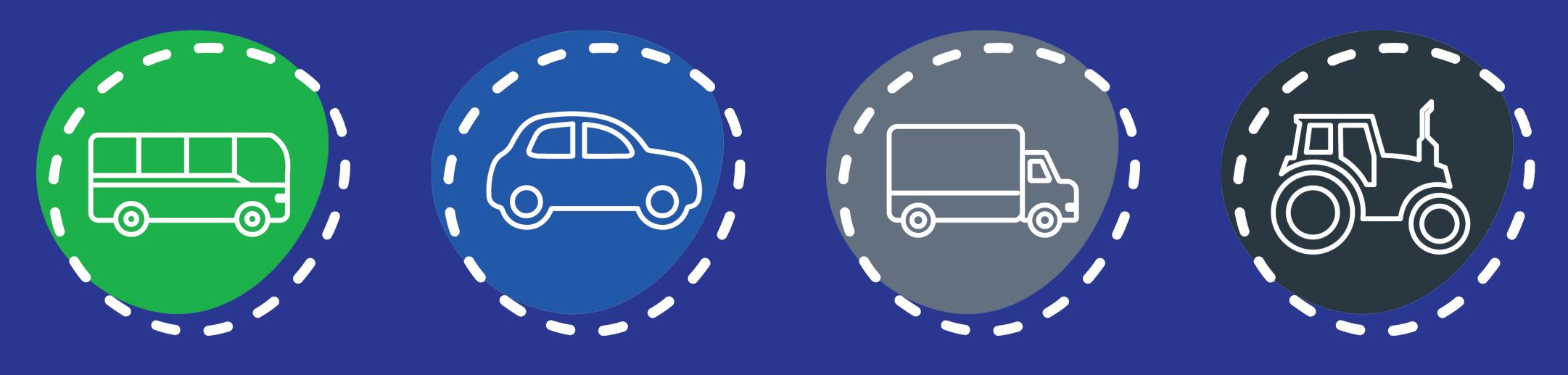
## MIDDLESEX CENTRE TRANSPORTATION MASTER PLAN



#### COUNCIL PRESENTATION December 13, 2023









### AGENDA

- Study Overview and Process
- Policy and Planning Alignment
- Strategic Framework
- Recommended Actions
- Implementation
- Next Steps





## **Study Overview and Process**















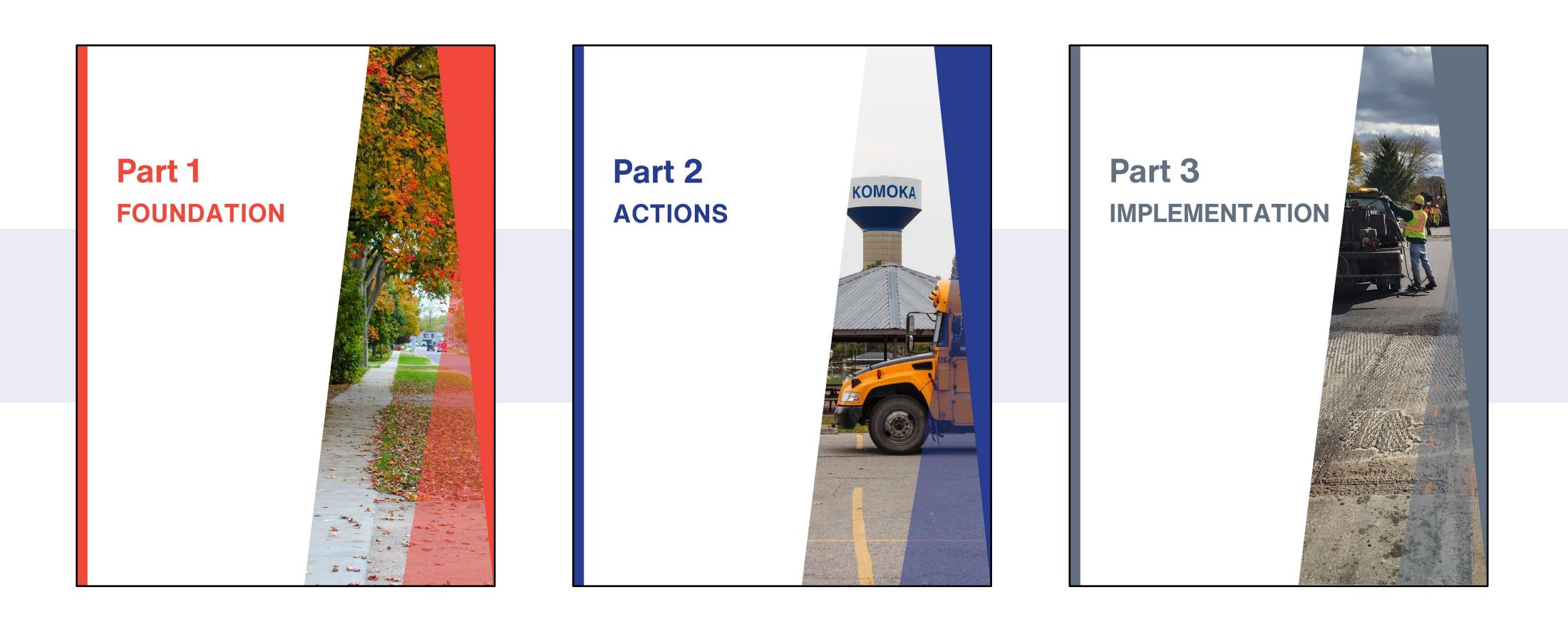


### OVERVIEW

### The Municipality's First Standalone **Transportation Master Plan (TMP)**

The TMP is a long-range strategic plan to guide transportation policies, infrastructure and services for the Municipality's transportation system through 2046.







#### **Transportation** includes the movement of people and goods by all travel modes: car and truck, rail, public transit, cycling, walking and more.

### STUDY PROCESS

#### PHASE 1

Needs and Opportunities

#### Round 1 Engagement January-February 2023

- Public Information Centre 1
- Public Opinion Survey 1
  266 submissions received
- Interactive Mapping Tool
- Stakeholder Group Meeting



#### PHASE 2

#### Transportation Network Development

#### Round 2 Engagement October-November 2023

- Public Information Centre 2
- Public Opinion Survey 2



#### PHASE 3

#### Transportation Master Plan Report



We are here

#### **Council Approval and Public Review Period**

Council Presentation 30-Day Statutory Public Review Period

### WHAT WE HEARD

#### **Common themes shared from the public and stakeholders:**

### Phase 1 Engagement:

Identified needs and opportunities:

- Need to accommodate growth well
- Glendon Drive operational concerns
- Safety issues such is speeding
- Safety concerns with pedestrian crossings of County Roads
- Inadequate separation between vehicles and cyclists
- Mixed support for increased sidewalks
- Transit services would be helpful esp. for travel to London
- Support from City of London staff on new Highway 402 interchange

### Phase 2 Engagement:

- General support of TMP goals • Local small-town character is important • Generally positive response to draft
- actions
- Progress on Glendon Drive improvements is top of mind
- Agreement with identified sidewalk infill priorities
- but should not impact driving times provide great value
- Cycling infrastructure is important, A new Highway 402 interchange would



