

North Carolina Department of Transportation
Work Zone Safety & Mobility Final Rule
Policy Sub-Committee
March 30, 2006
Traffic Control Conference Room, Century Center B2



Sub-Committee Members attending:

Name	Representing	Sub-Committee
Joseph Ishak, PE - Lead	NCDOT Work Zone Traffic Control Unit	Policy
DeWayne Sykes, PE	NCDOT Roadway 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
Stuart Bourne, PE	NCDOT Work Zone Traffic Control Unit	Policy
Terry Hopkins, PE	NCDOT Traffic Safety Unit	Policy

Sub-Committee Members not present:

Mike Bruff, PE	NCDOT Transportation Planning Branch	Policy
Gus Jordi, PE	Charlotte Department of Transportation (CDOT)	Policy
Derrick Lewis, PE	NCDOT Feasibility Studies Unit	
Charles Cox, PE	NCDOT Project Development & Environmental Analysis	Policy
Lawrence Gettier, PE	NCDOT Work Zone Traffic Control Unit	

Others attending:

Jennifer Portanova, PE	NCDOT Work Zone Traffic Control Unit	Policy
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The members of the Policy Sub-Committee met to begin the development of the policy. The policy should consist of the following:

- Vision Statement
- Goals and Objectives
- Specific Policy Provisions for Application during Project Delivery

This meeting focused on completing a final draft for a vision statement to bring to the next Committee Meeting on April 20th. The following is the draft vision statement:

NCDOT develops comprehensive transportation management plans throughout the project development process, purposefully plans safe and efficient work zones, and uses innovative techniques in design, contracting methods, and construction to minimize delays for all roadway users.

The next area of the policy to be developed is the Goals and Objectives. The Key Components of a Work Zone Policy are identified in Section 3.2 of the FHWA *Implementing the Rule on Work Zone Safety and Mobility*. On page 3-6 the Policy Guidance and Agency Processes and Procedures section list examples of topics that can be included in the policy.

Action Item: Each sub-committee member was given one component to identify what the Department is doing now to support this component, which draft goal(s) fits into the specific component, and any new goals that could fit into the component. For reference, the Assignment for the Next Meeting that includes the initial list of goal, along with the NCDOT's 2005 Business Plan has been attached to these minutes. Sub-committee members will **submit the components to Jennifer by April 27th** to be compiled for distribution to the sub-committee.

The sub-committee brainstormed two components for goals. The brainstorming notes are attached at the end of the minutes.

The next Committee Meeting will be Committee Meeting on **April 20th** at 1pm in the Traffic Control Conference Room. The next Policy Sub-Committee Meeting will be on May 11th at 1pm in the Traffic Control Conference Room.

The Committee Website is online at http://www.ncdot.org/doh/construction/wztc/final_rule/. As discussed in the Sub-Committee Meeting the Committee Ground Rules are as follows:

1. Be prepared for the meeting.
2. Follow through on agreements and action items
3. Come to the meeting on time.
4. Value the diversity of team members.
5. Make decisions by consensus of all necessary team members.
6. Participate in the meeting.
7. Listen and have an open mind.

Brainstorming Notes

1. Overall policy issues [e.g., establishing a committee to discuss and coordinate agency work zone activities; developing memoranda of understanding (MOUs) with utility operators to coordinate schedules; acceptable levels of work zone performance such as queue thresholds].
 - Minimize third party delay on project delivery (utilities, railroad, municipalities, schools, etc)
 - Provide utility companies with our design plan (policy)
 - Provide incentives to utility companies to move utilities
 - Increase percentage for emergency hold back for utility companies
 - Buy permanent utility easements
 - Including room for utilities in our right of way project (doing now)
 - Increase level of credibility in work zones
 - Have same requirements for contractors and maintenance (Maintenance, Construction Unit, MPOs, Municipalities, Utilities)
 - Use of ITS (Dynamic lane merge, Smartzone, permanent DMS, etc.) in work zones
 - Incorporate work zone discussions earlier in the project process
2. Work zone options (e.g., night work, full-closure, detours).
 - Establish standard work zone strategies per project type based on impact
 - Minimize motorist delay

