



## 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:** February 12, 2019

**Report Number:** PWES-2019-01

**Subject:** 2018 Traffic Analysis – Radar Speed Surveys

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### Recommendations

It is recommended:

**That** Public Works & Environmental Services Report No. PWES-2019-01 titled '2018 Traffic Analysis – Radar Speed Surveys' **be received**.

### Background

The Public Works & Environmental Services (PWES) staff placed radar speed trailers along streets where speeding concerns were brought forward to PWES through Ward Councillors on behalf of residents. The speed trailers recorded data associated with vehicles traveling along roadways such as traffic volume; vehicle speed; time of day; and other important aspects related to traffic analysis.

### Comments

PWES conducted radar speed surveys in 2018 at eleven street locations as listed below in Table 1. The radar trailers were deployed for a minimum of one week.

### Speed Analysis

The traffic engineering industry standard utilized in setting the regulatory speed limit for a street facility uses the “85<sup>th</sup> percentile speed”, which is defined as the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions. Most motorists generally travel at a speed deemed comfortable depending on visual aspects that influence speeds, such as:

- Lane and shoulder configurations, widths and presence of curbs;
- Presence of vertical and horizontal curves;
- Sight distance and obstructions;
- Presence of surrounding developments to the street; and
- Access management characteristics and medians/turn lane configurations.

Maintaining the uniformity of speeds increases safety and reduces the risks for vehicle collisions. When vehicles deviate from a standard speed, either faster or slower, the potential for accidents is increased. By setting the speed limit to the 85<sup>th</sup> percentile speed this uniformity is achieved and safety is increased. Selection of the most appropriate speed limit is important in inviting driver compliance, allowing effective enforcement, and reducing accident incidence.

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

**Table 1: 2018 Radar Speed Locations**

Location	Posted Speed Limit	Average Speed	85th Percentile Speed
Tecumseh Road near Dorset (westbound traffic)	50 km/h	50.7 km/h	58.8 km/h
Tecumseh Road near Dorset (eastbound traffic)	50 km/h	51.8 km/h	59.0 km/h
Riverside Drive east of Arlington (eastbound traffic)	50 km/h	51.1 km/h	59.0 km/h
Riverside Drive at Kensington (westbound traffic)	50 km/h	49.4 km/h	58.6 km/h
Riverside Drive at Pinewood (eastbound traffic)	50 km/h	52.2 km/h	59.2 km/h
<b>Riverside Drive at Centennial (westbound traffic)</b>	<b>50 km/h</b>	53.8 km/h	<b>62.1 km/h</b>
Intersection Road west of Shawnee (westbound traffic)	50 km/h	52.7 km/h	59.7 km/h
<b>Intersection Road at the residential boundary (eastbound traffic)</b>	<b>50 km/h</b>	57.2 km/h	<b>66.4 km/h</b>
Little River Boulevard near Chene (eastbound traffic)	50 km/h	45.6 km/h	54.5 km/h
<b>McNorton Street near the baseball diamond (eastbound traffic)</b>	<b>40 km/h</b>	44.5 km/h	<b>51.8 km/h</b>
Dillon Drive at Coronado (westbound traffic)	40 km/h	35.1 km/h	47.0 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 not considered excessive as indicative of the Average Speeds outlined in the above table.

The **85<sup>th</sup> percentile speed** points to three locations where motorists were traveling more than 10 km/h over the posted speed limit:

- Riverside Drive at Centennial (westbound traffic)
- Intersection Road at the residential boundary (eastbound traffic)
- McNorton Street near the baseball diamond (eastbound traffic)

The Ontario Provincial Police (OPP) has been notified of the three above-noted areas of concern for enforcement.

PWES will also look to continue to gather radar speed data on these streets to determine the trend analysis, which may result in a separate report to Council with recommendations on possible speed limit changes, enhanced enforcement, or the introduction of appropriate traffic calming features, as deemed necessary.

When the speed limit is set lower than the 85<sup>th</sup> percentile, motorists will continue to operate vehicles at the speed deemed comfortable.

The **average speed** slightly exceeded the posted speed limit at eight of the eleven locations, of which the exceedance was **not** greater than 7.2km/h.

### **Ontario Provincial Police – Motor Vehicle Collision Reports**

The OPP extracted motor vehicle collision data for the above-noted eleven street locations from December 2016 to December 2018. Over the course of two years, the OPP records indicate there were no motor vehicle collisions related to speed on the above-noted eleven locations. Of the three accidents reported, two of the three 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 a concern, the OPP have been notified for enforcement.

PWES will continue to conduct radar speed surveys in response to speeding complaints on a complaint-driven basis.

### **Consultations**

Ontario Provincial Police

### **Financial Implications**

There are no financial implications arising from this report.

## Link to Strategic Priorities

Applicable	2017-18 Strategic Priorities
<input type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that the Town of Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of the Town of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	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.

## Communications

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.

Prepared by:

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Reviewed by:

Kirby McArdle, P.Eng.  
Manager Roads & Fleet

Reviewed by:

Phil Bartnik, P.Eng.  
Director Public Works & Environmental Services

Recommended by:

Tony Haddad, MSA, CMO, CPFA  
Chief Administrative Officer

<b>Attachment Number</b>	<b>Attachment Name</b>
None	None