

Guidelines for Conducting Nighttime Visual Inspections of Sign Retroreflectivity

Visual Inspection Method



Overview

- With this method, a model year 2000 or newer sport utility vehicle (SUV) or pick-up truck has to be used and the inspector needs to be at least 60 years old.
- The inspection occurs at night at highway speeds.
- This method simulates the conditions of the research which FHWA used as a foundation for the minimum retroreflectivity levels.

Field Technique

- Preferable to use a two person crew.
- Must have a model year 2000 or newer SUV, pick-up, or similar vehicle
- Driver can be any age but inspector needs to be at least 60 years old.
- Inspection occurs at highway speeds with low-beams only.
- Inspector concentrates on judging sign retroreflectivity.
 - Example: adequate, marginal, poor (replace)
- Driver concentrates on driving safely.

Checklist

- Inspector and driver need to be well rested
- Have model year 2000 or newer SUV or truck vehicle with low-beam headlamps properly aimed
- Have routes selected
- Prepare inspection forms
- Have a list of the signs in driving order (if available)
- Clip board, pen lights, dash cam, tape recorder, laptop,
- Be fueled up
- Cannot start in earnest until complete darkness
- Remember to evaluate both colors of signs with two retroreflective colors (white on green, white on red, etc.)

Common Visual Inspection Features

- Aim inspection vehicle headlamps (take to certified auto mechanic)
- Two-person crew works best
- Having an inventory is preferred
- Use low-beam headlamps
- Have evaluation form and criteria
 - Example: good or bad (replace)
- Conduct evaluations at roadway speed

Visual Inspection Tips

- It is preferred to have a list of the signs along the inspection route.
 - Adds consistency to the inspections
 - Reduced need for writing during inspection
 - Only need a score for each sign such as: good, marginal, replace.
 - Provides documentation that the inspections were conducted --- just in case!
 - Allows identification of missing signs

Sign List Example




Sign Retroreflectivity Inspection Form

Date: _____

Route start point: _____

Inspector: _____

Route end point: _____

Sign Description	Sign Color	Odom. Reading	RETROREFLECTIVITY		
			Good	Marginal	Replace
Stop	Red	0.1			
Route Mkr	Wht	0.2			
Spd Lmt	Wht	0.5			

Your job is the most important part of making this new regulation successful



Increase safety

Increase nighttime visibility