

National Association of County Engineers



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January 11, 2011

U.S. Department of Transportation
Documents Management Facility
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Re: FHWA Docket No. FHWA-2010-0159, Manual on Uniform Traffic Control Devices (MUTCD) Compliance Dates

The National Association of County Engineers (NACE) appreciates this opportunity to comment on the compliance dates for certain requirements in the Manual on Uniform Traffic Control Devices (MUTCD).

This Memorandum transmits NACE's comments in this docket. NACE has had serious concerns with provisions of the 2009 version of the MUTCD from the moment it was promulgated in late 2009. Unless it is modified promptly, local as well as state governments will face significant costs, perhaps in the billions of dollars. Those costs can be avoided, consistent with safety, if FHWA promptly takes rulemaking action to improve the MUTCD and related rules.

Thus, NACE appreciates that FHWA has opened this docket regarding MUTCD compliance dates and indicated in the notice opening the docket that new rulemaking regarding the MUTCD is an option that will be evaluated.

In the enclosed comments NACE as well as AASHTO in separate correspondence, two organizations representing government agencies which oversee most of our nation's public roads, offer a "better way" through changes to the 2009 MUTCD. We address questions raised by FHWA in the docket regarding the compliance dates for some particular requirements and we also address important issues not specifically mentioned by FHWA. We see those additional issues as absolutely critical and inextricably related to compliance dates and requirements.

Specifically, in the enclosed comments we make 5 principal recommendations. Four of them collectively would have FHWA revise MUTCD provisions and rules so that a state or local agency could exercise "engineering judgment" with respect to the application in the field of standards in the MUTCD. State and local agencies clearly had such authority under prior versions of the MUTCD.

County Engineers have, through the years, made millions of decisions regarding the application and placement of signs and other traffic control devices and saved many, many lives through their efforts. Yet, provisions in the current MUTCD appear to have stripped state and local governments of much of their ability to exercise engineering judgment in the field regarding signs and other traffic


control devices. That dilution of the authority of state and local agencies does not advance safety but does pile costs on the backs of state and local governments. Moreover, those changes to state and local authority were adopted without provision of notice to the public that they were even under consideration. FHWA must promptly reverse this unwise dilution of the authority of state and local experts.

Our fifth principal recommendation is that FHWA reverse its recent trend of imposing more and more specific compliance dates for requirements. FHWA must make changes to the MUTCD to allow state and local agencies to replace signs and devices when they wear out, not before the end of their useful lives. The enclosed comments set forth the specific recommendations and a fuller presentation of the reasons why they must be adopted -- promptly.

NACE appreciates that this docket has been opened but emphasizes that the opening of this docket is not enough. Real relief is needed from the provisions of the 2009 MUTCD. We have offered in the enclosed comments recommendations for changes to the MUTCD and related rules that would achieve major cost savings consistent with safety.

We urge the FHWA to very promptly propose and adopt changes to the MUTCD and related rules in accord with our recommendations and comments.

Respectfully submitted,



A. R. Giancola, P. E.
Executive Director

Comments of the
National Association of County Engineers (NACE)
Before the
Federal Highway Administration (FHWA)
FHWA Docket No. FHWA-2010-0159
Manual on Uniform Traffic Control Devices (MUTCD) Compliance Dates
January 11, 2011

I. Introduction and Summary of Comments and Recommendations

The National Association of County Engineers (NACE) is pleased that FHWA has opened this docket (by notice published November 30, 2010, *75 Federal Register* 741280), providing a critically important opportunity for comment on issues related to the 2009 version of the Manual on Uniform Traffic Control Devices (MUTCD). The 2009 MUTCD was adopted by final rulemaking action on December 16, 2009, (*74 Federal Register* 66730) after the publication on January 2, 2008, of a notice proposing amendments to the MUTCD (*73 Federal Register* 268).

NACE County Members along with other local governments are responsible for 75% of our nation's public roads. Individually and collectively, NACE members have significant authority and expertise regarding signs and other traffic control devices.

As explained more fully below, NACE strongly recommends that, in follow up to the notice in this docket, FHWA very promptly publish in the *Federal Register* a notice of proposed rulemaking proposing improvements in the MUTCD, not only as to compliance dates, but also as to related issues, including the need to restore the concept that states can exercise "engineering judgment" with respect to MUTCD standards and other provisions and be in substantial conformance with the MUTCD, a concept that was clearly in place before the adoption of the 2009 MUTCD. At stake is the need to avert perhaps billions of dollars in regulatory costs that may not have meaningful safety benefit—at a time when state and local governments can least afford it and at a time when state and local government safety efforts have already helped achieve huge reductions in traffic fatalities.

In opening this docket, FHWA recognized that its final rulemaking action, adopting the 2009 MUTCD and related rules, has drawn criticism, noting that it is "aware of concerns on the part of some State and local highway agencies about the potential impact of MUTCD compliance dates in the current economic downturn, which has significantly reduced the resources available to such agencies." *75 Federal Register* at 74128.

