All Lanes OPEN

Summer 2025

In This Issue...

MESSAGE FROM THE DIRECTOR

My first job here at SHA was in our CHART Program as a Highway Operations Technician, working in our traffic management centers. I'm often asked what made me fall in love with the job. Helping people? Absolutely. No day ever being the same? Yes, that too. Funny as it may seem, I also loved using our Advanced Traffic Management System. When I was a kid, I would get so excited over the new release of Microsoft Windows. I had to have the newest version as soon as it came out. If PlayStation sent an update, I downloaded it the same day. As a TMC Operator, I was like a kid at Christmas whenever our Systems Team pushed out a new release. It wasn't just because it would be cool. I knew that there would be new features and tools that would make my job easier. CHART has always operated off of the belief that operations and business process should dictate software, not the other way around. That belief is why we still continue to invest in custom-built software. CHART Release 30 was deployed this past February, and it brought exciting new features you'll read about in this issue.

Our ATMS remains one of the best in the nation, not just because of the pure technology, but because of the teams that help develop it. They are just as committed to our mission as our operations teams. They know that their work helps save lives by ensuring we have the very best software to detect roadway incidents, alert the public, and dispatch resources. And we do, have the very best.

Have a great summer season!

Jason Dicembre
Director – Office of Transportation
Mobility & Operations (OTMO)

CHART MONTHLY STATISTICS

JANUARY 2025	FEBRUARY 2025	MARCH 2025
3,676 INCIDENTS MANAGED	**3,049** INCIDENTS MANAGED	**3,133** INCIDENTS MANAGED
2,796 MOTORISTS ASSISTED	**2,847** MOTORISTS ASSISTED	**3,052** MOTORISTS ASSISTED
29.42 MINUTES AVG INCIDENT DURATION	**29.06** MINUTES AVG INCIDENT DURATION	**27.88** MINUTES AVG INCIDENT DURATION
11.44 MINUTES AVG RESPONSE TIME	**11.19** MINUTES AVG RESPONSE TIME	**11.03** MINUTES AVG RESPONSE TIME

NEW HIRES

Welcome to the Team:

- **Michael Rossbach -** Highway Operations Technician (TMC Operations)
- **Julio Ford -** Highway Operations Technician (TMC Operations)
- **William Golden -** Emergency Response Technician - Regional Operations
- **Ryan Crouse -** ITS Technician - ITS Division

SHA'S 2025 INNOVATION SHOWCASE

OTMO Wins Safety Award at 2025 SHA Innovation Showcase

SHA's 2025 Innovation Showcase took place on June 3rd at the Hanover Complex. Its purpose was to recognize great ideas across the agency, which range from new processes or procedures, modifications made to tools or equipment, or any safer or more efficient way to get work done. OTMO was among several SHA offices and districts that participated and displayed a CHART patrol vehicle equipped with the LaneBlade, a debris-removal technology that enables the CHART driver to safely remain in the vehicle while clearing a lane. Our display had many visitors, who were quite interested in and impressed with the technology. OTMO's innovation also won the event's Safety award.

Congratulations to OTMO, and thanks to Tim Peck, Dan Rice, and Tom Costello for representing us at the event!

OTMO AWARDS & RECOGNITION DAY

OTMO Awards & Recognition Day

The OTMO Awards and Recognition Day event was held in the Office of Traffic and Safety Training Room at the SHA Hanover Complex on May 7th and featured good food and fun activities. Congratulations to all of our award winners!

Team of the Year - Francis Scott Key Bridge Collapse Response Team

Alex Archer
Jennifer Christopher
John Coll
Eric Dubbert
Al Fitzgerald
Jeramy Lanning
April Lindsey
Dale Lineweaver
Maki Morka
Dan Nims
Natalie Nwandu
Andy Orr
Tim Peck
Rashad Rice
Andrea Richburg
Dave Rineholt
Dave Rossbach
Kristen Routzahn
Amy Schrum
Sarah Stinchcomb
Jason Watson
Aaron Williams
Devin Wilson
Mike Zeback

