A MESSAGE FROM THE DEPARTMENT OF HOMELAND SECURITY (DHS) OFFICE OF EMERGENCY COMMUNICATIONS (OEC) DIRECTOR RON HEWITT

In November 2014, DHS Secretary Jeh Johnson signed the 2014 National Emergency Communications Plan (NECP), a comprehensive framework to help public safety plan for the deployment and use of wireless broadband, while also enhancing existing land mobile radio (LMR) systems necessary for mission critical voice. Over the past 18 months, OEC worked with more than 350 public- and private-sector representatives, including members of SAFECOM and NCSWIC, to update the 2008 NECP on issues related to governance, planning, standard operating procedures, training and exercises, research and development goals, and objectives and recommendations. The 2014 NECP recognizes the interconnectedness of responder communications and takes an expanded view of the stakeholder community across incident response—from traditional public safety (e.g., law enforcement, fire, emergency medical services) to the whole emergency communications community (e.g., 9-1-1/Public Safety Answering Points [PSAP], emergency management, industry). OEC will implement the 2014 NECP in coordination with public safety stakeholders. The joint meeting of SAFECOM and NCSWIC provided a unique opportunity for stakeholders across the country to develop innovative strategies and long-term solutions to overcome emergency communications challenges. Your attendance shaped critical discussions related to the 2014 NECP, the SAFECOM Grant Guidance, and the interactions between each segment of the Emergency Communications Ecosystem.

IN MEMORIAM

SAFECOM and NCSWIC members paused to remember two colleagues from the public safety community who passed away in 2014.

BILL MCCAMMON

Bill McCammon, SAFECOM representative for the Metropolitan Fire Chiefs' Association, passed away on October 13, 2014. He served as the Executive Director of the East Bay Regional Communications System Authority, which built and operates an interoperable communications system for 43 public agencies within Alameda and Contra Costa counties. Bill was also the current president of the Alameda County Fair Board of Directors and Treasurer of the National Fire Protection Association's Board of Directors. During his tenure as Alameda County's first Fire Chief, the department doubled in size. Some of his more recent and noteworthy contributions to the community included implementing the Hazardous Materials Response Team, the Paramedic Program, the Rescue Company, and a water rescue program. Bill also led the effort to form the Alameda County Regional Emergency Communications Center.

GREGG RIDDLE

Gregg Riddle, former SAFECOM member representing the Association of Public-Safety Communications Officials (APCO), passed away on June 27, 2014. He had a highly accomplished public safety career spanning four decades, beginning with a position as a paid, on-call firefighter in his hometown of Harvey, Illinois. In 1971, he joined the Elk Grove Fire Department, retiring after 30 years as the Deputy Fire Chief responsible for Administrative Operations in 2000. While with the Elk Grove Fire Department, Gregg was instrumental in building Fire Station 8 and renovating the Department's Administration Center. His final assignment was with the West Suburban Consolidated Dispatch Center from 2000 to 2008 as its first Executive Director. Gregg joined APCO International in 1981 and earned distinctions of Senior and Life Member. He was elected to the APCO Executive Committee in 2008 and served his presidential year from 2011 to 2012.

NECP IMPLEMENTATION AND THE EMERGENCY COMMUNICATIONS ECOSYSTEM

Chris Essid, OEC Deputy Director, thanked NCSWIC and SAFEOM members for their continued partnership, which will be critical to the implementation of the newly revised 2014 NECP. The 2008 NECP was designed to address stakeholder-identified gaps caused by disparate LMR systems and a lack of coordination during emergency response efforts resulting from ineffective governance, standard operating procedures, and training and exercises. This new version builds on those lessons while keeping pace with the evolving emergency communications landscape.

The 2014 NECP was developed through extensive coordination among industry stakeholders and public safety representatives at all levels of government, including SAFECOM and NCSWIC, during more than 30 working sessions over a nine-month period. OEC also received feedback from emergency management agencies, and public safety officials not included in the 2008 NECP. Updates to the plan take into account the number and variety of new and existing technologies currently available as well as new partners incorporated into formal response operations. This evolving landscape is conceptually depicted in *Figure 1*, the Emergency Communications Ecosystem. While not losing focus on the need to continue supporting LMR and mission-critical voice capabilities, the Emergency Communications Ecosystem graphic consists of many inter-related components and functions, and acts as a framework through which to understand the ever-changing emergency communications landscape.