## **Policy and Planning Alignment**















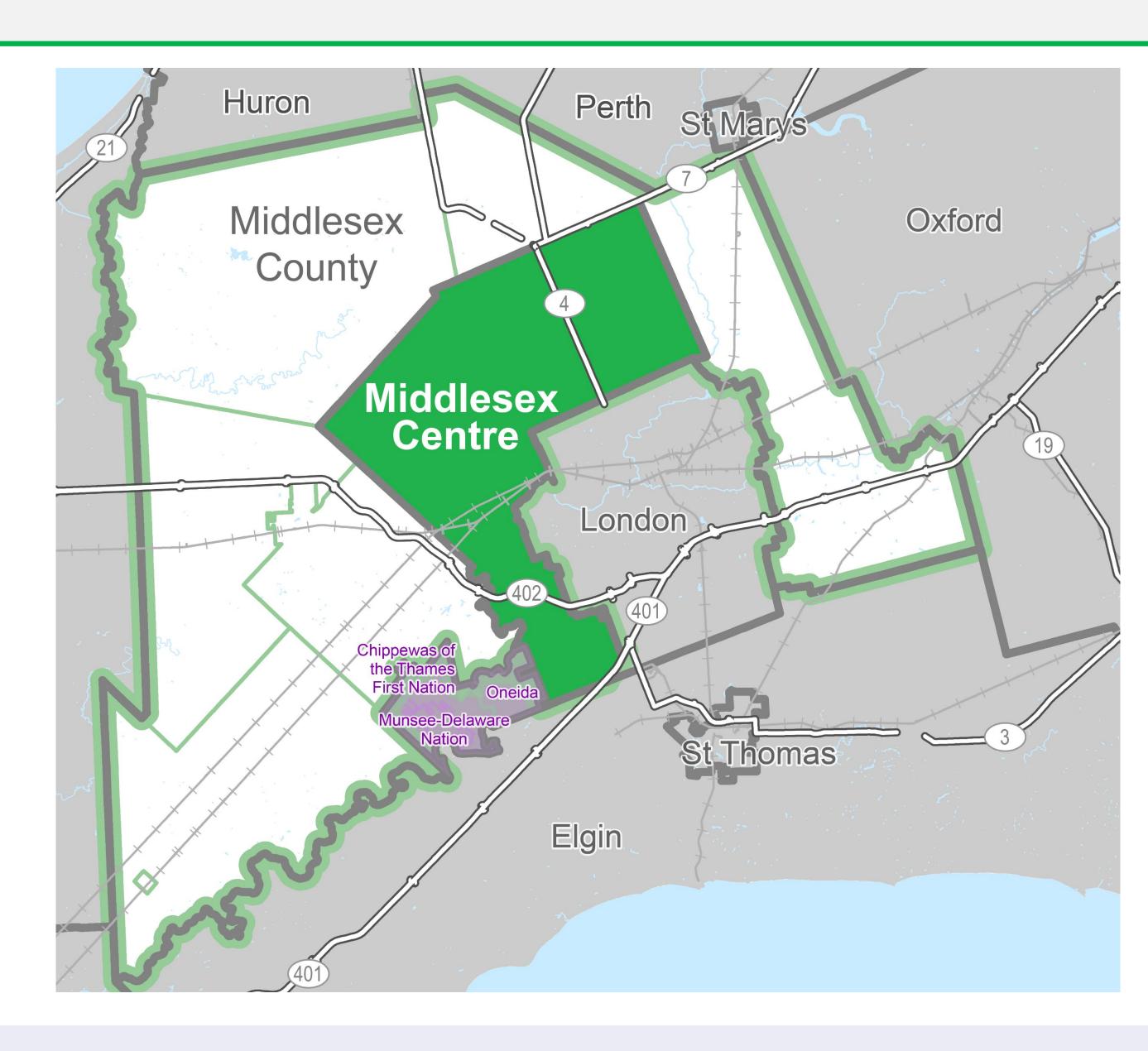
### **AN INTERCONNECTED NETWORK**

### **A Municipal Transportation Network Interconnected with Broader Transportation Networks**

While the focus of the TMP is on elements under Municipality jurisdiction, transportation in Middlesex Centre is integrated with and influenced by the broader transportation system.

How does the **TMP study fit** with the broader transportation system?





#### **Province of** Ontario

 Provincial Policy Statement Connecting the Southwest Provincial Cycling Network Conservation Authorities



Middlesex County

- Official Plan
- Cycling Strategy





- Strategic Plan
- Official Plan
- Trails Master Plan
- Vision Zero
- Servicing Master Plan

### ALIGNING WITH COUNCIL'S STRATEGIC PLAN

### The TMP is informed by Middlesex Centre Strategic Plan 2021-2026 • Of the five Strategic Priorities, the TMP focus is Sustainable Infrastructure and Services, which includes the objective of improved

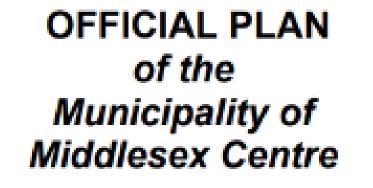
safety for road users





## **ALIGNING WITH THE NEW OFFICIAL PLAN**

Together, the OP and TMP provide a blueprint for transportation priorities and growth management, long-term planning, and funding of transportation networks.





November, 202



#### The TMP alignment with OP policies includes: Promoting and protecting the predominantly agricultural character and

- economy
- Maintaining and improving network efficiency and safety
- Considering bicycle and pedestrian feasible, between settlement areas
- Direct connections to new employment lands





# transportation options within and, where

#### Support of urban areas and Village Centres e.g. advocating for greater recognition of Municipality priorities along County roads

### **ALIGNING WITH COUNTY PRIORITIES**

Transportation policies play a key role in the County's vision of its future. The County's Official Plan and Cycling Strategy and have informed the development of the Middlesex Centre TMP.



and policies includes:

- Formalizing a road hierarchy integrated with County roads and Provincial highways
- Encouraging a high standard of urban design by prioritizing principles such as pedestrianization
- Facilitating economic development opportunities adjacent to Provincial 400series highways (e.g. Delaware)
- Supporting and building on the County **Cycling Network Plan**
- Encouraging greater electric vehicle usage through the provision of charging infrastructure



## The TMP alignment with County initiatives

## Strategic Framework















### **TRANSPORTATION VISION**

### **A Vision for** Transportation

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Municipality of Middlesex Centre Transportation Master Plan | Council Presentation



**Transportation networks and services** will provide the connectivity needed to move people and goods within, to and from our community safely, reliably and efficiently, while supporting a strong quality of life for Middlesex Centre residents, reducing negative environmental impacts, and exercising municipal fiscal responsibility.



### **TRANSPORTATION GOALS**

#### **3 OVERARCHING** GOALS Cross-cutting and inform all TMP recommendations

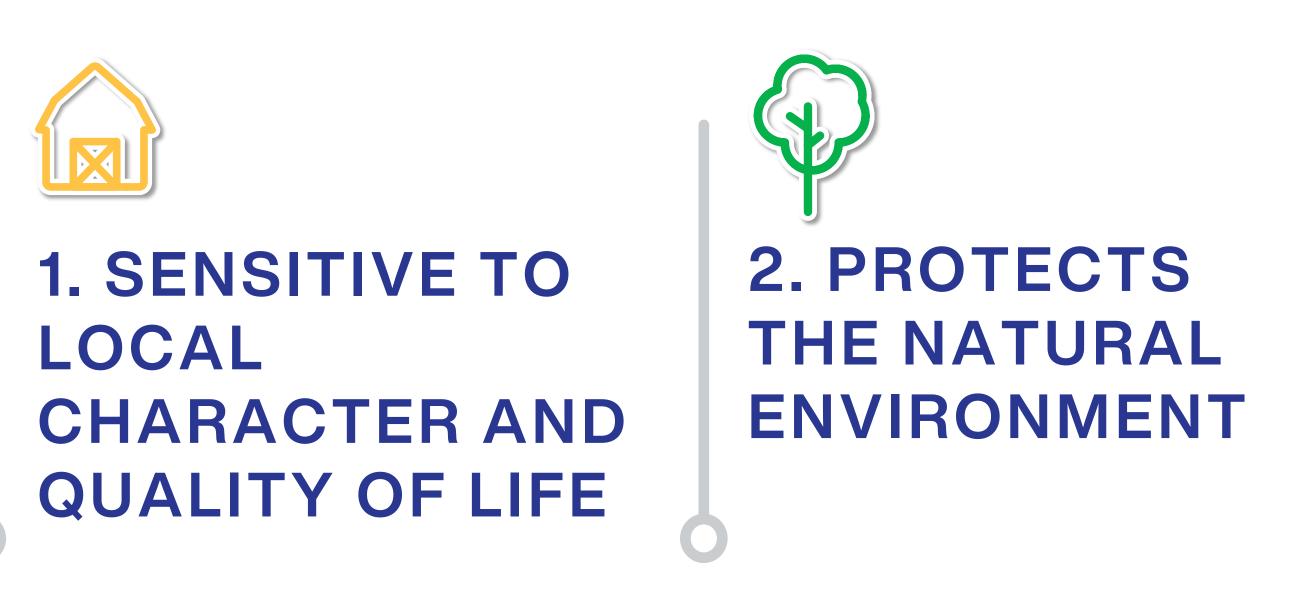
#### **3 MOBILITY GOALS** Achievable through mode-specific actions







