Appendix A

Online Survey Summary

TRANSPORTATION SURVEY SUMMARY

Stantec

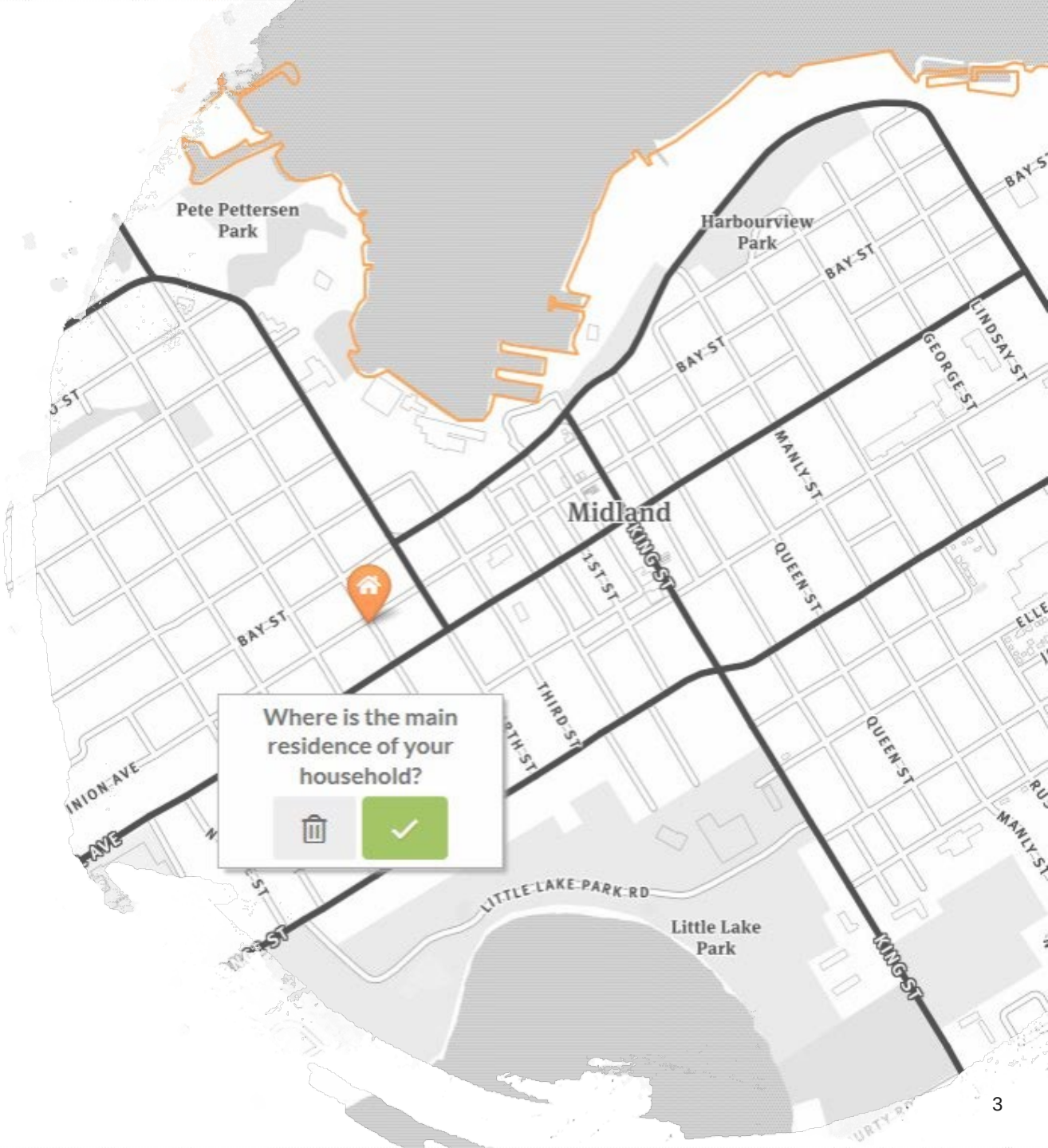
Midland

MOVING MIDLAND

Table of Contents

Survey Methodology

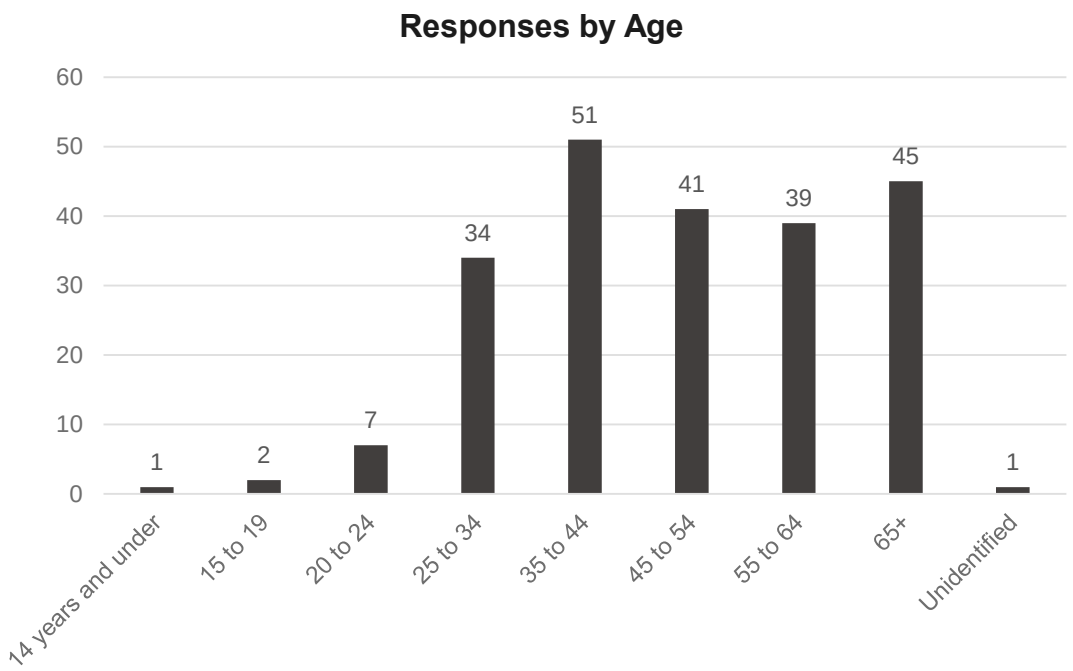
- The Town Midland TMP online survey ran for a duration of 31 days between December 17th, 2018 to January 17th, 2019.
- Using the online survey and interactive map software, participants identified what influences their travel mode, issues, opportunities, priorities and the vision of the TMP.
- A total of 221 responses were received and separated into 7 geographical zones to categorize residents' travel behaviour.

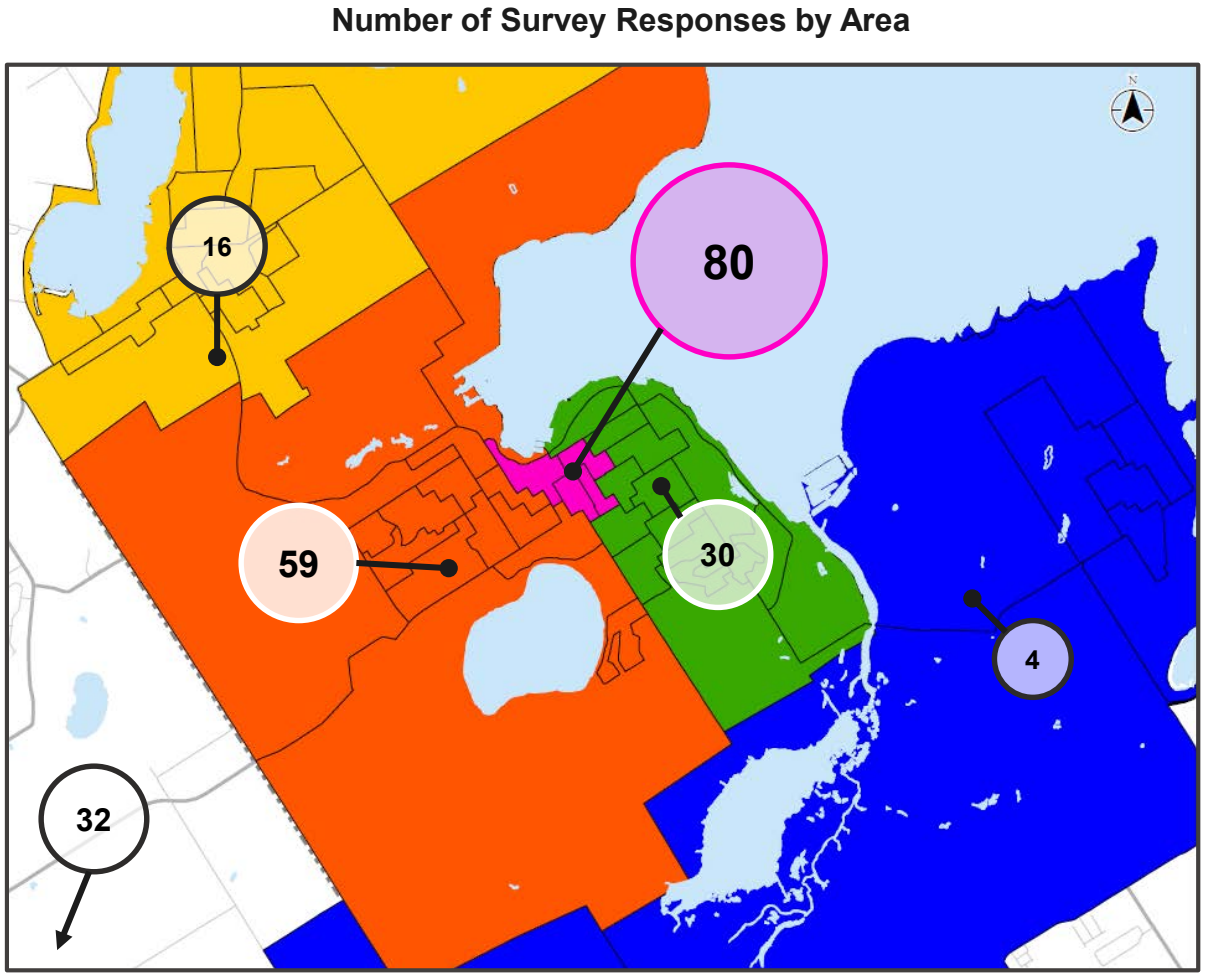


Online Survey Results

General Statistics

General Statistics





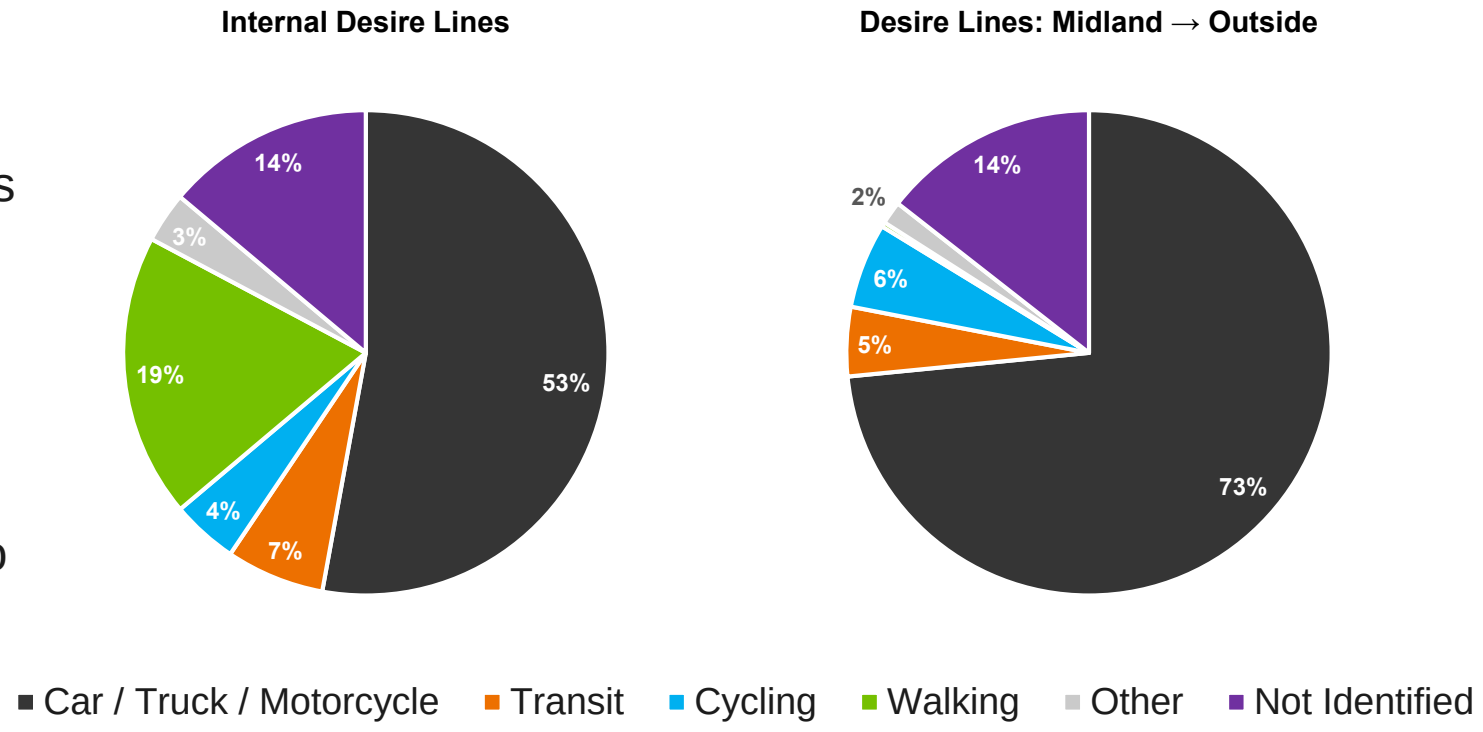
Online Survey Results

Travel Demand

Travel Demand

- Survey participants identified internal Origin-Destination desire lines that were more likely to be completed on sustainable forms of transportation such as transit, walking, or cycling, as opposed to external Origin-Destination desire lines that showed a preference for Automobiles

- External desire lines show there are opportunities for transit and cycling to potentially provide an option for connecting to neighbouring municipalities such as Penetanguishene, Tay, and Port McNicoll

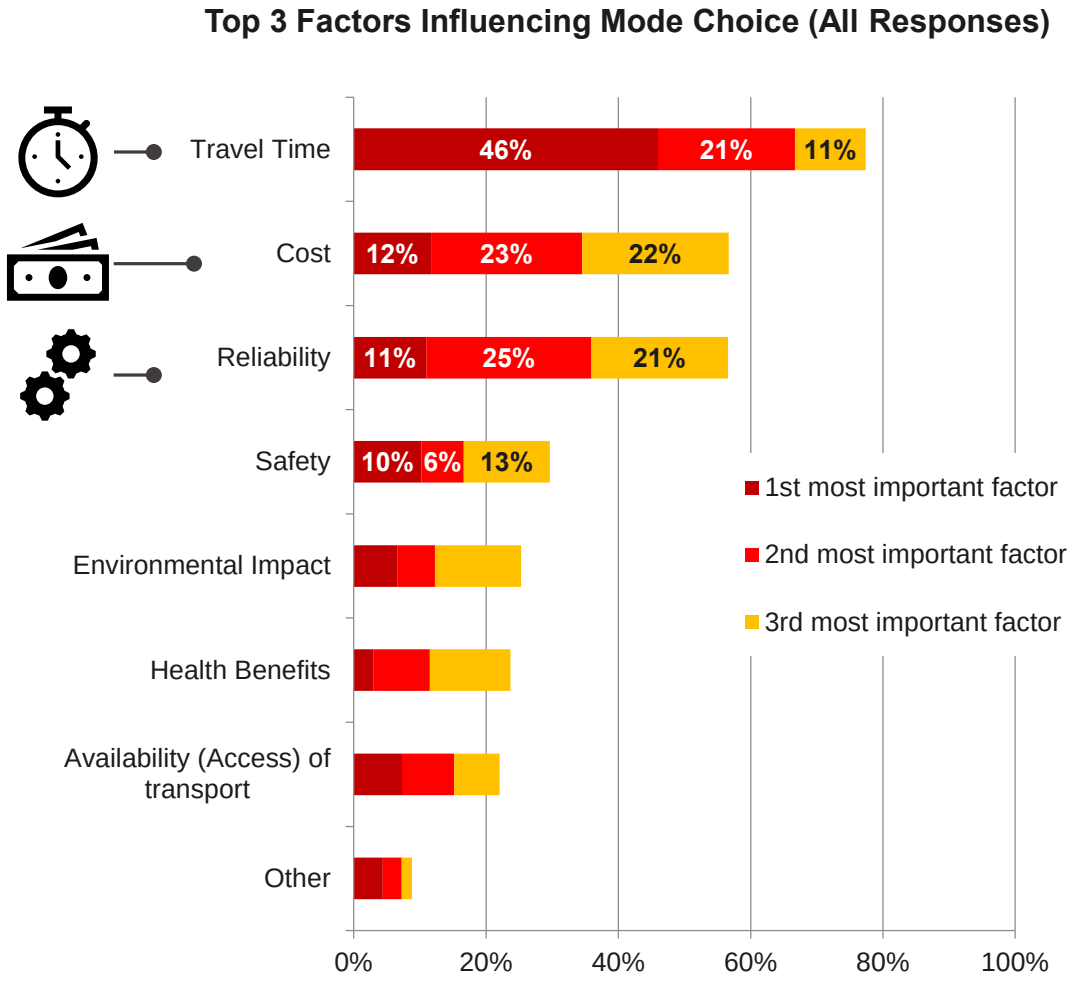


Online Survey Results

Travel Influence

Travel Influence

- Survey participants identified **travel time** as having the most influence on their transport mode choice followed by **cost** and **reliability**
- Participants from all geographical locations identified **environmental impacts**, **health benefits**, and **Availability (Access) of transport** and as having the ***least*** influence on their mode choice
- Residents from rural areas and hamlets identified similar factors influencing their mode choice as respondents from Midland



