Brian Tegtmeyer: Hello, and welcome to the State of 911 Webinar series, hosted by the NHTSA National 911 program. My name is Brian Tegtmeyer and I will be your moderator for today's session.

Brian Tegtmeyer: This Webinar series is designed to provide useful information for the 911 stakeholder community about federal, state and local participation in advancing 911 technology and operations. It includes real experiences from leaders working to enhance roadway safety through the safe system approach

Brian Tegtmeyer: In today's session, we will begin with a discussion on the role of 911 in the safe system approach to roadway safety. Then we will hear a spotlight presentation on utilizing Waze data in 911 center operations. Following each of these presentations, we will have a couple minutes for live Q And A.

Brian Tegtmeyer: Today's webinar is being recorded and will be posted on 911.gov.

Brian Tegtmeyer: For more information on the state of 911 Webinars access to archived recordings or to learn more about NHTSA's National 911 program, please visit 911.gov.

Brian Tegtmeyer: Feedback or questions about the webinars can be sent to Nhtsa.national911@dot.gov.

Brian Tegtmeyer: This is a 911 program, we would like to remind participants about the docs and tools page of the 911.gov website. This page includes updated resources and improved access to policy documents, plans, reports, and other tools for stakeholders. We encourage submission of any content to be shared with the 911 community. Submissions can be made through the online submission form available on the docs and tools page, or by scanning the QR code.

Brian Tegtmeyer: Additionally, we encourage you to visit the 911 telecommunicator tree of life at 911treeoflife.org. By scanning the QR Code, you can share the name of a remarkable 911 telecommunicator who has inspired you and honor their contributions to the 911 community

Brian Tegtmeyer: For closed captioning hover at the bottom of the Zoom screen for meeting controls. Then click the CC button to start viewing the captioning. Please note that all participants' phone lines have been put in listen only mode. And this webinar is being recorded. To ask questions of our presenters, please use Zoom's Q and A feature located at the bottom of your screen. You may enter your questions at any time during the presentation.

Brian Tegtmeyer: These will be provided to the presenters, and addressed at the conclusion of the presentation. If there is not enough time, the questions will be answered and posted with the Webinar recording and presentation to 911.gov.

Brian Tegtmeyer: With that, I would like to introduce our 1st session and panelists. The role of 911 in the safe system approach. Today we have April Heinze,

Brian Tegtmeyer: VP. And Chief of operation of, Chief of 911 operations for the National Emergency Number Association; Ty Wooten, Director of Government Affairs, International Academies of Emergency Dispatch; and Rick Birt, Director of DC Highway Safety Office and the Governor's Highway Safety Association.

Brian Tegtmeyer: Thank you.

Brian Tegtmeyer: April, If you can go ahead.

April Heinze: I'm not seeing the slides. Sorry.

Brian Tegtmeyer: Oh.

Brian Tegtmeyer: We are on the 1st slide, The safe system approach.

April Heinze: Okay. I'm not sure why I'm not seeing the slide, so I'll just keep going. So 911 touches pretty much every aspect of the safe systems approach

April Heinze: from safer people. So let's talk about safer people a little bit. 911 receives calls on anything from a person walking down the side of the road on a major busy interstate, to a reckless driver, distracted driver, motorist assist along the side of the road, folks driving under the influence, etc.

April Heinze: So it that aspect the safer, safer people aspect

April Heinze: covers pretty much all of that. When it comes to safer roads,

April Heinze: The safer roads includes calls for debris, traffic hazards, lights out, broken down motorists, and many other things.

April Heinze: I'm sorry, Brian, but I'm not seeing the slide. So? And I got a note

April Heinze: going in. Okay, okay, thank you. Okay. So when it comes to safer speeds,

April Heinze: the safer speeds 911 is the hub of the 911 as 911 centers play the huge role, the biggest role in the enforcement of traffic and speed. So from receiving a call from somebody driving a hundred miles an hour, weaving in and out of traffic

April Heinze: to responding to Law Enforcement officers requesting assistance with running a plate,

April Heinze: calling in a traffic stop, and recording all of the activities of those different types of incidents

April Heinze: When it comes to safer vehicles, one of the things that 911 receives, we receive calls using automatic crash or advanced automatic crash notifications.

April Heinze: Those calls are received in many different ways. When we receive those calls, we can receive those calls from things and devices, from smartphones to smart devices, calling in on calling a 911 center on behalf of somebody who's been involved in an accident to the car itself calling the 911 center doing an assisted dial.

April Heinze: Also from telematics service providers. So there's any number of various different ways

that 911 receives those calls. Now, mind you, those types of calls are also somewhat complicated, because each and every one of those types of calls

April Heinze: are received slightly differently. So the 911 professional will have to determine different pieces of information from different types of calls that way.

April Heinze: In addition, there's also the post-crash care. So post-crash care really begins When that 911 call is placed. The 911

April Heinze: professional will have to identify the location, vehicle description, specific details of the incident, and each of those incidents are different. So they're going to be specific details for one thing, that isn't part of another thing. Also providing pre-arrival instructions.

April Heinze: So, next slide. 911 is

April Heinze: the first critical step in the life saving system, and that step starts with the 911 call.

