

MIDDLESEX CENTRE TRANSPORTATION MASTER PLAN



Public Information Centre 2 – October 2023

TRANSPORTATION SOLUTIONS

Introduction



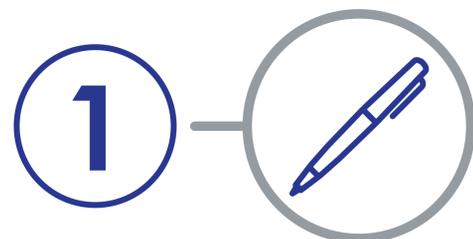
WELCOME



Thank you for attending the second Public Information Centre for the Municipality of Middlesex Centre **Transportation Master Plan!**

Please take this opportunity to learn about study progress and to give us your input for Middlesex Centre's future transportation network.

Study information and consultation materials are also available at middlesexcentre.ca/tmp



1 Sign in. Let us know if you'd like to be added to the project contact list, where you will receive updates at key study milestones.



2 Stroll around. Review the information boards to learn about the Transportation Master Plan.



3 Share your input. Provide feedback and complete the survey online: middlesexcentre.ca/tmp



MIDDLESEX CENTRE TRANSPORTATION MASTER PLAN

Contact Information

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What is the Transportation Master Plan?

The Municipality of Middlesex Centre is developing its first standalone Transportation Master Plan (TMP) – a long-range strategic plan to guide transportation policies, services and infrastructure for the Municipality’s transportation system.

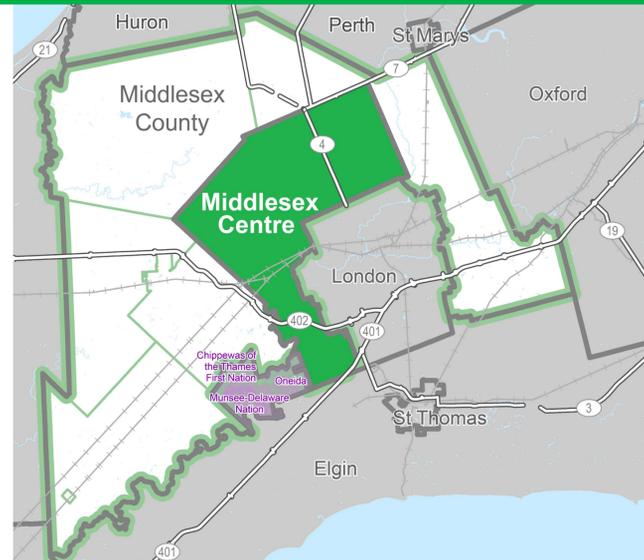
At the point in the study, we are presenting draft recommended solutions for Middlesex Centre.

Local vs. County and Provincial Transportation Networks

The TMP will recommend actions and strategies focused on elements of the transportation system that are the responsibility of the Municipality. However, the TMP will also include actions to advocate for and coordinate on changes to County and Provincial infrastructure and policies that are most important to residents.

Action Development

The Transportation **Vision** and **Goals** were developed to direct the study process. **Needs and opportunities** identified from technical analysis and public input were then grouped under each Goal, with corresponding draft **actions** developed to help guide Middlesex Centre’s transportation system toward its desired future.



Action Development



Study Purpose and Objectives

The TMP will:

- Guide decision-making relating to Middlesex Centre’s transportation system over the next 25 years
- Align with and support the Municipality’s Official Plan and other strategic plans and policies
- Support the Municipality’s vision for its future transportation system, leading Middlesex Centre toward a more safe, accessible, and sustainable transportation network and services
- Support local travel and longer-distance connections for all travel modes, supporting community livability and strengthening local economic and tourism opportunities
- Inform long-range financial planning



“Transportation” is the movement of people and goods by all travel modes: car, truck, rail, public transit, cycling, walking and more.

The Vision and Goals were updated based on your feedback during the first round of engagement, where they were well supported.

A Vision for Transportation

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.

3 MOBILITY GOALS: ACHIEVABLE THROUGH MODE-SPECIFIC ACTIONS

PROVIDES SAFE AND EFFICIENT CONNECTIVITY

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

PROMOTES HEALTHY LOCAL MOBILITY

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

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.

3 SUPPORTING GOALS: OVERARCHING TO ALL RECOMMENDATIONS

SENSITIVE TO LOCAL CHARACTER AND QUALITY OF LIFE

Provides transportation solutions that reduce the negative impacts of transportation on local rural communities and urban centres, settlements and hamlets.

PROTECTS THE NATURAL ENVIRONMENT

Minimizes disruption of local habitats, waterways, agricultural land and natural heritage features, and reduces non-renewable energy use and pollutants arising from transportation.

EXERCISES FISCAL RESPONSIBILITY

Represents cost-effective Municipal spending on infrastructure and operations and takes advantage of partnership opportunities and external grants.

Recommended Actions



GOAL 1: Provides Safe and Efficient Connectivity



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

SURVEY RESULTS

ROAD NEEDS AND OPPORTUNITIES

Respond to anticipated capacity constraints along County roads into the future.
(No Municipality roads were found to require capacity expansions over the TMP planning horizon.)

