

IN THIS ISSUE

Texas Leads the Way.....	1
New Helmet Design Protects Highway First Responders.....	2
New Statewide Contract will Improve HazMat Response, Statewide TIM Meetings and Training.....	3
The Rise of Alternative Fuels.....	4
Statewide Webinar, Training & Faces of the Fallen.....	5

TIM News

The Lowdown on the Highways

Of the 4.2M miles of road in the US, only 48,890 are Interstates (1%), and another 160,955 are in the National Roadway System. Local governments are responsible for maintaining 3.17M of road (77.5%). One-third of all road miles are unpaved gravel or dirt.

Texas has 683,533 miles of roads, making it the state with the highest road mileage in the US. TxDOT maintains more than 73,000 centerline miles of paved road which is 180,000 miles of road in lane miles. Additionally, the Interstate Highway System in Texas covers 3,240 miles.

[CLICK HERE](#)
to read the online source

For newsletter comments,
contact: TIM@txdot.gov.



Has It Been A Year Already?

By Christopher Gray, Statewide TIM Coordinator, TxDOT



It is hard to believe that it has been a full year already since Sean and I started with the Texas Department of Transportation as the Statewide TIM Coordinators. In that year, we have spent a tremendous amount of time learning, teaching, and serving as SMEs or Subject Matter Experts, as we would learn the use of acronyms pales in comparison to our last career. We have served on boards across this great state of ours. We have traveled as far west as El Paso and as far east as Carthage to teach the Traffic Incident Management course. We are constantly expanding our footprint into Traffic Incident Management.

Sean has taken the lead on the Autonomous Trucking/Vehicles and Unmanned Aerial Vehicles, while I have served in an advisory capacity to the Safety Service Patrol initiatives across the state and beyond, attending meetings out of state, as far away as Cambridge, Massachusetts. I am currently serving as the Emphasis Leader for the state Highway Safety Plan around Post-Crash Care. We continue to work hard in these areas to bring the latest and greatest information back to Texas, ensuring the safety of our first responder community.

We are currently number one in the nation for first responders trained in Traffic Incident Management, with 72,797, or 73.2% of state registered responders, with additional classes scheduled through the year's end. We have certified over sixty new TIM instructors to continue to share this life-saving information with first responders in every corner of the state.

As most of you know the new edition of the National TIM responder Course was released. The statewide TIM team met for an extensive and exhaustive review of the new federal edition and completed editing the course to include Texas-specific laws and policies. If you are a TIM instructor, please contact us to get a copy of the new, updated PowerPoint presentation.

As we approach Crash Responder Safety Week we are working closely with those in media relations to distribute public safety campaign materials across social media platforms to bring awareness to the event and remind drivers to *Slow Down and Move Over*, in an attempt to make roadways safer for our first responders.

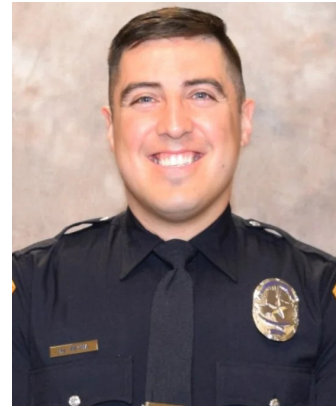
Moving forward we look forward to working with all of you to help Texas remain number one in the nation and providing lifesaving training that ensures **Everybody Goes Home!**

Chris

NEW HELMET DESIGN PROTECTS HIGHWAY FIRST RESPONDERS

By Bob Murphy, Sr. Project Manager, AECOM

It was a first responder's worst nightmare – at the scene of a crash on an icy highway on a frigid Saturday morning. Suddenly an out-of-control car crosses the median and runs down two fire rescue personnel and a police officer in a secondary crash. Two lost their lives after the January 2020 crash on Interstate 27 in Lubbock, Texas. The third fire rescue paramedic died three years later after initially suffering a traumatic brain injury.



In memory of the three victims – Lubbock Fire Rescue Lt. Eric Hill and Firefighter Matt Dawson and Lubbock Police Department's Officer Nicholas Reyna

Since that fateful day, Lubbock Fire Rescue Lt. Brady Robinette has been on a mission to improve head safety for first responders at highway incidents. His focused approach led research teams to look at all types of existing helmets. They found that U.S. fire rescue fire helmets are designed for structural firefighting and not to protect the head in the event of falls or struck-by incidents.



Lubbock Fire Rescue Lt. Brady Robinette with the First Responder Highway Helmet. (Photo Courtesy of Lubbock KCBD).