Safety & Equipment Care Awards

Alex Archer
Howard Bostick
Raymond Burroughs
John Coll
Jeffrey Cresanto
Patrick Crogan
Peter Davy
Ryan Dovel
Neil Ecker
Albert Fitzgerald
Michael Fondjo
Sean Frederick
Mario Funez
Upton Hilderbrand
Paul Hubbe
Gary Hunt
Joseph Iman
Anthony Johnson
Rodney Johnson
Brian Knott
Brian Libby
Ryder Malone
James Manis
Eric Meredith
David Mitchell
Devin Naylor
Robert Nicholson
Wesley Rawlins
Richard Reeves
Jared Resh
Daniel Rice
Robert Ritter
Jason Schaefer
Thomas Smith
Douglas Stewart
Barry Stonestreet
Jason Swanger
Quantay Taylor
Russel Teat
Eric Thrift
Gary Tyler
Bryan Walker
Shane Wallace
Jason Watson
Donald Welsh
Devin Wilson
Terrell Young

Service Awards

5 Years

Charles Dorsey
Michael Fondjo
Warren Henry

10 Years

Peter Davy
Jesse Edmonds
Eric Fogle
Djuan Kelly
Mohammed Raqib
Devin Wilson

15 Years

Laura Frymoyer

20 Years

Jason Dicembre
Michael Fromm
Bryan Walker
Jason Watson

25 Years

Neil Ecker
Upton Hilderbrand
James Manis
Andrew Orr
Wesley Rawlins

30 Years

Charlie Moss
Dina Patterson

35 Years

Paul Hubbe
Gary Hunt
Danny Rice

CONNECT WITH US

7491 Connelley Drive
Hanover, MD 21076

OTMO@mdot.maryland.gov

OTMO WEBSITE

roads.maryland.gov

MDOTSHA

MDSHA

marylandstatehighwayadmin

TETHERED DRONES ON CHART VEHICLES PILOT

OTMO's Cameras are Flying High!

The first cameras used by the CHART Program were mostly installed on roadside poles with most being between 30 and 40 feet off the ground. The installations and getting power to them was expensive, and the original commercial T-1 communication infrastructure could easily run several thousand dollars per month, but that was the fastest way to get "eyes" on crashes or congestion on Maryland's highways in the mid 1980's.

By the 1990's, we had connected to other types of cameras like cameras on government facilities, like tunnels and radio towers, but the vast majority were still pole-mounted, expensive and never exactly where you wanted them. So, during the 90's, we also added some portable trailer-mounted cameras to our fleet, but cellular communication was in its infancy, and now we were paying per minute, but once again this was a very important step forward for the safety of Maryland drivers.

By the early to mid 2000's, cellular communication was much better and much less expensive. This led to Automatic Vehicle Location and dash cameras on all CHART vehicles. Dashcams were great. They filled in many of the coverage "holes" we had with our pole-mounted roadside cameras. Sadly, once the drivers got to the scene and started their response, the camera was rarely looking where the operators needed to see!

