U.S. DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
FIRST RESPONDER NETWORK AUTHORITY
MINUTES OF THE DECEMBER 9, 2020 COMBINED BOARD AND COMMITTEES
MEETING VIA WEBEX

The First Responder Network Authority (FirstNet Authority) held an open public meeting of the FirstNet Authority Board and its Committees. The meeting took place via WebEx on Wednesday, December 9, 2020 and began at 11:00 AM EST. An audio recording of the meeting, transcript, and the archived presentation, are available for viewing on the FirstNet Authority website: www.FirstNet.gov.

INTRODUCTION
Board Chair Robert "Tip" Osterthaler opened the meeting by welcoming all who virtually joined the First Responder Network Authority (FirstNet Authority) Combined Board and Committees meeting. In his opening statement, he welcomed new federal Board member designee, Billy Bob Brown, Jr., who is the Assistant Director for Emergency Communications at the Cybersecurity and Infrastructure Security Agency (CISA) within the Department of Homeland Security (DHS). Mr. Brown will be a member of the Network and Technology Committee.

The main focus areas of the meeting were the 2021 Board meetings schedule; presentation of the annual Chief Harlin R. McEwen Public Safety Broadband Communications Award; approval of the September 30, 2020 Combined Board and Committees meeting minutes; the FirstNet Authority Roadmap release; updates from the Public Safety Advisory Committee (PSAC) from PSAC Chair Todd Early; updates from the Advocacy, Network and Technology, and Finance Committees; a Finance Committee vote and Board vote; and closing remarks from FirstNet Authority Chief Executive Officer (CEO) Edward Parkinson.

Roll Call
Robert "Tip" Osterthaler ("Chair"), Richard Carrizzo ("Vice Chair"), Billy Bob Brown Jr., Welton Chase, Neil Cox, Brian Crawford, Billy Hewes, Karima Holmes[1], Edward Horowitz, Darrin Jones, Paul Patrick, Jessica Renier, Matt Slinkard, and David Zolet. A quorum was present for the Board and Combined Committees.

Conflicts Statement and Reminder
Prior to participating in the FirstNet Authority Combined Board and Committees meeting, Board Secretary Janell Smith provided Board members with the meeting agenda and Conflict of Interest Guidance that applies to the Board members. All Board members responded prior to the meeting that they did not need to recuse themselves from participation in any portion of this meeting, therefore indicating no conflicts of interest, and the meeting proceeded.

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[1] Karima Holmes was not able to attend this meeting.

Votes Taken

Prior to proceeding with the business of the day, Chair Osterthaler requested a motion to approve the meeting minutes from the September 30, 2020, Combined Board and Committees meeting. Edward Horowitz made the motion. Matt Slinkard seconded, and the Board unanimously voted to approve the September 30, 2020 Combined Board and Committees meeting minutes to be available to the public following the meeting.

The Finance Committee voted to approve the following committee resolution:

- Edward Horowitz motioned to approve Finance Committee Resolution 27, Operational Expenses Investment Recommendation. Paul Patrick seconded, and the Finance Committee unanimously voted to approve the resolution.

The Board voted to approve the following resolution:

- Vice Chair Carrizzo motioned to approve Board Resolution 108, Operational Expenses Investment. Neil Cox seconded, and the Board unanimously voted to approve the resolution.

Chief Harlin R. McEwen Public Safety Broadband Communications Award

The Chief Harlin R. McEwen Public Safety Broadband Communications award was established in 2017 in honor of Chief Harlin R. McEwen for his extraordinary expertise, experience, and leadership as the founding Public Safety Advisory Committee (PSAC) Chair. Vice Chair Carrizzo introduced retired Chief Jeff Lane as the 2020 awardee. Chief Lane is from the Fire and Rescue Department in Gainesville, Florida, where he began his career, having 30 years of experience across all the emergency services within the organization. Chief Lane accepted the award and took a few moments to speak on his experiences.

