

TRAFFIC INCIDENT MANAGEMENT FOR THE BALTIMORE REGION (TIMBR) COMMITTEE

December 4, 2019
10:00 a.m. – 12:00 p.m.

MDOT SHA Statewide Operations Center Training Room

MINUTES

1. WELCOME AND INTRODUCTIONS

Chris Letnaunchyn opened the meeting with introductions.

2. REVIEW OF MINUTES FROM JUNE 5, 2019, AND SEPTEMBER 4, 2019

The June 5 and September 4 minutes will be sent in the future for review and comment.

3. MARYLAND STATE POLICE (MSP) USE OF UNMANNED AERIAL SYSTEMS (UAS)

First Sergeant Colin Bristow provided an overview of the MSP UAS drone program.

- A policy for use of UAS for crash reconstruction was developed and is awaiting final approval by the Colonel.
- To date, UAS has been used 12 times for crash reconstruction. While the policy is pending approval, permissions from both FAA and the Colonel are needed before deployment. Once the policy is in place, MSP will just need to notify the FAA prior to use.
- MSP flew two missions within the last two months that yielded significant reductions in road closure time.
 - I-695 incident with all lanes closed: UAS reduced road closure time by approximately 1.5 hours.
 - I-70 at mile marker 60, all lanes closed in both directions: UAS reduced road closure time by approximately 2.5 hours.
- Over 100 photos are captured within 8-12 minutes of flight time. They are then processed and pieced together to map out crash scenes. The system removes moving vehicles from the images.
- First Sergeant Bristow presented sample results of the aerial mapping tool when the drone was deployed on I-97 for a police chase that resulted in a car wreck at Exit 5 in Glen Burnie. He stated that the mapped scene was conducted on the shoulder so there was no impact to the travel lanes.

- MSP currently has four drones in their fleet, each assigned to the following regions: 1) Western Maryland, 2) Baltimore/Carroll/Howard counties, 3) Southern Maryland, and 4) Eastern Shore.
- MSP has 12 pilots certified through the FAA. MSP's goal is to equip all pilots with drones in their vehicles to cut down on travel time to the crash scene.
- MSP is collaborating with Rick Dye from SHA and one of the crash team members to procure software that will allow drones to stream live video feeds back to the SOC through mView. This additional feature may help detect the cause(s) for traffic queues and congestion sooner.
- First Sergeant Bristow said the cost of each drone hardware is approximately \$7,000 – \$8,000; the bulk of expenses went into the pilots' certification and licensing.
- The current policy is written to approve drone technology for crash reconstruction missions. Amendments to the policy would be needed to allow use of drones for other special traffic operations.
- SHA has a drone that can be used for emergency incidents (e.g., service bridge or dam failures).
- The main use of the current drones is to capture images; they are not capable of hauling heavy equipment.
- A question on signal and communication was raised because it is common for drones to lose signal from nearby interference with cell phone towers. MSP has not experienced any situations where drones at the crash scenes have lost signal contact and failed.
- There are airspace restrictions (i.e., the National Capital Region). MSP's code will state that drones are allowed where helicopters are allowed.
- The quality of the images from drones is the same as total stations now, and drones can capture hundreds of points.
- A question was raised on how the reduction of time is measured by implementing the aerial mapping tool at crash scenes. First Sergeant Bristow explained that his team uses historical data to compare. He added that it takes approximately half an hour to take the drone out of the case, set the aerial parameters, and fly the drone to map an entire scene.
- The UAS flies autonomously over the site based on the parameters entered; the pilot is not flying it in real time.
- Many agencies are using this technology so a question was raised on the use of cooperative purchasing to acquire drones. MSP has a grant to purchase drones for special operations. These drones will have additional camera capabilities that are not necessary for crash reconstruction missions.
- There is funding available to purchase eight more drones, which will be done early in 2020. MSP aims to equip all pilots with drones by mid-Summer 2020.
- Pilots must be recertified every two years. This is an additional cost on top of potential equipment maintenance and repair costs.

