

DEPARTMENT OF TRANSPORTATION**Federal Highway Administration****23 CFR Part 630****FHWA Docket No. FHWA-2001-11130****RIN 2125-AE29****Work Zone Safety****AGENCY:** Federal Highway Administration (FHWA), DOT.**ACTION:** Advance notice of proposed rulemaking (ANPRM); request for comments.

SUMMARY: The FHWA is seeking comments regarding improvements that can be made to its regulation on Traffic Safety in Highway and Street Work Zones to better address work zone mobility and safety concerns. The FHWA has identified goals for maximizing the availability of roadways during construction and maintenance, while minimizing impacts on road users and highway workers, and would like to ascertain whether the current provisions in our regulation are adequate to address the unique mobility and safety challenges posed by work zones. Therefore the FHWA is soliciting input to identify the key issues that should be considered if the regulation were to be updated.

DATES: Comments must be received on or before June 6, 2002.

ADDRESSES: Mail or hand deliver comments to the U.S. Department of Transportation, Dockets Management Facility, Room PL-401, 400 Seventh Street, SW., Washington, DC 20590, or submit electronically at <http://dmses.dot.gov/submit>. All comments should include the docket number that appears in the heading of this document. All comments received will be available for examination and copying at the above address from 9 a.m. to 5 p.m., e.t., Monday through Friday, except Federal holidays. Those desiring notification of receipt of comments must include a self-addressed, stamped postcard or you may print the acknowledgment page that appears after submitting comments electronically.

FOR FURTHER INFORMATION CONTACT: Ms. Shelley Row, Office of Transportation Operations, HOTO-1, (202) 366-1993; or Mr. Raymond Cuprill, Office of the Chief Counsel, HCC-30, (202) 366-0791, Federal Highway Administration, 400 Seventh Street, SW., Washington, DC 20590-0001. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:**Electronic Access and Filing**

You may submit or retrieve comments online through the Document Management System (DMS) at: <http://dmses.dot.gov/submit>. Acceptable formats include: MS Word (versions 95 to 97), MS Word for Mac (versions 6 to 8), Rich Text File (RTF), American Standard Code for Information Interchange (ASCII)(TXT), Portable Document Format (PDF), and WordPerfect (versions 7 to 8). The DMS is available 24 hours each day, 365 days each year. Electronic submission and retrieval help and guidelines are available under the help section of the web site. An electronic copy of this document may also be downloaded by using a computer, modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202) 512-1661. Internet users may also reach the Office of the Federal Register's home page at: <http://www.nara.gov/fedreg> and the Government Printing Office's web page at: <http://www.access.gpo.gov/nara>.

Background

Highway construction and maintenance work zones cause mobility and safety problems for the traveling public, businesses, highway workers, and transportation agencies, resulting in an overall loss in productivity and growing frustration. Work zones are a necessary part of meeting the need to maintain and upgrade our aging highway infrastructure. However, with vehicle travel increasing significantly faster than miles of roadway, we also have a growing congestion problem that is further worsened by work zones.

Legislative and Regulatory History

Section 1051 of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Public Law 102-240, 105 Stat. 1914, 2001, December 18, 1991, required the Secretary of Transportation (Secretary) to develop and implement a highway work zone safety program to improve work zone safety at highway construction sites by enhancing the quality and effectiveness of traffic control devices, safety appurtenances, traffic control plans, and bidding practices for traffic control devices and services. The FHWA implemented this provision of ISTEA through non-regulatory action, by publishing a notice in the **Federal Register** on October 24, 1995 (60 FR 54562). (Hereinafter referred to as "the notice.")

The purpose of this notice was to establish the National Highway Work Zone Safety Program (NHWZSP) to

enhance safety at highway construction, maintenance and utility sites. In this notice, the FHWA indicated that having appropriate National and State standards and guidelines would contribute to improved work zone safety. To attain these National and State standards and guidelines, the FHWA identified, among other things, the need to update its regulation on work zone safety, 23 CFR 630, subpart J.

The notice indicated that the FHWA would review current work zone problems and update the regulation to better reflect current needs including reinforcement of guidance on bidding practices, work zone accident data collection and analysis at both project and program levels, compliance with traffic control plans, and work zone speed limits. While the focus of this notice was work zone safety, it also identified the need "to minimize disruptions to traffic during construction of highway projects."

Work zone mobility and safety are major concerns to the traveling public, businesses and transportation agencies. The FHWA has identified National goals for maximizing the availability of the Nation's roads during road construction and maintenance while minimizing impacts on road users and workers. To facilitate the attainment of these goals and to better meet the needs of transportation agencies, the traveling public, and highway workers, the FHWA is considering a wide range of options, including revising and expanding the regulations in 23 CFR 630, subpart J; alternatively, the FHWA is considering policy guidance. Congress' continued interest in this subject is evidenced by the fact that the House Transportation and Infrastructure Committee, Subcommittee on Highway and Transit, held a hearing entitled Work Zone Safety in July 2001.

