

Federal Highway Administration

[Docket No. FHWA-2021-0011]

Improving Road Safety for All Users on Federal-Aid Projects

AGENCY: Federal Highway Administration (FHWA), U.S. Department of Transportation (DOT).

ACTION: Notice; request for information (RFI).

SUMMARY: Our priority at DOT and FHWA is to make our transportation system safe for all people. Right now, we face a crisis on our roadways. In 2021, an estimated 42,915 people across the Nation – 117 people per day – lost their lives in motor vehicle crashes. This represents the highest number of fatalities since 2005. Every transportation project, whether the project’s purpose is safety-related or not, is an opportunity to improve safety. The street network including on-road and off-road facilities should provide safe, equitable, accessible, and comfortable transportation for everyone. Part of the work that DOT proposes to significantly reduce fatalities and serious injuries on our Nation’s highways, roads, and streets is to develop a National Roadway Safety Strategy (NRSS). The NRSS, adopts the Safe System Approach principles to guide our safety actions, and identifies critical and significant actions DOT will take now in pursuit of five core objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. As part of the actions to address the national crisis of fatalities and serious injuries on our roadways, FHWA requests comments on what strategies, programmatic adjustments or regulatory changes could help improve safety on U.S. highways. Requests for comments include but are not limited to whether changes to the FHWA

Design Standards regulation or other FHWA regulations are needed to facilitate the development of Complete Streets and Complete Networks that serve all users, how the safety performance of Federal-aid projects should be assessed, how funding could be optimized for safety improvements, and how to include measures and collection of more data that can improve safety performance across Federal-aid projects.

DATES: Comments must be received on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: To ensure that you do not duplicate your docket submissions, please submit comments by only one of the following means:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov> and follow the online instructions for submitting comments.
- *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue S.E., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001;
- *Hand Delivery:* West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue S.E., Washington, DC 20590-0001, between 9 a.m. and 5 p.m. e.t., Monday through Friday, except Federal holidays. The telephone number is (202) 366-9329;
- *Instructions:* You must include the agency name and docket number or the Regulatory Identification Number (RIN) for the rulemaking at the beginning of your comments. All comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided.

FOR FURTHER INFORMATION CONTACT: For questions about this notice, contact: Phillip Bobitz, FHWA Office of Safety Technologies, (717) 221-4574,

Phillip.Bobitz@dot.gov, or Elizabeth Hilton, Office of Preconstruction, Construction and Pavements, (202) 924-8618, Elizabeth.Hilton@dot.gov; for legal questions contact Lev Gabrilovich, FHWA Office of the Chief Counsel, (202) 366-3813, Lev.Gabrilovich@dot.gov. FHWA is located at 1200 New Jersey Avenue, S.E., Washington, DC 20590-0001. Office hours are from 8:00 a.m. to 4:30 p.m. e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access and Filing

A copy of this notice, all comments received on this notice, and all background material may be viewed online at <http://www.regulations.gov> using the docket number listed above. Electronic retrieval help and guidelines are also available at <http://www.regulations.gov>. An electronic copy of this document also may be downloaded from the Office of the Federal Register's Website at www.FederalRegister.gov and the Government Publishing Office's Website at www.GovInfo.gov.

Background

In 2021, an estimated 42,915 people across the Nation – 117 people per day – lost their lives in motor vehicle crashes. This represents the highest number of fatalities since 2005 and is a result of increases on rural Interstates and urban roads, among younger and older drivers, pedestrians and bicyclists, and in other crash types.¹ In January, DOT

¹ Newly Released Estimates Show Traffic Fatalities Reached a 16-year High in 2021
<https://www.nhtsa.gov/press-releases/early-estimate-2021-traffic-fatalities#:~:text=The%20National%20Highway%20Traffic%20Safety,the%2038%2C824%20fatalities%20in%202020.>

unveiled the NRSS.² The NRSS commits DOT and FHWA to respond to the current crisis in traffic fatalities by “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” in pursuit of the goal of achieving zero highway deaths. To achieve this goal, the Department has adopted the “Safe System Approach,” which acknowledges both human mistakes and human vulnerability, and designs a redundant system to protect everyone by preventing crashes and ensuring that if they do occur, they do not result in serious injury or death. The Department will use a five-pronged model to address safety: safer people, safer roads, safer vehicles, safer speeds and post-crash care. Under the NRSS, FHWA committed to launching a Complete Streets initiative, to implement policies that prioritize the safety of all users in transportation network planning, design, construction, and operations. An important area of focus for the NRSS is the disproportionate, adverse safety impacts that affect certain groups on our roadways. Fatalities due to traffic crashes disproportionately affect communities of color, people living in rural areas, people with disabilities, and older adults. For example, fatalities among Black people increased by 23 percent between 2019 and 2020 compared to an overall increase of 7.2 percent.³ People who are American Indian and Alaska Native have roadway fatality rates more than double the national rate on a per population basis.⁴ Although men consistently represent more than 70 percent of drivers involved in fatal crashes, when comparable crashes are analyzed and risk taking differences are accounted for, studies have shown that motor vehicle

