

## ITEM 10 – INFORMATION

### February 18, 2026

#### Regional Transportation Safety Trends and Findings from Inventory of Roadway Safety Strategies

**Background:** TPB staff will brief the board on findings from its recent Regional Roadway Safety Study Update and assessment of regional safety activities. Proposed by the TPB as part of the 2024 Regional Roadway Safety Summit, the assessment inventories the activities of member jurisdictions to address roadway safety in the region and attempts to understand the effectiveness of deployed strategies, as well as barriers to implementing countermeasures and programs. Staff will also present a related paper that reviews current research on the effectiveness of automated traffic enforcement.

#### Attachments

- 2025 TPB Regional Roadway Safety Update
- Regional Inventory of Roadway Safety Strategies
- Automated Speed and Red-Light Enforcement White Paper



# REGIONAL INVENTORY OF ROADWAY SAFETY STRATEGIES

February 2026



National Capital Region  
**Transportation Planning Board**

## **TRANSPORTATION PLANNING BOARD (TPB) REGIONAL INVENTORY OF ROADWAY SAFETY STRATEGIES**

Prepared by ICF and Fehr & Peers on behalf of the National Capital Region Transportation Planning Board (TPB)

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### **ABOUT THE TPB**

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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# TABLE OF CONTENTS

<b>Introduction .....</b>	<b>4</b>
Study Background .....	5
Resolution R3-2021 and Study Goals .....	6
Research Focus Areas .....	7
Data Collection Process .....	7
Benchmarking Assessment .....	7
Questionnaire Of TPB Member Agencies .....	8
Agency Interviews .....	9
Data Analysis And Synthesis .....	9
<b>Synthesis of Findings.....</b>	<b>10</b>
Resolution and Safety Strategy Implementation Status .....	11
Theme 1: Most Jurisdictions Are Adopting Safety Planning And Agency Culture Norms .....	15
Theme 2: Speed Reduction Countermeasures In The Resolution Are Used Most Frequently By Local Jurisdictions .....	16
Theme 3: Impaired Driving And Unbelted Driving Countermeasures Are Typically Led By Police Departments And State Dots .....	18
Theme 4: Local Governments, State DOTs, And Police Departments Share Common Ground To Address Distracted Driving.....	19
<b>Recommendations .....</b>	<b>21</b>
Role of the TPB .....	22
Role of Jurisdictions .....	30
<b>Looking Ahead .....</b>	<b>41</b>
<b>Appendices .....</b>	<b>43</b>
Appendix A: Benchmarking Assessment Framework and Summary Results.....	44
Appendix B: TPB Road Safety Benchmarking Questionnaire Results .....	50
Appendix C: Resolution R3-2021 .....	65

## Section 1

# INTRODUCTION



## Study Background

Roadway safety is a critical topic of the metropolitan Washington region, involving users of all modes across Washington, D.C., Maryland, and Virginia. The Metropolitan Washington Council of Governments (COG) National Capital Region Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization (MPO) for the metropolitan Washington region. The TPB works to address some of the region's most significant issues, such as land use, the economy, public health, traffic safety, and emerging technologies. Safety of all modes of travel is an important element of TPB's Vision and a regional priority. As shown below (**Figure 1**), there are a total of 22 member jurisdictions that comprise the TPB. Together, they represent urban, suburban, and rural communities (Table 1) of about 10,000 to more than one million residents. Many have adopted aspirational safety goals associated with Vision Zero and Towards Zero Deaths.

*Table 1: TPB Member Jurisdictions by Geography Type*

Geography Type	State	Jurisdiction	
Urban Core	DC	District of Columbia	
Inner Suburbs	MD	City of Bowie	
		City of College Park	
		City of Gaithersburg	
		City of Greenbelt	
		City of Laurel	
		Montgomery County	
		Prince George's County	
		City of Rockville	
		City of Takoma Park	
		Outer Suburbs	MD
City of Frederick			
Frederick County			
Urban Core	VA	City of Alexandria	
		Arlington County	
Inner Suburbs		VA	City of Fairfax
			Fairfax County
			City of Falls Church
Outer Suburbs		VA	Loudoun County
			City of Manassas
			City of Manassas Park
			Prince William County

*Figure 1: The Council of Governments Local Governments*



In 2020, TPB Resolution R3-2021, which has served as the TPB's primary roadway safety policy, encouraged the region to prioritize safety efforts around select focus areas. It established and funded the Regional Roadway Safety Program (RRSP), which serves to support roadway safety efforts regionwide. Since it was developed, the program has awarded \$2.1 million to 32 projects, including site-specific planning or preliminary design, education campaigns and toolkits, complete streets, local road safety plans, guidelines and standards, and more.

In October of 2024, the TPB hosted the Regional Roadway Safety Summit, convening over 50 professionals from numerous organizations and member jurisdictions. The Summit offered a forum to explore transportation safety issues and thoughtfully discuss how the TPB can collectively move forward with a comprehensive approach to lower traffic-related injuries and fatalities in our communities. Four expert speakers shared insights on both regional and national trends in roadway safety, an approach of Systems-Level Thinking, and guidance from the U.S. Department of Transportation on avenues for federal funding. The event concluded with the development of recommendations for TPB action, one of which was to “Inventory and report on safety-supportive activities undertaken by TPB members pertaining to TPB Safety Resolution R3-2021”. This call to action led to the introduction of this Regional Inventory of Roadway Safety Strategies.

## Resolution R3-2021 and Study Goals

In July 2020, the TPB adopted Resolution R3-2021 that “reaffirms road user safety as a top priority and prioritizes the implementation of projects, programs, and policies to reduce the number of fatal and serious injury crashes on the region's roadways.” The resolution encouraged jurisdictions to take the actions, either individually and/or collectively, described in the four following sections:

1. Increase seat belt use among all occupants in a motor vehicle; reduce unsafe vehicle speeds on all roadways in the region; and reduce impaired and distracted driving.
2. Identify and implement applicable countermeasures, especially those outlined in the table shown below<sup>1</sup>, as appropriate and on a case-by-case basis, in an equitable and non-racist manner, consistent with the TPB’s Policy Statement on Equity.
3. Establish and fund a Regional Safety Program at the TPB, beginning in fiscal year 2021, to assist its member jurisdictions and the region to develop and/or implement projects, programs or policies to equitably improve safety outcomes for all roadway users. Funding for the first year of the Regional Safety Program will total \$250,000 which will be provided through the TPB’s Unified Planning Work Program.
4. Calls upon all its member jurisdictions and agencies to adopt safety goals consistent with Vision Zero or Towards Zero Death policies and develop local roadway safety plans and ensure their equitable impacts on all road users; and calls upon its member states to adopt procedures that increase the use of ignition interlock devices for impaired driving offenders.

The TPB developed this Regional Inventory of Roadway Safety Strategies in coordination with member agencies to assess current local safety efforts and better understand how jurisdictions are aligning with Resolution R3-2021, particularly Sections 1, 2, and 4. This report presents the current state of road safety practices across the region, including jurisdictions’ successes, gaps, and opportunities to overcome barriers.

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<sup>1</sup> The Resolution R3-2021 references a table of countermeasures to design and operate safer infrastructure and encourage safer behavior. The full resolution with the table can be found in **Appendix C**.

## Research Focus Areas

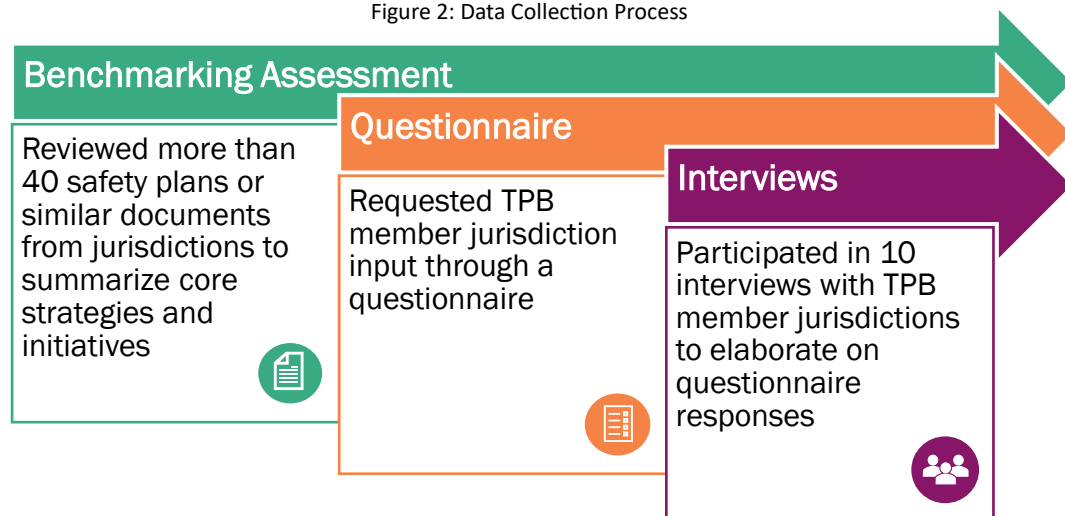
To understand whether jurisdictions are in alignment with R3-2021, the project team developed three overarching questions:

1. Does each jurisdiction have a safety plan or program?
2. Does each jurisdiction focus on impaired driving, seat belt usage, distracted driving, and reducing speeds?
3. What strategies does each jurisdiction use to address impaired driving, seat belt usage, distracted driving, and reducing speeds?

## Data Collection Process

To answer the questions outlined in the research focus area, the project team took a three-step iterative approach (**Figure 2**). First, the team conducted a benchmarking assessment, which reviewed up to two documents per jurisdiction to assess general alignment with R3-2021 and safety program best practices. Next, the team prepared and distributed a digital questionnaire for member jurisdictions. Lastly, a subset of member jurisdictions was interviewed by the project team to dive deeper into each jurisdiction's progress toward roadway safety and the integration of R3-2021 into their programming and planning. Although each data source was collected at a separate point in time, the project team conducted an iterative process to create and inform the other data collection strategies.

Figure 2: Data Collection Process



### BENCHMARKING ASSESSMENT

The benchmarking assessment, denoted by the green paper icon, provides a qualitative measurement of alignment with the safe system approach, safety program best practices, as well as alignment with R3-2021. To conduct the benchmarking assessment, the project team reviewed up to two documents for each of the 22 TPB member jurisdictions against a benchmark framework.

The benchmark framework utilized five distinct categories built using the Safe System Approach (SSA) elements: Safe Speeds, Safe Roads, Safe Road Users, and Safe Vehicles. The fifth category, Safety Planning and Agency Culture Norms, was added to capture alignment with best safety program practices. These five



listed categories each had up to seven benchmarks, and the framework included a total of 23 individual benchmarks.

The documents selected for review included transportation safety programs, strategies, and policies, ranging from Safety Action Plans, Vision Zero Action Plans or Updates, Safe Routes to School Reports, Mobility Plans, Pedestrian or Bicycle Master Plans, and other program documents or standalone policies. To capture state-level efforts aligned with R3-2021, the team also examined the Highway Safety Plans (HSPs) for Virginia, Maryland, and the District of Columbia.

The team reviewed each jurisdiction's documents and assessed their status relative to the benchmark. Based on the data extracted, the team assigned one of three statuses to each benchmark: "Planned", "Implemented", or "Not Mentioned." For example, within the category "Safe Road Users: Impaired Driving," one benchmark is "Conducts pedestrian and driver impairment awareness campaign." The team also included a narrative description of the jurisdiction's work toward that benchmark. The team developed key search words for each benchmark for ease of navigation and to streamline the review process among the multiple documents.

The results were synthesized into summaries for each geographic category—urban core, inner suburbs, and outer suburbs—as well as an overall total to better identify trends across different areas. To assess the extent of implementation, the team categorized each benchmark or countermeasure into three alignment levels: widespread alignment, emerging alignment, and limited or no alignment. Benchmarks with widespread alignment were those adopted or planned for adoption by more than 17 jurisdictions. Emerging alignment included those adopted or planned by 10 to 17 jurisdictions, while limited or no alignment referred to benchmarks adopted by fewer than 10 jurisdictions. A summary of the document review of TPB member jurisdictions and states can be found in **Appendix A**.



## QUESTIONNAIRE OF TPB MEMBER AGENCIES

To supplement the benchmarking assessment results, a standardized online questionnaire, was developed and administered to all 22 TPB members. The questionnaire included 14 questions and is denoted by the orange form icon. The questionnaire was designed to further understand the research focus questions related to whether a jurisdiction has a safety plan, if they focus on the four resolution areas (e.g., impaired driving, distracted driving, seat belt usage, and speeding), and what strategies they deploy to address the focus areas. The questionnaire also asked about individual strategy effectiveness, ways in which jurisdictions collaborate with TPB and leverage its resources, and what barriers they face in pursuing safety goals within their jurisdiction. The questionnaire was distributed by MWCOC/TPB staff to members of the TPB Safety Subcommittee via email. The project team sought diverse representation of geographic contexts within the region by sending tailored email requests to staff at member jurisdictions and reminder emails to those who had not yet responded. The questionnaire was open from September 22, 2025 to October 20, 2025. Of the 22 jurisdictions that were requested to participate, 13 responses were collected. The raw questionnaire results can be found in **Appendix B**.



## AGENCY INTERVIEWS

The final data collection point in the research phase was conducting virtual interviews with 10 member jurisdictions and is denoted by the purple group icon. Interviews took place between October 15, 2025 and November 18, 2025. In the questionnaire, respondents were asked if they were interested in participating in a follow-up interview. The project team followed up with respondents who responded yes to schedule a one-hour virtual discussion. Interviews were primarily conducted with representatives from the transportation planning or public works departments. Of the ten interviews, two also included representatives from the police department, and another two included follow-up communication with police department representatives.

The project team developed four general questions to ask all interviewees. General questions focused on each interviewee's role in advancing safety in their jurisdiction; if and how they tracked progress on reducing impaired driving, distracted driving, speeding, and seat belt usage in their jurisdiction; if they had a safety task force or other interdepartmental coordination, and what barriers TPB could help them address to achieve safety goals.

Beyond the general questions, the project team generated custom questions for each interviewee tailored to their questionnaire responses and the results of the benchmarking assessment for their jurisdiction. About six to eight tailored questions were crafted for each interview. The tailored questions focused more on strategies implemented to address speeding, impaired driving, distracted driving, seat belt usage, and their effectiveness. Verbatim notes were taken at each interview, and key findings and themes were extracted and summarized from each response.

## DATA ANALYSIS AND SYNTHESIS

Leveraging the three data points, the project team extracted key successes and challenges that jurisdictions shared at any point in the data collection process and consolidated them into a single working document. Preliminary opportunities for both TPB and local jurisdictions to either continue and expand upon successful initiatives or address challenges were identified. The list of potential opportunities was synthesized into prominent themes, such as Institutional, Enforcement-driven, Data-informed, Education, Safe Roads, Safe Vehicles, Safe Speeds, and Safe Road Users. The team also grouped challenges and successes by the R3-2021 focus areas of Impaired Driving, Distracted Driving, Seat Belt Use, and Speeding. The themes were then used to inform the development and iteration of final recommendations. The final recommendations are grouped using the same categorization for R3-2021 safety strategies, including Design and Operate Safer Infrastructure, Encourage Safer Behavior, as well as a category focused on Safety Planning and Agency Culture Norms.

## Section 2

# SYNTHESIS OF FINDINGS

# Resolution and Safety Strategy Implementation Status

These findings highlight trends that were consistently identified through the document review, questionnaire, and interviews. The findings are grouped by theme to include safety planning and agency culture norms and the R3-2021 resolution focus areas, speeding, impaired driving, seat belt usage, and distracted driving. Within each of the trend areas, there are supporting findings that point to specific programs or key data points.

Table 2 presents the strategies outlined in R3-2021 to address impaired driving, distracted driving, seat belt usage, and speeding, and how TPB jurisdictions align at a high level. Green indicates common region-wide deployment, where more than 15 combined jurisdictions or State agencies have implemented the strategy. Yellow indicates partial region-wide deployment, where between 5 and 15 combined jurisdictions or State agencies have implemented the strategy. Blue indicates limited or no active deployment, where fewer than 5 combined jurisdictions or State agencies were identified as having implemented the strategy through the three datasets; it also indicates strategies that must be implemented and enforced by State agencies. The accompanying narrative text provides further context on factors influencing alignment, and where TPB jurisdictions stand at the time of review.

Overall, speed-reduction strategies show the highest level of uptake across the region, with traffic calming programs, automated enforcement, and road diets emerging as the most widely implemented tools. Agencies are selectively applying design-based strategies such as lane narrowing, centerline hardening, and high-friction surface treatments, often shaped by jurisdiction geography type and roadway context. Impaired-driving strategies are less consistently deployed at the local level because many rely on police-led enforcement, state-led campaigns, or court-mandated tools like ignition interlocks. Distracted-driving efforts show partial deployment, with compliance campaigns and dynamic messaging used in several jurisdictions, but limited local involvement in legislative reforms. Seat belt awareness is primarily driven by state agencies, with local focus varying. Overall, the regional jurisdictions demonstrate strong engagement in infrastructure-based safety strategies, while behavior-focused countermeasures depend more heavily on state policy, enforcement capacity, and external partners.

