Project Title: Growing Support for the Safe System Approach

Deliverable 5

Final Report

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Executive Summary

This 2023 Road to Zero Community Traffic Safety Grant project consisted of developing a survey tool and guide that community stakeholders can use to assess the level of agreement their constituents have with the Safe System Approach (SSA) principles and beliefs. While the SSA has been formally adopted by the U.S. DOT as a best practice approach to improving traffic safety, support and adoption of the SSA may be hindered by key stakeholders and elected officials assuming that their constituents will not accept its principles. Providing them with a tool to efficiently assess the level of public support in their community can help remove barriers and perhaps incorrect assumptions and better facilitate the adoption of the SSA.

This project team used the survey about the SSA to collect responses from a sample of 421 adults in the U.S. who were similar[1] to the general population. The results revealed that:

- Three-quarters of participants (74.9%) were moderately or more concerned about their safety and the safety of family and friends on roads.

- Over half of participants (57.2%) ranked improving safety on roads as the highest priority compared to improving access for people who walk or ride bicycles along roads (22.0%) or reducing congestion or traffic on roads (20.8%).

- Over 80% of the participants agreed with 13 out of 15 statements about the Safe System Approach.
    - Most participants agreed with core tenets such as no one should be seriously injured or killed on roadways and that people make mistakes and roadway systems should be designed so that mistakes are less likely to result in death or serious injury.

- Most participants recognized that various potential strategies to improve roadway safety based on the Safe System Approach may be effective. The data indicated a strong positive relationship between individuals' perceived effectiveness of safety strategies and their agreement with the Safe System Approach ($r(421) = .46$, $p < .001$).

- Over 8 out of 10 participants (82.8%) supported their local government doing more to improve the safety of roads in their community.

- Two-thirds or more of participants supported various strategies addressing safer people, safer roads, safer speeds, safer vehicles, and post-crash care.

- Participants get most of their information about roadway safety from traditional news media (40.9%) and online news media (28.8%) as the most common sources.

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[1] The sample was chosen to reflect the U.S. population demographically. The demographic groups represented by the sample include age, gender, region, race, ethnicity, income and area classification (20 percent rural).

- Some (24%), but not many, participants were aware of organizations or groups that work on improving roadway safety.

- Three quarters of participants (75.5%) were interested in a website that would give them information about the safety of roads in their community and provide a way to raise concerns.

The participants for this survey were not randomly selected, and therefore these results cannot be generalized to all adults in the U.S. Nonetheless, the results reveal strong support for the Safe System Approach among participants, along with important relationships between beliefs, and provide a framework for future surveys to evaluate support for the SSA and ways to increase it.

Introduction

Fatalities and serious injuries from traffic crashes are a significant public health concern[2] and have increased in recent years.[3] The Safe System Approach has been successfully used by other countries to reduce fatal and serious injury crashes.[4] The Federal Highway Administration adopted the Safe System Approach as a foundation for its Transportation Strategy.[5]
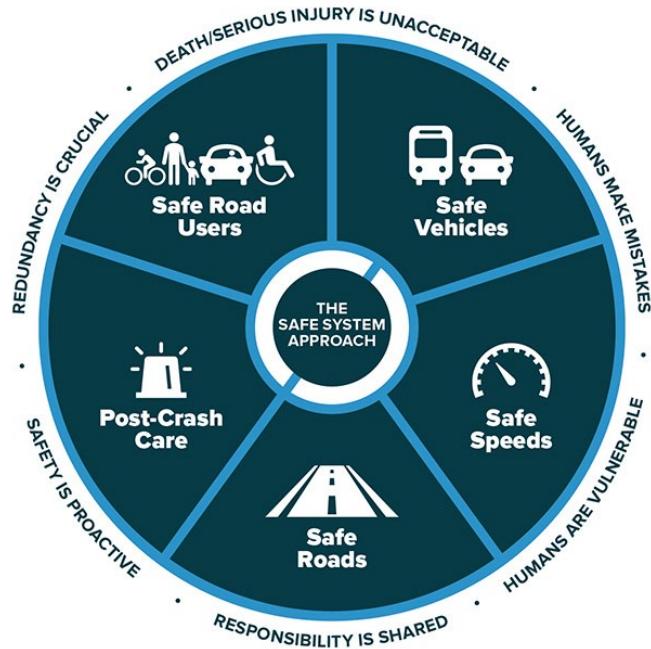
Figure 1. The Safe System Approach Principles and Objectives[7]

Getting to zero roadway fatalities and serious injuries will require systemic change. The SSA could guide that change, or it could be dismissed or discounted by stakeholders. When viewing the SSA as a mechanism for fostering systemic change, it is valuable to examine research on organizational change from the field of implementation science. Bryan Weiner, a researcher focused on systemic change in healthcare systems, noted that systemic change requires shared resolve: "I emphasize shared resolve because implementing complex organizational changes involves collective action by many people, each of whom contributes something to the implementation effort. Because implementation is often a 'team sport,' problems arise when some feel committed to implementation, but others do not".[6]

