



U.S. DEPARTMENT OF COMMERCE  
FIRST RESPONDER NETWORK AUTHORITY  
**COMBINED BOARD AND COMMITTEES MEETING TRANSCRIPT**

**December 9, 2020**

Tip Osterthaler: Good morning everyone. I am Tip Osterthaler, Board Chair for the First Responder Network Authority (FirstNet Authority). Today we are convening for FirstNet's Combined Board and Committees Meeting. I want to thank all of you who've joined us virtually for this meeting, and as is customary at this meeting, which is our last of this year, we're going to spend a little bit of time looking back on the progress we've made over the course of 2020 and also talk a bit about our priorities for the coming year.

The first thing I'd like to report before we get into it is that the program remains both on cost and on schedule, and that's very good news, particularly in light of all the challenges that we've all faced in the course of 2020.

Today, also as we do on our last Board meeting of the year, we intend to award the Harlin R. McEwen Award to a leader in the field of public safety broadband communications.

Before jumping into today's discussion, let us reflect for just a moment on the events of the past year. It would be an understatement to say 2020 has been a year like no other for the nation as well as for the public safety community. We have been faced and are still faced with the pandemic, which has created unique and unprecedented challenges for the public safety community, but that has not been all. In addition, the nation experienced a brutal fire season in the west and an overlapping hurricane season particularly within the Gulf of Mexico. All of these events together have tested the whole notion of FirstNet in a way that I think, number one, we couldn't have predicted, and number two, that we would be pleased to see how well the network has performed.

COVID-19 has tested our first responders and public health officials who've been on the front lines of this pandemic for the majority of the year, and it would be fair to say, I think, that the network has lived up and even exceeded its expectations and we're very pleased to be able to report that.

The FirstNet Authority's mission of course is to build the very best, most

security mobile broadband network in the country for our public safety community, and we are working very hard every day to ensure that public safety has what they need to successfully accomplish their critical mission on behalf of all the communities that they serve.

While we at the FirstNet Authority certainly cannot predict the next emergency or major incident that we'll have to respond to, we will continue to focus on delivering to public safety what they need to be able to communicate and coordinate responses in times of emergencies of all types.

With this in mind, I'm very pleased to say once again that we remain on cost and on schedule, and in particular we have been pleased to see the response of the public safety community in our growing subscriber numbers, and along those lines, we've been particularly gratified that just during the past couple of days, we've sort of achieved the endorsement of one of the nation's premier law enforcement entities. I would like to turn this over for a moment now to another one of our Board members to talk about that.

Darrin Jones:

Thanks, Tip. Hey, I would just like to say how incredibly pleased and excited we are over at the Federal Bureau of Investigation to be joining our Department of Justice colleagues, many of our family members, in the FirstNet family. We are as many of you know some 37,000 people scattered across 56 field offices in nearly 400 resident agencies across the country. So, we are very excited about leveraging the FirstNet technology and pushing the envelope continually in interoperability with our state and local partners. So very excited to reach this event. Thanks, Tip.

Tip Osterthaler:

Thank you very much, Darrin. This year in addition to seeing accelerated subscriber growth, we made our first substantial investments in the network in two major directions. One of them was to continue to add to the capacity of our deployable component of the network, which of course has been heavily utilized as you might imagine during the year given all the things that have taken place, but we also made a major investment in order to prepare the FirstNet 4G LTE Network for transition into the 5G ecosystem in the coming years. And it was important to do that and those decisions were made earlier in the year.

In addition, of course, we've continued our nationwide outreach to public safety, which has been not made easier, of course, by the pandemic and the difficulties with traveling and conducting business in the traditional ways, but our Outreach Team has done a great job of converting to this environment, continuing their very active efforts to maintain a dialogue with the public safety community, and really hasn't missed a beat as again

indicated by our growth in subscriber numbers.

We have also updated a Roadmap which we will talk a little bit later on in the conversation today. The Roadmap, of course, is a very important guiding document for the Board and we will talk more about in a bit.

With so many public safety agencies now using the network in their response to the pandemic, we can also I think be pleased to see that our work is having a very direct and measurable impact on this part of the community. It's not only improving their ability to respond and operate across the country, it's ultimately enabling the response, particularly of the medical first responders, to adopt business practices that are different than what we may have anticipated we even needed in years past. And, the ability of the network to provide the backbone that's needed for new use cases, new applications, new ways of doing business for all of our public safety but in particular for our medical first responders, I think is notable.

Before we move into today's agenda, I do want to make one additional comment and that is that many of you are used to seeing Ed Horowitz in this chair. He is still a member of the Board, lucky for us. And I want to thank him once again for his leadership, particularly in getting this to the point where we understood what we needed to do to prepare for the 5G transition. Ed has put us on the right path for success, and I want to thank you once again, Ed, for your leadership of the Board and your continuing involvement and your continuing contributions. Thanks.

Edward Horowitz: Thank you, Tip. It is really a privilege to serve.

Tip Osterthaler: Moving on into the agenda for the day. I am going to just go through briefly what we have on the schedule because not everyone I think has got access to video.

First thing we are going to do is introduce a new federal Board member designee; do that in just a moment. We will talk about next year's Board schedule very briefly. We will then move to the sort of heart of the meeting by recognizing this year's recipient of the Harlin R. McEwen Award, then we're going to talk a bit as I said earlier about the Roadmap, which I think you'll find of interest. We're going to receive an update from the Public Safety Advisory Committee (PSAC) as we normally do from Chairman of that committee, Todd Early, and then we're going to get updates from the various committees: Advocacy; Network and Technology; and Finance Committees. Following that we have a couple of resolutions that we need to formally adopt and vote on, but before we get into that, let's make sure that we have a quorum, and I'll ask our Board Secretary to call the roll and confirm that each committee also has a quorum. Madam Secretary, please call the roll and then also go through

the Conflicts of Interest Statement.

Janell Smith: Okay, one second. All right. Good morning everyone. First, I will call the roll. I will check you as "here," Chair.

Richard Carrizzo?

Richard Carrizzo: Present.

Janell Smith: Billy Bob Brown, Jr.?

Billy Bob Brown, Jr: Present.

Janell Smith: Welton Chase?

Welton Chase: Present.

Janell Smith: Neil Cox?

Neil Cox: Present.

Janell Smith: Brian Crawford?

Brian Crawford: Here.

Janell Smith: Billy Hewes?

Billy Hewes: Present.

Janell Smith: Karima Holmes?

Edward Horowitz?

Edward Horowitz: Here.

Janell Smith: Darrin Jones?

Darrin Jones: Present.

Janell Smith: Paul Patrick?

Paul Patrick: Present.

Janell Smith: Jessica Renier?

Jessica Renier: Present.

Janell Smith: Matt Slinkard?

Matt Slinkard: Present.

Janell Smith: David Zolet?

David Zolet: Present.

