

# Aquitaine Avenue Road Safety Improvement Pilot Project

Public Information Session

May 30<sup>th</sup>, 2024

[mississauga.ca/aquitaineroadsafety](https://mississauga.ca/aquitaineroadsafety)



## Project Overview



The City is aiming to increase the comfort, accessibility and safety for all road users along Aquitaine Avenue, from Tenth Line West to Millcreek Drive.

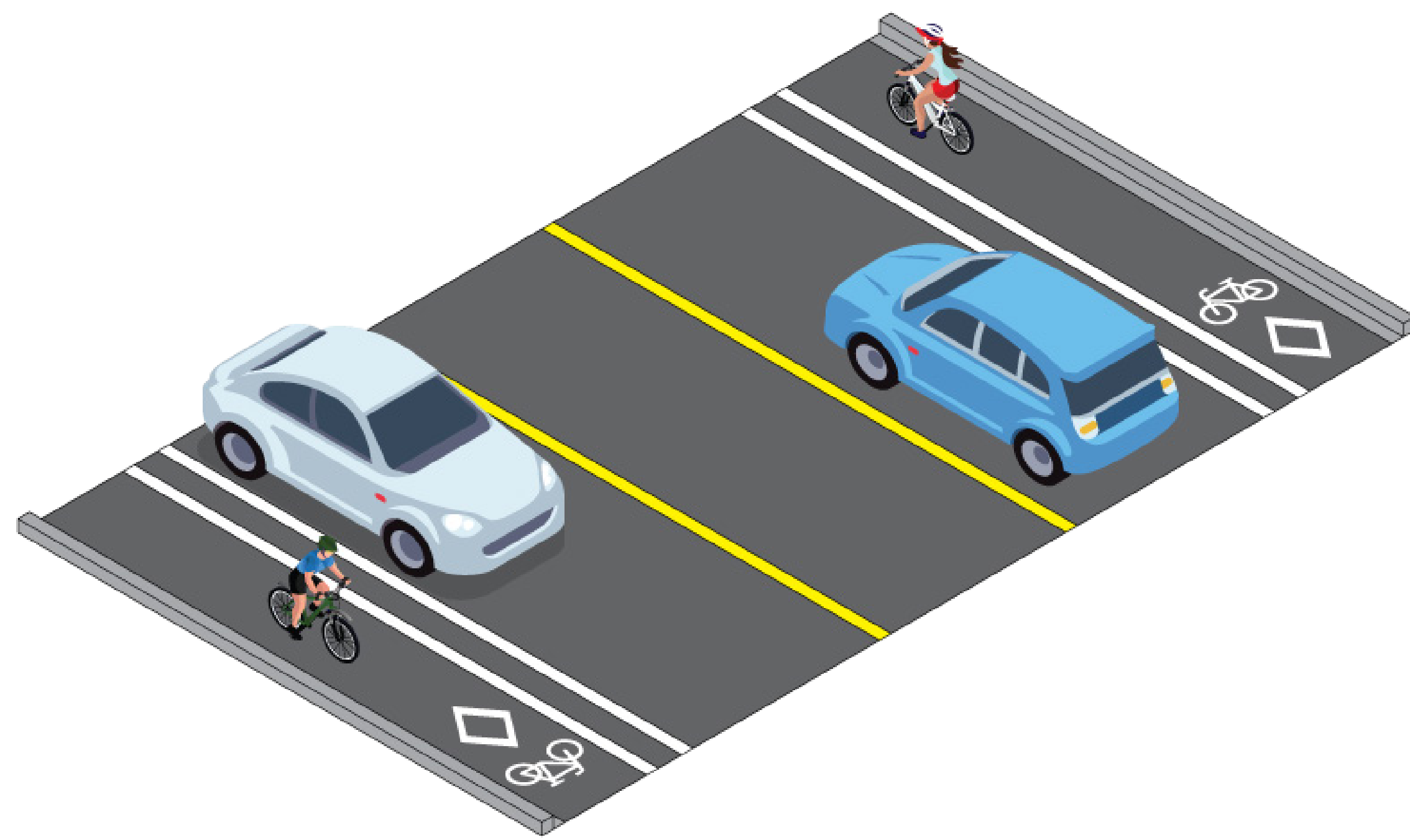
The Aquitaine Avenue Road Safety Improvement Pilot Project is a reconfiguration of Aquitaine Avenue from four lanes to three lanes, plus protected bicycle lanes.

The aim of this project is to help increase the comfort, accessibility and safety for all road users, including cyclists, pedestrians and drivers.

As part of the pilot, on-road protected bike lanes, dedicated vehicle parking lanes, and dedicated centre or left-turn lanes have been added on various sections of Aquitaine Avenue.

The installation of the pilot road reconfiguration is complete. The City is monitoring road operations throughout 2024, and collecting community feedback. This will help to inform a preferred permanent configuration, which would be implemented with a planned future road resurfacing.

This project is consistent with City of Mississauga policies, plans, and initiatives for road safety and encouraging sustainable modes of transportation.





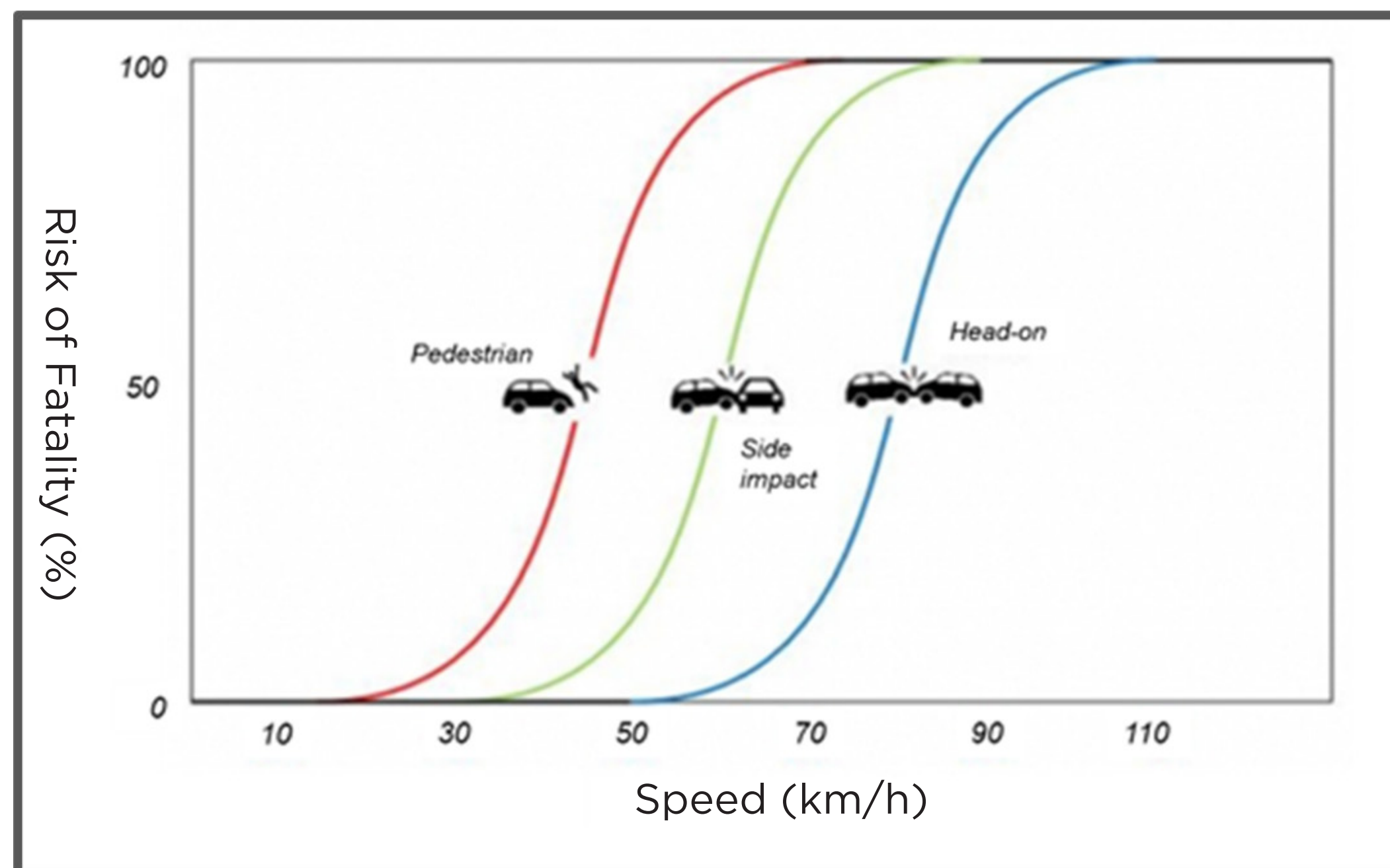
## Project Purpose

### “What problem is this project trying to solve?”

Speeding has been identified as a problem on Aquitaine Avenue. Speed measurements show that prior to the road reconfiguration, most motorists were comfortable driving up to 21 km/h over the legal posted speed limit. 9 out of 10 drivers exceeded the speed limit.

Speeding is a leading cause of road injuries and fatalities. It also contributes to more traffic noise, and makes walking and cycling less comfortable and safe.

4 to 3-lane road conversions have been shown to decrease speeding, and open up road space for dedicated bicycle lanes or other uses. This is consistent with Mississauga’s Vision Zero Action Plan, the Transportation Master Plan.



This chart illustrates the increasing risk of fatality with motor vehicle speed.



### Vision Zero Action Plan

Vision Zero was adopted by Mississauga in 2018.

It is a strategy to eliminate all traffic-related serious and fatal injuries.

It prioritizes the safety and access of the most vulnerable road users.



