



Connecting Oxford 2024 - Transportation Master Plan

OXFORD COUNTY COUNCIL
JULY 12, 2023

OUTLINE

- What is Connecting Oxford 2024
- Master Plan Process
- Review of Oxford County
- Public Consultation Summary
- Mode Share Summary
- Preferred Transportation Strategies
- Infrastructure Implementation Plan



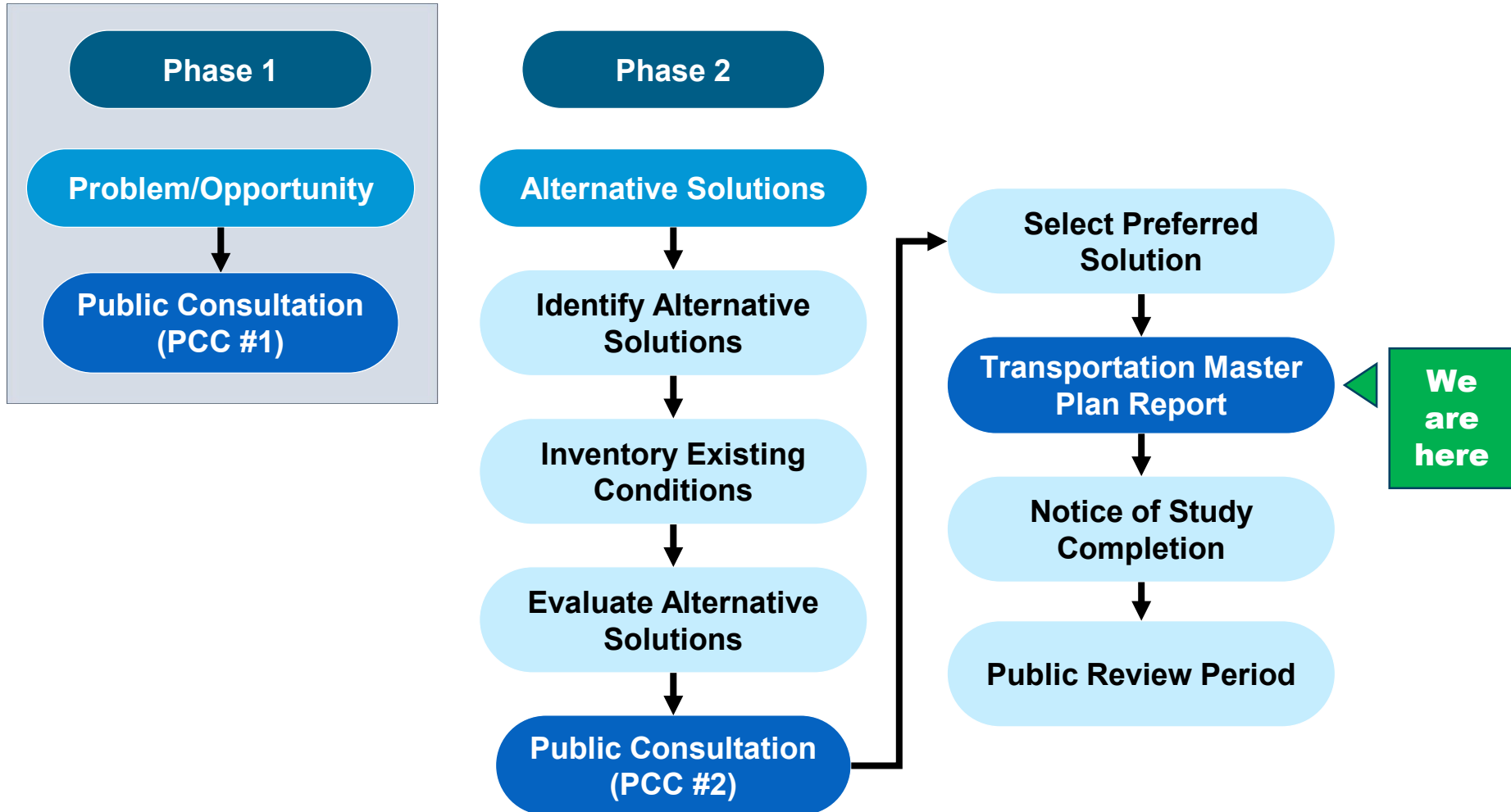
WHAT IS CONNECTING OXFORD 2024

- Connecting Oxford 2024, Oxford County's TMP is a strategic long term planning document that outlines and defines policies, programs and infrastructure improvements needed to manage both existing and future transportation demands to the year 2046.
- A safe, effective and sustainable multimodal transportation master plan which focuses on all modes of transportation with provisions to support freight/goods movement, agriculture equipment mobility, corridor access management and low carbon transportation.

