The Eastern Transportation Coalition: Traveler Information Services Web Roundtable
November 19, 2020

Question and Answer Summary

Primary contacts from each of the Coalition member agencies were invited to share an update on recent Traveler Information activities by their agency. Below is a brief overview of the topics covered by each member and the related questions from the participants. A listing of the participants is provided at the end of this document. A recording of this meeting can be found on the Coalition's YouTube channel - *https://youtu.be/uQQVo4EdO6A*

Alabama DOT

Brett Sellers - Asst. State TSM&O Engineer

Alabama DOT's main travel information platform is the ALGO Traffic website. It includes travel times, incidents, weather, speeds, and much more. Alabama DOT also has Twitter feeds automatically generated based on the data within the ALGO site. In the future, ALGO kiosks will be placed in Welcome Centers/Rest Areas to provide travel info. DMS boards across the state are used to provide travel times as well as to communicate safety messages.

Q: **Kelly Wells (North Carolina DOT):** What brand of DMS do you have? The graphics are great.

A: Brett Sellers (Alabama DOT): Thanks everyone, we use Daktronics here.

Q: **Kelly Wells (North Carolina DOT):** Do you use graphics from the Daktronics library or do you create your graphics?

A: Brett Sellers (Alabama DOT): We've created our own and we may borrow a few here and there.

C: **Chet Osborne (Massachusetts DOT):** Hey Bama, great use of full-color DMS!

Connecticut DOT

Denise Markow – TSMO Program Director, The Eastern Transportation Coalition
(provided a verbal report based on information submitted by Hal Decker, Principal Engineer, Connecticut DOT)

Instead of a 511 page, Connecticut DOT uses a Smart Webpage, social media, Highway Advisory Radio (HAR), and DMS boards to communicate with travelers. They are also providing information on winter weather conditions. Connecticut DOT will be implementing a Statewide Maintenance Decision Support System (MDSS) to provide real-time road condition data to the public. Connecticut DOT is using an API feed for WAZE as advanced user. Regarding incident duration, Connecticut DOT estimates clearance times for traffic based on real-time data.

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C: **Denise Markow (The Eastern Transportation Coalition)**: For those states interested in finding out more about API data feed development to third-party providers, please let me know.

Georgia DOT

Matt Glasser - Regional Traffic Operations Program Manager

Georgia DOT distributes traveler information using its 511 system (web and phone), DMS boards, and social media. In collaboration with Optasense, GDOT is using existing fiber optic cable along their interstates to collect speed and congestion and estimate volumes at locations. GDOT is looking at how this can be used in the future. Georgia DOT is conducting a trial of Carbyne's product c-Lite, Georgia DOT operators can send exact locations from motorists seeking assistance back to the TMC so that assistance can be provided faster and information can be entered in the ATMS system more easily and with less confusion. Georgia DOT is using their GA Alert (HELP) for preemptive alerts to motorists. This reduces the queue size seen at the event and decreases the possibility of secondary accidents. For truckers, Georgia DOT is partnering with Drivewyze to provide in-cab alerts to truckers with targeted messaging (ex. Sharp Curve Ahead, Slow Down). They are piloting this system in six metropolitan areas of Atlanta and are seeing promising results.

Q: **Sue Catlett (New Jersey DOT):** For your use of HELP and sending pre-emptive messages about slowdowns, how are you determining your slowdowns?

A: Matthew Glasser (Georgia DOT): We're being pretty conservative right now. Our SOP looks for a majority of lanes being blocked for over 30 minutes. It's still a bit of a judgment call. We'd like to get to something more automated using probe data.

C: **Denise Markow (The Eastern Transportation Coalition)**: Recently in Georgia, HELP was used to divert traffic because of a chemical fire emphasizing a different type of use case for HELP.

