RURAL ROAD SAFETY PEER EXCHANGE

FINAL SUMMARY – AUGUST 7-8, 2024

Oklahoma City, Oklahoma

U.S. Department of Transportation
Federal Highway Administration

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Introduction

The 2024 Rural Road Safety Peer Exchange took place from Tuesday, August 7th to Wednesday, August 8th, 2024, in Oklahoma City, Oklahoma. There were over 60 participants registered for the event representing seven states: Mississippi, Texas, Oklahoma, Iowa, Kansas, Montana, and Nebraska. About 25 presentations were provided over the course of the two days. The presentations, roundtable discussions, and group exercises produced personal, expansive, thoughtful conversations surrounding rural road safety issues and challenges that traffic safety professionals experience throughout the region. This report provides a summary of shared themes amongst participants as well as documentation of collaboration and discussions that took place over the duration of the peer exchange. The structure includes key takeaways, directed discussion topics, and questions that spurred spontaneous response, and identified future needs.

Key Takeaways

Throughout the course of two days, it was evident that the traffic professionals in the room whether they are from law enforcement, planning, or engineering want to improve the transportation safety culture. Many participants are working to identify the appropriate tools to promote a healthy safety culture within their own organization. Specific key takeaways from conversations, discussions, and insights of participants include:

Understanding where to begin developing programs that implement low-cost safety-focused strategies and countermeasures

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- Some participants with mature safety programs shared experiences of where and how to start in the beginning of the process, but most participants found that challenges for ramping up a new program were overwhelming. These participants specifically needed information on how to start identifying systemic traffic safety issues and selecting effective strategies and proven countermeasures.
- Many participants identified cost and resources such as limited staff as a concerning barrier to overcome and begin programs that implement potential solutions.
- When starting to undertake new, improved safety-focused programs, traffic safety professional need to learn about new, effective resources and solutions and apply proven countermeasures to specific traffic safety issues. This may require some traffic safety professionals to unlearn old techniques and thinking.
- We need to change our safety culture - we are not making progress because we are not changing our ways.
    - There are many examples of historical solutions that have little to no success yet are still being utilized today – it is a particular challenge to overcome in order to shift culture and champion safety.

Comprehending and leveraging funding opportunities at Federal and State levels

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- Though participants understand that BIL has resulted in many new programs and funding, they still find themselves struggling with how to apply to specific programs and how to effectively leverage these opportunities during the years funding is available.
- Participants noted that holding outreach events such as peer exchanges from state and Federal agencies were helpful and informative to begin application processes.

Effectively messaging to rural America

- Participants in their current roles, as traffic safety professionals, identified safety messaging to the populations of rural America as one of their biggest challenges.
- Participants identified that their organizations need assistance in determining how to communicate with these populations as current efforts have very limited success.
- Participants also mentioned that engineers and planners don't have all the insights, skills, and tools required to create effective messaging and education, therefore partnering with other professionals in these fields is essential.
- Conversations are the most powerful tool – with several presentations focusing on how conversations are the most effective tool to changing behavior; many participants and speakers shared personal stories and successes surrounding conversations where if tailored to specific audiences the outcome of the discussion was behavioral change and spreading of information.
    - Specific audience examples included high school students hearing from their peers especially those who are victims of severe crashes, high school students listening to their sports coaches, younger children witnessing their parents' habits, and older adults hearing from their church or community leaders.
    - It was also noted that specific messaging targeting different age groups needs to be shared via ways that those age groups engage with media – i.e., younger adults and children use social media whereas older adults engage more with tv commercials.
    - Every single crash has a vehicle and has a person – behavior needs to be targeted.

Collaborating across different government agencies and partnering with outside entities

- Working together with people in different fields of traffic safety helps bring ideas, strategies, and awareness to these specific issues allowing for more effective solutions to be implemented.
- Without collaboration and partnership across different agencies involved in the safety of the system, we may never get to zero fatalities.
- Traffic safety professionals across the US need to work to break down the silos and work across systems to integrate and implement change.
- Collaboration and partnership are important to utilize pooled resources.
- Involving professional and subject matter experts in different fields such as medical, psychology, advertisement, and communications are just some of the many collaborations that need to be realized in traffic safety to reach target groups and achieve results.

Day 1 – Wednesday August 7th, 2024

Welcome Notes

Lily Ballengee welcomed the participants and presenters. She explained that out of 300,000 traffic-related deaths over the last seven years, 95% were vehicle fatalities.[1]

Carl Selby of the FHWA Oklahoma Division Office stated that 86% of the United States roadways are defined as rural roads. The most dangerous road profile is a two-lane rural road. Carl also shared that his family suffered severe injuries in a crash years ago, causing drastic changes and afflictions for the rest of their lives. He made the case that while it is important to reduce fatalities on our roads, ultimately reducing crashes is the goal due to the overwhelming amount of both fatalities and serious injuries.

Carl cited the Rural Two Lane Advancement Management Plan (RAAMP) allowing OKDOT to fund 42 projects around the state that include low cost solutions found in the FHWA Proven Safety Countermeasures. Some of the countermeasures being implemented include adding shoulders and rumble strips along roadways. The state is utilizing an innovative finance solution by applying for Build America Bureau TIFIA loans in packages to save money and keep inflation costs at bay.

Ice Breaker Activity

Attendees participates in a group exercise to discuss the issues and challenges of rural road safety.

Group 1 ▪ Education ▪ Apathy ▪ Lack of funding ▪ Distracted Driving/ DUI ▪ Speeding ▪ Emergency Response ▪ Deficient Roads ▪ Politics/enforcement ▪ Impairment ▪ Signage/pavement markings	**Group 2** ▪ Forgivable roadways ▪ Post crash care ▪ Staffing ▪ Intersection Control **Group 3** ▪ Speed ▪ Seat belt usage ▪ Alcohol ▪ Distraction ▪ Road departures
Group 4 ▪ Unattended pedestrian ▪ Pedestrians or bicyclists ▪ Drivers ed (young drivers) ▪ Drowsy drivers (commercial also) ▪ Funding (land values, priority projects or choices, capabilities, eligibility, SS4A)	**Group 5** ▪ Resources ▪ Tow truck response safety ▪ Social norming ▪ Technology distractions ▪ Driver responsibility (culture)

Table 1: Flip charts created during group exercise.

During a brief discussion regarding the report-out of flip chart activity, participants also noted the following challenges and limitations of rural road safety:

- Vulnerable road users (VRUs)
- Drug and alcohol use (especially surrounding new marijuana laws and users not understanding how impaired they are while driving)

[1] According to NHTSA FARS data, there was 312,517 traffic-related fatalities from 2016 to 2024 with 292,645 motor vehicle crashes representing 93.6% of total fatalities.

- Education funding
- Seat belt use
- Emergency response
- Speeding
- Lack of infrastructure
- Understanding of implementation issues (roadblocks in general – funding, buy-in, and grant subject matter experts, awareness of funding opportunities, lack of resources or staff to create plans or see through plans)
- Eligibility of funding, differing rules for each program and changing of programs

A Guiding Paradigm – Safe System Approach Application

Expected Outcome: Realizing the National Roadway Safety Strategy

Positive Culture Framework – Jay Otto, Montana State University, Center for Health and Safety Culture

Jay Otto began his presentation by prompting participants "What are the consequences that we are trying to reduce or eliminate?" And he suggests to attendees "begin by thinking about the end in mind".

Participants' responses included:

- There is tremendous trauma to everyone involved in crashes.
- People think they are invincible.
- Deaths and serious injuries are consequences.
- Minimizing the risk when a mistake is made.
- Billions of dollars are spent on traffic crashes (due to post trauma care and crash response as well as expensive healthcare costs).
- High cost of workers comp insurances (workplace incidents are traffic crashes).

Some people connected to consequences more than others – but there are plenty of consequences that are not highlighted. For example, Utah passed mandatory seatbelt laws and businesses supported the change because of the cost burden of motor vehicle crashes. "What are the behaviors that lead to these consequences?"

Participant responses included:

- Adverse childhood experiences ACEs (that lead to cause alcohol and drug issues)
- Not wearing seat belts
- Speeding
- Impaired driving

Traffic safety has focused on driver roadway behavior for years and this approach is not working. Traffic safety professional need to figure out a different way to change behaviors to influence consequences. Traffic safety professional needs to be defined as we think about changing safety culture and all those involved in making it a success effort such as engineers, politicians, planners, maintenance, judges (follow up on speed tickets in court) schools, parents, and law enforcement. "What are the beliefs that support these behaviors?"

Participant responses included:

- I don't have to wear my seatbelt
- People think they are invincible 'it won't happen to me'

- I could burn to death or drown if I wear my seatbelt (likewise officers need to get out of their vehicles faster and think not wearing it is better)
- I can drive drunk just fine
- if I'm drinking, I can use marijuana, and it will sober me up to drive

Jay talked about traffic safety professional's defeatist mindset with the examples that "a number of people will die and that's how it happens just the nature of roadways" and "you can't fix stupid". Jay discussed that "as leaders of traffic safety you need to differentiate between beliefs and behaviors and consequences."

Specifically, we need to change behaviors to change the consequences by focusing on the beliefs – especially the ones in organizations responsible for roadway safety – we need to lead by example. The United States is further behind compared to other countries on traffic safety – no one is at zero but they are much better positioned to learn from. "What are behaviors that could change within your organization that would improve traffic safety?"

Participant responses included:

- Seat belt use and heavy equipment within your agency or organization.
- Every project is a safety project not just a maintenance project – the safety office is not the only team responsible for safety and it needs to be integrated across all teams and all phases of projects
- Silence and not talking about the issues within traffic safety is part of the reason we are here. We need to understand how our complacency has contributed.

Jay Otto concludes with asking participants to focus on those behaviors you think would have the most impact and to use what you learn today to influence your organization as much as possible.

For more Positive Culture Framework training, see materials.

