

September 4, 2007

Dear City Attorney:

I am sorry for the delay in addressing your question about the person who ran the red light and who now alleges that he cannot be convicted of running the light because the installation of the light was not supported by an engineering study as required by the Manual on Uniform Traffic Control Devices (MUTCD). My research on that question ended up taking considerably longer than I anticipated.

Defenses to Argument that Engineering Study Must Support the Red Light

There appear to be several defenses to the argument that an engineering study must support the red light in question.

- **First**, Tennessee Code Annotated, ' 54-5-109, provides that the Department of Transportation has the power and duty to formulate and adopt a manual for the location of signs, signals, markings, or postings of traffic regulations on or along all streets and highways in Tennessee,

and no signs, signals, markings or postings of traffic regulations shall be located on any street or highway in Tennessee regardless of the type or class of the governmental agency having jurisdiction thereof except in conformity with the provisions contained in such manual.

In language tracking that statute, the Tennessee Department of Transportation in Tenn. Comp. R & Reg. 1680-3-1-.01 rule applies the current MUTCD to "all the streets and highway in the State of Tennessee," and in Tenn. Comp. R & Regs. 1680-3-1-.02, it adopts the 2003 Edition of the MUTCD.

However, the history of Tenn. Comp. R. & Regs. 1680-3-1-.02, indicates that the state did not adopt the MUTCD until after the study supporting the red light was done, which my information was in 1972. The historical note under that provision is as follows: "**Authority:** T.C.A. ' 54-5-108(b). **Administrative History:** Original rule certified *June 10, 1974*...." If that is so, the defendant is challenging a red light that was in place before the MUTCD was even adopted in Tennessee. For that reason, unless he can point in MUTCD to a continuing legal duty on the part of the state or city to update the traffic light, he would seemingly be out of court on the basis of the date the MUTCD was adopted. I will address that issue more below.

- **Second**, with respect to the red light in question, the MUTCD itself differentiates between “Standards,” “Guidance” and “Options,” in the application of the MUTCD, as follows:

Standard: When used in this Manual, the text headings shall be defined as follows:

- 1. Standard: a statement of required, mandatory, or specifically prohibited practice regarding a traffic control device. All standards are labeled, and the text appears in bold type. The verb shall is typically used. Standards are sometimes modified by options.**
- 2. Guidance—a statement of recommended, but not mandatory, practice, with deviation allowed if engineering judgement or engineering study indicates the deviation to be appropriate. All Guidance statements are labeled, and the text appears in unbold type. The verb should is typically used. Guidance statements are sometimes modified by Options.**
- 3. Option: a statement or practice that is permissive and that carries no requirement or recommendation. Options may contain allowable modifications to a Standard of Guidance. All Option statements are labeled, and the text appears in unbold. The verb may is typically used.**
- 4. Support: an information statement that does not convey any degree of mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements are labeled, and the text appears in unbold type. The verbs shall, should and may are not used in Support Statements. [See 2003 MUTCD, pp. 1-2 and 1-3.]**

With respect to the argument by the defendant who ran the red light in your City that the traffic light must be supported by an engineering study, ' 1A.09 of MUTCD says that:

Section 1A.09 Engineering Study and Engineering Judgement

Standard:

This Manual describes the application of traffic control devices but *shall not be a legal requirement for their installation* [My emphasis.]

Guidance:

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 their application of traffic control devices, this Manual should not be considered substitute for engineering judgment. [Emphasis is mine.]

Thus, while under Tennessee Code Annotated, ' 54-4-1-108, the MUTCD applies to all the streets and highways of the state, that Manual itself makes only the “Standards” mandatorily applicable to traffic signals. On its face, the “Standard” for '1A-09 of the MUTCD declares that a traffic engineering study, or even engineering judgment, is not a legal prerequisite for the legality of the installation of a traffic signal. Even if that were not so, the “Guidance” for ' 1A-09, indicates that “engineering judgment,” not an engineering study, is the touchstone of the placement of traffic signals:

Under ' 1A.13, of MUTCD, which contains the definitions applicable in that Manual, the “Engineering Study” is defined as:

[T]he comprehensive analysis and evaluation of available pertinent information, and the application of appropriate principles, Standards, Guidance, 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. An engineering study 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. An engineering study shall be documented. [See definition 26.]

Under the same provision of MUTCD, “Engineering Judgment” is defined as:

[T]he evaluation of available pertinent information, and the application of appropriate principles, Standards, Guidance, and practices as contained in this Manual and other sources, for the purpose of deciding upon the applicability of design, operation, or installation of a traffic control device. Engineering judgement 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. [See definition 25.]
[Emphasis is mine.]