MATTERS DISCUSSED

FirstNet Authority Roadmap Update

Chair Osterthaler discussed the recent update of the FirstNet Authority Roadmap and how it is important to stay connected to first responders in order to continue providing services to their associations and communities. The FirstNet Authority Roadmap is more than a strategic plan, it is a reference for all important decisions made. It is a key document that guides the FirstNet Authority Board in making resource allocation decisions, and the FirstNet program remains on cost and on schedule for 2020. FirstNet Authority Board decisions were tied to the priorities that were established in the Roadmap, which includes input from PSAC members, FirstNet Authority personnel, FirstNet subscribers, and those involved in the development of public safety communication technology. Chair Osterthaler then yielded to the PSAC Chair, Todd Early, to speak on updates for public safety.

PSAC Update

PSAC Chair Early took a few minutes to remember and honor PSAC member Sheriff Larry Emerson from the National Sheriffs Association and also part of the PSAC Executive Community, who had recently passed. Prior to his death, Chief Emerson stated that one of his

career accomplishments was being able to provide input into the FirstNet network. The loss of Chief Emerson and the time and contribution he has made to the PSAC will be missed, and his legacy will carry on for a long time.

PSAC Chair Early then provided updates on the ongoing work of the PSAC. At the PSAC webinar in October 2020, AT&T provided an overview and update on the FirstNet Authority Roadmap and information gathered from interviews with executives, stakeholders, publication reviews, and from quantitative research and analysis. AT&T also provided an update on the Response Operation Group and how they continue to serve public safety operations with over 600 responses in 2020, which included COVID-19, hurricanes, civil unrest protests, and wildfires on the west coast. At the Public Safety Communications Research (PSCR) 2020 Digital Experience, Dereck Orr highlighted lessons learned and current open innovation work and prize challenges in topics such as User Interface and User Experience to enhance the computer vision for public safety; Unmanned Aerial Systems; data analytics; differential privacy temporal maps; automated stream analysis for public safety; and the Public Safety Answering Points (PSAPs) that are focused on developing algorithms to detect and analyze a variety of unstructured and livestream public safety data during emergency events.

PSAC Chair Early went on to mention that AT&T presented a product overview of the FirstNet Network ICAM solution to the ICAM Strike Team, leveraging the needs of public safety. Earlier this year, PSAC members participated in poll questions to provide feedback on the features and capabilities of the imminent peril solution, especially in situations where first responders would utilize the tool the most. At the December PSAC webinar, the FirstNet Authority Roadmap Division hosted focus groups on FirstNet Authority Roadmap topics including location-based services and in-building coverage, which allowed PSAC members to voice and contribute to the discussions that support the work of the FirstNet Authority Roadmap Division and the stand-up of the PSAC User Working Group. The PSAC learned how the FirstNet network deployable fleet would grow following the approved investments, and the PSAC continues to provide valuable feedback to the FirstNet Authority Roadmap team to support future network investments.

The Tribal Working Group (TWG) spent most of the summer ensuring that the needs of Indian country and rural America were met when considering network investments by utilizing survey tools to capture feedback from members of the TWG. At the October 2020 TWG meeting, FirstNet Authority leadership discussed the FirstNet Authority Roadmap update and the importance of gathering data through engagements from a diverse set of stakeholders throughout Indian country. At the November 2020 TWG meeting, Bradford Willke from DHS CISA presented their mission and outreach collaboration efforts with the tribal nations. PSAC Chair Early closed by stating that he is looking forward to the planning of the 2021 activities with the FirstNet Authority to ensure the FirstNet network continues to best serve public safety.

Advocacy Committee Update
Committee Chairman Carrizzo shared the Advocacy Committee report for 2020, mentioning the successful accomplishments of the Engagement teams, who managed to virtually support engagements and data gathering. He went on to thank the Public Safety Advocacy (PSA) team for the work they have done during the pandemic and continued work engagements with public

safety. Committee Chairman Carrizzo then acknowledged and turned over the discussion to PSA Division Director David Buchanan to provide an update on PSA engagements completed in 2020.

Mr. Buchanan reminded attendees that the objectives for 2020 engagements would bring more topics to public safety specifically targeted towards first responders. By the end of Fiscal Year (FY) 2020, over 1,200 public safety engagements occurred across 56 states and territories, reaching over 30,000 stakeholders from across the nation, with more than 2,000 individual feedback items captured during meetings and engagements. These engagements included input from all levels of government – local, tribal, state, and federal, as well as input from public safety disciplines - law enforcement, fire, EMS, ECC community emergency managers - who understand the needs and operational use of the FirstNet network. This input is used to inform the FirstNet Authority Roadmap and investments going forward with a clear understanding of the needs of public safety to be reflected in these documents.