Clarify the role and function of individual Middlesex Centre roads to facilitate decision-making and design.

Create a better balance of County vs. Middlesex Centre priorities for County roads in settlement areas.

Plan for the increasing importance of Oxbow Drive in northern Komoka-Kilworth as a multi-modal corridor.

SAFETY NEEDS AND OPPORTUNITIES

Respond to driver behaviour concerns, such as speeding, to improve safety.

Address infrastructure factors that may affect traffic collisions.

Ensure at-grade rail crossing safety in view of updated guidelines.

ACTIONS INCLUDE...

- Support and collaborate with Middlesex County on **Glendon Drive capacity improvements** (in progress).
- Adopt a **new road classification framework** and map including designations for urban and rural roads.
- Encourage the County to update **County functional road classification** and associated design standards to distinguish between urban and rural contexts.
- Develop a plan for **multi-modal improvements along Oxbow Drive** to account for anticipated growth in Komoka-Kilworth as well as the route's role on the Province's planned cycling network.

ACTIONS INCLUDE...

- Continue **Vision Zero** campaign and related initiatives.
- Advocate for **safety improvements and traffic calming** along County roads through urban areas.
- **Improve safety at top collision locations** (improved sight lines, high visibility road paint, better lighting).
- Apply measures to **reduce risk of wildlife collisions**.
- **Review at-grade railway crossing warrants** against the latest best practices and update if required.



48% of respondents think improved road operations and safety are the most important transportation issues in Middlesex Centre.

The most important transportation issue is the flow of traffic in and out of London as more and more population depends on it. Control speed on Komoka road.
- *Komoka-Kilworth resident*

Try to slow the traffic down - especially through towns - it's way too high in Delaware, Kilworth, Komoka, even when the speed limits are low.
- *Delaware resident*

Trucks and vehicles roar through Ilderton not respecting the speed limits. Pedestrians may respect rules but some step out into traffic path and it isn't safe to do so.
- *Ilderton resident*

FUNCTIONAL ROAD CLASSIFICATION

Roads can be classified according to the services they provide: prioritizing traffic movement vs. local property access, their role in the larger transportation network connectivity, and their local context.

A proposed road classification framework for Middlesex Centre roads reflects road function and context, and also the road network part of the broader road hierarchy, with County roads and Provincial highways placing highest priority on traffic flow. The framework outlines the desired characteristics of each road class (e.g. speed, traffic volume, land access restrictions), and helps to guide the types of facilities to include for pedestrians, cyclists, transit and parking.

