



## TRANSPORTATION SAFETY SUBCOMMITTEE MEETING SUMMARY

Tuesday, October 8, 2019  
1:00 – 3:00 P.M.

### **Attendees:**

Cindy Burch – BMC (phone)  
Jon Capriel – Washington Business Journal  
Jeff Dunckel – SHA  
Andrew Ennis – DRPT (phone)  
Michael Farrell – COG  
Matthey Gaskin - COG  
Vanessa Holt – Fairfax County  
Cory Hopwood – Cambridge Systematics  
Adam Larsen – FHWA (phone)  
Andrea Lasker – Prince George’s County (phone)  
Karyn McAlister – DDOT (phone)  
Andrew Meese – COG (phone)  
Richard Retting – Sam Schwartz Engineering  
Laura Richards – Cambridge Systematics  
Cicero Salles – Prince George’s County DPWT  
Jon Schermann – COG  
Eric Tang – VHB  
Anne-Marie Turner – Sam Schwartz Engineering  
Nicole Waldheim – Cambridge Systematics  
Malcom Watson – Fairfax County (phone)

### **SUMMARY**

- 1:00 P.M.**     **1. WELCOME AND INTRODUCTIONS**  
*Vanessa Holt, Transportation Safety Subcommittee Chair*
- 1:10 P.M.**     **2. ASSESSING THE EFFECTIVENESS OF RECTANGULAR RAPID FLASHING BEACONS (RRFB)**  
*Dan Nabors, Design Manager, Department of Environmental Services, Arlington County*

Mr. Nabors will update the subcommittee on the work Arlington County is doing to deploy and then evaluate the effectiveness of RRFBs in addressing pedestrian safety and driver behavior. Arlington County has a lot of active areas that use walking, biking, and taking public transportation as a means of mobility. Since pedestrian crashes are low in Arlington County, a systemic approach was used in

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the rationale of deploying RRFBs. Unsignalized crossings were the focus of this deployment. These are typically mid-block crossings. There are currently 15 RRFBs in Arlington County. There are plans to add an additional 15 RRFBs over the next three years. This increase is driven by increased density, connections to dense areas, and redevelopment in the county. The cost per each RRFB assemblage is \$8000. The flashing beacon is run by solar power but can also be wired to nearby AC connections. In terms of assessing the effectiveness of the RRFB deployment several observations are monitored: How often are drivers adhering; Are pedestrians using the RRFB activation button, are speeds slowing near these locations; And how are pedestrians behaving at RRFB crossing. Arlington has developed a way to predict the effectiveness of the RRFB based on the observed speeds for example if a roadway has an observed speed of 37 MPH there is a 25% vehicle yield compliance rate, however if the observed speed is 30 MPH there is a 50% vehicle yield rate. Roadways with lower speeds will generate higher yield rates. Overall, we are observing increased vehicle yield rates and pedestrian utilization of the RRFBs. Going forward we will use this speed data with the deployment of future RRFBs. While all of the RRFBs are installed on four lane roads, we will be looking at some two-lane roadways.

**Questions:**

For the roadways that VDOT maintains, is the county paying for the RRFBs or is VDOT? *VDOT is paying for those applications.*

Referring to the yield rates, do you (Arlington County) have that same information for crossings without RRFBs? *We do have some information for uncontrolled crossings. We have observed a yield rate of 50%.*

Referring to the yield rates, do you do a before and after assessment of the yield rate after deploying RRFBs? *Yes, that is the information that is displayed in this presentation, the before and after.*

*What qualifies as a successful yield? Does the vehicle slow down or come to a complete stop? They slow down and stop for the pedestrian crossing.*

*When deciding to install an RRFB are pedestrian volumes taken into consideration? That is a great question, we are currently running a pilot to determine that volume number. It is lower than 20 crossings per hour, it is 10 crossings per hour. We are also looking at what is around the surrounding area within 500 feet that would call for a safe crossing.*

In Montgomery County they experienced poor compliance with pedestrians pressing the activation buttons, do you have information on that? Also do you have any RRFB crossings that are motion detected, meaning the pedestrians doesn't have to press a button for activation? *We do not currently have motion detection crossings, however, is some of the RRFBs are connected to AC we may be able to add additional features such as motion activation. We do have some*



*data on pedestrian activation, that data is still being processed. From quick observations, roadways with higher speeds do have high rates of compliance.*