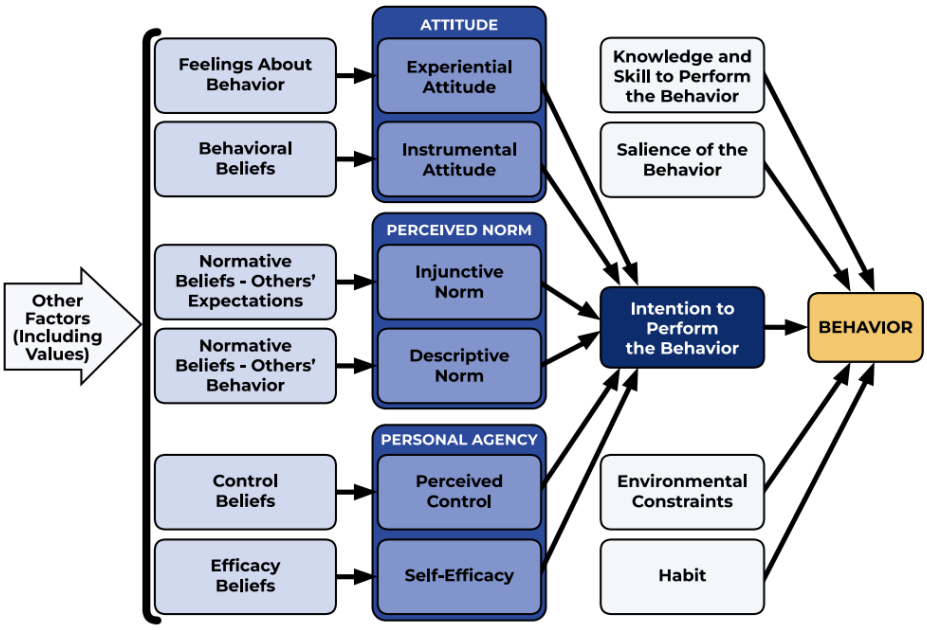

Figure 1: System of Positive Culture Framework, Montana State University, CHSC

Determining the Rural Road Safety Risks and Challenges

Expected Outcome: Recognizing data for improving rural road safety.

Oklahoma Data – Paul Harris, Oklahoma OHSO

Oklahoma Highway Safety Office (OHSO) has an open data interactive crash map that uses data derived from motor vehicle crash reports, motor vehicle citations, driver's license records, motor vehicle registration records, breath test analysis reports, attitude and awareness surveys, occupant protection surveys, fatality analysis reporting system, Department of Transportation statistics and information. The data is split between rural areas and urban areas as well as state maintained and county or city.

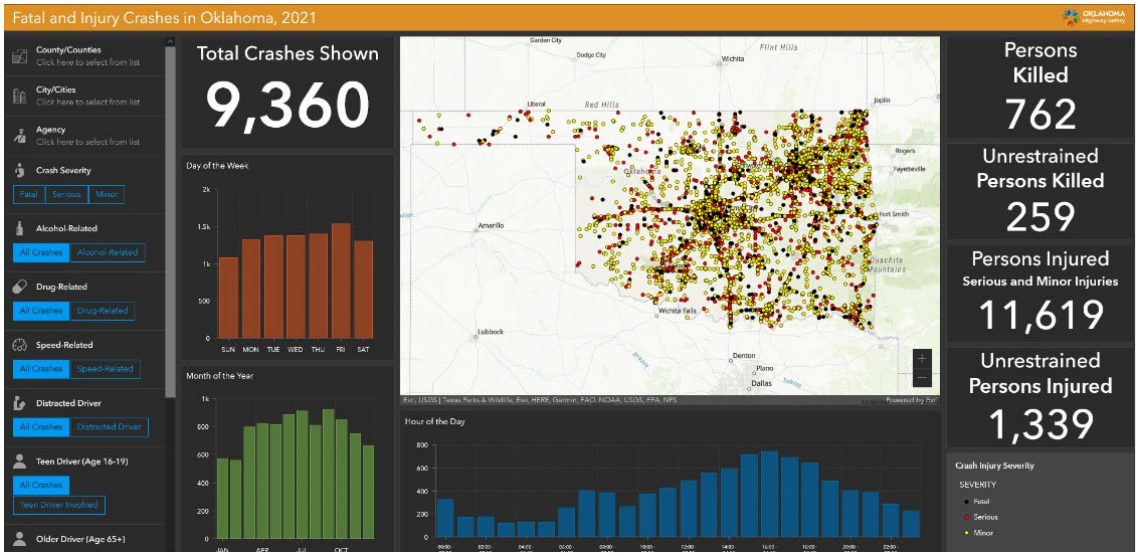

Figure 2: OHOS Fatal and Injury Crashes in Oklahoma, 2021

Paul dove into an example of seat belt usage data reporting that overall seat belt usage across Oklahoma is 81.2%. In 2023 it was reported only 72.7% of pick-up truck drivers wear seat belts which is a significant drop in recent years. There are about four million people in the state of Oklahoma with 80% living in cities and 20% living in rural areas, however 25% of crashes occur in cities and 75% occur in rural areas.

- With 60% of fatalities occurring on rural roads.
- Most large truck crashes occur on rural roads.
- Most train crashes occur on rural roads.
- 37% of alcohol-related crashes occur on rural roads.
- 28% of drug-related crashes occur on rural roads.
- 32.3% of speed-related crashes occur on rural roads.

When traffic safety professionals and their teams are developing plans or strategies, they need to use their data effectively to figure out the actual issues occurring on your roads.

Paul identified current challenges and limitations to data collection as well as data trends and safety observations.

- Data is presented today is 2 years behind because of how its reported and the effort that goes into ensuring quality assurance. Essentially, we focus on what happened two years ago not today, which is a huge problem for working towards being proactive.

- People are not at fault as much as we feel they are – roadways are poorly designed and maintained. Vehicles are larger than they used to be which makes some safety features of roadways functionally obsolete.
- Every single crash has a vehicle and has a person – behavior needs to be targeted.
- Collaboration and partnership are important to utilize pooled resources.
- Need to change our safety culture - we are not making progress because we are not changing our ways.

Collection, Analysis Tools and Use of Rural Road Data - Aaron Bartlett, NHTSA Region 7

NHTSA's mission focuses on saving lives and reducing injuries as well as costs associated with crashes. NHTSA collaborates with the National EMS Information System (NEMSIS).

Survival is a product of what the 911, emergency services, and state trauma system does in response to the roadway incident – recognizing the importance of data collection will change how rural road safety is approached to become more proactive.

911 and EMS have a role in each of the five elements of the Safe Systems Approach (SSA) and this needs to be realized across the country to better incorporate appropriate efforts and collaborate for improving chances of survival.

On average, out of 207 million 911 calls made every year, 83% are from wireless devices. There are over 6,000 911 centers across the nation. Over 60% of 911 centers are operated by law enforcement agencies. 911 telecommunicators are not officially recognized as first responders, and eight states have no minimum training guidelines.[2]

Source: FHWA.

In 2022, nearly 170,000 people who were severely injured received post crashed care. 911 centers dispatched EMS to 1.5 million crashes. Yet 40% of all crash fatalities among people who are alive when EMS arrives will die afterwards. There were 42,514 fatalities with 41% occurring in rural areas.[3]

Working with NEMSIS, NHTSA has released the V3 NHTSA Motor Vehicle Crash Severity Dashboard. The tool allows users to query by age, race, dispatching month/year, and time of day of dispatching as well as scene response time, injury risk factors, type of drug/alcohol indication.

The golden hour is defined as the time from when a crash occurs, 911 call, time from dispatch to arrival time, arrival time to stabilization, and time to transport to the nearest appropriate hospital. The average time to bleed out is three to five minutes and EMS arrives on scene about seven to ten minutes post-dispatch.

Training on STOP THE BLEED should be minimum training across the nation for EMS response staff. There is a 25% increase in chances of survival if crash victims can be transported to a Level 1 trauma center. 20% of trauma

[2] 2021 911 Profile Database Report – 911.gov (includes data from the year 2022)
[3] Traffic Safety Facts, 2022 Data, July 2024, USDOT, NHTSA – DOT HS 813599

deaths are preventable with optimal EMS and trauma care. Over one-third of severe injuries are not brought to proper care.[4]

Rural hospitals are closing, and this is a challenge for getting crash victims to trauma centers Challenges associated with rural post-crash care include:

- Distance
- Signals for phone calls
- Lack of resources and funding for services
- Someone to report crash if a driver can not
- EMS training
- Understaffing and volunteer EMS providers

For more information regarding 911 and post-care crash see materials and watch State of 911 webinars from 911.gov.

EMS Data: Traffic Crash Epidemiology and Post-Crash Care on Rural Roadways - Jeremy Kinsman, NHTSA Office of EMS (OEMS)

The NHTSA Office of EMS (OEMS) is a small, but mighty office with no Congressional assigned regulatory or enforcing authority. The office produces EMS guidelines, resources, tools, and reports for Federal, state, and local EMS agencies partners.

The NEMSIS DataStandard for EMS response and care is used by all 50 states, D.C., 3 U.S. Territories, and many Tribal Nations, including over 14,000 agencies who operate within jurisdictions. The NEMSIS Data Standard allows for interoperability with medical devices, other public health data systems, and health information exchanges, and provides a framework for near-real-time collection of near complete census of EMS records into the National EMS Database.[5]

Currently, OEMS is developing processes to allow for NEMSIS data linkage with police crash report data. EMS response time currently shows correlation between response time and motor vehicle crash (MVC) mortality rates. Emergency medical dispatch in rural areas findings include vehicle extrication resulting in increased time EMS is on-the-scene resulting in increased risk for first responder and bystander to be struck in secondary incidents.

As of June 2024, there were roughly160 ground EMS agencies that administer prehospital blood. Most of those agencies are in urban geographies (not yet in rural geographies due to distant proximity to blood banks, resources needed to establish contracts with blood banks and hospitals, purchase devices and supplies, implement logistics solutions, update scopes of practice and EMS protocols, and administer trainings).

People often don't think about minutes and seconds you don't have even in an urban setting - but 14,000 EMS agencies across the country 160 is a small number. Patients experience hemorrhagic shock who receive blood in the prehospital setting will need less blood overall (i.e., at the hospital) – a great way to keep blood center programs engaged to save blood and resources. EMS agencies administering prehospital blood maintain and track the blood using smart coolers, and if it is not used then it is returned to the blood center so that it can be used for other patients

[4] The Association Between Crash Proximity to Level 1 and 2 Trauma Centers and Crash Scene Morality of Drivers Injured in Fatal Crashes, March 2021, USDOT, NHTSA – DOT HS 811599
[5] NEMSIS Annual Public Data Report 2023

"Blood transfusions have the potential to save lives on scale of what we have seen with seat belts" – Jeremy Kinsman

Participant Question: "What types of impacts are you seeing with the blood transfusions being available in the field for EMS to use?" Jeremy explains that one study showed that injured patients at risk for hemorrhagic shock who were administered plasma had significantly lower mortality at 30 days (23%) versus the standard-care group which included infusion of crystalloid solution (33%).[6]

Rural Continuum - Hillary Isebrands, FHWA Resource Center

Crashes are labeled as rural or urban, but it is a spectrum and does not all look the same – sometimes crash data shows a location as urban within a city boundary, but the road itself is rural by design definitions. FHWA is looking at different types of data to move from urban and rural labels to understand the layer of risk factors beyond these two classifications of roadways.

