



**PUBLIC AGENDA
STANDING POLICY COMMITTEE
ON TRANSPORTATION**

Tuesday, February 7, 2023, 2:00 p.m.

Council Chamber, City Hall

Committee Members:

**Councillor B. Dubois, Chair, Councillor D. Kirton, Vice Chair, Councillor R. Donauer,
Councillor S. Gersher, Councillor D. Hill, His Worship Mayor C. Clark (Ex-Officio)**

Submissions providing comments and/or requesting to speak will be accepted for public meetings using the online form at saskatoon.ca/writetocouncil. If your submission includes a request to speak, you will be contacted by a representative from the City Clerk's Office with further information. **Submissions will be accepted no later than 5:00 p.m. on the Monday the week of the meeting.**

Pages

1. CALL TO ORDER

The Chair will call the meeting to order on Treaty 6 Territory and the Traditional Homeland of the Métis People and confirm roll call.

2. CONFIRMATION OF AGENDA

Recommendation

That the agenda be confirmed as presented.

3. DECLARATION OF CONFLICT OF INTEREST

4. ADOPTION OF MINUTES

4 - 10

Recommendation

That the minutes of the regular meeting held on January 10, 2023, of the Standing Policy Committee on Transportation, be adopted.

5. UNFINISHED BUSINESS

6. COMMUNICATIONS (requiring the direction of the Committee)

6.1 Requests to Speak (new matters)

6.2 Delegated Authority Matters

6.3 Matters Requiring Direction

6.3.1 2022 Annual Report and 2023 Work Plan – Saskatoon Accessibility Advisory Committee [TS2023-0201] 11 - 18

The Saskatoon Accessibility and Advisory Committee 2022 Annual Report and 2023 Work Plan is provided

Recommendation

That the 2022 Annual Report and 2023 Work Plan - Saskatoon Accessibility Advisory Committee be forwarded to City Council for information.

7. REPORTS OF THE ADMINISTRATION

7.1 Decision Reports

7.2 Approval Reports

7.3 Information Reports

Recommendation

That the reports contained in Items 7.1.1 to 7.1.3 be received as information.

7.3.1 Saskatoon Transit Farebox Operations Update [TS2023-0203] 19 - 22

A report of the Transportation and Construction Division is provided.

7.3.2 Unpaid Fares and Fare Evasion on Saskatoon Transit [TS2023-0203] 23 - 33

A report of the Transportation and Construction Division is provided.

7.3.3 Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones [TS2023-0204] 34 - 141

A report of the Transportation and Construction Division is

provided.

8. MOTIONS (Notice Previously Given)
9. URGENT BUSINESS
10. GIVING NOTICE
11. IN CAMERA SESSION (if required)
12. ADJOURNMENT



PUBLIC MINUTES

STANDING POLICY COMMITTEE ON TRANSPORTATION

**Tuesday, January 10, 2023, 2:00 p.m.
Council Chamber, City Hall**

PRESENT: Councillor B. Dubois, Chair
Councillor D. Kirton, Vice Chair
Councillor R. Donauer
Councillor S. Gersher
Councillor D. Hill via teleconference
His Worship Mayor C. Clark (Ex-Officio)

ALSO PRESENT: Councillor H. Gough
General Manager, Transportation & Construction T. Schmidt
Solicitor D. Kowalski
Deputy City Clerk S. Bryant
Committee Assistant H. Thompson

1. CALL TO ORDER

The Deputy City Clerk called the meeting to order on Treaty 6 Territory and the Traditional Homeland of the Métis People and confirmed roll call.

2. APPOINTMENT OF CHAIR AND VICE CHAIR

City Council, at its Regular Business Meeting held on September 26, 2022, made the following appointments for 2023:

SPC on Transportation

Councillor R. Donauer
Councillor B. Dubois
Councillor D. Hill
Councillor S. Gersher
Councillor D. Kirton

The Committee was requested to appoint a Chair and Vice Chair for 2023.

Councillor Dubois was appointed Chair for 2022 and Councillor Jeffries was appointed Vice Chair for 2022.

Moved By: Councillor Donauer

That the Standing Policy Committee on Transportation appoint Councillor Dubois as Chair for 2023.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Gersher, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

Moved By: Councillor Gersher

That the Standing Policy Committee on Transportation appoint Councillor Kirton as Vice Chair for 2023.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Gersher, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

3. CONFIRMATION OF AGENDA

Moved By: Councillor Donauer

1. That the following letters requesting to speak be added to item 8.2.1:
 - Tyrell Harder, dated January 6, 2023;
 - Ray Bourner, Riide Holdings Inc., dated January 9, 2023;
2. That the letter requesting to speak from Cary Tarasoff, dated January 5, 2023, be added to item 8.3.5;
3. That the items with speakers be heard following Adoption Minutes:
 - 7.2.1
 - Tyrell Harder
 - Ray Bourner
 - 8.3.5
 - Cary Tarasoff
4. That the agenda be confirmed as amended.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Gersher, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

4. DECLARATION OF CONFLICT OF INTEREST

4.1 Councillor Gersher - Inclusion of Airport Commercial Curb Fee in Taxi Fares [TS2023-0101]

Councillor Gersher declared a conflict of interest on the above item due to a member of family being in business with something that can be perceived in conflict with the taxi and TNC industry.

5. ADOPTION OF MINUTES

That the minutes of regular meeting of the Standing Policy Committee on Transportation held December 5, 2022, be adopted.

6. UNFINISHED BUSINESS

7. COMMUNICATIONS (requiring the direction of the Committee)

7.1 Requests to Speak (new matters)

7.2 Delegated Authority Matters

7.3 Matters Requiring Direction

8. REPORTS FROM ADMINISTRATION

8.1 Decision Reports

8.2 Approval Reports

8.2.1 Inclusion of Airport Commercial Curb Fee in Taxi Fares [TS2023-01-01]

A report of the Administration was provided.

The following letters were provided:

Request to Speak

- Tyrell Harder, dated January 6, 2023;
- Ray Bourner, Riide Holdings Inc., dated January 9, 2023

Councillor Gersher declared a conflict of interest due to a member of family being in business with something that can be perceived in conflict with the taxi and TNC industry. She was not present for consideration of this item.

License and Permitting Manager Wilson presented the report and responded to questions related to the licensing fee.

The Committee heard from the following speakers:

- Tyrell Harder
- Ray Bourner, Riide Holdings

Moved By: Councillor Donauer

That the Standing Policy Committee on Transportation recommend to City Council that the City Solicitor be requested to prepare an amendment to Bylaw No. 9651, Vehicles for Hire Bylaw, 2019, to permit the Saskatoon Airport Authority Commercial Curb Fee to be added to the taxi fare, as outlined in the report of the January 10, 2023, report of the General Manager, Community Services.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

8.3 Information Reports

Moved By: Councillor Hill

That the reports contained in Items 8.3.1 to 8.3.4 be received as information.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Gersher, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

Item 8.3.5 was considered next.

8.3.1 Committee Referrals – Standing Policy Committee on Transportation - January 2023 [TS2023-0102]

A report of the Administration was provided.

General Manager, Transportation and Construction Schmidt presented the matter.

8.3.2 Councillor H. Gough – Formalized Pedestrian Crossing Near 19th Street [TS2023-0104]

A report of the Administration was provided.

Director of Transportation Magus presented the report.

8.3.3 2022 Summer Road Maintenance Summary [TS2023-0103]

A report of the Administration was provided.