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#### **4. PROVIDES SAFE AND EFFICIENT CONNECTIVITY**

**5. PROMOTES HEALTHY LOCAL MOBILITY** 

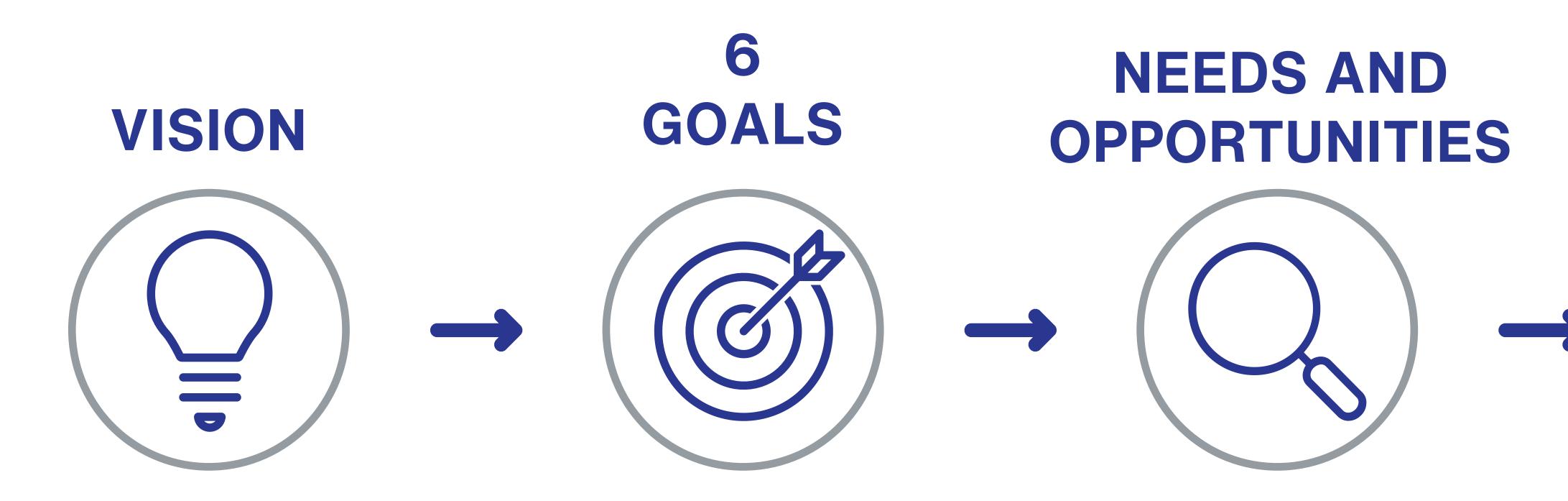
#### **6.** SUPPORTS LOCAL INDUSTRY







#### The development of transportation network recommendations followed a step-by-step process.



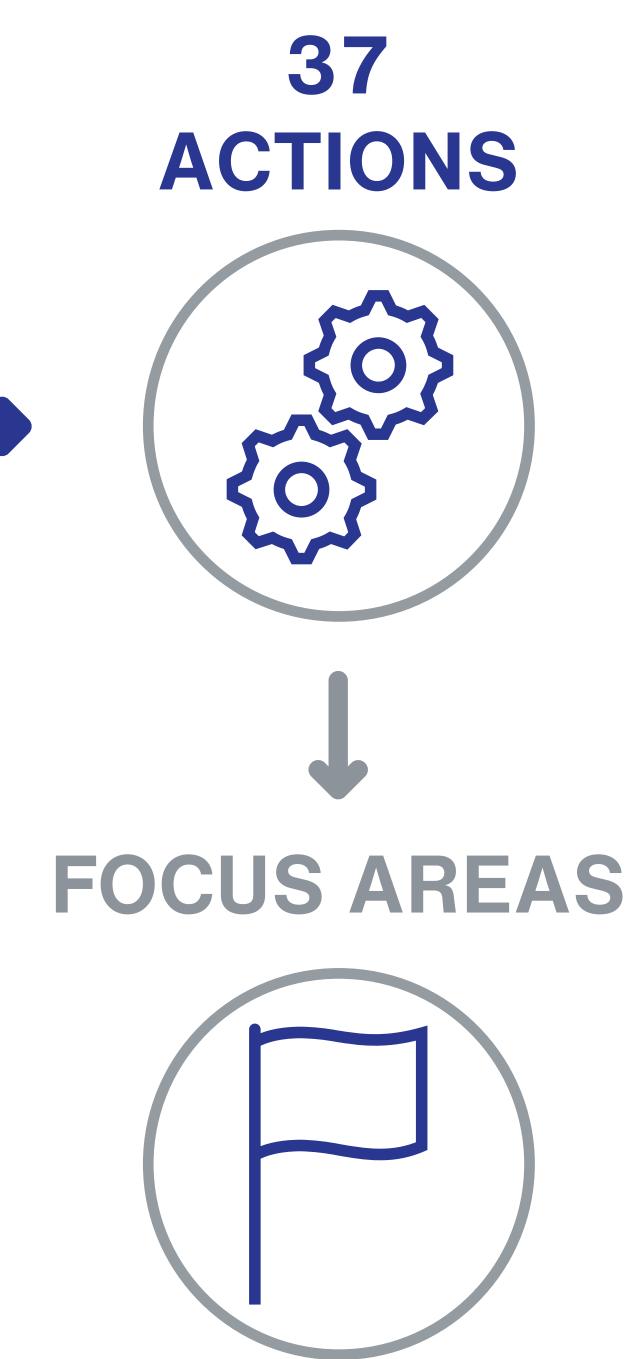
Actions vary in scope and include:

- New or expanded infrastructure
- Updated policies, strategies, guidelines and decisionmaking frameworks
- Collaborating with, seeking partnerships with and advocate to the County, the Provincial and adjacent municipalities

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### **NETWORK DEVELOPMENT PROCESS**





## **Recommended Actions**















### **GOAL 4: Provides Safe and Efficient Connectivity**



Supports safe, efficient and dependable personal (passenger) travel between, to and from Middlesex Centre communities and activities

#### **Road Design and Classification**

- Road capacity improvements
- Municipal road classification
- County roads urban context considerations

#### **Road Safety**

- Addressing driver behaviour concerns
- Collision review and mitigations
- At-grade rail crossing review

#### **Passenger Transit Services**

- Middlesex County Connect
- Consolidated passenger transit information

#### Resiliency

- Stormwater management
- Road surface conversion policy
- Electric vehicle charging infrastructure





• Other area passenger transit services

Travel Demand Management strategy

### **GOAL 4: Provides Safe and Efficient Connectivity (cont'd)**

#### **Road Capacity Action:**

 Support and collaborate with Middlesex County on the implementation of Glendon Drive improvements.