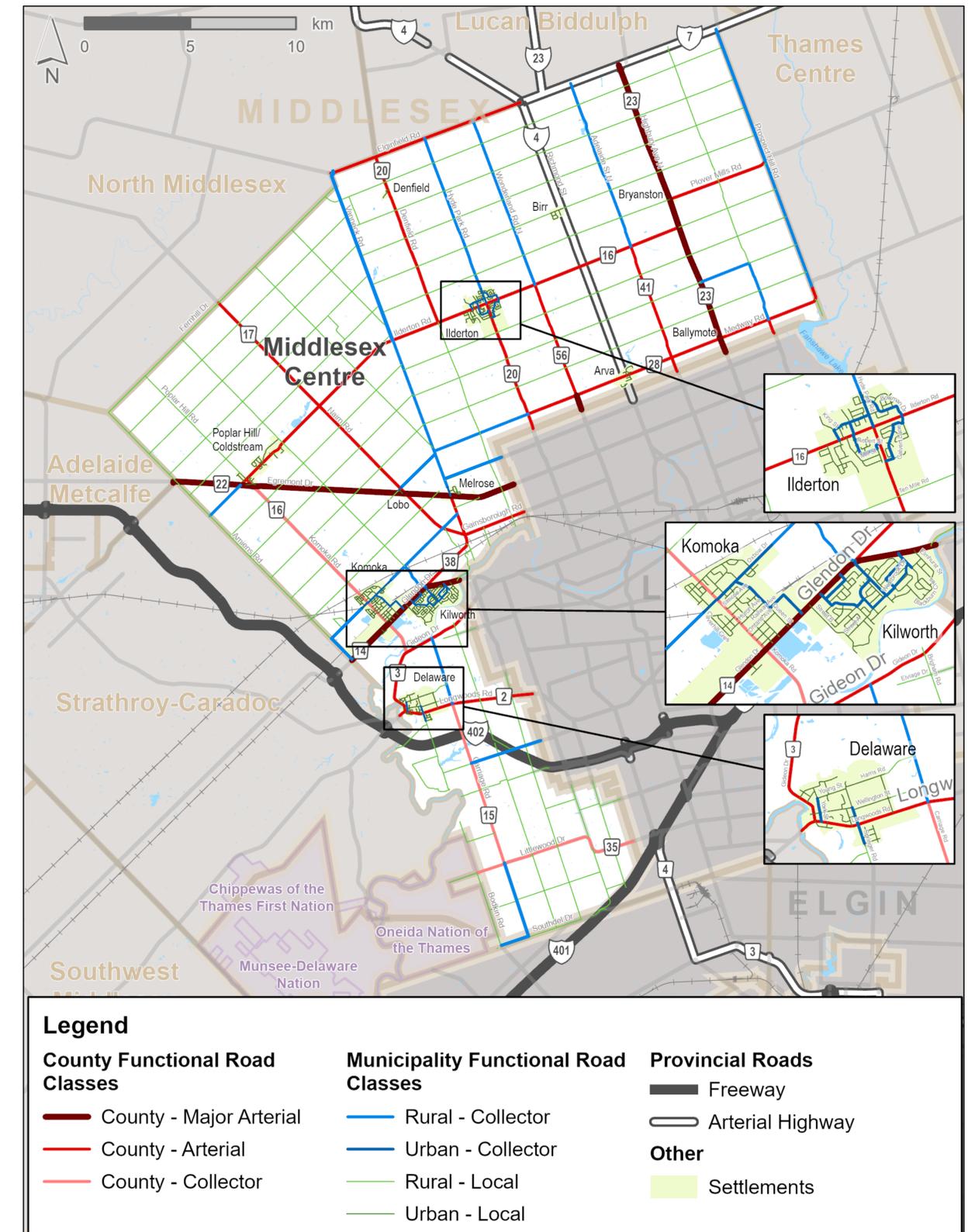
FUNCTIONAL ROAD CLASSIFICATION

- Arterial:** In Middlesex Centre, this role is served by County roads and Provincial highways. Traffic flow and regional network connectivity are the primary concern and therefore the roads tend to carry the highest volumes of traffic. Access to private properties is restricted to limit traffic conflicts. Active transportation facilities should be separated from vehicular traffic.
- Collector:** Traffic flow and land access are of equal priority, with some limits on adjacent land access. Collectors provide connectivity between arterial roads and local roads, and carry moderate volumes of traffic. In urban areas, sidewalks should be provided on both sides, and cycling facilities should generally have a degree of separation from vehicular traffic.
- Local:** Local roads prioritize property access, and function at lower speeds and carry lower volumes of traffic. Sidewalks should generally be provided on at least one side of the road in urban areas. Given their lower traffic volumes and operating speeds, shared cycling facilities are appropriate.

URBAN VS. RURAL CONTEXT

- Urban roads** have the context of increased density of adjacent development, and increased volumes of pedestrians, cyclists, and cars, trucks and transit. They typically have lower posted and design speeds, sidewalks, cycling lanes, and may have roadside parking provision.
- Rural roads** tend to serve longer distance travel at higher speeds, and may have a higher proportion of trucks and farm equipment. Paved road surfaces may not always be feasible where traffic volumes are very low.

Recommended Road Classification



GOAL 1: Provides Safe and Efficient Connectivity (continued)



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

SURVEY RESULTS

TRANSIT NEEDS AND OPPORTUNITIES

Address the transportation needs of those who are unable to or choose not to drive.

Continue to cooperate with and support the Middlesex County Connect transit service.

Leverage established municipal transit systems operating near or through Middlesex Centre as additional partnership opportunities.

Leverage population growth in urban settlement areas that will increasingly support transit operations.

Provide transit services appropriate to demand levels.

ACTIONS INCLUDE...

- Support and **promote Middlesex County transit** for Middlesex Centre residents and visitors. Provide barrier-free access to stops, as well as amenities at stops (e.g. benches, shelter).
- In cooperation with the County, **partner with London Transit** to extend routes to nearby settlements of Komoka-Kilworth, Arva, Delaware and Ilderton as they continue to grow.
- In cooperation with the County, **partner with Perth County Connect** to add stops along existing routes that pass through Arva and Birr.
- Promote connections into the broader region with a **focus on service to employment centres** (e.g. new Amazon distribution centre in Elgin County).
- **Maintain up to date one-stop source for transit information** in and around Middlesex Centre to improve ease and convenience of the transit systems serving residents.



30% of respondents would like to see transit provided or extended to Middlesex Centre.

Public transit connecting to London would be nice for teens and post secondary students
- Komoka-Kilworth resident