Elevating the public's voice in support of the SSA could foster greater commitment from stakeholders and organizational leaders. Roadway design and operation are inherently political

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[2] Retrieved from https://www.cdc.gov/transportationsafety/index.html

[3] Retrieved from https://www-fars.nhtsa.dot.gov/Main/index.aspx

[4] *Applying a Safe System Approach Across the Globe | FHWA*. (n.d.). Retrieved April 12, 2022, from https://highways.dot.gov/public-roads/winter-2022/07

[5] Retrieved from https://www.transportation.gov/NRSS

[6] Weiner, B.J. (2009). A theory of organizational readiness for change. *Implementation Science*, 4(1), 67.

efforts. Tribal, state, and local departments of transportation are influenced by a variety of elected officials. Leaders within these organizations must be adept at navigating local politics. However, these leaders may infer the public's desires based on who complains the loudest as opposed to the viewpoints of the majority of constituents who rarely contact their local elected official or transportation department. A more formal approach to assessing the viewpoints of the public elevates the voices of those often not heard by these stakeholders.

The Bloomberg School of Public Health's Consortium on the Safe System Approach (2021) recommended increasing public awareness of the potential of safe roads and greatly reduced crash deaths by developing and conducting a national Vision Zero/Safe System awareness and education campaign that is culturally sensitive and based on evidence. The foundation for an effective public awareness campaign is baseline data revealing current beliefs. This project contributes to such a foundation by assisting in the creation of pathways for successful adoption of the SSA, as outlined by the Safe System Strategic Plan.[7]

This project developed and implemented a survey to assess support for the SSA (and its principles and elements) among the general public. Documented support for the SSA among the public can be used to promote the approach with key stakeholders. The deliverables for this project included a survey, survey key findings from a national sample, and guidance for other jurisdictions to replicate the survey.

Methodology

This project consisted of five tasks across a 12-month time period with a total of six deliverables:

TASK 1: Conduct a review of published literature related to traffic safety culture, the Safe System Approach, and cultural readiness. (2 months)

The project team identified search parameters and topic areas for the literature search and reviewed over twenty articles in a summary report.

Deliverable 1: Summary of reviewed literature

TASK 2: Develop survey to identify public readiness, beliefs, values, barriers, and behaviors related to the Safe System Approach. (2 months)

Building upon the literature review, the project team developed a survey draft about the beliefs, values, barriers, and behaviors related to the SSA. The team collected 142 survey responses from a pilot sample of respondents using a Qualtrics purchased panel. After analyzing and reviewing the pilot sample data, the project team amended the survey to produce a final survey draft (Appendix A).

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[7] Abel, S., Lindley, J., & Paniati, J. (n.d.). Safe System Strategic Plan. Federal Highway Administration

Deliverable 2: Survey to assess community beliefs about the Safe System Approach

TASK 3: Recruit a minimum of 400 adults from across the U.S. who are similar in age, gender, and geography (urban, suburban, and rural) to U.S. population. (2 months)

Once again using the Qualtrics purchase panel, the project team collected 421 responses from adults across the U.S. and cleaned the data to prepare for analysis.

TASK 4: Analyze and summarize survey results and key findings alongside relevant Safe System theories to inform the analysis. (2 months)

The project team conducted an analysis of the survey data and summarized the results in a brief report (which is also provided in the next section).

Deliverable 3: Summary report of survey key findings

TASK 5: Complete final deliverables. (4 months)

The final project task consisted of developing a guide for key stakeholders on how to distribute the survey, collect responses, analyze and interpret the findings, as how their role fits into the process of supporting the SSA. This final task also included developing a webinar and this final report to summarize the project work.

Deliverable 4: Guidance to assist local agencies, tribal communities, and state agencies with surveying their constituents and educating elected officials and key stakeholders about implementing the Safe System Approach

Deliverable 5: Final report summarizing project including results of survey implementation and recommendations for next steps

Deliverable 6: A webinar (and recording) summarizing the project and findings

Results

This document shares the key findings of a survey of adults in the U.S. regarding their beliefs related to the Safe System Approach and various safety-related concepts, including roadway use behavior, and perceptions of road safety and safety strategies, among other factors. This knowledge enables a more comprehensive understanding of how individuals perceive and view safety-related concepts, facilitating targeted efforts to enhance awareness and garner broader support for the Safe System Approach.

These results are based on a survey of 421 adults gathered between December 1-19, 2023. Of all respondents, 55.6% were women, 43.7% were men, 0.5% were transgender men, and 0.2% preferred not to say. The age of respondents ranged from 18 to 85 and older. The ethnicity of

respondents was predominantly White or Caucasian. The demographics of respondents are similar to the U.S.[8] Table 1 presents detailed demographics.

The results should be interpreted acknowledging the following important limitations. The participants for this survey were not randomly selected, and therefore these results cannot be generalized to all adults in the U.S. Nonetheless, the results reveal strong support for the Safe System Approach among participants (as well as important relationships between beliefs) and motivate additional surveys of adults to further understand these beliefs.

