# Background Report

## **Towards 40**

118 Avenue: 106 Street to 109 Street

> SHARE YOUR VOICE SHAPE OUR CITY



July 2024

edmonton.ca/Towards40Projects

#### **TABLE OF CONTENTS**

| TABLE OF CONTENTS                                    | 3  |
|--|----|
| INTRODUCTION   | 4  |
| ABOUT TOWARDS 40 PROGRAM                             |    |
| PROJECT PROCESS AND DECISION MAKING                  |    |
| BACKGROUND INFORMATION & DATA COLLECTION             | 6  |
| Project Area   | 6  |
| Area Statistics                                      |    |
| City Policies, Programs and Technical Considerations | 7  |
| EXISTING CONDITIONS AND OBSERVATIONS                 | 8  |
| Driving  | 8  |
| Traffic Data   |    |
| Biking   | 11 |
| Walking  | 12 |
| Parking  | 13 |
| Truck Routes   |    |
| Utilities  | 14 |
| Previous Feedback                                    | 15 |
| OPPORTUNITIES & CONSIDERATIONS FOR DRAFT DESIGN      | 16 |
| WHAT IS NEXT   | 16 |

#### INTRODUCTION

#### **Report Purpose**

The purpose of this report is to share information collected during the **Gathering Information** phase on the 118 Avenue Towards 40 project area. This report includes information collected by the project team.

This report covers the project area of 118 Avenue from 106 Street to 109





CITY OPERATION PARKS AND ROLL DATE.

#### **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

Improving 118 Avenue from 106 Street to 109
Street will ensure that all Edmontonians using this roadway, regardless of how they travel, will get to where they're going safely

transition to 40km/h when default speed limits were reduced in 2021, but are in need of improvements to lower speeds and prioritize safety and 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.

**Towards 40 Program Roadmap** Gathering Creating Information **Draft Designs** Edmontonians share their BACKGROUND The City creates road design experience through public REPORT engagement opportunities options to encourage safer driving based on information Outlines what the City heard from the while the City gathers public and the technical data collected. technical data. Sharing WHAT WE Sharing **Draft Design** DECIDED **Final Design** REPORT The project team Final designs are shared and Shows how the shares the draft **Updating** designs with the project team arrived show how adaptable measures Design public for feedback will be used. at the final design. Installing Adaptable **Evaluating EVALUATION** REPORT Measures the Changes Outlines how driving behaviour Adaptable measures are Residents provide feedback through and lived experiences have implemented after residents public engagement while the City collects changed since installation. technical data. are notified in advance.

The project process outlined in the roadmap shows the project phases from start to finish.

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

#### **BACKGROUND INFORMATION & DATA COLLECTION**

#### **Project Area**

118 Avenue between 106 Street and 109 Street is an industrial local roadway which serves mainly the NAIT Campus within the Blachford Area..

**118 Avenue between 106 Street and 109 Street** was identified as a roadway where the speed limit should be reduced to 40 km/h due to its surrounding land use. Though it is an industrial roadway, it sees high pedestrian activity as it serves several NAIT buildings. As industrial roadways are not typically 40 km/h, there is a need to review the safety and compliance in the area.





**Area Statistics** 

At the time of this report, approximately 30,000 students attend NAIT throughout the school year. Approximately 4,000 students travel to the NAIT Campus by LRT.

In a 2018 report from NAIT regarding crosswalk safety, it was observed that NAIT's main campus accommodates over 50,000 visits from students and staff on a daily basis. The most convenient mode of travel throughout campus was by walking. Pedestrian use is steady throughout the day, with approximately 1,832 pedestrians observed crossing the roadway during a nine-hour window. It was

observed that many people arrive in vehicles to the NAIT campus, park and then travel between NAIT buildings on foot.

#### **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 118 Avenue project from 106 Street - 109 Street. For more detailed information on these policies, programs and standards, click on the titles below.

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

- 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





#### **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.

#### 118 Avenue from 106 Street to 109 Street

118 Avenue from 106 Street to 109 Street is a roadway in the Blatchford neighbourhood. It is located within the NAIT Campus and mainly serves NAIT students and staff. Along this roadway, are NAIT buildings, some businesses such as Ernest's at NAIT and Starbucks, surface parking lots and a parkade.