General Manager, Transportation and Construction Schmidt presented the matter.

Director of Roadways, Fleet and Support Services Saric addressed questions related to the implementation of the Fusion Enterprise Asset Management.

8.3.4 Sidewalks Infill Accelerated Implementation Program – January 2023 Update [TS2023-0105]

A report of the Administration was provided.

Director of Transportation Magus presented the report and responded to questions related to missing sidewalks and prioritization.

8.3.5 2nd Avenue Adjacent to New Central Library Street Redesign [TS2023-0106]

A report of the Administration was provided along with a letter requesting to speak from Cary Tarasoff, dated January 5, 2023.

Director of Transportation Magus presented the report and along with General Manager, Transportation and Construction Schmidt responded to questions related to the scope of project, accessible parking standards, street space and possible funding options.

The Committee heard from Cary Tarasoff.

General Manager, Community Services Lacroix responded to questions related to future planning for downtown Saskatoon.

The meeting recessed at 3:50 p.m. and reconvened at 4:04 p.m. with all members of the Committee in attendance.

Councillor Hill excused himself from the meeting at 4:04 p.m.

Chief Executive Officer Cooley and Director, Strategy and Communication Sampson, Saskatoon Public Library were present virtually and responded to questions related to parking, and potential funding.

Moved By: Councillor Gersher

That the report be forwarded to City Council for information.

In Favour: (6): Councillor Dubois, Councillor Kirton, Councillor Donauer, Councillor Gersher, Councillor Hill, and Mayor Clark

CARRIED UNANIMOUSLY

Moved By: Councillor Gersher

That the Administration be directed to work with the Saskatoon Public Library on a funding and project delivery model for the redesign as outlined in the report, and that the Administration provide a supplementary report to the January City Council meeting.

In Favour: (4): Councillor Kirton, Councillor Gersher, Councillor Hill, and Mayor Clark

Against: (2): Councillor Dubois, and Councillor Donauer

CARRIED

Item 8.3.1 was considered next.

- 9. MOTIONS (Notice Previously Given)**
- 10. URGENT BUSINESS**
- 11. GIVING NOTICE**
- 12. IN CAMERA SESSION (if required)**
- 13. ADJOURNMENT**

The meeting adjourned at 4:33 p.m.

Councillor B. Dubois, Chair

Deputy City Clerk S. Bryant

ANNUAL REPORT AND WORK PLAN

January 30, 2023

Secretary, Standing Policy Committee on Transportation

**Re: 2022 Annual Report and 2023 Work Plan – Saskatoon Accessibility
Advisory Committee (File No. CK. 430-1)**

The mandate of the Saskatoon Accessibility Advisory Committee (the Committee) is to provide advice on matters relating to promoting universal accessibility to ensure that the City of Saskatoon's services, facilities and infrastructure are barrier-free for citizens of all abilities.

The Committee provides guidance on a variety of topics including:

- ensuring that City of Saskatoon services, information, facilities and infrastructure are accessible for citizens of all abilities;
- policies and programs for improving accessibility to City services, information, facilities, infrastructure, and employment opportunities

Committee Membership

Membership on the Committee for the year 2022 was as follows:

Members

- J. Adamson, Public
- D. Funk, Public
- D. Duong, Public
- R. Gourley, Public
- B. Lehne, Public
- M. Loken, Public
- D. Gilchrist, Public
- D. Pantano, Public
- P. Benson, Saskatoon Council on Aging
- D. Bortis, Spinal Cord Injury Saskatchewan
- C. Wisser, Ability Hub YXE
- A. Nameth, Vision Loss Rehabilitation Saskatchewan
- R. Holmes, Saskatchewan Deaf and Hard of Hearing Services

Resource Members

- Councillor B. Dubois

- Director of Transportation J. Magus
- Director, Building Standards K. Fagnou
- Organizational Development Consultant T. Prado
- Senior Building Code Engineer D. Harington
- Access Transit Manager T. Davis (from January to March, 2022)
- Access Transit Supervisor T. Zavialez (from April to October 2022)
- Access Transit Manager B. Waldenberg (November 2022)
- Recreation Services Manager M. Wolfe
- Project Services Manager A. Moffat
- Director of Systemic Initiatives, Saskatchewan Human Rights Commission D. Seib

The 2023 membership on the Committee is as follows:

- J. Adamson, Public
- D. Funk, Public
- D. Duong, Public
- R. Gourley, Public
- B. Lehne, Public
- D. Gilchrist, Public
- D. Pantano, Public
- Vacant, Public
- P. Benson, Saskatoon Council on Aging
- N. Fernandez, Spinal Cord Injury Saskatchewan
- C. Wisser, Ability Hub YXE
- A. Nameth, Vision Loss Rehabilitation Saskatchewan
- Vacant, Saskatchewan Deaf and Hard of Hearing Services

Resource Members

- Councillor B. Dubois
- Director of Transportation J. Magus
- Organizational Development Consultant T. Prado
- Senior Building Code Engineer D. Harington
- Access Transit Manager B. Waldenberg
- Recreation Services Manager M. Wolfe
- Project Services Manager A. Moffat
- Director of Systemic Initiatives, Saskatchewan Human Rights Commission D. Seib

Work Plan Goals and Accomplishments

The work plan goals of the Committee in 2022 were as follows.

- Deafblind Services
- Access Transit / Conventional Transit
- Educational and Awareness
- Civic Accessibility and Safety

Appendix 1 provides a summary of key topics and resolutions by meeting, and Appendix 2 provides a summary of 2022 expenditures.

In addition, the following were also completed by the Committee:

2022 Reports and Communications

Matters Referred by SPC or City Council

1. **Governance Review – Advisory Committees – Review of Terms of Reference** [CK. 225-1 x 255-2] The Committee considered a report requesting for the Committee to review their terms of reference for suggested amendments.
 - Matter considered on January 12, 2022 and February 11, 2022

Referrals from the Standing Policy Committee

1. **Assisted Waste Collections Program [File No. CK 7830-3]** The Committee received the report as information
 - Considered March 11, 2022
2. **Travis Neufeld - Inclusion Saskatchewan - Accessible Parking in Downtown Saskatoon [File No. CK. 6120-4]** – The Committee reviewed the matter and resolved that feedback be forwarded to the Committee Assistant for appropriate forwarded to the Administration and that a letter be forwarded to the Standing Policy Committee on Transportation requesting that the Saskatoon Accessibility Advisory Committee be included in the further discussion on this item.
 - Considered March 11, 2022
3. **Melanie Christopherson - Accessible Transit [CK. 7000-1]** – the Committee received the letter for review. It was indicated at the meeting that the Advisory shall wait to provide feedback till the Administration's report back. The information was received.
 - Considered September 9, 2022
4. **Funding of Canada Healthy Communities Initiative [CK 1860-1, x6150-1, x1702-1]** – the Committee received the information.
 - October 14, 2022
5. **Comprehensive Zoning Bylaw Review – Accessible Parking Standards [CK. 4350-70]** – The Committee reviewed the report and provided feedback to the Administration

- October 14, 2022

Reports/Recommendations Submitted to City Council:

There were no reports/recommendations from the Saskatoon Accessibility Advisory Committee.

Reports/Recommendations Submitted to the Standing Policy Committee on Transportation:

1. **Assisted Waste Collections Program [File No. CK 7830-3]** The Committee resolved that a letter be forwarded to the Standing Policy Committee on Transportation to request the details of the communication plan for the Assisted Waste Collections Program.
 - Considered on May 13, 2022

Reports/Recommendations Submitted to the Governance and Priority Committee:

There were no reports/recommendations from the Saskatoon Accessibility Advisory Committee.

