The Eastern Transportation Coalition
Traveler Information Web Summit: Improving Safety - Implementing New Travel Information Services for Commercial Vehicles – March 17, 2022
Question and Answer Summary

NOTE: Please use the following link to access the presentation recording (available on the Coalition's YouTube channel) - https://youtu.be/NlhCJxFiAP8

Raising the Bar in Pennsylvania on Low Bridge Information [*Ryan McNary (Pennsylvania DOT) and Mary Farrell (Information Logistics)*]

Q1:   **Adam Storm (Florida DOT):** Are there any plans to push these alerts to Google Maps?

A: Ryan McNary (Pennsylvania DOT): We want to partner with Waze and plan to contact them.

C1:   **Marygrace Parker (The Eastern Transportation Coalition):** The rental trucks are very vulnerable - keep in mind that many of the trucks we see in bridge strikes don't require a CDL.

Q2:   **Raj Ponnaluri (Florida DOT):** What was a response from the maintenance office on sharing the bridge data? Are they sensitive about sharing the data?

A: Ryan McNary (Pennsylvania DOT): I don't think we heard a concern from maintenance at all. Everything's been positive internally after we bridged the gap in 2016 with the concerns. The team doesn't want to be out there maintaining these bridges after bridge strikes.

Q3:   **Chester Osborne (Massachusetts DOT):** How do you record changes to bridge clearance? Do staff remeasure after mill and pave operations?

A: Ryan McNary (Pennsylvania DOT): Yes, the bridge clearance is remeasured as a common practice and goes into a comprehensive statewide database. They have good procedures internally, which gives them the capability to get us the data set. We get quarterly updates; I think we're trying to get semi-annual updates.

Q4:   **Chester Osborne (Massachusetts DOT):** Do you record the height per lane or lowest point?

A: Ryan McNary (Pennsylvania DOT): If any part of the bridge is below 13 feet 6 inches, that is what we post - so, the lowest point.

C2:   **Glenn Rowe (Kittelson & Associates, Inc.):** The disclaimer might clarify that it doesn't include locally owned roads.

A: Ryan McNary (Pennsylvania DOT): That is accurate.

Q5:   **Sal Cowan (New Jersey DOT):** Is the EV layer on the 511 websites available wide-scale or did you have to do a lot of leg work to get it from Pennsylvania?

A: Mary Farrell (Information Logistics): Here is the EV source info - EV charging station locations are provided by the Alternative Fuel Data Center. If you look below the map, they have a section for developer APIs.

Https://afdc.energy.gov/fuels/electricity_locations.html#/find/nearest

C3: **Chester Osborne (Massachusetts DOT):** We worry about the latency of bridge clearance data. If a bridge changes height (more often than you would think it happens) and someone hits the bridge with a load that had been a "go" but is now a "no-go" but your layer was not updated that would be a major issue.

A: Ryan McNary (Pennsylvania DOT): The approach in Pennsylvania is the legal height. We are not giving specific heights of the bridges.

C: Denise Markow (The Eastern Transportation Coalition): Many years ago, maintenance forces had terrible heartburn over the data that was put out by weather information systems on 511 sites, specifically ice warnings, pavement temperature, and wind gusts. They felt that it was a great liability to the travelers to have that type of information posted on their 511. The thinking over the years has changed in terms of, "It's better to be out there and be as aggressive and informative as you can." Sometimes it might be wrong, but the presence of data out there has transformed that industry. I envision that down the road the same type of concept and thinking will take over when it comes to heights and weights restrictions.

C: Ryan McNary (Pennsylvania DOT): If the bridge office procedures are to remeasure and change the signing on the bridge in the field, I would think that due diligence upon the department has been met. It is a good topic to consider when scoping a solution, and part of the reason we are taking small steps toward making it public.

Q6: **Marygrace Parker (The Eastern Transportation Coalition):** Have you thought about truck manufacturers? We tend to focus on Google and Waze, but truckers and electronic logging devices (ELDs) are starting to move towards a more robust alert-type system. You could start to look at onboard systems with Mack Trucks in Pennsylvania or some of these ELD services.

A: Ryan McNary (Pennsylvania DOT): The only concern from my perspective is that the data is a static set that is updated semi-annually by our bridge unit. Each provider would need to download the data each time it is updated. It's very labor-intensive. That's why we're trying to build a better infrastructure where we can have this be pushed all the time through the Work Zone Data Exchange (WZDx). Once we have that infrastructure in place, we could then reach out to all these different ELDs.

