

Governor's Work Zone Safety Work Group

# Recommendations to improve Work Zone Safety in Maryland



Wes Moore Governor

Aruna Miller Lt. Governor

Submitted by: The Governor's Work Zone Safety Work Group

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## Acknowledgements

The recommendations included in this document are the direct result of the hard work, valuable input, and dedication from numerous stakeholders across every facet of the transportation sector. The completion, timeliness, and comprehensiveness of this report would not have been possible without their active participation and support.

We would like to express particular gratitude to the staff members of the Work Zone Safety Work Group's (WZSWG) Subcommittee Chairs, MVA Administrator Christine Nizer and SHA Deputy Administrator Teri Soos. Their efforts to identify members of the Work Group, organize the monthly meetings of the Subcommittees, and formalize the recommendations presented by the Subcommittees will have significant benefit to the safety and lives of roadway workers in Maryland.

## **Roster of Members**

The Governor's Work Zone Safety Work Group is composed of individuals with expertise in the transportation sector including representatives with backgrounds in law enforcement, construction industries, labor, and traffic safety campaigns. Lieutenant Governor Aruna Miller serves as the Chair of the Work Group, and Maryland Department of Transportation (MDOT) Motor Vehicle Administration (MVA) Administrator Christine Nizer serves as the Chair of the Driver Behavior Subcommittee and MDOT State Highway Administration Deputy Administrator Teri Soos serves as the Chair of the Roadway Operations Subcommittee.

#### Lieutenant Governor Aruna Miller

Lieutenant Governor, State of Maryland

**Teri Soos, P.E.** Deputy Administrator, Maryland State Highway Administration (SHA)

Christine Nizer Administrator, Maryland Motor Vehicle Administration (MVA)

**Senator Ariana Kelly** District 16, Judicial Proceedings Committee

**Delegate Natalie Ziegler** District 9A, Environment & Transportation Committee

#### **Breck Jeffers**

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### Introduction

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Every day across Maryland, there are approximately 1,000 state employees and contractors working to maintain and improve Maryland's roadways at more than 300 locations across the state.

As of November 15th, we have had 1,105 work zone crashes this year, averaging 3.5 crashes per day. A survey of road crew workers earlier this year from <u>the Associated General Contractors of America</u> found

that nearly half of Maryland roadway workers have experienced a crash in a work zone they have been working in with 42 percent saying that their work zones have been struck five or more times. For workers, it is a matter of when, not if, a worker will experience a vehicle crashing into their work zone.

Over the past five years, with a particular spike following the COVID-19 pandemic, Maryland has seen a spike in roadway fatalities – including in work zones. Furthermore, in March, tragedy struck Maryland when the lives of six roadway workers were taken in a single work zone crash on I-695. This horrific crash, in combination with the spike in roadway fatalities, presented a clear need to implement substantial actions to improve safety in work zones and protect the individuals who work on them.

In April 2023 during Work Zone Safety Awareness Week, Governor Wes Moore announced the creation of the Governor's Work Zone Safety Work Group (WZSWG) and appointed Lieutenant Governor Aruna Miller as Chair of the work group. The WZSWG was tasked with identifying a set of recommendations that would enhance work zone safety and protect roadway workers and law enforcement personnel from harm. Governor Moore called on the group to "…make sure this is not just going to be a task force."

Since Governor Moore directed the establishment of WZSWG, the full group and subgroups have met a total of 18 times between June and November to establish these recommendations.

The focus of the group has centered on changing driver behavior – which accounts for the vast majority of all work zone crashes. To do this, the group sought to create a "culture change" among drivers through a dramatic increase in both enforcement tactics and driver education methods.

The group has worked to incorporate the input of all sectors of the transportation community and input directly from Marylanders to ensure the recommendations are comprehensive and representative of what Marylanders say will help change their behavior in our work zones. Most importantly, it seeks to meet our profound responsibility to the families and loved ones of every Maryland road worker who has lost their life on the job and to the families of all Maryland workers who go to work every day on our roads.

These recommendations are designed to serve as a framework for the Moore-Miller Administration to guide a new and aggressive strategy to improve safety in work zones and save lives. That strategy includes budgetary, regulatory, and legislative action.