Communication by Committee Representatives (Chair, Vice-Chair, or designate) to the local media:

There were no matters communicated by Chair, Vice-Chair or designate to the local media for 2022.

Work Plan for 2023

In 2023, Committee will focus on the following categories for their workplan:

- Deafblind Services
- Access Transit / Conventional Transit
- Educational and Awareness
- Civic Accessibility and Safety
- Downtown and Bus Rapid Transit Accessibility

ATTACHMENTS

1. Appendix 1 – 2022 Meeting Summary
2. Appendix 2 – 2022 Expenditures

Yours truly,

A handwritten signature in blue ink that reads "C. Wisser".

Chelsea Wisser, Chair
Saskatoon Accessibility Advisory Committee

Appendix 1 – 2022 Meeting Summary – Key Topics and Resolutions

Meeting	Summary – Key Topics and Resolutions
January	<ul style="list-style-type: none"> • Chelsea Wisser was appointed as Chair, and Bill Lehne was appointed as Vice Chair for 2022. • Committee was provided an orientation. • 2022 membership was confirmed. • Report - Accessibility Standards – New Parks and Playground Structures was received as information. • Report - Governance Review – Advisory Committees Review of Terms of Reference was considered. • Committee discussed the budget.
February	<ul style="list-style-type: none"> • Harry Bailey Aquatic Centre Capital Project Verbal Update • Access Transit - Late Cancellation and No-Show Policy verbal update. • Report - Governance Review – Advisory Committees Review of Terms of Reference – members of Administration was present for questions and feedback to be provided. • 2021 Annual Report and Work Plan for 2022 was approved for submission. • Subcommittee Membership was deferred.
March	<ul style="list-style-type: none"> • Meeting Format was confirmed. • Chair updated on the Terms of Reference discussions. • Experience Transit Presentation • Report – Assisted Waste Collections Program received as information. • Letter- Travis Neufeld - Inclusion Saskatchewan - Accessible Parking in Downtown Saskatoon was considered. • Subcommittee Membership was confirmed.
April	<ul style="list-style-type: none"> • Snow Removal and Sidewalk Concerns were discussed. • Presentation - Electric Scooter: Regulatory Framework – Feedback to be provided.
May	<ul style="list-style-type: none"> • Verbal update - 2020 Building Code and Provincial Adoption Process • Letter to SPC on Transportation - Assisted Waste Collections Program – Communication Plan Request

	<ul style="list-style-type: none"> • Electric Scooter: Regulatory Framework – Draft feedback letter was approved and forwarded to the Administration.
June	<u>Due to Lack of Items – Meeting Cancelled.</u>
September	<ul style="list-style-type: none"> • Assisted Waste Collections Program Communications Update was provided. • Letter - Melanie Christopherson - Accessible Transit – considered for information at this time. • Presentation - Electric Scooter: Regulatory Framework – Feedback to be provided.
October	<ul style="list-style-type: none"> • Report from SPC - Funding of Canada Healthy Communities Initiative – Information received. • Report from SPC - Comprehensive Zoning Bylaw Review – Accessible Parking Standards- Feedback to be provided. • Presentation - Electric Scooter: Regulatory Framework – Update on regulations was provided.
November	<u>Due to No Quorum – Meeting Cancelled</u>

Appendix 2 – 2022 Expenditure

There were no expenditures for 2022.

Saskatoon Transit Farebox Operations Update

ISSUE

Saskatoon Transit's farebox and smart card system went live February 1, 2010. The original hardware surpassed its useful life and is no longer serviced by the vendor or other third-party suppliers. Further, a need was identified to move towards online/mobile purchasing option as opposed to having transit customers purchase physical fare products at store locations. What actions has Saskatoon Transit taken to improve farebox operations and reliability?

BACKGROUND

Saskatoon Transit has faced a number of challenges related to the reliability of the legacy farebox system, known as Payment In Motion (PIM). Knowing upgrades were required, three years ago Saskatoon Transit went to market to find a solution to provide mobile ticketing technology to the citizens of Saskatoon. The procurement process resulted in the purchase and implementation of the Masabi mobile ticketing system.

The Masabi system implementation involved two phases of implementation. The system utilizes mobile phone-based payment which can accept all current forms of fare except for the Low Income Pass and Discounted Pass which requires further process changes. Their smart card system, the portion of the system that utilizes actual physical card passes, is based on a cash account-based ticketing (ABT), which holds a cash value on the individual's account. In contrast, the PIM smart card system is based on a product-based ticketing system, which holds fare product (i.e., monthly pass, single ride, etc.) on the smart card.

Phase 1 of the Masabi implementation went live in June 2021 and included the mobile phone-based fare payment system, but not the cards required for transition to Masabi card-based fare collection. The system is marketed as the Masabi TGo App where tickets can be purchased on a web-portal or on a mobile phone device and then used on the bus, even in the absence of data or Wi-Fi services, to pay their fare.

In late 2022, upgrades were made to the PIM system as well to upgrade to a more modern version of the system. Retaining and upgrading the PIM system was deemed by the Administration to be important in part because the PIM system accepts cash fares on the bus as well as the printed transfers required for cash fares. Retaining both systems allowed all types of fares to continue to be utilized during a transition period.

Although there were periods throughout 2022 where many buses did not have full farebox capability, as of the writing of this report, every bus now has fully functional fareboxes, and any issues or failures that occur are dealt with through maintenance. The Masabi system has proven to be reliable with Saskatoon Transit experiencing few isolated incidents where an on-board validator had to be serviced.

A major component of Phase 2 implementation of the Masabi system will be adding the card fare payment option into this system to compliment the existing mobile phone payment option. Implementing the Masabi card payment system will require not only system change but policy considerations as well, since the City will be fully transitioning from the product-based ticketing PIM system to the cash account-based ticketing system.

This change will require public engagement and ultimately City Council approval as it will change how fares are collected, and may require changes to Bylaw 8370, The Transit Fare Bylaw, 2004.

The following three fare types, in their current form, are examples of areas which will require attention and process change before migrating to Masabi:

1. The Low-Income Pass, which is a discounted pass in conjunction with the Low-Income Leisure Pass program, remains available only on the PIM farebox system at this time. The existing internal processes involves a manual approval process administered by Community Services. As part of the Phase 2 implementation of the Masabi system, Saskatoon Transit will be collaborating with Community Services to explore opportunities to have the Low-Income Pass available on the Masabi TGo app and/or future smart card system.
2. The Discounted Pass, which is available to individuals receiving support through Saskatchewan's Income Assistance Programs is approved by the Provincial Income Support Team at the Ministry of Social Services. As part of the Phase 2 implementation of the Masabi system, Saskatoon Transit will be collaborating with the Ministry of Social Services to explore opportunities to have the Discounted Pass available on the Masabi TGo app and/or future smart card system.
3. Cash fares are still collected via the PIM system. The Administration will research industry best practices for cash collection to help shape the City's future direction on how to collect cash fare and the systems necessary.

CURRENT STATUS

At the time this report was written, 43% of rides tracked electronically were with mobile ticketing (Masabi). Use of mobile ticketing is increasing on a monthly basis as customers become more accustomed to this product type. All UPass rides are issued through Masabi mobile ticketing. Changes to high school transit pass eligibility has led to an increase in use among that demographic as well.

