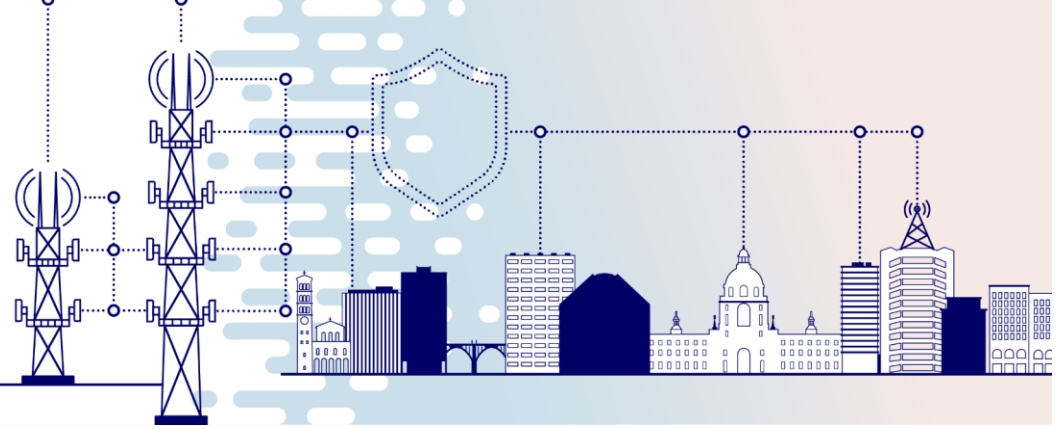


SAFECOM[®] BI-ANNUAL MEETING

Pasadena, CA | May 8-10, 2023



Spring 2023 SAFECOM Bi-Annual Meeting Executive Summary | Wednesday, May 10, 2023

The Westin Pasadena Hotel | Pasadena, California

Welcome, Opening Remarks, and New Member Introductions

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Figure 1: SAFECOM members and invited guests who attended one of two guided tours of the NASA Jet Propulsion Laboratory facility, in La Cañada, California.

SAFECOM Leadership, including Chief Gerald Reardon, SAFECOM Chair and SAFECOM At-Large (City of Cambridge Fire Department, Massachusetts); Assistant Chief Chris Lombard, SAFECOM First Vice Chair and SAFECOM At-Large (Seattle Fire Department, Washington); and Chief Jay Kopstein, SAFECOM Second Vice Chair and SAFECOM At-Large (New York State Division of Homeland Security and Emergency Services), welcomed members to the Spring 2023 SAFECOM Meeting in Pasadena, California.

Chief Reardon welcomed SAFECOM's newest members:

- **Steven Alonzo:** International Association of Fire Chiefs [Alternate]
- **Ross Bourgeois:** At-Large, New Orleans Office of Homeland Security and Emergency Preparedness
- **Robert Buxton:** National Emergency Management Association (NEMA) [Alternate]
- **Nicole Diedrick:** At-Large, Phoenix Police Department – Communications Bureau
- **Tony Downs:** American Association of State Highway and Transportation Officials [Alternate]
- **Chief Jon Goldman:** At-Large, Lakes Region Mutual Fire Aid
- **Red Grasso:** At-Large, FirstTech, North Carolina Department of Information Technology
- **Justin Kates:** At-Large, Massachusetts Emergency Management Agency

CISA | DEFEND TODAY, SECURE TOMORROW

- **Nina Koshinski:** At-Large, Pennsylvania State Police, Statewide Radio Network
- **Eddie Reyes:** DRONERESPONDERS Public Safety Alliance [Primary]
- **Brian Schaeffer:** Metropolitan Fire Chiefs Association (Metro Chiefs) [Alternate]
- **Rick Schute:** International Association of Emergency Managers [Primary]
- **Joel Thacker:** NEMA [Primary]
- **Jason Trautman:** At-Large, Fairfax County Fire & Rescue Department
- **Adam Wasserman:** National Association of State 911 Administrators [Primary]
- **Jim Weaver:** National Association of State Chief Information Officers [Primary]
- **Marty Williams:** American Public Works Association [Alternate]

Cybersecurity and Infrastructure Security Agency (CISA) Executive Assistant Director (EAD) for Emergency Communications, Billy Bob Brown, Jr., emphasized that SAFECOM is a success because of the members who come together and collaborate to address challenges within the public safety community. He presented Mark Buchholz, SAFECOM At-Large (Washington County Consolidated Communications Agency, Oregon), with a CISA Award of Appreciation in recognition of his service and contributions to SAFECOM since 2014.



