

POLICY NO. 101

BOARD OF COUNTY ROAD COMMISSIONERS  
OF THE COUNTY OF ST. CLAIR

SUBJECT: SIGN RETRO-REFLECTIVITY MANAGEMENT POLICY  
FOR MINIMUM RETRO-REFLECTIVITY LEVELS

ADOPTED: December 20, 2011

**GENERAL**

The purpose of this policy is to comply with the Federal Highway Administration (FHWA) requirement for implementation and continued use of an assessment or management method designed to maintain traffic sign retro-reflectivity at or above the established minimum levels by January 22, 2012 per the Manual of Uniform Traffic Control Devices (MUTCD).

All regulatory signs (black on white and white on red), warning signs (black on yellow), temporary traffic control signs (black on orange) and guide signs (white on green) are included in the assessment or management method.

The MUTCD mandates that all regulatory, warning, ground-mounted guide signs (except street name signs) and temporary traffic control signs must meet minimum retro-reflectivity criteria prior to January 22, 2015. The MUTCD mandates that all street name and overhead guide signs must meet minimum retro-reflectivity criteria prior to January 22, 2018.

**INSPECTION METHODS**

Any of the following inspection methods may be used. The ratings must include at least three (3) levels of compliance: Adequate, Marginal and Fail.

1. CONSISTENT PARAMETER PROCEDURE (VISUAL NIGHTTIME INSPECTIONS)

This procedure is allowed provided the following criteria are met:

- a. The inspector must be 60 years old or older and have 20/20 corrected vision
- b. The inspector must use a pickup truck or sport utility vehicle, model year 2000 or later
- c. The inspector must go through inspection training
- d. The inspector should inspect the signs during consistent conditions
- e. The inspector must keep the interior light of the vehicle off
- f. The inspector should inspect the signs at near normal speeds
- g. The inspector must use low beam headlights during inspections

If the inspector needs to slow down or stop the vehicle to read the sign, the sign needs to be replaced.

## 2. CALIBRATION SIGNS PROCEDURE

In this procedure an inspector views a "calibration sign" for each sign color needing inspection prior to conducting the nighttime inspection described in the Consistent Parameter Procedure. Calibration signs have known retro-reflectivity levels at or above minimum levels. The calibration sign shall be calibrated using a retro-reflectometer.

These calibration signs are set up where the inspector can view them in a manner similar to nighttime field inspections at posted speeds to calibrate their eye to the minimum retro-reflectivity of the color of sign to be inspected.

The inspector must meet all of the criteria of the visual Nighttime Inspections method.

## 3. COMPARISON PANELS PROCEDURE

For each of the sign colors needing inspection a calibrated sample sign near the minimum retro-reflectivity levels is used. The sample signs shall be calibrated using a retro-reflectometer.

The inspector may be of any age. The inspection must be performed at night at highway speeds.

The sample signs are taken into the field by the inspector. Any sign observed to be questionable in reflectivity is inspected using the comparison panel of the same color. The comparison panel is attached to the questionable sign.

The inspector shall view the signs at a distance of at least 25 feet with a flashlight held near the inspector's ear. If the sign is not as bright as the comparison panel, the sign must be scheduled for replacement.

## 4. MEASURED SIGN RETRO-REFLECTIVITY

Using a retro-reflectometer, physically hold the device on at least four (4) areas of each color of each sign and measure the average value of the sign. If the average reflectivity value is less than the minimum requirements, the sign must be scheduled for replacement.

## 5. CONTROL SIGNS

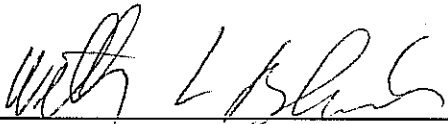
A selection of signs or sign sheeting (enough to represent all signs in the field) is placed permanently outside in the field or maintenance facility grounds. There must be enough of the signs or sheeting of each color and type to face all directions. A new set of signs or sign sheeting must be erected for each subsequent year.

The control signs are monitored over the years. As the signs fade the retro-reflectivity must be measured. Once the retro-reflectivity falls below minimum standards, all signs facing the direction of the faded sign installed on the county road system in that given year, must be scheduled for replacement.

## IMPLEMENTATION

This policy directs the St. Clair County Road Commission Management Staff to begin yearly inspections of all required signs on the county road system starting in 2012 using one of the five approved methods as stated in the Inspection Methods section of this policy, or as an alternative to physical inspections, shall review a computer generated report from the RoadSoft database and take action accordingly.

Any sign in need of replacement shall be documented on an inspection sheet and scheduled for replacement as soon as practical.

  
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William L. Blumerich, Chairman

  
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Kirk D. Weston, Managing Director