



Highlights for April 23, 2020 DVRPC Board Meeting

One hundred and twenty people attended the Regional Safety Task Force meeting held on March 31, 2020, including representatives from FHWA, NJDOT, PennDOT, MPOs, TMAs, the City of Philadelphia, county governments, law enforcement, non-profit organizations, advocacy groups, transportation consultants, and citizens.

Barry Seymour, DVRPC, welcomed the attendees and spoke about the urgent need for a better traffic safety culture in the region to address the rising numbers of serious crashes. Kevin Murphy, DVRPC, presented first on overall crash trends in the region. Fatalities and serious injuries (KSI) from crashes reached a new seven-year high in the region in 2018, up slightly from 2017. Mr. Murphy then discussed the program for RSTF 2020: Focus on Traffic Safety Culture, including the subsequent meetings focusing on traffic safety culture and the media, the law, and the health care sector.

Nicholas Ward, Montana State University presented *Traffic Safety Culture: A Primer for Traffic Safety Practitioners*. Mr. Ward identified a fundamental need to shift culture within agencies, organizations, and communities to accept the premise that traffic fatalities are unacceptable and preventable. Mr. Ward defined Traffic Safety Culture as a “shared belief system of a group of people that influences road user behaviors and stakeholder actions that impact traffic safety.” He identified stakeholders at the federal, state, community, workplace, and school level to collaborate on collective action to maximize efforts to change road users’ beliefs about traffic safety.

Wesley Kumfer, UNC Highway Safety Research Center, gave a presentation titled *Safe Systems: Putting Traffic Safety Culture into Practice*. Mr. Kumfer began by making the connection between safe systems, traffic safety culture, and achieving Vision Zero goals. Safe systems can be described as the internal organizational traffic safety culture based on four key principles: 1) adapt the structure and function of the transportation system to the complexities of human behavior, 2) manage the kinetic energy transferred among road users, 3) treat road user safety as the foundation of all system interventions, 4) foster the creation of a shared vision and coordinated action. These principles are advanced by changing an agency’s culture to prioritize safety as our primary transportation goal.

Ashwin Patel, PennDOT, Angela Dixon, City of Philadelphia, and Matthew Lawson, Mercer County participated in a local reaction panel. Ms. Dixon described the City of Philadelphia’s traffic safety culture as focused and compassionate. This culture is driven by the Vision Zero initiative enacted by the Mayor in 2016. Mr. Patel described PennDOT’s traffic safety culture as driven by AASHTO’s Toward Zero Deaths framework. Mr. Lawson highlighted that safety is a top priority for engineers and has been for a long time, but the more recent focus on all road users has brought to the fore a new paradigm in roadway design. At Mercer County, this is rooted in the county’s Complete Streets policy.

RSTF members volunteered to take action to improve traffic safety culture at transportation agencies in the region. Actions included developing a Vision Zero advocacy toolkit for communities, investigating internal cell phone use policies for drivers, incorporating bus stop standards, and investigating congestion and reliability impacts of roundabout safety projects.

Mr. Murphy concluded the program. The next RSTF meeting is scheduled for Wednesday, June 3, 2020 and the topic is Traffic Safety Culture and the Media.

RSTF Goal: *To reduce roadway crashes and eliminate serious injuries and fatalities from crashes in the Delaware Valley* **Connect With Us!**
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MEETING HIGHLIGHTS:

Introduction to Traffic Safety Culture

Tuesday, March 31, 2020
10:00 AM – Noon
Presented via Zoom

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

Welcoming Remarks

The meeting was called to order at 10:00 AM by Barry Seymour, Delaware Valley Regional Planning Commission (DVRPC). Mr. Seymour welcomed the attendees and spoke about the urgent need for a better traffic safety culture in the region to address the rising numbers of serious crashes.

Introduction to Traffic Safety Culture – Presentations

Two keynote speakers and three panelists addressed the meeting on traffic safety culture. Prior to the speakers, Kevin Murphy, DVRPC, introduced the topic. Mr. Murphy presented first on the Regional Safety Task Force and on overall crash trends, including regional crash data for 2014 to 2018. Fatalities and severe injuries (KSI) from crashes reached an eight-year high in the region in 2018, up slightly from 2017. Mr. Murphy also discussed the program for RSTF 2020: Focus on Traffic Safety Culture, including the subsequent meetings focusing on traffic safety culture and the media, the law, and the health care sector. Mr. Murphy then conducted an audience poll to gauge attitudes among the attendees. The results are provided at the end of this summary. Following the audience poll, Mr. Murphy introduced first the keynote speaker: Nicholas Ward, Director, Center of Health and Safety Culture, Montana State University.

