

Speed & Road Safety Concerns

Oxford Road 6 & Oxford Road 12, Foldens

Oxford Road 10, Culloden & Verschoyle

Oxford Road 12, Sweaburg

Oxford Road 27 (Prouse Rd), Dereham Centre

Presentation to South-West Oxford Council

May 16, 2023

Shawn Vanacker, Oxford County
Supervisor of Transportation

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 and Road Safety Review Work Plan

- **24hr/7day speed data collection and analysis**
- **All way stop warrant analysis, Dereham Centre**
- **Review existing conditions and collision data**
- **Determine appropriate posted speed limit (TAC)**
- **Consult with Municipal Representatives and Police**
- **Present findings and recommendations to SWOX 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 than design/operating speeds result in:
 - ▶ Tailgating
 - ▶ Impatient Drivers
 - ▶ Passing
 - ▶ Greater collision risk

OR 6 & OR 12, Foldens Existing Conditions

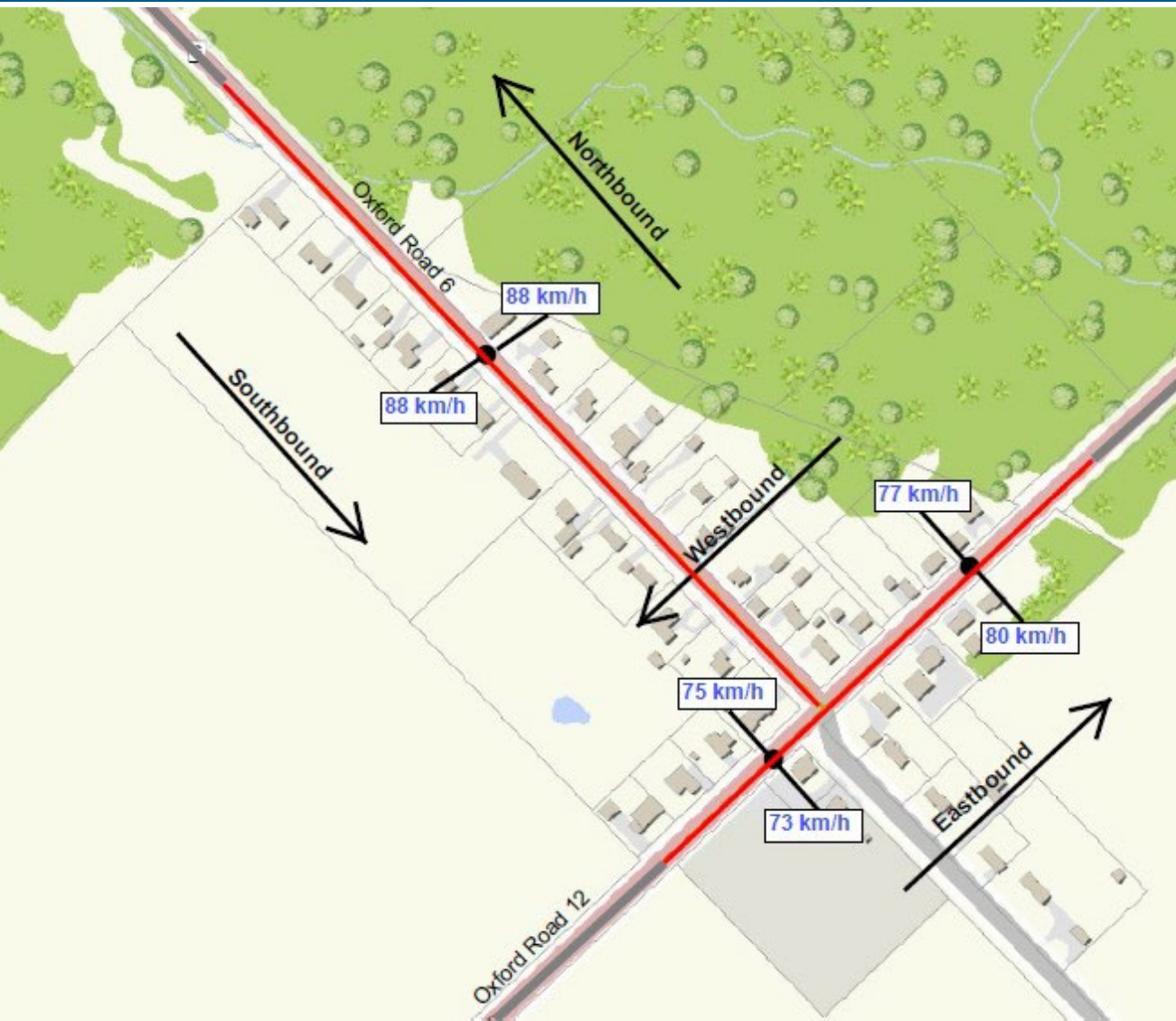
Oxford Road 6

- Rural x-sec
- Street lighting

Oxford Road 12

- Urban x-sec (no sidewalk)
- No street lighting

OR 6 & OR 12, Foldens Speed Data (24hr/7 day)



Legend

Speed Zone

— 60 Km/h

— 80 Km/h

85th Percentile

OR 6 & OR 12, Foldens Collision History

Year	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	2	0	2	1	1	4	0	1
Non-Fatal Injury	0	0	1	0	0	1	0	1
Fatal Injury	0	0	0	0	0	0	0	0
Total	2	0	3	1	1	5	0	2
Total Collisions 2014 – 2021: 14								

- **Historical collision data from 2014 to 2021:**