Online Survey Results

Issues & Successes

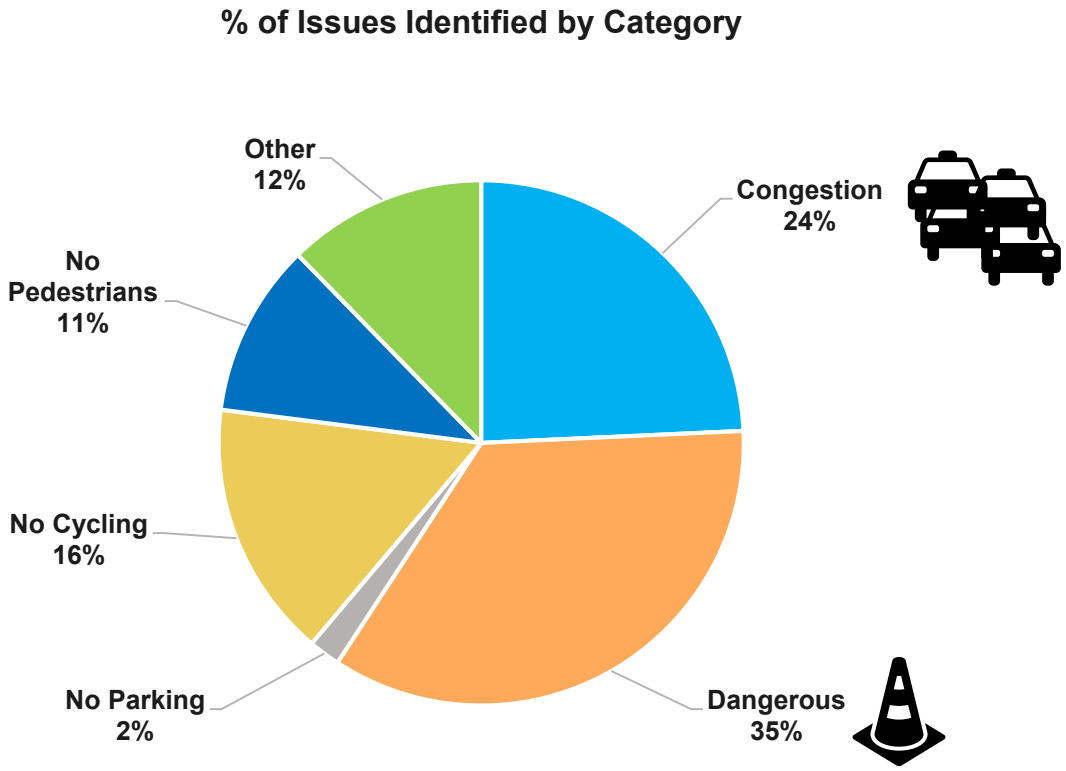
Areas of Issue

Over 200 descriptions were provided on the transportation issues in the Town; key words summarizing these issues are illustrated in the figure on the right

Areas of Issue

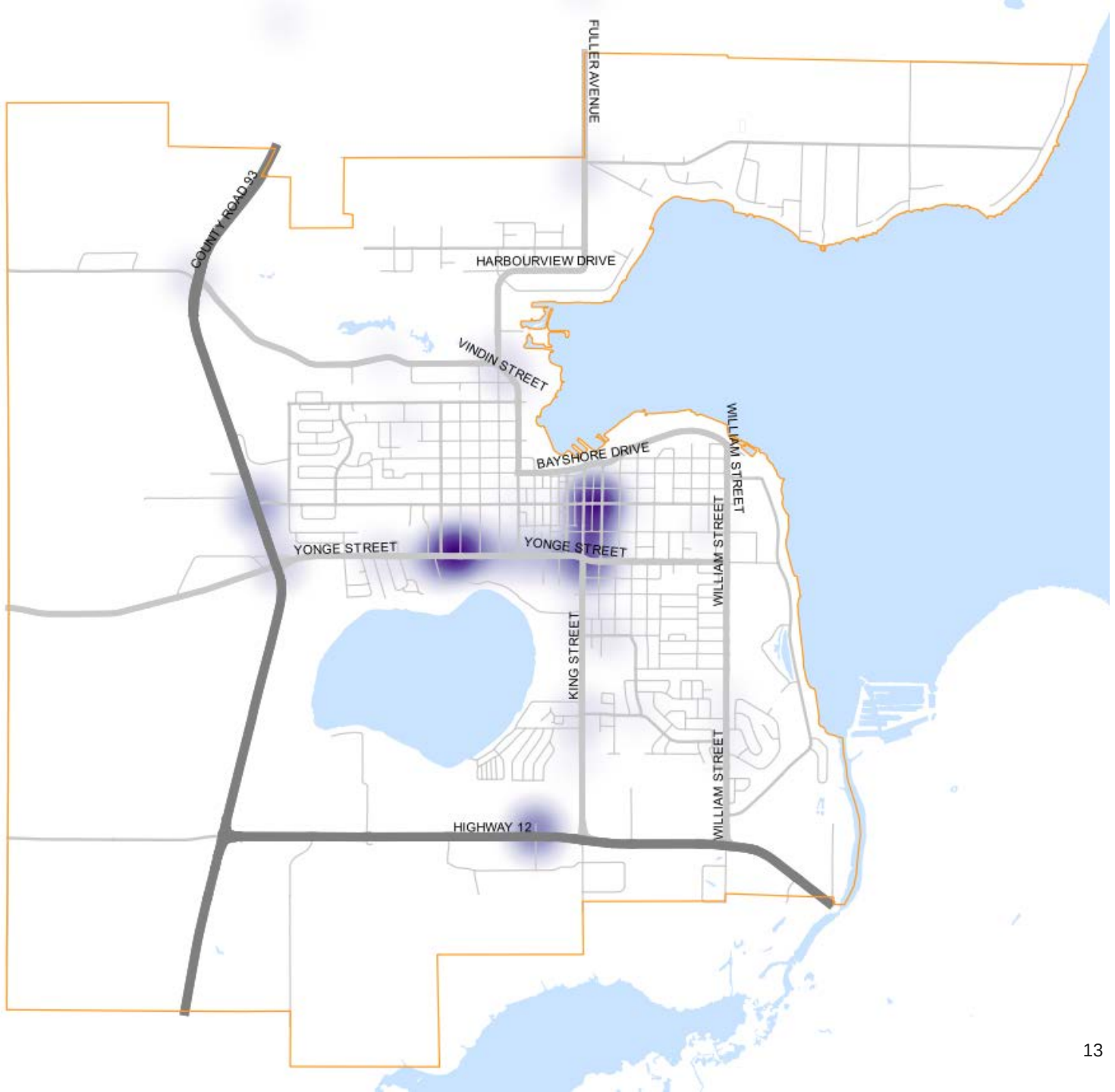
- **Congestion** and **dangerous conditions** were identified as the largest transportation problems in the Town

- Survey participants identified other specific transportation issues including:
  - **Lack of transit service -** congested buses and inadequate transit stops
  - **Poor road conditions -** gravel surfaces, potholes and muddy surfaces
  - **Snow plowing, weather maintenance**
  - **Unsafe conditions -** cycling, walking, speeding, lighting and turning movements



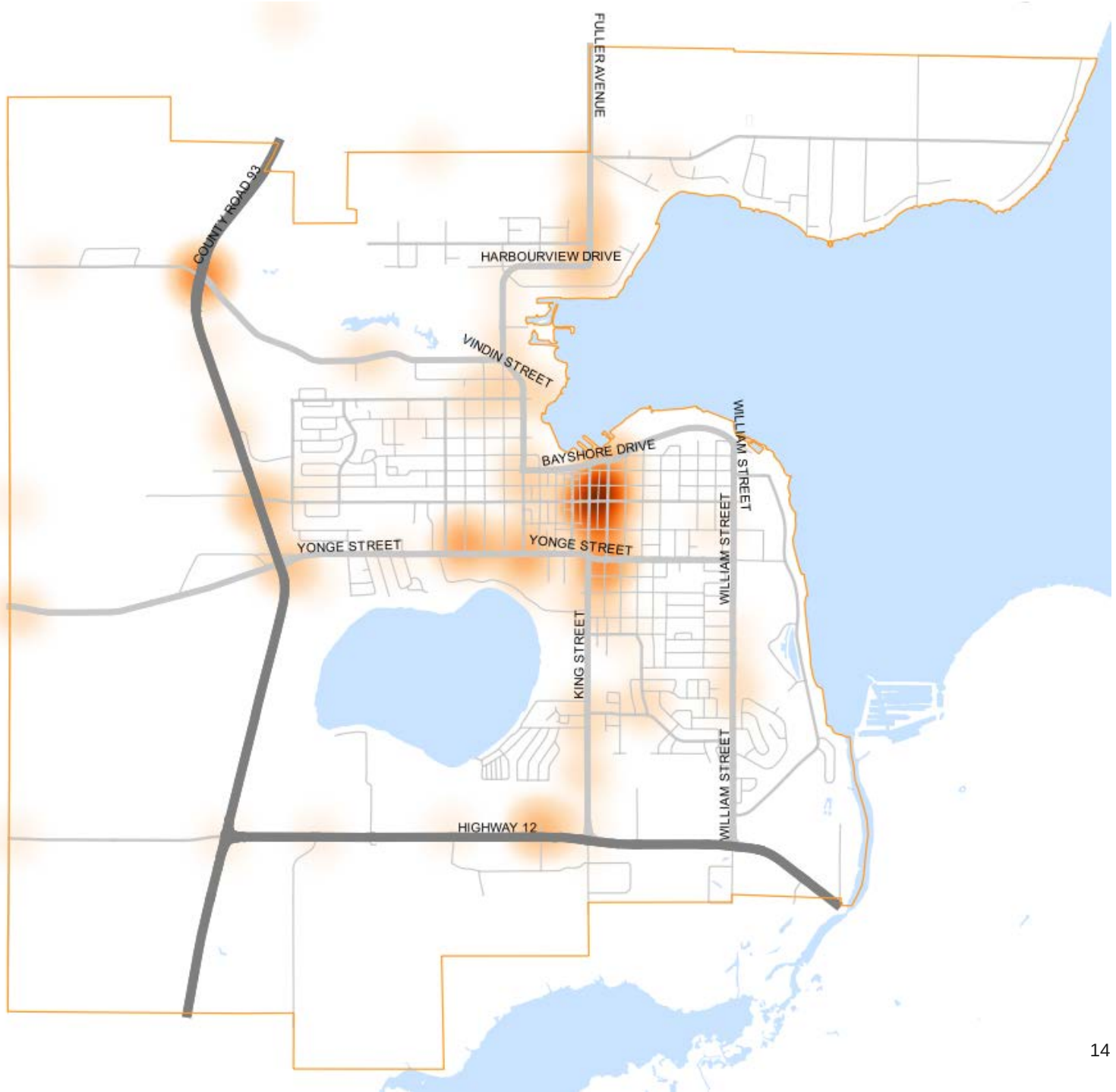
Problem Areas **Congestion**

- Areas identified as problems for congestion primarily focused on retail areas including:
  - **Smart Centres Walmart Plaza (Heritage Dr / Jones Rd)**
  - **Downtown Midland**
  - **Yonge St between Eigth St and Sixth St** and
  - **Canadian Tire Plaza (Penetanguishene Rd / Lanigan Dr)**



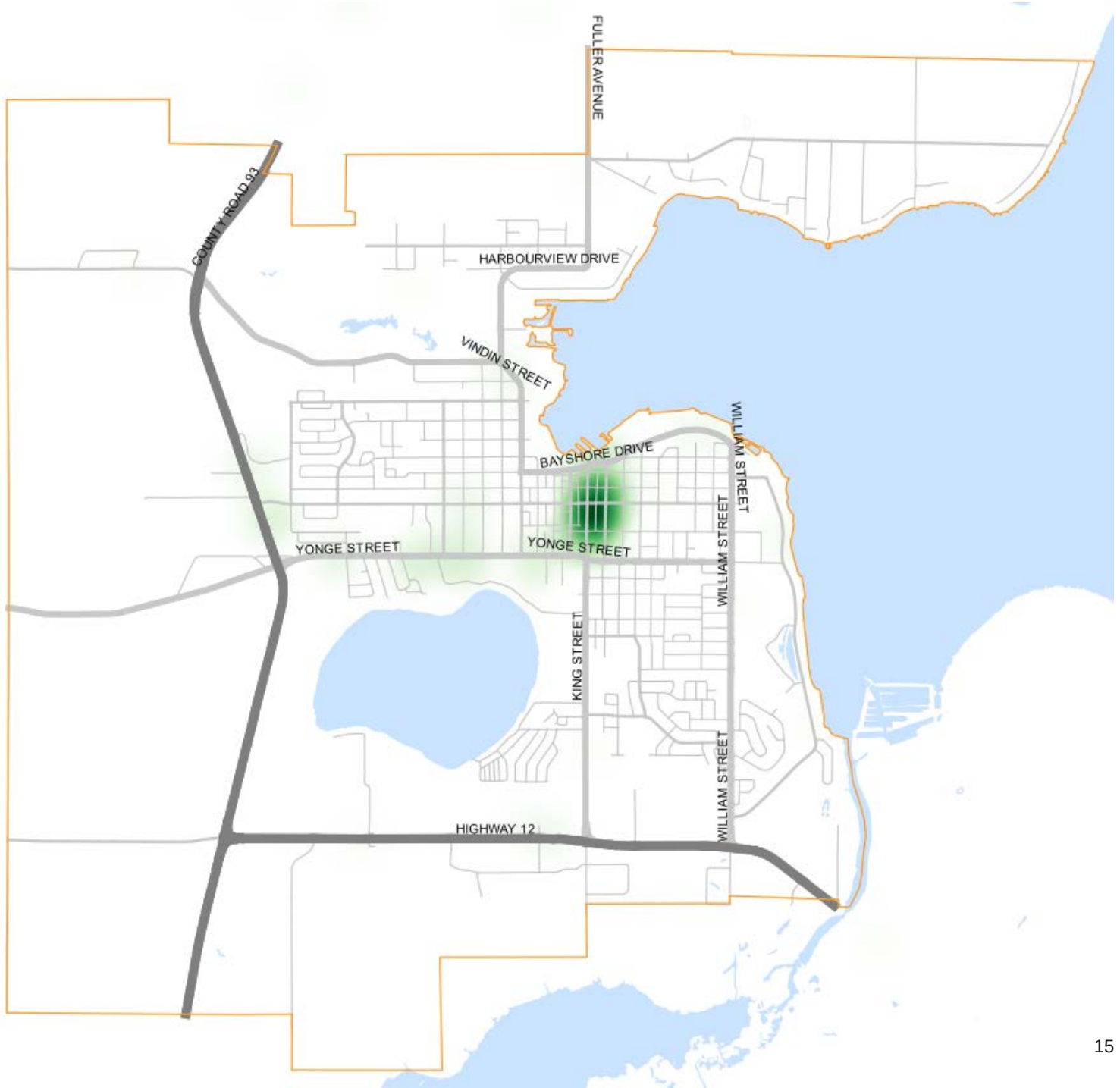
Problem Areas **Dangerous**

- Areas identified as dangerous often coincide with areas identified as congested and primarily focused on the following:
  - **Lack of bicycle/pedestrian facilities for safe crossing in the Downtown and along County Rd 93/Highway 12**
  - **Poor parking compliance in “no-parking” zones, particularly around Schools**
  - **Speeding**
  - **Poor intersection sightlines**



