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## NWX-DOC-NTIA-OTIA

Moderator: Elaine Sloan July 17, 2019 1:00 pm

Coordinator:	Welcome and thank you for standing by. At this time all participants are in a listen-only mode for the duration of today's conference. Today's call is being recorded. If you have any objections, you may disconnect at this time. I would now like to turn the call over to Scott Woods. Sir you may begin.
Scott Woods:	Thank you very much operator. Good afternoon everyone. Thank you for joining us today for Broadband USA's monthly webinar on broadband topics and issues of interest to the public.
	Again, my name is Scott Woods. I manage BroadbandUSA's Technical Assistance Program and will be moderating today's webinar.
	As we all know, broadband is critical to the economic development and vitality of communities across the United States. Given its importance, state, local and community leaders are constantly exploring how to expand the

local and community leaders are constantly exploring how to expand the availability, utilization and adoption of robust, high quality and affordable broadband services in their communities to now include public safety communications. Accordingly, today's webinar will focus on the First Responder Network Authority also known as FirstNet which was authorized by Congress in 2012 to develop, build and operate a nationwide broadband communications network to equip first responders with the communications tools needed to save lives and protect our communities.

Our speakers will provide an update on the status of the nationwide deployment of FirstNet as well as provide key insights from the initial first responder users.

Our speakers today are Dave Buchanan, Executive Director of Public Safety Advocacy with the First Responder Network Authority. We have Doug Clark, the Assistant Vice President the FirstNet Program for AT&T's Public Safety Solutions, and Chief Chris Denney, who's the Division Chief for the Southern Platte Fire Protection District in Kansas City, Missouri.

Before we begin, I would like to review the protocols and logistics for today's webinar. First, we will open up the webinar for questions after the completion of the presentations. Please use the Question box on the right-hand side of your screen to submit your questions or comments.

Second, the presentations along with the transcript and recording of today's session will be available on the BroadbandUSA website within seven days of the webinar under the Events at https://broadbandusa.ntia.doc.gov/past-events at Archives tab.

Finally, please visit our Broadband USA Web site for useful information about our technical assistance program including useful guides, products, publications and other tools that can assist you with the planning, funding and implementation of your broadband project. Recent additions to our site include information on permitting, an updated Federal Funding Guide and the American Broadband Initiatives Milestone report.

As we begin our first speakers representing FirstNet and AT&T are Dave Buchanan and Doug Clark. Dave Buchanan serves as Executive Director of FirstNet's Public Safety Advocacy Division. He's responsible for leading the team that engages first responders and public safety agencies on their operational needs for the FirstNet broadband network.

Mr. Buchanan first joined FirstNet in 2013. And has been working on national public safety programs and policies in both the legislative and executive branch for more than 20 years.

Doug Clark is an Assistant Vice President AT&T for Public Safety Solutions. And leads FirstNet's state outreach and consultation. He's responsible for a team that engages with districts, states and territories on specific public safety and first responder needs.

His special focus areas include LMR and LTE interoperability, mobile data communications, deployable technology and mobile security. Doug has 16 years of telecommunications experience including business development, consulting and sales leadership roles at AT&T.

Please welcome Dave Buchanan and Doug Clark.

Dave Buchanan: Thank you Scott and thanks for having us on the webinar today. Really appreciate the opportunity to address the team today on what we're doing at FirstNet, and where we're going, and the work we're doing. As you can see here on the slide, our work today is really four different things. We're going to talk to you about the history of FirstNet, our partnership and strategy going forward. Doug's going to walk you through the specificity of the network, what you can expect to see in the FirstNet network and the developments in this technology.

We're then going to work together to walk you through a number of success stories and use cases from the field, reports from the field. So that you all can see how first responders are using this wireless, dedicated broadband network today, dedicated to public safety.

And then we'll closeout our section before we turn it over to Chief Denney to talk how we're engaging public safety and why that's an important part of the process going forward.

So on the next slide I want to take a minute just to talk you through the history of FirstNet. I think many of you may be aware, FirstNet was first conceived out of the 9-11 report. When use cases and stories came out of 9-11 how police departments and fire departments couldn't talk to each other, the 9-11 Commission directed that Congress fund a solution to solve the communications gaps between public safety agencies.

And it took all of almost a decade before Congress and the Administration could settle on the path forward in creating the First Responder Network Authority in 2012. We worked in the early part of this decade.

Once FirstNet was stood up, I started in 2013, was involved in the initial outreach and consultation that we did to public safety in 2012, 2013, 2014,

2015 to develop the request for proposal that ultimately led to our partnership with AT&T. And we're going to talk about that more in a second.

We also were engaged in our consultation and engagement with states in 2016 and 2017. To develop state plans that led to the governors opting in to allow the network to be built out by FirstNet in each of the 56 states, territories and District of Columbia.

