FAQ from Divisions on Policy and Guidelines

Policy Comments

⇒ Is the Significant project information "criteria" or "guidelines"?

The first four sheets are intended to serve as our general policy. The rest of the information will serve as guidelines for personnel in order to insure compliance with the Rule. Incorporated into those guidelines are criteria for the determination of a significant project.

⇒ Does this include encroachment work?

The Rule applies to all Significant projects and activities that are federally funded. Since the average citizen has no idea of the source of the money used to perform work, the Department has taken this opportunity to apply the Rule to all projects and activities in our State regardless of the source of funding. Encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project Transportation Management Plan (TMP) needs.

⇒ What about projects that are not considered Significant according to the criteria, but are significant to the people in the area?

This is a great example of the proactive approach North Carolina has always taken as it relates to Work Zone Traffic Control. We would encourage your Division to use your judgement and apply the elements of these guidelines to any non-Significant project or activity.

Although not specifically mentioned in your comments to us, we'd like to make you aware that documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. Through our Maintenance Pilot Project, we hope to know more specifics about what the additional workload might be. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

As always, we appreciate Division 14's active participation in this process. If you have additional comments or suggestions, feel free to contact us. We look forward to working with Division 14 in the future to optimize Work Zone Safety and Mobility in North Carolina.

- ⇒ Is the Final Design meeting where the level of significance is finalized?
- ⇒ Is the Planning scoping meeting where a project will initially be evaluated for its level of significance?

Yes, it is anticipated the initial Significant designation will be at the Planning Scoping meeting. The finalized Significance Level should be determined no later than the Final Design meeting.

Public Information

⇒ We fax info to radio stations, schools, newspapers, etc.

Public Information is an integral part of the Transportation Management Plan (TMP) of a significant project. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects.

TELEPHONE: 919-250-4159

FAX: 919-250-5948

WEBSITE: WWW.NCDOT.ORG/~WZTC

Documentation

⇒ Does this rule require a documented effort for your Public Information (PI) plan?

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 2 of 2

⇒ We don't want to get to the point that we are having a checklist just to have a checklist.

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The Work Zone Safety and Mobility Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project TMP needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ The assumption is that someone will pull that document to use on future projects.

Any good evaluation and assessment program would include a review of previous projects and lessons learned. The Work Zone Safety and Mobility Committee has developed draft Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

- ⇒ We have a tailgate safety meeting for each operation and we have form to go by which includes Traffic Control. Do we just document there what standard we use?
- ⇒ Can we incorporate into work zone safety meeting?
- ⇒ Maybe we need a checklist added to the safety meeting info.

When there is a Significant project, it will require planning prior to the tailgate safety meetings. However, those meetings would be a good time to confirm the planning that has already taken place.

Division Procedures

⇒ Create a maintenance working group to develop a consistent, department-wide way to address maintenance concerns and the Rule.

This is a great idea! We discussed this in a WZS&M committee meeting. It was decided to put together a "Maintenance Pilot Project" first. Maintenance issues as related to this policy could then be identified as a "Volunteer" Division began to implement the Policy. As these issues are identified, they would then be discussed by the "Maintenance Working Group" you suggested. Division 5 has agreed to be the "Volunteer" Division. It was further suggested in our last committee meeting that the individuals to make up this "Maintenance Working Group" be discussed and identified at a future Operations Staff meeting. We are recommending a few of the operations and maintenance personnel on our original committee be in the maintenance working group.

⇒ For routine maintenance, we know our hot spots and know when we can and can't get out there. I don't see that as an issue. With additional procedures there is additional design cost. If my costs increase because of what the policy is requiring (15 min. delay in the criteria) then the number of bridges that can be replaced may decrease.

We realize there may be an increase in cost for Significant projects. Our intent is to comply for the Rule while keeping costs to a minimum.

⇒ We are not going to gain much on routine maintenance projects.

One thing the committee hopes to gain as a minimum is statewide consistency for Significant maintenance activities. If consistency already exists as a minimum, we have assured ourselves we are properly addressing safety and mobility in North Carolina.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 3 of 2

As always, we appreciate Division 2's active participation in this process. If you have additional comments or suggestions, feel free to contact us. We look forward to working with Division 2 in the future to optimize Work Zone Safety and Mobility in North Carolina.

Significant Projects criteria

⇒ Are there criteria national standards? It appears we are applying a standard for "Significant" projects that include many more projects than application of the national standards include.

The guidance from the FHWA is provided in the Work Zone Safety and Mobility Rule itself and subsequent documents that have been published to help states implement the Rule. The Department has taken a proactive approach by also applying the Rule to projects and activities that do not have federal funding. While this may add more Significant Projects to the "list", it also keeps the procedures simpler and creates consistency for work zones statewide.

Other

⇒ Prefer to not be more restrictive

While developing the policy, the committee has tried to allow as much flexibility in this process as possible without compromising consistency.

TMP

⇒ Do you have same time restrictions for every TIP project or do you look at each project individually?

Time restrictions would depend on the type of facility, the volume of traffic and any other factor that affects safety and mobility. Each project should be evaluated individually. If two different types of projects or activities at the same location require lane closures, time restrictions for those lane closures should be the same.

⇒ If it is significant, such as a cross pipe on Market Street, operations staff does review the TC.

As suspected, North Carolina is already considering some of the aspects of the Rule presently. Continue to do those things that will keep the safety and mobility of work zones acceptable.