Maine DOT

Colby Fortier-Brown - ITS Assistant Engineer
Stephen Landry - State Traffic Engineer

To provide information to travelers, Maine DOT uses the New England 511 (shared with Vermont and New Hampshire), social media, message boards, emails, texts, and the WAZE app. We have a shared 511 site (New England 511) with New Hampshire and Vermont. On New England 511, there is a developer portal that provides an API feed. Compass events feed to Waze. Maine DOT uses probe data from TomTom to populate travel times on DMS. Maine

DOT proactively uses social media or DMS for winter road conditions and incident duration. This winter, Maine DOT will begin to populate winter messaging semi-automatically on its DMS. RWT (Road Weather Temperature), which is an app developed in 2018 and deployed in 2020 to provide visualizations of the winter road and weather conditions. *Maine DOT provided additional slides answering the other questions posed to the agencies; they are on slides 29 - 32.*

Maryland DOT - SHA

Jason Dicembre - Chief, TMC Operations Division

Maryland DOT-SHA provides information to the public via its Maryland 511 website, Twitter (511 specifically), and DMS. They joined the Waze for Cities program and operators are entering major closures into the Waze map. Maryland procured the INRIX HELP platform and plan to use it for incidents with a large-scale impact in addition to full closures. For winter weather conditions, Maryland DOT-SHA has a separate web page (STORM) to display snowplow/ vehicle locations. The UMD Civil Engineering Department is helping Maryland DOT to better predict incident durations. Using analytics, UMD analyzes the DOT's incident data taking into account many factors including incident type, number of vehicles, pavement, whether a Haz-Mat was involved, number of responders on the scene, and other factors to determine the "probable" duration (currently only for the I-95 corridor). It is planning to be based on roadway class, not specific roadways. Presently, this is only informational but the current model showed a 93% success rate at predicting the duration.

Massachusetts DOT

Chet Osborne – Director of TSMO

Mark Goldstein - Lead State Snow & Ice Engineer

Massachusetts DOT provides information to travelers via XML and Mass511 (web interface and mobile app). Mass511 currently provides cameras, incidents, construction, closures, and weather information (more available on the web interface) on Mass 511and are looking to enhance the road weather information. They are planning to expand Mass511 to be more multi-modal by adding bike share locations, parking, transit, freight parking, and COVID testing/vaccine sites, in early 2021. To distribute traveler information, Massachusetts DOT also uses Google and WAZE and is working with Apple on an API for its 511 app. Massachusetts DOT conducts a full response to all events and does not predict or forecast event end times, but is interested in Maryland's predictive incident work.

New Jersey DOT

Susan Catlett - Project Manager, Transportation Mobility

Salvatore Cowan - Senior Director, Transportation Mobility

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New Jersey DOT uses DMS signs, a voice assistance program for its 511 information, and multiple Twitter feeds to send information to travelers. New Jersey DOT is part of the Safe Passage Program, which displays messages year-round on statewide DMS signage to promote safety to the motoring public. DMS signs are also used to provide weather information. New Jersey DOT coordinates winter weather alerts with local media. Travel times for interstates and arterials are provided and in key locations, they include comparisons for alternative routes. As part of their 511, NJDOT has a Safety Service Patrol layer. Through a partnership with iCone (and funded by an FHWA's EDC State Innovation Transportation Council grant), NJDOT to place ITS hazard beacon technology in safety service patrol vehicles; this shows the location of active vehicles and when the vehicle lights are activated it sends a signal to Waze (via an XML feed) so that vehicles approaching the location receive a notification from Waze - First Responder Ahead – Move Over. New Jersey DOT also uses INRIX's HELP program.

C: **Denise Markow (The Eastern Transportation Coalition):** I like the comparative travel time idea!

A: Dennis Motiani (PANYNJ): It has been effective.

Q: **Denise Markow (The Eastern Transportation Coalition):** Are you looking at HAAS alerts like the Pennsylvania Turnpike Commission?

A: Sal Cowan (New Jersey DOT): We met with HAAS. We want to finish our pilot program with iCone and determine the effectiveness before installing any additional vehicle detection devices. New Jersey DOT has not signed the Waze agreement. We are pursuing a pilot with Waycare to get and feed data to Waze. We already feed data to Waze via our partnership at TRANSCOM.