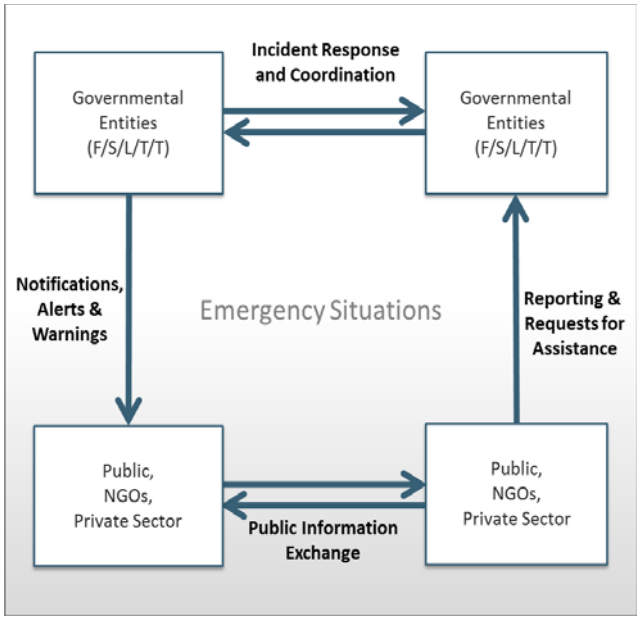

Figure 1. Emergency Communications Ecosystem

The NECP's strategic goals will measure progress, enabling OEC and other Federal government entities to target available resources for continued success. OEC will measure operational performance and emergency communications capabilities, as well as track the completion of recommendations and implementation activities, using a three-pronged approach similar to that established for the 2008 NECP. This includes measuring operational performance, measuring emergency communications capabilities, and tracking completion of recommendations and implementation activities.

The new goals identify specific actions stakeholders can take over the next three to five years to support emergency communications at any level, especially in support of existing LMR systems and the increasing use of broadband applications and services, such as streaming video or location-based services, wireless emergency alerts and Next Generation 9-1-1 (NG 9-1-1), and social media to exchange critical information during emergencies. Coordination on the SCIPs remains a key area of cooperation between OEC and stakeholders as well as collaboration across governance bodies, including First Responder Network Authority (FirstNet) Single Points of Contact, IT support, cybersecurity, and other members of the expanded emergency communications community; participation in ongoing TA workshops, such as our broadband planning workshops; and coordination on feedback included into the annual SAFECOM Grant Guidance.

OEC supports stakeholder implementation efforts through various tools, efforts, and published guidance documents, including communication unit member training. SAFECOM and NCSWIC were instrumental in designing the communication unit training program and will be critical to its future as it examines how to reflect new technologies within the ecosystem. OEC will be turning to both stakeholder groups to seek guidance on how to keep training relevant and efficient.

In response, several members offered suggestions regarding the implementation of the 2014 NECP:

- Align Statewide Interoperability Executive Committee agendas to SCIP goals and initiatives to increase familiarity with the SCIP
- Align SCIP goals to the NECP goals rather than the SAFECOM Continuum
- Increase support for the SWIC in each State to ensure effective NECP-focused TA requests
- Actively engage decision makers, especially Governors via the National Governors Association, to teach them about the 2014 NECP and provide formal support for the SWICs
- Update regional communications plans, turning them into operational and strategic documents, with explicit instructions for different scenarios
- Remind public-safety personnel of available communications assets and be more vocal about successes
- Engage the next generation of public-safety and emergency-communications personnel and determine ways to highlight the advantages of choosing a career path in emergency communications

Ron Hewitt closed the morning discussion by mentioning that OEC will provide written recognition to every State and organization that contributed to the development of the 2014 NECP. The updated NECP, the 2014 NECP Brochure, and the 2014 NECP Slick Sheet can all be found on the DHS website.