Successful Areas

- Areas of successful transportation were identified primarily along Yonge Street and in the Downtown due to better pedestrian and cyclist safety
- Survey participants identified specific success factors including:
  - **Safety** - pedestrian crossing and sidewalks, new bike lanes and traffic calming along Yonge St, 4-way/Signalized stops in Downtown
  - **Transit Connections** - enhanced transfers to Penetanguishene and Linx buses and good service area for local routes
  - **Intersection Optimizations** - appropriately implemented signals and turning lanes, particularly at Hugel Ave / King St

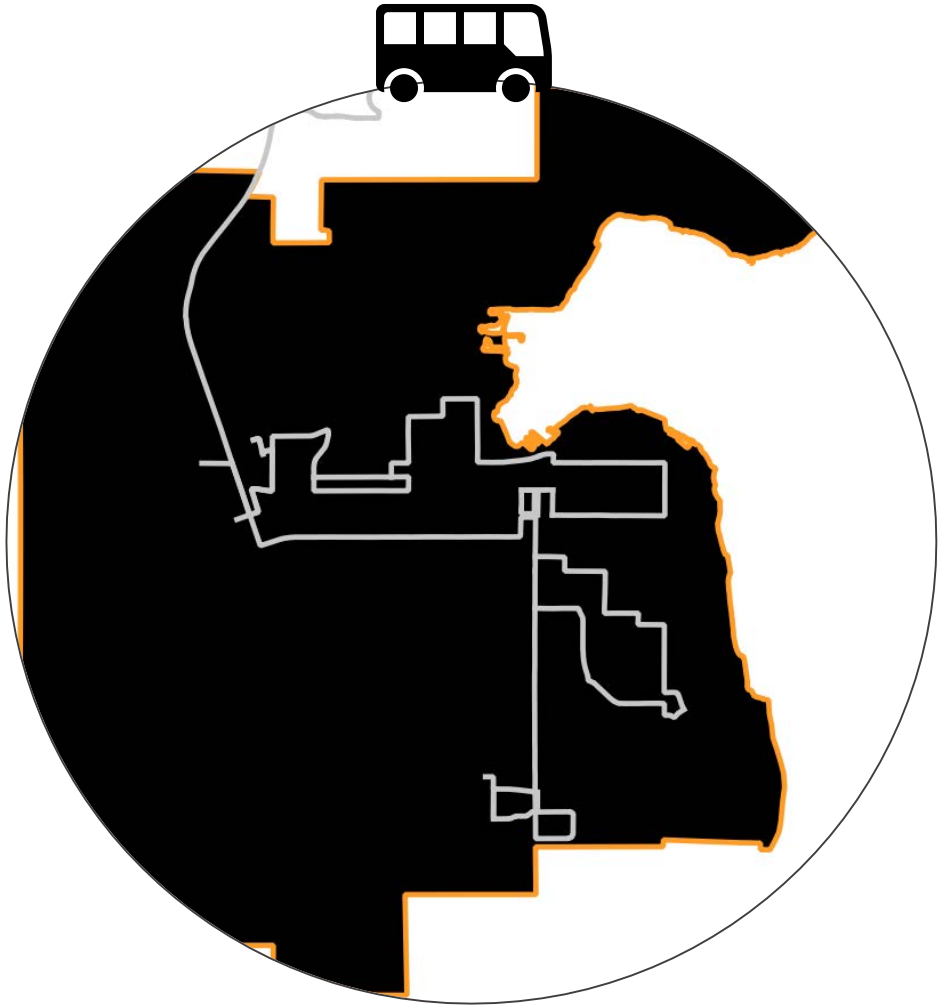


Background Data

Existing Transportation Networks

Existing Transportation Networks

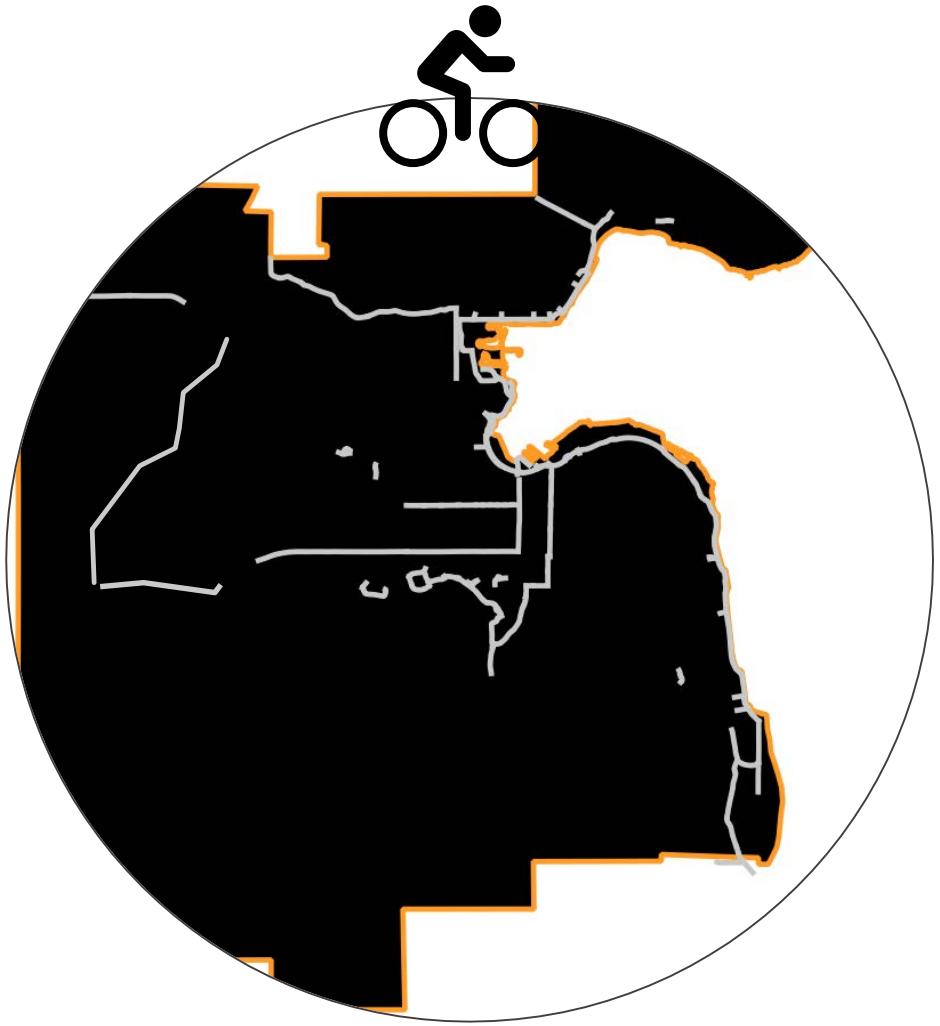
151 KM



44 KM

Existing Transportation Networks

118 KM



25 KM

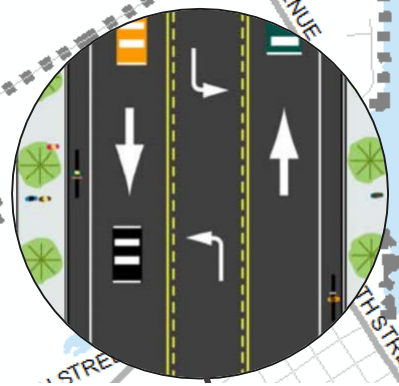
Online Survey Results

Transportation Links

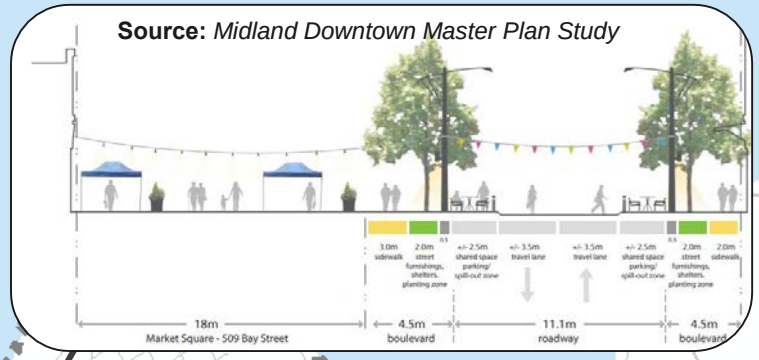
Automobile

- Participants did not identify key additional corridors to be built, however there was a desire for improving operations along the major corridors where demand is high such as:
  - **County Rd 93**
  - **Highway 12**
  - **Yonge St**
  - **King St**

- Improvements to King St as part of the Downtown Master Plan will be an important consideration for how automobiles access and pass-through on King St and the impacts to other corridors



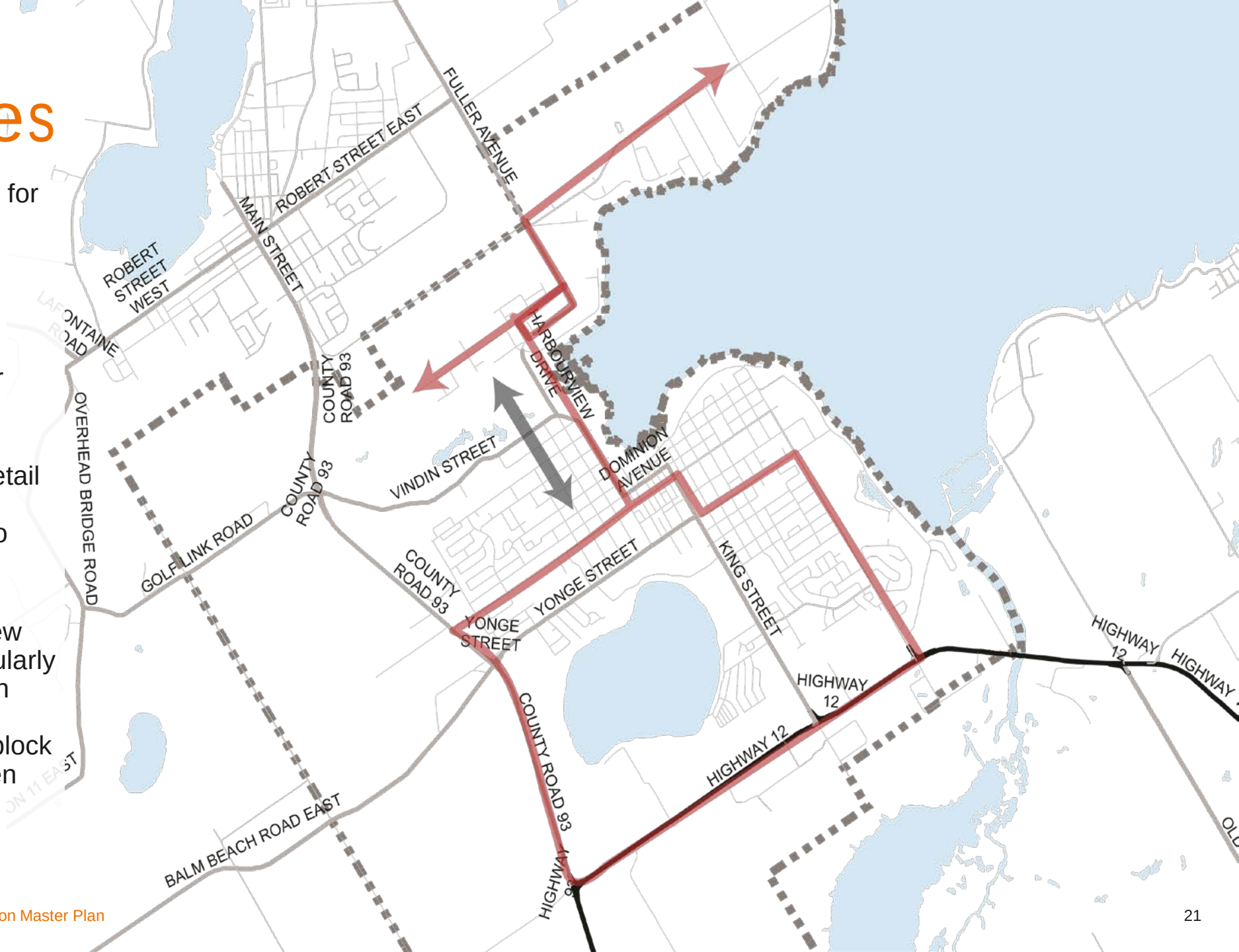
Source: *Yonge Street Road Diet*



Source: *Midland Downtown Master Plan Study*

Transit Routes

- Participants identified a desire for better and more reliable bus service
- Demand for transit service connecting residential neighborhoods that are further away from the Downtown
- More direct routing between retail areas on County Rd 93 and Highway 12 without needing to transfer downtown
- Desire for better service for new residential subdivisions particularly along William St and Aberdeen Blvd. Potential opportunity to create pedestrian/bicycle midblock connections between Aberdeen and William to support transit.