April Heinze: Now, mind you, I just talked about all of these different things that 911 receives.

April Heinze: Well, there's also large volumes, especially on larger interstates. So if you receive a call on a, on a vehicle crash on an interstate number one will receive any number of calls. It can be any from one on a you know, in the middle of the night to 50, depending on how big the crash is, and how

April Heinze: many people are driving down that road at that given time.

April Heinze: It's also not limited to just crashes. Anything that somebody calls 911 on in a preventative way is something that 911 will receive a call on. We talked about motorist assist. We talked about various different types of debris in the road, etc.

April Heinze: Also, the various different types of situations, you know. There, you get calls for people from you know, there's something going on with the road itself. Maybe the the road is heaving in the middle of the summer. And it's caused a crash, or people are, are swerving to miss those types of things.

April Heinze: Okay, next slide.

April Heinze: And I believe it's Ty.

Ty Wooten: Thank you. April, you know, as we begin, and we look at

Ty Wooten: the emergency response that April described and how it affects

Ty Wooten: the safe systems approach. We have to take a look at all of the different emergency responses to crashes. Right? So we know that each year approximately 13 million motor vehicle crashes occur.

Ty Wooten: and we believe that somewhere around 6 million crashes out of those 13 million

Ty Wooten: law enforcement is dispatched to recognizing that some may have different aspects and, and different agencies may not send on every individual crash.

Ty Wooten: And we know also know that 911 dispatches about 1.5 million times each year to EMS and Fire for responses to those crashes. And when a crash happens,

Ty Wooten: we have a role in keeping the roadway safe

Ty Wooten: by preventing secondary crashes and other hazardous

Ty Wooten: conditions, not only for field responders, but other people in the public.

Ty Wooten: We also have an identification of an understanding that out of the 5,400 911 centers across the United States.

Ty Wooten: In that 1.5 million crashes that we are dispatching EMS to when

Ty Wooten: EMS arrives on the scene 40% of the people

Ty Wooten: who ultimately may succumb to their injuries, 40% of them were alive when EMS arrived.

Ty Wooten: That means that we can have an impact and truly have an impact on the number of people who ultimately die and are succumbed to their injuries.

Ty Wooten: The opportunity is here is a chance to improve

Ty Wooten: what we're doing and saving more lives. And we can do that through a whole host of number of different ways

Ty Wooten: and 911 has a critical impact on

Ty Wooten: ensuring and helping to mitigate those deaths.

Ty Wooten: By replacing outdated technology, making it more easy or quicker to locate crash victims as well as

Ty Wooten: providing post-crash care through things like emergency medical dispatch, which we'll talk about in a second.

Ty Wooten: Also

Ty Wooten: 911 telecommunicators and 911 professionals across the country have a role in understanding and being a part of the traffic incident management system or TIM. Effective traffic incident management

Ty Wooten: can help to reduce the duration of an impacted or impacts of traffic incidents by improving

the safety of emergency responders and reduce the frequency of secondary crashes.

Ty Wooten: We'd encourage you to go utilize the QR code that's here on this screen and on this slide to get more information about free online training

Ty Wooten: provided by the Federal Highway Administration about TIM management.

Ty Wooten: But locating that crash, coordinating the response of all public safety responders, and knowing who to send,

Ty Wooten: how much to send, And if we were to send lights and sirens, if those are needed, these all have an impact to mitigating additional crashes and saving lives as we work through the safe systems approach.

Ty Wooten: And as we talk about

Ty Wooten: understanding the use of protocol systems, we know through data that we've collected through the National 911 program that 43% of PSAPs today are providing some sort of emergency medical dispatch

Ty Wooten: and follow a specific protocol.

Ty Wooten: This results in the appropriate use of lights and sirens as we just spoke about,

Ty Wooten: knowing what to send and how to send it can make an impact on those things that you know, and help reduce secondary crashes, whether it be field responders responding to the crash

Ty Wooten: you know, on their way or by

Ty Wooten: you know, making sure that we're sending the appropriate response and providing countermeasures. You know, we know that

Ty Wooten: emerge, whether it be emergency medical dispatch or police dispatching or fire protocols. The use of these protocols is a clinical countermeasure, and providing information to bystanders to help begin to create and provide care on the scene improves post-crash care, and improves the survivability of those victims that we were talking about earlier.

Ty Wooten: Utilization of these protocols and responding to 911 tele or having 911 telecommunicators utilizing these systems

Ty Wooten: help us to obtain those critical incident data

Ty Wooten: and details and again provide those pre-arrival instructions and dispatching the most appropriate resources to ensure that we get the right people to the scene at the right time.

Ty Wooten: And that may include, you know, gaining information specifically in, in, maybe in rural areas

where there may be a long

Ty Wooten: commute to or response time. You know, that may mean that understanding what's going on on the scene immediately may provide the telecommunicator with the ability to launch a

Ty Wooten: helicopter or other mechanisms that they may not normally respond in those kinds of situations. So all of these things, all of that data helps to provide a better response. And that's what how 911 can have a huge impact in not only

Ty Wooten: the post-crash care, but ensuring that we help to

Ty Wooten: increase the survivability of all all crashes that occur.

Ty Wooten: and I think I'm turning back over to April.