During the Joint meeting's final session, OEC and support staff facilitated a discussion surrounding each of the Emergency Communications Ecosystem segments. Major discussion items from the session included:

1. Government to Government – When governments communicate, it is important that government agencies secure their systems and vet personnel, as required, for various types of information (i.e., Law Enforcement Sensitive information, Health Insurance Portability and Accountability Act information). Also, more work needs to be done to standardize practices governing information sharing, promote efficiencies, and build sustainable relationships within and among all levels of government [agencies].
2. Government to Citizen – Information disseminated from the government to the public must be clear, concise, and able to be understood by large audiences. Working with NGOs may benefit governmental agencies as they determine the best ways to disseminate messaging; however, a distinct line should be drawn between supporting to the NGO's mission versus driving their agendas.
3. Citizen to Government – It is important to have multiple avenues for communication to ensure redundancy and resiliency. Before the government can collect information from citizens, however, it must educate the public on how to properly use social media, digital communications, and public information hotlines related to sharing critical information during emergencies and disasters. There is also a need to study alerts from the private industry and how third parties affect information sharing. NCSWIC and SAFECOM should employ research findings from the field and work with the next generation of emergency communications officials to stay current and knowledgeable.
4. Citizen to Citizen – Facilitators asked stakeholders to consider how information sharing is governed among the private industry, non-governmental entities, and the public, and how the proliferation of social media and public information dissemination impact their coordination during an event. Participants questioned their involvement in these types of interactions and noted the role of existing personnel responsible for coordinating with the private industry, such as public information officers within their formal Incident Command Structures; others suggested more consistent, day-to-day coordination with non-governmental entities is always needed.

"OKLAHOMA! WHERE THE WIND COMES SWEEING DOWN THE PLAIN"

Nikki Cassingham, Oklahoma SWIC, welcomed a panel of local public safety officials who spoke of their individual experiences responding to the 2013 Moore, Oklahoma, tornado. As she pointed out, the 2013 Moore Tornado was a huge success in terms of communications because of the role of Statewide Interoperability Governing Body (SIGB) and communication unit leaders (COML).

First to present was Mr. Gayland Kitch, City of Moore, Oklahoma, Emergency Management Director and Oklahoma State-certified COML, who provided context, background, and detailed information on the location of and destruction caused by the tornado. The 2013 Moore tornado was an EF5 tornado that carved a 17-mile trail of destruction through Moore, Oklahoma, and adjacent areas on the afternoon of May 20, 2013. Gayland noted the storm's directional path (*see Figure 2*), originally touching down west of Newcastle, skirting southwestern sections of Oklahoma City, and moving northeast through Moore before dissipating east of town. Major losses included Briarwood and Plaza Towers Elementary Schools (where seven school children perished), the school district administration building, Moore's Post Office, 1000 homes, 60 businesses, two parks, and the Moore Medical Center. Response efforts established an Incident Command in truck bays at Fire Station #1, Unified Command with fire and law enforcement, State incident management teams (e.g., communications units), and a diverse collection of statewide assets. A primary sweep of search and rescue began immediately following the storm, which required many assets from the Oklahoma Regional Response System—different levels of specialized units across the State capable of responding to all types of disasters that support interoperable communications devices for more effective response.

