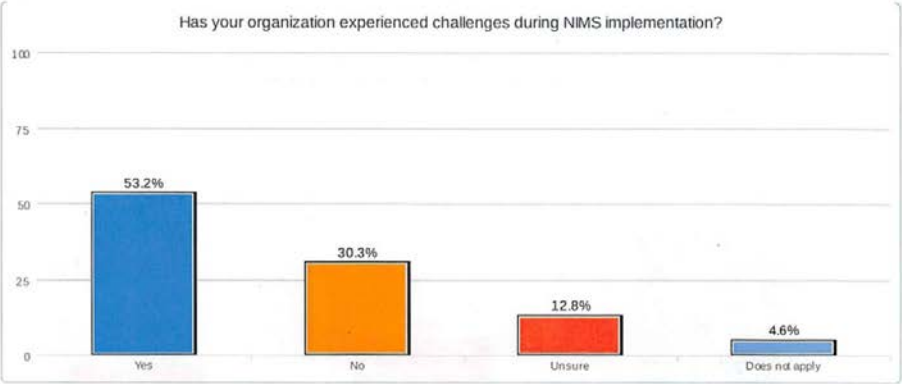


28. Does your organization have an identified Public Information Officer (PIO)?

Value	Count	Percent %
Yes	84	77.1%
No	22	20.2%
Unsure	3	2.8%

Statistics	
Total Responses	109



29. Has your organization experienced challenges during NIMS implementation?

Value	Count	Percent %
Yes	58	53.2%
No	33	30.3%
Unsure	14	12.8%
Does not apply	5	4.6%

Statistics	
Total Responses	109

Please describe?

Count	Response
1	A lot of members are resistant to change, but this is a requirment of membership.
1	Available times; available funding; elected official indifference

APPENDIX J

Survey Results, page 34 of 39.
Question 29 comments, cont'd.

1	Being able to deliver the classes after initial training was done. Very few TTT sessions.
1	Completion of courses and changes from "ICS" terminology to NIMS standards.
1	Compliance with taking courses
1	Difficulty in membership buy-in to new terminology and procedures.
1	Easy to over-apply ICS by inexperienced personnel
1	Implementation and compliance
1	Implementing NIMS with other non fire agencies is a challenge.
1	Intergarated Federal agencies sometime are slow to react to NIMS or not use it at all
1	LE is a slow group to understand and use the ICS structure and other NIMS requirements.
1	Learning and using ICS forms
1	N/A
2	NA
1	NIMS has unrealistic and difficult to measure matrix's for the average VFD.
1	NIMSCAST is a bit vague. More resources need to be typed.
1	New programs alway offer challenges with staff acceptance
1	No concept of the need for ICS
1	No problems
1	Non-emergent agencies usually don't follow NIMS entirely
1	Nonsupport by agency leadership. Irrelevance in opinion of hospital staff.
1	Not at this time.
1	Old heads do not like change
1	Personnel resist training. Instructors are boring.
1	Role clairication
1	Staff availability for training.
1	The scheduling of classroom training for career firefighters.
1	Time constraints. Other training requirements.
1	Training and exercising non-safety employees
1	Training personnel in using this system. New vs. Tradition.
1	Unsure not fully implemented
1	We moved into with no problems
1	getting buy and participation from other agencies
1	getting buy in and participation by members
1	having sufficent personnel adequately trained for sepecific events.
2	na
1	other seem not to understand the real ICS and how it realy should work
1	people unwilling to do it
1	proper implementation
1	resistance to change
1	scheduling
1	the typing changes have confused a few folks
1	tough to get everyone on board
1	training and cooperation of elected and appointed public officials
1	we were using FIRESCOPE ICS which is very similiar
1	we've always used it
1	x
1	z
1	no challenge to implementation. All new hires are required to complete ICS 100, 200. Paramedic level responders required to complete 700, 800. District Chief and above rank required to complete 300, 400.
1	We have been using incident command systems since the early 80's; it is a commonly accepted daily practice in our organization.
1	The coordination of different agencies. Communication. Time constraints. Getting all Personnel trained.