Secretary of Transportation Ray LaHood has been more direct in identifying concerns with the 2009 MUTCD. A press release issued on November 30, 2010, set forth the following statement by Secretary LaHood "on Federal Street Sign Regulations":

"I believe that this regulation makes no sense. It does not properly take into account the high costs that local governments would have to bear. States, cities, and towns should not be required

to spend money that they don't have to replace perfectly good traffic signs.

“To set things right, the first step is to reopen public comment and give people a chance to weigh in. There have got to be better ways to improve safety without piling costs onto the American people. Safety is our priority, but so is good government. Listening to the public helps to ensure both.”

We (NACE) applaud Secretary LaHood for his straightforward support for revising the current MUTCD and for his efforts to ensure an opportunity for public comment on these issues. We agree that FHWA can fashion a revised rule that is consistent with safety and less costly and burdensome. That task can and should be undertaken very promptly.

More specifically, in this docket FHWA has posed seven questions relating to compliance dates set forth in the 2009 MUTCD for several new or modified requirements. FHWA also states that it is seeking comment to “help FHWA in further examining these issues and evaluating potential future alternative courses of action, including additional rulemaking.” We are pleased that FHWA’s notice expressly raises the possibility of additional rulemaking and are pleased that the Secretary has taken the position that something must be done to change a regulation “that makes no sense.”

Accordingly, we set forth the following comments and recommendations to assist FHWA in improving the MUTCD as to compliance dates and as to very important related matters. Included are five principal recommendations for changes in the MUTCD and related rules. The first four of the five principal recommendations set forth changes to the MUTCD and to 23 CFR 655 to clearly ensure the ability of state and local highway agencies to exercise “engineering judgment” with respect to MUTCD standards and other provisions, a concept that was clearly in place before the adoption of the 2009 MUTCD (see pages 4 through 8). We explain that this necessary flexibility is consistent with safety and will reduce the compliance costs associated with MUTCD requirements and compliance dates, fully consistent with the Secretary LaHood’s search for “better ways to improve safety without piling costs onto the American people.” The fifth recommendation is that FHWA delete specific compliance deadlines except in those cases where a statute requires that a particular matter be addressed through a specific compliance deadline (see pages 8-9). This will further help ensure that state and local governments do not bear the cost of replacing signs or other devices before the end of their useful life.

A proposed rule, consistent with our recommendations, should be published in the *Federal Register* less than one month after the close of the comment period in this docket, promptly followed by a notice adopting those recommendations as a final rule.¹ FHWA simply must make prompt completion of corrective rulemaking action a top priority, lest state and local government

¹ NACE is aware that the National Committee on Uniform Traffic Control Devices has requested a very short extension of the comment period in this docket, through January 31, 2011, to allow that organization to have the benefit of its annual meeting (January 19-21) before having to file comments in this docket. While NACE believes that FHWA should move extremely quickly upon the close of the comment period in this docket to promulgate proposed and final rules in accord with NACE’s recommendations, we support the very short extension request made by the NCUTD.

face avoidable and significant cost burdens as implementation deadlines under the increasingly inflexible MUTCD draw closer.

II. Compliance deadlines for specific requirements in the 2009 MUTCD are inextricably related to additional aspects of the 2009 MUTCD and related rules; prompt rulemaking action is needed to address the related issues as well as specific compliance dates.

Before addressing the seven specific questions posed by FHWA in the November 30, 2010, notice in this docket, we wish to make clear a number of points regarding the MUTCD that may not be the direct object of FHWA's seven questions. These points, however, are inextricably related to questions regarding the cost of meeting compliance dates for MUTCD provisions. They, as well as compliance date provisions, require rulemaking action.

A. The ability of state and local agencies to use engineering judgment with respect to MUTCD standard statements should be restored promptly and related changes also made.

Engineering Judgment

In adopting the 2009 MUTCD, FHWA has made major language changes to the framework of the entire MUTCD regarding the application of "engineering judgment" by state and local highway agencies as a factor in decisions regarding traffic control devices covered by a standard statement.

These changes are not an issue separate from compliance dates for standards and the cost of compliance. To the contrary, this issue is inextricably tied to the issue of compliance dates for standards and the cost of compliance. The presence (or absence) of the ability of state and local highway agencies to apply "engineering judgment" to the application of standards and other provisions of the MUTCD can have a major impact on what actions are required to achieve compliance and, therefore, on the cost of compliance over time. Engineering judgment has long been understood by states as allowing, for example, practical and pragmatic solutions, consistent with safety, to avert costs that otherwise would flow from rigid adherence to MUTCD provisions that are overly prescriptive or impractical in given cases.

As noted below, one state has estimated that, as to just one new requirement in the MUTCD regarding certain overhead signs, the inability to exercise engineering judgment could increase state compliance costs by some \$25 million dollars, with no perceived safety benefit. Consider also that the 2009 MUTCD establishes compliance deadlines for, among other things, "one way" signs. There may be circumstances where a "do not enter" sign is currently in place and effectively meeting the need to prevent driving on the wrong side of a divided highway. For such reasons, the full restoration of the provisions of the prior MUTCD pertaining to engineering judgment would mitigate—but not eliminate—the current need to eliminate compliance deadlines not required by statute or to extend current compliance deadlines.