ASSIGNMENT FOR NEXT MEETING

Components needed in Policy

3. Overall policy issues [e.g., establishing a committee to discuss and coordinate agency work zone activities; developing memoranda of understanding (MOUs) with utility operators to coordinate schedules; acceptable levels of work zone performance such as queue thresholds].
4. Work zone options (e.g., night work, full-closure, detours).
5. System planning strategies (e.g., grouping and sequencing of projects in a corridor; including the costs for work zone management strategies in plans).
6. Design strategies (e.g., traffic control, choice of materials, use of positive separation, temporary structures).
7. Contracting strategies (e.g., low bid, design-build, lane rental, A+B bidding, incentive/disincentive contracting).
8. Work zone management strategies (e.g., use of intelligent transportation systems, traveler information, real-time work zone monitoring, traffic incident management, and enforcement).
9. Agency use of work zone reviews, process reviews, or safety inspections/audits.
10. Strategy for use and collection of work zone data.
11. Criteria for identifying significant projects. (Significant Policy Sub-Committee)
12. Exception criteria and procedures for significant projects.
13. Procedures for determining transportation management plan (TMP) needs for projects

Initial Draft of Goals

- Move significant construction decisions to the scoping stage (Planning, TEB, Feasibility, Program Analysis)
 - Scope in items that will improve safety
 - Reduce exposure by considering different methods of construction, ie closing the road
 - Etc.
- Plan Corridors (Planning, Feasibility Studies, Program Analysis)
 - Serve a transportation need (well planned and timely approach to planning a project)
- Improve incident management response (Incident Management)
- Interdepartmental Field Visits (All Units)
 - Create an assessment checklist and/or work with Roadway Construction Engineers, Division Safety Engineers, and Regional Traffic Engineer to add the things that need to be assessed in their audits
 - Evaluate maintenance project with similar criteria as maintenance projects
- Improve safety for workers and all types of transportation (motorist, pedestrian, and bikes)
 - Reduce crashes (TEB, Incident Management, WZTCU)
 - Scope in items that will improve safety (Planning, Feasibility Studies, Program Analysis)
 - Reduce exposure by considering different methods of construction, ie closing the road
- Increase level of credibility in work zones
 - Have same requirements for contractors and maintenance (Maintenance, Construction Unit, MPOs, Municipalities, Utilities)
 - Use of ITS (Dynamic lane merge, Smartzone, permanent DMS, etc.) in work zones
- Improve general statewide knowledge by requiring work zone certifications both for contractor and DOT (WZTCU, Construction, Maintenance)
- Minimize motorist delay by using more efficient and innovative constructibility methods (Program Delivery, Construction)
 - Consider contract times at the scoping stage
 - Incorporate value engineering earlier in design
 - Timely construction
- Design for future needs (one piece of this is the Strategic Highway Corridor Plan) (All Units)
- Interdepartmental Training (so we can all understand how this final rule affects us)
 - Include consultants and contractors
- Minimize community impacts (natural and human) (Planning, PDEA, Project Analysis, TEB, Maintenance, Roadway, Construction Unit)
- Make Public Information more readily used/known (Construction Unit, Maintenance, Traffic Services)

Assignment to Jennifer by April 27th

- Identify what the Department is doing now to support this component.
- Identify which draft goal(s) fits into the specific component.
- Identify any new goals that could fit into the component.

Next Meeting Objectives

- Discuss and complete the final draft of goals and objectives

Components needed in Policy

Terry Hopkins/Gus Jordi	1. Overall policy issues [e.g., establishing a committee to discuss and coordinate agency work zone activities; developing memoranda of understanding (MOUs) with utility operators to coordinate schedules; acceptable levels of work zone performance such as queue thresholds].
Joseph Ishak	2. Work zone options (e.g., night work, full-closure, detours).
David Wasserman/Charles Cox	3. System planning strategies (e.g., grouping and sequencing of projects in a corridor; including the costs for work zone management strategies in plans).
DeWayne Sykes/Mike Bruff	4. Design strategies (e.g., traffic control, choice of materials, use of positive separation, temporary structures).
Jimmy Travis	5. Contracting strategies (e.g., low bid, design-build, lane rental, A+B bidding, incentive/disincentive contracting).
Stuart Bourne	6. Work zone management strategies (e.g., use of intelligent transportation systems, traveler information, real-time work zone monitoring, traffic incident management, and enforcement).
Max Tate	7. Agency use of work zone reviews, process reviews, or safety inspections/audits.
Kevin Lacy	8. Strategy for use and collection of work zone data.
Significant Projects Sub-Committee	9. Criteria for identifying significant projects. (Significant Policy Sub-Committee)
Significant Projects Sub-Committee	10. Exception criteria and procedures for significant projects.
Significant Projects Sub-Committee/Policy Sub-Committee	11. Procedures for determining transportation management plan (TMP) needs for projects