## **Governor's Work Zone Safety Work Group Recommendations**

#### Driver Behavior Subcommittee

**Findings:** The Driver Behavior Subcommittee was led by Christine Nizer, Administrator for the Maryland Motor Vehicle Administration. The Subcommittee included representatives from law enforcement, state and industry construction workers, and stakeholders for motorist safety. Subcommittee staff included the MVA's Highway Safety Office, which is dedicated to saving lives and preventing injuries from motor vehicle crashes.

The subcommittee's primary overarching goal was to identify the driving behaviors that contribute to work zone crashes and develop recommendations to change these behaviors. The subcommittee agreed that poor driver behavior included distracted driving, excessive speeding (or failure to reduce speeds in work zones), and impaired driving. While human error is a significant contributor to work zone crashes, the subcommittee also recognized that the general public may not be aware of work zone limits or new Maryland laws, such as the expanded Move Over law. To address this area, several recommendations focus on improving driver education from the rookie driver to older driver safety, and dedicating marketing campaigns on work zone safety. Partnerships with schools and stakeholders are also important to expand state government and industry's reach into diverse demographic groups.

One common theme that resonated throughout the subcommittee's meetings was that permanent solutions will require a general culture shift focused on safety and courtesy – this will necessitate action from all Maryland road users. From giving construction workers and other drivers ample space, to simply remaining calm in traffic, the general public must refrain from aggressive driving, set positive examples for other motorists and be vigilant when driving through work zones. The subcommittee agreed that this recommendation was such an important priority that it was included in the administrative, budgetary, and legislative recommendations.

#### Administrative Recommendations:

- Establish a Culture of Safety and Courtesy: In order to reach the state's goal of zero motor vehicle-related fatalities or serious injuries by 2030, every motorist must acknowledge their responsibility to show respect for other road users, minimize distractions, and encourage others to adopt responsible behaviors. The MVA's Highway Safety Office markets that *Every Crash Is Preventable* and focuses on changing driver behaviors to improve road safety including in work zones.
- **Driver Manual:** From new education for rookie drivers to continuing education for older drivers, the Maryland Driver Manual is a critical resource. The MVA should strengthen language around automated speed enforcement and educate drivers that they may be cited without law enforcement present. The MVA should also expand the distracted driving sections that focus on work zone considerations.
- Education: While the minimum age for a Maryland Provisional Driver's License is 16 years and six months, there is no age limit (young or old) to educate Marylanders. From encouraging schools to teach young passengers to wear a seat belt to ensuring veteran drivers are aware of changes in Maryland law, such as the expanded Move Over law, education shouldn't stop with the state-mandated Driver Education Program. This recommendation may also include changes to the existing curriculum and/or online training resources.
- Mascot for Work Zone Safety Campaign: In partnership with the Maryland State Department of Education, the state should develop a safety mascot with student involvement. This would

allow young Marylanders to associate work zones with the "slow down" message the mascot will deliver.

- Expand education around flashing green-lights: Motorists may recognize orange cones and orange barrels are related to work zones, but may not be aware that flashing green lights on trucks relay a similar message. Along with the Roadway Operations Subcommittee, the state should improve the public's understanding of flashing green lights and its context. In 2022, the Maryland General Assembly enacted legislation that authorizes highway maintenance vehicles to display flashing green lights in work zones. Prior law only permitted amber flashing lights to warn motorists about upcoming work zones.
- Aggressively partner with stakeholders: A central tenet of the Moore-Miller administration is to work in partnership to accomplish shared goals. The Subcommittee recommends that state agencies work in partnership with industry stakeholders and safety advocates to seek and reach every community group. These partnerships may include crash simulations, demonstrations, and so forth.
- **Partnership and common goals between three branches of government:** The legislature, executive agencies, and judiciary along with the public should have common safety goals. The WZSWG is making a major step in the right direction to reach a general consensus that can be used to inform current and future decision makers of real, tangible actions that can save lives.
- Improved notifications and signage entering work zones: Research shows that alerting drivers of an upcoming work zone can reduce speeds by at least 25% and minimizes hard-braking that leads to secondary crashes, injuries, or fatalities. The WZSWG recommends expanding SHA and industry's utilization of Alert Systems, such as safety alerts on navigation apps, to improve driver awareness about upcoming roadwork.

