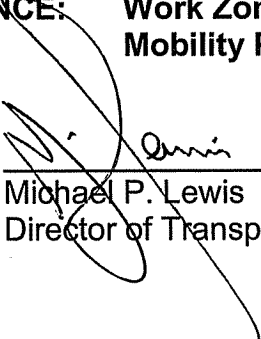




RIDOT POLICY

DATE: December 22, 2008

REFERENCE: Work Zone Safety and
Mobility Policy



Michael P. Lewis
Director of Transportation

Policy Statement:

It is the policy of the Rhode Island Department of Transportation (RIDOT) to systematically consider the safety and mobility impacts of work zones for all construction and maintenance projects, non-emergency maintenance activities, and work completed under the approval of a Temporary Traffic Control Permit (Projects) and to implement appropriate strategies to help manage these impacts such that, to the greatest extent practicable, all work zones deliver (1) high levels of safety to road users and highway workers and (2) minimal amounts of congestion and delay to the traveling public.

Policy Goal and Objectives:

The overall goal of this work zone safety and mobility policy is to minimize the amount and severity of (1) traffic crashes occurring within work zones on Rhode Island highways and (2) traffic congestion resulting from work zones on Rhode Island highways. Realization of this goal will be possible through the attainment of four key policy objectives listed below:

1. Consideration of the broad safety and mobility impacts of work zones across all stages of Project development;
2. Implementation of well thought-out work zone designs and transportation management strategies under the supervision of properly trained personnel;
3. Use of available work zone safety and mobility data on all Projects to help manage the immediate impacts of work zones and to assess the performance of the overall work zone safety and mobility policy; and
4. Enhanced coordination and cooperation among and between RIDOT, its consultants and contractors, and other interested parties with regard to work zone design, implementation, and management.

Project-Level Policy Provisions:

Project Planning

During the initial planning stage of development, a conceptual screening-level assessment of the expected work zone impacts should be completed for each Project. The anticipated work characteristics, traffic demands, level of public interest, and degree of adverse impact to road users shall be considered and used to assign the Work Zone Impact Level (Impact Level) of the Project, in accordance with Section 450.05.05 of Design Policy Memorandum (DPM) 450.05 Work Zone Safety and Mobility.

Where combined and/or inter-relational work zone impacts (e.g., impacts resulting from multiple concurrent Projects in an area, impacts from special event and/or seasonal traffic, impacts on other transportation modes, etc.) are identified for the Project, action(s) should be taken to minimize or eliminate the associated impacts if feasible (e.g., combining work, adjusting Project schedules, providing transit incentives/improvements, etc.). Where practical and as early as possible, the costs for the implementation of transportation management strategies to mitigate the adverse safety and/or mobility impacts of the work zones should be estimated so that appropriate funds can be budgeted for the Project.

Project Design

All Projects shall be designed in accordance with DPM 450.05.

A Transportation Management Plan (TMP) shall be developed for each Project, regardless of assigned Impact Level. The TMP shall describe the set of coordinated transportation management strategies (e.g., the recommended construction sequence, the traffic-related work restrictions, and the set of Temporary Traffic Control (TTC) plans) that will be used to manage work zone impacts during the work. TMPs shall be developed and submitted in accordance with DPM 450.05 and are to be updated throughout Project development as design changes are made. For routine maintenance activities (e.g., non-contract grass mowing, litter pick-up, highway sweeping, drainage and lighting system repairs, traffic control device maintenance, minor bridge repairs, etc.), the Highway and Bridge Maintenance Division will meet once yearly with the Chief Design Engineer, the Traffic Management Chief, and the State Traffic Engineer to discuss and determine the types of TTC and extent of TMP development that are appropriate, and to seek blanket approvals for the next operating year.

Where appropriate, provisions and/or pay items for the implementation of the transportation management strategies indicated in the TMP shall be included in the Plans, Specifications, and Estimates (PS&Es) for the Project. Failure to include in the TMP shall not constitute waiver of a contract provision or pay item.

Project Completion (Construction)

Prior to start of work, the properly trained person(s) who will have the primary responsibility and sufficient authority for implementing the TMP during the work (the TMP Implementation Manager) shall be designated on the TMP. For contract work, both

RIDOT and the contractor must designate a TMP Implementation Manager. For emergency maintenance activities, if time allows the Highway and Bridge Maintenance Division should coordinate with the Traffic Management Chief, the State Traffic Engineer, and/or the Chief Engineer to determine (1) what types of transportation management strategies are to be implemented during the work and (2) whether a TMP must be developed.