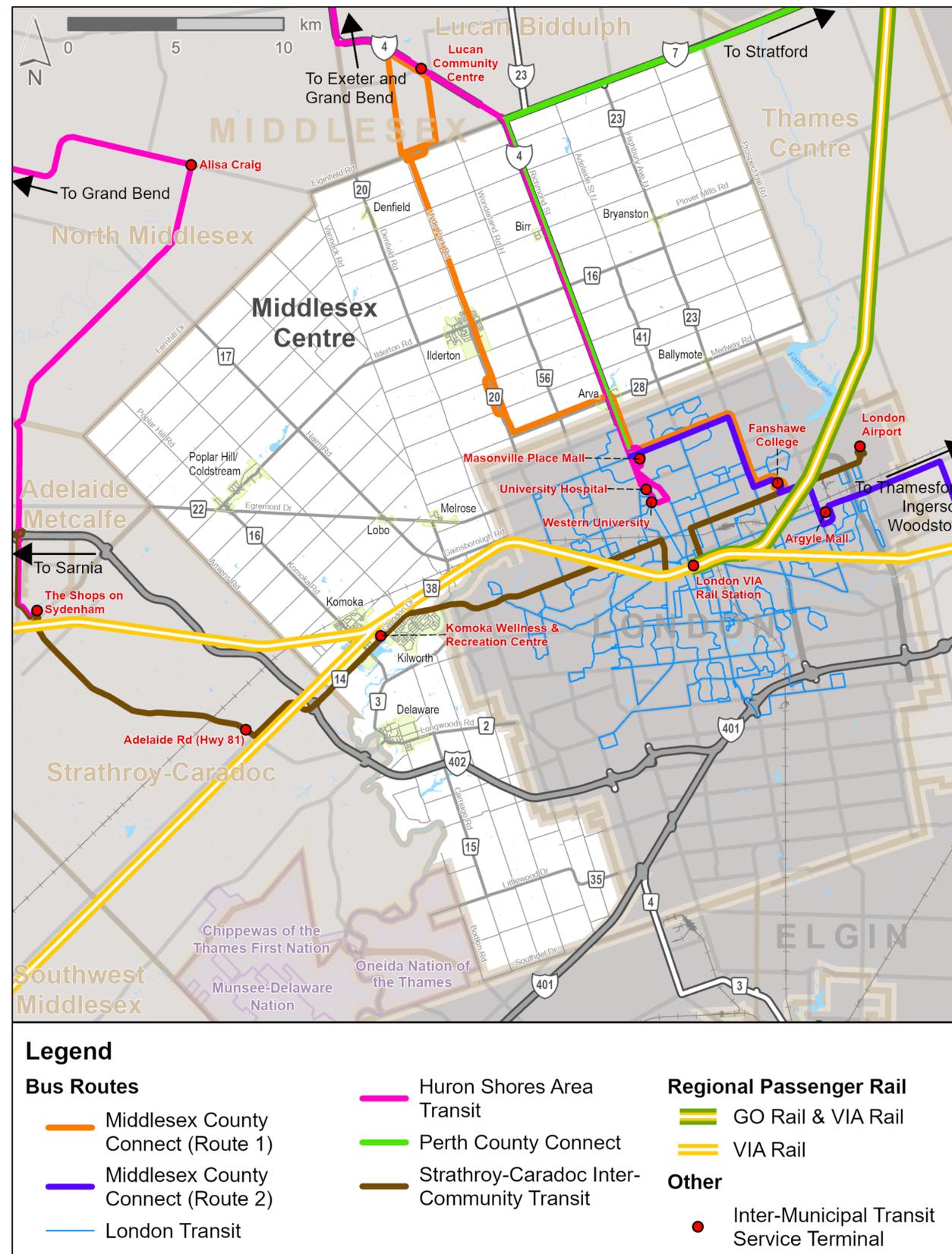
I would love to see bus route started ASAP so those who don't have cars can get a cheaper mode of transport. Transportation cost is affecting out budget. We need a bus to London ASAP.
- Ilderton resident

Should also mention moving people to and from London. Perhaps a minibus once a week going to Byron and back a few times in the day to allow those without a car to do some shopping in London or see their doctor.
- Delaware resident

Partnering to Build on and Expand Existing Services

The most feasible way for Middlesex Centre to improve its transit network is to form partnerships with the County and with neighbouring transit service providers, which include:

- **Middlesex County Connect** – as of May 29, 2023, services now include:
 - Route 1 – Lucan – Ilderton – Arva – London: two trips on weekdays
 - Route 2 – Woodstock – Ingersoll – Putnam – Dorchester – London: one trip on weekdays
- **Strathroy-Caradoc Inter-Community Transit** – 2-3 daily trips between Sarnia and London, with a stop at the Komoka Wellness Centre
- **London Transit** – a rich network of services is currently provided entirely within City boundaries
- **Perth County Connect** – three trips weekly from London to Waterloo, with no stops while passing through Middlesex Centre
- **Huron Shores Area Transit** – two routes each run two trips daily, with no stops while passing through Middlesex Centre



Priority Transit Connections

While continuing to promote Middlesex County Transit services, below are priority transit service expansions for the Municipality to explore with other service providers, in cooperation with the County:

- Partnering with **London Transit** to extend routes to nearby settlement of Komoka-Kilworth. Connections to Delaware, Ilderton and Arva can also be explored as these settlements continue to grow.
- Partnering with **Perth County Connect** and **Huron Shores Area Transit** to add stops in Middlesex Centre along existing routes that pass through the Municipality
- Partnering with service providers (London, St. Thomas, Elgin, etc.) for connections into the broader region with a focus on service to **employment centres** (e.g. new Amazon distribution centre in Elgin County).