FHWA is applying public health strategies with SSA to see what type of data can better represent rural crashes because current reporting is not accurate or precise. FHWA is working to embrace partners within SSA elements - peer exchanges are helping frame the narrative of safety with all industry stakeholders and partners in the system

Land development continuum - What type of facilities in rural areas? What type of crash? What type of interstates? By using land use data instead of urban vs rural road data, we can use trauma center locations overlayed with these different data sets and show a picture of what is truly happening across the country for instance.

Other examples include Montana just opened their first Level 1 Trauma Center, before that a victim had to be transported to a different state for care possibly so we can see how this service area has changed and grown to serve the residents of Montana.

Colorado has specific hotspots with fatal and severe injury crashes on rural roads when one overlays this data with trauma centers – these hot spots are, unfortunately, out of the 50-mile range requiring much more time to get crash victims to appropriate hospitals.

[6] Prehospital Plasma during Air Medical Transport in Trauma Patients at Risk for Hemorrhagic Shock, New England Journal of Medicine, 25 July 2018

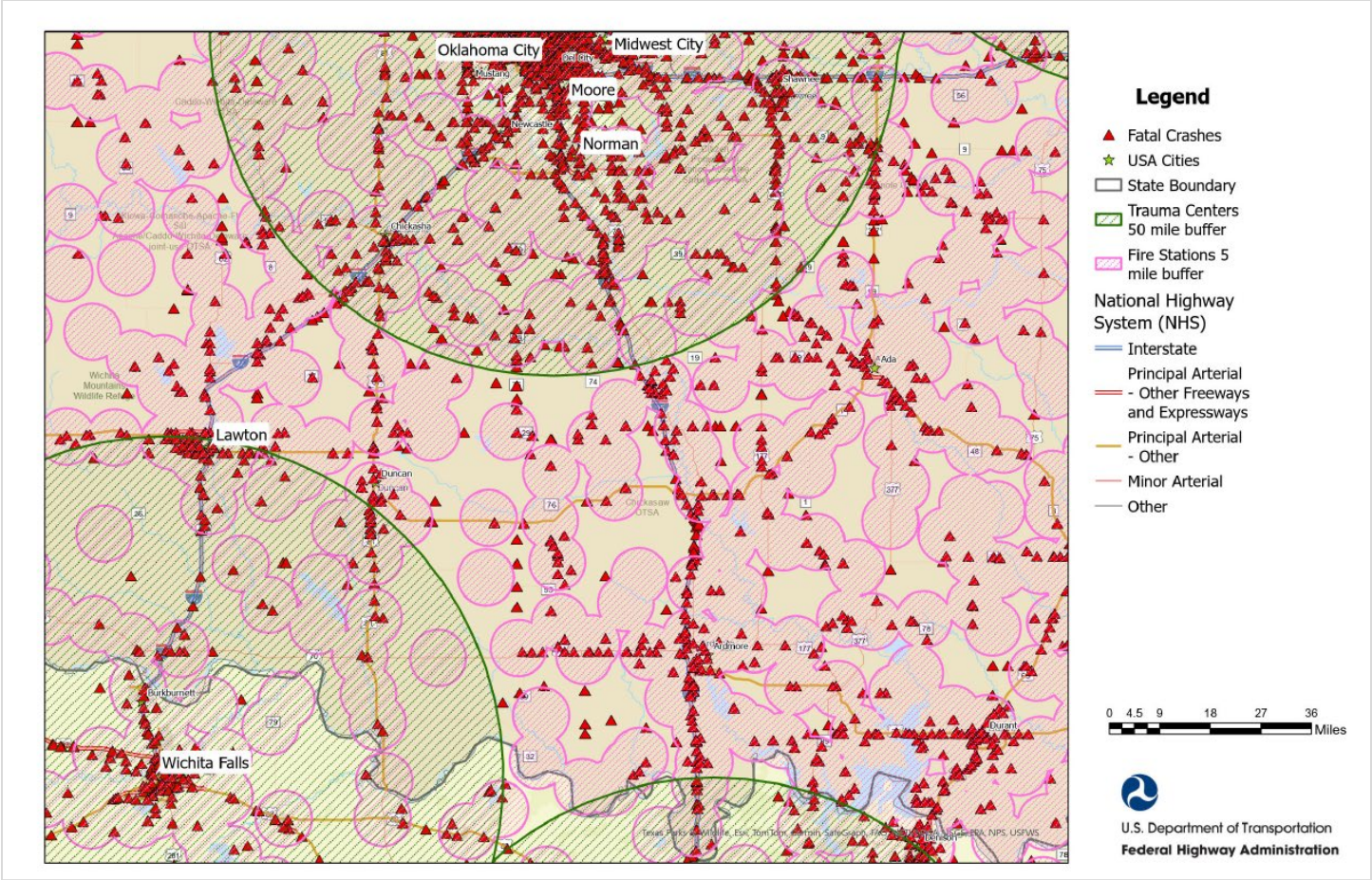

Figure 3: USDOT, FHWA GIS map with overlaid data showing fatal crash sites outside of 50-mile buffer radii from Level 1 and 2 trauma centers in Oklahoma and Kansas.

Participant Question: "Are you looking at personnel giving medical care or volunteers giving medical care?" Hillary says no but wants to encourage folks to figure out what the abilities each place has and create database to eventually feed into NEMSIS.

ICAT & Cambridge Mobile Telematics - Neal Hawkins, Iowa State University

There will never have enough Level 1 trauma centers, and we won't have enough EMS and law enforcement. We need to have better behaviors, and one potential solution could be monitoring behaviors with insurers.

Iowa utilizes Iowa Crash Analysis Tool (ICAT) which updated daily with crash reports. Weekly reports also include classifications of collision like vehicle lost control, ran off road, overturned, ejected, etc. Some weeks reports are upsetting due to overwhelming negative trends such as, about 40-45% of crashes are unrestrained.

There are identified challenges with emerging data. Storing and organizing emerging data from vehicle, cellular, fleet, and others requires significant storage capabilities because of the sheer amount of data available. Purchasing data where available about 'your vehicle' – Iowa buys data to stay informed of crash indications and this data is sent to them nearly a minute after it happens so all data is live. Other data also purchased includes data about cell phone usage, braking, and vehicle speeds.

The phone handling data can also be overlayed with road type, time of day, event count, percentage by 10 days, average of locations, and duration of handling.

Researchers are using this data to assess risk across all roadway segments with GM risk scores to visualize an entire picture with factors like speed, seat belt, hard braking etc. The Oklahoma Challenge organization and Cambridge Mobile Telematics partnered to launch safe contest for teens

Participant Question: What do you want to do with the data? Neal explains that they want to give data to states and explain how law enforcement can more effectively enforce certain locations where phone handling for example is much denser. Neal comments that auto insurers need to get involved this type of datamining effort with any associated groups in higher risk categories, like teenagers for example to help train them to be better drivers.

Roundtable Discussion

Participant Question: What is the push to link serious injuries and minor based on hospital outcomes?

Jeremy responds with there are 14,000 EMS agencies across the country and the software being used by hospitals brings outcome data back to crash data at the local level. At the national level it is challenging to do that. There is a huge goal to reach linking police crash report with V3 with EMS with trauma record with hospital record – to complete a victim's data. Currently, Wyoming completes its data, and we can use that case study, but we need more states to do this. We are working closely with the HHS national coordinator (health information standards) they have established common standards across the country to help to link the data together, but this space is developing with emerging technologies and new standards.

Hillary comments that county health departments do cross over with crash reports, EMS reports, and hospital records as well as coordinate with each other to complete data, though injuries are wild cards because of surviving or not, or for example outcomes for minor stuff is not documented. National level is active and proactive – but the local level has a lot of opportunities to grow in this area.

Paul also explains that Oklahoma does not update its police reports based on outcomes from hospitals, but they are looking to update the data across the state - so if an outcome changes to a fatality, it will be updated. Hopefully, this will be an AI and machine learning technology where it reports live updates to NHTSA. For example, heart attack before the crash is not a fatality and it can get changed and updated.

Participant commented that there is an interstate system issue of people missing when they go to a trauma center in a different state – sharing between states to account for outcome of survival or fatality is important.

Participant commented that EMS is so much more advanced with war strategies and serious injuries to save limbs.

Participant shares that Ohio no longer differentiates between serious injuries and fatalities now PCR – they are more interested in if EMS is there in time.

Participant Question: How do you use these websites for law enforcement in specific locations not just state-wide?

Neal explains that auto enforcement was taken out because of certain laws and that's why it was so helpful for law enforcement to have this website to find locations to enforce within their jurisdiction or county. Neal adds sharing with high schools and sharing with national park entrances and others - giving them data is more powerful than waiting for politicians or anything else to respond and be proactive.

Paul adds giving data to counties is so helpful because the state has the resources to collect and analyze data; this helps with staff turnover and allows the passing of information to new employees or law enforcement. Neal and Paul agree just giving them the data is so helpful for them to decide how to use the data, not telling them what to do.

Rosemarie Anderson commented with SSA EMS/Public Health is a critical part of looking at the system of traffic safety management in a different way to be proactive. *With 300,000 local entities in the country how do we incorporate what state agencies have done to give them the data?* Rosemarie also explains local partners don't have time or have resources to do become familiar with tools or do their own data analysis – *Are the states interested in doing data collection and analysis for them and just give them trends and locations and information instead of passing off raw data?*

Neal confirms this is the approach they are using and it's important to make it user-friendly. Aaron also highlights that it's important to add in data that should be overlayed to understand the whole picture better and understand how at risk a population is because of the risk factors and high-risk locations in that community. Figuring out rates and trends can help states determine which local agencies need more help also to improve their traffic safety.

Jeremy confirms we have local zip code level, but national level wise we can't release everything because of privacy laws, but exploring states giving it out at a local level is a new development. There is repository vendor in 40 states that NHTSA partners with to create dashboards with databases that local partners can have access to – being able to use these tools to visualize the information instead of learning to analyze it.

Neal reinforces that some officers want to just see what locations that they need to do enforcement and don't have time always to investigate and prepare where to look at details. It is meeting folks where they are at. Giving the highlights and high-level information versus analyzing dashboards versus massive raw data collection and analyzing.

Paul shares that funding for outreach to go to law enforcement with information from OHS to provide clear pictures of where enforcement is needed. They also do community outreaches each month for people to discuss issues in their areas and do surveys to continue to collect information from people who live there.