C: Marygrace Parker (The Eastern Transportation Coalition): It might be a good opportunity to have a conversation with someone like Mack Trucks or a couple of the larger ELDS and ask how they pull that information. Then you can create a basic format for everyone to use once the data is updated regularly.

Q7: **Kelly Wells (North Carolina DOT):** I had heard in WZDx circles that New York State DOT was starting to do some of this with bridge weight restrictions - not just height but weight.

C: Steve Levine (Transcom): Low bridge clearances are a very big issue. It is of interest to at least three agencies in the state of New York; MTA, New York City DOT, and New

York State DOT. We had a conversation with them about seeing if there's a way of expanding some of the work that Sal and you are doing with Drivewyze.

C: Kelly Wells (North Carolina DOT): Someone in our circles is working right now with Google to try to give them posted bridge data. To reinforce some of the questions earlier, Google came to us recently and asked for our truck data. It took me hours to pull together all the stuff that people sent me about truck data from NCDOT. One of the concerns was when we asked for posted bridge information. We're constantly updating bridge information and the concern was just like Ryan said; if we gave them information it wouldn't be in real-time. It would be ideal to have dynamic databases for bridge height and weight like we've done with crashes and work zones. Just add bridge height and weight to that and make it readily accessible for the navigation providers. Similar to the WZDx concept, have all this information in one place and then have standards that define the way we communicate to all the interested parties.

Q8: **Charles Ukegbu (New York City DOT):** When we initially approached Google in 2014, their concern was about liability. How have you dealt with the issue of liability and any concerns about that?

A: Ryan McNary (Pennsylvania DOT): We haven't had that conversation with those companies yet. The way I would approach it is if we didn't give them this information, isn't there more liability for the motorist striking the bridge? If we have this data and we're dedicated to keeping it up to date and setting up our processes where we keep it a real-time data set, it's something that we need to have out there for individuals. But the concern is that these navigation services are more focused on passenger vehicles. They don't have a profile specifically for trucks. I think the conversation has to start with the Drivewyze and the Trucker Paths of this community that have those data points where they could have a commercial motor vehicle (CMV) profile.

C: Charles Ukegbu (New York City DOT): The other challenge we have is that low bridges are not only on the main interstates or state routes. They're in neighborhoods and other areas. What we were looking for is something that saturates and we can report as a service to the general public. Our goal is to provide all that information about all the restrictions that there can be regarding height as you navigate from one point to the other through our network. For example, our subway structures are 10ft 6 inches.

Eyes On the Ground, Anywhere, Anytime: A Technology Demonstration *(John Farrell, Information Logistics)*

Q9: **Paul Krisavage (IBI Group):** Who is responsible for the storage of the video? Video of this type becomes evidence and the issue of data retention comes into play.

A: John Farrell (Information Logistics): Basically, the system is configured such that it could either save the video or not save the video. It can be whatever the agency's preferences and rules are equipped to handle. It can be live-streamed and nothing's ever recorded or it can be saved for later; whatever retention policy is required.

Q10: **Kelly Wells (North Carolina DOT):** Is this an a la carte product or do you have to have another Information Logistics system to purchase it?

A: John Farrell (Information Logistics): This is a standalone product.

Q: Kelly Wells (North Carolina DOT): What is the pricing structure?

A: John Farrell (Information Logistics): The way we have it set up right now is that there is a base fee per year that includes X amount of usage. If you use it more you would pay more but it's a pretty low base fee.

North Carolina Pilot: Using Drivewyze/INRIX for Commercial Vehicle Alerts *(Kelly Wells, North Carolina DOT)*

Q11: **Ryan McNary (Pennsylvania DOT):** Have you gotten any feedback from people reaching out to your social media or email?

A: Kelly Wells (North Carolina DOT): We have not. I'd like to talk with the trucking association and ask them if they know about this and if they have heard back from their customers. Currently, I don't have a feedback loop for this.

Q12: **Sal Cowan (New Jersey DOT):** We have a good relationship with the New Jersey Motor Trucking Association. Before the launch of the Drivewyze platform here in New Jersey, we reached out to them (NJ Motor Trucking Association) and they spoke very highly of the coordination and products from Drivewyze as a safety initiative for their constituents. They were appreciative of the launch. I have not gotten any feedback from the Motor Trucking Association but we're doing our internal review of the data quality.

A: Kelly Wells (North Carolina DOT): We did that too when we first started getting the alerts. Something to think about - how are you going to evaluate the effectiveness?