## Legend for Table 2: Implementation Status of R3-2021 Strategies

	<i>More than 15 combined jurisdictions have implemented the strategy</i>
	<i>Between 5 and 15 combined jurisdictions have implemented the strategy</i>
	<i>Fewer than 5 combined jurisdictions were identified as having implemented the strategy. The strategy is typically led by State agencies.</i>

**Table 2: Implementation Status of R3-2021 Strategies**

Focus Area	Strategy	Where Jurisdictions are Today
Speed Reduction	Automated Traffic Enforcement Technology (including Speed Cameras and Red-Light Cameras)	At least 16 jurisdictions and all three States have deployed tech-enabled automated traffic enforcement (ATE). Legislation in DC, MD, and VA allows for ATE and TPB supports ATE ticket reciprocity between the states and DC. Speed camera placement in VA is limited to school and work zones during designated hours, while placement of speed cameras in MD is limited to school zones or residential areas with speed limits of 35 mph or less. Many local agencies expressed these limitations as a barrier to expanding ATE hours of operation and locations, such as High-Injury Network (HIN) corridors.
	Road Diets	At least 16 jurisdictions are implementing road diets on their roadways, and they were reported as one of the most favorable implementation solutions across the region. While there has been reported public pushback to road diet implementation, local jurisdictions such as the City of Rockville and the City of Alexandria have addressed pushback by deploying road diets in locations where agreement is high for the treatment, then sharing public messaging that communicates the successful co-benefits of implementing them elsewhere.
	Lane Narrowing	At least 12 jurisdictions have implemented lane narrowing as a treatment to reduce speed or create space for new features such as bike lanes. However, road diets and speed cameras are more commonly used in the region and produce similar results.
	Roundabouts	At least 10 jurisdictions have implemented roundabouts throughout the region, but higher construction costs and public pushback mean they are implemented less widely.
	Centerline Hardening	At least 11 jurisdictions have implemented centerline hardening as a traffic calming measure designed to address safety concerns that are more prevalent in dense, urban environments with high volumes of pedestrian traffic. The described use case aligns with where this treatment is implemented in the region: in the District and in urban parts of the region, but less so in the outer suburbs and rural areas as more highways in these areas are divided.
	High Friction Surface Treatment (HFST)	At least four jurisdictions have implemented or are planning to implement high friction surface treatments to reduce speeds along sharp curves. Of the four jurisdictions, three were located in the outer suburbs, and one was located in the inner suburbs. As sharp curves are more commonly found in rural areas of the region, this treatment is not deployed evenly across the TPB jurisdictions and has been designated as “partial region-wide deployment” rather than “limited”.
	Lowering Speed Limits	At least 12 jurisdictions have lowered speed limits. However, many note that speed limit changes alone have limited effectiveness and work best when paired with other traffic calming measures, such as roadway design changes.
	Traffic Calming Guidelines or Policies	At least 17 jurisdictions across all three geography types have implemented traffic calming programs, making them the most commonly deployed speed reduction strategy in the region. Where jurisdictional traffic calming programs exists, treatments include a variety of measures, allowing for scalability and feasibility for agencies of all sizes.



Focus Area	Strategy	Where Jurisdictions are Today
Impaired Driving	Media Campaigns	Media campaigns are deployed across the region by both police and transportation departments in 11 jurisdictions and by all three State agencies. However, their reported effectiveness in changing behavior is varied and uncertain.
	Compliance Campaigns	Impaired driving compliance campaigns can include public information campaigns and high-visibility enforcement efforts led by police departments. Compliance campaigns are not consistently deployed across the region due to variations in staff size and training limitations. Jurisdictions such as the Alexandria Police Department have leveraged grants to fund the deployment of targeted Midnight Patrol officers who focus on impaired driving.
	Server Training Programs	Local transportation departments and police departments did not address this strategy in their programming. The VA state agency's Highway Safety Plan was identified as implementing this effort; however, deployment has not involved local jurisdictions, and many are unaware of these programs' status or effectiveness. In MD, police and transportation departments are less aware of these programs, but most jurisdictions have similar programs under public health or other similar departments. Montgomery County has a Alcohol Beverage Service Department that leads training efforts and establishes regulations for alcohol service.
	Ignition Interlock	Ignition interlocks are mandated by the court system; therefore, planners, engineers, and police departments deferred to the courts for shepherding deployment. Both the DC and VA state agencies were identified as supporting increased use of ignition interlocks for impaired driving offenders, but efforts have not trickled down to local jurisdictions, leaving many of them unaware of their status or effectiveness.
	Supporting Open-Container Laws	No jurisdictions were identified as promoting open-container laws to deter impaired driving. Both transportation and police departments shared that legislative action falls outside their typical purview.
	Rideshare Programs and/or Late-Night Transit	At least six regional agencies reference or promote ride-share programs like SoberRide or late-night transit. However, few jurisdictions had insight into their effectiveness or how often the services are used.
Distracted Driving	Compliance Campaigns	At least nine jurisdictions implemented compliance campaigns for distracted driving, and Highway Safety Office (HSO) funding is available for this strategy. Through a partnership between DDOT and DC HSO, the District of Columbia leverages dynamic messaging trailers on its roadways to address distracted driving.
	Supporting "Moving Violation" Classification Laws	Classifying distracted driving as a "moving violation" requires changes to state and/or local laws, with no local jurisdictions identified as supporting legislation for this action. Planners, engineers, and police departments deferred this work to external partners in the region and have little to no involvement in this type of activity. States have shown to classify different types of distracted driving as a "moving violation". For example, MD has a hands-free law that places a 1 point violation on a driver's license for texting and a 12 point violation and a "must appear" for the use of a handheld phone while driving that causes an accident that directly results in the death/serious bodily injury of another person.

Focus Area	Strategy	Where Jurisdictions are Today
Seat Belt Usage	Seatbelt Awareness Campaigns	At least seven local jurisdictions and all three state agencies were identified as having implemented or planning to implement seatbelt awareness campaigns across the region. These campaigns are primarily led by Highway Safety Offices and State Police. Local police departments participate in the state-led campaigns, but planners and engineers at local agencies do not see this as a priority responsibility.
	Support State Primary Seatbelt Legislation	Both VA and DC state agencies were identified as planning to support state-level primary seat belt legislation. As this strategy requires changes to state and/or local laws, planners, engineers, and police defer this work to external partners in the region and have little to no involvement in this type of activity.

In addition to taking inventory of where jurisdictions stand in regards to strategies outlined in Resolution R3-2021, four themes arose as the most prominent from the three datasets. These themes relate to each of the four emphasis areas and identify specific successes, challenges, and gaps in addressing traffic safety that were noted by jurisdiction staff.



## THEME 1: MOST JURISDICTIONS ARE ADOPTING SAFETY PLANNING AND AGENCY CULTURE NORMS

Most TPB jurisdictions are advancing their safety commitments by developing Safety or Vision Zero Action Plans, though many still face staffing and financial constraints that limit full implementation. Agencies noted that limited dedicated staff, especially in smaller jurisdictions, make programs like TPB's Regional Roadway Safety Program (RRSP) essential. They also emphasized that while cross-agency coordination with state partners, law enforcement, schools, and internal teams is critical, bringing all these stakeholders together regularly and keeping them engaged remains a high-effort challenge.

### Plan Creation

Fifteen out of 22 TPB jurisdictions have developed, are developing, or have been awarded funding to develop a Safety or Vision Zero Action Plan. Within these plans or programs, nine have committed to assessing the impact of traffic safety on vulnerable populations. These efforts range from producing separate Equity Analysis Memos to integrating vulnerable populations into existing stakeholder engagement processes. Six of these jurisdictions have taken safety a step further by developing safety implementation programs with dedicated Vision Zero or safety staff. The City of Alexandria, District of Columbia, Montgomery County, Prince George's County, Arlington County, and the City of Rockville have more established Vision Zero programs, where these programs have run for longer periods of time and have a larger staff size.



15 jurisdictions have documented commitment to traffic safety via **Safety or Vision Zero Action Plans**, with 6 being well-established and 9 being new or emerging programs.

### External and Internal Coordination

External coordination with partner agencies, such as State DOTs, police departments, and schools, and internal coordination with other divisions at a local agency are critical to being able to "do more" for safety. Many respondents shared that the amount of time it takes to bring all these entities together on a regular basis, and the ability to keep them engaged in safety, is beyond their job responsibilities. While the document review found that 17 jurisdictions describe collaboration among agencies and departments as a goal on paper, the questionnaire and interviews found this to be a key barrier in advancing safety project implementation. Arlington County has an Inter-Departmental Safety Working Group (IDSG) and an External Safety Working Group (ESG), which both meet regularly to provide critical input on safety needs.



17 jurisdictions have documented their emphasis on collaboration as a goal, though 70% of questionnaire respondents and most jurisdictions interviewed described **interdepartmental coordination as a barrier**.

### Limited Dedicated Safety Staff

Larger local governments have an average of one to three staff members dedicated to safety, while smaller agencies typically have one staff member responsible for safety on top of additional responsibilities. Local governments with limited staff dedicated to safety efforts face challenges in executing all elements of an effective safety program. Interviews with several jurisdictions highlighted that the RRSP has enabled smaller agencies to consider and lead safety projects outside of their usual capacity.



77% of questionnaire respondents listed "staffing shortages" as a barrier, but many interviewees cited the **RRSP as critical safety funding** for addressing their gaps.



## THEME 2: SPEED REDUCTION COUNTERMEASURES IN THE RESOLUTION ARE USED MOST FREQUENTLY BY LOCAL JURISDICTIONS

Local jurisdictions rely on a wide range of speed-reduction strategies, with traffic calming programming being the most common and consistently applied tool. Another often-cited strategy is targeted automated traffic enforcement (ATE), where planners and engineers coordinate closely with police departments to identify appropriate camera locations and share data. While some agencies use road diets paired with before-and-after analysis to demonstrate effectiveness, these projects can face public and political resistance. Changes to posted speed limits are applied selectively, though jurisdictions noted they are typically not effective unless combined with other strategies such as physical design changes.

### Traffic Calming Efforts

Traffic calming efforts are a primary strategy deployed by jurisdictions to address speeds on local roads. Treatments align with engineering countermeasures listed in R3-2021, often including crosswalk installation, signage, curb extensions, and speed bumps/tables. While traffic calming efforts are primarily implemented on local roads, other treatments such as median barriers and islands, roundabouts, chokers that reduce roadway width, and lateral shifts that realign straight streets are also effective on busier arterial roads. Washington, DC found success in formalizing these efforts through DDOT's Neighborhood Scale Traffic Calming Program, which identifies quickly implementable improvements to improve safety. Commonly cited challenges for a fully operational traffic calming program include coordination and buy-in from emergency responders and a lack of a prioritization method to determine locations for traffic calming treatments.



20 jurisdictions highlight traffic calming measures in their documents, and 77% of questionnaire respondents listed them as **effective**.

## Police Department Collaboration

Safety programs become more effective when planners/engineers collaborate with police departments to address roadway and behavioral concerns. Interviews revealed that the most common collaboration efforts are ATE, crash data sharing, and fatal crash reviews. The Fairfax County Department of Transportation and the Fairfax County Police Department meet quarterly with a special focus on reducing pedestrian crashes by sharing ideas for improvements.



The City of Alexandria finds success through their collaborative efforts with the Alexandria Police Department, which together review fatal and severe injury crash data to determine next steps.

## Road Diets

A majority of local governments implement road diets. Where they have been implemented, agencies have typically conducted before-and-after analyses to document and share the results of their effectiveness. While more than half of the questionnaire respondents listed road diets as effective, road diets often receive public and political pushback, so much consideration is given to where to put them and how to communicate their impacts.



The City of Rockville has found success through conducting before-and-after analyses and messaging other benefits of road diets, such as the economic benefits to local businesses.

## Automated Traffic Enforcement (ATE)

ATE is cited as a positive speed enforcement tool. It is used throughout Washington, DC, Maryland, and Virginia, but it is legislatively restricted to school and work zones in Virginia. Interviews revealed that while ATE is effective, locational restrictions inhibit the placement of cameras. Several Maryland and Virginia jurisdictions would like to place them along high-injury networks or operate at all hours, but are unable to due to the current state guidance. Montgomery County was able to pass local legislation to place cameras in the high-injury network. Other identified challenges include the lack of ticket reciprocity, which limits ATE effectiveness, and the inability of some local governments to obtain data from the cameras to improve safety programming.



16 jurisdictions are using ATE in some capacity, and 69% of questionnaire respondents listed **speed cameras as effective**.

## Speed Limit Reductions

While some local governments have reduced the posted speed limits on select roadways, the effectiveness of this strategy alone was cited as low, with 39% of questionnaire respondents listing it as “not effective”. However, effectiveness increases when this strategy is paired with other traffic calming solutions, such as roadway design changes. The City of Rockville lowered speed limits on a corridor then paired it with the addition of bike lanes, lane narrowing, and pedestrian enhancements, noting substantial speed reductions after the roadway design changes were implemented.



Based on the questionnaire and interviews, many respondents felt that **speed limit reductions alone were not an effective strategy** to reduce speed.





### THEME 3: IMPAIRED DRIVING AND UNBELTED DRIVING COUNTERMEASURES ARE TYPICALLY LED BY POLICE DEPARTMENTS AND STATE DOTs

Local governments report that impaired and unbelted driving countermeasures are primarily led by police departments, with planners and engineers playing a limited role. Of the police departments interviewed, many focus most of their efforts on impaired-driving education, partnerships with local businesses, and targeted enforcement informed by crash analysis. Seatbelt campaigns generally align with national or state initiatives rather than local priorities, and ignition interlock requirements are handled through the courts rather than jurisdictions. Interviewees also noted that in states where seat belt laws remain a secondary offense, local agencies typically do not engage in related legislative discussions.

#### Planner and Engineer Involvement

Planners/engineers at local jurisdictions play a limited role in identifying or implementing solutions for impaired and unbelted drivers. The questionnaire revealed that most respondents were unsure of impaired driving strategies or effectiveness, and nearly all jurisdictions deferred to their local police departments for action on addressing both impaired and unbelted driving when interviewed. If planners/engineers play a role in behavioral safety, it is through sharing social media posts or through a specific partnership with a non-engineering partner. DDOT partnered with its Highway Safety Office to place distracted driving dynamic messaging trailers, strategically placing them in locations with higher rates of distractions. These trailers worked to both educate drivers and capture photos of distractions for future safety programming efforts.



**No jurisdictions'** documents address campaigns for reducing underage drinking and to improve vendor compliance, server training, or promotion of open container laws.

#### Ignition Interlock

Ignition interlocks are not implemented by transportation departments or police departments. Only two jurisdictions highlight their support for ignition interlock efforts in their documents. When questioned about the strategy in interviews, both police departments and planners/engineers deferred to the courts in mandating ignition interlocks for drivers.



62% of questionnaire respondents were **unsure of the use of ignition interlock** in their jurisdiction, and 23% did not implement them.

#### Police Department Focus on Impairment

Three interviews with local police departments revealed that they focus most of their time on addressing impaired driving by conducting education and marketing efforts, conducting saturated enforcement, deploying strategic enforcement based on crash analysis results, and coordinating with vendors and bars. Some police departments have a network of stakeholders they partner with to address impaired driving and meet with on a regular basis (WABA, SoberRide, Reality Check, Safe Kids Coalition, and hospitals). The City of Manassas police department focuses its efforts on developing relationships with downtown bar owners and businesses. The City hosts a monthly First Friday event, and to ensure it is successful and can continue, police



The questionnaire revealed that **media campaigns** and providing **ride share programs and/or late-night transit service** are commonly deployed impaired driving countermeasures.

and businesses play a role in preventing over-serving and limiting intoxicated driving.

### Seat Belt Laws and Campaigns

Local police departments noted that enforcing seat belt use is challenging in states where seat belt laws are a secondary offense, such as Virginia, because officers cannot stop a vehicle solely for non-use and may only issue citations when another violation has occurred. Interviews indicated that this limitation contributes to lower enforcement effectiveness and that most law enforcement agencies align their efforts with national Click-It-or-Ticket grant cycles. Conversely, in Maryland, seat belt laws are a primary offense only for front seats. Local governments generally limit their involvement in these efforts to sharing social media messages. Seven jurisdictions reported implementing targeted seat belt campaigns, yet 62% of questionnaire respondents were unsure whether these efforts were effective.



Only **1 jurisdiction** was identified as supporting state-level primary seat belt legislation in their documentation.

### Underreporting

Interviews with both police departments and local jurisdictions revealed agreement that data on seat belt usage is underreported in terms of the number of citations and warnings issued, as the secondary offense designation restricts officers from pulling over unbelted drivers and passengers for this infraction alone, creating a barrier for reporting. Most instances of unbelted driving are self-reported once a driver has been pulled over for a separate primary offense, which contributes to underreporting. Both local governments and



## THEME 4: LOCAL GOVERNMENTS, STATE DOTs, AND POLICE DEPARTMENTS SHARE COMMON GROUND TO ADDRESS DISTRACTED DRIVING

Local governments and police departments agree that distracted driving is significantly underreported and remains a priority concern, largely due to the difficulty of enforcing distracted driving laws. Across interviews, agencies highlighted a growing use of creative strategies, including dynamic messaging informed by police data and, in some cases, automated enforcement. Jurisdictions are also emphasizing the co-benefits of broader safety countermeasures, such as curb extensions and speed humps, which can help reduce the severity of crashes when distracted driving occurs.

### Dynamic Messaging

Agencies are finding creative ways to address distracted driving. One interview identified dynamic messaging as an extremely effective tool to reduce the number of driver cellphone pick-ups by using police departmental data to inform strategic placement. Automated traffic enforcement was also identified as a strategy to enforce distracted driving in one jurisdiction.



**Distracted driving trailers** with dynamic, community-focused messaging have been successful in Washington, D.C. They are typically placed on their high-injury network and can gather real time data for the District.

### Co-benefits of Safety Countermeasures

Local governments are highlighting safety countermeasures like centerline hardening, curb bump-outs, speed humps, road diets, bike lanes, and other traffic calming measures to combat distracted driving. The

City of Rockville has observed these co-benefits, where other safety countermeasures can lessen crash impacts and help reduce the likelihood of death or serious injury when distracted driving occurs.

## Section 3

# RECOMMENDATIONS

# Role of the TPB

Although the TPB does not own or operate transportation infrastructure, it plays a central role in advancing roadway and traffic safety across the metropolitan Washington region. As a convener, the TPB brings together state, local, and federal partners to align safety priorities, share data, and coordinate on strategies that address regionally significant challenges. The TPB also serves as a key resource by developing analyses, toolkits, and policy guidance that help agencies understand crash trends, evaluate safety countermeasures, and strengthen their own programs. Building on its long-standing leadership in regional planning, the TPB can continue supporting member agencies by conducting targeted safety studies, developing “off-the-shelf” resources that jurisdictions can utilize, offering training and best practices, and facilitating cross-jurisdiction collaboration to accelerate progress toward shared safety outcomes.

