



Partnering Workshop at Suburban Showplace March 3, 2017

On March 3rd, 2017, approximately 140 members from across the traffic incident management (TIM) community gathered for the 12th annual Southeast Michigan Traffic Incident Management Partnering Workshop at the Suburban Collection Showplace in Novi, Michigan. The event was organized by [Beaubien Engineering](#), the [Michigan Department of Transportation \(MDOT\)](#), the [Southeast Michigan Council of Governments](#) and the [Traffic Improvement Association of Michigan](#), and sponsored by [Opticom](#) and [ITS Michigan](#). Participants in the workshop ranged from professionals in police, fire, emergency medical services, public safety answering points, towing companies, freeway service patrol operators, and road agencies from the state, county and municipal levels. And for the first time ever, the audience included representatives from several automotive original equipment manufacturers (OEMs) and suppliers and Patrick Son, Managing Director of the [National Operations Center of Excellence \(NOCoE\)](#).

The half-day workshop was opened with welcoming remarks from Dave Staudt, Mayor Pro Tem of the City of Novi, a former police official himself, and a keynote address from Lt. Colonel Richard Arnold of the [Michigan State Police \(MSP\)](#), who painted an exciting picture for the



Lt. Col. Richard Arnold

the audience of what the world and traffic incident management could look like in the future with connected and autonomous vehicle technology. His remarks set the stage for the workshop agenda that walked participants through a series of presentations on “TIM Today”, “TIM Tomorrow” and “TIM in the Future”.



Oladayo “Dayo” Akinyemi, MDOT’s [Southeast Michigan Transportation Operations Center \(SEMTOC\)](#) Manager, Reginald Washington, a Maintenance Coordinator and First Responder for MDOT in Wayne County, and Lt. Michael Shaw, of the MSP addressed some the current challenges and advancements in “TIM Today”. Their presentations included recent efforts to mitigate and respond to weather related events, especially flooding on freeways through improved weather data collection and sharing at SEMTOC, monitoring of the regions 136 pump stations that help remove water from low spots along the freeway system, and increased efforts to proactively identify trouble spots and remove debris before it clogs drainage systems. They also led a discussion on recent initiatives to combat wrong way drivers on the freeway system, including a review of videos of several incidents and how they are now being handled more effectively than ever before. They wrapped up this session with an after-



Dayo Akinyemi, MDOT

action look at one of the area’s high crash locations and some strategies being pursued to reduce both primary and secondary crashes.



Reggie Washington, Dayo Akinyemi, and Lt. Shaw

Transitioning to a discussion of “TIM Tomorrow”, the workshop participants heard a presentation from Kymberly Pashkowsky, a firefighter and instructor from [Algoma Township Fire Department](#), on the latest technology for expedited extraction of injured crash victims. Kymberly discussed an overview of IC, Incident Command starting with S.M.A.R.T Objectives to evaluate the scene quickly and efficiently in order to make time efficient decisions while touching on the command priorities of each scene. An Overall picture was displayed of how an Traffic Incident Management scene is laid out with each component of Fire, Police, EMS and Towing with the goals of the "Golden hour" and "Platinum ten" as reminders to all on the need for excellent patient care and quick Traffic Incident Management clearing. Kymberly went into the latest technology of Vehicle extrication with Fire Department engagement goals of how to approach each vehicle while creating the inner and outer circle with scene stabilization. Kymberly's presentation led into discussion the efforts of the Grand Rapids Fire Department, 131 Expedited Towing program including statistics of the last 2 years of creating a relationship and improving communication with the local towing departments to clear highways up to twenty minuets faster with less backup in the Queue.



Kymberly Pashkowsky

Then Craig Shackelford, Crash Investigator for the International Center for Automotive Medicine ([ICAM](#)) at the University of Michigan, spoke to new technology and approaches that could drastically improve the quality and reduce the time needed for crash investigations and reconstruction work. Craig built upon other presentations calling for the need to have more inter-professional collaborations to improve response to serious roadway incidents involving injuries. He offered a personal reflection about several decades of technical investigations of serious motor vehicle crashes and the need to constantly build competencies. As a Crash Investigator/Research Analyst for the International Center for Automotive Medicine/ University of Michigan he offered a unique learning opportunity for first responders to learn leading edge methods of sizing up incidents.



Craig Shackelford



Tom Bruff (SEMCOG) leads breakout discussion between auto suppliers and first responders

The workshop then moved to a discussion about “TIM in the Future” with the advancement of connected and autonomous vehicles (CV/AV). Michele Mueller, MDOT’s Connected Vehicle Manager in Southeast Michigan, provided an overview of the latest developments and applications being pursued by transportation agencies and the automotive sector. She also highlighted the [Planet M™](#) initiative, an initiative to pull together all the work in Michigan on the future of mobility, from technology research and deployments to talent recruitment and development, under one brand. Patrick Son shared remarks regarding specific CV/AV applications that would benefit incident response which are being discussed nationally, and then shared a NOCoE [video](#) of several of these applications which were demonstrated in 2016 at an event sponsored by ITS Pennsylvania. The session concluded with a group workshop exercise, where TIM professionals and auto industry representatives explored and discussed how CV/AV technology and applications could improve TIM in the future.



MDOT Region Engineer
Tony Kratofil

Patrick Son
National Operations
Center of Excellence



Michele Mueller

The key messages from this discussion were:

Exact Location Information was widely discussed as being crucially needed. While many drivers have cellphones, they may be out of reach after an accident or the injuries sustained by the driver may make them unable to dial for assistance and provide a location. In addition to location data from the vehicle, more signage is needed along the roadways so drivers can identify their location easier.

Damage/Injury Information a connected vehicle that can transmit the type, severity, and location of damage to a vehicle can alert how many first responders are needed and what equipment is necessary to contain and clear incidents. Data should also be available to transmit the number of occupants and potential injuries likely with type, severity, and location of impact to the vehicle. TOCs would also like the data so that it can be quickly verified by camera and ITS utilized to reroute drivers. *Representatives from the auto industry indicated that a lot of this technology is technically available, but due to privacy laws and other legal issues they cannot be implemented currently.*

Data Sharing /Technical Specifications many discussed the lack of a uniform “language” that would allow vehicle to vehicle communication of different vehicle makes. Several groups discussed how the information will not only be shared *with* the first responders, but then to other drivers behind the incident. There are many services (WAZE, MiDrive, RCOC apps) available, but there was question as to whether these systems can display a uniform message. Many questioned how technologies built-in to newer vehicles can be “retrofitted” or available to drivers with older vehicles. Others technical capabilities desired include:

- “Heads up” displays to allow drivers to receive information without having to look down.
- Signal priority for first responders
- Vehicle detection and collision avoidance warnings at the site of an incident
- Speed limiter along incident and work zones
- RWIS integration to prepare vehicles to mitigate speeds during inclement weather
- Available parking and disabled spaces
- Vehicle shutdown for wrong way driver

Policy many felt it was important to have lawmakers as champions for connected vehicle technology so that implementation can occur in the best manner. It was suggested that legislation should be passed requiring all vehicles to be equipped with connected technology. There are still legal questions regarding who gets data and how much they receive.

Concerns in addition to privacy concerns regarding medical data there was discussion about data encryption and vehicle hacking. Also would data be provided in real-time or would there be a lag as data goes through encryption?