 - ▶ **14 total collisions**
 - ▶ **Collision Rate**
 - **OR 6 = 1.67 per 1mil vehicle kms**
 - **OR 12 = 1.75 per 1mil vehicle kms**
 - **Provincial Avg (2019) = 1.53 per 1mil vehicle kms**

OR 6, Foldens 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)
Curry Road to 555m north of Oxford Road 12 – Rural	80	80	0	80
555m north of Oxford Road 12 to Oxford Road 12 - Urban	60	60	0	60

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

OR 12, Foldens 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)
Jordan Line to 170m west of Oxford Road 6 – Rural	80	80	0	80
170m west of Oxford Road 6 to 205m east of Oxford Road 6 - Urban	60	60	0	60
Budd Line to 205m east of Oxford Road 6 – Rural	80	80	0	80

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

OR 6 & OR 12, Foldens Speed & Road Safety Review Findings

- **Excessive speeds at the north (OR 6) and east (OR 12) approaches**
- **Marginally excessive speeds at west (OR 12) approach**
- **Limits of existing 60km/hr speed zones on OR 6 and OR 12 extend beyond the built up limits**
- **Current posted speeds align with TAC recommended posted speed**
- **Collision rate is slightly higher than 2019 Provincial average**

OR 6 & OR 12, Foldens Recommendations – Immediate



Legend

Speed Zone

— 60 Km/h

— 80 Km/h

■ Proposed Electronic Speed Feedback Signs (SFS)

● Relocated Community Boundary Signs (OTM)

■ Proposed Speed Zone Limit

STOP Stop Condition (N/S)