**Table 3** highlights recommendations for TPB to implement that will further the region’s goals for roadway safety. Each recommendation was informed by a particular challenge that was noted through the three datasets. This challenge was then used to inform initiatives or efforts that TPB could lead to help address. The recommendations were divided into three categories, two of which pull from R3-2021 itself: *Design And Operate Safer Infrastructure* and *Encourage Safer Behavior*. The third category *Safety Planning and Agency Culture Norms* was added to capture alignment with best safety program practices. The recommendations were also categorized by what type of recommendation the strategy is, including *Education and Outreach*, *Policy or Program*, *Event or Webinar*, *Document or Resource Development*, and *Sharing Best Practices*.



Table 3: TPB Recommendations

R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
Safety Planning and Agency Culture Norms	<b>Few local governments have staff dedicated specifically to Vision Zero or transportation safety</b> , which makes it challenging to execute all elements of an effective safety program.	Share guidance on the makeup of effective safety working groups and the types of roles they play to bolster internal and external safety capabilities.	Document or Resource Development
		Provide guidance on available data to use and how to complete safety analysis (high injury network, high risk network, and crash profiles).	Document or Resource Development
		Contact member agencies with small staffs to identify one safety technical assistance need TPB can support.	Education and Outreach
Safety Planning and Agency Culture Norms	For areas of <b>safety implementation outside the local government's purview</b> (enforcement, school education), coordination is critical, but it does not always happen because of institutional siloes and/or staff resources and time.	Share information on effective safety working groups to enhance coordination with external stakeholders in general. Examples include the City of Manassas and Fairfax County.	Sharing Best Practices
		Share information on opportunities to enhance coordination with schools from jurisdictions such as Arlington County and the City of Alexandria. Share information on how Safe Routes to School (SRTS) opportunities can support safety improvements at schools to create buy-in and interest.	Document or Resource Development
		Provide example agendas for the types of activities, types of discussions, and types of outcomes that can occur at external stakeholder meetings to lead to more successful collaboration. Examples could include Arlington County and the City of Alexandria.	Document or Resource Development
		Create a template for facilitating fatal crash review meetings to improve coordination with enforcement. Template could include stakeholders to invite, example agenda, and desired outcomes.	Document or Resource Development
Safety Planning and Agency Culture Norms	<b>Interdepartmental coordination</b> is critical to being able to "do more" for safety. It can be difficult to get people out of their job responsibility siloes to also address safety needs. Staff turnover is also an issue. There can be a disconnect between safety planning and implementation if they are	Create and share examples for how local governments can incentivize internal coordination (i.e., small budget allocations to different departments to address safety).	Document or Resource Development
		Share examples of effective interdepartmental working groups, their makeup, meeting cadence, and roles. Examples	Sharing Best Practices

R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
	run out of different departments and/or with different budgets.	could include Arlington County, Charles County, and the City of Manassas.	
Safety Planning and Agency Culture Norms	Local governments and police departments can be good partners, but <b>coordination gaps exist</b> , especially related to crash and citation data sharing, safety plan and project engagement, and/or regular communication on safety challenges and solutions.	Set up a data sharing template (one for Maryland and one for Virginia) to help local jurisdictions and enforcement share data consistently.	Document or Resource Development
		Share examples of successful data collaboration between police department and local governments (i.e., fatal crash reviews, speed camera outcomes, project-level decision-making). Examples could include City of Alexandria and Charles County.	Sharing Best Practices
		Host a workshop highlighting the City of Alexandria's traffic safety enforcement program and collaboration with the City's transportation staff.	Event or Webinar
		Share guidance to better align current crash data to USDOT's newest Model Minimum Uniform Crash Criteria (MMUCC) standards.	Document or Resource Development
		Develop a data script that integrates key data points from each jurisdiction's data for more regular cross-state data analysis projects.	Document or Resource Development
		Engage with each state's Traffic Records Coordinating Committee (TRCC) to discuss challenges and successes in data accessibility.	Education and Outreach
Safety Planning and Agency Culture Norms	Collaboration between <b>local governments and Highway Safety Offices (HSO)</b> per state is limited.	Research how Highway Safety Offices (HSOs) are addressing legislative strategies, such as open container laws, ignition interlock, moving violations, ticket reciprocity, and server training programs. Share findings with local agencies.	Policy or Program
Safety Planning and Agency Culture Norms	Collaboration between <b>local governments and state DOTs</b> in MD and VA can be limited when it comes to safety project implementation on state roads.	Establish a state DOT/local government working group (one for Virginia and one for Maryland) or hold special Safety Committee meetings to share and understand common barriers to safety implementation. Several working groups already exist, such as Virginia's Bicycle and Pedestrian Advisory Committee, Virginia DMV's pedestrian safety	Policy or Program

R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
		stakeholder group, and Maryland's Bicycle and Pedestrian Advisory Committee.	
		Host a webinar with state DOTs and local governments (one for Virginia and one for Maryland) to share success stories for implementing safety treatments on state routes that run through local communities.	Event or Webinar
Safety Planning and Agency Culture Norms	<b>SS4A, TLC, and RRSP</b> funding have been a successful tool to incentivize safety planning and implementation.	Continue to provide support to local governments that want to apply to SS4A and RRSP in future rounds.	Education and Outreach
		Continue with the TLC and RRSP funding programs and consider opportunities to maintain it at current levels or expand funding to meet growing demand.	Policy or Program
		Continue to identify TLC or RRSP grants that would benefit from additional/continued work after completion. Explore best practices for post-project follow-up and identify scalable ways to monitor implementation.	Policy or Program
Safety Planning and Agency Culture Norms	Leaders and/or champions are critical to have engaged in safety planning and implementation.	Share information on safety ambassador programs. An example could come from Prince George's County.	Sharing Best Practices
		Share examples of effective Vision Zero leadership models, highlighting DDOT as an example.	Sharing Best Practices
Safety Planning and Agency Culture Norms	Police departments play the primary role in addressing impaired driving strategies.	Share examples of safety education campaigns, such as Arlington County and Prince George's County distributing materials to bars and restaurants about drinking and driving during the holidays.	Sharing Best Practices
		Share examples of successful partnerships between local agencies, institutions, and PD to prevent impaired driving and reduce recidivism. Examples could come from the City of Alexandria, Arlington County, and Charles County.	Sharing Best Practices
		Share examples of successful PD efforts related to preventing impairment and reducing recidivism and share those examples with other PDs in the region. Examples could	Sharing Best Practices

R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
		come from the City of Alexandria, DDOT, City of Manassas, and Fairfax County.	
Safety Planning and Agency Culture Norms	Lack of coordination between City or County departments on transportation and land use planning can hinder progress on safety	Host an educational webinar on the Safe System Pyramid by using examples from the TLC grants and from ITE literature on pyramid integration.	Event or Webinar
Safety Planning and Agency Culture Norms	The benefits of automated enforcement are not maximized in all local governments due to legislative implementation constraints and/or lack of leadership support.	Seek opportunities to highlight regional leading practitioners on ATE implementation.	Sharing Best Practices
		Develop materials to help local agencies communicate the benefits of automated enforcement with leaders.	Document or Resource Development
		Coordinate with COG to promote enabling broader deployment of ATE in Maryland and Virginia (beyond school zones, work zones, and buses) by jurisdictions.	Policy or Program
		Continue to coordinate with COG to promote and encourage ticket reciprocity as a legislative priority.	Policy or Program
Safety Planning and Agency Culture Norms	Big data can be a helpful data source to improve safety decision-making.	Develop a resource documenting available big data for safety (i.e., Replica, Streetlight, Inrix, etc) and its capabilities, including jurisdictions with successful use cases.	Document or Resource Development
		Consider a regional license for a big data company to share amongst jurisdictions.	Policy or Program
		Host a webinar highlighting how jurisdictions are successfully leveraging big data.	Event or Webinar
		Share examples of agencies that have successfully completed network or segment-level speed analysis using big data. Examples could come from Arlington County and the City of Fairfax.	Sharing Best Practices
Design And Operate Safer Infrastructure	<b>Before and after analysis</b> (especially for road diet or complete streets projects) is valuable to demonstrate safety changes, safety benefits, and accountability to results.	Share common metrics, ways to collect the data, and ways to share the results to enable more local governments to do before-and-after analyses. This information can be drawn from jurisdictions currently implementing before and after	Sharing Best Practices

R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
		studies, such as DDOT, Arlington County, and the City of Alexandria.	
		Share documented outcomes from before and after studies for key safety treatments (e.g., bike lanes, lane narrowing, pedestrian improvements) to illustrate their impact on driver speed behavior. (Arlington, Rockville)	Sharing Best Practices
Design And Operate Safer Infrastructure	<p><b>Traffic calming programs are effective</b> and are being implemented by several local governments to address neighborhood safety concerns. Challenges do exist related to EMS coordination and buy-in, neighborhood complaints, lack of location prioritization, and messaging on the purpose of improvements.</p>	Share examples of effective traffic calming programs in the region, such as DDOT's Neighborhood Scale Traffic Calming Program and Arlington County's Neighborhood Complete Streets Program.	Sharing Best Practices
		Share examples of effective coordination with EMS on traffic calming.	Document or Resource Development
		Share re-framed safety messaging ideas to help local governments create more support for safety improvements (e.g., economic benefits of road diet along commercial corridor).	Document or Resource Development
		Inventory current practices for handling resident requests. Share best practices for existing prioritization processes.	Document or Resource Development
Design And Operate Safer Infrastructure	Road diets are a proven and valuable safety solution. However, they often face pushback from the public and leaders. <b>Strategically selecting locations</b> for these based on crash and contextual data, and land use factors has helped them move forward.	Share best practices for successful road diet implementation in the region. An example could come from the City of Alexandria, recovering from public pushback to a contentious road diet, but continues to use road diets as its primary tool to lower speeds. The City of Rockville has successfully deployed road diets in locations where agreement is high for the treatment, then messaging their success to implement them elsewhere.	Sharing Best Practices
Design and Operate	<b>Developers</b> are not always considering and including safety treatments in planned projects.	Provide training to developers on relevant complete streets or traffic impact analysis guidance. In the training, share	Education and Outreach



R3-2021 Theme	Challenge/Opportunity	TPB Recommendation	Type of Recommendation
Safer Infrastructure		examples where local governments have successfully coordinated with developers on safety treatments.	
Design and Operate Safer Infrastructure	Attempting to <b>integrate safety into all projects</b> and make every dollar a safety dollar using project prioritization is effective.	Share existing prioritization processes for capital improvement programs. Examples could come from Arlington County and DDOT.	Sharing Best Practices
Design and Operate Safer Infrastructure	Some engineering solutions, while not widely adopted, have been observed to be effective.	Recategorize the Resolution solutions table to highlight engineering solutions within the engineer/planners' purview: highly effective, piloting, etc. Assign lead agencies/ownership for solutions not under engineering/planning (ex., ignition interlock led by Courts).	Policy or Program
Design and Operate Safer Infrastructure	<b>Piloting treatments</b> is a beneficial way to determine safety effectiveness, can be an educational tool for the public, and can create more support from leadership.	Inventory existing pilot and demonstration projects across jurisdictions to provide a comprehensive understanding of what has been tried, the scale of the projects, and lessons learned. It could inform future webinars, help identify gaps, and support knowledge sharing.	Document or Resource Development
Encourage Safer Behavior	<b>Enforcement staffing concerns</b> are a barrier to effectively addressing all safety needs. Officers are spread thin over multiple duties (not all departments have a dedicated traffic unit and those that do are also understaffed); ATE citations must be approved by an officer before being processed and can take time; officer training on safety may also be limited (officers were not recently trained on DUI and traffic safety enforcement) due to shifting priorities (post-COVID, community trust in policing).	Hold one TPB safety subcommittee meeting to focus on coordination between DOTs and law enforcement. "Invite your Enforcement" session to discuss collaboration opportunities.	Event or Webinar
Encourage Safer Behavior	<b>Planners/Engineers</b> have the opportunity to play a role in <b>non-engineering solutions to see positive behavioral change</b> , but do not always see this as a direct link to their job responsibilities.	Highlight examples of multiagency collaborations to address engineering/non-engineering challenges in tandem, such as DDOT.	Sharing Best Practices
		Develop a regional education campaign or resources related to impairment, unbelted, and/or distraction for local governments to utilize and promote with the public.	Document or Resource Development



## Role of Jurisdictions

Local jurisdictions are the primary implementers of roadway and traffic safety strategies across the metropolitan Washington region. While the TPB provides regional coordination, data, and policy guidance, it is local governments and state transportation agencies that adopt safety policies, update design standards, prioritize capital investments, and deploy on-the-ground countermeasures. State and District DOTs manage and maintain much of the roadway network and are therefore central to implementing systemic safety improvements, from redesigning high-injury corridors to integrating safety considerations into routine maintenance. Many jurisdictions are already strengthening their safety practices by adopting a variety of speed-reduction strategies, advancing Complete Streets policies, and developing localized guidance to support safer infrastructure. As agencies continue to respond to community needs and evolving safety challenges, their role remains essential: bringing practitioner insight, identifying feasible solutions, and shaping the day-to-day decisions that directly influence safety outcomes on the region's roads.

In a similar structure to **Table 3**, **Table 4** highlights recommendations for individual member jurisdictions to implement that will further the region's goals for roadway safety. Each recommendation was informed by the particular challenge identified in the previous table. The challenges were then used to inform initiatives or efforts that jurisdictions themselves could lead to help address. The recommendations were also categorized by what type of recommendation the strategy is, including *Education and Outreach*, *Policy or Program*, *Event or Webinar*, *Document or Resource Development*, *Sharing Best Practices*, and *Collaborative Effort*. As member jurisdictions vary in safety planning staff size, program maturity, and geographic context, jurisdiction examples are also provided for most recommendations, so that jurisdictions can better understand what these strategies look like in practice and how they might be able to emulate successful programs or policies.

Table 4: Member Jurisdiction Recommendations

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
Safety Planning and Agency Culture Norms	<b>Few local governments have staff dedicated specifically to Vision Zero or transportation safety</b> , which makes it challenging to execute all elements of an effective safety program.	Utilize the Regional Roadway Safety Program (RRSP) to advance safety efforts.	Policy or Program	<p><b>The City of Rockville</b> The City of Rockville's Vision Zero Manager coordinated with the Fleet Management team to retrofit work trucks with side guards to prevent pedestrians, bicyclists, and smaller vehicles from falling under the truck. The Vision Zero Manager was able to secure a budget for the Fleet Management team to install the retrofits.</p> <p><b>District Department of Transportation</b> Vision Zero staff at DDOT coordinated with the rush hour towing division to prioritize towing along the High-Injury Network as a way to maximize impact, but within the same budgetary constraints</p>
		Consider on-call consulting services to increase staff bandwidth.	Collaborative Effort	
		Participate regularly in TPB Safety Subcommittee meetings to hear from agencies with similar-sized safety staff and share challenges.	Event or Webinar	
		Participate in the regional Vision Zero Working Group, led by DDOT, to engage with other local agencies in the region on safety discussions.	Collaborative Effort	
		Review eligibility requirements for the Transportation Alternatives Program (TAP), which can be used to fund staff.	Policy or Program	

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
		Seek opportunities to best utilize existing budgets by focusing on the most effective safety strategies and collaborating with other departments to ensure allocation of resources has the highest return.	Sharing Best Practices	
Safety Planning and Agency Culture Norms	For areas of <b>safety implementation outside the local government's purview</b> (enforcement, school education), coordination is critical, but it does not always happen because of institutional siloes and/or staff resources and time.	Develop an external working group, including partners from enforcement, EMS, educators, public health, advocates, and others.	Collaborative Effort	<p><b>Arlington County</b> Arlington County has an External Stakeholder Group that meets annually and includes representatives from civic associations, advocates, and schools, such as a high school student liaison. Arlington County conducts a quarterly interdisciplinary review of severe and fatal crashes to identify and implement timely infrastructure and non-infrastructure changes.</p> <p><b>The City of Alexandria</b> The City of Alexandria has a multidepartment group to identify locations for and implement automated traffic enforcement (ATE) by looking at speed, school, and traffic data. Group members range from the Complete Streets team, Alexandria Police</p>
		Find strategic activities to collaborate on with key external safety partners. Common approaches include demonstration projects, updates to policy guidelines, data sharing, and co-hosting events.	Collaborative Effort	

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
		Establish monthly or quarterly fatal and serious injury crash review teams. These are used by several local governments and cited as an effective method to increase stakeholder collaboration with enforcement and EMS.	Collaborative Effort	<p>Department (APD), City communications staff, and representatives from the school district. APD manages the ATE operations and has two staff members who monitor the citation data. The City of Alexandria Vision Zero team meets quarterly with the Alexandria Police Department to discuss all transportation issues, including fatal and severe injury crashes. The groups will also meet informally or more frequently as needed due to a critical crash.</p> <p><b>District of Columbia</b> DDOT reviews all fatal and severe injury crashes in-depth through the Safe System lens to see where the breakdown occurred, and design changes in response.</p>
Safety Planning and Agency Culture Norms	<b>Interdepartmental coordination</b> is critical to being able to "do more" for safety. It can be difficult to get people out of their job responsibility siloes to also address safety needs. Staff turnover is also an issue. There can also be a disconnect between safety planning and implementation if they are run out of different departments and/or with different budgets.	<p>Develop an inter-departmental safety working group to include staff from other departments at the local agency, such as maintenance, design, construction, and others.</p> <p>Where feasible, conduct demonstration projects and engage stakeholders and leaders in these as a way to enhance coordination across siloes.</p>	<p>Collaborative Effort</p> <p>Sharing Best Practices</p>	<p><b>The City of Rockville</b> The City of Rockville Vision Zero Manager coordinated with the Fleet Management team to retrofit work trucks with side guards to prevent pedestrians, bicyclists, and smaller vehicles from falling under the truck. The Vision Zero Manager was able to secure a budget for the Fleet Management team to install the retrofits.</p> <p><b>Arlington County</b> Arlington County has found success by messaging to County leadership that quick-build projects that respond to fatal or severe crashes should be treated as equivalent to a rapid response to a water mainline breaking. Additionally, Arlington County has a robust pilot program where safety countermeasures are tested by type or by location</p>

