The Corporation of the Town of Tecumseh

Public Works & Environmental Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Environmental Services

Date to Council: February 11, 2020

Report Number: PWES-2020-05

Subject: Traffic Analysis – 2019 Radar Speed Surveys

Recommendations

It is recommended:

That Public Works & Environmental Service Report No. PWES-2020-05 Traffic Analysis – 2019 Radar Speed Surveys, **be received**.

Background

Public Works & Environmental Services (PWES) staff deployed portable radar speed trailers along roadways where residents raised concerns respecting vehicular speeding. The radar collects vehicular traffic data and generates traffic statistics such as vehicle speed and traffic volume and other data to perform analysis and develop comprehensive reports.

Comments

PWES conducted radar speed surveys at thirteen locations on eleven streets as listed below in Table 1. The radar trailers were deployed at each location 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 "85th 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 85th 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 the locations of the radar speed trailers, the posted speed limit at each location, the recorded average speed and the recorded 85th percentile speed.

Table 1: 2019 Radar Speed Locations

Location	Posted Speed Limit (km/h)	Average Speed (km/h)	85th Percentile Speed (km/h)
Arlington Blvd. south of Hayes (northbound traffic)	**40**	**44**	**55**
Arlington Blvd. south of Hayes (southbound traffic)	**40**	**44**	**54**
Brighton Rd. south of Cove (northbound traffic)	50	45	50
Clarice Rd. mid-point (eastbound traffic)	40	40	49
Dillon Dr. bet'n Lacasse & St. Pierre (westbound traffic)	40	38	48
Dresden Pl. adjacent Dresden Park (eastbound traffic)	40	39	48
Lanoue St. at Cortina (westbound traffic)	50	46	55
Oldcastle Rd. north of Castlewood (southbound traffic)	**50**	**59**	**69**
Riverside Dr. east of Christy (westbound traffic)	**50**	**55**	**62**

Location	Posted Speed Limit (km/h)	Average Speed (km/h)	85th Percentile Speed (km/h)
Riverside Dr. at Grace (eastbound traffic)	**50**	**55**	**62**
Southfield Dr. at Dove (northbound traffic)	**40**	**46**	**56**
St. Gregory's Rd. east of Revland (eastbound traffic)	40	41	49
St. Thomas Cres. west of Lesperance (westbound traffic)	40	37	47

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 **85th percentile speed** points to four streets where motorists were traveling more than 10 km/h over the posted speed limit:

- Arlington Boulevard;
- Oldcastle Road;
- Riverside Drive; and
- Southfield Drive

The Ontario Provincial Police (OPP) were notified of the above-noted areas of concern for further enforcement. Detailed data was provided for further assistance such as time of day and direction of traffic where speeding was more prevalent.

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.

The **average speed** slightly exceeded the posted speed limit at five of the eleven streets, of which the exceedance was not greater than 9km/h.

Public Works staff 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	2019-22 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 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 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.

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:

Cheryl Curran, BES
Clerk I Administrative Clerk

Reviewed by:

Kirby McArdle, P.Eng.
Manager Roads & Fleet

Reviewed by:

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

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	**Attachment Name**
None	None