Congratulations, Mark!



CISA Certificate of Appreciation
Awarded to
Mark Buchholz

“In recognition of your contributions and leadership to the SAFECOM and NCSWIC NG911 Working Group’s mission to identify, document, and develop work products that will facilitate the transition to NG911, utilizing stakeholder feedback from multiple levels of governance and associations.”

SAFECOM At-Large, Executive Director for the Washington County Consolidated Communications Agency (OR); SAFECOM-National Council of Statewide Interoperability Coordinators (NCSWIC) Next Generation 911 (NG911) Working Group Chair

Figure 2: CISA Award of Appreciation presented by Billy Bob Brown, Jr., CISA EAD for Emergency Communications to Mark Buchholz, SAFECOM At-Large.

Get to Know SAFECOM!

SAFECOM Members participated in an interactive “bingo” session to learn more about other attendees. Participants were given a randomized gameboard and moved around the room to find SAFECOM members and other attendees who matched the criteria. The first five players to achieve five matched bingo squares in a row or the whole board (i.e., “blackout” Bingo) won!



Figure 3: SAFECOM members get to know one another through an interactive session of Bingo.

SAFECOM SCHOOL

May 9, 2023

New members learned about SAFECOM's history, goals, objectives, and mission. Discussions also included protecting the SAFECOM brand, member responsibilities, and code of conduct. Members were introduced to CISA's role in SAFECOM and received an overview of CISA resources and key federal staff who support SAFECOM.

Toni Sawyer, CISA, answered questions on invitational travel, outlining CISA's Travel Authorization and the Direct Deposit and Travel Order Request forms. Furthermore, she provided instructions for flight changes and cancellations, use of Privately Owned Vehicles and ride sharing apps, as well as the process for receiving reimbursements. Any outstanding travel questions should be directed to ECInvitational@cisa.dhs.gov.

Keynote Speaker: How Artificial Intelligence Can Support First Responders



Figure 4: Edward Chow, Ph.D., Civil Program Office Manager, NASA JPL.

Edward Chow, Ph.D., Civil Program Office Manager, National Aeronautics and Space Administration (NASA) [Jet Propulsion Laboratory](#) (JPL), opened by recapping recent mentions of artificial intelligence (AI) in the news. Many articles and media reports have covered concerns about the rapid development of capabilities and potential adverse effects on humanity. The U.S. Government has yet to establish any regulations or designate any official duties to address risks and responsibilities surrounding this new technology, but Dr. Chow noted that AI has the attention of legislators and the public safety community. The public safety community's interest relates to the potential AI offers in receiving and analyzing huge amounts of data and learning from what it can consume and analyze to help solve problems. Dr. Chow believes there are already many lessons learned that can help public safety when properly applied.

To that end, in partnership with the Department of Homeland Security Science and Technology Directorate, Dr. Chow is managing a JPL project dubbed AUDREY, or the Assistant for Understanding Data through Reasoning, Extraction, and sYnthesis. AUDREY uses neural and symbolic processing at differing levels of intelligence to develop a body of knowledge intended to assist law enforcement, firefighting, emergency medical services, and the emergency communications community with many cybersecurity, physical security, and public safety challenges, including:

- Personnel safety
- Voice recognition, even among multiple speakers
- Speech learning
- Real-time person or object recognition
- Smoke and fire detection
- Targets and target features identification and tracking
- Flashover conditions developing in burning structures
- Fleet accident reduction
- Search and rescue operations
- Interactive map and navigation support
- Optimization of the use of 5G connectivity to transfer data and discover available networks
- Improved cybersecurity, including intrusion detection and finding anomalies in network traffic (e.g., evidence of brute force and zero-day attacks)

In a discussion with SAFECOM members following his remarks, Dr. Chow indicated that he believes AI applications have reduced his daily work burdens by two hours, although this has not yet been quantified through studies. He also indicated that research is underway to determine if an analysis of smoke conditions on arrival could help firefighters understand what is burning. That understanding could enable responders to adapt firefighting techniques and priorities in real-time, which could further enable them to extinguish fires faster, save lives, and improve firefighter health and safety.

NASA JET PROPULSION LABORATORY TOURS | LA CAÑADA, CALIFORNIA

May 9, 2023

NASA JPL holds a unique place in the universe—it is a leader in robotic space exploration, sending rovers to Mars, probes into the farthest reaches of the solar system, and satellites to advance understanding of our home. SAFECOM members had the opportunity to attend a guided tour of JPL in La Cañada, CA. The tours included an overview of JPL's activities and accomplishments. Guests also visited the von Karman Visitor Center, the Space Flight Operations Facility, and the Spacecraft Assembly Facility.