Department of Transportation's 2005 Business Plan

Safety

Goal 1:

Develop and deliver services, products and projects that ensure a safe and secure environment for employees, stakeholders /partners, and customers

Objective A: Reduce employee accident and injury/illness rates

1. Reduce number of DOT vehicle and equipment accidents by 5% from 2004 benchmark (Sanderson)
2. Achieve an overall DOT incident rate of 5.5 or less (Sanderson)
3. No work place fatalities (Sanderson)

Objective B: Reduce accidents, injuries, and fatalities among stakeholders/partners

1. No work place fatalities (Sanderson)
2. Provide real-time information to employers regarding their employees' driving records (Tatum)
3. Increase the number of employers with access to the Transportation Notification System (Tatum)
4. Improve the reporting of vehicle insurance in order to reduce the number of uninsured motorists on the highway (Tatum)

Objective C: Reduce crashes and fatalities on the transportation system

1. Reduce highway fatal crash rate from 2004 benchmark (ultimate goal is 1 per 100M vmt) (Sanderson)
2. Reduce number of work zone fatalities from 2004 benchmark (Sanderson)
3. Increase participation of law enforcement agencies on the Traffic Records Communication System (Tatum)

Objective D: Ensure DOT employee's compliance with the department's Safety Policy.

- Achieve zero (0) citations from OSHA (Sanderson)

Environmental Excellence

Goal 1:

Deliver all products, services and projects in compliance with the Department's Environmental Stewardship Policy and with all state and Federal environmental laws.

Objective A: Ensure DOT employee's compliance with the department's Environmental Stewardship Policy.

1. Continued delegation of Erosion and Sedimentation Control Program (Sanderson)
2. Achieve zero Notice of Violations on projects, facilities and operations (Riddick, King, Sanderson, Tatum)

Objective B: Ensure compliance of industry partners with state and federal environmental laws, rules and regulations

1. Achieve zero Notice of Violations on projects (Sanderson)
2. Achieve zero contract violations related to or as a result of adverse environmental impacts (Sanderson)

Objective C: Expand environmental sustainability practices (Sanderson)

1. Increase recycling by 10%
2. Reduce volume by 5% in waste stream
3. Increase utilization of alternative fuels by 10% within DOT's fleet
4. Expand use of gray/reclaimed water
5. Identify and track other areas of recycling efforts

Objective D: Improve air quality, water quality and land resource management (Sheats)

Air Quality:

1. Review, assess, and program at a minimum, 90% of available CMAQ funds, based on the applications received by the January 31, 2005 due date
2. Complete air quality analysis in non-attainment and maintenance areas (both MPO areas and rural counties) on time to prevent conformity lapses

Water Quality:

3. Improve water quality and land resource management. Track the following for value evaluation:

- Linear footage of stream that was fenced
 - Linear footage of stream stabilized
 - Linear feet of stream buffered (acres in preserved buffers and feet of stream preserved)
 - Acres of riparian buffer replanted
 - Length of bridge extended beyond the hydraulic opening requirement (including cost, reason for extension and environmental value)
 - Drainage size of area treated by grassed swales and stormwater retrofits
 - Acres of wetlands preserved and enhanced
- Land Resource Management:
4. Achieve yearly goal of "0" Notice of Violations (NOV'S) on projects, facilities and operations (Sanderson, Riddick and King)

Goal 2:

Accelerate/streamline the environmental component of the project delivery Process

Objective A: Zero project delays due to environmental mitigation

1. Plan, fund, and monitor expense allocation of the EEP and other mitigation efforts (Sheats and Foster)
2. Identify appropriate mitigation funding sources and allocation of funds in TIP (Sheats and Foster)

Objective B: Implement environmental initiatives, programs and process Improvements

1. Develop DOT Environmental Management Plan (EMS) by September 2005 (Sheats - OEQ)
2. Develop DOT EMS Implementation Plan by end of year (Sheats)
3. Support the development of GIS data layers and analysis tools (Sheats, Sanderson and Paxton)

Diversity Programs

Goal 1:

Maximize opportunities for diverse participation in all DOT operations.

