Report No. PW 2022-26 Attachment No 2

Speed & Road Safety Concerns Oxford Road 2 & Oxford Road 3, Princeton

Presentation to Township of Blandford-Blenheim Council March 16, 2022

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Growing stronger together

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



OR 2 & OR 3 Speed and 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 BB Council
- Public consultation
- County Council approval



OR 2 Existing Conditions

- Rural x-sec west and east ends of village
- Urban x-sec on north side from OR 3 west
- Semi urban x-sec on south side from OR 3 west
- Boundary road shared with Brant County



OR 3 Existing Conditions

- Urban x-sec from OR 2 to Gissing St
- Semi urban x-sec from Gissing St to Township Rd 2/Roper St
- Rural x-sec north of Township Rd 2/Roper St



OR 2 Speed Zones



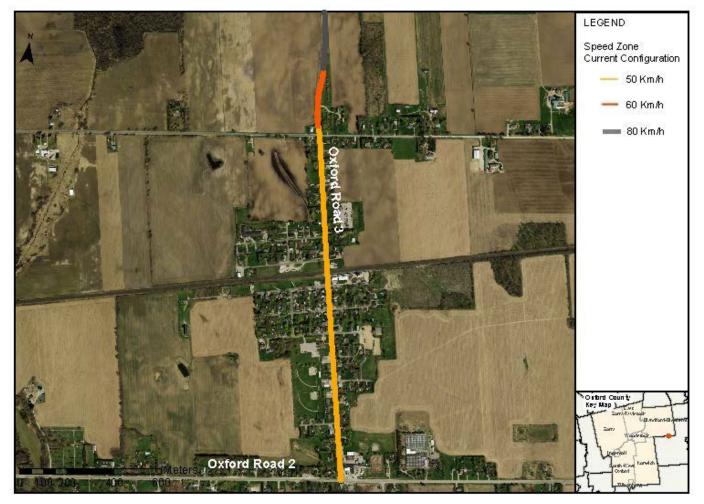
Oxford Road 2 Princeton



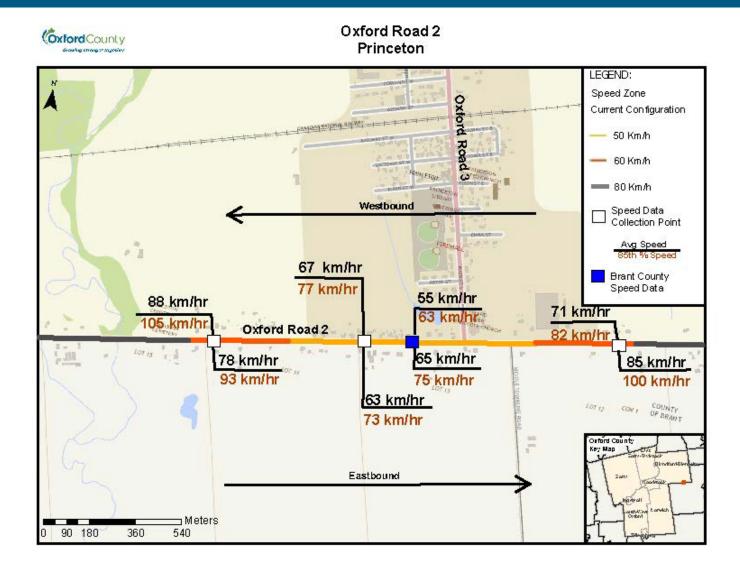
OR 3 Speed Zones



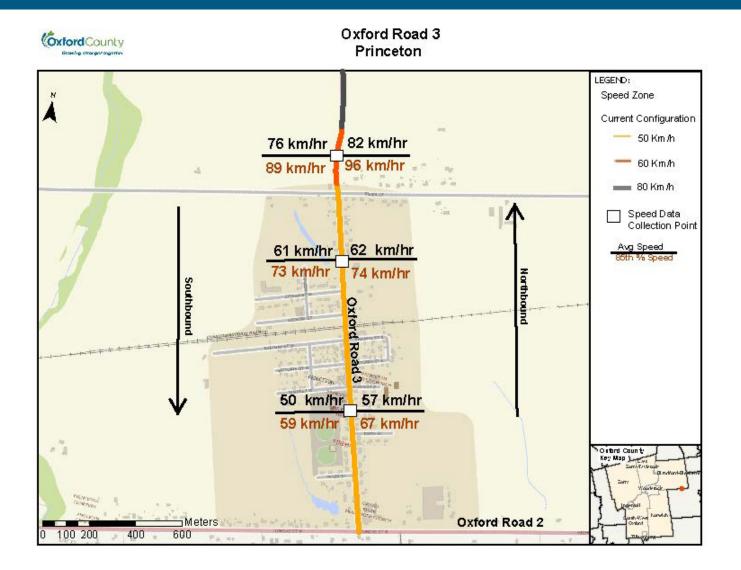
Oxford Road 3 Princeton



Speed Data – OR 2



Speed Data – OR 3



Collision History OR 2 Study Limits

Year	2013	2014	2015	2016	2017	2018	2019	2020
Property Damage Only	0	0	0	2	2	3	1	2
Non- Fatal Injury	0	0	0	0	0	0	0	0
Fatal Injury	0	0	0	0	0	0	0	0
Total	0	0	0	2	2	3	1	2
Total Collisions 2013 – 2020: 10								

- Historical collision data from 2013 to 2020:
 - 10 total collisions; property damage only
 - Avg 1.25 collisions/year
 - Collision Rate
 - OR 2 = 0.81 per 1mil vehicle kms
 - Provincial Avg (2018) = 1.46 per 1mil vehicle kms