#### **Budgetary Recommendations:**

- Establish a Culture of Safety and Courtesy: In order to reach the state's goal of zero motor vehicle-related fatalities or serious injuries by 2030, every motorist must acknowledge their responsibility to show respect for other road users, minimize distractions, and encourage others to adopt responsible behaviors. The MVA's Highway Safety Office markets that *Every Crash Is Preventable* and focuses on changing driver behaviors to improve road safety.
- Work Zone Safety Marketing:
  - **Billboards:** Many motorists are not aware of work zone penalties. In the event that stricter work zone statutes or regulations are implemented, informational billboards around active work zones could play an important role in driving a cultural change towards safety and courtesy in work zones.
  - **Informational Handouts:** Handouts at public engagement events could complement the WZSWG recommendations.

• **High Profile Leaders Outreach Campaign:** An SHA or MVA's Highway Safety Office safety campaign with recognizable elected officials, business leaders, athletes, and so forth, will improve the public's engagement with highway safety messages. This person(s) would be the "face" of Maryland highway/work zone safety.

#### **Legislative Recommendations:**

- Establish a Culture of Safety and Courtesy: In order to reach the state's goal of zero motor vehicle-related fatalities or serious injuries by 2030, every motorist must acknowledge their responsibility to show respect for other road users, minimize distractions, and encourage others to adopt responsible behaviors. The MVA's Highway Safety Office markets that *Every Crash Is Preventable* and focuses on changing driver behaviors to improve road safety.
- Automated Speed Enforcement: Current Maryland law sets a \$40 citation for work zone speed violations, which is the lowest in the nation, with zero points. The WZSWG recommends increasing the citation fine amount and directing revenues towards road safety priorities.

#### Roadway Operations Subcommittee

**Findings:** The Roadway Operations Subcommittee, led by Teri Soos, P.E., Deputy Administrator for Operations at the Maryland State Highway Administration, was comprised of eleven Marylanders with vast experience and leadership in both the public and private sectors of the transportation industry and law enforcement. The experiences, thoughts, and ideas shared by this group, led to these recommendations.

The subcommittee's primary goal was to identify areas for improvement in the design and operation of work zones and develop recommendations to address those needs. The basis of the subcommittee's recommendations began with the understanding of the major factors that contribute to work zone crashes, which include excessive speeding, distracted driving, and aggressive driving as well as appreciating the general goal of a work zone, which is to communicate with drivers and protect workers. While a driver must pay attention to changes in the road required by a work zone, the subcommittee recognized the need to address risks associated with our fast-moving and complex highway system. To that end, the subcommittee's recommendations address two main themes: preventing crashes from happening in the first place and minimizing the harm caused when they do happen.

To address the prevention of crashes, the subcommittee focused on how a work zone can better communicate to drivers and provide flexibility to account for different types of projects, from mowing operations to large capital projects, on different types of roads, whether rural or urban. For this area, recommendations focus on standards and design and integration of best practices, such as work zone safety reviews, increased presence of Maryland State Police (MSP) and local law enforcement in work zones, and more robust inspections, among others. To address how we can minimize harm, the subcommittee focused on how to better protect workers along our roadways. For this area, recommendations focused on delivering a more robust work zone specific training and certification

program to field staff, Personal Protection Equipment (PPE) to enhance worker visibility, and positive protection, among others.

At the core of the subcommittee's discussions was that to achieve these goals a shift is required in how we support the safety of our fellow Marylanders. From addressing work zone site planning and its operation, to different ways to communicate expectations to drivers, to protecting the people working on our roads, to the enforcement of laws, every aspect of work zone safety is significant. And, from the perspective of the Roadway Operations subcommittee, the investment that partners and stakeholders from both public and private entities make into establishing, building, and sustaining a holistic culture of safety will be critical.