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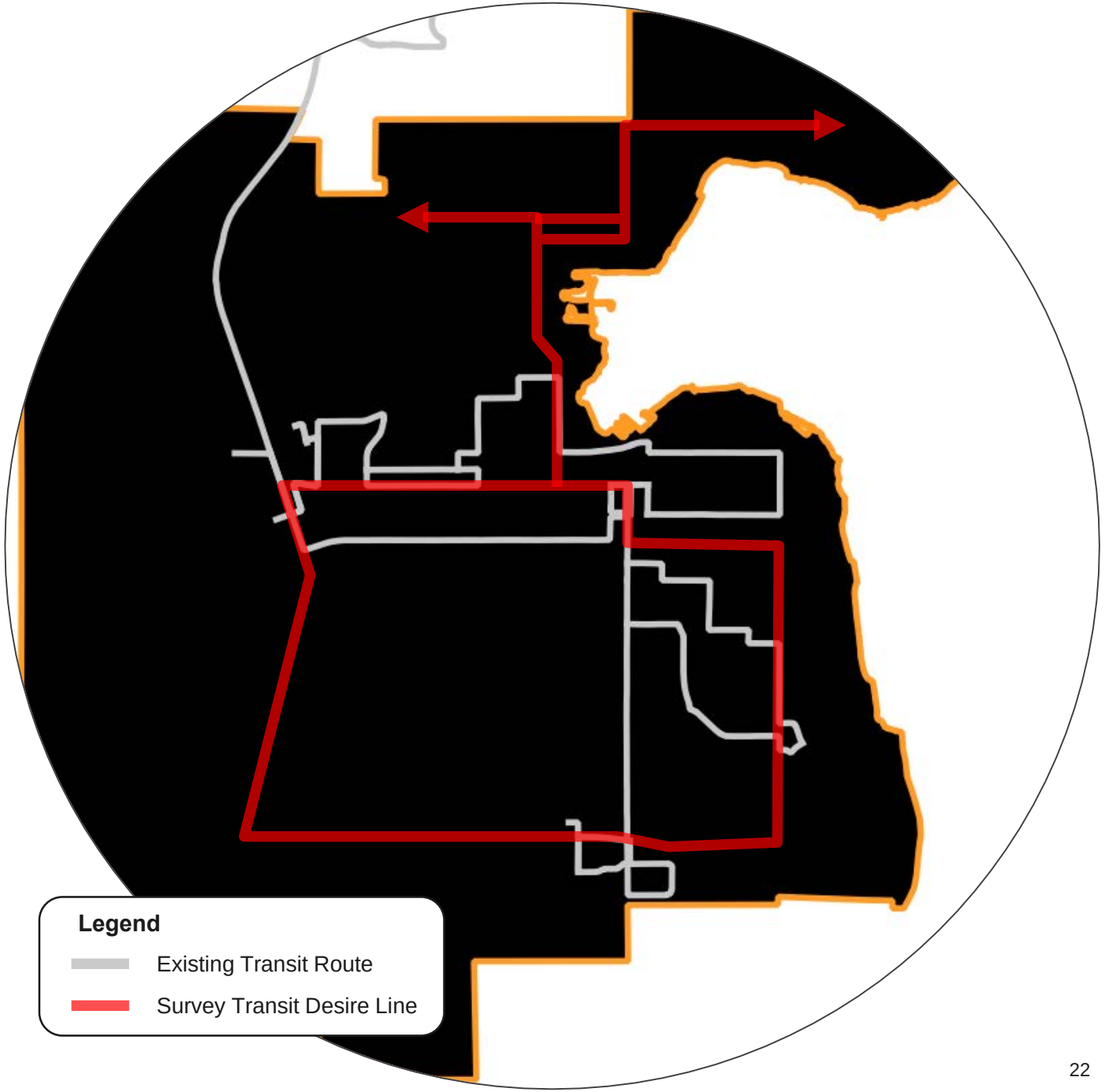
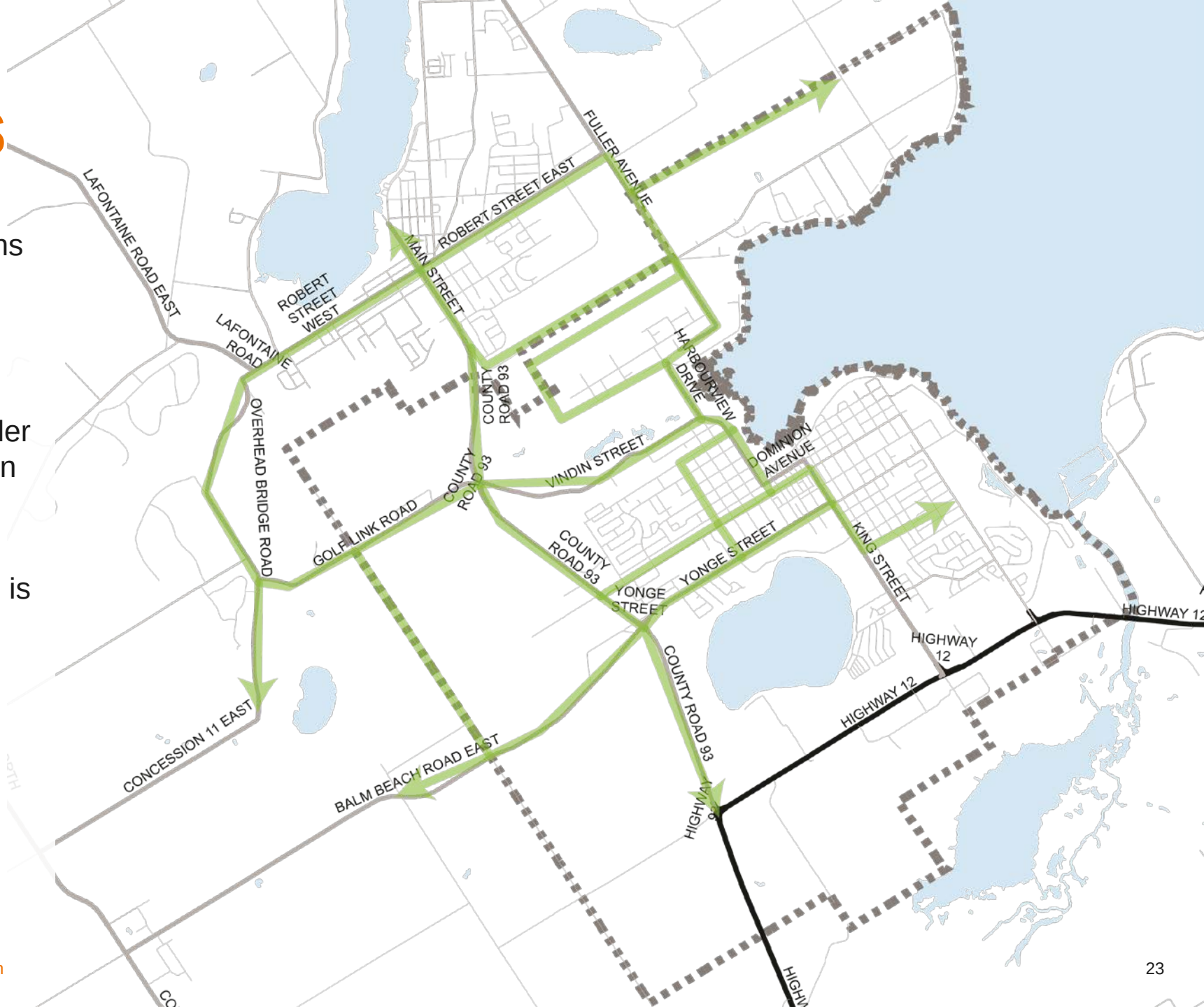


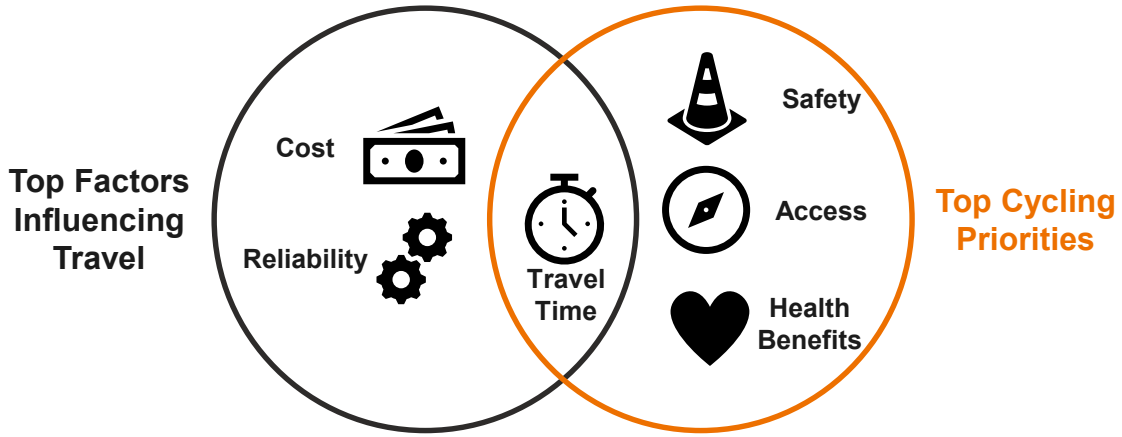
Cycling Routes

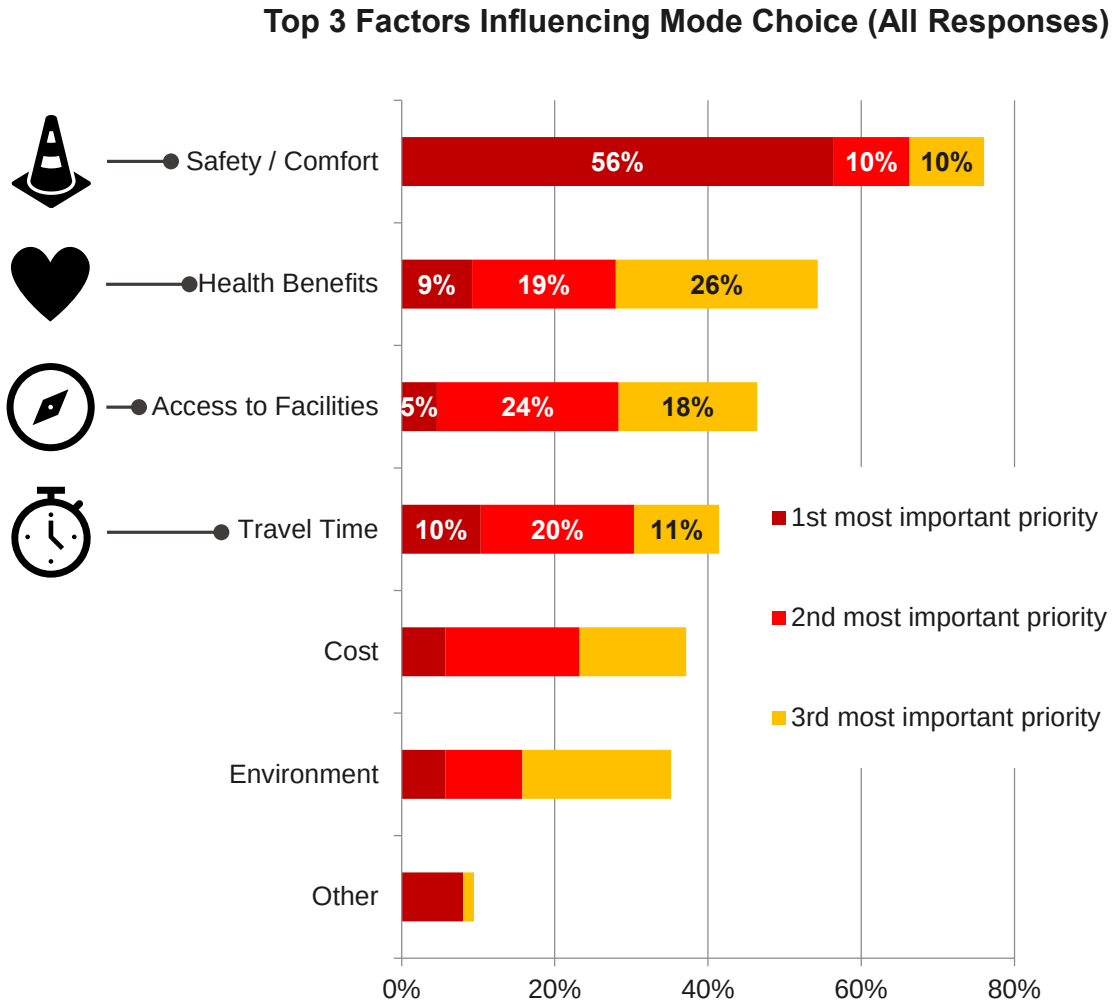
- Support for better cycling connections between Midland and neighbouring communities
- Respondents identified the need to improve bike lane connectivity in order to enhance safety and accessibility in Midland
- Respondents identified the following is key corridors for cycling:
  - **Harbour View Dr**
  - **Balm Beach Rd E**
  - **County Rd 93**
  - **Vindin St**
  - **Golf Link Rd**



Cycling Priorities

- Over half of the survey participants identified **safety and comfort** (56%) as the primary factor encouraging them to cycle, followed by **travel time** (10%) and **health benefits** (9%)
- Respondents want to feel **safe** while riding their bike which goes together with **access to facilities** that provide safety, and which ultimately give them an alternative option to get where they want to go (**Travel Time**)
- Cyclists have specific needs and priorities compared to other road users, however a need for infrastructure that helps people get places faster to cut down on travel time is shared across modes





Cycling Routes

- The survey identified routes that work towards filling in the gaps and create a more permeable network that serves not just internal trips but external ones as well

- The survey identified lines also show a desire for more direct routing between internal areas within Midland

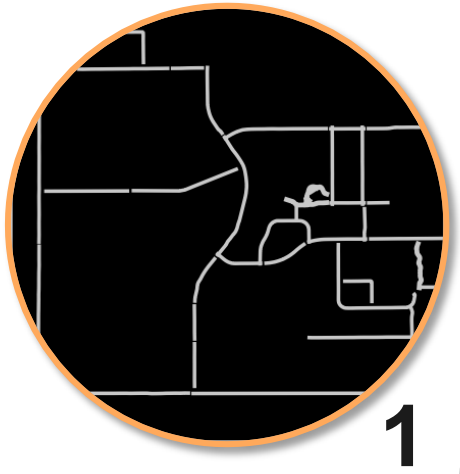
Walking Routes

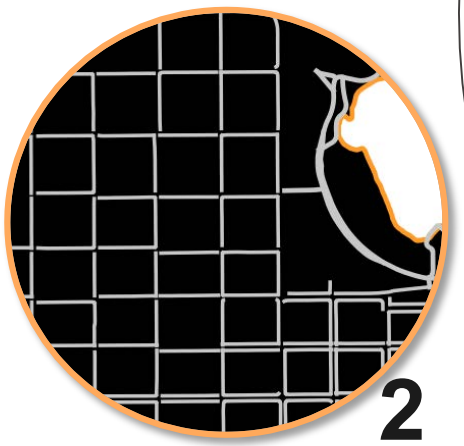
- The majority of respondents identified a desire for better pedestrian facilities along:
  - **County Rd 93**
  - **Vindin St**
  - **Balm Beach Road East; and**
  - **King St (between Galloway and Hwy 12) where there is a 900m gap between protected pedestrian crossings**
- Better connections and access to the waterfront and Tiffin area along Aberdeen Blvd
- Desire for a recreational path along the waterfront north of Bayshore Dr
- Other walking connections identified are related to safer sidewalk conditions to connect to major trip generators like schools, shopping centres, and recreational facilities

Walking Routes

- The existing pedestrian network provides a more permeable and connected pedestrian network in the older neighbourhoods, but has larger blocks with fewer connections in neighbourhoods on the periphery of the Town

- Opportunities to add sidewalks on more local streets to increase these connections in newer neighbourhoods





Online Survey Results

Priorities

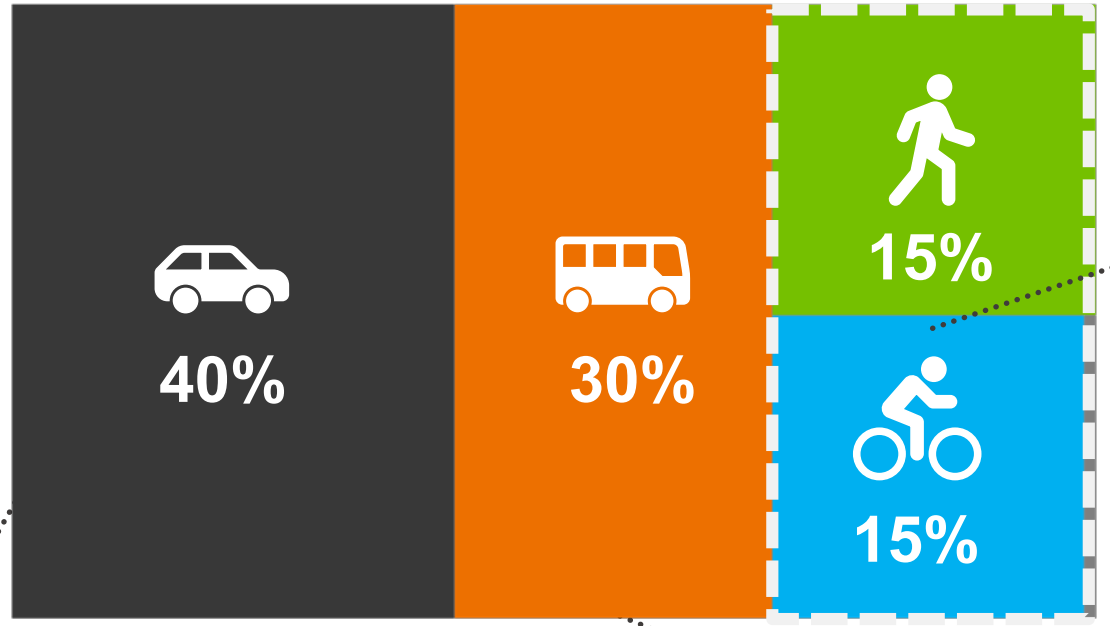
Priorities

Participants were asked to identify what % of the TMPU should be focused on each mode of transportation. Respondents identified that the majority of the TMPU should focus on a mixture of transportation options, not just automobiles

60%

% of TMPU that should be dedicated to sustainable forms of transportation

Average Respondent Priority % by Mode

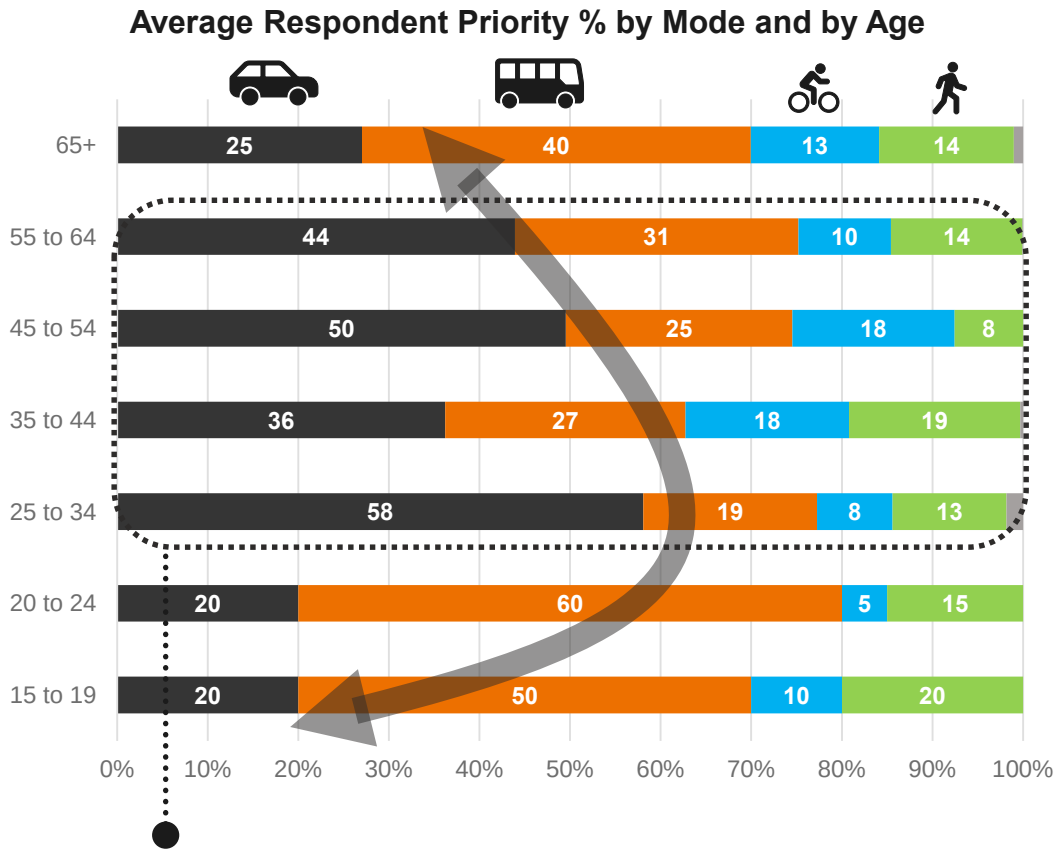


30% to focus on active transportation focusing on safety, access, and travel time improvements