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
				with before-and-after data collection and public input.
Safety Planning and Agency Culture Norms	Local governments and police departments can be good partners, but <b>coordination gaps exist</b> , especially related to crash and citation data sharing, safety plan and project engagement, and/or regular communication on safety challenges and solutions.	Establish monthly, quarterly, or annual meetings with Police Departments to share crash data and intel on crash types and locations.	Collaborative Effort	<p><b>The City of Alexandria</b> The City of Alexandria Vision Zero team meets quarterly with the Alexandria Police Department to discuss all transportation issues, including sharing crash data or insights on crash patterns or locations.</p> <p><b>Charles County</b> Charles County has a Traffic Safety Subcommittee that includes both the Planning Department and Sheriff's Office, which meets regularly and shares crash and citation data as needed to address site specific issues.</p>
Safety Planning and Agency Culture Norms	<b>SS4A, TLC, and RRSP</b> funding have been a successful tool to incentivize safety planning and implementation.	Continue to apply for SS4A funding.	Policy or Program	<p><b>City of Fairfax</b> City of Fairfax was awarded an SS4A action plan development grant, which provided the capacity they did not have to develop a Safety Action Plan, use big data they typically are not able to access, and develop a project list to address site-specific safety issues.</p>
		Continue to apply for TLC and RRSP grants.	Policy or Program	
		Further advance RRSP projects. that would benefit from additional/continued work after completion. Explore best practices for post-project follow-up and identify scalable ways to monitor implementation.	Policy or Program	<p><b>Prince George's County</b> Prince George's County has been awarded SS4A implementation funds, enabling them to construct and install safety projects that might not have been possible, or taken much longer to install. Prince George's County also found success in an RRSP grant that enabled them to apply for and be awarded an SS4A grant.</p>



R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
				<p><b>Arlington County</b> A regionwide impaired driving study was conducted through an RRSP grant led by Arlington County.</p> <p><b>City of Alexandria</b> The City of Alexandria's use of TLC and RRSP grants has provided them with additional capacity to analyze and plan for safety improvements along high-need corridors.</p>
Safety Planning and Agency Culture Norms	Leaders and/or champions are critical to have engaged in safety planning and implementation.	Explore opportunities to create a safety ambassador program.	Collaborative Effort	<p><b>Prince George's County</b> Prince George's County Ambassador Program trains volunteers to influence and expand Vision Zero messaging through social media, event attendance, and focus group feedback.</p>
Safety Planning and Agency Culture Norms	Police departments play the primary role in addressing impaired driving strategies.	Deploy engineering or operational strategies to address specific patterns identified in alcohol-involved crashes, such as adding protected left turn phasing during late-night hours where there is a history of impaired driving crashes.	Policy or Program	<p><b>City of Alexandria</b> The City of Alexandria Vision Zero team meets quarterly with the Alexandria Police Department to discuss all transportation issues, including safety challenges.</p> <p><b>Arlington County</b> The Arlington County Vision Zero team attends an annual roll call with the police department to increase awareness of ongoing collaborative efforts and opportunities.</p>
		Develop a meeting frequency/cadence to collaborate with Police Departments.	Collaborative Effort	<p><b>Charles County</b> Charles County has a Traffic Safety Subcommittee that includes both the Planning Department and the Sheriff's Office.</p> <p><b>City of Manassas</b> City of Manassas has a good relationship with bars</p>

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
				and downtown businesses as part of a monthly First Fridays event. Everyone would like the event to continue, so bar owners and PD collaborate to limit impairment.
Safety Planning and Agency Culture Norms	Big data can be a helpful data source to improve safety decision-making.	Consider which big data sources suit the jurisdictions needs based on TPB research and recommendations.	Policy or Program	<p><b>City of Fairfax</b> The City of Fairfax is using Replica data for hard braking, sudden acceleration, speed, and cellphone use as part of their risk analysis in their Safety Action Plan development.</p> <p><b>Arlington County</b> Arlington County has used Streetlight data to analyze countywide speed patterns in comparison to posted speed limits.</p>
Design And Operate Safer Infrastructure	<b>Before and after analysis</b> (especially for road diet or complete streets projects) is valuable to demonstrate safety changes, safety benefits, and accountability to results.	Review existing before and after studies (or identify gaps or barriers for conducting one) to improve consistency and inform future evaluations.	Policy or Program	<p><b>Arlington County</b> Arlington County Vision Zero Program regularly conducts before-and-after studies when piloting new safety countermeasures or at new locations, when installing a quick-build, and along its high-injury network. Before and after studies typically include data collection of speed, volume, community feedback, and/or crash data.</p> <p><b>City of Alexandria</b> City of Alexandria Complete Streets team conducts pre- and post-project studies to analyze the impacts of traffic calming strategies such as road diets. Data is typically collected one year before and after installation and includes speed, volume, and divergent traffic.</p>
Design And Operate	<b>Traffic calming programs are effective</b> and are being implemented by several local	When design guidelines are developed or come up for revision,	Document or Resource Development	<p><b>District of Columbia</b> DDOT incorporates EMS and Fire early in planning and design discussions and utilizes data-driven</p>

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
Safer Infrastructure	governments to address neighborhood safety concerns. Challenges do exist related to EMS coordination and buy-in, neighborhood complaints, lack of location prioritization, and messaging on the purpose of improvements.	coordinate efforts with emergency responders.		before-and-after traffic calming assessments to demonstrate the impacts of traffic calming on EMS and Fire response.
		Develop a communication strategy for traffic calming programs that clearly conveys the benefits and purpose of proposed treatments (such as improved safety, reduced speeds, etc.) whenever these measures are planned for implementation.	Education and Outreach	DDOT has also developed a Traffic Safety Input (TSI) Prioritization Model, which proactively assigns a prioritization score to every intersection in the city.  <b>Montgomery County</b> Montgomery County Planning developed the Fire Department Access Performance-Based Design Guide, which balances roadway design between fire department access issues and bicycle and pedestrian safety infrastructure.
		Based on the prioritization framework inventory completed by TPB, jurisdictions can develop or refine frameworks to ensure fairness, transparency, and alignment with broader safety and livability goals.	Document or Resource Development	<b>City of Rockville</b> City of Rockville found success in messaging the benefits of a road diet to local businesses and the public by focusing on the economic benefits and not just the safety benefits. Loss of potential on-street parking, or the impacts during construction, can be mitigated through early discussions with local businesses.  <b>Arlington County</b> Arlington County's Vision Zero program has a strong and proactive relationship with business improvement districts (BIDs) and communicates forthcoming infrastructure changes, pilots, or studies with custom info sheets that the BIDs are able to distribute to local businesses. Some BIDs will even partner on projects such as buying planters to beautify traffic calming devices.  <b>City of Fairfax</b> City of Fairfax's Public Works Department requires

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
				citizen signatures when requesting traffic calming, which acts as a prioritization tool.
Design and Operate Safer Infrastructure	Developers are not always considering and including safety treatments in planned projects.	Inventory current development review practices, identify gaps, and then explore ways to integrate safety considerations where feasible.	Document or Resource Development	
Design and Operate Safer Infrastructure	Attempting to <b>integrate safety into all projects</b> , and make every dollar a safety dollar using project prioritization is effective.	Develop prioritization processes so all capital improvement projects are inclusive of safety.	Policy or Program	<b>District of Columbia</b> At DDOT, safety is integrated into the budget process, as every funding request in the Capital Improvement Program undergoes an equity assessment, which includes a safety questionnaire to assign a safety score.

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
Design and Operate Safer Infrastructure	<b>Piloting treatments</b> is a beneficial way to determine safety effectiveness, can be an educational tool for the public, and create more support from leadership.	Explore opportunities to leverage funding sources (SS4A and RRSP) to implement pilot or demonstration projects.	Policy or Program	<p><b>City of Alexandria</b> The City of Alexandria is piloting centerline hardening &amp; a neighborhood slow zone, and is planning to do post-project analysis. Additionally, the City of Alexandria Police Department has piloted midnight patrol officers who conduct enforcement late at night for impaired drivers, which was possible through Department of Motor Vehicles grants.</p> <p><b>Arlington County</b> Arlington County has a robust pilot program in which safety countermeasures are tested by type or by location with before-and-after data collection. Data collection typically includes speed, volume, community feedback, and crash and/or citation data. The pilot results are distributed to the public through infosheets and social media messaging.</p>
Encourage Safer Behavior	<b>Enforcement staffing concerns</b> are a barrier to effectively addressing all safety needs. Officers are spread thin over multiple duties (not all departments have a dedicated traffic unit and those that do are also understaffed); ATE citations must be approved by an officer before being processed and can take time; officer training on safety may also be limited (officers were not recently trained on DUI and traffic safety enforcement) due to shifting	<p>Invite law enforcement representative(s) to one meeting annually to discuss crash data and locations.</p> <p>Take an active role in developing a relationship with PDs and finding opportunities for collaboration by meeting officers where they are.</p>	<p>Collaborative Effort</p> <p>Collaborative Effort</p>	<p><b>City of Alexandria</b> The Alexandria Police Department (APD) has a robust traffic safety unit that consists of motor officers, crash personnel, and several sworn officers to sign off Automated Traffic Enforcement (ATE) citations. APD also trains officers to streamline efficient enforcement interactions to maximize coverage.</p> <p><b>Arlington County</b> The Arlington County Vision Zero team attends an annual roll call with the police department to increase awareness of ongoing collaborative efforts and opportunities.</p>

R3-2021 Theme	Challenge/Opportunity	Jurisdiction Recommendation	Type of Recommendation	Jurisdiction Example
	priorities (post-COVID, George Floyd).			
Encourage Safer Behavior	<b>Planners/Engineers</b> have the opportunity to play a role in <b>non-engineering solutions to see positive behavioral change</b> , but do not always see this as a direct link to their job responsibilities.	Identify opportunities for multiagency collaboration.	Collaborative Effort	<b>District of Columbia</b> DC's Highway Safety Office and DDOT collaborated to pilot distracted driving automated enforcement and messaging which led to safer behavioral changes. Messaging boards were placed at corridors with high distracted driving, and cameras observed if drivers were distracted less by their mobile devices in response to dynamic messaging boards.

## Section 4

# LOOKING AHEAD



The Transportation Planning Board (TPB) developed this Regional Inventory of Roadway Safety Strategies to build on the strong foundation established through TPB Resolution R3-2021. While the TPB does not own or operate transportation facilities, its leadership in convening partners, sharing resources, and elevating best practices strengthens the region's collective ability to reduce severe crashes and integrate safety into everyday decision-making.

Through this process, the TPB staff identified five priority recommendations that can be implemented in the near term to address common needs across member jurisdictions:

1. **TPB Safety Subcommittee Meeting on Enforcement Collaboration** – TPB will hold a safety subcommittee meeting focused on coordination between DOTs and law enforcement, including an “Invite Your Enforcement” session to discuss collaboration opportunities.
2. **Impaired Driving Strategies** – Compile and share a concise set of regional best practices on impaired driving prevention, including examples of effective safety education campaigns, successful partnerships between local agencies and police departments, and notable police department initiatives addressing impairment.
3. **Technical Assistance for Small Staff Agencies** – Many jurisdictions cited limited staff dedicated to Vision Zero or transportation safety, making it difficult to advance program elements. TPB will contact member agencies with smaller staff to identify one safety technical assistance need TPB can support.
4. **Before-and-After Analyses** – Jurisdictions cited before-and-after analyses as valuable to demonstrate safety changes, benefits, and accountability to results, especially for road diets or complete streets projects. To support jurisdictions in executing these analyses, TPB will inventory project studies that conducted before-and-after evaluations, then synthesize results, methods, and metrics.
5. **Ticket Reciprocity & Broader ATE Deployment** – To support local expansion efforts and advance regional support for Automated Traffic Enforcement (ATE), TPB will continue to coordinate with COG to promote enabling broader deployment in MD and VA (beyond school zones, work zones, and buses) and encouraging ticket reciprocity as a legislative priority.

## Section 5

# APPENDICES

## Appendix A: Benchmarking Assessment Framework and Summary Results

Table 5: List of Documents Reviewed during Benchmarking Assessment

State	Geography	Jurisdiction	Document
District of Columbia	Urban Core	District of Columbia	Vision Zero Safe Streets for Washington DC (2022)
			DC Auditor Vision Zero Parts 1 and 2 Reports
	State	DC HSP	Triennial Highway Safety Plan (2023)
Maryland	Outer Suburbs	Charles County	Charles County Local Roadway Safety Plan (LRSP) (2023)
			Transportation Update (Priority Letter) to MDOT
	Outer Suburbs	Frederick County	"Towards Zero Deaths" Safety Action Plan (2022)
			Frederick County 2025 Transportation Priorities (project implementations) update
	Inner Suburbs	Montgomery County	Vision Zero 2030 Action Plan (2023)
			Vision Zero Work Plan
	Inner Suburbs	Prince George County	Vision Zero Action Plan (2020)
			Vision Zero Update 2023
	Inner Suburbs	City of Bowie	Transportation Priorities Plan (2024–2025)
			Speed Camera Website
	Inner Suburbs	City of College Park	Complete & Green Streets Implementation Plan (2024)
	Outer Suburbs	City of Frederick	"Let's Move Frederick!" Comprehensive Bike & Pedestrian Plan (2024)
			Frederick Police Expands Automated Traffic Enforcement Program
	Inner Suburbs	City of Gaithersburg	Local Road Safety Plan (LRSP), (2024)
			Safe Routes to School (2024)
	Inner Suburbs	City of Greenbelt	Complete and Green Streets Policy (2019)
			Automated Speed Enforcement Website
	Inner Suburbs	City of Laurel	Traffic Safety and Calming Measures Policy (2023)

State	Geography	Jurisdiction	Document
	Inner Suburbs	City of Rockville	Pedestrian Master Plan (2023) February 2025 Vision Zero Update
	Inner Suburbs	City of Takoma Park	Takoma Park Minor Master Plan Amendment (2024)
	State	MD HSP	2021 – 2025 SHSP
Virginia	Urban Core	Arlington County	Vision Zero Annual Update 2024 Arlington's Transportation Future Website
	Inner Suburbs	Fairfax County	2022 FCDOT Safe Streets for All Program Recommendations Move Fairfax City Safe Streets for All Project Update, July 2025
	Outer Suburbs	Loudoun County	On-Street Bikeway Gap Analysis & Assessment (2022) Safe Streets Loudoun Website
	Outer Suburbs	Prince William County	Comprehensive Traffic Safety Action Plan Transportation Planning Website
	Urban Core	City of Alexandria	Alexandria Mobility Plan (2021) FY 2024 Annual Report and Work Plan
	Inner Suburbs	City of Fairfax	Bike Fairfax City Plan (2021) City of Fairfax 2035 Comprehensive Plan (2022)
	Inner Suburbs	City of Falls Church	Neighborhood Traffic Calming Program (2023) Bicycle Master Plan (2025)
	Outer Suburbs	City of Manassas	Mobility Master Plan (2025) Manassas 2045 - Chapter 6 & Appendix A
	Outer Suburbs	City of Manassas Park	Vision Zero Action Plan (2025) Active Transportation Plan Plan (2023)
	State	VA HSP	Virginia's 2022-2026 Strategic Highway Safety Plan

**Table 6. Summary Results of Document Review by Jurisdictions' Geography Type**

SSA Element	Resolution	Benchmark / Countermeasure	Inner Suburbs (12 jurisdictions)	Outer Suburbs (7 jurisdictions)	Urban Core (3 jurisdictions)	Grand Total
<b>1. Safe Planning and Agency Culture Norms</b>		1.1 The document reaffirms road user safety as a top priority, adopts safety goals consistent with Vision Zero, and prioritizes the implementation of projects, programs, and policies following TBP's Policy Statement on Equity.	7	7	3	17
		1.2 The document describes collaboration among agencies, departments, or jurisdictions to implement safety strategies, share responsibilities, and identifies funding sources or programs specifically dedicated to safety improvements.	7	7	3	17
		1.3 Developed or recommended developing a safety checklist for use during planning and project identification efforts.	4	5	1	10
<b>2. Safe Road Users</b>	Impaired Driving	2.1 Conducts pedestrian and driver impairment awareness campaigns.	5	4	2	11
		2.2 Hosts campaigns to reduce underage drinking and improve vendor compliance checks.	0	0	0	0
		2.3 Implements server training to prevent underage service and overserving.	0	0	0	0
		2.4 Promotes open-container laws to deter impaired driving.	0	0	0	0
		2.5 Expands ride-sharing options (e.g., SoberRide) and late-night transit to prevent impaired driving.	0	1	0	1
		2.6 Conducts high-visibility impaired driving compliance campaigns.	3	1	1	5
	Distracted Driving	2.7 Conducts distracted driving education campaigns (e.g., D.R.I.V.E.).	4	3	2	9
		2.8 Supports legislative action to classify distracted driving as a "moving violation."	0	0	0	0
	Seat Belt Usage	2.9 Implements targeted seat belt awareness campaigns.	5	1	1	7
		2.10 Supports state-level primary seat belt legislation.	1	0	0	1