April Heinze: Yep. So 911's role in highway safety. We really have 4 different areas of opportunity to work with the highway safety program. That is, is that of operations where and where operations is concerned. The highway safety program can assist us with training

April Heinze: from anything from call taking protocols to traffic and traffic incident management training to the the minimum training guidelines that have been

April Heinze: created for the 911 profession. Those minimum training guidelines, by the way, are being updated, and that should be, those should hit the the market here soon.

April Heinze: In addition, you've got in GIS, where geographic information systems are concerned. Grant opportunities to in update your NG911 compliancy

April Heinze: include, ensure that there is better information for from the caller and identifying your boundaries. And then there's date, the data opportunities, data uniformity is an integral part of providing accurate data.

April Heinze: And, and there's also opportunities where there potential for automated collection, operational, technical and administrative data. And it also includes interoperability. The key piece here is the collaborate and coordination of all of these various different pieces.

April Heinze: Now I think it is over to Rick.

Rick Birt: Thanks. April. Really appreciate that. And Hello, everyone, Rick Birt, I'm the director of the DC. Highway Safety Office. If you're not familiar with your highway safety office.

Rick Birt: I think you're missing an opportunity for partnership and collaboration. You can visit GHSA, the Governor's Highway Safety Association, ghsa.org to find your local highway safety office, and as April, just highlighted, there are lots of ways that highway safety offices just like mine are working with our 911 centers all across the country. The first opportunity, Recently GHSA and NHTSA collaborated

Rick Birt: on a Post-Crash Care Summit.

Rick Birt: and what we were able to do through this summit was bring together many elements of the post-crash care community to look at the ecosystem that is post-crash care. And I think you've already heard a little bit from Ty and April about what that role of 911 is, but certainly we, as highway safety offices, saw this as an opportunity to kind of peek behind the curtain and understand the role of 911

Rick Birt: at a deeper level. For those of you who have been in mobility safety for quite some time, you might remember the 4 E's which preceded the safe system approach. And when we got to emergency response, as that 4th E I will be honest and say that as a traffic safety professional, I always struggled. How do I help in this arena? Right? I'm not a 911 call taker. CAD, What's that? There's lots of opportunities

Rick Birt: to learn. And that's really what came about at this post-crash care Summit. We were able to see that there are opportunities to collaborate. We each need to learn a little bit more about each other, and and so I so appreciate Brian and his team, inviting me to to do just that, to speak a little bit about what highway safety offices are, and how we can work with you, the frontline warriors who are helping keep our communities safe.

Rick Birt: We are very open as your highway safety office to find out what your challenges are. We have certainly some ideas, and certainly with our funding there are some limitations. But we're very open to having a conversation, and that's what I'm hoping that you'll do today that you'll leave this webinar, you'll reach out to your HSO director, HSO team, and you'll say, Hey, let's have a conversation and be prepared to talk about the challenges that you face.

Rick Birt: April just gave a great overview of those 4 columns of the ways that 911 plays a role in post-crash care. Look back at that slide and think about where are there gaps? Maybe, in your operations or opportunities for enhancement? Where can your office be a leader? Particularly in your region, or with some of the other elements within the ecosystem of post-crash care. How can we increase opportunities to partner with our trauma centers. How can we

Rick Birt: increase opportunities to work with the medical community? There's lots of potential there. And you all are really that 1st step in making sure that we get quality, post-crash care to those who have been affected by crashes. And so I hope you'll do that. Come with a long wish list would be one of my best tips for you, because there is such a novelty in working in this space. I think all of us, as HSO Directors are looking for ways

Rick Birt: to try innovation, to try new things that will breed success. I'm thrilled that our office has given a grant to NASEMSO, the National Association of EMS Officials to create what I believe is the first post-crash care liaison. We have Ali Chavez on our team.

Rick Birt: She's a NASEMSO employee, but she sits in our office, and she's really tasked with being a liaison between all of the pillars

Rick Birt: of the post-crash car ecosystem to find ways to work together with our Fire and EMS, to find ways to support our Office of Unified Communications, and to support 911 in the district to work with

our regional partners. Certainly the district is unique. We are not a state, and so we very much are a place of transaction in a place where people pass through, and so working with our neighboring jurisdictions, Maryland

Rick Birt: and Virginia it's really key. And so Ali is taking on all of those elements, and more, to help us really carve a path and to find a path of how we can work more in this space.

Rick Birt: We've also given a grant to the Office of Unified Communications, which is which is our our district 911 center. OUC is doing exactly what April described. We're working with them to update their CAD and to do some software updates

Rick Birt: to find ways to make better the flow of information from the units that are in the field to our 911 dispatch center. We're also doing advanced training to again give our call takers more confidence in how they handle a car crash and the complexities that are in that space. We're encouraging them to take TIMs which you already heard Ty talk about as a great resource from our Federal highways partner.

Rick Birt: And we're also exploring other opportunities to get our 911 center into the community to talk about post-crash care as a pillar of community outreach engagement and education. So we've seen lots of great results. We're about 4 months into our partnership. And already we're finding new ways

Rick Birt: to collaborate. In our case, because we are the highway safety office, We also have some relationships with other government agencies that perhaps our 911 centers didn't have access to. We have abilities to mobilize our departments' transportation to work with our State highway patrol, or State police to engage the medical examiner, and some of those elements of the community. So again, as you're thinking about meeting with your highway safety office director.