The standard fire helmet protects from top impacts, not from the side, front, or back. Helmets used in Europe have a suspension system with a 4-point chin strap, whereas structural helmets only have two-point straps. Some helmets have plastic and metal pieces on the side, which could injure the wearer during a side impact. Furthermore, many other first responders, including police officers and safety service patrol operators, do not wear any head protective gear while at highway incidents.

This past summer, after years of research, design, and testing, Lt. Robinette announced at the July 2024 TxDOT Statewide Traffic Incident Management meeting that the American Society for Testing and Materials (ASTM) has approved a standard for protective helmets worn by pedestrian roadway workers and first responders. The 400+ member Lubbock Fire Department was one of the first agencies to implement one new helmet design made by Team Wendy®, and other departments are starting to update their headgear for traffic incident responses.

Now, the challenge is to get this information out to the thousands of first responder agencies so that they will consider changing their guidelines and using newly designed protective headgear with a 4-point chin strap and a foam internal core. Be sure to consider this for your department.

For more information:

- The Emergency Responder Safety Institute (ESRI): <https://www.respondersafety.com>
- American Society for Testing and Materials (ASTM): https://www.astm.org/e3422_e3422m-24.html
- Team Wendy SAR Tactical™ Helmet: <https://www.teamwendy.com/products/helmets-accessories/helmets/sar-tactical>

NEW STATEWIDE CONTRACT WILL IMPROVE HAZMAT RESPONSE

By: Josh Pulley, Hazmat Contract Coordinator, TxDOT

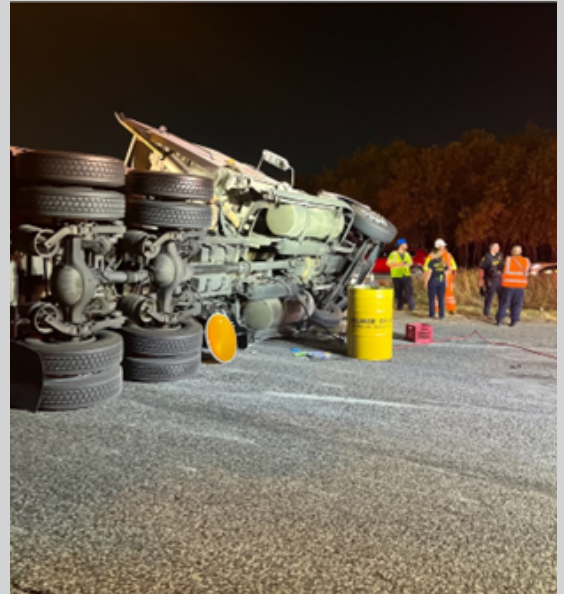
In an effort to clear traffic incidents on State roadways, TxDOT has revamped its statewide HazMat response contract. This new effort will establish contractors in every TxDOT district across the state, with locations housing equipment, material, and qualified response personnel who will be ready to deploy within the district.

The contract was crafted in a way that will open the response from not only HazMat incidents but any potentially hazardous incidents or crashes on or along State Rights of Way or TxDOT facilities. This will allow major roadway incidents, including wrecks, spills, and natural and manmade disasters to be cleared quicker and more safely than in the past.

There are provisions written into the contract that the contractors are to be on scene, with traffic control, prepared to work within 60 minutes of the call inside the county in which they are based, within 90 minutes in contiguous counties, and 120 minutes in counties further out. This - along with the instructions in the contract which direct the contractor to seek payment from the responsible party prior to seeking payment from TxDOT - will bring peace-of-mind to maintenance sections who may have been reluctant to activate their contractors in the past. It also adds an element of safety for the first responders on the roadway during the incident.

TxDOT's Houston District, which covers Harris, Montgomery, Waller, Brazoria, Fort Bend, and Galveston counties, has been using this contract in conjunction with increasing awareness of Traffic Incident Management (TIM) principles with local law enforcement, fire departments, and wreckers for about 2 ½ years. Within this time, we have seen average annual clearance times of commercial motor vehicle (CMV) crashes decrease by around 20 minutes district-wide with our goal being average clearance times of 2 hours or less.

Finally, this contract does not mean that other hazmat contractors cannot work on State Rights of Way. District representatives meet regularly with hazmat and wrecker companies who are not on contract to let them know that they are welcome to work on TxDOT roadways, as long as they follow TIM principles, the Texas Manual on Uniform Traffic Control Devices (TMUTCD), and are able to work safely and quickly to clear incident scenes.