The survey has five sections:

- Perceptions about safety of the roadway system
- Agreement with the Safe System Approach
- Perceptions of effectiveness of various strategies to improve safety
- Support for various strategies to improve safety
- Sources of information about road safety.

Each section includes results from the survey and observations based on the results.

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[8] Retrieved from https://www.census.gov/quickfacts/fact/table/US/PST045223

Table 1. Summary of Demographics

Variable	Frequency	Percentage
Gender:		
Man	184	43.7
Woman	234	55.6
Other	3	0.7
Age:		
18-34 years	101	24.0
35-54 years	149	35.4
55+	171	40.6
Race		
White	346	82.2
Black	35	8.3
Asian	14	3.3
Other	15	3.6
American Native	7	1.7
Native Hawaiian	1	0.2
Prefer Not to Say	3	0.7
Hispanic		
Yes	81	19.2
No	337	80.1
Prefer not to say	3	0.7
Household Income		
Less than $25,000	72	17.1
$25,000-$49,999	86	20.4
$50,000-$74,999	72	17.1
$75,000-$99,999	54	12.8
$100,000-$149,999	72	17.1
$150,000 or more	55	13.1
Prefer not to say	10	2.4
Area Classification		
Urban	148	35.2
Suburban	195	46.3
Rural	78	18.5
Region		
South	147	34.9
West	102	24.2
Mid-west	95	22.6
North-east	77	18.3

Safety Using the Roadway System

- 45% of respondents said a family member or friend have been injured or killed in a car crash.

- Three-quarters of participants (74.9%) were moderately or more concerned about their safety and the safety of family and friends on roads.

- More than 9 out of 10 participants considered roadway safety as moderately, very, or extremely important:
    - 92.1% - Safety for people walking on roads in your community
    - 91.0% - Safety for people riding a bike or scooter on roads in your community
    - 93.7% - Safety for people using vehicles on roads in your community

- Over half of participants (57.2%) ranked improving safety on roads as the highest priority compared to improving access for people who walk or ride bicycles along roads (22.0%) or reducing congestion or traffic on roads (20.8%).

- While most participants felt safe driving or riding in a vehicle, fewer felt safe walking or riding a bike or scooter.
    - 84.7% felt safe driving or riding in a vehicle
    - 70.4% felt safe using public transportation like buses
    - 66.7% felt safe using a ride service (Uber, Lyft, taxi)
    - 61.3% felt safe walking along roads or on sidewalks
    - 47.8% felt safe riding a bike or scooter on roads, sidewalks, or bike paths

- Participants believed that several factors significantly contributed to serious injuries and deaths on roads:
    - 83.2% - driving in unsafe ways like running red lights, driving aggressively, or driving impaired
    - 75.3% - driving at speeds over the established limit
    - 51.2% - poor road maintenance
    - 45.5% - low investment in programs dedicated to road safety infrastructure
    - 27.4% - inadequate care by first responders after an accident or crash
    - 25.7% - not being able to afford newer vehicles which are safer

Observations
- There is concern about roadway safety among participants, and roadway safety is an important priority.
- Perceptions of safety vary by mode.
- Perceptions of factors significantly contributing to serious injuries and deaths on roads align with elements of the Safe System Approach.

Level of Agreement with the Safe System Approach

Table 2. Agreement with Safe System Principles

How much do you agree or disagree with the following statements?	Disagree	Neither	Agree
"No one should be killed or seriously injured when using our roads."	5.3%	6.9%	87.8%
"Appropriate efforts should be taken to reduce the likelihood that someone else's actions on the road could result in my or a member of my family's death or injury."	3.6%	9.4%	87.0%
"People make mistakes. Our roadways should be designed so that when someone using our roads makes a mistake, no one should be killed or seriously injured."	5.5%	11.0%	83.4%
"Steps should be taken to identify and fix dangerous roads before an accident/crash occurs instead of only making changes to roads after someone is killed or seriously injured."	2.8%	7.7%	89.5%
"Everyone, regardless of where they live, their background, or how much money they make, should feel safe on our roadways."	1.9%	7.7%	90.3%
"We should prioritize efforts to improve the safety of roads in areas with the highest rates of accidents/crashes that result in deaths and serious injuries."	3.0%	8.6%	88.4%
"There should be ways for people to walk safely in their community without worrying about being hit by a vehicle."	3.3%	6.1%	90.6%
"There should be ways for people to ride a bicycle or scooter safely in their community without worrying about being hit by a vehicle."	2.8%	10.0%	87.2%
"People who are walking or riding a bicycle or scooter are at greater risk of being killed or seriously injured in an accident or crash than people in vehicles. Therefore, steps should be taken to protect them when on roads with vehicles."	7.2%	12.2%	80.6%
"The responsibility of anyone who uses the roads is to comply with the laws of the roads."	1.9%	6.4%	91.7%
"Companies that make vehicles should be required to use designs and technology that make vehicles safer."	3.6%	13.3%	83.1%
"People are less likely to be killed or seriously injured in a low-speed crash than a high-speed crash."	11.7%	17.5%	70.8%
"Roads should be designed to decrease the chances that someone is killed or seriously injured if they are in an accident or crash."	3.6%	10.3%	86.1%
"Increasing safe ways that people can walk or use bicycles or scooters to get to where they need to go will decrease pollution and emissions related to climate change."	8.9%	23.3%	67.8%
"Increasing safe ways to walk or use bicycles or scooters improves the ability for people who don't have or can't afford a vehicle to get where they need to go."	2.8%	11.7%	85.5%