Mr. Ward presented *Traffic Safety Culture: A Primer for Traffic Safety Practitioners*. Mr. Ward identified a fundamental need to shift culture within agencies, organizations, and communities to accept the premise that traffic fatalities are unacceptable and preventable. Mr. Ward cited the Road to Zero Coalition's strategies for reducing driver fatalities of doubling down on what works, accelerating advanced technology, prioritizing safety, and stressing the importance of Traffic Safety Culture in reducing fatalities. Under one paradigm, driver behavior is the most frequent critical reason for fatal crashes, indicating a deliberate choice that can be changed by influencing the choice process. Beliefs, values, and attitudes from the driver's social environment influence their willingness to engage in risky driving behaviors that may lead to a crash.

Mr. Ward defined Traffic Safety Culture as a "shared belief system of a group of people that influences road user behaviors and stakeholder actions that impact traffic safety." He identified stakeholders at the federal, state, community, workplace, and school level to collaborate on collective action to maximize efforts to change road users' beliefs about traffic safety. This collective action includes three different strategies: encouraging

protective behaviors, such as seatbelt use and increasing following distances; encouraging proactive behaviors, such as safe road users encouraging other road users to behave as safely as they do; and creating effective partnerships within stakeholder groups to integrate traffic safety strategies. Mr. Ward concluded by stressing that Traffic Safety Culture is a process, not a single intervention or countermeasure, and these measures have to be taken within the local context. Agencies should create shared understandings internally about Traffic Safety Culture and find opportunities to adopt Traffic Safety Culture as an approach to accomplish traffic safety goals.

Following Mr. Ward, Mr. Murphy introduced the second keynote presenter: Wes Kumfer, Engineering Associate, UNC Highway Safety Research Center. Mr. Kumfer gave a presentation titled *Safe Systems: Putting Traffic Safety Culture into Practice*. Mr. Kumfer began by making the connection between safe systems and achieving Vision Zero goals, and followed with an overview of the safe systems approach to traffic safety. Safe systems can be described as the internal organizational traffic safety culture based on four key principles: 1) adapt the structure and function of the transportation system to the complexities of human behavior, 2) manage the kinetic energy transferred among road users, 3) treat road user safety as the foundation of all system interventions, 4) foster the creation of a shared vision and coordinated action. These principles are advanced by changing an agency's culture to prioritize safety as our primary transportation goal.

Mr. Kumfer explained that the need for safe systems is made clear by crash injury and fatality trends climbing again after record lows last decade, with the greatest increases seen among vulnerable users—pedestrians, and also bicyclists. Although the safe systems approach to traffic safety is the most comprehensive and most desirable, there are barriers that may inhibit implementation, including: funding mechanisms, project prioritization methods, desire for individualism, and victim blaming particularly in the media. Mr. Kumfer concluded with ways a roadway owner agency can change their processes to prioritize safety: reassess speed limits looking for opportunities to lower them, explore safer designs like roundabouts, continue to enforce speed limits, and reach out to the community to promote traffic safety culture which will yield support for innovative safety improvements.

Introduction to Traffic Safety Culture – Panel Discussion

Mr. Murphy introduced Patricia Ott, MBO Engineering. Ms. Ott, who is also an RSTF co-chair, served as the moderator for the panel discussion. Ms. Ott introduced the three panelists: Ashwin Patel, PennDOT, Angela Dixon, City of Philadelphia, and Matthew Lawson, Mercer County.

Ms. Dixon described the City of Philadelphia's traffic safety culture as focused and compassionate. This culture is driven by the Vision Zero initiative enacted by the Mayor in 2016. Mr. Patel described PennDOT's traffic safety culture as driven by AASHTO's Toward Zero Deaths framework. Mr. Lawson highlighted that safety is a top priority for engineers and has been for a long time, but the more recent focus on all road users has brought to the fore a new paradigm in roadway design. At Mercer County, this is rooted in the county's Complete Streets policy.