Janell Smith: Mr. Chair, we do have a quorum for the Board as well as for all four committees. Now I will read the Conflicts Statement.

Prior to participating in the FirstNet Authority Combined Board and Committees Meeting today, the Board members have reviewed the agenda as well as the Conflict of Interest Guidance provided by the Ethics Law and Program Division of the Department of Commerce Office of General Counsel, regarding the Conflict of Interest Standards that apply to Board members. All Board members have responded prior to today's meeting that they do not have a conflict and will not need to recuse themselves from participation in any portion of this meeting. Thank you.

Tip Osterthaler: Thank you Madam Secretary. Now let us proceed to the minutes of the last meeting. Each member of the Board has before him or her the Minutes of our September 2020 meeting. Are there any additions or corrections to those Minutes at this time?

Seeing and hearing none, I will accept a motion that we accept these Minutes.

Edward Horowitz: This is Ed Horowitz. I so move.

Tip Osterthaler: And do we have a second to the motion?

Matt Slinkard: This is Matt Slinkard. I second the motion.

Tip Osterthaler: Thank you, Ed. Thank you, Matt. All in favor, please say "aye."

[Group]: Aye.

Tip Osterthaler: All opposed, please say "nay."

Are there any abstentions?

Hearing none, the September 2020 Meeting Minutes are accepted. Madam Secretary, please make the Minutes available to the public following this meeting

Janell Smith: I will do that.

Tip Osterthaler: Okay, moving on. I would like to start, as I said earlier, by introducing one new Board member, Billy Bob Brown. He is the new Department of Homeland Security (DHS) designee on the Board. Billy Bob serves as the Assistant Director for Emergency Communications within the Cybersecurity and Infrastructure Security Agency (CISA). He will be a member of the Network and Technology Committee. We thank you very much for your willingness to serve on the Board, serve on that committee, and welcome to the Board, Billy Bob.

Billy Bob Brown, Jr: Tip, thank you for the warm welcome, and thanks to all the Board members and all the FirstNet Authority staff, particularly for the myriad of briefings in the recent times since joining the Board. I am looking forward to supporting public safety and this important work with you all. Thanks.

Tip Osterthaler: Thank you very much for that. Welcome once again.

Now, let us take a look at the schedule for the coming year. The Board meeting schedule has been established for the year. Those of you who have video should see it on the slide. We do plan to meet four times during 2021, in February, May, August and November. Some of you may recall that we have sometimes had a special meeting in the course of a year just to focus on the budget. This year we plan to do our budget consideration and approval in conjunction with our regular meeting in the August timeframe, so the August meeting will include the Board's approval of the Fiscal Year (FY) 2022 budget as well as this other normal business.

Information on these meetings will continue to be made available in the Federal Register Notice and also on the FirstNet.gov website.

Moving now to the next agenda item. Many of us and many of you in the audience remember Harlin McEwen's important role in the early days of the FirstNet Authority, leading the PSAC from its inception in 2017. The sole award of the FirstNet Authority is named in his honor, and he was the first recipient. This award honors an individual who has displayed remarkable leadership or made significant contributions in the field of public safety broadband communications. We're pleased to continue to present this award to a true leader in public safety communications, recognizing a leader in the field that is a true champion for FirstNet, helping us to advocate for public safety as we build, maintain and improve the network. I am now going to turn this over to Richard Carrizzo, the Vice Board Chair, and the Chairman of our Advocacy Committee, for him

to announce our award recipient.

Richard Carrizzo: Thank you, Mr. Chair. It does give me great honor to announce this year's award winner, especially named after a good friend, Harlin R. McEwen. So, this year we had many esteemed and accomplished public safety leaders. A lot of good people had put in for this, had recommended, so we're very excited that there is so many people out there that are advocating for us and making this even just a better network throughout the whole United States.

This year's award, it is my honor to announce that this year's 2020 Harlin R. McEwen Award recipient is Chief Jeff Lane. We are honoring Chief Lane today virtually. We wish we were all together to really congratulate him, but hopefully in the future we will be able to. So, Chief Lane began his career within the Gainesville Fire and Rescue Department, which actually he recently retired from earlier this month. Chief Lane had worked a little over 30 years across all the emergency services within that organization. He held positions with specialties as the Communications Officer, Hazardous Materials Technician, he was a Paramedic and maybe he still is a Paramedic, Incident Commander, Fire Inspector, and also the Fire Chief.

Quite recently Chief Lane spearheaded a multi-jurisdictional and multi-discipline effort to evaluate wireless broadband needs for public safety within the whole Gainesville area. That led to a city-wide adoption of FirstNet services within Gainesville. We thank Chief Lane for all of his hard work and congratulate him on his recent retirement, even though we know we know that he'll continue to keep working and advocating for FirstNet, not just within Gainesville but throughout the whole nation

Please help me in congratulating Chief Lane as the 2020 Harlin R. McEwen Award recipient. At this time though we are going to show a quick, brief video before we introduce Chief Lane on some of the work that he has done in Gainesville.

[Video Begins]

Chief Jeff Lane: Gainesville is kind of an urban area in the midst of a very rural region. Gainesville Fire Rescue, we have about a 200-person responder department. We operate all the specialty teams, hazardous materials, USAR, advance emergency medical with paramedic on every truck. Even on the medical side, we have a community paramedic program that is very unique from many that is around the country.

Danny Williams: My role in the FirstNet implementation here was looking at how it compared with our previous carrier and how what impacts, if any, would

be if we moved over to FirstNet. We used a two-stage approach to that. The first was signal strengths throughout the whole area. In addition to that, we used the speed test app to actually perform speed tests with previous carrier and FirstNet, looking at what kind of bandwidth moved through when we were actually getting in the different areas and then that's all overlaid with our speed tests. So, we could actually look at the signal strength in an area, see if the signal strength was good, fair, or poor, and then correlate that with an actual speed test measurement. So, taking a look at that and doing that all over the county, we were able to put together a good picture of the benefit of FirstNet.

[End of Video]

Richard Carrizzo: Again, on behalf of the FirstNet Authority, the Board of Directors, and all of public safety, within the United States and surrounding areas. We congratulate you on the 2020 Chief Harlin R. McEwen public safety reward recipient.

Opening it up for you to give some remarks if you would like.

Chief Jeff Lane: Thank you very much. I really appreciate that. I certainly was surprised and very honored, Mr. Chair, and also to the Board and Board members and staff. I would like to recognize all of our good fortune for being here healthy today and able to meet, and give my very best to all the first responders who perhaps are not well today or others who've lost a loved one out there, but mostly to those that are out there hard-working today saving lives during this unprecedented national crisis.

To be here in a kind of electronic forum while many may be new to is really what FirstNet is all about - overcoming barriers in vital communications for a greater cause.

