

Speed & Road Safety Concerns

Oxford Road 119, Thamesford

Presentation to Township of Zorra Council

June 16, 2021

Frank Gross, Oxford County
Manager of Transportation and Waste Management Services

County-wide Traffic Calming Approach

- Regular/ongoing speed monitoring in communities and settlement areas
- Information sharing and collaboration with Police, municipal partners and community
- Adoption of posted speeds which are consistent with driving environment
- Need and prioritization of traffic calming measures
- Consideration of traffic calming measures as part of road design for planned road rehabilitation and land development
- Speed monitoring to evaluate effectiveness of traffic calming measures

OR 119 Speed and Road Safety Review Work Plan

- **Speed data collection/review**
- **Review existing driving environment**
- **Review historical collision records**
- **Determine appropriate posted speed limit**
- **Data evaluation and recommendations**
- **Share results and proposed recommendations with Municipal Representatives and Police**

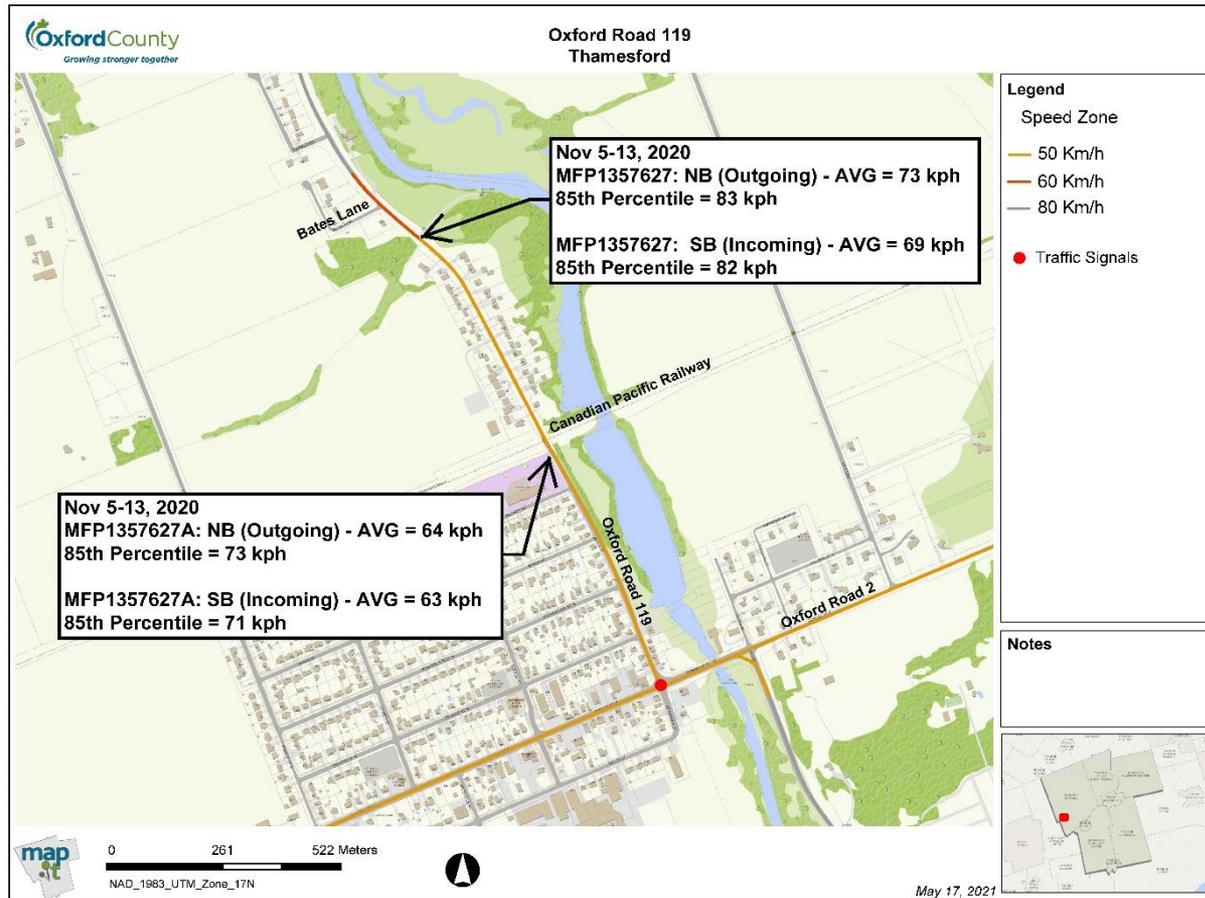
OR 119 Existing Conditions

- **Urban x-sec (curbs, sidewalks)**
 - (OR 2 to CP Railway underpass)
- **Rural x-sec (gravel shoulders)**
 - (North of CP Railway underpass)
- **Limits of urban x-sec does not align with built-up area**
- **School area at McCarty Street**