During the work on all Projects, the transportation management strategies identified in the TMP shall be used to manage the safety and mobility impacts of the Project work zones. The Transportation Management Center should be informed at the earliest practical opportunity about all upcoming work activities that will have an impact on road user mobility (e.g., the closure of a travel lane). The latest version of the American Traffic Safety Services Association (ATSSA) *Quality Guidelines for Work Zone Traffic Control Devices* shall be used to help maintain the quality and adequacy of devices for the duration of the Project, and a level of inspection necessary to provide ongoing compliance with the quality guidelines shall be provided on each Project. Field observations and available work zone data (including operational data and work zone crash data) shall be used to manage the work zone impacts of the Project while the work zone setups are implemented in the field. Work zone-related feedback and complaints received from the public should be documented and addressed as appropriate.

If at any time (1) a significant deviation from any of the strategies included in the TMP (e.g., the use of an alternate construction sequence) is desired by one or more members of the Project implementation team (e.g., the contractor), (2) field observations and/or data suggest that impacts to road users are or will be unacceptable, or (3) one or more performance requirements established in the TMP are not being met in the field, the RIDOT TMP Implementation Manager shall report the situation to his/her supervisor or Division/Section/Unit manager (e.g., the Construction Management Chief for construction projects). The supervisor / manager will coordinate with the State Traffic Engineer, the Traffic Management Chief, the TMP Development and/or Implementation Manager(s), the Chief Engineer, and/or other interested parties as appropriate and/or necessary to consider and determine whether revised and/or alternate strategies should be implemented in an effort to lessen the adverse safety and/or mobility impacts of the Project. If the supervisor / manager deems that strategy changes should be implemented, the changes shall be documented in a revised version of the TMP and the Traffic Management Chief, the State Traffic Engineer, and the Chief Engineer must approve of the revised TMP prior to their implementation.

If a significant deviation from any of the strategies included in the TMP is requested by the contractor, unless directed otherwise by the RIDOT the contractor is responsible for preparing and submitting to the RIDOT TMP Implementation Manager appropriate documentation (e.g., design calculations, analysis reports, TTC plans, etc.) showing that the requested change(s) are (1) feasible and (2) expected to result in safety and mobility impacts that are no more adverse than the impacts resulting from the strategies already included in the latest approved TMP. The RIDOT will review and consider the submittal(s) as described in the preceding paragraph and will determine whether the changes should be implemented. If the requested changes are approved by the RIDOT, unless otherwise directed by the RIDOT the contractor shall prepare and submit to the RIDOT TMP Implementation Manager a revised version of the latest approved TMP in

both printed and electronic (Microsoft® Excel) format that documents all of the approved changes. Work to implement the changes shall not begin until the Traffic Management Chief, the State Traffic Engineer, and the Chief Engineer have approved of the revised TMP.

Following completion of work, the overall performance of the work zone(s) implemented as part of the Project shall be documented by the RIDOT TMP Implementation Manager using the Post-Construction Work Zone Performance Assessment (PCWZPA) portion of the TMP. Work zone safety and mobility data collected during the work should be considered during this assessment.

Agency-Level Policy Provisions:

Training

All personnel involved in work zone planning, design, implementation, operation, inspection, management, and enforcement on all Projects will be adequately trained at a level appropriate to the individual's job responsibilities and to the job decisions the individual is required to make. Specific training guidelines are identified by the Human Resources Administrator in *Training Guidelines for Personnel Responsible for Work Zone Safety & Mobility*.

Process Reviews

At least once every two years, a process review shall be performed to assess the effectiveness of the work zone safety and mobility provisions of this policy. These reviews shall be completed by a Work Zone Process Review Committee (WZPRC) made up of management personnel from each RIDOT Division, Section, and/or Unit involved with the planning, design, implementation, inspection, and/or management of work zones and a representative of the FHWA Rhode Island Division Office.

At each process review meeting, the TMPs (including the PCWZPAs), the TTC plans, the work zone operational and crash data, and the documented work zone-related public feedback and complaints from at least two (2) Projects that have been completed within the previous two years for each Impact Level (where available) shall be reviewed by the WZPRC to ensure that a cross-section of Project types is considered. The WZPRC shall consider whether the provisions of this policy, DPM 450.05, and the implemented TMPs and TTC plans were beneficial and/or detrimental to the level of adverse impact experienced on each Project. The performance measure areas to be considered are work zone safety and mobility, work efficiency and effectiveness, and the public's perception of and satisfaction with work zones.

At the completion of each process review, a report summarizing the findings of the review shall be developed by the WZPRC and approved by the Chief Engineer. The report shall document the successes and failures observed and include any proposed policy, provision, and/or TMP template changes that the WZPRC believes will improve work zone safety and mobility in Rhode Island. The Director will review the approved report and assign responsibilities for action as appropriate.

Responsibilities for Success:

Each RIDOT Division, Section and Unit affected by this policy is required to develop or revise its own internal processes and procedures to address the work zone safety and mobility goals, objectives, and provisions provided herein. Every employee involved with the planning, design, implementation, inspection, and/or management of work zones has a responsibility to the Department to comply with the policy provisions in order to foster a reduction in work zone-related crashes and congestion on our highways.