Phase 2 of the Masabi plan implementation was deferred primarily due to the fact that Saskatoon Transit's staff were fully dedicated to providing continued service during the pandemic and did not have the capacity to conduct the public engagement and bylaw reviews during the pandemic.

DISCUSSION/ANALYSIS

In the spring 2023, Saskatoon Transit plans to re-commence with Phase 2 implementation of Masabi mobile ticketing. With the cash account-based ticketing, the Masabi smart card technology is expected to provide new opportunities not available with the current PIM smart card technology in how fares are charged to streamline fare purchases and incentivize ridership. Pursuing new options for fare collection will involve public engagement, and may ultimately require City Council approval, and changes to Bylaw 8370, The Transit Fare Bylaw, 2004. Phase 2 implementation will involve collaboration between Saskatoon Transit, Communications and Public Engagement, the Chief Strategy and Government Relations Officer and Solicitor's Office to review and assess changes and impacts of Phase 2 Masabi plan implementation. It is expected the public engagement, policy and bylaw review could take 12 to 18 months to complete followed by a report to Committee and City Council with options and recommendations for approval.

Phase 2 implementation will not include a fare review as this will be dependent on upcoming work Administration was directed to undertake in development of a Council Policy on User Fees and Subsidies to clearly identify principles and objectives on where to charge fees and offer subsidies and report back to the appropriate Committee no later than Quarter 4 of 2023. This direction was provided through the [report](#) titled Considerations and Options for Supporting Low-Income Households at the November 7, 2022 Environment, Utilities and Corporate Support Standing Policy Committee meeting.

Saskatoon Transit is in the process of hiring an Electronics Technician position that will be dedicated to repair and servicing of farebox technology and other IT technology on buses, such as the GPS routing used by operators and GPS tracking used by the Transit App for riders to monitor real time locations of buses. This will better position Saskatoon Transit to consistently maintain farebox and IT functionality on a go-forward basis across the fleet.

FINANCIAL IMPLICATIONS

Saskatoon Transit collected approximately \$11.5 million in revenue in 2022, or \$958,000 per month. The cost of the new PIM smart card and cash fareboxes to replace the original smart card and cash fareboxes installed in 2010 is estimated at \$558,000, which includes all components, support and installation. There is sufficient funding within the existing budgets for these asset replacements. The total investment to date for Masabi implementation is \$1.7 million.

OTHER IMPLICATIONS

There are no privacy, legal, social, or environmental implications identified with this report.

NEXT STEPS

Saskatoon Transit will continue installing the new PIM smart card and cash fareboxes in the remaining fleet. As of writing of this report, 80 buses of the 130-bus fleet have had

Saskatoon Transit Farebox Operations Update

the new equipment installed. It is planned to have the new PIM smart card and cash fareboxes installed in the entire fleet by early April 2023.

In addition, the hiring of an Electronics Technician for ongoing repair and service of fareboxes and IT technology on buses is currently in progress.

Phase 2 of the Masabi mobile ticketing implementation will re-commence in the spring 2023 with work anticipated to take 12 to 18 months to complete.

Report Approval

Written by: Mike Moellenbeck, Operations Manager, Saskatoon Transit
Reviewed by: Tracey Davis, Fleet and Maintenance Manager, Saskatoon Transit
Mike Jordan, Chief Policy and Government Relations Officer
Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Saskatoon Transit Farebox Operations Update.docx

Unpaid Fares and Fare Evasion on Saskatoon Transit ISSUE

Unpaid fares and fare evasion on Saskatoon Transit.

BACKGROUND

The Standing Policy Committee on Transportation, at its meeting held on August 8, 2022, considered a motion of Councillor Hill, and resolved:

"That the Administration report on the issue of unpaid fares on fixed route transit buses, identifying:

- percentage of riders who pay vs. those who don't,
- amount of lost revenue,
- routes most affected,
- identifiable trends with respect to dates and times of incidents,
- what the current policy is in recording unpaid fares,
- how incidents of unpaid fares are dealt with by operators and administration,
- if a fare enforcer position has ever been considered,
- the status of fareboxes with respect to missing or inoperable boxes, and
- any data from other municipalities that would be relevant.

CURRENT STATUS

Saskatoon Transit has two fare payment systems. Payment in Motion (PIM) fareboxes accept cash and Smart Card fares, and Masabi validators accept mobile ticketing fares. All buses are equipped with both systems.

DISCUSSION/ANALYSIS

There are two types of fare issues experienced by Saskatoon Transit, unpaid fares and fare evasion. For the purposes of this report, these issues are defined as follows:

- Unpaid Fares – Transit fares that have not been paid by a rider on a fixed route bus due to either a missing or inoperable farebox.
- Fare Evasion – Transit fares that have not been paid by a rider on a fixed route bus and working fareboxes are in place.

Unpaid fares on Saskatoon Transit are not tracked as there is no feasible way to determine if a person is boarding the bus with a valid fare card or cash for fare payment if there is no operable farebox available for fare payment.

Fare evasion is tracked by operators using the Mobile Data Terminal (MDT) on the bus. If the fareboxes are operable and a rider boards and rides the bus without payment, the operators are trained to record the fare evasion on the MDT at the time and location the fare evasion occurred. The information provided in this report is based on recorded fare evasion statistics from 2021 (Appendix 1) and January 1, 2022 to November 30, 2022 (Appendix 2).

1. Percentage of Riders Who Pay vs Those Who Don't Pay

- 8,171 instances of fare evasion were recorded by operators in 2021. This represents 0.2% of 2021 electronic ridership.
- 20,705 instances of fare evasion were recorded by operators from January 1, 2022 to November 30, 2022. This represents 0.5% of the electronic ridership during this period.

2. Amount of Lost Revenue

- For 2021, assuming a \$3.00 cash fare for each recorded fare evasion instance, \$24,500 of revenue is estimated to have been foregone to fare evasion. This amount represents approximately 0.3% of total revenue in 2021.
- Extrapolating for the entire year based on 20,705 fare evasions in the first 11 months of 2022, and assuming a \$3.00 cash fare for each of these instances, \$67,800 in revenue is estimated to be foregone due to fare evasion in 2022. This amount represents approximately 0.6% of Saskatoon Transit's budgeted fare revenue in 2022.

3. Routes Most Affected and Identifiable Trends with Respect to Dates and Times of Incidents

- Appendix 1 (2021) and Appendix 2 (January 1, 2022 to November 30, 2022) provides recorded fare evasion data for the following:
 - 10 most affected locations;
 - 10 most affected routes;
 - Instances by time of day;
 - Instances by day of week; and,
 - Map illustrating the locations of the most affected locations and routes.
- A summary of the data for 2021 with respect to dates and times of incidents is as follows:
 - 28% of the recorded fare evasions occur at the 10 most affected locations.
 - 64% of the recorded fare evasions occur on the 10 most affected routes.
 - 96% of the recorded fare evasion occurs from Monday to Saturday with the percentages between 12% on Saturday and 18% on Wednesday and Friday.
 - 86% of the recorded fare evasion occurs between 7:00 a.m. and 8:00 p.m. with between 5% and 8% each hour.
- A summary of the data with respect to dates and times of incidents for January 1, 2022 to November 30, 2022 revealed:
 - 32% of the recorded fare evasions occur at the 10 most affected locations.

