

Report No: PW 2021-26 PUBLIC WORKS

Council Date: July 14, 2021

To: Warden and Members of County Council

From: Director of Public Works

Speed Management and Road Safety Reviews – Uniondale, Thamesford, Tavistock and Delmer

RECOMMENDATIONS

- 1. That County Council endorse the implementation of speed management and road safety measures in Uniondale (Oxford Road 119, Oxford Road 28), Thamesford (Oxford Road 119), Tavistock (Oxford Road 24, Oxford Road 59) and Delmer (Oxford Road 20) as per Report No. PW 2021-26;
- 2. And further, that a by-law be presented to County Council at the August 11, 2021 Council meeting to amend By-law No. 5725-2015, being a by-law to provide for speed limits, to designate and modify speed zone limits as outlined in Report No. PW 2021-26.

REPORT HIGHLIGHTS

- The purpose of this report is to seek County Council endorsement to implement recommended speed management and road safety measures in Uniondale, Thamesford, Tavistock and Delmer.
- Adjustments to speed zone limits and posted speeds in the subject areas are recommended to align with limits of built up areas and Transportation Association of Canada (TAC) guideline criteria to promote uniform traffic flow and reduce the risk of collisions.
- Implementation measures include, but are not limited to, the installation of electronic speed feedback signs (Oxford Road 119 Uniondale, Oxford Road 119 Thamesford, Oxford Road 24 and Oxford Road 59 Tavistock, Oxford Road 20 Delmer); installation of transverse pavement marking bars (Oxford Road 119 Uniondale, Oxford Road 20 Delmer); and painted edge lines for lane delineation (Oxford Road 28 Uniondale, Oxford Road 119 Thamesford).

Implementation Points

Road safety measures identified for immediate implementation will proceed following Council authorization and enactment of by-law amendments. A number of additional measures will be considered for future implementation pending the findings of ongoing monitoring and overall effectiveness of the immediate measures.

Financial Impact

Traffic calming and road safety measures recommended for immediate implementation will be funded from the 2021 Business Plan and Budget.



Communications

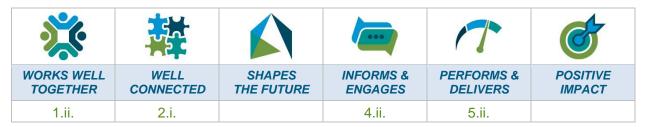
Staff liaised with respective Area Municipality staff representatives, Ontario Provincial Police (OPP) and residents to detail the work plans and outcomes (findings and recommendations) of the speed management and road safety reviews. As well, staff presented the review findings and recommendations to the respective Area Municipality Councils as follows:

- Oxford Road 20, Delmer, was presented to Township of South-West Oxford (SWOX) on June 1, 2021;
- Oxford Road 24 and Oxford Road 59, Tavistock, was presented to Township of East Zorra-Tavistock (EZT) on June 2, 2021; and
- Oxford Road 119, Thamesford and Oxford Road 119 and Oxford Road 28, Uniondale, was presented to the Township of Zorra on June 16, 2021.

Report No. PW 2021-26, along with any potential amendments, will be circulated to the Township of SWOX, Township of EZT, Township of Zorra and OPP for information.

With Council's adoption of By-law No. 5725-2015 amendments, Public Works will work with the communications team to develop proactive communication that clarifies these speed management and road safety changes. This may include social media, media outreach, advertising and/or other approaches.

Strategic Plan (2020-2022)



DISCUSSION

Background

In response to requests from Area Municipality representatives and residents, traffic speed and road safety reviews were recently completed at the following locations throughout the County:

- Oxford Road 119 and Oxford Road 28 (Uniondale);
- Oxford Road 119 (Thamesford);
- Oxford Road 24 and Oxford Road 59 (Tavistock); and
- Oxford Road 20, (Delmer).

Staff retained a third party Consultant (Dillon Consulting) to undertake the speed and road safety reviews in Uniondale, Thamesford, Tavistock and Delmer using traffic data provided by the County.

County-wide Approach to Speed Management and Traffic Calming

The 2021 speed and road safety reviews undertaken in Uniondale, Thamesford, Tavistock and Delmer were completed in accordance with the County-wide approach that was adopted by County Council through Report No. PW 2019-14. This approach identifies the following key principles that can be applied consistently across the County-wide road network for the development of recommended speed management and traffic calming implementation measures.

- Adoption of posted speeds and limits of speed zone which are consistent with the driving environment in accordance with Canadian Guidelines for Establishing Posted Speed Limits - Transportation Association of Canada (TAC) – 2009;
- Regular/ongoing speed monitoring in communities and settlement areas;
- Information sharing/collaboration with Police, municipalities and community members;
- Identifying and prioritizing implementation of traffic calming measures;
- Consideration of speed management, traffic calming and road safety measures as part of road design/geometry for planned future road rehabilitation/land development; and
- Ongoing monitoring to evaluate effectiveness of speed reduction, traffic calming and road safety measures following implementation.