Texas TIM Regional Meetings

Statewide TIM Meeting (Location Varies Monthly)
Austin Incident Management (AIM) High Meeting
Childress TIM Meeting
Dallas TIM Meeting
El Paso Metro TIM Meeting
Big Bend TIM Meeting (Alpine, TX.)
Fort Worth TIM Meeting
Houston TranStar TIM Meeting
Northeast San Antonio (NESA) TIM Meeting
San Antonio TIM Meeting

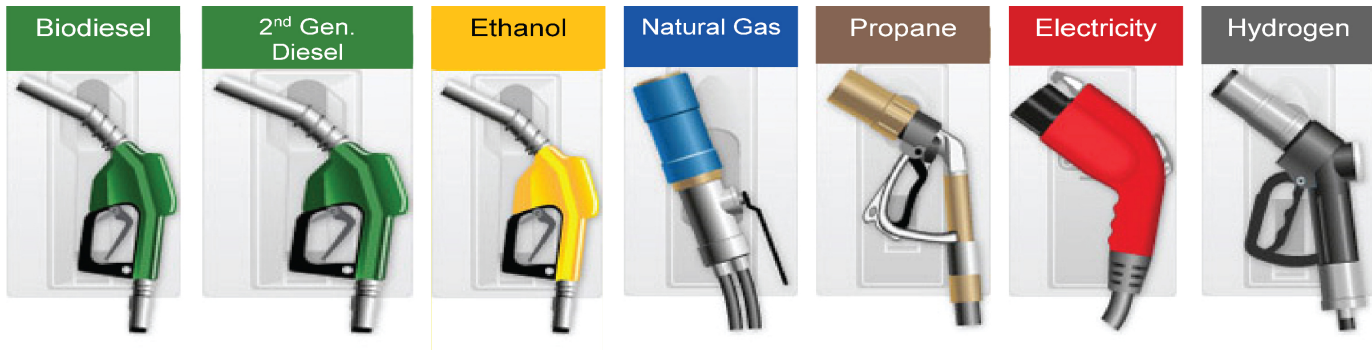
Bi-Monthly - Third Wednesday Every Fourth
Thursday of the Month
Bi-Monthly
Bi-Monthly
Quarterly
Quarterly
Bi-Monthly
Every Second Thursday of the Month
Quarterly - Fourth Tuesday
Every Second Monday of the Month

For a complete, up-to-date list of TIM Training in Texas, go to the Texas TIM website at:

<https://www.txdot.gov/safety/traffic-incident-management.html>.

THE RISE OF ALTERNATIVE FUEL VEHICLES: WHAT RESPONDERS NEED TO KNOW

By Cecil Arient, San Antonio TIM Coordinator, AECOM



If you're like me, you may have just recently heard of this acronym. What qualifies as an alternative fuel vehicle or AFV? First, all AFVs are very different. You have electric vehicles (EVs), including hybrid (electric/gas), of which many people have heard. However, there are also propane vehicles, natural gas, hydrogen, and solar, and recently, a patent has been approved for an ammonia engine. Yes, ammonia! Powering a motor that does not always involve petroleum.

Due to their design and components, AFVs do not behave the same as traditional internal combustion engine (ICE) vehicles in a traffic incident. The design of AFVs may pose particular risk dynamics to first responders that compound traditional TIM strategies such as “quick clearance,” “lane collapse,” and “maintaining traffic flow.” AFVs have a more substantial risk of explosions with discharge of shrapnel and extremely high heat. Scene contamination, toxic by-products of combustion, and protracted extinguishing may take hours and copious amounts of water.

There are also significant weight differences in AFVs in crashes: EVs, on average, weigh 30% or more than their ICE counterparts. Some EV commercial vehicles can have as many as 160,000 battery cells. If one cell is compromised or malfunctions, there is potential for a propagation series called “Thermal Runaway.” Federal contracts mandate that 10% of their fleet be zero-emission vehicles. If you haven’t already, you will soon see electric post office trucks, Amazon trucks, garbage trucks, and even the diesel big daddy Cummins, which has an electric commercial vehicle.



A 30-foot container carrying lithium-ion batteries sits on the side of the road on Interstate 15 near Baker, California. (San Bernardino County Fire Department)

On February 15th, 2024, in Los Angeles, a compressed natural gas (CNG) tractor-trailer caught on fire and exploded while firefighters were fighting the fire. A decision was made to keep the road open during the firefighting process. The compressed natural gas saddle tank exploded and blew a firefighter 60 feet through a chain link fence. Nine firefighters were injured, including two who were critically injured.