OR 119 Speed Zones



Speed Data – OR 119



Collision History OR 119 Study Limits

Year	2013	2014	2015	2016	2017	2018	2019	2020
Property Damage Only	0	4	4	5	3	4	3	2
Non-Fatal Injury	0	0	0	1	0	1	1	0
Fatal Injury	0	0	0	0	0	0	0	1
Total	0	4	4	6	3	5	4	3
Total Collisions 2013 – 2020: 29								

- Historical collision data from 2013 to 2020:
 - ▶ 29 total collisions
 - ▶ 3 collisions resulted in non-fatal injuries
 - ▶ 1 collision resulted in fatal injury (pedestrian)
 - ▶ 25 collisions resulted in property damage
 - ▶ Avg 3.6 collisions/year
 - ▶ Avg 2.0 collisions/year within study area (excluding 13 collisions at the signalized intersection at OR 119 & OR 2)
 - ▶ Collision rate = 1.4 collisions/1mil vehicle kms
 - MTO 2010 Avg = 1.7 collisions/1mil vehicle kms
 - Annual collisions (right angle impacts, turning movements) are below Ontario Traffic Manual warrant for an All Way Stop (Avg. 4 collisions/year over 3 years) at any road intersecting OR 119

Posted Speed Limits – OR 119

SEGMENT	POSTED SPEED (KM/HR)	TAC RECOMMENDED POSTED SPEED* (KM/HR)	DIFFERENCE (KM/HR)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/HR)
OR 2 to CP Railway underpass	50	60	+10	50
CP Railway underpass to 150m south of Bates Lane	50	60	+10	60
150m south of Bates Lane to #321 OR 119	60/80	80	+20/0	70
#321 OR 119 to the Limits of the Last Horizontal Curve	80	80	0	80

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

Appropriate Posted Speeds

- **Reduces speed variation/differential**
- **Promotes uniform traffic flow**
- **Reduces risk of collisions**
- **Improves enforcement effectiveness**
- **Enhances road safety**