⇒ A lot of things are decided before we leave the yard to make sure we have the correct signs, etc.

Pre-planning is essential to work zone safety and mobility. Keep up the good work!

⇒ Will we need some type of TMP or SOP for ALL activities in the Division?

TMPs will be required for all projects or activities. However, a TMP on a non-Significant project or activity may only include a Temporary Traffic Control Plan (TTC). All elements of a TMP (TTC. Transportation Operations (TO), Public Information (PI)) will only be required for Significant projects.

⇒ Will standard drawings cover as TTC?

Depending on the scope of a project or activity, a TTC could be as simple as referring to the standard drawing that will be used.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 4 of 2

⇒ We modify standard drawings daily.

It is expected that there will have to be modifications to fit each scenario. Standard drawings were not intended to be applied to every situation. It is crucial not to assume a roadway standard drawing will fit every aspect of your work zone.

⇒ Do Raleigh let projects that are designed in the Division have to go through the TIP process for determining level of significance?

The following is the Policy description of Responsible Charge of Significance Evaluation:

Responsible Charge of Significance Evaluation

TIP Activities	Division Activities
The WZTCU will be responsible for facilitating	The Division will be responsible for facilitating
the determination of significance with Division,	the determination of significance or can choose
Planning, and Design Representatives	to delegate to or request assistance from the
	Work Zone Traffic Control Unit.

Other

⇒ We want someone to come down and spend time with our maintenance crew leaders to see if we are doing what is needed.

This was a great suggestion and since we met with your Division, the Safety and Mobility Committee has started a pilot project with Wake and Harnett counties to learn more about maintenance projects to be able to assist in implementation of the Rule.

⇒ I want to make sure I understand... We need to makes sure traffic flows and protect the safety of the workers?

Safety and Mobility are the key emphasis areas in the Rule.

Division Procedures

⇒ We tell our workers to drive through the work zone after it is set up.

Driving through a work zone set up is a great way to evaluate the safety and mobility. We encourage your Division to continue to use this as a method to evaluate the effectiveness of work zones as it relates to safety and mobility.

⇒ Are time restrictions covered in a TO? We have talked about getting together locally to make more consistent time restrictions. We could put a map on the internet with areas of time restrictions, holidays, etc. OR Resurfacing software has capability to pick point A to B. Maybe we could have time restrictions show in a box for a given area.

All of these comments are excellent ways to address Traffic Operations. Time restrictions are an essential element of the Transportation Operations plan. The WZS&M Committee has a specific strategy that involves developing such a database. We encourage you to continue to consider time restrictions in all your activities. We would also encourage you to capture any rules of thumb or experience based knowledge for those that may face these decisions in the future.

⇒ We sometimes ask contractors to do different things than we do.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 5 of 2

One of the anticipated results of the Rule implementation is to have statewide work zones be more consistent with each other.

⇒ We do dictate times they (encroachment contractors) can have lane closures

Time restrictions are an essential element of a Transportation Operations plan. We encourage you to continue to consider time restrictions in all your activities.

⇒ If contractors do encroachment work at night, we aren't there to see if they do the TC right.

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. It is not reasonable to expect the Department to be present for every traffic control installation. We should, however, work towards the goal of work zone traffic control education and awareness to encroachers will be more prepared to install effective work zone traffic control

⇒ Encroachments/ driveway permits- we don't tell how they do the TCP, they just have to follow the MUTCD

Although the MUTCD is a great start for proper work zone traffic control, it cannot be the solution for all situations since they will vary from one location to another. It is not the intention for the Department to provide specific guidance for every traffic control need. It is an expectation of the Rule that we require our encroachers and contractors to provide work zone traffic control that optimizes safety and mobility.

Documentation Comments

- ⇒ Instead of having another process to document, could we have a tab in BSIP since we are already getting a task number from there
- ⇒ We could have two options:
 - 1. Determined not to be a "significant project"
 - 2. Determined to be a significant project
 - □ Under this tab include a checklist and comments for required documentation for a significant project (project workflow). This would be where the required documentation could be kept.
- ⇒ CMEs know significant roads and use common sense to schedule crews to work on certain roads but we don't document

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project Transportation Management Plan (TMP) needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review. The WZS&M Committee will also be investigating the feasibility of using BSIP to document work zone traffic control activities. BSIP seems like a good method of documentation that would not require too much additional effort from your employees.

Division Procedures

⇒ For smaller activities, we handle in the Division. For bigger activities, we work with the Work Zone Traffic Control unit to get plans

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 6 of 2

That process parallels the process explained in the policy. We would encourage you to continue to let the WZTCU help you with your significant project TMP needs.

⇒ We do some Public Information (PI)

Public Information is an integral part of the TMP of a significant project. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects.

- ⇒ Who will review the TMP for encroachments
- ⇒ Contractors requesting driveway permits already push us to get their approval quicker, if we have to review a Traffic Control Plan (TCP) or submit it to Raleigh for review, it will add to the time required to process the permit request.

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. The WZTCU will always be a resource you can use to review TMPs for all activities. We realize the time frames for these reviews is a concern and commit to helping you do your everyday work as efficiently as possible.

⇒ If we review the encroachment agreement TCP, does that mean we "bought" the liability?