The FHWA is therefore seeking input into the consideration of revision of the current regulation.

Definitions/Explanation of Terms

The definitions and explanations for the key terms and phrases used in this ANPRM are provided below. Some are standard definitions as stated by various manuals/codes, trade organizations and public entities, while others are commonly understood explanations and interpretations.

Americans with Disabilities Act (ADA).¹ The Americans with Disabilities Act, Public Law 101-336 was enacted July 26, 1990. The ADA

¹ Americans with Disabilities Act (ADA) of 1990, Public Law 101-336, 104 Stat. 327 (July 26, 1990).

prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation. It also mandates the establishment of TDD/telephone relay services. The term "disability" means, with respect to an individual—(A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment.

Constructibility Review. Refers to a process for assessing and improving highway construction project contract documents to ensure rational bids and to minimize problems during construction. Constructibility is defined as the optimum use of construction knowledge and experience in planning, design, procurement, and field operations to achieve overall project objectives.²

Disruption due to Work Zones. The deviation from normalcy caused by work zones resulting in impacts on mobility, safety and productivity of users, businesses and highway workers.

Incident. Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD),³ Temporary Traffic Control, defines an incident as an area of a highway where temporary traffic controls are imposed by authorized officials in response to a road user incident, natural disaster, or special event.

Mobility. A representation of the efficiency and convenience of transportation facilities and traffic flow. The commonly used performance measures for the assessment of mobility include delay, speed, travel time and queue lengths. With specific reference to work zones, mobility pertains to moving road users smoothly through or around a work zone area with a minimum delay compared to baseline travel when no work zone is present.

Mobility and Safety Audits. Refers to the process of evaluating work zone traffic control and management plans

² From National Cooperative Highway Research Program (NCHRP) Project 20-24(12), Avoiding Delays During the Construction Phase of Highway Projects, Draft Report July 2001. This project is currently underway, with publication of the final results expected in early 2002. When completed, a copy of the final report may be obtained electronically at: <http://www4.nas.edu/trb/onlinepubs.nsf/web/crp> or by writing to the Transportation Research Board (TRB), Lockbox 289, Washington, DC 20055.

³ Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition, December 2000. This document is available electronically at the following URL: <http://mutcd/kno-millennium.htm>.

against the applicable mobility and safety standards, in order to obtain an estimate of the performance of the work zone with respect to the attainment of those mobility and safety standards.

Road User/Traveler. Part 1 of the MUTCD, General, defines road user to include all vehicle operators (private, public and commercial), bicyclists, pedestrians or disabled people within the highway, including workers in temporary traffic control zones.

Safety. A representation of the level of exposure to danger for users of transportation facilities. With specific reference to work zones, safety refers to minimizing the exposure to danger of road users in the vicinity of a work zone and road workers at the work zone interface with traffic. The commonly used measures for road safety are the number of crashes or the consequences of crashes (fatalities and injuries), at a given location or along a section of highway, during a period of time. Worker safety in work zones refers to the safety of workers at the work zone interface with traffic and the impacts of the work zone design on worker safety. The number of worker fatalities and injuries at a given location or along a section of highway, during a period of time is also used to depict the safety of work zones.

Temporary Traffic Control Zone. The MUTCD defines a temporary traffic control zone as an area of a highway where road user conditions are changed because of a work zone or traffic incident by the use of temporary traffic control devices, flaggers, police, or other authorized personnel.

User Cost. The cost of the disruptions due to work zones borne by road users, nearby residents and businesses, transportation agencies, and contractors. User costs primarily include travel delay costs (time value of money), additional fuel consumption costs, environmental impact costs, and accident costs. Consideration may also be given to lost sales, late deliveries/lost productivity, and costs of delayed construction.

Work Zone. The MUTCD defines a work zone in Part 6, Temporary Traffic Control, as an area of a highway with construction, maintenance, or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign or rotating/strobe lights on a vehicle to the END ROAD WORK sign or the last temporary traffic control device.

The National Committee on Uniform Traffic Laws and Ordinances

(NCUTLO)⁴ adds to this definition in Section 4 of its Work Zone Model Law, by including the following: a work zone may be for short or long durations and may include stationary or moving activities, including: Long-term highway construction such as building a new bridge, adding travel lanes to the roadway, extending an existing roadway, etc; Short-term highway maintenance such as striping the roadway, median, and roadside grass mowing/landscaping, pothole repair, etc; and Short-term utility work, such as repairing electric, gas, or water lines within the roadway. The work zone does not include private construction, maintenance or utility work outside the highway.

