

Highlights of October 4, 2016 RSTF Meeting

Intersection Safety

All presentations and related meeting handouts are located on the RSTF Website: http://www.dvrpc.org/Committees/RSTF/Presentations/2016-10.pdf

1. Welcome and Introductions

The meeting was called to order at 9:35 AM by RSTF Co-Chair Bill Beans, Program Manager, MBO Engineering. After welcoming everyone, he invited participants to introduce themselves. Mr. Beans then reviewed the agenda. Afterward he directed attendees to the recently published 2015 Transportation Safety Action Plan (also available at www.dvrpc.org/Products/15022) and other materials on display.

Mr. Beans then announced that his tenure as cochairman is ending—his last meeting will be in December—and made a call for his replacement, seeking someone to represent the New Jersey side of the region or an agency that works across both states. He expressed appreciation for his partner in leading the RSTF, Co-Chair Peggy Schmidt, Executive Director of Partnership TMA, and noted that she and DVRPC staff make the position a pleasure. No volunteers came forward, but the invitation will remain open and revisited at the December meeting. He then announced that this would be the last RSTF meeting for Regina Moore, Transportation Engineer with DVRPC's Office Transportation Safety and Congestion Management, and RSTF coordinator. Ms. Moore accepted a position with the Virginia Department of Transportation starting on October 24th, 2016. On behalf of the RSTF, Mr. Beans thanked Ms. Moore for her service to the RSTF and wished her well in her new position.

2. Emphasis Area Focus – Intersection Safety

Two speakers presented on the "Intersection Safety" emphasis area. George Fallat, County Engineer, Mercer County, New Jersey gave the first presentation focused on engineering considerations for intersection safety drawing from the intersection safety class he teaches for New Jersey Local Transportation Assistance Program (LTAP). Next was Ian Stoddart, Deputy Chief, Narberth Ambulance, who spoke about the dangers intersections present in emergency response situations, and the technology and protocols that are available to improve safety for responders.

Starting with where crash data comes from, Mr. Fallat explained the importance of understanding the safety problem at an intersection, how to diagnose it, and how to improve it. Recognizing that this is a multi-step process, it also takes many people to execute properly. While crash data is essential, it must be balanced with exposure (traffic volume) to put the problem in context. Several times Mr. Fallat referenced the AASHTO¹ Green Book, a necessary guide for understanding code as well as what is appropriate at various intersection types. Of note from the Green Book, adequate sight distance promotes adequate stopping distance at intersections. Obstructions along the approaches to an intersection can compromise site distance and therefore compromise safety.

Intersection geometry and turning radii are other elements of proper intersection design. Increased radii means increased crossing distance for pedestrians and thus greater exposure to a crash, which is exacerbated for pedestrians with handicaps. Where right-of-way is limited it can be expensive to fix

¹ American Association of State Highway and Transportation Officials (AASHTO)

geometric problems at an intersection. Intersection safety is everyone's business because everyone is a pedestrian and a large section of the population also drive. Mr. Fallat also briefly covered roundabouts and their safety advantages as compared to signalized or stop-controlled intersections.

Next was Mr. Stoddart speaking from the emergency response perspective. Forty-three percent of the annual crashes that emergency medical services (EMS) responders are involved in while on duty occur at intersections. Ambulances, even with lights and sirens on, do not have the right-of-way at an intersection and must stop to ensure it is clear before proceeding. One technology which has improved EMS response times and safety at intersections is signal preemption, a system that allows the normal operation of traffic signals to be prompted to change via an in-vehicle transponder. This allows EMS personnel to change a signal from red to green to assist safe passage through an intersection. Opticon was mentioned as a preferred vendor. Mr. Stoddart explained that signal preemption has had a positive effect on EMS safety. Another area of consideration is how to make EMS lights and sirens more effective in notifying other drivers during an emergency situation. One recent development is a siren that also creates a rumble effect which gives a sensation to drivers within a certain range.

Because ambulance driving is a high adrenaline occupation drivers must be trained to drive safely while handling the life or death situations that the job requires. This training is a state-mandated yearly training, which includes safety at intersections. Mr. Stoddart also mentioned that ambulance vehicle design is an area of safety improvement that is being advanced.

Questions:

- Kelvin MacKavanagh, DVRPC Goods Movement Task Force: Does vehicle design make some radii harder to navigate?
 - Mr. Fallat responded yes, and that this is especially true for larger vehicles.
- Gus Scheerbaum, City of Philadelphia Office of Transportation and Infrastructure Systems commented that speed effects severity and is an important component in the safety of an intersection.
- Ms. Schmidt: Can you explain the difference between a circle and a roundabout?
 - Mr. Fallat responded that the roundabout design yields lower speeds and roundabouts require entering traffic to yield to traffic in the roundabout.
- Joe Stafford, Executive Director, Bicycle Access Council commented that the presentations were excellent and wanted to especially thank Mr. Stoddart because everyone should know the vehicle code and how to be safe when driving through an EMS situation, and that retesting would be good for people to re-learn what's important.

