

TRAFFIC INCIDENT MANAGEMENT FOR THE BALTIMORE REGION (TIMBR) COMMITTEE

Wednesday, March 4, 2020

10:00 A.M.

State Highway Administration, Statewide Operations Center Training Room
7491 Connelley Drive, Hanover, Maryland 21076

MINUTES

1. WELCOME AND SELF-INTRODUCTIONS

Chris Letnaunchyn opened the meeting with self-introductions.

2. REVIEW OF MINUTES FROM DECEMBER 4, 2019

There were no comments on the minutes from the December 4, 2019 meeting.

3. STATE PROJECT UPDATES

US DOT First Responder Grant Pilot Program: Carole Delion gave an overview on the Federal Highway Administration (FHWA) multi-modal grant program for First Responder Safety using the 5.9 GHz technology. A total of \$38 million will be funded to projects that will equip emergency response vehicles (ERV), transit vehicles and/or related infrastructure with connected vehicle technology to support vehicle safety and response time efficiencies (e.g., rerouting, notifications, etc.).

To be eligible for the grant program, proposed technology must be operable in the 5.9 GHz spectrum only. There is more of an emphasis on first responder fleet vehicles, but the technology must be implementable on infrastructure and transit as well. Maryland currently has two 5.9 GHz deployments: (1) deployment at the National Harbor with 5 DSRC units and portable signals on county roads and (2) deployment by MDTA at the Fort McHenry Tunnel with 2 DSRC units.

- Question: Is the request for a new FCC license a long process?
Answer: The FCC has held off approving any licenses because they control the 5.9 GHz spectrum. Carole also added that a new license was requested in November 2019.

Carole stated that the program has not been fully launched and there are still some unknowns. They are unsure of the full grant requirements, when it is due, or if it will require a new FCC license. She stated that MDTA currently has a statewide FCC license so any project that touches an MDTA facility may be eligible.

CHART is searching for interested partners that can provide ideas and recommendations, provide support with available funds, commit to participation if the grant is awarded, and/or help with reviewing the application.

- Question: Has the cost estimate been completed?
Answer: Not yet. Project criteria need to be finalized before the total costs can be determined.
- Question: How can the 5.9 GHz technology benefit traffic incident management?
Answer: It will create a connected vehicle ecosystem that can provide warnings to alert

vehicles to move over for incoming ERVs. ERVs equipped with 5.9 GHz technology will be able to communicate with infrastructure like traffic signals to minimize response time.

- Question: Are there already ideas in place or is this currently in the brainstorming process?
Answer: The ICC and Bay Bridge are two projects that are under consideration. There is a focus on MDTA facilities since their license is statewide. We are still in the brainstorming process and seeking input. CHART has a meeting in the next two weeks to finalize the details.
- Question: What is an example of the 5.9 GHz technology that can be useful on I-95?
Answer: Queue warnings. They can alert vehicles of incoming vehicles around a bend with poor sight distance. This can reduce the number of rear-end crashes at the end of queues due to traffic incidents. This could be installed on ERVs and the ERV location can be broadcast to alert all approaching vehicles.

Contact Carole for more information about the project (cdelion@mdot.state.md.us).

SHA HAAS ALERT Pilot – Carole also provided an overview on the SHA HAAS Alert Pilot. HAAS has developed a small, onboard unit with a digital alerting system that is installed on vehicle fleets/response vehicles to notify the public of their position in real time. The HAAS unit is activated when a vehicle component, like emergency lights, boom, etc., is turned on, which then sends a message directly to Waze in real time. Vehicle operators do not need to take any additional action, the alert is sent automatically to Waze. The HAAS unit was tested on three vehicles – boom truck, barrel-dispensing truck, and CHART patrol truck.

Carole discussed the pilot observations of Waze notifications for an I-95 crash. More Waze users interacted with the civilian alert than MDOT's alert. She indicated the motorist alert came out first and is probably the reason why more people interacted with that notification. She added that the motorist alerts had eight (8) comments that were consistent in describing where the crash occurred. When a CHART truck was first on scene, the first message on Waze was from the HAAS alert and that was the notification with the most responses/interactions.

- Question: Do the responders have the ability to send the message to Waze while they are en route to the scene? Is the message automated?
Answer: The messages are automated, so the operator does not have to worry about anything besides turning on the component as they typically do. Alerts are sent to Waze to broadcast to the public. In the I-95 crash example, the onboard unit was connected to the emergency flashing lights. As soon as the operator switched on the emergency lights, an alert was sent to Waze.

Carole indicated that the HAAS unit operates on cellular frequency and not on 5.9 GHz spectrum.

Currently the notifications are only pushed to Waze. CHART has a pilot to determine if there are other vendors that would be able to use this information.

- Question: This technology could be duplicated with an onboard modem. What is the advantage of using the HAAS Alert?
Answer: There are some partnering issues with Waze; however, HAAS has established a good relationship with Waze to push the alerts instantaneously.