As a continued execution of the FirstNet Authority Roadmap, PSA concentrated on the collection of feedback from an in-depth 200-level questionnaire from public safety specific to each domain. Adjustments were made on how engagements were delivered this year due to the travel restrictions, but the FirstNet Authority was still able to host more than 30 webinars to bring specific topics and audiences into the meetings that resulted in positive outcomes. In other words, webinars are here to stay and will continue to be offered in FY 2021 as a continued way to deliver effective and efficient feedback to public safety as well as stay connected with users. This increased level of collaboration with public safety will bring more hands-on demonstrations to the industry, academia, outreach and engagements, to improve the FirstNet network experience. PSA is also looking to expand its government engagements and continue to build from the work done in prior years and in 2020 to allow government representatives to improve the FirstNet experience for first responders and public safety.

Network and Technology Committee Update
Committee Chairman Cox spoke on the FirstNet Authority's recent concentration and strategic guidance on a host of spectrum issues, an in-depth discussion of coverage and deployment, and examination of the direction to a 5G-ready network. The main focus for the network is to ensure that public safety is receiving the speed of the 5G network in its coverage area. Committee Chairman Cox introduced Investment Lead Karlin Younger to speak on the new grant program and updates to the R2 Network.

Ms. Younger recapped the FirstNet Authority's role in providing program support and technical assistance to the National Institute of Science and Technology (NIST) PSCR Division to launch a $1 million grant program to advance technological innovation in the two key verticals – *Response* and *Resiliency*. Specifically, the Economic Development Administration (EDA) is providing up to $750,000, and NIST PSCR is providing up to $250,000. The grant was awarded in July 2020 to a public-private partnership consisting of RapidSOS, an entrepreneurial company involved in public safety communications; Responder Corp, an early-stage investor focused on the public safety communications area; Orleans Parish Communications District; and Western Fire Chiefs Association, with the strategic support from the State of New Hampshire.

The awardees will focus on the development, building, and launching of new resources, tools, and opportunities to connect like-minded individuals and provide avenues for entrepreneurs, public safety agencies, industry stakeholders, organizations, investors, and associations involved to tackle R2 challenges and accelerate the pace at which technology can reach the public safety marketplace and empower first responders. In order to accomplish this, the R2 Network will consist of three pillars – R2 Learn, which is a resource to educate stakeholders; R2 Portal, an online solution to collaborate; and R2 Connect, virtual and in-person events to share and learn. Since July 2020, the awardees have been making progress in building the necessary tools and resources to launch the R2 Network in early 2021.

In November 2020, the awardees hosted a webinar to introduce the progress made thus far and launched a beta version of the R2 Portal that can be found at R2Network.com, which allows entrepreneurs to build out their company profile and technologies so that when the R2 Network is launched, resources will already be available and free to use by the various communities. Attendees at this webinar included entrepreneurs, public safety, and industry communities with over 700 stakeholders who registered. Ms. Younger then yielded to FirstNet Authority Chief Technology Officer Jeff Bratcher.

Mr. Bratcher spoke about the 1.7 million connections to the FirstNet network that are taking advantage of public safety-specific features such as priority and preemption. There are over 14,000 public safety agencies and organizations that are subscribed to the network with over 700 cellular market areas as defined by the Federal Communications Commission that are Band 14 capable. It is this dedicated spectrum that is now available and operational. The AT&T team continues to be ahead of schedule in the first phase of the Nationwide Public Safety Broadband Network (NPSBN) contract.

Mr. Bratcher discussed the continued work that the FirstNet Authority Standards team has done with the 3rd Generation Partnership Project (3GPP). The 3GPP Release 17 work continues and is focused on enhancements to the building blocks for the mission-critical services to 5G, additional device-to-device direct and relay modes, multicast broadcast capability, enhanced location-based services, and the non-terrestrial network support within 3GPP. Mr. Bratcher went on to mention the involvement between FirstNet Authority staff, AT&T, and others alongside the Alliance for Telecommunications Industry Solutions and the Telecommunications Industry Association, who are key standards-setting organizations in North America working the functions and standards for the Land Mobile Radio Networks to the long-term 3GPP and 5G networks.