Mr. Patel identified the need to balance all users where segregating space is not possible as a major obstacle to fostering a strong safety culture at PennDOT. Finding the balance between congestion and safety is key, especially because increasing congestion can result in greater driver aggression.

Mr. Lawson discussed the need for champions within the agency to advocate for new ways of thinking about roadway design, such as reducing lane widths from 12 to 11 feet. This requires strong analysis that demonstrates to engineers the safety benefits without negatively impacting other concerns.

Ms. Dixon noted the importance of collaboration beyond government leadership to move forward Vision Zero initiatives. At the staff level, there is the need to investigate peer cities' success and how to bring that to Philadelphia. Culture change comes through education and continuing to adapt. It also requires breaking down silos within the Streets Department, like working with fleet management.

Mr. Lawson noted the role of the Greater Mercer Transportation Management Agency in promoting safety culture to the public through outreach campaigns, which the county is limited in its ability to tackle.

Jesse Buerk, DVRPC, asked about convincing local officials of the need to prioritize safety over congestion concerns. Mr. Patel highlighted the need to quantify the impacts on safety and congestion. Mr. Lawson pushed for the need to show up and begin to change the culture of planning boards and municipal staff. Many of these discussions are tied to land development, when these issues are raised. Ms. Dixon noted the importance of funding and involving communities in the process of implementing safety initiatives, like Neighborhood Slow Zones in Philadelphia. Part of the success of the program was the education piece about why slowing traffic in neighborhoods was important.

Leonard Bonarek, BCOGP, asked about Mr. Lawson's collaboration with the East Trenton Collaborative (ETC) and NJDOT. Mr. Lawson explained how ETC, a nonprofit representing a low-income area of Trenton, asked him for assistance with resolving safety issues in their neighborhood, but that there are significant jurisdictional challenges. ETC has worked hard to bring attention to impacted agencies on the plight of road users in their neighborhood.

An anonymous attendee asked about how to encourage public agencies to set an example in terms of safe driving. Ms. Dixon noted the risk management program that Philadelphia employs and their effort to make the safe driving course mandatory and "top of mind." Mercer County has a no cell phone use policy among others but these can be better promoted.

Additional Q&A (not live answered)

Sarah Stuart, BCOGP: Has anyone or any institution in the U.S. analyzed the strategies and tactics of the anti-drunk driving and anti-tobacco campaigns to understand how to design a traffic safety culture shift campaign?

Mr. Ward: There is research that has examined attributes of messaging such as the use of fear or humor and showing the behavior you don't want or the behavior you do want, etc. So we can learn from this research about which attributes to work with in the development of our strategies.

Cassidy Boulan, DVRPC: What's a good way to find out about existing traffic safety culture related beliefs? Is there a resource for a standard survey or set of questions to use to find out?

Mr. Ward: Beliefs are inside our heads, so we need to use tools like interviews or surveys to ask questions that lead people to expose their beliefs. Because the relevant beliefs depend on which behavior we are focusing on, the questions we need to ask often need to be specific to the behavior. We have done projects on a variety of

road user behavior such as speeding, seatbelts, distracted and impaired driving, so these might be good starting points to modify for specific cultures.

Ms. Stuart: Recently in the COVID-19 national discourse, motor vehicle fatalities were used as a comparison, i.e. we don't ask people to stop driving even though 30K people die in the U.S. every year. Would the panelists comment on that? What does that say about our national traffic safety culture?

Mr. Ward: It is very interesting isn't it? Part of the reason is driving is a foundation of our culture. Another reason is how we perceive risk. Things that are easy to recall and think about are believed to be more likely (risky). We are seeing COVID stuff every day. So it feels risky. We rarely hear about traffic safety, so it may feel less risky. Plus, driving is a thing we can control - and we are all better than average drivers (haha) - so we do not see it as risky, because crashes won't happen to us. COVID is more of an external random risk. So it feels riskier. Our only way to control that risk is to avoid it, like self-isolation.

Michael Clemmons, PPTF: What can we do to improve pedestrian situational awareness without blaming the pedestrian? To promote things like making eye contact with drivers and to be aware of traffic while using noise-canceling headphones, texting and walking while intoxicated.

