

Background Report

Towards 40 106 Street: 97 Avenue to 100 Avenue

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SHAPE OUR CITY

Edmonton

February 2025

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INTRODUCTION

Report Purpose

The purpose of this report is to share information collected during the **Gathering Information** phase for the 106 Street from 97 Avenue to 100 Avenue Towards 40 project area. This report includes information collected by the project team.

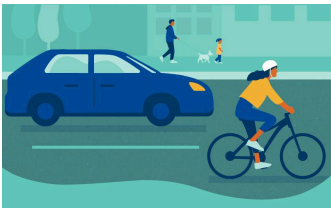
This report covers the project area of 106 Street from 97 Avenue to 100 Avenue.



ABOUT TOWARDS 40 PROGRAM

The Towards 40 program is focused on improving safety in areas where speeding and safety issues have been identified on low compliance and exception roads. The program uses adaptable measures that encourage speed compliance and safer behaviours to create safe and livable streets for all, moving Edmonton closer to our Vision Zero goal.

Low compliance roads have a default speed limit of 40 km/h. They are locations where speed limits are regularly violated and where safer behaviours can be encouraged. Exception roads are those that did not transition to 40 km/h when the default speed limit was reduced in 2021, but are in need of improvements to lower speeds and prioritize safety and



Improving 106 Street from 97 Avenue to 100 Avenue will ensure the safety of all Edmontonians using this roadway, regardless of how they travel.

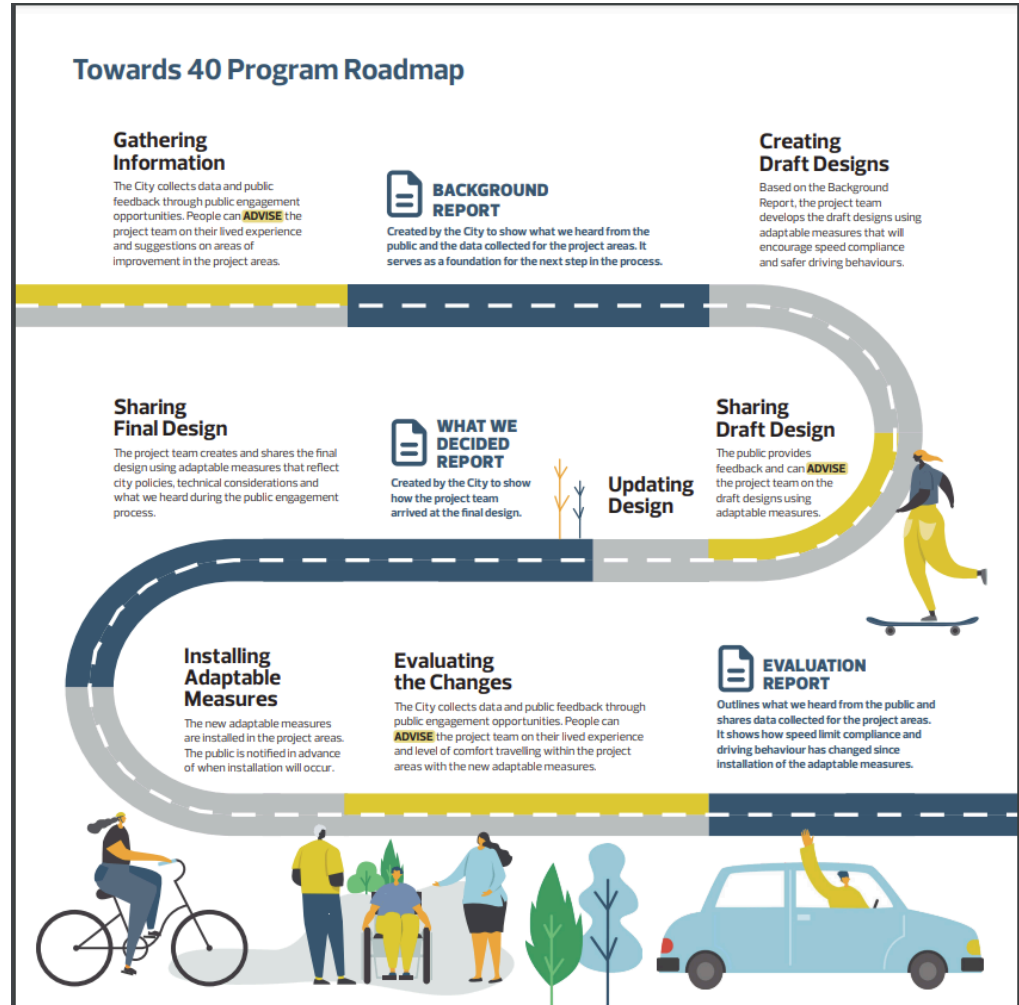
accessibility. The default speed on exception roads will become 40 km/h once the roadway is permanently reconstructed.

