



November 20, 2023

VIA ELECTRONIC SUBMISSION

Hon. Shailen Bhatt
Administrator
Federal Highway Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Work Zone Safety and Mobility and Temporary Traffic Control Devices (Docket No. FHWA-2022-0017).

Dear Administrator Bhatt:

The American Road & Transportation Builders Association (ARTBA) on behalf of our more than 8,000 members of the transportation construction industry respectfully submits the following comments on the Federal Highway Administration (FHWA)'s proposed rule titled, "Work Zone Safety and Mobility and Temporary Traffic Control Devices." ARTBA is pleased with FHWA's proposal as it would make significant improvements to protect the lives and health of roadway users, and workers who build, repair, and maintain our nation's roads and bridges. The rule would support the U.S. Department of Transportation's aspiration of zero traffic deaths and is directly in line with the National Roadway Safety Strategy (NRSS) particularly Principle 4—which addresses important infrastructure improvements and countermeasures. While generally the proposed rule would significantly improve roadway work zone safety, ARTBA respectfully offers the following suggestions that would further enhance the plan's effectiveness.

Background

ARTBA's highest priority is the safety and welfare of roadway workers and users. Even one work zone injury is too much for our members. According to the Bureau of Labor Statistics (BLS), roadway construction is one of the most hazardous occupations in the United States. Each year, tens-of-thousands of workers, motorists, vehicle occupants, cyclists, and pedestrians are injured or killed in roadway work zones.¹ Incidents at construction sites can increase the risks of

¹ According to FHWA, in 2020 117 workers at road construction sites experienced fatal occupational injuries; 62 involved a worker on foot being struck by a motor vehicle. Also, in 2020 there were 857 fatalities in 774 fatal work zone crashes. See 88 Fed. Reg. 64836 at 64837.



additional vehicular or worker accidents, and roadway congestion for motorists.

A provision of the “Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users” (SAFETEA-LU), was to increase the awareness of, and attention to, the importance of work zone traffic control and safety devices and to ensure the availability of funds for these provisions.² FHWA’s implementing regulations concerning work zone safety and mobility, and temporary traffic control devices were last amended in 2004 (Subpart J) and 2006 (Subpart K).³ ARTBA and its members have often cited concerns that since finalization, the regulations have fallen short of their intended outcome to increase safety. The regulations required state departments of transportation (DOTs) to develop and adopt work zone safety policies, conduct work zone impact analyses, and develop transportation management plans (TMP) for the purpose of increasing safety.⁴ This latest regulatory update would address various shortcomings with the existing rules by re-emphasizing elements of work zone safety that remain unaddressed. For example, the rule would require DOTs to define the safety and mobility performance measures they will monitor and report.⁵ It modifies the current requirement for bi-annual work zone process reviews and instead would mandate work zone programmatic reviews performed every five years.⁶ The rule revises the definition of what is considered a “significant project” as well as modifying the language describing the components for a TMP.⁷

ARTBA’s Comments on the Rule

- I. FHWA should provide additional clarity on what is meant by “predefined thresholds” required in state policies.

The proposed rule would require states to implement a policy for systematic consideration and management of work zone impacts “that exceed a preestablished crash rate in the work zone” as well as worker fatality and injury rates, queues, speeds, etc. when they meet “predefined thresholds.”⁸ FHWA needs to provide further guidance on what is meant by “predefined threshold” so they are standardized, can be compared between states, and so meaningful national statistics can be developed.

² Pub.L. 109–59; 119 Stat. 1144.

³ Federal Register, Vol 88, No. 181, p. 64836

⁴ *Id.*, pgs. p. 64837- p. 64838

⁵ 88 Fed. Reg. 64836 at 64838.

⁶ *Id.*

⁷ *Id.*

⁸ 88 Fed. Reg. 64836 at 64843.



Furthermore, as the states develop and manage performance measures and gather information on fatal and injury crashes occurring in a work zone, this information should be reported to FHWA and made available in an aggregated format to the public to allow better monitoring and enable others outside of state officials to assist with interventions to reduce those numbers.

II. Regulations related to safety training should be integrated, and not segregate worker safety needs.

FHWA's proposal would require personnel involved in all phases of transportation construction projects to obtain training appropriate to the job decisions they make.⁹ ARTBA agrees that ongoing training is an integral component to maintaining safe work sites and supports these requirements. However, to be consistent with other sections of this regulation, the training requirements in this section should include the topic of worker safety among the mandatory list for such personnel involved with work zone management. FHWA's safety training approach should be comprehensive with all aspects of work zone management, and not artificially segregate traffic control requirements from worker safety needs. ARTBA encourages FHWA to take a wholistic approach to project design and management, with safety at the forefront.

III. FHWA should provide additional specificity as to how it will determine whether Plans, Specifications, & Estimates (PS&Es) are adequate.