Figure 5: Images from the NASA JPL Tour: NASA JPL Logo (top), Spacecraft Assembly Facility (left), and Mars Perseverance Rover full-scale model (right).

Public Safety Communications Research Update



NIST NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
U.S. DEPARTMENT OF COMMERCE

Figure 6: Brianna Huettel, PSCR Strategy and Operations Lead.

Brianna Huettel, Strategy and Operations Lead, National Institute of Standards and Technology (NIST) Public Safety Communications Research Division (PSCR), provided an update on PSCR's recent initiatives. PSCR's mission is to serve as an objective technical advisor and laboratory and is driven towards advancing public safety communications technologies by accelerating their development, adoption, and implementation so that the public safety community can more effectively carry out their mission to protect lives and property. NIST PSCR was established in 2002 with an initial focus on Land Mobile Radio (LMR) before later expanding to broadband technology. With the passing of the Middle Class Tax Relief and Job Creation Act, the group received \$300 million in funding that expired at the end of fiscal year 2022, but has received additional funding from NIST to continue their research.

NIST PSCR has facilities in Boulder, Colorado, that include a public safety innovation lab, a public safety immersive test center, and a virtual lab tour. These facilities, equipped with a 4G Core LTE network, P25 Phase 1 and 2 LMR System, RF Chambers, Interoperability Lab, mobile research vehicle, mobile staircase for z-axis motion, and motion capture system, allow PSCR to test and measure current and emerging public safety technologies and simulate virtual response scenarios where technology will be deployed. Previous research areas for NIST PSCR include LMR-to-LTE, public safety analytics, resilient systems, and others. Currently NIST PSCR is focusing on location-based services, mission critical voice, security, uncrewed aircraft systems, and user interface/user experience.

Ms. Huettel encouraged participants to attend the upcoming [5x5: Public Safety Innovation Summit](#) in June 2023, as well as the road-mapping session on the third day of the summit. She also encouraged SAFECOM to sign up for the [PSCR newsletter](#), and to check out resources at [pscr.gov](#).

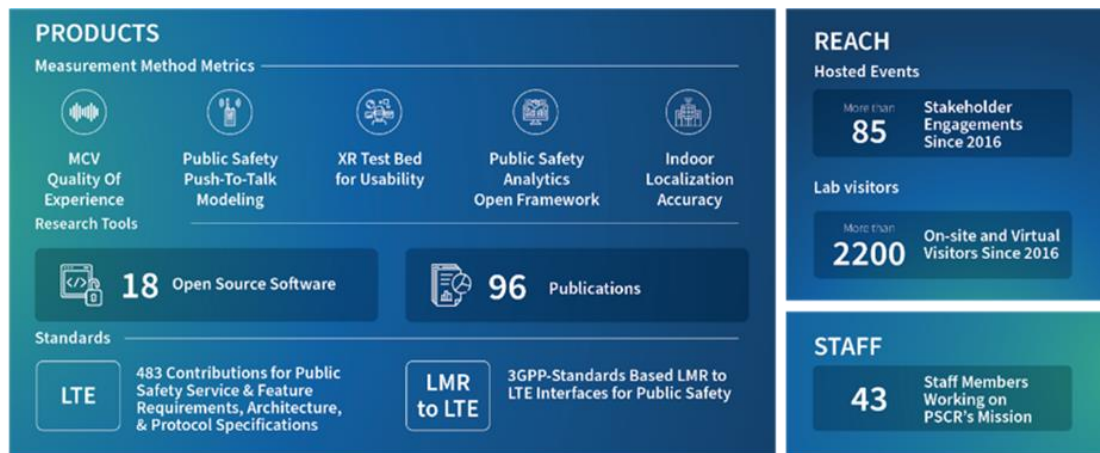


Figure 7: PSCR's accomplishments and impacts for the public safety community.