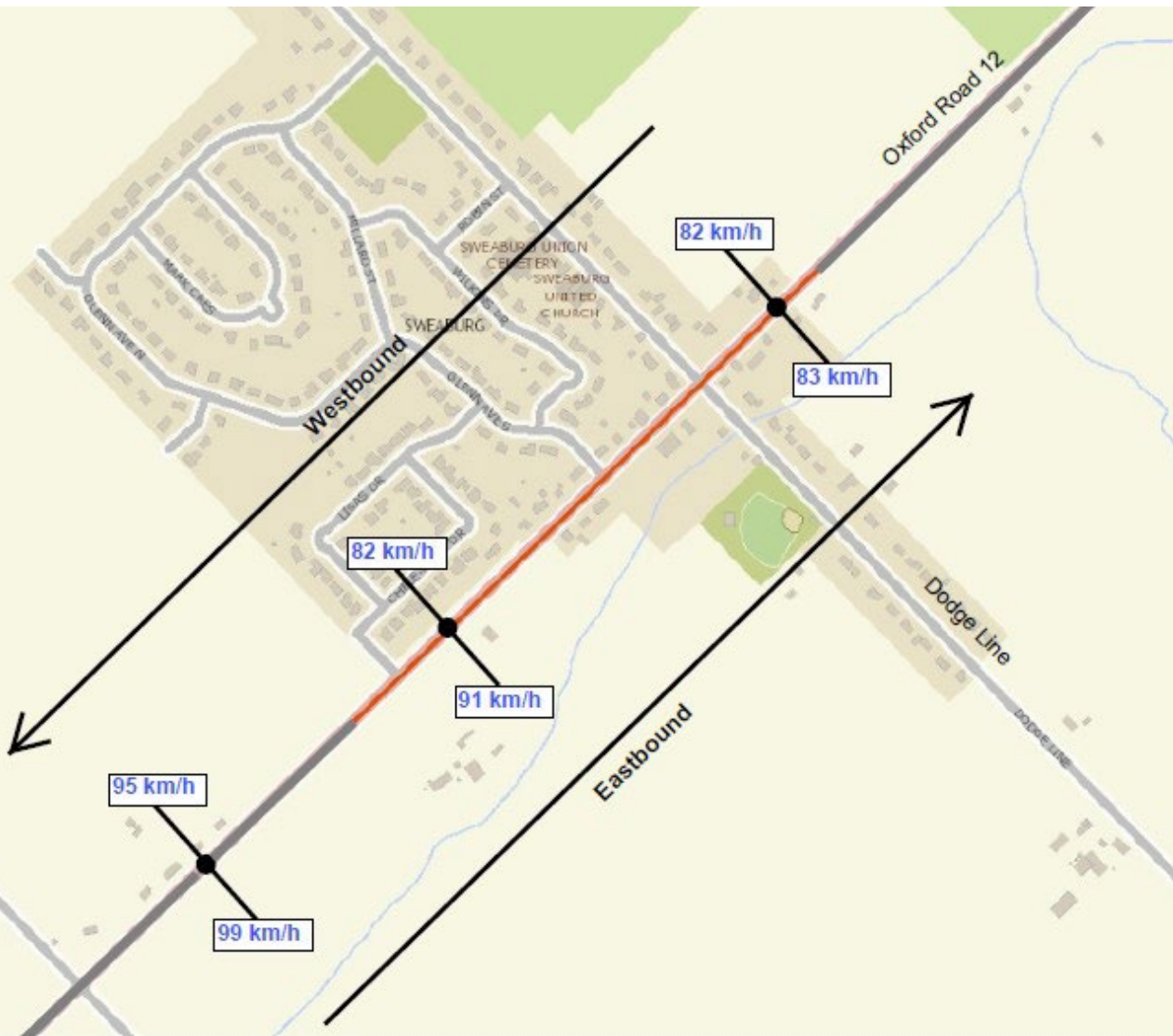
OR 6 & OR 12, Foldens Future Considerations

- **OR 6 – urbanization of x-sec (curb & gutter, sidewalk) as part of scheduled road rehab**
- **OR 12 – extend urban x-sec to village limits as part of scheduled road rehab**
- **Community gateway features (community sign, landscaping)**
- **Post monitoring/data sharing with Police**
- **Community Watch Program (Township)**

OR 12 – Sweaburg Existing Conditions

- Rural x-sec with street lighting
- Several vertical curves within study area

OR 12 – Sweaburg Speed Data (24hr/7 day)



Legend

Speed Zone

60 Km/h

80 Km/h

85th Percentile

OR 12, Sweaburg Collision History

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	0	1	1	0	1	0	0	2	0
Non-Fatal Injury	0	0	0	0	0	0	0	0	0
Fatal Injury	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	1	0	0	2	0
Total Collisions 2013 – 2021: 5									