The transportation construction industry has long been concerned about bad actors who sacrifice safety to increase profit margins. As such, clearer guidance by DOTs could help "level the playing field" to ensure adequate temporary traffic control measures are implemented. Unfortunately, not much has changed since the original adoption of FHWA's Subpart J. States have not exercised more aggressive oversight to review bids and consider temporary traffic control and safety separate and apart from the remainder of the bid despite industry calls to do so. Increased enforcement by FHWA combined with state vigilance to verify project proponents are upholding required safety measures would ensure contracts are awarded to those who have adequate plans and dedicated funds to conduct the project in a safe manner. This provision should include more specific guidance as to how roadway owners might determine if the PS&Es are inadequate, and criteria for compliance with this provision.

IV. The rule must accurately align positive protection cost estimates with benefits to worker safety.

⁹ *Id.* at 64843.



The increased use of positive protective measures between workers and motorists is an important strategy to reduce the number of deaths, injuries, accidents, and delays. The need to act quickly and decisively is supported by U.S. Department of Transportation statistics estimating that in 2021, there were 106,000 work zone-related crashes resulting in 42,000 injuries and 956 fatalities. Over the past ten years, fatalities resulting from work zone-related crashes have increased a staggering 62 percent.

ARTBA agrees with the criteria and considerations proposed by FHWA, but in the past base assumptions used in cost-benefit studies have been skewed so that the use of positive protective measures was deemed too high to merit their deployment, when in fact, positive protection may have been a good alternative. For example, a study released by FHWA, presumptively commissioned to determine the cost-benefit of implementing Section 1405 of the Moving Ahead for Progress in the 21st Century Act (“MAP-21”), relied on data that estimated the average size of a work zone on an NHS bridge would be four miles and require three miles of concrete barrier. Other types of positive separation were not considered. This calculation has no factual basis as only 24 bridges in the U.S., out of 614,000 highway bridges (or .0039 percent), are four miles long or longer.¹⁰¹¹ As a result of this premise, the cost to use positive separation was grossly over estimated. ARTBA therefore encourages FHWA to revisit the data pertaining to positive protection and to incorporate measures into the final rule that are reflective of the benefits that these safety measures provide.

V. FHWA should not remove requirements that positive protection devices meet crashworthiness evaluation criteria.

ARTBA is pleased to see that FHWA has proposed language like that initially offered in the 2006 Subpart K NPRM and MAP-21, which would require the use of positive protective devices in work zones with high anticipated operating speeds unless an engineering study otherwise determined that these devices were not necessary. Providing workers with additional protection in situations where there is no means of escape is crucial to increase work zone safety.¹² FHWA’s reversal of the presumption of when an engineering study should be provided is a major step forward to ensuring positive protection is used in dangerous situations. ARTBA is concerned, however, with FHWA’s removal of the qualifier that positive protection devices

¹⁰ National Highway Traffic Safety Administration data compiled by the National Work Zone Safety Information Clearinghouse, available at <https://workzonesafety.org/work-zone-data/>.

¹¹ Understanding Federal Highway Administration (FHWA), available at <https://www.transportation.gov/transition/FHWA/Understanding-FHWA>; List of longest bridges, available at https://en.wikipedia.org/wiki/List_of_longest_bridges.

¹² 88 Fed. Reg. 64841



meet crashworthiness evaluation criteria. This criterion ensures the various mechanisms used are tested for their appropriateness to offer the necessary protections at relevant speeds. FHWA should retain this language so that workers can be assured that devices meet the highest standards for safety and protectiveness.

ARTBA further recommends that FHWA consider the following, which is part of the association's *Positive Protection Policy Statement*. Such suggestions could be incorporated into the relevant sections within Subpart K:¹³

When serious hazards are foreseen or encountered on a project, positive protection should be specified and an associated pay item provided, unless an agency representative determines the same to be impractical or unnecessary for the project under applicable standards, directives, guidance, policy, or other written agency position (collectively referred to as "Agency Standards"). Such a determination, if made, should be noted in applicable specifications. Agency Standards should be appropriately updated to reflect this policy and when it is impractical or unnecessary. Decisions regarding deployment of positive protective measures should be documented, made available to affected parties, and subject to revision based on site conditions.

Recognized serious hazards include:

- 1. Work zones that provide workers no means of escape from motorized traffic such as tunnels or bridges;*
- 2. Long duration work zones (e.g., two weeks or more) where workers are exposed significant motorized traffic;*
- 3. Projects with anticipated operating speeds of 45 mph or greater, especially when combined with high traffic volumes;*
- 4. Work operations that place workers close to travel lanes open to traffic;*
- 5. Roadside hazards, such as dangerous drop-offs or unfinished bridge decks, that will remain in place 24 hours longer; and*
- 6. Any other situation not specifically outlined above which merits the use of positive protection.*

These situations listed in the ARTBA policy match criteria offered in the Manual on Uniform Traffic Control Devices and the ANSI/ASSP Standard A10.47.