#### **Driving**

#### **Road Classification**

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

118 Avenue from 106 Street to 109 Street is a local roadway that connects directly to nearby arterial roads.

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

- 118 Avenue (east of 106 Street)
- 106 Street

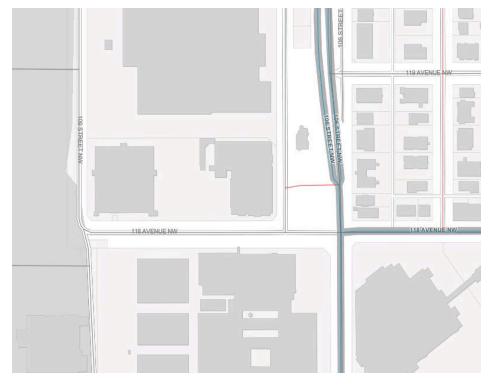
Collector Roads are moderate capacity corridors that function to carry traffic from local roads to arterial roads.

• There are no collector roads connecting 118 Avenue, west of 106 Street to arterial roads.

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

Nearby local roads include 109 Street and 106 A Street

18 Avenue between 106 and 109 Street is a low compliance local road where speed limits are regularly violated.



Blue are Arterial Roads, Red are Collector Roads and Grey are Local Roads

#### **Traffic Data**

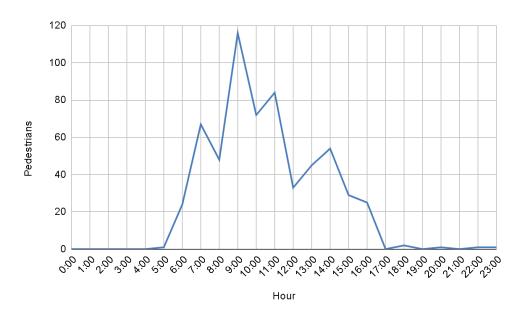
To understand the current operating conditions of 118 Ave, the city conducted a pedestrian and cyclist count at the crosswalk, and a speed survey west of 106A Street. The turning movement count location is marked in the figure below in brown, and the speed survey location is marked in green.



The pedestrian and cyclist count study was conducted to help the City understand the number of pedestrians and cyclists using the crosswalk. It was conducted on Tuesday June 18, 2024. On this date, NAIT's spring term was in session, which saw less activity than during the fall and winter terms.

Monitoring showed significant pedestrian presence at the crosswalk:

- 603 pedestrians were counted using the crosswalk
- Pedestrian volume peaked at 9 am, where 116 pedestrians were counted



• 13 bicycles were counted were counted at the crosswalk

Speed data was collected at 118 Avenue west of 106A Street in June 2024.

The average speed compliance rate with the 40 km/h speed limit was 82.4%. The average 85th percentile speed, which is considered the operational speed of the road, was 42.5 km/h in both directions. The average daily traffic was 1669 vehicles/day.

118 Avenue previously had a speed limit of 50 km/hr. Bylaw 20826 went to Council on June 11, 2024 to lower the speed limit on 118 Avenue from 106 Street to 109 Street to 40 km/hr. This reflects the local roadway context and is consistent with all other local roadways in Edmonton.

#### **Intersection Controls**

There is a fully signalized intersection along **118 Avenue** at 106 Street

#### **Crash History**

In the five-year period between 2019 and 2023, five crashes occurred on 118 Avenue. No injuries were reported as a result of these crashes. Three of these crashes were due to causes associated with speeding. No vulnerable road users were involved in any of these crashes. Two crashes on this road were caused by striking a parked vehicle.

#### **Opportunities**

- Review measures and signage to highlight when people are entering the local roadway
- Use traffic calming measures to create visual awareness for drivers, especially at pedestrian crossings.
- Review mid-block crossings to ensure visible sightlines.

#### **Biking**

#### **Existing and Planned Bike Routes**

There are several existing bike routes and planned routes on and near the project area. People who bike may use the shared pathway along the south side of 118 Avenue from 106 to 109 Street more often due to the existing and planned bike network in and around the project area.

