

North Carolina Department of Transportation
Work Zone Safety & Mobility Final Rule
Policy Sub-Committee
June 22, 2006
Traffic Control Conference Room, Century Center B2



Sub-Committee Members attending:

<i>Name</i>	<i>Representing</i>	<i>Sub-Committee</i>
Joseph Ishak, PE - Lead	NCDOT Work Zone Traffic Control Unit	Policy
DeWayne Sykes, PE	NCDOT Roadway Branch	Policy
Stuart Bourne, PE	NCDOT Work Zone Traffic Control Unit	Policy
Derrick Lewis, PE	NCDOT Feasibility Studies Unit	Policy
Lawrence Gettier, PE	NCDOT Work Zone Traffic Control Unit	Policy

Sub-Committee Members not present:

Mike Bruff, PE	NCDOT Transportation Planning Branch	Policy
Jimmy Travis, PE	NCDOT Construction Unit (Public Information)	Policy
Kevin Lacy, PE	NCDOT Traffic Engineering Branch	Policy
Max Tate, PE	Federal Highway Administration (FHWA)	Policy
Terry Hopkins, PE	NCDOT Traffic Safety Unit	Policy
Gus Jordi, PE	Charlotte Department of Transportation (CDOT)	Policy
Charles Cox, PE	NCDOT Project Development & Environmental Analysis	Policy

Others attending:

Jennifer Portanova, PE	NCDOT Work Zone Traffic Control Unit	Policy
------------------------	--------------------------------------	--------

The members of the Policy Sub-Committee met to discuss the Committee's comments on the draft Goals and Objectives. The goal of the meeting was to finalize the draft Goals and Objectives. At the meeting, each attendee was provided two documents. One document contained all the comments in blue (see attached), and the second was a proposed document that incorporated the comments.

The attendees determined which comments would be incorporated into the revised document, part of an action plan for later development, or not incorporated into the document. The finalized draft document is attached at the end of these minutes.

The final draft Goals and Objectives will be combined into one document with the draft Significant Projects Criteria and sent out to the Committee on July 6th for a final review. Committee Members will meet on July 13th to finalize the combined document that will be presented to Len Sanderson on July 19th.

WZ Safety & Mobility Policy Sub-Committee
DRAFT GOALS & OBJECTIVES
REVISED JUNE 22, 2006

Goal 1: To develop an agency culture committed to the Work Zone Safety and Mobility Policy

- Objective 1: Educate staff on effects of safety and mobility policy on their respective work and promote organizational awareness
- Develop a program or method to educate staff at all levels
 - Make policy easily available to all levels
- Objective 2: Educate staff on how their timely decisions affect work zone safety and mobility, construction duration and cost
- Develop a program or method to educate staff at all levels
- Objective 3: Be national leaders in work zone safety and mobility
- Participate in national committees
 - Host national or regional work zone safety conferences
 - Document and share initiatives and successes nationally
- Objective 4: Implement requirements of the Work Zone Safety and Mobility Policy (23 CFR 630 Subpart J)
- Coordinate work zone activities with IM during planning, design, and construction
 - Develop TMP for all Significant Projects
 - Develop selection criteria for the significant project process
 - Develop selection process for significant projects

Goal 2: To provide a safe work zone for all workers and road users

- Objective 1: Utilize ITS and enforcement strategies to enhance safety
- Use Smart Work Zone Technology to monitor traffic flow and adjust traffic strategies
 - Coordinate with the law enforcement agencies to establish enforcement guidelines for matching enforcement strategy to type of work zone
 - Use permanent ITS devices/programs more effectively and cost effective
 - Provide appropriate level of enforcement in WZ to maintain safe speeds and decrease aggressive driving
 - Coordinate with other agencies to develop a program to familiarize law enforcement with work zone safety
- Objective 2: Monitor work zone for major incidents
- Conduct investigations on major incidents, implement improvements where appropriate
- Objective 3: Provide safe design with the work zone in mind
- Establish criteria for the use of positive separation for temporary and final alignment
 - Design safe and user friendly roadway alignments
 - Use innovative methods and devices such as, temporary lighting, brighter/larger sheeting, better retroreflectivity, rumble stripes, delineation, and enforcement
 - Evaluate crash history on corridor, alleviate any deficiencies, and incorporate into successive stages and the final design
- Objective 4: Provide a continuous safe work zone environment
- Monitor and maintain work zone devices

- Follow guidelines for speed limit reduction in work zones
- Establish procedures for speed limit in work zones
- Continue to conduct safety meetings (tailgate meetings)
- Include Incident Management (IM) Plan as part of TMP

- Objective 5: Reduce crashes in work zone
- Improve method of collecting work zone crash data
 - Evaluate and consider pre-work zone crash data in TMP design

Goal 3: To consider mobility and access in work zones

- Objective 1: Utilize innovative technology in work zones
- Use ITS (dynamic lane merge, Smart Work Zone)
 - Establish guidelines to match technology with work zone strategy
 - Pro-active “Real-time” Regional and Statewide notifications for significant projects (similar to major accidents – Real time information to DMS, Welcome Centers, Trucking Association, etc.)
 - Establish a project website for Significant Projects to provide and exchange information to participants in the delivery system

- Objective 2: Minimize impacts to users
- Consider IMAP as a strategy
 - Improve coordination with local travel stakeholders (schools, police, fire, etc.)
 - Provide the contractor adequate access to the project to expeditiously complete the work
 - Provide the motoring public with adequate access to business and residences (where applicable) without minimizing efficiency of the work zone