- **Historical collision data from 2013 to 2021:**
 - ▶ **5 total collisions; property damage only**
 - ▶ **Avg 0.56 collisions/year**
 - ▶ **Collision Rate**
 - **0.46 per 1mil vehicle kms**
 - **Provincial Avg (2019) = 1.53 per 1mil vehicle kms**

OR 12, Sweaburg 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)
Trillium Line to Chele-Mark Drive	80/60	70	-10/+10	70
Chele Mark Drive to 200m east of Dodge Line	60	60	0	60
200m east of Dodge Line to Cedar Line	80	80	0	80

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

OR 12, Sweaburg Speed & Road Safety Review Findings

- Excessive speed on incoming/outgoing approaches
- Excessive speed west of Sweaburg
- West limits of 60km/hr zone extends beyond the village limits
- Posted speed through Sweaburg aligns with TAC recommended posted speed
- Minimum sightline distance at Trillium Line below TAC guideline for posted speed (80km/hr)
- Collision rate is lower than 2019 Provincial average

OR 12, Sweaburg Recommendations – Immediate



Legend

Speed Zone

60 Km/h

80 Km/h

Proposed Electronic Speed Feedback Signs (SFS)

Relocated Community Boundary Signs (OTM)

Proposed Speed Zone Limit

Stop Condition (N/S)

OR 12, Sweaburg Future Considerations

- **Urbanize road x-sec (curb & gutter, sidewalk) and vertical realignment as part of scheduled road rehab**
- **Community gateway features (community sign, landscaping)**
- **Post monitoring/data sharing with Police**
- **Community Watch Program (Township)**

OR 10 – Culloden

Existing Conditions

- **Urban x-sec (paved shoulders, curb & gutter)**
- **Street lighting**

OR 10 – Culloden Speed Data (24hr/7 day)



Legend

Speed Zone

60 Km/h

80 Km/h

85th Percentile

OR 10, Culloden Collision History

Year	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	0	0	3	0	1	2	3	1
Non-Fatal Injury	0	0	0	0	1	0	0	0
Fatal Injury	0	0	0	0	0	0	0	0
Total	0	0	3	0	2	2	3	1
Total Collisions 2014 – 2021: 11								

- **Historical collision data from 2014 to 2021:**
 - ▶ **11 total collisions**
 - ▶ **Avg 1.38 collisions/year**
 - ▶ **Collision Rate**
 - **0.89 per 1mil vehicle kms**
 - **Provincial Avg (2019) = 1.53 per 1mil vehicle kms**