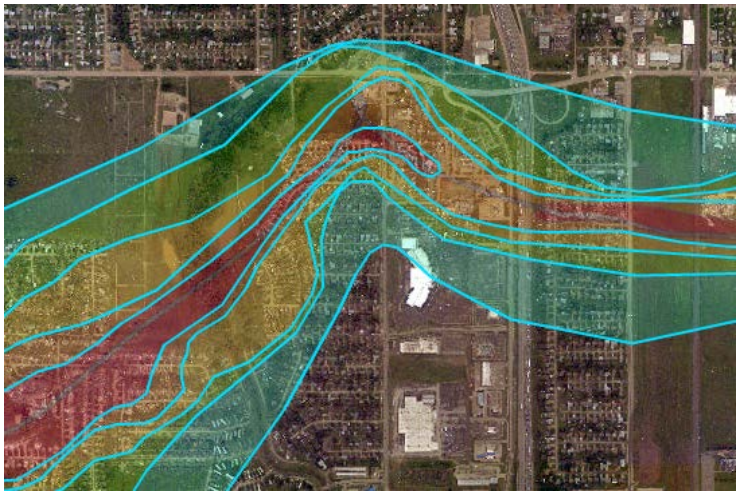

Figure 2. Path of the tornado heading northeast-east in Moore, Oklahoma

Mr. William Scott, from the Oklahoma Military Department and also an Oklahoma State-certified COML, presented lessons learned from his experiences with Oklahoma communication units (COMUs) in response to the tornado. Resource management was a major concern for Moore in terms of coordinating communications, as an influx of self-deployed responders arrived from different jurisdictions within the State. In the region, interoperable communications radios covered approximately 90% of the area; however, there remained several disparate radio systems. For instance, although a majority of response organizations in Oklahoma utilize VHF radios, some have instead opted to buy UHF systems. Also, despite significant power issues related to faulty generators and circuit failures, the team was able to establish a command channel and develop an operation plan, which was put into place the morning following the storm. Inefficiencies tended to result from a lack of training and inability to remain flexible during a large-scale, coordinated response (i.e., resistance to the initial plan). Bill noted several successes during response and recovery operations, such as their open cache radios, capabilities available as a result of their Command Mobile 1 (*Figure 3*), their WebEOC COML Board, recent experience conducting exercises, and the diverse availability of volunteers, needed radios, and other equipment. Issues related to coordination, technology, staffing, logistics, and demobilization included:

Figure 3. Command Mobile 1

- Lack of a liaison at command level with surrounding jurisdictions for communication planning purposes
- Lack of tactical patches
- Other types of infrastructure damage, equipment failure, and overloaded systems (e.g., cell phone infrastructure)
- Shortage of sustainable deployable certified COMLs

Mr. David Grizzle, Norman, Oklahoma, Emergency Manager and Citizen Emergency Response Team (CERT) volunteer, provided information on utilizing system volunteers, including CERT, during the response. Volunteers, he mentioned, are value-added assets to any program, such as the 400 amateur radio operators available to the region. Norman has an established Citizen Corps CERT program and volunteer response team. One of the biggest communications issues was managing donations and the massive influx of resources to the area, which volunteers were responsible for coordinating within a local warehouse. Additionally, it was a challenge to manage talkgroups for those traveling outside the boundaries of the local system; as volunteers and workers moved beyond city borders, there were limitations to communications. In general, David reiterated the need for volunteers to be incorporated in overall communications planning and formal training, and for career responders to train alongside volunteers. The core group of volunteers for this area was well-educated, trained, well-versed in communications systems and operations, and supported through Homeland Security Grant Program funding, which led to general success. As a final reminder, Gayland encouraged States and local areas to assist their volunteer teams with establishing standards similar to those of formal public-safety practitioners and include them in strategic and tactical planning functions.

CITIZEN TO GOVERNMENT

NG 9-1-1

Laurie Flaherty, National 9-1-1 Program Coordinator, provided an in-depth examination of the citizen to government segment of the Emergency Communications Ecosystem. Four crucial communications aspects of this segment of the ecosystem Laurie noted are shown in *Figure 4*.

Figure 4. Citizen to Government Segment of the Emergency Communications Ecosystem

As the figure demonstrates, a citizen calls a 9-1-1 PSAP in response to an emergency situation at which point the PSAP dispatches emergency responders to the incident's location. Each component of the emergency communication system must work together seamlessly to ensure a fast and efficient response. As such, the utilities commissions, PSAPs, and first responders must know each other, be able to talk to each other, coordinate efficiently, and leverage resources in order to operate in a unified manner.

One early effort to achieve a coordinated approach to enhancing the current systems was the Department of Transportation's (DOT's) NG 9-1-1 Initiative in 2004 in which actively solicited collaboration with emergency communications stakeholders.

DOT's National 9-1-1 Program is charged with three Congressionally mandated duties:

1. Facilitate coordination among public- and private-stakeholders at Federal, State, and local levels
2. Serve as an information clearinghouse
3. Administer grant programs on behalf of PSAPs

These translate into two essential functions:

- Provide a Federal focus for 9-1-1
- Promote and support 9-1-1 services at every opportunity

NG 9-1-1 systems are currently being deployed at the State and local levels nationwide. The DOT and National Association of State 9-1-1 Administrators (NASNA) are also gathering data to build a database highlighting the status of NG 9-1-1 deployment across the country. To date, 40 States have responded. Information was also shared on where to find 911 agencies at the State level. There is a great deal of variability with regard to the location of 911 agencies at the State level. Laurie noted that Iowa, Michigan, Minnesota, and Utah currently have combined governance bodies (911 governance and LMR governance), aiding in seamless coordination required to implement NG 9-1-1 and Public Safety Broadband systems.