The National Highway Traffic Safety Administration's (NHTSA) Model Minimum Uniform Crash Criteria (MMUCC)⁵ states that a work zone is a segment of the roadway marked to indicate that construction, maintenance, or utility work is being done. A work zone extends from the first warning sign to the end construction (work) sign or the last traffic control device. Work zones may or may not involve workers or equipment on or near the road. A work zone may be stationary (such as repairing a water line) or moving (such as re-striping the centerline); it may be short term (such as pothole patching) or long term (such as building a new bridge).

The American National Standards Institute (ANSI), in its Manual on Classification of Motor Vehicle Traffic Accidents, American National Standard—ANSI D-16,⁶ is proposing a definition for work zone, which is similar to the NCUTLO definition. It states that a work zone is an area of a

⁴ National Committee on Uniform Traffic Laws and Ordinances (NCUTLO), Work Zone Model Law, Section 4—Definitions (j). More information on the NCUTLO and its Work Zone Model Law may be obtained electronically at: <http://www.ncutlo.org> or by writing the NCUTLO at, 107 S. West Street, # 110, Alexandria, VA 22314, Ph—800-807-5290.

⁵ Model Minimum Uniform Crash Criteria (MMUCC), National Highway Traffic Safety Administration (NHTSA), August 1998. Information about and copies of the Model Minimum Uniform Crash Criteria (MMUCC) may be obtained on the Internet at: <http://www.nhtsa.dot.gov> or by writing the NHTSA at 400 7th St. SW Washington, DC 20590, Phone: 888-327-4236.

⁶ The purpose of this American National Standard is to provide a common language for collectors, classifiers, analysts and users of traffic accident data. The Manual promotes uniformity and comparability of motor vehicle traffic accident statistics developed in states and local jurisdictions. Information about this standard may be obtained by contacting the American National Standards Institute at 1819 L Street, NW, Washington, DC 20036, Telephone: 202.293.8020, Fax: 202.293.9287 or on the Internet at: <http://www.ansi.org>.

trafficway⁷ with highway construction, maintenance or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign or flashing lights on a vehicle to the END ROAD WORK sign or the last traffic control device. A work zone may be for short or long duration and may include stationary or moving activities. Inclusions: Long-term stationary highway construction such as building a new bridge, adding travel lanes to the roadway,⁸ extending an existing trafficway, etc.; Mobile highway maintenance such as striping the roadway, median, and roadside grass mowing/landscaping, pothole repair, etc.; Short-term stationary utility work such as repairing electric, gas, or water lines within the trafficway, etc. Exclusions: Private construction, maintenance or utility work outside the trafficway.

Work Zone Duration. Refers to the length of time for which a work zone is needed to complete the required highway construction or maintenance activity.

Work Zone Frequency. Refers to either the number of work zones or distance between multiple work zones along a corridor or in a road network; or the time between recurrent work zones for performing road construction or maintenance work at the same location, along the same segment of a corridor, or in a road network.

Statement of the Problem

As much of the Nation's transportation infrastructure approaches its service life, preservation, rehabilitation, and maintenance become an increasing part of our transportation improvement program.⁹ The Transportation Equity Act for the 21st Century (TEA-21), Public Law 105-178, 112 Stat. 107, enacted in June 1998, provides for a 40 percent increase in transportation funding over the total provided in the ISTEA.¹⁰ Much of this

⁷ The American Association of State Highway Transportation Officials (AASHTO) equivalent of "trafficway" is "highway, street or road."

⁸ The AASHTO term equivalent to "roadway" is "traveled way."

⁹ FHWA report, "Meeting the Customer's Needs for Mobility and Safety During Construction and Maintenance Operations," September 1998. This report is available electronically at: http://safety.fhwa.dot.gov/fourthlevel/pro_res_wzs_links.htm or may be obtained by writing the FHWA Safety Core Business Unit at FHWA, Safety, 400 7th Street, SW., Washington, DC 20590.

¹⁰ Statement of Vincent F. Schimmoller, Deputy Executive Director, FHWA, USDOT, Before The House Committee on Transportation and Infrastructure, Subcommittee on Highways and

funding is being spent on maintaining and operating existing roads, since comparatively few new roads are being built. At the same time, traffic volumes continue to grow and create more congestion.

