Report No. PW 2021-10 Attachment No. 2

Speed & Road Safety Concerns

Oxford Road 16 and Oxford Road 119, Kintore

Presentation to Zorra Township Council January 14, 2021

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



County-wide Traffic Calming Approach

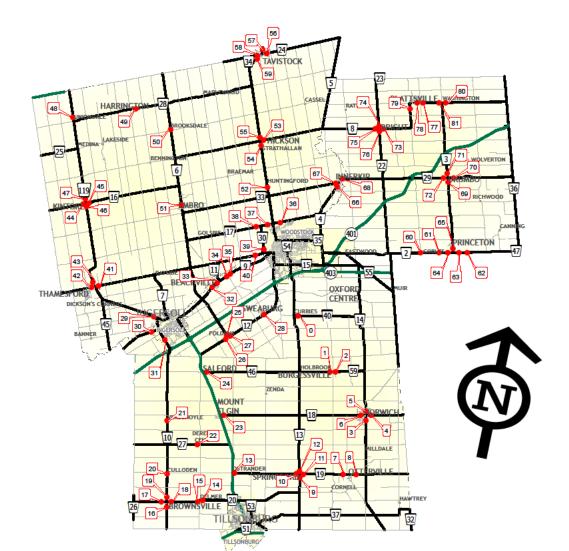
- Regular/ongoing speed monitoring in communities and settlement areas
- Information sharing and collaboration with Police, municipal partners and community
- Adoption of posted speeds which are consistent with driving environment
- Need and prioritization of traffic calming measures
- Consideration 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



Traffic Data Benchmarking

 24 hr speed counts at over 80 locations in 2019

 Reduced speed zones through rural communities, hamlets and built up areas





Speed & Road Safety Concerns

 Speeding concerns identified by A.J Baker Public School through correspondence to Zorra Twp Council



Kintore Speed and Traffic Review Work Plan

- Review speed data on Oxford Road 16 and Oxford Road 119 through Kintore
- Review existing driving environment
- Review collision reports
- Determine appropriate posted speed limit
- Data evaluation and recommendations
- Share results and proposed recommendations with Zorra PW staff and OPP
- Share results with A.J. Baker P.S Representatives



Oxford Road 16 Existing Conditions

- Urban X-sec through Kintore (east and west of OR 119)
 - Curb and paved shoulder (parking lanes)
 - Sidewalk with paved portions of boulevard behind the curb
- Intersects with OR 119 at an all-way stop control
- Speed step down at east and west approaches (80/60 km/hr)

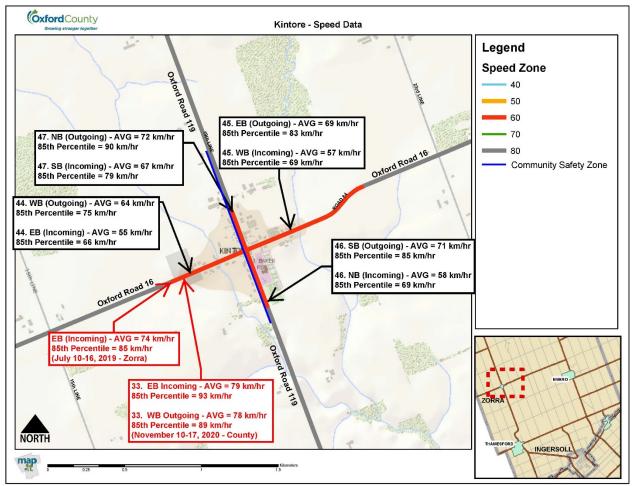


Oxford Road 119 Existing Conditions

- Semi-urban X-sec north and south of OR 16
 - Sidewalk, open ditches, gravel shoulders
 - Curbing at intersection of OR 16
- Community Safety Zone
- Intersects with OR 16 at an all-way stop control
- Speed step down at north and south approaches (80/60 km/hr)



Speed Data - Kintore





Collision History Summary – Kintore (CR 16 & CR 119)