It is my pleasure of course to accept this award. It is truly humbling, and I cannot express my thanks to the Board and to the committee for their consideration. Mostly to public safety leaders everywhere from organizations large and small, or perhaps kind of like me in the middle, this award really recognizes their work and the commitment of men and women, law enforcement, fire rescue, and emergency management.

So, it is on their behalf that I accept the award and glad to be accepting of something that reflects so well on Chief McEwen's unprecedented and unequalled advocacy and leadership. Certainly, those and the other recipients as well.

FirstNet obviously represents an advancement in greater interoperability. That is probably the hallmark and the security's there, but just having



connectivity as this Board is advancing into the 5G networks and other advances is only one part of the problem. It is really about how to connect people so it's really not a lot of good, as I've learned here regionally, to have great technology with neighboring departments and entities if you don't really have anything to share. Of course, we do in establishing those relationships and establishing the case use is really the hallmark of successful implementation.

We've been able to implement a decentralized emergency operation center here using FirstNet to manage our larger, lengthy, more complex responses, storms and those types of things that wouldn't be possible without FirstNet, and during this epidemic, unbeknowing that were coming, it has proved invaluable to maintaining our emergency operations structure conditions remotely.

Also, on the horizon of course, we have wearables now that transmit your heartrate and your cardiac rhythm. We certainly see FirstNet transmitting that data to paramedics who are on their way to the scene of an emergency and transform how care is delivered in the field. We also certainly see the case use for law enforcement giving a touchless traffic citation via video from their electric patrol car in the very near future.

More advanced tracking of our Fire Fighters so we never again have to lose a Fire Fighter in the smoke and flames just because we could not locate them before they ran out of air. That is in the very near future.

So, these applications and dozens less more glamorous day to day uses of the FirstNet platform will define the next decade for us and for FirstNet. But finding that common ground and meaning is going to be hard, because Fire Fighters, Police Officers, public safety people, they are very practical. It has not just the hypothetical or potential, it has to actually work. So, every agency that I know that is drowning in data that we are collecting, but how are we using that data to help the people in the field?

We have to mine it. Takes too long. We have to use FirstNet and the new technologies to grab the gold as it comes through the systems. I often refer to a test-less vehicle, Mr. Chair, is nothing more than a 5,000-pound cell phone that we can ride. The amount of data and the amount of information that flows and that guides all the operating systems to that vehicle is really what makes it transformative. We can certainly see police cars, fire trucks, and other emergency vehicles similarly being connected and having robust connections through information sharing and providing all of us in leadership and management capacity, a type of 21st or 22nd century battlefield awareness and interaction that coordinates Police, Fire, and other response agencies to provide one basic service seamlessly as if it was one proprietor.

FirstNet obviously represents technological advancement and leveraging of public space. This Board has been outstanding at using that space quickly and efficiently getting it to the users in the field. That means not just the enclaves of wealth, not just to the large metropolitan populations, but all across our great land. Theory serves no one. The innovation must be practical and with thoughtful applications operating in a sustainable environment so every department, county, territory, parish, every city, town, and hamlet has to have this access, and that is the measure of success that you bring to the table today.

So, it is happy to say that I accept it. Certainly an unknown Fire Chief in a small college town - probably one with a great football team, I might add - could not only obtain but immediately benefit from lives saved and responders' safety, and do so in an economically sustainable package is a tribute to this Board's work and to the FirstNet platform. And I hope that you will continue to be a catalyst of users where you bring ideas to the forefront, because they have needs. So I believe the people like yourself, like Chief McEwen, Tom Sorley, and Sheriff Miller represent what it is to be a friend of the future of public safety, so it's hope that I can do that as well and that I can be counted on to be in that brand and advance this cause in any way that I can.

So, Mr. Chair and Board members, thank you again and please call upon me anytime that I can do anything because I will be ever indebted to you for this honor. Thank you.

Tip Osterthaler:

Thanks very much, Chief Lane. Congratulations once again on behalf of the entire Board and your comments are the perfect lead in, I think, to the next part of the discussion we're going to have, which really has to do with how do we do exactly, as you suggest we need to do, which is stay connected to the use cases, the users, and the community out there who are providing these essential services for the rest of society. And one answer to that for us is that we develop, update, think carefully about, and use in our everyday decision-making at the Board level, the FirstNet Roadmap.

Last month, the FirstNet Authority released an update of its Roadmap. And, every time I look at this document, I'm reminded of when I first became involved in this project, and one of my first questions was how in the world does a federal agency in Washington D.C. even really understand how this diverse community of first responders all over the country communicate with us, and how do we absorb the information about what it is? Is it going to make a national broadband network for

public safety successful in their eyes, not in ours, but in theirs. And part of the answer was those who created the Authority in the first instance also created the PSAC, which was statutorily a voice that was going to ensure we stayed aligned, and that's an extremely important one and we're going to hear from Todd Early in a moment about the work of the PSAC, but it's not enough. It cannot be the only voice. What we also need to do is stay connected to the users that are actually out there providing services every day, not just in the associations and the leaders of that community, but the people that are actually out there in the patrol cars and in fire trucks and in the ambulances.

That is really where the Roadmap comes in. I have been involved in a lot of sort of strategic planning exercises in a lot of different places inside government and in the private sector, and some of those planning exercises have resulted in actionable plans. A great many, unfortunately, have resulted in shelf-ware, and, you know, very slick documents that kind of go on the bookshelf and are never to be seen again. And, what distinguishes those two is whether or not the strategic plan, in this case the Roadmap, which is something more than a strategic plan, actually is our reference document for every important decision made, and the FirstNet Roadmap is exactly that. It does not sit on a shelf. It is the Board's key reference document as we make resource allocation decisions, which you heard me in the introduction mention that we made our first investment decisions in the course of this year, 2020. Those investment decisions were directly tied to the priorities that were established in the Roadmap, and the Roadmap was built by people that participate in the PSAC, people that are on the FirstNet staff, people that are on the FirstNet Board, but also extended discussions by our outreach activities to users out in the field across the nation, across the user community, plus, people that are the most deeply involved in the development of public safety communication technology. So, we had technologists' input, but we also had a great deal of user input, supplemented by activities on the PSAC, and that's what caused us to build that Roadmap, and you can directly trace our resource allocation decisions made to date with what the user community told us we needed to do by the Roadmap.

So, I'd like to end this part of it by saying congratulations to the FirstNet team who developed this excellent document but congratulations really to people like you, Chief Lane, who participated in these various rounds of discussions to make sure that the guidance documents that we were producing were actually going to drive the network in the direction you needed it to go, and we're confident that that is what the Roadmap is doing at this point, but it's only because of your willingness to engage and other professionals like you.

What I would like to do now is move to a key part of that community that

speaks for public safety and that is the PSAC, and we have Todd Early on the call today. Todd, over to you.

