

To: Community and Operations Services Committee

From: Ron Diskey, Commissioner,
Community and Operations Services Department

Report Number: CO-23-17

Date of Report: April 19, 2023

Date of Meeting: April 24, 2023

Subject: Tiger Tail Signage on Stop Sign Posts

Ward: All Wards

File: 03-05

1.0 Purpose

The purpose of this report is to respond to the direction of CO-22-04 from the Community and Operations Services Committee on December 5, 2022;

“the request for Tiger Tail Signs to be added to stop signs be referred to staff to investigate and report back in the second quarter of 2023.”

2.0 Recommendation

That the Community and Operations Services Committee recommend to City Council:

1. That Tiger Tail signage not be installed below stop signs at intersections under the jurisdiction of the City of Oshawa and staff continue to monitor and follow the guidelines for intersection improvements as outlined in the Ontario Traffic Manual and;
2. That City Staff continue to work with Durham Regional Police Service to target City intersections with reported issues by completing stop sign compliance enforcement.

3.0 Executive Summary

Not applicable

4.0 Input From Other Sources

- Durham Municipal Insurance Pool
- Legal Services
- Operations Services

- Regional Municipality of Durham
- Municipality of Clarington
- Town of Whitby
- Town of Ajax
- City of Pickering
- Township of Scugog
- Township of Uxbridge
- Township of Brock
- City of Mississauga
- Town of Oakville
- Town of Milton
- City of Peterborough
- City of Hamilton
- Oxford County
- Durham Regional Police Services
- Peel Regional Police Services

5.0 Analysis

5.1 Tiger Tail Signage on Stop Signs

Tiger Tail signage is a red and white striped sign (30cm x 90cm) that is installed below a stop sign. The Tiger Tail sign is not an officially recognized sign and is not approved for use in the Ontario Traffic Manual (O.T.M.). There are no official guidelines for its use, and no studies have been completed to show the sign effectiveness for addressing stop sign compliance issues in Ontario.

5.2 Ontario Traffic Manual (O.T.M.)

The purpose of the O.T.M. is to provide information and guidance for transportation practitioners and to promote uniformity of treatment in the design, application and operation of traffic control devices and systems across Ontario. The objective is to establish safe driving behavior norms, which can be achieved by a predictable roadway environment through the consistent, appropriate application of traffic control devices. Further purposes of the O.T.M. are to provide a set of guidelines consistent with the intent of the Highway Traffic Act, R.S.O. 1990, c. H.8 (“Highway Traffic Act”) and to provide a basis for road authorities to generate or update their own guidelines and standards.

The O.T.M. is made up of a number of Books, which are being generated over a period of time, and for which a process of continuous updating is planned. Through the updating process, it is proposed that the O.T.M. will become more comprehensive and representative by including many traffic control devices and applications specific to municipal use. Some of the Books of the O.T.M. are new, while others incorporate updated material from the Ontario Manual of Uniform Traffic Control Devices (M.U.T.C.D.) and the King’s Highway Guide Signing Policy Manual (K.H.G.S.P.M.).

The O.T.M. is directed towards its primary users: traffic practitioners. The O.T.M. incorporates current best practices for the Province of Ontario. The interpretations,

recommendations and guidelines in the O.T.M. are intended to provide an understanding of traffic operations and they cover a broad range of traffic situations encountered in practice. They are based on many factors which may determine the specific design and operational effectiveness of traffic control systems. However, no manual can cover all contingencies or all cases encountered in the field. Therefore, field experience and knowledge of application are essential in deciding what to do in the absence of specific direction from the Manual itself and in overriding any recommendations in this Manual.

The traffic practitioner's fundamental responsibility is to exercise engineering judgement and experience on technical matters in the best interests of the public and workers. Guidelines are provided in the O.T.M. to assist in making those judgements, but they should not be used as a substitute for judgement.

Design, application and operational guidelines and procedures should be used with judicious care and proper consideration of the prevailing circumstances. In some designs, applications, or operational features, the traffic practitioner's judgement is to meet or exceed a guideline while in others a guideline might not be met for sound reasons, such as space availability, yet still produce a design or operation which may be judged to be safe. Every effort should be made to stay as close to the guidelines as possible in situations like these, and to document reasons for departures from them.

The O.T.M. is a well-respected manual in the road engineering community and is accepted by the courts as "best practice". Failure to follow the criteria and standards outlined in the O.T.M. places municipalities at significant risk.

5.3 Current Stop Sign Compliance Countermeasures

Traffic Operations staff have a variety of options available to address intersection safety and stop sign compliance concerns when they arise in the City of Oshawa. Stop sign compliance countermeasures provided in O.T.M. include; stop sign ahead warning signs (with or without amber flashing beacons), oversized stop signs, supplementary stop signs on the left side of the roadway, red flashing beacons, and additional pavement markings. Other countermeasures to improve intersection and stop sign sightlines include boulevard tree trimming and additional parking restrictions.

Staff are also able to request assistance from Durham Regional Police Service (D.R.P.S.) to provide targeted enforcement for stop sign compliance.