MASTER PLAN DEVELOPMENT

- Adhere to Municipal Class Environmental Assessment Master Plan process – Phases 1 & 2
- Review of Existing and Future Conditions:
 - Population and Employment Growth to 2046
 - Resident/Non-Resident Trip Origins and Destinations
 - Existing Road Network Conditions and Multi-modal Transportation Systems
 - Transportation Mode Share
 - Future Conditions
- Public Consultation and Engagement
- Preferred Transportation Strategy to 2046

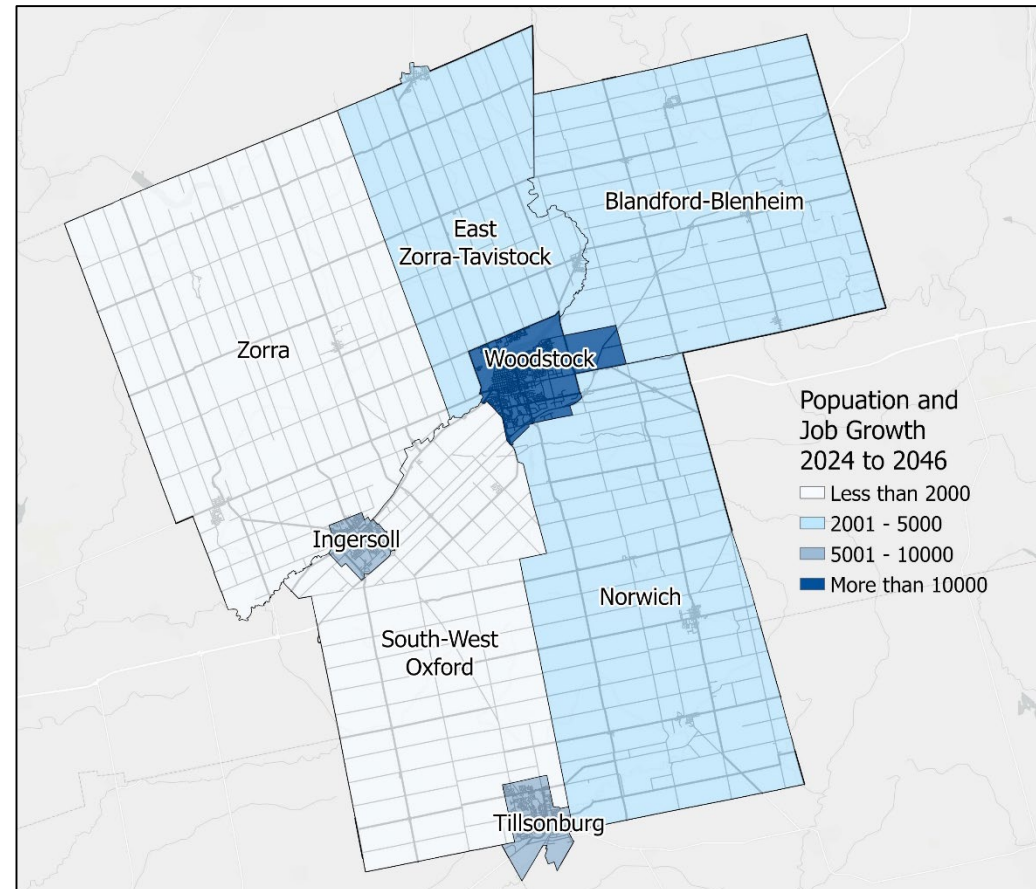
MUNICIPAL CLASS EA PROCESS



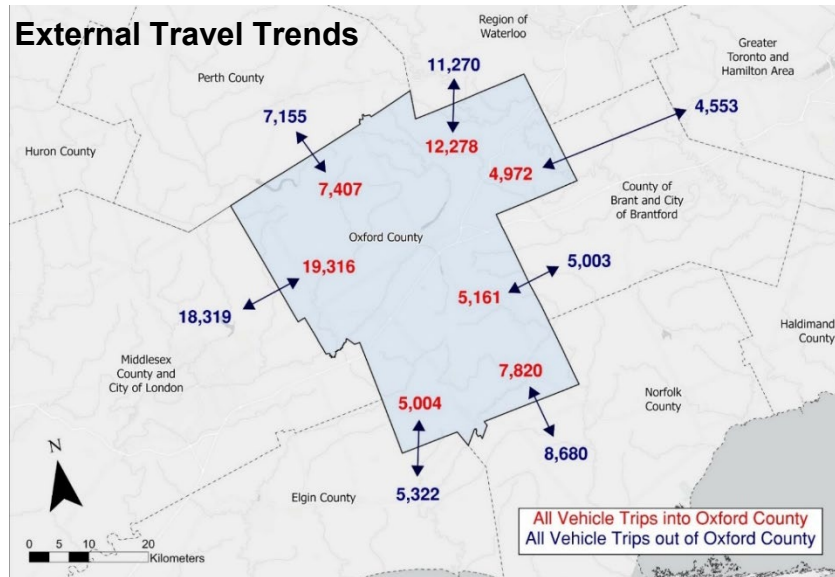
THE COUNTY IS GROWING

- Oxford County is expected to grow by ~ 34,000 residents and 15,000 jobs by 2046.
- Intensification & Secondary Plan Area expansions