Respondents felt that 40% of the TMP focus should be on vehicular modes (including cars, trucks and motorcycles)

30% to focus on transit both within and beyond Midland

Priorities by Age



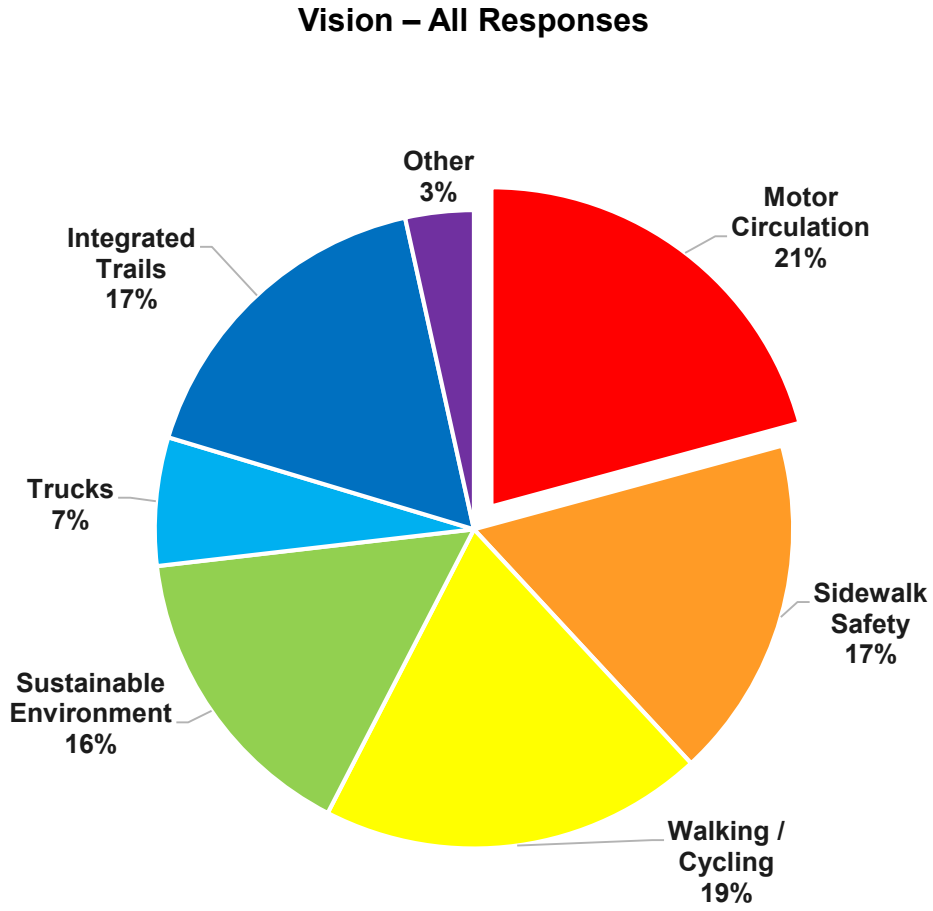
25 to 44 year old young professionals had a greater focus on automobiles, compared to school-aged and older respondents who had a stronger focus on transit and active transportation

Online Survey Results

Study Vision & Objectives

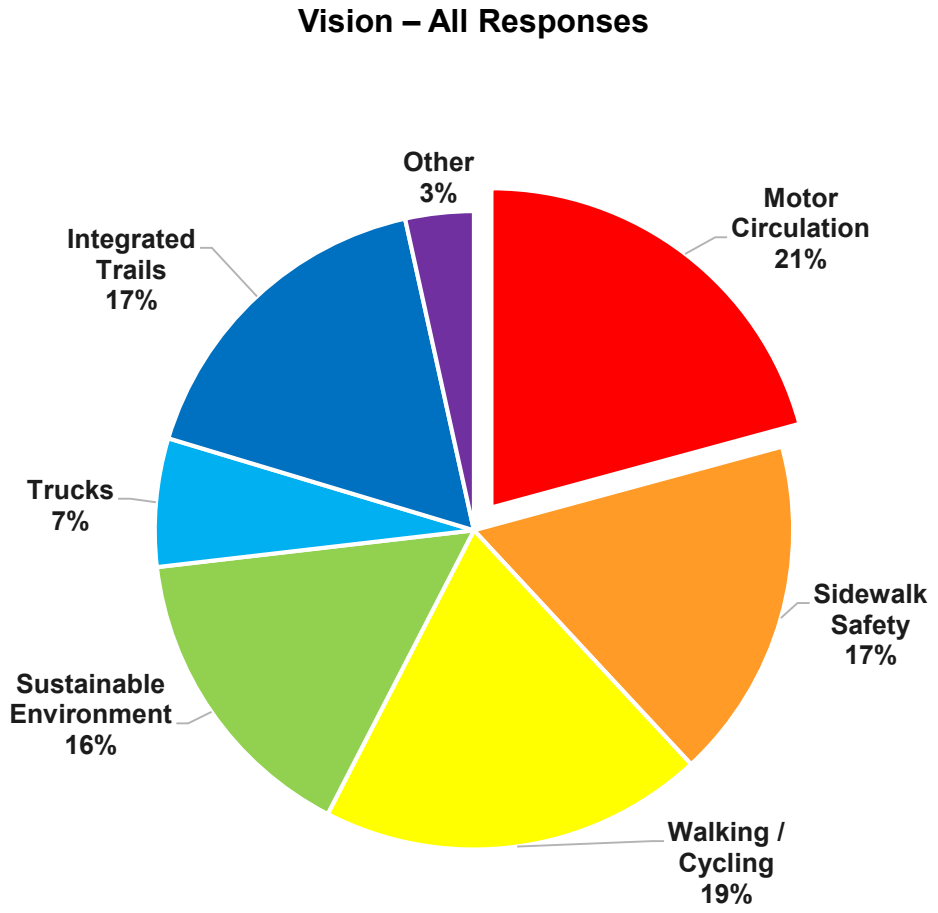
Vision for the Town

- Streets that allow efficient circulation of motor vehicles
- Streets, sidewalks and trails designed with safety as the first priority
- Streets designed for walking and cycling so residents can choose to leave their car at home
- A sustainable transportation system that minimizes impacts on the natural environment
- A road network that accommodates trucks to support existing and future businesses
- Trails that are integrated with streets and sidewalks to provide routes for recreation and active transportation
- Other



Vision for the Town

- Overall, residents want a TMP with a balanced vision between efficient motor circulation, sustainable transportation, and safety.
- Sidewalk Safety, Integrated Trails, and Motor Circulation is a vision that is consistently demanded across all age groups and areas
- Survey respondents identified not just a need to focus on internal connections, but also external ones neighbouring municipalities
- The need for more signalized intersections and crosswalks along major road networks are also desired in order to, improve accessibility and safety throughout Midland



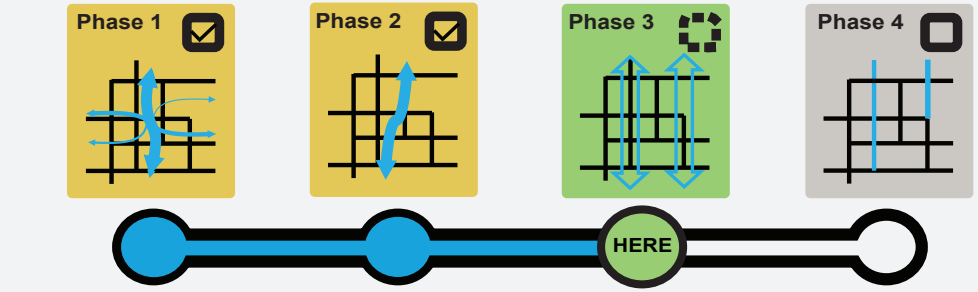
Online Survey Results

Conclusions

Conclusions

- **Influences:** Residents identified **travel time**, **cost**, and **reliability** as the most important factors influencing their travel
- **Issues:** Traffic **congestion** and **dangerous conditions** were the main concerns for residents. These generally revolve around major retails areas around County Rd 93, Highway 12, and Downtown, as well as along Yonge St
- **Successes:** Residents like areas **where safety is prioritized** particularly where safe spaces are provided for all modes of transportation such as on Yonge St. They also identified good **transit connections** and the existing **transit service area** as successes, as well as **intersection optimzations** that maximize intersection capacity such as at Hugel Ave / King St, where turning lanes were added.
- **Priorities:** There should still be a focus on enhancing auto circulation, however there is a desire to focus more on Transit and Active Transportation, particularly for school-age children and senior age demographics
- **Potential Improvements to Transportation Links:**
  - **Auto:** Enhance operations and maximize the roadway infrastructure along major roads where travel demand is high
  - **Transit:** Better reliability, and frequencies. Better internal connections between periphery areas of Midland including new subdivisions and retail centres
  - **Cycling:** More cycling infrastructure that is safe/protected, and that connects commercial areas on Harbour View Drive, County Road 93 and Yonge Street, as well as provide connections to the peripheries. A focus on improving recreational / tourism opportunities along the waterfront
  - **Walking:** Fill-in the gaps in Midland between existing pedestrian facilities to create a more permeable pedestrian network with better connectivity to recreation and retail centres, particularly on County Rd 93 and Highway 12
- **Vision:** A multi-modal transportation network that integrates a mixture of infrastructure and options for residents to jobs, services, and recreation providing options for travelling within and beyond the Town safely and efficiently

Transportation Master Plan Study Phases



Objectives

1. Provide Infrastructure for Growth:

Plan for the multi-modal transportation network's future needs over the next 5 to 20 years so that it not only addresses existing issues, but also accommodates future growth sustainably.

2. Prioritize and Encourage Active Transportation

Cycling and walking should be options not only as separate modes of transportation, but also as a means to address future growth and traffic congestion. Active transportation infrastructure should be complimentary toward promoting transit, tourism, and healthier communities.

3. Prioritize and Encourage Transit

Transit should be a viable alternative for residents, leveraging multi-modal connections and emerging/creative service solutions to maximize its investment.

4. Improve Safety for All Road Users

The multi-modal transportation network should be safe, comfortable, and reliable for all road users regardless of how residents choose to travel throughout Midland.

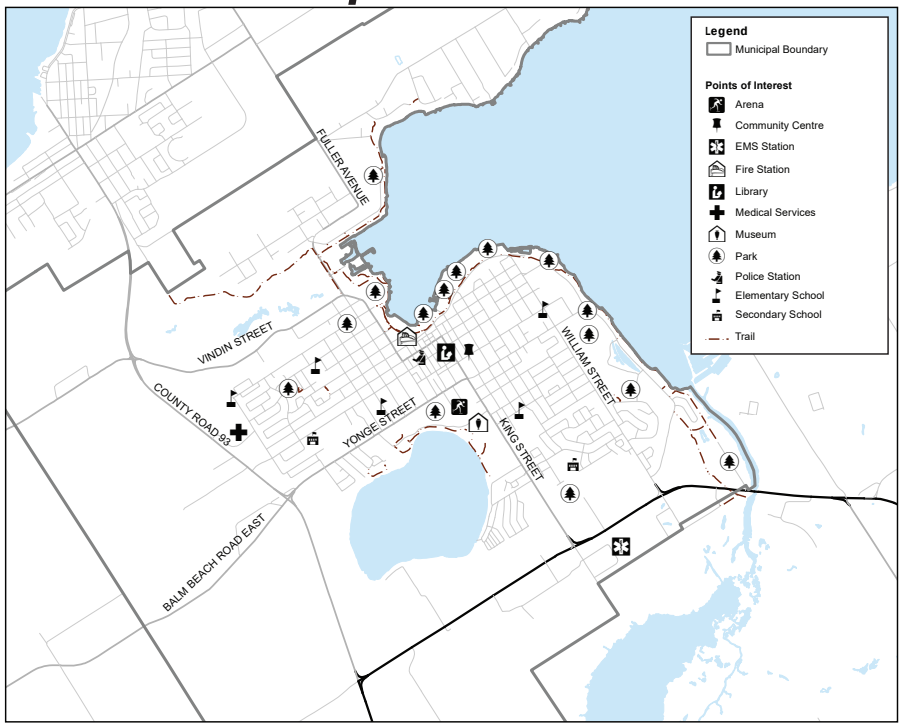
5. Plan Flexible Infrastructure for Seasonal Changes

Infrastructure should be planned and coordinated between different modes of transportation to create one multi-modal transportation system. This should promote the idea of using different modes for different trips and needs.

6. Enhance Multi-Modal Connections

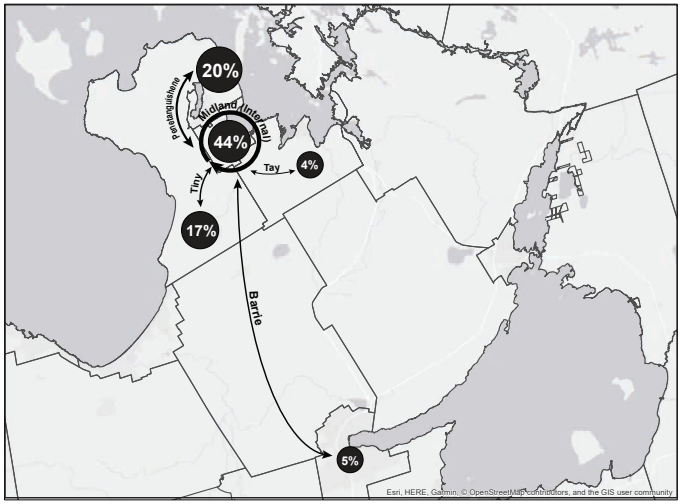
The multi-modal transportation network should be planned to leverage emerging and future technology in a way that allows the system to maximize investments in transportation.

Map of Midland



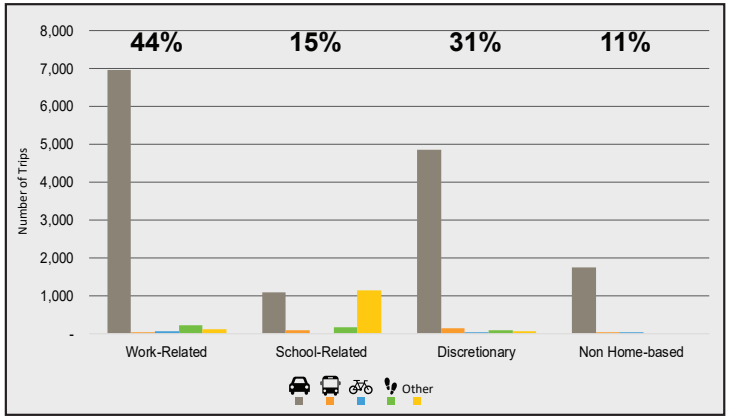
Trip Distribution

Trip Distribution | AM Peak Period (2016)



- Currently most morning peak period trips go within, or to/from adjacent municipalities such as Penetanguishene, Tiny, and Tay. Over 40% of trips remain internal to Midland and 85% remain within North Simcoe as shown in the figure above.
- Approximately 60% of morning peak period trips are work and school-related and predominantly made by automobile, although a significant number of School trips are made by school bus. All trip purposes are predominantly completed by automobile as shown below.