From 1980 to 1999, the U.S. experienced a 76 percent increase in total vehicle-miles traveled, while total lane miles of public roads increased only by 1 percent.¹¹ Congestion is frustrating and costly to businesses and individuals. The Texas Transportation Institute (TTI) estimated that the cost of congestion was approximately \$78 billion in 1999. The combination of heavier traffic volumes passing through a road network with more work zones increases the operational and safety impacts of those work zones on the road network.

Over the years, highway professionals have devised and implemented several strategies and innovative practices for minimizing the disruption caused by work zones, while ensuring successful project delivery. However, more effort is required to meet the needs and expectations of the American public, given the current and expected level of investment activity in highway infrastructure, a significant portion of which is for maintenance and reconstruction.

The results of a recent FHWA nationwide survey, reported in "Moving Ahead: The American Public Speaks on Roadways and Transportation in Communities,"¹² illustrates the American public's frustration with work zones. Key findings include:

- Work zones were cited as second only to poor traffic flow in causing traveler dissatisfaction;
- The top three improvements indicated by the public as a "great help" to improve roadways and transportation are related to roadway repairs and work zones. They are:
 - a. More durable paving materials (67 percent);
 - b. Repairs made during non-rush hours (66 percent); and
 - c. Reducing repair time (52 percent);

Transit, Hearing on Work Zone Safety, July 24, 2001. An electronic copy of this statement may be obtained at: <http://www.house.gov/transportation/press/press2001/release100.html>.

¹¹ "Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance (C&P) Report to Congress," FHWA, 1999. A copy of this report may be obtained electronically at: <http://www.fhwa.dot.gov/policy/1999cpr/>.

¹² The results of the survey are available in "Moving Ahead: The American Public Speaks on Roadways and Transportation in Communities," FHWA Publication No. FHWA-OP-01-017, 2000. A copy of this publication is available electronically on the FHWA web page at: <http://www.fhwa.dot.gov/reports/movingahead.htm>.

• The use of better traffic signs showing expected roadwork, and better guide signs for re-routing traffic to avoid roadwork, were also cited as being of "great help," by 40 percent and 35 percent of the respondents respectively; and

• Many travelers indicated a preference to have the road closed completely for moderate durations in exchange for long-lasting repairs.

The following facts illustrate the adverse impacts of work zones on traveler and construction worker safety:

• Work Zone fatalities reached a high of 872 in 1999,¹³ while 39,000 Americans were injured in work zone related crashes in the same year;¹⁴

• From 1992 to 1999, about 106 to 136 highway workers died each year in road construction activities, as indicated by the Bureau of Labor Statistics' Census of Fatal Occupational Injuries.¹⁵ On average, 23 percent of these fatalities were due to workers being struck by vehicles or mobile equipment in roadways.

Further, the contracting industry is under pressure to expedite construction and minimize disruption, and has expressed concerns that these pressures reduce productivity, and may compromise quality.

While mobility and safety are two distinct challenges posed by the circumstances we face on our highways, it is important to realize that both these elements are closely tied to one another. Studies and data analyses over time have proven that as congestion builds, crash rates increase; and as crashes increase, more congestion occurs. Therefore, it is important to develop comprehensive solutions and mitigation measures for work zones that address both mobility and safety of transportation and traffic flow from the perspective of reducing the impacts of work zones on users, businesses and highway workers, and ultimately improving mobility, safety and productivity.

In recognition of these facts and findings, the FHWA is seeking to identify and foster ways to make work zones function better. This requires looking at the full life of our transportation infrastructure and may require changing the way construction

¹³ The statistics on work zone crashes for the year 2000 were not officially available at the time this ANPRM was drafted.

¹⁴ Fatal Analysis Reporting System (FARS) maintained by the NHTSA. More information is available electronically at: <http://www-fars.nhtsa.dot.gov/>.

¹⁵ The Bureau of Labor Statistics' Census of Fatal Occupational Injuries is available electronically at: <http://www.bls.gov/iif/oshcfoi1.htm>.

and maintenance projects are conceived, planned, designed and executed. Changes to the project development process may fundamentally include consideration of the mobility and safety impacts of work zones on road users and businesses, at the same time providing for worker safety and efficient construction. It is essential that all interested parties participate in developing any rules, regulations and/or guidelines to facilitate improved, comprehensive practices for road construction and maintenance projects.

Currently, the regulation has the broad purpose of providing guidance and establishing procedures to ensure that adequate consideration is given to motorists, pedestrians, and construction workers on all Federal-aid construction projects. However, the content of the current regulation is narrowly focused on the development of Traffic Control Plans (TCPs) and on the operations of two-lane, two-way roadways. The FHWA believes that the trends of increasing road construction, growing traffic and public frustration with work zones call for a more broad-based examination of the current regulations.