The Department will always be liable to some degree for anyone working in our right of way. It is our hope that by reviewing encroachment agreement TMPs, the result will be more effective work zone traffic control, therefore reducing our liability.

⇒ Driveway permits – most driveway installations have minimal impact during actual construction. For those with greater impacts (requiring turn lane or other improvements to the roadway), incorporate evaluation for the need of a TMP in the planning stages of the development – perhaps at the municipal or county level. That will give developers and their engineering firms a "heads up" and time to prepare, hopefully eliminating delays or concern at a later date in the process when timing of work becomes more critical to them. Will probably need to give engineering firms general guidelines as to when a TMP will be required and the approval process.

This would be an excellent proactive approach to getting quality TMPs from encroachers. The WZTCU is committed to supporting your efforts in this area.

Policy

⇒ What area does the Raleigh-Durham Transportation Management Area (TMA) cover?

It is our understanding the boundaries of a TMA change constantly. The best way to determine if you are working in a TMA is to use http://www.ncdot.org/doh/preconstruct/tpb/mpo/default.html to view the most recent boundaries of your TMA.

⇒ Interstate mowing shouldn't be a significant activity.

We agree that most Interstate mowing would not be considered significant. However, if the mowing requires vehicles and/or equipment to be close to the travelway or creates disturbances that may affect the safety and/or mobility of that facility, it may be considered significant.

⇒ How do we determine User Value / User Cost?

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 7 of 2

True User Value and User Cost can only be determined using models based on the Highway Capacity Manual. The Work Zone Traffic Control Unit (WZTCU) has these capabilities and would be happy to assist anyone trying to determine the User Value/User Cost of an activity.

Documentation

- ⇒ What is this leading to? Are we going to have to do formal documentation for significant activities? Will we have to write out a page for the Temporary Traffic Control (TTC), a page for the Transportation (TO) plan, and a page for the Public Information (PI) plan? If yes, this will have a significant impact on us and the amount of work we get done.
- ⇒ Evaluation / Documentation of Division activities is hard because of the quantity of work (in some areas of Division 5).
- ⇒ We are doing most everything for a Transportation Management Plan (TMP), just not documenting.
- ⇒ A checklist or developing some SOPs would work for documentation. (Something simple we can live with)

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the WZTCU will continue to assist you with your significant project TMP needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

Division Procedures

- ⇒ We use time restrictions on Division activities.
- ⇒ Traffic Operations information is not always written down for Division activities.

Time restrictions are an essential element of the TO Plan. We encourage you to continue to consider time restrictions in all your activities. We would also encourage you to capture any rules of thumb or experience based knowledge for those that may face these decisions in the future. This would also create more consistency not only in your Division, but statewide. The WZS&M committee has developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ Traffic Operations are documented in encroachment agreements and POC projects.

Some elements like time restrictions would be documented in these situations. We want to make sure we are capturing all of the elements of a TO Plan.

⇒ Public Information depends on the significance of the work.

Indeed, Public Information is not necessary in all situations. All significant projects would be required to include a Public Information element of the TMP. We believe, as we progress with implementing the Rule, we will find that the projects we are already using Public Information on will be significant activities.

⇒ Public Information for encroachment agreements can be hard because we don't know when the contractor will begin work.

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 8 of 2

encroacher and the Department. As always, the WZTCU is a resource you can use to review TMPs for all activities.

⇒ Typically if a project is significant, we get cooperation from the contractor.

This is great news! Continue to coordinate with contractors to implement TMPs on Significant activities. This will result in a higher quality work zone.

⇒ There is not typically any Public Information out of the DDC office. They do coordinate this with others.

The source of Public Information is not as important and the Public Information itself. As long as Significant activities have Public Information included, we are meeting the intent of the Rule.

⇒ The Division is doing all the components of a TMP to some degree on projects of significance.

This, too, is great news! It is possible the only aspect of the Rule missing from you Division may be documentation.

⇒ The Division does not do the evaluation of projects part very often.

Your Division is not unique in this aspect. This will be an area of constant improvement for all Units in the Department, including WZTCU.

⇒ When we ask a contractor to develop a traffic control plan we need some help / training on evaluating the submitted TCP to see if it is acceptable. Will the WZTCU help us with this?

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. The WZTCU will be glad to assist you as you encounter these issues.

⇒ We have done pavement marking projects at night because of traffic.

Working at night is time restriction resulting from your considerations as they relate to transportation operations. Continue to evaluate each activity in this manner.

- ⇒ The Division hasn't looked at as many factors when deciding project significance. We looked at:
 - Congestion
 - Any major traffic generators in the area?
 - Truck traffic

All of these factors are important elements of determining activity significance. We would encourage you to use all the elements described in the criteria on page 12 of the most current draft Policy to determine the significance of an activity.

⇒ Resurfacing packages often have time restrictions in them. Does this count as documentation or do we have to do something separate?

