

To: Warden and Members of County Council

From: Director of Public Works

Speed Management and Road Safety Reviews – Springford, Curries, Foldens, Culloden, Verschoyle, Sweaburg and Dereham Centre

RECOMMENDATIONS

- 1. That County Council endorse the implementation of speed management and road safety measures in Springford (Oxford Road 13, Oxford Road 19), Curries (Oxford Road 40), Foldens (Oxford Road 6, Oxford Road 12), Culloden (Oxford Road 10), Verschoyle (Oxford Road 10), Sweaburg (Oxford Road 12) and Dereham Centre (Oxford Road 27), as described in Report No. PW 2023-28;**
- 2. And further, that a by-law be presented to County Council at the June 28, 2023 Council meeting to amend By-law No. 5725-2015 to designate and modify speed zone limits as outlined in Report No. PW 2023-28;**
- 3. And further, that County Council authorize the transfer of \$50,000 from the Roads Reserve to the 2023 Traffic Calming Capital account;**
- 4. And further, that a by-law be presented to County Council at the June 28, 2023 Council meeting to amend By-Law No. 6511-2023 to designate and modify Community Safety Zone limits as outlined in Report No. PW 2023-28.**

REPORT HIGHLIGHTS

- The purpose of this report is to seek County Council endorsement to implement recommended speed management, traffic calming and road safety measures on County roads in Springford, Curries, Foldens, Culloden, Verschoyle, Sweaburg and Dereham Centre.
- Adjustments to posted speeds and boundary limits of existing speed zones in the subject areas are recommended to align with village limits and/or the limits of built up areas in accordance with Transportation Association of Canada (TAC) guideline criteria to promote uniform traffic flow, reduce vehicle operating speeds (85th percentile) and reduce the risk of collisions.
- Implementation measures vary by community and include, but are not limited to, the installation of electronic speed feedback signs; flexible centre line delineators; regulatory and warning signs; speed limit adjustments; speed zone adjustments; adjustments to boundary limits of an existing Community Safety Zone; relocation of community entrance gateway signage and installation of additional street lights.

Implementation Points

Road safety measures identified for immediate implementation will be initiated in Q4 2023 following Council authorization and enactment of by-law amendments. Where identified, additional street lights will be implemented in 2024, pending budget approval.

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

The 2023 Business Plan and Budget includes \$150,000 in the Traffic Calming capital account to fund various County-wide traffic calming measures as approved by County Council.

Anticipated expenditures in 2023 include implementation of traffic calming measures that were approved in Report No. [PW 2023-17](#) as well as County-wide Community Safety Zone (CSZ) implementation as approved in Report No. [PW 2023-05](#). As a result, an additional \$50,000 is required to supplement the 2023 Traffic Calming capital account in order to fund the proposed immediate traffic calming measures recommended in this report.

The 2023 budgeted closing balance for the Roads Reserve is approximately \$18.4 million, which is sufficient to fund the additional need.

Additional street lights will be considered as part of the 2024 capital budget submission.

Communications

Staff liaised with respective Area Municipality representatives, Ontario Provincial Police (OPP) and residents throughout the establishment of work plans and the outcomes (findings and recommendations) of the speed management and road safety reviews noted above. Staff presented the review findings and recommendations to the respective Area Municipality Councils on the following dates:

- Oxford Road 13, Oxford Road 19 – Springford and Oxford Road 40 – Curries were presented to Township of Norwich Council on Tuesday, May 9, 2023; and
- Oxford Road 6, Oxford Road 12 – Foldens, Oxford Road 10 – Culloden, Oxford Road 10 – Verschoyle, Oxford Road 12 – Sweaburg and Oxford Road 27 – Dereham Centre were presented to the Township of South-West Oxford Council on Tuesday, May 16, 2023.

Community consultation and engagement efforts for the proposed speed management and road safety implementation measures included distribution of notices to residents in the vicinity of the study areas (Attachments 1 and 2), as well as postings on [Speak up, Oxford! \(SUO\)](#) and social media.