SSA Element	Resolution	Benchmark / Countermeasure	Inner Suburbs (12 jurisdictions)	Outer Suburbs (7 jurisdictions)	Urban Core (3 jurisdictions)	Grand Total
<b>3. Safe Speeds</b>		3.1 Uses equitable, tech-enabled automated enforcement (ATE) (e.g., speed cameras, red light camera).	7	7	2	16
		3.2 Identifies locations that could benefit from traffic calming measures (e.g., road diets, tree plantings).	8	6	3	17
		3.3 Installs traffic calming treatments (e.g., road diets, roundabouts, narrower lanes).	9	5	3	17
		3.4 Installs roundabouts at intersections with high fatality and serious injury crashes.	4	3	0	7
		3.5 Applies left-turn calming (e.g., left-turn hardening) at intersections with pedestrian-related crashes.	4	4	2	10
		3.6 Expands automated traffic enforcement (ATE) at intersections (e.g., red-light, speed-on-green, box blocking).	4	4	3	11
		3.7 Addresses speeding along sharp curves by installing high friction surface treatments (HFST).	2	3	0	5
<b>4. Safe Roads</b>		4.1 The document supports the implementation of proven infrastructure countermeasures, outlined in Resolution R3-2021 that go beyond impaired driving, distracted driving, seat belt usage, and speeding.	8	5	3	16
		4.2 Document includes High-Injury Network or High-Risk Network.	5	4	2	11
<b>5. Safe Vehicles</b>	Impaired Driving	5.1 Supports increased use of ignition interlocks for impaired driving offenders.	0	1	1	2

**Table 7. Summary Results of Document Review by State Highway Safety Plan<sup>2</sup>**

SSA Element	Resolution	Benchmark / Countermeasure	State
<b>1. Safe Planning and Agency Culture Norms</b>		1.1 The document reaffirms road user safety as a top priority, adopts safety goals consistent with Vision Zero, and prioritizes the implementation of projects, programs, and policies following TBP's Policy Statement on Equity.	3
		1.2 The document describes collaboration among agencies, departments, or jurisdictions to implement safety strategies, share responsibilities, and identifies funding sources or programs specifically dedicated to safety improvements.	3
		1.3 Developed or recommended developing a safety checklist for use during planning and project identification efforts.	1
<b>2. Safe Road Users</b>	Impaired Driving	2.1 Conducts pedestrian and driver impairment awareness campaigns.	3
		2.2 Hosts campaigns to reduce underage drinking and improve vendor compliance checks.	2
		2.3 Implements server training to prevent underage service and overserving.	1
		2.4 Promotes open-container laws to deter impaired driving.	0
		2.5 Expands ride-sharing options (e.g., SoberRide) and late-night transit to prevent impaired driving.	1
		2.6 Conducts high-visibility impaired driving compliance campaigns.	2
	Distracted Driving	2.7 Conducts distracted driving education campaigns (e.g., D.R.I.V.E).	3
		2.8 Supports legislative action to classify distracted driving as a "moving violation."	0
	Seat Belt Usage	2.9 Implements targeted seat belt awareness campaigns.	3
		2.10 Supports state-level primary seat belt legislation.	2
<b>3. Safe Speeds</b>		3.1 Uses equitable, tech-enabled automated enforcement (ATE) (e.g., speed cameras, red light camera).	3
		3.2 Identifies locations that could benefit from traffic calming measures (e.g., road diets, tree plantings).	2
		3.3 Installs traffic calming devices (e.g., road diets, roundabouts, narrower lanes).	3

<sup>2</sup> Though some countermeasures in this section were not found during the document review, they may be present in other documents such as local legislation and police/sheriff department program initiatives.



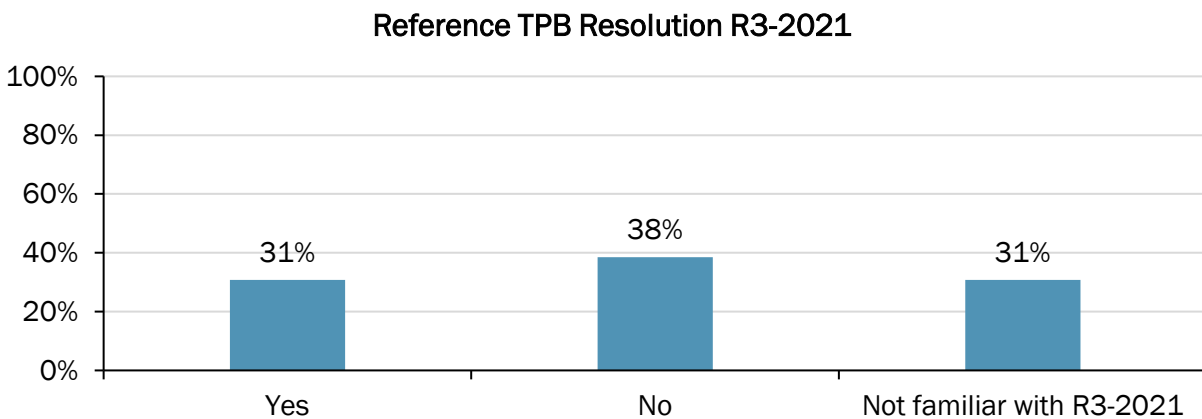
SSA Element	Resolution	Benchmark / Countermeasure	State
		3.4 Installs roundabouts at intersections with high fatality and serious injury crashes.	2
		3.5 Applies left-turn calming (e.g., left-turn hardening) at intersections with pedestrian-related crashes.	2
		3.6 Expands automated traffic enforcement (ATE) at intersections (e.g., red-light, speed-on-green, box blocking).	2
		3.7 Addresses speeding along sharp curves by installing high friction surface treatments (HFST).	1
4. Safe Roads		4.1 The document supports the implementation of proven infrastructure countermeasures, outlined in Resolution R3-2021 that go beyond impaired driving, distracted driving, seat belt usage, and speeding.	3
		4.2 Document includes High-Injury Network or High-Risk Network.	2
5. Safe Vehicles	Impaired Driving	5.1 Supports increased use of ignition interlocks for impaired driving offenders.	2

## Appendix B: TPB Road Safety Benchmarking Questionnaire Results

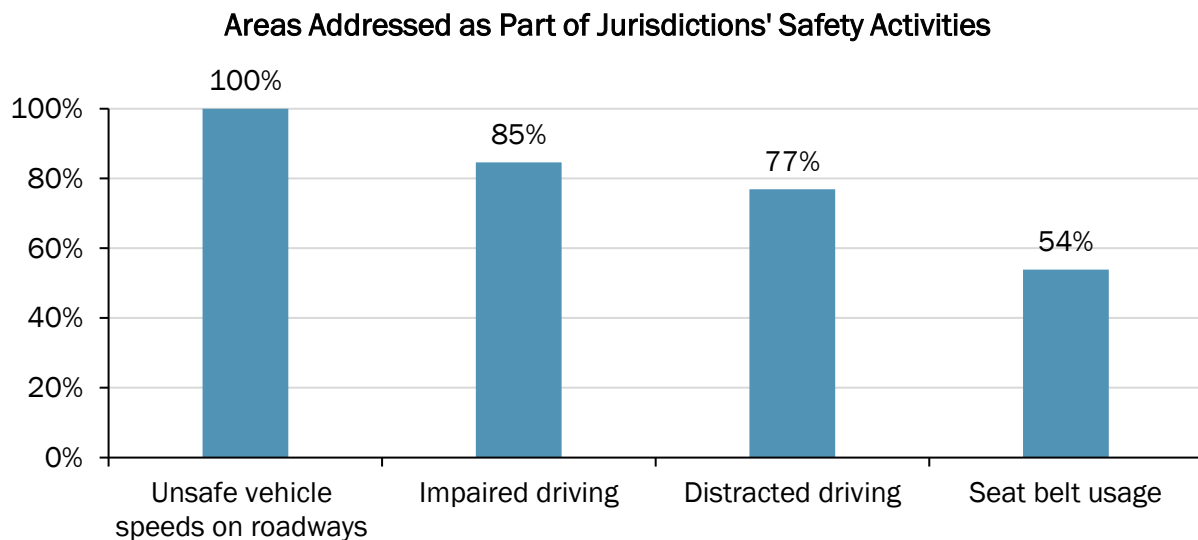
There were 13 responses to the questionnaire. All multiple-choice and select-all-that-apply questions were required, but open-ended questions were voluntary.

### Jurisdiction's Safety Practices

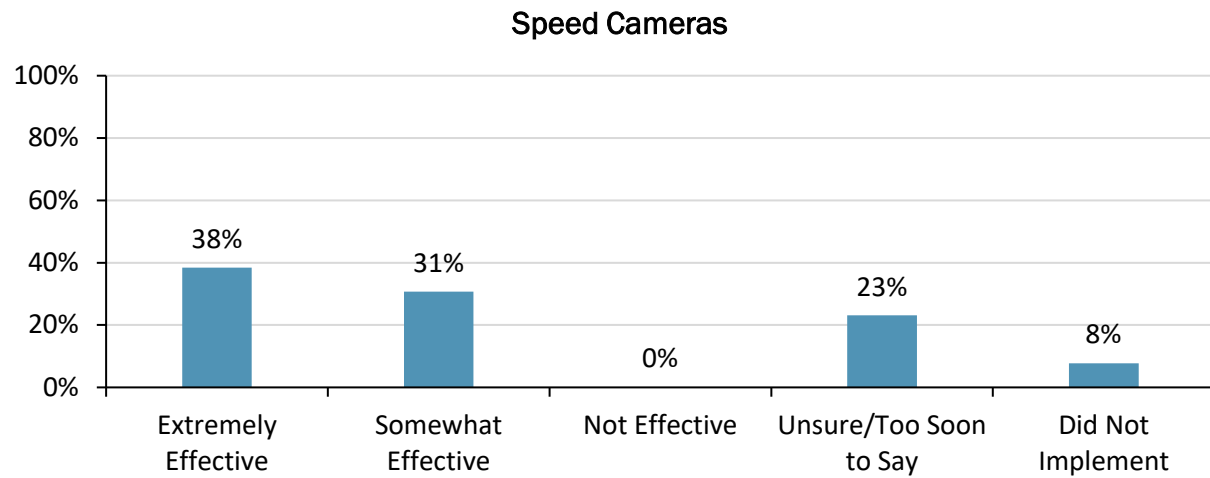
*Figure 3. Q1 Does your jurisdiction reference TPB Resolution R3-2021 in setting priorities for your jurisdiction's roadway safety initiatives? \**



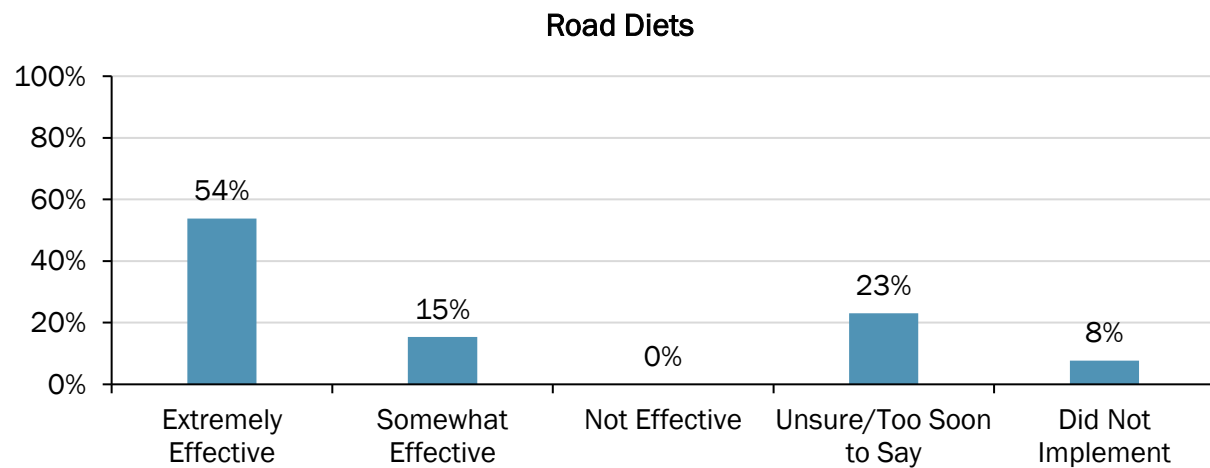
*Figure 4. Q2. The following four areas have been identified as key safety challenges in the region. Does your jurisdiction address these areas as part of its safety activities? (Select all that apply) \**



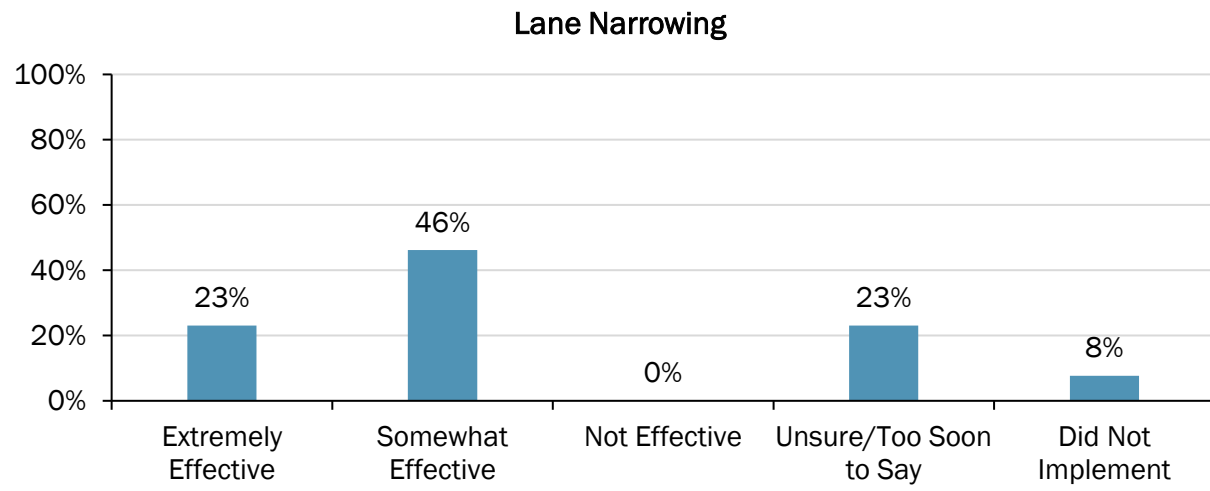
*Figure 5. Q3—Speed Cameras—What strategies have you implemented, and what strategies have been effective in reducing **speed** in your jurisdiction? \**



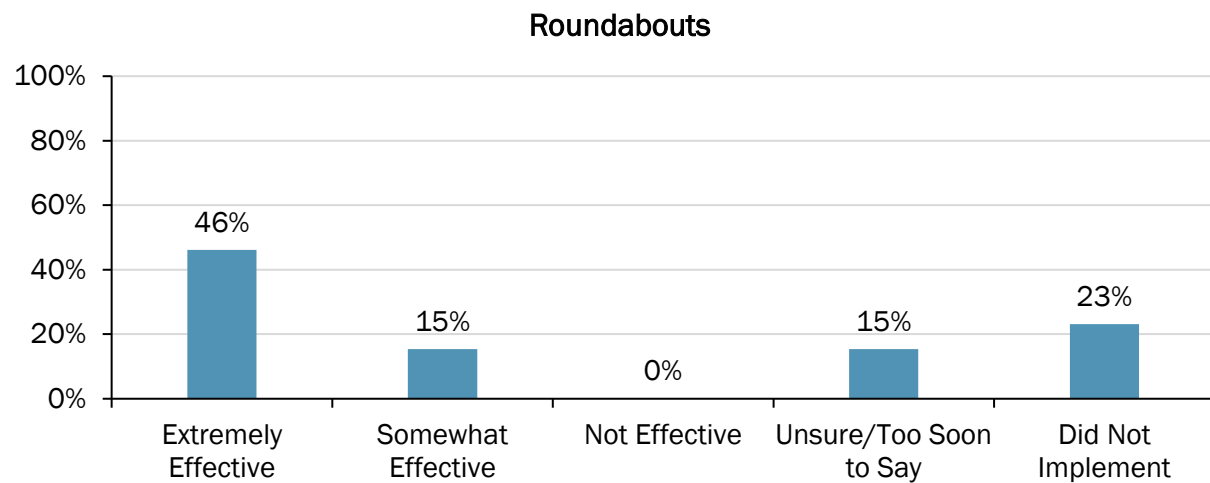
*Figure 6. Q3—Road Diets—What strategies have you implemented, and what strategies have been effective in reducing **speed** in your jurisdiction? \**



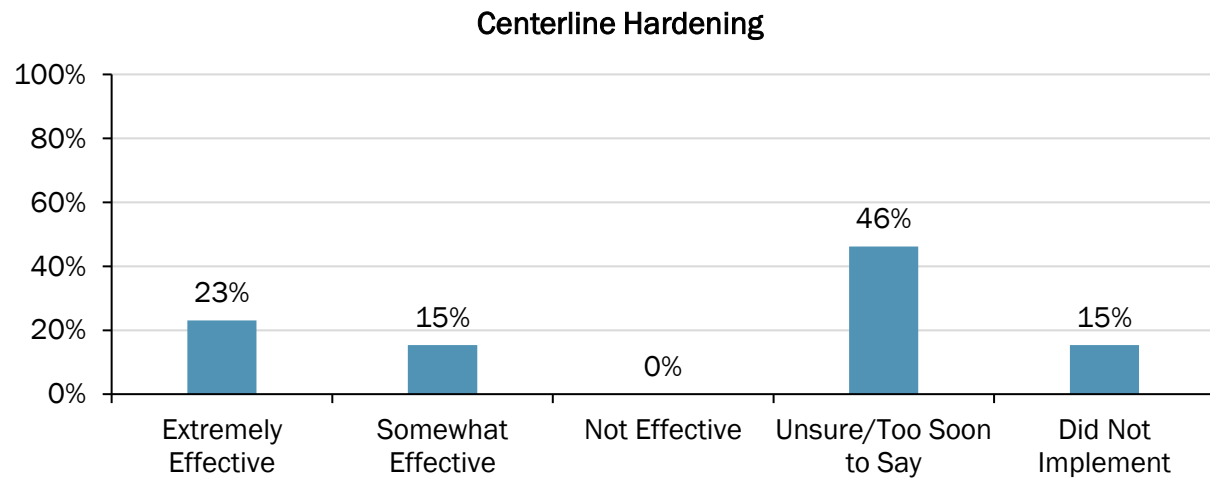
**Figure 7. Q3—Lane Narrowing—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