Roberto Mussenden, Attorney Advisor at the Federal Communications Commission (FCC), also provided a brief introduction to how the FCC Public Safety and Homeland Security Bureau is working to improve accountability as 9-1-1 systems migrate to an all-Internet Protocol-based environment. Over time, 9-1-1 has become more complex as systems become increasingly interconnected and vulnerable. Today, a single outage can affect millions of people. In 2014, there were four 9-1-1 outages unrelated to weather, ranging from 625,000 people affected for one hour to over 40 million people affected for two hours. The FCC is working to protect 9-1-1 services by encouraging transparency and accountability during outages.

On August 8, 2014, the FCC adopted text-to-9-1-1 rules which require that all wireless carriers and providers of interconnected text messaging services must be capable of supporting text-to-9-1-1 by December 31, 2014, and that covered text providers must commence delivery of 9-1-1 text messages to requesting PSAPs by June 30, 2015, or within six months of the date of a PSAP's request (whichever is later). As of September 23, 2014, 138 PSAPs across 18 States support text-to-9-1-1, with at least 48 others planning to go live by early 2015. For information on PSAP best practices for adopting text-to-9-1-1, visit the FCC website. The FCC is also updating rules for Enhanced 9-1-1 (E9-1-1) location accuracy. Updated E9-1-1 rules are expected by early 2015. Finally, the FCC is currently preparing a proposal to end the non-service initialized phone rule that requires carriers to forward wireless 9-1-1 calls from NSI phones that do not have a service contract.

Members interested in connecting with their State 9-1-1 Administrator should contact Bruce Cheney, NASNA representative to SAFECOM, or Evelyn Bailey, Director, NASNA. For more information on the National 9-1-1 Program, contact Laurie Flaherty; and for more information on the FCC, contact Timothy May.

GOVERNMENT TO GOVERNMENT

INTEGRATED PUBLIC ALERT AND WARNING SYSTEMS (IPAWS)

Antwane Johnson, Director of the IPAWS Program Management Office (PMO), noted that Federal Emergency Management Agency's (FEMA) emergency alert program published standards for emergency alerts in the private sector in 2009. FEMA developed the standards in coordination with the Organization for the Advancement of Structured Information Systems (OASIS), emergency management and public safety practitioners, broadcast and wireless industries, the Department of Homeland Security Science and Technology (DHS S&T), the Federal Communications Commission, (FCC) and the National Oceanic and Atmospheric Administration (NOAA), and performed a nationwide test of the Emergency Alert System (EAS) on November 9, 2011.

Figure 5. IPAWS Lab

IPAWS introduced an interface to cellular carriers for mobile device alerting, more integration with NOAA alerting networks and modernized the EAS system by providing a digital connection for improved message delivery to radio and TV stations for broadcast warnings. IPAWS also adds flexibility to accommodate future communications technologies by utilizing open information standards for easy integration with private sector technology and alert message

distribution capabilities. The system is a national capability used by local and State authorities to send emergency warnings and alerts about threats to public safety to local populations. IPAWS is used for extreme weather alerts, warnings about chemical spills, fires, road closures and evacuations and AMBER Alerts. IPAWS is used by any level of government or non-governmental public safety organizations (NGO) that have been appropriately coordinated with their respective State or territorial government. New cellular phones are automatically configured to receive alerts from IPAWS; however, citizens may turn off all alert notifications, except Presidential national alert messages. Jurisdictions with IPAWS capability can:

- Activate EAS for radio and TV stations
- Alert all enabled cell phones in a defined geographic area, even when cell networks are congested
- Broadcast non-weather related warnings over NOAA Weather Radio
- Post alert information to the IPAWS All-Hazards Information Feed for distribution and by secondary distributors such as internet service providers and application developers

IPAWS alerts are disseminated to a variety of systems and devices − more than 20,000 TV, radio, cable, and satellite stations; cellular devices supported by 60 wireless service providers; NOAA Weather Radios; and internet , websites, and social media and applications that monitor the IPAWS All-Hazards Information Feed. Currently, agencies in 47 States and 368 local jurisdictions have registered to use IPAWS. The majority of the communications infrastructure used by IPAWS to deliver alerts to citizens is privately owned and demonstrates the tremendous public/private partnerships to make alerts/warnings impacting public safety issues readily available across the nation. FEMA is not an alerting authority and does not issue alerts but provides the IPAWS as a service to State, local, and other Federal alerting authorities.