Observations

- Over 80% of the participants agreed with most (13 out of 15) statements about the Safe System Approach.
- Most participants agreed with core tenets such as no one should be seriously injured or killed on roadways and that people make mistakes and roadways systems should be designed so that mistakes are less likely to result in death or serious injury.
- General education could increase the level of agreement.

Perception of Effectiveness of Various Strategies

When people perceive a strategy to improve roadway safety is effective, they may be more likely to support it. Table 3 summarizes prevalence of beliefs that various strategies addressing safer people, safer roads, safer speeds, safer vehicles, and post-crash care are effective.

Table 3. Perceptions of Effectiveness of Various Strategies

In your opinion, how effective would the following be in reducing accidents/crashes that result in deaths and serious injuries?	Believe is Effective
Changing the laws about alcohol impaired driving to decrease the legal limit for blood alcohol content from 0.08 to 0.05	73.6%
Enforcing impaired driving laws	89.4%
Enforcing speeding laws	91.9%
Using automated enforcement (speed cameras) to ticket people who are speeding in school zones or near pedestrians or bicyclists	83.3%
Using automated enforcement (red light cameras) to ticket people who drive through red lights	80.6%
Designing vehicles that stop drivers from engaging in unsafe behaviors while driving (i.e. using cell phones, driving under the influence of alcohol/drugs, driving 20 mph over the speed limit)	84.7%
Reducing the speed limit to 25 mph on roads where there are a lot of pedestrians or bicyclists	82.2%
Designing roads that separate bicyclists from vehicles	93.1%
Designing roads that reduce dangerous intersections by using round-abouts or traffic circles	80.3%
Designing roads that decrease speeds - in other words, people just naturally don't drive as fast	84.2%
Providing training to drivers focused on bystander intervention that will assist them in aiding others until emergency services arrive	72.5%
Increasing EMS (Emergency Medical Services) resources so response times are lower in rural areas and other settings with limited post-crash care capabilities	84.2%

Observations

- Most participants recognized that various potential strategies to improve roadway safety based on the Safe System Approach may be effective, thus they are likely to support the Approach overall.
- The data indicated a strong positive relationship between individuals' perceived effectiveness of safety strategies and their agreement with the Safe System Approach ($r(421) = .46$, $p < .001$). Participants who held a higher perception of the efficacy of safety strategies were more inclined to express support for the principles and objectives of the Safe System Approach.
- Educational efforts could help more people understand how these strategies could improve roadway safety.

Support for Improving Road Safety

Participants were also asked how much they would support their local government doing more to improve the safety of roads in their community and how much they would support specific ways to reduce fatalities and serious injuries on roads.

- Over 8 out of 10 participants (82.8%) supported their local government doing more to improve the safety of roads in their community.
- Two-thirds or more of participants supported various strategies addressing safer people, safer roads, safer speeds, safer vehicles, and post-crash care (see Table 4). Additionally, while many perceived that most others in their community would also support these strategies, some did not.

Table 4. Actual and Perceived Support for Various Strategies

To what degree do you support or oppose the following ways to reduce fatalities and serious injuries on roads?	Support	Perceive MOST Support
Changing the laws about alcohol impaired driving to decrease the legal limit for blood alcohol content from 0.08 to 0.05	70.7%	60.8%
Enforcing impaired driving laws	85.8%	75.8%
Enforcing speeding laws	86.0%	73.5%
Using automated enforcement (speed cameras) to ticket people who are speeding in school zones or near pedestrians or bicyclists	73.7%	58.9%
Using automated enforcement (red light cameras) to ticket people who drive through red lights	74.6%	57.5%
Designing vehicles that stop drivers from engaging in unsafe behaviors while driving (i.e. using cell phones, driving under the influence of alcohol/drugs, driving 20 mph over the speed limit)	74.0%	58.8%

Reducing the speed limit to 25 mph on roads where there are a lot of pedestrians or bicyclists	77.4%	59.4%
Designing roads that separate bicyclists from vehicles	83.0%	72.4%
Designing roads that reduce dangerous intersections by using round-abouts or traffic circles	69.6%	60.6%
Designing roads that decrease speeds - in other words, people just naturally don't drive as fast	75.1%	58.8%
Providing training to drivers focused on bystander intervention that will assist them in aiding others until emergency services arrive	66.4%	58.3%
Increasing EMS (Emergency Medical Services) resources so response times are lower in rural areas and other settings with limited post-crash care capabilities	77.7%	75.8%

Observations

- Most participants supported various potential strategies to improve roadway safety based on the Safe System Approach, thus they are likely to support the Approach overall.