Mr. Kumfer: Very good question. I believe this is a two-way street, where we want to improve situational awareness for all road users wherever conflicts can occur. Some engineering solutions may be to make widespread usage of RRFBs and improved roadway lighting. We can also interact with children in things like "traffic gardens" to help them understand the transportation system.

Andrew Besold, MCPC: Dr. Kumfer you mention the increase in horsepower but what about the effect of other aspects of improvements in vehicle engineering? Cars today are so well engineered with improvements to frame rigidity, suspension and sound proofing, that they trivialize speed in cars with lower horsepower. Has anyone looked at this maybe in Europe where horsepower rates remain low?

Mr. Kumfer: I was responding to a question about other vehicle aspects beyond horsepower that affect safety, but the question disappeared. One thing I do know about is that vehicles are much quieter than they used to be, so it is much harder for drivers to tell if they are speeding without looking at the speedometer. Speedometers may also send subtle cues to drivers that because their speedometers go to high speeds, they can hit those speeds. As for a solution, some nations have stronger regulations on speed governors in engines.

Nathan Attard, Delaware Transit Corporation: What role does reducing VMT play in traffic safety culture?

Mr. Kumfer: The number of vehicles and the miles they travel directly affect crashes. To get to zero, we also need to reduce VMT. That is a controversial statement. But getting to zero means we also need to change our values and beliefs about motorized mobility. It's definitely connected, in my opinion. If we measure VMT rather than LOS, we might see how much we prioritize vehicular mobility over other forms of mobility. Reducing vehicular traffic will generally reduce crashes, but we also need to consider how reduced vehicle traffic may also influence speeds - that's something we may be seeing right now under Covid-19.

Will Fraser, Clean Air Council: Is there a national policy campaign to look towards for influencing green book changes that have the largest impact i.e., reducing lane widths, speed limits, and vehicles sizes etc.?

Mr. Kumfer: Some NACTO guidance addresses some of these issues. I believe they just published or are about to publish new, Safe Systems-based guidance on speed limit setting.

Jerry Foster, GMTMA: We are in the midst of a natural experiment that will show the effect of (sudden lack of) congestion on fatalities and serious injuries.

Mr. Kumfer: I'm hoping to study some of those effects here in NC (working with another group on campus to secure funding right now). We may see an interesting phenomena where congestion reduction may correspond to reduced total collisions, but there may be higher speeds that may increase severe crashes. My wife witnessed someone speeding straight through a stop sign just yesterday.

Ms. Stuart: I have a question for DVRPC. Will DVRPC consider a regional vision zero target that will drive its funding/budgeting decisions on infrastructure projects?

Mr. Murphy: Partners of DVRPC's Board and RTC have the best opportunity to advance a regional vision zero target, and BCOP is a "partner" that could help get that conversation started.

Action Items and Conclusion

Participants brainstormed action items to address traffic safety culture in the region throughout the meeting and posted them to the Chat box. Action items included:

Bicycle Coalition of Greater Philadelphia, Sarah Stuart: The Bicycle Coalition of Greater Philadelphia intends to develop a Vision Zero advocacy toolkit and host 3 of community meetings (in person and virtual) annually.

DVRPC, Marco Gorini: Investigate DVRPC's cell phone use policy for drivers and pursue education of all employees on safe driving.

South Jersey Transit Authority/South Jersey Transportation Planning Organization, Jennifer Marandino: Investigate SJTA/SJTPO's cell phone use policy for drivers.

SEPTA, Tim Phelps: Incorporate SEPTA bus stop standards in all suburban and rural planning where service exists.

Montgomery County Planning Commission, Andrew Besold: PSA campaign that humanizes bicyclists and pedestrians. Many are likely aware of the Australian study from last year where drivers considered cyclists lower than cockroaches (no joke!).

