

Sign Retroreflectivity Requirements

According to the National Safety Council, about half of traffic fatalities occur at night, yet only about one-quarter of travel takes place after dark. As the U.S. population ages, nighttime visibility is becoming even more of a safety concern. By the year 2030, about 19 percent of the U.S. population will be 65 or older, compared to 13 percent in 2010.¹ In general, vision and reaction times decrease with age. To enhance the safety of nighttime driving, the FHWA has set Federal standards to improve the nighttime visibility of the signs on all public streets and highways.

The sheeting used on traffic signs is “retroreflective,” meaning it is designed so that light bounces back from the sign to enable nighttime visibility. Over time, the sign sheeting degrades. The FHWA standard, which is contained in the *Manual on Uniform Traffic Control Devices* (MUTCD), establishes minimum levels of sign retroreflectivity.

Phased-in Deadlines

The Federal standard governing sign retroreflectivity allows public agencies to phase in compliance according to the schedule shown at right. This allows jurisdictions to plan for sign upgrades within their existing maintenance cycles.

Flexible Compliance Methods

Agencies have until January 2012 to implement a method for maintaining traffic sign retroreflectivity at or above the minimum levels. Agencies can choose either an assessment method or a management method, or a combination of the two. The basic assessment methods are visual assessment or measuring sign retroreflectivity. If an agency wants to avoid having to assess individual signs, they can simply have signs replaced under a management program.

Compliance is achieved by *having a method in place and using the method to maintain minimum levels of retroreflectivity*. Provided that a method is being used, an agency would be *in compliance even if there are some individual signs that do not meet the retroreflectivity levels* at a particular point in time.

¹ Source: U.S. Census Bureau
<http://www.census.gov/population/www/projections/summarytables.html>

Public Agencies are allowed to phase-in their compliance as outlined below:

January 22, 2012

Implement a method to maintain minimum levels of retroreflectivity

January 22, 2015



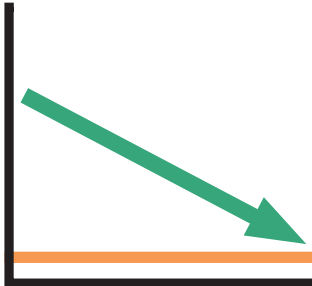

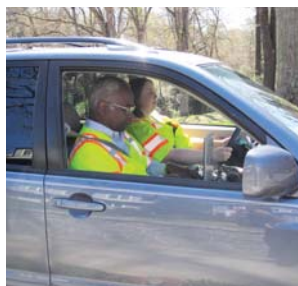


Replace regulatory, warning, and ground-mounted guide signs

January 22, 2018

Replace overhead guide signs and street name signs



Menu of Sign Retroreflectivity Maintenance Method Options

CHOOSE FROM THESE METHODS			MANAGEMENT METHODS			ASSESSMENT METHODS			
			Control Signs Replacement Program	Blanket Replacement Program	Expected Sign Life Replacement Program	Measured Retro- reflectivity	Select Any One of These Three Visual Procedures		
							Consistent Parameters	Comparison Panels	Calibration Signs
									
MUTCD Retroreflectivity Test Method Requirements & Recommendations	EQUIPMENT NEEDS	Retrore- flectometer	Retroreflectometer Needed To Check Control Signs			<i>Required</i>			
		Inspection Vehicle					PU or SUV	Any	Any
		Must Know Sheet Type	<i>Required</i>	<i>Required</i>	<i>Required</i>	<i>Required</i>			
		Inventory	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial	Not Required in MUTCD, but might be beneficial
	INSPECTOR REQUIREMENTS	Trained	Training on retroreflectometer required			Training on retroreflectometer required	<i>Required</i>	<i>Required</i>	<i>Required</i>
		Age				Any	60+	Any	Any
	TIME DEMANDS	At Night					<i>Required</i>	<i>Required</i>	<i>Required</i>
		Must Stop At Signs	<i>Required</i> control signs only			<i>Required</i> every sign		<i>Required</i> Marginal Signs Only	

Funding Eligibility

State and local road agencies may seek funding assistance through the following Federal Aid programs to help defray some of the costs related to ensuring sign retroreflectivity. Specific eligibility requirements are determined at the State and local levels. Please coordinate with partnering agencies: local Metropolitan Planning Organization; State Department of Transportation (DOTs), and the State FHWA Division Office.

Sign Management Programs: Federal programs that are possible sources of funding for setting up sign management programs include:

- State Planning and Research Program (SPR);
- Community Safety Grants;
- Highway Safety Improvement Program (HSIP), if data-supported, with link to State's Strategic Highway Safety Plan; and

Sign Replacement Programs: Federal programs that are possible sources of funding for sign replacement programs include:

- National Highway System, which provides funds for improvement to rural and urban roads in the National Highway System, including Interstate and inter-modal terminals;
- Surface Transportation Program, which provides flexible funding that may be used by States and localities for projects on any Federal highway, bridge projects on any public road, transit capital projects, and intercity bus terminals and facilities. A portion of funds reserved for rural areas may be spent on rural minor collectors;
- Interstate Maintenance Program (IMP), which provides funding for maintenance of the Interstate System;
- HSIP, if data-supported, with link to State's Strategic Highway Safety Plan; and

For More Information

FHWA Nighttime Visibility Web Site http://safety.fhwa.dot.gov/roadway_dept/night_visib/

Manual on Uniform Traffic Control Devices <http://mutcd.fhwa.dot.gov/>

Sign Retroreflectivity Toolkit http://safety.fhwa.dot.gov/roadway_dept/night_visib/retrotoolkit/

American Traffic Safety Services Association (ATSSA) Retroreflectivity Clearinghouse

<http://www.atssa.com/page.wv?name=Home§ion=Retroreflectivity>

Local Technical Assistance Program

<http://www.ltap.org/>

Local FHWA Division Office

<http://www.fhwa.dot.gov/field.html>



U.S. Department of Transportation
Federal Highway Administration