Objective A: Develop a diverse DOT workforce that reflects the diversity of the public workforce

1. Meet and/or exceed Affirmative Action goals on an annual basis (Henderson)
2. Develop and implement Affirmative Action Plans (AAP) for DOT (Henderson)
3. 300 supervisors and managers attend the Equal Opportunity Institute (EOI)

Objective B: Maximize opportunities for diverse participation in all DOT contracting and purchasing

1. Award \$14 million in contracts to Small Business Enterprises (Steve Varnedoe)
2. Achieve private engineering firm goal commitment of:
 - DOH: 10.81% (pending approval from FHWA) DBE (8.13% Race Conscious/2.68% Race Neutral), 10% MB, and 5% WB (Sanderson)
 - Aviation: 11.7% DBE (all Race Conscious) (King)
 - Public Transportation: 24.81% DBE (19.8% Race Conscious/5.01% Race Neutral) (King)
3. Achieve construction contract goal commitment of 10.81% DBE, 10% MB, and 5% WB (DeWitt and Varnedoe)
4. Achieve goods and services contract goal commitment of 1% Disabled, 10% MB and 5% WB (Riddick)
5. Increase utilization of HBCU (Historically Black College and University) institutions in contracted research projects by 5% (Riddick)

Objective C: Deliver services that meet the needs of a diverse population

1. Provide language training and cross-cultural training opportunities to staff directly involved with customer service (Memory)
2. Gather data on unmet customer needs (Memory)

System Preservation and Maintenance

Goal 1:

Preserve the investment in the state's transportation infrastructure

Objective A: Maintain and operate the transportation system

1. Maintenance Condition Assessment Program (Varnedoe)
 - Obtain an increase in funding and manage the statewide and regional tier network to achieve LOS "B" and "C" respectively as defined by the

- Maintenance Condition Assessment Program, by 2007
- 2. Rest Area / Welcome Center Operations (Love)
 - Develop and implement performance standards and evaluation process
- 3. Litter Removal (Love)
 - Increase number of pounds of trash removed from the highways by 5%
 - Increase participation in Adopt A Highway program by 5%

Objective B: Implement Preventive Maintenance Strategies to extend the service life of the infrastructure

Bridges

1. Bridge Preservation Program - exceed 2004 benchmark condition rating for tatewide tier (Interstate and NHS) each year (Varnedoe)

Pavement

2. Yearly reduce poor ride quality (IRI) of the statewide tier (Interstate and NHS) to achieve 0% by 2010 (Varnedoe)
3. Pavement Preservation Program – Yearly increase mileage in the statewide tier (Interstate and NHS) under the Pavement Preservation Program in to reach 85% in “good” condition by 2010 (Varnedoe)

Traffic Signal / ITS Systems

4. Achieve 90% of intersections/ ITS devices with preventative maintenance inspection completed (Varnedoe)

Objective C: Develop a comprehensive Transportation Modernization Program

1. Develop and implement a plan to convert the Secondary Roads Program from paving program to a modernization program (similar to North Carolina Moving Ahead) (Varnedoe)
2. Yearly reduce the number of deficient bridges to achieve the national average of 25% by 2010 (currently 31%) (Varnedoe)
3. Develop a recurring Capital Pavement Maintenance Program (rehabilitation/structural) through the TIP for the statewide and regional tier network with initial funding by 2006 (Varnedoe)

Objective D: Plan for and effectively respond to Natural Disasters and Maintenance Emergencies

1. FHWA System restored within 180 days (Varnedoe)
2. Satisfy FEMA eligibility requirements for maximum reimbursement (Varnedoe and Barbour)
3. Net positive public feedback (Memory)