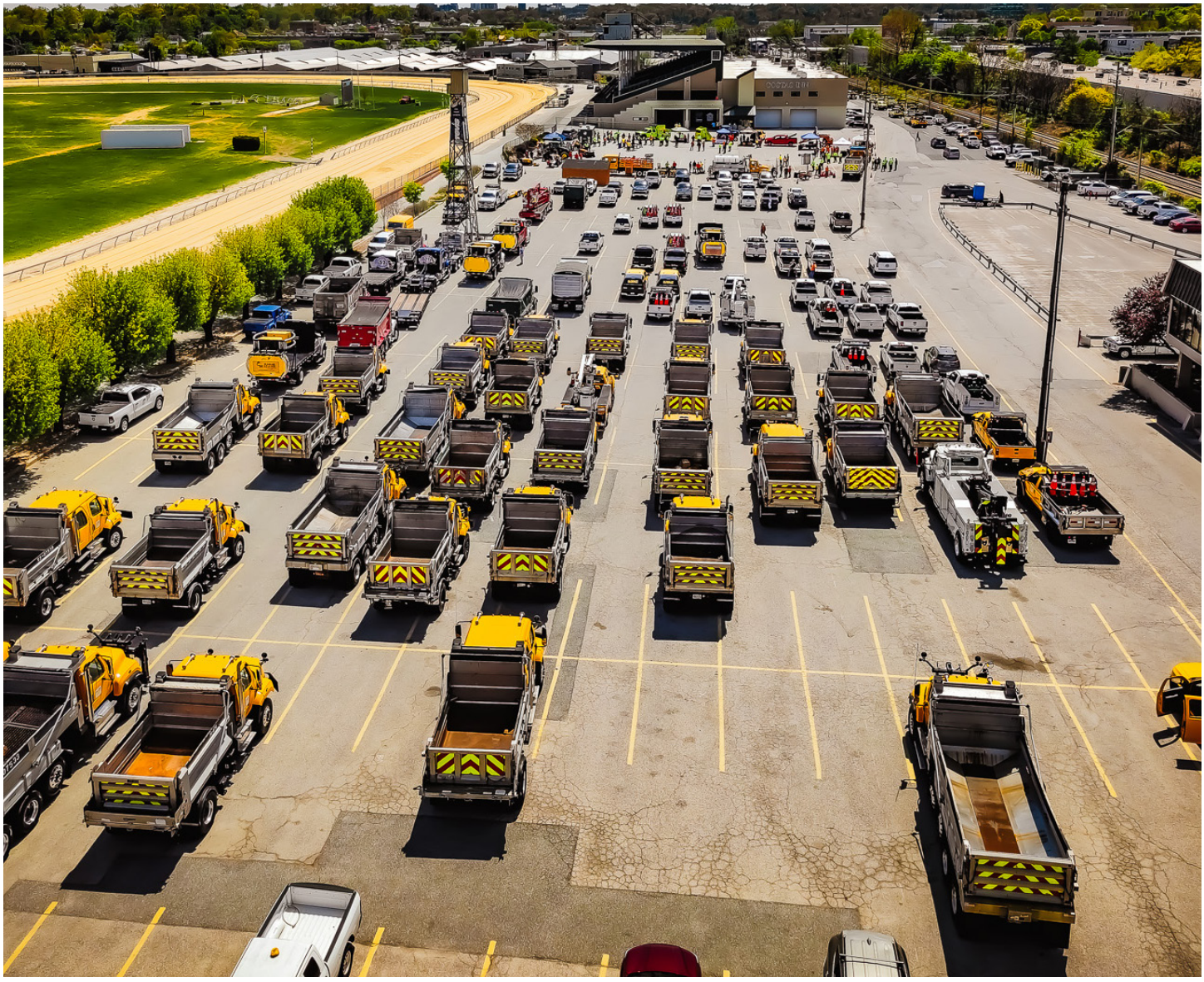
By the mid 2010's, we had modified our dashcams to fully pan-tilt-zoom cameras attached to a short pole on top of each CHART response vehicle. Now, drivers could concentrate on being emergency responders, and TMC operators could concentrate on controlling the technology in the field. It took us nearly 20 years to graduate from our first pole-based cameras to mobile dashcams but only 5 years to jump again to fully pan-tilt-zoom cameras on all CHART vehicles. What would the next step be?

In 2024, OTMO put in for a State Transportation Innovation Councils (STIC) grant to install a tethered drone to one of our Emergency Response Units (ERUs). The new drone has been received and is being attached to the back of an OTMO ERU and will be activated by the driver and rise over a hundred feet in the air to expand the operational view of all needed Maryland responders as major incidents occur on the roadway. Eventually, this will reduce the need for engineering, installing and maintaining more expensive permanent roadside cameras that are continuously being installed as major roadway incidents increase and our coverage areas expand. These videos will be shared like all of our other 1,000+ cameras with other regional first responders through the MView video sharing system operated by the Maryland State Police.


EMERGENCY PATROL
EMERGENCY PATROL
Towson
Ellicott City

UNITY RIDE

For the third year in a row, OTMO helped organize and participated in the Unity Ride, which was held on April 23rd as part of National Work Zone Safety Awareness Week. Participants included various Maryland contractors, trucks and personnel from SHA maintenance shops from all seven districts, several other offices within SHA as well as MDTA, MTA, and Maryland State Police. This year's Unity Ride began in BWI Airport's Gold lot off Digiulian Boulevard and proceeded to Dorsey Road, I-97, I-95, I-695, I-83 to Padonia Road, then proceeded south on York Road, ending at the Timonium Fairgrounds.
The event continued with a work zone technology expo at the Fairgrounds, which included demonstrations of automated flaggers; Pro-bid trucks, which are special body trucks dedicated to carrying safety cones and signs to set up/tear down work zones; the MDTA's tunnel washing machine as well as a CHART patrol vehicle equipped with LaneBlade technology. Whether you have family, friends or personally work in or around work zones, please remember to slow down, move over and pay attention so everyone can go home at the end of every day.