Improving this area will ensure all Edmontonians using this roadway, regardless of how they travel, will get to where they're going safely.

PROJECT PROCESS AND DECISION MAKING

Towards 40 Program Process

The project process outlined in the roadmap below shows the project phases from start to finish for the Towards 40 program.



At the time of this Background Report, the Gathering Information phase has been completed.

[For a larger version of the roadmap, click here.](#)

BACKGROUND INFORMATION & DATA COLLECTION

Project Area

106 Street from 97 Avenue to 100 Avenue is a one-way southbound roadway. It is primarily used by those who live, work or play nearby, as well as by commuters to access other arterial roads such as 97 Avenue.

106 Street from 97 Avenue to 100 Avenue is a roadway where safer driving behaviors can be encouraged. The project area (shown in purple in the map below) is in the downtown neighbourhood.



[Neighbourhood Profiles - Federal Census 2021](#)

Area Statistics

Data in this report references the 2021 Federal Census from Statistics Canada.

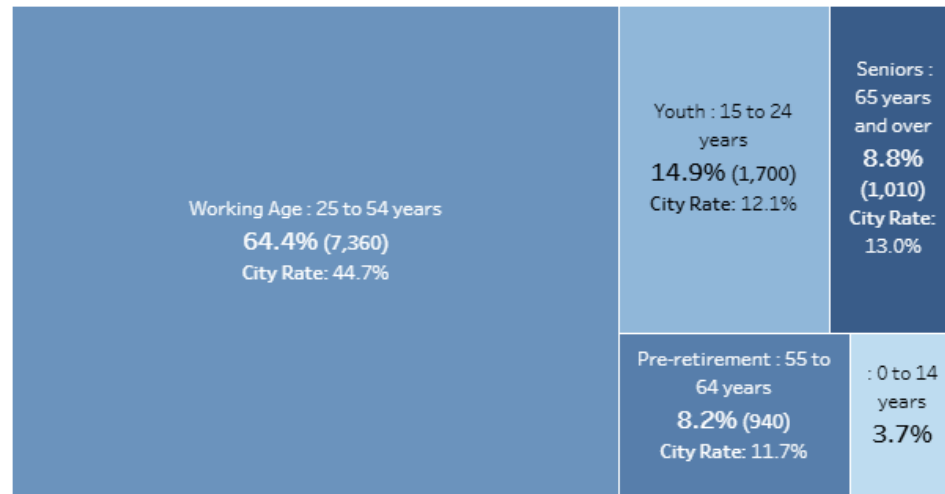
Highlights

- 64.4% of residents in the downtown neighbourhood are aged 25-54 years.
- Although the primary mode of travel in the downtown neighbourhood is by car as a driver, this mode of travel is 29.3% lower than the city average.
- Travel by walking and by public transit is significantly higher in the downtown neighbourhood as compared to the city average.

- The downtown neighbourhood consists mainly of apartments. There are no single-detached homes located here.