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1	Getting the initial training completed. New firefighters have it incorporated into their academy classes.
1	neighboring departments that do not utilize ICS. Some claim they do, but do not really. Also our county communications center is run by law enforcement, who believes that ten-codes are essential to sound like cops, and who does not know how to speak plain English. They claim to be compliant despite insisting on ten codes during multi agency and multi jurisdictional incidents. We just refuse to use them and speak English.
1	When we were a true combination department, 30+ volunteers and brand new career members we would still hear some of the older members using 10 codes. Now with us being a combination department in word on paper only the problem is with leader identification. IC should always be named IC on radio. Not X IC this transmission, Captain 2 next and John later on.
1	Our organization was willing to implement NIMS but when we had a severe weather event we had difficulty trying to get other departments in our city to comply.
1	Law enforcement was/is hesistant to adopt NIMS. Fire and EMS has worked together to have a trouble free implementation.
1	On one muliple disasater drill with live "victins" and live response, the first due in Engine was delayed by a train, so the second due in engine was first and they did not know what to do because they practiced being second in, very funny.
1	It is a long process and at times hard to follow what all the requirements are and is a lot for volunteers.
1	Most are not experienced with NIMS. Establishing unified command is near impossible. Most will not use the forms. My agency is a 2 person career, 60 person volunteer emergency management agency, who uses ICS, but works with many fire, police, and EMS who are not proficient with ICS, nor are very unified.
1	Change in termonolgy and we were ahead of other city departments took a while before everybody became onboard
1	Obtaining the buy in of employees not in the fire department. In addition, getting employees to send us the certificates has been difficult
1	-Training issues-long training for 300/400 -why change from what we do now -getting everyone to use it when needed -why do I need to know this?
1	Members threatening to quit if required to complete training; members without computer skills/access; neighboring department who do not comply without any penalty
1	LE is so used to responding to the 2 vehicle accident and taking care of everything themselves. It has been hard for some to transistion to NIMS, ICS and unified command.
1	county communications center not wanting to change all radio traffic to plain text, and classes not available for ics 300 and 400 for all members to attend.
1	some of our surrounding volunteer FD's have a hard time waiting in staging areas until assigned to a division. They just want to charge off and fight fire.
1	Works great for large scale incidents but has caused issues on type 4 and 5. Our organization uses NIMS for the most part but makes sure we can transition to a NIMS on large scale incidents
1	The change in the radios did take some time. Also to have all surrounding counties and towns to get on the same page
1	Normal resistance to change. Difficulty giving up 10 codes. Making the use of ICS on every incident a priority
1	Some agencies are not as polished with NIMS so it is a challenge when the join our incidents to make sure they understand what role(s) they will be in.

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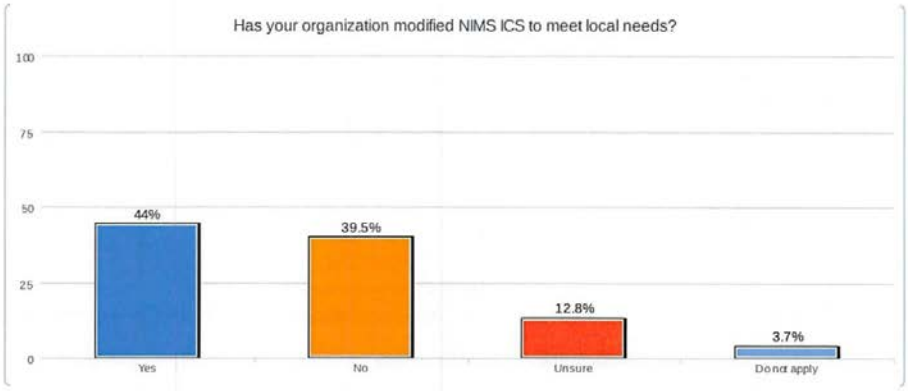

30. Has your organization modified NIMS ICS to meet local needs?

Value	Count	Percent %
Yes	48	44.0%
No	43	39.5%
Unsure	14	12.8%
Do not apply	4	3.7%

Statistics	
Total Responses	109

Please describe?