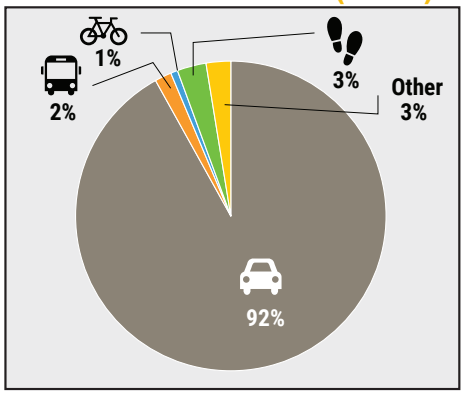
Trip Purpose by Mode | AM Peak Period (2016)



*2011 Transportation Tomorrow Survey Data used for Transit and Cycling Modes due to low sample size in the 2016 survey

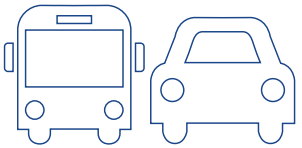
Mode Split

Mode Split AM Peak Period (2016)



*2011 Transportation Tomorrow Survey Data used for Transit and Cycling Modes due to low sample size in the 2016 survey

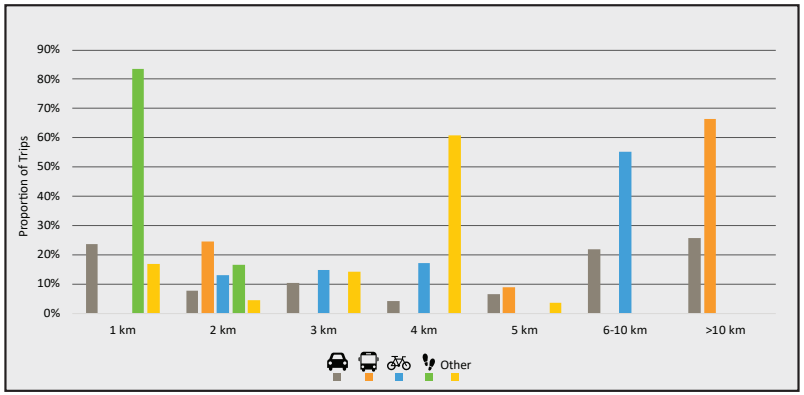
Since 2011 automobile mode share has remained consistent as the primary mode of over 90% of trips. Alternative modes of transportation like cycling, walking, and transit have all seen limited increases in mode share over the past five years.



Trip Length / Purpose

Different modes of transportation are more or less ammenable as a mobility option based on the type and length of trips being conducted. Currently 100% of walk trips are made at distances of 2 km or less, while cycling is more ammenable to medium-distance trips between 2-8km. Typically, cycling in small communities sees most trips between 2-5 km distances, which highlights Midland's unique context that sees biking done at slightly longer distances to access neighbouring municipalities. Transit usage in Midland is split into two buckets: local short-distance trips that are 2 km or less, and longer regional trips that are greater than 10 km. Despite Automobiles having an average trip distance of 13 km, 46% of car-related trips are made for trips under 4km. There are opportunities to shift a portion of short/medium-distance trips onto active transportation and transit.

Trip Length by Mode | AM Peak Period (2016)



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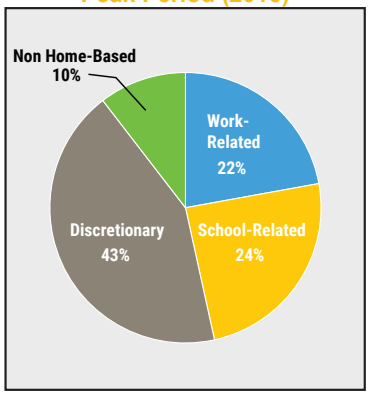
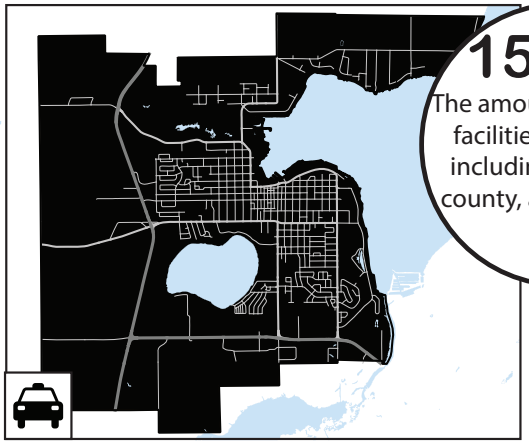
Active Transportation Trip Purpose AM Peak Period (2016)

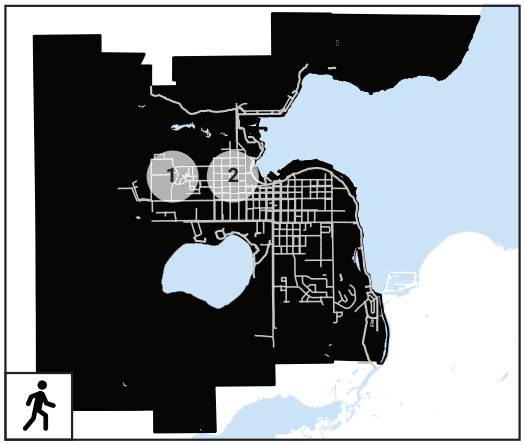


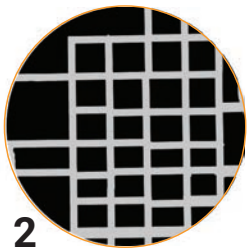
Existing Transportation Network



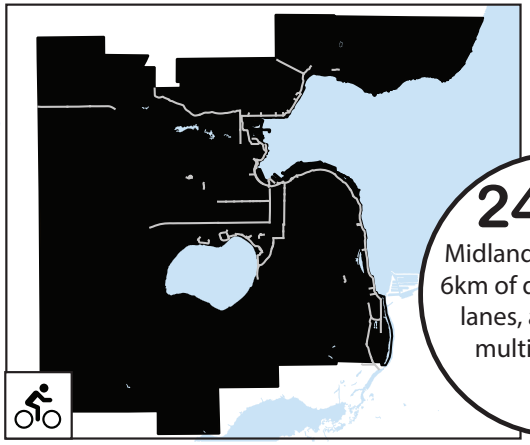
151km
The amount of roadway facilities in Midland, including municipal, county, and provincial roads.

The existing road network presents good coverage across the town with few natural barriers, beyond Little Lake that present a challenge for getting to and from different areas across Midland.





The pedestrian network is comprised of 118 km of infrastructure including both sidewalks and multi-use paths. As the pedestrian network extends out from the downtown, it follows a suburban form with fewer gridded networks and more circuitous routes. The impacts of this form of network creates large circuitous blocks that often require pedestrians to walk further to access collectors and arterial roadways as visualized above.

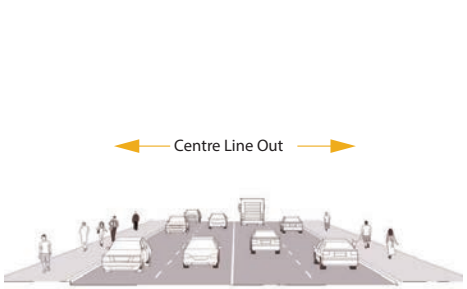


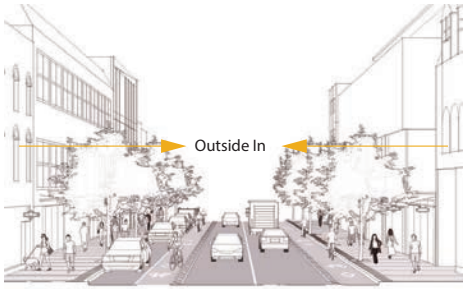
24km
Midland has less than 6km of dedicated bike lanes, and 18km of multi-use paths.

Midland's cycling network mostly comprises multi-use trails with a handful of roadway facilities accounting for a total of 24 km of cycling infrastructure throughout the Town. The existing network has some significant gaps in the periphery areas of the Town with limited connections to major retail trip generators along County Road 93 and Highway 12.

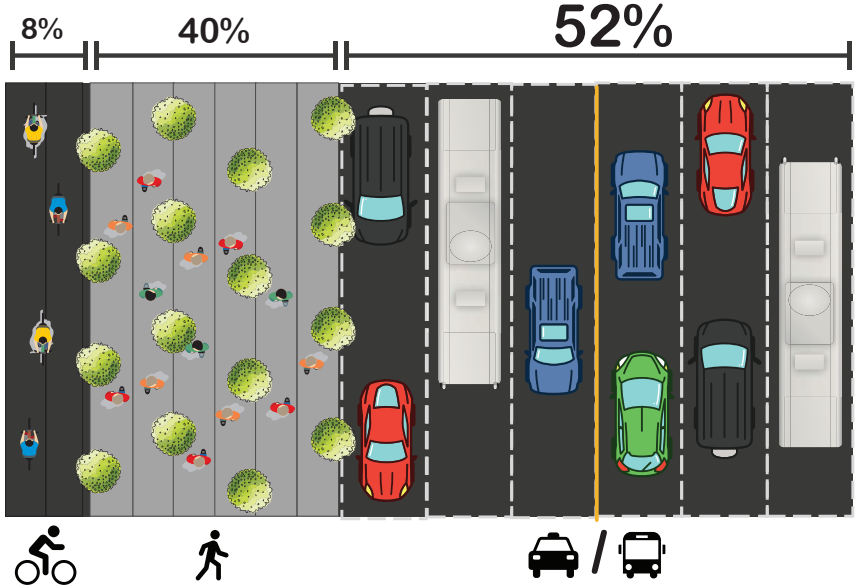
Different Road Users | Different Networks

Depending on what mode of transportation residents currently choose the existing transportation network provides considerable differences in connectivity. While the road and pedestrian networks provide fairly good connections throughout Midland, the cycling network provides little connectivity, and the transit network is circuitous often necessitating a transfer Downtown to go from one corner of the city to another. There are opportunities to think about how other modes can be accommodated on Midland's streets to not only encourage sustainable transportaiton, but also sustainable land use development.



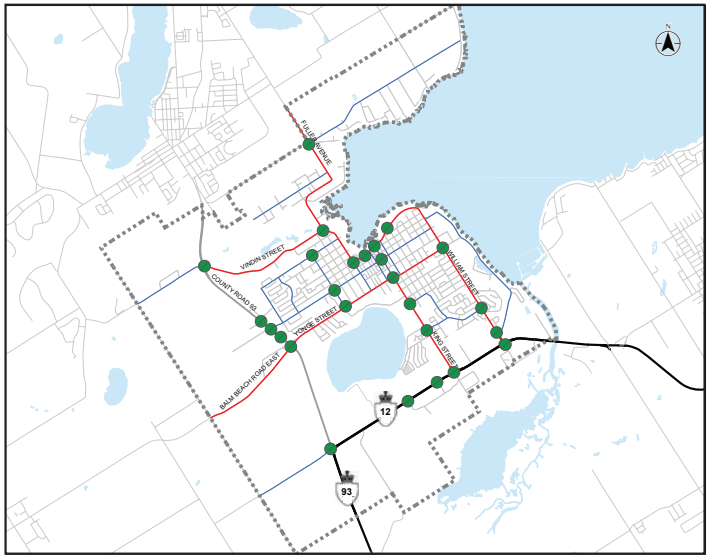


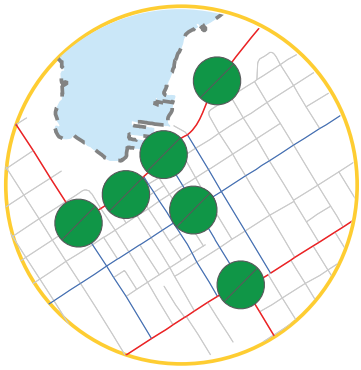
% of Infrastructure Dedicated to each Mode



Existing and Future Traffic Conditions

Existing Peak Hour Intersection Level of Service





Downtown Midland

Legend

Municipal Boundary Urban Areas

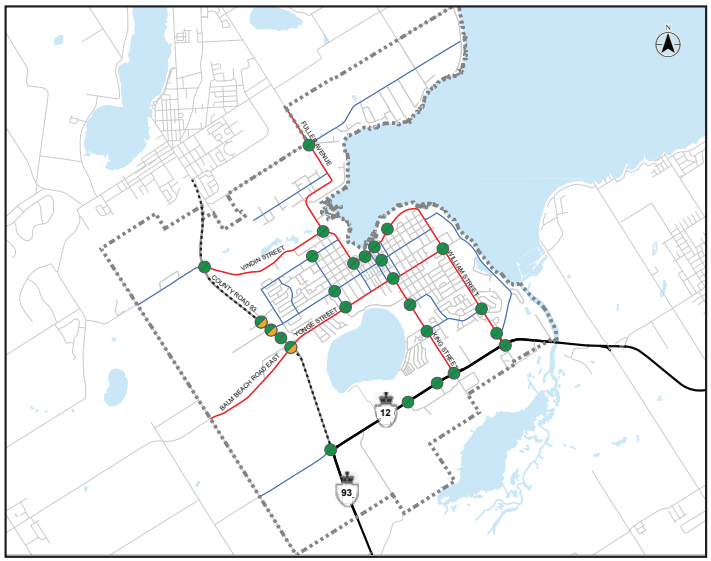
Level of Service (LOS)

A-C
D
E
F

AM Peak Hour LOS

PM Peak Hour LOS

Forecasted 2041 Peak Hour Intersection Level of Service (with no improvements)



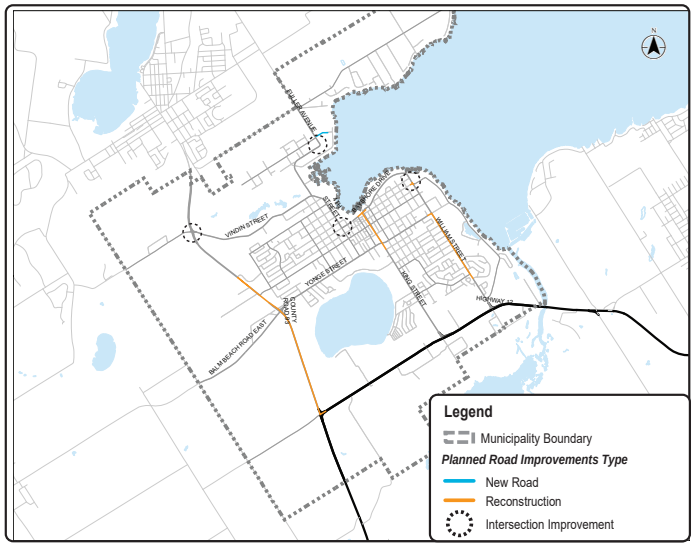
LOS Service

The quality of intersection operations at signalized and unsignalized intersections is evaluated in terms of level of service (LOS) and volume to capacity (v/c) as defined by the Highway Capacity Manual (HCM). Under existing peak hour traffic conditions most intersections operate at acceptable levels of service. When we apply forecasted trips onto the existing road network without any additional road improvements through to 2041 only a few intersections along County Road 93, particularly around the CanadianTire Plaza, start to deterioriate slightly.

Planned Improvements

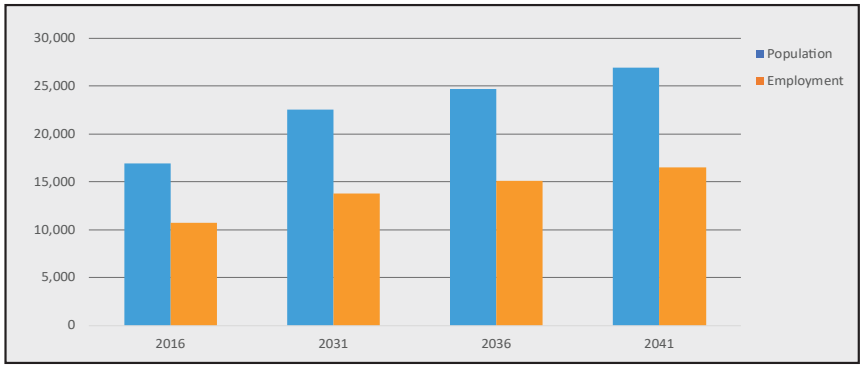
Improvements on County Road 93 and William Street were planned in the previous Transportation Master Plan to occur by 2021. County Road 93 is planned to have paved shoulders between Highway 12 and Yonge Street with provisions for a centre turn lane. Between Yonge Street and St. Andrews Drive, County Road 93 will have a multi-use path on the east side of the road. This will also coincide with intersection improvements at County Road 93 and Vindin Street. William Street is expected to be converted from 3-lane sections to 1 lane per per direction and a centre turn lane, with segments of the roadway to be widened from a 2-lane section to 3 lanes. Several other intersection improvements are planned throught Midland in the long-term.