Rick Birt: which I hope you will do. Think about what relationships do you need strength, and what partnerships could your office benefit from?

Rick Birt: And then, as you go to your highway safety office, say, Hey, could you make an introduction to? You can visit their website where you can find something called the Annual Grant Application or the AGA.

Rick Birt: This will be a document that every highway safety office submits to NHTSA that outlines the projects and priorities of our office. So you can see what projects are being funded, how the money is being distributed. We have many different types of funding that come from different sections of the 402 and 405 arena. So there's some flexibility in how your office, or the how the Highway Safety Office might be able to fund your project.

Rick Birt: So that's a good read as well to understand the priorities of your HSO, and how you might be able to work with them as a partner.

Rick Birt: I keep saying the word, partner, because I hope, if nothing else you'll you'll leave with the understanding that HSOs want to work with you. We want to have a deeper understanding of this last component, because you all,

Rick Birt: you're our last chance. When we've gotten to you, we've failed in other elements of our safe system approach. And so we are truly counting on you to help us figure out How do we reduce some of those scary numbers that you saw just a moment ago? How do we innovate? How do we better support you and our EMS partners, our medical partners, so that we can truly not make Vision Zero just a watch

Rick Birt: word or a phrase. But truly something we're moving towards, and I truly appreciate, on behalf of GHSA in my office all the work that you do, and truly appreciate the opportunity to share a little bit about how we might work together. I'll share my contact information if I can be of any help in introducing you to your HSO Director. Please don't hesitate to contact me. And with that

Rick Birt: I will turn it back over to Brian. Thank you very much.

Brian Tegtmeyer: Thank you so much. Thank you. April, Ty and Rick, for that great information on 911's role in post-crash care. Happy to take any questions from the audience if you want to put them into the Q And A Chat. But let me start with a question for Rick right away. You know, Rick, I think you had a great talking about, you know, introducing yourself to the Highway Safety Office. I think it's important for the 911 community to understand, though, that that

Brian Tegtmeyer: this is like building a new relationship, it's probably not existent. Right? So, so I mean, do you think highway safety offices are starting to learn more about post-crash care. And if so, are they even thinking that 911's a role in that? Or is that where we've got to build these relationships.

Rick Birt: I think it's all the above, Brian, I mean. I think there's certainly an acknowledgement now, particularly as as we've all moved to the safe system approach

Rick Birt: that 911 is that launch pad to post-crash care. Now again, what do we do with 911? I think that's where we're all still learning. And I think we're learning together. And so that's why I encourage folks to come with your wish list to do an environmental scan as you look at how your agency responds to a crash and think about where those opportunities for improvement are. That's gonna help your Highway Safety Office better understand the circumstances in which you're working.

Rick Birt: Better understand the dynamics of post-crash care and also better position your agency to receive funding. That's one of the great things about our relationship with the Highway Safety office is that we come with funding. And so we're able to provide, you know, one-time funding to address short-term challenges, ongoing funding for longer-term projects.

Rick Birt: And so there really is an opportunity to not only build a camaraderie, which I do think, as you described kind of has to start from square one, that first part of the relationship, but then can blossom into something that's really been beneficial. And I so appreciate our 911 director being such a great partner now to our office as we think about again our shared vision of reducing roadway trauma, injury and fatalities, and 911's got to be a part of that.

Brian Tegtmeyer: Thank you so much. Great answer, Rick. So April and Ty, you were both part of that GHSA post-crash care summit

Brian Tegtmeyer: Did you see the light bulbs going off with regards to 911's involvement? I mean, I think

there was a lot of discussion about that. If you, either one of you want to jump in on that.

April Heinze: Yeah, I definitely thought it was it was very beneficial for 911 to have the conversations. It was interesting how many of the vehicle manufacturers that were

April Heinze: not aware of where 911 was at.

Ty Wooten: Right, and then I would. I would add that, you know, I think that there was a lot of folks in the

Ty Wooten: in the summit that we had in DC. A few months ago were, you know, a lot of them, for from the

Ty Wooten: from the Highway Safety Administrations from the States, and

Ty Wooten: the number of them who didn't quite understand

Ty Wooten: all of the aspects that, that 911 touches relative to the safety of, of the roadways. I think everybody kind of fixates on that one aspect of post-crash care. But when you begin to

Ty Wooten: you know, peel back the layers of the onion to understand that there are so many aspects that we touch on a daily basis, whether it's you know, every wheel that we turn, whether it's for a crash or not.

Ty Wooten: Is, you know, having an impact on traffic and safety

Ty Wooten: on our on our roadways. And I think, you know, getting them to kind of see that is an important aspect, and understanding the capabilities of what 911 can do through things like emergency medical dispatch and other protocol use that was kind of

Ty Wooten: important and exciting for them to have those light bulbs go off at that moment.