<https://www.bicycling.com/news/a26977798/dehumanization-of-cyclists-boosts-aggressive-drivers/>

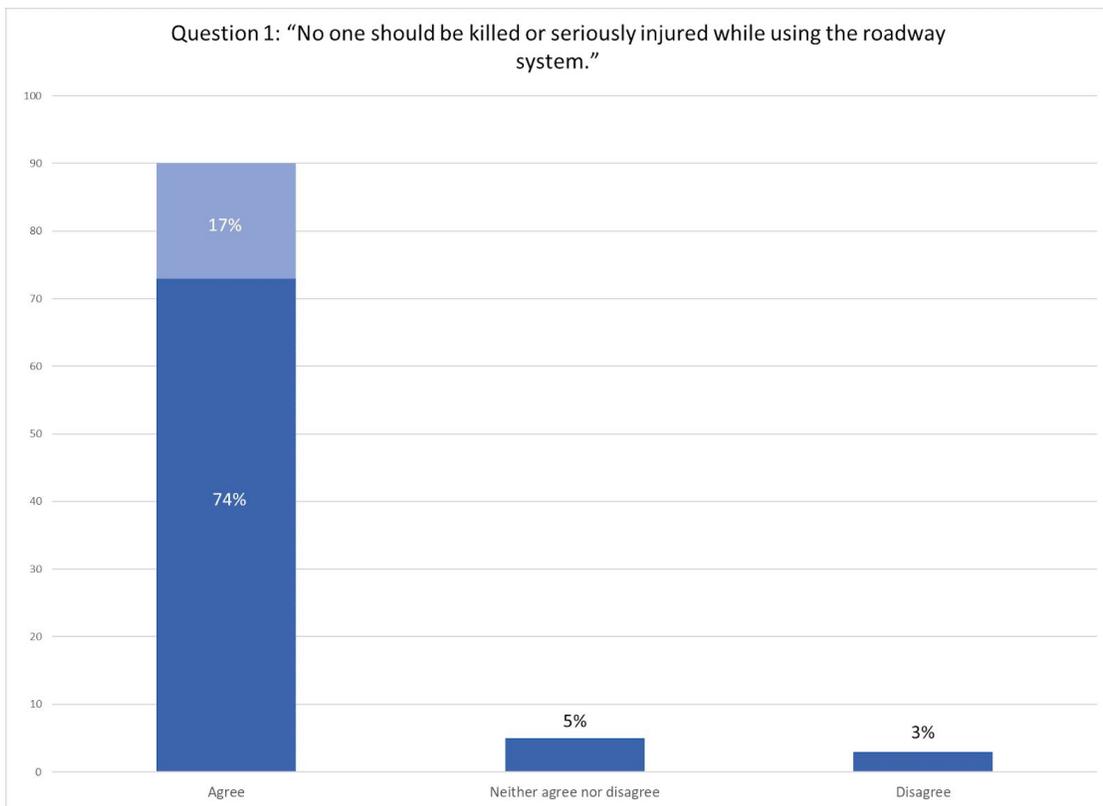
SICK Inc., George Thiel: To better understand how SICK as a leader safety system supplier in other industries can help support this industry and others

DVRPC, Jesse Buerk: Follow-up PA statewide analysis of roundabout safety improvements with analysis of congestion/reliability at these locations (using probe data).

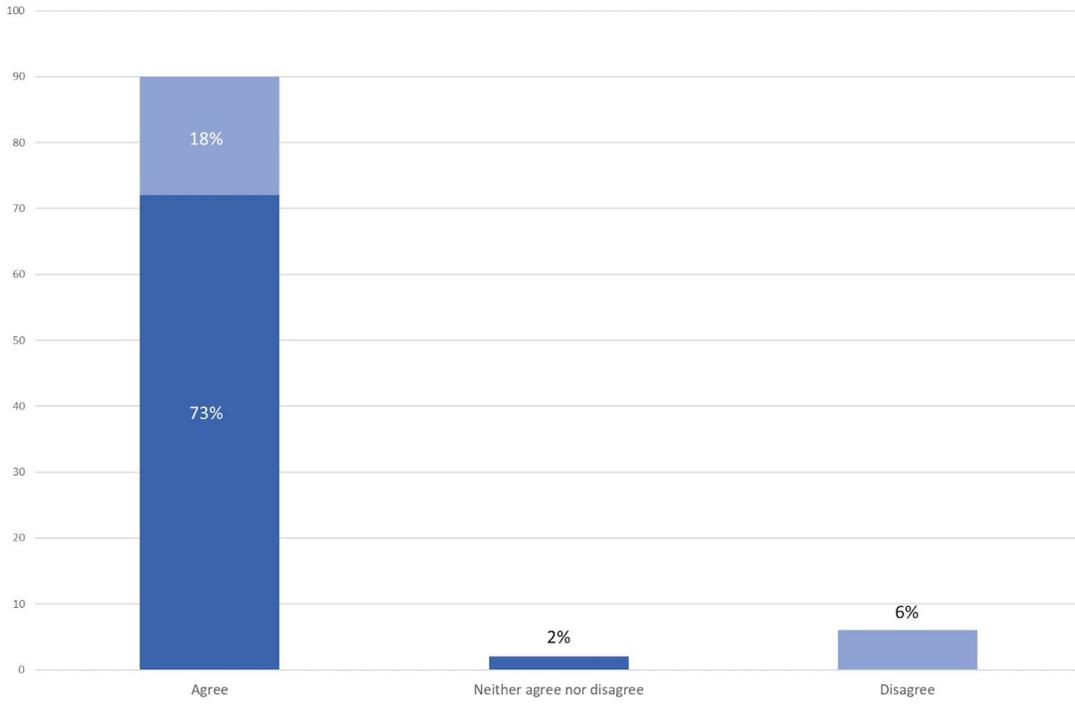
Mr. Murphy concluded the program with a thank you to all speakers and a reminder to complete the meeting evaluation. The next RSTF meeting is scheduled for Wednesday, June 3, 2020 and the topic is Traffic Safety Culture and the Media.