	2024 - 2046 Population Growth	2024 - 2046 Job Growth
Oxford County	33,724	14,816
Woodstock	17,014	9,330
Tillsonburg	4,230	1,594
Ingersoll	4,186	2,218
Blandford-Blenheim	1,588	276
East-Zorra Tavistock	2,172	458
Norwich	2,258	492
South-West Oxford	1,046	206
Zorra	1,230	242



TRAVEL TRENDS – ORIGIN AND DESTINATION PATTERNS



Top 3 Destinations

- 1) Middlesex County
- 2) Region of Waterloo
- 3) Norfolk

Top 3 Origins

- 1) Middlesex County
- 2) Region of Waterloo
- 3) Norfolk

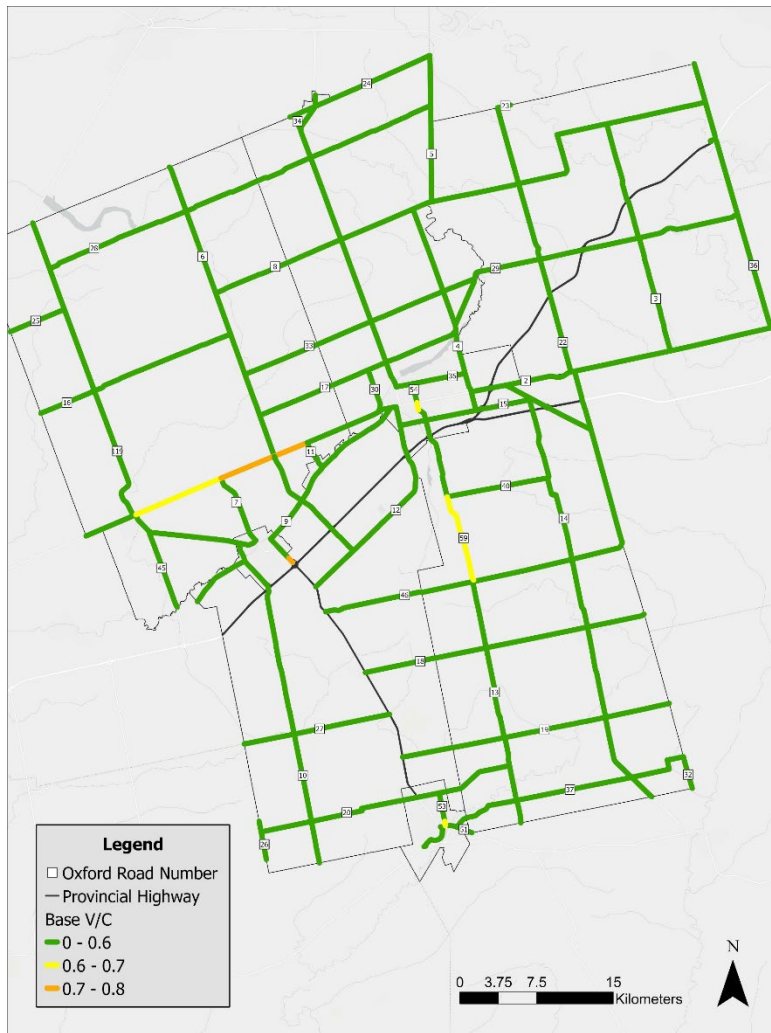
Top 3 Internal County Origin-Destination Patterns

- 1) Woodstock to Woodstock
- 2) Ingersoll to Ingersoll
- 3) Tillsonburg to Tillsonburg

Internal Travel Trends

		Origin							
		Woodstock	Tillsonburg	Ingersoll	Norwich	Zorra	East Zorra-Tavistock	South-West Oxford	Blandford-Blenheim
Destination	Woodstock	243,333	1,842	8,143	6,157	3,087	8,554	6,416	2,881
	Tillsonburg	1,965	69,054	1,593	3,205	237	68	3,701	21
	Ingersoll	9,139	1,455	71,991	443	4,214	376	6,685	120
	Norwich	7,321	3,456	507	20,050	244	274	1,245	210
	Zorra	3,591	397	4,681	234	15,421	671	808	102
	East Zorra-Tavistock	9,628	54	422	190	710	16,652	340	1,144
	South-West Oxford	8,149	4,194	7,419	1,291	743	370	6,931	122
	Blandford-Blenheim	3,593	23	161	224	117	1,235	95	7,445

EXISTING ROAD NETWORK ANALYSIS



What is Volume-to-capacity (V/C)?

