MEETING HIGHLIGHTS:

Safe System Approach Focus Area: Safe Speeds

Thursday, December 9, 2021
2:00 PM – 4:00 PM
Presented Via Zoom; 62 attendees

All presentations and related meeting handouts are located on the RSTF Website:
www.dvrpc.org/Committees/RSTF

Welcome Remarks

The meeting was called to order at 2:00 PM by Marco Gorini, DVRPC, and Sharang Malaviya, PennDOT and RSTF co-chair.

Mr. Malaviya first reiterated the goal of the RSTF: to reduce roadway crashes and eliminate serious injuries and fatalities from crashes in the Delaware Valley. All participants and RSTF partners are encouraged to engage with RSTF materials via social media, especially as the full Transportation Safety Analysis & Plan (TSAP) Storymap will be published early next year. Mr. Malaviya announced that this meeting will be the last of Pat Ott's time as co-chair and promoted the call for nominations for the next New Jersey co-chair. Before introducing the topic of the meeting, Mr. Malaviya introduced the action items tracking list, a spreadsheet where volunteers can update themselves or claim unclaimed action items that were proposed in previous meetings. Lauren Sendel-Grant, Montgomery County Planning Commission, was spotlighted for her completion of a task from October's Lane Departure meeting. Additionally, it was announced that there is an expansion of the Highway Safety Improvement Program's (HSIP) eligible activities to include traffic calming and measures to reduce vehicle speeds.

Kevin Murphy, DVRPC, introduced the meeting's emphasis area, Safe Speeds, and highlighted the fact that speed is the number one indicator of crash severity. Mr. Murphy then presented a five-year overview of regional killed and serious injury (KSI) crash trends noting that the problem has worsened since 2016. Then Mr. Murphy highlighted the unusual crash rate trend that emerged in 2020, when a significant spike in fatalities occurred despite significantly fewer cars on the road, and mentioned that KSI trends have not improved during 2021 (though still awaiting final numbers). He also mentioned the forthcoming Regional Speed Management Action Plan as an opportunity to address speeding. Mr. Murphy then introduced the presenter Lennart Nout of Mobycon.

Presentation 1: Lennart Nout, Mobycon

Mr. Nout began his presentation by introducing Mobycon's work in transportation planning in Europe and North America, as well as some of the existing safety planning tools for reducing crash rates and severity. He then introduced the Dutch concept of the Slow and Steady Street.

Slow and Steady Streets are designed to have reduced operating speeds by having very narrow lanes (roughly 9 feet) with a wide median strip that eliminates the possibility for overtaking (therefore reducing aggression and speeding). The median and addition of bike lanes are made possible by reducing the 4-lane roads down to 2 lanes with an operating speed at around 25 mph. The Slow and Steady Street boasts separated bike infrastructure, fewer emissions, more green space, snow storage (if applicable), and the ability to maintain occasional on-street parking.

Traditional intersections managed by traffic lights are the least safe intersection, where a safety study conducted in the Netherlands revealed 4-way signaled intersections are more than twice as unsafe as their roundabout counterparts. Mr. Nout noted that traffic lights are not a safety tool, but a traffic management tool. Instead, the Slow and Steady Streets model eliminates the need for traffic lights at intersections by prioritizing only one street and flow of traffic. These intersections have a variety of design opportunities depending on land use and traffic contexts, but Mr. Nout focused on the "kidney bean" example (see the presentation materials for an example). The kidney bean intersection operates similarly to a stretched roundabout, where left turning vehicles are pulled out of the traffic flow next to a raised median, which forces slow speeds. Because of the median, there is only one direction of traffic for pedestrians, drivers, and cyclists to worry about when crossing. These intersections can easily handle up to 15,000 vehicles per day and are therefore put to good use in busy arterials in (sub)urban environments. There are of course considerations to be made for parking, public transportation, and emergency vehicle issues. A semi-paved strip in the median at designated points can solve the emergency vehicle priority issue by giving room for emergency vehicles to pass. Another potential con includes the requirement of good upstream management of traffic flow where the Slow and Steady Street is bookended by intersections that ensure some gaps in the stream of traffic input. Additionally, there is concern that cyclists and pedestrians do not have priority and that there is potential for new intersections to take up more footprint that previous small intersections.