And now we're in the operational phase of the network. And you're going to hear Doug describe how far we've come along in deploying the network nationwide, where we are with it, what we're doing. And you'll hear me describe in just a few slides our role in the public side of the public-private partnership to advance the network going forward.

On the next slide, I want just to illustrate the unique public-private partnership we have. We selected AT&T as our private sector partner after we developed that RFP with public safety's input. After release of that RFP and had a competition, AT&T was selected as our partner.

And their role is to develop, deploy the nationwide network, the core network, the radioactive network to provide security, cybersecurity, mission critical services, applications and device ecosystem for public safety. Really run the network.

Our job and the public side of the public-private partnership, the Federal Government side, is to not only oversee that contract we have with AT&T, ensure they're doing all the things that they said they'd do in the contract and then meet all the promises we made in the 56 state plans. But also provide advocacy for public safety as we go forward in the deployment of the network to ensure that the network continues to be deployed, evolve, advance, invested in in the ways that meet public safety's needs.

Two I think really important aspects of the public-private partnership is we didn't create a static network. It isn't just something we created once and there you have it like it's the interstate highway system. It's an evolving network that will continually expand, grow, improve and evolve to meet the changing technological and communication needs of public safety.

And we have billions of dollars, literally over \$15 billion coming back into the network. Reinvestment dollars into this network so that we can continue to meet those needs. So I think it's an important partnership. It's a unique partnership.

It allows AT&T to bring their strengths of a Fortune 10 company, as a leading provider of wireless services to first responders. And allows the government, the Federal Government, to play our unique role, overseeing that contract. And making sure that the public mission of public safety network is met.

On the next slide, I want to talk about just at the highest level before Doug in a few minutes gets into some of the details, some of the key attributes that makes this a differentiated experience. What makes FirstNet different than let's say AT&T commercial network or any of the other three leading wireless carriers, cell carries that probably many of you are subscribed to?

First of all it's dedicated to public safety. Public safety is who this network is for. It's who it was built for. It was built with their needs and requirements baked into the partnership, baked into the deployment plan. And now baked into the services that are being offered. We pledged that it would be a modernized network with innovation surrounding the applications that would be on the network. Ensuring that, for example, firefighters have apps that are specialized for their job in delivering fire services.

There are telemedicine apps available to paramedics as paramedics use FirstNet going forward. And that our nation's law enforcement officers have specialized apps and devices that help them do their unique jobs even better.

It's a prioritized network. And that's first responders, police, fire, EMS, emergency communications employees, and emergency managers all are prioritized ahead of everybody else on the network to make sure their data throughputs and their calls receive top priority and top consideration as the network handles that data across the network.

This was met to solve the issue that probably many of you have experienced, I just experienced this past weekend, when you're in a crowded stadium or in a place where there's heavy congestion and calls can't go through or messages can't be sent. This network alleviates that problem.

Ensures that first responders have their own dedicated network so that their network allows them to perform their mission critical responsibilities, voice, data, video, messaging, mapping, situation awareness. All of that is able to happen seamlessly and prioritized.

And finally specialized. This network is specialized above what you find in a commercial network. So you're going to hear Doug talk about the deployable network that allows AT&T to bring the network in an expedited fashion when first responders need it the most.

Specialized for them in terms of the services and customer service that's available. And it's specialized in the cybersecurity and the security that's available under the network.

So all of these attributes again, we heard from public safety in 2012 through 2016 that these are the kinds of attributes they're looking for in their network. We're fortunate to find a partner that could help us deploy a network that meets those needs. And we're off, more than off and running in delivering that network to public safety.

On the next slide you'll see that we're not just satisfied though with the network we deployed with AT&T in 2017 or 2018. We're working very hard to build a roadmap on the government side of the public-private partnership, a roadmap for the future.

So we can continue to evolve, enhance, improve and invest in the network going forward to ensure that we're meeting the evolving and changing needs of public safety as they continue to adopt wireless broadband and adopt FirstNet to help them do their jobs even better.

The roadmap includes a technology framework. So we're working with public safety and industry to understand -- and our partner -- to understand where the technology is going to evolve and where it needs to evolve. We're going to spend a significant amount of time getting public safety's feedback to understand their needs. And understand how to operationalize those technologies.

Continue to do analysis from across industry and drivers from our partner. Make sure we understand where the private sector, even without FirstNet would be going. So we're not duplicating investments that are already going to be made and we're investing in places where there are either gaps or opportunities.

And then we're going to publish those opportunities and priorities to guide our future investment. Guide that \$15 billion that's going to go back out the door to reinvestment network.