Todd Early:

Thank you, Mr. Chairman and Board members, and thank you for the opportunity to join you today. I would like to take just a minute before my update and mention some sad news. Last week our long time PSAC member and friend from the National Sheriff's Association, Sheriff Larry Emerson passed away. And I just wanted to take this time to honor Larry, Sheriff Emerson, and the commitment and input that he had into the PSAC and into this network. One of my fellow EC members mentioned that, as Sheriff Emerson mentioned one day, that one of his career accomplishments was having input into the FirstNet network and being able to provide that, and we are all very sad to see our friend leave us and just want to thank him for his time and contribution into the PSAC. His legacy will last a long, long time.

We all had the pleasure of working with Larry over the years, and he was a fine and collaborative and intelligent contributor to the PSAC. We'll all personally miss him, and I know that the FirstNet Authority and my fellow PSAC members share in that loss, and from all of us, our thoughts and condolences are with Larry's family and friends, but he will definitely be missed.

The PSAC continues to stand ready to help the Board and the Authority. We had a very busy fall full of meetings. Since the last Board meeting, the PSAC met for a business meeting, much like what we are going to be doing next week. We have adjusted our cadence a little bit in our meetings since we have gone remote and not having in-person meetings. And we are having meetings usually immediately following the Board meeting so we can stay up to date and in conjunction with the Board meetings and we will be having that meeting next week.

Our October PSAC business meeting, we provided the PSAC an overview of the update being made to the FirstNet Authority Roadmap, and how the FirstNet Authority captured deeper and more detailed information from its stakeholders by conducting executive interviews, publication reviews, and quantitative research and analysis. AT&T provided PSAC members an update on FirstNet and how the Response Operation Group continues to serve public safety operations with over 600 responses in 2020, including Hurricanes Laura and Sally, COVID-19, civil unrest protests, and wildfire response operations on the west coast.

Public Safety Communications Research (PSCR's) Derrek Orr joined the meeting and highlighted lessons learned from the PSCR 2020 Digital Experience, and the current open innovation work and prize challenges, including topics like UI and UX enhancing computer vision for public

safety; Unmanned Aerial Systems; data analytics; differential privacy temporal maps and automated stream analysis for public safety; and specifically, the ASAPS that are focused on developing algorithms to detect and analyze a variety of unstructured and livestream public safety data during emergency events.

I would like to update you on our ICAM Strike Team. In our October meeting, AT&T presented to members of the PSAC Strike Team an overview of the FirstNet network ICAM solution, and benefits of leveraging the PSAC's expertise into the needs of public safety in terms of ICAM. Frank Minice, who is leading that group, I appreciate his leadership. He and the team have done a great job of continuing to work together on this important topic, and we appreciate Scott Agnew from AT&T FirstNet and his team taking the time to continue to collaborate with the team on this very important matter.

Our December PSAC webinar, the FirstNet Authority Roadmap Division hosted focus groups on Roadmap topics, location-based services, and in-building coverage, where members of the PSAC joined to contribute to conversations that will support the Roadmap Division's work, and the standup of the FirstNet Authority PSAC User's Working Group. We will focus on this on next week's business meeting, in which Board members have already been invited to attend, should have received a notice already.

Our Tribal Working Group (TWG) held its monthly teleconferences in October, November, and December. At the October TWG meeting, FirstNet Authority leadership provided delegates a Roadmap update and discussed the importance in gathering data through Roadmap engagements from a diverse set of stakeholders throughout Indian country.

Bradford Willke, from DHS, Cybersecurity and Infrastructure Agency, joined the November TWG meeting to present the delegates on CISA's mission and their collaboration efforts with tribal nations in the FirstNet Authority.

The December call wrapped up the year nicely with the delegates sharing their current and recent experiences responding to COVID in using FirstNet and other broadband platforms to communicate in Indian country. The TWG continues to provide an important perspective of tribal users to us, and we appreciate their continued work, and I am looking forward to continuing that in 2021.

I'd like to also say thank you to Danae Wilson who Chairs the TWG, and also Kevin McGinnis, who all of you are very familiar with, who is our tribal liaison, and since the inception of the Board, has had a lot of input and participation in the TWG.

As always, I would like to thank the PSAC Executive Committee and the PSAC membership for it is hard work and dedication to supporting the FirstNet Authority Roadmap in investment decisions. Look forward to additional opportunities as we move forward into 2021 for additional collaboration and partnership with the Authority to ensure the FirstNet network continues to best serve public safety.

Mr. Chair, that is my update. I appreciate you and the Board giving me time to provide you an update on the important work that the PSAC is doing. I am happy to answer any questions that you have.

Tip Osterthaler: Thank you very much, Todd. Any Board members have any questions for Todd before we move on? Thanks, Todd, for the work that you're doing as the leader of the group, and also for the work of your members and member organizations, without which I suspect those of us who live inside the beltway would quickly lose our way. So, thank you for your continuing inputs and guidance and keeping us straight. Let us move on now to the remainder of the agenda, starting with an update from the Advocacy and followed by the Network and Technology Committee Chairs.

Richard Carrizzo: Thank you, Mr. Chairman. It gives me great pleasure today to share the Advocacy Committee report to the Board and all those that are listening. As you can imagine, 2020, with everything that's been going on for the last 10 months, I'm pleased to report though that our Engagement Teams have accomplished an incredible amount of engagements and data gathering through this time and all through virtually so it's been an incredible 2020 thus far. But what I'd like to do is first thank all my Advocacy Committee members that I've had a pleasure with participating on both virtual engagement meetings monthly and our continued work with the engagements and how wonderful those discussions have been and how fruitful and interesting and the knowledge that we've been able to gain.

I appreciate all the continued work Dave Buchanan's team, that he continues to do, everything that is able to be done through this virtual time and the data that has come back. That data's very important to FirstNet Authority along with the Board as it continues to provide us with information, and, without that information, we wouldn't be able to ensure that this network moves forward, not just for public safety wants, but the needs that are really needed.

At this time, I would like to turn it over to Dave Buchanan, our Director of Public Safety Engagement Division, to provide more information about some of these engagements that we have done through 2020.

David Buchanan: Thanks, Chief. Happy to do so and on this slide, I am just going to take five minutes to give you a review of our work from 2020 and what we accomplished. As you may remember last year's December Board meeting, I talked about our objectives for 2020 would be to be more specific with the topics we're bringing to public safety and to be more targeted about the first responders we're meeting with in 2020, and I'm pleased to report that we accomplished both of these objectives in our work this year.

This last year we engaged public safety to capture feedback from first responders in all 56 states and territories. We met with all disciplines in public safety: law enforcement, fire, EMS, the ECC community emergency managers, in those 56 states and territories, and we met with public safety at all levels of government - state, tribal, local, federal, in those 56 states and territories, again to bring the FirstNet conversation to first responders, to understand their needs and to capture their operational use of FirstNet. I believe it's important to engage broadly and to leave no stone unturned into the four corners of the country, again in all disciplines, all levels of government, in all 56 states and territories, and glad our team was able to accomplish that this year.