Presentation 1 Q&A

After concluding the presentation, Mr. Nout answered some questions from the chat, with Mr. Gorini's help moderating. Kevin Murphy asked about the differences between traditional roundabouts and the kidney bean intersection, where land use context and traffic volumes are the same. Mr. Nout clarified the kidney bean prioritizes one direction of traffic flow (and is therefore more useful in areas with unbalanced traffic) and the roundabout is better for more balanced traffic flows since it holds all directions of traffic at equal priority. Cassidy Boulan asked if there were other design elements besides narrow lanes to force or encourage 25 mph operating speeds. Mr. Nout emphasized that narrow lane widths are key, in addition to visually narrowing the lanes by using "side friction," like adding trees or hard curbs that drivers are wary of bumping their car into. The inclusion of curves as opposed to straight roads in road design also force drivers to actively engage with steering. Mr. Nout also clarified that the Slow and Steady Street design does not work as well in commercial contexts with high levels of pedestrian traffic, but its intersections do encourage higher throughput of traffic despite taking out traffic lights. It is recommended that the Slow and Steady Street be implemented over a stretch of at least two miles in order to address the issue of traffic flow, but longer stretches are more efficient. There is a concept design for a kidney bean intersection along [New Castle Route 9 in Delaware](#).

Panelist Discussion

Janna Chernetz, Esq., Tri-State Transportation Campaign, introduced the recent history of the pilot red-light camera program in the state of New Jersey. Despite evidence of large reductions in crashes, New Jersey's red-light camera program ended without extension and has not seen another automated enforcement program since. Ms. Chernetz then introduced Ms. Kite-Laidlaw, New York City Department of Transportation, to speak on behalf of the successful automated speed enforcement program in NYC.

Ms. Kite-Laidlaw opened the presentation by remarking on how the safe system approach is becoming increasingly common in conversations across state and national law. She then outlined the current state of the automated speed enforcement program, in which NYC currently operates roughly 1,800 cameras (with goals to expand by another 1,000) that operate from 6am to 10 pm within roughly 750 school speed zones. These cameras capture speeding violations that are over the 10 mph barrier and automatically deliver $50 fines to whoever is in ownership of the car that committed the violation. Placement of these cameras is data-driven and based on pedestrian needs. Speed has fallen 72% at camera locations and injuries have been reduced by 14%. According to their 2020 data, over half the vehicles that received a single violation did not receive another, demonstrating that drivers are getting the message despite relatively low consequences. Unlike officer-issued speeding tickets, automated camera-issued tickets are rarely contested by those who receive them, and only .1% of those that are contested are overturned. Ms. Kite-Laidlaw also reviewed the political state of affairs when it comes to automated enforcement. In New York, the effort had to be authorized by state legislation. NYC Department of Transportation teamed up with safety advocates to humanize the issue, and the strategy allowed the legislation to pass with a pilot program of 20 locations in early 2014, then increased to 140 locations by mid-2014. It expired in 2018 without extension, but follow-up legislation passed in 2019 to revitalize and expand the program. Ms. Kite-Laidlaw concluded her presentation with an argument "against New York exceptionalism." She believes every city with Vision Zero plans should pursue automated enforcement strategies as an actionable and data-driven yet humanized approach to build political momentum around reaching zero deaths and serious injuries.

Ms. Chernetz then facilitated some chat questions for Ms. Kite-Laidlaw. The chat had questions around the restrictions of the operating hours of the cameras, to which Ms. Kite-Laidlaw responded that the program had to be politically sensible and follow a strategy of incrementalism. Initially the intersection red-light cameras had operation times that tied directly to school hours, since the safety of children was a politically viable strategy. Data that came from those pilots became the backing for expansion. Another question asked for the reasoning behind not capturing the driver's image and not using the cameras to address the "epidemic of hit and runs." Ms. Kite-Laidlaw responded with the consideration of privacy and equity concerns and the cost of having cameras powerful enough to capture and recognize faces of drivers. Another question was around the notification of drivers (via signage) as they enter an area with a traffic camera. Speed limit signs say "photo enforced," but since cameras are located in nearly every neighborhood and there is incentive to have drivers think their speeding could be caught by a camera anywhere, locations are not explicitly publicized.

