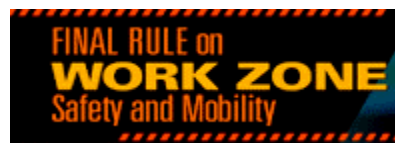


**North Carolina Department of Transportation
Work Zone Safety & Mobility Final Rule Committee**

June 22, 2006

Traffic Control Conference Room, Century Center B2



Committee Members attending:

<i>Name</i>	<i>Representing</i>	<i>Sub-Committee</i>
Joey Hopkins, PE	NCDOT Division Maintenance	Significant Projects
Kelly Damron, PE	NCDOT ITS Operations Unit	Significant Projects
Joe Geigle	Federal Highway Administration (FHWA)	Significant Projects
Wendi Johnson, PE	NCDOT Division Construction	Significant Projects
Steve Kite, PE	NCDOT Work Zone Traffic Control Unit	Significant Projects
Meredith McDiarmid, PE	NCDOT Work Zone Traffic Control Unit	Significant Projects (Lead)

Committee Members not present:

Greg Fuller, PE	NCDOT ITS & Signals Unit	Significant Projects
Nicole Hackler	NCDOT Feasibility Studies Unit	Significant Projects
Burt Tasaico	NCDOT Program Analysis Unit	Significant Projects
Scott Capps, PE	NCDOT State Road Maintenance Unit	Significant Projects
David Wasserman, PE	NCDOT Systems Planning Group	Significant Projects
Deborah Hutchings, PE	NCDOT Systems Planning Group	Significant Projects

Others attending:

Jessica Kuse, PE	NCDOT Work Zone Traffic Control Unit	Significant Projects
Michelle Long, PE	NCDOT Construction Unit	Significant Projects

The Significant Projects Sub-committee met to discuss the full committee's comments on the criteria levels to be used in selecting "Significant Projects", procedures to implement "Significant Projects", performance criteria and criteria for exemptions.

Joey Hopkins and Steve Kite are going to set up another meeting to discuss how best the requirements of the final rule could be implemented for routine maintenance. These solutions will be included in the procedures to implement "Significant Projects".

Steve Kite will provide the sub-committee revised the procedures to implement "Significant Projects", performance criteria and criteria for exemptions based on discussions during the meeting. He will email his revisions to the sub-committee to have email correspondence instead of an additional sub-committee meeting on these items to begin finalizing them.

Meredith McDiarmid will contact Mike Bruff to gain a better understanding regarding his comment to remove "Metropolitan" from criteria levels 2 and 3.

Below is a copy of the progress made on the Significant Projects portion of the Work Zone Safety and Mobility Policy. The items in red are revised comments from the sub-committee. Items highlighted in yellow are still to be discussed.

SIGNIFICANT PROJECTS Should we rethink the use of the word “projects” in light of our discussion that not all road work is considered a project or a work zone?

I. Definition:

A ‘Significant Project’ is one that alone or in conjunction with other projects is anticipated to cause **substantial** work zone impacts to the motoring public, businesses, or local communities during its construction **duration** or will relieve existing congestion on the highway network upon its completion.

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 or rural), traffic and travel characteristics, type of work being performed, time of day/night, and complexity of the project. 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.

II. Criteria:

Projects that meet either Level 1 and Level 2 criteria as defined below will be identified as “Significant”. These projects will receive additional scrutiny and have additional measures implemented in an effort to reduce their overall impacts to the greatest extent practical. Actions such as planned/coordinated letting schedules, accelerated construction practices, innovative contracting techniques, monetary incentives, public **involvement** and public information strategies, etc. are methods to help achieve the desired result of reducing sustained work zone impacts on North Carolina’s transportation network. Additionally, all Interstate **activities** within the boundaries of a Transportation Management Area that occupy a location for more than three days with either intermittent or continuous lane closures shall be considered a ‘Significant Project’. Projects located on a Strategic Highway Corridor and/or the National Highway System (NHS) may also be designated as ‘Significant’. In addition, other activities may be labeled significant as deemed necessary.

Below are the descriptions that identify the 4 levels of projects and differentiate the impacts that projects have on the motoring public, local communities, and commerce in North Carolina.