MENTAL HEALTH FIRST AID TRAINING FOR MANAGERS

CHART Operations Managers recently received training through participation in a comprehensive, nationally recognized course known as “Mental Health First Aid,” which was facilitated by Megan Heller of SHA’s Organizational Development Division in Building #4 in SHA’s Hanover Complex. This training, which is offered throughout the agency, introduces participants to Mental Health First Aid, explains essential concepts and definitions, and investigates how mental health affects a person’s life. It also enables those being trained to discuss mental health; identifies early signs and symptoms of a mental health challenge and how to discuss one’s concerns in a productive way; addresses how mental health challenges or disorders may progress and what they might look like; explains how to identify situations that may become crises and how to discuss substance use crises, non-suicidal self-injury, psychosis, and suicide; explains those situations that are automatically considered crises and what can be done in cases where an individual appears to be in crisis; and, lastly, discusses reasons to prioritize self-care for those performing Mental Health First Aid and ways to integrate it into our busy lives.

CHART Regional Operations Managers recently participated in a two-hour class, which was held in Building #4 in SHA’s Hanover Complex and facilitated by Maryland State Police (MSP) Capt. Diane Hansen, a trainer at the MSP Academy, called “Mental Health Resilience.” The course was focused on coping with trauma from the experiences that CHART operators have had in responding to incidents as part of the job but also trauma outside of work. The course also covered the symptoms of post-traumatic stress and discussed and challenged the stigma associated with getting help for mental health-related concerns.

NEWS FROM CHART

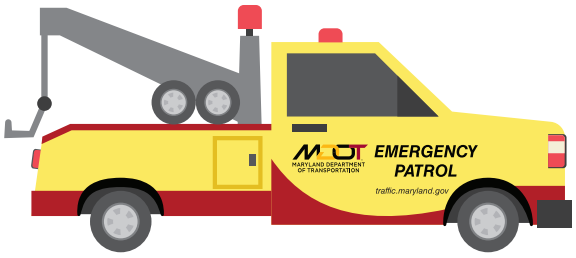
Touch a Truck Event

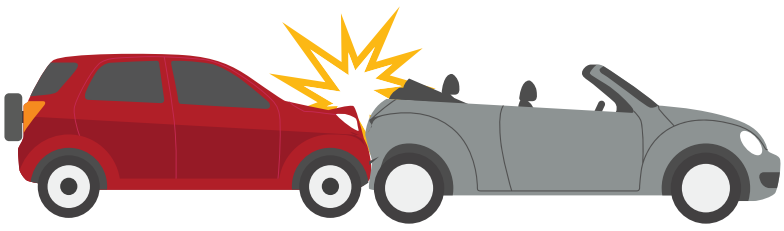
OTMO participated in the annual Touch a Truck event, which took place on May 2nd at the Beth Tfiloh Dahan Community School in Baltimore this year. Despite the rainy weather, this fun and interactive educational event was a success with CHART vehicle drivers engaging with both the parents and the kids, asking them questions and sharing smiles!

TESTIMONIAL

I ran over an object on the I495 Beltway North at Rt 50 today. I didn't see the object in the roadway, but heard the sound of metal hitting the tire and bouncing off my SUV. By the time I reached Annapolis Rd. in Lanham and the thumping and roaring was so loud I had to pull off the roadway. I opened the door slight enough to see my rear tire was heavily damaged. I called for a tow truck in Lanham, and was waiting for it when two SHA employees, **Wesley Rawlins and his trainee Habib** stopped and approached my vehicle to find out what kind of problem I was encountering and if I needed help. I told them I had called a tow truck, but didn't know how soon it would arrive. They assisted me identifying whether I had a miniature spare tire (I was previously unaware), and said they could change the tire for me. Just as they were pulling the tire out, the tow truck showed up. The tow truck driver said he wouldn't change the tire, but he would tow it to tire shop to have the tire changed. At that point, I asked Wesley and Habib if they would be so kind as to change it since tow driver would not change the tire on the spot. I wanted to commend these two kind individuals; they were concerned about my safety outside of my vehicle as directed me to stay out of harm's way as they changed my tire, which only took them a matter of minutes to complete. I appreciate both gentleman's professionalism, courtesy and concern they showed me during this ordeal.