Findings and recommendations for Springford and Curries (Township of Norwich) were posted on SUO on Wednesday, May 10, 2023 and Foldens, Culloden, Verschoyle, Sweaburg and Dereham Centre (Township of South-West Oxford) were posted on SUO on Wednesday, May 17, 2023. SUO links and notices were shared with Township of Norwich and Township of South-West Oxford staff for their information and posting on their respective websites. Community notices for Springford and Curries were hand delivered on Thursday, May 11, 2023 and Foldens, Culloden, Verschoyle, Sweaburg and Dereham Centre notices were hand delivered on Wednesday, May 17 and Thursday, May 18, 2023.

The notices advised residents of proposed traffic calming and road safety measures in the subject areas and provided information on how to request a delegation and/or submit written comments to be received by County Council at the June 14, 2023 Council meeting. Social media posts were issued beginning June 1, 2023 advising residents of the speed management and road safety reviews and upcoming County Council meeting on June 14, 2023, as well as the delegation deadline.

Following County Council's potential adoption of By-law No. 5725-2015 and By-Law No. 6511-2023 amendments on June 28, 2023, Public Works will work with the Strategic Communications team to develop proactive communications that clarify these speed management and road safety measures. This may include social media, direct mailing, advertising and/or other approaches.

Report No. PW 2023-28, along with any potential amendments, will be circulated to the Township of Norwich, Township of South-West Oxford and Ontario Provincial Police (OPP) for information.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.ii.	2.i.		4.i. 4.ii.	5.ii.	

DISCUSSION

Background

Speed management and road safety reviews were recently completed at a number of locations throughout the County in response to requests from Area Municipality representatives and residents. The locations are as follows:

- Oxford Road 13 and Oxford Road 19 (Springford – Township of Norwich);
- Oxford Road 40 (Curries – Township of Norwich);

- Oxford Road 6 and Oxford Road 12 (Foldens – Township of South-West Oxford);
- Oxford Road 10 (Culloden – Township of South-West Oxford);
- Oxford Road 10 (Verschoyle – Township of South-West Oxford);
- Oxford Road 12 (Sweaburg – Township of South-West Oxford); and
- Oxford Road 27 (Dereham Centre – Township of South-West Oxford).

County-wide Approach to Speed Management and Traffic Calming

The 2023 speed and road safety reviews undertaken in the subject areas 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 speed zone limits 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, municipal partners 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.

With respect to posted speed limits, there is a general belief that increasing the posted speed to better align with the driving environment and promote a more consistent flow of traffic will result in traffic speed increases. This is evident when reviewing the community feedback where staff are recommending adjustments to posted speed limits.

However, contrary evidence exists where the Ministry of Transportation (MTO) recently conducted a study where traffic speeds were increased to 110 km/h on several 400 series highways across the province. Throughout the study, the MTO monitored all raised speed limit sections for safety/operations and concluded that the operating speeds and collision trends within these sections remained comparable to other similar highway sections where speed limits remained unchanged at 100 km/h. On March 29, 2022, the province issued a news release titled "[Ontario Raising Highway Speed Limits](#)" which provided further details on the study, findings and implementation measures.

Although it may be perceived that the MTO study and findings are only applicable to 400 series highways, the evidence based engineering principles adopted and utilized for setting posted speeds (TAC Guidelines) are the same whether they are used for assessing a highway or the County's arterial roads. Staff interpret that the MTO findings and recommendations support traffic engineering science that the driving environment influences driver behaviour when selecting a safe operating speed (as opposed to the posted speed limit).

Driver's choice of speed is significantly influenced by the driving environment and road design and most drivers travel at a speed they consider to be safe regardless of posted speed limits. Simply imposing lower posted speed limits is ineffective in reducing operating speeds unless the posted speed and/or reduced speed zone limits align with changes in the driving environment, matching driver expectations based on their surroundings and visual cues.

Posted speed limits set substantively lower than the operating/design speeds reduces enforcement effectiveness and can result in:

- Tailgating;
- Impatient drivers;
- Increased passing; and
- Greater collision risk.