This year, California has had two significant AFV incidents, each shutting down major interstates for over a day. In July 2024, a semi-truck hauling lithium-ion batteries caught fire after the truck crashed and overturned. Interstate 15 between Barstow and Baker was closed in both directions due to toxic gas emissions from the incident. To make matters worse, the public stuck in traffic along the roadway dealt with temperatures reaching around 110 degrees.

In August 2024, a Tesla semi-truck crashed into a stand of trees off Interstate 80 in Placer County, CA, and started on fire, releasing clouds of toxic fumes into the air. Due to the extreme toxicity of the fumes, police had to divert traffic miles from the crash site. NTSB is still investigating this incident.

Have you incorporated any SOGs and SOPs for AFVs? Will you have areas where their use may be restricted on the roadway? It's time to have these talks before they happen in your area.

TIM MEETINGS

Texas Statewide TIM Webinar
December 11th, 2024, 11:00 AM
February 19th, 2025, 11:00 AM
April 16th, 2025, 11:00 AM

Every third Wednesday, every other month. (Except December to accommodate the holiday).

The cities of Austin, Childress, Dallas, El Paso, Fort Worth, Houston, and San Antonio all have local TIM meetings that discuss local TIM operations.

For Meetings and Webinar information, contact:

TIM@txdot.gov.

STATEWIDE MEETINGS AND TRAINING

The statewide TIM team continues to push the TIM safety agenda to first responder communities across the state with continuous training and TIM team meetings.

The October 16th Statewide Texas TIM meeting was held at the TxDOT Headquarters in Bryan, TX. Held in-person and virtually through MS Teams, Mr. Zeke Reyna, the Emerging Technology Team Lead at the Strategic Initiatives and Innovation Division at TxDOT, presented on the use of autonomous trucks on Texas highways. He discussed how these technologies will directly affect first responders in roadway incidents.

Does your area or region have a regular TIM meeting with first responders? Every day first responders risk their lives on the smallest incidents on Texas roadways. Training and discussion at TIM meetings can make the difference between a completed shift, and one that ends in tragedy. The statewide TIM team is here to help you start a TIM team in your area.

Texas also continues to lead the way in training! Members of the New Mexico

Department of Transportation (NMDOT) regularly attend the El Paso TIM meetings (the New Mexico/Texas border are a few miles from El Paso) to strengthen the working relationships between the states' first responders. When they heard that the Statewide TIM Coordinators provided training for High-Tension Cable Barrier Extrication and Electric Vehicle Emergencies for First Responders, they asked if they could get the training in their state! Mr. Jim Comfort traveled to Las Cruces, NM, where he taught a class of thirty-two (32) DOT maintenance personnel and firefighters. Mr. David Fink taught four of these classes over a two-day period to first responders in the New Caney, TX, area. At the same time Messrs. Arient (San Antonio TIM Coordinator) and Josh Pulley (TxDOT HazMat Coordinator in the Houston area) taught the four-hour FHWA TIM for first responders class in League City, TX. See page three (3) for a list of upcoming training dates.

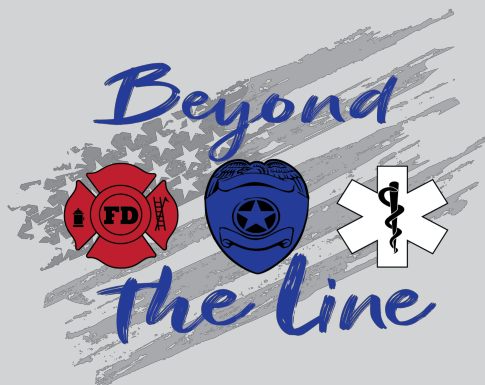
If your agency needs training in High-Tension Cable Barrier Extrication, Electric Vehicle Emergencies for First Responders, or the FHWA Traffic Incident Management for First Responders, please contact either Sean Mannix or Christopher Gray at TIM@txdot.gov for more information and shcheduling.

FACES OF THE FALLEN – REMEMBERING OUR COMRADES

Our hearts and prayers go out to the family, friends, and colleagues of these fallen responders. Thank you for your selfless service to the people of Texas. May you rest in eternal peace. Stand easy, we have the watch...



FTW Police Officer Billy Randolph
End of Watch: 8/24/2024



Trooper Kevin Alexis Ramirez Vasquez
End of Watch: 9/28/2024