Approved by NCUTCD Council January 20, 2006

National Committee on Uniform Traffic Control Devices
TECHNICAL COMMITTEE RECOMMENDATION

TECHNICAL COMMITTEE: Regulatory/Warning Sign TC

DATE OF ACTION: 1/18/2006 RWSTC

REQUEST NUMBER

TOPIC: Traffic Control Device Determinations
   Section 1A.09, Engineering Study and Engineering Judgment

ORIGIN OF REQUEST: NCUTCD Edit Committee

DISCUSSION: Section 1A.09 as a Guidance statement recommends 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’.

Furthermore, MUTCD definitions, Section 1A.13, Items 25 and 26, define as a Standard for both engineering study and engineering judgment that they, “shall be performed 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”.

It is impossible for the many local jurisdictions without engineers employed on their staff to meet these requirements and tyrannical on our part to expect them to hire an engineering consultant to make these decisions.

The above statement indicates that it is recommended, should, that a decision to use a particular device at a particular location should be based on either an engineering study or engineering judgment. The assumption is that a particular device at a particular location would encompass all decisions on traffic control device installations. Additionally, the MUTCD by definition requires engineer involvement or supervision for all engineering study and engineering judgment decisions. It is well known that most traffic control devices are installed by sign crews making field decisions that are not necessarily reviewed by engineers or covered by policies prepared by engineers. It is not the intent of the Manual to make all these device installations subject to engineering oversight. The Manual does however, explicitly, and rightly so, require the use of engineering judgment and engineering study for some specific decisions. Revision of this statement would not revise or change the other Manual requirements requiring an engineering study or engineering judgment.

Interpretation of the wording of Section 1A.09 as it is revised requires the following:
<table>
<thead>
<tr>
<th>The decision to use a particular device at a particular location should be made consistent with the principles of this Manual,</th>
<th>Anyone having the responsibility to install and maintain devices can make the decisions following the principles.</th>
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<td>and if required herein on the basis of either an engineering study or the application of engineering judgment.</td>
<td>In specific wording in the MUTCD, the exercise of engineering judgment or the need for an engineering study are specified. The “if required herein” maintains these requirements specified elsewhere in the Manual.</td>
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<td>should seek engineering assistance, if needed, from others</td>
<td>If they need engineering assistance as required by the engineering study or judgment requirements covered above then they should seek it.</td>
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</table>

These revisions recognize the current practice of installing signs throughout the country and do not detract from the requirements that engineering studies must be done under engineering supervision for very specific traffic control decisions. However, at the same time it is not required that an engineer be involved in the decisions for each device at every location.

This item was discussed by the Edit Committee at Savannah, Georgia, on June 11, 2003, with the wording revisions suggested to ease the requirements on local jurisdictions. Note, there is a need to revise some other MUTCD Sections in order to maintain consistency within the MUTCD.

**THE RECOMMENDED WORDING:** It is recommended that the Guidance paragraph of Section 1A.09, *Engineering Study and Engineering Judgment* be revised as follows;

> “The decision to use a particular device at a particular location should be made **consistent with the principles of this Manual and, if required by this Manual, herein** 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, as well as in the location and design of the roads and streets that the devices complement. Jurisdictions with responsibility for traffic control that do not have engineers on their staffs, should seek engineering assistance, if needed, from others, such as the State transportation agency, their county, a nearby city, or a traffic engineering consultant.”
To make that work some other MUTCD Sections as follows need to be revised because of their reference to Section 1A.09 or relationship to Section 1A.09. These revisions would be as follows;

Section 2A.03 **Standardization of Application**, delete the following text;
Guidance:

*Signs should be used only where justified by engineering judgment or studies, as noted in Section 1A.09.*

Section 2C.02 **Application of Warning Signs**, delete the following text;

**Standard:**

— The use of warning signs shall be based on an engineering study or on engineering judgment.

Section 5A.02 **Application**, delete the support text as shown below:

Support:

It is possible, in many cases, to provide essential information to road users on low-volume roads with a limited number of traffic control devices. The focus might be on devices that:

A. Warn of conditions not normally encountered;
B. Prohibit unsafe movements: or
C. Provide minimal destination guidance.

*As with other roads, the application of traffic control devices on low-volume roads is based on engineering judgment or studies.*

VOTE: For = Majority
Opposed = Dan Paddick
Abstentions = None