We also sought to be as very specific about the topics we are working on, and you can see the number of feedback items we were able to capture through these engagements. More than 2,000 individual feedback items captured through these meetings and through these engagements. Feedback used to improve and enhance the network for today, feedback used to inform the Roadmap going forward, and used to inform our investments, so we have an understanding of public safety and what their needs are for the network and that those needs are reflected in those documents.

We also have very specific Roadmap engagements. We brought what we call 200-level, that is second level, in-depth conversation around the Roadmap domain topics. We had 200-level engagement again with public safety in all 56 states and territories this year. So, we are very confident that we have brought the right conversation to the right people and we expect to continue that approach as we drive forward in FY 2021.

This year we did have to adjust how we delivery engagements, as everyone experienced restrictions on travel this year. We brought about a new webinar approach. You see more than 30 specific webinars we hosted since June, between June 1st and September 30th, again to bring that specific dialogue to specific audiences. We are delighted with the outcome of those meetings and the response we have received from public safety. I think it is an efficient and effective way to bring our value and

to bring our content and to capture feedback. And while we are all looking forward to resuming in-person travel, as soon as it is appropriate and practical, we are also pleased that virtual meetings are here to stay. Webinars are here to stay, and we will be offering those as a product offering for engagements in FY 2021, again as a continued way to be efficient and effective in how we deliver content to public safety, and how we capture feedback, and how we stay connected with user needs going forward.

Last comment before I conclude my slide is just looking ahead to '21. Again, we are going to continue to be focused on being specific on the topics we are engaging on and being targeted on who we meet with so that we are bringing again the right conversations to the right people. We are looking to increase the level of collaboration we do with public safety by bringing more demonstrations, more hands-on, improve their experiences with FirstNet. We expect to be able to formalize our industry and academia, outreach and engagements this year and be looking to improve the delivery of those engagements and leverage those relationships to improve the FirstNet experience. And then we're looking to expand our government engagements to build upon the work we've done this last year and prior years on our federal engagements to leverage our partners in the federal space and the government space to improve FirstNet experience for first responders and public safety.

So, with that, Mr. Chair, that concludes my overview for today, and thank you for the time, and look forward to answering any questions at the appropriate time. Thanks.

Richard Carrizzo: Thank you, Dave. Appreciate that. I will turn it over if there is no questions for the Advocacy Committee first, are there any questions for either Dave or me?

Hearing none, I will turn it over to Neil Cox for the Network and Technology Committee update.

Neil Cox: Thanks, Rich. Good morning everyone. There has been a great progress in major program results since our last readout by the Network and Technology Committee in September. In fact, we had a committee meeting last week where we concentrated a lot on and gave strategic guidance to FirstNet Authority's focus on a host of spectrum issues, an in-depth discussion of the coverage and deployment, and examination of the direction to a 5G ready network.

Now, you see all these commercials on TV about 5G, and you never read the real fine print down at the bottom, but the 5G deployment for public safety is going to be different than it is for others. You know, we are not



concerned about getting a refrigerator smart, or downloading a YouTube video in seconds, we are more concerned on using the speed for public safety, and speed has its problems. One of them is coverage area. I mean, some of the really high milli metric that gives the best bandwidth goes about three times as fast as your coverage area, about three times the size as the wi-fi in your home. So as, you can be assured that the FirstNet Authority's focus on 5G will be dedicated towards how it is deployed for public safety, which will be completely different.

So, in this briefing we're going to hear from Karlin Younger, who's a lead, investment lead, and provide an update on an exciting new grant program which has been established, the R2 Network, which has an express purpose to connect first responders with technology innovators and entrepreneurs.

Then, we're going to hear from Jeff Bratcher, the Chief Network and Technology Officer, who will then provide an update focused on the following themes: recent progress in global standards, which I think is very important that we are building this network on global standards; differentiating devices available for public safety users, and that's extremely important, because one of the reasons why we built this network for first responders was to have unique applications and devices, which we'll be talking about some of those solutions both innovative applications and solutions that are being used by first responders; and then the progress in advancing public safety technologies through the collaboration with our peers at PSCR. It is nice that Jeff is located and his, our labs are kind of across the street from them, and we are able to collaborate on next generation public safety technologies that can be used on this network.

So, with that, I am going to turn it over to Karlin, who will proceed with our update.

Karlin Younger:

Thank you very much sir. I am very excited to be here to provide an update on the R2 Network. As a brief recap, last year the FirstNet Authority collaborated with the Economic Development Administration (EDA) and the National Institute of Science and Technology (NIST) to launch a new, one-million dollar grant program designed to advance technological innovation in two key verticals - *Response* and *Resiliency*, hence the two R's in R2.

After a competitive process, this past July, the grant was awarded to a public-private partnership consisting of RapidSOS, Responder Corp, the Orleans Parish Communications District, and the Western Fire Chiefs Association, with strategic support from the State of New Hampshire.

Over the next three years, these awardees will build, develop, and launch

new resources, tools and opportunities designed to connect entrepreneurs, public safety agencies and industry stakeholders. The idea is to create a new kind of network, a professional or social network of organizations collaborating together to tackle response and resiliency challenges. By connecting innovators and agencies, the makers and the doers, the aim of these activities are to really accelerate the pace at which technology can reach the public safety marketplace, do what it's meant to do, and empower our first responders.

In order to do so, the R2 Network will consist of three complimentary pillars. *R2 Learn* will be a collection of educational resources for innovators and agencies to learn about and understand the unique challenges and opportunities in the public safety marketplace. The *R2 Portal* will be an online solution where stakeholders, including innovators and public safety agencies, can connect to source, vet, and deploy new technologies to meet their needs. And, finally, *R2 Connect* will be a series of virtual and, hopefully, one day, in-person events to really bring the community together to share lessons learned and best practices in deploying these new technologies to face *Response* and *Resiliency* challenges.

In terms of progress thus far, the awardees have been busy since July building out the tools and resources needed to formally launch the R2 Network starting in early 2021. In November, the awardees hosted an introductory webinar that was well attended by the entrepreneur, public safety, and industry communities; over 700 stakeholders registered, and we were very pleased to see that progress.

At that webinar as well, the awardees were able to launch a beta version of the *R2 Portal* that can be found at [R2Network.com](http://R2Network.com). This beta version of the portal has designated areas for entrepreneurs to build out their company profile and their technologies, such that when the R2 Network is ready to formally launch in early 2021, there will already be resources available for the various communities.

Looking forward into 2021, these resources will be added in a tiered fashion, starting with additional resources for entrepreneurs and then first responders. Similarly, the first resources in *R2 Learn* and the first events as part of *R2 Connect* will launch and build throughout the coming year.