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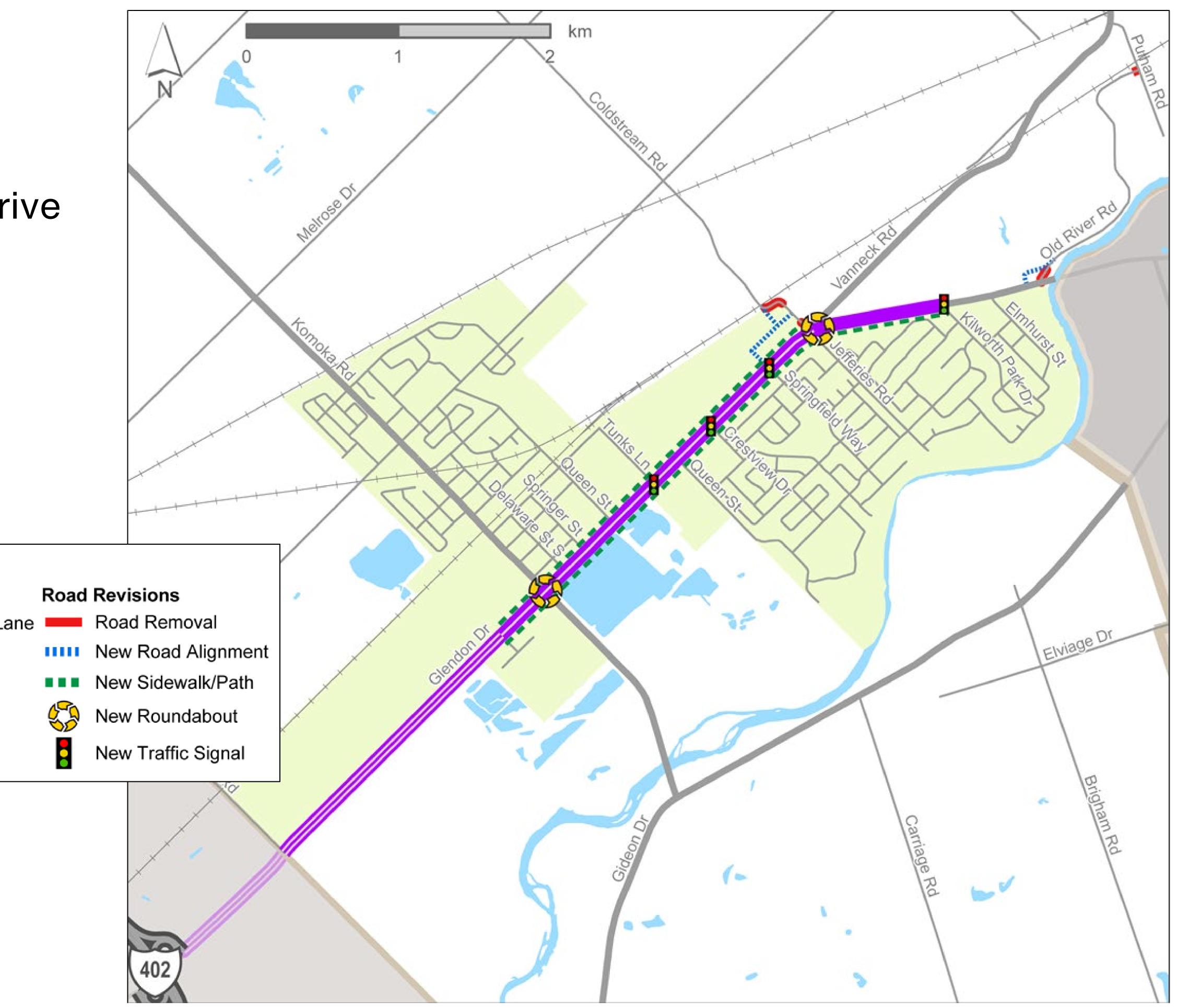
Settlements

#### **Existing Road Alignment**

- Provincial Freeway
- County Road
- Local Road

#### Road Widenings

- 2 Lanes with Centre Passing Lane
  - 2 Lanes with Centre
  - 2 Lanes No Median





### **GOAL 4: Provides Safe and Efficient Connectivity (cont'd)**

#### **Road Classification Actions:**

- Adopt a new road classification framework and map including designations for urban and rural roads
- Implement upgrades to existing roads identified as collector roads
- Encourage the County to update County functional road classification and associated design standards for greater recognition of Middlesex **Centre priorities within urban** contexts