Count	Response
1	.
1	Called ambulances "ambulances" before calling them medic units.
1	Different type of areas require different apparatus responce
1	I guess they have, not sure
1	I'm sure we have changed something but I can't put my finger on it.
1	ICS work as it was first build
1	Minor terminlogy
1	Modified check in form 211 to meet our needs.
1	Modified it to a smaller scale.
2	N/A
1	No identified changes
1	No straight out of the book ececpt for we use 10codes
1	SOGs and SOPs
1	Since we use NIMS we did not have to modify.
1	The roles are filled out to the event
1	To meet the need of operations, during floods.
1	Unknown
1	We are adopting the Blue Card local incident management system.
1	We follow NIMS in all of our responses regarless of the incident
1	We follow NIMS-ICS
1	We have began blending Blue Card and NIMS.
1	We only use it for large scale operations
1	We require our Officers to use it as much as they can and to teach their crews.
1	When implementing we adjusted a few things to encourage acceptance
1	meets our needs

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2	n/a
1	na
1	our region adopted NIMS
1	reduced to meet scale of incidents
1	that is the concept of ICS, use what you need to when yoou need to.
1	use a basic modular approach without full implementation
1	utilize the modular nature of the system
1	very little change
1	within last year have gone to credentialing type IV,V ICS aka blue card training
1	x
1	z
1	Have to tailor it to our needs, call types, apparatus, personnel etc... Every city / town is different and one size helps but does not fit all.
1	I personally implement elements of NIMS/ICS during the management of incidents at my property as appropriate.
1	in this part of the country we still use the term tanker when dsealing with structural firefighting, although tender is becoming more common.
1	We have made modifications based upon incident type to fit the needs of the operation at that given time.
1	We have included NIMS triangle to the ICS charts which translates into being NIMS complaint; we have removed the terms sectors from our vernacular
1	For the most part, no, but there are some very minor position name alterations mostly due to carryover from earlier versions.
1	Hospital is JCAHO accredited, and must follow JCAHO standards that do not comport with NIMS and ICS standards.
1	We scale it to fit our needs. "Scalability" is a NIMS virtue that we leverage to our advantage.
1	We are a Federal disaster medical assistance team (DMAT) from NW OH. We operate with federal plans that we modify depending on the location, and type of emergency.
1	Simplified and adapted for a very rural environment. Most typed resources don't exist. All fire and EMS are 100% volunteers with other jobs. It is difficult to find time for training. There is no budgets.
1	we routinly do not have enough personnel to fill all the baisc required postioins and most times and individual is filing 2 or more roles
1	At times we have not filled all of the branches based on the size/scope of the event and our avaiable personnel.
1	In an attempt to implement NIMS, we are using a NIMS-lite type of modification to start easing the membership into the process.
1	ICS needs to be adapted for better use in a MACS/EOC. MACS do not actually conduct operations, so the sections are modified as needed to fit the coordination mission.
1	Adopted NIMS ICS standard to meet the national requirement and to be compatible with all regional responder agancies.

31. What changes are necessary to ensure the success of a universal ICS?

Count	Response
1	Agency specific changes
1	All neighbors and statewide responses being on the same NIMS page.
1	All parties are working together and on the same goal
1	Buy in as to why ICS has benefits and to document that it makes improvements during incidents.
1	Chiefs buying into it.
1	Continual training
1	Continued education and structured training and drills
1	Continued use and acceptance in the area
1	Convincing non-users that the system is far better than most other systems.
1	Education and funding to incorporate NIMS and ICS
1	Everyone has to be on the same page and know how to utilize Unified Command