Going beyond individual examples, and taking into account all jurisdictions and all MUTCD provisions, NACE estimates that the changes to engineering judgment represent a very

substantial additional cost burden for state and local governments, one that could run into the billions of dollars.

More specifically, Section 1A.13 of the 2009 MUTCD sets forth definitions. The definition of “engineering judgment” is similar to its counterpart in the 2003 MUTCD and reads as follows:

“Engineering Judgment – the evaluation of available pertinent information, and the application of appropriate principles, provisions, and practices as contained in this Manual and other sources, for the purpose of deciding upon the applicability, design, operation, or installation of a traffic control device. Engineering judgment shall be exercised by an engineer, or by an individual working under the supervision of an engineer, through the application of procedures and criteria established by the engineer. Documentation of engineering judgment is not required.”

Clearly, and properly, this definition recognizes the role of case by case judgment in applying the provisions of the MUTCD to particular situations and locations in our nation’s vast and varied highway and transportation system.

However, Section 1A.13 of the 2009 MUTCD, while not significantly modifying the definition of engineering judgment, did modify the definition of “standard.” As in the prior version of the MUTCD, a standard is defined in relevant part as “a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device.” The 2009 MUTCD added to this definition the following: “Standard statements shall not be modified or compromised based on engineering judgment or engineering study.”

Similarly, Section 1A.09 of the 2009 MUTCD deleted from that section of the prior version of the MUTCD that –

“The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and application of traffic control devices, this Manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices”

The apparent effect of these changes is to diminish, if not remove, state and local agency engineering judgment as a factor in decisions regarding traffic control devices covered by a “standard.” These changes need to be reversed.

In addition, the 2009 MUTCD deleted from the definitions of “engineering judgment” and “engineering study” specific reference to “standards” and “guidance” as being subject to engineering judgment or study. While the term “provisions” appears to cover all the elements of the MUTCD, whether standards, guidance, or other, to ensure that the recommended revision of Section 1A.09 would have its intended effect of allowing engineering judgment to be applied to standards as well as other MUTCD provisions, NACE also recommends revision of the definitions of “engineering judgment” and “engineering study” by striking the use of “provisions” and substituting “provisions, including but not limited to standards and guidance.”

Principal Recommendations 1, 2, and 3

Accordingly, NACE strongly recommends:

1. Section 1A.13 be revised by deleting the sentence: “Standard statements shall not be modified or compromised based on engineering judgment or engineering study.”

2. Section 1A.09 be revised by inserting the above quoted language that was deleted from the prior version of the MUTCD, specifically by inserting the following either at the outset of the guidance statement for Section 1A.09 or, preferably, adding it to the standard statement:

“The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and application of traffic control devices, this Manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices.”

3. Section 1A.13 be revised in the definitions of “engineering judgment” and “engineering study” by striking the use of “provisions” and substituting “provisions, including but not limited to standards and guidance.”

Implementation of these recommendations by FHWA would be fully consistent with safety and would assist in holding down unnecessary costs and ensuring enhanced safety benefit from the dollars invested in traffic control devices. In short, NACE sees these and the other recommendations included in these comments as both pro-safety and furthering cost efficiency.

It has also been highly frustrating that no notice was provided to the public that these changes to Section 1A.09 and to the definition of standard in Section 1A.13 were contemplated.

Specifically, in its 2008 notice of proposed amendments to the MUTCD, FHWA requested comment on “these proposed amendments” or to “these proposed changes” to the MUTCD (73 *Federal Register* 268). Later on in the notice, FHWA described the various proposed changes to the MUTCD in sequence. Paragraph 20 described changes to section 1A.08 and Paragraph 21 described changes to section 1A.10. No change to section 1A.09 was proposed or raised for consideration. Section 1A.09 was skipped over. See 73 *Federal Register* at 270. Similarly, the discussion of proposed changes to definitions, paragraph 24, did not indicate any proposed change to the definition of “standard.”² See 73 *Federal Register* at 271.

So, these very significant changes were presented to the public for the first time when the final rule was published December 16, 2009. The 2008 notice of proposed amendments to the MUTCD did not even hint at these changes.

These changes bear on the ability of state and local highway agencies to be in substantial conformance with the MUTCD and apply engineering judgment to modify the way MUTCD provisions are applied, to achieve or maintain safety at less cost. These changes are inextricably related to the impact of all the particular changes made by FHWA in adopting the 2009 MUTCD

² Nor was there any notice of any change to the definitions of “engineering judgment” and “engineering study.”

and even to efforts to comply with provisions in the 2009 MUTCD that were carried forward from the prior version of the MUTCD without change.

As these changes are regarded as significant, beginning immediately upon publication of the final rule there has been a consistent series of comments and letters sent to FHWA expressing disagreement with both the substance of those actions and the process followed by FHWA in publishing them for the first time at the final rule stage.