Previously Planned Road Improvements

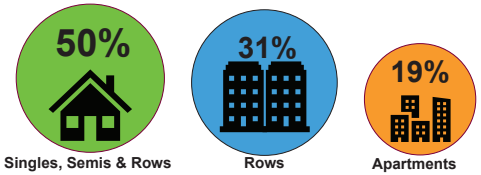


Future Travel Demand

Population / Employment Projections in Midland

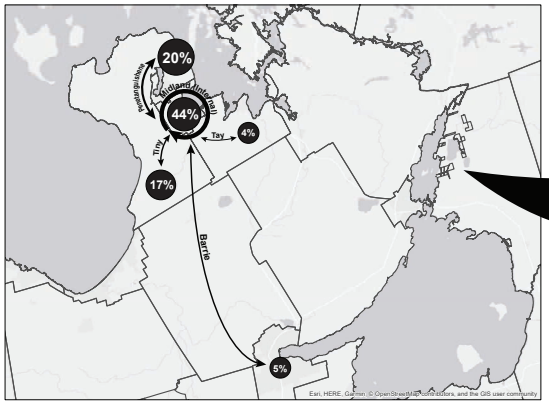


2031 Forecasted Residential Unit Development

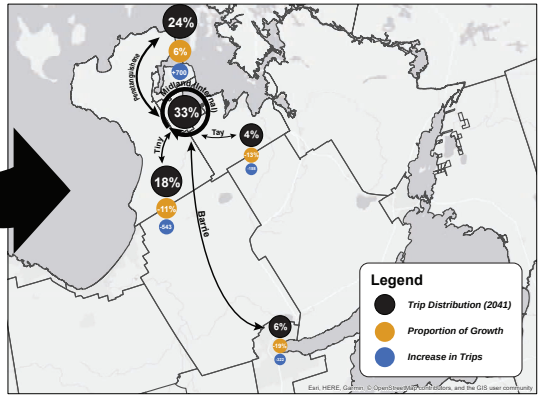


Midland is expected to continue to grow adding approximately 10,017 new residents and 5,787 new jobs until 2041. The bulk of new growth is expected to be low-density housing occuring along intensification districts which are primarily located along the waterfront and Midland's major roadways such as County Road 93 and Highway 12.

Exisiting AM Peak Hour Trip Flows



Forecasted 2041 AM Peak Hour



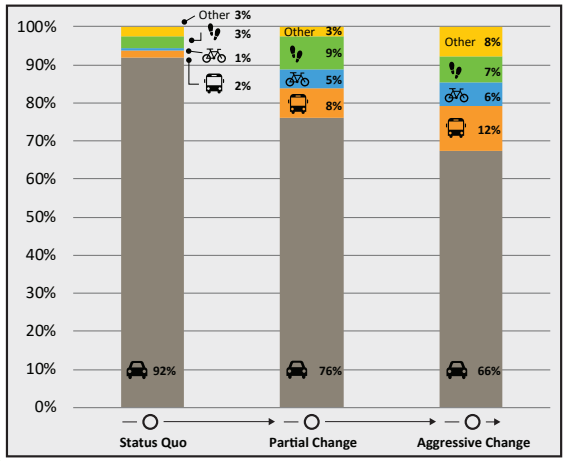
Trip Distribution

Currently, internal trips within Midland account for 41-44% of all peak hour trip flows with the bulk of remaining trips (40% going to and from neighbouring municipalities within North Simcoe County such as Penetanguishene, Tiny, and Tay. To a lesser extent, the City of Barrie represents one of the few travel demand pulls outside of North Simcoe.

Future travel demand forecasts were developed for the morning and afternoon peak hours leveraging existing travel demand data coupled with population and employment growth within Midland as well as in surrounding municipalities.

Future peak hour forecasts anticipate that trips to and from neighbouring North Simcoe County municipalities are forecasted to account for up to 67% of all growth associated with peak hour trip flows. This will result in a change in trip distribution where adjacent North Simcoe municipalities account for 46% of all peak hour trips as opposed to the current 40% they account for today. This change is caused by increasing employment and residential growth in surrounding municipalities.

Internal trips that start and end within Midland are anticipated to comprise a lower proportion of trips to approximately 30% compared to the existing 41-44% that is observed today. This does not mean that fewer trips will be using Midland's roadways, but it does mean that there will be a shift from internal trips to external trips.



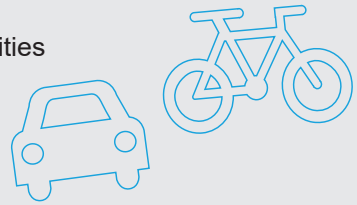
How do you want transportation to be like in the future?

The future is a continually moving target that is difficult to predict entirely. We've identified three mode split scenarios that range from the status quo to more aggressive changes that would shift a considerable amount of people away from their vehicles and onto alternative modes of transportation. These scenarios focus on shifting short to medium-distance trips onto active transportation, transit, or other emerging technologies such as e-scooters to mitigate single-occupant vehicle trips in the future. The resulting future mode split will be impacted by the recommended solutions and their implementation.

Complete Streets as a tool for land use planning

There are opportunities to update Midland's road classification to incorporate a Complete Streets approach that considers the needs of all users, such as people who walk, bike, take transit or drive, including people of varying ages and levels of ability. While the existing road classification explicitly outlines the vehicular and, to a lesser degree, sidewalk requirements, there are opportunities to incorporate considerations for transit and active transportation to further leverage the street network as a tool for influencing land use. The main attributes of a complete street includes:

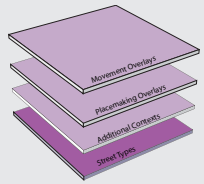
- Safe and Accessible facilities for all ages and abilities
- Provide a range of transportation choices
- Create healthy and livable neighbourhoods
- Create vibrant and attractive public spaces
- Support economic prosperity



Opportunities for Achieving Complete Streets

Every roadway maintenance or construction project is an opportunity to include Complete Streets design elements. Some of the most common ways to construct Complete Streets include when new road construction, or reconstruction, resurfacing, utility work, or during subdivision and site redevelopment.

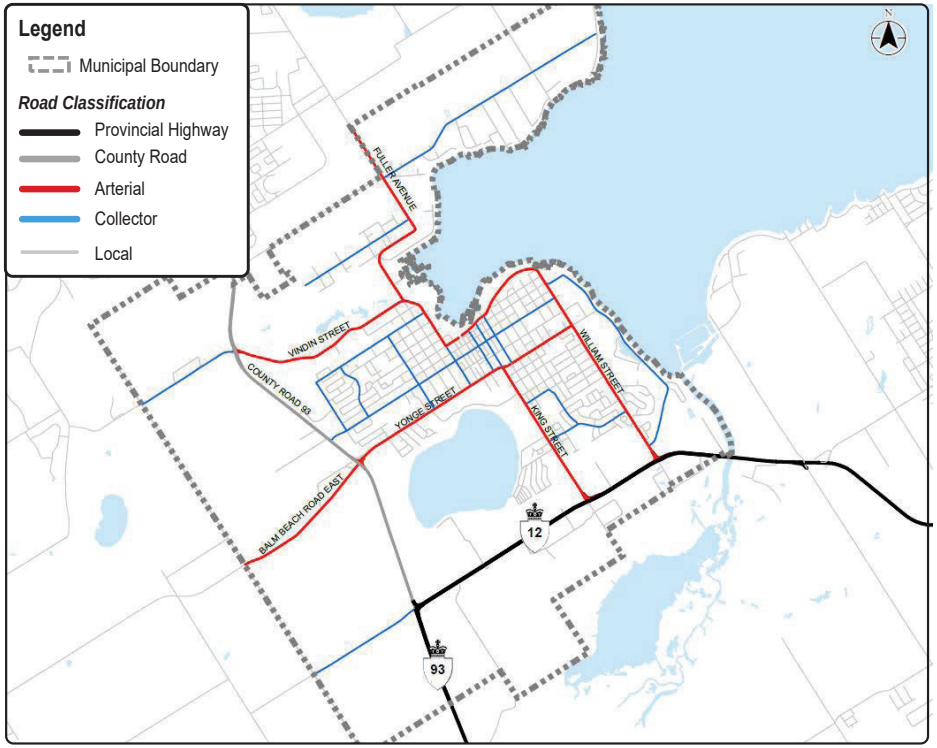
What is considered in a complete street cross-section



1) Land Use Context
2) Development Pattern Intensity
3) Roadway Typology
4) Existing Cross-Section
5) Modal priority and balance

Instead of primarily focusing on number of vehicular lanes and widths, there's an opportunity to take a holistic multi-modal view that considers the human, safety, and land use relationships that are impacted.

Existing Road Classification in Midland

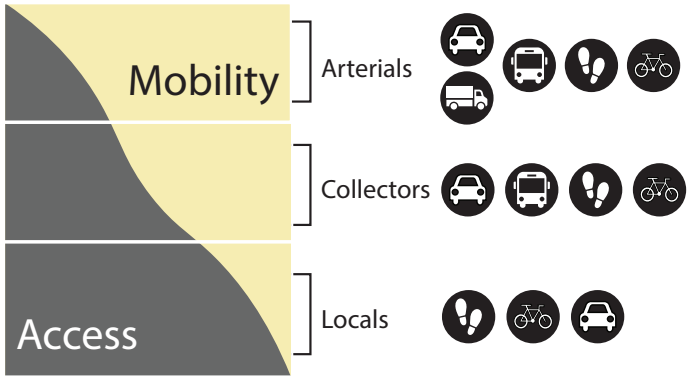


Arterial roadways should connect to the provincial and county road network as well as service major commercial or employment areas in Midland. They should accommodate designated pedestrian and cycling facilities, along with transit priority measures where applicable. The type of pedestrian or cycling facility is determined by vehicular volume and speed, where higher volume roadways will need greater safety measures. Where needed on-street parking should also be accommodated. Typical right-of-way width should be 18m - 30m depending on the configuration.

Arterial

Collector roadways should connect internal areas within Midland as well as connect to Arterial Roadways. They should accommodate pedestrian and cyclist facilities, although they don't have to be designated facilities. Depending on roadway volume and speeds, shared facilities or the implementation of nearby multi-use paths may suffice. Where needed on-street parking could also be accommodated. Typical right-of-way width should be 12m - 18m depending on the configuration.

Collector

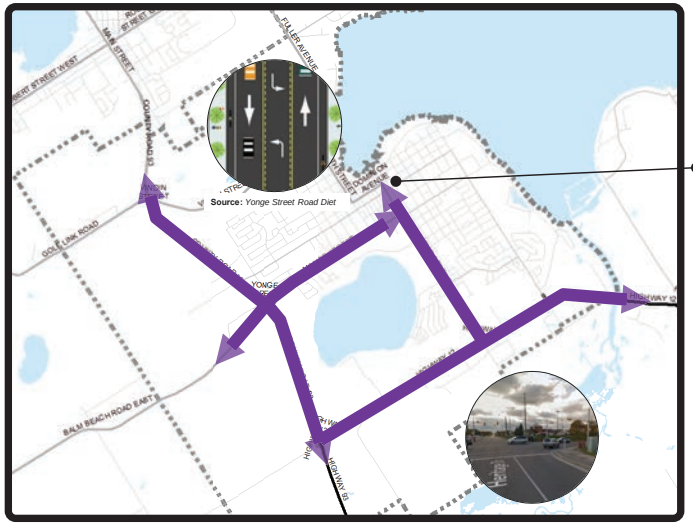


Mobility vs. Access

Each class of roadway serves a different function and focus on different modes of transportation within the network. There are opportunities to formalize the inclusion of active transportation and transit into the design and planning of Midland's roadways in a way that balances the need to move around town, as well as for placemaking and providing safe infrastructure for all road users.

Online Survey Feedback for Improving Transportation Networks

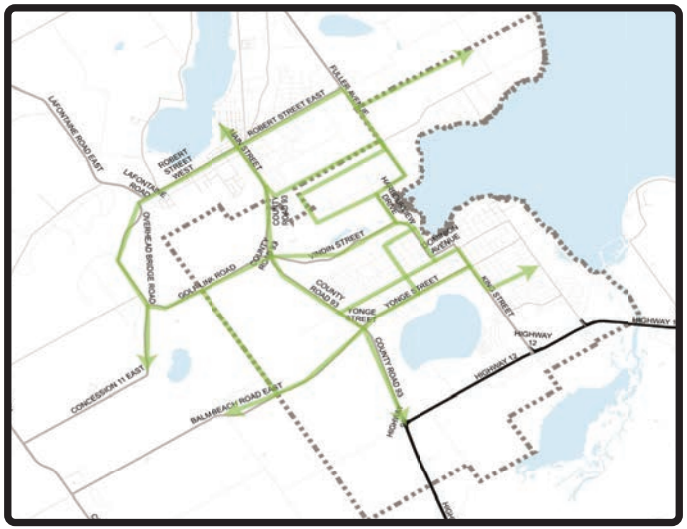
Road Network



- Respondents identified a need to enhance operations and maximize the roadway infrastructure along major roads where travel demand is high, such as County Road 93, Highway 12, Yonge Street and King Street

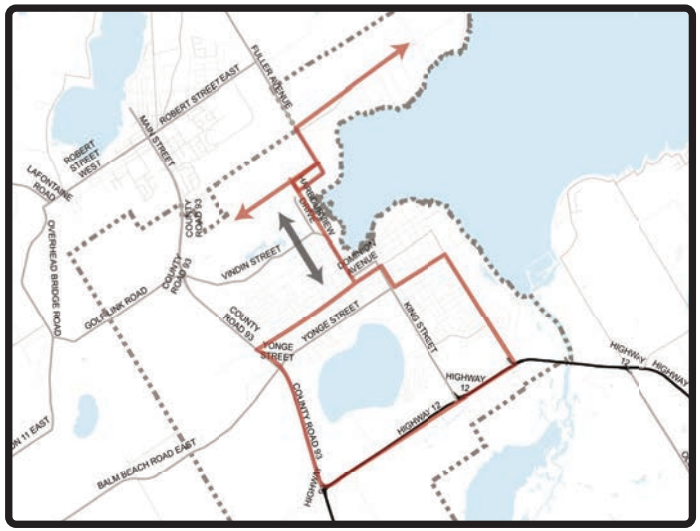
- Improvements to King Street as part of the Downtown Master Plan will be an important consideration for how automobiles access and pass-through on King Street and the impacts to other corridors.

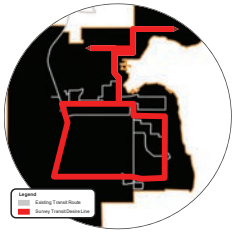
Cycling Network



Respondents identified a need for more cycling infrastructure that is safe/protected, and that connects commercial areas on Harbour View Drive, County Road 93 and Yonge Street, as well as provides connections to the peripheries. A focus on improving recreational / tourism opportunities along the Waterfront is also desired.

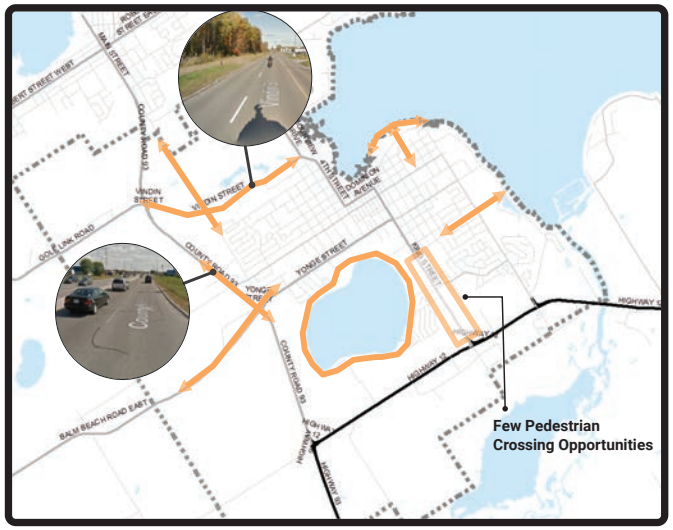
Transit Network





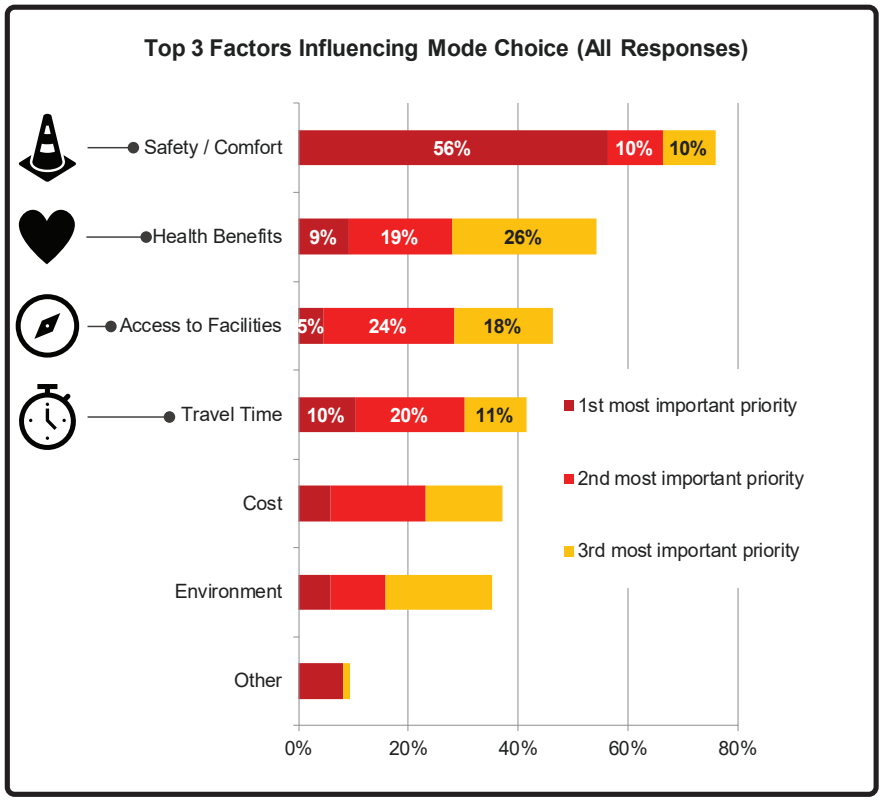
- Respondents identified the need to provide better and more reliable bus services in Midland. They want better internal connections between periphery areas of Midland including new subdivision particularly along William Street and Aberdeen Boulevard and retail centres.
- More direct routings is also needed between retail areas on County Road 93 and Highway 12 without needing to transfer downtown.