- Participants who reported stronger support for safety strategies expressed more agreement with the principles and goals of the Safe System Approach ($r(421) = .58$, $p < .001$).

- Participants who perceived a stronger social norm of support for safety strategies among their peers expressed more support for the various strategies ($r(421) = .56$, $p < .001$) and more agreement with the principles of the Safe System Approach ($r(421) = .33$, $p < .001$). This suggests that individuals who believe that there is widespread endorsement for safety strategies within their social circles are more inclined to embrace the comprehensive safety measures advocated by the Safe System Approach.

- Normalizing support for these strategies may grow more support for the specific strategies and the Safe System Approach overall.

Sources of Information About Road Safety

When asked about where participants get most of their information about roadway safety:

- 40.9% said traditional news media,
- 28.8% said online news media,
- 24.9% said social media,
- 22.9% said friends and family, and
- 20.8% said they do not get information on road safety.

Some, but not many, participants were aware of organizations or groups that work on improving roadway safety.

- 24.4% knew of organizations or groups in their community.
- 23.9% knew of organizations or groups in their city or county.
- 30.1% knew of organizations or groups in their state.

Participants indicated they would reach out to a variety of people or organizations to raise concern about the safety of roads in their community. Some (11.3%) didn't know who they could reach out to for expressing concern.

- 47.3% said a local elected official (mayor, city council, county commissioner, etc.)
- 44.7% said their local city/town transportation department
- 31.6% said their state transportation department
- 30.6% said their local police department
- 26.5% said their state elected official (governor, representative)
- 16.7% said state police

Two thirds of participants (66.7%) felt moderately or more comfortable reaching out to contact someone about the safety of roads in their community.

Three quarters of participants (75.5%) were interested in a website that would give them information about the safety of roads in their community and provide a way to raise concerns.

Observations
- Traditional and online news media continue to be important ways to communicate with the public about road safety.
- As many participants indicated they would reach out to local elected officials about road safety concerns, it may be important to keep these officials informed about road safety and what they should do when contacted.
- Developing and making people aware of websites about road safety in their community may be a viable way to keep the public informed and provide a way for them to raise concerns.

Conclusion

The results of a survey of 421 adults in the U.S. who were demographically similar to the U.S. population revealed support for the Safe System Approach as most participants agreed with the core tenets of the Approach. Many participants were concerned about roadway safety and considered it a priority. Many participants recognized that various strategies that aligned with the Safe System Approach could be effective at improving safety and also supported such strategies. While these results cannot be generalized to all adults in the U.S., the results reveal the opportunity for agencies to conduct similar surveys of their jurisdictions to reveal the extent of support for the Safe System Approach and identify opportunities to grow support.

Recommendations

All key stakeholders play a role in promoting the SSA and its principles. In fact, the SSA cannot succeed without key stakeholders working together to support the implementation of its principles. Planners, designers, and engineers need to consider the SSA principles when planning and building roadways and infrastructure. Safety practitioners and advocates and the public health sector must promote the importance and benefits of the SSA, using effective public outreach tools to garner widespread support. The public health sector must also work within the community to improve the pre- and post-crash care components related to the SSA. Elected officials (and those who may contact elected officials) must set aside presuppositions and seek to understand their constituents' beliefs related to the SSA. They may be surprised to find more support for the SSA than initially assumed.

The guide deliverable created as part of this project provides guidance on how to grow support for the Safe System Approach by using a survey that assesses supportive beliefs. The guide document includes four core sections focused on in the survey:

- Ways to use the survey to grow supportive beliefs,
- Guidance on summarizing the results of the survey,
- Using the results with key stakeholders, and
- Tips on communicating results.

Once the survey responses have been collected, it is important to share the results with key stakeholders. Appendix B contains slides that provide an overview of the project and is yet another resource for local communities and jurisdictions to utilize. The Safe System Approach needs the support of all stakeholders to succeed.

Appendix A: Survey

Consent

The Texas A&M Transportation Institute is asking for your input. We are learning about ways to improve safety on our roads. Your voice matters. Each and every survey is very important to us.

This survey will take about 15 minutes and asks questions about your experiences and beliefs about traveling on roads – whether by vehicle, public transportation, bicycle, or walking. Your participation is voluntary, and you can stop at any time. You can choose not to answer any question you do not want to answer. Your responses are confidential. We will not share individual responses; only summary results will be shared in reports or publications.

This study has been approved by the Texas A&M University Institutional Review Board (IRB). If you have questions or comments about the survey, please contact Christine Yager with the Texas A&M Transportation Institute at c-yager@tti.tamu.edu. If you have questions about your rights as a participant, you may contact the Texas A&M Human Subjects Projection Program office at (979) 458-4067 or irb@tamu.edu. You can also access the research information sheet by clicking this here.

Proceeding with the survey indicates your consent to participate.

While this survey can be completed on a mobile phone, it is recommended that you complete it on a laptop for viewing ease.

Thank you for taking this survey!

Demographics

How old are you?

How do you describe your gender?