Ms. Chernetz then transitioned into introducing panelists Mahmood Shehata, RK&K, and John J. Taylor, Esq., Archer & Greiner P.C. They both commended Ms. Kite-Laidlaw's presentation and reinforced the necessity for peer exchanges as a means to share lessons learned. Mr. Shehata spoke from the perspective of how the Pennsylvania's Automated Work Zone Speed Enforcement (AWZSE) program is operating, and Mr. Taylor spoke about AWZSE in a legislative context. They both reiterated the political and financial struggles automated enforcement has faced in Pennsylvania and beyond, particularly the

misconception that they are "gotcha money-grabbing programs" for municipalities or even for Vision Zero programs. This rhetoric has already limited the extent and effectiveness of existing PA pilot programs.

Ms. Chernetz then began facilitating the moderator questions for the panelists. She opened by asking for the positives and "what went right" with the various programs and pilots. Mr. Taylor acknowledged that their team was very considerate of the criticisms and very careful of the distribution of revenue and surveillance (going back to the "money-grabbing program" rhetoric). Because the goal of the cameras is to eventually reach zero violations, there is understanding that the program will not be a long-term revenue stream, but even so it was important to ensure the money from fines went directly to PennDOT for road projects and not to municipalities for their own use. He emphasized the importance of having agreement and collaboration among stakeholders, especially at the legislative level. Ms. Kite-Laidlaw agreed with the financial concerns and clarified that the program's political success is partly because the low-cost fines are less expensive than an officer-issued speeding ticket, and the automated enforcement does not come with insurance bumps or license notes. Additionally, the fines go towards a general fund instead so that it can be argued Vision Zero does not need the support of tickets to be effective. Though Vision Zero doesn't have a magic solution, speed management is a vital strategy to enforce, but it's not the only part of the solution. Mr. Shehata also echoes Ms. Kite-Laidlaw's earlier sentiments around the importance of centering safety and humanizing the issue of automated enforcement.

Ms. Chernetz's next question revolved around the role of data in starting/maintaining an automated enforcement program. Ms. Kite-Laidlaw opened by saying KSI data is key, especially before and after data. There is also the use of data to justify 24/7 cameras, as data shows 30% of crashes happen outside of the camera's allowed operating hours. Mr. Taylor cited the success of Philadelphia's red light camera program in reducing fatalities to zero at select locations for a number of years after camera installation and drastically reducing the percentage of tickets issued by roughly 93%. Mr. Shehata mentioned a reduction of speeding violations from 10-15% to 2-3% within the work zone pilot program. The 13% repeat offenders show drivers are getting the message, which is especially notable considering first-time offenders receive nothing more than a $0 fine and a warning.

Ms. Chernetz concluded with a question about equitable implementation of automated enforcement. Ms. Kite-Laidlaw discussed how the camera locations prioritized high pedestrian KSI rates since pedestrians are more likely to be living in the communities where they are walking and therefore more likely to be representative of the communities of color in need of safety efforts. Mr. Taylor discussed how automated enforcement meant a reduction in police involvement for traffic violations, which makes the process more equitable. Mr. Shehata agreed that the selection of project locations is the first step in the equity conversation, which means there must be a data-driven approach. Additionally, the goal is to change driving behaviors state-wide, not just within certain communities.

Special Strategies Breakout Rooms

Each of the four breakout groups discussed potential "action items," with a focus on the Safe Systems Approach, that each person could take on to support the RSTF's goal of achieving safe speeds in the region. These action items were recorded and are being tracked by DVRPC, which will check in on the progress before future meetings. Discussion lasted approximately 30 minutes and each began by discussing reactions to the presentations, following with discussion on potential action items.

In reaction to the presentations, breakout groups reiterated the importance of the following points:

- In regard to Mr. Nout's presentation, people thought it was interesting to hear a European perspective and appreciated the possibility of the kidney bean intersection design.
- It is vital to understand the monetary, political, and equity concerns of automated enforcement strategies. Much of the discussion revolved around the balance between data-driven solutions and using emotion to drive the importance of safety legislation and implementation. Citizen groups are an important element of the emotion and personal narrative, and tying automated enforcement pilots to children's safety is an effective strategy when dealing with political incrementalism.
- There is currently a piece of drafted legislation about work zone speed enforcement in New Jersey, but it ties its fine revenue to paying for State Troopers. Instead, there was discussion of the potential to move these funds to General Revenue for transportation improvements as has proven successful in Pennsylvania.