And at that, first responders will know that this network then reflects their priorities. And that they know that the roadmap we're producing represents their needs.

On the next slide you see the steps. You see the topic areas that we are focusing on in the roadmap. The core network which is the backbone that allows us to run the prioritization and future evolutions of the network.

Coverage and capacity are a priority public safety has identified. Again, you know Doug is going to talk more about this in a few minutes.

The respective deployables and how we bring the network to where public safety does their jobs not just to places where it's commercially viable. And then these four other areas which are critically important helping public safety really adopt FirstNet as a mission critical tool and device.

It's improved situational awareness like location-based services, sensors, wearables, and mapping, voice communications. We heard Doug talk about mission critical push-to-talk and voice communications between first responders. Secure information exchange or data management. The important information that needs to transmit across the wireless broadband network. And then user experience.

Making sure the network continues to be specialized. And we've got applications, devices and hardware and software that meets the ruggedized and specialized way that first responders do their jobs.

We need smartphones that firefighters can operate with a mask on and gloves on. You need smart devices that police officers can operate hands-free. And you need smart devices that paramedics can use to transmit sensitive, personal medical information to emergency rooms to help them do their jobs.

These are all critical components we'll be building into the future evolution of the network to continue to make it even more valuable for first responders.

On the next slide you'll see the process we're using for doing this. And I mention this because this is a really important part of the public-private partnership. It's how we bring public safety into the network. And I'm just going to take a minute on this because I'm going to hit it again at the end.

So we spent the first half of the year at the top left half of this page understanding, researching, interviewing, focus grouping and surveying public safety to really understand the top six to ten issues, and priorities and domains we need to focus on.

We then produced this roadmap we've been engaging public safety on. And on the right-hand side, we're now in this iterative feedback loop with public safety to make sure we've got these issues right. And make sure we fully understand the future operational needs under these topics. So as we deploy the network and manage the network with AT&T and ultimately make future investment decisions about how to evolve and enhance the network, we're doing it in a way that meets public safety's needs. I can't emphasize it enough. Our key and really only constituency group is public safety.

There's a reason for this network. There's a genesis for this network. There's fathers and mothers of this network and there's a reason why we're going to continue to push this network forward in a way that meets their needs.

So on the next slide just to wrap up my section before I turn it over to Doug, these are three things we're really focused on at the First Responder Network Authority this year. Engaging public safety to capture their needs.

Producing a roadmap which we hope to have published later this summer. And then ultimately making our first investment decisions in 2019 to begin what amounts to the next 23 years in this 25-year contract we have with AT&T to make investments to meet public safety's needs.

That's the key activities we're engaged in. It's why we are - what's the key role we have in the partnership. And it's what we're really focused on.

So with that, we'll go to the next slide and we'll turn it over to Doug to talk about network development and technology, Doug.

Doug Clark: Okay thanks Dave. And good afternoon and good morning to everyone on the call. A real honor to be able to talk today about some of the progress that's been made for the FirstNet network, the program and the buildout.

If we go to the next slide. So as of May 2019 so not too long ago, AT&T announced that we had over 600,000 FirstNet connections on the network. Which equated to roughly 7250 public safety agencies that are signed up for FirstNet service.

That's significant growth since the end of the opt-in period at 2018. And we continue to see velocity as public safety entities and organizations recognize how that this isn't a traditional commercial network experience. And it's built based on the needs of public safety.

I really commend the First Responder Network Authority for taking requirements for public safety and obviously based on the history that Dave provided, you know, issued an RFP that allowed AT&T to work together with them on the public-private partnership to buildout this program.

As part of the public-private partnership, there's a variety of milestones as Dave alluded to that AT&T is committed to meet. And one of those milestones is deployable network assets that are dedicated to public safety and it's a primary FirstNet - and it's putting FirstNet subscribers on the FirstNet network.

And so, you know, I'm proud to announce that, you know, that earlier last year and early this year we have 75 deployable network assets available including three flying cell-on-wings. I always messed it up with cell-on-wheels but it stands for cell-on-wings. It's a new variant to COW.

And we deployed these assets in 2018 over 100 plus times. And we have a significant, a very robust program that comes with these assets called the Response Operations Program. And essentially as a first responder agency

you have the ability to request one of these assets to be able to support your communications needs.

When you open up, you know, the request, we work internally at AT&T with our different organizations to be able to assess the situation in that particular area and identify what the appropriate type of resolution or asset needs to be deployed. And this program has worked very well.

We deployed it in a variety of locations and we'll probably talk a little bit about that, Dave and I will, on some of the different engagements and use cases.

Recently AT&T was recognized that the FirstNet network is 25% faster than any other commercial network that's out there. And that's through Speed Test. You know, we've been investing in overlaying the existing infrastructure of AT&T's network within 14 from the public safety spectrum.