We note that, perhaps as a result of such complaints, FHWA has issued on October 1, 2010, an “official interpretation” of the 2009 MUTCD suggesting that under limited circumstances states that have their own MUTCD or supplement may yet be able to exercise “engineering judgment” with respect to standards, after undertaking documentation work not believed to have been required under prior versions of the MUTCD. However, while the issuance of that interpretation is appreciated, as some believe that it may provide limited flexibility to some states in some cases, the state DOT community has not accepted that interpretation as a sufficient response to the apparent inflexibility caused by the changes to the MUTCD adopted by FHWA in 2009 regarding engineering judgment.³

Moreover, the text of that official interpretation noted that it addresses circumstances “until such time as revised language is proposed and adopted through the rulemaking process.” NACE does not wish to focus in these comments on the precise meaning and effect of the official interpretation, but on the need to promptly issue a notice of proposed rulemaking and to complete a rulemaking process that will adopt our recommended changes to the MUTCD and any related rules.

FHWA should also revise its rules and MUTCD provisions regarding substantial conformance of state versions of the MUTCD with the National MUTCD.

Since 2006 FHWA has had in place a rule calling for state versions of the MUTCD to be in “substantial conformance” with the MUTCD as adopted by FHWA. 23 CFR 655.603(b) (1). We believe that this substantial conformance rule, when adopted, did not reduce the ability of state and local highway agencies to exercise engineering judgment and be in substantial conformance with the MUTCD. As described above, the concept of their exercising engineering judgment was embedded in the MUTCD as in effect at the time the substantial conformance rule was adopted. Moreover, that rule specifically states that, as used in that part of the CFR, definitions and “usages” in the MUTCD apply. 23 CFR 655.602. This would allow, within the ambit of substantial conformance, application of engineering judgment to standards if that was the usage in the MUTCD.

However, the substantial conformance rule does provide that a “State MUTCD or supplement shall conform as a minimum to the standard statements included in the National MUTCD.” 23

³ We are aware that FHWA has claimed that its changes to the MUTCD regarding engineering judgment were merely clarifying and not substantive. Such claims are difficult to reconcile with comparison of the wording of relevant portions of Sections 1A.09 and 1A.13 of the 2009 MUTCD with the wording of its predecessor version, as the earlier version expressly allowed the application of engineering judgment to standards statements while the latter expressly constrained the use of engineering judgment as applied to standard statements.

CFR 655.603(b)(1). AASHTO is concerned, against the above described backdrop of recent changes to the MUTCD, that 23 CFR 655.603(b)(1) could become viewed as an independent basis for construing that states must conform to standard statements in the National MUTCD without room for application of engineering judgment or study. Thus, to ensure clarity, a rulemaking regarding the 2009 MUTCD should also clarify 23 CFR 655.

Moreover, apart from the engineering judgment issue, NACE has long viewed the provisions of 23 CFR 655.603(b)(1) as providing insufficient flexibility for state and local highway agencies to be in substantial conformance with the National MUTCD while accommodating state and local concerns that must be addressed and remedied within those jurisdictions.

Principal Recommendation 4:

Accordingly, in the notice of proposed rulemaking/notice of amendment (to the MUTCD) that NACE asks be issued (and then adopted as a final rule) very promptly, FHWA should propose changes to 23 CFR 655 as follows:

1. Insert immediately before the period at the end of section 655.602 the following: “, including but not limited to provisions regarding the application of engineering judgment and engineering studies to the application of standard statements.” This would help clarify that any reference in 23 CFR 655 to standards is not construed as precluding a state from being in substantial conformance with the MUTCD and applying engineering judgment to the application of a standard.
2. Delete the 2nd, 3rd, and 4th sentences of section 655.603(b)(1) so that the “substantial conformance” of a state MUTCD or supplement can be determined through a more flexible process involving the partnership of the FHWA and a state.

B. FHWA should remove specific compliance dates from the MUTCD unless a specific date is required by statute; to the extent that FHWA insists on retaining specific compliance dates not required by statute, all remaining specific compliance dates should be pushed back by at least 10 years.

FHWA should refrain from imposing specific compliance deadlines unless directed to do so by Congress. Specific compliance deadlines are inherently problematic. They force jurisdictions to prioritize changing traffic control devices that are subject to specific compliance dates over other safety investments without the ability to consider relative benefits and costs. Instead, jurisdictions should be able to replace signs as part of ongoing work plans or projects or when they wear out. FHWA itself has recognized, even in this docket, that the general practice is that “[e]xisting devices in the field that do not meet the new MUTCD provisions are expected to be upgraded by highway agencies over time to meet the new provisions via a systematic upgrading process, but there are no specific dates for required completion of the upgrades.” *75 Federal Register* at 74128. Yet, increasingly, and particularly in the 2009 MUTCD, FHWA has set compliance dates for new provisions. FHWA notes 46 compliance dates from earlier versions of the FHWA that had not been reached by 2009 and 12 new dates set in the 2009 MUTCD. *75 Federal Register* at 74128. This is burdensome.

Moreover, that these compliance dates have not yet been reached—or the provisions fully implemented in many jurisdictions—has not prevented a major decline in highway fatalities in recent years.

We also disagree with some of the premises apparently utilized by FHWA in its determinations as to when to impose compliance deadlines. FHWA states that it has established specific compliance dates “predominantly” based on the useful service life of devices. *75 Federal Register* at 74129. This statement appears to acknowledge that, to some extent, FHWA would require replacement of devices that have not reached what FHWA considers to be their useful life. Moreover, we suspect that, in the field, the service life of devices may not infrequently be longer than assumed by FHWA. States and others should be able to exercise their professional expertise to continue to use signs and other devices that are not worn out and not have to use scarce dollars to replace them prematurely.

