Report No. PW 2023-28 Attachment No. 3

Speed & Road Safety Concerns

Oxford Road 13 & Oxford Road 19, Springford

Oxford Road 40, Curries

Presentation to Norwich Township Council May 9, 2023

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Manager of Transportation and Waste Management Services



County-wide Traffic Calming Approach

- Ongoing speed monitoring in communities
- Information sharing and collaboration with OPP, municipal partners and community
- Adoption of posted speeds which are consistent with driving environment
- Prioritization and monitoring of traffic calming measures
- Consideration of traffic calming measures as part of road design



Speed & Road Safety Review Work Plan

- 24hr/7day speed data collection and analysis
- Review existing conditions and collision data
- Determine appropriate posted speed limit (TAC)
- Consult with Municipal Representatives and Police
- Present findings and recommendations to Norwich Council
- Public consultation
- County Council approval



Establishing Posted Speeds (TAC)

- TAC Guidelines 2009
- Risk based analysis
- Physical and Road-User characteristics
- Systematic, consistent approach
- Site specific characteristics, engineering judgement
- Excludes school zones/playground areas
- Local, Provincial policies



Appropriate Posted Speeds and Speed Variation/Differential

- Reduces speed variation/differential
- Reduces risk of collisions
- Enhances road safety
- Risk of collision is lower with uniform traffic flow
- Improves enforcement effectiveness

- Promotes uniform traffic flow
- Collision rate is more directly affected by speed variation than absolute speed
- Posted speeds lower then design/operating speeds result in:
 - Tailgating
 - Impatient Drivers
 - Passing
 - Greater collision risk



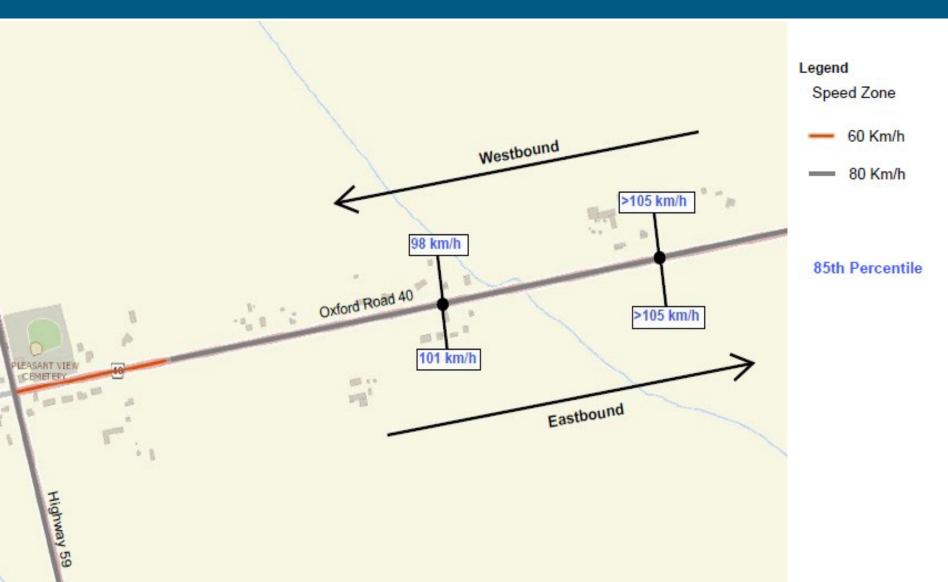
OR 40, Curries Existing Conditions

Rural cross section (gravel shoulders, ditches)

Vertical curves (hills) through study area



Oxford Road 40 Speed Data (24hr/7 day)



Collision History (OR 40 Study Area)

Year	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	0	0	3	0	0	0	1	0
Non- Fatal Injury	0	0	0	0	0	0	0	0
Fatal Injury	0	0	0	0	0	0	0	0
Total	0	0	3	0	0	0	1	0
Total Calliniana 2014 2021: 4								