The FHWA is considering updating the current regulations to seek and facilitate comprehensive means and methods to reduce the need for recurrent road work, the duration of work zones, and the disruption caused by work zones. The FHWA hopes to receive substantial input from the transportation community in the development of new regulations and guidelines. Through this ANPRM, the FHWA seeks to initiate discussion with the transportation community and any interested parties by soliciting comments and input on several key questions. During the entire rulemaking consideration process, the FHWA will conduct outreach and solicit comments, suggestions and input from a variety of transportation stakeholders and will be grateful to all participants for their contributions. The FHWA will continue to file relevant information in the docket as it becomes available and interested persons should continue to examine the docket for new material.

General Discussion for Considering Policy and Regulation Change

To reduce the need for recurrent work zones, reduce the duration of work zones, and reduce the disruption due to work zones, the FHWA will consider updating the current regulation based on the following objectives of the FHWA's work zone mobility and safety program:

- Reduction of the impacts of highway work zones on road users,

construction workers, businesses and society, at the same time maximizing the availability of the roadway for efficient traffic movement;

- Enhancement of the way construction projects are currently conceived, planned, designed and executed to bring about a focus shift to customer-oriented construction project planning;
- Identification of an exhaustive set of issues that govern work zone mobility and safety for possible consideration in an updated regulation;
- Consideration and incorporation of a range of innovative practices and technologies that can substantially improve work zone mobility and safety; and
- Extensive outreach and dialogue with a wide cross-section of transportation stakeholders and the community, characterized by a willingness to listen and respond to inputs and suggestions.

Request for Comments

Based on previous studies and the knowledge base accumulated over time through input from States, local agencies, and professional organizations, the FHWA has identified a set of issues that may be addressed as part of this rulemaking effort. We have posed these issues as questions to elicit comments, guidance and suggestions. The FHWA believes that the magnitude of the problem under consideration and the level of concern voiced by road users requires reconsideration of how we plan, design and construct roadway projects to shift our focus to the needs of road users and businesses while balancing the need for worker safety. A customer-oriented construction project planning and implementation approach necessitates that we examine the complete project development cycle. Therefore, we have grouped the questions into categories that generally correspond to the major steps in project development. These categories are:

- General (wide-ranging policy and regulatory considerations);
- Transportation Planning and Programming;
- Project Design for Construction and Maintenance;
- Managing for Mobility and Safety In and Around Work Zones;
- Public Outreach and Communications; and
- Analyzing Work Zone Performance.

Commenters are also encouraged to include discussion of any other issues they consider relevant to this effort.

General

1. Should there be a National policy to promote improved mobility and

safety in highway construction and maintenance? If so, should the National policy be incorporated into the regulation or issued separately as guidance that outlines guidelines and best practices for implementation?

2. Are the current provisions of 23 CFR 630, subpart J adequate to meet the mobility and safety challenges of road construction and maintenance projects encountered at all stages of project evolution? If they are not adequate, what are the provisions and/or sections that need to be enhanced and/or modified to ensure mobility and safety in and around work zones?

3. Should work zone regulations be stratified to reflect varying levels and durations of risk to road users and workers, and disruptions to traffic? What would be the most appropriate stratification factors (*e.g.*, duration, length, lanes affected, Average Daily Traffic (ADT), road classification, expected capacity reduction, potential impacts on local network and businesses)?

4. Currently, there are several definitions for work zone, as defined by the MUTCD, ANSI D16 (proposed), NCUTLO and NHTSA. These definitions, even though similar in basic structure and implication, differ in length and the degree of detail addressed. Should there be a common National definition for work zone to bring about uniformity? If so, what should the common National definition be?

Transportation Planning and Programming

It is important to consider user mobility and safety impacts and worker safety requirements across the different stages of highway project development. Consideration of these impacts should begin early and be consistently coordinated across the planning processes and project development stages. The FHWA expects that such consideration will reduce the need for recurrent work zones, the duration of work zones, and the disruption caused by work zones.

5. How, if at all, are impacts to road users due to road construction and maintenance part of the management and operations considerations that are addressed in transportation plan development?

6. To what extent should the metropolitan and statewide transportation planning processes address cross-cutting policy issues that may contribute to increases in project costs (for example, the use of more durable materials, life-cycle costing, complete closure of facilities,

information sharing on utilities, etc.)? Is it appropriate to consider the impact of construction and maintenance projects to road users in planning for future roadway improvements at the metropolitan level? At the statewide level? At the corridor level?

7. What data and methods are currently available to address the above considerations? What else would be needed to support such considerations in the metropolitan and statewide transportation planning processes? At the corridor level?