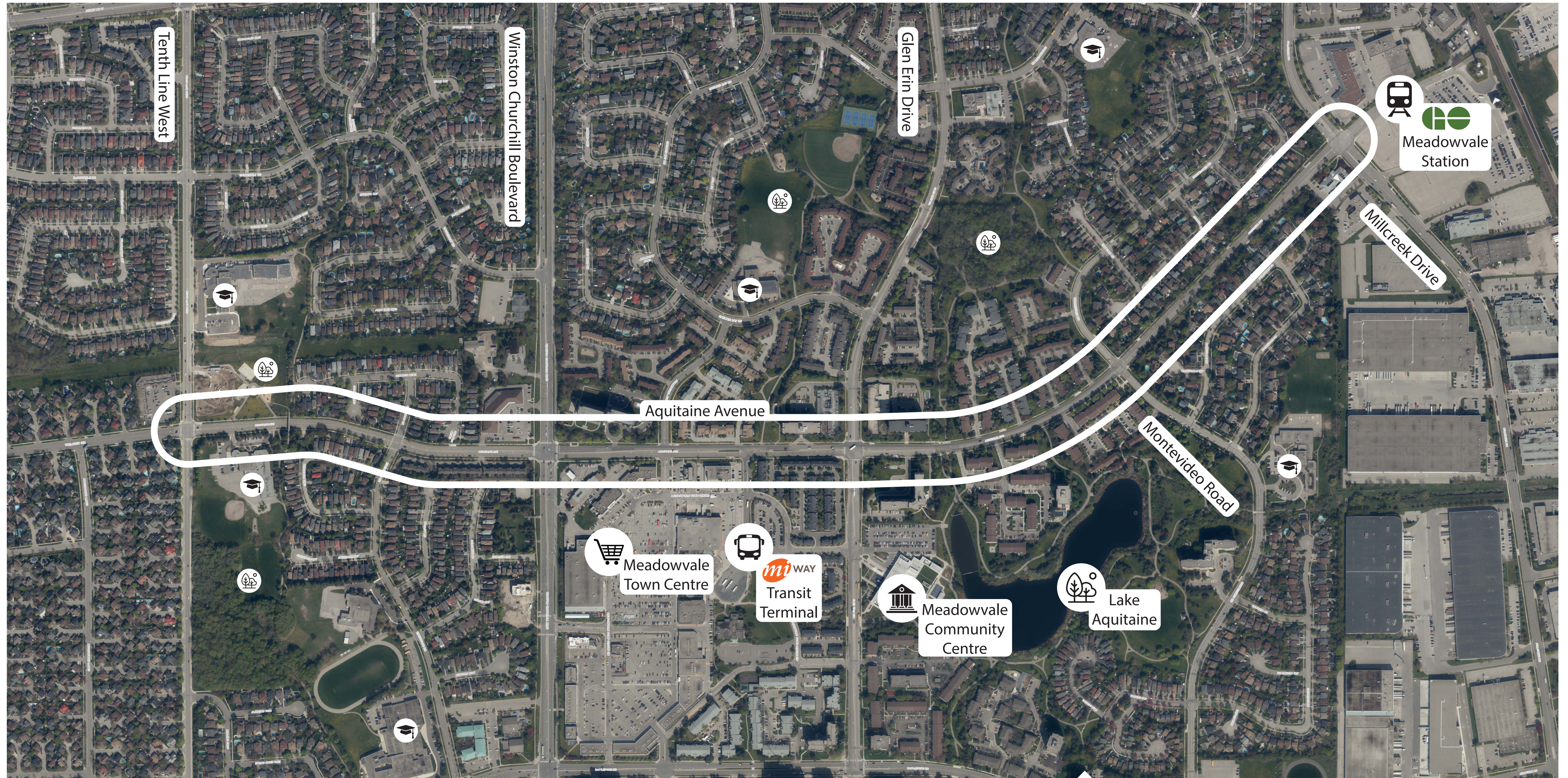
### Transportation Master Plan

Approved in 2019, the TMP outlines a variety of road safety objectives including:

- Roads, sidewalks, and trails are designed to prioritize the safety of pedestrians, cyclists, and other vulnerable travelers.
- Speeds are well-matched with the types of activity happening in the roadway and along the street.
- People feel safe and secure when traveling in Mississauga by any mode.

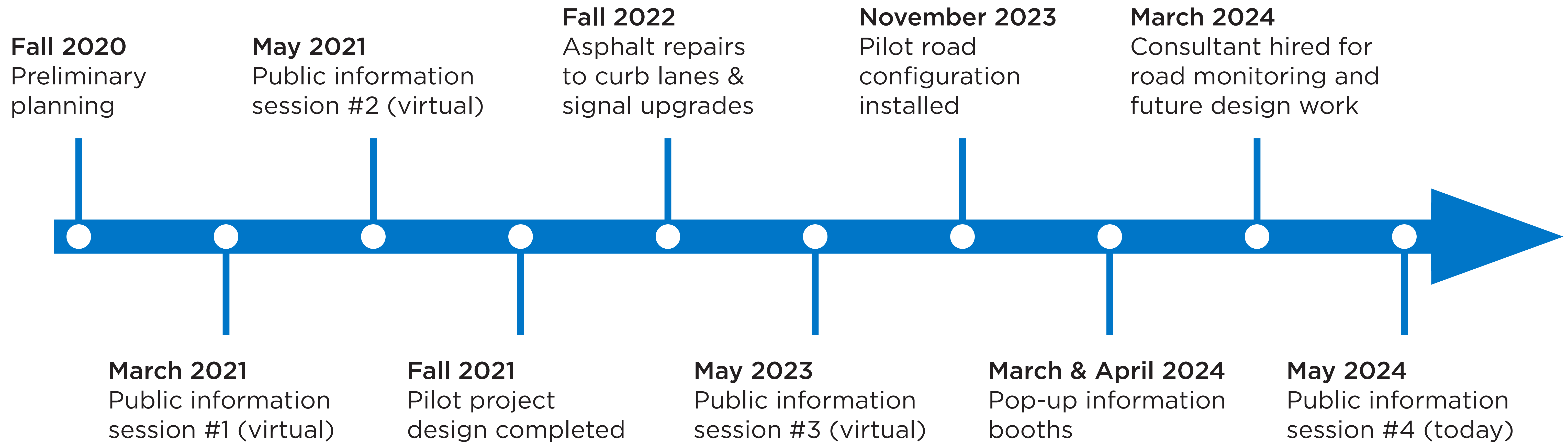


# Project Area





# Timeline

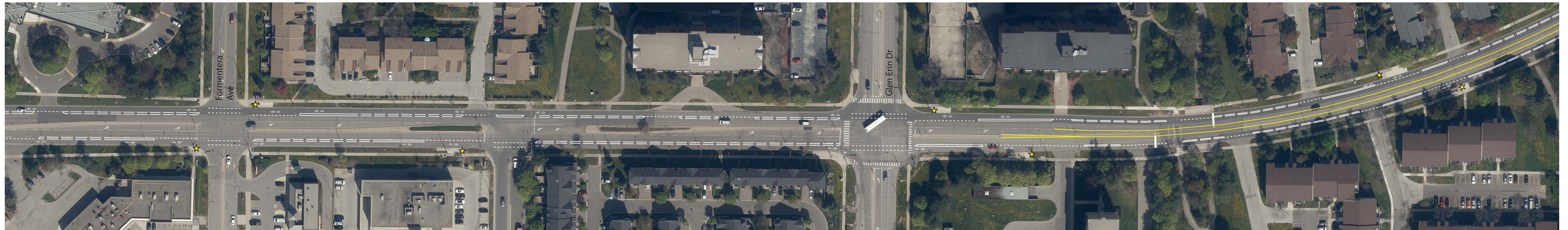




# Road Configuration



Aquitaine Avenue, from Tenth Line West to Meadowvale Town Centre



Aquitaine Avenue, from Meadowvale Town Centre to Lake Aquitaine Trail



Aquitaine Avenue, from Lake Aquitaine Trail to Millcreek Drive



## Design Elements

### 4 to 3-Lane Road Conversion

Aquitaine Avenue was reduced from 2 lanes per direction to 1 lane per direction, plus either a parking lane (west of Winston Churchill Boulevard) or centre turn lane (east of Glen Erin Drive).

This is known as a 4 to 3-lane road conversion, or a “road diet”. In North America, studies have shown that these types of conversions have increased the safety of roads, by reducing speeding, and reducing the amount and severity of collisions.