The Wireless Emergency Alerts (WEA) component of IPAWS is the newest technology for public warning. WEA enables 90-character alert messages to be broadcast from geographically-specified cell towers to any WEA capable device using the cell tower. There are no fees associated with sending or receiving a WEA message. WEA message types are defined by three categories (1) Imminent Threat which includes: severe weather and State or local emergency warnings; (2) AMBER Alerts for missing children; or (3) Presidential, for national emergency incidents.

CITIZEN TO CITIZEN

PRIORITY TELECOMMUNICATIONS SERVICES

Heather Kowalski, OEC, provided an update on priority telecommunications services, including Government Emergency Telecommunications Service (GETS), Wireless Priority Service (WPS), and Telecommunications Service Priority (TSP). She began by posing a question to the audience: how do emergency communications specialists transfer data from the public and other sources in a secure way in consideration of new and emerging technologies that continue to complicate long-term response and recovery? Following background information on PTS (see final slides for more information), Heather suggested a broader definition of the concept of "citizen", especially as it is mentioned in the emergency communications ecosystem, to involve a variety of large and small private and non-governmental organizations as well as individuals representing both the private and public industry. For instance, public works coordinates closely with private organizations responsible for removing tree debris for communities following a massive storm. She encouraged stakeholders to think outside the box when considering the impacts of citizen to citizen communications. Organizing response with private entities that provide citizens with necessary services before, during, and after emergencies or disasters greatly increases the effectiveness and success of the response. Heather proposed the following in closing:

- Create, test, and exercise plans, and make sure that they include private industry leaders, NGOs, and the public
- When testing and exercising, create unconventional scenarios to test limits and design unpredictable situations (e.g., three-quarters of your batteries have expired)
- Understand the difference between voice-over communications and data-over communications

GOVERNMENT TO CITIZEN

FCC Interoperability Rule Update

Roberto Mussenden, FCC, provided stakeholders with an update on the FCC Interoperability Rule. Roberto noted the challenge with putting non-Federal entities on Federal interoperability channels. Under current rules the requestor needs a federal sponsor and must submit an individual application to gain access to the required channel. This often means that during times of need, such as disasters, the National Telecommunications and Information Administration (NTIA) faces an inordinate number of applications. However, the FCC and NTIA have made recent progress towards streamlining this process. Instead of individual requests, there would exist a memorandum of understanding between the FCC and NTIA, appended to the Federal record, authorizing public safety organizations within their State to program NTIA-governed Federal interoperability channels for use by State or local radios in the event of a disaster or large-scale emergency. Roberto suggested the SWICs act as the non-Federal representative coordinating this effort and asked if there was any resistance from participants. Additionally, the FCC and NTIA are trying to determine whether or not it makes sense to have one agency serve as the single point of Federal organization for the effort.

SAFECOM Grant Guidance

The *SAFECOM Grant Guidance* provides guidance to grantees on emergency communications activities that can be funded through Federal grants; best practices, policies, and technical standards that help to improve interoperability; and resources to help grantees comply with technical standards and grant requirements. Each year, OEC works with all levels of government to ensure the Guidance incorporates important stakeholder feedback. OEC publishes the *SAFECOM Grant Guidance* in anticipation of DHS Funding Opportunity Announcements, which allows grantees to adopt and reference it when applying for Federal funds. The Guidance has become increasingly significant as it is now recognized by the Administration as the primary guidance on emergency communications grants and is included in the DHS grants Standard Terms and Conditions. In other words, all grantees seeking DHS funds for emergency communications must adopt the *SAFECOM Grant Guidance*.

Fiscal year (FY) 2015 investment priorities are similar to last year's as they continue to reflect stakeholder input; however, in consideration of the 2014 NECP, OEC continues to further align the guidance with NECP objectives and concepts. With that in mind, the first four priorities remain consistent while the last has been expanded to reflect the emergency communications ecosystem (i.e., inclusion of "technology" to the language). This marks the biggest change for stakeholders by ensuring the entire guidance is inclusive of new and emerging emergency communications systems and capabilities, including LMR, public safety broadband, Next Generation 9-1-1, and public alerts and warnings. By incorporating these systems as investment priorities, OEC can better assist stakeholders with sustaining mission critical communications while also planning for new technological investments. More specifically, updates to this year's guidance focuses on four main areas:

1. NECP updates
2. Inclusion of the ecosystem
3. Incorporation of standards and guidance for all emergency communications systems
4. Cybersecurity developments

Changes to section 5, *Emergency Communication Systems and Capabilities*, include broader guidance on technology and standards (i.e., sustaining LMR when investing in new technologies) with detailed technical standards located in the appendices (e.g., Project 25 standards, recent guidance on broadband from FirstNet). OEC collected initial feedback from participants regarding the level of *SAFECOM Grant Guidance* compliance applicants need prior to receiving grant funding. Stakeholders will continue these conversations beyond the meeting. OEC will continue to collect feedback from stakeholders at the beginning of 2015.

