

# The Corporation of the Town of Tecumseh

Public Works & Environmental Services

**To:** Mayor and Members of Council

From: Kirby McArdle, Manager Roads & Fleet

Date to Council: January 30, 2018

**Report Number:** PWES-2018-02

**Subject:** Traffic Analysis – Radar Speed Surveys

#### Recommendations

It is recommended that:

1. Public Works & Environmental Services Report No. 02/18 titled Traffic Analysis – Radar Speed Surveys **be received**.

### **Background**

The Public Works & Environmental Services (PWES) department has received a number of concerns throughout the year from residents with respect to the speed at which vehicles were traveling on a number of streets and roadways throughout the Town of Tecumseh. These complaints were also brought forward to PWES staff through the Ward Councillors on behalf of residents. Subsequently, to assist in our investigation into the speeding concerns, PWES staff placed radar speed trailers along the streets of concern in order to record the data associated with vehicles traveling along the roadways. The data collected included: traffic volume; vehicle speed; time of day; and other important aspects related to traffic analysis.

#### Comments

PWES conducted radar speed surveys at eleven street locations as listed below in Table 1. Ten of the streets were urban streets and one was a rural roadway. The radar trailers were deployed at each location for a minimum of one week.

### **Speed Analysis**

The data in Table 1 illustrates that the 85<sup>th</sup> percentile speed of vehicles was only slightly over (less than 10 km/h) the posted speed limits on the majority of the streets where the speed trailers were deployed. The 85<sup>th</sup> percentile is the speed at or below which 85% of vehicles

travel. Generally, traffic engineering practice has been to set the posted speed limit at the 85<sup>th</sup> percentile speed.

Uniformity of vehicle speeds reduces the potential of collisions and reduces the risks and severity for vehicle collisions. When vehicles deviate from a uniform speed (either faster or slower) the potential for accidents increases, whether caused by a slow car in a rear end collision or a fast car making lane changes to maneuver through slower traffic. By setting the speed limit to the 85<sup>th</sup> percentile speed this uniformity is achieved and safety is increased.

Speeds are generally considered to be excessive when the 85<sup>th</sup> percentile speed is in excess of 10 km/h over the posted speed limit [in areas with a posted speed limit of 70 km/h or less].

TABLE 1

Roadway Classification	Location	Posted Speed Limit	85 <sup>th</sup> Percentile Speed
Urban	Arlington Boulevard	40 km/h	49.2 km/h
	Charlene Lane	50 km/h	49.4 km/h
	Edgewater Boulevard	40 km/h	49.6 km/h
	Lacasse Boulevard @ St. Denis	40 km/h	55.8 km/h
	Little River Blvd @ Lesperance Road	50 km/h	54.0 km/h
	Little River Blvd @ Michael Drive	50 km/h	56.3 km/h
	McNorton Street	40 km/h	47.9 km/h
	Michael Drive (800 block)	40 km/h	52.9 km/h
	Riverside Drive @ Pinewood	50 km/h	56.8 km/h
	Southfield Drive	40 km/h	56.0 km/h
	St. Gregory's Road @ L'Essor High School	40 km/h	53.7 km/h
	St. Gregory's Road @ Revland	40 km/h	49.4 km/h
Rural	South Talbot Road	60 km/r	81.3 km/h

According to the data recorded and downloaded from the radar speed trailers, motorists on the majority of the streets that were monitored were generally found to be traveling at speeds that are <u>not</u> considered excessive, with the exception of the following streets:

- The 85<sup>th</sup> percentile speeds recorded on Lacasse Boulevard, Michael Drive and Southfield Drive were found to be between 12 and 16 kilometers over the respective posted speed limits.
- The 85<sup>th</sup> percentile speed recorded on *South Talbot Road* was 21 kilometers over the posted speed limit of 60 km/h.

It should be noted that the urban streets where the 85<sup>th</sup> percentile speed was found to be above the posted speed limits by more than 10 km/h have all been at roads where the posted speeds were previously reduced from 50 km/h to 40 km/h at the request of residents.

At areas where speeding was found to be an issue, the Ontario Provincial Police has been notified for enforcement.

The posted speed limit was reduced on South Talbot Road from 80 km/h to 60 km/h in response to complaints from residents of a perceived increase in traffic volume that was attributed [by the residents] to "cutting through" [to by-pass Highway 3] and a perceived problem with speeding. According to the data recorded, it appears that the 80 km/h posted speed limit was originally set correctly, as the 85<sup>th</sup> percentile speed is 81 km/h.

Where there is a significant discrepancy between the posted speed limit and the operating speeds of motorists, the posted speed limit should be reviewed and potentially reconsidered.

#### Posting Inappropriately Low Speed Limits

Posting an inappropriately low speed limit has the potential to increase speed differentials between vehicles, large differences in operating speed can lead to an increase in rear end collisions and other collisions, and can also encourage unsafe passing around slower moving vehicles. If drivers feel speed limits are unreasonably slow, the speed limit signs will be ignored and will become ineffective.

#### Ontario Provincial Police (OPP) - Motor Vehicle Accident Reports

The OPP has reviewed their records and has indicated that the majority of motor vehicle collisions reported [on the streets listed in Table 1] were not caused by speed – the majority of the collisions were the result of driver error.

#### Conclusion

- Widespread speeding does not appear to be a Town-wide problem.
- The majority of motorists are driving within or marginally above the posted speed limit.
- Areas where speeding is an issue, the Ontario Provincial Police will be notified for enforcement.

#### **Consultations**

Ontario Provincial Police

### **Financial Implications**

There are no financial implications arising from this report.

## **Link to Strategic Priorities**

Applicable	2017-18 Strategic Priorities		
	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.		
	Ensure that the Town of Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.		
	Integrate the principles of health and wellness into all of the Town of Tecumseh's plans and priorities.		
	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.		
	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.		
Communica	tions		

Not applicable			
Website □	Social Media	News Release □	Local Newspaper

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

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Reviewed by:

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Reviewed by:

Dan Piescic, P.Eng.
Director Public Works & Environmental Services

Recommended by:

Tony Haddad, MSA, CMO, CPFA Chief Administrative Officer