- o Man
- o Woman
- o Transgender man
- o Transgender woman
- o Non-binary
- o Prefer to self-describe _____
- o Prefer not to answer

Choose one or more races that you consider yourself to be:

- ☐ White or Caucasian
- ☐ Black or African American
- ☐ American Indian/Native American or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ Other: _____
- ☐ Prefer not to say

Are you of Spanish, Hispanic, or Latino origin?

- o Yes
- o No
- o I prefer not to answer

In what state do you currently reside?

What best describes where you live?

- o Urban (population of 50,000 or more)
- o Suburban (population between 2,500 and 50,000)
- o Rural

What was your total household income before taxes during the past 12 months?

- o Less than $25,000
- o $25,000-$49,999
- o $50,000-$74,999
- o $75,000-$99,999
- o $100,000-$149,999
- o $150,000 or more
- o Prefer not to say

How often do you:

	Never	Less than once a week	About once a week	A few days a week	Most days each week	Every day
Drive a vehicle						
Ride in a vehicle driven by someone else						
Walk along roads or on sidewalks						
Bicycle or use a scooter on roads, sidewalks, or bike paths						
Use public transportation like buses						

Experience and Thoughts

In this section, we want to ask a few questions about your experiences and thoughts about using roads.

Has a member of your family or a friend been injured or killed in a vehicle crash?

- o   Yes
- o   No
- o   I don't know

How safe would you feel doing the following on roads in your community? Even if you don't do these things, tell us how safe you would feel if you did.

	Not at all safe	Somewhat safe	Moderately safe	Very safe	Extremely safe
Drive or ride in a vehicle					
Walk along roads or on sidewalks					
Ride a bike or scooter on roads, sidewalks, or bike paths					
Use public transportation like buses					
Use a ride service like Uber, Lyft, or a taxi					

In your opinion, how much do the following contribute to serious injuries and deaths on roads?

	Very low	Low	Medium	High	Very high
Driving at speeds over the established limit					
Poor road maintenance					
Low investment in programs dedicated to road safety infrastructure					
Inadequate care by first responders after an accident or crash					
People driving in unsafe ways like running red lights, driving aggressively, or driving impaired					
People not being able to afford newer vehicles which are safer					

Concern

In this section, we want to learn about how concerned you are about safety on roads.

How concerned are you about your safety and the safety of family and friends on roads?

- o Not at all concerned
- o Somewhat concerned
- o Moderately concerned
- o Very concerned
- o Extremely concerned

How important to you is…

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
Safety for people walking on roads in your community					
Safety for people riding a bike or scooter on roads in your community					
Safety for people using vehicles on roads in your community					

How would you prioritize the following? Drag the one most important to you to the top of the list and the one least important to you to the bottom of the list.

- ❖ Reducing congestion or traffic on roads
- ❖ Improving safety on roads
- ❖ Improving access for people who walk or ride bicycles along roads

How much do you agree or disagree with the following statements?

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
"No one should be killed or seriously injured when using our roads."					
"Appropriate efforts should be taken to reduce the likelihood that someone else's actions on the road could result in my or a member of my family's death or injury."					

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
"People make mistakes. Our roadways should be designed so that when someone using our roads makes a mistake, no one should be killed or seriously injured."					
"Steps should be taken to identify and fix dangerous roads before an accident/crash occurs instead of only making changes to roads after someone is killed or seriously injured."					
"Everyone, regardless of where they live, their background, or how much money they make, should feel safe on our roadways."					
"We should prioritize efforts to improve the safety of roads in areas with the highest rates of accidents/crashes that result in deaths and serious injuries."					
"There should be ways for people to walk safely in their community without worrying about being hit by a vehicle."					
"There should be ways for people to ride a bicycle or scooter safely in their community without worrying about being hit by a vehicle."					
"People who are walking or riding a bicycle or scooter are at greater risk of being killed or seriously injured in an accident or crash than people in vehicles. Therefore, steps should be taken to protect them when on roads with vehicles."					

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
"The responsibility of anyone who uses the roads is to comply with the laws of the roads."					
"Companies that make vehicles should be required to use designs and technology that make vehicles safer."					
"People are less likely to be killed or seriously injured in a low-speed crash than a high-speed crash."					
"Roads should be designed to decrease the chances that someone is killed or seriously injured if they are in an accident or crash."					
"Increasing safe ways that people can walk or use bicycles or scooters to get to where they need to go will decrease pollution and emissions related to climate change."					
"Increasing safe ways to walk or use bicycles or scooters improves the ability for people who don't have or can't afford a vehicle to get where they need to go."					

Effectiveness

There are many different ways we can reduce fatalities and serious injuries on our roads. In this section, we want to ask you how effective you think different strategies would be.

In your opinion, how effective would the following be in reducing accidents/crashes that result in deaths and serious injuries?