3. Developing Action Items

Mr. Beans then segued from the emphasis area discussion into the next agenda item, developing action items.

Education Group: Ms. Schmidt—lead, Ms. Moore—assist

 Ms. Schmidt offered to collaborate on a brochure about what to do when an ambulance approaches an intersection. This work will be shared with Mr. Stoddart for review, and once finalized made available for distribution. Also, the template will be available to interested agencies. Discuss with New Jersey legislators the legality of using earbuds while driving. Both of these actions will be done by members of the education group, and the report back time is next meeting.

Engineering Group: Mr. Beans—lead, Kevin Murphy, DVRPC—assist

- Amanda Lozinak, Transportation Management Association (TMA) of Chester County volunteered
 to draw from available EMS safety and intersection safety resources to create info-graphics
 and/or social media content that can be shared via social media by the TMA's of the RSTF. The
 plan is to create the content then share it with the other TMA's, and the two presenters, to
 ensure that the content is correct and is properly citing an accepted resource. Once this has
 been done the content will be shared via social media by the TMA's. Report back time is next
 meeting.
- 2. Joe Milanese, Michael Baker Int'l, will investigate how to get safety messages to drivers via state channels like variable message signs (VMS), DMV's, state inspection locations, and driver education channels. Report back time is next meeting.

Enforcement Group: Ray Reeve, New Jersey Division of Highway Traffic Safety—lead, Paul Carafides, DVRPC—assist

1. Share information about connected vehicles, including a demo video. This group discussed these and other ideas with the RSTF. No specific volunteer actions were recorded.

Emergency Response/Policy Group: Gus Scheerbaum, City of Philadelphia—lead, Zoe Neaderland, Manager, Office of Safety and Congestion Management—assist

- 1. Investigate sources of funding for Opticon emergency preemption units for use in emergency response vehicles. Ms. Neaderland will do a brief check into funding sources and coordinate with Mr. Stoddart for review and eventual sharing of information with the RSTF. She will report back in three months.
- 2. Mr. Stafford volunteered to draft a letter on reasonable ways to educate people about key changes in safety laws when renewing their driver's licenses. This letter will be to an appropriate committee of the Pennsylvania Legislature. Mr. Stafford will report back in three months with a draft that could be endorsed by the RSTF and sent.
- 3. Mr. Scheerbaum volunteered to research inexpensive engineering strategies to improve intersection safety, especially along key emergency routes (e.g.: routes to hospitals). Ms. Neaderland will help distribute the information such as links. This will be reported in three months.

4. Follow-Up from Previous Meetings

Mr. Beans then introduced the next agenda item, Follow-Up from Previous Meetings, and introduced Ms. Moore who thanked all RSTF members that reported back on actions taken since the last meeting, and noted that a table of those actions was included in the meeting folder.

Mr. Beans then asked for approval of the minutes from the June 29th meeting on Sustaining Safe Senior Mobility, and they were approved without comment.

5. Update from the First Responders

Nothing was reported from officers present.

Mr. Carafides gave an overview of recent activities of DVRPC's Incident Management Task Forces (IMTFs)—full update was included in the meeting folder. A Pennsylvania Traffic Incident Management (TIM) Summit is being organized for November that will bring together TIM professionals from across Pennsylvania to collaborate on a possible Statewide Incident Management Program. In New Jersey, the Statewide Incident Management Guidelines have been updated and endorsed by the New Jersey Attorney General. These guidelines are best practices for incident management as recommended by first responders. The New Jersey Southern Area First Responders (SAFR) IMTF has also updated their guidelines, and extended their service area to NJ 55 through Gloucester County; which now covers the same territory as the New Jersey State Police's Bellmawr Barracks. Lastly, the DVRPC Transportation Operations Management Master plan is being updated and will include and a new Transportation Systems Management and Operations plan including performance measures and a regional view of actively managing multimodal transportation.

6. Legislative Update

Tracey Noble, AAA Mid-Atlantic New Jersey gave an overview of her written comments included in the meeting folder, and led a discussion about New Jersey's transportation trust fund. In late September of this year New Jersey legislators agreed to increase the gas tax by 23 cents per gallon, offset somewhat by a sales tax reduction of less than one percent. The sales tax piece is part of a package of tax cuts lawmakers agreed to in exchange for the first gas tax hike since 1988, which also eliminates the estate tax, eases taxes on retirement income, boosts the Earned Income Tax Credit for the working poor, and creates a tax deduction for veterans. This new legislation will fund an eight-year \$16 billion transportation trust fund. Mr. Fallat described the problems Mercer County experienced when a major bridge project was among the 900 statewide transportation projects that were halted this summer while politicians worked on a trust fund solution.