Hillary shares that peer exchanges, outreach, partnership, and collaboration needs to happen. Hillary adds that staff must do the most with what they have and be impactful, for example just asking maintenance crews to observe and pay attention to hotspots. Sometimes we just need signs in these rural settings; a Proven Safety Countermeasure that is low cost. Hillary highlights these issues do not need to be solved with huge projects and data analyzing; sometimes its simpler and a lack of basic proven safety countermeasures that can make a huge difference. This needs to be messaged through field sites and partnerships to understand what really is happening in a location that is a hotspot. We need to influence the people around you to be safe also especially with younger age groups.

Speeding and Speed Management

Expected Outcome: Understanding why effective coordination can slow speeding.

Region 6 Speeding Data - Barbara Penny, NHTSA Region 6

In 2020, Region 6 speeding accounted for 7% of the total of speed-related deaths, but in 2021 that number increased, and reduced again in 2022. Information and reports can be found at:

- Traffic Safety Facts CRASH-STATS Early Estimate of Motor Vehicle Traffic Fatalities in 2023 shares information about the first 3 months of 2023.
- Transportation Safety for Tribal Governments
- 2024 Progress Report on the National Roadway Safety Strategy
- Success stories include NHTSA Speeding Campaign Along Route 66

NHTSA is also exploring expanding partnerships from diverse pools of stakeholders in different industries like Louisiana all HBCUs, Mississippi Allstate insurance, New Mexico cannabis industry leaders, Oklahoma oil and gas leaders, Texas – El Paso Traffic Safety Collation, and BIA IHSP – Muskogee Nation.

Emerging Tools and Data - Neal Hawkins, Iowa State University

"If you don't measure something, how can you maintain it?"

Available data to purchase is vehicle data comes from the vehicle itself. Other data such as cellular is GPS form phones which can be off and less accurate. Fleet/other – agencies like Iowa and Missouri have transitioned to Samsara and Geotab which resulted in 90% increase of vehicle seatbelt usage.

Data attributes include speed, ignition status, elevation, heading, longitude, latitude, time, and journey ID, speed acceleration, hard braking, speed deceleration, and a breakdown of mean, avg, min, max, standard deviations.

Connected vehicle data from Iowa has seen many benefits. In a work zone you can see where the hard braking is occurring along the segment of the work zone, and you can see where state vehicles are placed as well as how many vehicles are moving through the time period selected. The dashboard allows one to query by county from map and add roadway types.

Agencies don't need to wait for months to perform studies or get funding or install devices its automated data and it's the most innovative way at the moment that can measure actions live and report data back instantly.

Kansas Law Enforcement Liaison Kansas Speed Management – Daniel Kiser, Kansas OHS

Daniel told the group that part of the Law enforcement liaisons job is to do outreach and messaging about speed management. Kansas has consistently reduced fatalities over the past three-years. Kansas, Missouri and Oklahoma have a tri-state crew where they collaborate across the three states and partner to work on different campaigns. This connection has also resulted in ideas of ways to address specific traffic safety issues

Partnering with Seatbelts Are For Everyone (SAFE) safety program and NHTSA, Kansas participates in the Route 66 Summer Safety Speed Campaign which was successful and was then pushed across the state.

He noted that the LELs also host conferences and connect people in communities and pointed out that you need to find people who want to listen and are engaged and meet them where they are at and build a network. Engineers needs to be placed in the same room as law enforcement along with students, planners, and everyone involved in the SSA to communicate.

Daniel concluded his presentation by telling attendees that Word of mouth, news campaigns, and churches are a great place to communicate with people as well as schools, PTA meetings, and town meetings.

Roundtable Discussion

Participant Question: "Where do you get the speed data?" [Referring to Neal Hawkins' presentation about Iowa data collection efforts] Neal explains that they purchased it from Streetlight and it is expensive, but that's the connected vehicle data - other models are cheaper.

Participant Question: "What is the portion of tribal lands versus state lands?" [Referring to NHTSA's dashboard] Barbara explains that you can query by land type for the NHTSA dashboard.

Participant Question: "How did Iowa implement and how did the program get removed?"

Neal explains that, in Iowa, the program started with allowing towns to put a speed camera on main roads in the towns, but residents revolted because it was automated at 11mph over. And in response, legislation changed the rules so that the city must be a certain size and basically regulated it out. The law needed to be cleaned up.

IowaDOT was asked to interpret the new law they created and make the program work with the new law. Changes include having to report to IowaDOT about why a camera is needed at a specific location and revenue collected will go back to traffic safety. IowaDOT does not want to do this application process and approvals, but politicians are worried that it is seen as a tool to build revenue and not safety related.

Participant Question: "Are any other states present implementing these speed programs?"

Some cities in Oklahoma have implemented cameras to verify registration/insurance coverage, not speed cameras. And the cameras are not allowed on ODOT ROW but can be pointed at ODOT's ROW.

Nebraska doesn't allow any right now – a couple of organizations are pushing for work zones and school zones. Traffic safety professionals believe if they start there, they can show proof of it working there's a chance for viability in legislation, but there are active groups against speed cameras.

Speed cameras are not allowed in Kansas. Biggest challenge in Kansas is 'freedom-thinking people' don't want the government in their car or be given a ticket without judgement.

Texas had speed cameras at one time and due to revenue building misinformation, they are now banned, but they are trying to figure out how to implement a program again.

Participant Question: "What is the experience with sending out warnings but not tickets?"

In his response Daniel shared that there needs to be actual consequences and there is no consequence with warnings. Funds and other resources are expended to catch speeders which are not recouped with warnings. He further stated we should be transparent about cameras and what the revenue is used for, and he believes the revenue generated from cameras should be used for traffic safety.

Rosemarie asks participants and presenters "What are we doing to change behaviors when it comes to speeding apart from cameras?"

Daniel responds that social-norming and reminding people what should be normal through effective communication. Reinforcing behaviors like following the speed limit, not speeding through residential areas, and not passing EMS vehicles. Neal adds not through law action and enforcement because people hate automated speed cameras. He suggests insurance companies being more involved, for example, road users that speed pay excessively more for insurance establishing a financial consequence. He added that outreach, community engagement, and media is very important for messaging and reaching people. Utilizing media (TikTok, social media, etc.) can be effective as well as emerging technology in vehicles providing feedback on vehicle speeds. Neal talked about the diversity of vehicles in rural areas including agricultural vehicles results in greater speed variance often causing bigger consequences.

Rosemarie asks participants "[If] anyone has more to comments on speed variance in rural areas and different types of road users (VRUs, horses, etc)?"

Participant talks about how Amish buggies and sight distance are a huge issue in their communities and outside of those areas. Blind drives and curbs are an issue. This is clearly a risk factor that will identify high risk areas. Rosemarie commented on unpaved roadways and the safety issue of dust. Unpaved roads in general are not self-enforcing there are speeders on these roadways though it is difficult to see people or other drivers through the dust. Daniel adds as a nation we don't want to be policed but we are being risky and putting others at risk – he thinks we need to utilize collaborative partnerships to reach all types of peoples who think in different ways to reinforce what speeds are safe.

Communicating, Collaborating, and Outreach for Rural Road Safety

Coalition Building, Safety Planning and Engaging Public Health

Expected Outcome: Strategies to improve safety through collaborative outreach.

Cheyenne and Arapaho Tribes Transportation Planning - Angela Plumley, Cheyenne and Arapaho Tribes Department of Transportation

Training and onboarding are important with new staff and continuing educating for veterans within their department this is a priority. Teaching transportation lingo, jargon, and technical language is important to identifying traffic safety issues. Angela makes the case that understanding traffic safety action plans and education is what helped propel her to be successful in her job. She concludes that wearing many hats across tribal government and local or county level agencies is essential to implementing impactful solutions.

The department performed a pilot study on what traffic issues exist in their community allowed them to start a transit program and hire within the tribe, but many don't have driver's license causing it to be difficult to retain tribe members – this was solved by providing re-trainer courses to get their licenses. Angela partnered with members of the Oklahoma Safety Council for defensive driver courses access. She realized that this particular challenge is another area of unawareness within the tribal government, specifically understanding what laws impact tribal members.

Angela highlights her and her team's outreach experiences include working with education and school communities. They worked with a local phone company with a texting simulation and to pretend you're texting and drive so you can show folks how risky it is. The department purchased a golfcart and simulated impaired driving with tribal officers using drunk googles to show the impairment and delay of timing between wearing and not wearing the googles. By bringing the equipment into the community it was easier to simulate real-life experiences and also create trust within the student population by having tribal law officers involved.

Angela oversees a nine-county service area and has met with 23 county commissioners to explain goals of working together to tackle safety issues on the same road and jurisdiction. With more roads under their transportation assets means more allocating funds. So, collaboration between cities and counties also brings more funding resources including the state. The tribal government developed a GIS road inventory database, a goal of hers as a newcomer to the job to have everything centralized and computerized because visualization matters.

Her department has identified 7,000 miles of roads to add to inventory for allocation, but that was far too many, so the department identified mileage that tribal transit used or routes with residents or tribal facilities (cemeteries) or essential tribal services. The county wanted to work together with the tribal government to improve and repave roads within school jurisdictions shared. Angela wanted to also incorporate improvements because people may start speeding with the repaving. She was able to install flashing stops signs and other school zone improvements. It is problematic that the school within the tribal land does not have any tribal members, but to show good faith the tribes did the project anyways because it was in their jurisdiction of the county.

Angela concludes that it is important to collaborate to stretch resources and dollars, but also to help intake local knowledge and other perspectives.

Mississippi 2024 SHSP Update - Mark Thomas, Mississippi DOT

In an effort for more coordination and collaboration the Mississippi SHSP 2024 Update will be open to more safety stakeholder groups. Currently the working group includes highway patrol, local PDs, MPOs, state agencies people, FHWA division. This will allow the plans to be used and be useful not just meeting federal requirements.

He stated that the current emphasis areas include young drivers, impaired drivers, unbelted, lane departure, and intersection crashes with unlicensed drivers being a crosscutting strategy.

19 objectives support the five emphasis areas. To gain active buy-in from executive leadership a new vision team was created. This is expected to hold them accountable for decisions as agency leaders and maintain department heads interest to effectively enable implement activities.

Successes realized include: New strategies implemented; Expanded collaboration; Better input on safety needs beyond just engineering; Mandatory driving education in schools: New relationships at executive level leadership

Opportunities for improvement include: Improved inroad with public health sector; buy in from more groups; continuous movement on implementation upon plan completion; identifying the best parties statewide to include in the process.