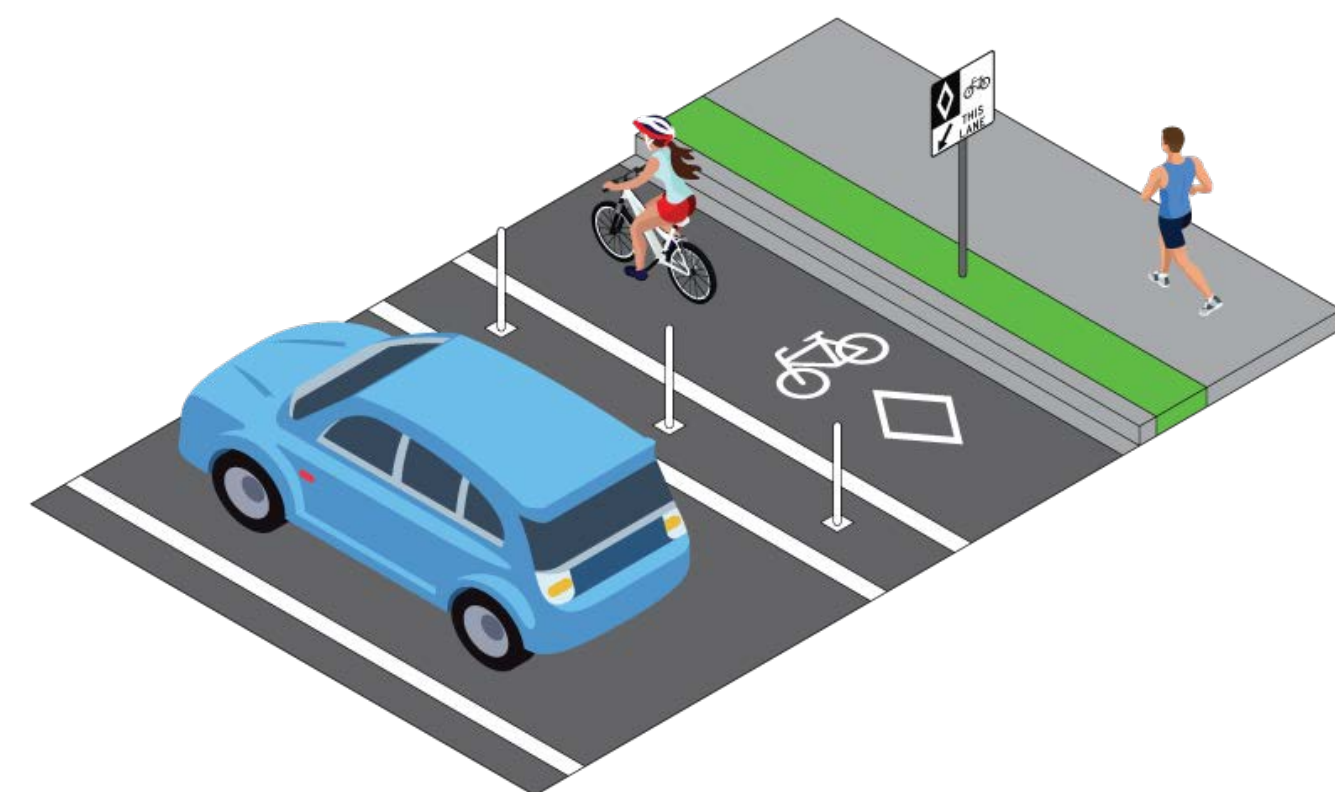
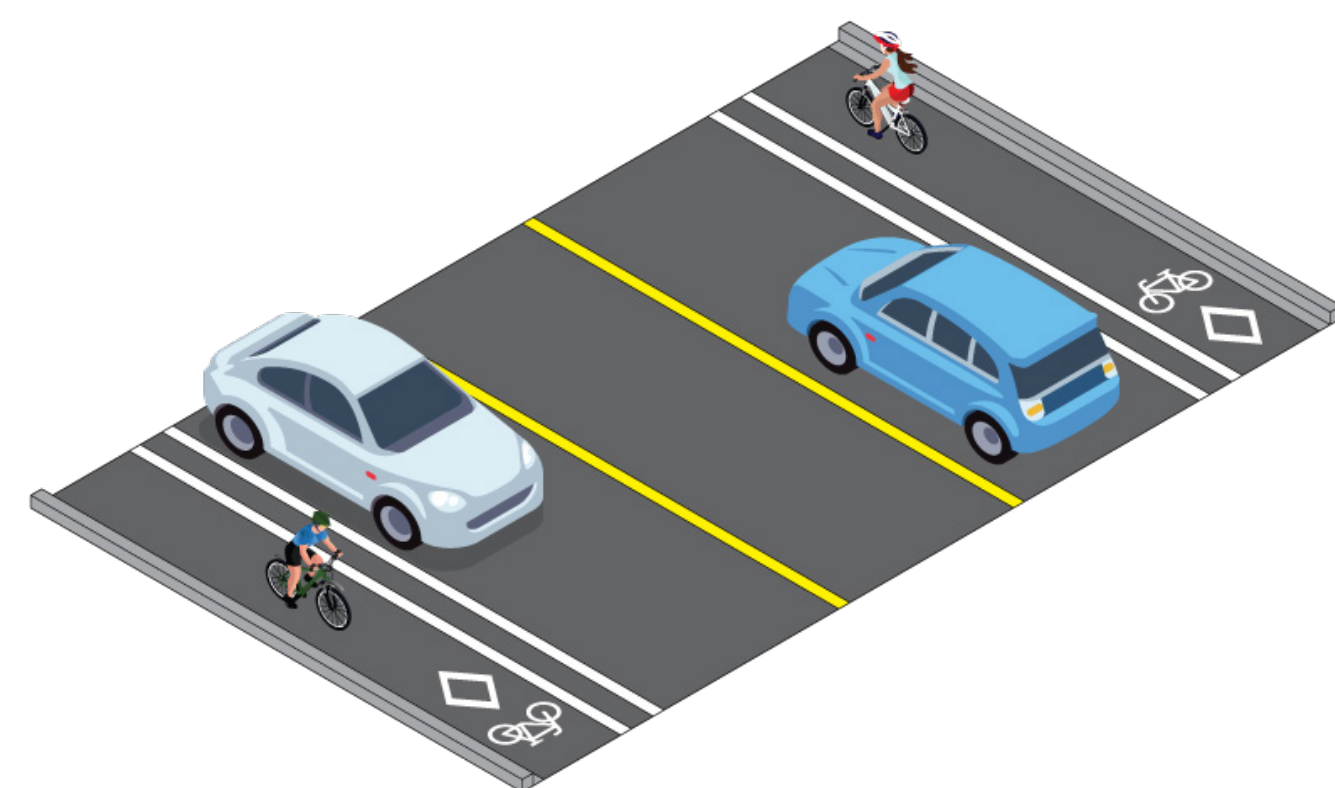
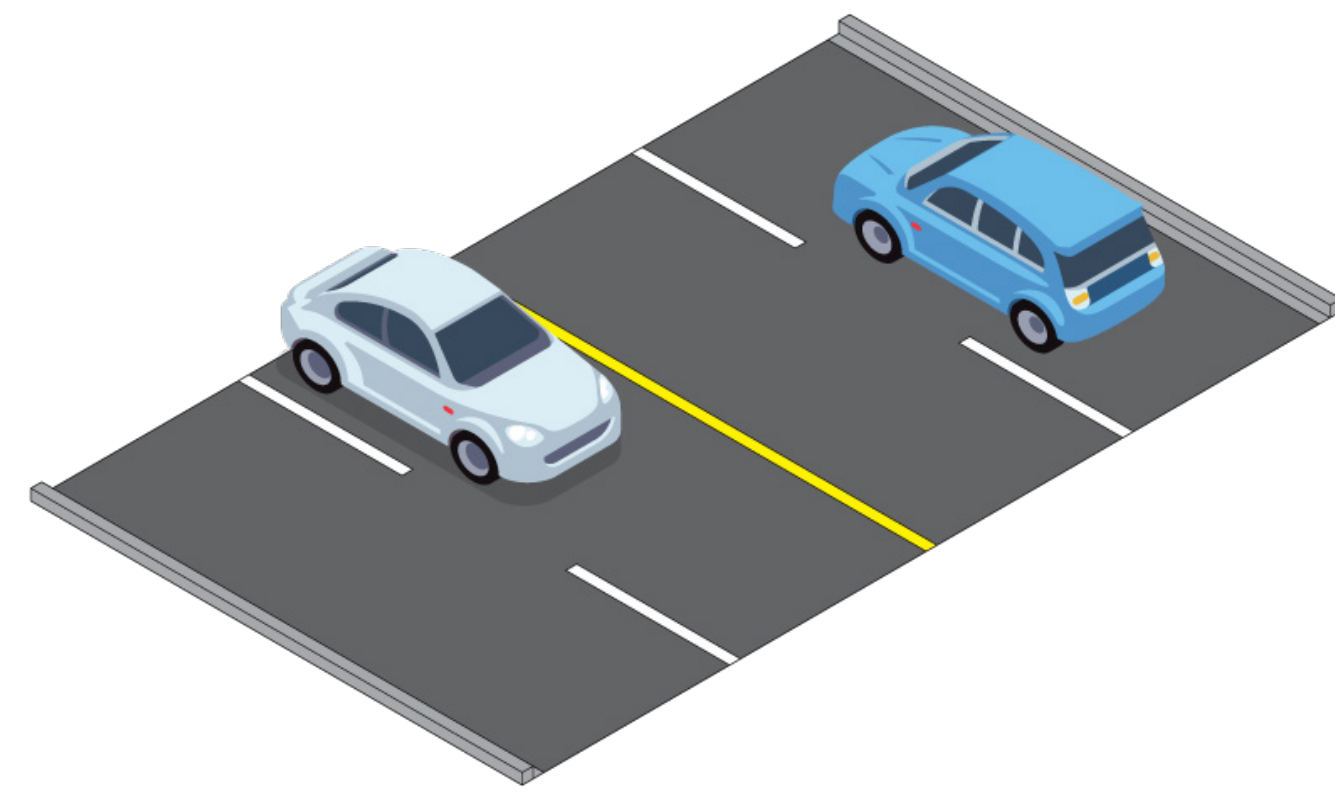
These conversions also typically free up road space for other uses. Typically bike lanes are installed to increase the transportation options on the road.

### Protected Bike Lanes

Protected bike lanes were installed on Aquitaine using flex-posts/bollards. These are typically used on temporary/non-permanent installations to discourage motor vehicles from entering bike lanes, increasing the comfort and safety of bike lane users.

In permanent installations, concrete curbs/barriers are typically used instead of or along with the flex-posts.