Ms. Noble spoke about New Jersey's public question #2 to be presented at the November election which asks voters if they want to support a constitutional dedication of transportation trust fund dollars to transportation projects. If this ballot question passes then money collected for the transportation trust fund can only be used for transportation projects.

Mr. Scheerbaum mentioned Pennsylvania House Bill 2233 which seeks to establish a pilot program for speed enforcement cameras on US 1 (Roosevelt Boulevard). A hearing was held in late September at Philadelphia City Hall to support this bill based on successes that have been realized through the automated red light enforcement program of Philadelphia.

Mr. Stafford mentioned Act 36 of 2016 which provides for the Share the Road license plate. The fees collected for this special plate will be used exclusively to maintain PennDOT's central office position of Bicycle and Pedestrian Coordinator, and to fund highway pedalcycle signage approved by PennDOT. Mr. Stafford also mentioned Act 3 of 2012, to reiterate that it established a clearer set of vehicle code statutes to increase the margin of safety for bicyclists as legitimate roadway users.

7. DVRPC Staff Updates on Safety Efforts

Next Mr. Beans introduced Ms. Moore and Mr. Murphy for updates on current projects.

- RSTF Special Safety Study on Speed: Ms. Moore gave a brief summary of the research that was completed; it is included in the link on page one of this summary
- Streamlined Road Safety Audit (RSA) Update: Warren Strumpfer, RSTF member, focused on the
 recommendations, the road owner response, and next steps. One correction was made to the
 presentation by Mr. Reeve who pointed out that his organization, the New Jersey Division of
 Highway Traffic Safety, does not manage the Safe Routes to School program, which was identified as
 a possible funding source. That program is run by NJDOT and facilitated by the MPO's.
- Resources on Safety Funding; DVRPC and the RSTF: Ms. Moore discussed a white paper on funding safety projects that explains options for improving safety. Also mentioned was a companion piece that provides a top-level overview of the RSTF's relationship to DVRPC.
- Update on Highway Safety Improvement Program Projects: Mr. Murphy gave a short presentation on the evolution of a safety project. Mr. Murphy focused on one project location in New Jersey and another in Pennsylvania, both of which were identified through a data-driven process, and were the subject of an RSA. In summary, project implementation is a multi-year effort that sometimes requires more than one planning study to move to the funding stage. Local champions play an important role in securing improvement funds. Although funding is available at several levels of government, federal Highway Safety Improvement Program funds typically require the most process and thus the most time.

8. Member Updates and Open Forum

Mr. Beans then moved to member updates. Mr. Reeve mentioned that October 10th is national "Put the Brakes on Fatalities Day", run locally by NJDHTS. Mr. MacKavanagh announced that presentation ideas are currently being accepted for the 2017 New Jersey Transaction Conference.

OCTOBER 4TH, 2016 RSTF MEETING ATTENDEES LIST

Akins, Shoshana DVRPC

Arcuicci, Janet Montgomery County Planning Commission

Avicollo, Rich Gilmore & Associates
Beans, Bill MBO Engineering

Boyer, Mike DVRPC
Brady, Bill TMA Bucks
Carafides, Paul DVRPC

Cerbone, Vince PennDOT – District 6

Fallat George Mercer County Engineering Department

Huff, Alan SJTPO

Lozinak, Amanda TMA of Chester County

MacKavanagh, Kelvin DVRPC Goods Movement Task Force

Malaviya, Sharang PennDOT – District 6
Mastaglio, Mike Urban Engineers

McKillop, Adam Gloucester Township Police

Merritt, Darrell PennDOT – District 6
Milanese, Joseph Michael Baker Int'l

Moore, Regina DVRPC
Murphy, Kevin DVRPC
Neaderland, Zoe DVRPC
Neff, Justin DVRPC

Noble, Tracy AAA Mid-Atlantic

Noll, Steve TMA Bucks Omer, Marhaba NJDOT

Ott, Pat MBO Engineering

Pace, Frank Gloucester Township Police
Ragozine, Bill Cross County Connection TMA

Reeve, Ray NJDHTS Rodriguez, Alex Autobase

Scheerbaum, Gus City of Philadelphia Office of Transportation and

Infrastructure Systems (OTIS)

Schmidt, Peggy Partnership TMA – Montgomery County

Stafford, Joe Bicycle Access Council
Stoddart, Ian Narberth Ambulance
Strumpfer, Warren Traffic Safety Advocate

Sun, Yuting DVRPC

Whitaker, Karen Delaware County Planning Department Zochowski, Matt Camden County Planning Department