Time restrictions in a TMP/TCP or any other contract would suffice for documentation. The activities that don't have these types of things will need more documentation.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 9 of 2

Documentation

- ⇒ What am I supposed to do with the documentation? File it?
- ⇒ If you are requiring me to document something that is not critical, then I'm not sure if we want to put that down on paper. If we put it down on paper, then as a County Maintenance Engineer, I will feel that I need to monitor whether what is documented is followed.
- ⇒ So then what do you want to document?
- ⇒ What good is a piece of paper? Should I, as a County Maintenance Engineer, do those or is it the Division Engineer's responsibility?
- ⇒ Need to identify the essential documents of information that should be considered for Transportation Management Plan (TMP), Transportation Operations (TO), Temporary Traffic Control (TTC), Public Information (PI) = Don't define absolutes!
- ⇒ We are doing these things we just don't have a shelf to put them on.
- ⇒ I need to understand what the are the essential elements I need to check (consideration) for the TMP

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. Where the documentation is kept, the method use to document, and the person responsible for documentation should be a decision the Division makes to fit their daily practices best. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project TMP needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

TMP

⇒ If I'm mowing on I-40 during the day, do I have to do a TMP? The criteria needs to be massaged to address certain activities, such as mowing, guardrail repair, etc.

Most Interstate mowing would not be considered significant. However, if the mowing requires vehicles and/or equipment to be close to the travelway or creates disturbances that may affect the safety and/or mobility of that facility, it may be considered significant. Since each operation is different, the guidelines are intended to provide enough information so Significance can be determined on a case by case basis.

⇒ Aren't we truly already doing what is required in a TMP?

We agree! Most Divisions are doing what is required in a TMP for some projects. It is possible the only aspect of the Rule missing from you Division may be documentation. Finally, Significance determination on a consistent basis statewide is another goal of this program.

⇒ What about signal work? My concern is lawyers using the documentation to get money for those in an accident and my signal is not operational.

Depending on the activity, it is possible for signal work to be considered Significant. In those cases, we would be required to meet the intention of the Rule. It is our intention for documentation to show the considerations that were part of the activity preparation to prevent such accidents.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 10 of 2

Policy

- ⇒ "Policy" implies that there is a certain amount of absolutes. On the other hand "strategy" would implies flexibility I would prefer it to be flexible. The absolutes will absolutely hang you at some point.
- ⇒ This needs to be a dynamic strategy which identifies the methodology to modify the strategy as we gain understanding—this is flexibility

Except for the first four pages, the document you reviewed is intended to serve as guidelines. We are developing goals and strategies to provide you flexibility as you apply the Rule to the activities in your Division.

⇒ Get to the point in the policy and then have guidelines. Wordy. "Lots of mumbo jumbo".

This feedback will be relayed to the WZS&M Committee. We strive to provide a useful document with as much information as possible without becoming burdensome.

⇒ The language should be written in active voice

This input will be relayed to the WZS&M Committee as well for their consideration.

SOPs

- ⇒ Maintenance has SOPs for roads with time restrictions
- ⇒ For 90% of maintenance activities, a SOP will cover. It's the other 10%...

Using SOPs is an acceptable way to accomplish consistency and effectiveness. How you determine to capture your efforts to provide TMPs for Significant activities will be at your discretion.

Other

⇒ Everyone one exercises his or her judgement by using your experience. If you don't have the experience then you go ask questions.

Everyone should continue to use his or her experience and judgement to evaluate an activity's significance. We would also encourage you to capture any rules of thumb or experience based knowledge for those that may face these decisions in the future. Any assessment and evaluation performed for activities will aid in the consistency of work zone traffic control statewide.

⇒ Would need a description of an outline of responsibility of County Maintenance Engineer for every encroachment you approve.

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. The protocol your Division uses will be as your discretion. As always, the WZTCU is a resource you can use to review TMPs for all activities.

⇒ Everything that was presented is TIP related.

It is true, we expect most Significant projects to be TIP projects. However, we are aware that some Division activities will be considered Significant. The committee is working diligently to work with the Division Maintenance personnel to include useful information for these activities in the document.

⇒ We do press releases for most projects

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 11 of 2

Public Information is an integral part of the TMP of a significant project. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects.

⇒ How much impact or influence will MPO's have? To determine significant or to determine strategies?

MPOs and RPOs have been invited to participate in the WZS&M Committee. We have one municipality representative and have identified this group as a focus area in our outreach efforts.

⇒ Your are talking about 75 plans a year, and county maintenance is looking at 75 plans a day.

We agree Significant activities will be the exception rather than the norm for Maintenance activities. The WZS&M Committee is launching a Division Maintenance Pilot Program to develop tools to be used as they evaluate maintenance activities for their Significance.

- ⇒ Work Zone Flagger Certification will play into this
- ⇒ Will flaggers be required to speak English?

Work Zone Traffic Control Training is an integral part of the Rule. The WZTCU is in the process of developing a Work Zone Traffic Control Qualifications and Training Program to address the training elements required in the Rule. Part of the focus of this program will be for flaggers to be able to properly guide the motorist safety through a flagging operation.

Division Procedures

⇒ We don't have 6 months in advance to determine if a project is significant. I just got my budget, so I wouldn't have the 6 months time if I want to do any winter work.

Significant Division activities may not require 6 months of evaluation. This was a suggested time frame that may be considered sufficient to properly plan for a Significant activity.

⇒ Is there a different procedure for federal and state money?

The Department has decided to apply the Rule to all activities statewide since the average motorist does not know how projects are funded. The same procedure will apply to both federal and state funded projects.

- ⇒ I'm confused on what is the procedure if we are doing mowing vs. slow moving operation? Now, for mowing we just use the slow moving operations.
- ⇒ If I have a sweeping contract on I-85 I can put it in the file and use it?

The intent of the Rule is to evaluate each activity for its impact on Safety and Mobility. The procedures you are using for your activities should not change unless your evaluation of its Significance necessitates an alternate TMP approach.