Some of the proposed action items included:
- Investigate post-COVID changes to traffic patterns and how this impacts travel speed
- Research potential locations for "kidney bean" intersection design in both PA and NJ
- Write an op-ed on the RSTF and Safe Speeds / Safe Systems Approach
- Increase training at DOTs around Safe Speeds / Safe Systems Approach
- Develop guidance and resources about who to contact and consider inviting to road safety audits.

After the sessions were finished, RSTF members left the breakout groups and returned to the main session.

Closing Remarks

After the strategy sessions, Patricia Ott, MBO Engineering, LLC, concluded the program with gratitude to the attendees for participating in the program. DVRPC will follow up about action items identified during the breakout sessions and hope to see RSTF members and partners reviewing and circulating the Traffic Safety Culture Media toolkit materials. The working group, including Robyn Briggs, Joy Huertas, Elise Bremer-Nei, Leonard Bonarek, Emily Kennedy, Michael Clemmons, and Tracy Nerney were thanked for their contributions to the toolkit.

The next RSTF meeting is scheduled for March 2022, with a focus on Safe People. A legislative update on New Jersey's Safe Passing Law, which will require drivers to give four feet of space when passing bicyclists when it takes effect in March 2022, will also be discussed at this meeting.

Meeting Attendee List

Kayla Bancone, DVRPC
Tracy Barusevicius, DCTMA
William Beans, MBO Engineering
Edward Boothman, Highway Safety Network
Cassidy Boulan, DVRPC
John Boyle, Bicycle Coalition of Greater Philadelphia
Elise Bremer-Nei, NJDOT
Valerie Brown, Camden County Office of Sustainability
Eric Bugaile, Archer Public Affairs
Catherine Bull, Voorhees Transportation Center
Laura Cerutti, TransOptions
Janna Chernetz, Tri-State Transportation Campaign
Michael Clemmons, DVRPC PPTF
Ricardo DeOliveira, DRPA - Walt Whitman and Commodore Barry Bridges
Dana Dobson, City of Philadelphia Streets Department
Brian Donovan, Chester County Planning Commission
Jon Dugan, Rutgers
Patrick Farley, Cross County Connection TMA
Liz Feinberg, Public Participation Task Force
Laura Fredricks, Families for Safe Streets Greater Philadelphia and NJ
Marco Gorini, DVRPC
Eva Hayes, COP
Leo Hegarty, PA DUI Association
Morgan Hugo, Liberty Resources
Daniel Hutton, Urban Engineers
Krys Johnson, PennDOT
David Kanthor, PCPC
Christopher King, Delaware Valley Regional Planning Commission
Julia Kite-Laidlaw, NYC DOT
Gregory Krykewycz, DVRPC

Roz Lopez, Kensington Stakeholders
Doris Lynch, Port Richmond Neighborhood Association
Kelvin MacKavanagh, RSTF
Sharang Malaviya, Pennsylvania Department of Transportation
Betsy Mastaglio, DVRPC
Sean Meehan, Alan M. Voorhees Transportation Center, Rutgers University
Kevin Murphy, DVRPC
Justin Neff, DVRPC
Christine Norris, Center for Injury Research and Prevention at CHOP
Lennart Nout, Mobycon
Kate O'Connor, Brain Injury Alliance of NJ
Patricia Ott, MBO Engineering, LLC
Taghi Ozbeki, DVRPC
Kaylen Phillips, DVRPC
Rena Pinhas, Montgomery County Planning Commission
Joe Rapp, NJDOT
Christian Regosch, BCPC
Lily Reynolds, City of Philadelphia
William Riviere, NJDOT
Lauren Rushing, New Jersey Bike & Walk Coalition
Mary Ann Sandone, DCTMA
Ian Schwarzenberg, DVRPC
Lisa Serieyssol, Princeton Vision Zero Task Force
Mahmood Shehata, RK&K
Adam Smith, City of Philadelphia
Themelis Soulounias, Delaware River Port Authority
William Spaeth, Sellersville Fire Department
Tom Stanuikynas, Burlington County Bridge Commission
Alyson Strigle, DCTMA
Sonia Szczesna, Tri-State Transportation Campaign
John Taylor, Archer Public Affairs
Leigh Ann Von Hagen, Voorhees Transportation Center, Rutgers University