OR 10, Culloden Posted Speed Limits

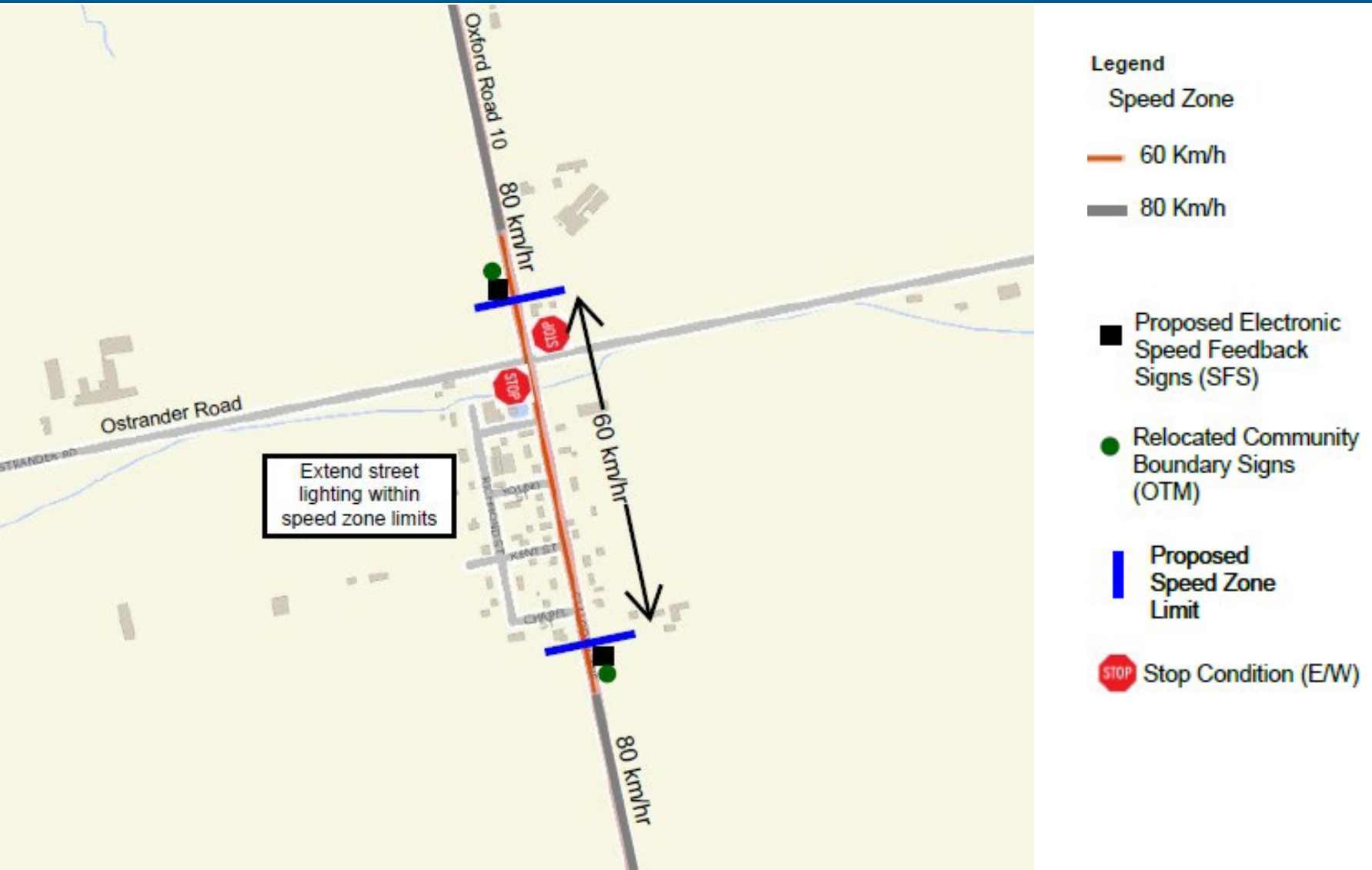
SEGMENT (NORTH TO SOUTH)	POSTED SPEED (KM/H)	TAC RECOMMENDED POSTED SPEED* (KM/H)	DIFFERENCE (KM/H)	OXFORD COUNTY RECOMMENDED POSTED SPEED (KM/H)
Airport Rd to 100m north of Ostrander Rd – Rural	80	90	+10	80
100m north to 475m south of Ostrander Rd - Urban	60	70	+10	60
475m south of Ostrander Rd to Keswick Rd - Rural	80	90	+10	80

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

OR 10 – Culloden Speed & Road Safety Review Findings

- **Excessive speeds incoming at north & south approaches**
- **Marginally excessive speeds outgoing at north & south approaches**
- **Limits of existing 60km/hr zone extend beyond the built up limits**
- **Current posted speed is 10km/hr below TAC recommended posted speed**
- **Collision rate is lower than 2019 Provincial average**

OR 10, Culloden Recommendations – Immediate



OR 10 – Culloden

Future Considerations

- **Extend urban x-sec (curb & gutter) as part of scheduled road rehab**
- **Community gateway features (community sign, landscaping)**
- **Post monitoring/data sharing with Police**
- **Community Watch Program (Township)**

OR 10 – Verschoyle Existing Conditions

- **Semi urban x-sec (paved shoulders)**
- **Street lighting**

OR 10 – Verschoyle Speed Data (24hr/7 day)