GOAL 2: Promotes Healthy Local Mobility



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

SURVEY RESULTS

WALKING NEEDS AND OPPORTUNITIES

Respond to a lack of safe pedestrian road crossings across busy roadways.

Implement safe walking routes between homes and schools.

Improve network connections for pedestrian activity in settlement areas.

Prioritize a network of sidewalks and trails in new developments in Middlesex Centre.

Remove barriers to building sidewalks in existing neighbourhoods.

ACTIONS INCLUDE...

- Continue to follow Ontario Traffic Manual guidance for the **implementation of safer pedestrian crossings** on Municipal roadways where needed.
- **Upgrade school crossings** at strategic locations on County roads to reflect latest best practices.
- Encourage the County to **prioritize implementation of its planned network along Ilderton Road**. This would allow for safer cycling/walking to Oxbow Public School.
- Formalize a **framework to prioritize sidewalks gaps** based on road classification, proximity to schools, transit, parks, community facilities, etc.
- Adopt road classification framework to **emphasize safety while meeting the needs of all road users** throughout communities, and apply guidance for sidewalks along different roadway classes.
- Implement a **connected sidewalk network**, including pedestrian lighting and amenities such as benches where needed, consistent with AODA requirements.
- Update by-laws and relevant policies to **require new developments include sidewalks or trails** consistent with the road classification framework.
- Update design guidelines to include **alternative sidewalk designs and placement** to facilitate sidewalk retrofits along existing roads.



41% of respondents would walk to local destinations more often if safer and more pedestrian crossings were available.

It would be ideal to have walkable communities decreasing reliance on vehicles to access businesses and community offerings. It creates a community feel when our kids can move about safely in designated pedestrian trails.

- *Komoka-Kilworth resident*

Crosswalks / lights would be of value on Ilderton Road to improve pedestrian safety.

- *Ilderton resident*

More sidewalks in Delaware. Also proper road lighting in residential areas.

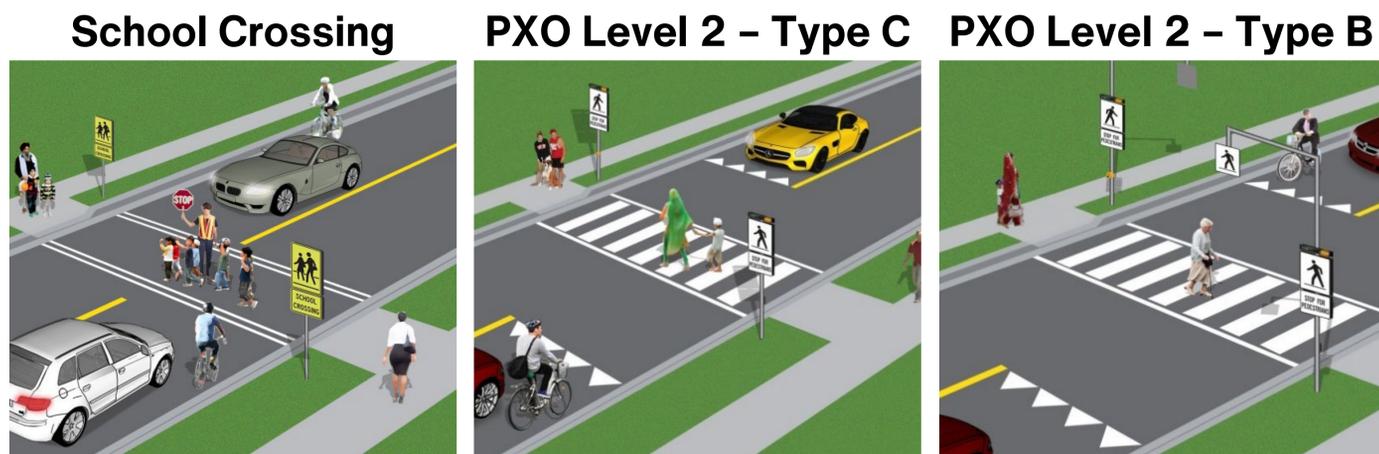
- *Delaware resident*

Pedestrian Crossings Overview

There are two main types of mid-block crossings:

- **School Crossing:** Drivers are required to stop only when a crossing guard is present with their stop sign. School crossings provide safe passage during peak hours but are not in force the rest of the time, limiting their utility. Provincial guidelines limit these crossings to streets with speed limits no higher than 60 km/h.
- **Pedestrian Crossover (PXO):** Drivers must always yield to pedestrians and wait until they clear the roadway before proceeding. PXOs provide on-demand safe crossing for pedestrians at all hours, while limiting impacts to traffic flow only to the times where pedestrians are present. PXOs include signs and may include pavement markings, lights, and/or pedestrian push buttons.

School Crossing and examples of PXOs, selected based on traffic volumes, speeds and number of lanes to cross.