FHWA also states that traffic control device upgrades are eligible uses of Federal-aid highway funds, thus “mitigating the impacts on State and local highway agencies.” *75 Federal Register* at 74129. This is hardly a clear-cut proposition. Demands for highway and transportation investment vastly exceed available resources. It is hardly significant mitigation for FHWA to increase the already great demand for transportation investment by imposing new requirements that must be met by specific deadlines (without providing any additional funding for that purpose), thereby postponing the ability of state and local agencies to address other needs, including safety needs. Already, there are in place a comprehensive highway planning process and a highway safety planning process that provide the public an opportunity to comment and that assist states in prioritizing safety investments. See generally, for example, 23 USC 134, 135, and 148. The setting of compliance deadlines effectively overrides the planning process, at least in part, dictating that investment in certain devices within a certain time period is a priority regardless of other factors brought forward in the state or MPO planning processes.

Principal Recommendation 5:

For such reasons, NACE recommends that FHWA reverse this trend toward specific compliance dates. FHWA should revise the MUTCD to remove all specific compliance dates except for those established because a compliance deadline regarding a particular matter is required by statute. Further, going forward, FHWA should not add any new specific compliance dates to the MUTCD except for those where a statute requires a compliance deadline regarding a particular matter. To the extent that FHWA should, notwithstanding our recommendation, decide to set (or keep in place) any specific deadlines, we ask that any deadlines included in the 2009 MUTCD (whether imposed for the first time by the rulemaking establishing the 2009 MUTCD or by earlier regulatory action and carried forward by the 2009 MUTCD) be extended at least 10 years. As the additional 10-year period proceeds, more information regarding the costs and other challenges involved in implementing a given provision of the MUTCD will become available to state and local agencies as well as to FHWA, enabling FHWA to determine whether the requirement should be continued or whether any further extension of a compliance date would be warranted.

C. FHWA must give greater weight to mitigating or avoiding the cost burdens of the 2009 MUTCD.

In the January 2, 2008, *Federal Register* notice proposing MUTCD changes, FHWA stated, “[t]hat this action would not be a significant regulatory action.” 73 *Federal Register* 332. Whether or not that was a correct statement at the time, the subsequent changes to the MUTCD regarding engineering judgment have greatly increased the economic impact of the changes to the MUTCD.

FHWA also asserted in the 2008 notice that, “[t]hese changes are not anticipated to adversely affect, in any material way, any sector of the economy,” that “this action would not have a significant economic impact on a substantial number of small entities,” and that the proposal involved “little additional cost to public agencies or the motoring public.” 73 *Federal Register* 332.

Yet the request for comments in this docket mentions, at six locations, the real potential of economic hardship that these requirements might have on some jurisdictions. 75 *Federal Register* 74128-74131. The possibility that some state agencies and many local governments will bear an undue financial burden is quite real. The costs appear to be particularly steep for counties and smaller agencies that do not have specialized engineers on staff or extensive federal funding levels to fulfill even the preliminary studies and research to implement these changes.

Secretary LaHood has grasped the essence of the problem. In addition to his November 30 statement quoted on page 2, above, the Secretary has also stated, “[w]hile in better times this may have been appropriate, it doesn’t make a whole lot of sense given the difficult economic conditions facing many cities and states across the country.” *FastLane* blog, December 1, 2010.

The 2008 notice also states “that this rulemaking will not . . . affect the State’s ability to discharge State governmental functions.” 73 *Federal Register* 332, January 2, 2008. Yet state agencies will be unable to maintain their core transportation infrastructures (roads and bridges) if extensive regulations shift scarce funds into traffic device projects.

NACE’s concern that the costs for state and local agencies of implementing revisions to the MUTCD have not been fully appreciated at FHWA is not new. In comments dated July 30, 2008, in response to the 2008 notice of proposed amendments to the MUTCD, AASHTO and NACE strongly urged FHWA to undertake a careful assessment of the economic impact of the proposed changes. We continue to believe that analysis of the cost of changes to the MUTCD has been incomplete. FHWA should reassess all of its standards, particularly those with specific compliance dates that have not yet occurred, and consider the full range of costs associated with compliance. These include, but are not limited to:

- 1) the costs of complying with the changes on roads that are not on the federal-aid system and not eligible for federal reimbursement, including both public roads and private toll roads, roads in shopping centers, around office buildings, and other private roads;
- 2) costs to be borne by local agencies and not likely to be reimbursed through state agencies given funding pressures;

- 3) sign and sign infrastructure costs;
- 4) other costs, including but not limited to marking, signal, and hardware costs;
- 5) any liability costs;
- 6) life cycle costs;
- 7) indirect costs, including:
 - (A) any costs of diverting funds from other highway and transportation investments that improve safety, such as guard rail and rail grade crossing investments and pavement resurfacing, to meet new requirements and their compliance deadlines,
 - (B) any costs of reassigning personnel from other duties to address the myriad of compliance issues raised by the 2009 MUTCD, and
 - (C) the costs for developing plans for compliance, even for the many requirements that are not associated with a specific compliance date.