MS continue to stand up their internal safety collaboration group to ensure every project is a safety project and continue to engage potential future working group for continuance. Improvement in collaboration has gained momentum through the SS4A process and the development of LRSPs

Oklahoma City Area HIS Division of Environmental Health Service Program Overview- David Bales, US Public Health Service

DEHS oversees general environment including food health and institutional environmental health work including hospitals inspections and facilities emergency management plans. There are 6 field offices in Oklahoma and one in Kansas which serves a population of 407,942 persons. There are 43 Tribes within the area and 29 are direct with additional buy-back agreements with 3 other non-direct service Tribes. The field offices do most of their work in rural areas even if the offices are in towns.

MVC Injury Prevention work is staffed by local Child Passenger Safety Technicians (CPST) and proxies. The positions are funded through grants. They partner with Tribes, SAFE KIDS, NHTSA, Police Departments and others. The CPS programs are done at healthcare and childcare facilities and provide seats to anyone in need. Sites include Choctaw, Apache Tribes of Oklahoma, Kaw Nation, Ponca Tribe. Grant application usually comes out in the fall.

- Partners – tribal, SAFE KIDS (state and tribal), NHTSA, PD, FD and many more.
- Training opportunities level 1, 2, 3 and IP fellowship (priority given to tribe members or tribal organization people – virtual allowed for more people to come in and nontribal members can partake).

Kansas LTAP Overview - Nelda Buckley, Kansas LTAP

The Local Field Liaison Program is a part of the Kansas LTAP – KU Transportation Center. The LTAP Team has 4 staff members and provides training and technical assistance to public agencies.

Nelda is the Local Field Liaison; she has been visiting local and tribal agencies around the state in an effort to market the activities of the program and also to learn about the needs of the communities. Over the past two and a half years she has visited all but 5 of the counties in Kansas and nearly 200 cities building relationships, providing awareness of the LTAP Center and ways they can help with transportation needs. The technical assistance and training include road safety assessments, identifying low-cost safety improvements, implementing LRSPs, providing information on available funding and informational webinars.

Oklahoma Challenge Program Overview - Linda Terrell, Oklahoma Challenge

Linda talked about the OK Challenge Program. A program that works with children and young adults. She told the attendees that the youth are important stakeholders and should be involved in traffic safety improvements as their creativity is key to longevity. They understand their peers and how to connect to them through messaging. She

pressed that traffic-related deaths were the second leading cause of death for 15–24-year-olds. She encouraged creating traffic safety programs to connect with youth in schools and develop contests to help encourage and motivate them to learn about driving. One of OK Challenge Program project is to inform youth about blind spots on trucks especially since there are so many trucks on OK roads.

In closing she encourage participants to use positive reinforcement in messaging - what to do instead of what not to do. Provides free resources on website

Roundtable Discussion:

Participant Question: "How is Oklahoma Challenge Program funded?" Oklahoma Challenge is a small nonprofit that receives state funding from Oklahoma OHS, and they also raise money in other ways.

Participant Question: "How well-known is the injury prevention program?" David said it is a national program offered to all Tribes and very competitive only 1 or 2 people receive fellowship in an area each year. They collaborate with the CDC and professors and more.

Desk Top Group Exercise Day 1

Expected Outcome: Disciplines working together to solve safety problems.

Maps of the rural continuum were distributed to pre-assigned groups to discuss the following:

- How often do rural roadways get driven in your state? By law enforcement, maintenance staff, road supervisor/engineer?
- If a crash happened in a particular location on the map, how would you respond?
- What data are you using to prioritize
- Should features along the roads outside the hospital buffer be built/maintained differently?
- How do you collaborate with your local/regional public health departments?

Results and finding from the group discussions:

- Maintenance staff regularly travel rural roads around the state and routinely identify safety issues.
- Implementing low-cost countermeasures, can be used to address those high-risk locations where roadway departure crashes occur, for example, on sharp curves adding chevrons signs along the curved roadway edge with reflective strips.
- Concerns when dispatched services are oversubscribed at a given time – where does the call go and why?
- Dispatching emergency medical services in sparsely populated areas with less resources are challenging– CAD usually comes in at the local level, but if it is not available in the state then there is a limitation to services being provided simultaneously.
- Mentioned the large gap (due to trauma center availability in surrounding areas) on I35 where emergency response time depends if you are on the highway due to faster response time. There are many fire stations nearby, so a strategy could be focusing on EMS training fire station staff with stop the bleed.
- On the Mississippi map there is a large amount crashes in one particular area and a better understanding of fire station support capabilities could determine effective actions. There are no hospitals nearby. Considering the location is a college town with Choctaw casino nearby discussions around risk factors and strategies should address identified targeting behavior with enforcement, on the road campaigns, and outreach to specific groups can be effective.

- On the Oklahoma map discussion involved the effects of population growth around the metro city area and widening roads contributed to congestion and ultimately more crashes. The group acknowledged studying this cause and effect would be required before making an informed decision on type of countermeasures to implement.
- On the Oklahoma map, it was suggested that congestion along principal arteries causes delays of EMS arriving at a crash sites as well as transporting victims to trauma centers. There are clearly not enough trauma centers for the number of severe crashes occurring in the area.

Rosemarie discussed main takeaways from this exercise including how working together with people in different fields of traffic safety helps bring ideas, strategies, and awareness to these specific issues allowing for better effective solutions to be implemented. Without collaboration and partnership across different agencies involved in the safety of the system, we may never get to zero fatalities.

Day 2 – Thursday August 8th, 2024

Takeaways from Day 1

Rosemarie Anderson summarized the key points and discussions from Day 1. Linda Terrell, Oklahoma Challenge Program led the group in a collaborative exercise.

Group Exercise

Participants worked in five groups assigned to use a single finger to lower a long rod. The groups had to keep the rod level and not remove their finger.

The Takeaway: This was an analogy to demonstrate how working together thoughtfully is the only way to collaborate and work together to reach a goal in an area that many people or teams or agencies or offices touch – like traffic safety.

Communicating, Collaborating, and Outreach for Rural Road Safety (continued) Communication – Jay Otto, Montana State University, Center for Health and Safety Culture

Summarizing the communication and outreach session, Jay begins by explaining that there is very little evidence that education campaigns alone will change behavior. For example, the famous "Got milk?" campaign did not increase milk sales until behavior of consumers was studied and revealed that people were interested in the protein gained from milk consumption and that needed to be their target message. Therefore, we should think in the same way to message traffic safety.

He mentioned some components of effective strategies and campaigns which includes policy, laws, and effective countermeasures and asking the following questions.

- What behavior are we working to change?
- How will changing this behavior change consequences?
- What beliefs do we need to grow to change this behavior?
    - Some people react very differently when being told what to do. The more these people are forcefully told to do something the more likely they are to be psychologically reluctant.

Dosage matters - the common reason some campaigns fail is lack of dosage. You need to identify your reach - how much of your focus population experiences your message? You need 80% or more of the population to be reached. You need to identify the amount of times a targeted group sees your message - how often does your focus population experience your message? It needs to be often. You need to identify how long a campaign needs to run - how long does your focus population experience your message? It needs to be long. If you can't fund this properly it won't be effective.

Jay reiterates that "[changing behaviors] is all about conversations". Policy changes in organizations requires education and conversation. In traffic safety spaces there is tons of money used and it's not effective – and there is not often funding left for focus groups and controlled populations to figure out if it's effectiveness. Jay explains if you use a teacher to do outreach campaigns and education with students for drug awareness that can be much more effective than students experiencing campaign ads for 30 seconds or posters. He explains that targeting campaigns does not have the desired impact because it is the same concept – the reach needs to be deep. Without the tools no campaign is truly effective, and dosage is required.

Freight – Trucking and Rail

Safe Movements of Goods and Services in Rural America

Expected Outcome: Understanding safety measures in place to share the roads safely.

Section 130 Overview – Abe Anshashi, FHWA NE Division

Rail Highway Crossing Program (RHCP) Overview and Changes in BIL (Section 130)

Abe presented on the Section 130 is the Railway Highway Crossing Program: a reimbursement program to state DOTs. It was created in 1987 to provide funds for the 'elimination of hazards' at public railway crossings. These projects are eligible for 100 percent federal funds. Under BIL, 50% provision for protective devices was eliminated; increases data compilation and analysis; increases funding for crossing closure (targets specific locations where funds can be used to increase safety)

- BIL Section 11108(a)(2)

Section 130 funding are set aside from a state's HSIP funds and apportioned by formula with a minimum of 0.5% going to each state. The funds are distributed by formula however there are other programs where funds can be drawn from. Half of the formula is dependent on the number of public crossings in a State, and the other half is a combination of lane miles and vehicle miles on Federal-aid highways, and payments made into the Highway Trust fund. These funds must be spent within 3 years of obligation.

- 23 U.S.C. 130(e)(1) - Section 130 funds can be used for the following projects:
  - Any public railway highway grade crossing
  - Bike/ped crossings including separate public bike paths and public pedestrian trails and sidewalk adjacent to a public roadway
  - Crossing blocked by idling trains

This includes preliminary engineering, design, ROW acquisition and construction costs. Also eligible are matching funds for a local agency on a state funded project and incentive payment to local agencies to close a public crossing. Abe also discussed ineligible projects which include fencing along a railroad ROW to prevent trespassing; automated enforcement; and crossings for light rail, street cars or trolley

Federal Grant Opportunities

- Safe Streets For All (SS4A)
- Reconnecting Communities (RCP)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)

Resources

- Railway Highway Crossing Program Resources – includes reports and joint FHWA and FRA webinar series
- RCHP BIL Reporting Guidance
- RCHP BIL Guidance Q&A

Roadside Inspections from Federal Perspective - Sean Ivins, FMCSA

Sean discussed various components of Roadside Inspections Program within the enforcement program, Compliance, Safety, Accountability (CSA). Roadside Inspectors serve as the first line of defense against those motor carriers that pose a high crash-risk, and they play a critical role in improving commercial motor vehicle (CMV) safety. Safety Scores are updated with FMCSA, post inspections and include the following information:

- Driver fitness
- CDLs record
- Medical card
- Unsafe driving habits – speeding, following too close, improper lane changes, and seat belt usage
- Vehicle maintenance record
- Hours of service logged for drivers

Controlled substances – random testing results and pre-employment test or any suspicious drivers that refuse testing are also logged in the FMCSA Drug & Alcohol Clearinghouse database. The clearinghouse went live in 2016 and reportedly prohibited 150,000 drivers from driving in the US, Canada, and Mexico. Oklahoma alone had 2,700 drivers prohibited. Automated database allows for putting drivers in immediate probation period if a test is failed.

Multimodal Planning Division - Jared Schwennesen, Oklahoma DOT

A focus of Multimodal Planning Division is safety on and around railroads and crossings with vulnerable road users (VRUs) and motor vehicles. The Division also does planning for ports and waterways.