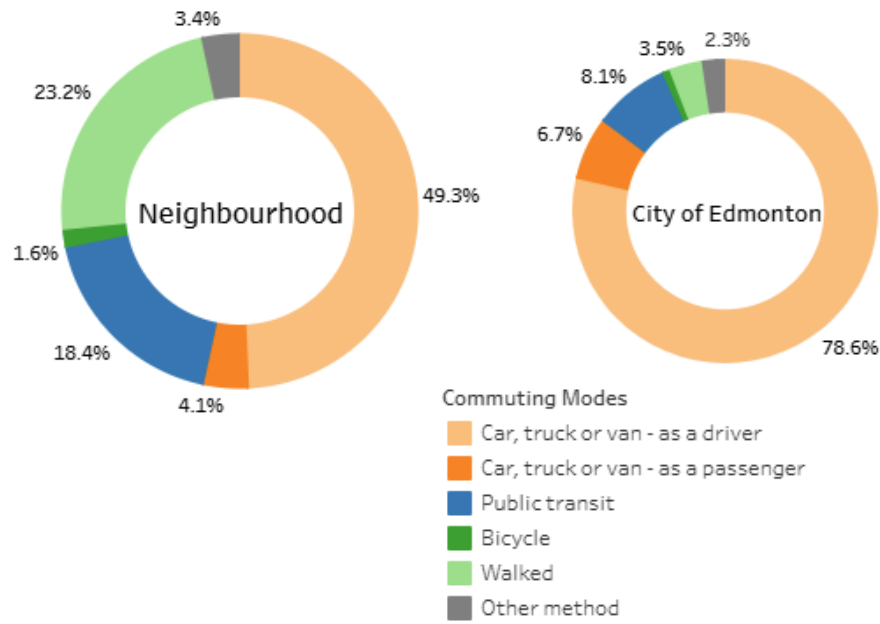
Age Distribution

In the downtown neighbourhood, there is a higher number of residents of working age (64.4%) than the city average (44.7%), and a higher number of youth ages 15 to 24 years old (14.9%) than the city average (12.1%). The number of children aged 0-14 (3.7%) is much lower than the city average (18.5%). The number of residents that are pre-retirement (8.2%) is lower than the city average (11.7%), and the number of residents 65 years and over (8.8%) is lower than the city average (13%).



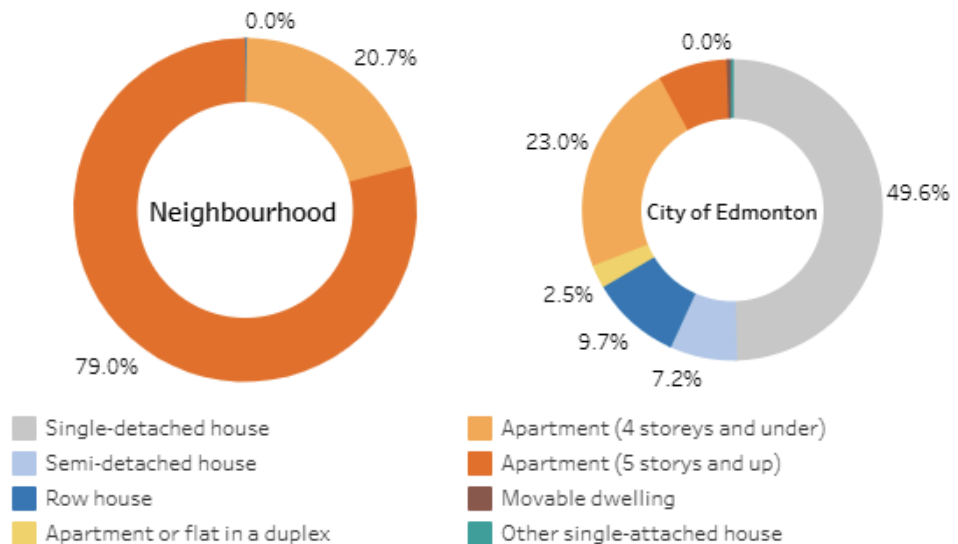
Journey to Work

In the downtown neighbourhood, the primary mode of travel is by car, truck or van, as a driver (49.3%) and is much lower than the city average (78.6%). Travel by car, truck or van as a passenger (4.1%) is lower than the city average (6.7%). Travel by public transit (18.4%) is much higher than the city average (8.1%), and travel by using other methods (3.4%) is slightly higher than the city average (2.3%). Travel by bicycle (1.6%) is higher than the city average (0.8%) and travel by walking (23.2%) is significantly higher than the city average (3.5%).



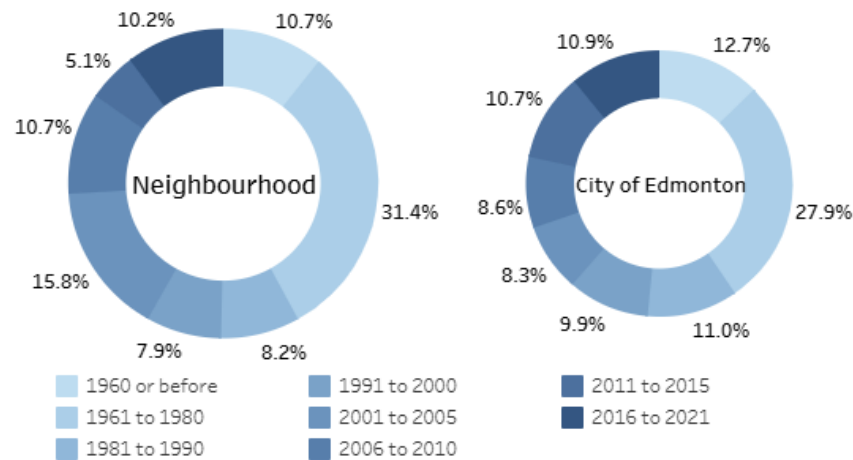
Private Dwellings by Structure Type

In the downtown neighbourhood, there are no single-detached houses (0.0%) compared to the city average (49.6%). There are no semi-detached houses (0.0%) compared to the city average (7.2%). There is also a smaller number of row houses (0.3%) than the city average (9.7%) and no apartments in a duplex (0.0%) compared to the city average (2.5%). The downtown neighbourhood has primarily apartments that are four stories or under (23.0%) and is significantly higher than the city average (0.4%) and apartments that are five stories and up (79.0%) as compared to the city average (7.4%).