Legend

Speed Zone

60 Km/h

80 Km/h

85th Percentile

OR 10, Verschoyle Collision History

Year	2014	2015	2016	2017	2018	2019	2020	2021
Property Damage Only	1	2	0	1	0	0	0	1
Non-Fatal Injury	0	0	1	0	1	0	0	0
Fatal Injury	0	0	0	0	0	0	0	0
Total	1	2	1	1	1	0	0	1
Total Collisions 2014 – 2021:								

- **Historical collision data from 2014 to 2021:**
 - ▶ **7 total collisions**
 - ▶ **Avg 0.88 collisions/year**
 - ▶ **Collision Rate**
 - **0.58 per 1mil vehicle kms**
 - **Provincial Avg (2019) = 1.53 per 1mil vehicle kms**

OR 10, Verschoyle 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)
Ebenezer Rd to 150m north of Mount Elgin Rd – Rural	80	90	+10	80
150m north and 1,060m south of Mount Elgin Rd – Urban	60	70	+10	60
1,060m south of Mount Elgin Rd to Daniel Rd – Rural	80	90	+10	80

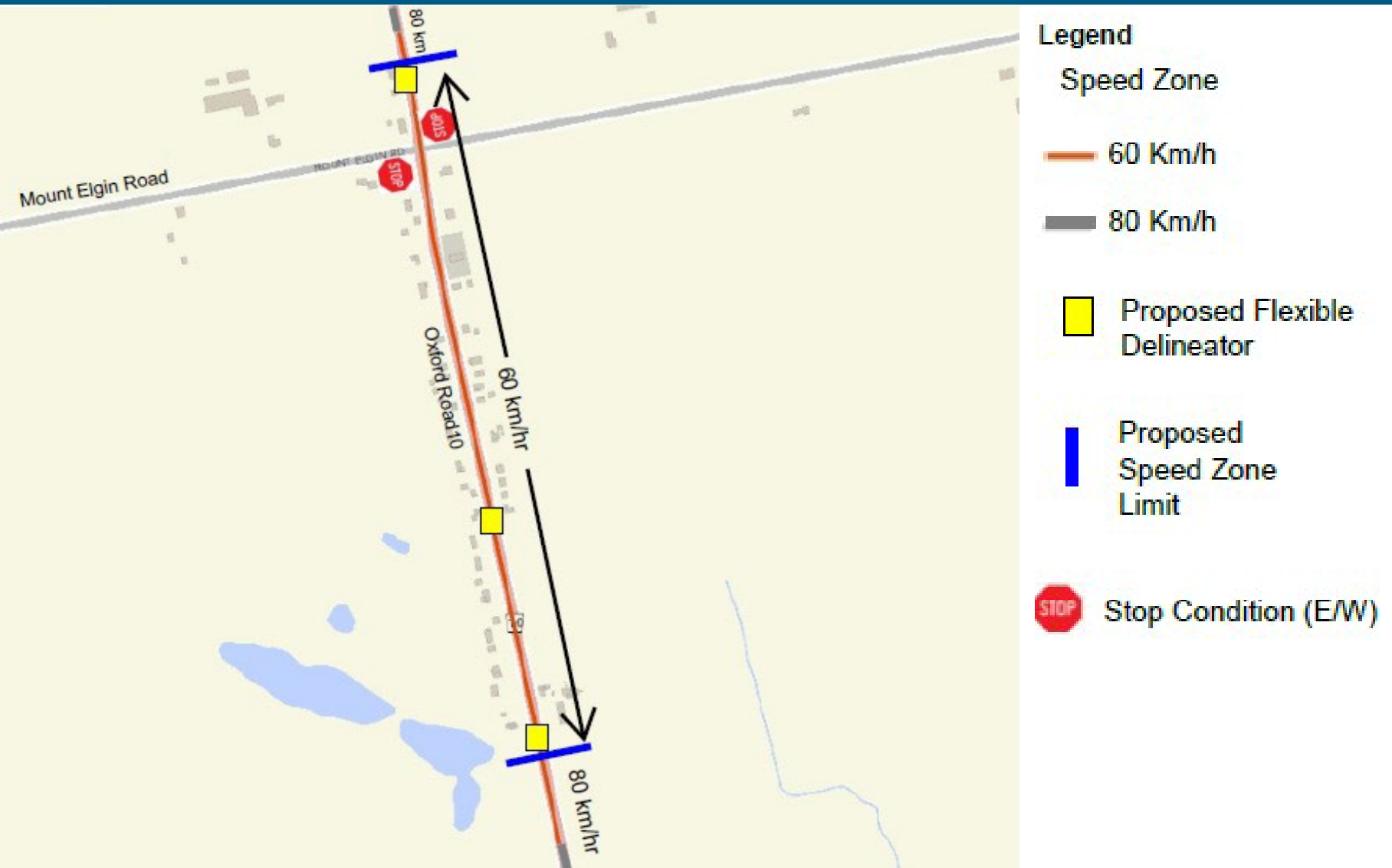
*TAC Canadian Guideline for Establishing Posted Speed Limits (2009)