Total Collisions 2014 – 2021: 4

- Historical collision data from 2014 to 2021:
 - 4 total collisions; property damage only
 - Avg 0.50 collisions/year
 - Collision Rate
 - 0.1.41 per 1mil vehicle kms
 - Provincial Avg (2019) = 1.53 per 1mil vehicle kms



Oxford Road 40 Posted Speed Limits

SEGMENT	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED ¹ (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
500m to 2,000m East of Oxford Road 59 – Rural	80	70	-10	70

¹TAC Canadian Guideline for Establishing Posted Speed Limits (2009)



Driveway Sightline Assessment



Legend

Speed Zone







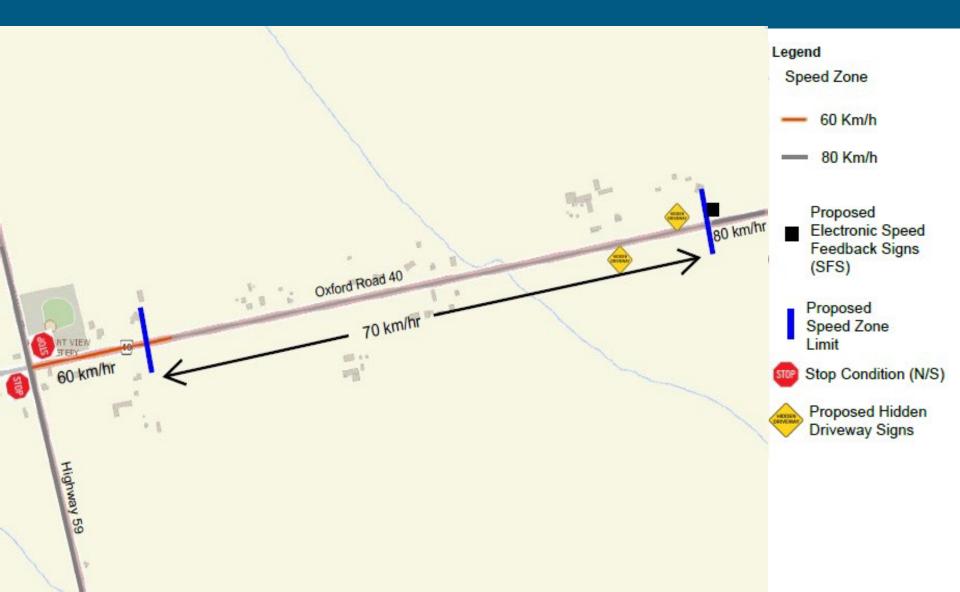


Oxford Road 40 Speed & Road Safety Review Findings

- Excessive speeds throughout the study area
- Collision rate is lower than the 2019 Provincial average collision rate
- Collisions were animal or weather related
- 3 out of 10 driveways do not meet TAC desired sightline distances (80km/hr posted speed)
- Posted speed is 10km/hr above TAC recommended posted speed



Oxford Road 40 Immediate Measures



Oxford Road 40 Future Considerations

 Vertical realignment as part of future corridor upgrades (20 yr+)