All of these resources, both current and future, will be free to use and open to the entire community. None of these grant-funded resources are designed to be exclusive, or to the exclusive benefit of any one company, organization, or agency.

And so, for our part, for the FirstNet Authority, we act as subject matter

advisors to the grant-making agency, which is EDA. EDA is also the primary funder of this opportunity of this grant with a co-sponsorship from our friends at NIST PSCR as well.

And so while FirstNet didn't directly fund this grant, nor did it invest dollars into this program, we are excited to continue to support it programmatically, and are excited for it's potential to really bring innovation to the entire public safety community, thus supporting the creation of new companies, and new jobs, and supporting community resiliency as well. So, that concludes my remarks. Unless there are any questions, I am happy to turn it over to Jeff.

Neil Cox: Okay, hearing no questions, I will turn it over to Jeff Bratcher.

Jeffrey Bratcher: Great. Thank you, Chairman Cox, can you hear me okay? Can you hear me okay, Chairman?

Neil Cox: Yeah.

Karlin Younger: Yes, we can hear you. Thanks, Jeff.

Jeffrey Bratcher: Thank you. So, good morning everyone. Nice to be with you virtually. And I recall about a year ago we were in sunny Florida. Hopefully in the coming year we will be able to travel again. I thought I'd lead off my update, Chairman Cox, with a quick recap of some information that we were presented and has been in the press related to the network momentum on FirstNet and the great presentation that Jason Porter, the Senior Vice President from AT&T, that is the lead of the FirstNet program, gave us yesterday during our briefing.

As of the end of September, there are over 1.7 million FirstNet connections on the FirstNet network taking advantage of those public safety specific features, such as priority and preemption, and leveraging those capabilities during the pandemic has been a tremendous satisfactory goal and accomplishment that the Board, the Authority staff, as well as the AT&T staff take extreme pride in, serving that public safety community. We now have over 14,000 public safety agencies and organizations that are subscribers to the FirstNet Network, and we have over 700 markets now, the cellular market areas as defined by the FCC. We have over 700 of those that now have the Band 14, that dedicated spectrum that public safety fought for about a decade to get the license for, available and operational in those markets.

We are very pleased with the progress. The AT&T FirstNet Team continues to be ahead of schedule in the deployment for what we have been calling this first phase of the contract. They are ahead of that

deployment schedule, and we look forward to continuing that momentum going forward.

The 76 dedicated deployables that are available as well or have been in use, as PSAC Chairman Early mentioned earlier. Over 600 events over the last year. The value that that brings to the public safety community is immeasurable. We, I think, are extremely surprised at the success of that. Very pleased with the success of the deployables program, and it links back to the investments that were approved earlier this year, enhancing that fleet in the next year as well as our 5G upgrade, and again, we're not stopping this great momentum. We are leveraging investments into the network. Chairman Cox, you mentioned the 5G right around the corner as well, so we are extremely pleased with that.

To touch on some of the four quadrants listed here with our standards efforts - the 3GPP migrated as I briefed out last September to virtual meetings. They are not having their face-to-face, which historically has been how they conducted their standards development, but they have transitioned in the pandemic and are doing this virtually. And they quickly redefined new paradigm of this international virtual collaboration across the many companies, government agencies, and other stakeholders that help drive this worldwide cellular market.

We are pleased our team that is dedicated in ensuring the public safety requirements in the standards bodies are being represented. We shared in September Release 17 work is in full swing. That work has accelerated since then, and we have worked on several items, work items as it is called in the Standards Committee, related and directly supporting public safety critical communication needs.

Some of those include the building blocks for the mission critical services on the 5G architecture, the proximity services with direct and relay mode capabilities in the 5G architecture, multi-cast broadcast, the enhanced location-based services standards development, and also some of the non-terrestrial network support, these low earth orbit satellite systems. The Standards Committees are taking looks now at how those can be integrated into a seamless operational wireless broadband use anywhere in the world. And then last, but not least, the system security enhancements for the new 5G architecture.

Touching on ATIS, the Alliance for Telecommunications Industry Solutions and Telecommunications Industry Association, so ATIS and TIA, those are the key standard-setting organizations here in North America, and we have staff that are actively participating, along with AT&T and others, to define and contribute to those Land Mobile Radio (LMR) to FirstNet and LTE interworking broadband cellular data

interworking, so that LMR and LTE systems have that interface to connect the systems together in a standards-based approach.

Some of the devices, moving to the upper right quadrant. There are now over 250 devices in the ecosystem for FirstNet, and over 180 of those devices directly support our Band 14 spectrum. There has been excellent, steady growth on that list of devices, and having a strong partner that has worldwide push with AT&T driving that requirement into the equipment manufacturers has been tremendous to accelerating this list.

It is grown with 37 devices since we met last September, and we feel very confident and continue to drive as public safety, the PSAC, and Dave mentioned their outreach. The public safety users expect a rich and diverse portfolio of devices for their use on this network based on their need. Thirteen of the latest smart phones, 12 routers and Internet of Things (IoT) devices, 4 tablets, 4 smart watches, rugged handhelds, 2 hotspots. Those are a recap of some of the more recent additions. If you have not checked that list, you can see that on the NIST website, and see that full list of devices.

Moving to the application catalog. We now have over 150 applications in that catalog. It is grown with the addition of 20 since our last meeting in September. There are several exciting recent additions to the set of solutions to benefit public safety, and there is one that a volunteer Fire Fighter actually developed and is now available in the applications catalog. The application is called "Active 911," and this connects smart phones with computer aided dispatch to get real time alerts with mapping, routing, and response so that incident command knows who's coming, who is available, who is there, and what resources are on the ground before anyone leaves the station. This has delivered more than 200 million alerts to first responders worldwide. And it is fantastic we have the actual public safety users developing apps and making those available and working with the API's and the other capabilities through our developer program to make the applications they need to save lives.

A second example is a portfolio of applications that provides approved staff in schools. It's called "School Guard," on college campuses, "Campus Guard," and in work places, "Guard 911"- a single button mechanism to report an armed intruder, active shooter, or other types of violence to 911 and the first responders. The goal is to reduce the notification and response time for these types of incidents.

Finally, moving to the Collaborations quadrant. As you mentioned Chairman Cox, and the updates and Karlin also talked about our close relationship with the PSCR group within NIST, that continues with the support of new challenge as well as the recent completion of one of

PSCR's most ambitious prize challenges. This was the "Tech-to-Protect" Challenge.

This was designed to engage entrepreneurs, technologists, students, programmers, designers, as well as public safety experts to create solutions across critical technical areas of public safety communications. This includes secure communications, location-based services, public safety data analytics, mission critical voice, and user interface and user experience development.

The FirstNet Authority was a significant contributor, with our staff to the challenge providing public safety and technical subject matter experts to influence and enhance those public safety operational use cases and guidance and the technical definition and review, as well as evaluating and judging several of the competitions. The final progress round of the challenge just completed in November, there were nine awardees, receiving a total of over \$500,000, to continue maturing their applications and solutions toward product realization.