We believe that implementing the 2009 MUTCD in its current form would be likely to impose billions in costs and that the 2009 MUTCD revisions constitute a significant rule and an unfunded mandate under Federal law and regulation. AASHTO has advised us that Caltrans has estimated \$500 million to \$1 billion to implement the 2009 MUTCD, apparently just for Caltrans. Clearly, annual costs for the nation (state and local agencies and private road owners) are well into nine figures annually.

We also emphasize that we consider that it would be highly inappropriate, and utterly inconsistent with Secretary LaHood's public statements, for USDOT and FHWA to avert serious analysis and consideration of the cost burdens of the 2009 MUTCD by attempting to advance technical interpretations of what is or is not a significant rule or unfunded mandate.

However, our concern ultimately is not analysis, but sorely needed relief. Accordingly, while we support much closer cost analysis, we urge that issuance of a sorely needed notice of proposed rulemaking not be delayed while FHWA undertakes analysis.

We will add that a critical factor in assessing the costs may be whether the rules that were in place until recently regarding engineering judgment are restored. For example, we are aware of a letter to FHWA from the Alabama DOT that effectively advises that the apparent removal of the ability to (be in substantial conformance with the MUTCD and) apply engineering judgment to application of a standard regarding Overhead Arrow per lane signs could cost that one state approximately \$25 million. Thus, if FHWA should choose not to correct the MUTCD to clearly restore the engineering judgment concept, we believe that costs of implementing the 2009 MUTCD could be multiple times what they would be otherwise.

III. Responses to specific questions posed in the notice.

1. What, if any, difficulties does your organization anticipate in meeting the seven MUTCD compliance dates discussed above for upgrading existing non-compliant devices in the field?

The sheer number of new requirements in the 2009 MUTCD will take time to process, prioritize, and implement. An initial challenge for state and local highway agencies (and affected private sector entities) is to identify all of the standards present in the 2009 MUTCD, then to consider

the extent to which the many roads within their authority are in compliance, and to develop a plan or plans to pursue compliance. Since safety and cost analysis for many of the new provisions is lacking, it is not currently possible to determine exactly how difficult or costly it will be to meet the greatly expanded requirements from the 2009 edition of the MUTCD. This cost and effort, however, is believed to be significant, beginning with the effort to assess what needs to be done. Moreover, at least at the current time, these assessments would have to be undertaken on the assumption that states have limited if any authority to (be in substantial conformance with the MUTCD and) apply engineering judgment in determining the extent to which to apply standards. As explained more fully above, we do not support the retention of specific compliance deadlines. To the degree that compliance deadlines are retained, however, they should be extended for at least 10 years. This additional time will allow economic and safety impacts of the changes to be addressed and allow sufficient time for device changeovers to occur.

NACE represents over 3,000 counties nationwide, and the circumstances facing those County transportation departments vary. Accordingly, in addition to the recommendations it has made in these comments, NACE supports any greater flexibility requested by any of its individual members in comments to the docket.

2. Are there one or more of these seven MUTCD compliance dates that are more problematic than the others for your organization? If so, which ones, and why?

All seven compliance deadlines have the potential to cause problems for states, private entities, and local governments—as do other requirements in the 2009 MUTCD. Complying with the new deadlines from the 2009 MUTCD inevitably will force other projects to be delayed. Since overall funding is limited, this situation will delay safety, economic, and social benefits from other projects. Moreover, the apparent loss of the ability to apply engineering judgment (and be in substantial conformance with the MUTCD) will increase the costs of compliance as to many individual requirements. As explained more fully above, if they cannot be eliminated entirely, specific compliance deadlines should be extended for at least 10 years.

Of the deadlines, though, the most onerous relate to the **2C.06 through 2C.14 requirements for horizontal alignment warning signs**. These requirements represent a significant change from previous criteria. The MUTCD has gone from no requirement (optional use) for horizontal alignment signing to very specific and extensive “shall” requirements. Jurisdictions essentially will be forced to start from scratch with evaluating every horizontal curve in their inventories. Moreover, if these deadlines continue to be linked to the changed definition of a standard, the apparent loss of the ability to be in substantial conformance with the MUTCD and apply engineering judgment will make the total cost of compliance much greater, as the needed evaluations will be less able to be combined with any helpful cost savings approaches consistent with safety that can result from the application of engineering judgment.

To comply with **2C.06**, given the new, inflexible definition of the term “standard” and the inability to apply engineering judgment to the practice of highway signing, jurisdictions will have to assess their highway curves in a number of ways to determine 85th-percentile speed,

advisory speed, and prevailing speed to comply. This requirement is a significant burden to all jurisdictions and especially those that do not have traffic engineering personnel on staff.

Section 2C.07 requires installation of a turn sign, regardless of the posted speed or the actual condition that requires an advisory speed posting of 30 miles per hour or less. Without the ability to apply engineering judgment to the actual condition, jurisdictions must install a turn warning sign for all curves that have an advisory speed of 30 miles per hour or less—thus generating the need for further reviews, even for those installations that may have been engineered to have signing that fits the actual roadway conditions.