Brian Tegtmeyer: All right. That's great, Ty, and I think that's an important point you brought up is that you know, when we're out there talking about this. It's that part of the story that we forget that every time we take a 911 call, whether we dispatch Police, Fire or EMS, or we don't dispatch them. It's a potential impact on the lives on the roadway, because emergency responding

Brian Tegtmeyer: vehicles are, you know, that vulnerable road users. And in. And it's a very dangerous job getting to an emergency, and both for the emergency vehicles and the motoring public around them. So I think that's great. Well, all 3 of you. Thank you so much for your time, Happy. I don't see any other questions that we have for you at this point, so we're going to move on to our next part of our presentation.

Brian Tegtmeyer: and with that I'd like to introduce our next section speaker.

Brian Tegtmeyer: Rodger Mann, the Chief Innovation Officer for North Central Texas 911 who's going to talk about utilizing Waze data

Brian Tegtmeyer: in 911 Center Operations project.

Rodger Mann: Thank you, Brian, and thanks for having me on here. On behalf of Christy Williams and I, the Director, We're really thankful for involving us in this, and I'm looking forward to some questions. I will kick it off with the 1st slide.

Rodger Mann: I will give you guys a brief overview of the North Central Texas 911 communication district.

Rodger Mann: What we're doing with our Council of Governments, transportation departments in terms of traffic and navigation technology and our integrated partnerships.

Rodger Mann: I'll also touch on the 511 system that's run by our transportation department, and we'll go into some questions later on.

Rodger Mann: Just a brief overview for those who are not familiar with the region we are a 14-county region around the Dallas Fort Worth Metroplex.

Rodger Mann: growing very steadily 156 cities, roughly, 10,000 square miles and 40

Rodger Mann: emergency communication centers or PSAPs. So it's a large region population's growing rapidly and we face obviously a bunch of of incidents, but many of them, of course, are related to roadway safety.

Rodger Mann: Here's a map of the region just showing you the layout of the land here. So we've got the 13 counties that surround the Metroplex. We also have 5 ECCs inside of Dallas County, and we partner with all these different agencies, and one of the challenges for us, though, is interoperability between the different districts. So we are working on different technologies to incorporate roadway safety and CAD incidents. We're planning for large events, in particular, FIFA, which is coming up in 2026,

Rodger Mann: and we've got various different task forces working with public safety swat teams, hazmats, and we are working very close now with our transportation department and programs like safer, safer streets. So I'll touch on this a bit more.

Rodger Mann: Just to give you another overview here. So we have had E911 since 1991.

Rodger Mann: wireless phase II, Text-to-911. We've got cloud-based dispatch mapping systems like Rapid Deploy, RapidSOS in every single call center.

Rodger Mann: real time text. And we've got analytics. That's also cloud-based. We have been in the I3 nextGen space since 2013.

Rodger Mann: We perform geospatial call routing through the emergency call routing function. We've had an esinet in place for some time.

Rodger Mann: So the agency itself, I'd say, is definitely cutting edge agency. We try to test new

technology. And then we run a series of pilots, and we present the data to our ECCs and our stakeholders to make sure that it's going to be a good fit for them. The priority for us overall is safety for our citizens. Making sure we push the right technology at the right time.

Rodger Mann: and one of those in particular is what we did with Waze.

Rodger Mann: In 2019 I worked very closely with the transportation departments at the Council of Governments.

Rodger Mann: and we partnered with Waze and back then was called the Waze Connected Citizens program

Rodger Mann: and Waze at that point was very interested in bi-directional you know, communication between different partnering agencies. For public safety, It can be a bit of a challenge for a call taker to report back and to give feedback

Rodger Mann: at a during a live call because they're basically spending, you know, 3 to 5 seconds on a map. And it's a 30 second call. So it's very difficult for them to always push data back to Waze. So Waze agreed to allow us to use the feed for public safety

Rodger Mann: without requiring the bidirectional feedback, which is very, very useful for us.

Rodger Mann: and we launched this in 2019. There's actually an article that I was I placed in the bottom of the slide here, and it covers the the sort of the rollout of what we did with Waze and some of the feedback.

Rodger Mann: We noticed that in 2020 was when we actually first started to survey our PSAPs and ECCs. And there was some really good results from what we could see. So we correlated call data based on different call types and correlated that to the Waze events.

Rodger Mann: And what we noticed is that there was a reduction in certain types of calls.

Rodger Mann: So sorry. Let me step back here. One second

Rodger Mann: we noticed that there was reduction in call traffic for reporting wrecks and abandoned vehicles in the roadways.

Rodger Mann: That was significant reduction, in certain roadways, especially along the corridors, the big, the major highways.

Rodger Mann: and at first Waze was used a lot in around the Metroplex, but we saw it rolling out into more of the rural areas. So this screenshot here is actually of a city in Johnson County, and we're seeing Waze events every single day. In 2019 it wasn't so prolific, and now we're seeing a lot more

Rodger Mann: so besides, just the the wrecks and abandoned vehicles. The other thing to point out here is that it's become a lot easier for a driver to report incidents. But look at what they're doing today with

Apple and Android in the vehicles. You can report an incident fairly easily, and that has, we've seen a reduction in the call traffic for those incidents.

Rodger Mann: What we've done, too, though, is we determined that some of the Waze data, although it's very useful,

Rodger Mann: was not super useful for a PSAP.