Is a measure of the vehicular demand relative to the carrying capacity of the roadway based on known relationships with geometry, traffic control and driver behaviour.

V/C – 0.0 to 0.6

Free-flowing traffic with no delays.

V/C – 0.6 to 0.7

Stable traffic flow with little delays.

V/C – 0.7 to 0.8

Some restricted traffic flow. Decline in comfort and convenience

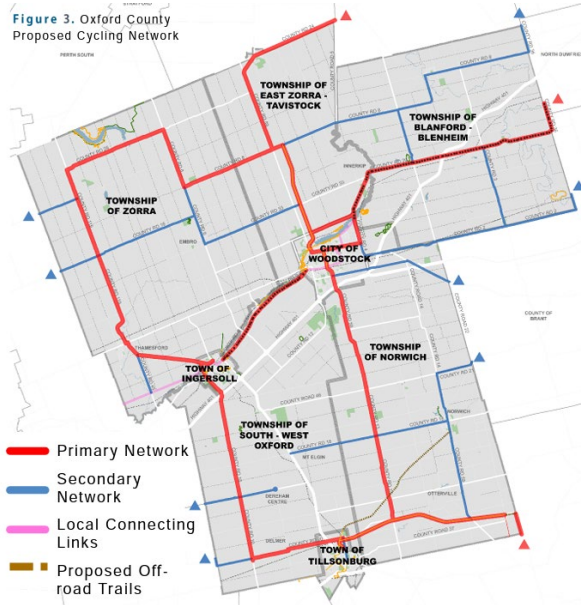
V/C – 0.8 +

Restricted traffic flow with increased delays. Approaching capacity

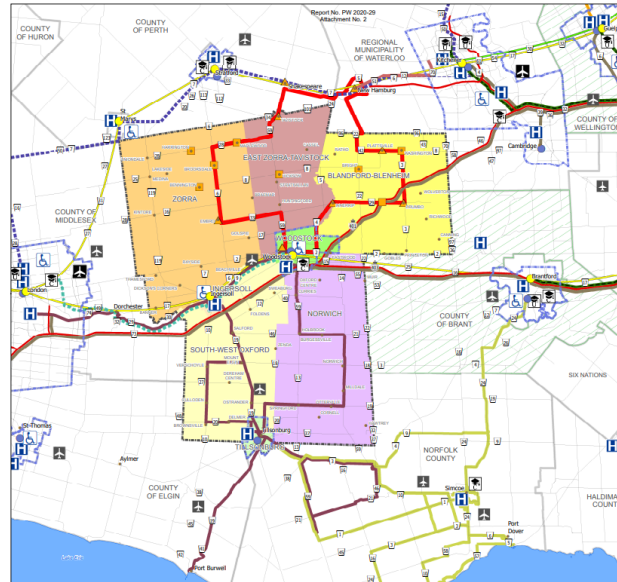
TRAVEL TRENDS – ACTIVE TRANSPORTATION, INTER-COMMUNITY TRANSIT, GOODS MOVEMENT & RAIL

Cycling Network

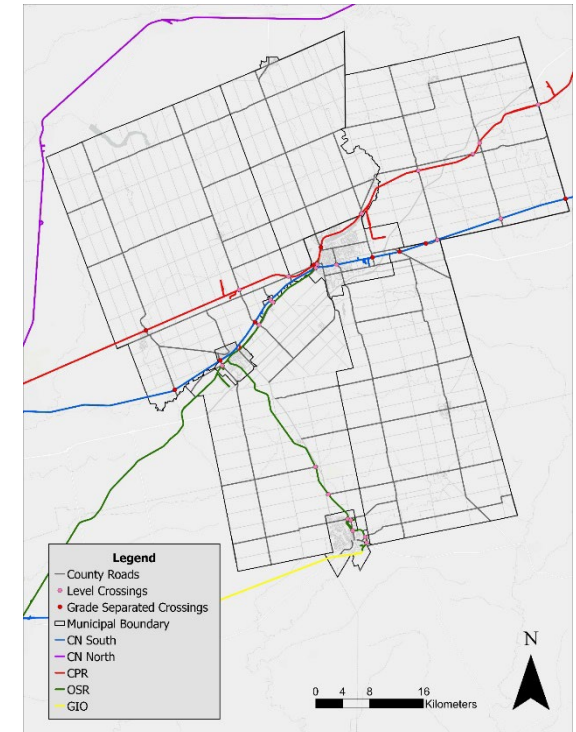
Figure 3. Oxford County Proposed Cycling Network