Level 1 Projects- These represent ‘Significant Projects’ and are anticipated to have an adverse network impact to the traveling public at the National, **Statewide, and Regional levels to include the Interstate and Intrastate system, and have a High Level of Public Interest**

Level 2 Projects- These represent ‘Significant Projects’ and are anticipated to have an adverse impacts to the traveling public at the Regional, Municipality, and Local levels, and have a perceived High Level of Public Interest

Level 3 Projects- Anticipated Low Impacts to the traveling public at the Regional, Municipality, and Local levels, and have a perceived Moderate Level of Public Interest

Level 4 Projects- Anticipated Low Impacts to the traveling public at the Local level, and have a perceived Low Level of Public Interest

Below are the criteria that identify the 4 levels of projects and differentiate the impacts that projects have on the motoring public, local communities, and commerce in North Carolina.

Level	Existing or anticipated AADT	Total Truck Traffic	Duration of Traffic Impacts (change this to include corridors, etc.) (using conventional estimating/letting methods)	User Value and/or User Cost	Anticipated Additional Travel Times	Anticipated Level Adverse Impacts to existing transportation infrastructure (mass transit, rail, pedestrian traffic)	Anticipated Level Adverse Impacts to high volume traffic generators such as stadiums, large shopping centers, tourist destinations, etc.
1 meets ANY of these criteria	AADT per lane > 15,000 Examples: 60,000 AADT for a 4 lane road 90,000 AADT for a 6 lane road 120,000 AADT for a 8 lane road	≥ 20%	≥ 3 Years	≥ \$50,000/day	exceeding 15 minutes	High	High
2 meets at least 2 of these criteria	AADT per lane ≥ 10,000 but < 15,000 Examples: 40,000 AADT for a 4 lane road 60,000 AADT for a 6 lane road 80,000 AADT for a 8 lane road	≥ 15% but < 20%	≥ 2 Years but < 3 Years	≥ \$25,000/day but < \$50,000/day	> 10 minutes but ≤ 15 minutes	Moderate	Moderate
3 meets at least 2 of these criteria	AADT per lane ≥ 7,500 but < 10,000 Examples: 30,000 AADT for a 4 lane road 45,000 AADT for a 6 lane road 60,000 AADT for a 8 lane road	≥ 10% but < 15%	≥ 1 Year but < 2 Years	≥ \$12,500/day but < \$25,000/day	> 5 minutes but ≤ 10 minutes	Low	Low
4 meets ANY of these criteria	AADT ≤ 7,500	< 10%	< 1 Year	< \$12,500/day	< 5 minutes	N/A	N/A

III. Procedure: **This is still be revised.**

Raleigh Let Projects:

During the initial scoping and planning **all** TIP projects will be qualitatively evaluated to determine if they are a 'Significant Project'. During the **project** development process, all will be quantitatively re-evaluated based on criteria to either remain or be removed as a 'Significant Project'. Once a project is confirmed as a 'Significant Project', the transportation management strategy as well as the project contractual type, project duration, let schedule and the determination for incentives for early completion will be established. The Transportation Management Plan (TMP) will be developed **considering** these metrics.

Division Let Projects:

Projects originated at the Division **level** (ex. Resurfacing, DDL, BPOC **and other maintenance activities**) are to be evaluated using the "Significant **Project**" definitions (**Quantitative** Analysis) and/or Criteria (Qualitative Analysis) 6 months prior to Letting. Once identified, these are to be communicated to the Design Build Executive Committee. The Design Build Executive Committee will then review and if necessary request exemptions to FHWA or notify the WZTCU to design a TMP. This Committee will also initiate the appropriate actions such as accelerated construction techniques, scheduling adjustments, project durations, 8 week advertisements etc.

I basically agree with Joey's comments about maintenance activities. I think a main concern would be a CME having to jump through 10 more hoops to try and patch a road. I think our criteria and thresholds look good so far. One part of the process in the FHWA guidelines is establishing who determines if a project is significant. I don't know if we have addressed this yet. One of my earlier suggestions was Debbie Barbour for TIP when the decision is made in the preconstruction phase. Then it gets confusing on the maintenance side, can a CME decide if a project is significant, or does it have to be the DME or Division Engineer?

IV. Exceptions **(If we do this for all projects, who approves the non-federally funded projects? J. Travis)**

Exceptions may be granted by FHWA on specific projects and/or categories of projects. For projects that are classified as "Significant" according to the Rule, but in reality, may not have a high level of sustained work zone impacts, an exception may be warranted. Projects that are classified as "Significant" through the application of this provision, but in the judgement of the Department do not cause sustained work zone impacts, may request an exception from the FHWA Division Office **at NCDOT's request**. The Department may use either qualitative or quantitative criteria and methods (or a combination of both) to illustrate that the specific project or categories of projects will not have sustained work zone impacts.