Speed Variation/Differential

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

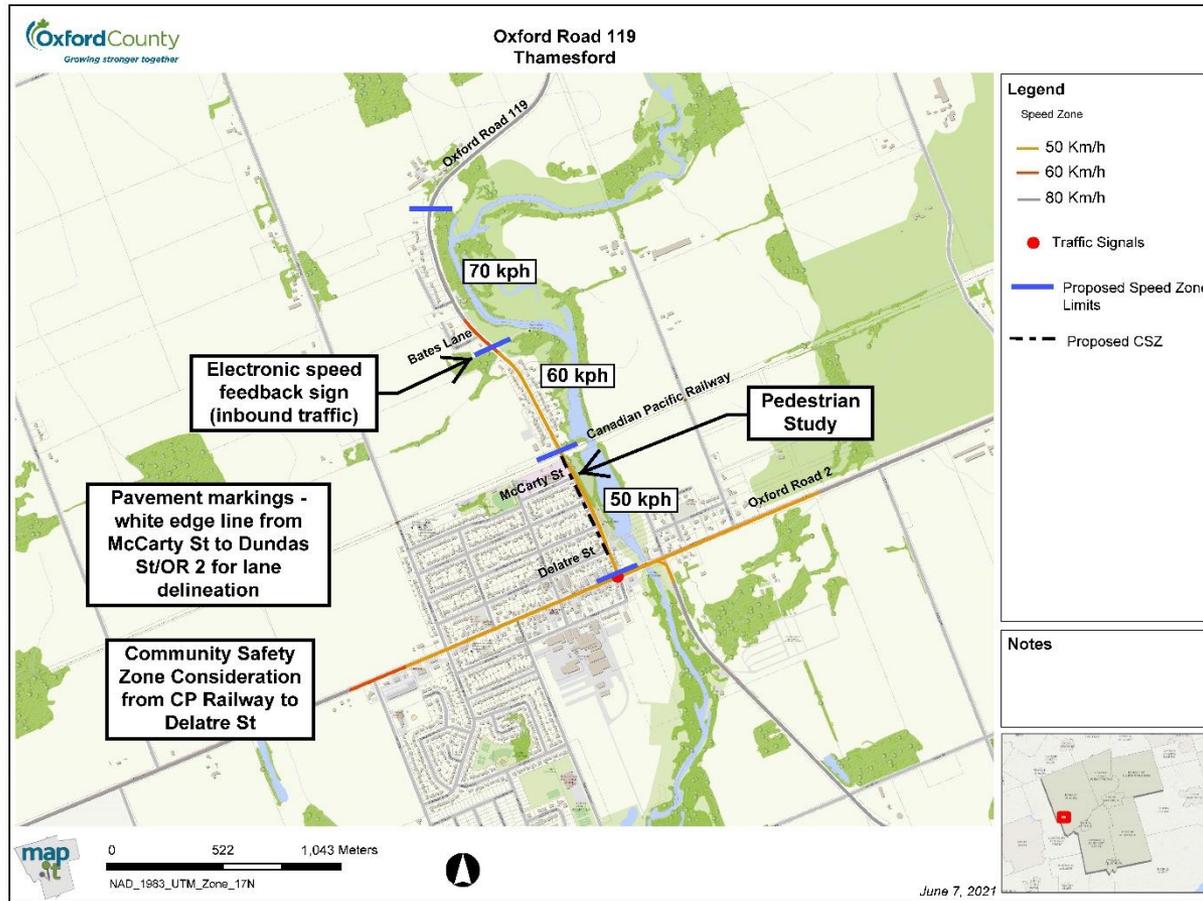
Establishing Posted Speeds (TAC)

- **TAC Canadian Guideline – 2007**
- **Risk based analysis**
- **Physical and Road-User characteristics**
- **Systematic, consistent approach**
- **Site specific characteristics, engineering judgement**
- **Excludes school zones/playground areas**
- **Local, Provincial policies**

Speed and Road Safety Review Findings

- **Operating speeds on OR 119 were found to be excessive**
- **50km/hr speed zone is below TAC recommended posted speed**
- **60km/hr speed transition zone does not align with built driving environment**
- **Travel lane along OR119 from OR2 north to CP Railway underpass is wide with no edge lines**
- **Historical collision data did not show apparent speed related trends**

Recommendations – Immediate OR 119



Future Considerations OR 119

- **Extend urban x-sec on OR 119, north of the CP Railway underpass to proposed northerly limits of 60km/hr zone**
- **Ongoing Police enforcement and speed data sharing**
- **Automated speed enforcement/CSZ designation**
- **Curb extensions (bump outs), separated bike lanes**
- **Community Watch Program (Township)**
- **Physical features at village limits**
 - ▶ Community sign
 - ▶ Landscaping, trees, shrubbery

Community Safety Zone Designation

- **Highway Traffic Act (HTA)**
 - ▶ permits CSZ designation on part of highway where public safety is of 'special concern'
 - ▶ speed fines can be doubled in CSZs
- **Ontario Traffic Manual (OTM)**
 - ▶ evidence that public safety is of special concern
 - ▶ CSZs not intended for entire length of roadway
 - ▶ number/location of CSZs are critical for successful enforcement

Proposed County-wide CSZ Designation Criteria

- **Areas of special safety concern**
 - ▶ Schools, community centres, recreational areas, hospitals, senior centers/residences, high pedestrian volumes
- **Safety risk analysis for areas of special concern**
 - ▶ Collision ratio, traffic volumes, pedestrian volumes, operating speeds, % sidewalks, # of entrances/km
- **CSZ designation would support potential implementation of Automated Speed Enforcement (ASE)**
- **County Council approval of proposed CSZ criteria (June 23, 2021)**
- **Segments in Thamesford would meet area of special concern**

Next Steps

- **Report to County Council – July 14, 2021**
- **Implementation of immediate measures**
 - ▶ Speed zone adjustments
 - ▶ Installation of speed feedback sign
 - ▶ Pedestrian study (Fall 2021)
 - ▶ Pavement markings (edge line)
- **Post Monitoring**

Speed & Road Safety Concerns

THANK YOU