Many emergency responder groups are studying the issue of traffic incident operations. Due to the all too frequent deaths of responders at incident scenes, there is an increasing interest in training personnel to work safely and efficiently while in or near moving traffic.

The North Texas Council of Governments, based out of Arlington TX, offers a 16-hour program titled ‘Freeway Incident Management’. Participants attending the monthly course offerings over the past four years include police patrol officers, supervisors, and crash scene investigators. From the fire side, firefighters, paramedics, and department officers as high-ranking as Assistant Chiefs have attended. Tow and recovery operators and owners regularly attend as do local and State transportation department officials, supervisors, and workers. Courtesy patrols, HOV patrol personnel, traffic news reporters, and even mass transit police personnel participate on a regular basis.

Besides classroom presentations and equipment demonstrations, participants spend class time playing with toy trucks… and they love it! A unique solution has been developed by Battalion Chief Ron Moore of the McKinney TX Fire Department, a Lead Instructor for the Freeway Incident Management course. Moore recognized the need to address the challenge of having emergency responders attending the class understand as well as practice their traffic management skills in a safe and controlled environment. Simple yet very effective tabletop scenarios with matchbox-size toys vehicles have become a highlight of the Council of Government’s course.

To set up for this portion of the Freeway Incident Management course, instructors arrange four pairs of tables side-by-side in a room. Posters as large as 5’ x 5’ are secured to these tables. The posters consist of simple hand-drawn line art of a city street intersection, black and white graphics of a typical freeway, and now even high-resolution aerial fly-over images of actual intersections. The GPS-based aerial fly-over images provide the ultimate in training realism. These images accurately represent actual streets, roads, and highways as they really exist along with the buildings, obstructions, vegetation and signage that is present. All digital images as well as the hand-drawn artwork have been enlarged to fit the scale of a Matchbox-type toy vehicle. These small toy vehicles, available at department stores and toy stores, have no consistent scale in length relative to one another but Moore discovered that there is a ‘scale’ in the width of all these toys. This width was used to create the scale of the street and highway lanes of travel.

The COG instructional team can choose a variety of table-top scenarios representing any of several traffic management situations; a city or rural surface street or road, a traffic light-controlled four-way intersection, a multi-lane freeway, an expressway off-ramp, a multi-lane service road, and an HOV lane with or without concrete Jersey barriers.
assortment of ‘civilian’ vehicles are placed within the lanes of traffic on each tabletop simulating moving traffic that must be managed in the scenario.

A standard issue of emergency responder toy vehicles is placed at each table; two police cars, two fire trucks, one ambulance, a tow truck, a highway/DOT vehicle, a helicopter, and 8 miniature traffic cones. When it is time for the practical exercises, participants are arranged into teams with each team grouping around one of the four tabletop scenario setups. To start the tabletop, there are a few ‘twists’ thrown in by the COG instructors.

Prior to starting the scenario, instructors require that each emergency responder toy vehicle be ‘assigned’ to a member of the group. This is accomplished by having team members pick up a vehicle and hold it in their hand. As an unexpected challenge, the member cannot assume the role of the agency they work for. In other words, cops have to pick up the tow truck or the ambulance for example. Firefighters have to ‘drive’ a cop car to the scene. It makes for an interesting challenge for the participant who are suddenly now required to think about traffic management from a different agency’s perspective.

Once ready, the lead instructor states which agency is to be ‘first-due; arriving as the first emergency responder at the simulated scene. The individual holding that emergency responder vehicle places their vehicle and the cones assigned to it on the tabletop image. Once the first-due vehicle is on scene for all four groups, the instructor states which agency is next to arrive. The person holding that vehicle must then place their vehicle on the tabletop image. This is repeated until both PD vehicles, the two FD vehicles, the tow truck, ambulance, and highway department/DOT vehicle is positioned. At that point, the instructors interact with the team to discuss their decisions. At the discretion of the Lead Instructor, the medical helicopter is incorporated into the freeway scenario. Participants are encouraged to create landing zones off the highway instead of landing the aircraft on the shutdown highway. Landing off-highway speeds the quick clearance process significantly.

When one scenario is done, all tabletops are reset and the group rotates to a different tabletop. This time, beside being confronted with a different situation, the emergency vehicles have to be passed between group members. No member can represent the same agency they assumed in the first scenario and no member can represent the agency they work for in real life until the fourth and final scenario.

The tremendous advantage of Matchbox-size tabletop scenario training for highway safety training is that the scenarios give everyone the opportunity to look at an incident from a true 3-dimensional perspective. By mixing the participants within each group and then not allowing them to represent the agency they work for, quite a bit of discussion and interaction is generated during the scenario. What is commonly called “Safe Parking”, the proper positioning of emergency vehicles at incident scenes, can be easily explained and reinforced with some creative use of tabletop scenario training.
Instructor Ron Moore, McKinney Fire Dept Battalion Chief, leads a team of participants through their highway incident scenario while TEEX’s Howard McCann looks on. The poster in the background is an image of an actual intersection enlarged to the scale of the matchbox-size toy vehicles.
Instructor and Dallas County Sheriff’s Dept officer Danny Plummer leads the discussion on traffic management of an expressway off-ramp scenario based on use of the tabletop matchbox-scale toy vehicles and an expressway road system diagram.
Police, fire, tow operators, and highway department personnel are challenged by the realism of traffic incident management tabletop training.
Using drawings consisting of simple hand-drawn line art, participants in the North TX Council of Government’s Freeway Incident Management course practice their scene control skills through tabletop training exercises. Shown is one team’s solution to an intersection collision using two police vehicles, two fire trucks, an ambulance and a tow truck.