Carole indicated that over 50 incidents were reported during the 1.5 week-long pilot program. She stated that there were frequent reports and interactions with alerts from the CHART vehicles. Notifications also went out for roadwork maintenance.

During the pilot, the historical information was organized in 2 tiers, (1) within 24 hours and (2) within 7 days. Data beyond 7 days was deleted.

Carole stated that there were no issues with the installation or any obvious limitations.

Carole stated that no significant differences were noticed in the surrounding vehicle behaviors.

- Question: Is the data coming out of the HAAS Alert system specific to Waze or can it be used with other apps and vendors?
Answer: It is not specific to Waze.
- Question: Is there a use for HAAS Alert on transit?
Answer: MTA vehicles have modems and MTA would currently prefer to use the modems.

HAAS is open to pilot with local jurisdictions. The agreement typically allows 30 days to pilot the program, but they are flexible in accommodating more time.

It was recommended to not connect the HAAS Alert System to police hazard lights.

Carole stated that SHA has completed the pilot and is moving in the direction of notifying the public in real time; SHA is still evaluating using the HAAS units.

MDOT iPAWS Alerting – Jason Dicembre provided an overview on the iPAWS alerting system. iPAWS is the federal standard to integrate the national warning system, wireless emergency services, amber/weather alerts, etc. on mobile phones. Penn DOT and INRIX worked with FEMA to create a similar platform to push transportation related alerts to the public. Penn DOT has implemented this tool extensively. In the two years that they had the capability, they activated it 43 times.

The platform allows operators to draw a geo-fence polygon to push a safety message to all cell phones in the selected area, often to people trapped in traffic. The alert comes with a link where the public can subscribe to receive additional alerts. The public can also use the system to send a message to operators.

SHA has received official Notice to Proceed and procured the iPAWS alerting system in mid-December 2019.

There is a platform and software component to send the alerts. FEMA authorization is required to send an alert, which requires a Collaborative Operating Group (COG) certificate.

MDOT TSO is applying for the COG certificate on behalf of MDOT so that any transportation business unit (TBU) will have access to this certification to send iPAWS alerts through MDOT's platform, EverBridge, or anything else that is considered in the future.

Jason stated that MAA already has a COG certificate that was approved by FEMA. They are looking to simply update that certificate.

Jason stated that a website is under construction. It will allow the public to access the information and register for the alerts.

A second approver is required before the messages are broadcast. The importance of crafting messages carefully was emphasized to avoid miscommunication or false information that may cause unnecessary panic. It is also suggested that a message library can be in place for specific scenarios at specific facilities. Follow-up messages are also needed to inform public of progress.

4. TIMBR COMMITTEE ACTION ITEMS

- Question about incorporating TIM needs into roadway design: There are currently not many new roads being designed/built, so this is not very applicable to our region.
- Use of Waze. The State recently signed an agreement with Waze. Jason stated that the Connected Citizens Program (CCP) is used as an operational tool. SHA can now add road closures directly into Waze and can connect directly to Waze data. SHA is considering using Waze as an operational tool. Currently only supervisors can enter road closures in Waze; they are working on defining procedures for when an operator should enter a road closure.
 - Jason noted that a couple of weeks prior, there was a period when many road closures were coming in to Waze at once and it was difficult for operators to enter them into two systems.
 - Jason said that, on average, the public adds an incident to Waze about 10 minutes before it is detected by responders/operators.

MDTA Traffic Operations has also signed an agreement with Waze.

Jason said that, despite SHA being a CCP member, Waze has a ranking system that allows other users with higher ranking to deny/remove any road closure that may be reported by SHA so he does not have the capability to ensure that all incidents are reported and stay reported.

- Training Update: In the last meeting, the TIMBR Committee was aiming to hold two or three TIM training courses this spring, depending on the number of trainers and locations available. Ideas for locations include: Baltimore City, Carroll County close to Baltimore County (possibly Hampstead, follow up with JJ Lynott), and Anne Arundel County near the Bay Bridge.

Other training updates:

- Pat Rooney scheduled a Train the Trainer session on May 8, 2020 for Harford County Sheriffs only. The Train the Trainer course is 1 day, and the 4-hour class is a requested prerequisite.
- The Eastern Shore is well covered, but we are short of active instructors in the Baltimore region. Eileen will work with Pat to locate more trainers.
- Attendance is an issue when the training sessions are scheduled ahead of time with people registering then not attending.
- Local training and agency-specific trainings was suggested to simplify coordination efforts.
- Pat distributes information about TIM classes to Maryland Fire Rescue Institute, Maryland State Firemen's Association (MSFA), and Maryland Emergency Management Agency.
- MFRI is now teaching the SHRP 2 TIM class
- Emergency Responder Safety Institute has developed 10 online courses that have been approved by FHWA.
- It was suggested that the best way to get fire fighters to take the TIM course is to hold it at a fire station.
- There were ideas for possible incentives to companies that have x% of their staff trained in TIM – giving the organization or the trainers cones, LED flares, or something else.
- MSFA will focus on TIM the week of June 14 to 20 so Pat will try to take advantage of this by having classes that week. Pat will be teaching the TIM course at the State Fire Convention on June 22.