Program Delivery

Goal 1:

Deliver the transportation program

Objective A: Deliver TIP projects on schedule and within budget

1. Achieve 90% of Interstate, Rural and Urban projects let to contract in calendar year 2005 (Barbour, Thorpe, Varnedoe, DeWitt)
2. Achieve 70% of Bridge projects let to contract in calendar year 2005 (Barbour, Thorpe, Varnedoe, DeWitt)
3. Begin Right of Way acquisition on 80% of the Interstate, Rural and Urban ojects as scheduled in calendar year 2005 (Barbour and Thorpe)
4. Begin Right of Way acquisition on 60% of Bridge projects as scheduled in calendar year 2005 (Barbour and Thorpe)
5. Achieve \$650 million let in TIP projects (construction costs) in calendar year 2005 (Barbour, Thorpe, Varnedoe, DeWitt)
6. Control project construction contract cost increases so that actual contract costs on TIP projects do not exceed the total TIP project cost estimates by more than 5% for calendar year 2005 (Barbour, Thorpe, Varnedoe, DeWitt)
7. Control total construction cost overruns to no more than 4% of contract award costs (DeWitt and Varnedoe)
8. Complete 75 environmental documents in 2005 to meet TIP schedules (Thorpe and Barbour)
9. Submit permit applications a minimum of 9 months prior to project let for projects requiring individual 401/404 permits (Barbour and Thorpe)
10. Track data, review and accelerate project level traffic forecasts (Bruff)
11. Complete 60% of construction projects within the original contract time (DeWitt and Varnedoe)

Objective B: Deliver DOT (non-TIP) managed programs on schedule and within budget

1. Continue to manage projects that have been authorized to successful completion. Other projects being held pending availability of cash flow. (King)
2. Continue to develop and manage SB 1005 projects under existing contracts (Sheats/Thorpe)
3. Manage expenditures of Operations Programs as outlined in the contingency plan (Varnedoe)
4. Re-engineer issuance process for driver licenses and develop RFP by late 2005 for next generation of digital imagery licensing (Tatum)
5. Improve operational efficiency of field offices (Tatum)
6. Reduce the number of duplicate records by 10% each year in DMV (Tatum)

Objective C: Identify and implement process improvements to enhance delivery of transportation projects and programs

1. Establish department wide centralized private engineering firm (PEF) qualification (certification), rating system and utilization data base (DeWitt)
2. Fully implement the prompt payment policy and procedure (Sanderson, Sheats, King, Riddick)
3. Fully implement the Merger 01 process and complete the process information (Sanderson and Sheats)
4. Develop implementation plan for phase II of PMii (Sanderson and Sheats)
5. Reduce the total number of project schedule changes by 10% in fiscal year 2005 from benchmark fiscal year 2004 (Sanderson and Sheats)
6. Complete integration of Comprehensive Transportation Planning and Project Development processes and implement. Develop performance measures and tracking mechanisms (Sheats)

Objective D: Develop and implement innovative project delivery methods

- Develop criteria that would trigger the use of alternate project delivery methods on a project at certain milestones (DeWitt)

Goal 2:

Develop a process to integrate the Statewide Long-Range Multi Modal Transportation Plan (STP) into departmental decisions and operations

Objective A: Produce implementation plans for each action item identified in the STP

1. Develop legislation needed to begin implementation of the STP (Coward)
2. Complete development of performance measures associated with the Investment Scenario identified in the STP (Coward)
3. Prepare strategy for STP data refresh (needed in 2006) (Coward)

Objective B: Develop a communication strategy for NCDOT employees, transportation stakeholders and the general public

1. Increase the number of meetings conducted on the STP (Sheats)

Congestion Mitigation

Goal 1:

Reduce congestion and improve operational efficiency on the existing transportation system, and achieve operational efficiency on planned improvements and additions

Objective A: Promote the utilization of public transportation and other commuting alternatives

1. Increase alternate work arrangements in non-attainment areas (King)
2. Increase percentage of person trips using alternate modes (King)

Objective B: Improve the operational efficiency of the transportation system

1. Implement and adhere to the Access Management Policy (Sheats and Sanderson)
2. Review and optimize the operation of 50% of existing state-maintained closed oop traffic systems (Varnedoe and Barbour)