Poll Results

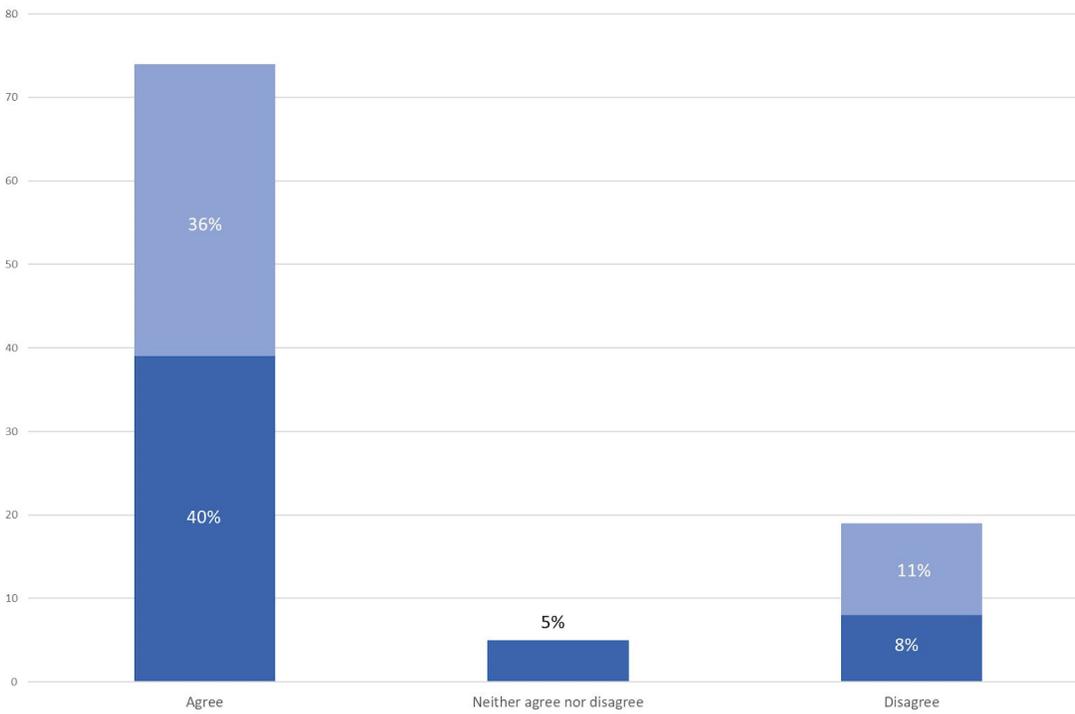
These five poll questions were presented to attendees at the start of the meeting, before the keynote presentations. Respondents were asked to react to five separate statements, presented in the same order they are shown here, and vote on whether they agree or disagree with the statement. Across all poll question results below, the lighter blue indicates the percentage of respondents that said they “Somewhat” agree or disagree, while dark blue indicates the percentage of respondents that said they “Strongly” agree or disagree. 98 respondents participated in the five poll questions.