Inter-Community Transit

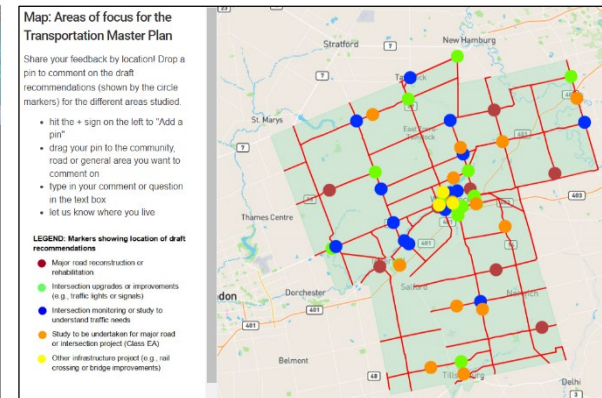


Rail Network



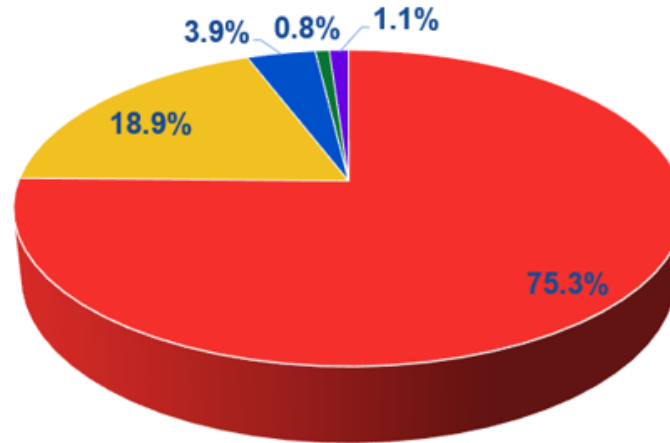
PUBLIC CONSULTATION AND ENGAGEMENT

- **“Speak Up Oxford”** website to post notices, information on consultation events, and other relevant project information
- **TMP Feedback surveys (2), interactive maps (2) and question forms (2)**
- **Public Consultation Centres / Pop-Up Events** (September 27, 2022, and March 21, 2023), both in-person (at all 3 urban centres) and virtual
- **Advisory Committees** (Internal, External and Economic Development)
- **Indigenous Communities** were contacted throughout the project and provided with relevant project information

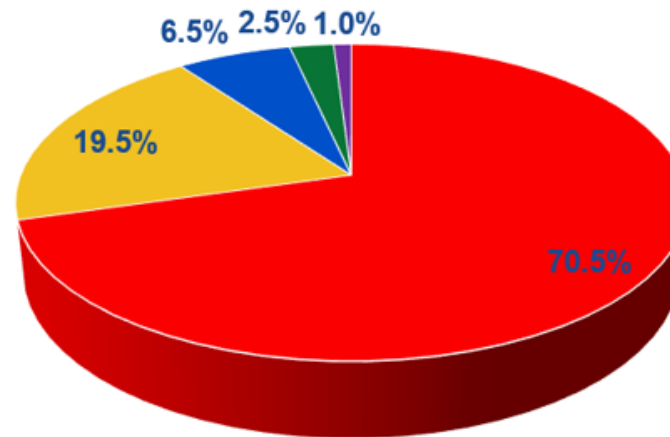


MODE SHARE – 2024 AND 2046

**Existing Mode Share
2024**



**Future Mode Share
2046**



PREFERRED TRANSPORTATION STRATEGY

Road Network Strategy:

- **Road Infrastructure Improvements** (road widening/urbanization, intersection upgrades, bridge and culvert replacements, railway crossing enhancements, intersection feasibility studies, etc.);
- **Corridor Management** policies to support County-wide Road Safety Strategy and Traffic Calming approach, Automated Speed Enforcement, and Access Management Guidelines; and
- Continued monitoring of the County road network to ensure **adequate Traffic Control and Levels of Service** are provided.

PREFERRED TRANSPORTATION STRATEGY

Active Transportation Strategy

- Infrastructure and policies to support **Active Transportation** (walking, cycling, etc.); and
- Ongoing provisions for wider asphalt platform (with edge line) for on-road cycling as part of regular road resurfacing programs, along with Share the Road signage installation; as per **2021 Cycling Master Plan implementation.**

PREFERRED TRANSPORTATION STRATEGY

People and Goods Movement Strategy:

- Ongoing Advocacy and coordination regarding regional **Freight and Passenger Rail infrastructure and service enhancements**;
- Initiatives and policies to promote **Transportation Demand Management** (carpooling, telecommuting, flexible work hours, work-from-home etc.); and
- Ongoing infrastructure provisions to accommodate freight transport and agricultural machinery while promoting accessibility and route connectivity.