3. Decrease the number of major incidents with clearance times greater than 2 hours (Varnedoe)

4. Integrate modal options in our transportation system where feasible (Sanderson, King and Sheats)

Objective C: Increase opportunities for customers to use technology

1. Increase the on-line services (Paxton)
2. Continue to increase awareness of 511, TIMS and roadway cameras (Varnedoe and Memory)

Organizational Excellence

Goal 1: (Customer Service)

Consistently provide excellent customer service in a timely and professional Manner

Objective A: Provide clear and timely responses to internal and external Customers

1. Develop a comprehensive customer service plan (Memory)
2. Implement changes to DOT supported systems to support online services for customers (Paxton)

3. Use appropriate technology to provide information to customers (Paxton)

Goal 2: (Transportation Advocacy)

Advocate for a transportation system that provides a high level of service and meets the needs of the state

Objective A: Communicate transportation goals and objectives

- Develop and implement an internal and external communications plan (Memory)

Objective B: Enhance and establish new partnerships with stakeholders

- Increase and improve partnerships, or partner with other public and non-profit entities (DeVane)

Goal 3: (Financial Management)

Ensure financial equilibrium between operating goals and financial resources

Objective A: Link organization strategic mission to measurable financial goals

- Provide monthly financial updates starting the first quarter of 2005 (Foster)

Objective B: Maximize available financing to accelerate project delivery and maintain positive cash flow

1. Integrate strong cash management practices into DOT (Foster)
2. Use long range cash flow simulation models to ensure adequate resources for priority projects (Foster)

3. Provide monthly cash scorecard to Financial Planning Committee starting first quarter of 2005 (Foster)

4. Develop Strategic Financing Plan in 2005 (Foster)

Objective C: Provide upgraded financial analysis and reporting to measure strategic benchmarks

1. Develop an Executive Dashboard (Foster and Paxton)
2. Begin work on an integrated Business Data Warehouse (Foster and Paxton)

Goal 4: (Workforce Development)

Recruit, develop and retain outstanding/highly qualified/motivated employees

Objective A: Recruit and retain highly qualified, competent employees

1. Conduct periodic work force needs assessments and develop targeted recruitment, hiring and retention programs focused on short, mid and longrange needs (Henderson)
2. Decrease vacancy periods and turnover rates in scarce skilled positions (Henderson)
3. Increase retention rate of employees (Henderson)

4. Continue the implementation and development of skill based/competency based pay program (Henderson)

5. Develop and implement departmental recognition programs that reward specific behaviors that add value to the business unit (Henderson)

Objective B: Develop outstanding/highly competent employees

1. Develop a DOT Succession Plan (DeVane)
2. Develop an annual employee training and development plan (Henderson)
3. Review training accomplishments during year-end review cycles to ensure training opportunities were provided as stated (Henderson)

4. Explore the skill sets needed within the organization and opportunity to recognize pertinent certifications, registrations and licenses (Henderson)

Objective C: Safeguard the transportation infrastructure

1. Perform a risk assessment for the transportation infrastructure (Sanderson and King)

Objective D: Safeguard the integrity of computer systems, electronic data, and physical records

- Develop an overall security plan which does not adversely affect production (Paxton)

Objective E: Continue implementation of Governor Easley's Operation Stop Fraud

- Reduce number of fraudulent issuances (Tatum)

Goal 5: (Security)

Secure and protect the transportation system and the department's customers, employees, physical assets, records, and data and computer systems from risk

Objective A: Ensure business continuity

- Establish Business Continuity Plan framework (DeVane)

Objective B: Safeguard access and movement in and around NCDOT facilities

- Perform a risk assessment for NCDOT facilities (Riddick)

Objective C: Safeguard the transportation infrastructure

- Perform a risk assessment for the transportation infrastructure (Sanderson and King)

Objective D: Safeguard the integrity of computer systems, electronic data, and physical records

- Develop an overall security plan which does not adversely affect production (Paxton)

Objective E: Continue implementation of Governor Easley's Operation Stop Fraud

- Reduce number of fraudulent issuances (Tatum)