USING THE ECOSYSTEM AND THE NECP TO IMPROVE EMERGENCY COMMUNICATIONS ACROSS STATE, LOCAL, TRIBAL, AND TERRITORIAL GOVERNMENTS

OEC is in the process of developing the *Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials* (Governance Guide). In consideration of the NECP revision, the 2008 and 2010 Governance Guides needed to be reworked into a national governance document, providing guidance, recommendations, and best

practices in a single resource. The updated Governance Guide will incorporate valuable information regarding NECP Goal 1 (Governance and Leadership) and NECP Goal 2 (Planning and Procedures). The new Governance Guide will reflect the evolving Emergency Communications Ecosystem by articulating the roles and responsibilities of emergency communications officials to establish, implement, assess, and update their governance structures and plans. The Governance Guide will also stress need for strong and unified governing bodies. During their respective meetings, SAFECOM and NCSWIC members discussed establishing and maintaining strong governance structures, increasing coordination across evolving emergency communications disciplines, and potential challenges and solutions to establishing a governance structure that is inclusive of all emergency communications disciplines. Data gathered during those meetings will be utilized to begin developing a draft of the new Governance Guide. OEC plans to hold various teleconferences and webinars with the Governance Guide working group in early 2015 to further develop the Guide. If there is any further interest in joining the working group, please email OEC.
Kenzie Capece, OEC, and Miriam Montgomery, OEC, will lead the research, design, and development of the 2015 Governance Guide, based on the NECP, and feedback obtained from the stakeholder community operating within the Emergency Communications Ecosystem.

During a session held on December 4, Kenzie and Miriam engaged stakeholders in a conversation to gain feedback on how NECP implementation affects the structure and function of governance bodies at the State, local, tribal, and territorial level. Facilitators asked stakeholders a series of questions about existing governance structures, roles and responsibilities, and "lessons learned," focusing on the State- and local-level perspective and experience. This discussion is intended to directly provide input to the Governance Guide structure and content.

Participants shared how they coordinate across disciplines and within existing emergency communications governance structures (e.g., 9-1-1), and provided comments and suggestions based on what has and has not worked for their communities:

- Governance structures are most successful when they coordinate across levels of government and disciplines, including volunteers and the private industry
- Participation is often optional and based on volunteering, is more consistent if members perceive organizational success, and tends to increase when local is represented as majority (more buy-in), rather than State-level government passing down regulations
- Organically building the network and soliciting participation appears to be most successful in select States
- Initiatives tend to succeed and gain legislative support more readily when introduced by non-State employees
- It is important to inform and involve newly-elected local and State officials, such as mayors and governors, when developing governance structures, and include a representative from the State Chief Information Officer's (CIO) team
- Different States have different levels of home rule, which often dictate how governance structures function, and needs to be considered while developing any structure or practices

Other questions asked: 1) How do stakeholders recommend refining existing governance structures at the local level to enhance coordination across emergency communications disciplines (i.e., broadband, Next Generation [NG] 911) beyond the traditional Land Mobile Radio (LMR)? 2) Which topics require the most coordination across disciplines and jurisdictions? 3) How do you increase the authority of local governance structures?

Both NCSWIC and SAFECOM members suggested that those trying to build governance structures at the local level gain community support from those in control of funds and the political agenda, those in charge of training and exercises, and those with experience coordinating at both the operational and policy levels. Additionally, although a majority agreed that governance structures should include all relevant parties, some cautioned against involving agencies, especially at the Federal or tribal levels, without clear and proper incentive or purpose.