Project Design for Construction and Maintenance

In making decisions on alternative project designs, project designers should consider different strategies and practices that may lead to reductions in the need for recurrent road construction and maintenance work, the duration of work zones and the disruption caused by work zones. Examples of such considerations include life-cycle cost analysis, alternative project scheduling and design strategies, such as, full road closures and night time work, using more durable materials, coordinating road construction, estimation of user costs/impacts, risk and reward sharing with contractors, and constructibility reviews for projects.

8. How can the FHWA encourage agencies to incorporate the above considerations (life-cycle cost analysis, alternative project scheduling and design strategies, etc.) in the decisionmaking process for evaluating alternative project designs? What are the most appropriate ways to include these considerations in project design?

9. Can user cost be a useful measure to assess alternative means to design and implement work zones? What weight should agencies assign to user costs as a decisionmaking factor in the alternatives evaluation process? Should analytical tools, such as QuickZone,¹⁶ QUEWZ-98,¹⁷ etc., be used for the evaluation of various design alternatives and their estimated impact to the public? What other impact measures (delay, speed, travel time, crashes)

¹⁶ QuickZone is a traffic analysis delay estimation tool designed by the FHWA to aid State and local design and construction staff, operations and planning staff, construction contractors and even utility contractors. This Microsoft Excel spreadsheet tool can be used to analyze both urban and inter-urban corridors. QuickZone 1.0 will soon be available. QuickZone Beta version 0.99 is available as a free download at <http://ops.fhwa.dot.gov/wz/workzone.htm>.

¹⁷ QUEWZ-98 is a microcomputer analysis tool that estimates traffic impacts, emissions and additional road user costs resulting from short-term lane closures in work zones. More information about this tool may be obtained online at: <http://tti.tamu.edu/researcher/v36n2/quewz98.stm>.

should agencies estimate and use for alternatives evaluation?

10. Given the fact that utility delays have been cited as roadblocks to efficient project delivery, what should be done to address this issue?

Managing for Mobility and Safety in and Around Work Zones

There are many methods that can be applied to managing traffic in and around work zones. The application of Intelligent Transportation Systems (ITS) for purposes, such as, traffic management, automated enforcement and traveler information is a useful method to improve transportation mobility and safety. The current and future mobility and safety challenges presented by work zones may require Traffic Control Plans (TCPs) to include traffic management, enforcement and operations considerations (such as ITS based traffic control and traveler information, speed management and enforcement, incident and emergency management, etc.), security considerations, and other considerations (for example, utility location and coordination information).

11. The current regulation specifies the requirement for TCPs for work zones, but does not address the issues of sustained traffic management and operations, or traffic enforcement methods and partnerships. Should the scope of TCPs be expanded to include such considerations? What are the most relevant practices or technologies that should be considered in planning for traffic management, enforcement and operations? What are the most appropriate ways to facilitate the inclusion of such considerations in traffic control planning?

12. Should TCPs address the security aspects of construction of critical transportation infrastructure? Should TCPs address the security aspects of work zone activities in the vicinity of critical transportation or other critical infrastructure?

13. How should TCPs address ADA requirements?

14. Should more flexibility be allowed on who develops TCPs—State DOTs, municipalities, contractors or law enforcement agencies—and how should the responsibility for developing TCPs be assigned? Should certification be required for TCP developers? How can the owners and contractors share the roles, risk and rewards in developing TCPs and implementing and operating work zones?

15. To ensure roadway mobility and safety and work area safety, should mobility and safety audits be required for work zones?

Public Outreach and Communications

To reduce the anxiety and frustration of the public, it is important to sustain effective communications and outreach with the public regarding road construction and maintenance activity, and the potential impacts of the activities. This also increases the public's awareness of such activities and their impacts on their lives. The lack of information is often cited as a key cause of frustration for the traveling public. Therefore, it is important to identify the key issues that need to be considered from a public outreach and information perspective.

16. How can we better communicate the anticipated work zone impacts and the associated mitigation measures to the public? Who—the State, local government, contractor, or other agency—should be responsible for informing the public?

17. Should projects with substantial disruption include a public communication plan in the project development process? If so, what should such a plan contain?

Analyzing Work Zone Performance

Evaluation is a necessary tool for analyzing failures and identifying successes in work zone operations. Work zone performance monitoring and reporting at a nationwide level has the potential to increase the knowledge base on work zones and help better plan, design and implement road construction and maintenance projects.

18. Should States and local transportation agencies report statistics on the characteristics of work zones (such as number of work zones, size, cost, duration, lanes affected, ADT, road classification, level of disruption and impacts on local network and businesses) to appropriate State or Federal agencies? If so, in what ways do you think this would be beneficial?