- All crash team members are UAS pilots; there are several others from MSP who are licensed as well.

4. UPDATE ON OUTREACH TO LOCAL JURISDICTIONS

- All meetings have been conducted. Locals expressed interest in getting more people TIM training but several agencies indicated that they were not sure how to sign up for the courses. Eileen put them in touch with Pat Rooney.
- It was noted that we should ensure that all responders (volunteer fire, tow companies, HAZMAT, and crash reconstruction members) are trained.
- It was suggested at one of the meetings to include TIM training as an in-service training.
- Several school systems were interested in receiving CHART text alerts.
- It was recommended to add the OOTS Traffic Operation Division to TIMBR.
- It was noted that in some cases, there is a need to improve sharing of incident information between agencies within a jurisdiction and also for more communication between state and local agencies.
- There was interest in looking at how incident response and clearance times have improved over the years.
- Locals would like to see how TIM needs are incorporated in the roadway design phases.
- Locals expressed issues with Waze making congestion worse, particularly the summer beach traffic in Anne Arundel and Queen Anne's counties.
- It was suggested that a list of all TIM trainers be developed and those people can be called upon to assist with in-service TIM training.
- It was recommended that the TIMBR committee sponsor several TIM courses around the region. These courses would be the 4-hour free SHRP 2 TIM courses and would be open to all responders. Consider holding them in areas where training numbers are low. Also, it was suggested that we coordinate with the NCR. We need to make sure that the locations and times are convenient for responders.
 - The following locations were suggested:
 - Carroll County Public Safety Training Center
 - Elkridge Fire Station in Howard County
 - Baltimore County Police Academy Training Center
 - Baltimore County Public Works training center in Phoenix, MD
 - Hartford County Emergency Operations Center
 - It was suggested that we reach out and identify a couple of trainers and match them up by skill level (inexperienced with more experienced) to co-teach a training course.

- It was noted that we should consider holding some training in the evenings to accommodate volunteer fire community.
- We will aim to hold up to three courses by mid-2020.
- It was stated that four jurisdictions (Montgomery, Prince George's, Charles, and Frederick) in Maryland are within D.C.'s MPO boundaries. MWCOC is planning to start a TIM committee.

5. FHWA TIM SELF ASSESSMENT

The TIM Self-Assessment (SA) was conducted at the September TIMBR Committee meeting. A summary of the scores for the last five years was prepared to show trends and discuss areas for improvement. Below are highlights from the discussion:

- Our goal is to provide more training next year and revisit this score in the next self-assessment.
- Eileen will follow up with Jason Dicembre on AAR documentation practice. He has been using RITIS to prepare incident summaries. Currently there is no formalized or standard threshold/trigger to determine when to prepare/conduct a multi-agency AAR. As a result, there is currently no standard AAR documentation procedures in place.
- Topics related to Roadway Clearance Time (RCT) measures. It was suggested that these topics may be best discussed at a Traffic Incident Management Conference. It is not likely that local agencies would develop performance measures.
- Secondary Crash data is difficult to obtain. There is a field on the crash report form to indicate if an incident is a secondary crash; however, there has not yet been any analysis if the field is being used and if responders understand when to use it. Reports in the Automated Crash Report System (ACRS) may not accurately reflect the number of secondary crashes. In addition, it might be difficult for a responder in the field to realize that an incident is a secondary crash; there might be a need to have a supervisor identify secondary crashes, especially those that are not obvious (i.e., the secondary crash is along a detour route because the driver is not familiar with the area). It was recommended that we might identify more secondary crashes if we can process overall crash data by using data collected at the scene (e.g., GPS coordinates of the crash location and time of occurrence comparisons).
- We are making the efforts and are doing well but there is always room for improvement in TIM training based on the feedback received from the local outreach meetings. We would like to organize more courses and make training opportunities more accessible by providing them in different locations throughout Maryland and offering the courses during the day and evening.
- There has been some collaboration with SHA and MSP on a towing incentive program for heavy tows called TRIP (Towing and Recovery Incentive Program). The TRIP Program is developing incentives for towers. If an incident meets criteria for a TRIP incentive, the towing company will receive an incentive if they can clear the scene within 90 minutes. If a company misses the clearance window three times, they would be taken off the heavy-duty tow list.
- Many Medical Examiner issues were significant when the committee first started, but many of these issues have improved. This is a matter of educating all responders on the need to have the medical examiner arrive on scene as soon as possible.
- Continuing education will help; need to educate new responders also. In addition, it is important to educate responders on the importance of accurate data.