- Dollie. D.





CONNECTED VEHICLE POOLED FUND STUDY SPRING 2025 MEETING

This year, Maryland had the honor of hosting the Connected Vehicle Pooled Fund Study's 31st bi-annual meeting at the Harry Hughes Conference Center at the MDOT headquarters facility in Hanover. The meeting took place over four days (May 6th-9th) and included in-house presentations and discussions as well as field visits. It also featured subject matter experts representing 14 states from Alaska to Florida. SHA Administrator Will Pines delivered the opening remarks that included several Connected and Automated Vehicle (CAV) accomplishments and planned activities in Maryland.

Day two focused on project working sessions covering topics such as MAP Guidance, Connected Work Zones, Connected Vehicle (CV) Procurement Specifications, Connected Intersections, and the Connected Intersections Message Monitoring System (CIMMS). The afternoon included strategic discussions on the future direction of the Pooled Fund Study.

Day three featured a field visit to National Harbor where Prince George's County officials warmly welcomed the participants and served delicious food. The field visit included CV infrastructure reviews with a bus tour, technology demonstrations by various vendors, hands-on equipment sessions, and a presentation by Prince George's County on initiatives regarding Vision Zero, which is a strategy to eliminate all traffic fatalities and severe injuries.

Day four offered an optional tour of the Turner-Fairbank Highway Research Center in McLean, VA, which featured a CAV tour; a CAV simulator; and visits to various labs, including Saxton Transportation Operations Laboratory (STOL), Federal Outdoor Impact Laboratory (FOIL), and the Hydraulics & Structures Lab.

The event was a huge success!


PRINCE GEORGE'S COUNTY
MARYLAND
Prince George's County
Department of Public Works & Transportation
Prince George's County
Welcomes the CV Pooled
Fund Study Group