County-wide Community Safety Zone (CSZ) Implementation

Areas throughout the County have been designated as Community Safety Zones (CSZs) through Report No. PW 2023-05 and enactment of By-law No. 6511-2023, following a comprehensive evaluation that was completed in 2022 in accordance with the County's CSZ criteria and warrant process adopted by County Council in 2021 (Report No. [PW 2021-31](#)).

CSZ's have been identified as an additional measure that can be used in support of potential traffic calming and road safety and are also eligible for Automated Speed Enforcement (ASE) should a potential future County-wide ASE program be adopted. Implementation of CSZ regulatory signage in designated areas will proceed starting in July 2023.

Oxford Road 19, through Springford, has been designated as a CSZ within the limits of the existing 50 km/h speed zone. However, proposed recommendations for posted speed and speed zone limit adjustments in Springford, if approved by County Council, will require corresponding adjustments to the boundary limits of this CSZ and associated by-law amendments.

Comments

The work plan, findings, and proposed recommendations for safety reviews completed in the Township of Norwich communities of Springford and Curries and the Township of South-West Oxford communities of Foldens, Culloden, Verschoyle, Sweaburg and Dereham Centre are detailed in Attachments 3 and 4, respectively. Area Municipality Councils received staff presentations as information and were generally supportive of ongoing efforts to address speeding and road safety concerns in their respective communities.

Recommendations for Immediate Implementation

Curries (Oxford Road 40)

- A new 70 km/h speed zone will be implemented east of the built-up area on Oxford Road 40 (Curries Road);
- An electronic speed feedback sign will be installed for westbound traffic where the new 70 km/h speed zone begins;
- The boundary limits of the existing 60 km/h speed zone will be adjusted to better align with the built up limits; and
- Hidden Driveway warning signs will be installed westbound and eastbound near the vertical curve at the east limits of the 70 km/h speed zone to advise motorists of upcoming entrances.

Springford (Oxford Road 13 and Oxford Road 19)

- Electronic speed feedback signs will be installed at all four approaches: north and south ends of Oxford Road 13 (West Street) and at the west and east ends of Oxford Road 19 (Main Street);
- The boundary limits of the existing 50 km/h speed zone at the north and south ends of Oxford Road 13 (West Street) will be adjusted to align with the village limits and limits of the built up area;
- The boundary limits of the existing 50 km/h speed zone on Oxford Road 19 (Main Street) will be adjusted to 60 km/h and will be extended at the west end of the community where the posted speed is currently 80 km/h to better align with the limits of the built up area;
- The boundary limits of the existing CSZ on Oxford Road 19 (Main Street) will be adjusted to align with the limits of the proposed 60 km/h speed zone;
- Current street lighting on Oxford Road 19 (Main Street) will be extended further west to align with the 60 km/h speed zone limit; and
- Community boundary sign on the south end of Oxford Road 13 (West Street) will be relocated to better align with village limits.

Foldens (Oxford Road 6 and Oxford Road 12)

- Electronic speed feedback signs will be installed on all County road approaches: north end of Oxford Road 6 (Foldens Line) and at the west and east ends of Oxford Road 12 (Sweaburg Road);
- The boundary limits of the existing 60 km/h speed zone at the north end of Oxford Road 6 (Foldens Line) and the east end of Oxford Road 12 (Sweaburg Road) will be adjusted to align with the village limits and limits of the built up area;
- Current street lighting on Oxford Road 6 (Foldens Line) will be extended further north to align with the 60 km/h speed zone limit and street lighting will be added to Oxford Road 12 (Sweaburg Road) within the 60 km/h speed zone limit; and
- Community boundary signs on the north end of Oxford Road 6 (Foldens Line) and the west and east ends of Oxford Road 12 (Sweaburg Road) will be relocated to better align with the village limits.

Sweaburg (Oxford Road 12)

- Electronic speed feedback signs will be installed on all County road approaches: west and east ends of Oxford Road 12 (Sweaburg Road);
- The west boundary limit of the existing 60 km/h speed zone will be adjusted to align with the village limits and limits of the built up area;
- A new 70 km/h speed zone will be implemented from the 60 km/h zone at the west limit of Sweaburg to a point west of Trillium Line intersection;
- Current street lighting will be extended further west and east to align with the 60 km/h speed zone limit; and
- Community boundary signs on the west and east ends will be relocated to better align with the 60 km/h speed zone limits.