PREFERRED TRANSPORTATION STRATEGY

Transportation System Sustainability & New Technology Strategy:

- Ongoing implementation of **Low Carbon Transportation and New Technology alternatives** (electric vehicle charging stations, alternative fuel vehicles, roundabout intersection improvements, autonomous vehicles, etc.).

INFRASTRUCTURE IMPLEMENTATION PLAN

Major Road Reconstruction / Rehabilitation / Urbanization

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Blandford-Blenheim	Oxford Road 3 (Road part of Princeton Drainage Project includes Urbanization)	✓		
Woodstock	Oxford Road 9 (Oxford Road 2 to #226 Ingersoll Road) - Phase 2 *	✓		
Zorra	Oxford Road 16 (from 31st Line to Kintore) - Phase 2	✓		
Zorra / Norwich	Oxford Road 19 (Highway 19 to Norfolk County Border)		✓	
Tillsonburg	Oxford Road 53 (Brock Street E to Highway 19)			✓
Woodstock	Oxford Road 59 (Dundas Street to Henry Street)			✓
Woodstock	Oxford Road 35 (Oxford Road 59 to Oxford Road 54) *	✓		
Woodstock	Oxford Road 35 (Oxford Road 54 to Lansdowne Avenue) *		✓	
Woodstock	Oxford Road 35 (Woodall Way to Oxford Road 4)		✓	
Ingersoll	Oxford Road 9 / King Street (Oxford Road 10 to Town Limits) ⁽¹⁾	✓		
Blandford-Blenheim	Oxford Road 22 / Oxford Road 8 (in the village of bright)		✓	
Norwich	Oxford Road 59 (within the village of Burgessville)	✓		

Note: * - The project will include the implementation of the cycling facility of the Primary Network as identified in the Cycling Master Plan

Note: (1) - The project should include coordination with an improvement identified in the County's 2024 WWWW MP.

INFRASTRUCTURE IMPLEMENTATION PLAN

Bridge / Culvert Rehabilitations

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Countywide	2024 Design (2026 Construction)	✓		
Countywide	2025 Design (2027 Construction)	✓		
Countywide	2026 Design (2028 Construction)	✓		
Countywide	2027 Design (2029 Construction)	✓		
Countywide	2028 Structures: 843927, 856645, 816765, 324873, 593175 & 963929	✓		
Countywide	2028 Design (2030 Construction)	✓		
Countywide	2029 Structures: 596279, 596020, 684656, 842608, 376551 & 686115		✓	
Countywide	2029 Design (2031 Construction)		✓	
Countywide	2030 Structures: 816111, 684200, 195840, 885646, 465125 & 975130 (Boundary)		✓	
Countywide	2030 Design (2032 Construction)		✓	
Countywide	2031 Structures: 922773, 927566, 263226, 375488, 886117 & 592540		✓	
Countywide	2031 Design (2033 Construction)		✓	
Countywide	2032 Structures: 884114, 595880, 375739, 565718, 375770, 375806, & 985320 (Boundary)		✓	
Countywide	2032 Design (2034 Construction)		✓	
Blandford-Blenheim	Culvert Rehab. 686444 - OR 2, 1.7km E of 22 (Boundary)	✓		
Blandford-Blenheim	Bridge Rehab. 686843 - OR2, 1.3km W of 3 (Boundary)	✓		
Blandford-Blenheim	Culvert Repl. 687425 - OR 2, 4.35km E of 25 (Boundary)	✓		
Blandford-Blenheim	Culvert Rehab. 715213 - OR 4, 0.75km N of 35	✓		
Blandford-Blenheim	Bridge Rehab. 805907 - OR 29, 0.3km E of 4	✓		

INFRASTRUCTURE IMPLEMENTATION PLAN

Bridge / Culvert Rehabilitations (cont'd)