And I think what's important to recognize is that as part of the public-private partnership, AT&T provided access to all the spectrum that's part of our network for the First Network. But we've deployed over 600 plus markets. A market is defined as a service area across the United States and the territories with Band 14 spectrum.

And we're at 50% to our - with our coverage completion of Band 14. And actually we're well ahead of schedule. And we expect to increment up even faster, you know, based on our deadline of when we need to be deployed with Band 14 across the network to meet our milestones.

That being said, in 2018, we actually we expanded the public safety broadband network coverage by over 50,000 square miles. Next slide.

So this kind of gets into the deployables a little bit. And so, you know, as Dave was talking a little bit about the deployable program out there, you know, FirstNet solution includes access to not only hundreds of existing AT&T deployable resources, plus access to an additional 72 dedicated personal deployables and now it's 75 with those three flying cell-on-wings.

So FirstNet customers can request these to support operational requirements when there's no terrestrial coverage in an emergency situation or a planned event by calling FirstNet Support. The cell-on-wings were added to the fleet in March of 2019.

Each one of the cell-on-wings is comprised of two tethered drones in a trailer for transport. It's equipped with a satellite dish and fiber connections. It's capable of withstanding light rain and wind speeds of up to 25 miles per hour.

And it's really able to reach heights of up to 400 feet making it very ideal for situations like a wildfire and mountain rescue missions where the terrain, you know, previously made it difficult to maintain connectivity. Or to bring in a full code cell on light truck.

And so what we've done is we've started to diversify our deployable lineup to look at how we meet the needs of the situation that public safety finds them in where they need coverage. You know, the great news about these deployables, they've been used not only in situations where logistics, the response coordination is essential as some of the hurricanes, flooding and wildfires.

But we also use these deployables when there are search-and-rescue operations as well as missing children searches or, you know, just evidentiary searches for cold cases that may be in remote areas where the terrain today doesn't have regular terrestrial coverage.

So they're very multifaceted in the way that they're utilized. But, you know, it's all part of the FirstNet program. But on top of that, AT&T brings, you know, hundreds of additional assets to use to respond and maintain the network.

Public safety entities can also take advantage of deployables. And if you need access to a deployable that you want to own and maintain yourself, public safety agencies are able to take advantage of that through the FirstNet program.

And I think one thing that we probably don't highlight enough but I think it's very important and we'll kind of get a little bit into the next slide here in a second is we also know that the deployables are able to be utilized when there's gaps in terrestrial coverage.

But the FirstNet program through AT&T also offers satellite services. So satellite phones, beacon routers. And we have specialized services to be able to outfit vehicles so that you're able to take advantage of satellite service if you find yourself always wanting to have backup connectivity or operating in an area that needs satellite communications. Go to the next slide.

So the FirstNet device ecosystem, so I think, you know, very early on in 2018, I think there was one device out there that was in AT&T's portfolio that was - that had the N14 integrated into it. And so, you know, Dave talked a little bit about the delivery milestones and one of them was the FirstNet core.

And with the FirstNet core comes capabilities that don't exist on commercial networks, preemption. It has a special SIM card that has the FirstNet logo on it. And that SIM card gives you access to the FirstNet core.

So what we've had to do is grow our device ecosystem to support that SIM card as well as support the public safety spec through the Band Class 14 spectrum in our portfolio and in our lineup. So as of today, there's over 100 plus devices that support the FirstNet, the FirstNet SIM.

And in that there's a significant amount of devices that support Band Class 14 including specialized devices that are built for very rugged and durable use cases and environments. However, just the normal day-to-day operating platforms that you may see with android or OIS have Band Class 14 capability in those devices as well.

And I think what's really important as you start to look at your device adoption and device adoption strategy is to recognize that the latest devices have the latest technology in them.

And because of that, with the Band Class 14 spectrum that's out there and how much of it that's been deployed, it will be important that you have a device that has that frequency in it. So that you can see and take advantage of that spectrum that's been deployed.

So it's always important as you look at the, you know, shifting onto the FirstNet Network or you're in the upgrade cycle to make sure that you get the latest device. And to make sure that you give access to the best coverage experience and take advantage of all the frequency that's on the FirstNet network. Next slide. So the app catalog, so I think what's important about the app catalog as one of the deliverables is the application ecosystem is one of the greatest opportunities for the FirstNet program.

Such that, you know, being able to get applications in the hands of our first responders that enable their situational awareness, enable them to communicate more efficiently, effectively to not only other first responders but those that support the mission of first responders. And create an environment where information could be easily shared and communications can take place.

But with that, you have to step back and you have to say, how do we make sure that the applications that first responders can get access to are definitely relevant to their mission? Have been vetted to be known to have a high level of security on the application.