- 70% of the recorded fare evasions occur on the 10 most affected routes.
 - 95% of the recorded fare evasion occurs from Monday to Saturday with the percentages between 13% on Monday and Saturday and 20% on Tuesday.
 - 87% of the recorded fare evasion occurs between 7:00 a.m. and 8:00 p.m. with between 5% and 7% each hour.
- Comparison of the data from 2021 and January 1, 2022 to November 30, 2022 indicate the following:
 - 2021 experienced approximately 39% of recorded fare evasions compared to the first 11 months of 2022.
 - 8 of the 10 most affected locations are the same, although in different order.
 - 9 of the 10 most affected routes are the same, although in different order.
 - Recorded fare evasions by day of week and time of day are very similar for both years.
4. What the Current Policy is in Recording Unpaid Fares
- Unpaid fares are not recorded as they are not feasible to track. Operators are trained to record fare evasion by pushing a button on the MDT that tracks the time, date and location of the fare evasion.
5. How Incidents of Unpaid Fares are Dealt with by Operators and Administration
- Operators are instructed to not engage in enforcing fares and, when appropriate, may inform an individual of the fare.
 - If an operator requires additional support, a supervisor will be called to speak to a passenger and provide education, awareness and information on Saskatoon Transit fares.
6. If a Fare Enforcer Position Has Ever Been Considered
- A fare enforcer position has not been considered at Saskatoon Transit. A fare enforcer position would require direction and additional FTE(s) and funding approval from City Council.
 - At the February 22, 2022 Governance and Priorities Committee meeting, a [report](#) titled Mask Enforcement on Saskatoon Transit was presented. Although this report was prepared for mask enforcement rather than fare enforcement, the options for mask enforcement presented in the report provide comparable options for fare enforcement along with high level estimates of resources required for the various enforcement options.

7. The Current State of Fareboxes with Respect to Missing or Inoperable Boxes

- A separate companion report detailing the status of farebox operations at Saskatoon Transit is on the agenda for the February 7, 2023 Standing Policy Committee on Transportation.

8. Any Data From Other Municipalities That Would be Relevant

- Of the municipalities that were contacted for information regarding tracking fare evasion and fare evasion enforcement, seven responses were received. Four municipalities responded that fare evasion is not tracked (Calgary, RM of Wood Buffalo, Moose Jaw, Banff) and three municipalities responded fare evasion is tracked (Winnipeg, Regina, Leduc). Regina and Leduc reported approximately 4% fare evasion and less than 1% fare evasion respectively based on ridership. Saskatoon recorded 0.3% fare evasion in 2021 and 0.5% fare evasion in the first 11 months of 2022 based on electronic ridership.
- The Fare Enforcement Policy at Saskatoon Transit is consistent with other municipalities. Most agencies do not have operators enforce fare, citing concerns for employee safety and the need to mitigate escalating interactions. Of the seven municipalities that responded, Moose Jaw was the only municipality of the seven that responded where operators undertake fare enforcement. In most other municipalities that responded, operators inform supervisors for additional support when required.
- Fare evasion support is provided in larger cities such as Calgary, Edmonton, and Winnipeg by way of peace officers or special constables who can issue tickets for bylaw infractions.

FINANCIAL IMPLICATIONS

In 2021, the foregone revenue from recorded fare evasion is estimated at \$24,500, or approximately 0.3% of total revenue in 2021. In 2022, the foregone revenue from recorded fare evasion is estimated at \$67,800, or approximately 0.6% of Saskatoon Transit's budgeted fare revenue in 2022. Saskatoon Transit revenue continues to trend upward as ridership recovers from impacts of the pandemic. These trends have been consistent with the lifting of restrictions.

Regarding lost revenue due to fare box inoperability, the Administration estimates this amount to be \$165,000 for 2022. 2022 total revenues are approximately 78% of pre-Covid (2019) revenues due primarily to ridership, which is recovering but a return to pre-pandemic levels in the near future is uncertain.

OTHER IMPLICATIONS

There are no privacy, legal, social, or environmental implications identified.

NEXT STEPS

Unless directed otherwise, Saskatoon Transit will continue to follow the current Fare Enforcement Policy and monitor, track and record fare evasion occurrences.

APPENDICES

1. Recorded Fare Evasion Statistics for 2021
2. Recorded Fare Evasion Statistics from January 1, 2022 to November 30, 2022

Written by: Mike Moellenbeck, Operations Manager, Saskatoon Transit
Reviewed by: Tracey Davis, Fleet and Maintenance Manager, Saskatoon Transit
Mike Jordan, Chief Policy and Government Relations Officer
Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Unpaid Fares and Fare Evasion on Saskatoon Transit.docx

Recorded Fare Evasion Statistics for 2021

Table 1 – 10 Most Affected Locations

10 Most Affected Locations	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (8,177)
Confederation Terminal	463	6%
Downtown Terminal South	293	4%
Superstore Confederation	290	4%
Downtown Terminal West 1	237	3%
Downtown Terminal North	197	2%
Downtown Terminal West	187	2%
22nd Street / Avenue X	186	2%
Centre Mall Terminal I/B	148	2%
22nd Street / Avenue P	130	2%
1st Avenue / 21st Street	128	2%
Totals	2,259	28%

Table 2 - 10 Most Affected Routes

10 Most Affected Routes	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (8,177)
60	1,109	14%
2	1,043	13%
8	686	8%
65	513	6%
64	406	5%
6	365	4%
10	334	4%
4	280	3%
81	229	3%
7	228	3%
Totals	5,193	64%

Table 3 – Time of Day

Time of Day	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (8,177)
5:00 AM	12	0%
6:00 AM	231	3%
7:00 AM	387	5%
8:00 AM	579	7%
9:00 AM	422	5%
10:00 AM	421	5%
11:00 AM	441	5%
12:00 PM	458	6%
1:00 PM	521	6%
2:00 PM	663	8%
3:00 PM	756	9%
4:00 PM	680	8%
5:00 PM	483	6%
6:00 PM	389	5%
7:00 PM	399	5%
8:00 PM	411	5%
9:00 PM	313	4%
10:00 PM	271	3%
11:00 PM	234	3%
12:00 AM	106	1%
Totals	8,177	100%

Table 4 – Day of the Week

Day of Week	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (8,177)
Sunday	359	4%
Monday	1,065	13%
Tuesday	1,391	17%
Wednesday	1,499	18%
Thursday	1,364	17%
Friday	1,489	18%
Saturday	1,010	12%
Totals	8,177	100%