² DOT National Roadway Safety Strategy, January 2022, available at <https://www.transportation.gov/sites/dot.gov/files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf>

³ NHTSA Early Estimates of Motor Vehicle Traffic Fatalities And Fatality Rate by Sub-Categories in 2020, June 2021, available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813118>.

⁴ NHTSA Fatality Analysis Reporting System (FARS) 2018 Final File; Population – Census Bureau

fatality risk is, on average, 17 percent higher for a female than for a male of the same age.⁵ The disproportionate safety impacts are especially true in underserved communities, where people face heightened exposure to risk. The 40 percent of counties with the highest poverty rates in 2019 experienced a fatality rate 35 percent higher than the national average on a per population basis.⁶

Traffic deaths among people who walk or bike have also become a higher proportion of fatalities. This highlights the need for a Safe System approach that not only addresses safety on roadways but also the multimodal aspect of how our infrastructure works. More information can be found about the specific commitments of the NRSS at <https://www.transportation.gov/NRSS>.

Funding

The Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (Pub. L. 117-58, Nov. 15, 2021), provides a historic opportunity for FHWA to work closely with State, local and Tribal partners to put increased transportation funding to work incorporating safety for all users into every federally-funded road project. FHWA encourages States and other funding recipients to prioritize safety in all Federal highway investments and in all appropriate projects, using relevant Federal-aid funding. This notice and the actions that follow are part of the solution in achieving the vision of zero fatalities.

⁵ NHTSA Injury Vulnerability and Effectiveness of Occupant Protection Technologies for Older Occupants and Women, May 2013, available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811766>

⁶ FARS 2019 data publication, 1st release; Poverty rates and Population data by County, U.S. Census. The fatality rate for the top 40 percent of counties by poverty rate was 14.9 per 100,000 population versus 11.0 for the country.

The FHWA provides financial aid (Federal-aid) to States for the improvement of Federal-aid highways through the Federal-aid highway program (FAHP). A Federal-aid highway is a public highway eligible for assistance under Chapter 1, of title 23, United States Code (U.S.C.), other than a highway functionally classified as a local road or rural minor collector (23 U.S.C. 101(a)(6)).

Between 2016 and 2020, 85 percent⁷ of all public highway fatalities occurred on Federal-aid highways, which represent 25 percent⁸ of the entire public highway network. The Highway Safety Improvement Program (HSIP), legislated under 23 U.S.C. 148, is the core funding program administered by FHWA under FAHP for safety, and HSIP funds are eligible for use on all public highways. State, local, and Tribal agencies mainly use HSIP funds when addressing safety; however, this dedicated source of safety funds is relatively small compared to other Federal-aid funding programs, representing only about 6 percent of the total FAHP.⁹ FHWA recognizes that the funding available through HSIP alone will not achieve the goal of zero fatalities on the Nation’s highways and is seeking comments through this notice on how to include measures that improve safety performance across Federal-aid projects. Examples of other FHWA formula funds that can be used for safety improvements include the National Highway Performance Program, and the Surface Transportation Block Grant program, which includes the Transportation Alternatives Set Aside funds which authorize funding for programs and

⁷ NHTSA Fatality Analysis Reporting System (FARS) 2016-2019 Final and 2020 Annual Report File (ARF) Fatalities in motor vehicle traffic crashes by year and Federal highway status. Federal-aid highways include all Land Use and Functional System attributes in FARS except: Land Use attribute 1 (rural) and Functional System attributes 06 (minor collector) and 07 (local), Land Use attribute 2 (Urban) and Functional System attribute 07 (local), and unknowns from Land Use and Functional System.

⁸ FHWA Highway Statistics 2019 (<https://www.fhwa.dot.gov/policyinformation/statistics/2019/hm16.cfm>)

⁹ Federal-aid apportioned programs under the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117-58, also known as the “Bipartisan Infrastructure Law”) (<https://www.fhwa.dot.gov/bipartisan-infrastructure-law/funding.cfm>).

projects including Safe Routes to Schools projects. The FAHP funds also may be used for any pedestrian and bicycle facility, whether on or off-road.