Private Dwellings by Period of Construction

In the downtown neighbourhood, the majority of development or construction of dwellings occurred between 1961 and 1980 (31.4%) and is similar to the city average (27.9%) with construction regularly occurring prior to 1960 all the way to present (2016 to 2021).



City Policies, Programs and Technical Considerations

The following City of Edmonton standards, programs, policies and best practices set the direction and are applicable to the Towards 40 project team to include and consider in the 106 Street project from 97 Avenue to 100 Avenue. For more detailed information on these policies, programs and standards, click on the titles below.

- [City Plan](#)
- [Vision Zero](#)
- [Safe Mobility Strategy](#)
- [Speed Limit Reduction](#)
- [Bike Plan](#)
- [Complete Streets Design and Construction Standards](#)
- [Snow and Ice Control Policy](#)
- [Public Engagement Policy](#)
- [Transportation Association of Canada \(TAC\) Guidelines](#)
- [NACTO Guidelines](#)
- [CROW Design Manual for Bicycle Traffic](#)
- [Gender Based Analysis Plus \(GBA Plus\)](#)
- [Accessibility for People with Disabilities Policy C602](#)

For more information on Vision Zero, please visit edmonton.ca/VisionZero

For more information on the Safe Mobility Strategy, please visit edmonton.ca/SafeStreets



EXISTING CONDITIONS AND OBSERVATIONS

The following section is an overview of existing conditions and observations that includes an overview of the existing roadway with information about driving, traffic safety, biking, walking, transit and parking as well as opportunities to align with city policy, programs and current standards.

106 Street from 97 Avenue to 100 Avenue

106 Street from 97 Avenue to 100 Avenue is an arterial roadway in the downtown neighbourhood. It is one-way, southbound only for vehicle traffic. In this area are residential towers, commercial areas and parking lots. Some buildings have parking turn outs in front of them to separate from the driving lane. Parking is permitted in some locations. The sidewalk is separated by a boulevard with trees between 100 Avenue and 98 Avenue. The sidewalk is located next to the roadway between 98 Avenue and 97 Avenue. From 98 Avenue to 97 Avenue, there is a steep hill with a suggested speed of 35km/hr.

Driving

Road Classification

There are mainly three categories of roadways in the City of Edmonton: Arterial Roadways, Collector Roadways and Local Roadways.

106 Street from 97 Avenue to 100 Avenue is an arterial roadway that connects directly to nearby arterial, collector and residential roads. Although it is an arterial roadway, it functions more like a collector roadway.





Arterial Roads carry the highest traffic volume and give vehicles the ability to travel longer distances at higher speeds. Other arterial roads near the project area include:

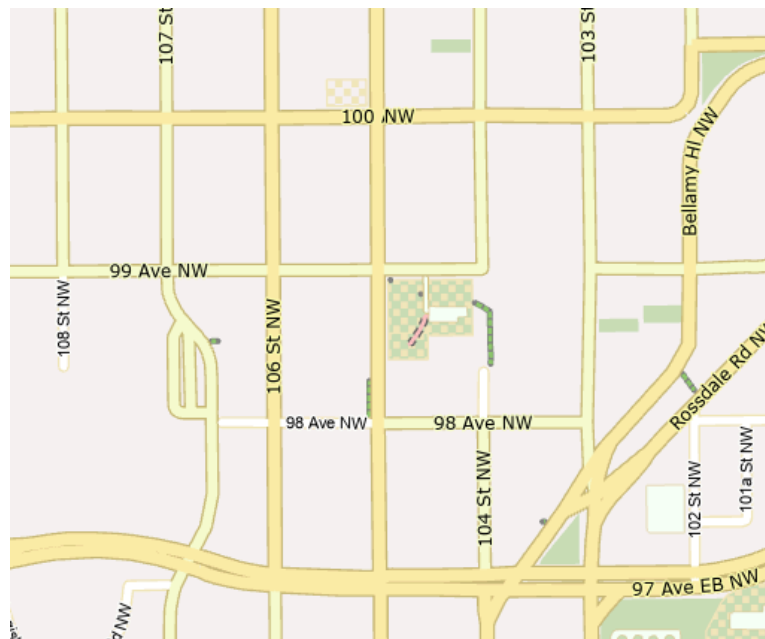
- 100 Avenue
- 97 Avenue

Collector Roads are moderate capacity corridors that function to carry traffic from local roads to arterial roads.