Source: Ministry of Transportation of Ontario,
<https://www.ontario.ca/page/driving-near-pedestrian-crossovers-and-school-crossings>

Sidewalks

A formalized policy with the following elements would guide the provision of sidewalks in urban areas of the Municipality, with the following elements:

- **Functional Road Classification:** Providing a framework for sidewalk coverage, outlining which types of roads should be supplied with sidewalks on one or both sides.
- **Prioritizing Sidewalk Gaps:** Adopting a framework based on criteria such as road classification, proximity to schools, transit, parks, community facilities, etc.
- **Updating By-laws:** New policies for new developments to follow the road classification sidewalks requirements.
- **Updating Design Guidelines:** Reduce barriers to implementing sidewalks along existing roadways with minimal property impacts.

Gap Analysis

Applying the policy approach, two initial priority locations for sidewalk installation/expansion include Queen Street (Komoka) and Westbrook Drive (Kilworth), both roads serving an urban collector road function.

Recommended Actions: Work with Middlesex County to upgrade existing school crossings on County roads to PXOs to increase crossing safety. Continue to follow Ontario Traffic Manual guidance to install pedestrian crossovers where appropriate along Municipality roads.

GOAL 2: Promotes Healthy Local Mobility (continued)



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

SURVEY RESULTS

CYCLING NEEDS AND OPPORTUNITIES

Increase separation between vehicles and cyclists, where appropriate and feasible, to improve safety for both cyclists and motorists.

Continue to support the County in the implementation of its planned cycling network.

Review County's cycling network for routes along Middlesex Centre roads.

Leverage increasing interest in cycling for recreation, while expanding cycling for utilitarian purposes.

Continue to leverage broader cycling network connectivity opportunities.

Improve the alignment between the Trails Master Plan and the County's cycling network.

Continue to build upon and implement the Trails Master Plan network.

ACTIONS INCLUDE...

- Update design guidance to reflect **latest best practices for cycling facility types** (e.g. bike lane, paved shoulder, multi-use path, etc.) provided by the Ontario Traffic Council.
- **Update the Trails Master Plan** (developed in 2014), coordinating with the County and adjacent municipalities for regional connectivity. The plan would build on and connect with the County's planned cycling network to provide connections to local destinations, points of interest and natural areas.
- Provide **safe crossings at intersections** and at locations where trails cross roadways.
- **Support updates to the County Cycling Network Plan** – this includes upgraded facility (route) types or moving cycling routes to calmer roadways parallel to Wonderland Road, Adelaide Street, Oxbow Road and Carriage Road where traffic is expected to increase.
- Work with London and Middlesex County to **provide a cycling connection between Komoka-Kilworth and London over the Thames River**, preferably over the Glendon Drive bridge.
- Advocate for **safe and direct cycling routes between Ilderton and London**



48% of respondents would cycle more if increased separation from traffic was provided.

Middlesex Centre is a hotspot for cyclists and there should be cycling paths away from the high-speed roads.

- *Melrose resident*

Provide cycle routes that are not on roadways but still offer the same destination.

- *Rural resident*

Middlesex Centre will see increased walking and using bikes for transportation that should be safely separated from road traffic.

- *Komoka-Kilworth resident*

COUNTY CYCLING NETWORK REVIEW

Facility (Route) Type Review

A review of the 2018 County cycling network plan indicates updates needed to Municipality and County facility types to meet revised Provincial guidelines.

Adelaide Street: Traffic volumes and speeds will require buffered paved shoulders or alternate routing.

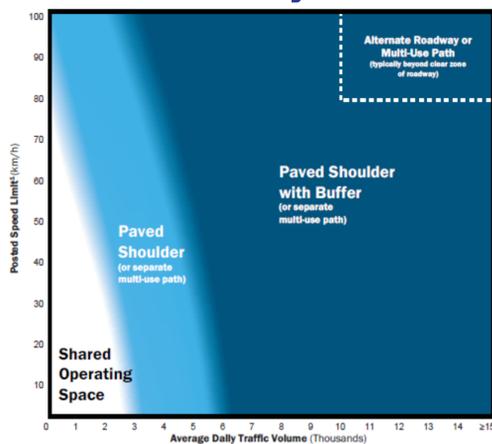
Wonderland Road: Traffic volumes and speeds will require buffered paved shoulders or alternate routing.

Oxbow Drive: Current traffic levels and anticipated growth will require rural paved shoulders and urban cycling lanes.

County Road 15 (Carriage Road): A future interchange at Highway 402 and Carriage Road, which would increase vehicular traffic on the route and will require buffered paved shoulders or an alternative cycling route.