Traffic Data Benchmarking

In November 2019, 24 hour speed data was collected at over 80 County road locations, primarily in areas where speed limits are reduced from 80 km/hr through rural communities and built-up areas. County-wide speed counts were undertaken to provide benchmark traffic data and to inform County-wide speed management, traffic calming and road safety reviews.

Additional speed data was collected on Oxford Road 119 (Allen Street) from November 5 to November 13, 2020 to fully inform the speed and road safety review undertaken in Thamesford.

Vehicle Operating Speeds and Posted Speeds, Speed Zone Limits

Within the study areas, vehicle operating speeds (85th percentile) exceeded posted speeds in varying degrees ranging from not excessive to very excessive and in some instances the reduced speed zone limits extended beyond the limits of built up areas.

Current posted speeds in Uniondale (Oxford Road 119), Thamesford (Oxford Road 119), Tavistock (Oxford Road 24 and Oxford Road 59) and Delmer (Oxford Road 20) were found to be below recommended posted speeds in accordance with TAC guideline criteria, while current posted speeds in Uniondale (Oxford Road 28) were found to be above the recommended posted speed. Further, limits of speed zones did not substantively align with limits of built-up areas/urban road cross section and TAC guideline criteria in many cases.

Pedestrian Studies

A Pedestrian study was undertaken on Oxford Road 59 (Woodstock St N) at Jacob Street in Tavistock, in response to a Resident's concern with pedestrian safety in this area. The findings of the study indicated that pedestrian volume in this area met the Ontario Traffic Manual (OTM) warrants for a controlled pedestrian crossing (PXO).

Comments

The work plan, findings and proposed recommendations for safety reviews completed in Uniondale (Township of Zorra), Thamesford (Township of Zorra), Tavistock (Township of EZT), and Delmer (Township of SWOX) are detailed in Attachments 1, 2, 3, and 4 respectively. Following deliberations with Area Municipality Councils, staff received general support for the proposed immediate and future speed management and traffic calming recommendations, with some exceptions as noted below.

Uniondale (Oxford Road 119, Oxford Road 28)

Zorra Township Council was generally in support of the proposed speed management and traffic calming measures recommended for Oxford Road 119 and Oxford Road 28 detailed in Attachment 1. However, Zorra Township Council did not support the proposed posted speed adjustment on Oxford Road 119 from 60 km/hr to 70 km/hr through Uniondale and requested a southbound dedicated left turn at the intersection of Oxford Road 119 and Oxford Road 28 (Attachment 5).

As part of the speed management and road safety review undertaken in Uniondale, a traffic movement count and left turn lane warrant study was completed at this intersection. The study found that southbound and northbound left turn lanes are not warranted and the intersection is operating at a high level of service (minimal delays, sufficient gapping for turning movements).

Southbound left turns was found to be the predominant turning movement at this intersection with traffic volumes being approximately 50% of the TAC left turn lane warrant. Of the five reported collisions (2013-2020) within the Oxford Road 119 Speed and Road Safety Review study area, none were intersection related. Further, in liaise with Township staff, a field visit review found that intersection sight lines were not impacted in the current road configuration.

Tavistock (Oxford Road 59, Oxford Road 24)

EZT Township Council verbally supported the proposed speed management and traffic calming implementation measures for Oxford Road 59 and Oxford Road 24 as detailed in Attachment 3.

In addition, EZT Township Council verbally requested that the County consider installation of an electronic speed feedback sign for incoming traffic at the east end of Oxford Road 24/Hope Street East. In response to this request, additional seven day speed data was collected on Oxford Road 24/Hope Street East by EZT Township staff as shown in Attachment 6.

This additional speed data showed that incoming speeds (westbound) were not excessive and, as a result, does not support the need for an electronic speed feedback sign at the east approach for incoming (westbound) traffic. Outgoing speeds (eastbound) were found to be marginally excessive, validating the County's original findings and recommendations for an electronic speed feedback sign for outgoing (eastbound traffic) on Oxford Road 24 near Fuhr Street.

Delmer (Oxford Road 20)

As per Attachment 7, Township of SWOX Council was generally in support of the proposed speed management and traffic calming measures detailed in Attachment 4. Through resolution, the Township of SWOX Council also requested additional traffic calming measures on Oxford Road 20 at the east and west approaches to Delmer.

In response to the SWOX Council resolution, staff are recommending installation of Community signs with landscaping at the east and west limits of Delmer on Oxford Road 20 along with painted transverse bars with decreased spacing over the entire distance that are intended to create an illusion to the driver that vehicle speed is increasing. These gateway features are intended to serve as visual clues and alert drivers that they are entering a Community and need to reduce their speed.

Community signs and landscaping will be coordinated with SWOX Township staff and will be implemented on a cost sharing basis.