And that's really where the application ecosystem app catalog come into play for FirstNet. Each one of the applications in the app catalog has to go through a level of governance to be able to be to have access into the app catalog.

And the app catalog can be accessed through a web portal that you're provided as part of the FirstNet program that allows you to maintain and control your particular deployment. But also gives you access to additional tools like applications.

And you can go into this app catalog and be able to identify what applications may be relevant to your agency, to your department. And then you can download those applications. If you use a mobile device management software, you can pushout those applications to specific users. And, you know, I think another area you look at inside of the Local Control portal that the app catalog sits in is definitely the ability to have network status information. But also be able to perform a capability that you can uplift users on the network that may not be in a primary agency such as police, fire, EMS, emergency management, trauma center doctors, or PCaps.

But actually uplift users that may be in extended primary user groups. And uplift them to have the same status on the network as a primary user. So that they can continue to communicate from a logistics perspective and have that preemption capability that the First Responder network provides.

And the preemption capability is literally grabbing that radio frequency signal and giving you connectivity from the services you need access to during periods of congestion on the First Net network. To be able to communicate not only with other first responder agencies but those are also that you rely on during large scale events. Go to the next slide.

And so, you know, the network, as you can imagine, and all the assets associated to it, security is one of the number one elements that's important to this infrastructure and to the operations of it on a day-to-day. So what we've turned up is a dedicated security network operations center where we are monitoring all the assets on the network and looking for anomalies.

We coordinate tightly with AT&T's Global Network Operations Center. And AT&T has a significant amount of expertise in monitoring security as well as network operations. Which, you know, I think puts us in a very different spot globally compared to other carriers out there.

And the great thing about the FirstNet program is you're taking advantage of that expertise that AT&T has in the market and all of the assets that AT&T

has for security monitoring of the FirstNet network. And really what this provides is a complete end-to-end view, 24-7, 365 days a year as to the traffic, any traffic anomalies that are on the network and any threats that may appear.

But even more so because we have such a deep expertise on security monitoring, you know, we're protecting the network before those threats even get to the network asset by having just broad, global awareness as to the threats that are occurring out there.

So I think this is important. So as you start to recognize that the national public safety broadband network, FirstNet, is different than the traditional wireless carrier that you maybe are utilizing today, one of the questions that always comes up is hey, is it affordable?

This provides some very unique capabilities that I've been asking for. And, you know, can I procure this off of existing contractual relationships that my city, county, state utilizes? So what we've done is we've made the service plans affordable.

And they're within range to what you pay today on your existing cellular services which helps ease adoption as well as the device cost are in range with what, you know, you have today in the cellular industry. The service plans themselves, there's unlimited plans.

There's pool plans all depending on your particular use case. You know, there's smartphone plans. There's data only plans. There's machine-to-machine options for those of you that are taking advantage of OIT.

And what I think is very important also is there's agency paid plans and then there's individual subscriber paid plan. And so let's talk about subscriber paid. What subscriber paid is the recognition through the feedback that was provided that volunteers, you know, special volunteer organizations as well as individuals in primary agencies may need access to the FirstNet network on their personal devices as well.

And so what AT&T has done is we've setup subscriber paid plans by which through authentication of your credentials that you're able to join the FirstNet network to take advantage of the capabilities that we talked about on your personal phone.

And when it comes to agency plans, you know, there's multiple contract options that are out there, NAS-PO, NPP.gov, GSA Schedule 70. And then there's states and counties and cities that have their own custom government contracts. So all of those contract vehicles are available for FirstNet as well.

And all of that is supported by - and all of this is supported by a 24 by 7 dedicated customer care line that understands the needs of public safety. It's a single phone number.

There are chat options and email options available as well. US-based public safety specific representatives that understand the needs of public safety. And we do offer training on how to utilize the tools associated with the Local Control portal for customer support as well.

So I think, next slide. So that's it. So I'm going to hand back to Dave. I think Dave, you and I are going to talk to this section on some of the different experiences that we've had with adoption. Dave Buchanan: Yes, thanks Doug. And we're going to move quickly through this because I want to make sure we have plenty of time to hear from Chief Denney. And then we've got time for questions.

So on the next slide with the four pictures, I want to hit on two of them here. And then we'll move to the other slide and Doug I'll let you pick up from there.

But a couple of things I wanted to point out here. You heard me describe just sort of how we got here with FirstNet and what we're focused on. You heard Doug describe the specific network. Now we're going a talk a little bit about what agencies are actually doing with it.

On the top left you see in the District of Columbia just two weeks ago on July 4, the Metropolitan Police Department which is the police department for the District of Columbia, the Metropolitan Fire Department which is the fire department in the District of Columbia as well as the US Park police, all using FirstNet at the Fourth of July festivities.