- The Firefighter Safety Stand Down will take place from June 14-20, 2020 with this year's theme highlighting the hazards that responders face while performing their duties on roadways. Pat is looking to participate and recruit instructors from this event.
- Raj Sharma mentioned the Stockholm declaration and the World Roadway Safety Ministerial Conference that may have ideas on TIM training.
- We are still looking for a good sample of an After-Action Report to model.
- At this time, 50% of SHA signals are in the ATMS. Eileen will be in touch with Dale Lineweaver to determine the percentage of signals that are in the ATMS in the Baltimore region.

5. STATE AND LOCAL TIM UPDATES

- Proposal to Maryland Highway Safety Office - The request for \$10K to fund the TIM Conference was not approved at this time. However, there may be partial funding from the Office of Highway Safety to accommodate one-third of a TIM conference.
 - It was suggested that local/national committees (i.e., ITS MD or ASCE) and/or vendors might be partners to fund the rest of the conference.
 - State Farm was another recommendation as a partner or other companies/vendors.
- Upcoming planned and special events
 - May 5-14, 2020 – Police Unity Tour
 - May 13, 2020 – National Police Week
 - August 29-30, 2020 – Carroll County Balloon Festival
 - September 6, 2020 – Maryland Cycling Classic is a professional bike race that will start in Harford County, into Baltimore County, and end in Baltimore City. They currently do not have a proposed route but has requested 75 police officers to staff the event and help with rolling closures.
 - September 9-15, 2020 – Maryland Fleet Week & Air Show Baltimore
- FITM Plan updates - Tina Bui provided a summary on the Freeway Incident Traffic Management (FITM) detour route updates. Daniel Consultants, Inc. (DCI) has been working with CHART to update detour plans to a statewide format.
 - The project is on a 5-yr cycle with six (6) phases and DCI is currently wrapping up the 3rd phase, which covers numerous routes in the Baltimore region (I-83, I-97, and MD 295). April 2020 is the projected completion date.
 - Phase 4 will focus on the I-95/I-495 beltway and I-95 corridor.
 - By October 2022, all Maryland routes will be updated to the new format. A 4-year maintenance cycle is then proposed to ensure plans reflect any new geometric changes, standards, upgraded signal locations/type, etc.
- Complete Trip - ITS4US Deployment Program - The ITS4US Deployment Program is a US DOT grant program that aims to solve mobility challenges for people with disabilities, older adults, low income, rural residents, veterans, and people with limited English proficiency. Details of this program have not yet been released; full details are expected in summer 2020. Eileen indicated that USDOT expects to award 2 to 10 grant awards; please contact Eileen if there is any interest in getting involved in the program.

6. OTHER BUSINESS

- New committee chair - Chris Letnaunchyn is stepping down as chair so the TIMBR committee is in search of a new committee chair. The TIMBR Committee is looking for one or two people to volunteer to (co)chair the TIMBR Committee. Eileen indicated that they have not had co-

chairs for TIMBR in the past but that is possible. Co-chairs from two different response agencies would work well.

- Tim Peck mentioned that SHA is putting Move Over messages on mud flaps of wrecker trucks. He can provide additional information if interested. The flaps cost less than \$30 per set.
- 2020 meetings: June 3, September 2, December 2 (First Wednesday quarterly)

[Handouts: Agenda, Meeting Presentation Slides, FHWA First Responder Safety Technology Pilot Program Handout, ITS4US Deployment Program Handout]

Members

Jennifer Biddle, Howard County Department of Public Works
Colin Bristow, Maryland State Police
Tina Bui, Daniel Consultants
Bob Cumberland, Emergency Responder Safety Institute
Joe Davis, MDOT Maryland Transit Administration
Jason Dicembre, MDOT State Highway Administration, CHART
Hiwot Habtemariam, MDOT State Highway Administration, TDSD
Breck Jeffers, Federal Highway Administration, Maryland Division
Bill Johnson, MDOT State Highway Administration
Tanya King, Daniel Consultants
Chris Letnaunchyn, Carroll County Department of Public Works
JJ Lynott, MDOT Maryland Transit Administration
Ben Myrick, MDOT State Highway Administration
Timothy Peck, MDOT State Highway Administration
Cpt. Jason Pulliam, Maryland Transportation Authority Police
Patrick Rooney, MDOT State Highway Administration, CHART
Raj Sharma, Baltimore City Department of Transportation
Cpl. Todd Walker, Baltimore County Police
Scott Yinger, MDOT State Highway Administration, CHART
Patrick Zilliacus, Metropolitan Washington Council of Governments/TPB

Guests and Staff

Carole Delion, MDOT State Highway Administration, CHART
Eileen Singleton, Baltimore Metropolitan Council