SAFECOM Member Spotlight: National Criminal Justice Association



Mr. John Sweeney provided a SAFECOM Member Spotlight presentation on the [National Criminal Justice Association \(NCJA\)](#). The NCJA collaborates with federal, state, local, and tribal justice agencies to improve communication efforts and increase the effectiveness of criminal justice agencies and programs throughout the nation. The association hosts multiple events throughout the year to encourage

discussions about the justice system and to support the development of criminal justice policy. Mr. Sweeney shared that the NCJA wants to support elected officials at a local level since each jurisdiction faces different challenges. He emphasized the value that the NCJA places on interpersonal relationships. The NCJA combines professionals on the political spectrum with local officials to foster cohesive discussions that can lead to informed decisions. In 2023, the NCJA is partnering with SEARCH, The Justice Research and Statistics Association, to host a [symposium on justice information technology, policy, research, and practice](#). Workshops will focus on justice and policing reform, gun violence and prevention, crisis response and alternatives to incarceration, and measuring crime and justice operations. The event will be held in Long Beach, California, July 24-26, 2023.

Interactive Polling Session: Shaping the Future of SAFECOM

Assistant Chief Chris Lombard, SAFECOM First Vice Chair, led the group in an interactive polling session. He mentioned a similar session at the Joint SAFECOM-National Council of Statewide Interoperability Coordinators (NCSWIC) meeting in Jacksonville, Florida, in December 2022 that was beneficial. SAFECOM Leadership hopes to keep these sessions a regular part of the meetings moving forward. Poll questions asked for membership input on SAFECOM successes, current public safety challenges, and recommendations on how SAFECOM can better share resources. Members identified collaboration, dedication, and participation as factors that make SAFECOM successful. Challenges facing the public safety community include funding, succession planning, and the growth of technology. Participants recommended utilizing webinars, association outreach, social media, and video clips to increase awareness of SAFECOM resources.



Figure 8: Assistant Chief Lombard facilitating the interactive polling session to shape the future of SAFECOM.

From Blizzards to Wildfires: How San Bernadino County Responds to Emergency Events Spanning Rural and Urban Settings



Figure 9: Chief Dan Munsey, Fire Chief and Fire Warden with the San Bernadino County Fire Protection District.

Chief Dan Munsey, Fire Chief and Fire Warden with the San Bernadino County Fire Protection District, provided an overview of San Bernadino County Fire Department's (SBFD) innovative plans for the future of emergency response. Innovation, leadership, and planning were some of the major themes emphasized. Chief Munsey expressed his advocacy for call prioritization and how well it has been working for San Bernadino County, with the notion that it should be the standard for all public safety answering points. Call prioritization through the commercially available Medical Priority Dispatch System has allowed SBFD to reduce the number of unnecessary Advanced Life Support (ALS) responses and increase ALS resources availability for the most time-sensitive and serious medical emergencies. In addition, Chief Munsey covered the Primary, Alternate, Contingency Emergency (PACE) plans and stressed the importance of jurisdictions establishing this methodology for effective and reliant emergency communications operations.

Chief Munsey also presented his vision of an innovation-focused future for the SBFD, outlining their "4 Pillars of Success:"

- **Culture:** Change the culture. First responders need to get out of a stagnant mode to allow for emergency response to continue to grow effectively. Fundamentals of leadership are inclusive of innovation and change
- **Training:** Train the workforce on future considerations, not just the here and now. Jurisdictions should be thinking along the lines of 5-10 years from now. Where are we going to be in the future?
- **Infrastructure:** Prioritize data and information needs, Internet of Things (IoT) and Cloud Sourcing. Do not solely rely on the systems in place today. Example: California Metro Chiefs are working with Microsoft on a cloud-based system where all information can be stored. Second phase is to add IoT AI components
- **Re-Imagine Budgets:** Get rid of legacy systems!

Review and Validate Research Findings for the NECP Update

The [National Emergency Communications Plan \(NECP\)](#) is one of CISA's premier guidance documents that serves as the nation's strategic plan to strengthen and enhance emergency communications capabilities. Title XVIII of the Homeland Security Act of 2002 directs CISA to periodically update the NECP to reflect changes to and influences on the emergency communications landscape. Last updated in 2019, CISA is currently conducting research and analysis through a review of new legislation and policies, open-source information (e.g., after action reports from real world events such as the pandemic), input from groups such as SAFECOM, and NECP implementation progress. Prior to the in-person meeting, CISA met with many of SAFECOM's subgroups (i.e., committees, working groups, and task forces) to collect input to identify topics for further research and inclusion in the updated NECP. During the meeting's interactive session, members