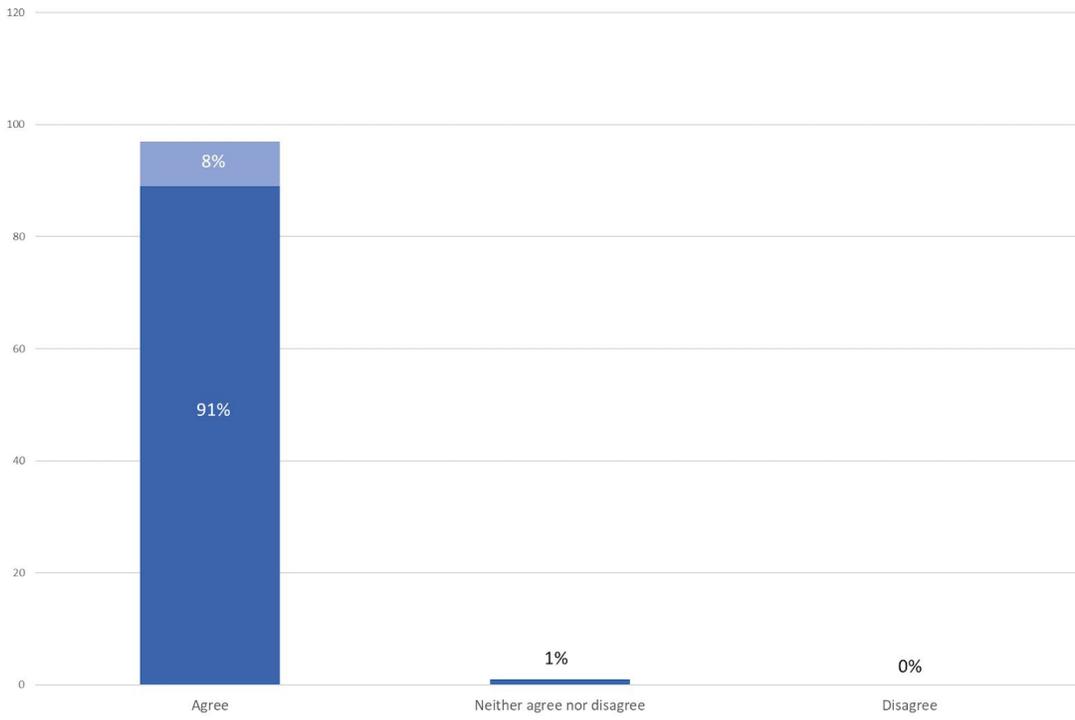
Question 2: "Road users can be expected to make mistakes and violate the rules and regulations of the roadway transportation systems."



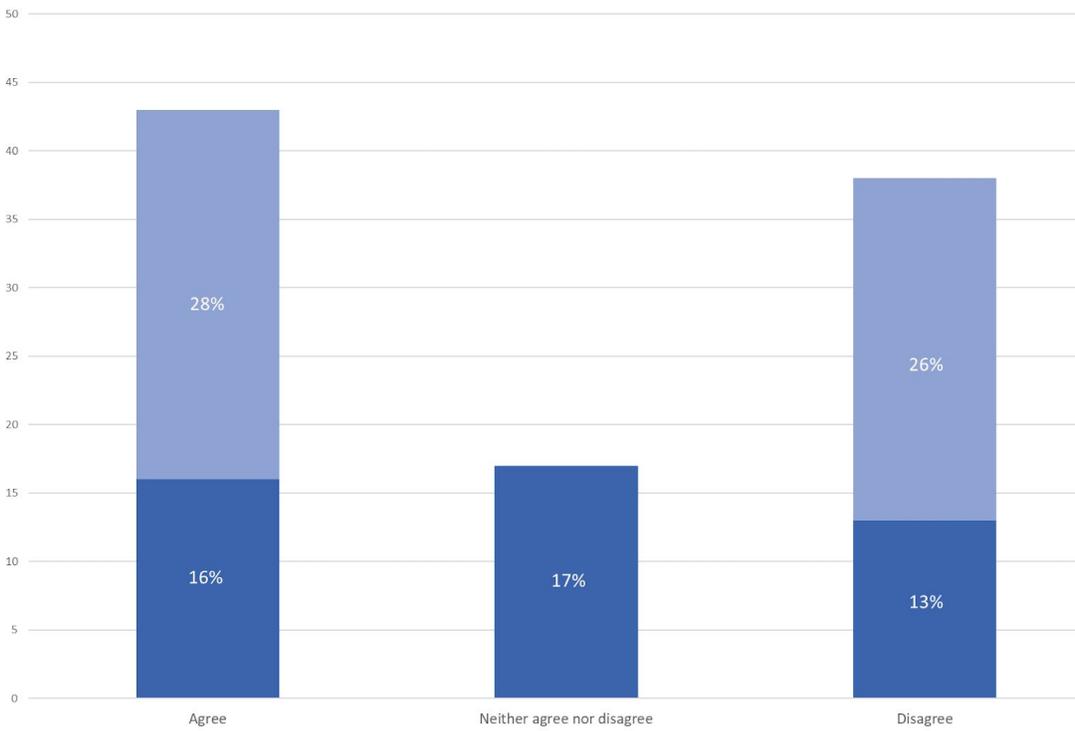
Question 3: "Road users should not be killed or seriously injured as a result of making mistakes and violating the rules and regulations of the roadway transportation systems."