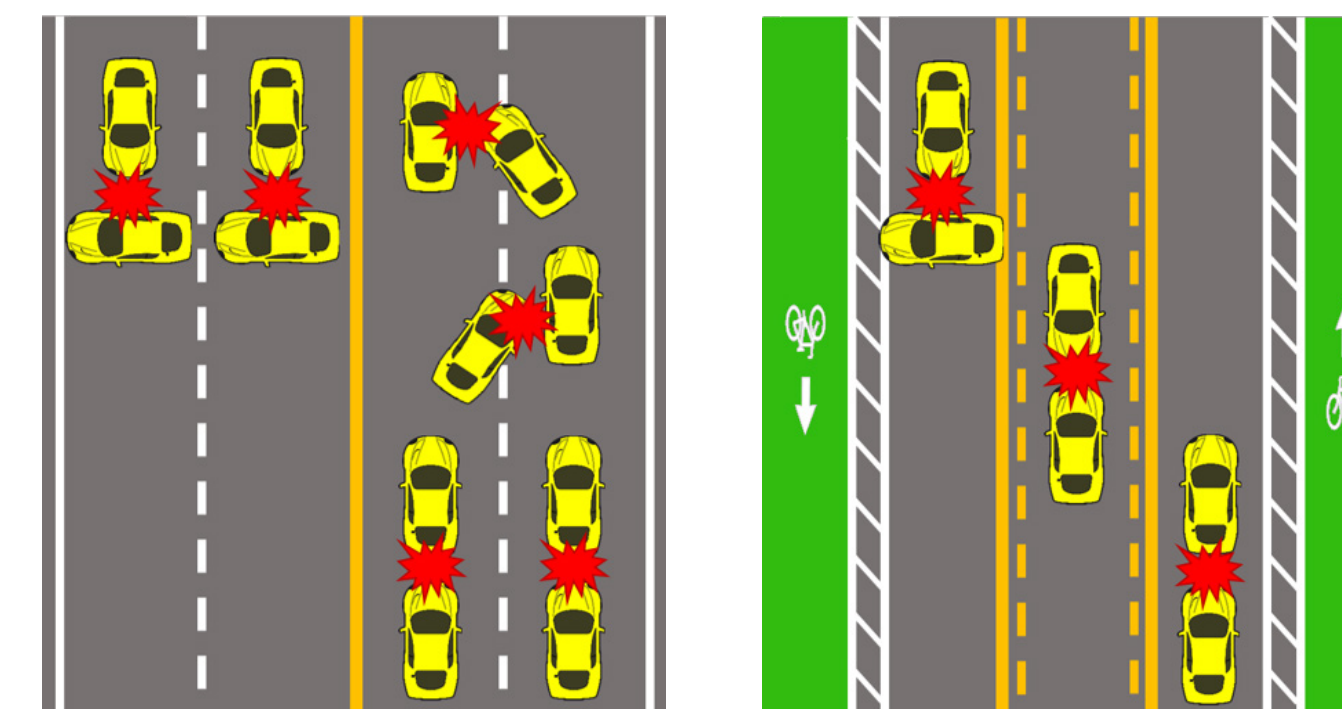
Bikes, e-bikes, and e-scooters are permitted to use bike lanes.



### Parking Lane

West of Winston Churchill Boulevard, parking lanes were added on one side of Aquitaine Avenue, where cars typically parked.

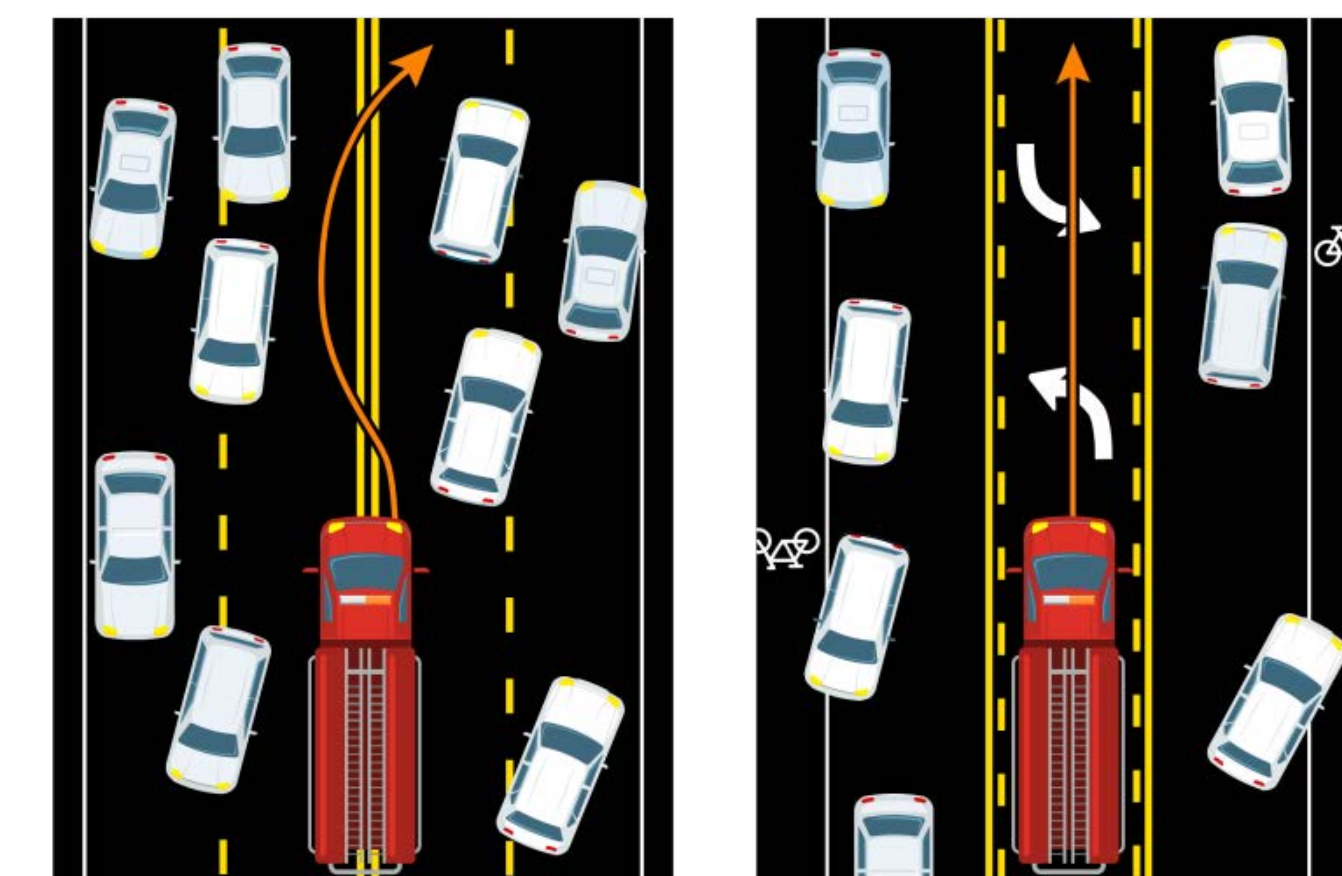
The parking lanes show where parking is permitted, and are placed outside of the bike lane buffer. This increases the comfort and safety of cyclists, who would otherwise be riding between parked and moving cars, and would be at more risk from opening doors.



### Collision Reduction

A 3-lane road has less collision points than a 4-lane road. This is due to vehicles having to cross less lanes to turn.

The centre turn lane provides a space for vehicles entering and exiting driveways out of the flow of through traffic, which reduces weaving and avoids the through lane being blocked.



### Emergency Vehicles

Emergency vehicles are able to utilize the centre turn lane as a through lane to bypass traffic. This can be more beneficial in heavy traffic, as emergency vehicles may have to weave less around other vehicles.



## Transit Network



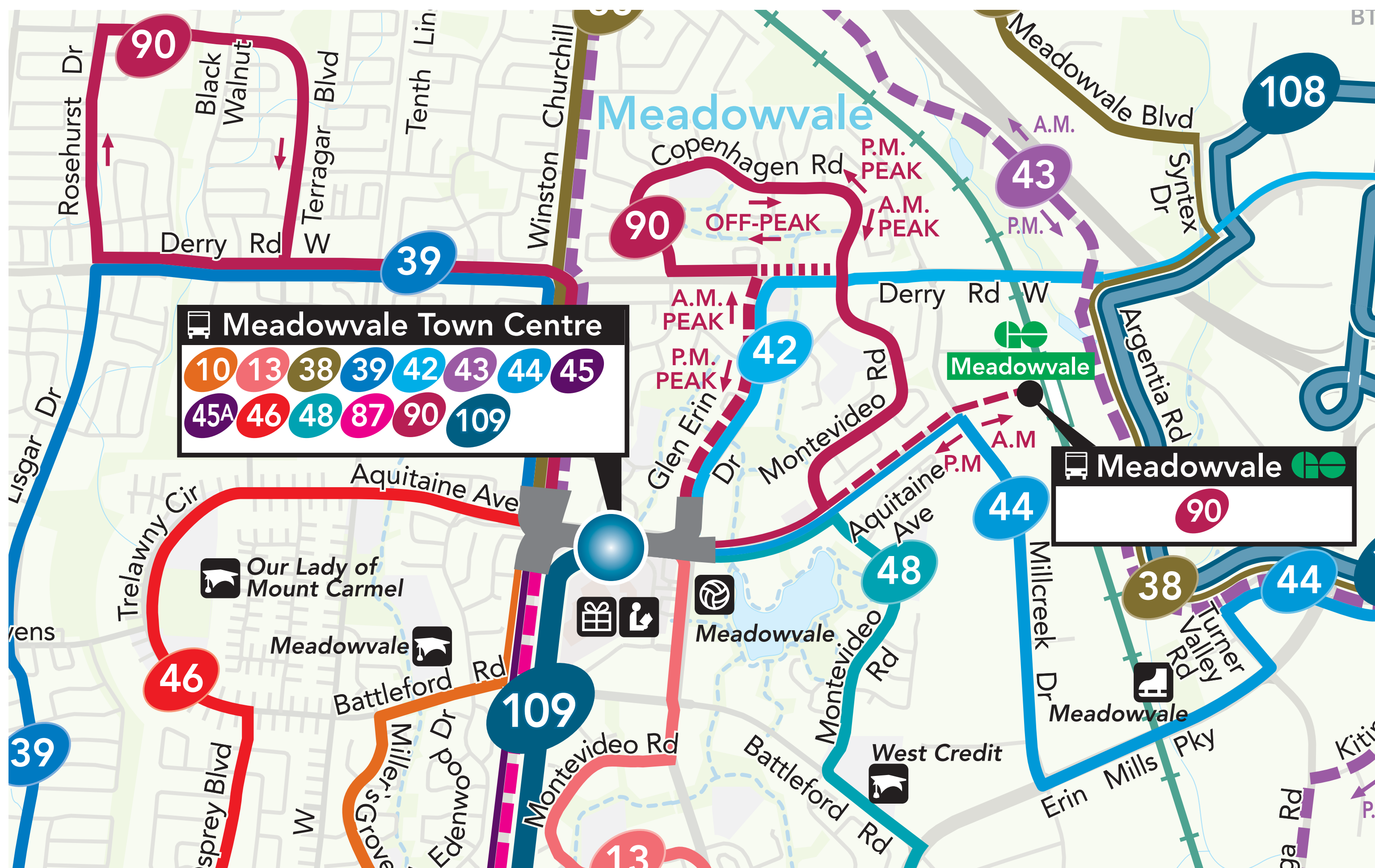
A number of MiWay and GO bus routes serve Aquitaine Avenue, and use the central section (between Winston Churchill Boulevard and Glen Erin Drive) to access the Meadowvale Town Centre Transit Terminal.