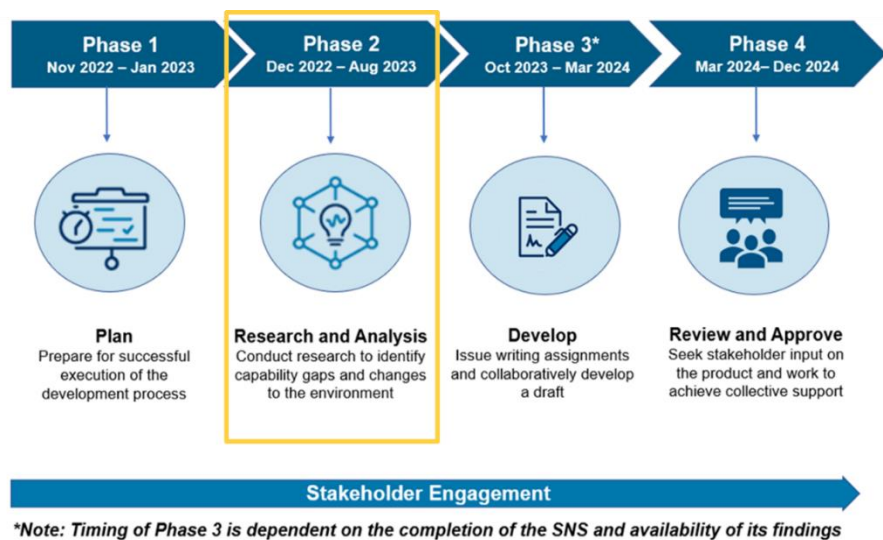


Figure 10: Proposed timeline for updating the NECP.

were introduced to these findings by circulating the room and reading them on large poster-board taped around the walls of the meeting space. As participants read the various statements, they stuck color-coded dots next to the finding to illustrate their stance toward it—green indicated agreement, yellow indicated mixed feelings or partial agreement, and red indicated disagreement with the statement. Afterwards, members met in small groups to further discuss each of the themes and how to adjust the language of problematic statements or to delete them fully.

Following small group discussion, members reconvened for an open discussion on the findings and provided feedback to CISA. Members considered the inclusion of human factors in the NECP, acknowledging the importance of topics such as mental health, but questioned whether the NECP was the appropriate platform. Members indicated these best practices are already documented and housed in more appropriate forums and guidance documents. They also suggested that the NECP is utilized by a wide array of public safety professionals and that documented findings within the NECP would need to be applicable to all agencies and disciplines across the nation. Members suggested keeping the NECP a high-level resource and recommended that specific challenges and concerns, such as scammers who prey on the elderly or how a department provides mental health resources, remain out of the NECP in favor of focusing on CISA's vision to "enable the nation's emergency response community to communicate and share information securely across communications technologies in real time, including all levels of government, jurisdictions, disciplines, organizations, and citizens impacted by any threats or hazardous events."

FirstNet Authority Update

Chief Kevin Nida, Senior Public Safety Advisor with the First Responder Network Authority (FirstNet Authority), and Mr. Paul Patrick, SAFECOM At-Large (Utah Department of Health) and FirstNet Authority Board Member, provided an update on the state of the Nationwide Public Safety Broadband Network and the progress made in its development and implementation. They also discussed upcoming initiatives planned to improve services that can enhance public safety through additional investments.

FirstNet Momentum

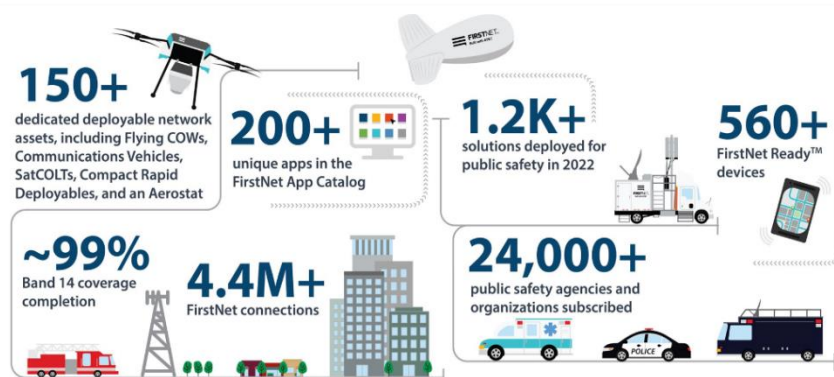


Figure 11: FirstNet Momentum. Source: [AT&T Momentous Public Safety Expansion](#).

Chief Nida reported that FirstNet has achieved 99% of its planned coverage implementation. FirstNet has released over 200 unique applications for end users, available through its [App Catalog](#). There are currently more than 4.4 million devices, and more than 24,000 agencies on the FirstNet Network.