In addition to an affirmative presumption on the use of positive protection in dangerous situations, ARTBA's policy encourages state DOTs to update their plans, specifications, applicable standards, directives, guidance, policy, etc. to normalize when, how and where such

¹³ See <https://www.artba.org/government-affairs/policy-forums/>



separation should be used, thus giving clearer guidance to designers and traffic engineers. Having this clarity would ensure project specifications and guidance can be developed more rapidly, without having to begin anew for each work zone. It is important that determinations based on such studies be documented and available for review. ARTBA strongly supports FHWA's proposed language as found in §630.1106(b), "The person conducting the engineering study shall document such study." This ensures openness and opportunity for review.

It is helpful that FHWA expanded the list of situations where positive protection devices offer the highest potential for increased safety of roadway workers. While many envision a concrete barrier when positive protection is noted, the final rule should make clear other effective devices, include mobile barriers, moveable barriers, steel barriers, truck-mounted attenuators, etc. In providing such examples, designers and engineers would be prompted to consider positive protection in a broader context, beyond concrete barriers.

Conclusion

ARTBA appreciates the opportunity to comment on FHWA's proposed rule and asks that FHWA consider the above additional modifications. With these additions, we believe the rule will go far towards implementing the U.S. Department of Transportation's National Roadway Safety Strategy, taking a comprehensive, systematic approach to reducing the unnecessary deaths and injuries that occur daily on America's roadways. ARTBA has been a vocal proponent of FHWA's work zone safety strategic plan being incorporated as the sixth pillar in the National Roadway Safety Strategy. As such, the association reiterates its previous recommendation to ensure roadway and work zone safety strategies are interconnected.¹⁴

If you have any questions or would like to discuss this further please contact Brad Sant, senior vice president for safety and training by email at bsant@artba.org or Prianka Sharma, vice president and counsel for regulatory affairs by email at psharma@artba.org.

Sincerely,

Dave Bauer
President & CEO
American Road & Transportation Builders Association

¹⁴ See comments from the Transportation Construction Coalition attached and incorporated.



We're Building A
Better America!

American Road & Transportation Builders Association (co-chair) ■ Associated General Contractors of America (co-chair) ■ American Coal Ash Association ■ American Concrete Pavement Association ■ American Concrete Pipe Association ■ American Council of Engineering Companies ■ American Subcontractors Association ■ American Iron and Steel Institute ■ American Society of Civil Engineers ■ American Traffic Safety Services Association ■ Asphalt Emulsion Manufacturers Association ■ Asphalt Recycling & Reclaiming Association ■ Associated Equipment Distributors ■ Association of Equipment Manufacturers ■ Concrete Reinforcing Steel Institute ■ International Slurry Surfacing Association ■ International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers ■ International Union of Operating Engineers ■ Institute of Makers of Explosives ■ Laborers-Employers Cooperation and Education Trust ■ Laborers' International Union of North America ■ National Asphalt Pavement Association ■ National Association of Surety Bond Producers ■ National Electrical Contractors Association ■ National Ready Mixed Concrete Association ■ National Steel Bridge Alliance ■ National Stone, Sand and Gravel Association ■ National Utility Contractors Association ■ Portland Cement Association ■ Precast/Prestressed Concrete Institute ■ Surety and Fidelity Association of America ■ The Road Information Program ■ United Brotherhood of Carpenters and Joiners of America

May 4, 2022

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Dear Secretary Buttigieg:

The Infrastructure Investment and Jobs Act (IIJA) represents an opportunity to revitalize the U.S. surface transportation infrastructure network and enhance the lives of all Americans. The national associations and labor unions of the Transportation Construction Coalition (TCC) are eager to seize this opportunity.

One of the key priorities of this landmark legislation is its emphasis on safety and particularly the safety of roadway construction workers.

Delivering on the promises of the IIJA is a responsibility our industry embraces, and our members have no greater priority than protecting their workforce and the traveling public. It must be emphasized the men and women who will make the promises of the IIJA a reality are not discretionary system users—they are required by their jobs to work feet from traffic that can be moving 65 miles per hour or higher.

We support the provisions of the IIJA that seek to protect Vulnerable Road Users (VRUs) and are gratified the law specifically cites construction workers among the categories of VRUs. We are concerned, however, that the U.S. Department of Transportation's (USDOT) public outreach and implementation efforts in this area have focused extensively on pedestrians, bicyclists, and persons with disabilities, while omitting construction workers from written materials and presentations about its VRU efforts.

All fatalities and injuries on the nation's surface transportation infrastructure network are equally tragic, but strategies to protect construction workers are distinct from those of other VRUs. As USDOT moves forward, we urge the following steps to help ensure the safety of the nation's roadway construction workers:

- Embrace the Federal Highway Administration's work zone safety strategic plan as a sixth pillar of your National Roadway Safety Strategy.
- Include roadway construction workers when identifying VRUs (e.g., cyclists, persons with disabilities, pedestrians, etc.).
- Disaggregate construction workers from National Highway Traffic Safety Administration reports on pedestrian injuries and fatalities and include data on both categories of VRUs.

- Create specific targets and plans to better protect roadway construction workers when formulating measures to reduce the number of pedestrian deaths and injuries.

We would welcome the opportunity to meet with you or members of your team to discuss how we can move forward together on this important matter.

Sincerely,

The Transportation Construction Coalition