GO trains and buses serve the Meadowvale GO Station on the east end of Aquitaine Avenue.

Buses pull into the bike lane at bus stops, similar to other roads with bike lanes.

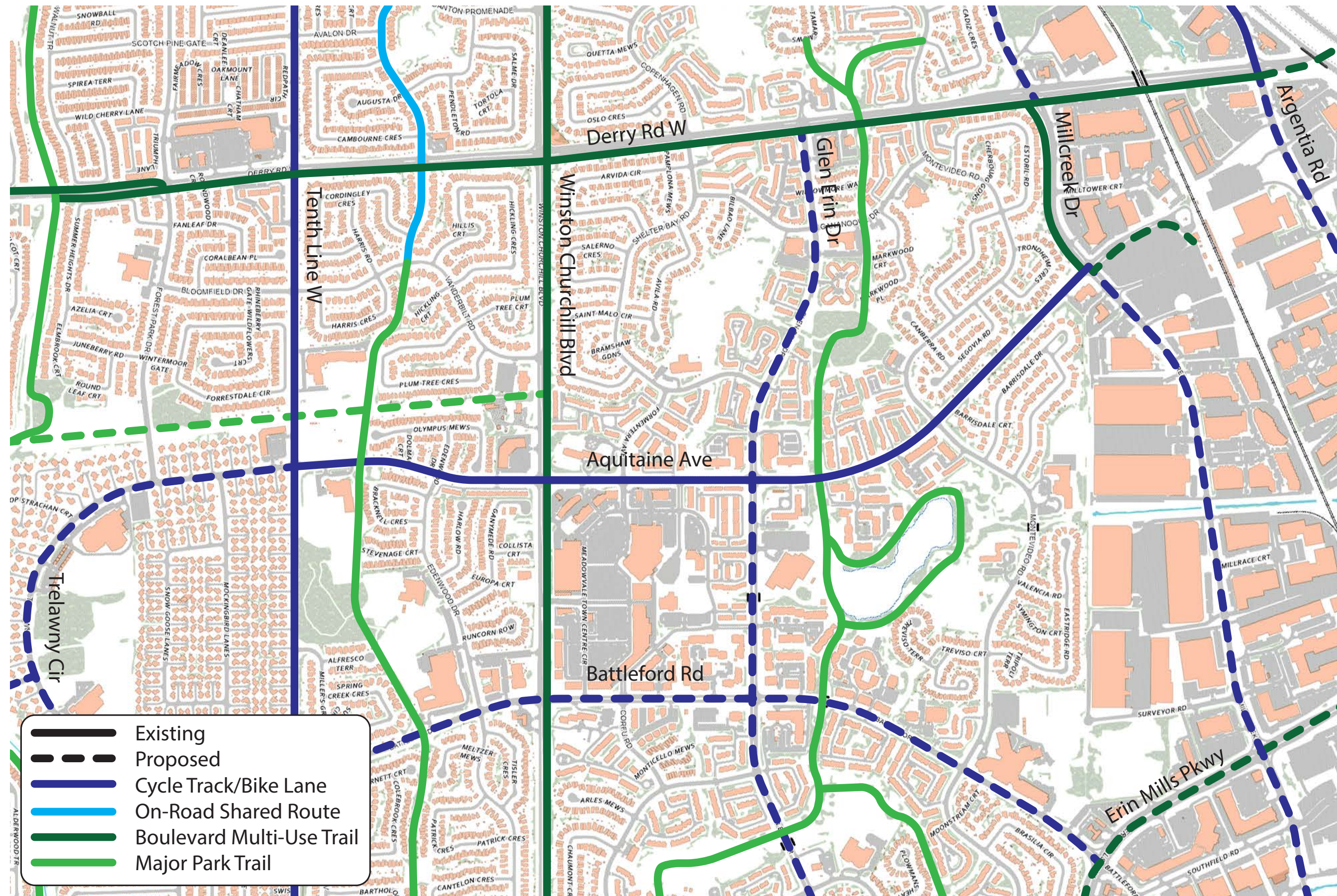
The design of the Aquitaine Avenue Road Safety Improvement Pilot Project was planned with input from MiWay, with ongoing adjustments to flex-post locations made based on input from bus operators.

Transit operations will be monitored and feedback collected throughout the pilot project.





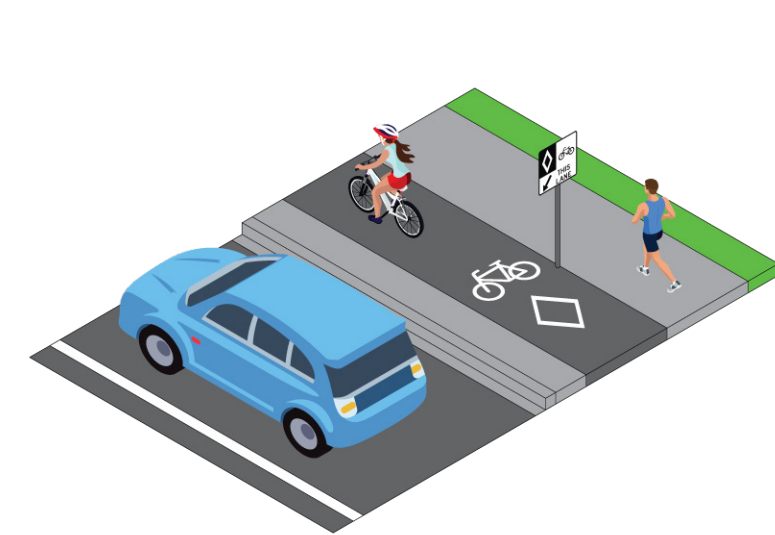
## Cycling Network



The City of Mississauga is continually enlarging the cycling network as per the 2018 Cycling Master Plan. The aim is for cycling infrastructure to be comfortable and safe for most users. To achieve this, most new infrastructure on major roadways is physically separated from motor traffic.

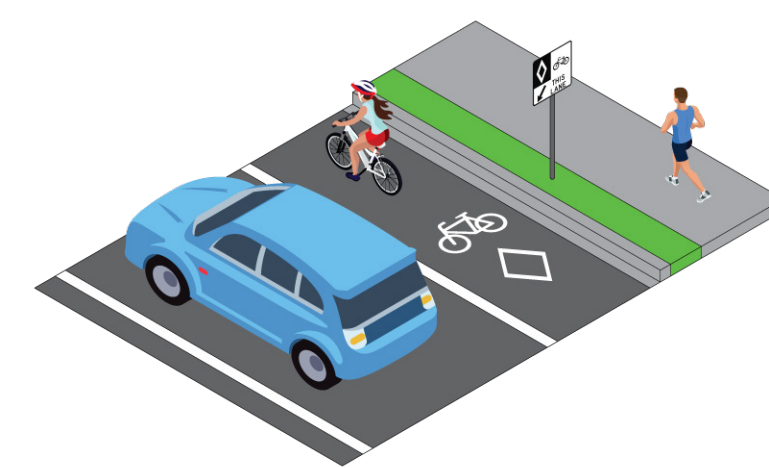
In Ward 9/Meadowvale, Aquitaine Avenue was identified as a potential major east-west cycling route that connects various existing and future north-south cycling routes, and major destinations such as Meadowvale Town Centre & Transit Terminal, Meadowvale Community Centre, and the Meadowvale GO Station.

Common cycling infrastructure types are shown below. Note that e-bikes and e-scooters are also permitted to use all cycling infrastructure on or along roadways.



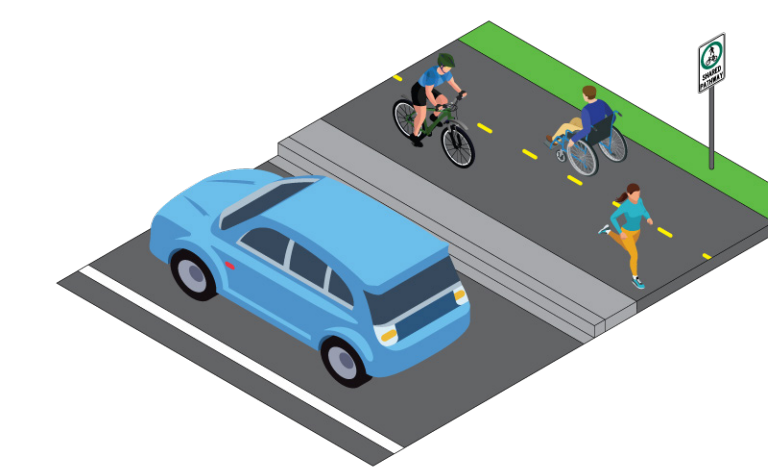
### Cycle Tracks

Bike-only paths on the boulevard, at sidewalk level. Typically one-way on each side of the road.