Culloden (Oxford Road 10)

- Electronic speed feedback signs will be installed on all County road approaches: north and south ends of Oxford Road 10 (Culloden Line);
- The boundary limits of the existing 60 km/h speed zone at the north and south ends will be adjusted to align with the village limits and limits of the built up area;
- Current street lighting will be extended further north and south to align with the 60 km/h speed zone limit; and
- Community boundary signs on the north and south ends will be relocated to better align with the 60 km/h speed zone limits.

Verschoyle (Oxford Road 10)

- Flexible centre line delineators will be installed at the north and south approaches to Verschoyle, as well as near the midway point of the village on Oxford Road 10 (Culloden Line) to address excessive outgoing speeds identified in the study; and
- The boundary limits of the existing 60 km/h speed zone at the north and south ends will be adjusted to align with the village limits and limits of the built up area.

Dereham Centre (Oxford Road 27)

- Electronic speed feedback signs will be installed on all County road approaches: west and east ends of Oxford Road 27 (Prouse Road);
- The boundary limits of the existing 60 km/h speed zone at the west and east ends will be adjusted to align with the village limits;
- Street lighting will be added within the 60 km/h speed zone limits; and
- Community boundary signs on the west and east ends will be relocated to better align with the village limits.

Note: The intersection of Oxford Road 27 and Dereham Line did not meet the traffic volume and/or collision warrants as identified in the Ontario Traffic Manual (OTM) for an All-Way Stop and as such, it is not proposed for implementation at this time.

Recommendations for Future Consideration

Recommendations for future consideration include the following:

- Urbanization of the road cross-section which could include curb and gutter and sidewalk within the limits of the built-up area (Dereham Centre, Foldens, Culloden, Verschoyle, Springford, Sweaburg);
- Vertical realignment of Oxford Road 40 (Curries) and Oxford Road 12 (Sweaburg) as part of future corridor upgrades;
- Formalize parking lot and driveway access to SWOX municipal office (Dereham Centre);
- Consideration of Automated Speed Enforcement;
- Ongoing post monitoring and data sharing with Police; and
- Consider development of Local Community Watch programs (Townships).

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

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

Public Consultation

Public feedback in response to the Community Notices identified the following key concerns:

Curries – Oxford Road 40

- Intersection safety at Oxford Road 40 and Oxford Road 59;
- Intersection safety at Oxford Road 40 and Middletown Line;
- Safety of walkers and the need for paved shoulders; and
- Proximity of electronic speed feedback signs to adjacent property and potential nuisance from the flashing message board.

Springford – Oxford Road 13 and Oxford Road 19

- Resistance to changing the posted speed to 60 km/hr on Oxford Road 19;
- The need for a controlled pedestrian crossing on Oxford Road 19;
- Safety of children during school bus pick up/drop off;
- Illegal use of off-road vehicles on roadways and sidewalks; and
- Excessive noise from engine brakes and customized exhaust systems.

Verschoyle – Oxford Road 10

- Concern with implementation of flexible centre line delineators over more favourably perceived electronic speed feedback signs; and
- Excessive noise from engine brakes and customized exhaust systems.

During the staff presentation to Township of South-West Oxford Council on May 16, 2023, several residents in attendance were provided an opportunity to speak. Residents generally felt that the proposed traffic measures did not go far enough to address speeding and road safety concerns in their respective communities.

Conclusions

Speeding concerns raised in the subject areas have been assessed through the review of traffic speed, volume, vehicle class and collision data. Staff utilized traffic management principles and engineering best practice methodologies to develop site specific 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 communities and are generally supported by Area Municipality staff and Councils.

Staff will continue to collaborate with Area Municipalities, stakeholder agencies, 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

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ATTACHMENTS

- Attachment 1: Community Notice (Township of Norwich)
- Attachment 2: Community Notice (Township of South-West Oxford)
- Attachment 3: Work plan, Findings and Proposed Recommendations (Township of Norwich)
- Attachment 4: Work plan, Findings and Proposed Recommendations (Township of South-West Oxford)