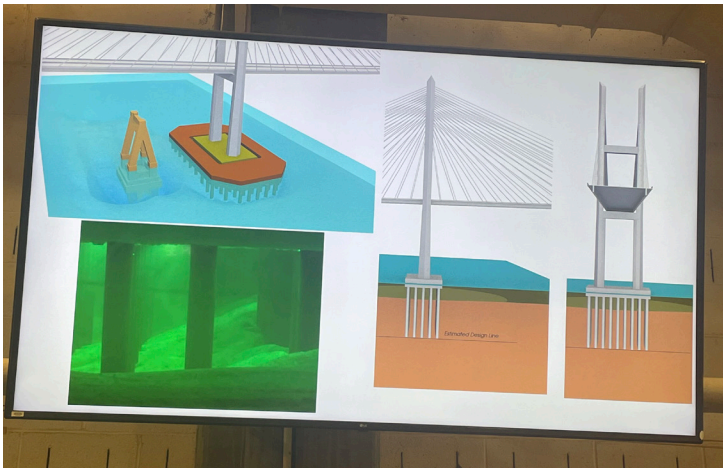


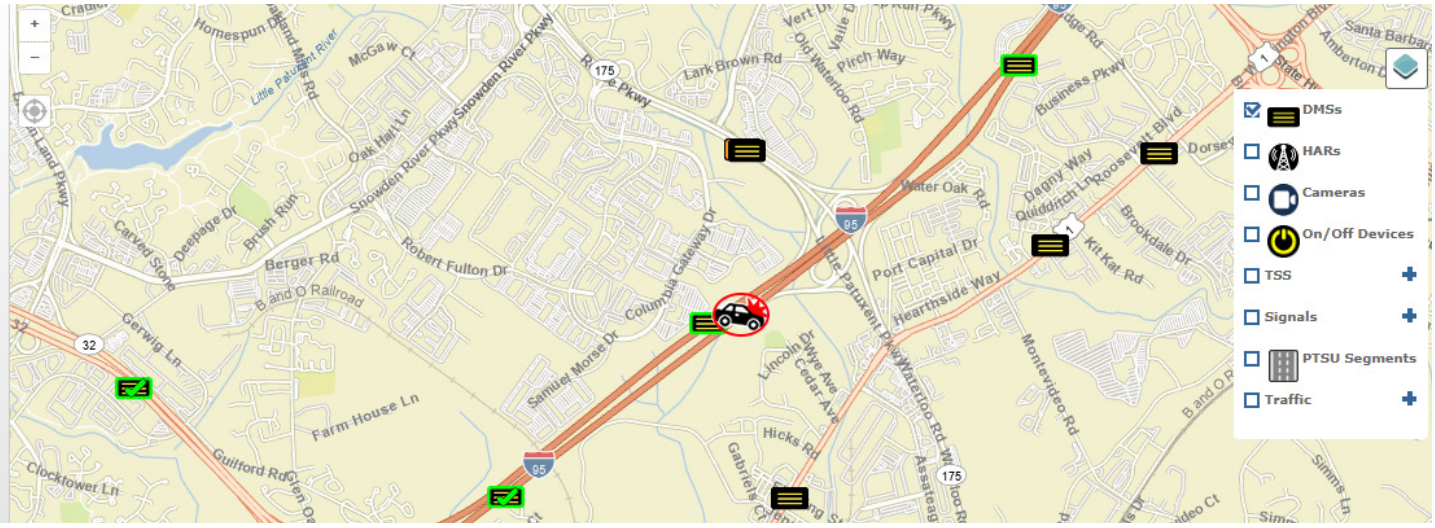
CHART RELEASE 30

The Smart is Getting Smarter

While the CHART Systems as we know them today (Advanced Traffic Management System - ATMS, Emergency Operations Reporting System - EORS, Lane Closure Permitting System - LCP and CHART on the Web) have been around for 25 – 35 years in one form or another, when asked what support Maryland's Highway Operations Technicians need the most from their automated systems, notifications to the public consistently rose to the top. These notifications are critical if we want to reduce the very dangerous secondary crashes that often follow an initial crash. How can we get the word out to the public more quickly, to the most appropriate devices with the most consistent messages?

ATMS has had some type of decision support function for the operators since 2007. The first attempt to answer the three questions above was a map showing the devices available to the operators when an incident was created in the system. While it was simple and fast, it did not have any directional component and had no way of checking if an operator was choosing the best field devices or even if the devices they chose were upstream from the event. So speed alone was a good step, but we needed more. The second attempt was in 2012, and now the ATMS had the ability to geospatially map each device on an electronic roadway that told the system how far each device was from the crash as well as what was upstream... but it took a hit in timeliness. With the system taking 30 seconds to a minute to respond to the operators, and stopping them from doing other important work while waiting, it quickly died that most horrible of software deaths... it was mostly ignored. There were some additional attempts to speed up the processing in 2019, but by then the damage was done and the decision support sub-system continued to be minimally used. But the problems did not go away. Timely notification to the public was still a major operations concern and even became a metric that was tracked by higher administration offices.

In 2024 decision support was again requested by operations, and updated mapping systems and ATMS coding greatly increased overall system processing speed. Everyone agreed that now was a good time for a fresh look at the problem.



In February Release 30 of ATMS was deployed with the following capabilities:

Decision Support results will now be presented to the operator in the Response section of every traffic event every time lanes are closed or updated. These suggestions can be used (Executed) without change, edited (Copy and Edit) or removed (not to be suggested again). The system does not block other actions of the operator while it is working and even graphically shows the operator that it is IN PROGRESS , COMPLETED and how much time those actions took.

Users are responsible for all message content; Decision Support does NOT send messages to signs without user interaction. The Decision Support feature is rules-based, meaning for every event and every lane change the system looks at a complex set of rules to make suggestions. These rules are configurable by a System Administrator.

Decision Support suggestions can be validated in two ways:

Users can click on the magnifying glass icon under the suggested message which will open a new window with sign routing details to help the user verify the suggestion is appropriate.

Users can view the Close Devices Map in the event. Suggested signs will have a green check mark. It is helpful to use the map layer control to turn off all layers except DMS when making selections