C: Mike Pack (Pennsylvania Turnpike Commission): We're also working on a proof of concept with Waycare. I'll reach out to kick around some ideas.

C: **Sal Cowan (New Jersey):** The 511NJ website accumulated 8.4 million hits in 2019.

C: **Russell Holt (Rhode Island DOT):** Looks like a high/healthy number of hits to me... your website is certainly accessible via mobile phones, so guessing a very fair chunk come from them

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New York State DOT

Paul Krekeler - GreenLITES Project Manager

New York State DOT uses its 511NY system (web, mobile, & IVR) to provide traveler information. Additionally, Variable Message Signs (VMS) for weather alerts and other transportation communication. 511NY shows winter road conditions, which are manually updated by field personnel every 4 hours. Recently, New York State DOT signed an agreement with Waze for Cities to use Waze information. Through the 511NY mobile app, data is shared with TomTom, Garmin, Google, and Apple.

North Carolina DOT

Kelly Wells - State Traveler Information Engineer

North Carolina DOT uses the Wireless Emergency Alert (WEA) with its Emergency Management Agency to push geofenced notifications to travelers. This is a one-way system that is free to use, in conjunction with the State Emergency Management Agency. It is challenging for North Carolina DOT to predict incident end times. This is especially difficult in dealing with severe weather events on the coastal highway. The current system requires definitive start and end times for incidents when reporting.

C: **Sal Cowan (New Jersey DOT):** New Jersey will always post an "Estimated Duration" of an incident based on discussions with responders.

C: **Dennis Motiani PANYNJ**: That shows that we have some idea and we communicate and also willing to change if we have to. Pennsylvania is the same; they are very careful**.** We used to use "Until further notice" and I didn't like that because it had a negative connotation.

Pennsylvania DOT

Daniel Farley - Chief, TSMO Operations and Performance Section

Pennsylvania DOT uses a variety of communication techniques, including PA511, social media, DMS, geofenced notifications, highway advisory radio, and its 511Connect (HELP system). 511PA is now a joint contract between PennDOT and the PA Turnpike Commission. Currently, users can add Waze or Google on top of the 511app. The 511 website provides winter related information on snowplows, which rest facilities are open, and weather warnings. PennDOT has deployed cameras and message signs in rural areas to close gaps in traveler information during the winter months. In addition, for winter months, road restrictions are provided for commercial vehicles. PennDOT uses third-party data for a variety of purposes including planning, design management/operations, and performance measures. Pennsylvania DOT is working to make Highway Advisory Radio (HAR) more virtual and provide push notifications to subscribers while in "drive mode."

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C: **Sal Cowan (New Jersey DOT):** Here's an example of our DMS boards: https://www.nj.com/coronavirus/2020/05/knucklehead-highway-signs-were-a-1st-for-nj.html

C: **Denise Markow (The Eastern Transportation Coalition):** 511PA is the original HELP system.

Q: **Kelly Wells (North Carolina DOT):** Who do you think will use the bridge height info?

C: Dennis Motiani (PANYNJ): NYSDOT does that and the truck users use it as a "know before you go".

Q: Kelly Wells (North Carolina DOT): But how do you get them to use it instead of just trusting Waze & Google maps?

A: Dennis Motiani (PANYNJ): The height and weight restrictions are on their 511 website so the data comes from a good source; the public agency itself.