Collision History OR 3 Study Limits

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

- Historical collision data from 2013 to 2020:
 - 5 total collisions; 1 non-fatal injury & 4 property damage only
 - Avg 0.63 collisions/year
 - Collision Rate
 - OR 3 = 0.55 per 1mil vehicle kms
 - Provincial Avg (2018) = 1.46 per 1mil vehicle kms



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



Posted Speed Limits – OR 2

SEGMENT (WEST TO EAST)	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED* (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
West Quarter Townline Road to Horner Creek – Rural	80	90	+10	80
Horner Creek to the start of the North Sidewalk - Rural	50/60/80	80	+30/+20/0	70
Start of North Sidewalk to Brant Road 25 - Urban	50	70	+20	60
Brant Road 25 to Blenheim Road / Etonia Road - Rural	50/60/80	80	+30/+20/0	80

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

Posted Speed Limits – OR 3

SEGMENT (SOUTH TO NORTH)	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED* (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
Oxford Road 2 to Township Road 2 - Urban	50	60	+10	50
Township Road 2 to Township Road 3 – Rural	50/60/80	80	+30/+20/0	80

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



Speed and Road Safety Review Findings OR 2

- Operating speeds are excessive
- Posted speed through village is 20km/h below TAC recommended speed
- Historical collision data did not show apparent speed related trends

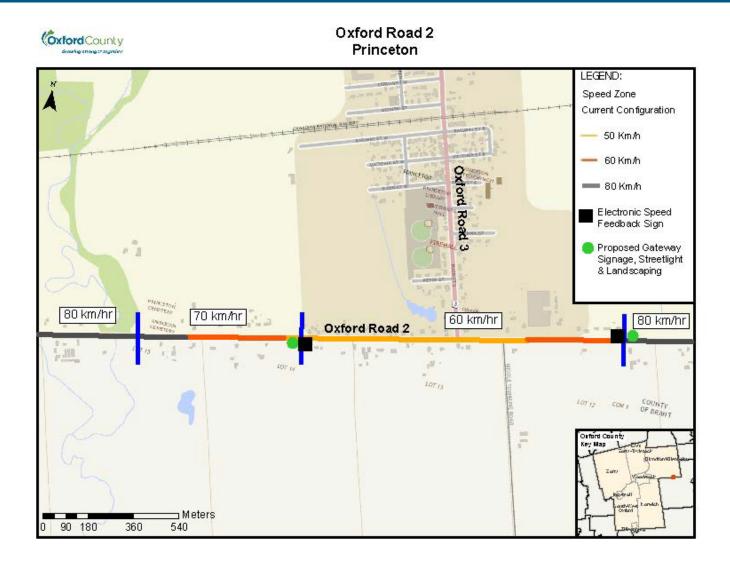


Speed and Road Safety Review Findings OR 3

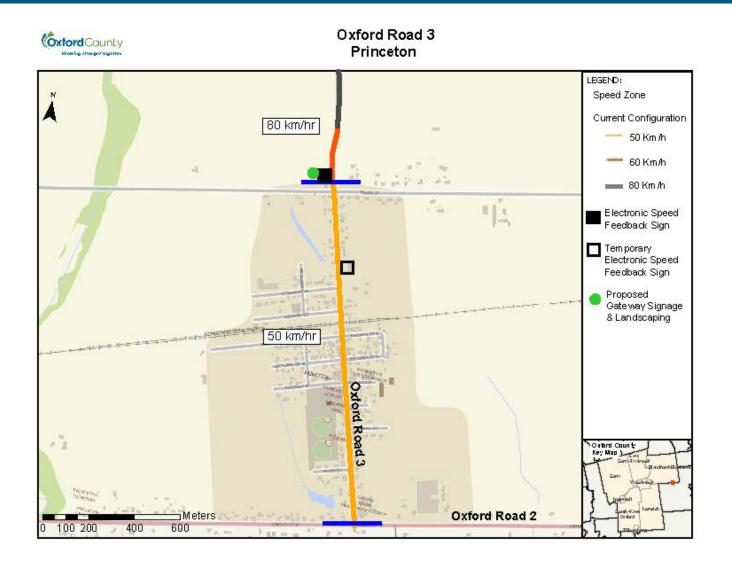
- Operating speeds are marginally excessive between OR 2 and Gissing St
- Operating speeds are excessive north of Gissing St
- 50km/h zone north of Gissing St does not align with the driving environment
- 60km/h transition zone north of Township Rd 2
 /Roper St is ineffective at reducing approach speeds
- Historical collision data did not show apparent speed related trends



Recommendations – Immediate OR 2



Recommendations – Immediate OR 3



Future Considerations OR 2 and OR 3

- Extend urban x-sec on OR 2 to align with proposed 60km/h speed zone
- Extend urban x-sec on OR 3 from Gissing St to Township Rd 2/Roper St (2024)
- Reduce road width on OR 3 (2025)
- Pedestrian warrant study OR 3



Future Considerations OR 2 and OR 3

- Ongoing Police enforcement and speed data collection & sharing
- Automated speed enforcement/CSZ designation
- Community Watch Program (Township)
- Traffic calming features
 - Pavement markings
 - Flexible delineators



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 supports potential implementation of Automated Speed Enforcement (ASE)
- Segments in Princeton would meet area of special safety concern on OR 3 (community centre)





- Public consultation
- County Council Authorization
 - Brant County authorization for OR 2 recommendations
- By-law amendment
 - Brant County matching by-law for OR 2
- Implementation of immediate measures
 - Speed limit and zone adjustments
 - Installation of electronic speed feedback signs
- Post Monitoring



Speed & Road Safety Concerns

THANK YOU