I find no language in the 2003 version of MUTCD that specifies the frequency with which engineering studies, or even engineering judgments, must be made to support traffic signals. In the case of Graber v. City of Ankeny, 656 N.W.2d 157 (Iowa 2003), which will be considered in more detail below, the Iowa Supreme Court analyzes MUTCD in connection with the question of whether that Manual imposes a duty on a government to periodically update engineering studies (and presumably engineering judgements). The Court concludes that:

There is no similar provision in the MUTCD imposing an engineering study requirement upon a city's *operation* of traffic devices.... [Emphasis is mine.] MUTCD '4A-2; see also *id.* ' 42-20 (because "traffic flows and patterns change it is necessary that the engineering data be updated and re-evaluated regularly.") After the original installation is completed, the MUTCD suggests "regular checks including the use of accurate timing devices should be made." *Id.* ' 4B-20. Use of the word "should" indicates that it is recommended but not mandatory. [At 162]

I was not able to find the provision of which Graber in the 2003 version of MUTCD. However, ' 4B.02 in that version provides that:

Section 4B.02 Basis of Installation or Removal of Traffic Control Signals

Guidance:

The direction and use of traffic control signals *should* be based on an engineering study of roadway, traffic, and other conditions.

Guidance:

Engineering judgment should be applied in the review of operating traffic control signals to determine whether the type of installation and the timing program meet the current requirements of all forms of traffic.... [Emphasis is mine.]

Under that provision, the result in Graber would be the same. The review of operating traffic control signals to determine whether the installation and the timing programs meet the current requirements of all forms of traffic is "Guidance," which is not mandatory.

- **Third**, I have been able to find a small number of cases on the question of whether a person convicted of running a red light can raise the defense that the red light did not conform to MUTCD. Graber, above, directly involves the question of whether an engineering study must support the red light. Although it is not clear from that case which version of MUTCD was at issue, the Iowa Supreme Court, citing MUTCD, said this about the engineering study:

Graber argues that this section [MUTCD ' 1A-4] [Which is 1A.9 in the 2003 version] imposes a duty upon the city to perform engineering studies in the operation and maintenance of traffic control devices and general regulation of traffic. However, the requirement that an engineering study be performed applies not to the operation of traffic control devices, but to the initial decision to use a particular type of traffic control device at a particular location. As to the city's original decision to use traffic lights at this intersection, the Manual functioned as an aid to guide the exercise of professional judgement in that choice. *The MUTCD is not meant to function as a substitute for professional judgment in the selection of traffic control devices.* [At 162] [Emphasis is mine.]

The Court continues:

A number of other jurisdictions have considered whether the MUTCD functions as a mandate or a guideline. The majority of these jurisdictions have determined the MUTCD is nothing more than a guideline. See, e.g. *Cope v. Scott*, 45 F.3d 445, 451, (D.C. Cir. 1995); *McComb v. Tamlyn*, 173 Or.App. 6, 20 P.3d 237, 241 (2001) (provisions of MUTCD do not require traffic engineer to use particular signal in designing specific intersection because manual vests city engineer with discretion in making such decisions); *Dep't of Transp. v. Sanchez*, 75 S.W. 2d 24, 28-29 (Tex. App. 2001) (3.5 second clearance interval for traffic signals was set within the discretionary guidelines stated in paragraph 4B-15 of the Texas MUTCD); *Searles v. Agency of Transp.* 171 Vt. 562, 762 A.2d 812, 814 (2000); *Harmann v. Schulke*, 174 Wis.2d 848, 432 N.W.2d 671, 674 (Ct. App. 1988). See also *Zank v. Larson*, 552 N.W.2d 719, 722 n.2 (Minn. 1996) (Minnesota MUTCD "affords substantial discretion to local governmental units regarding all red clearance intervals.") We align ourselves with the majority of jurisdictions considering this issue. [At 162-63]

In City of Wichita v. Rice, 889 P.2d 789 (An. App. 1995), the defendant was convicted of running a red light. He argued that the light was obscured in violation of MUTCD. In upholding his conviction, the Court pointed to ' 11.20.30 of the Wichita Code which provided that all traffic control devices were required to conform to the MUTCD, and declared that:

The Manual provides that an effective traffic control device should command attention, give adequate time for proper response, be kept in proper position, and be clean and legible. The manual provides that care should be taken that weeds, trees and shrubbery do not obscure the face of the sign. [At 792]

The Court also pointed to ' 11.20.030 of the City Code, which provided that provisions of the traffic control ordinance “for which official traffic control devices are required to be enforced against an alleged violation if at the time and place of the alleged violation an official device is not in proper position and sufficiently legible to be seen by an ordinarily observant person.”