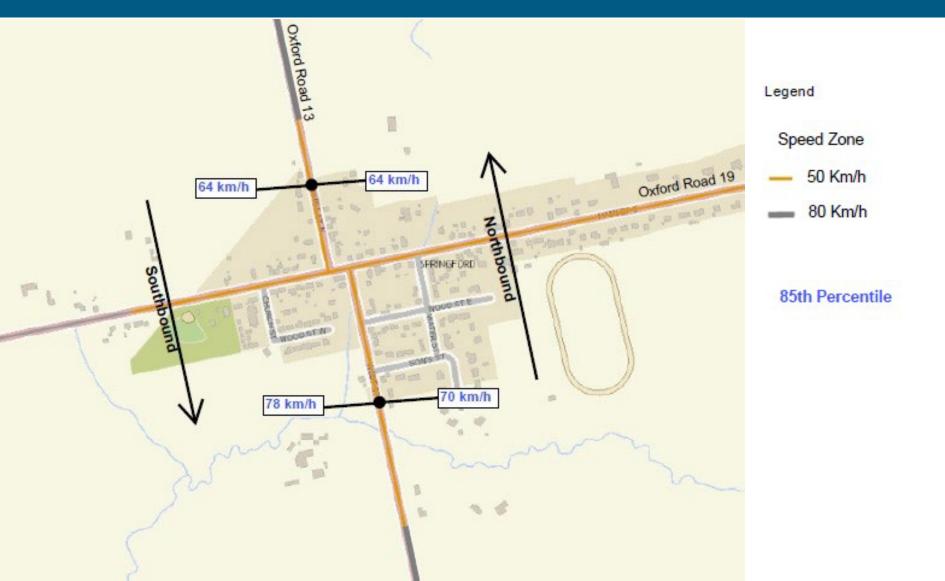


OR 13 & OR 19, Springford Existing Conditions

- Urban x-sec
- Paved shoulders
- Curb & gutter
- Sidewalk on east side (OR 13)
- Sidewalk on north side (OR 19)
- OR 19 & OR 13 intersect (offset) with stop condition on OR 19



Oxford Road 13 Speed Data (24hr/7 day)



Oxford Road 19 Speed Data (24hr/7 day)



Collision History (OR 13/OR 19 Study Area)

Year	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	1	1	3	4	6	6	2	7
Non- Fatal Injury	0	1	2	1	1	1	1	1
Fatal Injury	0	0	0	0	0	0	0	0
Total	1	2	5	5	7	7	3	8

Total Collisions 2014 - 2021:

- Historical collision data from 2014 to 2021:
 - ▶ 38 total collisions
 - Avg 4.75 collisions/year
 - Collision Rate
 - 0.66 per 1mil vehicle kms
 - Provincial Avg (2019) = 1.53 per 1mil vehicle kms



Oxford Road 13 Posted Speed Limits

SEGMENT (NORTH TO SOUTH)	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED* (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
Milldale Rd and 240m north of OR 19 – Rural (north approach)	50/80	90	+40/10	80
240m north of and 350m south of OR 19 – Urban	50	60	+10	50
350m south of OR 19 and Ninth Rd – Rural (south approach)	50/80	90	+40/10	80

^{*}TAC Canadian Guideline for Establishing Posted Speed Limits (2009)



Oxford Road 19 Posted Speed Limits

SEGMENT (WEST TO EAST)	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED* (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
Zenda Line and 600m west of OR 13 (N) – Rural (west approach)	80	80	0	80
600m to 300m west of	80/50	80 – Rural	0	80
OR 13 (N) – Rural/Urban		70 - Urban	+20	60
300m west of OR 13 (N) and 1,070m east of OR 13 (S) – Urban (east approach)	50	70	+20	60

^{*}TAC Canadian Guideline for Establishing Posted Speed Limits (2009)