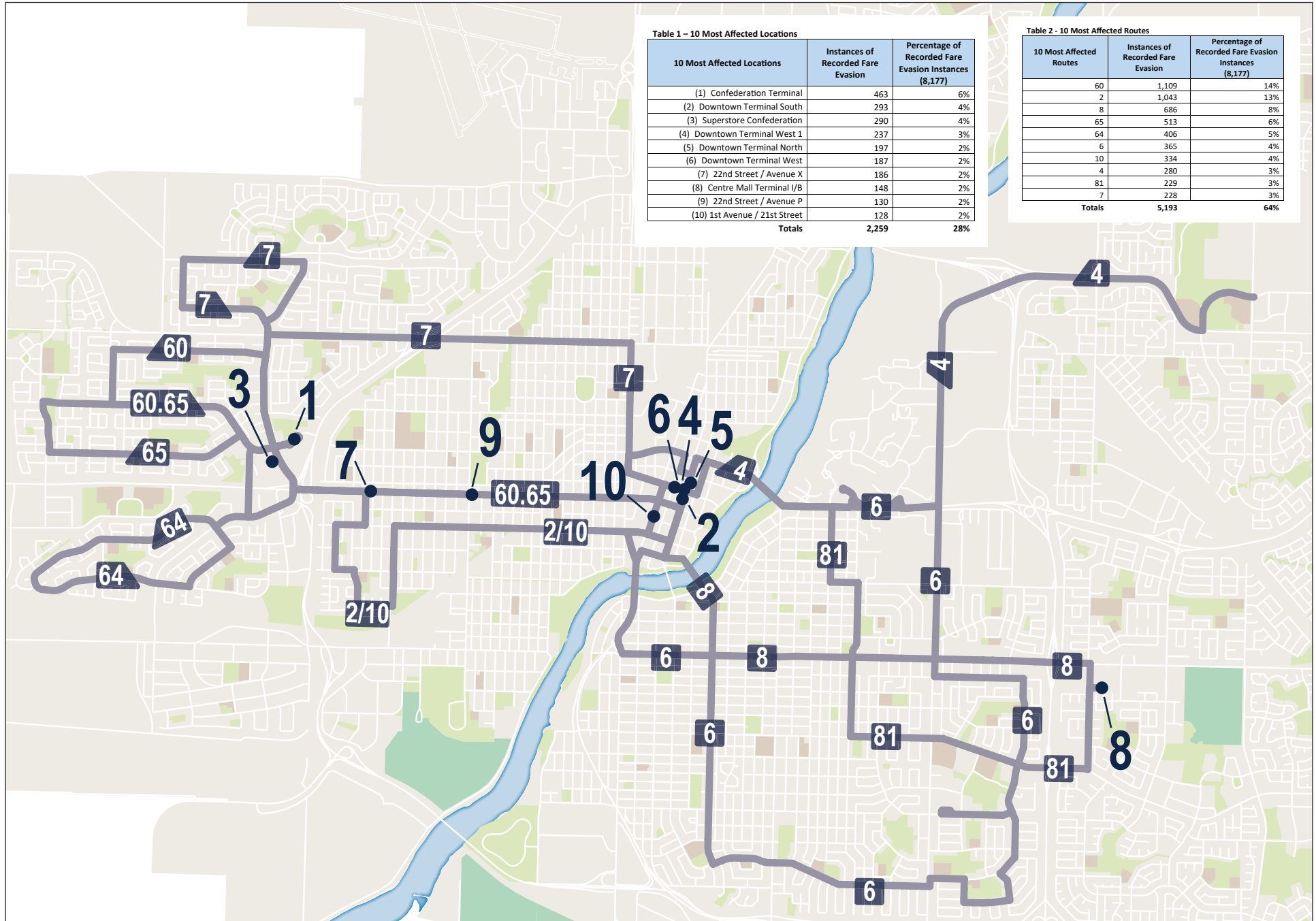
Recorded Fare Evasion Statistics for 2021

Table 1 – 10 Most Affected Locations

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(10) 1st Avenue / 21st Street	128	2%
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81	229	3%
7	228	3%
Totals	5,193	64%



Recorded Fare Evasion Statistics from January 1, 2022 to November 30, 2022**Table 1 - 10 Most Affected Locations**

10 Most Affected Locations	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (20,705)
Confederation Terminal	1,447	7%
Downtown Terminal South	1,143	6%
Superstore	970	5%
Downtown Terminal West 1	621	3%
22nd Street / Avenue T	529	3%
Downtown Terminal North	478	2%
22nd Street / Avenue X	475	2%
22nd Street / Avenue P	395	2%
1st Avenue / 21st Street	331	2%
20th Street / Avenue Q	328	2%
Totals	6,717	32%

Table 2 - 10 Most Affected Routes

10 Most Affected Routes	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (20,705)
60	3,418	17%
2	3,180	15%
65	2,224	11%
7	1,288	6%
8	1,242	6%
4	695	3%
10	686	3%
64	621	3%
61	607	3%
6	585	3%
Totals	14,546	70%

Table 3 - Time of Day

Time of Day	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (20,705)
5:00 AM	16	0%
6:00 AM	447	2%
7:00 AM	938	5%
8:00 AM	1,303	6%
9:00 AM	1,277	6%
10:00 AM	1,152	6%
11:00 AM	1,178	6%
12:00 PM	1,347	7%
1:00 PM	1,435	7%
2:00 PM	1,504	7%
3:00 PM	1,867	9%
4:00 PM	1,720	8%
5:00 PM	1,342	6%
6:00 PM	1,084	5%
7:00 PM	1,010	5%
8:00 PM	940	5%
9:00 PM	863	4%
10:00 PM	626	3%
11:00 PM	507	2%
12:00 AM	149	1%

Totals 20,705 100%

Table 4 - Day of Week

Day of Week	Instances of Recorded Fare Evasion	Percentage of Recorded Fare Evasion Instances (20,705)
Sunday	1,004	5%
Monday	2,732	13%
Tuesday	4,048	20%
Wednesday	3,480	17%
Thursday	3,137	15%
Friday	3,669	18%
Saturday	2,635	13%

Totals 20,705 100%

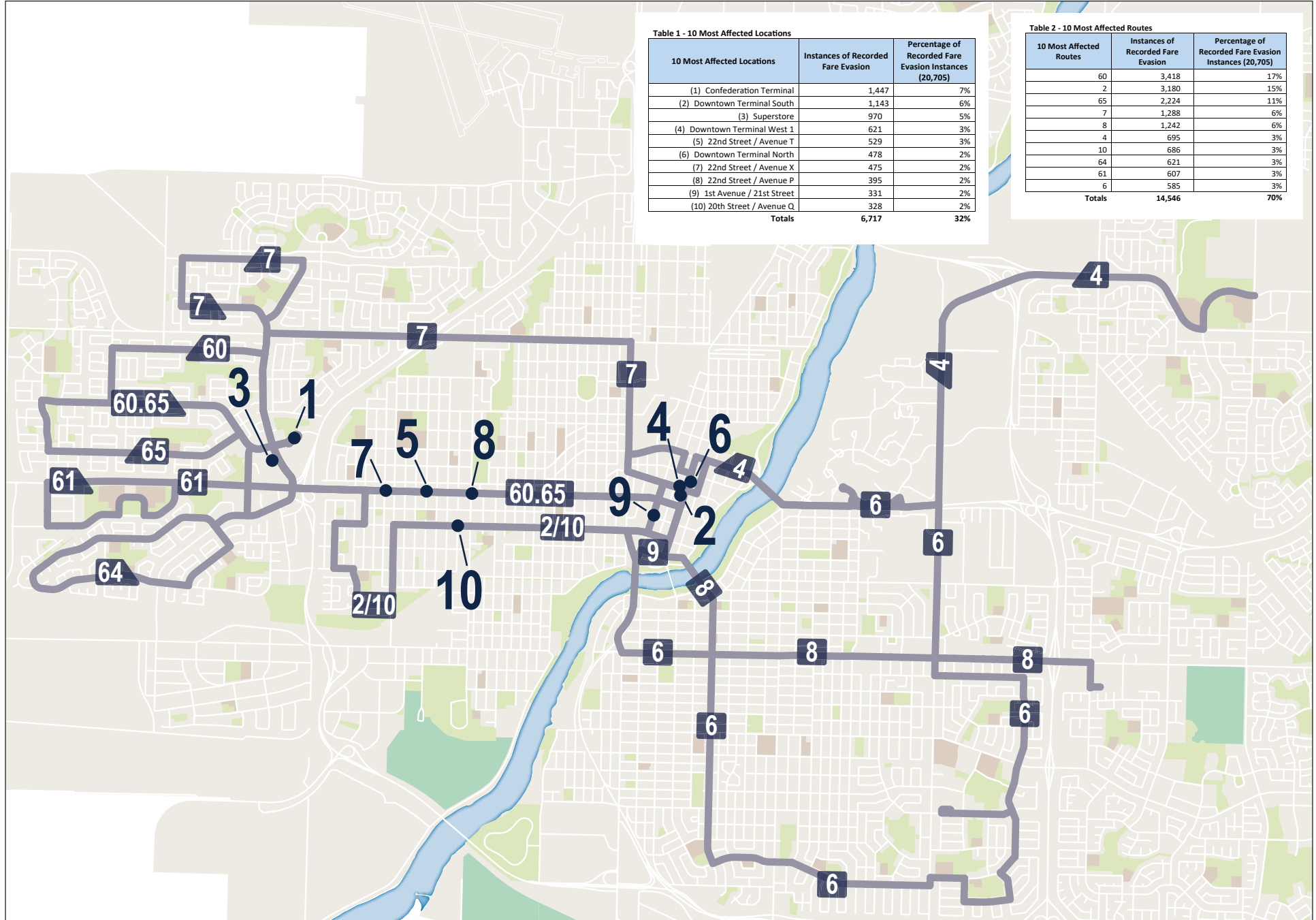
Recorded Fare Evasion Statistics for 2022

