

System Operation Advisory

Traffic and Safety Division

TSA 2007 - 01

October 8, 2007

From James D. Culp, Engineer of Traffic and Safety

MDOT Traffic and Safety
Division
P.O. Box 30050
Lansing, Michigan 48909
Phone/517-373-2323
Fax/517-373-2330
www.michigan.gov/mdot/

Index: Signing

Questions regarding this
Traffic and Safety Advisory
should be directed to:

Mark Bott
Traffic Operations Engineer
517-335-2625



JDC:MWB:nw

No Turn on Red Signs

This Advisory serves as notice on the need to determine the validity of NO TURN ON RED signs currently in place. When the NO TURN ON RED sign is placed, it will reduce the intersection's through traffic capacity. Under Michigan Law, motorists facing red signal indications may, after stopping, complete right turns onto two-way or one-way streets or left turns onto one-way streets unless prohibited by a traffic control device. Although turn-on-red may be prohibited, they should not be arbitrarily disallowed. Engineering judgment, after carefully analyzing traffic conditions at the location, should be the basis for a turn-on-red prohibition. A prohibition should be considered only after its need has been fully established and less restrictive measures have been ruled out. At some locations, conditions may require only part-time prohibition of turn-on-red.

As per Section 2B of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD) a NO TURN ON RED sign should be considered when an engineering study finds that one or more of the following conditions exists:

A. Inadequate sight distance to vehicles approaching

from the left (or right, if applicable);

B. Geometrics or operational characteristics of the intersection that might result in unexpected conflicts;

C. An exclusive pedestrian phase;

D. An unacceptable number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians, or persons with disabilities; and

E. More than three right-turn-on-red crashes reported in a 12-month period for the particular approach.

The decision to prohibit a turn-on-red on one or more legs of an intersection will be the joint responsibility of the Region/TSC Traffic and Safety Representative and a representative of the local agency affected. The department will install and maintain all NO TURN ON RED signs at state trunkline intersections at no cost to the local agency.

When used, the NO TURN ON RED sign shall be located above or adjacent to the traffic signal or as close as possible to the point where the turn is made, or at both locations, so one or more of the

System Operation Advisory

Traffic and Safety Division

TSA 2007 - 01

October 8, 2007

MDOT Traffic and Safety
Division
P.O. Box 30050
Lansing, Michigan 48909
Phone: 517-373-2323
Fax: 517-373-2330
www.michigan.gov/mdot/

Index: Signing

Questions regarding this
Traffic and Safety Advisory
should be directed to:

Mark Bott
Traffic Operations Engineer
517-335-2625



JDC:MWB:nw

No Turn on Red Signs (Page 2)

signs are visible to a driver intending to turn, at the point where the turn is made. If possible, far right installations should be considered to supplement the near right signs. Overhead illuminated NO TURN ON RED signs may be considered when conditions such as high pedestrian concentrations, predominant crash patterns, multi-phase signals, and limited sight distance exist.

If capacity issues exist but there still is a safety concern with the right turns and the opposing left turns, a disappearing NO TURN ON RED case sign can be installed where there is an opposing left-turn phase.

Another option is to install a right turn green arrow with supplemental NO TURN ON RED signs. This would only apply at locations where there is a left-turn phase on the cross street. Either case would require an exclusive right-turn lane.

Diagonal spans may not be conducive to installing disappearing case signs or right-turn green arrows due to the distance to the stop bar. Box and Diagonal span calculations need to be verified to determine if they can accommodate the additional weight. Significant modifications may be required and determined not practical at that time.

The Traffic Signals Unit should be contacted to assist in evaluating the proposed operation before proceeding.

Please share this information with traffic and safety staff and consultants evaluating existing NO TURN ON RED signs.