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Blandford-Blenheim	Culvert Rehab. 886609 - OR 8, 2.7km E of 22	✓		
Norwich	Bridge Rehab. 774050 - OR 14, 3.2km N of 21	✓		
Norwich	Culvert Rehab. 684802 - OR 2, 0.4km W of 30	✓		
Norwich	Culvert Rehab. 814230 - OR 22, 0.3km N of Gunn's Hill Rd (Boundary)	✓		
Norwich	Bridge Rehab. 225536 - OR 19/Main St, 2.1km W of 59	✓		
Norwich	Bridge Rehab. 773216 - OR 59, 0.15km S of 18	✓		
Norwich	Bridge Rehab. 813810 - OR 22, 0.5km N of 21 (Boundary)	✓		
Norwich	Bridge Rehab. 814010 - OR 22, 0.5km S of Substation Rd (Boundary)	✓		
South-West Oxford	Bridge Rehab. 224538 - OR 19, 2.8km E of 19	✓		
South-West Oxford	Culvert Repl. 263548 - OR 27, 0.1km E of 10	✓		
Woodstock	Bridge Rehab. 59755 - OR 59, 0.4km N of 35	✓		
Zorra	Culvert Repl. 194950 - OR 119, 0.5km S of 2	✓		
Zorra	Bridge Rehab. 843613 - OR 16, 0.01km E of 31st Ln, with stream realignment	✓		
Zorra	Bridge Rehab. 682935 - OR 2, 0.15km E of 119	✓		
Zorra	Bridge Rehab. 784064 - OR 33, 0.4 km E of 6	✓		
Zorra	Culvert Repl. 843164 - OR 16, 1.9km E of 119	✓		
Zorra	Bridge Rehab. 374623 - OR 6, 0.1km N of 9	✓		
Zorra	Bridge Rehab. 643977 - OR 16, 0.5km W of 6	✓		
Zorra	Culvert Repl. 682563 - OR 2, 0.13km E of Cobble Hill Road (Boundary)	✓		

INFRASTRUCTURE IMPLEMENTATION PLAN

Cycling Infrastructure

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Woodstock / East Zorra-Tavistock	Oxford Road 4 from Oxford Road 35 to Oxford Road 29	✓		
Blandford-Blenheim	Oxford Road 29 from Oxford Road 4 to Oxford Road 36	✓		
Blandford-Blenheim	Oxford Road 36 from Oxford Road 29 to Piper St			✓
Norwich	Oxford Road 13 from Oxford Road 59 to Trans Canada Trail		✓	
South-West Oxford	Oxford Road 9 from Woodstock to Ingersoll	✓		
Woodstock / East Zorra-Tavistock	Oxford Road 17 from Hickson Trail to Oxford Road 4		✓	
East Zorra-Tavistock	Oxford Road 59 from Oxford Road 8 to Oxford Road 24		✓	
East Zorra-Tavistock	Oxford Road 24 from Oxford Road 59 to Punkeydoodles Ave	✓		
Woodstock	Oxford Road 59 from Hickson Trail to Oxford Road 35		✓	
Woodstock	Oxford Road 54 / Oxford Road 59 from Oxford Road 35 to Juliana Drive		✓	
Zorra	Oxford Road 6 from Oxford Road 28 to Oxford Road 8			✓
Zorra	Oxford Road 8 from Oxford Road 6 to Hickson Trail			✓
Zorra	Oxford Road 10 from Oxford Road 20 to Oxford Road 119			✓
Norwich	Oxford Road 59 from Oxford Road 54 to Oxford Road 13			✓
Zorra	Oxford Road 119 from Oxford Road 7 to Oxford Road 28			✓

INFRASTRUCTURE IMPLEMENTATION PLAN

Intersection Upgrades / Improvements

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Blandford-Blenheim	Oxford Road 8 & Oxford Road 36 (Roundabout) – Boundary Waterloo Led	✓		
Woodstock	Oxford Road 15 & Springbank Avenue – North Right Turn Lane	✓		
Norwich	Oxford Road 59 & Palmer, Oxford 59 & Tidey – Turning Radius Improvements	✓		
Zorra	Oxford Road 6 & Oxford Road 16 – Overhead Flashing Lights	✓		
East Zorra-Tavistock	Oxford Road 59 & Oxford Road 28 – Overhead Flashing Lights	✓		
Zorra	Oxford Road 2 & Middleton Street – Signalization and Turning Lanes		✓	
Woodstock	Oxford Road 59 & Pattullo Avenue – Realignment (City of Woodstock Led)	✓		
Woodstock	Oxford Road 12 (Mill St) and Oxford Road 2 (Dundas St.) - Phase 2 – North Right Turn Lane		✓	
Tillsonburg	Oxford Road 20 (North Street) & Oxford Road 53 (Tilson Avenue) – Signalization ⁽¹⁾	✓		
Woodstock	Oxford Road 12 & Juliana Drive – Roundabout		✓	
Woodstock	Oxford Road 12 & Athlone Avenue – Roundabout		✓	
East Zorra-Tavistock	Oxford Road 24 & Oxford Road 5 (Punkydoodles) – Study to be completed at end of 2023	✓		
Woodstock	Oxford Road 4 & Oxford Road 2 – Duel Left Turn Lane		✓	
Norwich	Oxford Road 2 & Oxford Road 55 (Township 53) – Roundabout	✓		
Ingersoll	Oxford Road 10 & Thomas Street – Signalization			✓
Ingersoll	Oxford Road 10 & Oxford Road 9 – Signalization			✓
Ingersoll	Oxford Road 10 & Union Road – Signalization			✓

Note: (1) - The project should include coordination with an improvement identified in the County's 2024 W/WW MP.