The defendant might have had a case if he had been able to show that the light was not visible, declared the Court. But in this case, the driver of the car the defendant struck testified that it was sufficiently visible to have been seen, and that evidence was uncontroverted.

That case does not indicate what section of the MUTCD the Court cited, and I do not find a similar provision in the 2003 version of MUTCD, but ' 1A.02 of the 2003 version has the following “Guidance” provisions with respect to principles of traffic control devices:

To be effective, a traffic control device should meet five basic requirements:

- A. Fulfill a need;
- B. Command attention;
- C. Convey a clear, simple meaning;
- D. Command respect from road users; and
- E. Give adequate time for proper response.

Those provisions suggest the same “guidance” for being able to see the red light as did the provision of MUTCD to which the Court pointed in City of Wichita v. Rice. That case also points to the same logical result in your city’s case: If the red light is visible, motorists are required to obey it. Indeed, from a policy standpoint, it almost seems ridiculous to argue otherwise.

However, the conviction of a driver who made a right turn on a red light during hours such turn were not allowed was overturned in City of Lynnhurst v. Mcginness, 741 N.J.E.2d 976 (Ohio. App. 2000), where the sign indicating the hours turns were prohibited did not conform to the MUTCD. The Court declared that there could be no criminal liability for violation of a traffic control device that did not conform to that Manual. Apparently the provision of MUTCD at issue was 2L-31 “NO TURN ON RED” sign (R-23.). I have been unable to find a comparable provision in the 2003 version of the MUTCD, but I do observe that most, if not all, the provisions therein governing the *faces* of traffic control signals are “Standards,” and are presumably mandatory under the MUTCD.

The City of Lynnhurst Court pointed to the earlier case of City of Maple Heights v. Smith, 22 N.E.2d 607 (Ohio App.3d. 1999), from the same appellate district, in which it was held that, “there is no criminal liability for violation of a traffic control device that is unofficial and not in conformity with the manual.” [At 979]

The facts in City of Maple Heights and City of Lynnhurst appear the same. However it may be that the Ohio statutes under which Ohio’s MUTCD was adopted are stricter than are similar statutes in Tennessee. The City of Lynnhurst Court acknowledges that there is a split among Ohio districts on the question of whether traffic signals must conform to the Ohio MUTCD before they are enforceable.

Burden of Proof

In his August 1, 2007 letter to you, the defendant who challenged the red light in your city’s case himself pointed to the case of Thomas v. Harper, 385 S.W.2d 130 for the proposition that there is a presumption of regularity ad validity to traffic signs and signals unless the contrary is shown.

I think it was you that pointed me to the case of City of Oak Ridge v. Brown, 2005 WL 1996620 (Tenn. Ct. App.) in which it was held that a person charged with violating the speed limit had the right to raise the defense that the posted speed limit had not been lawfully established, in that case on the ground that an engineering study had not preceded its establishment. *It needs to be said here, that a specific state statute requires speed limit signs to be supported by an engineering study: Tennessee Code Annotated, ' 55-8-152. As far as I can determine, there is no similar requirement for stop lights, beyond any requirements MUTCD might contain.*

The Court of Appeals sent that case back to the trial court for further proceedings, obviously to give the defendant an opportunity to show that the speed limit was not lawfully established. In doing so, declared that the defendant has the burden of poof as to the unlawful establishment of the speed limit sign:

We express no opinion as to whether the defendant can establish,

to the satisfaction of the trier of fact, that the posted speed limit on State Route 62 was not properly established. As far as the City's burden of proof is concerned, it can rely upon the presumption of validity referred to in *Thomas*. It will be the defendant's obligation to rebut the presumption by proving that the posted speed limit was not properly established. If he fails to satisfy this obligation, the presumption prevails and proof of the posted speed limit establishes the speed limit. [At 3]

I am not sure the matter is as simple as that for your City. If the defendant can get by the problem of the first MUTCD being adopted in the state only in 1974, does he have to "prove" that an engineering study is required to support the red light? It strikes me that at some point the city must be able to go forward with proof that either MUTCD does not require an engineering study to support the red light, or that MUTCD does not contain an engineering study to support the red light's continuing operation after its installation. At the same time, it does seem to me a difficult proposition for the defendant to show that the state did not use an engineering study or engineering judgement in the installation of the traffic light, especially the latter, which MUTCD says is *not required to be documented*. I am a little puzzled about how the defendant can make that kind of showing.

Sincerely,

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