<u>Transportation Management Plan (TMP)</u>

- ⇒ We do most of the TMP items but we don't document.
- ⇒ Pretty much doing it (TMP) now, just not documenting it.

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 12 of 2

difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project TMP needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ If it (traffic operations or public information) is in the contract documentation then we have it.

This is great news! Transportation Operations (TO) and Public Information (PI) could be captured in contract documentation. It is possible the only aspect of the Rule missing from you Division may be documentation.

- ⇒ Sometimes we put Traffic Operations in TIMS.
- ⇒ Sometimes we put Public Information in the newspaper.

Public Information is an integral part of the TMP of a significant project. TIMS and the media are definitely great avenues for Public Information. We encourage your Division to continue to use and explore new avenues of Public Information on Significant projects.

Policy

⇒ How early on in the process will Division personnel be involved in planning?

On TIP projects, discussion of Significance will begin as part of the Feasibility Studies on that project. For Division activities, how early you begin considering elements of the TMP for an activity will depend on the scope of that activity. The Rule encourages planning for the safety and mobility of an activity as early in the process as possible. Our guidelines suggest consideration as early as 6 months before the activity is performed.

⇒ How much pull will this policy have with TIP scheduling?

This is an interesting question that we do not have the answer to. The WZTCU will strive to include consideration for Safety and Mobility at the level necessary for each project.

- ⇒ Need to get lettings straight with corridor projects.
- ⇒ US 421 Sanford Bypass: 5 projects total. The middle 3 have been let and are nearing completion. The 2 projects that tie in at each end will not be let for another 3 years. This is a road to nowhere!
- ⇒ The US 311 High Point Bypass is being dumped onto a 2 lane SR road.

The time frame for delivery of corridor projects to the public is definitely a mobility element for consideration. Letting dates of corridor projects will be part of the discussion related to a project's Significance.

Division Procedures

- ⇒ Projects need to be looked at regionally to see the overall impact.
- ⇒ Had 3 parallel streets on a Moving Ahead project. Coordinated finishing 1 street before starting on the next one.

Network impacts are one of the primary considerations when applying the Rule to projects. Your Division is commended for considering network impacts already in your activities.

⇒ We don't use full blown TMPs on Division activities.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 13 of 2

TMPs with all its elements (Temporary Traffic Control (TTC), Transportation Operations (TO), Public Information (PI)) would be necessary on Significant activities only. Your Division may not have had a Division activity that would be considered Significant.

⇒ Had to close I-85 for a maintenance activity. Had everything planned out in advance. Had sign placement sites marked on the pavement before hand so everyone would be on the same page.

This is a perfect example of prior thought and planning that facilitates better results for workers and motorists.

- ⇒ How does this TMP process fit into encroachments?
- ⇒ Getting compliance with encroachment agreements from contractors is a problem.
- ⇒ (Utility) Contractors feel that because they have an encroachment agreement with us that they are covered for anything.
- ⇒ Contractors are supposed to have a copy of the encroachment agreement on the project site. 99 out of 100 don't have a copy or know what the agreement is.

Excellent comments! As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. As a Department, we should work towards the goal of elevating the level of work zone traffic control education and awareness of encroachers. This will allow them to be better prepared to install effective work zone traffic control.

⇒ For major waterline crossings of a road we get complaints / feedback from the public about the operation.

Public feedback is a great way to evaluate the effectiveness of your work zone traffic control for an activity. The ultimate goal is to implement the elements of the Rule on Significant projects and avoid complaints related to safety and mobility.

Policy

 \rightarrow On p.13 in the chart for Level 4, is the AADT per lane?

All of the AADT's listed were intended to be per lane. The guidelines have been revised to better reflect that intention.

⇒ Page 13 is too detailed. Give classifications of what you're looking for. More of an informal dynamic plan.

The WZS&M Committee would love to work with you to provide a more user-friendly document. We will be contacting you to set up a time to get more details on the ideas you have.

Documentation

 \Rightarrow Is this CYA?

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 14 of 2

⇒ How many times have we been sued for this?

We do not know the answer to this question. As with any new requirement, we would expect to be in litigation more than we are presently if we do not comply.

⇒ Why can't the training of our employees to make good decisions suffice as fulfilling the requirements?

Training and judgement are integral parts of this process. No work zone safety and mobility program would be successful without these elements. Documentation, checklists, etc. would be of no use without the training and judgement that is involved with these decisions.

⇒ If we have formal checklist there may be more liability.

If the checklist were part of the policy, that could be the case. The checklist would be part of the guidelines provided to you as a tool for your use. It would not be the only acceptable method of documentation.

⇒ I'm not opposed to the checklist, but if we do a mandatory checklist and we don't do it then it's a catch 22. Are you not guiltier then if you don't do the checklist?

It is our hope that the checklist will help you document not cause more liability. It will be your choice as a Division whether to accept that practice.

⇒ We've started talking about these things, such as shorter duration, working around the clock. Do you document or do you not?

Our recommendation is to document what work zone safety and mobility measures you considered in your TMP for significant activities. We believe documentation will provide more consistency statewide.

⇒ Documentation is your contract.

The documentation we have been discussing would be considered part of the process of developing a TMP for significant activities.

⇒ Do we have to have a checklist or can it be provided as a guide? We are all for guidelines.