For each curve, an appropriate advisory speed must be identified and documented. This requirement will place significant burdens on jurisdictions, especially those that have existing, proven effective methods for identifying changes in horizontal alignment. The study identified in the NPA for the 2009 MUTCD as the basis for proposing the changes, NCHRP Report 500, Volume 7, ‘A Guide for Reducing Collisions on Horizontal Curves,’ concludes, contrary to the manual’s requirement, that “advisory speed signs do not effectively reduce speeds at horizontal curves.” This conclusion undercuts the requirement. At the very least, this deadline should be extended for at least 10 years so that any safety benefits can be established and data can be evaluated.

Section 2B.40 provisions relating to one-way signs are also problematic, as recognized in the notice. The notice fails to mention that the 2009 MUTCD upgraded the requirements for one-way signs at divided highways with narrow medians from an option to a standard. This change is extremely significant as it means that jurisdictions that have no previous recommendation or requirement will now have to identify the affected locations and bear the considerable expenses associated with sign and support hardware in addition to labor and travel costs to install the required signs at locations where they were not previously required. The costs related to this change cannot easily be identified, but they are thought to be considerable. In addition, in the 2008 notice of proposed amendment of the MUTCD FHWA proposed 10 years from adoption for compliance. The 2009 MUTCD adopted a much shorter compliance time frame – December 22, 2013. As explained more fully above, we support deletion of specific compliance deadlines and, if they cannot be eliminated entirely, specific compliance deadlines should be extended for at least 10 years.

3. If these dates were extended, how long do you estimate it would take to complete the necessary traffic control device upgrades?

As explained more fully above, we support deletion of specific compliance deadlines and, if they cannot be eliminated entirely, specific compliance deadlines should be extended for at least 10 years. This approach would allow what may prove to be adequate time for economic and safety study and implementation of traffic control device upgrades. This approach would also better enable traffic control device upgrades to be prioritized as an element of the overall transportation system, with consideration given to the value of various investments, rather than arbitrarily assigning traffic control device upgrades greater importance than other important investments.

4. What safety or other impacts would result if some of the dates were extended?

While many of the new provisions in the 2009 MUTCD may conceivably have a positive safety impact, defining a specific relationship between the installation of specific signs and safety is challenging. This is especially true since FHWA has not provided an estimate of the number of lives that might be expected to be saved (or other quantifiable safety measures of effectiveness) as the result of implementing the changes in the 2009 MUTCD. Nor has there been time to undertake more than cursory cost study at the federal, state, or local levels. Without such information, it is not possible to estimate impacts if the compliance dates were changed.

As FHWA has recognized at page 74128 of the notice, though, jurisdictions must balance traffic control improvements with other projects affecting safety. The significant inflexible compliance deadlines being injected into the manual create pressure on states and other agencies to invest to meet MUTCD requirements without the ability to consider other necessary safety improvements. Because of the deadlines, replacing sign structures may have to take priority over, for example, erecting guard rail or straightening curves, or widening shoulders. Eliminating or extending the new compliance deadlines therefore can potentially achieve a net positive safety result by allowing jurisdictions to make improvements based on overall safety benefits, not compliance deadlines.

These concerns are especially compelling in the current economic climate. Tax receipts for state and local governments are expected to remain flat, or at least not return to pre-recession levels, for some years to come, thus adding further pressure when priorities must be determined and investments selected. Commenting on Secretary LaHood's *FastLane* blog, Scott Assenmacher, P.E., from Michigan described the situation in this memorable way. He wrote, "[w]ith these requirements in place, roads in Monroe County, Michigan will have . . . [the] brightest, shiniest, most readable and visible signs out there that read, 'Bridge Out' and 'Road Closed.'"

The possibility that some state agencies and many local governments will bear an undue financial burden is very real. As Secretary LaHood has stated about the compliance deadlines, "While in better times this may have been appropriate, it doesn't make a whole lot of sense given the difficult economic conditions facing many cities and states across the country." (*FastLane* blog, December 1, 2010).

5. Are there other MUTCD compliance dates not described in this notice that are problematic for your organization? If yes, which ones, and why?

All the new compliance deadlines are potentially problematic to at least some jurisdictions from a cost standpoint.

Perhaps the most problematic compliance requirements not described in the notice concern provisions relating to overhead signs. While no date has been listed in the compliance table for this requirement, compliance is required at all new installations and reconstruction locations. Though time has not permitted a full accounting for cost related to this provision, the figures available suggest that compliance will be extremely expensive. Caltrans, for instance, has estimated the cost for replacing just 20 percent of Caltrans's 600,000 signs at \$400 million. Without the ability to apply engineering judgment, Florida estimates a cost of \$100 million to comply with requirements (**Figures 2E-11 and 2E-12** and related text) related to arrow-per-lane

signing for 200 optional lane exit signs. Florida has also noted concerns over superficial changes in requirements regarding the appearance of toll shields that are hard to imagine as meaningful for safety, especially compared to cost. Yet, Florida would have to either enter a period of inconsistency in its signage (with possible confusion to the motoring public), as it gradually changes over the signs, or incur significant costs of changing over signs before the end of their useful life. Alabama estimates costs associated with **Section 2E.20** at \$25.8 million, without perceived safety benefit. These costs could well be avoided consistent with safety through the application of engineering judgment.