Three hundred or four hundred thousand people on the mall all for a concentrated time period. At a time when commercial customers weren't able to use their phones or had degradated services on the commercial network, those first responders because of the deployable the SAC code that Doug described were able to make all the communications that they needed to make in order to keep people safe on the mall that day.

In the bottom left-hand corner, you see the Boston Marathon. We have been embedded with the Boston Fire Department and Police Department for the last three years helping them plan for the network and plan for use of the network during the million-person spectacle that is the Boston Marathon, the third Monday every April.

And they went from testing devices in 2017 to becoming partial customers in 2018 and then full-blown, full use of FirstNet for same purposes use of FirstNet at that specialized event.

Top right-hand corner you see a storm in Connecticut where deployables can also be rolled in to restore coverage when Mother Nature has taken down commercial networks. And you'll see in the bottom right-hand corner, small events like Orem, Utah and their Summer Fest where we're able to plan with the public safety agency for them to use the network for that specialized, small town event.

On the next slide and then Doug I'm going to hand it to you to make some comments about this. We were able to bring the network to the Terre Haute airshow last summer, 40,000 people in Terre Haute, Indiana, Doug's home state.

Able to provide supplemental coverage and provide a bolstered network for the first responders who were securing that site for federal, state and local public safety. Great success there and a good example of use of the network at a planned event.

Doug, anything you wanted to say about these DC, Boston, Connecticut or Terre Haute or anything else that shows an example of FirstNet?

Doug Clark: Yes, I think one of the things that we're starting to see too is that emergency management agencies are starting to adopt FirstNet with IOT asset tracking type solutions, you know, from a logistics perspective on inventory and where items may be for, you know, coordination, and deployment, and preparation for disasters.

We're seeing, you know, fire and EMS adopt solutions to be able to, you know, reduce the time it takes emergency crews to prepare a stroke patient for a CT scan, you know. And create awareness in transit of the patient status with the hospital, you know, and with the trauma center doctors.

There's a variety of different applications that FirstNet is being utilized for. And one of the ones that, you know, you're highlighting Dave is definitely one of the most important ones and that's providing that connectivity.

And then, you know, on top of that connectivity comes all the different situational awareness applications that can be taken advantage of. But yes, let's get to Chris and let's have Chris talk a little bit about what he's doing.

Dave Buchanan: Yes. But just to wrap up for our section, the next slide is just how important our engagement has been to public safety. And our commitment to public safety in this next slide. Understand your needs, collaborate with public safety and transform public safety.

> So with that, I'll turn it over to Chris Denney to take the last section here, Chief Denney.

Chief Chris Denney: Well first of all thank you. Thank you to FirstNet Authority and thank you to AT&T as well as all those in attendance for this opportunity to speak a little bit about how Southern Platte Fire is using FirstNet. First of all, this is a brief picture of our fire district as a whole. We're in the southern portion of Platte County Missouri which is a Kansas City metropolitan county. The region is made up of nine counties.

If you can tell in the picture, to the northeast of our district, we are very close to the Kansas City International airport. So we help supplement that with our resources. And we border with Leavenworth, Kansas, Kansas City, Kansas, Kansas City, Missouri, Riverside and then a couple of fire districts to our north which are Central Platte and West Platte. So we'll go to the next slide.

Now these are the three topics that I'm speaking about with regards to FirstNet and how we're using it. First of all, push-to-talk. We as an organization are using push-to-talk district wide. Every single one of our response units carries a push-to-talk device, a FirstNet device, a sonim rugged device.

Used in everyday operations so everybody gets used to it, everybody's familiar with it. And within that we have the ability to create talk groups for special circumstances. But we have every day talk groups should we need to talk to groups as a whole.

I'm assuming everybody remembers Nextel or has heard of Nextel. This push-to-talk initiative is a very close depiction of that but with more advanced features for today's age. Local control, Local Control specifically is the onestop shop that we use to control everything that we need to control within our FirstNet account.

And what that includes is user management, app management and we - And if you have a large fleet of devices, you have the MDM integration as well as being able to control services and billing and get reports and everything of that nature. There's a specific tool within Local Control called the Corporate Admin tool. And within that Corporate Admin tool that is where the control of your pushto-talk users occurs as well as your push-to-talk talk groups.

Another area within the Corporate Admin tool is ability for LMR integration or land-mobile-radio integration control. And I'll speak to that towards the end.

Land-mobile integration is your integration from your push-to-talk device to your land-mobile radios. We here in the Kansas City region run a P25 system. It's a 800 megahertz trunk system. We are in the very beginning stages of doing an LMR integration from our push-to-talk system.