C: Denise Markow (The Eastern Transportation Coalition): The effectiveness is hard to measure because it is a mobility measure. How many accidents did you prevent today by placing that message on the board, and somebody took a different route and avoided an accident? The data analysis is powerful.

A: Kelly Wells (North Carolina DOT): Since Drivewyze can measure both alerted and non-alerted trucks, we are able to do an of analysis slowdown behavior by trucks receiving the alerts versus those that do not have the alerts.

Q13: **Jonlee Anderle (National Highway Traffic Safety Administration):** A common occurrence in Wyoming is the mapping apps sending CMV drivers onto impassable secondary roads when the interstate was closed due to weather. Has anyone looked at this issue as part of this overall strategy?

A: Kelly Wells (North Carolina DOT): When we started to look at how to work in traveler information, we quickly recognized that Google, Apple, and Waze are not meant for trucks. Google's come to us and said we're thinking about if it's feasible to do trucks. The other side of the coin is figuring out what truckers are using. To me, this is still an

unanswered question. I know how to get information to Google, Apple, and Waze but I don't exactly know what trucks use for navigation. I have a list of ELDs that I keep. Many of you have seen my other table for navigation providers. I'm trying to create a parallel table for trucks. If someone says my Trimble, Trucker Path, or ProMiles isn't right, I obtain a list of contacts in those companies. But the ecosystem of truck navigation is not well understood. There's hardware that you buy and then there's software that you buy. I think an interesting matter for someone to take on is understanding truck navigation better.

C: Marygrace Parker (The Eastern Transportation Coalition): It's great to think about getting things into ELDs and other platforms. But when we start to think about who our truck driving community is there's a sense that there are these companies that have somebody sitting in a dispatch center. But that's not true for smaller carriers. One of the things that Drivewyze has done is think about the idea that I can download an app and it doesn't matter if I'm an owner-operator or the most sophisticated trucking company out there. When we think about this it's that idea of who is that community. I have some ideas about looking at some online trucker publications. Maybe we can enlist them to help us with some feedback on these products.

Q14: Mark Eastburn (Delaware DOT): Did you say it was $50,000 for a year? We are in Delaware and were given a quote of $100K from Drivewyze.

Kelly Wells (North Carolina DOT): $250,000 per year for 500 centerline miles of Interstate in North Carolina.

Q15: Chester Osborne (Massachusetts DOT): I want to make sure I understand the pricing model. DOT pays for INRIX data, DOT pays for this Drivewyze feature to "push" to commercial vehicles. Do drivers need to pay for their interface as well as the data for the notifications? What does it cost the driver?

A: Kelly Wells (North Carolina DOT): It's a turnkey solution from the North Carolina DOT side. INRIX & Drivewyze work together to make the alerts for the $250k that NCDOT pays.

C: Marygrace Parker (The Eastern Transportation Coalition): The great thing about what Drivewzye has done is they make the app free to drivers as Marc said- any driver can download it. They don't have to pay Drivewyze, or be in their e-screening subscribed program - if you are anyone from an independent driver to a small company to someone who drives for a big company like JB Hunt, you can get this information. I think there is a great opportunity as more states bring this on to get to the industry publications (and particular ones where the independent drivers go to/read) to show what this is, that it is out there for them.

Using Technology to Enhance Commercial Vehicle Safety on New Jersey Roads [*(Sal Cowan (New Jersey DOT), Amy Lopez (INRIX), and Marc Nichols (Drivewyze)*]

Q16: **Branislav Dimitrijevic (New Jersey Institute of Technology):** Is the slowdown or congestion alert generated based on vehicle speed, or the average? Speed on the TMC where the vehicle is currently traveling? Are the alerts pushed to all users located (geofenced) at the affected TMC?

A: Amy Lopez (INRIX): Our slowdowns are determined by a change in delta speed from one segment to the next. A minimum of 35 miles per hour is what we call internally a dangerous slowdown. What we alert into the ELD is a sudden slowdown. Congestion is the same threshold - It's a change in segment-to-segment speeds of 35 mph or greater in areas of non-recurring congestion.

C4: **Charles Ukegbu (New York City DOT):** We had a bridge strike task force meeting with the NYPD, Port Authority, MTA Bridges and Tunnels, the State DOT, and a few public representatives. They reported that one of the challenges they've had since the pandemic was an increase in the number of strikes to facilities and structures. With the increase of contactless tolls, there's no one to turn around trucks at those locations that are over height. I would like to find a technological way to address this issue.