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1	Everyone needs to adopt NIMS
1	Everyone needs to buy into it - including those who are resistant to the whole NIMS concept.
1	Expand concepts to standardize EOC and MACS positions and functions
1	Flexibility
1	I don't believe a universal ICS is realistic.
1	Im not sure if it is possible to ensure a universal ICS
1	It's working fine for us. Not sure if I see a need to change it.
1	Keep it Simple and do not allow any deviation from the national standard
1	Minor Terminology
1	Must approach it as a regional effort.
1	Needs to be continually evaluate and grow as needed.
1	No comment
1	None
1	Re-evaluate resources
1	Release the FEMA Emergency Operations Field Ops Guide and the Area Command Guide
1	Require participation
1	Some agencies are going to have to be forced to implement ICS.
1	Staff acceptance and enough training
1	State and Federal oversite - Funding to audit All Public Safety
1	Stop "counting" useless IS course completions as a measure of success.
1	Streamlining of the overall process.
1	Stronger leadership.
1	Training
1	Training and communication
1	Universal training standards would be a start..
1	We made need to break team down into a number groupd with a team leader.
1	buy in from troops
1	change in 10codes
1	full implementation
1	gear toward outside agency - we need their buy-in (IE law enforcement)
1	have all personal that use NIMS credentialed
1	i do not see any change needed
1	more scalable and applicable in smaller situtaions to encourage more everyday use
1	none, it works great if people use the real ICS and not jsut ICTeam system
3	not sure
1	simplification
1	that a degree of flexibility remains
1	time. But it it really necessary to be %100? I feel it should fit as needed
1	unsure
1	x
1	see above. as instructor for ics 100-400 and IS 700,800 there was a sizable gap managing the 95% of calls our department encountered. gap filled with blue card use
1	stop thinking that every department has the resources or time to implement something that has a far greater chance of never happening than do our every day incidents. we can't keep up now with all the required training just to stay certified to fight a darn fire much less adding more requirements to our plate. not everybody is paid and when you are dealing with volunteers they only have so much time to give. we want to help the community but don't want to spend all our time meeting less than productive goals. someone needs to understand that in the rural areas we have always gotten by safely without big programs that only the big citites can implement.
1	With regards to assignments of Divisions and Group being assigned as seperate levels, there are times that groups may need to be assigned to a specific disvision. One example would be a tractor group assigned to Divison A.
1	Feds/State must bribe agencies. In some European State purchases apparatus and equipment if agency meets all State requirement.

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1	Exercising and getting people to look at it with open minds leaving rank behind. FD's don't really know ICS
1	Getting agencies outside of the emergency agencies to use ICS daily. Making upper management understand that this is not just for the line personnel.
1	I like the idea of the Federal/State Government withholding grant money. That got everyone's attention here.
1	the first thing that the LE side needs to do is use the ICS structure on small incidents so the bigger incidents will not be so cumbersome to use it.
1	We are already using the ICS as specified with inconsequential changes - example: We have been transitioning from referring to our "Accountability Officer" to that of the Resource Status Officer. Things like that.
1	Make it practical. The system was designed for Wildland fires encompassing 1000's of acres, not for 1 and 2 room fires
1	I think more needs to be done to get fire service to switch to NIMS. I am retired fire training officer, most Dept in our state are not even close to clompliance.
1	Easier way to provide train the trainer classes or provide more instructors for the higher level training.
1	Universal mandates and timelines that require all hospitals to implement ICS for all staff by such-and-such date.
1	As the training and concepts are made as relevant as possible for the largest number of people/organizations, the possibility of a universal ICS becomes more of a possibility.
1	Cut down on the acronyms. It is a common irony to everyone who attends training when the instructors speak of using plain english but the course requires an acronym dictionary. Keep in mind Fire personnel have been using ICS for a long time while most other governmental/municipal entities are very new to it. The use of acronyims and form numbers instead of plain english is a turn off and road block to new learners. It gets a little overwhelming.
1	Keeping local agencies from modifying ICS and in turn changing the common terminology basis of the system.
1	A accountability tag system to go along with already established timed roll calls, more discipline on radio communication namely identifying leader, supervisor etc by their incident title not name or department rank. Finally, better SOP's that address NFPA 1561, 1600 and ICS system.
1	An easier way to teach front line personnel how to implement NIMS and how their actions set the stage for how the incident will be run if it escalates.
1	Change - Change in general is hard. It is hard to teach an old dog new tricks. Egos- Unfortunately egos of all agencies and disciplines still get in the way of the mission. I feel it has gotten better over the years. Continued training and exercises over time will hopefully ensure success.
1	I don't think this is entirely possible. Regionally we are good. Statewide we are better. Past that we are all probably 90% at best.
1	Got to get the ICS system translated into all the languages in the Universe first, then get lazy firefighters to read it and understand it.
1	further training and acceptance, and perhaps some spot-auditing of agencies to be sure they truly are using it.
1	Universal ICS has been developed for large scale incidents which occur infrequently. There is a need for universal ICS on a smaller scale for the type of incidents that occur more often.