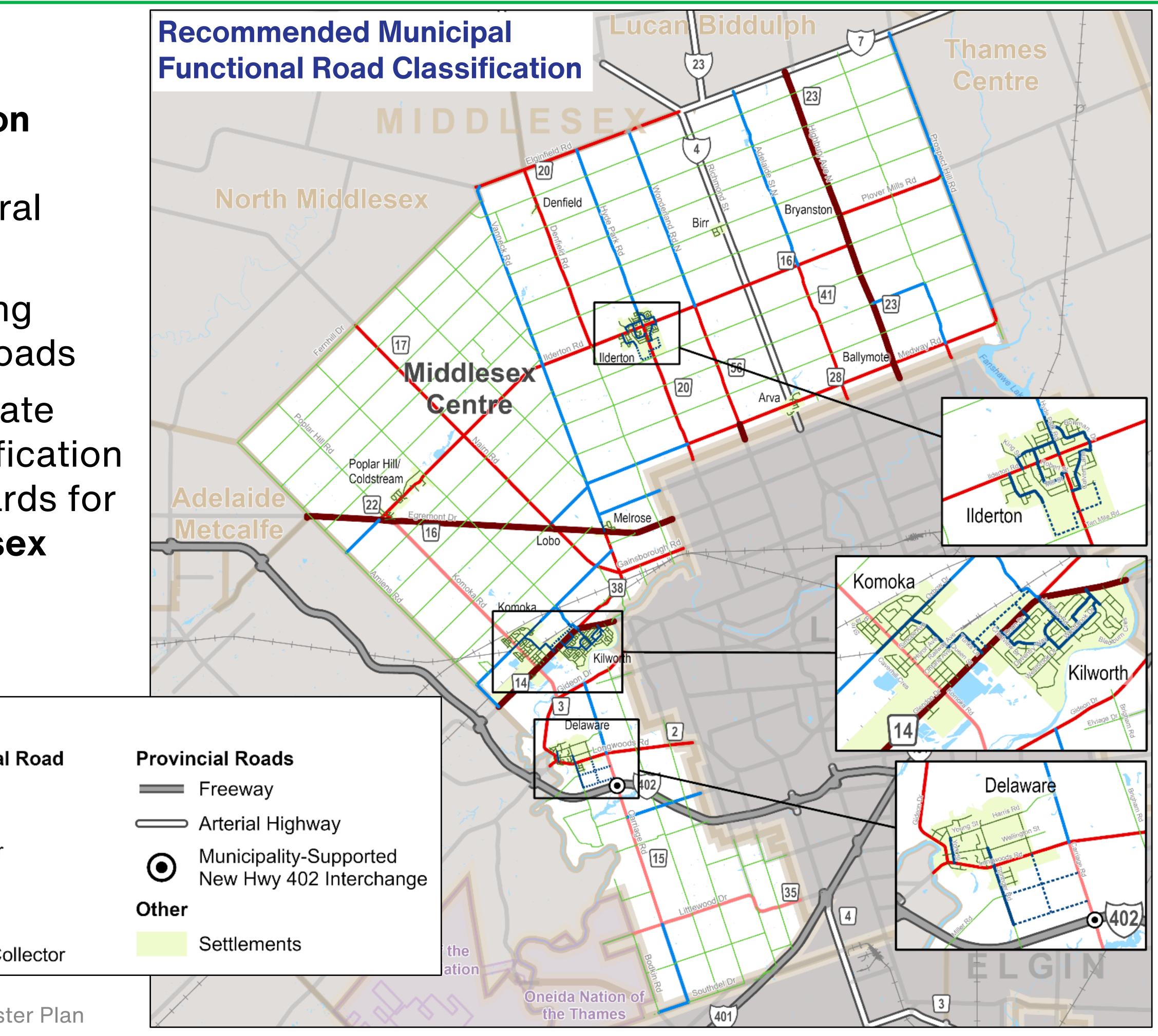
#### Legend

#### County Functional Road Classes

- County Major Arterial
- County Arterial
- County Collector

#### Municipality Functional Road Classes

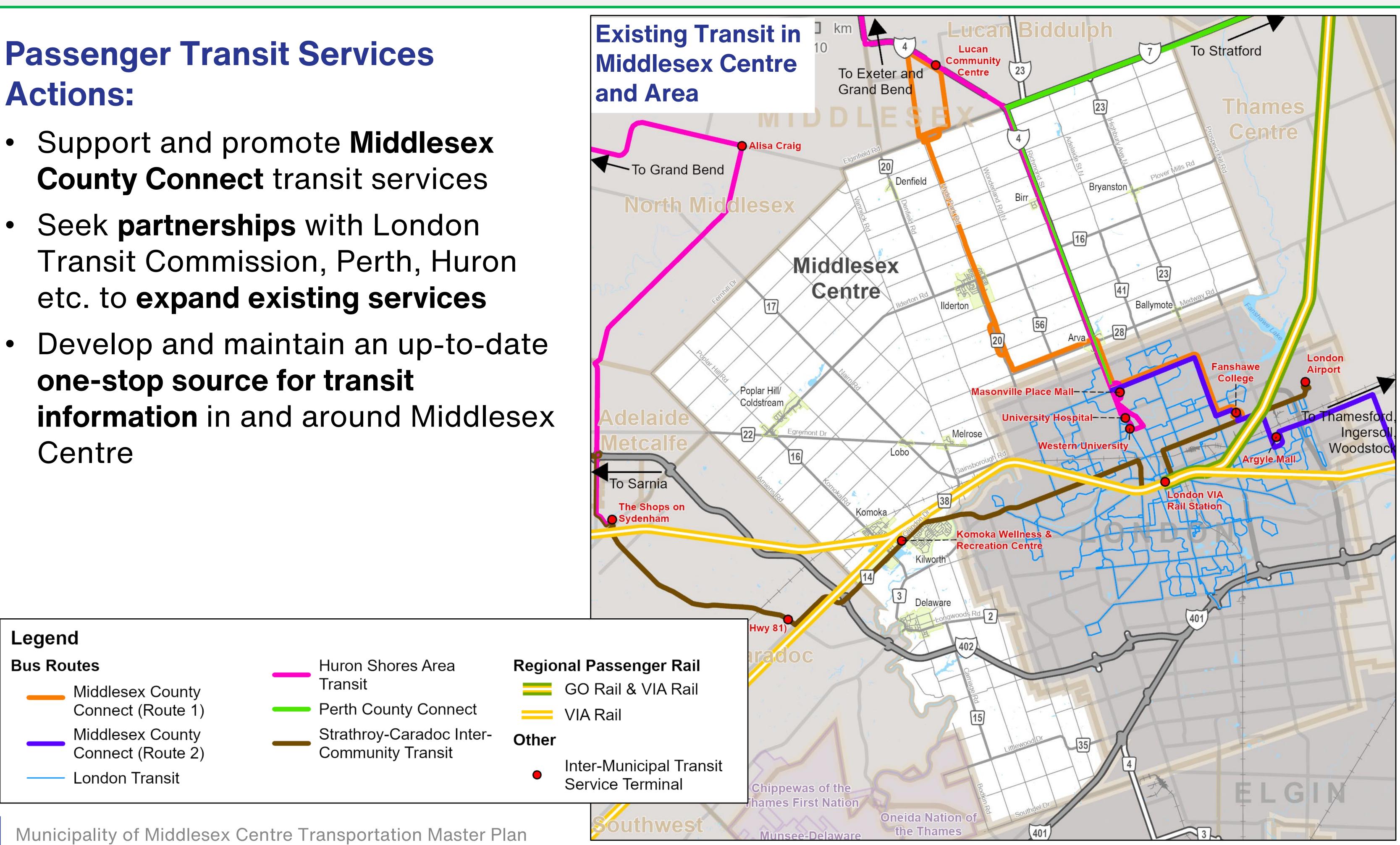
- Rural Collector
- Urban Collector
- Rural Local
- Urban Local
- Future Urban Collector







- one-stop source for transit Centre



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### **GOAL 4: Provides Safe and Efficient Connectivity (cont'd)**





### **GOAL 4: Provides Safe and Efficient Connectivity (cont'd)**

#### **Road Safety Actions**

- Continue Vision Zero campaign Continue to collaborate on County Road safety improvements (e.g. speeding in settlement areas)
- Apply mitigating measures at top ten **collision locations**
- Apply measures to reduce risk of wildlife collisions
- Review rail signal warrants and placement of warning signals when road conditions change (e.g. Oxbow Drive)
- Remove vegetation at at-grade crossings to improve sightlines