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Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones

ISSUE

This report provides information on the safety reviews completed for pedestrian crossings on arterial streets near elementary schools where reduced speed school zones will be removed.

BACKGROUND

At its Regular Business Meeting held on November 22, 2021, City Council considered the Residential Speed Limit Review – School Zones, Playground Zones, Senior Zones, and Effective Hours report and resolved, in part:

- “8. That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritized alongside Neighbourhood Traffic Review implementation projects.”

At its Regular Business Meeting held on March 28, 2022, City Council considered the Amendments to Council Policy C07-015 Reduced Speed Zones for Schools report and resolved, in part:

- “3. That the Administration delay the removal of the school zones at École Henry Kelsey and St. Mary's Community School until after the safety audits, including public engagement, are conducted and align speed zone hours at these locations in the meantime when overall speed zone implementation takes place.”

CURRENT STATUS

Safety reviews have been completed for pedestrian crossings across the two arterial streets where reduced speed school zones will be removed near elementary schools:

- 20th Street West between Avenue P South and Avenue L South for the St. Mary's Wellness and Education Centre school zone, and
- 33rd Street West between Valens Drive/Faulkner Crescent and Avenue K North for the École Henry Kelsey school zone.

DISCUSSION/ANALYSIS

The 20th Street West Crossing Safety Review near St. Mary's Wellness and Education Centre is included as Appendix 1. The safety review recommendations are provided in the following table. Included in the table is a justification for each recommendation and if the recommendation is required prior to the school zone being removed.

Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones

Location	Recommendation	Justification	Required prior to School Zone Removal
20 th Street West and Avenue O South	Install curb extensions on northeast and southwest corners of 20 th Street West and Avenue O South	Improve pedestrian safety	Yes
	Replace Pedestrian Actuated Signal on west leg with Active Pedestrian Corridor on east and west legs	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on the northwest corner	Improve pedestrian accessibility	No
20 th Street West and Avenue N South	Install curb extensions on the northwest and southwest corners and relocate Active Pedestrian Corridor to accommodate curb extensions	Improve pedestrian safety	Yes
	Adjust ramps on the northeast and southeast corner	Improve pedestrian accessibility	No
20 th Street West and Avenue M South	Install curb extension on the northeast and southeast corners	Improve pedestrian safety	Yes
	Relocate bus stop	Accommodate bus operations east of new curb extension	Yes
	Replace Pedestrian Actuated Signal with Active Pedestrian Corridor	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on southwest corner	Improve pedestrian accessibility	No

The 33rd Street West Crossing Safety Review near École Henry Kelsey is included as Appendix 2. The safety review recommendations for this area are provided in the following table. Included in the table is a justification for each recommendation and if the recommendation is required prior to the school zone being removed.

Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones

Location	Recommendation	Justification	Required prior to School Zone Removal
33 rd Street West	Remove the existing pavement markings that show two through lanes in each direction on 33 rd Street West	Clarify proper street use	Yes
	Contact SGI to discuss the relocation of the Photo Speed Enforcement camera	Meet program requirements and driver expectations	No
33 rd Street West and Valens Drive / Faulkner Crescent	Rebuild the pedestrian ramp in the northeast corner to meet City of Saskatoon standards	Improve pedestrian accessibility	Yes
	Construct a pedestrian landing area in the southeast corner of the intersection	Improve pedestrian accessibility	Yes
33 rd Street West and Avenue L North	Construct curb extensions on the east leg of the intersection	Improve pedestrian accessibility	Yes
	Install standard parking restriction and pedestrian crosswalk signage	Improve pedestrian accessibility	Yes
	Relocate existing transit stop and bench approximately 45 metres to the east	Improve pedestrian accessibility	No
33 rd Street West and Avenue K North	Install a pedestrian ramp on the northwest corner of the intersection	Improve pedestrian accessibility	Yes
	Trim the tree obstructing sight lines of the eastbound advanced pedestrian crossing warning sign	Improve visibility of sign	No
	Install standard parking restrictions in advance of the crosswalk	Improve pedestrian safety	Yes

Meetings were held in November and December 2022 with representatives from the following:

- St. Mary's Wellness and Education Centre Administration,
- École Henry Kelsey Administration,
- St. Mary's Wellness and Education Centre Community Council,
- École Henry Kelsey Community Council,
- Greater Saskatoon Catholic School Division,
- Saskatoon Public School Division,
- Pleasant Hill Community Association, and
- Hudson Bay Park | Mayfair | Kelsey Woodlawn Community Association.

Stakeholders were supportive of the recommendations to improve pedestrian safety and would like to see recommendations implemented permanently prior to removal of the school zone. Several stakeholders expressed a desire to maintain the reduced speed school zones on the arterial streets.

The proposed improvements were circulated to Saskatoon Police Service, Saskatoon Light and Power, Saskatoon Fire Department, Saskatoon Transit, Parking Services, Roadways, Fleet and Support and their comments will be incorporated into the designs for the recommendations.

FINANCIAL IMPLICATIONS

The recommendations for 20th Street West are estimated to cost \$406,000. These recommendations will be considered alongside other recommendations identified through the Neighbourhood Traffic Review Program. The traffic calming measures and adjustments to pedestrian accessible ramps will be funded through Capital Project P.01504 – Neighbourhood Traffic Review Permanent Implementation. The actuated pedestrian corridors will be funded through Capital Project P.02290 – Traffic Control Systems. The Administration will include these in future multi-year budget deliberations.

The recommendations for 33rd Street West are estimated to cost \$110,250. The traffic calming measures will be funded through Capital Project P.01504 – Neighbourhood Traffic Review Permanent Implementation. The pedestrian accessible ramps and pavement marking corrections will be delivered through a roadway and sidewalk preservation project planned for 33rd Street West between Avenue H North and Avenue P North in 2023 and funded by Capital Project P.02270 Paved Roads and Sidewalk Preservation. This roadway and sidewalk preservation project is on schedule for delivery of the project in summer of 2023.