OR 10 – Verschoyle

Speed & Road Safety Review Findings

- Excessive speeds outgoing at north & south approaches
- Marginally excessive speeds incoming at north & south approaches
- Limits of existing 60km/hr zone extend beyond the built up limits
- Current posted speed generally aligns (within 10km/hr) of TAC recommended posted speed
- Collision rate is lower than 2019 Provincial average

OR 10, Verschoyle Recommendations – Immediate



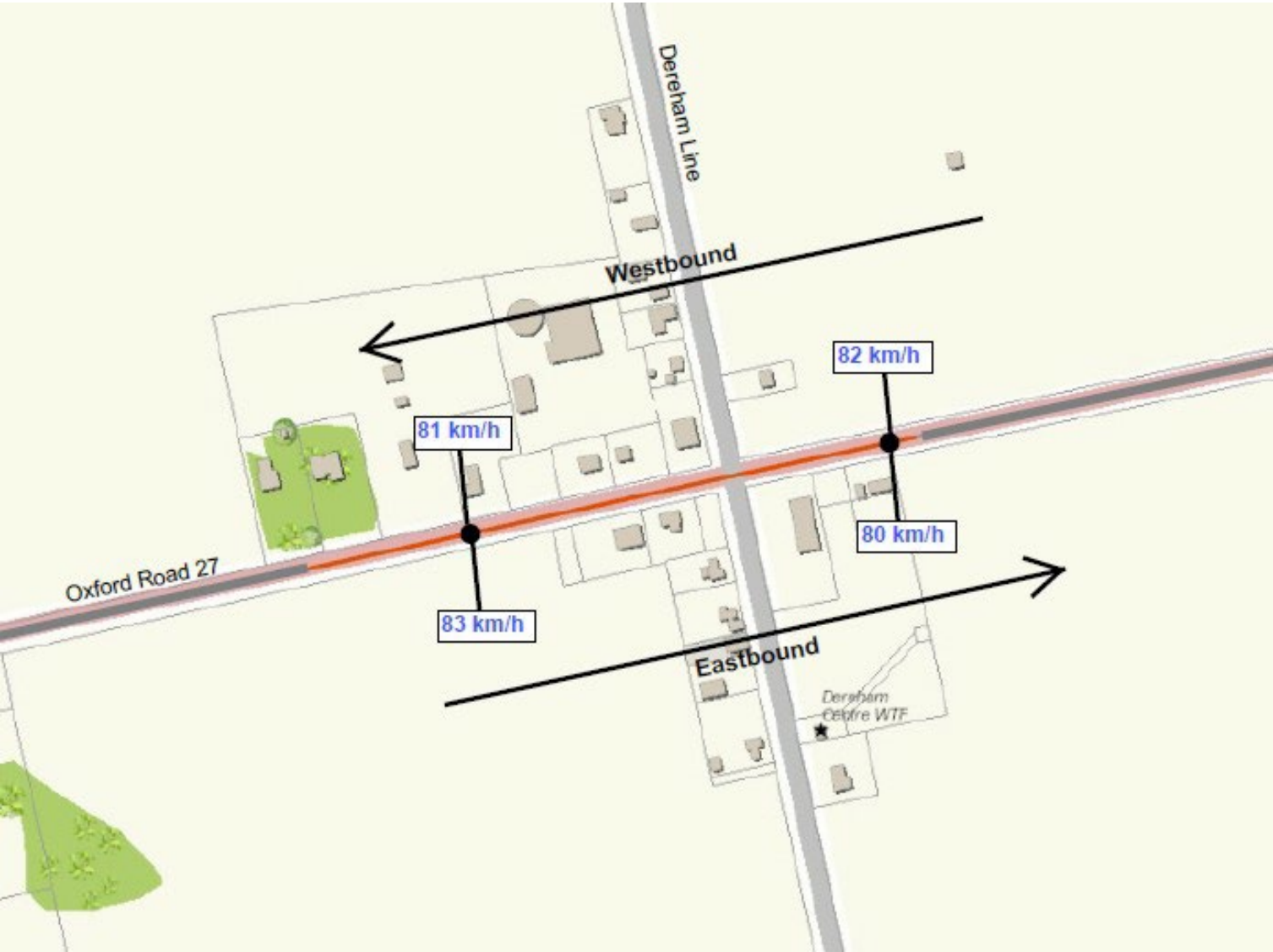
OR 10 – Verschoyle Future Considerations