Cycling Facility (Route) Type Selection Criteria

Rural Roadway



Urban Roadway

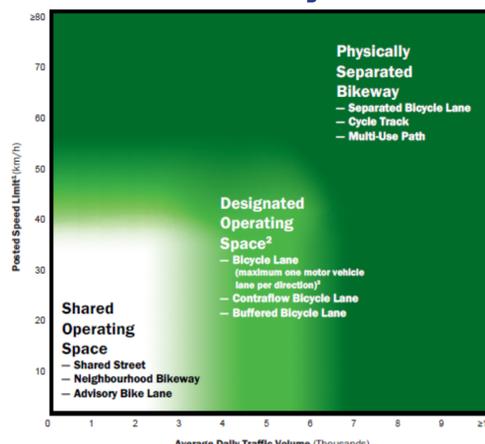
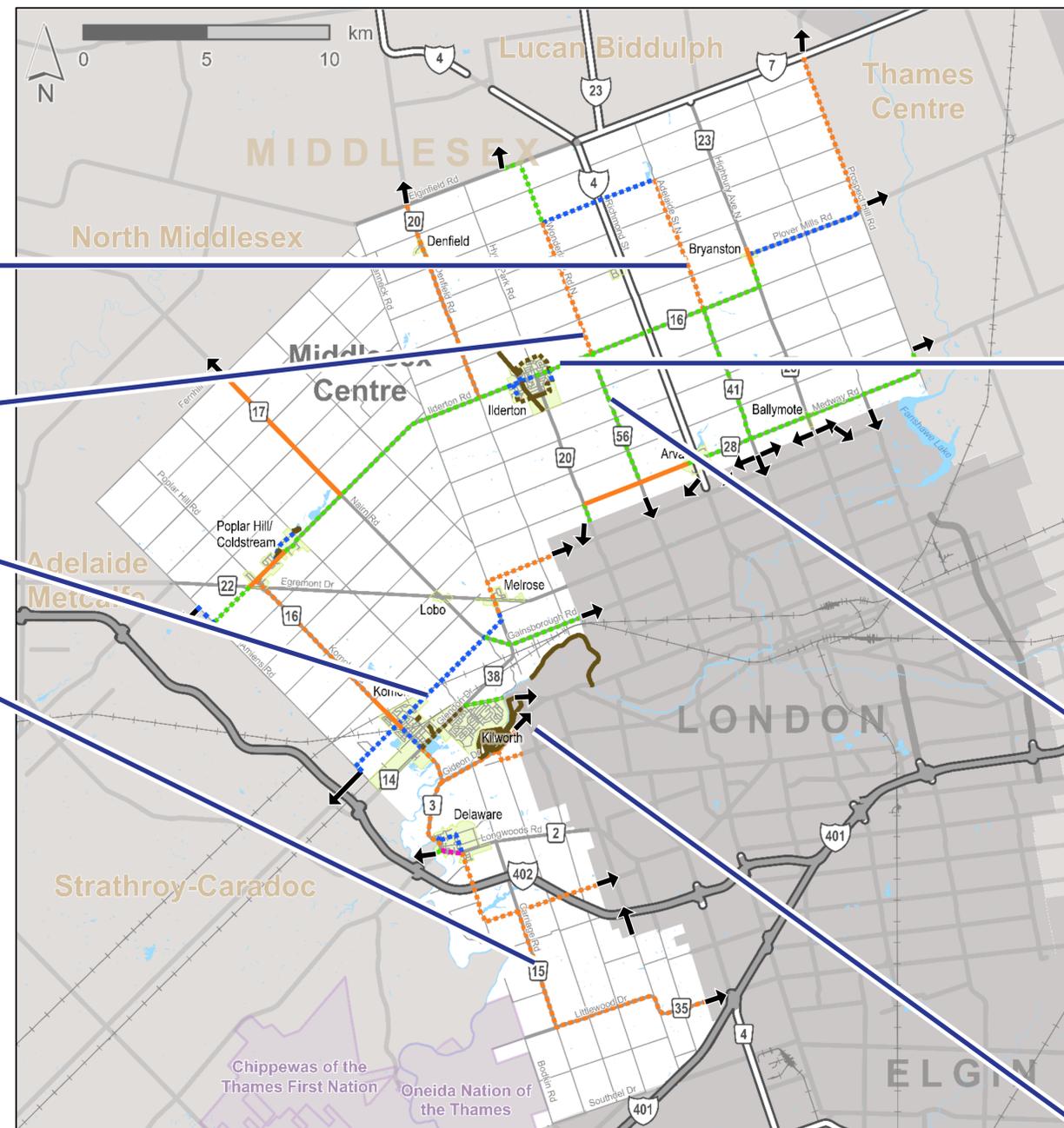


Image source: Ontario Traffic Manual - Book 18 - Cycling Facilities (2021)



Legend

Proposed Facility Types

- Buffered Paved Shoulder
- Cycle Track
- Multi-use Trail
- Paved Shoulder
- Signed Route

Existing Trails

- Paved Shoulder
- Off-Road Trail

Other

- Settlements
- Existing or planned cycling route to border municipality

Municipality Road Network

- Provincial Freeway
- Provincial Arterial Highway
- County Road
- Local

Priority Connections

Draft actions include the Municipality advocating for Middlesex County and the City of London to advance the implementation of selected key cycling routes.

County Road 16 (Ilderton Road): This is part of a key connection to London (via Wonderland Road). The ability to walk or cycle more safely between Ilderton and Oxbow Public School is a top priority for the Municipality.