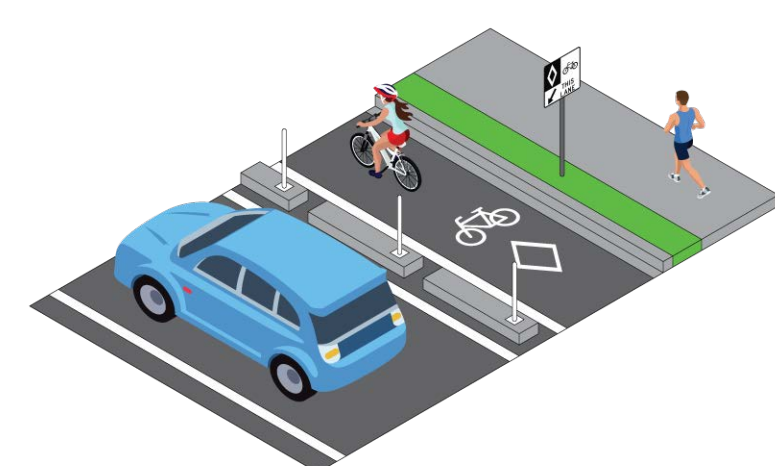
### Bike Lanes

A designated lane on the roadway for bikes.



### Boulevard Multi-Use Trail

A path shared between bikes and pedestrians on the boulevard. Typically two-way on one side of the road.



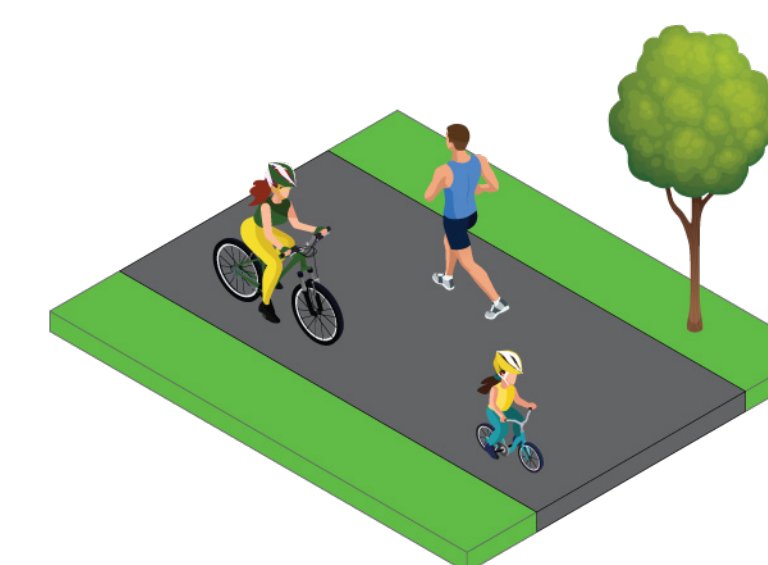
### Protected Bike Lanes

Bike lane separated from traffic with a physical barrier, such as flex-posts/bollards and/or concrete curbs.



### Shared Route

Low-traffic residential roads where bikes share the same road space as motor vehicles.



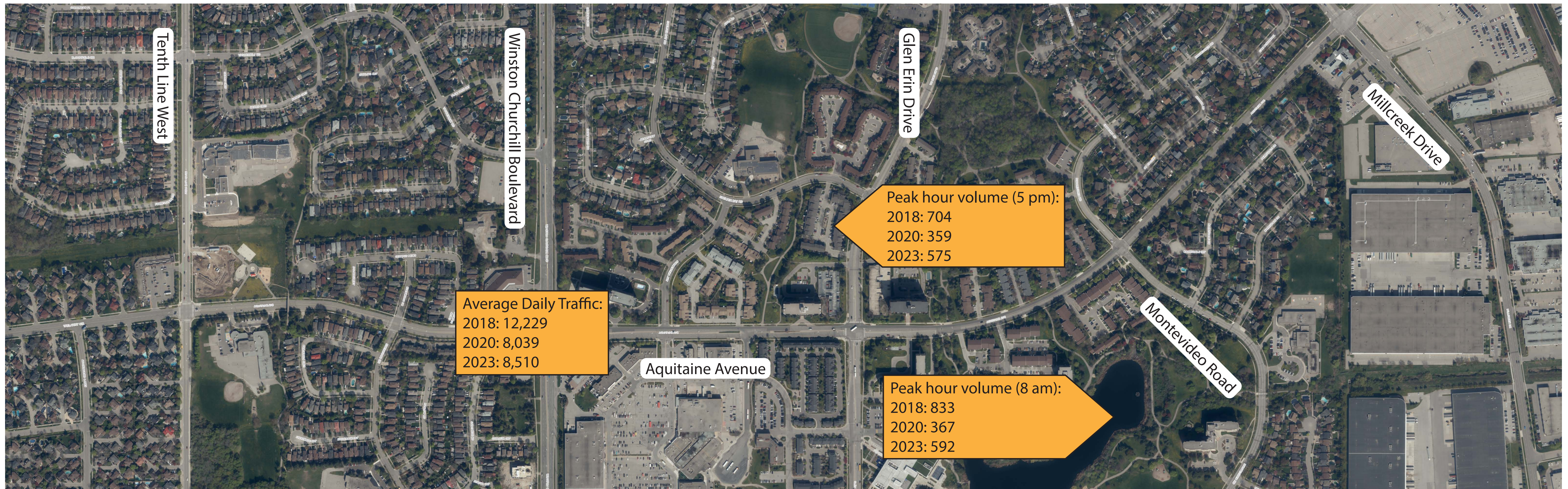
### Park Trail

A path shared between bikes and pedestrians through major park, river, or utility corridors.



# Traffic Volume

Traffic volume measurements are shown below, with average daily traffic, and the peak hour traffic per direction. Additional traffic volume measurements will be taken in 2024 Q2, Q3 and Q4, and 2025 Q1.



Daily traffic volumes of less than 20,000 vehicles can typically be accommodated with a 4 to 3-lane road conversion. However this is dependent on the peak hour volume.

A peak hour volume below 750 vehicles per hour per direction is likely feasible for a 4 to 3-lane road conversion. Peak hour volumes between 750 to 875 vehicles per hour per direction should be reviewed cautiously.



Peak hour volumes before pilot:

Eastbound: **592**

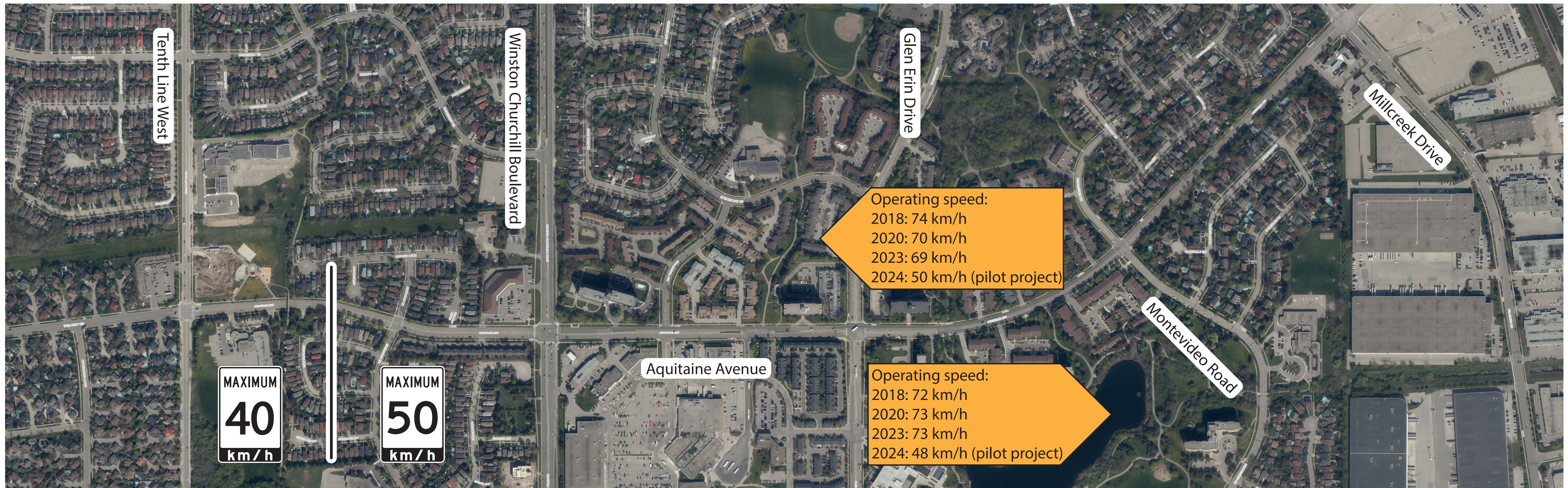
Westbound: **575**

Being under the 750 vehicles per hour threshold, peak hour volumes on Aquitaine Avenue in 2023 supported the 4 to 3-lane conversion.



## Traffic Speed

Traffic speed measurements are shown below. The numbers represent the 85<sup>th</sup> percentile operating speed throughout the day. Results are preliminary, pending further investigation and verification. Additional traffic speed measurements will be taken in 2024 Q3 and Q4, and 2025 Q1.



The operating speed is the 85<sup>th</sup> percentile speed, a typical measurement that indicates that 85% of drivers are comfortable driving at or below this speed.

Road design should encourage operating speeds which match closely to the speed limit, otherwise excessive speeding and speed differentials can be a problem.