- Objective 3: Minimize motorist delays and reduce congestion in work zones
- Monitor work zones (speed, volume, queue, lengths)
 - Establish a process for collecting data
 - Establish and verify criteria for delays (thresholds)
 - Coordinate existing DOT data collecting efforts
 - Match the traffic management strategy to the desired construction duration and work zone impacts

Goal 4: To advocate innovative thinking in work zone planning, design, and management, so as to consider alternative/innovative design, construction, contracting, and transportation management strategies

- Objective 1: Consider appropriate project selection, project scope, and project limits
- Ensure quality alternate routes
 - Consider efficiency of work zone traffic patterns and final traffic operations pattern
 - Instill getting out and staying out mentality

- Objective 2: Consider work zone impact during planning
- Revise existing feasibility study process to account for work zone impacts, such as network impacts
 - Revise existing project planning process to account for work zone impacts, such as network impacts, identification of significant projects and environmental resources by considering other adjacent projects
 - Establish default traffic management strategies per project type based on impact that are then refined on a project-by-project basis
 - Consider funding for traffic management strategies early in the process
 - Consider contract duration at the planning scoping stage

- Identify all stakeholders that could impact coordination issues such as, utilities, enforcement, community impacts, etc

Objective 3: Consider work zone impact during design

- Conduct a more detailed design level assessment of the work zone impacts of individual projects and develop appropriate TMPs.
- Establish a process during design to follow up on traffic management strategies that were determined in the planning process
- Establish design standards for temporary alignment during construction
- Consider impacts of geometric design on traffic management strategies
- Consider impacts of geometric design in temporary and final alignment
- Incorporate value engineering earlier in design
- Design for future needs
- Consider maintenance needs
- Provide the most accurate contract duration estimate
- Use internal and external constructability reviews on all significant projects
- Allow more flexibility to the contractor to increase productivity

Objective 4: Consider work zone impact during construction

- Implement and monitor TMP strategies
- Revise TMP strategies if necessary

Objective 5: Consider innovative techniques

- Develop procedures to use during the planning and design process for the use of innovative contracting techniques and materials during construction
- Establish a process for the use of innovative construction methods
- Establish a program to provide the contractor incentives for the use of innovative techniques, such as VECP
- Establish a process to select innovative contracting methods for significant projects, such as lane rental, complete road closure, A+B, design-build.
- Improve accessibility to electronic project files/data for all affected parties

Objective 6: Minimize third party delay on delivery of projects

- Update current Utility, Rail, and Right of Way policies, procedures, specifications, and design manuals
- Include Utility, Rail, Municipality, and Right of Way coordination early in the planning process
- Include and use the appropriate level of Subsurface Utility Exploration (SUE) on all significant projects
- Investigate innovative ideas to minimize and eliminate 3rd party conflicts

Goal 5: To provide credibility in work zones

Objective 1: Continue to provide and disseminate useful and essential information

- Work with local media
- Utilize ITS (Smart Work Zone Technology, permanent DMS)
- Include Public Information (PI) component into Transportation Management Plan (TMP)
- Coordinate work zone activities better by using existing databases that captures on going construction activities on Interstates and US Highways (TIMS, STOC, Construction Progress Database, RTMS, “Speed Info” Areas)
- Ensure better information is generated and entered into existing databases that capture construction activities

Objective 2: Provide consistency for all work zones, such as construction and maintenance

- Require Contractor Certification
- Establish industry standards for traffic control devices
- Establish a statewide database that includes predetermined time restrictions on Interstates and US Highways based on location
- Establish a system for issuing lane closure permits for every lane closure
- Educate DOT staff including residents, inspectors, etc about standards and specifications

Objective 3: Ensure Contractor's Compliance with work zone policies and regulations

- Require the Contractor to provide a Traffic Control Inspector
- Use work zone signing only when work zone could be affecting traffic
- Develop a program to promote and improve compliance

Objective 4: Provide responsive customer service during the entire project delivery process to both internal and external customers

- Consider all target audiences during planning and early development stages of TMP strategies
- Establish a project identity for significant projects at the planning stage that is consistent through the delivery of the project and transfers from planning to design to construction
- Provide timely responses to customers regarding work zones and work zone impacts
- Establish a project website for Significant Projects to provide information to the public

Goal 6: To continuously assess and improve work zone strategies, practices, and procedures

Objective 1: Assess, document, and implement successful strategies

- Evaluate work zone crash data to establish new and proven work zone strategies and procedures that reduce crashes in work zones
- Solicit suggestions from field engineers through post-construction evaluations to develop lessons learned to ultimately change design policies
- Solicit feedback from contractors, law enforcement, and road users
- Improve crash data collection methods

Objective 2: Conduct project performance assessment and process reviews

- Conduct a bi-annual process review to assess wide scale performance of work zones with the goal of improving work zone processes and procedures. Appropriate personnel who represent the project development stages and the different offices within the department, and the FHWA should participate in this in this review.
- Regularly conduct "Windshield Reviews" of active construction project work zones. Appropriate personnel from the department and the FHWA should participate in these reviews.
- Conduct safety inspections/audits as needed to address specific problems that occur
- Create an assessment checklist and/or work with Roadway Construction Engineers, Division Safety Engineers, and Regional Traffic Engineer to add the items that need to be assessed in their audits
- Participate in the FHWA Work Zone Self Assessment Program

Objective 3: Provide and disseminate essential temporary traffic control design information to traffic control professionals

- Set up communication web for traffic control professionals
- Provide training for traffic control professionals
- Develop Traffic Control Design Manual and standards
- Continue to host Work Zone Traffic Control Rodeo
- Provide training on updates, industry practices, NCDOT policies and procedures