Rodger Mann: And that's because we are putting a lot of data and a lot of symbology into the map. So we ran the Waze feeds through an ESRI Geo event server, and we filtered out some of the events. So, for example, road debris, we decided that there was a bit too much noise in the map. There's a lot happening there.

Rodger Mann: so we could filter that out using using our technology in house and partnering with ESRI.

Rodger Mann: So that was really useful for us. And we could just put the pertinent information down on the map.

Rodger Mann: Some other things we've seen is that

Rodger Mann: drivers are now able to see where construction zones are. There's less calls 911 to navigate around construction.

Rodger Mann: And 1st responders, in fact, use the map and mobile apps as well to navigate around construction zones.

Rodger Mann: We've seen cities such as Frisco, which is in the north

Rodger Mann: east of our region in Collin County, who proactively monitor Waze events, and if they see that there's a a whole bunch of incidents coming for a roadway incident or crash, they proactively monitor and notify their first responders to get ready to roll out.

Rodger Mann: I'm going to touch on some of the things too, some of the technology Waze has been incredibly useful, but in terms of roadway safety. And what we're doing as well. We've also incorporated other data into the system, such as dynamic low water sensor technology. So we can monitor several different low water sensors in the region, and those proactively change based on the flow of that particular stream or river.

Rodger Mann: and that also helps us to to avoid certain areas. So if there's a an incident in area, or if there's a caller that wants to get to a certain place, our call takers can proactively monitor that, and they can push traffic around these incidents.

Rodger Mann: We also partner with several of our mapping vendors. So, for example, this is Rapid Deploy. We partner with a bunch of different technology partners. And we also incorporate vehicle crash data from Onstar and other telematic providers.

Rodger Mann: Most of these providers use the VEDS standard which is the vehicle emergency data set. And so we can see crash data coming in with the call, or even before the call. So preemptively appearing on the screen, we can see additional data from the vehicle. We can see if it's been in a high-speed collision. If airbags have been deployed.

Rodger Mann: Our call takers can even see extrication sheets if they need to, so they can, they can alert the Fire Department that there may be an electric vehicle, hybrid vehicle that needs extrication, and that'll help a lot to to save lives also because and saving the fact that the firefighters get can get really burned when they

Rodger Mann: cut open the vehicle. So that's another set of additional data that we push through into the system.

Rodger Mann: It's been incredibly useful for us

Rodger Mann: and some other tools we have built into the system as well. We have navigation built into our dispatch mapping.

Rodger Mann: and this might seem like a small tool. But it's actually very useful. We can proactively help callers navigate around incidents. We can help them navigate to

Rodger Mann: hospitals. For example, if there's an emergency event, and these directions can be sent to the call taker. So again, this is a really quick way for a call taker to

Rodger Mann: to take the call, to gather the data and then send it to the to the actual 911 caller in a text message, and that can go into their text message string and it can open up their native app could be a Google maps or Apple maps, and they can navigate to that location without tying up the 911 call lines.

Rodger Mann: Another important thing that we've done is we partnered with the with Tech Start and we are incorporating live traffic feeds into our system.

Rodger Mann: And that's been really useful for

Rodger Mann: different types of events, especially large planned events, and if there's been any wreck on the roadways, the call takers can instantly pull up a series of live traffic cameras, and that can give them a good situational awareness of that particular region.

Rodger Mann: And these cameras can be shared with first responders as well, so they can see exactly what's happening before they go out on scene. We've seen some really good success stories of vehicle fires that have been reported, and the firefighters know exactly how to get there, what to do. They can see if it's been electric vehicles or hybrid, and how to navigate around that situation to get to that region.

Rodger Mann: We're also planning to roll this out with FIFA when we do the World Cup, and we do planning to set up, set up several different incident command stations. We can stream live video.

Rodger Mann: And it's not just traffic cameras we are partnering with other suppliers of cameras in terms

of, let's say, FIFA, for example, the Arlington Stadium and some other traffic feeds. We can gather from them and other video feeds. So it's been very important to see this coming to fruition and being used widely across the region

Rodger Mann: and then, just to highlight our Council of Governments. The transportation partner does amazing things over here. They have a system called 511. And it's been newly revamped. And this is essentially a Saas solution that integrates different feeds from API vendors. Also feeds like HERE and Waze. The DART, which is our local lightweight, lightweight rail system. And then some of the larger railway systems as well, and all the different private toll road authorities, too. So everything is pushed into one hub.

Rodger Mann: And this data is something that we are working on to incorporate into 911.

Rodger Mann: And right now, at the moment, if you do go to see the NCTCOG 501 system.

Rodger Mann: it does have a great deal of information that's very useful for all the residents. This is accessible to the public.

Rodger Mann: They also have a mobile app as well. That has all this data that's that's available. And there are several different elements of data streams here that we'd like to see incorporated into 911. So that's one of the the biggest things we work on right now is trying to figure out how to incorporate this data and work really closely with our technology partners to incorporate and access this feed.

Rodger Mann: So there's a screenshot of the of the mobile app that's used in the region, and this is available for everyone to use. So as you can see, it does some of this, some similar features as reporting incidents and different technology. That's that's incorporated. But we can also pull this back into 911 and that's a that's project that we are currently working on with with our department.