Except for the first 4 pages of the document provided to you at our presentation, all of it is considered guidelines. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ It will depend on how much management buys into this process. It will fall short if management does not get it down to the lowest level. Are you looking for a checklist in a file or a successful program?

Our intention is to have a successful program. We agree that management support will be critical to that success. We intend to continue to facilitate this program in a way that will foster success.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 15 of 2

Transportation Management Plan (TMP)

⇒ What about projects that are currently under construction? Do they have to meet the new requirements?

Beginning on October 12, 2007, NCDOT will be required to begin implementing the Rule on projects that are in the early planning stages. Projects and activities already past those milestones would not be under that requirement.

⇒ In Salisbury my Assistant Residents have developed a good working relationship with the paper and local media. We get them to advertise traffic shifts, road closures, etc.

This is great news! Public Information is an integral part of the TMP of a significant project. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects.

- ⇒ A lot of times we don't like to advertise that a project will be complete within a few weeks because:
 - People complain that their yard isn't the way they want it
 - If we don't finish by the date we said, people complain

Concerns of providing unintentional misinformation are completely warranted. The key would be to communicate with the public as is reasonable.

Policy

⇒ My only comment concerns the second policy goal, which states: "To develop an agency culture committed to the Work Zone Safety and Mobility Policy". To me, this statement seems to imply that we currently do NOT have a culture committed to Work Zone (WZ) safety, which is simply NOT true. As with everything, the WZ safety culture could certainly be improved or enhanced. We need to recognize the significant improvement efforts that have already been made in the field pertaining to WZ safety. Perhaps FOSTER could be substituted for DEVELOP?

You have a very good point, and we appreciated the comment. That implication was not intentional. The WZS&M Committee has changed the goal to "To *promote* an agency culture committed to the Work Zone Safety and Mobility Policy."

Division Procedures

⇒ Encroachments are the weakest part of our maintenance operations. We have requirements for traffic operations / public information in our agreements but it is hard to police / control encroachment agreements.

As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department. It is not reasonable to expect the Department to be present for every traffic control installation. We should, however, work towards the goal of work zone traffic control education and awareness to encroachers will be more prepared to install effective work zone traffic control.

Although not specifically mentioned in your comments to us, we'd like to make you aware that documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 16 of 2

minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project TMP needs. Through our Maintenance Pilot Project, we hope to know more specifics about what the additional workload might be. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

Documentation

⇒ We don't document, follow-up or evaluate

Your Division is not unique in this aspect. This will be an area of constant improvement for all Units in the Department. Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project Transportation Management Plan (TMP) needs. Through our Maintenance Pilot Project, we hope to know more specifics about what the additional workload might be. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

TMP

⇒ We do approach slab repair from 9am to 3pm on interstates or if it is raining. This work is longer than 3 days. We do Public Information (PI) by letting the Public Information Office (PIO) and City of Charlotte know. We use lane closures as shown in the Roadway Standard Drawing (RSD). Sometimes we do traffic shifts instead of lane closures.

You have mentioned all the components of a TMP (Public Information (PI), Transportation Operations (TO), and Temporary Traffic Control (TTC)). We would also encourage you to capture any rules of thumb or experience based knowledge for those that may face these decisions in the future. It is possible the only aspect of the Rule missing from you Division may be documentation.

- ⇒ You can print TIMS, and take photos of Changeable Message Signs when they are running for PI
- ⇒ We have a Public Information Officer which gives notices of upcoming work events

We encourage your Division to continue to use and explore new avenues of Public Information on significant projects and to continue to consider time restrictions in all your activities.

Other

⇒ Is the City of Charlotte to do this also?

The Rule applies to all Significant projects and activities that are federally funded. Since the average citizen has no idea of the source of the money used to perform work, the Department has taken this opportunity to apply the Rule to all projects and activities in our State regardless of the source of funding. Local public agencies that receive Federal-aid highway funding will need to implement the policies and procedures required by the Rule.

Division Procedures

⇒ We already do this, just on a smaller scale.

This is great news! It is possible the only aspect of the Rule missing from your Division may be documentation.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 17 of 2

⇒ Some encroachments are significant. For example, Duke Power crossing I-85 with power lines. Encroachments do have restrictions. We require encroachment contractors to submit TCP for review on bigger projects to make sure they go by the MUTCD.

This, too, is great news! As you are aware, encroachment agreements provide an interesting challenge as we work to meet the requirements of the Rule. We anticipate this element will require more coordination for both the encroacher and the Department which you seem to already be doing. As always, the WZTCU is a resource you can use to review TMPs for all activities.

- ⇒ Decision made depends on how critical the project and the road. We look at the projects typically by the quarter.
- ⇒ For Turnkey projects, we do TO and Pl. Contractor does TC.

These seem to be reasonable approaches to Significant projects. We would encourage you to continue to evaluate each project and activity for its Significance as early in the planning process as possible.

Documentation

⇒ Maintenance doesn't have documentation but Purchase Order Contracts do have Transportation Operations (TO) in contract

Some elements like time restrictions would be documented in these situations. The intent is to make sure we are capturing all of the elements of a Transportation Management Plan (TMP) for Significant projects or activities.