Average 85<sup>th</sup> percentile speed difference compared to speed limit:



Before Pilot: 21 km/h over



After Pilot: 1 km/h under

Vehicles complying with speed limit:



Before pilot: 1 in 10



After Pilot: 9 in 10



## Collisions



The City of Mississauga obtains collision data from the Peel Regional Police. This data is limited to collisions that have been reported to the police and may contain incorrect or missing information. Collisions that are still under investigation are not accessible for review and therefore may be missing from recent data.

One of the aims of the pilot project is to reduce the amount and severity of collisions.

Collisions data for 2024 will be collected in the fall and early 2025 to compare to this data.

### Collisions reported on Aquitaine Avenue, from 2015 to 2023 (9 years, inclusive):



Total collisions: **220**

Avg **24.4** per year



Collisions Between  
motor vehicles and  
pedestrians/bicycles: **21**

Avg **2.3** per year



Collisions resulting in  
non-fatal injuries: **35**

Avg **3.9** per year



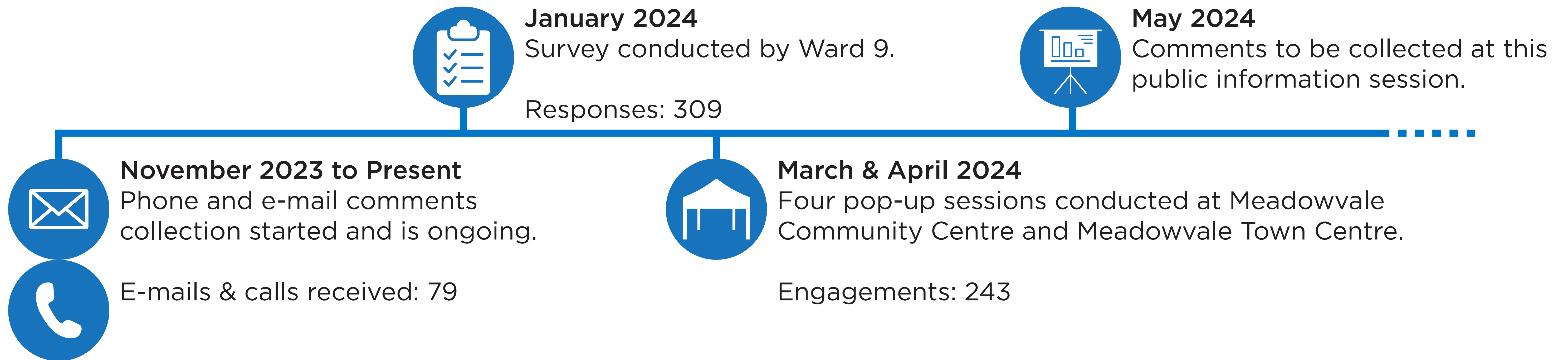
# Community Feedback

The Aquitaine Avenue Road Safety Improvement Pilot Project was implemented in November 2023.

Community feedback has been continuously collected since then.

## What happens with the feedback?

Collected feedback, along with traffic measurements, engineering best practices and City policies, will help to inform changes to the pilot project, and shape proposed alternatives for the future permanent road configuration.



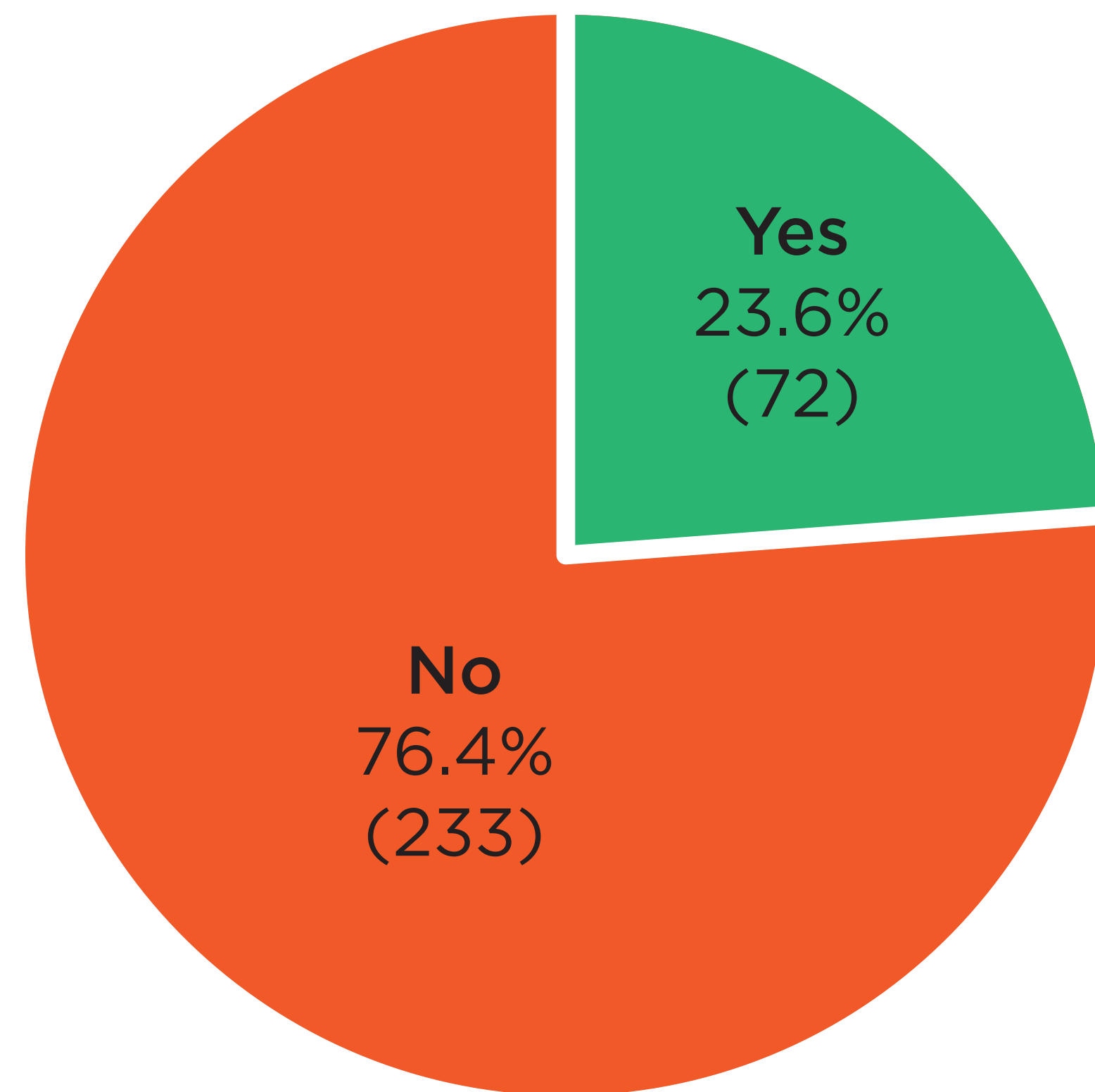


# Survey Responses

In January 2024, a survey was conducted by the Ward 9 councilor’s office. 309 responses were received.

## Summary of comments (with number of similar comments)

Do you support the Aquitaine Avenue Road Safety Improvement Pilot Project?



- The bike lanes are rarely/not being used (82)
- This project is a waste of money/taxes (52)
- The bike lanes cause congestion (43)
- The road is not safe (17)
- The bike lanes are a great idea (17)
- How does this affect snow removal? (15)
- The bike lanes slowed down traffic (13)
- Cars have trouble turning (13)
- A multi-use trail instead of bike lanes would be better (9)
- The bike lanes are causing confusion/distractions to drivers (9)
- The bike lanes are not necessary, Meadowvale has many trails (8)
- Buses/trucks have a hard time on the road (7)
- There should be a full bike network in Mississauga (7)
- This has reduced the noise of racing (6)
- There needs to be better signage on the road for drivers and cyclists (5)
- Great idea, but could have been implemented better (5)
- I use the lane, it’s great (4)
- Remove the flex-posts/bollards (3)
- Good idea, there should be more safe bike infrastructure (2)
- This is not the best place to do this (2)
- Would have been better if this was done in spring/summer time (2)
- Once the weather is warmer I will use the lane (1)
- The lane made it easy to bike with my family (1)
- I felt safer biking on the sidewalk (1)
- There should be bike storage at the Meadowvale town centre (1)
- Colour the bike lanes green (1)



## Pop-Up Sessions

In March and April 2024, four pop-up sessions were conducted at Meadowvale Community Centre and Meadowvale Town Centre.

These aimed to get feedback from the general public who may not have otherwise reached out to submit comments.