Year	2013	2014	2015	2016	2017	2018	2019
Property Damage Only	0	1	1	0	5	3	3
Non-Fatal Injury	0	0	1	0	0	0	0
Fatal Injury	0	0	0	0	0	0	0
Total	0	1	2	0	5	3	3

Total Collisions 2013 – 2019: 14

^{*}Collision History Summary shows collisions along both CR 16 and CR 119 corridors OPP: 10 intersection MVCs 2015-2019, speed was not a primary factor



Collision Data - Kintore

- Historical collision data from 2013 to 2019:
 - ▶ 14 total collisions
 - ▶ 13 collisions resulted in property damage only
 - ▶ 1 collision resulted in a non-fatal injury
 - Avg 2.0 collisions/year
 - ► Collision rate= 0.16 collisions/1mil vehicle kms

 MTO 2010 Avg = 1.7 collisions/1mil vehicle kms



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



Posted Speed Limits - OR 16

SEGMENT	POSTED SPEED (KM/HR)	TAC RECOMMENDED POSTED SPEED* (KM/HR)	DIFFERENCE (KM/HR)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/HR)
15 th Line to Cemeteries	80	90	+10	80
Cemeteries to 375m east of CR 119	60	60	0	60
375m east of CR 119 through curves	60	80	+20	60
East of curves to 23 rd Line	80	80	0	80
* TAC Canadian Guideline				



Posted Speed Limits - OR 119

SEGMENT	POSTED SPEED (KM/HR)	RECOMMENDED POSTED SPEED* (KM/HR)	DIFFERENCE (KM/HR)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/HR)
South of Kintore	80	90	+10	80
Through Kintore	60	70	+10	60
North of Kintore	80	90	+10	80
* TAC Canadian Guid				



Speed and Road Safety Review Findings

- Outgoing speeds were generally found to be excessive on the east end of Oxford Road 16
- Incoming speeds were found to be marginally excessive (incoming) at the north end of Oxford Road 119
- Incoming/outgoing speeds were found to be excessive at west end
- All-way stop where OR 16 and OR 119 intersect is having a traffic calming effect on vehicle speeds
- Historical collision data did not show apparent speed related trends
- 60km/hr zone at east, north and south ends extend beyond limits of urban cross section
- Posted speeds are within 10km/hr of TAC guidelines, except at east end



Appropriate Posted Speeds

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

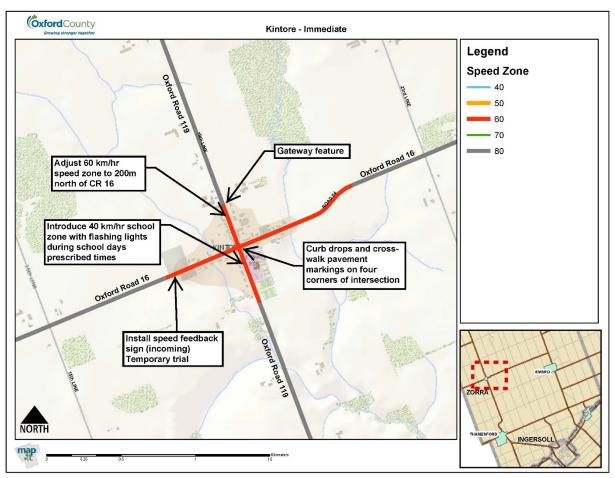


Speed Variation/Differential

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



Recommendations -Immediate





Future Considerations

- Ongoing Police enforcement and speed data sharing
- Automated speed enforcement (photo radar)
- Consider extending urban cross section south on OR 119 (street lighting, curb, sidewalk) ~2025
- Re-evaluate east end after OR 16 Phase 2 road improvements in 2022
- Controlled Pedestrian Crossing at School (Crossing Guard, PXO)
- Built features at Community limits (gateways, entrance signage, flexible delineators, plantings)



Next Steps

- Review findings and recommendations with A.J Baker P.S representatives
- Report to County Council (March 24, 2021)
- By-law amendments
- Implementation of immediate measures



Speed & Road Safety Concerns - OR 16 & OR 119 Kintore

THANK YOU