One byproduct that we find very exciting of this challenge is that one of the finalists has recently had their application listed in the FirstNet application catalog, making it the first commercial FirstNet approved application resulting from this "Tech -to-Protect" Challenge. The name of the application is "QS First Responder" developed by QuantaSTAT. So, again, the crafters of the legislation envisioned this research and development funding that PSCR's been a great steward of in ensuring and developing those innovating activities, applications, and network enhancements, and we are seeing the results of that investment now.

Again, it's another example of the type of innovation that can be brought to first responders through these collaborative research programs, such as Karlin mentioned, as well as the one now, the "Tech-to-Protect" with PSCR. And it is informed by the unique skill sets from our outreach with our public safety community, our PSAC and the technical staff and operational experience staff from the FirstNet Authority. So, Chairman Cox, that concludes my update. I will turn it back to you and we can take questions if you would like.

Neil Cox: Thank you Jeff. With no questions, let us turn it over to Chair Tip.

Tip Osterthaler: Thanks Neil, and thank you Jeff and Karlin, and everyone who contributed to this part of the conversation. Let us move forward now to the Finance Committee update with Brian Crawford.

Brian Crawford: Thank you, Tip. I am pleased to report that the FirstNet Authority finished FY 2020 on sound financial footing. Furthermore, our fiscal

plan execution early in this coming year of 2021 is well within the boundaries of the Board approved budget, and now I would like Kim Farington, FirstNet's Chief Financial Officer, to provide greater details and a brief financial update.

Kim Farington: Thank you, Brian. Good day, FirstNet Board members. I am going to take the next few minutes to provide you with an update on our cumulative results of operations for the FY 2020, which ended on September 30th of this year, and share with you the positive results we've achieved despite all the challenges that we met this FY.

As you can see from the graphic, the Board approved budget for last FY 2020 is represented by the line at the top - the \$82.1 million. Throughout the year, you can see by the bars underneath the line of the \$82.1 million budget, that each month we show our cumulative results year-to-date. The great news is, as I said, despite all the challenges, we were able to achieve just a 3 percent variance for the FY, ending the year obligating \$80 million. And, kudos goes to all staff at FirstNet and all Business Units, because as an example, Dave Buchanan and his Engagement Team were able to pivot and still achieve their mission despite the restrictions that we had to deal with.

But in the end, we were able to actually use the funds that we were not able to use for those face-to-face events and conferences. We were able to use those funds for other emerging priorities that came up throughout the year, and despite all of that, we were as I mentioned, able to achieve a 3 percent variance compared to our budget for FY 2020.

We have entered into FY 2021, and we are continuing that trend of making sure that every dollar we spend does go towards the mission of FirstNet, and we look forward to continuing FY 2021 in the same manner that we operated in FY 2020.

So, I will pause and take any questions. Okay, if no questions, then I will turn this back over to our Chief Executive Officer, Mr. Ed Parkinson, for additional information about an investment resolution.

Edward Parkinson: Thank you Kim, and good morning everyone. It is a privilege to see everyone here today. As many of you remember in June of this year, we took the first step to ensuring that public safety's Nationwide Public Safety Broadband Network (NPSBN) remained state-of-the-art by funding a multi-phase technology upgrade to 5G. Doing so will ensure that public safety is going to continue to benefit from the unique capabilities of the NPSBN such as priority, preemption, mission critical push-to-talk, as networks evolve from 4G to 5G.

Today, we are taking further steps as we get closer to the operationalization of FirstNet with the initial 5G capabilities. The proposed resolution will seek to authorize additional investment resources to support this initiative. I will pass this over to Brian Crawford, our Chair of the Finance Committee, for him to introduce the resolution.

Brian Crawford: Thanks Ed. As Ed mentioned, in order to move forward with additional resources to support our initiative, we must vote on two resolutions. We will start with the Finance Committee Resolution 27, and before we vote do any Finance Committee members have any questions about the proposed resolution?

Hearing none, we are prepared to vote on a Finance Committee Resolution 27.

Madam Secretary, would you please read the operative language?

Janell Smith: Sure. Finance Committee Resolution 27 - Operational Expenses Investment Recommendation. Therefore, be it resolved that the Finance Committee hereby recommends that the Board authorize FirstNet Authority management to take all actions necessary, including the obligation of funds from the Reinvestment in Network Enhancement Fund, for the operation and maintenance expenses associated with the Initial Core Generational Upgrade through calendar year 2021. The Finance Committee further recommends that the Board authorize management to obligate funds from the Reinvestment in Network Enhancement Fund for this purpose beyond calendar year 2021 via the annual budget process.

Brian Crawford: Thank you, Janell. Now, may I have a motion to approve from a Finance Committee member this Finance Committee Resolution 27?

Edward Horowitz: Good morning. It is Ed Horowitz. I put forth a motion to approve the Committee Resolution Number 27.

Brian Crawford: Ed Horowitz makes the motion. Is there a second?

Paul Patrick: Yeah, Brian. Paul Patrick. I will second the motion.

Brian Crawford: Finance Committee member Paul Patrick seconds.

All those in favor from the Finance Committee say "aye."

[Group]: Aye.

Brian Crawford: Opposed indicate by saying "nay."



Are there any abstentions?

Hearing none, Madam Secretary, will you please make the following resolution available to the public following this meeting?

Janell Smith: Yes.

Brian Crawford: Chair Osterthaler, I turn this over to for the introduction of the proposed Board resolution.

Tip Osterthaler: Thank you, Brian. The Board is now prepared to vote on Resolution 108 - Operational Service Investment. Before we vote, do any Board members have any questions on the proposed resolution?

Hearing none, we are prepared to vote on Resolution 108.

Madam Secretary, would you please read the operative language?

Janell Smith: Yes. Board Resolution 108 - Operational Expenses Investment. Now therefore, be it resolved that the Board hereby authorizes FirstNet Authority management to take all actions necessary, including the obligation of funds from the Reinvestment in Network Enhancement Fund, for operation and maintenance expenses associated with the Initial Core Generational Upgrade through calendar year 2021. The Board further resolves to authorize management to obligate funds from the Reinvestment and Network Enhancement Fund for this purpose beyond calendar year 2021 via the annual budget process.

Tip Osterthaler: Thank you, Madam Secretary. May I have a resolution from any Board member to approve Board Resolution 108?

Richard Carrizzo: Carrizzo will make the motion for Board Resolution 108 as read.

Tip Osterthaler: Chief Carrizzo proposes that it be approved. May I have a second to the motion?

Neil Cox: This is Neil Cox. I second the motion.

Tip Osterthaler: All in favor, say "aye."

[Group]: Aye.