Regulations

States that receive Federal-aid under the FAHP for their Federal-aid highways must adhere to applicable Federal statutes and regulations. Among the requirements included in these statutes and regulations are requirements pertaining to the consideration of safety. For example, States and metropolitan planning organizations (MPO) establish and implement planning processes that provide for the consideration and implementation of projects, strategies, and services that will address the safety of the transportation system for motorized and nonmotorized users. See 23 U.S.C. 134 and 135. In addition, 23 U.S.C. 109 requires that each Federal-aid project provide facilities that are conducive to safety and specifies that the Secretary must consider the American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual (HSM) in developing design criteria. See 23 U.S.C. 109(a)(1) and 109(c)(2)(D). This statute also requires that the design of a highway on the National Highway System (NHS), other than a highway also on the Interstate System, consider access for other modes of transportation. 23 U.S.C. 109(c)(1)(D). The FHWA's Design Standards regulations codified in Part 625 of Title 23 of the Code of Federal Regulations (CFR) (23 CFR Part 625 or Part 625) note in 23 CFR 625.2(c) that an important goal of FHWA is to provide the highest practical and feasible level of safety for people and property associated with the Nation's highway transportation systems.

Safety Beyond Roadways

Starting with the enactment of the Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102-240), Federal transportation laws and policies have placed increasing emphasis on improving the safety and comfort of pedestrian and bicycle travel. The DOT and FHWA have sought to provide travelers with a choice of transportation modes and increase the percentage of trips made by nonmotorized modes of travel. Statutory changes have established broad eligibility of bicycle and pedestrian facilities for Federal-aid funding. See 23 U.S.C. 133(h), 206, 208, and 217. However, an increasing portion of highway fatalities are people outside of automobiles, primarily pedestrians, motorcyclists, and bicyclists, and in 2021 these modes made up more than one-third of all traffic fatalities.¹⁰

The House Report accompanying the DOT, Housing and Urban Development, and Related Agencies Appropriations Bill for 2021 requested a report from FHWA reviewing its current policies, rules, and procedures to determine their impact on safety for road users, particularly those outside of automobiles. FHWA delivered this report, “Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges,” in March 2022.¹¹ Potential solutions proposed in the report include the issuance of guidance to help ensure that FHWA design standards are interpreted and applied to better consider safety for all users, and the identification of methods to increase the assessment of safety outcomes across all types of Federal-aid projects to improve safety performance. Specific actions under these solutions include requesting information from stakeholders.

¹⁰ NHTSA Early Estimates of Motor Vehicle Traffic Fatalities And Fatality Rate by Sub-Categories in 2021, May 2022, available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298>

¹¹ [Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges \(dot.gov\)](#)

Accordingly, FHWA requests comments on two specific areas of the FAHP: (1) the design of roads on the NHS; and (2) how the safety performance of Federal-aid projects should be assessed and how to include measures that improve safety performance across Federal-aid projects.

Design Standards for the NHS

The FHWA requests information to inform efforts to develop road designs for all users that can reduce motor vehicle-related crashes, pedestrian and bicyclist risk, and encourage walking and bicycling for transportation by incorporating well-designed multimodal infrastructure. The BIL defines “Complete Streets standards or policies” as those which “ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.”¹² Complete Streets prioritize safety, comfort, and connectivity to destinations for people who use the surface transportation network and reduce motor vehicle-related crashes and pedestrian and bicyclist risk by incorporating well-designed multimodal infrastructure. They also can promote walking and bicycling by providing safer places to achieve physical activity through transportation.¹³ Many State and local governments have adopted Complete Streets policies, ordinances, or laws to integrate people and place in the planning, design, construction, operation, and maintenance of our transportation networks.¹⁴

¹² U.S. Congress. “[H.R.3684 - Infrastructure Investment and Jobs Act](#).”, Section 11206(a), Accessed November 2021.

¹³ Centers for Disease Control and Prevention Community Guide to Preventative Services, accessed December 23, 2021, available at <https://www.thecommunityguide.org/resources/one-pager-built-environment-approaches-increase-physical-activity>.