- Resiliency



- electric vehicle charging stations
- vehicular road capacity





#### Update standards for bridges and culverts due to increased extreme weather events

 Continue to apply road surface conversion **policy** (per 2023 Road Needs Study)

• Develop and implement a strategy for

• Develop and implement a travel demand management strategy to reduce demand for

### **GOAL 5: Promotes Healthy Local Mobility**



Provides safe, accessible and convenient mobility options to connect between daily activities within local communities.

#### Cycling

- Cycling facility (route) type guidance County Cycling plan: review of routes under municipality jurisdiction
- Prioritization of area cycling connections
- Trails Master Plan update

#### **Pedestrians**

- implementation
- Sidewalk implementation and prioritization



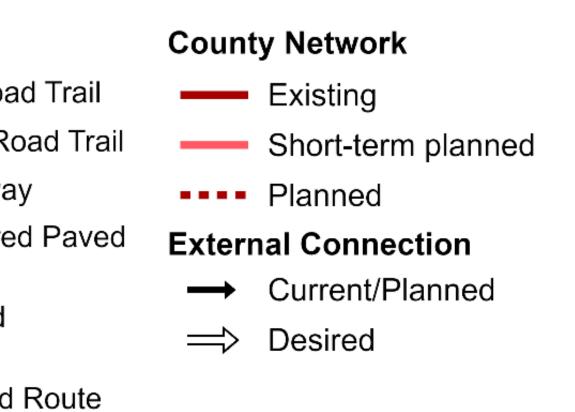
#### Pedestrian crossing guidance and

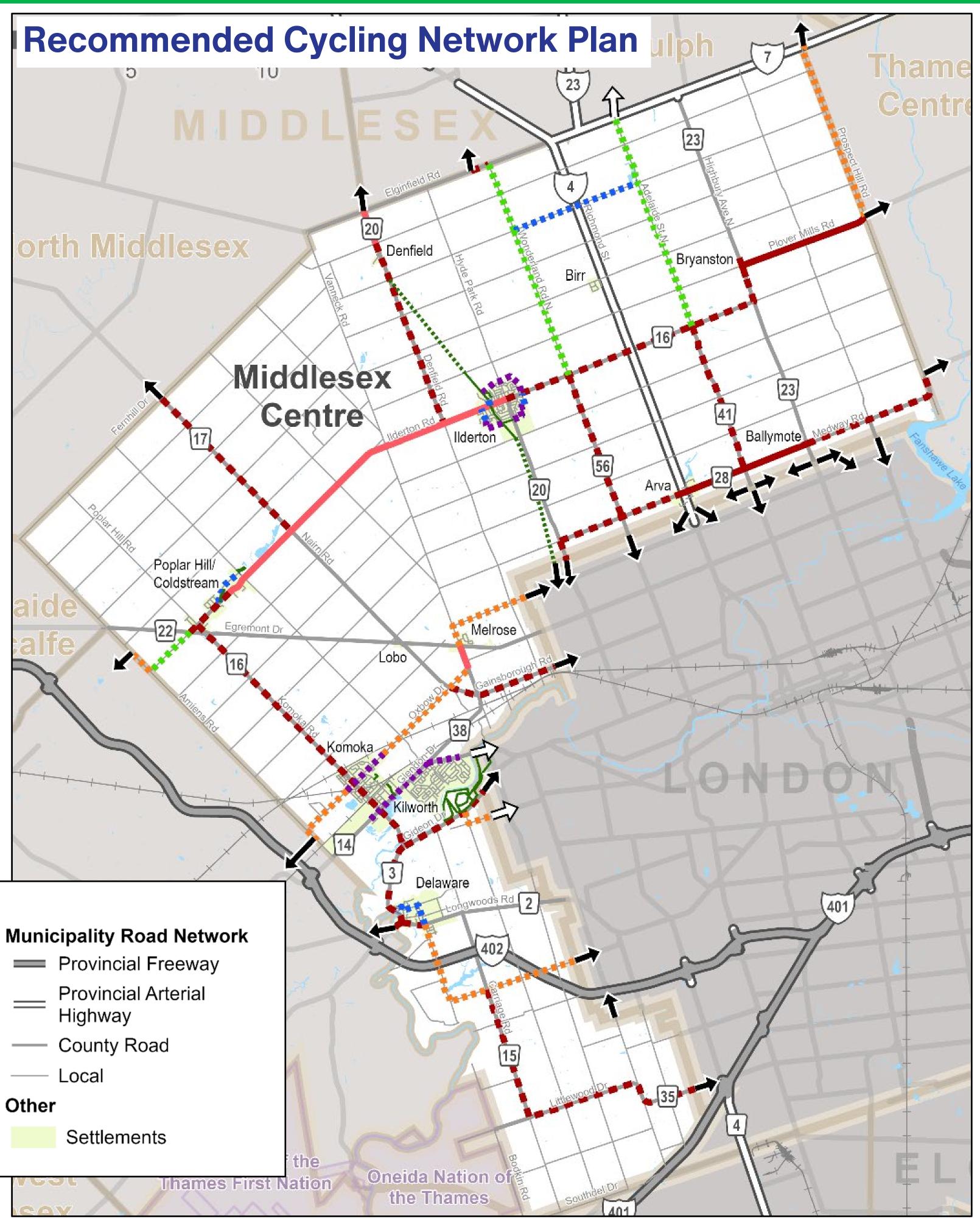
### **GOAL 5: Promotes Healthy Local Mobility (cont'd)**

