NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

WORK ZONE SAFETY AND MOBILITY POLICY

Approved by the Board of Transportation
July 12, 2007
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I. INTRODUCTION

In an effort to develop an agency culture committed to providing safe work zones for all workers and road users while considering mobility and access, the North Carolina Department of Transportation (NCDOT) has developed this Work Zone Safety and Mobility Policy. The 2004 Federal Highway Administration's Work Zone Safety and Mobility Rule 23 CFR 630 Subpart J, now referred to as the updated rule, initiated the development of this policy. The intent of this policy is to support the systematic consideration and management of work zone impacts related to safety, mobility, operations, and training. The development of Transportation Management Plan components, for both federally and non-federally funded activities, will address the impacts an activity has on the transportation infrastructure/road network, road users, businesses, and/or local communities during construction. Also this policy will standardize a Department-wide process for project/activity evaluation and implementation to improve credibility of work zones.

Specific components of this policy include a Policy Statement, Goals and Objectives, and Guidelines for implementation of the Work Zone Safety and Mobility Policy. The Guidelines include strategies to achieve the Goals and Objectives, Roles and Responsibilities for NCDOT staff, and Policy Provisions for application during planning, design, construction and maintenance. Also included is an assessment component to ensure the requirements are effective and the work zone strategy practices and procedures are continuously reviewed. These guidelines shall be used to ensure the goals of the Work Zone Safety and Mobility Policy are met.

II. POLICY STATEMENT

The North Carolina Department of Transportation applies comprehensive transportation management strategies throughout the planning and project development process, purposefully provides safe and efficient projects, and uses innovative techniques in design, contracting methods, and construction to minimize impacts, crashes and delays.

III. GOALS

The goal of this policy is to fully implement the requirements and to develop a sustained agency culture committed to the Work Zone Safety and Mobility Policy (23 CFR 630 Subpart J) by:

- Providing safe work zones for all workers and road users
- Considering mobility & access in work zones and minimizing the affects of work zones/activities on the surrounding transportation network
- Advocating innovative thinking in work zone planning, design, and management
- Improving credibility of work zones
- Continuously assessing and improving work zone strategies, practices, and procedures

IV. GUIDELINES FOR IMPLEMENTATION OF THE WORK ZONE SAFETY AND MOBILITY POLICY FOR PLANNING, DESIGN, CONSTRUCTION AND MAINTENANCE

The Department shall develop Work Zone Safety and Mobility Guidelines that:

- Specifically define procedures for projects/activities to be systematically evaluated and categorized into levels of significance based on the safety and mobility impacts to the roadway and the surrounding roadway network.
- Evaluate projects/activities during the planning, design, and construction phases of the project/activity.
• Require the components for what is to be included in the Transportation Management Plans to be dependent on the level of significance an activity is anticipated to have on the roadway and the surrounding roadway network
• Include procedures for exception requests
• Include procedures for evaluating an activity and the safety and mobility guidelines during and after construction to ensure continuous improvement of the guidelines
• Define the responsibilities of each Unit and Division

A. Project Evaluation Criteria (For Planning And Design)

Each project/activity will be categorized into 1 of 4 levels using the evaluation criteria below:

• Existing AADT (may also use the AADT anticipated when the work zone/activity will be in place)
• Total Truck Traffic
• Duration of Construction
• User Value and User Cost
• Anticipated Additional Travel Times
• Anticipated Impacts to the Existing Transportation Infrastructure/Network
• Anticipated Impacts to High Traffic Volume Generators

Recommendations from Division Personnel and other Department units will be taken into consideration based on above information. Projects/Activities categorized as Levels 1 or 2 will be considered “Significant” as defined in Section IV B. Levels 3 and 4 will be considered non-significant. Information regarding specific level criteria may be found in the Guidelines for Implementation of the Work Zone Safety and Mobility Policy.

B. Significant Project/Activity Definition

A “Significant” project/activity is one that, alone or in conjunction with other projects/activities, is anticipated to cause sustained work zone impacts to the road users, businesses, or local communities during construction or one that will substantially relieve existing congestion on the highway network upon its completion. Additionally, all Interstate projects/activities within the boundaries of a Transportation Management Area (areas with populations greater than 200,000) that occupy a location for more than three days with either intermittent or continuous lane closures shall be considered a “Significant” project/activity. Projects/Activities classified in the “Statewide” and “Regional” Tiers of North Carolina’s Long-Range Statewide Multimodal Transportation Plan may also be designated as “Significant.”

Sustained work zone impacts refer to work zone-induced deviations from the normal range of transportation system safety and mobility. The extent of the work zone impacts may vary based on factors such as: road classification, area type (urban, suburban and rural), traffic and travel characteristics, type of work being performed, time of day/night, and complexity of the project/activity. These impacts may extend beyond the physical location of the work zone itself, and may occur on the roadway on which the work is being performed, as well as other highway corridors or other modes of transportation.

“Significant” projects/activities require, at a minimum, the following to ensure the safety and mobility of workers and road users on North Carolina’s transportation network:
• Transportation Management Plans (TMP) that
  • Provides detailed construction sequencing through a Temporary Traffic Control Plan (TTC)
• Addresses Transportation Operations as well as direct impacts on the Transportation Network (TO)
• Incorporates Public Information into the planning, design and construction of the project/activity (PI)
• Possible Alternative Delivery Techniques to minimize impacts and durations of impacts
• Appropriate work zone strategies, such as enforcement, incident management techniques & technology, to create more efficient and effective work zones

C. Project/Activity Evaluation Criteria (For Construction and Maintenance)

During the construction stage of a project or activity, it is imperative to continuously monitor, assess and improve the work zone strategies, practices and procedures that were used during the planning and design phase of the project/activity. The Department will use criteria to evaluate and continuously improve the planning and design process.

D. Transportation Management Plan

A Transportation Management Plan (TMP) is required for all projects/activities. The project's/activity's level of significance will determine which components of the TMP will be required. Information regarding specific requirements may be found in the Guidelines for Implementation of the Work Zone Safety and Mobility Policy. Below is a list of the possible TMP components:

• Temporary Traffic Control Plan (TTC): Required for all projects/activities
• Transportation Operations Plan (TO): Required for Significant Projects/Activities and other Projects/Activities as needed
• Public Information Plan (PI): Required for Significant Projects/Activities and other Projects/Activities as needed

V. DEPARTMENTAL RESPONSIBILITY

Each unit affected by this policy is required to develop or revise internal processes and procedures to address critical decision-making earlier in the project development process and to promote innovative thinking in work zone planning, design, and management in order to improve safety and mobility on North Carolina's transportation network. Each unit has a responsibility to the Department to ensure success.

This, the 26 day of July, 2007

W. F. (Bill) Rosser, PF
State Highway Administrator
North Carolina Department of Transportation

This, the 20 day of August, 2007

John F. Sullivan, III, PE
North Carolina Division Administrator
Federal Highway Administration