



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Avenue, SE.
Washington, DC 20590

August 18, 2008

In Reply Refer To: HOTO-1

Mr. Michael J. Tantillo
Transportation Engineer
Vanasse Hangen Brustlin, Inc.
8300 Boone Boulevard, Suite 700
Vienna, VA 22182-2624

Dear Mr. Tantillo:

Thank you for your July 28 letter requesting an official interpretation of an Option statement contained in Sections 4C.02, 4C.03, and 4C.04 of the Manual on Uniform Traffic Control Devices (MUTCD.)

The Option statement in these three sections states that 70 percent, rather than the normal 100 percent, of the vehicular volume thresholds may be used for signal warrant analysis "if the posted or statutory speed limit or 85th-percentile speed on the major street exceeds 70 km/h or exceeds 40 mph or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000." You have asked whether this option for use of the 70 percent factor is intended to be applied to both rural and urban environments, including suburban locations along a roadway with a 45 mph speed limit.

The quoted language in the Option statement in question allows the 70 percent factor to be applied in either of two conditions --- on higher speed roads (above 40 mph or above 70 km/h), or on roads of any speed that are located in the built-up areas of isolated small rural communities. These two site conditions do not both have to be present in order to apply the Option. A road with a speed limit of 45 mph would be eligible for application of the 70 percent factor regardless of whether it is in an urban, rural, or suburban environment. Conversely, a road with a posted, statutory, or 85th percentile speed of 40 mph or less would not qualify for application of the 70 percent factor unless the intersection is in the built-up area of an isolated (typically rural) community of less than 10,000 population. A developing suburban area typically would not meet this condition because it is not "isolated."

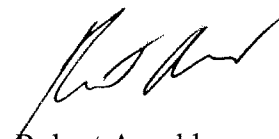
I hope that this information clarifies the intent of the Option in question. Thank you for writing on this subject. If you have any questions, please contact Mr. Scott Wainwright of our staff by e-mail at scott.wainwright@dot.gov or by telephone at 202-366-0857. Please note that

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we have assigned your request the following official interpretation number and title: "4-346(I)—70 Percent Factor for Warrants." Please refer to this number in any future correspondence regarding this issue.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Robert Arnold", written in a cursive style.

Robert Arnold
Director, Office of Transportation
Operations

FHWA:HOTO-1:SWainwright:ds:60857:8-15-08

cc: HOTO-1 HOTO-1(HKalla/SWainwright)

Mr. Martin Knopp, HRC-MW Mr. Pat Hasson, HRC-MW

HDA-VA(2) Mr. Roger Wentz, ATSSA Mr. Jim Baron, ATSSA

Chron E84-401 Reader E84-401

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Vanasse Hangen Brustlin, Inc.

July 28, 2008

MUTCD Team
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue SE
HOTO-1
Washington, DC 20590

Dear MUTCD Team:

I am writing to request an official interpretation as per Section 1A.10 of the 2003 edition of the Manual on Uniform Traffic Control Devices. In Chapter 4C, Traffic Control Signal Needs Studies, several of the warrants present an option allowing the use of 70% numerical threshold values, "If the posted or statutory speed limit or 85th-percentile speed on the major street exceeds 70 km/h or exceeds 40 mph or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000." I would like to know if this option, presented in Sections 4C.02, 4C.03, and 4C.04, is intended to apply to both rural and urban environments. While performing a traffic signal needs study in a rapidly growing suburban county along a roadway with a 45 mph speed limit, we were challenged by the reviewing agency as to the use of the 70% threshold. Your input would be much appreciated to help resolve the interpretation differences.

Sincerely,

Michael J. Tantillo
Transportation Engineer
Vanasse Hangen Brustlin, Inc.