- **Urbanize road x-sec (curb & gutter, sidewalk)**
- **Community gateway features (community sign, landscaping)**
- **Post monitoring/data sharing with Police**
- **Community Watch Program (Township)**

OR 27 – Dereham Centre Existing Conditions

- Rural x-sec
- No street lighting

OR 27 – Dereham Centre Speed Data (24hr/7 day)



Legend
Speed Zone

60 Km/h

80 Km/h

85th Percentile

OR 27 – Dereham Centre Collision History

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

- **Historical collision data from 2014 to 2021:**
 - ▶ **4 total collisions**
 - ▶ **Avg 0.50 collisions/year**
 - ▶ **Collision Rate**
 - **2.95 per 1mil vehicle kms**
 - **Provincial Avg (2019) = 1.53 per 1mil vehicle kms**

OR 27 – Dereham Centre 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)
Oxford Road 10 to 330m west of Dereham Line – Rural	80	80	0	80
330m west of Dereham Line to 120m east of Dereham Line – Urban	60	Urban – 70 Rural - 70	+10 +10	60
120m east of Dereham Line to Highway 19 – Rural	80	80	0	80

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

OR 27 – Dereham Centre Speed & Road Safety Review Findings

- **Excessive speeds throughout Dereham Centre**
- **Limits of existing 60km/hr zone extend beyond the built up limits on east end and don't extend to the built up limits at the west end**
- **Current posted speed generally aligns (within 10km/hr) of TAC recommended posted speed**
- **Collision rate is higher than average 2019 Provincial (due to low traffic volume)**

OR 27 – Dereham Centre Recommendations – Immediate



OR 27 – Dereham Centre Future Considerations

- **Urbanize x-sec (curb & gutter, sidewalk)**
- **Formalize parking lot/driveway access to SWOX municipal office**
- **Community gateway features (community sign, landscaping)**
- **Post monitoring/data sharing with Police**
- **Community Watch Program (Township)**

Next Steps

- **Public consultation**
- **Present to South-West Oxford Council**
- **County Council Authorization**
- **By-law amendment**
- **Implementation of immediate measures**
 - ▶ Speed limit and zone adjustments
 - ▶ Installation of electronic speed feedback signs
- **Post Monitoring**

Speed & Road Safety Concerns

THANK YOU