- 99 Avenue

Local roads are low volume roads which typically provide access to local properties.

- 98 Avenue



Map legend: Arterial roads are dark yellow, collector roads are medium yellow and local roads are pale yellow.

Traffic Speed Data

The City conducted two speed surveys, one north of 99 Avenue and another north of 97 Avenue to understand how speeds vary between the level and sloped segments of 106 Street. Data was collected continuously for five days from October 3 to 7, 2024.

The speed data analysis revealed that the speed profiles were similar between the level and sloped segments of 106 Street. Surprisingly, the 85th percentile speed was higher and the compliance rate was lower near the level segment compared to the sloped segment. A possible explanation to the high compliance rate and lower speeds at the sloped segment of 106 Street would be drivers slowing down when approaching the traffic signal at the intersection of 106 Street with 97 Avenue to merge safely onto the arterial road.

Indicator	North of 99 Avenue	North of 97 Avenue
Average Speed	38 km/h	32.3 km/h
85th Speed	45 km/h	42 km/h
Compliance Rate*	69.10%	84.50%

*compliance rates were calculated against the 40 km/h speed limit.

Traffic Volume Data

A turning movement count was also conducted at the intersection of 106 Street and 97 Avenue. The intersection was monitored for 24 hours on October 10, 2024. The average daily traffic on 106 Street north of 97 Avenue was found to be 3,619 vehicles/day, 46 of which were heavy vehicles.

The intersection turning movement count showed four violations to the one-way traffic on 106 Street, showing that few drivers are violating the one way. Three vehicles were captured turning right from 97 Avenue to 106 Street and one vehicle continued straight through northbound on 106 Street from south of 97 Avenue to north of it.

A total of 446 pedestrians were counted using the crosswalks at the intersection within the 24-hour period. The majority crossed at the west leg, which is closer to the Alberta Legislature Building. During the same monitoring period, nine bicycles were observed on roads, while 25 were seen using the crosswalks.

Intersection Controls

There are fully signalized intersections along **106 Street** at:

- 100 Avenue
- 99 Avenue
- 97 Avenue

Crash History

In the five-year period between 2019 and 2023, a total of 72 crashes were recorded on 106 Street between 100 and 97 Avenues. Of these, 10 resulted in minor injuries, all occurring at intersections, while the remaining involved property damage only.

Intersections accounted for 49 crashes, with the highest concentration (31 crashes) occurring at 97 Avenue. The primary contributing factors for these intersection crashes included following too closely, improper lane changes and failure to observe traffic signals.

The remaining 23 crashes took place along midblock segments, all of which resulted in property damage only. The leading causes of midblock crashes were running off the road, striking parked vehicles and improper lane changes. Notably, 14 of these midblock crashes occurred between 98 and 97 Avenues, likely influenced by the steep slope in this area. Midblock crashes were either speed-related or not driving at speed appropriate for the weather and roadway conditions and took place between October and March. There is a possible role of snow and ice in contributing to some of these crashes. 106 Street from 100 Street to 97 Street receives a high level of service for snow clearing. It is currently cleared at a high level of priority and also receives a special treatment that is applied on all the steep hills within the downtown area.

Opportunities

- Use traffic calming measures to create visual awareness for drivers near intersections and accesses to slow them as they approach the hill
- Explore the use of one lane only southbound, instead of the current two lanes and/or define the use of the roadway
- Review signal timings and phases at 97 Avenue

Biking

Existing and Planned Bike Routes

There are several existing bike routes near the project area.