More goods can be moved on rail and waterways than by road as each rail car is 4 trucks long and a barge is 15 carloads. Additionally, freight movement by rail or waterway is safer as most conflicts are removed. In the 1980s there was on annual average 300 train to vehicle crashes with 30-50 fatalities, but now the state has managed to reduce these figures to single digits. Pedestrian incidents have outpaced vehicle fatalities requiring the Division to change focus. Communities in general do not have the funds to implement safety improvements, however the state has been able increase its resources so they can provide assistance.

Grants have been a great opportunity. Section 130 is the biggest program with the state receiving $8 million every year. The new change of 100% federal share increases the amount of railway crossings that can be addressed in a year.

Oklahoma started implementing medians to stop people from going around gates - 70% of incidents happened at active lights and gates. Oklahoma spends $100,000 on education and will start Hispanic-specific campaign targeting. The success is attributed to having a good standing relationship with the rail company to get projects done.

Roadside Inspection from Highway Patrol Perspective – Jill Underwood, Kyle Metcalf, Chris Black, and Tyson Wright, Oklahoma Highway Patrol

OK Highway Patrol Officers enforce according to the Commercial Motor Vehicle Safety Alliance. 50 troopers cover 77 counties mostly in urban areas, due to more carriers present in urban areas. They perform more than 200,000 inspections in a year and considers this program a proactive safety approach. In 2023, there was 24,000 inspections performed in Oklahoma with 11,000 carriers put out of service for safety issues including 1,068 seat belt violations. Commercial trucks are pulled over on the side of roadway or highway and BASICS levels 1, 2, and 3 roadside inspections are performed. Oversize enforcement for state law and permits are also conducted.

Goods and products transportation have increased tremendously requiring larger loads to be transported – this is reflected in increased applications for permits and officers now providing escorts especially for green energy industry growth and the transporting of wind turbine parts. Officer escorts are a crucial safety feature of these trips. Officers also respond to fatalities with large trucks as they are certified and trained to inspect these vehicles and will assist with investigations to determine fault and causation. The grant program also requires safety talks and outreach across the state with the hope to reduce crashes and increase awareness around safer options.

Current seat belt laws in Oklahoma are a $20 fine for drivers and $300 for an unrestraint child. Points are added to truck drivers' safety score and that makes them care about being safe and restrained while driving. OHP officers noted that more shoulders are needed along roadway to do inspections safely.

Roundtable Discussion:

Participant Question: "Ohio took control away from counties on truck load weights, and most large trucks are 12% heavier as a result – there is a large difference between 80,000 and 90,000 pounds and has caused roadway damage. Ohio does not allow these heavy weight vehicles on highways or state routes, so county roads are being utilized instead. Do other states have this issue?"

Oklahoma allows for county resolutions to pick truck routes and restrict trucks. However, there are limitations, for example, a large truck cannot service an oil field so a driver would have to first stop at a scale to see how heavy the current load is before proceeding off the truck route. OHP trooper added the oversized loads are dangerous for those commercial vehicles in terms of brakes maintenance.

Participant Question: "Are more large trucks getting into crashes and operating less safely?"

The OHP troopers explains that trucking and driving used to be more professional based with higher standards and noted the following challenges:

- CDL courses and maintenance of the license have huge cost burdens to drivers who are often now contractors or gig workers
- Companies engage in risky behavior as the strive to move their freight and hiring standards are compromised as they face challenges associated with a shortage of drivers. Some companies are even hiring back drivers they fired for safety issues.
- Distractions have increased with the onslaught of technology
- Companies also abuse break rules and there are plenty of inspections that find false logs of driver's hours.

Participant Question: "A number of northeast states have truck parking information to find spots to park and sleep – is that similar in Oklahoma?" A lot of times drivers will keep going to get to a truck rest stop because the side of the road is not safe to park and sleep. Oklahoma absolutely needs more trucking parking.

Participant Question: For Rail Crossing Program, can funds be used to close a crossing and create a pedestrian crossing bridge? No, it cannot be used for that project. There are extensive requirements it will also depend on the state.

Participant Question: What do you think is needed in terms of education for truck drivers and other drivers to communicate to them about safety needs in sharing the roadways?

The officer explained, the blind areas around the trucks are the most important part to consider. People are in a hurry and are being risky for no reason and introducing that behavior around a truck is putting their lives at risk. People do not understand what it takes for commercial vehicles to stop, it is like trying to stop a train moving at 80 mph. In addition, technology is also destroying the norm for safe driving as people are distracted and oftentimes might not even see a truck. The FMCSA grant requires each trooper to stop a minimum of 8 trucks every month. An officer stated he used each stop as an educational opportunity, when he pulls over a truck, he gives them the choice to tell 10 people about slowing down and moving over or pay a $1,000 ticket. In Oklahoma, $900 state ticket for cellphone use by truck driver and $10,000 for the truck company if they are at fault too

Participant Question: What are the trends you see for violations? The trooper states weight, brakes, and no CDLs are most common.

Participant Question: Is the safety score a composite score for all drivers? How does it get back to drivers? How do they not get hired again? The officers explains that carriers get safety scores and drivers are assigned a scores. The score follows the drivers and the insurance increases, or they will not cover drivers with bad scores, so it does create systemic consequences.

Addressing Safe Users Element and Creating a Safety Culture

Issues and programs addressing impaired driving in rural areas and improving rural seatbelt use.

Expected outcome: Elevating a safety culture through defined actions.

Governors Traffic Safety Bureau, Iowa Department of Public Safety – Brett Tjepkes

There are 89,824 miles of two-lane rural roadways in Iowa representing 78% of the total roadways in the state. 74% of fatal crashes occur on second rural roadways in Iowa. 97% safety seat belts usage in the state, though 50% of all passenger vehicles fatalities were unbelted. Unbelted drivers are more likely to have unbelted passengers especially among teen drivers. Rural areas have lower child restraint use. Restraint use decreases as child age increases.

After several years away, Iowa Department of Public Safety reintroduced the High Five Rural Traffic Safety Project that was initially implemented in Iowa in 2014. This specific project looks to increase belt use among driver may lead to increase in child passenger restraint and include retrain use in rural areas and among teens.

Five communities were selected to concentrate these efforts - Appanoose, Fremont, Humboldt, Keokuk, and Mitchell. These were not the worst offending communities across the state, but due to lack of resources and needing to collaborate with law enforcement these areas were selected. This initiative included education outreach partnering with law enforcement; Seat Belts For Everyone (SAFE) program resources to encourage teens to get involved with traffic safety; and engineering work including RSAs to find low-cost engineering solutions in each county.

Texas Changing Behavior in Border Communities – Frank Marrero, NHTSA Region 6

What happens after Click It or Ticket It campaigns end?

Frank said 5,980 lives lost in Region 6 (TX, OK, LA, MS, NM) in restrained and unrestrained fatalities with 38-50% unrestrained on average depending on the state. There was a 24.8% increase in unrestrained occupant fatalities from 2018 to 2022 in the region compared to 17.3% nationally. This year, Texas has an average of 10 fatalities per day though there has been improvement since the COVID spike.

New campaign Help #EndTheStreakTX was introduced along with Click It or Ticket It campaigns. Both campaigns use a display of a seat belt holding up a large pickup truck. Communities find it very compelling, and media is involved. According to TX DOT survey after the Click It or Ticket It campaign ends, the seat belt use rate goes down from what it is during the actual campaign. However, making the seat belt citation process long and difficult requiring court appearance, court referrals, child passenger course attendance, hands-on instruction, course completion to dismiss tickets is a great tool to motivate the public to use their seat belts. TXDOT is working to expand it in rural areas and Hispanic communities

Public Participant and Engagement - Bill Kovarik, Nebraska OHS

Bill stated it is necessary to understand the population and analyzing the data to choose effective strategies for implementation and communication. Nebraska is among the lowest seat belt use states in the nation. In 2017 there was a recorded high of 86 percent seatbelt use which has now dropped to 76 percent with rural areas lower with as low as 50 percent in some counties. The fatality rate in rural Nebraska is double that in urban areas. Teens make up 5 percent of the drivers but 18 percent of the fatalities. Based on the survey 83 percent of drivers state they wear seatbelt always; only 15% think will receive a citation for unbelted; more 50 percent agree Nebraska should have a primary seat belt law and only 30 percent have heard a seatbelt message.

In an effort to increase seatbelt use law enforcement, Office of Highway Safety and other safety partners organized and participated in community events. Feedback is that seatbelt citations are not very effective in states with secondary seatbelt laws.

Teen targeted engagement challenges include that teens do not see OHS ads because they do not watch television or listen to the radio. Teens get their information from TikTok or reels on Instagram. These are effective means to communication with teens. Teens are more receptive to their peers providing the message not adults. This is a relatively new effort of engagement only being implemented for a year. In 2023 14% of crashes involved a teen driver and in 2024 so far has dropped to 12%. In 2023 30% of teen drivers involved with alcohol-related crashes dropped to 12.5% so far this year in 2024, but these are early numbers still.

Roundtable Discussion:

Participant Question: "How much are seat belt citations? In Iowa it is $125 after court fees." It is a $15 citation in Nebraska, which does play a part in driver's decision not to wear a seat belt.

Participant Question: "Has your organization investigated rural community's workplace seat belt policies? And enforcement in public agencies?" Brett responded that they do not have programs that are employer-based, there are challenges due to lack of capacity right now.

Participant Question: "Are you using influencers to make ads in Nebraska?"

Bill responded that college students create college ads and high school ads use teen drivers. Real teens in real crashes are in the ads. Bill added there are seat belt enforcement at their public agencies, and it really has made a difference in seat belt use and including in their communities not only workplace – because these ideas go home with them. Others shared that TXDOT and Oklahoma have an employer program – that started with national safety council and took on ownership from there. Linda added they found that teens listen to other teens and their parents more so than influencers.

Participant Question: "What are you doing to continuing messaging so it's not a one-off outreach?"

Bill said kids request school programs and presentations that they can relate to. Students do not want to listen to adults telling them what to do. With funding and resources, they are doing the most they can, but they do need more to keep going. The need is there, and teens want it to be engaged and considered.

Participant Question: "What would you say was the major push to get the High Five Program to other states?"

Brett responded that NHTSA got involved to study it, improve it, and spread it. Brett added that the High Five Program is not successful as the same communities that were 'high fives' ten years ago at the same status today. Brett is interested in what NHTSA's study finding reveal. Bill added that they could not include the highest ranked county – 3 out of the 5 were in one district only, therefore others were selected to even out with highway patrol resources.