#### **Cycling Actions:**

- Update design guidelines to latest Provincial guidance (OTM Book 18)
- Adopt the updates to the County Cycling **Network Plan –** Municipality routes
- Support County Road cycling implementation
- Advancing cycling network priorities:
  - Ilderton Road (CR 16) between Ilderton and **Oxbow Public School**
  - Ilderton to London via Ilderton Road (CR 16) and Wonderland Road (CR 56)
  - Connection between Komoka-Kilworth and London over the Thames River
- Provide safe crossings where trails cross roads
- Update the **Trails Master Plan** (2014)

egend					
Local Network					
	Existing - Off-Roa				
	Proposed - Off-Re				
•••••	Planned - Bikewa				
	Planned - Buffere Shoulder				
	Planned - Paved Shoulder				
•••••	Planned - Signed				





#### Other

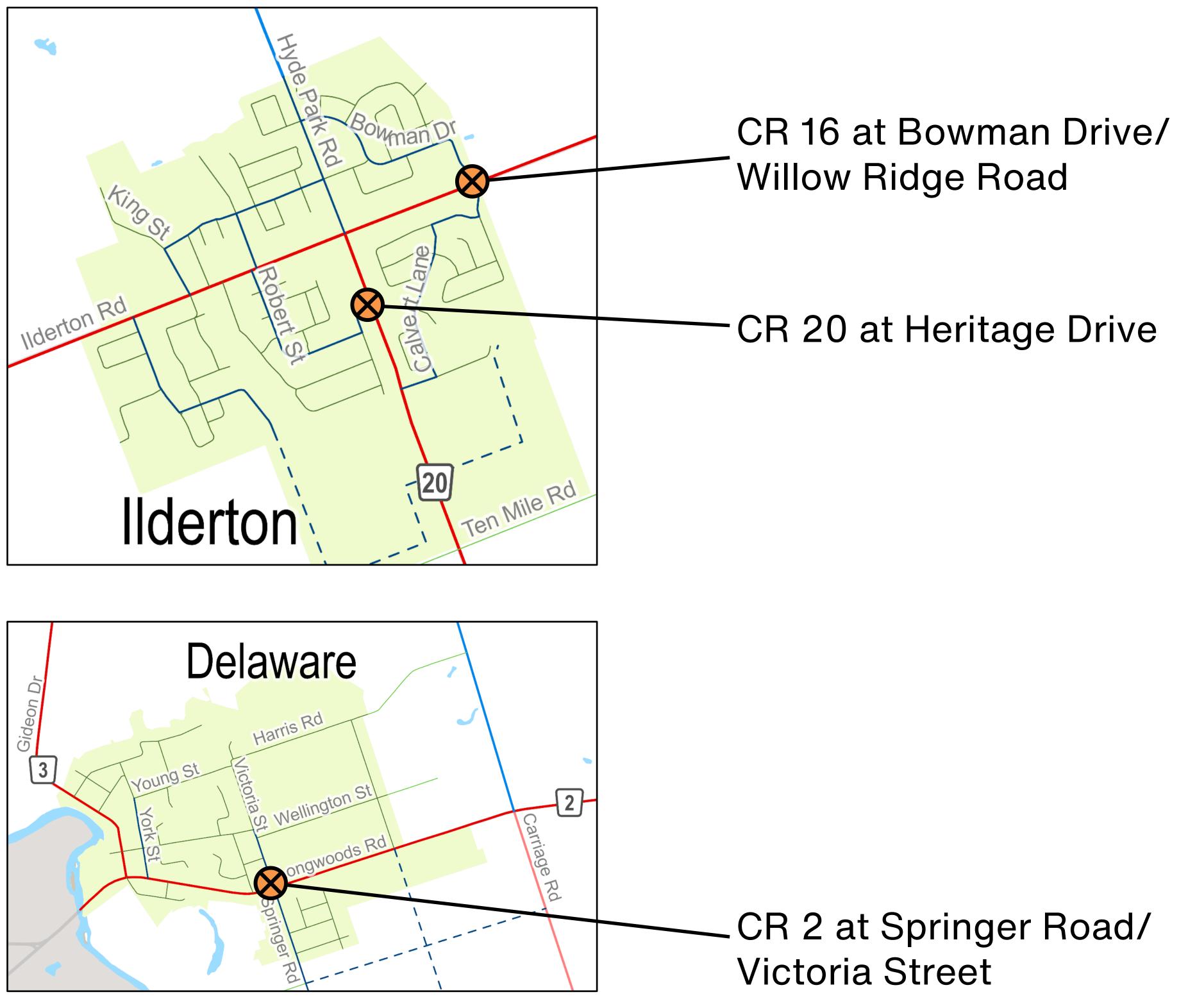


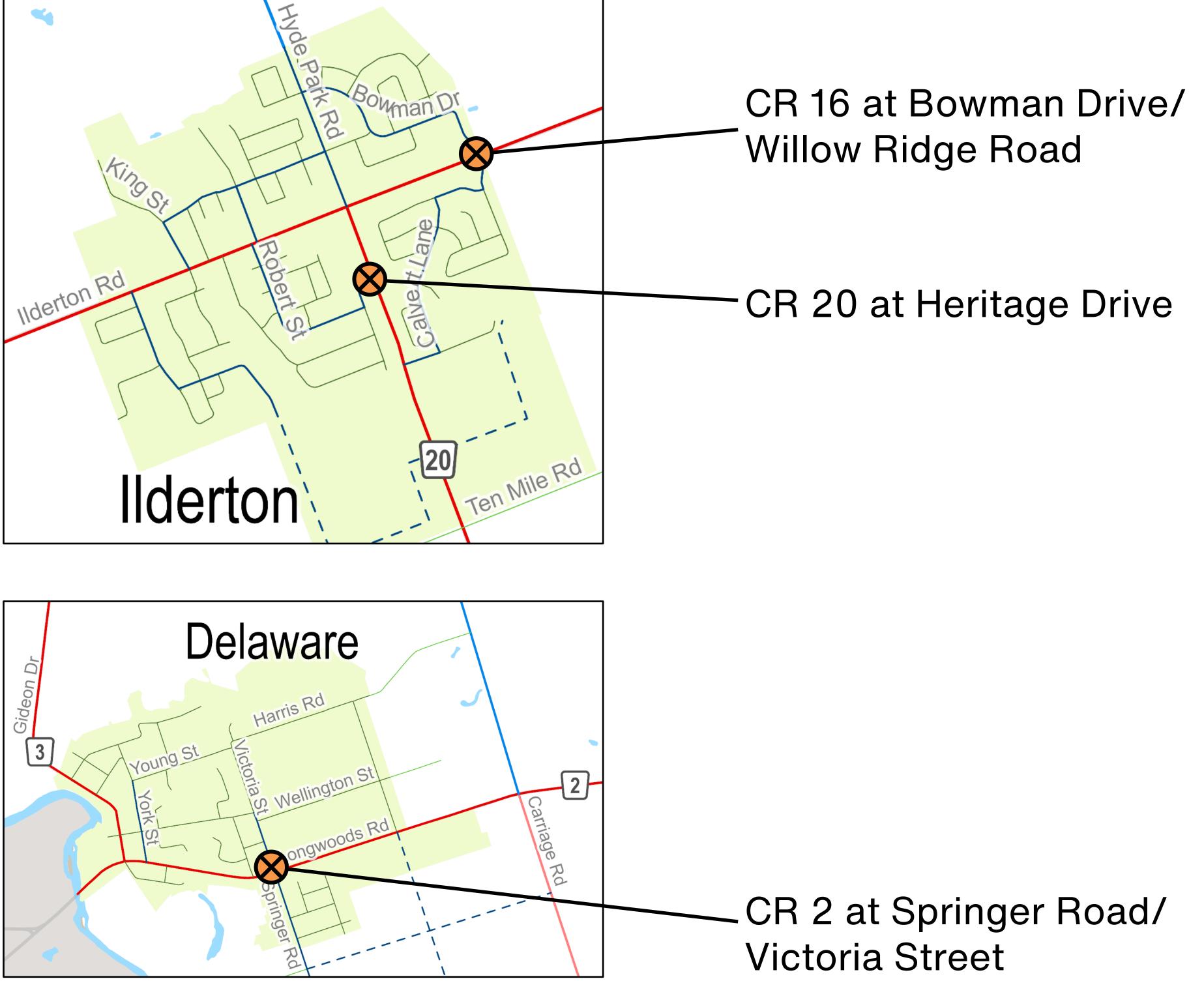
#### **GOAL 5: Promotes Healthy Local Mobility (cont'd)**

#### **Pedestrians – Actions:**

- Continue to follow Province's guidance for implementing pedestrian crossings
- In collaboration with the County, upgrade pedestrian crossings from school crossings to pedestrian crossovers

#### **Candidate Pedestrian Crossover Locations**







#### **GOAL 5: Promotes Healthy Local Mobility (cont'd)**

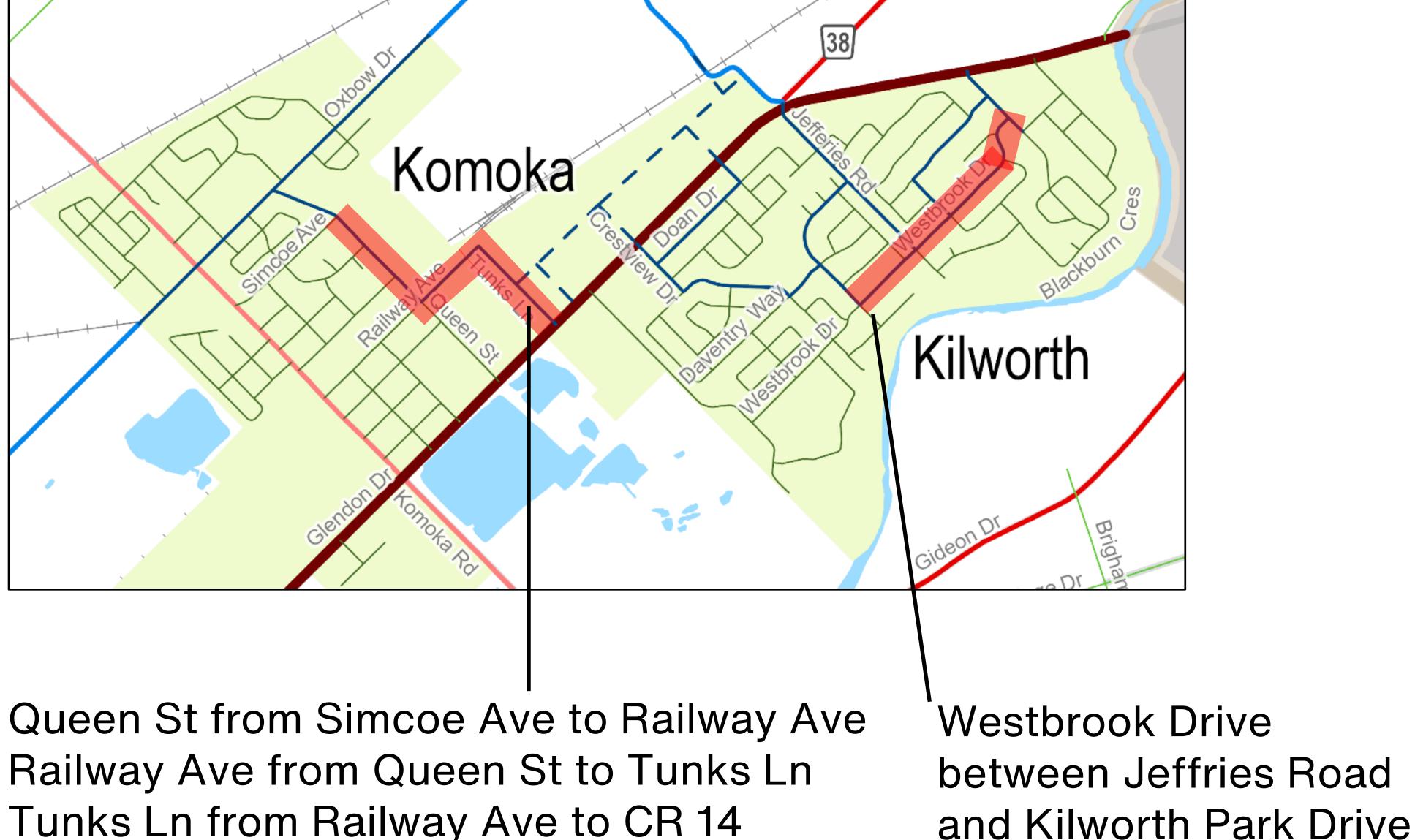
#### **Sidewalks – Actions:**

- Formalize a prioritization framework for infilling sidewalks gaps; factors include:
  - road classification
  - proximity to schools, transit, parks, community facilities
- Require **new developments** to include sidewalks or trails consistent with the road classification framework
- Implement a connected sidewalk **network** using a sidewalk prioritization framework for guidance in filling network gaps, and including amenities
- Update guidance to include alternative sidewalk designs to facilitate sidewalk retrofits

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#### **Example Sidewalk Infill Priorities**





Tunks Ln from Railway Ave to CR 14



### **GOAL 6: Supports Local Industry**



Supports prosperity in Middlesex Centre by meeting the transportation needs of agriculture and other local industries, such as efficiently moving goods to and from markets.