(Joey Hopkins noted in an email that he had concerns about the exception process and wonder how that will affect routine maintenance operations that last more than 3 days (intermittently) or on ones where there is not 6 months of planning time before construction.)

Blanket exceptions for certain categories of projects may be sought by the Department if it is determined these projects will not have sustained impacts, and can demonstrate it to the FHWA. Some examples of Interstate system projects that might qualify for blanket exceptions include:

- Road work on Interstate projects where the **work zone** capacity far exceeds the demand **(Maybe say Work Zone reduces capacity but not less than demand K. Damron)**

- Night work on certain Interstate routes (what about complete closures? K. Damron)
- Off-Peak and weekend lane-closures on certain Interstate routes
- Short-term, moving operations (e.g. striping) on certain Interstate routes

This seems too lax. These are causes- what we really care about is effect (i.e. increased travel times) these are too easy. K. Damron

The process for exception requests include the following:

- Assess the Work Zone impacts of the specific Interstate project or categories of project using appropriate methods (qualitative, quantitative, or combination of both)
- Compare the expected work zone impacts with the Department's Work Zone Policy provisions and verify the project is not expected to have sustained work zone impacts
- If the project or categories of projects appears to meet the conditions for an exception, the State Work Zone Traffic Control Engineer will prepare the exception request and submit it to the FHWA Division Office for their review.
- If the project originates at the Division level, then the Division Engineer will prepare the exception request and submit it to the FHWA Division Office for their review.

Written correspondence to the FHWA Division Office explaining the exception request is required. The main element of an exception request will be the Department's assessment of the expected work zone impacts, and may include a description of the project and local conditions.

V. Selection of Transportation Management Plan (TMP) components

A Transportation Management Plan (TMP) is required for all projects. A TMP lays out a set of coordinated strategies and describes how these strategies will be used to manage the work zone impacts of a project. The scope, content, and level of detail of a TMP will vary based on the Work Zone Policy and the anticipated work zone impacts of the project. The type of TMP needed for a project is based on whether the project is determined to be a "Significant Project"

The components of the Transportation Management Plan are determined by the Level of project as defined in the Criteria Section above. Listed below are the required components by Project Level.

Level 1: (This would require more Public Information Staff manpower up front (earlier in the process) to be involved in these projects)

Temporary Traffic Control Plan (TTC)
Transportation Operations Plan (TO)
Public Information Plan (PI)

Level 2: (There are concerns with Public Information Staff manpower needed to accomplish this as TIP increases)

Temporary Traffic Control Plan (TTC)
Transportation Operations Plan (TO)
Public Information Plan (PI)

Level 3:

Temporary Traffic Control Plan (TTC)
Transportation Operations Plan (TO)- As Appropriate
Public Information Plan (PI)- As Appropriate

Level 4:

Temporary Traffic Control Plan (TTC)

Evaluation procedure is important to instill in this section on defining significant projects. Where criteria can be modified if necessary (T. Hopkins).

I am not sure we need minimum/maximums, since there are multiple criteria. It's a technical issue, but we need to look at it so we don't technically exclude projects with differing conditions
J. Travis

I recommend that someone at the state level also have to grant exceptions, not just FHWA. In other words, both a state rep and FHWA would have to concur that an exception is to be granted.
R. Rochelle

I would recommend clarifying who is responsible for preparing the TMP for each project rather than leaving it implied. R. Rochelle

Is there a way to hone down to volumes during work zone hours such as for night work? Could we not collect this data fairly easily? K. Damron

Can we say that sometimes you will know because you have done it before- ie last summer we closed road X from X-Y PM on summer nights with minimal backups and then define minimal?
K. Damron

Next Meeting and Follow-up Information

- Committee Meeting July 13th, 1pm Traffic Control Conference Room
- Subcommittee meeting, August 3rd, 1pm, Signing Conference Room

ACTION ITEMS:

- Review the ideas for the performance measurements for Significant Projects and criteria for exemptions that Steve will be sending you.. These items will need to be finalized in the next subcommittee meeting on August 3rd.