#### Existing routes include:

- 118 Avenue (southbound) from 102 Street to 109 Street
- Princess Elizabeth Avenue (northbound) from 103 Street to 102 Street

 106 Street (eastbound) from Princess Elizabeth Avenue heading south to Downtown

• West of 109 Street and North of Princess Elizabeth Avenue

Planned routes (with construction completion in Fall 2024) include:

- 106 Street, north of Princess Elizabeth Avenue
- Princess Elizabeth Avenue from 103 Street to 106 Street
- Connections near the LRT station
- Connections west of 109 Street, just south of 118 Avenue



Green = existing bike infrastructure; Red = planned bike infrastructure

#### Walking

#### Crossings

There are four marked crossings along 118 Avenue from 106 to 109 Street at:

- 118 Avenue and 106 Street, which includes a full signal
- Mid-block on 118 Avenue, east of 106 A Street with a 'zebra' marked crossing
- Mid-block on 118 Avenue, west of 109 Street, with a 'zebra' marked crossing
- 118 Avenue and 109 Street, with a marked crosswalk at a three-way stop



#### **Opportunities**

 Reduce crossing distance for those crossing the roadway, especially at the mid-block crosswalks

- Consider visual cues that help identify upcoming crossings
- Consider adding measures to slow vehicles down prior to the crossings

#### **Parking**

Parking is located along 118 Avenue from 106 to 109 Street in most areas along the north and south sides of the roadway. This parking is an EPark zone with paid parking in effect. Areas where parking is not permitted are signed as no parking.

Other parking in the project area is accommodated on private property belonging to NAIT which offers surface lots and a parkade.

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

- On a crosswalk or within five meters 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

From a review of the project area, it is observed that the no parking signage is too close to the midblock crossings.

#### **Opportunities**

 To define where parking is not permitted and enhance safety near marked crosswalks.

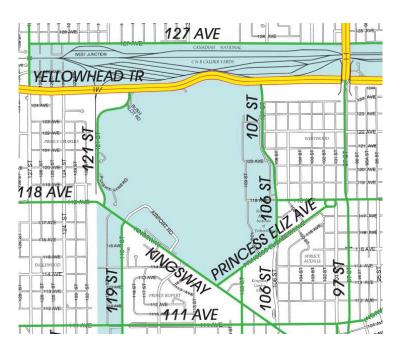
#### **Truck Routes**

On the Edmonton Truck Route Map, roadways that are on a 24-hour truck route are marked in green and include 106 Street, 118 Avenue and Princess Elizabeth Avenue. The project area itself 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. It is important to note that there is a structural clearance of 4.8m on 118 Avenue from 106 Street to 109 Street in both directions due to a connection between two buildings over the roadway.



As noted previously, 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 106 Street – pending the ability to meet the height restriction or Princess Elizabeth Avenue.





#### **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, council 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:

- Safety issues near the crosswalks
- Speeding

- Drivers failing to stop for pedestrians
- Near misses between vehicles and people who walk
- Hard to see cars/pedestrians at the crosswalks due to parked cars
- Crosswalks poorly marked and poorly lit

Representatives from the City have been meeting with NAIT administrators on a regular basis about this project. At these meetings, NAIT shared the following information:

- A line of sight for pedestrians and vehicles entering the crosswalk was important on 118 Avenue from 106 Street to 109 Street
- They recommend that the City considers prohibiting parking adjacent to the crossings.
- They shared a study that they did in 2018 regarding the crossing along 118 Avenue between 106 Street and 109 Street as they have been experiencing issues in the area for quite some time. The key points from the study include:
  - Visibility of pedestrians at the crosswalk, all at time, but especially when it is dark
  - Parked vehicles partially block sightlines at the crossings
  - Sightlines are blocked when vehicles queue eastbound at the afternoon / evening peak time at 106 Street.
- They shared that the area has a high number of pedestrians as this is the most convenient way to travel around campus

### OPPORTUNITIES & CONSIDERATIONS FOR DRAFT DESIGN

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

- Review measures and signage to highlight when people are entering the local roadway
- Use traffic calming measures to create visual awareness for drivers, especially at pedestrian crossings.
- Review mid-block crossings to ensure visible sightlines.
- Reduce crossing distance for those crossing the roadway, especially at the mid-block crosswalks
- Consider adding visual cues that help identify upcoming crossings

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

• Consider adding measures to slow vehicles prior to the crossings

 To define where parking is not permitted and enhance safety near marked crosswalks

#### **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.