Participant Question: "Did other law enforcement agencies take on the initiative doing safety checks and stops based on the action taken in the other five counties?"

Brett responded that initiative was not taken. He also shares that during this time, a Fremont County sheriff deputy was killed in a crash not wearing a seat belt. Brett expected the crash l would be triggering enough concern to spread the awareness amongst agencies and catch on, however it did not. Bill added that as an aftermath of COVID people seems to be more reactive and upset with being told what to do – making our jobs more difficult in traffic safety.

Participant Question: "What age can teens get their driver license in your state and – do you talk about changing the age at all? Do you talk about 14 years old beyond the wheel?"

Brett responded that Iowa gave young drivers even more access to driving privileges after COVID mostly for employment purposes. Even though the agency provided a myriad of data proving the dangers and risks behind that policy change, the law was signed. Bill added that the driving privileges for employment were in conjunction, in some states, with allowing younger teenagers to work longer hours, effectively changing child labor laws because of the worker shortage post COVID.

Participant Question: "Should parents also be part of the solution?"

Bill responded that parents should be, however parents are more likely to discipline their kids with something that is less likely to inconvenience them. Taking away their car will mean they must now provide transportation for their teens therefore they will not use it as a part of discipline. Parents need to realize driving is a privilege. The culture is generally changing in Iowa. Farming is more of a business now and children are working less on the farms, so culture is changing. Children were learning to drive in the past because of farm work, today kids are not having these same experiences and gaining driving skills anymore in rural America. Frank added that kids in the northeast do not want to drive for various reasons ranging from too expensive and existing alternatives - transit and ride share. It is important to understand how and where culture is changing in urban versus rural settings.

Rosemarie stated engineers and planners have limited background and experience in outreach and messaging effectively therefore embracing collaboration and partnerships with folks who have communication expertise is necessary.

Addressing Safer Roads Element

Safety strategies focused on rural roadways.

Expected outcome: Improving safety through the application of proven countermeasures.

Rural is Fun! - Holly Kostrzewski, NHTSA

- NHTSA identified key safety issues in rural areas that include impaired driving, occupant protection, post-crash care, speed, and selecting appropriate, proactive countermeasures.
- The DOT Safety Council, Rural Subcommittee, was established in October 2022 and membership is across multiple agencies within DOT. NHTSA also has their own rural working group.

Countermeasures That Work

- NHTSA Countermeasures - Users can now build your own book on the website and download it customized.
- A new Guide Countermeasures That Work: An Introductory Resource For Rural Communities.
    - A begin here guide for rural traffic safety professionals
    - A complimentary guide for behavioral rural traffic safety to FHWA infastructure proven countermeasures

FHWA Proven Safety Countermeasures - Jerry Roche, FHWA Office of Safety

FHWA released the latest Proven Safety Countermeasures with 28 countermeasures under five focus areas. The Proven Safety Countermeasures in Rural Communities guide was recently released which included 14 of the proven safety countermeasures that specifically address rural road safety issues.

Jerry explains that the word Proven in the guide's name reflects that all of those countermeasures are proven effective in reducing fatalities and serious injuries. If you or your team doesn't know where to start to tackle traffic safety issues, start with this guide.

Jerry also explains how the Safe System Approach (SSA) is integrated through these countermeasures because for a fatality to occur it must be a perfect storm many things that go wrong at once. That is why redundancy is a tool that we find crucial to prevent fatalities and serious injuries.

Jerry continues to explain how the kinetic energy equation being applied within a system and its relationship to safety features on roadways. For example, electric vehicles are heavier than conventional gas vehicles and trucks are carrying larger loads – some road features like guard rail designs will become functionally obsolete. At the moment, we can't control or regulate the size of all vehicles, but we can control speed. Velocity is a crucial component of the equation; by lowering speeds and managing speed better we can control outcomes of crashes.

Roadway Safety Strategies in Nebraska - Kyle Christensen, Nebraska DOT

Kyle provided an overview of the Nebraska DOT safety infrastructure initiatives through implementation of proven safety countermeasures. He noted that NDOT has adapted a vision zero policy and that it will not be achieved without applying the Safe System Approach (SSA).

NDOT plans to implement 26 miles of cable median barrier in 2024, which is a 100 percent increase over what was previously constructed on the State's highways. The benefit cost analysis supported implementation of this countermeasure in many locations across the state when analyzing cross median crashes. Immediate safety impacts and benefits have been realized.

With a goal of addressing over 6,000 rural county intersections the County Road Stop Sign Program was created to replace existing stop signs, add advance stop ahead warning signs, and add retroreflective strips to the posts of the new signs.

Recently NDOT reviewed and updated 2 policies related to run off the road crashes. The first change reduced the minimum AADT requirement for adding 2-foot surfaced shoulders from 2,000 to 1,000 AADT. With this change an additional 532 miles of highways and 19 miles of rural county roads will get 2-foot surfaced shoulders added during the next resurfacing project. The second change removed the minimum AADT requirements for the installation of edge line and centerline rumble strips. An additional 5,000 miles of highways will have edge line and/or centerline rumble strips installed on the next resurfacing project.

To reduce the number and severity of crashes on the Interstate during winter months, variable advisory speed limit signs were installed along 251 miles of Interstate. An advisory speed limit will be shown during adverse weather conditions.

Regarding intersection safety, NDOT has implemented three RCUTs on the state highway system and will be implementing five more in the next six years. Kyle stated that the RCUTs are relatively inexpensive countermeasures since anywhere from 10 to 20 RCUTs can be built at the cost of one roadway interchange. NDOT has also constructed 26 roundabouts on their system with an additional 10 planned in the next 6 years. Some roundabouts are installed at entrances to towns which helps to reduce speeds through town. NDOT has installed 1 modular roundabout and are looking at implementing more. Installing modular roundabouts allows for cost savings and faster implementation time frames.

Buchanan County Safety on Secondary Roads - Brian Keierleber, Buchanan County

Brian gave some background on Buchanan County. The county has a population of 21,093 people. Over the last decade, there has been 10 fatalities in the county. Brian stated his main goal is to address safety for all road users in his jurisdiction and community. There is a large Amish community in the county. The county experienced safety challenges associated with the diverse population and modes of travel. He discussed the following safety countermeasures implemented to address the challenges:

- Widening Shoulders: Due to the safety challenges presented with this mix of road users, wider the shoulders allowed more pavement beyond the travel lanes created a safer environment for pedestrians and Amish buggies especially during rain season since muddy conditions moved most pedestrians to travel lanes.
- Installation of chevrons signs, paved shoulders, flashing lights, and advanced warning signs
- A specific challenge in the community is curves or up hills where buggies actively travel.
- Road Safety Audits: utilize RSAs with many decisionmakers/stakeholders to field sites identify the safety issues and solutions to find what is going to work best for your locations.
- Engaged the community: Determine the most appropriate solutions for diverse population and feedback for those implemented.
- Six-inch edge lines: One the most effective strategies have been the installation of 6-inch edge lines on all county roads. This has reduced speeding because drivers perceive the road as narrower than it is.

Overall, Brian explains they have cut their fatality crashes in half by implementing effective countermeasures.

Roundtable Discussion:

Participant Question: "What is Nebraska standard roadway width for median to be installed? And how did you select the roads to install cables?"

Kyle explains that 54 feet is the minimum standard, however NDOT selected roads based on a cost benefit analysis. Ultimately prioritizing roads that would gain higher benefits. Jerry specifically asked Kyle to comment on what changed in NDOT's culture that led to these initiatives and projects centered on traffic safety implementation with new designs. Kyle responded that their team pushed and created a strong support with leadership buy-in which has even reached the governor. This has created a unique opportunity to get projects implemented.

Brian asked a follow up question "How did you push safety culture out to the locals?"

Kyle explains that NDOT paying for implementing these projects even roundabouts has allowed the effort to continue into local agency jurisdictions.

Participant Question: "To Brian, are adjacent counties starting to implement changes as well? Is the culture changing around you?" Brian explains that not only the counties surrounding his have begun implementation of countermeasures and program changes, but the state of Iowa as well. He finds the success has been infectious.

Leveraging Resources for Implementation of Solutions on Rural Roadways

Federal aid grant funding and technical assistance aimed at implementing rural road safety projects and programs.

Expected outcome: Identifying and using available grant opportunities.

Rural Technical Assistance and Resources – Lily Ballengee Office of Secretary Under Policy

Lily's work mainly focuses on stakeholders within rural and tribal communities and governments instead of a specific mode. The program strives to harmonize existing funding opportunities and raising awareness of newer DOT programs across the country by engaging rural and tribal communities. Technical assistance is also a huge, ongoing effort to provide services to communities post awards.

- Rural Opportunities to Use Transportation for Economic Success (ROUTES) Program Goals:
  - *Engaging Rural Communities* to better understand their transportation needs and work together to identify solutions.
  - *Harmonizing DOT Programs* to best support rural mobility using the ROUTES Council to lead Departmental activities and better align new and existing funding, financing, and technical assistance programs with the needs of rural and Tribal communities.
  - *Utilizing a Whole-of-Government Approach* by partnering with other federal agencies, initiatives, and regional commissions to expand the Department's presence in rural America, better promote resources, and capitalize on synergies between federal funding programs.
- Resources:
  - Subscribe to the ROUTES newsletter
  - Building a Better America Fact Sheet for Rural Communities
  - USDOT Grant Programs and Projects
  - Grant Applicant Toolkit
  - Rural EV Infrastructure Toolkit
  - National Center for Rural Road Safety
  - Access to Intercity Transportation in Rural Areas

Safety Funding - Laura Sievers, Iowa DOT

The state of Iowa has performed outreach to ensure that all cities and counties develop safety action plans including the state itself. This allows for these agencies to be ready to apply for Safe Streets For All (SS4A) when or if the organization needs funding for projects.

IowaDOT has several funding opportunities for local agencies to provide funds for implementation of safety action plans, found at IowaDOT Local Systems.

- Sign Replacement Program for Cities and Counties (SRPFCC)
- HSIP – Local is a program where the state utilizes Federal-aid Swap (state) funds to counties and cities for low-cost to medium-cost system safety improvements. There is no matched required with an annual budget of $5 million dollars.
- IowaDOT Traffic Safety Improvement Program (TSIP)
- IowaDOT Traffic Engineering Assistance Program (TEAP)
- County-State Traffic Engineering Program (C-STEP)
- Urban-State Traffic Engineering Program (U-STEP)
- Highway-Railroad Crossing Safety Program
- Highway-Railroad Grade Crossing Surface Repair Program
- Iowa Clean Air Attainment Program (ICAAP)

Laura stated that the programs and projects are only as strong as the employees and believes we need to focus on understanding younger employees to foster their learning. Being supportive is crucial to success.