Recommendations for Immediate Implementation

The main speed management and traffic calming recommendations for immediate near term implementation are as follows:

Uniondale:

- 1. Adjustment of the limits of the existing speed zone limits at the north and south approaches on Oxford Road 119 to align with the limits of the village/built up area;
- 2. Installation of electronic speed feedback signs on Oxford Road 119 to align with built-up limits:
- 3. Installation of transverse pavement markings bars on Oxford Road 119 at the north and south approaches in advance of the speed reduction zone;
- 4. Adjustment of the posted speed from 80 km/hr to 60 km/hr on Oxford Road 28 east of Oxford Road 119 to the Firehall;
- 5. Installation of a painted edge line for travel lane delineation on Oxford Road 28 across the frontage of Hutton Transport Limited; and
- 6. Adjust 60 km/hr speed zone to 70 km/hr on Oxford Road 119.

Thamesford:

- 1. Pedestrian study on Oxford Road 119 in the area of McCarty Street;
- Graduated reduced speed zones (70/60/50 km/hr) that align with the built up area and visual changes in the driving environment (horizontal, vertical curves and surrounding land uses);
- 3. Installation of an electronic speed feedback sign on Oxford Road 119 for incoming (southbound) traffic at the proposed limit of the 60 km/hr zone;
- 4. Community Safety Zone (CSZ) consideration from Delatre Street to CP Railway; and
- 5. Installation of painted edge lines for travel lane delineation on Oxford Road 119 from Oxford Road 2 to CP Rail underpass.

Tavistock:

- 1. Elimination of the 60 km/hr speed transition zones at the east approach on Oxford Road 24 and the south approach on Oxford Road 59;
- 2. Installation of an electronic speed feedback sign on Oxford Road 24 for eastbound traffic immediately east of Fuhr St;
- 3. Installation of an electronic speed feedback sign on Oxford Road 59 at the south limit of the proposed 50 km/hr zone for incoming traffic; and
- 4. Pedestrian crossing (PXO) with pedestrian activated flashing lights on Oxford Road 59 at Jacob Street.

Delmer:

- 1. Installation of electronic speed feedback signs on Oxford Road 20 at the east and west limits for incoming traffic;
- Installation of an electronic speed feedback sign on Dereham Line at the north limit for incoming traffic;
- 3. Installation of transverse pavement marking bars on Oxford Road 20 at the east and west limits in advance of the speed reduction zone;
- 4. Installation of gateway features (Community signs, landscaping) at east and west village limits: and
- 5. Adjust 50 km/hr speed zone to 60 km/hr on Oxford Road 20 (by County) and Dereham Line (by Township).

Recommendations for Future Consideration

Recommendations for future consideration include the following:

- Extension of urban road cross section (Uniondale, Thamesford, Tavistock);
- Sidewalk installation (Uniondale, Delmer); streetlighting (Delmer);
- Curb extension (bump outs) (Tavistock, Thamesford);
- Separated bike lanes (Tavistock, Thamesford, Delmer);
- Physical features at Community limits (entrance signage, landscaping) (Tavistock, Thamesford);
- Potential transfer of Maplewood Sideroad to the County to serve as an alternate route for existing through traffic on Oxford Road 24 (Tavistock by-pass);
- Consideration of Community Safety Zones/Automated Speed Enforcement (photo radar);
- Ongoing monitoring and data sharing with Police; and
- Townships to consider development of Local Community Watch programs.

Ongoing post monitoring will be undertaken after implementation of proposed immediate traffic calming measures to determine the effectiveness in reducing traffic operating speeds and consideration of further measures as necessary.

Police have been fully engaged in collaborative discussions with County and Area Municipality representatives throughout the various safety reviews and agree to support recommended speed management implementation measures through initial and ongoing enforcement and speed data analysis.

Conclusions

Speeding concerns identified by Area Municipality representatives and community members in the subject areas has been validated by traffic data. Staff has utilized traffic management principles and engineering best practice methodologies to develop evidence based recommendations intended to improve safety from its current state at these locations.

The recommendations are believed to appropriately balance traffic engineering science with local community perceptions of safety within the respective County Road networks which pass through these village clusters.

Staff will continue to collaborate with Area Municipalities, Police and Community members to monitor vehicle operating speeds and evaluate the effectiveness of traffic calming measures and make further incremental changes as necessary.

SIGNATURES	
Report Author:	
Original signed by:	
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Original signed by:	
David Simpson, P.Eng., PMP Director of Public Works	
Approved for submission:	
Original signed by:	
Michael Duben, B.A., LL.B. Chief Administrative Officer	

ATTACHMENTS

- Attachment 1: Workplan, Findings and Recommendations for Uniondale Oxford Road 119
 Attachment 2: Workplan, Findings and Recommendations for Thamesford Oxford Road 119
 Attachment 3: Workplan, Findings and Recommendations for Tavistock Oxford Road 24 and Oxford Road 59
- Attachment 4: Workplan, Findings and Recommendations for Delmer Oxford Road 20
- Attachment 5: Township of Zorra Council Resolution
- Attachment 6: Additional Speed Data from Township of East Zorra-Tavistock
- Attachment 7: Township of South-West Oxford Resolution