Pedestrian Network



Respondents identified a need to fill-in the gaps in Midland between existing pedestrian facilities to create a more permeable pedestrian network with better connectivity to recreation and retail centres, particularly on County Rd 93 and Highway 12. Many respondents also want safer sidewalk conditions to connect major trip generators.

Cycling Priorities

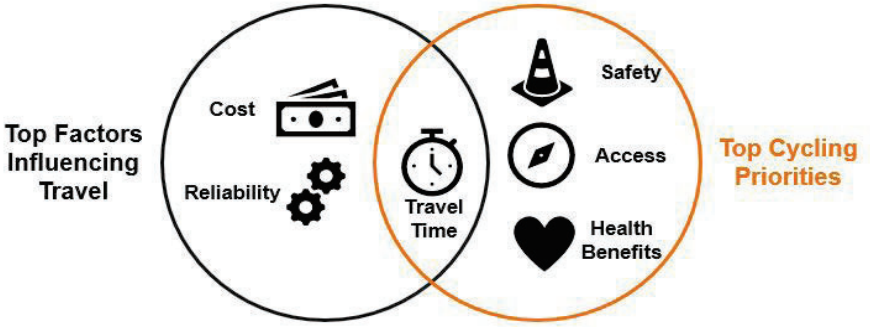


Over half of the survey participants identified **safety and comfort** (56%) as the primary factor encouraging them to cycle, followed by **travel time** (10%) and **health benefits** (9%)

Respondents want to feel **safe** while riding their bike which goes together with access to facilities that provide safety, and which ultimately give them an alternative option to get where they want to go (**Travel Time**)

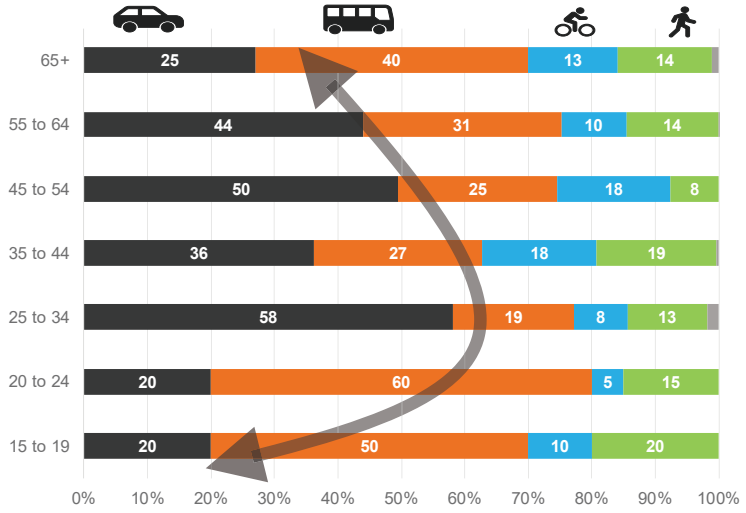
Cyclists have specific needs and priorities compared to other road users, however a need for infrastructure that helps people get to places faster and to cut down on travel time is shared across modes

Top Factors Influencing Travel & Top Cycling Priorities



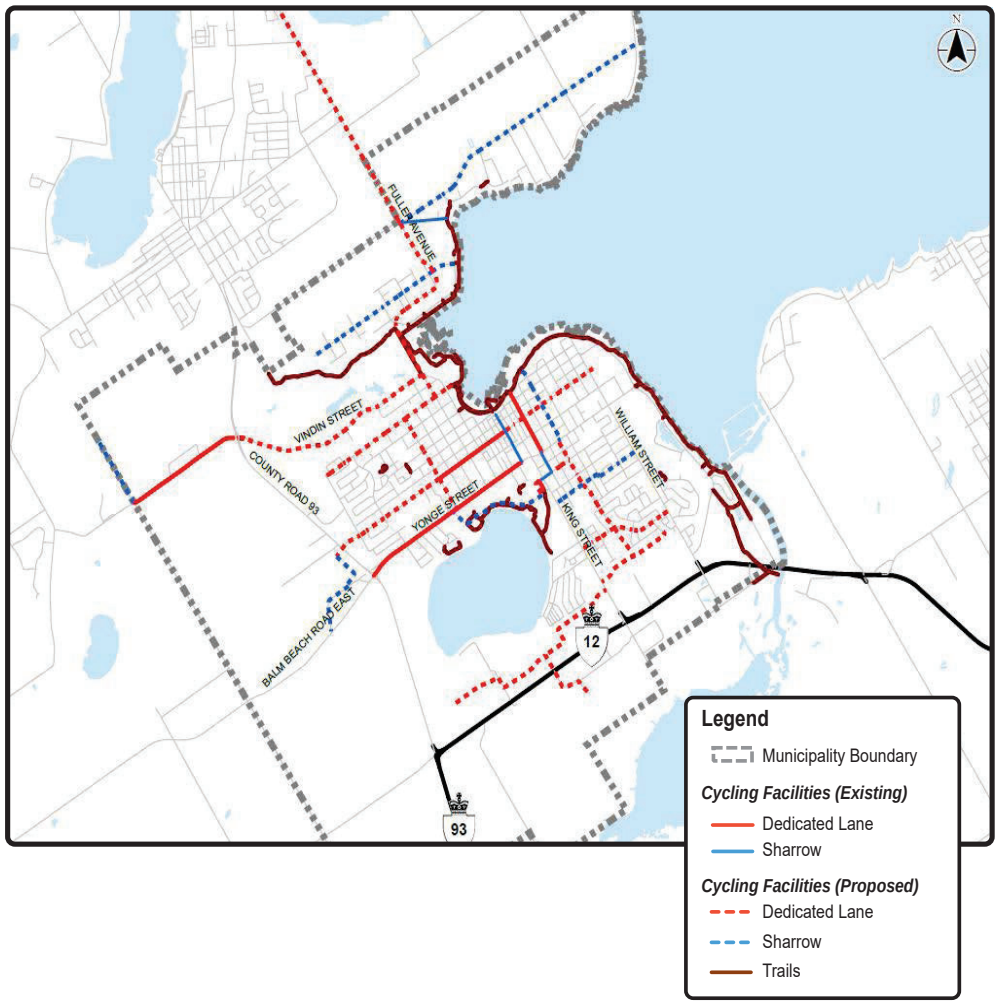
Priorities by Age

Average Respondent Priority % by Mode and by Age



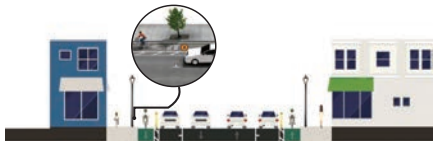
25 to 44 year old young professionals had a greater focus on automobiles, compared to school-aged and older respondents who had a stronger focus on transit and active transportation

Existing and Previously Planned Cycling Network



What the Future Active Transportation Network could Look Like

Bike Lanes



Protected Bike Lanes: are meant for roadways with high volumes of traffic and on-street parking to provide an additional layer of safety for cyclists separating them from motorized vehicles using flex bollards or planters. This mitigates the chances of getting hit by a door from a parked car or from vehicles stopping at the curb.

Unprotected Bike Lanes: serve many of the same functions as protected bike lanes, but do not need the same degree of protection, often only a painted buffer, due to being placed on roadways with lower vehicular volume and parking.

Multi-Use Paths

Multi-Use Paths: are shared pathways that can be used by pedestrians and cyclists that are separated from traffic and provide a much safer environment, particularly on roadways with high motor vehicle speeds and volumes. Multi-use paths are often 3m to 4m to allow for two-way movement and are often used as mid-block connections within and between parks and other recreational areas.

Paved Shoulders

Paved Shoulders are meant for rural areas with low cycling volumes. The shoulder is paved to allow for cyclists to travel separated from traffic when the shoulder is not being used for other purposes. Paved shoulders provide an opportunity to connect Midland, rural areas and neighbouring municipalities by cycling.

Sharrows

Sharrows: are shared roadway facilities recommended on low-volume roadways meant to connect to higher-order cycling facilities. Sharrows comprise primarily of road painting and signage that is intended to alert motorists to share the lane.

Issues & Opportunities

Internal Population Growth Outpacing Employment Growth

Currently:

- The Town of Midland is experiencing growth of 2% per year for population and employment purposes, and this growth is expected to continue until 2041.

- Half of Midland's Peak Period trips are internal to the Town with 44% of AM Peak Period trips starting and ending within Midland.

- In total around 5,500 trips are made between Midland and North Simcoe Municipalities such as, Penetanguishene, Tiny, and Tay.

In the future:

- Population is anticipated to outpace employment growth through the 2041 horizon. As internal trips are anticipated to decrease while external trips are forecasted to increase. This will impact travel demand trends and available options for residents to make these trips.

The opportunities for improvement are:

- Introduce more sustainable modes of transportation and Transit Oriented Developments (TOD) as well as leverage connections to the County's LINX transit system as well as Midland's transit net-work for external trips.

Most of Midland's Residential Development is Low-Density

Currently:

- Midland's overall housing supply is 75% low-density, and 25% are classified as higher density dwellings.

In the future:

- 80% of the growth in Midland is planned to be accommodated through low-rise developments through 2031, while 19% of planned developments will be high-density dwellings. Most of the growth will occur along intensification districts located along the Waterfront and Midland's arterial roadways such as Highway 12, and County Road 93.

The objectives for the development of alternatives are:

- Promote higher-density developments in Midland.
- Improving corridors to provide multi-modal functions, options and connections to provide residents mobility choices.

The opportunities for improvement are:

- Develop complete streets and parking strategies to promote a more compact built-form that can support sustainable modes of transportation such as transit, cycling, and walking, and equitably share and utilize roadway infrastructure.
- Amend Midland's road classification and design standards to reflect a changing transportation network that is inclusive of active transportation and transit to foster inter-modal connections.

Midland's Cycling & Pedestrian Networks are Disconnected

Currently:

- Midland's cycling & pedestrian network is primarily comprised of multi-use trails, bike lanes, sidewalks, and sharrows. However, both networks are disconnected throughout some areas in Midland. There is also limited cycling facilities in place, only 24 km of cycling infrastructure exists in the town.

In the future:

- The Town of Midland's Official Plan identifies up to 31.6 km of additional cycling infrastructure to be built over the long term. Midland's Official Plan also proposes an interconnect-ed trail route to connect North and South Midland to the Down-town core and the surrounding areas.

The objectives for the development of alternatives are:

Prioritize the development of a bicycle/pedestrian network based on: - Needs (Safety, connection to points of interests etc.)
- Available Right-of-Way;
- Increasing tourism opportunities;
- Connectivity to Existing and Future Trip Generators.

The opportunities for improvement are:

- The development of a cycling & pedestrian network by imple-menting facilities that connect to trip generators, residential and employment areas and provide options for safe and efficient movement across the Town.

- Improve large impermeable blocks on the peripheries and devel-op a complete streets strategy to improve Active Transportation connectivity in Midland holistically over time.

Transit Mode Share in Midland has Declined

Currently:

Since 2013, transit ridership has increased by 30%. However, overall weekday peak period transit mode share has seen little improvement. Large gaps also still exist around residential areas that are served by Midland / Pene-tanguishene Transit's "Hail Bus" .

In the future:

- More connections will be needed along the periphery of Town.
- Modified route structure and reduce congestion on buses by introducing larger sized buses to accommodate high volumes of passengers.

The objectives for the development of alternatives are:

- Provide more integrated multi-modal network to support and promote transit services so it can be a viable option for residents.

The opportunities for improvement are:

- Provide proper connections and amentities at transit terminals/stops between Active Transportation.

Increase in Congestion & Dangerous Conditions around Key Areas

Currently:

- Residents identified a few areas as problems for **congestion** is high around Retail Areas such as: Smart Centers, Walmart Plaza (Heritage Dr/Jones Rd), Downtown Midland, Yonge Street between Eigth Street & Sixth Street, and Canadian Tire Plaza

- Areas identified as **dangerous** often coincided with areas identified as congested and primarily focused on the following:
  - Lack of bicycle/pedestrian facilities for safe crossing in Down-town and along County Rd 93/Highway 12
  - Poor parking compliance in "no-parking" zones, particularly around Schools
  - Speeding, poor intersection sightlines and poor roadway conditions

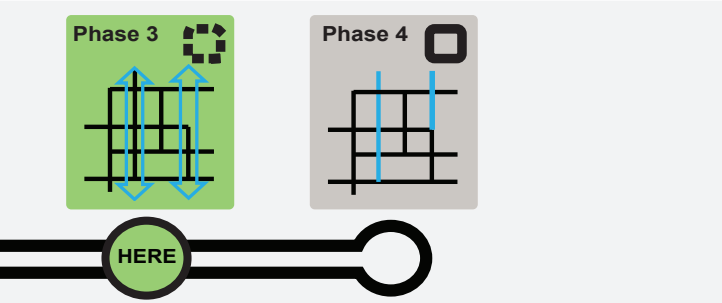
The objectives for the development of alternatives are:

- Reduce congestion around Retail Areas.
- Promote the use of alternative modes of transportation on the corridor and enhance overall operations and road safety.

The opportunities for improvement are:

- Identify policies and a framework for implementing traffic calming where it is warranted to enhance roadway safety.
- Provide safe and appropriate pedestrian and cycling connections.
- Improve roadway infrastructure/maintenance, particularly in the winter.
- Equitably balance vehicular operations for accessing key areas. Transportation Demand Measurements can provide an opportunity to lincrease car occupancy and reduce congestion.

Where do we go from here?



- Development and Assessment of Alternatives & Identifying Solutions
- Selecting Recommended Solutions & Developing Implementation Plan

We will Develop:

- Short-Term, Medium-Term, and Long-Term transportation solutions through the 2041 horizon year including:
  - Roadway Infrastructure Improvements
  - Active Transportation Infrastructure Improvements
  - Implementation & Costing Plan

- Transportation Supportive Policy Recommendations including:
  - Traffic Calming Policy
  - Complete Streets Policy
  - Transportation Demand Management (TDM) Policy
  - Parking Management Policy
  - Active Transportation Winter Maintenance Strategy
  - Smart Mobility Strategy

We will Integrate:

- With the Official Plan Update, Transportation Operational Review, the Parks & Trails Master Plan.

- To create a Multi-Modal Transportation Master Plan that takes a hollistic view on the entire transportation network including private vehicles, active transportation, transit, and new emerging technology.

How it all comes Together:

Vision & Objectives

What the Town wants tp achieve and work towards in the future in terms of retaining the status quo or pushing for more aggressive change:

- Provide Infrastructure for Growth;
- Prioritize and Encourage Active Transportation;
- Prioritize and Encourage Transit;
- Improve Safety for All Road Users;
- Plan Flexible Infrastructure for Seasonal Changes;
- Enhance Multi-Modal Connections;

Infrastructure

Improvements that will have to be physically implemented on the network:

- Roadway;
- Intersection;
- Cycling;
- Pedestrian;

Policies & Strategies

Policies that will be needed to support the physical improvements:

- TDM;
- Traffic Calming;
- Complete Streets;
- Parking Management;
- Winter Maintenance;
- Smart Mobility;