Rodger Mann: And that's my slides. Here's the information to reach out to us. And we got Christy Williams email address over here, but happy to answer any questions at the end of the session.

Rodger Mann: Thank you.

Brian Tegtmeyer: Well, that was a lot of information, Rodger. We do have some questions for you. We're gonna jump right into those. Alright. So the 1st question is, is the information you're showing Is it within your CAD system that has the Waze, the cameras, etc? Or is it integrated within your map, or are you doing something outside of it? You mentioned working with ESRI. And just want to make sure we clarify where your integrations between these systems lie.

Rodger Mann: Yeah. Good question. What I showed today was integrated into our dispatch maps. That's what we we use for our call handling equipment. So it's the it's the map that's gonna show caller location. And all the different GIS data types are available in the map.

Rodger Mann: Our CAD vendors in our region. We don't oversee the CAD, so they are CAD vendors that do different things. In terms of the feed, and how we push into Waze, the platforms we use are agnostic to GIS platform. So we can push in open source data or data through ESRI streams.

Rodger Mann: We chose to use what's called Geo event server, which allows us to manipulate different services like rest services that come into the system. And we can control exactly what type of data elements we push into that system. So in Waze

Rodger Mann: we take the feed, we get all the data elements into our, into our server in our GIS server. And then we can basically just filter out the events that we think and that our call takers think is the most pertinent for them to do their job.

Brian Tegtmeyer: Okay. Great. Our next question for you, Rodger, is, are you using computer vision AI on the video feeds? In other words, any real time, collision detection, or identifying wrong way drivers, pedestrians on the highways, anything like that.

Rodger Mann: Great question. We aren't. NCT is not right now. I believe that Tech Start is looking at that technology along with our Council of Governors Transportation department.

Rodger Mann: So that's that's there's more to come there. Be really interested to see what what happens. But at the moment we don't monitor that

Rodger Mann: but we do have the ability to set up critical incident boards of different regions. So if there's a large event, and there are going to be several incidents along a corridor, we can set up a video board that shows all the different incidents that occur on that roadway. So if it's been monitored in the PSAP, it's often put onto a separate screen, and they can practically see if there's been an incident and they can dispatch to their region, and that the location information for that particular crash is often

Rodger Mann: gleaned from the Waze feed, or it's taken from the actual crash data that comes through from a connected vehicle or Onstar or Bosch, etc.

Brian Tegtmeyer: So I know you talked a little bit about working with different parts of the Councils of Government, and Texas is, you know, set up in those regions and in a lot of different ways. But our previous session was talking about interfacing with the Highway Safety Office. As you guys work on these as you guys work on these programs. Are you working with your State Highway Safety Office or engaging beyond your Council of Governments?

Rodger Mann: Yeah. Good question, Brian. That's actually why I wanted to come up to you guys at NENA, SVP, because that's something that I'm really interested in doing. Our Council of Governments, it works very closely with the traffic management sensors, and we'd like to do a lot more with NHTSA. We'd like to also incorporate wrong way driving. It's been a very.

Rodger Mann: It's had a very big impact in this region. We've seen, we've seen some awful incidents. So that is something we're trying to understand and incorporate into the system. We're hoping that we can push it through a FEMA feed that would come through the Ipore system. So we can actually proactively use monitor those events and then alert 1st responders. But that that is something we are looking at.

Brian Tegtmeyer: Great. That would. That would be a very innovative use to connect traffic safety stuff through Ipos. So our next question for you, what are the realized benefits for the public to use the regions app. I think we're talking about the 511 app rather than using apps such as Waze to report information.

Rodger Mann: Great question. Yeah. And I'll say that I'm not the Sm on the 511 system, but I know that people use it.

Rodger Mann: It's more, I'd say, outside of the call flow of 911. So that's something that's used

Rodger Mann: not within a live situation. It could be used to report incidents as they see them or report different metrics. But not something that we've seen used

Rodger Mann: in a call. So I'd say, you know Waze technology and and other technologies use

Rodger Mann: in the call itself. And the 511 system is often used as from the mobile app side

Rodger Mann: Outside of the 911 industry.

Brian Tegtmeyer: Okay, great

Brian Tegtmeyer: with with the Waze integration. And and I don't know if you covered this or not. But is it really just one direction, you sending stuff to Waze? Or are you also able to take what Waze is seeing from crowdsource and pull that into your 911 center?

Rodger Mann: So we sync everything from Waze which is which all the crowdsource information. So we get all of that into the system. We. We do have the ability to push data back to Waze.

Rodger Mann: We. We just don't see a a large use of that with our call takers, because they are so busy. So we have seen

Rodger Mann: some of our cities that have the resources can push data back into Waze. For example, Pollen County, in the city of Frisco.

Rodger Mann: They will proactively push data into Waze, and if there's construction zones or they know something's coming up, they will use the CCP. Or Connected Cities Program, as it's called now and push data into the system. So it all depends on the region we haven't seen, like a wide adoption of of the bidirectional flow. But we, we rely on the data coming from the crowdsource environments, from Waze.

Brian Tegtmeyer: But I know across the nation there are 911 centers that will post like their traffic crashes up on a website or something like that. I mean, it is something that

Brian Tegtmeyer: if your agencies wanted you to, you could probably automate a bi-directional flow from your CAD into Waze correct?