APPENDIX A: ATTENDEE ROSTER

NCSWIC

Name	State
Curtis Nail (Alternate)	Alabama
Matt Leveque*	Alaska
Jeremy Knoll	Arizona
Penny Rubow*	Arkansas
Jack Cobb	Colorado
Michael Varney*	Connecticut
Mark Grubb*	Delaware
Jeff Wobbleton	District of Columbia
Greg Holcomb (Alternate)	Florida
Nick Brown*	Georgia
Brad Hokanson	Guam
Victoria Garcia*	Hawaii
Robert Hugi	Idaho
Joe Galvin*	Illinois
Steve Skinner	Indiana
Craig Allen*	Iowa
Jason Bryant*	Kansas
Chris Guilbeaux	Louisiana
Lori Stone (Alternate)	Maryland
Steve Staffier	Massachusetts
Brad Stoddard	Michigan
Jackie Mines	Minnesota
Dent Guynes	Mississippi
Steve Devine (Guest)	Missouri
Jesse Griggs (Alternate)	Nebraska
George Molnar	Nevada
Craig Reiner	New Jersey
Jacqueline Miller	New Mexico
Bernadette Garcia (Guest)	New Mexico
Robert Barbato*	New York
Jeffrey Childs	North Carolina
Michael Lynk	North Dakota
Darryl Anderson*	Ohio
Nikki Cassingham*	Oklahoma
Steve Noel*	Oregon
Mark Wrightstone	Pennsylvania
Felix Garcia*	Puerto Rico
Robert Steadman*	South Carolina
Jeff Pierce*	South Dakota

Name	State
Jeff Pierce*	South Dakota
Todd Early*	Texas
Karla Jurrens (Guest)	Texas
Reuben Molloy	United States Virgin Islands
Gordon Coles (Alternate)	Utah
Bill Schrier (Alternate)	Washington
G.E. McCabe	West Virginia
Tim Pierce	Wisconsin
Bob Symons*	Wyoming

***Denotes NCSWIC Executive Committee (EC) Member; all members are Statewide Interoperability Coordinators, unless otherwise noted*

SAFECOM

Name	Organization
Association Members	
William Brownlow	American Association of State Highway and Transportation Officials
Philip Mann	American Public Works Association
Gigi Smith*, Brent Lee*	Association of Public-Safety Communication Officials- International
Lloyd Mitchell	Forestry Conservation Communications Association
Chris Lombard	Interagency Board
Harlin McEwen*	International Association of Chiefs of Police
Gary McCarraher*	International Association of Fire Chiefs
Paul Szoc	International Municipal Signal Association
Mel Maier	Major County Sheriffs' Association
Gregory Frederick*	Metropolitan Fire Chiefs Association
Terry Hall*, Patrick Irwin*	National Association of Counties
Steve Cassano	National Association of Regional Councils
Bruce Cheney	National Association of State 9-1-1 Administrators
Darryl Ackley	National Association of State Chief Information Officers
Kevin McGinnis*, Paul Patrick*	National Association of State EMS Officials
Charlie Sasser	National Association of State Technology Directors
Andrew Afflerbach	National Association of Telecommunications Officers and Advisors
Steve Noel*, Mark Grubb*	National Council of Statewide Interoperability Coordinators
John Sweeney	National Criminal Justice Association
Glenn Cannon	National Emergency Management Agency
John Olson*	National EMS Management Association
Trey Forgety	National Emergency Number Association
Jimmy Gianato*, Tim Blute*	National Governors Association
Douglas Aiken*, Marilyn Ward*	National Public Safety Telecommunications Council
Paul Fitzgerald*	National Sheriff's Association

Name	Organization
Association Members (continued)	
Bonnie Maney	SEARCH, National Consortium for Justice Information and Statistics
Tom Sorley*	U.S. Conference of Mayors
Public Safety At-Large Members	
Don Bowers	Fairfax County Fire and Rescue (Virginia)
Mark Buchholz	Willamette Valley 9-1-1 (Oregon)
Anthony Catalanotto	Fire Department City of New York (New York)
Michael Davis	Ulster County 9-1-1 Emergency Communications (New York)
Bradley Hokanson	Guam Homeland Security/Office of Civil Defense (Guam)
Jay Kopstein	New York State Division of Homeland Security and Emergency Services (New York)
Paul Leary	Department of Research and Economic Development (New Hampshire)
Michael Murphy	Many, Louisiana Police Department (Louisiana)
George Perera	Miami Dade Police Department (Florida)
Gerald Reardon*	City of Cambridge Fire Department (Massachusetts)
Colin Rizzo	Port of Houston Authority (Texas)
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