- With implementation of drone technology, the score for back of queue warning may improve. Also, Waze alerts may help address this need. Text alerts may also help to improve this score.
 - Providence VFD and CHART are investigating using HAAS digital alerts, which is a new technology that sends alerts to drivers through navigation apps. An alert is triggered when an emergency vehicle has its lights and/or sirens on or its arrowboard is up. Agencies can receive a monthly report on how many contacts it made.
- It was noted that there is a cost associated with this but agencies are generally open to the idea of sharing data. New CAD vendors are easier to work with when it comes to sharing data with other agencies.
- In regards to the policies and procedures in place for signal timing to support traffic incidents, Ben Myrick said that SHA is revising signal timing plans. He mentioned current plans provide too much green time that does not provide enough gaps to accommodate pedestrian traffic during emergencies. He indicated that SHA would start this review process next year. He added that 50% of the signals are now in the ATMS system so these signals can be monitored in real time. He also mentioned that there is now a signal technician in the SOC during the morning and evening rush hours to facilitate quicker response to signal issues.

6. STATE AND LOCAL TIM UPDATES

- TIM Training Update – To date, 7,699 (33.2%) of Maryland responders have been trained, and 283 trainers have been trained.
- Proposal to Maryland Highway Safety Office – Our initial request for \$15,000 for a TIM Conference was not approved, but we may be able to receive funds later in the funding year. If so, we will aim to host a TIM conference in the fall.

7. OTHER BUSINESS

- Overview of State Alerts: Public alerts can only be issued by the state police, and only amber and weather alerts are pushed to cellphones. For vehicle alerts, the full vehicle description and tag number are needed. Tim Peck provided a description of each alert:
 - Amber – abducted child under the age of 18
 - Silver – missing person that is a senior citizen
 - Blue – violent criminal on the loose after killing or seriously injuring law enforcement
 - Yellow – suspect who committed a hit-and-run incident where a person has been killed or suffered serious injuries
- Upcoming meeting dates – SOC Training room will be under reconstruction in early 2020 and this room will no longer be available so we will need to meet elsewhere. T.J. Bathras offered to check availability at MDTA. Meeting dates in 2020 are: March 4; June 3; September 2; and December 2

ATTENDEES

Members

T.J. Bathras, MDOT Maryland Transportation Authority
Jennifer Biddle, Howard County Department of Public Works
Colin Bristow, Maryland State Police
Tina Bui, Daniel Consultants
Andrew Burke, Metropolitan Washington Council of Governments
Geoffrey Donahue, Maryland Department of the Environment
John Dulina, Maryland Emergency Management Agency
Dan Janousek, Maryland Department of Transportation
Bill Johnson, MDOT State Highway Administration
Shelley Kellam, MDOT Maryland Transportation Authority
Chris Letnaunchyn, Carroll County Department of Public Works
JJ Lynott, MDOT Maryland Transit Administration
Roxane Mukai, MDOT Maryland Transportation Authority
Frank Murphy, Baltimore City Department of Transportation
Ben Myrick, MDOT State Highway Administration
Timothy Peck, MDOT State Highway Administration
Daivamani Sivasailam, Metropolitan Washington Council of Governments
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