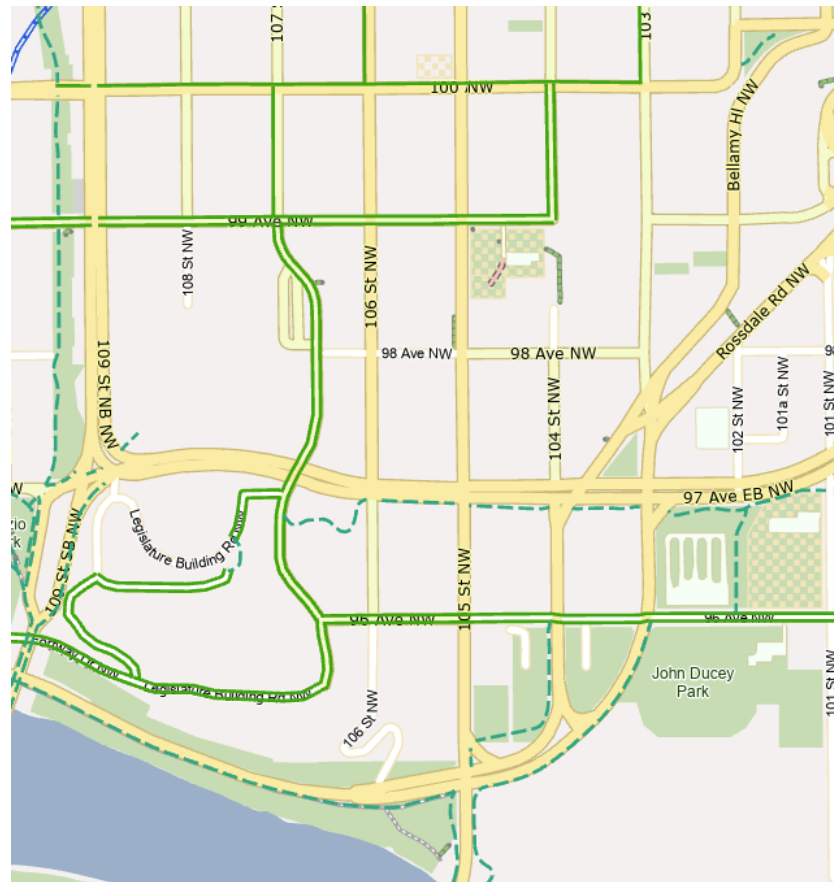
Existing on-street routes include:

- 100 Avenue along the north side of the roadway between 103 Street and west of 109 Street

- 99 Avenue along both the north side and the south side of the roadway from 104 Street to 112 Street
- 107 Street on one or both sides of the roadway south of 97 Avenue to 100 Avenue
- 106 Street from 100 Avenue to 104 Avenue

Existing off-street routes include:

- South of 97 Avenue running east/west
- West of 109 Street running north/south



Legend: Solid green lines are on-street bike routes; Dotted green lines are off-street bike routes

Opportunities

- Review intersection at 99 Avenue as the bike routing crosses 106 Street at this location
- Look at bike route opportunities along 106 Street in the project area

Walking

Crossings

There are four marked crossings along 106 Street from 100 Avenue to 97 Street at:

- 106 Street and 100 Avenue, which includes a full signal
- 106 Street and 99 Avenue, which includes a full signal
- 106 Street at 98 Avenue only on the north side of the intersection
- 106 Street at 97 Avenue, which includes a full signal

Opportunities

- Reduce crossing distance for those crossing the roadway
- Consider visual cues that help identify upcoming crossings
- Consider adding measures to slow vehicles down prior to the crossings

Parking

Parking is located along 106 Street from 100 Street to 97 Street in most areas along the east and west sides of the roadway.

- Some of the parking is an EPark zone with paid parking in effect
- There are both loading zones and accessible zones
- Areas where parking is not permitted are signed as “no parking”
- Other parking in the project area is accommodated on private property



As part of Bylaw 5590, a vehicle should not be parked:

- On a crosswalk or within five metres of a marked crosswalk
- Within five metres of a stop or yield sign
- Within five metres of an intersection
- Within five metres of a fire hydrant
- Within 1.5 metres of any access, i.e. to a driveway