County Road 56 (Wonderland Road): County Road 16 is part of a key connection between Ilderton and London and should be prioritized, with a direct connection to London. The rail trail is an alternative connection.

County Road 14/Oxford Street bridge: This would provide a key direct connection. (The City has also recently added paved shoulders along Gideon Drive to the south.)

GOAL 3: 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.

SURVEY RESULTS

GOODS NEEDS AND OPPORTUNITIES

Continue to plan for the efficient and reliable movement of goods.

Address challenges to the movement of trucks and agricultural equipment.

Create a direct road connection between the planned employment area in Delaware and Highway 402.

Continue to collaborate toward implementing a road-rail freight transfer opportunity in Middlesex Centre.

RESILIENCY NEEDS AND OPPORTUNITIES

Review standards for bridges and culvert design.

Review and address design and maintenance concerns regarding gravel roads.

Consider transportation demand management (TDM) strategies.

Address the lack of electric vehicle charging infrastructure in Middlesex Centre.

ACTIONS INCLUDE...

- Ensure that **farm equipment is considered** in the design of rural roads.
- Explore the use of **laybys** on roads with high volumes of farm vehicles, implementing a pilot project on selected roadways used by farm equipment.
- Together with the County, advocate for a **new interchange at Highway 402 and Carriage Road**.
- Work with partners (e.g. CN, CPKC) to explore the feasibility of a **road-rail transfer station**.

ACTIONS INCLUDE...

- Update **standards for bridges and culverts** based on increased frequency and magnitude of extreme weather.
- Implement **updated stormwater management strategy**.
- Review **gravel road conversion policy**.
- Develop and implement a **travel demand management strategy** to reduce demand for road capacity.
- Develop and implement a **strategy for electric vehicle charging stations**.



41% respondents would like to see improved road design of key routes to better support or manage goods movement and local businesses.

Agriculture requires roads that are built and maintained to adequately allow movement of agricultural products safely.

- Rural resident

Continue to support infrastructure needed for large farm machinery, and improve conditions for shared-use, multi-modal transport.

- Rural resident

Address electrification of grid to support move to electric vehicles.

- Komoka-Kilworth resident

Some gravel sideroads ... [are] too narrow for farm trucks

- Birr resident

The Supporting Goals inform the development and implementation of the Mobility Goals actions as noted below.



GOAL 4: SENSITIVE TO LOCAL CHARACTER AND QUALITY OF LIFE

Provides transportation solutions that reduce the negative impacts of transportation on local rural communities and urban centres, settlements and hamlets.

- Given the importance of inter-regional connectivity to London and high through traffic volumes, interregional and heavy vehicle traffic are encouraged to use appropriate routes, e.g. increased clarity on the role and function of each road in the network toward appropriate design, and continuing to work with the County to ensure County roads are appropriately expanded where needed.
- TMP actions work toward a better balance of County vs. Municipal priorities on urban County roads.
- Infrastructure will continue to be sensitive to rural/small town character, where appropriate, e.g. dark-sky streetlights, and appropriate sidewalk and road drainage designs.



GOAL 5: PROTECTS THE NATURAL ENVIRONMENT

Minimizes disruption of local habitats, waterways, agricultural land and natural heritage features, and reduces non-renewable energy use and pollutants arising from transportation.

- Disruption of agricultural lands, waterways, habitats and natural heritage features is reduced by optimizing the use of existing infrastructure rather than new infrastructure, where feasible.
- Safety for wildlife is increased through exploring and implementing ways to reduce wildlife collisions.
- Non-renewable energy use and the production of anthropogenic pollutants is reduced by supporting cycling, walking, and transit use, as well as by providing electric vehicle charging infrastructure.



GOAL 6: EXERCISES FISCAL RESPONSIBILITY

Represents cost-effective Municipal spending on infrastructure and operations and takes advantage of partnership opportunities and external grants.

- Municipal resources are used cost-effectively, focusing spending on actions with tangible impact.
- Transportation spending is kept within Municipal budget limitations.
- Municipal funds are leveraged through partnerships and access to federal and provincial grants where possible.

SURVEY RESULTS

“Connectivity” should not override the quality of life that originally brought current home-owners to Ilderton. The reduction in noise pollution, the emphasis on nature, the element of privacy, etc.
- Ilderton resident

Some areas are unique and that uniqueness needs to be preserved as much as possible.
- Komoka-Kilworth resident

Do not spend agricultural tax dollars on what we do not need. *- Rural resident*

Please do not install sidewalks in established neighbourhoods that have low traffic flow. A waste of taxpayers' money.
- Ilderton resident

More emphasis on ... protecting the local landscape and environment, managing growth in a much more controlled manner. One that our infrastructure can readily support.
- Rural resident

Next Steps



What's Next in the TMP Study?

Learn more about the study and what to expect in the coming months below. Following this round of engagement, which also includes stakeholder consultation, we will:

- Review your feedback to understand if any changes to the actions and strategies are required
- Develop a phased implementation plan and costing



Remember to share your input. Provide feedback and complete the survey online: middlesexcentre.ca/tmp

