



MAYOR & COUNCIL COMMUNICATION

DATE: 06/03/2014

CONSENT

ITEM # 7

AGENDA ITEM: Sign Retroreflectivity Policy

SUBMITTED BY: Beckie Gumatz, Deputy Clerk

THROUGH: Dean Zuleger, City Administrator

REVIEWED BY: Adam Bell, City Clerk/Assistant City Administrator

SUGGESTED ORDER OF BUSINESS:

- Introduction of Item City Administrator
- Report/Presentation.....City Administrator
- Questions from Council to Staff..... Mayor Facilitates
- Call for Motion Mayor & City Council
- Discussion..... Mayor & City Council
- Action on Motion..... Mayor Facilitates

POLICY RECOMMENDER: Staff, League of MN Cities

FISCAL IMPACT: Cost will vary depending on number, type, and frequency of signs replaced.

SUMMARY AND ACTION REQUESTED:

Council is respectfully requested to adopt a sign retroreflectivity policy. According to new state law, by June 13, 2014, all agencies, including cities, who maintain roadways open to public travel must adopt a sign maintenance program designed to maintain traffic sign retroreflectivity at or above specific levels. “Retroreflectivity” describes how light is reflected from a surface and returned to its original source. Traffic signs are made with retroreflective sign sheeting material that redirects headlamp illumination back toward the vehicle, thereby making the sign visible at nighttime to the vehicle driver. In consultation with the League of Minnesota Cities, staff has developed a sign retroreflectivity policy. As part of its consent agenda, no specific motion is required. If removed from the consent agenda, the recommended motion for the action is as follows:

“Move to approve the Sign Retroreflectivity Policy”

LEGISLATIVE HISTORY:

The *Manual of Uniform Traffic Control Devices* (MUTCD), published by the U.S. Department of Transportation, Federal Highway Administration (FHWA), sets forth basic principles of traffic signs in order to promote public safety on public roads. The MUTCD establishes uniform standards for traffic signs. The Minnesota Department of Transportation (MN/DOT) has adopted MUTCD and certain MN/DOT appendices as the *Minnesota Manual on Uniform Traffic Control Devices* (MN MUTCD). The Minnesota Commissioner of Transportation has ordered that the MN MUTCD shall be implemented and applied to all traffic control devices. The MN MUTCD requires the city to establish an assessment or management method that is designed to maintain sign retroreflectivity at or above minimum levels specified in MN MUTCD.

Regulatory, warning, and guide signs and object markers must be retroreflective or illuminated to show the same shape and similar color both day and night unless there is an exception in MN MUTCD. The requirements for sign illumination are not satisfied by street, highway, or strobe lighting.

A city may exclude the following signs from the retroreflectivity maintenance guidelines:

- A. Parking, Standing, and Stopping Signs
- B. Walking/Hitchhiking/Crossing signs
- C. Acknowledgment signs, including Memorial signs
- D. All signs with blue or brown backgrounds
- E. Bikeway signs that are intended for exclusive use by bicyclists or pedestrians

The MN MUTCD describes various evaluation methods that cities can elect to provide reasonable nighttime sign visibility. It does not dictate which method to use. Rather, the city has several options to choose from based on the city's resources, needs, and current practices.

After reviewing each of the evaluation methods described by the League of Minnesota Cities, and talking with Public Works about current practices, it seems most practical to go with a management method called 'expected sign life.' In this method, signs are replaced before they reach the end of their expected service life. The expected service life is based on the time required for the retroreflective material to degrade to the minimum retroreflectivity levels. The expected service life of a sign can be based on sign sheeting warranties, test deck measurements, measurement of signs in the field (control signs) and measurement of signs taken out of service, or information from other municipalities. The key to this method is being able to identify the age of individual signs. This is often accomplished by placing a sticker or other label on the sign that identifies the year of fabrication, installation, or planned replacement, or by recording the date of installation in a sign management system.

The basic idea is that the installation date of every sign in a city's jurisdiction is known, along with the type of retroreflective sheeting material used on the sign face. It is also necessary to define an expected sign life for each type of retroreflective sheeting material. This information is used in a systematic manner to "flag" signs that need to be replaced before their sign life expires.

One way this method is used is by placing an installation or replacement date sticker on each sign to allow field crews to know when specific signs reach their replacement age. If a sign is found to be older than indicated by the maximum life noted on the sticker, then the sign should be replaced. This method can be time consuming if signs along a roadway vary significantly in age, but it can be executed during the day and requires no inspection or measurement of the sign. This method requires that cities track the installation date of their signs. For the field replacement approach to this method, there is the benefit of associating the condition of a sign to its age.

The proposed policy reserves the right to be modified at any time deemed to be in the best interests of the City. Further implementation details will be brought back to Council as needed.

BACKGROUND INFORMATION (SWOT):

Strengths Improvements to nighttime visibility of traffic signs will help drivers better navigate roads at night and thus promote safety and mobility. Improvements in sign visibility will also help older drivers whose visual capabilities may be declining.

Adopting a Sign Retroreflectivity Policy will bring us in to compliance with the law.

Weaknesses Some studies have shown that if signs are too bright there may be a loss of legibility or create a glare that limits the driver's ability to see potentially hazardous objects near or on the road. The retroreflective properties of all sign sheeting materials degrade over time making signs progressively less visible at night.

One drawback to the enforcement method chosen is that it can be fairly time consuming to check date stickers if the stickers are not easily viewable or identifiable on the sign. Another possible difficulty relates to marking signs that need to be replaced, although immediate replacement is possible for some sign types.

Opportunities Adopting a sign retroreflectivity policy will significantly reduce tort liability lawsuits involving traffic signs.

Another opportunity would be to implement a computerized sign management system.

Threats None known at this time

RECOMMENDATION: Staff recommends approving the Sign Retroreflectivity Policy. If removed from the consent agenda, staff recommends the following motion:

“Move to approve the Sign Retroreflectivity Policy”