Are Your Signs In Compliance?  
What’s New For 2014…And Going Forward  
By Joanne Conrad, TAPCO Digital Division

In this issue I am going to talk about Sign Retroreflectivity and Sign Management.  
Traffic signs are installed along the streets, roads, and highways of America to inform or warn the motoring public of conditions, features, dangers, and direction of travel. In 2007 the Federal government set retroreflective minimums for the most critical of traffic signs on US roads.

Let’s talk about retroreflectivity. Agencies have until June 14, 2014 to implement and continue to use an acceptable assessment or management method that is designed to maintain regulatory and warning signs at or above the minimums in table 2A-3 of the 2009 MUTCD. Guide signs are to be added to the agency’s management or assessment method as resources allow.

There are hundreds of pages and volumes covering sign compliance so I am going to touch on a few that will impact you today. So are you ready? Do you have a plan in place? What assessment or management method are you using or will you use? What do the changes mean to you?

Approximately 50% of traffic fatalities happen at night. Approximately 25% of travel occurs at night. Intoxication and fatigue are a major influence in the high rate of nighttime crashes but nighttime driving is characteristically hazardous because of decreased motorist and pedestrian visibility. Retroreflective traffic control device deteriorate over time. The deterioration may be the reflective material is at a life end or there may simply be a maintenance issue such as cleaning a sign face.

There are management methods and assessment methods spelled out in the MUTCD. You may simply use one of these methods or a combination.

Assessment methods to consider are: Visual Nighttime Inspection and Measured Retroreflectivity. The visual nighttime inspection method is made by a trained inspector during nighttime conditions. There are 3 procedures that should be considered to properly implement this method: Calibration Sign Procedure, Comparison Panel Procedure, and Consistent Parameters Procedure. The measured reflectivity method is done using a retroreflectometer and comparing the readings to the minimum levels for the sign material. ASTM1709 is the Standard Test Method for Measurement of Retroreflective Signs Using a Portable Retroreflectometer at a 0.2 Degree Observation Angle. Measurements made by this test method are related to the nighttime brightness of retroreflective traffic signs approximately facing the driver of a mid-sized automobile equipped with tungsten filament headlights at about 200 m distance.

Management methods to consider are: Expected Sign Life Method, Blanket Replacement Method, and/or Control Signs Method. The expected sign life method requires agencies to monitor the degradation of individual and groups of signs. Many agencies use weathering test decks. The blanket replacement method requires an agency to group signs by geographic area, roadway corridor, and sheeting type, and to replace these signs by the shortest expected life. In the control signs method, agencies monitor the reflectivity of groups of signs using an assessment method and replace based on the performance of the control signs. Other methods may be developed based on engineering studies as long as they are designed to meet minimum levels in Table 2A-3 of the 2009 MUTCD, as stated in the MUTCD Standard statement in Section 2A.08. The methods described above are where you need to be by June 14, 2014. So just how do you achieve this? Consideration needs to be made as to the size of your city or county, your personnel, and budget constraints. But you need to have a method in place. How do you manage your method? Most agencies have GIS or a sign inventory.

Using a GIS or inventory program for record keeping is the key to successfully maintaining and tracking your signs. Retroreflectivity is not the problem that causes replacement of most signs. Other issues, such as vandalism, physical wear, knockdowns, wind load on supports, etc. — are far more of a problem than retroreflectivity.

Accurate inventories should be available for proper maintenance and upkeep of your signs. An Excel spreadsheet on a pc or in a ring binder is the basic method that has been and is still being used by many agencies. In today’s world of powerful computers and hand-held devices we are seeing a migration to...
There are many software systems available for your use from budget priced stand alone to web based for a yearly fee systems.

Inventory software is a database of your assets that provides ease of use and the ability to search or query single or multiple aspects of your sign installations. The software can be customized for or by your agency to store records in an orderly searchable database. Attributes include, but are not limited to GPS and GIS data, size, color, sheeting type, MUTCD codes, knock downs, inspection dates, and, most importantly, condition. Computers that are designed for field work make this an easy task. You can add your data in pre-populated fields on the fly.

Most agencies have some form of GIS System in place to track assets. According to Wiki...A geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data. Importing your database into a GIS or mapping system allows you to view, search, analyze, and keep up-to-date records. The GIS system uses a base map that displays boundaries, terrain, rivers, ponds, roads, and assets (such as your street name signs), etc. You can track assets through a layer system that is interactive. You can move and manipulate your assets. You can look at your GIS in the field on your mobile device and make notes regarding inspections.

Digital Division Mission Statement: “To promote the safety of citizens while driving the scenic highways and byways of America TAPCO today provides, state-of-the-art sign production, and inspection and maintenance software and hardware to make your job easier to achieve.”

Feel free to call or email me at 877-827-2652 joanne@tapconet.com www.tapconet.com

---

Everything you need to know about solar-powered flashers is at www.solar-traffic-controls.com

Wireless traffic systems ◆ solar-powered flashing beacons for school zones ◆ 24-hour applications ◆ pedestrian crosswalks ◆ road hazards ◆ stop signs ◆ radar speed displays ◆ wildlife crossings ◆ ITS sensors and camera systems ◆ pre-emption repeater systems ◆ DC LEDs ◆ and specialty systems for DOTS; firefighters; EMS; police chiefs; industrial facilities and public works departments ◆ view our entire product line ◆ learn how to stretch your budget with affordable and effective systems from Solar Traffic Controls

www.solar-traffic-controls.com
Info@solar-traffic-controls.com