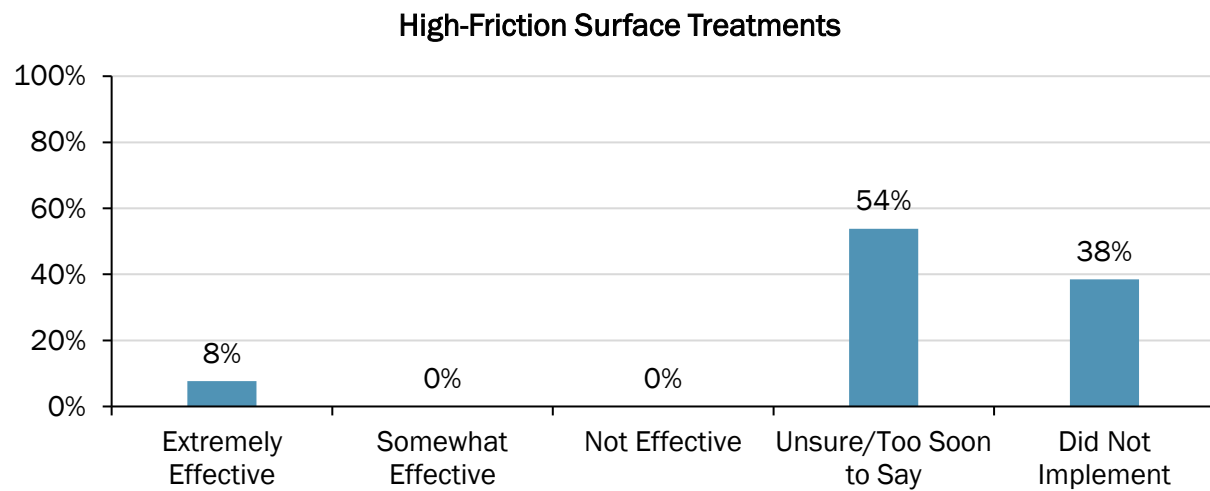
**Figure 8. Q3—Roundabouts—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



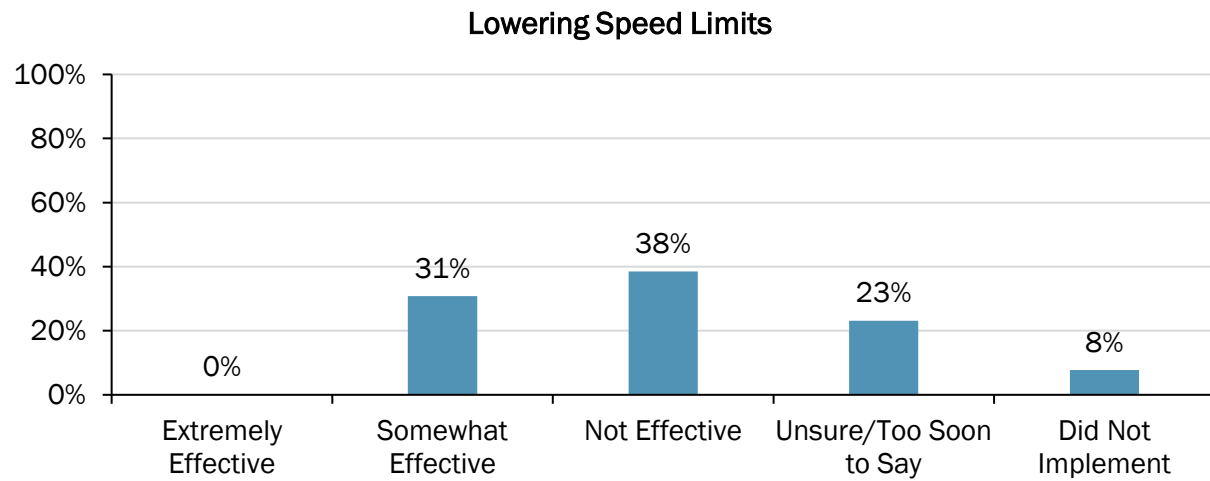
**Figure 9. Q3—Centerline Hardening—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



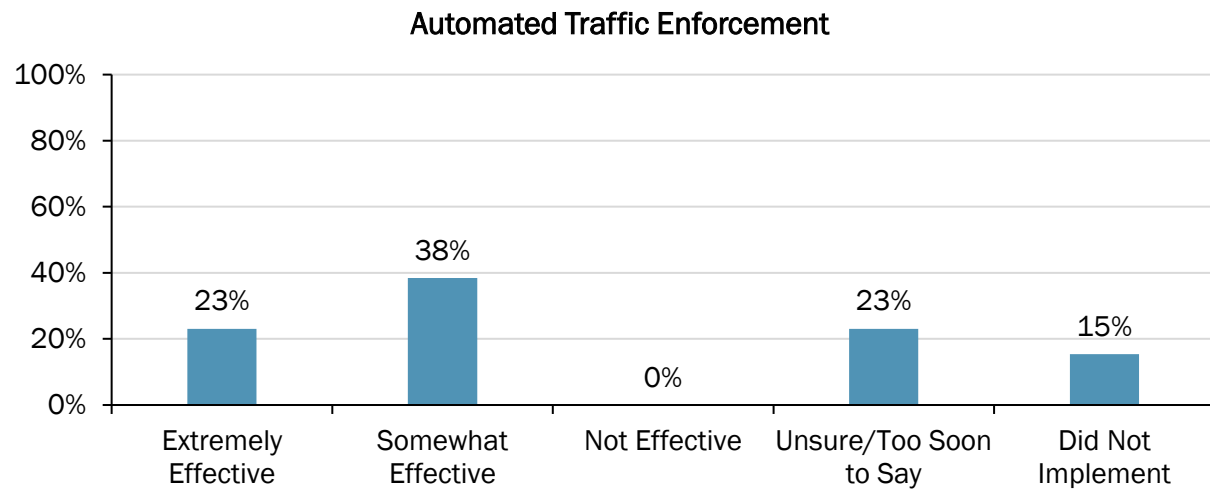
**Figure 10. Q3—High-Friction Surface Treatments—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



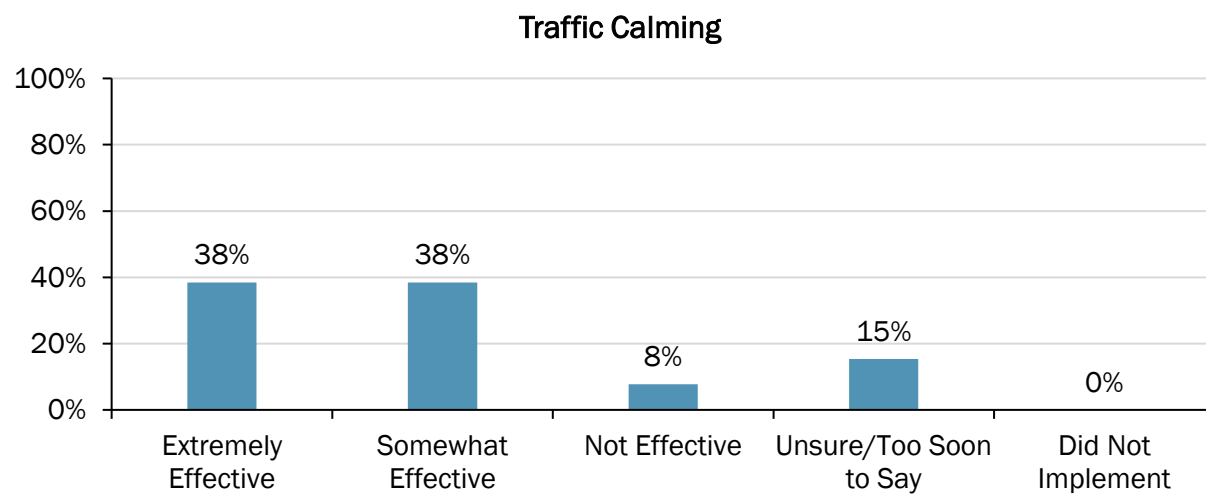
**Figure 11. Q3—Lowering Speed Limits—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



**Figure 12. Q3—Automated Traffic Enforcement—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***



**Figure 13. Q3—Traffic Calming—What strategies have you implemented, and what strategies have been effective in reducing *speed* in your jurisdiction? \***

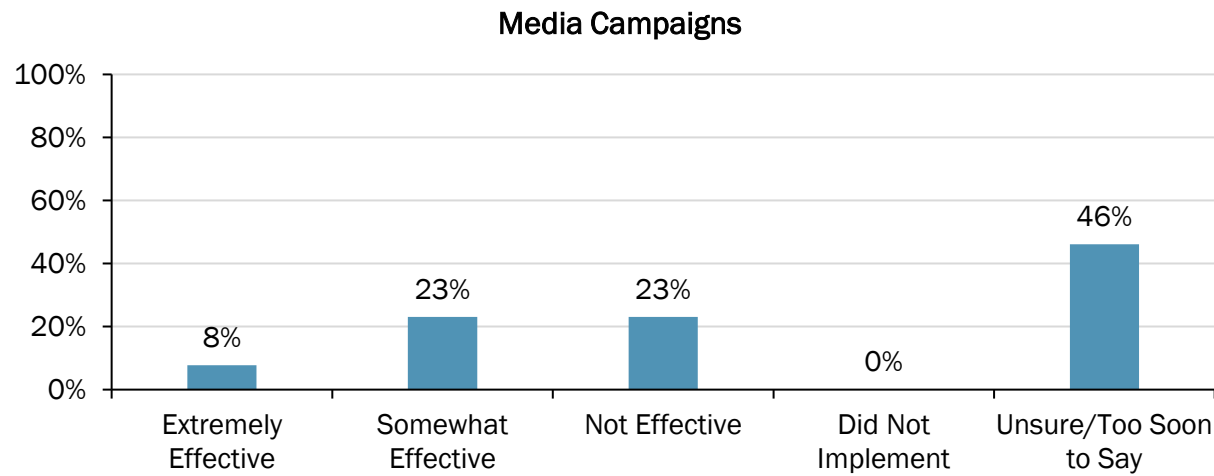


**Table 8. Q4 If your jurisdiction has implemented other strategies to reduce speed, please specify here:**

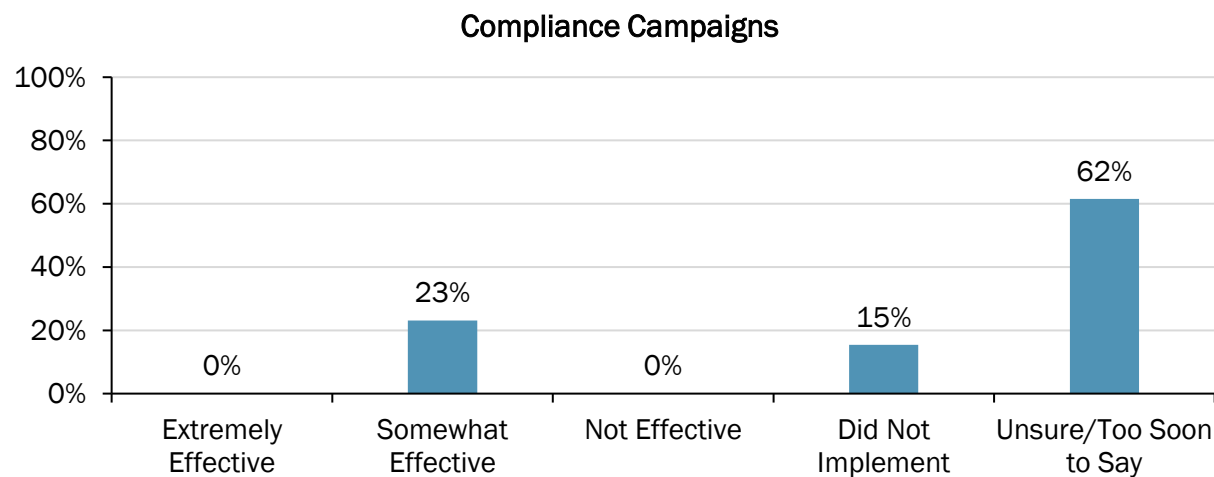
Open-Ended Responses
Signal timing adjustments for off-peak periods to short cycles rather than rest in green for arterials. Corridor signal timing for bicyclists/posted speeds across the network.
Traditional enforcement - somewhat effective
We are about to update the City's traffic calming policy in the fall.
Arlington has a speed reduction pilot to test various types of roadway markings on arterial roads to see impacts. We also do speed humps on neighborhood roads, which are very effective.
N/A
Unsure



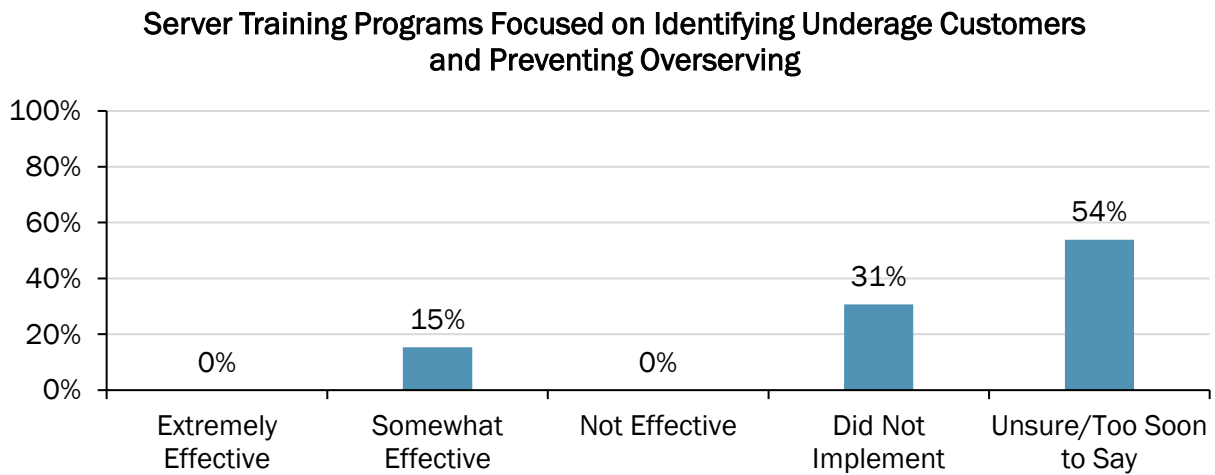
**Figure 14. Q5—Media Campaigns—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



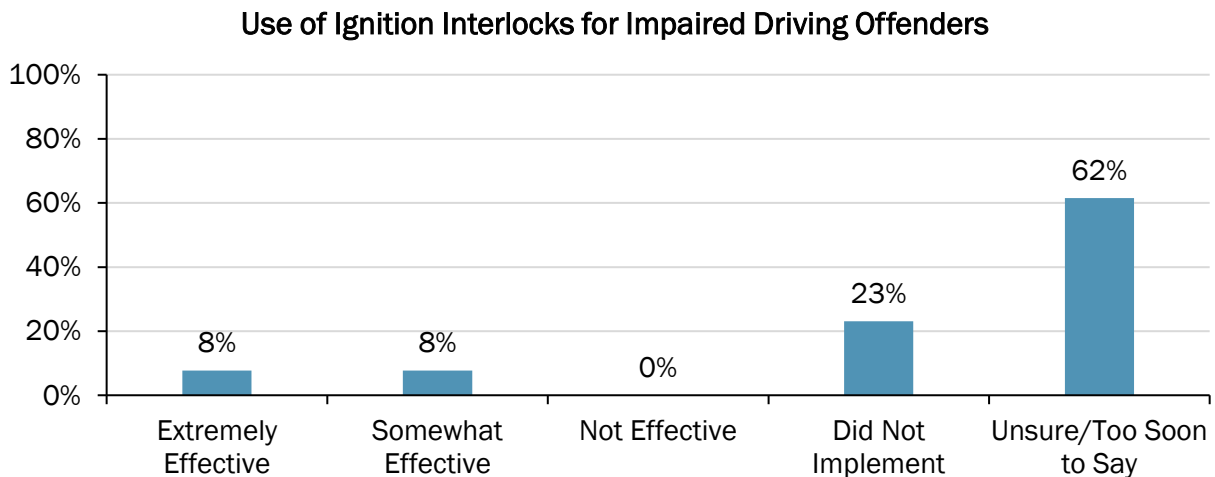
**Figure 15. Q5—Compliance Campaigns—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



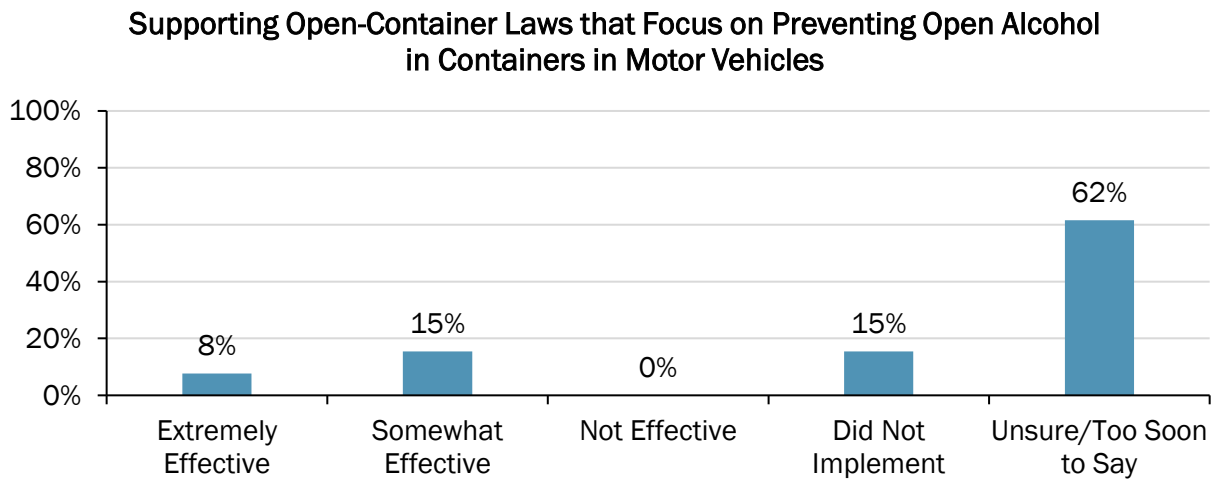
**Figure 16. Q5— Server Training Programs Focused on Identifying Underage Customers and Preventing Overserving—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