- ⇒ Why must we document for maintenance?
- ⇒ Who is going to ask if we document?
- ⇒ If nobody is going to ask for the documentation, but we set up a system to document, it opens us up to lawyers asking questions.
- ⇒ We don't have to have documentation listed in policy.
- ⇒ We have to trust our crew leaders to handle situations properly. If we aren't able to trust them, we need to address the issue that causes the distrust. We don't need to document everything.
- ⇒ If we have accident in a work zone, we document what was there.
- ⇒ Difficult for Roadside or Traffic Services to document because we are on different routes everyday. We follow flip charts.

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The Work Zone Safety and Mobility Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project TMP needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ If we document, and say we are going to use a flipbook, but something changes and there is an accident we will be liable.

The Department will always be liable for the decisions we make in planning, design, and the field, including revisions to those decisions. Having those decisions and/or revisions documented may actually assist us if the Significant project or activity results in litigation.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 18 of 2

⇒ We aren't documenting each day or putting on TIMS because we are closing lanes for spraying operations.

If those spraying operations are considered to be Significant by your Division, all the elements of a TMP will need to be considered. If the operation is not Significant, conduct business as usual.

TMP

- ⇒ Will TIMS counts as Public Information (PI), can we print the TIMS page and file it?
- ⇒ We use CMS or call radio stations
- ⇒ You want to put information in TIMS if intersection work is being done at a Significant location.
- ⇒ If it is significant, we put it on TIMS. Otherwise, we used the flipbooks.
- ⇒ Crews don't have laptop on a job site to change TIMS and sometimes if we can't paint one road, we move onto another.
- ⇒ In Contracts, we do have a TTC and TO. They don't have PI as much.
- ⇒ Brian does radio interviews daily in North Wilkesboro

Public Information is an integral part of the TMP of a Significant project. If an activity were considered to be Significant, putting pertinent information on TIMS or participating in radio advertisements would certainly be ways to provide information to the public. A TIMS print out would be good information to keep in the Significant project or activity file. Other Public Information efforts could include changeable message signs, informational fliers, etc., depending on the scope of the Significant project or activity. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects

⇒ Do Traffic Control flips books count as a Temporary Traffic Control (TTC)?

Depending on the Significant project or activity, flip books may be referred to as TTC for maintenance activities that have minimal impact.

Policy

⇒ What if we don't think something is significant and it is?

It is our intention for the information provided to you in the draft policy to be a source in the determination of Significance. We expect some Significance determinations be found to be incorrect through our evaluation and assessment of that activity. The expectation is to take the valuable information learned and incorporate any necessary revisions to the criteria. The implementation of the Rule will be a learning process for all of us. The FHWA intends for all states to improve their safety and mobility through an iterative process.

- ⇒ Spot Safety projects (federally funded)... do we have to get exceptions?
- ⇒ We administer spot safety. So we would go through charts to determine significance and TTC, Transportation Operations (TO) and Public Information (PI) as needed?

All federally and state funded projects will be evaluated for their Significance. Once a spot safety project has been determined to be Significant, it would include the elements of a TMP (TTC, TO, & PI). The level of detail each of those elements has will be specific to the project. If your Division determines such an activity requires an exception to the Rule, there is a process for exceptions described in the Policy.

⇒ Comment: Federal projects won't be an issue if we get an blanket exception for signal work, or positive guidance projects on roads that have high truck traffic...

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 19 of 2

Response from within Division: We won't need an exception. We are already meeting the requirements if TIMS counts as PI

- ⇒ Could Maintenance have its own chart to use for criteria for determining significant (like the chart of page 13)?
- ⇒ In summary, I believe that the policy and criteria work for TIP and other larger type projects. However, for maintenance and smaller type projects, another set of criteria should be developed that is more applicable for these situations and can be implemented by the field forces based on information that is readily available to them.

The Work Zone Safety and Mobility committee is working closely with maintenance to address their needs as it relates to these requirements. Although each work zone varies, all work zones should be evaluated for Significance using the same process.

The WZS&M Committee is developing a "Maintenance Pilot Project" first. Maintenance issues as related to this policy could then be identified as a "Volunteer" Division began to implement the Policy. As these issues are identified, they would then be discussed by the "Maintenance Working Group" you suggested. Division 5 has agreed to be the "Volunteer" Division. It was further suggested in our last committee meeting that the individuals to make up this "Maintenance Working Group" be discussed and identified at a future Operations Staff meeting. We are recommending a few of the operations and maintenance personnel on our original committee be in the maintenance working group.

Other

⇒ Who asked/ Who gave you (the Work Zone Traffic Control Unit) to do this task?

The Highway Administrator's office tasked the Work Zone Traffic Control Unit with the facilitation of Rule implementation.

⇒ How would we determine truck traffic if we don't have counts?

Most major routes have truck counts already available. If truck counts are not available, Traffic Engineering, Work Zone Traffic Control Unit or other entity should be able to estimate the truck percentages using a quick on-site count.

- ⇒ We are already doing most of this.
- ⇒ In summary, activities by our particular Field Units, for the most part, would never meet the stated criteria for a "significant project" designation at a level (1) or (2). Only rarely would we encounter a situation meeting the warrants listed for the level (3) category. It is strongly felt that current considerations utilized within our field operations are sufficient towards minimizing the impact to the area motorists, providing adequate advance notification and subsequent documentation of any efforts that may be implemented.

We agree that North Carolina is a leader in this area and the Rule will just confirm the proactive approach we have always taken. This policy puts in place a systemic procedure that assures that projects or activities that need additional planning and consideration get it.