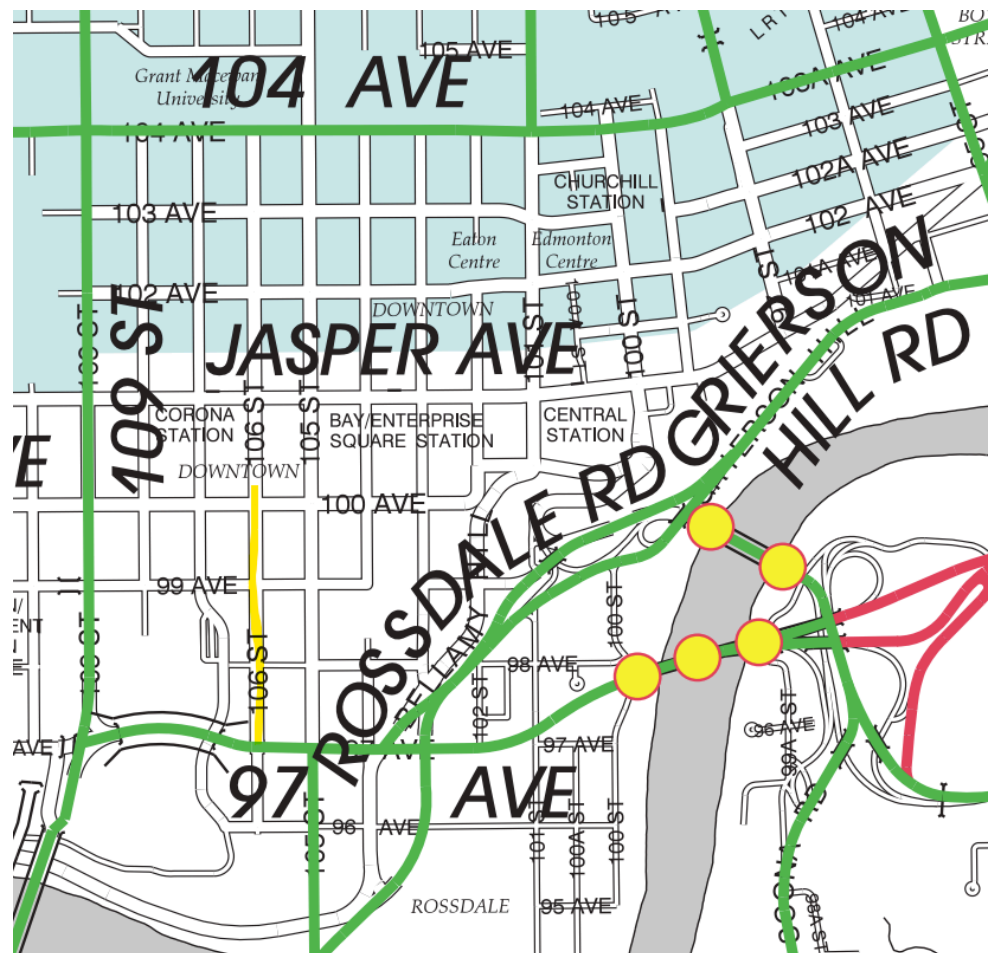
Opportunities

- Define where parking is or is not permitted

Truck Routes

The Edmonton Truck Route map shows that the project area is not a designated truck route. However, trucks and deliveries can travel on roadways not marked as a truck route to get to/from their destinations.

There are some commercial/businesses along the roadway. If these commercial areas are a destination for deliveries and if the destinations are not along a truck route, trucks are to take the shortest distance from their truck route to and from their destination. This means that deliveries to the businesses should access the area to/from 109 Street or from north of Jasper Avenue.



Note - project area is highlighted in yellow on the map above

Green indicates a 24 Hour truck route; blue shading indicates all roads in the area are truck routes.

Utilities

A review of surface level utilities within the project areas include communications infrastructure, power and streetlights, drainage and water. Any updates to the roadway should consider proximity to surface level utilities and work with the utility companies if required.

Previous Feedback

The City of Edmonton keeps a record of inquiries received through email, councillor offices and 311. These relevant inquiries were reviewed during the **Gathering Information** phase of this project.

From a review of past inquiries, below are the following themes in the project area:

- Pedestrian safety crossing the road
- Poor driver behavior
- Speeding, especially down the hill
- Cars running off the road, over sidewalks and into nearby properties



PUBLIC ENGAGEMENT SUMMARY AND RESULTS

What We Talked About

In December 2024, residents and stakeholders were invited to advise the project team on their lived experiences and suggestions for improvements travelling on 106 Street from 97 Avenue to 100 Avenue while walking/rolling, biking or driving.

How We Communicated

The project team communicated about public engagement opportunities in the **Gathering Information** phase of the project to stakeholders, residents and organizations via the following methods:

- 9,799 letters to residents and businesses
- Emails to two area stakeholder organizations
- 17 yard signs
- Two informational web pages: edmonton.ca/Towards40Projects had 220 views, and edmonton.ca/Towards40 had 108 views between the survey period from December 3, 2024 to January 6, 2025.

How We Engaged

An online survey was available on the project website between December 3, 2024 through to January 6, 2025. A total of 89 participants provided their feedback through the online survey.



What We Heard

Through the **Gathering Information** public engagement phase, respondents shared their observations and feedback on their lived experience and opportunities for improvements within the project areas whether they walk, roll, bike or drive. The common themes in these responses were:

- Travelling on the hill is hazardous in the winter, whether walking or driving
- People driving the wrong direction on the one-way road is a dangerous concern
- Improvements for safer walking by improving sidewalk conditions and crosswalks by adding lights or other measures to protect pedestrians .
- The desire for more protected bike lanes by people who bike

The tables and summaries below reflect further on the common themes identified for each mode of travel along 106 Street from 97 Avenue to 100 Avenue.