19. Should States and local transportation agencies report statistics on the mobility performance of work zones? Are typical mobility measures, such as, delay, travel time, traffic volumes, speed and queue lengths appropriate to analyze work zone mobility performance? What are the top three measures that are most appropriate?

20. Are the currently used measures for safety (typically, crashes, fatalities and injuries) appropriate to analyze work zone performance? If not, what other measures should be considered? Are current mechanisms for collecting this information adequate? If not, how can we improve them?

Rulemaking Analyses and Notices

All comments received before the close of business on the comment closing date indicated above will be considered and will be available for examination in the docket at the above address. Comments received after the comment closing date will be filed in the docket and will be considered to the extent practicable. In addition to late comments, the FHWA will also continue to file relevant information in the docket as it becomes available after the comment period closing date, and interested persons should continue to examine the docket for new material. A notice of proposed rulemaking (NPRM) may be issued at any time after close of the comment period.

Executive Order 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures

The FHWA has determined preliminarily that the contemplated rule would not be a significant regulatory action within the meaning of Executive Order 12866 and would not be significant within the meaning of Department of Transportation regulatory policies and procedures. It is anticipated that the economic impact of this action would be minimal. Any rulemaking action resulting from this ANPRM would propose to amend the current regulations and it is anticipated that any changes proposed would not affect any Federal funding available.

Any changes are not anticipated to adversely affect, in a material way, any sector of the economy. In addition, any changes are not likely to interfere with any action taken or planned by another agency or to materially alter the budgetary impact of any entitlements, grants, user fees, or loan programs.

Based upon the information received in response to this ANPRM, the FHWA intends to carefully consider the costs and benefits associated with this rulemaking. Accordingly, comments, information, and data are solicited on the economic impact of the changes described in this document or any alternative proposal submitted.

Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (Pub. L. 96-354, 5 U.S.C. 601-612), and based upon the information received in response to this ANPRM, the FHWA will evaluate the effects of any action proposed on small entities. If the rulemaking action contemplated in this ANPRM is promulgated, it is anticipated that the proposed action would not have a significant economic impact on a

substantial number of small entities. The FHWA encourages commenters to evaluate any options addressed here with regard to the potential for impact, and to formulate their comments accordingly.

Unfunded Mandates Reform Act of 1995

The actions being considered under this ANPRM would not impose unfunded mandates as defined by the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4, March 22, 1995, 109 Stat. 48). The actions being considered under this ANPRM would not result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year (2 U.S.C. 1532). Further, in compliance with the Unfunded Mandates Reform Act of 1995, the FHWA will evaluate any regulatory action that might be proposed in subsequent stages of the proceeding to assess the effects on State, local, and tribal governments and the private sector.

Executive Order 13132 (Federalism)

Any action that might be proposed in subsequent stages of this proceeding will be analyzed in accordance with the principles and criteria contained in Executive Order 13132, dated August 4, 1999, and the FHWA anticipates that any action contemplated will not have sufficient federalism implications to warrant the preparation of a Federalism assessment. The FHWA also anticipates that any action taken will not preempt any State law or State regulation or affect the States' ability to discharge traditional State governmental functions. We encourage commenters to consider these issues, as well as matters concerning any costs or burdens that might be imposed on the States as a result of actions considered here.

Executive Order 12372 (Intergovernmental Review)

Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.

Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501, *et seq.*), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct, sponsor, or require through regulations. Any action

that might be contemplated in subsequent phases of this proceeding will be evaluated for PRA requirements.

Executive Order 13175 (Tribal Consultation)

Any action that might be proposed in subsequent stages of this proceeding will be analyzed under Executive Order 13175, dated November 6, 2000, and the FHWA believes that any proposal will not have substantial direct effects on one or more Indian tribes; will not impose substantial direct compliance costs on Indian tribal governments; and will not preempt tribal law. Therefore, the FHWA anticipates that a tribal summary impact statement will not be required.

Executive Order 13211 (Energy Effects)

The FHWA will analyze any action that might be proposed in subsequent stages under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use. We have determined that any action contemplated will not be a significant energy action under that order because any action contemplated will not be a significant regulatory action under Executive Order 12866 and will not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

Therefore, the FHWA anticipates that a Statement of Energy Effects under Executive Order 13211 is not required.

National Environmental Policy Act

The agency will analyze any action that might be proposed for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347) to assess whether there would be any effect on the quality of the environment.

Executive Order 12630 (Taking of Private Property)

The FHWA will analyze any action that might be proposed in subsequent stages under Executive Order 12630, Governmental Actions and Interface with Constitutionally Protected Property Rights. The FHWA does not anticipate at this time that such action would effect a taking of private property or otherwise have taking implications under Executive Order 12630.

