

# ONTARIO GOOD ROADS ASSOCIATION



*Working for Municipalities*

## Minimum Maintenance Standards (MMS) SIGN Retroreflectivity: Facts, Myths, Questions & Concerns

It has been a little over one year since the amendments to the minimum maintenance standards came into effect. From the number of queries OGRA has received, there appears to be confusion regarding the inspection of signs for retroreflectivity.

This notice addresses the facts and most common misconceptions and questions about sign retroreflectivity.

### THE FACTS

1) The MMS were implemented by the Province to assist municipalities with managing the risk associated with the maintenance of roads and as a defence from claims citing negligence. Compliance is voluntary. MMS with proof of compliance through documentation has now become an industry norm recognized by the courts.

2) Amendments to the Minimum Maintenance Standards regulation, Ont. Reg. 239/02 that came into effect February 18, 2010 require municipalities to inspect their regulatory and warning traffic signs annually for retroreflectivity. See: Sections 11. (0.1) and 12. (1).

Ont. Reg. 239/02 definition: "Ontario Traffic Manual" means the Ontario Traffic Manual published by the Ministry of Transportation, as amended from time to time"

3) Ontario Traffic Manual (OTM) reference to

inventory, inspections and retroreflectivity is OTM Book 1, Appendix "B", (July 2001.)

- 4) Sign inspection ensuring that the sign is in fact there and in good condition is a component of regular patrolling as set out in Section 3 of the regulation.
- 5) Sign retroreflectivity inspections using the visual inspection method, as outlined in OTM, must be undertaken at night.



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### MYTHS, QUESTIONS, AND CONCERNS

**MYTH:** Sign retroreflectivity inspections must be conducted using a reflectometer.

Inspection of signs for retroreflectivity is undertaken as part of the municipality's risk management program to ensure that all signs within its jurisdiction meet or exceed the minimum requirements for reflectivity. The method of inspection is a choice by the municipality based on its available resources. Inspection options include the use of a reflectometer or visual inspection by trained personnel.

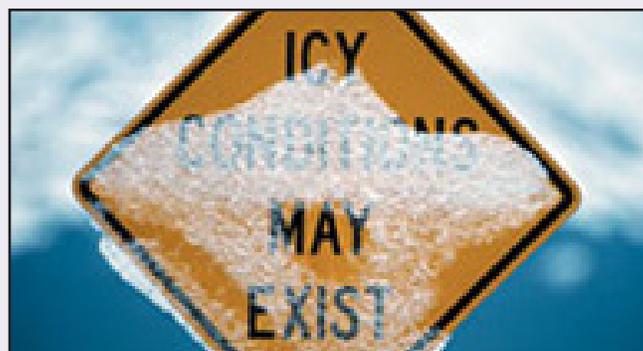
**CONCERN:** Sign retroreflectivity inspection requires a sign inventory.

An inventory of municipal signs is part of the municipality's risk management program. The inventory should include the type of sign, its location (latitude & longitude), its condition, and the date of the most recent inspection. The annual inspection for retroreflectivity should be included in the record.

Should there be a claim regarding a sign, whether its condition is in question or worse, that it is missing, the municipality needs to demonstrate due diligence regarding routine and retroreflectivity inspections.

**QUESTION:** Why should the person conducting the visual inspections for sign retroreflectivity ideally be 50 years old or older?

It is a recognized fact that eyesight degenerates with age. As people age, they need more light to see at night. In a report prepared for the Canadian Automobile Association (CAA), Dr. Alison Smiley, University of Toronto and Human Factors North Inc. shows that a 60 year old needs 8 times more light as a 20 year old to read road signs at night.



**QUESTION:** Why not replace all signs when they reach the manufacturer's recommended life expectancy instead of undertaking retroreflectivity inspections?

This may not be a practical solution from a resources perspective based on the number of regulatory and warning signs within a municipality. Further, signs are often damaged

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or missing and must be replaced on an as required basis with the result that not all signs within a municipality will be the same age.

**CONCERN:** The visual method of inspection does not give me hard numbers that track the degradation of retroreflectivity over time.

Risk managers are only interested in whether the sign exists at the proper location, that it is in good condition and a recent inspection confirms that it is still there. With respect to reflectivity, risk managers' concern is that the sign meets the standard, and if it does not, that it has been replaced.

**QUESTION:** Can you explain the term "risk manager"?

There is an element of risk in all municipal activities. All municipal employees and supervisors have a role in managing municipal risk while performing their daily tasks for the operation and maintenance of municipal infrastructure. In addition, municipalities purchase insurance to assist in risk management should negligence be found in the management of their infrastructure. Larger municipalities may hire staff with the title of "risk manager." Smaller municipalities include risk management in the job description of their supervisors (other duties as assigned.)

Should you have any questions or information to share with other municipalities regarding inspections of signs for retroreflectivity please contact Frank Hull, P. Eng.: [frank@ogra.org](mailto:frank@ogra.org)

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7. Click the **Save** button.