The new provisions related to **Sections 2B.03** and **2C.04** increasing the size of regulatory and warning signs are also extremely problematic. These changes have been incorporated into a previously existing compliance date of December 22, 2013, giving jurisdictions less than four years to implement all the increased sizes of regulatory and warning signs. Multi-lane facilities with speed limits of 45 miles per hour or higher, for instance, must have stop signs of a minimum 36- by 36-inches. This deadline is especially burdensome since a 30-inch sign is currently a standard size for most jurisdictions, especially local governments. Without conclusive safety data, these changes present formidable economic hardship to communities.

Requirements in **Section 2L.04**, when combined with the requirements of **Section 2B.10**, relating to changeable message signs are also burdensome. The 2009 MUTCD requirement that the colors used with CMS and PCMS signs match the colors used in static signs will significantly reduce, or even possibly eliminate, the use of PCMS for critical messages needing to be conveyed to road users. It also means that permanent CMS must either have the ability to display multiple colors or can be used to display only one type of message.

Because of the need for inventory, plan development, and possible right-of-way acquisition, **Section 2D.45** provisions relating to signing on conventional roads on approaches to interchanges is also problematic.

NACE anticipates that individual states and jurisdictions will offer additional comments in this docket identifying other compliance deadline issues in response to this question. The preceding discussion is meant to highlight certain key specific concerns, not to present the full range of possible issues.

6. What considerations should be applied to establish new compliance dates in the MUTCD?

As explained more fully above, NACE endorses eliminating specific compliance dates from the 2009 MUTCD except with respect to specific items where a specific compliance date is required by statute. States and other jurisdictions can then install complying devices as part of ongoing improvement plans. To the extent that new compliance dates are retained, however, they should be extended at least 10 years. During that time period, additional impact analysis can be undertaken as a basis for further appropriate action.

7. What other comments or input do you wish to provide FHWA regarding MUTCD compliance dates for upgrading existing traffic control devices?

In addition to costs associated with the provisions discussed in this notice, it must be noted that implementing the 2009 MUTCD as it currently exists will be extremely expensive for states. Based on a limited assessment, Caltrans estimates a cost of between \$500 million and \$1 billion to implement the provisions of the 2009 MUTCD. In an October 5, 2010, letter to Administrator Mendez, the Florida DOT estimated an additional cost of \$5,000 per interchange on every pavement marking project to comply with various new requirements (**Sections 3A.06, 3B.04, and 3B.05**), resulting in an annual cost of approximately \$3.75 million for the next 7 to 10 years. Florida DOT also considered that a number of those specific changes were adopted without notice. Other jurisdictions will no doubt have similar concerns as they determine costs related to the current version of the MUTCD.

The overall increase in standards is a factor. Some who have analyzed the 2009 MUTCD conclude that there is a 44 percent increase in the use of “shall” directives in the current MUTCD compared to predecessor versions. The vast extent of new requirements makes planning and budgeting more complicated and difficult to effect.

In addition there is confusion in some quarters due to the use of compliance dates for some provisions of the MUTCD designated as “guidance” (“should” not “shall” provisions). Compliance dates should be removed from all provisions of the MUTCD that are not standard statements. This will enable agencies to better focus on planning to meet true requirements, whether or not there are specific compliance dates associated with those requirements.

IV. Conclusion

FHWA was correct to issue this notice as a step towards promptly taking rulemaking action. The costs of the 2009 MUTCD’s requirements are significant and have not received sufficient attention; they include not only the costs of meeting specific compliance deadlines but also the related issues of increased compliance costs in a world that may not allow a state to (be in substantial conformance with the MUTCD and) apply engineering judgment to standards. At a time of economic and budget stress, the changes regarding engineering judgment would deny a state the opportunity to pursue cost savings consistent with safety.

FHWA should promptly promulgate a notice of proposed rulemaking/notice of proposed amendment to the MUTCD in accord with the five principal recommendations we have set forth above, namely to revise MUTCD Section 1A.09 (see page 4, above), Section 1A.13 (see pages 4-5, above), and 23 CFR 655 (see pages 7-8, above), as well as to convert provisions with specific compliance dates to provisions without specific compliance dates, and, in those cases where, notwithstanding our recommendation, specific compliance dates are retained, to extend those compliance dates by at least 10 years (see pages 8-9, above).

These changes should be proposed very promptly in order to create opportunities to achieve cost savings consistent with safety. To the extent that comments in this docket or other information raise additional needs for modification of the 2009 MUTCD, NACE asks that FHWA not delay

the prompt issuance of a NPRM on the above key elements while undertaking analysis or fashioning language as to other, less general issues. More detailed issues can be addressed in follow up rulemakings. Prompt pursuit of essential relief should not be delayed due to extensive analysis or consideration of new or more detailed points.

Finally NACE thanks the FHWA for its consideration of these comments and recommendations and strongly urges FHWA to promptly propose and adopt final rules in accord with these comments and recommendations.