INFRASTRUCTURE IMPLEMENTATION PLAN

Intersection Control Feasibility Studies

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Norwich	Oxford Road 13 & Oxford Road 18		✓	
Blandford-Blenheim	Oxford Road 29 & Oxford Road 36		✓	
South-West Oxford	Oxford Road 6 & Oxford Road 9		✓	
East Zorra-Tavistock	Oxford Road 59 & Oxford Road 24		✓	
Woodstock	Oxford Road 35 & Springbank Avenue	✓		
Woodstock	Oxford Road 54 & Oxford Road 35			✓
Woodstock	Oxford Road 15 & Oxford Road 12		✓	
Zorra	Oxford Road 2 & Oxford Road 6			✓
Zorra	Oxford Road 6 & Oxford Road 33	✓		
Zorra	Oxford Road 28 and Oxford Road 6	✓		
East Zorra-Tavistock	Oxford Road 60 and Oxford Road 33	✓		
South-West Oxford	Oxford Road 6 and Karn Road	✓		
East Zorra-Tavistock	Oxford Road 8 and Oxford Road 60			✓
Zorra	Oxford Road 119 and Oxford Road 2		✓	
Ingersoll	Oxford Road 10 and Thompson Road			✓
Norwich	Oxford Road 13 / Oxford Road 46 / Oxford Road 49	✓		
Woodstock	Oxford Road 9 & Oxford Road 2		✓	

INFRASTRUCTURE IMPLEMENTATION PLAN

Other Infrastructure Projects

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Blandford-Blenheim	Oxford Road 3 - (Drain part of Princeton Drainage Project by Township of BB)	✓		
Ingersoll	Railway Crossing Upgrades (add Gates) – Oxford Road 10			✓
Ingersoll	Railway Crossing Upgrades (add Gates) – Oxford Road 9			✓

Transportation Plans, Condition Assessments and Other Studies

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Countywide	Transportation Master Plan	✓	✓	✓
Countywide	Transportation Development Charges Technical Study	✓	✓	✓
Countywide	Road Needs Study	✓	✓	✓
Countywide	Cycling Master Plan	✓	✓	✓
Countywide	Trails Master Plan	✓		✓
Countywide	Goods Movement Priority Network Study	✓		
Countywide	Grade Level Crossing Assessment		✓	

INFRASTRUCTURE IMPLEMENTATION PLAN

Class Environmental Assessment Studies

Location	Action / Extent	Implementation Horizon		
		1 - 5 Yrs.	6 - 10 Yrs.	11+ Yrs.
Norwich	Oxford Road 18 (Oxford Road 13 to Highway 19)	✓		
Tillsonburg / South-West Oxford	Oxford Road 20 (Tillsonburg to Brownsville) *		✓	
Blandford-Blenheim	Oxford Road 22 (Oxford Road 22 to Oxford Road 21/New Dereham Road)			✓
Zorra	Oxford Road 28 (Oxford Road 119 to Oxford Road 5) *	✓		
Norwich	Oxford Road 14 (Oxford Road 15 to Oxford Road 59)		✓	
Blandford-Blenheim	Oxford Road 36 (Oxford Road 47 to Oxford-Waterloo Road)			✓
Woodstock	Oxford Road 4 & Oxford Road 15 Intersection, Oxford Road 4 Realignment	✓		
Tillsonburg	Oxford Road 53 (Brock Street E to Highway 19)		✓	
Tillsonburg	Oxford Road 53 (Oxford Road 20 to Brock Street E)		✓	
Ingersoll	Oxford Road 119 (Clarke Road to Highway 401)	✓		
Woodstock	Oxford Road 59 (Dundas Street to Henry Street)			✓
Woodstock	Oxford Road 17 (Oxford Road 59 to Oxford Road 4), Oxford Road 17 & Oxford Road 4 Intersection	✓		
East Zorra-Tavistock	Oxford Road 60 (Oxford Road 8 to Oxford Road 4), Oxford Road 60 & Oxford Road 4 Intersection	✓		
Tillsonburg	Oxford Road 51 (Highway 19 to Mall Road)			✓
Norwich	Oxford Road 13 / Oxford Road 46 / Oxford Road 49			✓
Woodstock	Grade Separation - Oxford Road 59 and CNR		✓	
Woodstock	Grade Separation - Oxford Road 9 and CNR		✓	

Note: * - The project will include the implementation of the cycling facility of the Primary Network as identified in the Cycling Master Plan

THANK YOU!

Questions?



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