	Not at all effective	Somewhat effective	Moderately effective	Very effective	Extremely effective
Changing the laws about alcohol impaired driving to decrease the legal limit for blood alcohol content from 0.08 to 0.05					
Enforcing impaired driving laws					
Enforcing speeding laws					
Using automated enforcement (speed cameras) to ticket people who are speeding in school zones or near pedestrians or bicyclists					
Using automated enforcement (red light cameras) to ticket people who drive through red lights					
Designing vehicles that stop drivers from engaging in unsafe behaviors while driving (i.e. using cellphones, driving under the influence of alcohol/drugs, driving 20 mph over the speed limit)					

	Not at all effective	Somewhat effective	Moderately effective	Very effective	Extremely effective
Reducing the speed limit to 25 mph on roads where there are a lot of pedestrians or bicyclists					
Designing roads that separate bicyclists from vehicles					
Designing roads that reduce dangerous intersections by using round-abouts or traffic circles					
Designing roads that decrease speeds – in other words, people just naturally don't drive as fast					
Providing training to drivers focused on bystander intervention that will assist them in aiding others until emergency services arrive					
Increasing EMS (Emergency Medical Services) resources so response times are lower in rural areas and other settings with limited post-crash care capabilities					

How much would you support or oppose your local government doing more to improve the safety of roads in your community?

- o   Strongly oppose
- o   Somewhat oppose
- o   Neither support nor oppose
- o   Somewhat support
- o   Strongly support

Support

In this section, we want to learn about how much you would support or oppose specific ways to reduce fatalities and serious injuries on roads.

To what degree do your support or oppose the following ways to reduce fatalities and serious injuries on roads?

	Strongly oppose	Somewhat oppose	Neither support nor oppose	Somewhat support	Strongly support
Changing the laws about alcohol impaired driving to decrease the legal limit for blood alcohol content from 0.08 to 0.05					
Enforcing impaired driving laws					
Enforcing speeding laws					
Using automated enforcement (speed cameras) to ticket people who are speeding in school zones or near pedestrians or bicyclists					
Using automated enforcement (red light cameras) to ticket people who drive through red lights					
Designing vehicles that stop drivers from engaging in unsafe behaviors while driving (i.e. using cellphones, driving under the influence of alcohol/drugs, driving 20 mph over the speed limit)					

	Strongly oppose	Somewhat oppose	Neither support nor oppose	Somewhat support	Strongly support
Reducing the speed limit to 25 mph on roads where there are a lot of pedestrians or bicyclists					
Designing roads that separate bicyclists from vehicles					
Designing roads that reduce dangerous intersections by using round-abouts or traffic circles					
Designing roads that decrease speeds – in other words, people just naturally don't drive as fast					
Providing training to drivers focused on bystander intervention that will assist them in aiding others until emergency services arrive					
Increasing EMS (Emergency Medical Services) resources so response times are lower in rural areas and other settings with limited post-crash care capabilities					

Perceived Support

In this section, we want to learn about how much you think most people would support or oppose specific ways to reduce fatalities and serious injuries on roads. Even if you are not sure, give your best guess.

To what degree do you think MOST PEOPLE in your community would support or oppose the following strategies to reduce fatalities and serious injuries on roads?

	Most people would strongly oppose	Most people would somewhat oppose	Most people would neither	Most people would somewhat support	Most people would strongly support
Changing the laws about alcohol impaired driving to decrease the legal limit for blood alcohol content from 0.08 to 0.05					
Enforcing impaired driving laws					
Enforcing speeding laws					
Using automated enforcement (speed cameras) to ticket people who are speeding in school zones or near pedestrians or bicyclists					
Using automated enforcement (red light cameras) to ticket people who drive through red lights					
Designing vehicles that stop drivers from engaging in unsafe behaviors while driving (i.e. using cellphones, driving under the influence of alcohol/drugs, driving 20 mph over the speed limit)					

	Most people would strongly oppose	Most people would somewhat oppose	Most people would neither	Most people would somewhat support	Most people would strongly support
Reducing the speed limit to 25 mph on roads where there are a lot of pedestrians or bicyclists					
Designing roads that separate bicyclists from vehicles					
Designing roads that reduce dangerous intersections by using round-abouts or traffic circles					
Designing roads that decrease speeds – in other words, people just naturally don't drive as fast					
Providing training to drivers focused on bystander intervention that will assist them in aiding others until emergency services arrive					
Increasing EMS (Emergency Medical Services) resources so response times are lower in rural areas and other settings with limited post-crash care capabilities					

Where do you get the most information about roadway safety?

☐ Social media
☐ Traditional news media
☐ Online news media
☐ Friends and family
☐ I do not get information on road safety

Do you know of any organizations or groups that work on improving roadway safety…

	Yes	No
In your community?		
In your city or county?		
In your state?		

If you wanted to raise a concern about the safety of roads in your community, who would you reach out to? (check all that apply)

☐ Local police department
☐ State police
☐ Local elected official (mayor, city council, county commissioner, etc.)
☐ State elected official (governor, representative)
☐ Local city/town transportation department
☐ State transportation department
☐ I don't know

If you wanted to, how comfortable would you be to contact someone about the safety of roads in your community?

o Not at all comfortable
o Somewhat comfortable
o Moderately comfortable
o Very comfortable
o Extremely comfortable

How interested would you be in a website that gave you information about the safety of roads in your community and provided you a way to raise concerns?

o Not at all interested
o Somewhat interested
o Moderately interested
o Very interested
o Extremely interested

In the past 30 days, how often have you…?