Rodger Mann: Correct, correct. We could and we did at one point we partnered with the company called Genesis Pulse, and we, the CAD systems, were able to do that.

Rodger Mann: But our CAD, our region has got about 22 different CAD vendors, which makes it quite a challenge. So we're looking at some of the systems we are, we are doing a CAD to CAD. We can see different incidents from different CAD providers into one space. So I think it'd be really interesting to

see what we could do after that and automate incidents and push it back into Waze.

Brian Tegtmeyer: Yeah, I think what you just said is worth repeating. So from NCT 911's point of view, your centers are how many different CAD systems.

Rodger Mann: We've got roughly about 23.

Brian Tegtmeyer: Okay. So again, you're supporting and historically are supporting their 911 call flow process and stuff like that. But you're not, it's not like, you have oversight over each individual, 911 center in your area.

Rodger Mann: Correct. As far as CAD goes, we we are responsible for the network and delivering the 911 call, and then the location side of things. The mapping side, as far as the CAD and dispatch side goes. As many agencies in Texas work the same way. That's separate, and each ECC is responsible for

Rodger Mann: sourcing their own CAD vendor, which makes it a challenge, as you can imagine, because we've got various different CAD vendors, various different incidents, which is why interoperability for us is a challenge. So we we have to rely on our partners to integrate and do over the top solutions or CAD to CAD solutions. So we can incorporate that data. And we can actually see that on one screen.

Brian Tegtmeyer: Makes sense all right. So the next question we have is is probably one that many people are thinking I'm asking about, which is you've talked about so much different integration and all the challenges. What's the overall cost or investment that NCT has made into this? And that may be hard to

Brian Tegtmeyer: extrapolate. But I mean, I would assume at least there's some cost, and definitely a lot of man hours to make this stuff work.

Rodger Mann: Yeah, I mean, I think there was is with with Waze in particular, because Waze provides the feed for free, for public safety.

Rodger Mann: It was as simple as, or can be as simple as incorporating a web service like a ESRI rest service into your map. They do make that available, and once you become a Connected Citizens or Connected Cities partner, you can, you can incorporate that feed.

Rodger Mann: I think it's really advantageous to rely on existing partnerships that are out there. So they, with many of our mapping partners already business partners with with Waze. So the cost to get that onto the map

Rodger Mann: is part of the contract. It's going to be built into the solution, or it's just a free of charge, free service.

Rodger Mann: From the development side of things, we did a bit more on the ESRI side, where we were using different technology to filter out Waze events. But it was nothing that was over the top. I mean it was. I wouldn't say it was anything more than a few thousand dollars to spend some time

Rodger Mann: and to work on, on that system. And we have existing ESRI servers and technology that we

have in place. So there's no additional infrastructure investments that we had to make

Rodger Mann: And after that, I think other part too of this is just the training side. So of course, we gotta take into account the fact that we train

Rodger Mann: over 450 call takers on using any new technology. So we do build up

Rodger Mann: a training training resource. And you know, obviously, just several different hours, or several different technologies and hours that goes into providing a training for the call takers. And that's something to take into consideration. But

Rodger Mann: beyond that

Rodger Mann: I think that you know, the more advanced we go into this and we look into our technology providers. It's, it's really important to make sure that you've written your contracts and RFPs in the right way, because you could think forward and think of what you can do and build this into a contract. And your, your technology partners out there have got the ability to to incorporate this information already. Without the agency itself going through much of the cost.

Brian Tegtmeyer: Alright, Our next question for you, and I'm not sure that you'll be able to answer this. But I wouldn't put it past you is, Do you know if Waze is a partner with RapidSOS?

Rodger Mann: Yes, they are as of June 2024.

Brian Tegtmeyer: Okay, great. So was, did that impact your implementation process?

Rodger Mann: We? We have

Rodger Mann: redundant mapping systems. I'll put it that way. So we have you know, depending on our ECCs. We provide different resources for them. Each one of our providers offers different technology, which is, which is good. I mean, it does take a bit more training

Rodger Mann: so we, we use Rapid Deploy, We use RapidSOS, and depending on the on the on the ECC, and their use case, they may use one or the other. As far as Waze goes, we've seen much high adoption in the Rapid Deploy system because we we configure the feed, and we can, you know, adjust the the amount of data that gets pushed through into that feed.

Rodger Mann: But I think both providers, both mapping providers, are seeing usage of it.

Brian Tegtmeyer: Right well at that time, at at this time, Rodger, that that ends our questions. We don't have any other questions for you. I appreciate your time. And with that

Brian Tegtmeyer: I'm

Brian Tegtmeyer: let me go ahead and move to the last slide here. I want to thank all of our speakers today, and panelists for their valuable contributions on this important topic. We want to thank everyone

who was able to attend the webinar, your participation highlights, the strength and dedication of the 911 community. Please remember to complete the post Webinar survey and check 911.gov for archived recordings of today's session.

Brian Tegtmeyer: We hope to see you at our next webinar, and that information is below. And if you're not registered to get email notifications of the information on the webinars. You can follow that by scanning the QR Code there. And with that, I'd like to thank you all, and hopefully you all will have a great day. Thank you.