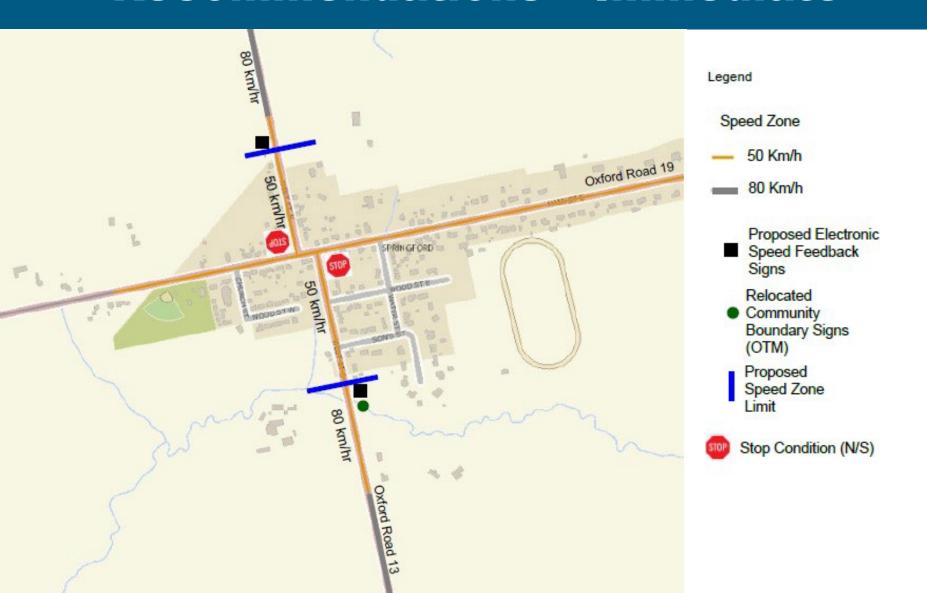


OR 13 & OR 19, Springford Speed & Road Safety Review Findings

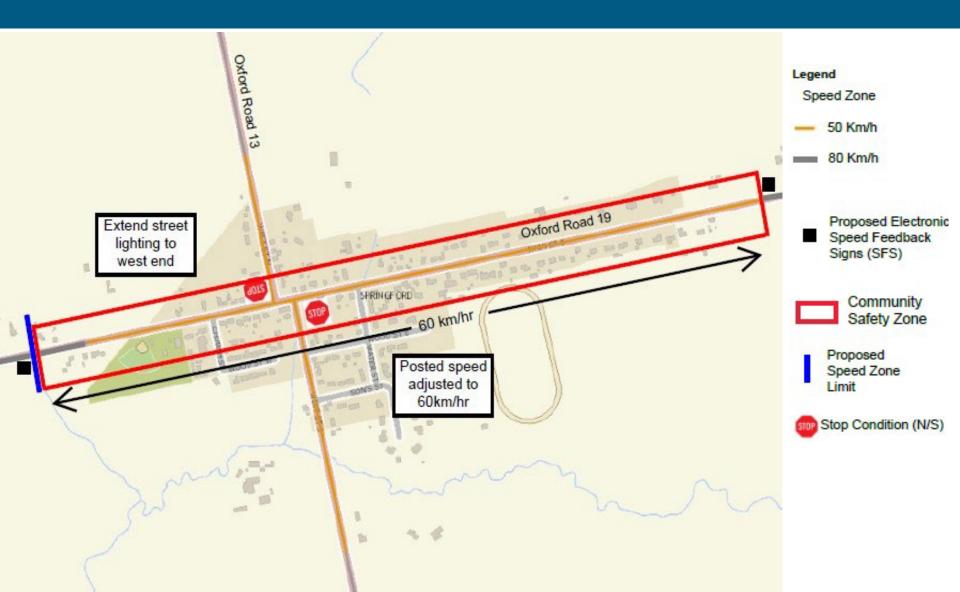
- Excessive speeds at south, east & west limits
- Marginally excessive speeds at north limit
- Existing 50km/hr speed zone on OR 13 extends beyond limit of built up area (north & south)
- Posted speed on OR 13 is 10km/hr below TAC recommended posted speed
- Posted speed on OR 19 is 20km/hr below TAC recommended posted speed
- Collision rate is significantly lower than 2019 Provincial average



Oxford Road 13 Recommendations – Immediate



Oxford Road 19 Recommendations – Immediate



OR 13 & OR 19 Future Considerations

- Community gateway features (community sign, landscaping)
- Extend urban road x-sec at west end of OR 19
- Automated speed enforcement (OR 19 CSZ)
- Community Watch Program (Township)



Next Steps

- Public consultation (Notices & Speak Up Oxford)
- County Council Authorization (June 14, 2023)
- By-law amendment
- Post monitoring/data sharing with Police
- Implementation of immediate measures
 - Speed limit and zone adjustments
 - Installation of electronic speed feedback signs
 - Extend street lighting at west end on OR 19 (2024)



Speed & Road Safety Concerns

THANK YOU

