

Report TR-TAPS-54-15

To: Chair Barfoot and Members of the Transportation and Public Safety Committee
From: M.J. Kelly, Director of Transportation Services
Meeting Date: July 23, 2015
Subject: Engine Brake Courtesy Signage
Status: Recommendation adopted by Committee as presented per Resolution TAPS101-15; Endorsed by County Council August 4, 2015 per Resolution CC112-15;

Recommendation(s)

WHEREAS a delegation attended the Transportation and Public Safety Committee meeting on May 21, 2015 regarding the placement of engine brake signage on Grey Road 31 in Singhampton;

AND WHEREAS the following resolution was passed at the May 21, 2015 Transportation and Public Safety Committee meeting and endorsed at the June 2, 2015 County Council;

That staff be requested to bring forth a report that examines courtesy signage which requests drivers to refrain from the use of engine brakes for presentation to committee.

AND WHEREAS engine brake courtesy signs are not recognized in the Highway Traffic Act or Ontario Traffic Manuals, nor do they have any legal status;

AND WHEREAS St. Mary's Cement is communicating with the drivers using its quarry on Grey Road 31 to minimize the noise they make in the residential area;

NOW THEREFORE BE IT RESOLVED THAT Report TR-TAPS-54-15 regarding the installation of engine brake courtesy signage be received;

AND THAT Grey County continues its practice not to install additional engine brake courtesy signs on Grey Roads.

Background

Road Sign Principles

The following information was obtained from the Ontario Traffic Manual.

Traffic control and management relies on a system of traffic control devices for conveying messages to the road user. The objective of these messages is to advise motorists of traffic regulations in order to enable observance of the law, warn them of roadway characteristics and road hazards, and provide them with the information necessary for route selection. Meeting these objectives improves safety and convenience for the road user, and promotes the efficient movement of people and goods and the orderly flow of traffic. Simplification of the driving task through uniformity in the design and application of traffic control devices is necessary to accomplish these objectives.

If traffic control devices are not carefully designed and properly installed they can interfere with and distract from each other, become visually ineffective, and lose their authority through excessive use. Therefore, simplicity in design and care in placement are essential. An effective traffic control device will attract attention, be legible and comprehensible, and be appropriate to the motorist's needs.

A principle goal in the development of the Ontario Traffic Manual is the achievement of uniformity throughout the Province and compatibility throughout Canada and North America. Achievement of this goal requires that the Manual provide the user with the design and dimensions of devices, and with guidance on fabrication and installation.

Traffic control devices should be well chosen and located to assist the road user. Improper or excessive use, particularly of regulatory and warning signs, tends to cultivate disrespect for signs in general. As a result, signs tend to lose their authority.

The wide variation in roadway speeds and complexity requires that traffic control devices be readily recognizable and understandable at a glance. Uniformity and simplicity in design (including shape, colour, pattern, dimensions, symbols, wording, lettering and illumination or reflectorization), position and application are of great importance in aiding recognition. The majority of these designs, symbols and word messages have been approved by the National Committee on Uniform Traffic Control Devices, after a thorough review of the varying designs used in Canada, supplemented by test studies.

Standardization of sign shapes advises the road user of the class of message contained. The task of driving can be simplified by enabling the road user to judge in advance the type of message to be expected. To meet the road user's requirements, a code of sign shapes has been established that applies to all signs.

Standardization of colours also assists the road user in a manner similar to the standardization of shapes. A code of sign colours has been established that applies to all signs.

Uniformity of application is important. Similar conditions should be treated in a similar manner, to accommodate driver expectation. Different types of information (and signs) should not be displayed on the same sign support.

Red or amber flashing beacons may sometimes be required to draw the driver's attention to the presence of a regulatory or warning (amber only) sign. The beacons are normally recommended when visibility distance is reduced to severe roadway geometrics, or other circumstances that are present which suggest that greater emphasis is required.

The use of flashing beacons should be restricted to only critical situations, in order to ensure that the impact is not lost to overuse or that they do not distract the driver.

Grey County Transportation Services utilizes the Ontario Traffic Act and the Ontario Traffic Manual when determining signage for Grey Roads.

Legal Signs

In accordance with the Highway Traffic Act, municipalities have the authority to pass By-Laws for the installation and enforcement of legal signs such as stop, speed limit, no parking, community safety zone and others. However, the signs must comply with the Highway Traffic Act. Legal signs normally have a white background.

Warning Signs

Warning signs are intended to provide advance notice to road users about unexpected and potentially dangerous conditions on or near the road.

The warning signs provide suggestions to the motorist but the information provided is not enforceable. Typically, warning signs are yellow and black and most are in a diamond shape.

Information Signs

Information signs are intended to direct users along roadways, identify intersecting routes, provide directions to destinations, identify emergency services, support road safety initiatives and provide administrative notifications. In this manner they aid road users to reach their destination.

Engine Brake Signage Principles

Truck (tandem truck or larger) drivers have several means to decelerate their trucks including standard wheel brakes, engine brakes and compression brakes.

Truck drivers prefer to use engine and compression brakes when possible as it results in less maintenance to their vehicle.

When trucks are hauling heavy material and the driver uses the standard wheel brakes, the temperature (friction) of the brakes will increase and they will be less effective.

The use of engine and compression brakes is noisier than standard wheel brakes. However, with regulations regarding trucks the decibel level of engine and compression brakes has been reduced.

Grey County endorsed Report TR-TAPS-04-13 Engine Brake Signs on January 8, 2013 identifying that no additional engine or air brake signs be installed on Grey Roads.

Some municipalities install the engine and compression brake signs and others do not.

When a municipality erects signs requesting a truck driver not to use engine or compression brakes and the truck is involved in an accident, the municipality's risk may be increased.

The signs are not recommended in the Ontario Traffic Manual and are not legal or enforceable.

Since the majority of the truck traffic on Grey Road 31 is travelling to or from St. Mary's quarry, the drivers are repeat users that are aware of the residential area, as well as the geometry of the road and the location of the stop sign.

St. Mary's quarry management staff has requested their drivers to be courteous to the residents on Grey Road 31 by minimizing the use of engine or compression brakes which will minimize the noise created by the brakes; however, the drivers are responsible for the safe operation of their vehicles.

Financial / Staffing / Legal / Information Technology Considerations

The placement and information provided on signs have an effect on the overall safety of roads. It is, therefore, highly recommended to maintain consistent road signs throughout the County.

The installation of signs suggesting truck drivers not use engine or compression brakes may increase the County of Grey's risk.

Link to Strategic Goals / Priorities

Not Applicable

Attachment

[TR-TAPS-04-13 Engine Brake Signs](#)

Respectfully submitted by,

M.J. Kelly

Director of Transportation Services