¹⁴ Smart Growth America Website, accessed on November 3, 2021, available at <https://smartgrowthamerica.org/program/national-complete-streets-coalition/>

The FHWA Design Standards regulations in Part 625 govern design standards and standard specifications applicable to new construction, reconstruction, resurfacing (except for maintenance resurfacing), restoration, and rehabilitation projects on the NHS. The NHS consists of roadways important to the Nation's economy, defense, and mobility, including all Interstate highways, other principal arterials, as well as other highways and city streets. Part 625 impacts the design of city streets that are on the NHS, regardless of ownership or project funding.¹⁵ Part 625 incorporates several publications by reference, including AASHTO publication, *A Policy on Geometric Design Highways and Streets* (Green Book). The Green Book provides a range of acceptable values for geometric features, allowing for flexibility that best suits the context and vision of the community while satisfying the purpose for the project and needs of all users. When the design standards in Part 625 are not met, FHWA, or a State department of transportation (State DOT) that has assumed the responsibility through a Stewardship and Oversight agreement, may consider design exceptions.

Traffic Control Device standards are not covered by Part 625, but by the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD). The MUTCD is incorporated by reference in 23 CFR 655, and is not a design standard. A Notice of Proposed Amendments to the MUTCD was issued for public comment¹⁶ as part of a rulemaking. Development of a Final Rule to issue a new edition of the MUTCD is underway and this request is not seeking comments on the MUTCD.

Data-Driven Safety Assessments

¹⁵ FHWA Website on the NHS, including maps in each State, accessed on November 3, 2021, available at https://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/.

¹⁶ 85 FR 80898, December 14, 2020.

Many State DOTs have developed tools, policies, and procedures to assess and analyze the safety performance of their existing facilities and projects, and to determine project alternatives and countermeasures that yield optimal safety performance, thus contributing to reduced fatalities and serious injuries on their transportation systems. These tools, policies and procedures include the use of Data-Driven Safety Analysis (DDSA) techniques that inform State DOTs' and local agencies' decisionmaking and target investments that improve safety and equity. DDSA is the application of the latest evidence-based tools and approaches to assess an existing or proposed transportation facility's future safety performance, including the use of AASHTO's HSM.¹⁷

Accordingly, safety is a required consideration in the development of a highway project for funding under the FAHP. Also, FHWA has taken various steps to further the consideration of safety in project development. However, in the wake of the recent trends related to fatalities and serious injuries on our roadways, more needs to be done. Therefore, FHWA is interested in hearing from the public on a range of questions related to whether changes to Part 625 or other regulations codified in Title 23 of the CFR are needed, how the safety performance of Federal-aid projects should be assessed, and how to include measures that improve safety performance across Federal-aid projects. The FHWA may use the information gathered through the public comments to consider future rulemaking options related to the design standards for projects on the NHS or for safety performance assessments on Federal-aid projects, or to develop resources (i.e. case studies, informational briefs, etc.) that can assist agencies with improving safety for all users when developing projects regardless of funding source.

¹⁷ AASHTO HSM, 1st ed. Washington, DC: AASHTO, 2010, is available at <http://www.highwaysafetymanual.org/Pages/default.aspx>.

For purposes of this RFI and as referenced throughout the questions, a safety performance assessment involves the application of analytical tools and techniques for quantifying the potential effects of transportation investment decisions in terms of crash frequency and severity.

Request for Comments and Information

The FHWA requests comments on the following questions. Please indicate in your written comments which question(s) you are answering.

Improving Road Safety for All Users

1. What steps are being taken by your agency (if you are commenting on behalf of an agency) or an agency you are familiar with to improve safety for all roadway users, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles? How are equity and demographic data considered?
2. For agencies that have adopted Complete Streets standards or policies (or similar policies), what benefits does your agency see in developing Complete Streets? Provide examples and citations to relevant regulations, policies, procedures, performance measures, or other materials where possible.
3. For agencies that have adopted Complete Streets standards or policies (or similar policies), what challenges has your agency experienced when implementing your Complete Streets policy?
4. For agencies that have adopted Complete Streets standards or policies (or similar policies), but have not adopted an alternative classification system, how do you identify the appropriate context(s) for the application of a complete streets design

model? Under what types of circumstances have you found the development of Complete Streets to be inappropriate?

5. To inform decisions on street design, some agencies¹⁸ have adopted modal hierarchies, or alternative street classification systems, that prioritize pedestrians, bicyclists, or others on certain street types based on context.¹⁹ Has your agency incorporated such a hierarchy, or classification into agency policies, and if so, what benefits have been realized? Please provide a link to your documents for reference.