And that in a brief nutshell in all honesty, is really how we are using FirstNet from within our fire districts. I would encourage anybody to reach out if you want to see live demos of what we're using. Various aspects that we're using or the dispatch console which we're using for larger events, emergency disasters

And if anybody wants to see our implementation and how we're using it, I am more than happy to do a demo in the future. But I know we're running short for time. And I know we want to get to a bunch of questions.

So I, at this point, I'd be happy to turn it back over to Scott.

Scott Woods: All right, thank you Chief Denney, I really appreciate it.

We will now open up the webinar for questions from the attendees. If you have not already done so, please type your questions or comments into the Question box on the right-hand side of the screen.

Right now, Aimee, my colleague at BroadbandUSA, will facilitate the question and answer session and I will turn it over to Aimee.

Aimee Meacham: Thank you Scott. So I do have a couple initial questions that I'd like to start with.

One is, how can agencies find out if FirstNet is in their area? And how can they subscribe?

Doug Clark: I'll take that. So this is Doug Clark. So if you're not familiar with who your FirstNet contact is in my organization or an individual from AT&T that services your particular geography, you can always go to FirstNet.com. And there is an ability to click on a link to fill out for more information.

> And that will end up going to my team. And then we will reach out and follow up with you on your particular agency's needs. And make recommendations on, you know, what type of FirstNet plans or services for your particular agency you can adopt.

And in that discussion as well, we can consult on coverage in your area so that you have a full understanding of what your particular geography has for coverage. So we can have a better understanding of your operation so, you know, we make the right recommendation. Aimee Meacham: Great, thank you. One other question, actually a couple of questions came up with respect to the slide, Doug, that I think it was to my next question which is how is FirstNet different from commercial wireless?

And I think one of the statistics that you had up was that FirstNet is 25% faster. And there was a footnote. Can you talk to both pieces?

Doug Clark: Yes. So, you know, what I always say is that, you know, the statistic is that the FirstNet network is 25% faster as measured by - let me get into the footnote here. The FirstNet network is 25% faster. And that's according to results of tests taken with Speed Test.

So I think that's really what the footnote is about is Speed Test is an interactive Web site that lets you test your internet connection bandwidth. So they did a bunch of testing of all the different networks. And that's what came back from a results perspective.

But I wouldn't limit the perspective on FirstNet as speed so how it's different. You know, there's a lot of different services that are available through the FirstNet program. And I always refer to it as a program or platform versus just a network because it provides a lot of different capabilities.

And I think one of the critical key capabilities is that it provides access to the network during periods of congestion. Where on traditional commercial wireless networks you may not have that type of access. And that's really surrounding the preemption feature that's built into the FirstNet network.

I think another big aspect to some of the services is that amount of local control that you get over your fleet that the Chief was talking about in your

deployment and also the deployable program. And let's not forget, you know, that the FirstNet network has Band 14 spectrum integrated into it.

That's a very special spectrum. It has some different capabilities and is managed a little bit differently. So I think, you know, when you start to look at traditional commercial networks compared to the FirstNet network there's a significant amount of differences other than just looking at it from a speed and bandwidth perspective.

You know, I think availability and reliability are two major things that we heard are very important to public safety. And that's really what the FirstNet network and program are built around.

- Aimee Meacham: Great, thank you. Since you mentioned it too, can you talk a little bit more about how priority and preemption work? And then I have questions for other folks too.
- Doug Clark: Yes. So preemption is so first off, preemption, if you're on the FirstNet core you have a FirstNet SIM. You know, preemption is always on service. It doesn't require a special configuration at the time that you want to use it.
  Because we know that in the lines of work that everyone conducts that, you know, you're not predicting large scale events; they happen.

And so preemption is always on. And so what preemption is doing is it's grabbing that frequency above and beyond other consumer users out there and giving public safety access to that supply and provide communications.

If the communications are in the network, the voice and data communications are prioritized across the network as well.

Aimee Meacham: Thank you. I was hoping Chief Denney could talk a little bit more about a couple of things. One is if you could talk about the Admin tool that's located in Local Control? And two, if anything that you're learning from FirstNet and from the data?

I know that you're doing some additional work collecting data on public safety and fire. And how, if at all, does like you're looking at real-time fire data analytics, how FirstNet might fit into that?

Chief Chris Denney: Sure. So from the first part, for the Corporate Admin tool I'm assuming they're asking about, the Corporate Admin tool is really where all the work is done for from a push-to-talk perspective. So you have User A that needs these - all these other users within their device. Well it's all done from within the Corporate Admin tool as well as talk group assignments.

> So if you need five of your command staff to have these certain talk groups and then all of your line personnel to have a different talk group that is essentially where everything is happening is within the Corporate Admin tool.