She also states that there are currently 9 million 18-year-olds in the country, and in 2039 there will be only 3.3 million 18-year-olds. She asks participants to start critically thinking about roadway use tax funding, shutting down schools resulting in children traveling further to attend school, retaining children from a young age to enter these careers, and many other problems we will face in years to come.

RAAMP – Brandon Dudgeon, Oklahoma DOT

Oklahoma has 35% rural population with 57% of fatalities (350 fatalities annually) occur in rural areas which is a much higher average compared to the US, which are 20% and 40% respectively.

There are 10,000 lane miles of two-lane rural highways in Oklahoma. By year end in 2023, Oklahoma has been able to add 1,100 miles of shoulders. The average cost to construct was around $4 million dollars per mile. Oklahoma DOT has assessed there is a 5,250-mile deficiency (where shoulder improvements are needed) which will cost nearly $20 billion to complete shoulders on these roadways. This is estimated to be over 40 years of work.

Working with legislators, Oklahoma DOT is utilizing a new program, the TIFIA Rural Project Initiative (RPI). Securing special interest loans to help with funding largescale projects with providing 49% of project costs. 33 projects financed over 3-year period in conjunction with Rural Two-Lane Advancement and Management Plan (RAAMP) funding five packages of projects covering over 111 miles of deficient shoulders.

Results and cost savings benefits include:

- $44 million dollars in crash costs reduction
- $29 million dollars of project costs
- $200 million TIFIA loans for all 33 projects costs $11 million annually for 20 years to pay back.

Roundtable Discussion:

Participant Question: “directed to Laura, have you considered modular roundabouts?”

Laura responds that a project was just approved for a modular roundabout, it was specifically easy to receive approval because it works in all roadway conditions.

Hillary asks Brandon “How you were able to sell TIFIA loans to leadership?”

Brandon explains that because project costs are tied to inflation, these types of loans at this amount of money was truly the only way to fund large scale projects. The savings, safety benefits, and saving lives also contributes to making the decision easier. He advises knowing your audience is important especially when nontechnical decisionmakers are in the room. The first process took about 9 months, but now submitting packages has a process with an expert on the team and does not require as much time.

Lily highlights that TIFIA loans are huge for rural areas because you can use tons of different agencies state-wide approach to pool money, though is not realistic for county or local level. Lily implies she would like to create notable practices guidance in the future.

Action Planning

Develop steps to move forward with improving safety on rural roads.

Expected outcome: action steps for implementation.

Groups were formed in states and participants wrote down flip charts to track notes of the discussion.

1. Iowa Group discussed moving forward with more collaboration with new safety professionals in response to turn over because the replacements are usually younger and have less experience. These young professionals may also be new to the safety mindset and field, so it is imperative that we pass down institutional knowledge. A few notes:
    a. Job training for new young safety professionals
    b. Using new data like telematics as input to RSAs and safety assessments to make better informed decisions on behavioral and infrastructure countermeasures
    c. County meetings every year don't include safety presentations but there are other discussions around the state going on – need to organize and prepare better with these types of events
    d. New engineers also have a lot of stress in their lives with new jobs and new families so it's imperative to support them within their job
    e. County engineers are responsible for local and county bridge inspections – ensure they have the proper training, support, and knowledge to do this job effectively
    f. Roadway conditions for yearly maintain and refurbishment needs to tracked better
    g. This is all in addition to safety culture shift across the state

Iowa Group believes that they have the resources out there, but they need to do more to collaborate and inform folks in decision-making roles.

2. Texas Group discussed how every project is a safety project top down.
    a. Ongoing education and engagement with maintenance crews for example to clear vegetation and report signs and other issues.
    b. Need to find buy-in outside of waiting for people to become interested because we are reactive as a victim being an advocate, but we can be both experts and advocates.
    c. Drivers Ed back in school using leadership's help
3. Nebraska Group discussed programmatic approaches to ongoing traffic safety issues in the state.
    a. Need to update legislation for primary seat belt law and distracted driving
    b. Utilize Circuit Rider LTAP to pursue funding
    c. Continuing to promote local road safety plans
    d. Providing technical assistance
    e. Training for local agencies on sign studies and speed studies

f. Leveraging Highway Safety Conference for training opportunities and more

4. Kansas Group discussed focusing efforts in these areas:
    a. EMS has not been involved in their safety efforts as much so that identifying partners to collaborate with and potentially explore developing Stop The Bleed program
    b. FHWA is doing technical assistance right now with MIRE data to help establish high risk locations
    c. How to get local agencies to apply for funding opportunities to make implementation possible not only developing local safety road plans, possibly collaborate with LTAP.
5. Oklahoma Group discussed focusing on better outreach and education to hire more than just engineers to highlight other career opportunities and explain to kids, teens, recent grads that you can be a safety professional and not be an engineer.

Day 2 Takeaways

Jay Otto begins by thanking everyone for not only attending but participating in the discussions and presentations. It is important to have these peer exchanges as one of the first steps to changing beliefs. These conversations are more powerful than any of us can imagine. He hopes that participants will work to inform others about taking on the role of being a safety champion.

By using this idea of championing safety to grow safety culture at your organizations you can fully lean in and act as a resource or take actions. Foster a shift from compliance to a commitment to being safe. Meeting regulations and requirements of federal design standards is not enough, think about what you can do that will create a bigger or actual impact. You will have to find your courage to prioritize safety no matter what – even if it causes delay or upsets others. Have the courage to speak up as a champion that's the most important aspect of a champion.

Think about as you go home what is one thing you can do differently next week to change the culture around you and commit to safety.

Appendices

Appendix A: Agenda

AGENDA

DAY 1

8:00 – 8:30	**Welcome & Introductions** **Lily Ballengee**, *Office of the Secretary, USDOT* **Carl Selby**, *FHWA OK Division* **Barbara Penny**, *NHTSA Region 6* **Kimberly Johnson,** *Southern TTAP*
8:30 – 9:00	**Icebreaker Activity** Group discussion on issues and challenges of rural road safety and expected outcomes. **Group Discussion**
9:00 – 9:45	**A Guiding Paradigm - Safe System Approach Application** Positive Culture Framework **Rosemarie Anderson**, *FHWA Office of Safety* **Jay Otto**, *Montana State University, Center for Health and Safety Culture* *Roundtable Discussion* Expected Outcome*: Realizing the National Roadway Safety Strategy*
9:45 – 10:00	**BREAK**
10:00 – 11:30	**Determining the Rural Road Safety Risk and Challenges** Collection, Analysis Tools and Use of Rural Road Data **Hillary Isebrands,** *FHWA Resource Center* **Aaron Bartlett,** *NHTSA's Region 7* **Neal Hawkins,** *Iowa State University* **Joanne Cisneros,** *FMCSA* **Jeremy Kinsman,** *NHTSA OEMS* **Paul Harris**, *Oklahoma HSO* *Roundtable Discussion* Expected Outcome*: Recognizing data for improving rural road safety.*
11:30 – 12:30	**LUNCH**
12:30 – 14:00	**Speeding and Speed Management** Opportunities to Coordinate and Collaborate – Infrastructure and Behavioral **Barbara Penny,** *NHTSA Region 6* **Neal Hawkins,** *Intrans/Iowa DOT* **Daniel Kiser**, *Kansas Law Enforcement Liaison* *Roundtable Discussion* Expected Outcome*: Understanding why effective coordination can slow speeding.*
14:00 – 14:15	**BREAK**
14:15 – 15:45	**Communicating, Collaborating and Outreach for Rural Road Safety** Coalition Building, Safety Planning and Engaging Public Health

	Angela Plumley, *Cheyenne and Arapaho Tribes DOT* **Mark Thomas,** *Mississippi DOT* **David Bales,** *US Public Health Service* **Linda Terrell**, Oklahoma Challenge **Nelda Buckley**, Kansas Safety Circuit Rider *Roundtable Discussion* Expected Outcome*: Strategies to improve safety through collaborative outreach.*
15:45 – 16:30	**Desk Top Exercise** Group Exercise Breakout Groups - Assigned Expected Outcome: Disciplines working together to solve safety problem.
16:30	**Wrap Up Day 1**

DAY 2

8:00 – 8:30	**Recap Day 1 and Report from Desk Top Exercise**
8:30 – 10:00	**Freight – Trucking and Rail** Safe Movement of Goods and Services in Rural America **Sean Ivins,** *FMCSA* **Abe Anshasi**, *FHWA NE Division* **Jared Schwennesen**, *Oklahoma DOT* **Chris Black and Tyson Wright,** *Oklahoma Highway Patrol* *Roundtable Discussion* Expected Outcome*: Understanding safety measures in place to share the roads safely.*
10:00 – 10:15	**BREAK**
10:15 – 11:30	**Addressing Safe Users Element and Creating a Safety Culture** Issues and programs addressing Impaired Driving in Rural Areas and improving Rural Seatbelt Use **Brett Tjepkes**, Iowa Dept of Public Safety **Frank Marrero,** NHTSA Region 6 **Bill Kovarik,** Nebraska OHS *Roundtable Discussion* Expected Outcome: *Elevating a Safety Culture through defined Actions.*
11:30 – 12:30	**LUNCH**
12:30 – 13:45	**Addressing Safer Roads Element** Safety strategies focused on rural roadways, **Holly Kostrzewski**, *NHTSA* **Jerry Roche**, *FHWA Office of Safety* **Kyle Christensen,** *Nebraska DOT* **Brian Keierleber,** *Buchanan County, IA* *Roundtable Discussion* Expected Outcome: *Improving Safety through the Application of Proven Countermeasures*
13:45 – 14:00	**BREAK**
14:00 – 15:15	**Leveraging Resources for Implementation of Solutions on Rural Roadways** Federal Aid Grant Funding and Technical Assistance aimed at Implementing Rural Road Safety Projects and Programs

Lily Ballengee, *USDOT OST*
Laura Sievers, *Iowa DOT*
Brandon Dudgeon, *Oklahoma DOT*

Roundtable Discussion
Expected Outcome*: Identifying and Using Available Grant Opportunities*

15:15 – 16:00 **Action Planning**
Develop Steps to Move Forward with Improving Safety on Rural Roads
Breakout Groups by State

Expected Outcome*: Action Steps for Implementation*

16:00 – 16:20 **Report Out**

16:20 – 16:30 **Wrap Up and Adjourn**

Appendix B: Participant List

Name	Position	Organization/Employer	Work Email	State
MISSISSIPPI				
Helen Porter	Director	Mississippi OHS	HPorter@dps.ms.gov	MS
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