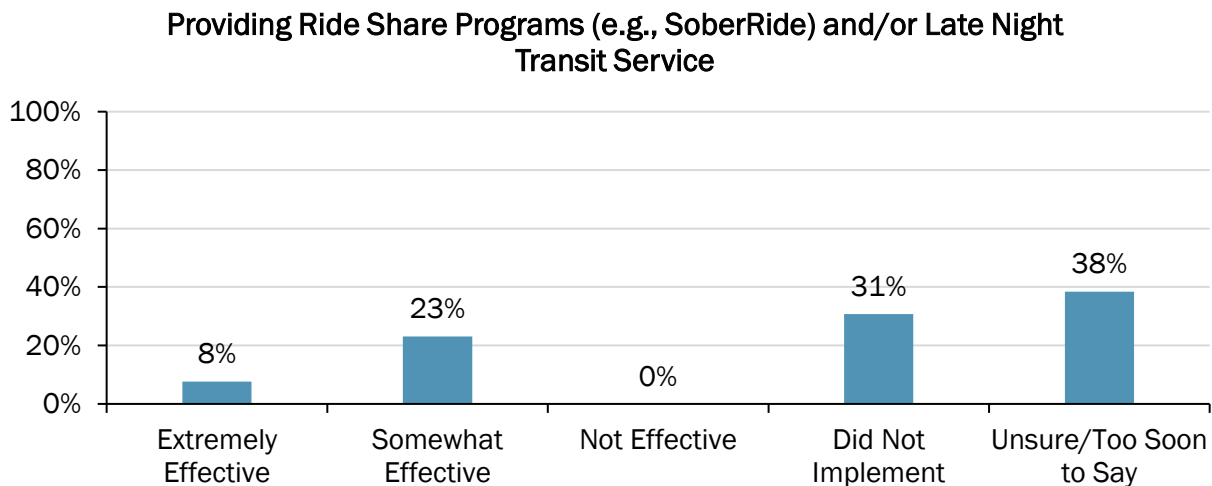
**Figure 17. Q5— Use of Ignition Interlocks for Impaired Driving Offenders—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



**Figure 18. Q5— Supporting Open-Container Laws that Focus on Preventing Open Alcohol in Containers in Motor Vehicles—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



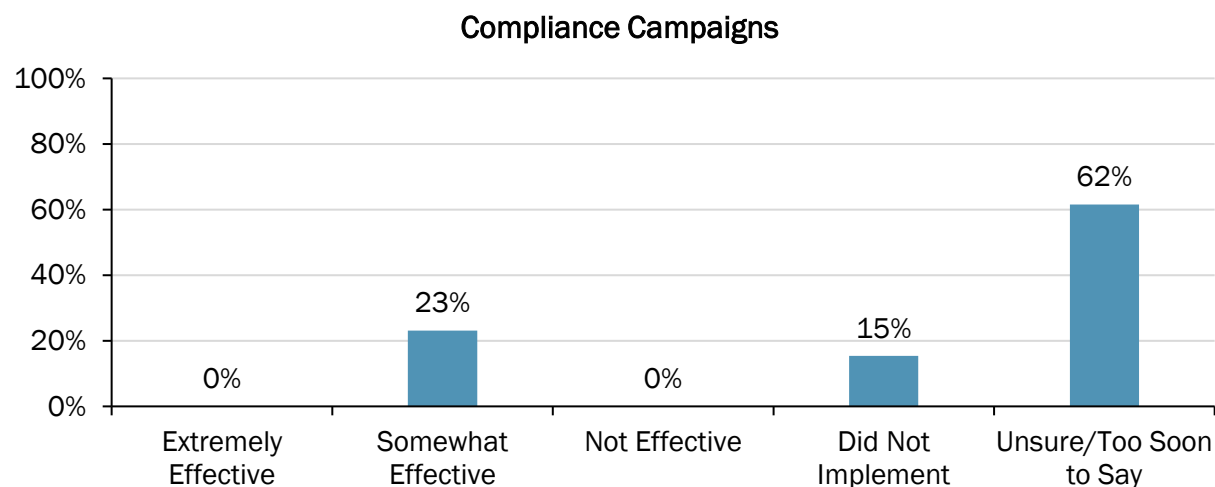
**Figure 19. Q5— Providing Ride Share Programs (e.g., SoberRide) and/or Late Night Transit Service—What strategies have you implemented, and what strategies have been effective in reducing *impaired driving* in your jurisdiction? \***



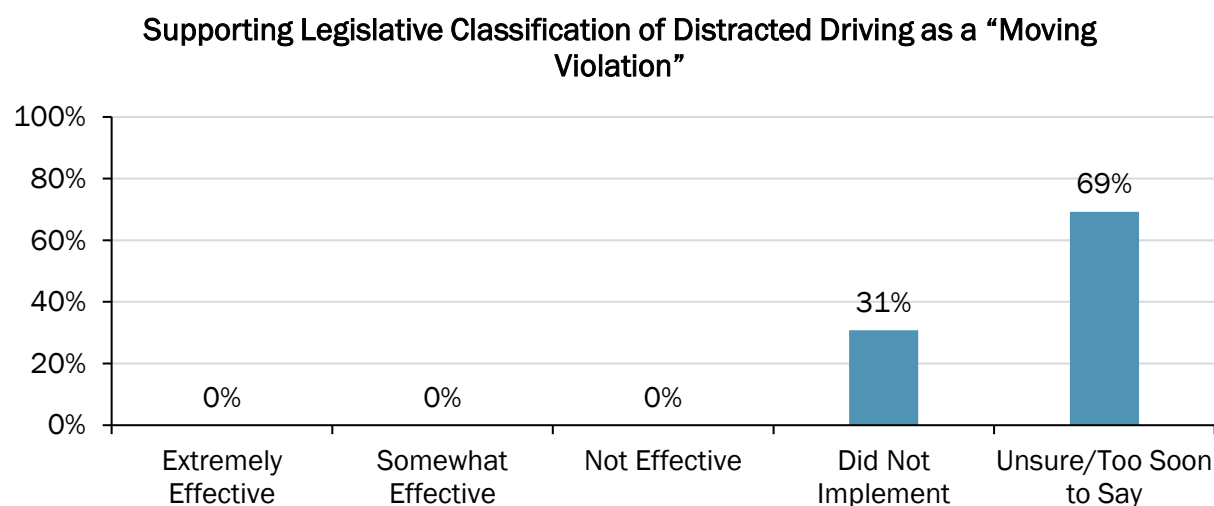
**Table 9.** Q6 If your jurisdiction has implemented other strategies to reduce impaired driving, please specify here:

Open-Ended Responses
If compliance campaigns mean sobriety checkpoints.
Saturation patrols with municipal, county, and state police officers.
Unsure, would need to have the Frederick County Sheriff's Office provide the information.
Unsure.
Unsure of compliance or communications campaigns police department may have implemented separate from transportation division messaging

**Figure 20.** Q7—Compliance Campaigns—What strategies have you implemented, and what strategies have been effective in reducing *distracted driving* in your jurisdiction? \*



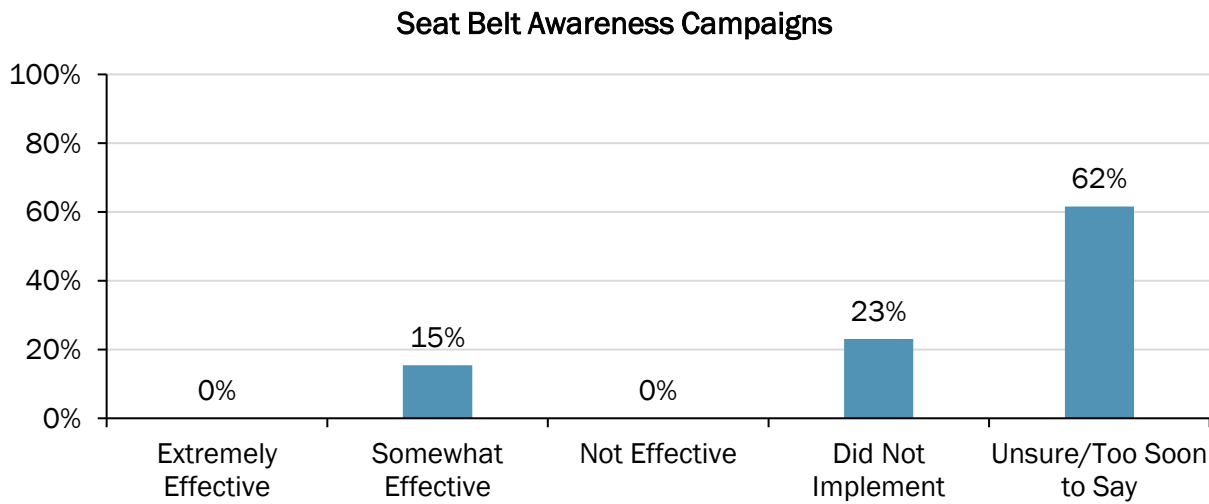
**Figure 21. Q7— Supporting Legislative Classification of Distracted Driving as a “Moving Violation”—**  
**What strategies have you implemented, and what strategies have been effective in reducing**  
**distracted driving in your jurisdiction? \***



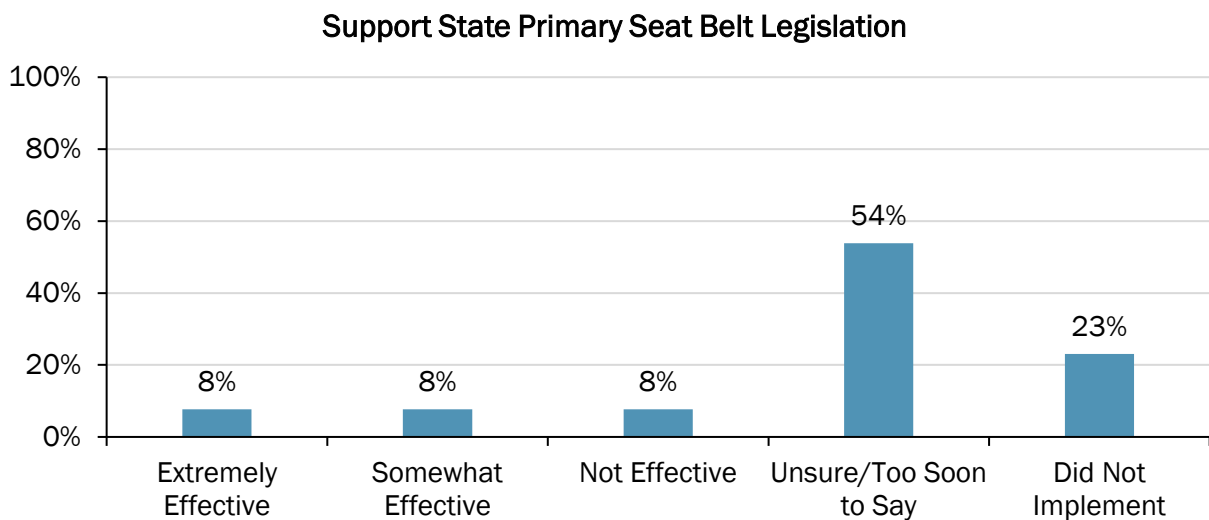
**Table 10. Q8 If your jurisdiction has implemented other strategies to reduce *distracted driving*, please specify here:**

Open-Ended Responses
Investigating Automated Enforcement for Distracted driving. Pilots have been fruitful.
Annual "Heads Up/Phones Down" video contest for high school students
Unsure, would need to have the Sheriff's Office provide the information.
Some strategies implemented by PD, not sure what they entail.
Unsure of compliance or communications campaigns police department may have implemented separate from transportation division messaging
Investigating Automated Enforcement for Distracted driving. Pilots have been fruitful.
Traffic calming - effective.

**Figure 22. Q9—Seat Belt Awareness Campaigns—What strategies have you implemented, and what strategies have been effective in increasing *seatbelt use* in your jurisdiction? \***



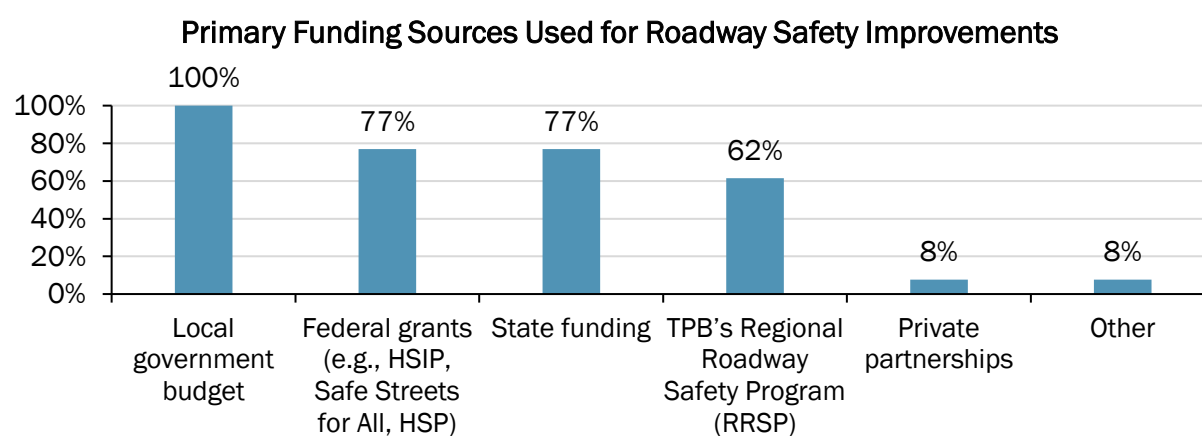
**Figure 23. Q9—Support State Primary Seat Belt Legislation—What strategies have you implemented, and what strategies have been effective in increasing *seatbelt use* in your jurisdiction? \***



**Table 11. Q10 If your jurisdiction has implemented other strategies to increase seatbelt use, please specify here:**

Open-Ended Responses
For child occupants, giving away car seats.
Saturation patrols such as "border-to-border" during NHTSA waves.
Unsure, would need to have the Sheriff's Office provide the information.
Unsure
For child occupants, giving away car seats.

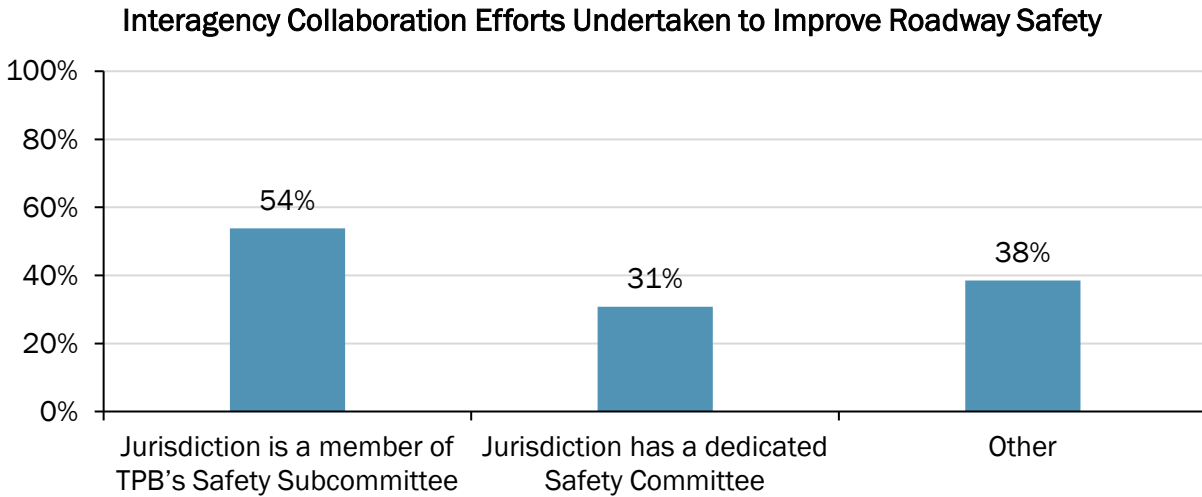
**Figure 24.** Q11 What are the primary funding sources your jurisdiction uses for roadway safety improvements? (Select all that apply) \*



**Table 12.** Q11 What are the primary funding sources your jurisdiction uses for roadway safety improvements? (Open-Ended Responses) \*

Other
Development conditions

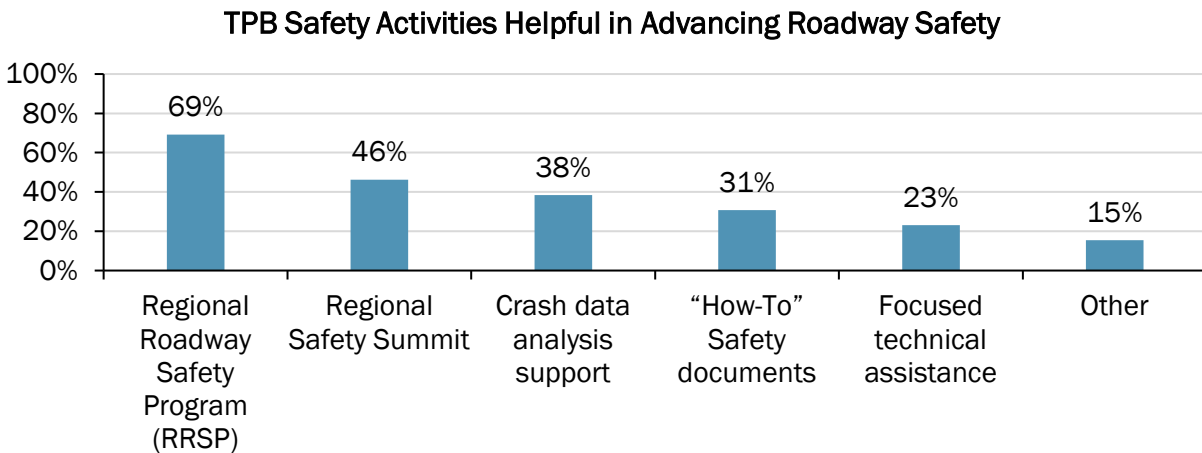
**Figure 25.** Q12 Please describe any interagency collaboration efforts your jurisdiction has undertaken to improve road safety. \*