5.4 Survey of Municipalities in Ontario

To obtain information on the current usage of Tiger Tails signage in Ontario, City Staff collected information from all Region of Durham municipalities and posted a survey to Ontario municipalities through the Ontario Traffic Council (OTC) web site.

Staff received survey responses from sixteen (16) municipalities, and two (2) Police Services.

Results of the survey are shown in Table 1.

Table 1: Survey Responses

Region of Durham Municipalities that reported using Tiger Tail signage	Clarington, Pickering
Ontario Municipalities that reported using Tiger Tail signage	Mississauga, Hamilton, Oakville, Vaughan, Milton, Region of Waterloo
Ontario Municipalities that reported not using Tiger Tail signage	Region of Durham, Whitby, Ajax, Scugog, Brock, Uxbridge, Peterborough, Oxford County
Summary of Survey Results	<ul style="list-style-type: none"> • Municipalities were asked to provide responses on their usage of tiger tail signage and if studies had been completed on the effectiveness of the signage. • The municipalities that confirmed usage of the tiger tail signage, installed the signage at new/existing stop controls, to enhance the visibility of the stop sign to help improve stop compliance issues that were reported. • With the signage not approved or having guidelines for installation by the O.T.M, each Municipality using the signage had different criteria or guidelines for how and where to install the signage. • No Municipalities using tiger tail signage had completed studies on the effectiveness of the signage when addressing stop compliance issues.
Police Services Comments	Peel Regional Police Services and Durham Regional Police Services agreed that improvements made to intersections using the Ontario Traffic Manual such as red flashing beacons are preferred instead of Tiger Tail signage

5.5 Tiger Tail Signage Costs

Stop control categories are as follows:

- All way stop control which includes stop signs on all three legs of a three-legged intersection and stop signs on all four legs of a four-legged intersection.
- Non all way stop control which includes a stop sign on one leg of a three-legged intersection (includes courts) and two stop signs on a four-legged intersection (either east/west or north/south).

Based on the above categories, the approximate cost to install Tiger Tail signage including labour, equipment and materials is as follows:

- All way stop control, the approximate average cost is \$230 per intersection
- Non all way stop control, the approximate average cost is \$160 per intersection

There are approximately 2,172 stop signs under the City of Oshawa's jurisdiction. Of that, 420 stop signs are installed at all way stop control intersections which includes both three-legged and four-legged intersections. Based on the average of three-legged and four-legged intersections which would be 3.5 stop signs, for a total of 120 intersections, at an approximate cost of \$230 per intersection, the approximate cost would be \$27,600.

The remaining 1,752 stop signs with an average of 1.5 signs, for a total of 1,168 intersections, at an approximate costs of \$160 per intersection, the approximate cost would be \$186,880.

Other municipalities reported increased maintenance costs due to vandalism and illegal advertisement signage posted on the Tiger Tail signage. The signage would require inspection through the annual sign reflectivity program. The cost to inspect additional Tiger Tail signage, at approximately \$30 per intersection for a total of 1,288 intersections, would be \$38,640.

5.6 Request for Tiger Tail Signage on Stop Signs

There is no evidence that adding Tiger Tail signage below stop signs will be effective in improving stop sign compliance and safety at intersections. Survey results revealed there have been no studies on the effectiveness of Tiger Tail signs. It must be stated that 'Tiger Tail' signs are not an approved sign in the O.T.M. It must also be noted that Tiger Tails signs were not included in the O.T.M. Book 5 'Regulatory Signs' update which was published in December 2021. This means Tiger Tail signs are not approved for usage in Ontario and should not be used in the City of Oshawa. As previously stated, the O.T.M. is a well-respected manual in the road engineering community and is accepted by the courts as "best practice". Failure to follow the criteria and standards outlined in the O.T.M. places municipalities at significant risk.

The O.T.M. has various countermeasure options available to address stop compliance issues at intersections. Staff also have the option to continue to work with Durham Regional Police Services on targeted enforcement at intersections with reported stop sign compliance issues.

Therefore, it is City staff's recommendation to not use Tiger Tail signage, but to continue following the O.T.M. guidelines and stop compliance countermeasures, and to continue to work with our contacts at D.R.P.S. when dealing with stop sign compliance issues at intersections.

5.7 Input from Durham Municipal Insurance Pool

Staff have reached out to the Durham Municipal Insurance Pool (DMIP) to get their input on what impact the installation of signage not included in the O.T.M. might have on future insurance claims against the City. DMIP have advised they have no concerns with this report.

6.0 Financial Implications

Financial implications to install Tiger Tail Signs at all stop sign locations within the City of Oshawa's jurisdiction, is approximately \$253,120, plus additional costs for maintenance and removal of vandalism which would vary from year to year. In order to implement a program of this magnitude, additional staff resources will be requested through the 2024 budget process.

7.0 Relationship to the Oshawa Strategic Plan

This report addresses the Oshawa Strategic Plan by responding to the goal of "Social Equity" with the theme of "An Active, Healthy and Safe Community" by continuing to support safe, shared use of roadways, trails, and other transportation systems and effectively focusing on accessibility, safety and speed reduction.



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