Question 4: "Designers of the roadway transportation system include all entities whose actions affect the operation of the system (e.g. vehicle design, law enforcement, policymaking, emergency services.)"



Question 5: "Designers of the roadway transportation system are ultimately responsible for the deaths and serious injuries occurring in this system."



March 31, 2020 RSTF Meeting Attendees List

Kasim	Ali
Matthew	Anderson
Christina	Arlt
Nathan	Attard
Wendy	Berk
Amy	Bernknopf
Andrew	Besold
Marley	Bice
Leonard	Bonarek
Amon	Boucher
Cassidy	Boulan
Mike	Boyer
John	Boyle
Richard	Brahler
Elise	Bremer-Nei
Robyn	Briggs
Matthew	Broad
Corey	Brown
Shelley	Brown
Jesse	Buerk

Paul	Carafides
Vince	Cerbone
Cecile	Charlton
Robert	Clarke
Michael	Clemmons
Frances	Conwell
Natalie	Cramer
Erin	Curry
Angela	Dixon
Melissa	Donner
Brian	Donovan
John	Doyle
Matthew	Edmond
Patrick	Farley
Lauren	Fink
Jerry	Foster
Rich	Francisco
Will	Fraser
Lois	Goldman
Maridarlyn	Gonzalez
Marco	Gorini

Pattie	Guttenplan
Suzanne	Hagner
Nicole	Hostettler
Joy	Huertas
Alan	Huff
Joe	Janos
Amy	Kaminski
Cheryl	Kastrenakes
Chris	King
Larry	Kubli
Dave	Kuhn
Wesley	Kumfer
Matthew	Lawson
Kelvin	MacKavanagh
Sharang	Malaviya
Nipa	Maniar
Jennifer	Marandino
Betsy	Mastaglio
Maureen	Donnelly
Kelli	McIntyre
Sean	Meehan

Melissa	Melora
Ellen	Miramontes
Anne	Mitchell
Karin	Morris
Kevin	Murphy
Justin	Neff
Tracy	Nerney
Chimai	Ngo
Tracy	Noble
Kate	Norris
Christine	Norris
Kate	O'Connor
Suzanne	O'Hearn
Patricia	Ott
Ashwin	Patel
Orla	Pease
Tim	Phelps
Matthew	Popek
Joe	Powell
Sue	Quick
Christian	Regosch

Lily	Reynolds
William	Riviere
Kathryn	Russo
Ben	Saracco
Greg	Schertz
Peggy	Schmidt
Ian	Schwarzenberg
Kristen	Scudder
Barry	Seymour
Drew	Shaw
Wayne	Shelton
Wayne	Shelton
Matt	Shinton
Chowdhury	Siddiqui
Richard	Simon
Keith	Skilton
Sheryl	Snider
Tom	Stanuikynas
Khalilah	Stewart
Aly	Strigle
Warren	Strumpfer

Sarah	Stuart
Sonia	Szczesna
George	Thiel
Andrew	Thompson
Jana	Tidwell
Elise	Turner
Christopher	Wagner
John	Ward
Nicholas	Ward
Claire	Warner
Mark	Washington
Jim	Weist
Will	Yarzab
Kelley	Yemen
Matt	Zochowski
Nick	Zuwalia-Rogers

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