#### **Goods Movement**

- More-direct Highway 402 connectivity
- Agricultural equipment on public roads
- Rail transload opportunities

### Parking Supply

Municipal Parking Supply

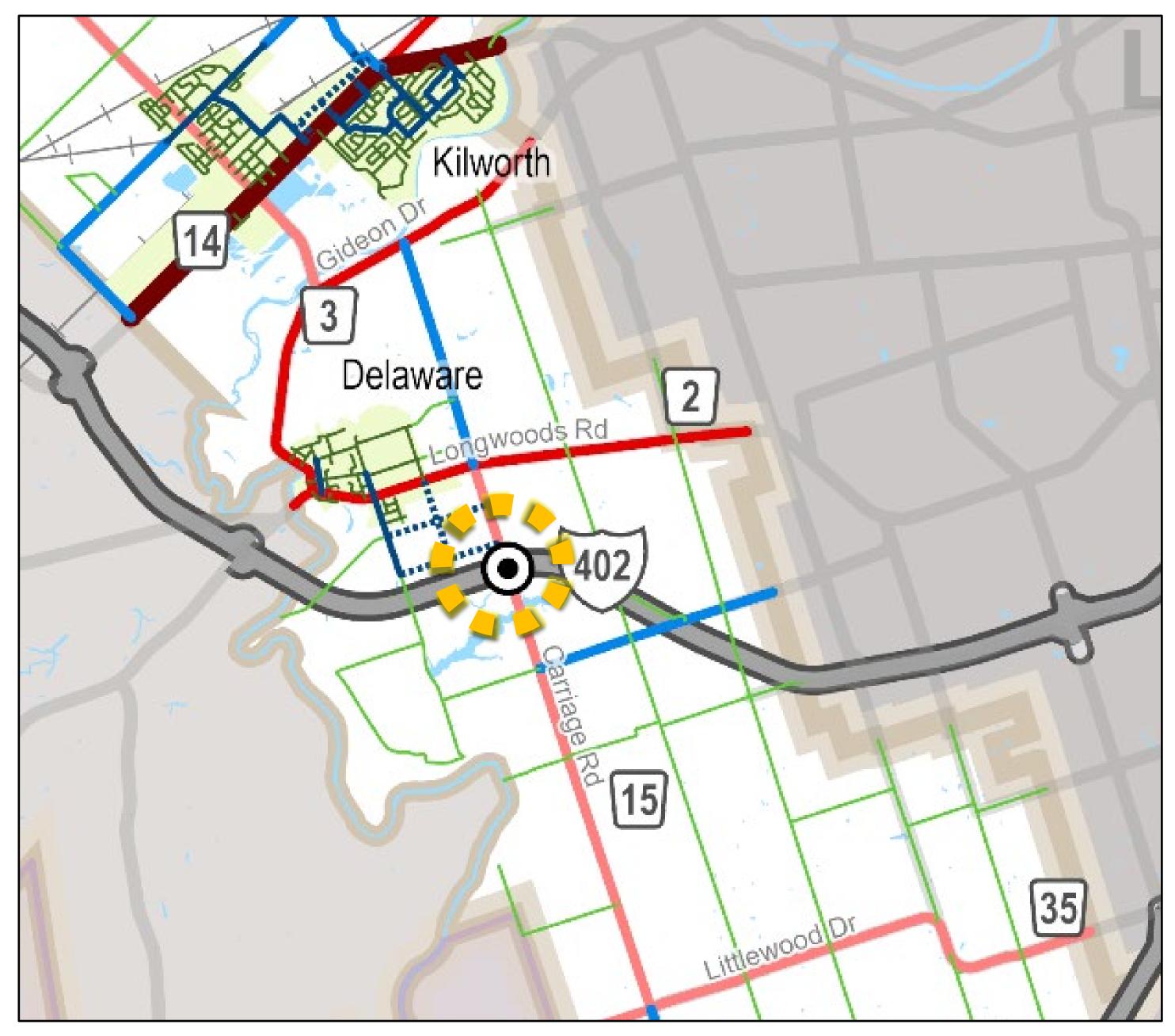


### **GOAL 6: Supports Local Industry (cont'd)**

#### **Goods Movement Actions:**

 Collaborate with the County and Province toward a new Highway 402 interchange at Carriage Road

#### **Support for New Highway 402 Interchange**



- transfer station.
- and maintenance of rural roads





#### • Work with partners (e.g. CN, CPKC) to explore the feasibility of a road-rail

## Consider farm equipment in the design

### **GOAL 6: Supports Local Industry (cont'd)**

#### **Parking Supply Action:**

• Continue to plan for municipal parking provision in or near Village Centres to support local businesses as well as other municipal objectives (e.g. electric vehicle charging, supporting carpooling and supporting transit services), and implement as needed

#### **Candidate Municipal Parking Location - Delaware**



SWOOP



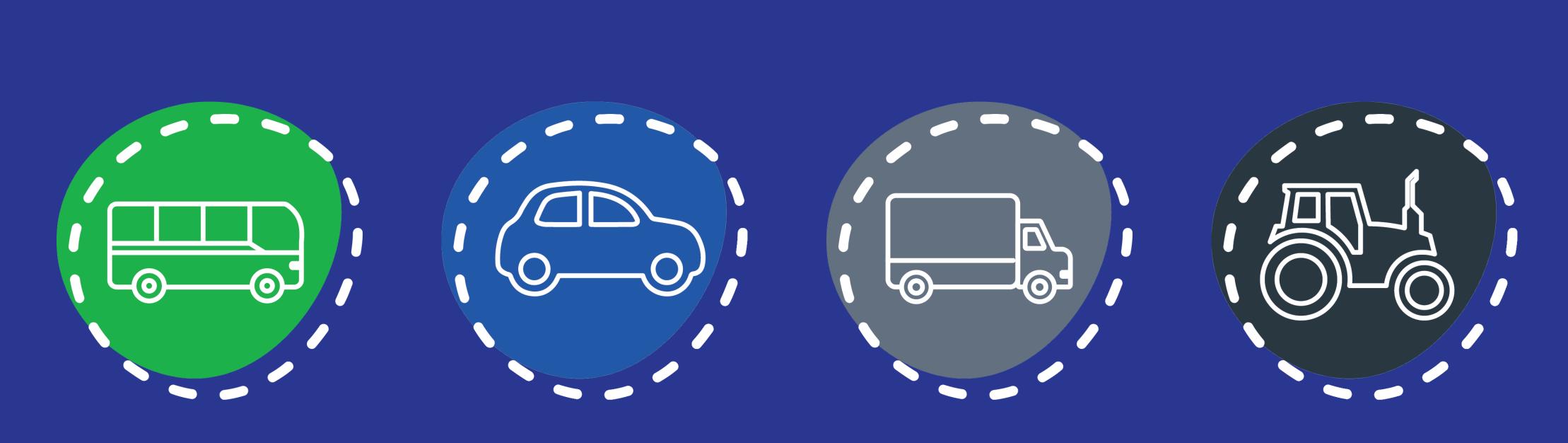
Map Data: Google ©2023 CNES / Airbus, First Base Solutions, Maxar Technologies,

## Implementation













### **ACTION PLAN AND PHASING**

phases, for example:

		Medium-Term Targets (2027 to 2031)	Long-Term Targets (2032 to 2046)
with LTC to extend routes to nearby settlements of	County, discussions with LTC on partnering to expanded services into	Expansion of LTC service into Middlesex Centre, if partnership is reached <b>Services and cost</b> <b>pending agreements</b>	Ongoing Services and cost pending agreements
the County, upgrade pedestrian crossings from	crossings or improve- ments implemented	Implementation of new or improved pedestrian crossings completed <b>Medium Cost</b>	Continued review and implementation of pedestrian crossings or improvements as needed

#### The Action Plan outlines an implementation plan for all 37 actions across three



### COSTING

- Land acquisition costs are not included

#### Phase

### Short-Term (2024 to 2026)

### Medium-Term (2027 to 203

### Long-Term (2032 to 2046)

#### Total

31

## County share and Province's contribution.

 High-level cost estimates are provided for higher-cost items only: collector road upgrades, cycling and pedestrian infrastructure, larger studies Significant cost uncertainty due to potential partnerships and cost-sharing

	Goal 4	Goal 5	Goal 6	Total
5)	\$3.3 M	\$2.13 M		\$5.43 M
)31)	\$6.9 M	\$2.4 M	\$0.1 M	\$9.4 M
	\$11.9 M	\$7.3 M	\$0.1 M*	\$19.3 M
	\$22.1 M	\$11.83 M	\$0.2M	\$33.93 M

\*\$25 M Highway 402 interchange costs not included in totals due to uncertainties in



## Next Steps











### NEXT STEPS

- Council to accept report
- Publish Notice of Study Completion
- Begin 30-Day Public Review Period
- Update with any required changes
- Return to Council to approve the final Transportation Master Plan
- **Begin implementation**
- Monitor implementation of the plan on an ongoing basis

#### Study web page: https://www.middlesexcentre.on.ca/articles/ transportation-master-plan





### centre in the centre of it all

# middlesex MIDDLESEX CENTRE TRANSPORTATION MASTER PLAN

## **QUESTIONS AND COMMENTS**

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### ARCADIS