Pennsylvania Turnpike Commission

Mike Pack - Manager of Incident Management/ Traffic Operations

The Pennsylvania Turnpike Commission uses various ITS devices to deliver information to travelers including pre-entry DMS on PennDOT roadways. The Pennsylvania Turnpike Commission (PTC) sharing data with Waze, Google (soon), Apple (discussions started), and Drivewyze. With regard to Waze, PTC can close a road in Waze and they are planning to start dispatching services based on Waze (highly reliable) data. The PTC is using HAAS alerts which are digital alerts that go to Waze to tell drivers to move over for emergency vehicles on the scene of an incident. The PTC has both hardwired vehicles and portable units. The PTC is testing a Radiolert Curve Warning System which interfaces with their truck rollover system and over-broadcasts on two FM stations when a vehicle is within a potential rollover location along the curve. The PTC needed to get approval from the FCC for this experimental use as well as approval from the FM stations to over-broadcast. They are looking to expand this alert system to other uses on their roadway system including tunnel reconstructions. The PTC got a federal grant to deploy phase one of their Truck Parking Management Systems (TPMS). They are planning to display truck parking availability on DMS in advance of the parking locations.

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Q: **Kelly Wells (North Carolina):** How did you begin a data-sharing agreement with Google? For maps data or incidents?

A: Mike Pack (Pennsylvania Turnpike Commission): We'll be sharing our incident data with google to display on their map and incorporate in navigation. We're also hoping to gain access to enter our full closures similar to how we work with Waze. I can get you a contact for google if you'd like. Email me at [mpack@paturnpike.com.](mailto:mpack@paturnpike.com)

Q: **Sue Catlett (New Jersey DOT):** When the number of spaces gets "low" what term do you place on signs to let them know? Do you have advanced signing about the spaces available?

A: Mike Pack (Pennsylvania Turnpike Commission): We will structure the exact message when we start working with our ATMS vendor on this, however, we plan to communicate "low" when our lots go below a certain percentage. We don't plan to say "full".

Rhode Island

Russ Holt - Principal Civil Engineer

Rhode Island DOT's Office of Communications and TMC utilizes a multimedia approach (websites, changeable message signs, social media, email, text, 511 app) for communicating traveler information, and a customer service team facilitates responses to questions/concerns. RIDOT is phasing out IVR for 511 and HAR systems due to lack of use. Unplanned roadway events are largely collected via TMC Operator, which then manually enters the data into the RhodeWAYS incident management application/database (which prompts automated Twitter feeds, website updates, etc.). Due to a lack of funding, RIDOT began to use Waze data to post travel times on select changeable message signs via the free Waze data/feed. They now have access to INRIX and are exploring additional uses with this data.

South Carolina DOT

Jennifer Rhoades - Assistant State Traffic Management Engineer

Tisha Dickerson Traffic Engineering - Intelligent Transportation System

South Carolina DOT recently updated their 511 website and app (June 2020) including integrating Waze, adding Smart camera features, and info cards for active icons on the map. They recently used a Smart Work Zone system with the goals of alerting drivers to the beginning of queues and encouraging the use of an alternate route when travel times were excessive. Mobile taper signs and alternative route signs were included as part of this project.

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Tennessee DOT

John Hall - Motorist Information Coordinator

Tennessee DOT continues to use their Smartway traffic website and have added a layer of WAZE data to the map. They currently use IVR in their state TMC; before COVID-19, the state TMC received an average of 950 calls a day and it has dropped to 650 calls a day. To convey information to travelers, Tennessee DOT uses 24 Twitter pages, DMS signage, and PSAs about COVID-19 safety. Although it still uses a Highway Advisory Radio (HAR), Tennessee DOT is considering sunsetting it. They also work with TV stations to share information regarding traffic, weather, and safety.

Virginia DOT

Crystal Underwood - Statewide Traveler Information Program Specialist

Virginia DOT's Operations division is providing real-time traveler information through a 511 IVR, Customer Service Center 800 number, Virginia 511, Waze, and DMS/DDMS signage. VDOT's communications team engages travelers through social media and project-related outreach websites. VDOT evaluating recently received responses to RFP for expanded communication including queue warning, push notifications, and hands-free features. VDOT is evaluating "Smart Vest" technology which alerts drivers to a work zone via a push notification from sensors embedded in safety vests worn by workers. VDOT is working on several Towing and Recovery Incentive Program (TRIP) pilots in different regions within the state. Virginia DOT uses INRIX data on their 511 website and for comparative travel times on their DMS.

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