What improvements could you suggest to make Driving, Walking or Rolling, Biking along 100 Street from 97 Avenue to 100 Avenue more comfortable?

“Cars are driving the wrong way constantly. It’s especially dangerous as the hill crests.” - Towards 40 participant

“The bike lane just ends and needs to be continued” - Towards 40 participant

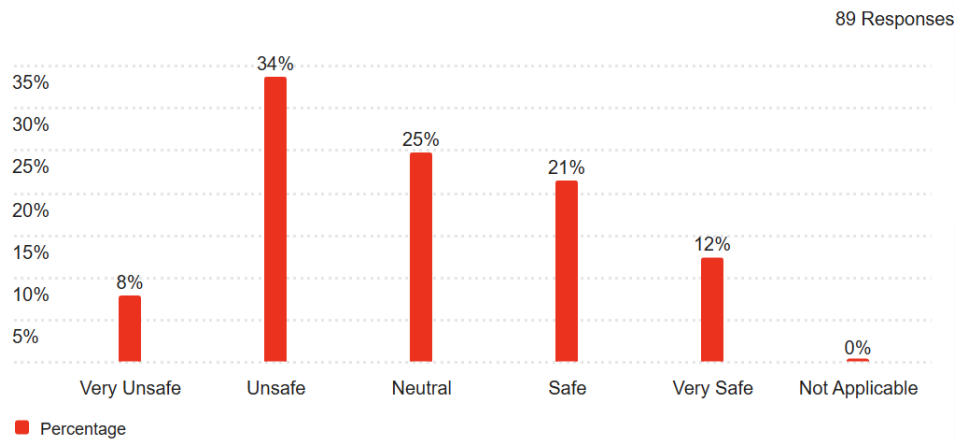
“... Something needs to be done to protect pedestrians ...” - Towards 40 participant

	Driving	Walking/ Rolling	Biking
	❖ Add measures to prevent people travelling the wrong way	❖ Widen sidewalks and improve sidewalk condition	❖ Add better protected bike infrastructure
	❖ Define the the driving and parking lanes	❖ Add measures to increase pedestrian visibility at all crosswalks along 106 Street	❖ Extend the bike lane north of 100 Avenue to connect with 97 street shared path or the legislature
	❖ Do something to slow down traffic .. like speed bumps	❖ Improve the crosswalk at 106 Street and 98 Avenue	❖ Allow for bikes to travel both north and south
	❖ Remove parking or only allow parking on one side of the street	❖ Add pedestrian lights at 106 Street and 98 Avenue	❖ Don’t add additional bike lanes
	❖ Increased maintenance or road closure during the winter months		

Safety rating:

When travelling along 106 Street between 97 Avenue and 100 Avenue (driving, walking/rolling and biking) how safe do you feel?

A total of 89 respondents shared their safety rating as follows: 12% very safe, 21% safe, 25% neutral, 34% unsafe, 8% very unsafe, 0% not applicable.



Safety rating reason:

While travelling along 106 Street...	
...respondents felt <i>unsafe</i> due to:	...respondents felt <i>safe</i> due to:
<ul style="list-style-type: none"> ❖ The steep road, especially in winter conditions ❖ People who drive travelling the wrong way on the one-way road ❖ Cars losing control going down the hill and hitting signs and driving over the sidewalk ❖ Cars not stopping for pedestrians ❖ Speeding ❖ Poor lighting ❖ Crime 	<ul style="list-style-type: none"> ❖ Not experiencing issues ❖ Trees between the road and sidewalk ❖ Low traffic in the area

OPPORTUNITIES & CONSIDERATIONS FOR DRAFT DESIGN

Several design opportunities will be considered in the draft design. These opportunities include:

Improving these areas will ensure that all Edmontonians using these roadways, regardless of how they travel, will get to where they're going safely.

- Use traffic-calming measures to create visual awareness for drivers near intersections and accesses and slow them as they approach the hill
- Explore the use of one lane only southbound, instead of the current two lanes and/or define the use of the roadway
- Review signal timings and phases at 97 Avenue
- Review intersection at 99 Avenue as the bike routing crosses 106 Street at this location
- Look at bike route opportunities along 106 Street in the project area
- Reduce crossing distance for those crossing the roadway
- Consider visual cues that help identify upcoming crossings
- Consider adding measures to slow vehicles down prior to the crossings
- Define where parking is or is not permitted

WHAT IS NEXT

Based on the information provided in this report, the project team will **Create a Draft Design** using adaptable measures for the project area.

The project team will share the draft design with area stakeholders in the **Sharing Draft Design** project phase anticipated in summer 2025.