Tip Osterthaler: Any opposed, say "nay."

Are there any abstentions?

Hearing none, Madam Secretary will you please make the resolution available to the public following this meeting.

Janell Smith: Yes, I will.

Tip Osterthaler: Okay, thank you, everyone. Board members, staff, this concludes our business for today. Before I turn it over to Ed Parkinson for CEO remarks, I would like to thank all Board members for your continuing involvement. I would like to thank the members of the public and the public safety community in particular who have taken the time to call into the meeting, and I very much appreciate the hard work that's gone in during the past year by all involved in this project, given all the challenges that we've had to overcome. I turn it over now to Ed Parkinson.

Edward Parkinson: Thank you, Tip. Appreciate that. Before I get into my remarks, I just would like to, as Todd Early, Chair of the PSAC mentioned, the passing of Sheriff Larry Emerson. I was very fortunate when I was just starting out working on Capitol Hill to meet Sheriff Emerson. He was a true gentleman, and really was able to provide me with terrific guidance. I was fortunate enough to meet his wife on two occasions. His deputy down there, and, you know, public safety has really lost a true hero and a great leader. And, so certainly to echo Todd's sentiments, I would like to pass along the FirstNet Authority's best wishes to his entire organization down there, his family, and to thank him for everything he has done for public safety.

I would like to thank the Board, too, for the continued support and leadership as we close out a very successful year and plan to hit the ground running in 2021. This resolution that the Board has passed today will ensure that we will continue to upgrade and operate a 5G ready core without any delay, and I thank the Board and the entire team at the FirstNet Authority for the opportunity to do so.

I too would like to congratulate Chief Lane for his recognition. It is very well deserved. He is a true leader in this field and a fantastic partner over the years with the FirstNet Authority. When Chief Carrizzo and I were able to make that call, those are the kind of calls you like to make to congratulate folks on just being a world-class leader in this space, so congratulations again to you, Chief Lane, on the terrific award.

As Chair Osterthaler said at the onset, this has been an incredibly challenging year for the entire nation to say the least, especially for our nation's first responders who are on the front lines of wildfires, hurricanes, civil unrest, the protests, ensuring that the community remains safe and that public safety remains safe, and of course COVID-19 pandemic.

We're proud and honored to support the incredibly important mission by delivering the only nationwide interoperable broadband network dedicated to public safety, and through our oversight role at the Authority, we're making sure that the FirstNet network delivers for public safety when and where they need it most, 24/7, 365.

We are also ensuring that the network evolves and improves along with the advances in technology. Just as public safety's mission evolves, the way that they respond evolves, we too have to provide solutions that evolve to meet these challenges.

We are also so pleased to have the network cross key milestones this year. At the beginning of 2020, we crossed over a million connections and we are excited to see the progress thereafter. The build out continues to be ahead of schedule, now with more than 80 percent complete in less than three years, and this is a terrific start, but that is what it is. It is a good start. We signed a 25-year contract for a reason, and we are not done. There is more to do to really realize the vision of the nationwide secure interoperable mobile broadband network and everything it can deliver for our first responders.

And so going forward, we at the FirstNet Authority will follow the playbook that has made us so successful over the last few years, by listening to public safety, developing our strategies based off their feedback, what they're telling us about their needs, and making strategic investments that fulfill public safety's operational needs and extract the most value out of our reinvestment dollars.

Now, 2020, while a challenge year, shows how it all comes together for the benefit of public safety. Even though we were virtual for most of the year, we were able to conduct nationwide outreach to public safety at all levels of government - federal, state, local, and most importantly tribal nations. Understanding the impact that COVID-19 has had on a variety of different communities, it's so vital for us to understand how we can prepare public safety for the challenges that they face and provide them solutions across the board.

We were able to implement and update our Roadmap, as Chairman Osterthaler referenced at the beginning, to reflect the current trends and developments that we are seeing in public safety and across industry. And, we were able to direct our investment dollars to where public safety needs them the most, by enhancing our coverage and expanding our deployable fleet and to be ready now for 5G, and we're excited about the capabilities that the 5G ecosystem is going to be able to provide public safety. The way that we engage with public safety, take their feedback, and integrate that into our organization is a proven system for success that

we will continue to follow in 2021 and beyond.

I would like to thank the Board again for their leadership and support, and I would also like to recognize the FirstNet Authority team, which makes this all happen. As many of us out there back in March when really the United States and the rest of the world shut down, we too were forced to go remote. And I would like to thank Jim Gwinn in particular, our Chief Information Officer (CIO) and his entire team at the organization, who really allowed for the FirstNet Authority to not skip a beat. We were ready. They prepared us for being able to work remotely, and when we were forced out of the office and we had to go to home, Jim and the CIO team really stepped up, and they deserve a lot of credit to keeping the operations and the FirstNet Authority going, so many thanks to Jim and the team.

It is also important to remember that public safety does not get this level of input, assurances, and oversight from anywhere else. The work that we do at FirstNet Authority is unique. There is no other network that has the type of PSAC input, the FirstNet Authority oversight, and frankly voice into the network that public safety gets with the FirstNet system, and that's one of the reasons why we take our stakeholder input so, so seriously here at FirstNet.

While we do not know when or where the next hurricane, wildfire, emergency, tornado, or event that public safety's going to have to run towards, we do know what public safety needs to be successful during those events. And, ultimately, we listen to the input that public safety provides us, and then we take the action to deliver for them. We did that in 2020, and we will continue to do that in 2021. And, I know I speak for the entire organization when I say how excited we are about the opportunity to lead, to provide public safety the best type of service, not only in terms of the network capabilities, but the best customer service they can experience going forward.

So, many, many thanks to the Board. Tip, thank you so much. Appreciate the time today. Thank you to the entire FirstNet team, to Lisa, to Jeff, the entire FirstNet leadership. It is an amazing group of people. I think we have got the best job in the federal government, and I really look forward to the challenges and the rewards for all our work in 2021. Thank you, Tip.

Tip Osterthaler:

Thank you, Ed. Thank you for your strong leadership on this project during the last very trying year. I think I remember the Board appreciates that you had to deal with an awful lot of different things that no one could have anticipated at the beginning of 2020, that you have done that very competently and very gracefully. Thank you so much for your

leadership. We now are at the end of our agenda.

Thank you to all who have participated once again. We are prepared to entertain a motion for adjournment.

David Zolet: Mr. Chairman, Dave Zolet, offering motion to adjourn.

Tip Osterthaler: Mr. Zolet, thank you very much. Is there a second?

Welton Chase: Welton Chase. I second the motion to adjourn.

Tip Osterthaler: Got a second from Welton Chase. All in favor, please say "aye."

[Group]: Aye.

Tip Osterthaler: All opposed, say "nay."

Are there any abstentions?

Hearing none, thanks once again for everyone who participated today on the call-in and on the video, and the meeting is now adjourned.