And then from FirstNet's perspective on data analytics, the nice thing about FirstNet is it's a priority and preemption service. So when the disaster happens, you can count on it to work.

It works separately from our data analytics perspective. But we are able to have a constant up-time network in all matters. So we're even taking advantage of FirstNet's Night Hawk LTE modem.

And making it a backup to our primary internet for our entire organization. That's currently in the process of being deployed as well. Hopefully that answers that question.

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Aimee Meacham: I think so, thank you. So another question that we have, this is back to AT&T and FirstNet so to Dave and Doug, is really about the mobile deployments.

And whether you have, if there's an emergency where you need to setup, you know, a COW or you need to send, you know, one of the aerial unmanned aerial vehicles into an area. Are there actually phones that can deploy with that or devices that can deploy with that may not already exist within in an area?

Doug Clark: Yes. So we have different ways to be able to support our first responders that are in a particular situation or impact that may not be part of the FirstNet network now. To be able to get them access to the devices for communications associated with a deployable network asset.

I think that's what you're asking right?

Aimee Meacham: Yes. Yes it is. And like we just got a ton of questions in the last couple of minutes. So are there significant burdens for tribal communities who are trying to access FirstNet and the public safety network? That's a recent question that came in.

Dave Buchanan: Doug, I can take a stab at that and you can come in if you want to fill anything else in.

I would say we have a dedicated team dedicated to working with tribes to make sure that they're connected to the FirstNet opportunity. We're very fortunate, we were able to recruit and hire enrolled members of tribes who have public safety communications expertise. We're very fortunate to have hired Margaret Gutierrez and Adam Geisler who represent us in Indian country. If you are calling from Indian country or your tribal nation and want to learn about FirstNet from a government perspective, we're happy to work with you. And contact me at the end of this webinar and I'll connect you to them.

And I'd say from -- and I'll let Doug jump in from an adoption perspective -you know, the tribal public safety agencies are just as important if not more so because of the sensitive lands that they are responsible and the unique lands they're responsible for providing public safety to as any other customer, state, federal, local.

- Doug Clark:I agree. And our organizations are tightly connected. So if you contact Daveand then we can move into discussions that we need to have.
- Aimee Meacham: Great, thank you. I think we have time for a couple more questions. Just to remind folks that a copy of the presentation will be available on the Web site in about a week. So please check back for that. And we will likely send the link out to everyone.

So one of the questions that we got was, how does one go about becoming a partner? Meaning, if you're an app developer or if you're making a device, let's say a backpack or something else that would be deployed or possibly be deployed in an emergency, how do they work with FirstNet and AT&T on that?

Doug Clark: I can take that. So, you know, we have a business development type of resource associated to different applications, devices. And so, I'm pretty sure we're publishing contact information.

So this is Doug Clark. You can get in touch with me and I can help facilitate an introduction so that you can understand the process.

Aimee Meacham: Thanks Doug. And then we had another question about sort of the difference between the current network and Band 14 which should have better inbuilding coverage. Can you talk a little bit about how that might work? And how the Band 14 rollout is going with respect to that?

Doug Clark: Yes. So Dave, I'll take that. So I think one of the perspectives is there's a variety of different frequencies that have been licensed by the FCC to AT&T. And AT&T is allowed to use the Band 14 spectrum because technically that is the spectrum of public safety. So we're allowed to use it as part of the network buildout.

Band 14 spectrum and frequency is at a lower frequency. So it has a better - it has better propagation characteristics. So it tends to penetrate inside of buildings and through walls better than some of the other licensed frequency you may see with commercial wireless networks that's out there as well.

Other carriers including AT&T may have some 700 MHz assets as well, spectrum assets. But Band 14, you know, is a lower frequency as well so it does penetrate and provide better coverage. And we're allowed to operate, you know, with high powered UV and other items or other areas that are, you know, coming in the future on that Band 14 spectrum.

Aimee Meacham: Great, thank you. Well we still have a few more questions. But we are out of time. So we'll look to see what we can do offline. And I want to kick it back to Scott.

Scott Woods: Thank you Aimee and thank you to the attendees for the questions and for our speakers today. Please join us again on Wednesday, September 18 for our next webinar on the digital economy and measuring the economic impact of broadband. Thank you again to all of our speakers and to all of the attendees for joining us. As a reminder, as Aimee said, the presentations, transcripts and audio recording will be available on the BroadbandUSA website within seven days.

And then finally, BroadbandUSA is available for technical assistance to help expand broadband connectivity, promote digital inclusion and broadband adoption in your community. For more information, please email us at broadbandusantia.gov or visit our website for more information. Thank you all again and have a wonderful afternoon.

Coordinator: That concludes today's conference. Thank you for participating. You may disconnect at this time.

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