#### Administrative Recommendations:

- Establish a Culture of Safety: Establish and support a culture based on the perspective that safety-related questions, feedback, and innovative ideas can be freely shared, discussed, and potentially implemented within state agencies and the contracting community. Develop a platform for broader questions, ideas, and feedback can be received and incorporated into current partnering structures for sharing and responding.
- **Training and Certification:** Update current training to ensure the most up-to-date standards, guidance, and best practices are consistently being implemented statewide, by both public and private entities. Frontline workers, as well as drivers of Truck-mounted Attenuators (TMA), would be trained and certified to ensure the safest work zone possible.
- **Buffer Lanes:** Review and update warrants and criteria to integrate national best practices for when and how buffer spaces can be implemented in a work zone, on a case-by-case basis. Criteria should take into account the project type, the location, and other contextual considerations.
- Worker Protection: Propose requiring anyone performing state-approved work on an interstate to wear ANSI Class III leg gaiters or pants. Update guidance to take into account project context, such as temperature and time of day. Additionally, identify and implement currently available Personal Protection Equipment (PPE) to ensure maximum visibility as practicable of our co-workers in the field.
- **Temporary Traffic Control Inspection Program:** Review and update current SHA's Work Zone Inspection program to include guidance with more focus on Maintenance of Traffic (MOT) inspection protocols and criteria. Additionally, document new resources needed to sustainably support the improved process and requirement for improved tools.
- Maintenance of Traffic (MOT) Reviews at Project Design: Incorporate into the current Project Design and Delivery process a specific Action Item where the proposed Work Zone design and Maintenance of Traffic configurations are reviewed by project stakeholders for

appropriateness and feasibility.

- **Contractual Requirements and Incentives for safe practices:** Develop an incentive structure for safe practices, with associated standards and contractual language. MDOT and its Industry partners would determine goals, criteria, and contract language to integrate into current practices.
- Annual Work Zone Safety Summit: Establish commitment with partners that a work zone safety summit will be held annually. Each summit should have a specific theme and core audience as well as include introductions to innovations or other technologies not currently in use.
- **Optimize Use of Current Resources:** Inventory current safety-related funding and grant opportunities and develop a plan to ensure they are being utilized.

#### **Budgetary Recommendations:**

- Additional Maryland State Police presence in work zones: Support additional funding for the Maryland State Police to ensure additional troopers are available for work zone enforcement operations. In addition, identify potential Memorandums of Understanding with local law enforcement agencies to provide additional enforcement presence at work zones.
- **Dedicated MOT inspectors and Independent Audits:** Authorize additional funding dedicated to Work Zone Maintenance of Traffic (MOT) inspection and auditing resources.
- **Funding Opportunities for Equipment or Innovations:** Authorize funding for the purpose of assisting entities to procure, research, test, and/or pilot new technologies or equipment that would benefit many, while reducing the risk to both public and private entities.

#### **Legislative Recommendations:**

- Automated Speed Enforcement (ASE):
  - Expand current law to allow flexibility with different types of technology and deployment strategies such as multiple ASE or point-to-point enforcement;
  - Authorize use of unmanned cameras;
  - Authorize counties to establish work zone ASE programs to ensure additional workers across the state have the same level of protections on state roadways.
- Increase Fine Structure for Work Zone Violations: Amend current law to significantly increase the citation fine. The fine should either match a ticket issued by a law enforcement officer during a live traffic stop, or the fine for passing a school bus with its stop sign flashing.
- Worker Memorial Site: Authorize the establishment of a site to honor and remember all of the workers who have been killed doing their jobs in Maryland highway work zones.

## **Appendix: Work Zone Safety Survey Responses**

On September 21st, 2023, the leadership of the Work Zone Safety Work Group announced a call to action for the public to provide their input on work zone safety recommendations. The survey received more than 2,200 responses, with 66 percent of Marylanders stating they were more likely to slow down if work zone speed camera fines were increased and 69 percent of Marylanders supporting the expanded deployment of automated speed enforcement cameras to protect roadway workers at additional work zones in Maryland. The complete results of the survey are available <u>here</u>. Written responses provided by survey respondents, are available <u>here</u>.