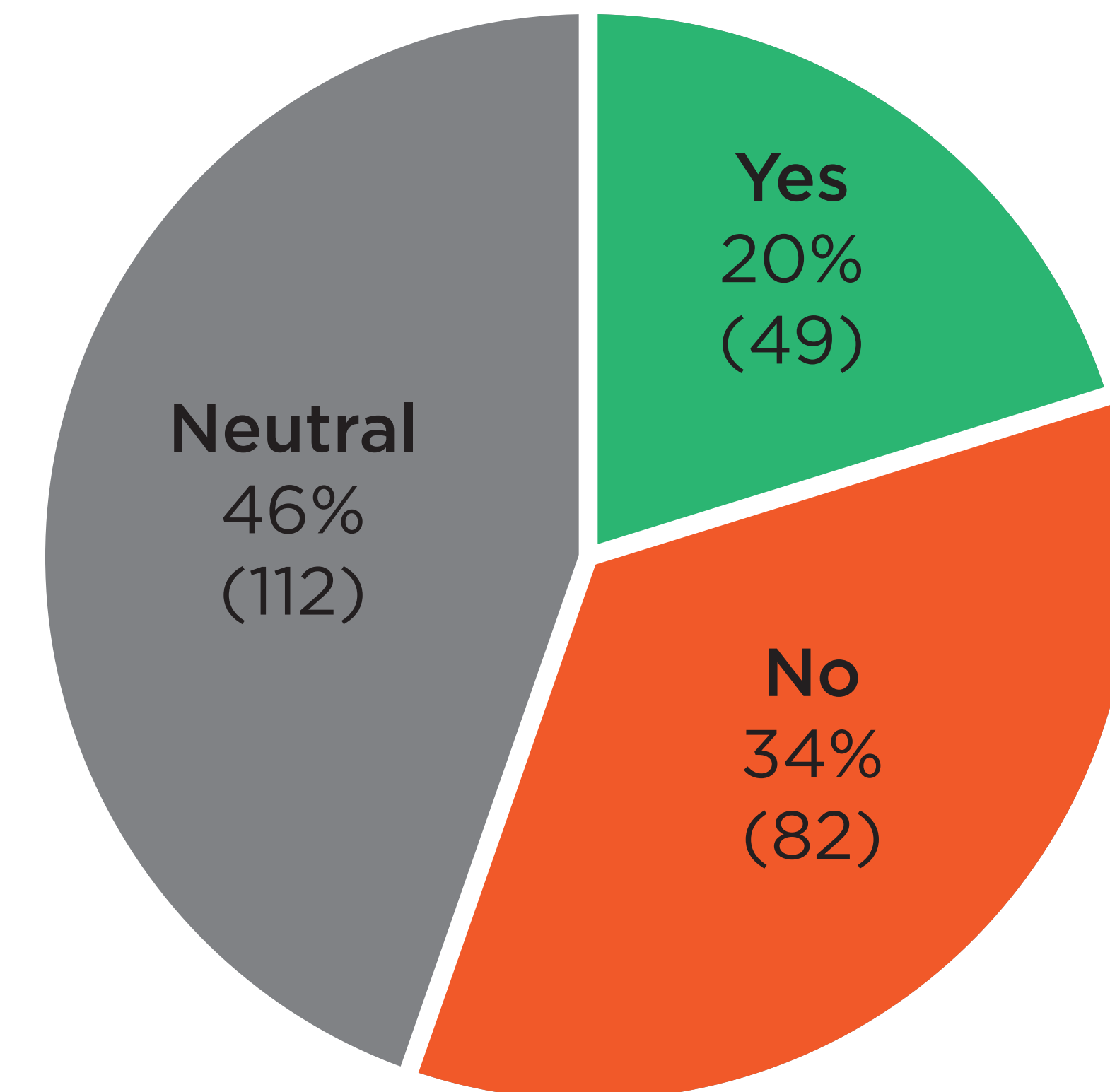
Staff engaged 243 residents.

### Pop-Up Dates

March 9 Meadowvale Community Centre  
March 13 Meadowvale Community Centre  
April 17 Meadowvale Town Centre  
April 20 Meadowvale Town Centre

Common comments, questions, and answers were similar to those submitted by e-mail and phone, and are shown on the following boards.

Do you support the Aquitaine Avenue Road Safety Improvement Pilot Project?





## Common Comments, Questions & Answers

**“The new road configuration is confusing, it took time to get used to it”**

There is typically a period of adjustment with any major new road reconfiguration. We appreciate residents’ patience with the new configuration.

**“Reducing the number of lanes is dangerous and causes congestion”**

Many studies of these types of road reconfigurations on similar roads in North America show a reduction in the number and severity of collisions, and only have a slight increase in travel times during peak hours. We will be monitoring traffic volume and travel times throughout the pilot project.

**“Not many cyclists use the bike lane, or ride on the sidewalk instead.”**

It can take time for people to change their transportation habits. We will be monitoring cycling usage to see how many cyclists use the bike lanes, if there’s an increase, and if many still use the sidewalk.

**“Cyclists should be on the boulevard (sidewalk, cycle track, or multi-use trail), not the roadway.”**

Boulevard options, such as cycle tracks or multi-use trails will be explored as future options.

**“Protected bike lanes will be difficult and expensive to plow in the winter.”**

The bike lane design was coordinated with the City’s road operations group, which has equipment able to plow them, and within the current budget for snow plowing.

**“Cars sometimes turn into or drive in the bike lanes between Winston Churchill and Glen Erin, they are too wide there”**

We will review the bike lane width and configuration in this section, and may make changes.

**“Cars turning onto Aquitaine from Winston Churchill are turning into a single lane or are confused with the bike lane.”**

We will review signage and markings at this and other busy intersections, and may make changes to address possible confusion by drivers.



## Common Comments, Questions & Answers (continued)

**“There should be more signage and markings to highlight the bike lane”**

Signage and markings are consistent with provincial guidance. We will review to see if more are needed.

**“Buses will have a hard time merging in and out of bike lanes at bus stops.”**

Buses have operated on many roads in the City which have bike lanes. MiWay has been and will be continually consulted on the project, and changes are made as needed to accommodate bus operations.

**“The bike lane has too much debris in it, it needs to be cleaned”**

Spring road sweeping operations are currently in progress, and the bike lane conditions will be monitored.

**“There is congestion going into the GO station in the morning, drivers use the centre turn lane/painted median to pass”**

The lane configuration leading to the GO station will be monitored and reviewed, and changes may be made.

**“How much did this cost? The money should be used elsewhere.”**

Installation of the road reconfiguration was approximately \$130,000. Funds for this and most road safety and cycling projects is provided by the provincial and federal governments specifically for these types of projects, and the City cannot reallocate it for other projects.

**“The bike lanes are great, we need more.”**

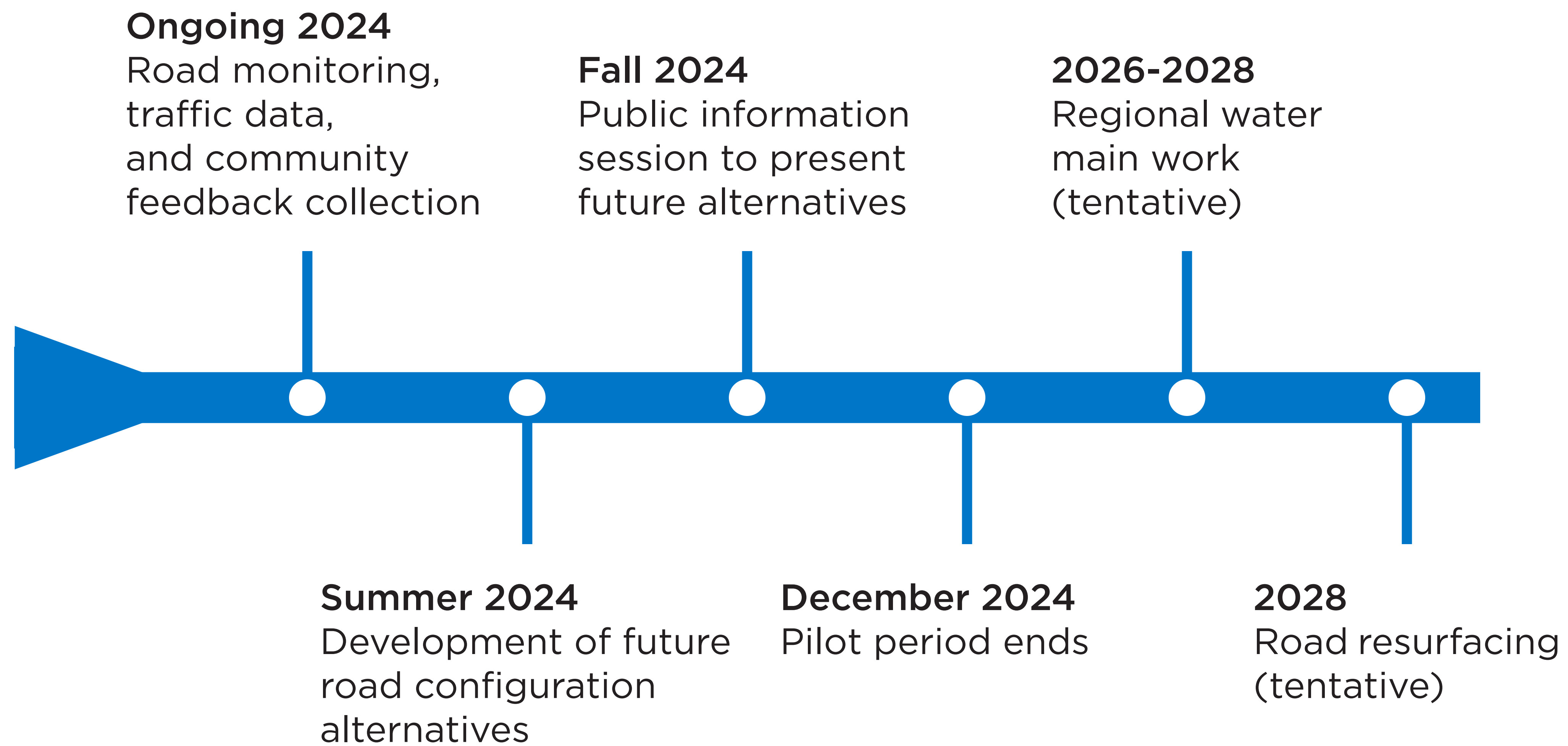
The City of Mississauga is continually expanding the cycling network, as per the Cycling Master Plan.

**“There should be better protection for cyclists, such as concrete barriers.”**

Bollards/flex-posts were used as this is a non-permanent pilot project. If it were to be permanent, then concrete dividers/barriers would be used to separate the bike lane.



## Next Steps





## Questions? Comments?

Please provide feedback by speaking with staff, submitting a comment sheet, or contacting us anytime during the project.

**Fred Sandoval**

Active Transportation Coordinator

City of Mississauga

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Project information and a copy of these display boards will be available on the project website.

[mississauga.ca/aquitaineroadsafety](https://mississauga.ca/aquitaineroadsafety)