	Never	Just once	A few times	Fairly often	Regularly
Driven while holding and talking on a cellphone					
Driven 15 mph over the speed limit on a freeway					
Driven aggressively by switching lanes quickly and/or very close behind another car					
Driven without wearing a seat belt					

Appendix B: Webinar Slides

These slides were used to provide an overview of the project work during a webinar.

RTZ Grant 2023

GROWING SUPPORT FOR THE SAFE SYSTEM APPROACH

Presented by:
TTI | Center for Transportation Safety
MONTANA STATE UNIVERSITY

Sponsored by: nsc National Safety Council


Project Goals

- To help foster the adoption of the Safe System Approach (SSA) and grow traffic safety culture.
- To provide a survey tool and guide for key stakeholders to assess public support for the SSA in their jurisdictions.

Texas A&M Transportation Institute

Project Overview

May 1, 2023 to April 30, 2024

01 Literature Review

Develop Survey Tool **02**

03 Collect Survey Data

Analyze Survey Data **04**

05 Develop Guide
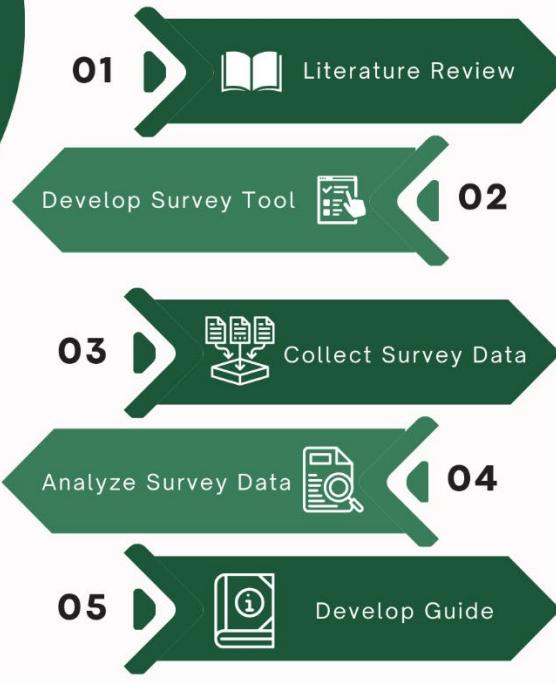
Survey:

01 Perceptions about safety of the roadway system

02 Agreement with the Safe System Approach

03 Perceptions of effectiveness of various strategies to improve safety

04 Support for various strategies to improve safety

05 Sources of information about roadway safety

Summary of Results

- 75% of respondents were concerned about their safety and the safety of family/friends on roads.
- Roadway safety is an important priority (91%+) for people walking, riding a bike or scooter, or using a vehicle on roads in their community.
- Most participants (67%+) felt safe driving or riding in a vehicle; fewer felt safe walking (61%) or riding a bike/scooter (48%).
- Perceptions of factors significantly contributing to serious injuries and deaths on roads align with elements of the Safe System Approach.

Summary of Results

Level of agreement with the SSA

- Over 80% of the participants agreed with most (13 out of 15) statements about the Safe System Approach.
- General education could increase the level of agreement.

Summary of Results

Perceptions of effectiveness of various strategies

- Most participants (73%+) recognized that various potential strategies to improve roadway safety based on the SSA may be effective, thus they are likely to support the Approach overall.
- The data indicated a strong positive relationship between individuals' perceived effectiveness of safety strategies and their agreement with the Safe System Approach ($r(421) = .46$, $p < .001$). Participants who held a higher perception of the efficacy of safety strategies were more inclined to express support for the principles and objectives of the Safe System Approach.

Summary of Results

Support for various strategies

- Over 8 out of 10 participants supported their local government doing more to improve the safety of roads in their community.
- Two-thirds or more of participants supported various strategies addressing safer people, safer roads, safer speeds, safer vehicles, and post-crash care.
- Many (58%+) perceived that most others in their community would also support these strategies.
- Participants who reported stronger support for safety strategies expressed more agreement with the principles and goals of the SSA ($r(421) = .58$, $p < .001$).
- Participants who perceived a stronger social norm of support for safety strategies among their peers expressed more support for the various strategies ($r(421) = .56$, $p < .001$) and more agreement with the principles of the SSA ($r(421) = .33$, $p < .001$).

Summary of Results

Sources of roadway safety information

- Two thirds of participants (67%) felt moderately or more comfortable reaching out to contact someone about the safety of roads in their community.
- Three quarters of participants (76%) were interested in a website that would give them information about the safety of roads in their community and provide a way to raise concerns.

RTZ Grant 2023

GROWING SUPPORT FOR THE SAFE SYSTEM APPROACH

Presented by: Center for Transportation Safety Christine Yager c-yager@tti.tamu.edu

MONTANA STATE UNIVERSITY

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