**Table 13.** Q12 Please describe any interagency collaboration efforts your jurisdiction has undertaken to improve road safety. (Open-Ended Responses)\*

Other (Open-Ended Responses)
Interjurisdiction Vision Zero coordination meetings that are less formal, working on border projects with neighboring jurisdictions
Vision Zero program
Jurisdiction works with County "Vision Zero" efforts
Interdepartmental coordination

**Figure 26.** Q13 Which of the following TPB safety activities have been helpful to your jurisdiction to advance roadway safety? (Select all that apply) \*

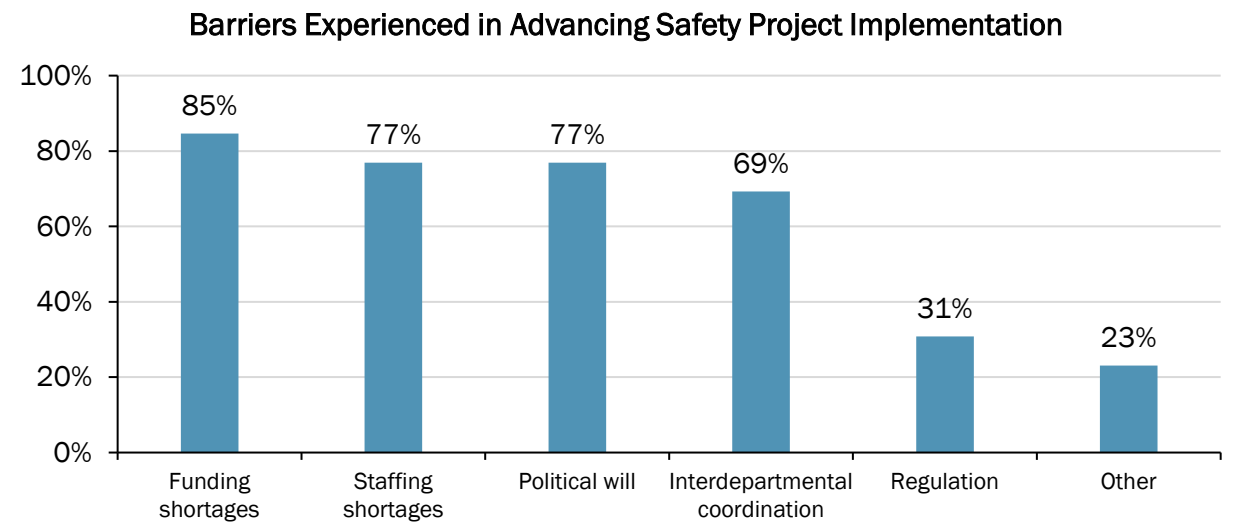




**Table 14.** Q13 Which of the following TPB safety activities have been helpful to your jurisdiction to advance roadway safety? (Open-Ended Responses) \*

Other
Unfortunately/fortunately we're able to handle the majority of our safety needs internally so we haven't yet utilized the RRSP grant program yet
Not familiar with other types of assistance, would like to learn more

**Figure 27.** Q14 What barriers are you experiencing in advancing safety project implementation in your jurisdiction? (Select all that apply) \*



**Table 15.** Q14 What barriers are you experiencing in advancing safety project implementation in your jurisdiction? (Open-Ended Responses) \*

Other
Administrative burden (often not worth using federal funds for smaller projects)
Long funding/implementation timelines
Funding and policy that prioritizes congestion mitigation more than safety

## **Appendix C: R3-2021 Resolution to Establish a Regional Roadway Safety Policy and Associated Roadway Safety and Equity Policy Statements, to Reduce Fatalities and Serious Injuries on the National Capital Region's Roadways**

**NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD**  
**777 North Capitol Street, N.E.**  
**Washington, D.C. 20002**

**RESOLUTION TO ESTABLISH A REGIONAL ROADWAY SAFETY POLICY, AND ASSOCIATED  
ROADWAY SAFETY AND EQUITY POLICY STATEMENTS, TO REDUCE FATALITIES AND  
SERIOUS INJURIES ON THE NATIONAL CAPITAL REGION'S ROADWAYS**

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB) has been designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia as the Metropolitan Planning Organization (MPO) for the Washington Metropolitan Area; and

**WHEREAS**, safety of all modes of travel is an important element of TPB's Vision, and a regional priority, with many of its member jurisdictions having adopted aspirational safety goals associated with Vision Zero and Towards Zero Deaths; and

**WHEREAS**, the provisions of the FAST Act continued the implementation of performance-based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States and metropolitan planning organizations (MPOs); and

**WHEREAS**, the Federal Highway Administration issued a rulemaking for state departments of transportation (DOTs) and MPOs to annually establish data-driven highway safety targets and report progress on achieving the targets for the following performance measures: number of fatalities, rate of fatalities per hundred million vehicle miles traveled, number of serious injuries, rate of serious injuries per VMT, and number of combined non-motorized fatalities and non-motorized serious injuries; and

**WHEREAS**, the TPB has reviewed the safety performance measures and established data-driven regional safety targets annually since January 2018 and acknowledges that the number of fatalities and serious injuries on the region's roadways are unacceptably high, which is contrary to its own vision and the region's aspirations; and

**WHEREAS**, the TPB remains focused on acting on its priorities and achieving the region's aspirational goals and is using the federally required annual regional highway safety targets and the process to evaluate the region's progress toward zero roadway deaths; and

**WHEREAS**, the TPB commissioned a regional roadway safety study to identify the factors contributing to and the predominant types of fatal and serious injury crashes in the region and recommend projects, programs and policies the region should prioritize to improve safety outcomes on the region's roadways; and

**WHEREAS**, the recommended regional roadway safety strategies, based upon the regional safety study as well as other relevant safety improvement ideas developed through ongoing Transportation Safety Subcommittee activities and continuing collaboration with state DOTs and member jurisdictions, have been reviewed by the TPB; and

**WHEREAS**, the TPB has established Equity Emphasis Areas that identify small geographic areas with high concentrations of low-income and / or minority populations for the analysis of disproportionately high and adverse impacts on these populations; and

**WHEREAS**, the TPB urges that safety measures, including those addressing roadway design and operations, be applied with particular attention to Equity Emphasis Areas; and

**WHEREAS**, the TPB condemns enforcement of roadway traffic operational and safety-related laws, both nationally and regionally, in ways that are discriminatory, exclusionary, or have disparate impacts on people of color and marginalized communities and calls for unconditional commitment to equity and anti-racism; and

**WHEREAS**, the TPB believes that road-user safety and the equitable, non-racist implementation of safety strategies are both equally important and should not be mutually exclusive; and

**NOW, THEREFORE, BE IT RESOLVED THAT** the National Capital Region Transportation Planning Board approves the following Regional Roadway Safety and Associated Equity Policy Statements for the National Capital Region:

#### **POLICY STATEMENT ON EQUITY**

The TPB and its staff commit that our work together will be anti-racist and will advance equity including every debate we have, and every decision we make as the region's MPO; and The TPB affirms that equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents; and We recognize past actions that have been exclusionary or had disparate negative impacts on people of color and marginalized communities, including institutionalized policies and practices that continue to have inequitable impacts today, and we commit to act to correct such inequities in all our programs and policies.

#### **POLICY STATEMENT ON ROADWAY SAFETY**

The National Capital Region Transportation Planning Board urges its members to reaffirm road user safety as a top priority and prioritize the implementation of projects, programs, and policies, in an equitable and non-racist manner, consistent with the TPB's Equity Policy statement, that strive to reduce the number of fatal and serious injury crashes on the Region's roadways by taking the actions, working individually and/or collectively, described in the Sections 1 through 4 below.

#### Section 1:

- Increase seat belt use among all occupants in a motor vehicle;
- Reduce unsafe vehicle speeds on all roadways in the region;
- Reduce impaired and distracted driving.

#### Section 2:

Identify and implement applicable countermeasures, especially those outlined in the table shown below, as appropriate and on a case by case basis, in an equitable and non-racist manner, consistent with the TPB's Policy Statement on Equity.

#### Section 3:

Establish and fund a Regional Safety Program at the TPB, beginning in fiscal year 2021, to assist its member jurisdictions and the region to develop and/or implement projects, programs or policies to equitably improve safety outcomes for all roadway users. Funding for the first year of the Regional Safety Program will total \$250,000 which will be provided through the TPB's Unified Planning Work Program.

#### Section 4:

- Calls upon all its member jurisdictions and agencies to adopt safety goals consistent with Vision Zero or Towards Zero Death policies and develop local roadway safety plans and ensure their equitable impacts on all road users.
- Calls upon its member states to adopt procedures that increase the use of ignition interlock devices for impaired driving offenders.

**Adopted by the National Capital Region Transportation Planning Board on July 22, 2020**



National Capital Region  
**Transportation Planning Board**



## ROADWAY SAFETY IMPROVEMENT STRATEGIES

### INTRODUCTION

During 2019 and 2020, the National Capital Region Transportation Planning Board (TPB) Technical Committee conducted a Regional Safety Study in collaboration with the state Safety Engineers from the District of Columbia, Maryland and Virginia Departments of transportation to:

- Understand the factors contributing to the high number of fatal and serious injury crashes in the National Capital Region (NCR);
- Determine where and what types of crashes on the roadway transportation network are over-represented;
- Identify and recommend proven effective project, program and policy solutions to significantly reduce fatalities and serious injury crashes; and
- Inform future Transportation Safety Subcommittee and Street Smart efforts.

Following are recommended actions that can, if implemented, significantly reduce the number of people killed or seriously injured throughout the region in four areas that were identified through data analysis as the area's serious traffic safety problems including pedestrian, intersection, major arterial, and young driver crashes. The appropriateness of any of the strategies listed in this document need to be determined on a case-by-case basis. This list of strategies is not comprehensive and does not preclude the use of other proven effective strategies to improve roadway safety.




































The TPB condemns enforcement of roadway traffic operational and safety-related laws, both nationally and regionally in ways that are discriminatory, exclusionary, or have disparate impacts on people of color and marginalized communities and calls for unconditional commitment to equity and anti-racism. As such, the TPB strongly urges all safety strategies implemented in the region be consistent with its Equity Policy statement, below:

The TPB and its staff commit that our work together will be anti-racist and will advance equity including every debate we have, and every decision we make as the region's MPO; and The TPB affirms that equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents; and We recognize past actions that have been exclusionary or had disparate negative impacts on people of color and marginalized communities, including institutionalized policies and practices that continue to have inequitable impacts today, and we commit to act to correct such inequities in all our programs and policies.





























### LEGEND

	Intersections		Major Arterials		Roadway Departure		Rear-end Collisions
	Speeding		Alcohol Impaired Driving		Distracted Driving		Occupant Protection
	Pedestrians		Young Drivers		Older Drivers		Enforcement
	Education		Emergency Medical Services		Communications		Legislation

## DESIGN AND OPERATE SAFER INFRASTRUCTURE









































			Install pedestrian hybrid beacon and advanced yield signs, stop markings and signs, high visibility crosswalk markings.
			Implement leading pedestrian interval (LPI) at intersections with high turning vehicle volumes.
			Conduct pedestrian road safety audits in areas with a higher than average crashes.
			Reduce motor vehicle speeds by using data driven, effective, and equitable enforcement methods that utilize available technology, such as automated speed cameras, and other traffic calming strategies such as narrower lanes, adding roundabouts, and implementing road diets.
			Evaluate mid-block crossings with higher rates of fatalities and serious injuries (especially those over 10,000 Annual Average Daily Traffic (AADT)) to determine the need for more improvements such as medians, refuge islands, pedestrian hybrid beacon, and rectangular rapid flashing beacons.
			Install pedestrian countdown signals.
			Improve geometry of pedestrian and bicycle facilities at signalized intersections with high frequencies of pedestrian and/or bicycle crashes and on routes serving schools or other generators of pedestrian and bicycle traffic.
			Provide walkways where appropriate, including paved shoulders, shared-use paths, trails, bicycle lanes and/or separated bike lanes.
			Install lighting at intersection and mid-block crossings to ensure motorists can see pedestrians crossing the road at locations with high pedestrian crashes.
			Evaluate double-right turns at intersections to determine if removal of one right-turn lane is warranted.
			Implement audible pedestrian crossing signals where appropriate.
			Create pedestrian safety zone programs in areas with high occurrences of pedestrian crashes.
			Replace intersections that have high numbers of fatalities and serious injuries with roundabouts, a circular intersection configuration with channelized approaches and a center island that results in lower speeds and fewer conflict points, wherever feasible.
			Utilize multiphase signal operation at signalized intersections with a high frequency of angle crashes involving left turning and opposing through vehicles as well as rear-end and sideswipe crashes.
			Increase change intervals (when the traffic lights change) at signalized intersections at locations where too-short signal change intervals cause rear-end crashes and crashes between vehicles continuing and entering the intersection between phases.
			Improve left-turn channelization (providing definite paths for vehicles to follow) at signalized intersections where left-turn crashes, including those associated with left turning vehicles from through lanes, are an issue.
			Improve right-turn channelization at signalized intersections with a high number of rear-end collisions.

## DESIGN AND OPERATE SAFER INFRASTRUCTURE

			Install LED heads and reflective backplates (reflective borders around traffic lights that make them more visible) in locations with high numbers of signalized intersection fatal and serious injury crashes.
			Restrict access to properties using driveway closures or turn restrictions that are near signalized intersections with high crash frequencies related to driveways.
			Restrict or eliminate turning maneuvers (including right turns on red) or employ signal coordination at signalized intersections with a high frequency of crashes related to turning maneuvers.
			Improve signage at unsignalized intersections by ensuring foliage does not block the sign, the lettering is still reflective, and the sign is located where it can be seen by motorists.
			Add reflective material to sign posts at unsignalized intersections.
			Install LED-enhanced stop signs at unsignalized intersections where there are a higher than average number of fatal and serious injury crashes.
			Implement high friction treatment at intersections that have a high number of rear-end crashes.
			Implement left-turn traffic calming (left turn hardening) to reduce left turn speeds and provide for safe turning behavior at intersections that show a pattern of pedestrian-related left turn crashes and intersection geometry that facilitates high speeds.
			Implement roadside design improvements such as clear zones, slope flattening, and adding or widening shoulders to improve ability for drivers to safely recover if they leave the travel lane.
			Implement enhanced delineation treatments to alert drivers in advance of the curve including pavement markings; post-mounted delineation; larger signs and signs with enhanced retro-reflectivity; and dynamic advance curve warning signs and sequential curve signs.
			Implement improvements including installation of cable barriers, guardrails, and concrete barriers to reduce the severity of roadway departure crashes.
			Identify areas in the region that could benefit from traffic calming including road diets that reduce the number of traffic lanes and planting trees that encourage reduced speeds.
			Install high friction surface treatment (HFST) in locations where the available pavement friction is not adequate to support operating speeds at a sharp curve, inadequate cross-slope design, wet conditions, polished roadway surfaces, or driving speeds in excess of the curve advisory speed.
			Install longitudinal rumble strips and stripes in locations where run-off-the-road crashes are high.
			Install the Safety Edge to eliminate the vertical drop-off at the pavement edge, allowing drifting vehicles to return to the pavement safely.
			Develop a regional Safety Checklist or template as a tool for local jurisdictions to use during planning and project identification efforts



## ENCOURAGE SAFER BEHAVIOR

			Include pedestrian safety and the risks of impairment for pedestrians and drivers in alcohol related media campaigns.
			Develop and implement pedestrian safety programs for elementary school students.
			Continue the regional Street Smart Campaign and strengthen by aiding member jurisdictions to engage street teams and other elements of the campaign at more locations throughout the year.
			Develop and implement school focused pedestrian strategies building on the work done in the Safe Routes to Schools program.
			Conduct education and fair, equitable, data-driven compliance campaigns focused on distracted driving (D.R.I.V.E, Texting and Driving Initiative).
			Support legislative classification of distracted driving as a "moving violation" and decide if changes are needed.
			Provide public information, education, and training for older drivers on risks associated with signalized intersections such as red-light running, speeding, not yielding to pedestrians, and difficulty judging speed and distance of approaching vehicles when making left turns.
			Conduct a study to determine the safety needs of older adults in the region and coordinate internally and externally to provide information on transportation alternatives other than driving.
			Increase automated enforcement at intersections including speed on green lights, stop-light camera, blocking the box, etc.
			Implement safety awareness campaigns specifically for low seat belt use groups.
			Support state primary seat belt legislation.
			Evaluate incident response times to determine if additional Traffic Incident Management (TIMS) training and/or other resources are needed. Develop incident response plans for interstates and arterials throughout the region.
			Implement strategic and well-publicized compliance programs aimed at young drivers.
			Conduct well publicized, multi-component compliance campaigns throughout the region to address underage drinking, including licensing actions for underage alcohol violations, and vendor compliance checks to reduce underage drinking.
			Implement and enhance server training programs to enable servers to identify underage customers and prevent overserving.
			Increase use of ignition interlocks for impaired driving offenders.
			Encourage uniform support for open-container laws, an effective countermeasure that prevents impaired driving by prohibiting the possession of any open alcoholic beverage container and the consumption of any alcoholic beverage by motor vehicle drivers or passengers.
			Provide and encourage use of ride sharing programs (like SoberRide) to reduce impaired driving; encourage more late-night transit service to provide options other than driving while impaired.
			Conduct well-publicized compliance programs aimed at impaired drivers.