Design Standards for the NHS

6. How could the FHWA regulations governing Design Standards for Highways (Part 625) be revised to consistently support prioritization of the safety of all users across all project types?
7. What changes to other FHWA regulations codified at Title 23, CFR are needed to equitably improve safety for people of all ages and abilities who use urban and suburban streets?
8. What changes to other FHWA regulations codified at Title 23, CFR are needed to equitably improve safety for people of all ages and abilities who use rural roadways, including in rural towns?
9. What, if any, elements of design are not adequately covered by the existing design standards in Part 625?

¹⁸ Example: Portland, Oregon, uses the prioritization of modes shown on p. 4 at <https://www.portland.gov/sites/default/files/2020-05/tsp-101-two-pager-03-21-2019.pdf>.

¹⁹ Example: Florida DOT Context Classification Guide, Figure 15. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/fdot-context-classification.pdf?sfvrsn=12be90da_4.

10. What specific provisions of Part 625 present an obstacle to equitably improving safety for people outside of vehicles, and why?
11. Are there additional documents that FHWA should incorporate by reference in Part 625 to better facilitate the context-sensitive design of streets that safely serve all users? Please identify the documents and describe why they should be referenced in the regulation.
12. Does Part 625 create any impediments to developing projects that meet the goals of your agency? If so, what goals are impeded, what are the impediments, and how would you suggest the regulation be revised?

Safety Performance Assessment Applicability

13. For which current projects (i.e., by improvement type, funding program/level, facility type, etc.) are safety performance assessments or analyses conducted in your State?
14. To what extent is the safety performance assessed on non-HSIP funded projects?
15. What policies or procedures on conducting project-specific safety performance assessments and analyses does your agency have? Provide examples and citations to relevant laws, regulations, policies, procedures, or other materials where possible.

Conducting a Safety Performance Assessment

16. What methods, tools, and types of safety performance assessments are used to analyze project-specific safety performance? What are the minimum data and analysis requirements that should be considered on how to conduct a safety performance assessment?

17. With whom do States engage (i.e. counties, cities, MPOs, rural planning organizations, and other political subdivisions) when assessing safety performance? How do States engage the public or use the safety performance assessment results to communicate to the public using inclusive and representative processes?
18. How are safety performance assessments integrated into the overall project development cycle? At which stage(s) of the project development process (e.g. planning and programming, environmental analysis, design, operations and maintenance) are project-specific safety performance assessments conducted? Are evaluations conducted after the project has been implemented? Responses may include examples of projects where safety performance assessments were conducted and how they informed the final project deliverables.
19. How is safety performance assessed or considered at the system level planning or early transportation project identification/prioritization stage? How is network screening used to inform project decisionmaking?

Safety Performance Assessment Process Evaluation and Outcomes

20. What indicators or measures have been used to determine the effectiveness of safety performance assessments?
21. To what extent is the safety performance assessment or analysis used to inform project decisionmaking? How is safety performance weighted in relation to factors such as environmental impact or traffic congestion? Are there requirements to include countermeasures or evaluation of alternative designs that are expected to improve safety performance? If yes, please provide examples of

the requirements or projects where the safety performance assessment led to the implementation of countermeasures and strategies that improved safety performance.

22. How is safety performance evaluated after the project is implemented? To what extent are countermeasures, alternative designs, or strategies to improve safety performance replicated on other projects, based on past project evaluations?

Safety Performance Assessment Implementation Considerations

23. What challenges or concerns does your agency see with possible Federal requirements for safety performance assessments on certain Federal-aid projects?
24. What challenges or concerns does your agency see with possible Federal requirements for implementing cost-effective safety improvements resulting from safety performance assessments?
25. What benefits does your agency see with possible Federal requirements for safety performance assessments on certain Federal-aid projects where safety may not be the sole motivation for the project? What benefits does your agency see for any Federal requirements for cost-effective safety improvements resulting from the assessments?
26. What criteria, thresholds, characteristics, or other factors should States consider when determining when to conduct a project-specific safety performance assessment or analysis for projects on the Federal-aid highway system?
27. What additional resources (i.e. staff, guidance, tools, budget, etc.) would be

necessary to adequately assess the expected safety performance of Federal-aid projects?

Authority: 23 U.S.C. 103, 109, 134, 135 and 402; Sec. 1404 of Pub. L. 114-94, 129 Stat. 1312; 49 CFR 1.85; 23 CFR Part 625.

Signed in Washington, DC:

Stephanie Pollack
Deputy Administrator
Federal Highway Administration