FirstNet will establish its next reinvestment priorities later in 2023 or early 2024 after FirstNet Authority works with public safety to determine their priorities and needs. FirstNet's current reinvestments have been additional deployables, upgrading the network to 5G, and improving indoor coverage. FirstNet's current Roadmap Priorities are:

- The FirstNet Core
- Coverage and Capacity
- Situational Awareness
- Voice Communications including push-to-talk services
- Secure Information Exchange
- Improved end user experience through new applications and access for additional approved devices

Chief Nida provided an extensive list of new services, features, and capabilities introduced over the last year, and Mr. Patrick reported on a new tribal outreach initiative. At a November 2022 meeting in Boulder, Colorado, FirstNet and National Telecommunications and Information Administration representatives met with tribal representatives from nine groups, including federally recognized tribes and Native American public safety and emergency services associations. Together, these participants make up a new Tribal Working Group, which will inform FirstNet's outreach, education, and consultation efforts with tribal nations in the future.

During a brief question-and-answer period following the briefing, the gentlemen confirmed that FirstNet has no plans to seek any allocation of the 4.9 GHz of spectrum that the Federal Communications Commission recently made available for public safety communications. They also noted that FirstNet has no plans to pursue any additional spectrum beyond the D-Block as there is no foreseeable need for additional frequencies.

CISA Priority Communications Services Update

Mr. Mark Russell and Mr. Matt Ambs, CISA Support, provided an update on [CISA's Priority Communications Services \(PCS\)](#). PCS is focused on three priority telecommunications services that enable essential personnel to communicate when networks are degraded or congested, including the Government Emergency Telecommunications Service (GETS) for wireline voice communications, Wireless Priority Service (WPS) for wireless voice communications, and Telecommunications Service Priority (TSP) for repair and installation of an organization's critical voice and data circuits. PCS has implemented a formal Proof of Concept (POC) process for evaluating potential new features and services to include gatekeeping questions such as: Will it benefit users? Is it feasible and practical? What are the technical foundations and potential issues? And does it align to program goals and objectives? POCs go through three phases, Needs Analysis, Proposal Development, and Prototype Development and Evaluation. Some of the current planned POCs include:

- Multimedia Priority Services/Multimedia Communications Services – Evaluating the interoperability of these features across service provider networks
- Dish – Evaluating advanced 5G features in Dish's stand-alone 5G network
- Information Sharing Framework – Assessing complex issues in cross-organizational data sharing such as data formats and security

Mr. Russell and Mr. Ambs also discussed the Identity and Access Management (IAM) POC, which introduces the concept of a PCS mobile app framework with associated back-end services and stronger user authentication. The goal of the mobile app framework is to streamline onboarding of new users and provide features like real-time network management to enable access to additional Wi-Fi networks. Current IAM POC status includes the lab build being 90% complete, use case testing is in progress, and brainstorming of further development to include: WPS enrollment, usage reports, broadcast messages/situational awareness, and Trustmark integration.

Calendar Review and Closing Remarks

Chief Reardon expressed gratitude for those who attended the meeting and acknowledged the outside obligations many members have outside of SAFECOM. The work members do inside and outside of SAFECOM makes a difference to prevent tragedies and save lives.

Participants observed a moment of silence in honor of Andy Seybold. Mr. Seybold was recognized throughout the public safety community for his dedication to public safety communications. Also known as "[the Public Safety Advocate](#)," Mr. Seybold was recognized by many organizations, such as the Association of Public Safety Communications Officials and the National Public Safety Telecommunications Council, and was the second ever recipient of the International Wireless Communications Expo lifetime award. Many professionals have cited Mr. Seybold's work as foundational education and the reason Congress awarded the 700 MHz D-Block spectrum to public safety and established the FirstNet Authority in 2012.

The meeting presentation will be available to members through the [Homeland Security Information Network](#). The dates for the Fall 2023 Joint SAFECOM-NCSWIC Bi-Annual Meeting have not been determined but are tentatively scheduled for either the week of December 4 or 11, 2023. Correspondence will be sent to members after the dates, location, and details have been finalized.

SAFECOM SUB-GROUP MEETINGS

May 8-9, 2023

In addition to the SAFECOM Bi-Annual Meeting, members of the Communications Section Task Force, SAFECOM Governance Committee, and SAFECOM Executive Board met to further collaborate on identified work products.