There are now over 250 FirstNet devices in the ecosystem, of which 180 directly support the Band 14 spectrum, and 37 were devices added to the NIST list since the September 2020 meeting. The applications ecosystem now holds over 150 applications in the catalog, with additional security vetting solutions and built-in mechanisms to ensure the applications continue to meet public safety needs for the network. One of the applications, "Active 911," was developed by a volunteer fire fighter to connect smart phones with computer-aided dispatch to receive real-time alerts with mapping, routing, and response to let the command know who is available and coming before even leaving the fire station. This application has delivered over 200 million alerts to first responders worldwide. Other applications were also developed,

including "School Guard" for approved staff in schools, "Campus Guard" for use on college campuses, and "Guard 911" for use in workplaces. This is a single button mechanism to report an armed intruder, active shooter, or other violent incidents to 911 and first responders. The goal for these specific applications is to reduce the notification and response time for these incidents.

Lastly, Mr. Bratcher mentioned that the FirstNet Authority collaboration with the PSCR program within NIST continues, with the support of a new challenge mentioned earlier by Ms. Younger, as well as the completion of the "Tech-to-Protect" Challenge. Nine awardees of the "Tech to Protect" Challenge received a total of over $500,000, to continue maturing their solutions and applications toward product realization. One of the finalists had their application, "QS First Responder" developed by QuantaSTAT, listed in the FirstNet app catalog, making it the first FirstNet-approved application resulting from this challenge.

Finance Committee Update
Committee Chairman Brian Crawford reported that the FirstNet Authority completed FY 2020 with a good financial standing, and that FY 2020 is well within the boundaries of the approved Board budget. He then yielded to Chief Financial Officer (CFO) Kim Farington to provide a brief update on the results of the FY 2020 operations and a look into FY 2021.

CFO Farington discussed the Board approved budget for FY 2020 as $82.1 million of which the FirstNet Authority was able to achieve a 3% variance, ending the year obligating $80 million. Funds that were not used went towards face-to-face events and conferences as well as emerging last-minute priorities throughout the year. Lastly, she ended with the plan on continuing the same trend in FY 2021 to make sure every dollar goes into the mission of the FirstNet Authority.

Closing Remarks
CEO Parkinson expressed his thoughts and condolences on the passing of Sheriff Emerson to his entire organization and family on behalf of the FirstNet Authority. He then went on to thank the Board members for their continued support and leadership for a successful 2020, with the approval of the resolution that allows the network to continue to upgrade and operate a 5G ready core. He also congratulated Chief Lane for his recognition as the 2020 Harlin R. McEwen award recipient and acknowledged him as a true leader and partner of the FirstNet Authority.

CEO Parkinson spoke on key milestones that took place in 2020, with over a million connections made by the FirstNet network and the 25-year NPSBN contract build out that continues to be ahead of schedule with more than 80 percent complete in less than three years. He mentioned that more work is to be done to truly envision this nationwide secure interoperable mobile broadband network and all it can deliver for first responders. With 2020 being mostly virtual, the FirstNet Authority was still able to conduct nationwide outreach to public safety at all levels of government to understand the impact that COVID-19 had on many communities, and to be able to better prepare and provide first responders with the solutions for the challenges they face on a regular basis. He thanked the FirstNet Authority team for their hard work, especially Chief Information Officer Jim Gwinn and his entire team for preparing the organization in a short period of time to be able to work remotely.

Next, he spoke on the advancements made to the FirstNet Authority Roadmap that includes the current trends and developments seen in public safety and across the industry, to invest in areas where public safety needs the most, to further guide the programs to enhance coverage, activities to expand the deployable fleet, and be ready for 5G. The feedback received from public safety helps the FirstNet Authority continue to learn, improve, share information on various disasters, and take action in order to deliver the best type of service to first responders moving forward in 2021. He then yielded to Chair Osterthaler.

Board Adjourned
Chair Osterthaler requested a motion to adjourn the meeting. David Zolet made the motion, Welton Chase seconded, and the Board unanimously voted to adjourn the meeting.