Division Procedures

⇒ We use Roadway Standard Drawings for our activities.

Roadway Standard Drawings may indeed be an acceptable Temporary Traffic Control Plan for an activity that is considered Significant.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 20 of 2

- ⇒ Tailgate safety meetings may cover, but not always. Can this be added to safety tailgate meeting?
- ⇒ Documentation at a tailgate meeting depends on the quality of the crew leader
- ⇒ What we do depends on the crew leader, operation, etc.
- ⇒ Significance is decided before the tailgate meeting.

When there is a Significant project, it will require planning prior to the tailgate safety meetings. However, those meetings would be a good time to confirm the planning that has already taken place.

⇒ We may go out in advance (a day, a week or more) for secondary roads or we may just go out that day

Preplanning is an integral part of having effective work zone safety and mobility. Proper planning for a Significant project would more than likely be done well in advance of the actual work.

TMP

- ⇒ Will TIMS counts as Public Information (PI), can we print the TIMS page and file it?
- ⇒ We use CMS or call radio stations
- ⇒ You want to put information in TIMS if intersection work is being done at a Significant location.
- ⇒ If it is significant, we put it on TIMS. Otherwise, we used the flipbooks.
- ⇒ Crews don't have laptop on a job site to change TIMS and sometimes if we can't paint one road, we move onto another.
- ⇒ In Contracts, we do have a TTC and TO. They don't have PI as much.
- ⇒ Brian does radio interviews daily in North Wilkesboro

Public Information is an integral part of the TMP of a Significant project. If an activity were considered to be Significant, putting pertinent information on TIMS or participating in radio advertisements would certainly be ways to provide information to the public. A TIMS print out would be good information to keep in the Significant project or activity file. Other Public Information efforts could include changeable message signs, informational fliers, etc., depending on the scope of the Significant project or activity. We encourage your Division to continue to use and explore new avenues of Public Information on significant projects

⇒ Do Traffic Control flips books count as a Temporary Traffic Control (TTC)?

Depending on the Significant project or activity, flip books may be referred to as TTC for maintenance activities that have minimal impact.

- ⇒ Spot Safety projects (federally funded)... do we have to get exceptions?
- ⇒ We administer spot safety. So we would go through charts to determine significance and TTC, Transportation Operations (TO) and Public Information (PI) as needed?

All federally and state funded projects will be evaluated for their Significance. Once a spot safety project has been determined to be Significant, it would include the elements of a TMP (TTC, TO, & PI). The level of detail each of those elements has will be specific to the project. If your Division determines such an activity requires an exception to the Rule, there is a process for exceptions described in the Policy.

⇒ Comment: Federal projects won't be an issue if we get an blanket exception for signal work, or positive guidance projects on roads that have high truck traffic...

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 21 of 2

Other

⇒ Who asked/ Who gave you (the Work Zone Traffic Control Unit) to do this task?

The Highway Administrator's office tasked the Work Zone Traffic Control Unit with the facilitation of Rule implementation.

We are already doing most of this.

⇒ In summary, activities by our particular Field Units, for the most part, would never meet the stated criteria for a "significant project" designation at a level (1) or (2). Only rarely would we encounter a situation meeting the warrants listed for the level (3) category. It is strongly felt that current considerations utilized within our field operations are sufficient towards minimizing the impact to the area motorists, providing adequate advance notification and subsequent documentation of any efforts that may be implemented.

We agree that North Carolina is a leader in this area and the Rule will just confirm the proactive approach we have always taken. This policy puts in place a systemic procedure that assures that projects or activities that need additional planning and consideration get it.

Documentation

- ⇒ Checklist might be helpful for documentation.
- ⇒ The Division generally used the Standard Drawings and asked if more documentation was needed. Deviation from a Standard Drawing used for a project should be documented.
- ⇒ Staff was concerned with what type of operations had to be documented and how.

Documentation has been an overarching issue statewide. Some aspect of documentation should be performed in an effort to relay the thought processes to others. Although the Rule does not specifically require everything to be documented, it does require assessment and evaluation that would be more difficult without documentation. The WZS&M Committee is committed to keeping additional workload to a minimum. As always, the Work Zone Traffic Control Unit (WZTCU) will continue to assist you with your significant project Transportation Management Plan (TMP) needs. We have developed a draft of Work Zone Traffic Control procedures and checklist that would be considered as documentation and it is attached for your review.

⇒ Some division personnel keep diaries.

This could be sufficient where minimal documentation is required, such as activities requiring only a Roadway Standard Drawing (RSD) or maintenance activity standard detail drawing.

Work Zone Safety and Mobility Rule Division 14 April 2, 2007 Page 22 of 2

Policy

⇒ How will this affect emergency situations? Even though it doesn't apply to emergencies, the DE brought up the preplanned detour routes for emergencies.

Even though the Rule does not apply to emergency situations, if the preplanned route for a particular emergency is already compromised by a construction or maintenance activity, continue to consider the impact of that detour on the safety and mobility of the detour route.

⇒ Will someone come around and check to see if we are doing these things?

This is a great question. We anticipate the FHWA will continue their usual project reviews as will WZTCU personnel, and would report any observed unsafe operations to the Division Maintenance Engineer or Resident Engineer. We do not anticipate additional personnel to be assigned to monitor compliance with the Rule.