Executive Order 12988 (Civil Justice Reform)

Any action that might be proposed in subsequent stages of this proceeding will meet applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to

minimize litigation, eliminate ambiguity, and reduce burden.

Executive Order 13045 (Protection of Children)

The FHWA will analyze any action that might be proposed in subsequent stages under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. The FHWA does not anticipate that such action would concern an environmental risk to health or safety that may disproportionately affect children.

Regulation Identification Number

A regulation identification number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross reference this action with the Unified Agenda.

List of Subjects in 23 CFR Part 630

Highway safety, Highways and roads.

(Authority: 23 U.S.C. 106, 109, 115, 315, 320, and 402(a); 23 CFR 1.32; 49 CFR 1.48; sec. 1051, Pub. L. 102-240, 105 Stat. 2001; sec. 358(b), Pub.L. 104-59, 109 Stat. 625.)

Issued on: January 31, 2002.

Mary E. Peters,

Federal Highway Administrator.

[FR Doc. 02-2822 Filed 2-5-02; 8:45 am]

BILLING CODE 4910-22-P

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Parts 161 and 167

[USCG-2001-10254]

RIN 2115-AG20

Traffic Separation Scheme: In Prince William Sound, AK

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes amending the existing Traffic Separation Scheme (TSS) in Prince William Sound, Alaska. The proposed amendments are adopted by the International Maritime Organization and have been validated by a recent Port Access Route Study (PARS). Implementing these amendments would provide straight traffic lanes between the Bligh Reef Pilot Station and Cape Hinchinbrook and should reduce risk for vessels operating in the area. The

rulemaking would incorporate the amended TSS into the Code of Federal Regulations.

DATES: Comments and related materials must reach the Docket Management Facility on or before March 8, 2002.

ADDRESSES: To make sure your comments and related material are not entered more than once in the docket, please submit them by only one of the following means:

(1) By mail to the Docket Management Facility, (USCG-2001-10254), U.S. Department of Transportation, room PL-401, 400 Seventh Street SW., Washington, DC 20590-0001.

(2) By delivery to room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.

(3) By fax to the Docket Management Facility at 202-493-2251.

(4) Electronically through the Web Site for the Docket Management System at <http://dms.dot.gov>.

The Docket Management Facility maintains the public docket for this rulemaking. Comments and material received from the public, as well as documents indicated in this preamble as being available in this docket, will become part of this docket and will be available for inspection or copying at room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. You may also find this docket on the Internet at <http://dms.dot.gov>.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call LT Keith Ropella, U.S. Coast Guard Marine Safety Office, Valdez, AK, telephone 907-835-7209, e-mail KRopella@cgalaska.uscg.mil; or George Detweiler, Coast Guard, Office of Vessel Traffic Management (G-MWV), at 202-267-0574, e-mail GDetweiler@comdt.uscg.mil. If you have questions on viewing or submitting material to the docket, call Dorothy Beard, Chief, Dockets, Department of Transportation, telephone 202-366-9329.

SUPPLEMENTARY INFORMATION:

Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related material. If you do so, please include your name and address, identify the docket number for this rulemaking (USCG-2001-10254), indicate the specific section of this

document to which each comment applies, and give the reason for each comment. You may submit your comments and material by mail, hand delivery, fax, or electronic means to the Docket Management Facility at the address under **ADDRESSES**; but please submit your comments and material by only one means. If you submit them by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit them by mail and would like to know they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period. We may change this proposed rule in view of them.

Public Meeting

We do not now plan to hold a public meeting. But you may request one by submitting a request to the Docket Management Facility at the address under **ADDRESSES** explaining why one would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

Background and Purpose

Under the Ports and Waterways Safety Act (33 U.S.C. 1221-1232) (PWSA), the Coast Guard establishes Traffic Separation Schemes (TSS's), where necessary, to provide safe access routes for vessels proceeding to or from U.S. ports. Before implementing new TSS's or modifying existing ones, we conduct a port access route study (PARS). Through the PARS process, we consulted with affected parties to reconcile the need for safe access routes with the need to accommodate other reasonable uses of the waterway, such as oil and gas exploration, deepwater port construction, establishment of marine sanctuaries, and recreational and commercial fishing. If a study recommends a new or modified TSS, we must initiate a rulemaking to implement the TSS. Once a TSS is established, the right of navigation is considered paramount within the TSS.

Maritime trends have not significantly changed since the publication of a description of the Prince William Sound Oil Transportation System in 1996. However, minor changes have occurred since publication. These changes include the replacement of several new escort vessels in the ALYESKA/SERVS fleet and the removal of several tankers from service. In addition, ALYESKA began operation of a Vapor Control Recovery Loading System in March,