*On collector roads, speeding is an issue, and in Prince George's County we are considering adopting RRFBs, does Arlington County have speed cameras for collector roads to enforce compliance? No, we do not have speed cameras, but we do use speed feedback signs in some instances, and those have yielded some mixed results. For some locations we are considering using the HAWK (High-Intensity Activated crosswalk). We do work closely with law enforcement as well.*

*Do you use advanced warning beacons at any of these locations? We have one, but we have not conducted a study on that, it is located in Crystal City where Amazon will be located. We had another crossing that had the advanced warning beacon, but that was upgraded to RRFB.*

*The corridors in your presentation, are those just your priority corridors? Those are the VDOT PSAP corridors where we are using RRFB.*

*You are identifying these areas for RRFBs based on risks and not actual incidents (crashes with fatalities and serious injuries) did you receive pushback from elected officials about the placement of these RRFBs at locations in which in some instances no crashes have occurred previously? We are currently under a Vision Zero Program, and our elected officials are on board. The community has been very supportive of these placements. The lower cost has also helped with this being a "non-issue."*

*The funding for your local efforts where does that come from? We try to get funding from VDOT, from developers coming to the area, and capital improvement projects.*

*Noticing your crossing improvement in terms of the curb, did you consider ease of truck movements through these while turning? Yes, there is ample room to make a turn with a truck. Analysis was done for this design.*

**1:40 P.M.**

**3. UPDATE ON THE REGIONAL SAFETY STUDY**

*Nicole Waldheim, Senior Associate, Cambridge Systematics*

Ms. Waldheim will update the subcommittee on the Regional Safety Study that is currently underway, including the results of peer MPO interviews and crash data analysis. Since the last update three peer MPOs have been interviewed (MTC, DVRPC, and EWGCOG). Coordination, Safety in Plans and Funding, Analysis Institutional, Target Setting, Education, and Outreach are the areas that were discussed during the interviewing process. Ms. Waldheim went into detail about the findings in each one of these areas it should be noted that these are not official recommendations from the study, merely observations and suggestions that are open to comment and change while the study is in progress:



## **Coordination**

The peer MPOs do have similar safety subcommittees, however their approach is a bit different from the TPB subcommittee. Safety is well integrated into other committees. Some of these peer subcommittees have embraced Vision Zero into their framework. The recommendations from these interviews include; Working more intensely with the local jurisdictions, holding a forum or event to present the results from this study, increase the effort of integrating the safety subcommittees interactions with other committees, possibly changing the structure of the subcommittee, and forming a multi-sector working group to address safety issues. There was lengthy discussion on these recommendations, especially regarding the multi-sector working group. This recommendation was considered idea but challenging due to funding and level of commitment. Several of the recommendations are already underway at TPB, but there are opportunities to increase those efforts.

## **Safety in Plans and Funding**

Incorporating a safety score into the overall project processes, TPB could possibly incorporate this with future solicitations going forward. Assisting jurisdictions with grant applications that have a safety component associated. Encouraging more engagement with programs such as Complete Streets.

## **Analysis**

Imperative to share this final study with other jurisdictions. This study will have a network screening, providing jurisdictions with the information they need in order to focus on certain areas where more safety efforts are needed. TPB could provide additional assistance, analysis, or guidance in these areas. There was discussion that this study will confirm some theories about what is driving the increase of crashes and fatalities in the area, and it will provide a simplified assessment that the policy decision makers can use to take action.

## **Institutional**

Sharing this information to maintain the high presence of the importance of safety in the region. Possible adoption of Vision Zero by the TPB. While this is rare several MPOs have done so. Discussion was also brought up about the difficulty of Vision Zero statewide adoption could conflict with local jurisdiction plans.

## **Target Setting**

Not much feedback in this area. Continue to track and monitor. Make use of the Federal guidance regarding project selection for target achievement. Virginia was discussed in terms of how the state has been focused on project selection aligning with the targets.

## **Education and Outreach**

Possibly TPB do a different campaign to spread the information to new audiences. A campaign like the current Street-Smart campaign.

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After this discussion general updates including the start of the data collection for the safety study was shared.

- 2:25 P.M.**      **4. ROUNDTABLE UPDATES**  
Jurisdictions and other participants to share safety-related items of interest with the subcommittee. This was pushed to the December agenda due to lack of time.
- 3:00 P.M.**      **5. ADJOURN**