OTHER IMPLICATIONS

There are no privacy, legal, or environmental implications identified.

The recommendations to improve the pedestrian crossings across these arterial streets will have a social benefit by encouraging safe crossings for people walking in the neighbourhood; however, the benefit has not been quantified.

NEXT STEPS

1. Add recommended improvements for 20th Street West to the Neighbourhood Traffic Management Program and install as funding allows.
2. Adjust school zone boundaries for St. Mary's Wellness and Education Centre to exclude 20th Street West after:
 - a. The traffic calming curb extensions at the intersections of 20th Street West and Avenue O South, 20th Street West and Avenue N South, and 20th Street West and Avenue M South have been installed permanently in concrete.
 - b. The bus stop at 20th Street West and Avenue M South has been relocated.
3. Add recommended improvements for 33rd Street West to the contract for the roadway and sidewalk preservation project scheduled for construction in 2023.
4. Adjust school zone boundaries for École Henry Kelsey to exclude 33rd Street West after:
 - a. The traffic calming curb extensions at the intersection of 33rd Street West and Avenue L North have been installed permanently in concrete.
 - b. The pavement markings on 33rd Street have been adjusted.
 - c. At the Valens Drive / Faulkner Crescent intersection the pedestrian ramps improved.
 - d. At the Avenue L North intersection install the parking restrictions and crosswalk signage.

Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones

- e. At the Avenue K North intersection install the pedestrian ramp, and the parking restrictions.
- 5. Arrange for SGI to remove the school zone photo enforcement camera site from 33rd Street West and possibly relocate to an alternate school zone location.

APPENDICES

- 1. 20th Street West Crossing Safety Review near St. Mary's Wellness and Education Centre
- 2. 33rd Street West Crossing Safety Review near École Henry Kelsey

Report Approval

Written by: Nathalie Baudais, Senior Transportation Engineer
Reviewed by: David LeBoutillier, Engineering Manager, Transportation
Jay Magus, Director of Transportation
Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Amendments to Council Policy C07-015 Reduced Speed Zones for Schools - Follow-up: École Henry Kelsey and St. Mary's Wellness and Education Centre School Zones.docx

20th St. W. Crossing Safety Review near St. Mary's Wellness and Education Centre



1/6/2023

Authorization

Prepared By:



Katie Sapieha, P.Eng.
Transportation Engineer



Nathalie Baudais, P.Eng.
Senior Transportation Engineer

Checked By:



David LeBoutillier
Transportation Engineering Manager

Executive Summary

As part of the Speed Limit Review, in November 2021, City Council approved changes around school and playgrounds with the following resolution, "That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects."

In March 2022, at its Regular Business Meeting, City Council approved the amendments to Council Policy C07-015, Reduced Speed Zones for Schools with the following resolution, "That the Administration delay the removal of the school zones at École Henry Kelsey and St. Mary's Community School until after the safety audits, including public engagement, are conducted and align speed zone hours at these locations in the meantime when overall speed zone implementation takes place."

To complete the review, collection and analysis of relevant traffic, pedestrian, and safety data was completed including the following:

- Speed and traffic volume measurements,
- Intersection turning movement counts,
- Pedestrian counts,
- Collision data, and
- Site observations.

Based on the analysis of the data, two sets of recommended improvements were created. The locations of the recommendations are shown in Figure ES-1. Table ES-1 lists the recommend improvements required to ensure the safety of all road users upon removal of the 30 km/hr school zone and improvements that will improve the general safety for pedestrians of the corridor but are not considered required to remove of the 30 km/hr school zone.

Meetings were held in December 2022 with representatives from St. Mary's Wellness and Education Centre, Greater Saskatoon Catholic School Division, Pleasant Hill Community Association, and St. Mary's Wellness and Education Centre Community Council. The review findings and recommendations were presented, and each group was generally supportive of the recommendations. The Greater Saskatoon Catholic School Division did indicate their desire to have the reduced speed limit school zone remain in place on 20th Street West.

Upon approval, the recommended improvements will be added to the Neighbourhood Traffic Management Program and will be installed as funding allows. The school zone will be removed from 20th Street West once the traffic calming curb extensions have been installed permanently in concrete.



Figure ES-1 - Locations of Recommendations

Table ES-0-1: Recommended Improvements

Location	Recommendation	Justification	Required prior to School Zone Removal
1 20 th Street West and Avenue O South	Install curb extensions on northeast and southwest corners of 20 th Street West and Avenue O South	Improve pedestrian safety	Yes
	Replace Pedestrian Actuated Signal on west leg with Active Pedestrian Corridor on east and west legs	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on the northwest corner	Improve pedestrian accessibility	No
2 20 th Street West and Avenue N South	Install curb extensions on the northwest and southwest corners and relocate active pedestrian to accommodate curb extensions	Improve pedestrian safety	Yes
	Adjust ramps on the northeast and southeast corner	Improve pedestrian accessibility	No
3 20 th Street West and Avenue M South	Install curb extension on the northeast and southeast corners	Improve pedestrian safety	Yes
	Relocate Bus Stop	Accommodate bus operations east of new curb extension	Yes
	Replace Pedestrian Actuated Signal with Active Pedestrian Corridor	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on southwest corner	Improve pedestrian accessibility	No

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Appendix B – Traffic Signal Warrants
Appendix C – Pedestrian Warrants
Appendix D – Collision Data
Appendix E – Functional Plans
Appendix F – Stakeholder Meeting Minutes

1. Introduction

In November 2021, City Council approved the following changes around schools and playgrounds in Saskatoon:

1. New playground zones with reduced speed limits of 30 km/h;
2. Year-round lower speed limits in both school and playground zones seven days a week from 7:00 a.m. to 7:00 p.m.;
3. Adjustments to posted signs and length of current school zones to align with national guidance provided by the Transportation Association of Canada;
4. Removal of lower speed school zones from high schools, designating them a “school area” where U-turns are still restricted.

At the regular business meeting on November 22nd 2021, City Council resolved in part:

“That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects”.

Prior to the implementation of the revised school zones in the summer of 2022, City Council requested safety reviews for pedestrian crossings at two locations where the school zones would be removed from arterial streets adjacent to elementary school sites. At its Regular Business Meeting on March 28, 2022, City Council resolved in part:

“That the Administration delay the removal of the school zones at École Henry Kelsey and St. Mary's Community School until after the safety audits, including public engagement, are conducted and align speed zone hours at these locations in the meantime when overall speed zone implementation takes place.”

This report presents the findings and recommendations resulting from the pedestrian crossing safety review that related to the removal of the St. Mary's Wellness and Education Centre school zone on 20th Street West between Avenue P South and Avenue L South.

2. Existing Conditions

St. Mary's Wellness and Education Centre is located on Avenue N South within the Pleasant Hill neighbourhood. A 30 km/hr school zone is currently in place on 20th Street West beginning 45 m west of Avenue O South and ending west of Avenue L South. The speed limit on 20th Street West outside of school zone hours is 50 km/hr.

20th Street West is classified as a minor arterial roadway and forms a connection between St. Paul's Hospital and the downtown core and is part of the Riversdale Business Improvement District. Through the study area, 20th Street West has two travel lanes and one parking lane in each direction. According to the City of Saskatoon 2021 Average Annual Daily Traffic (AADT) program, the 2019 AADT for this section of 20th Street West is 9,000 vehicles per day.

There are three intersections that are located within the study area. Each of these intersections has been upgraded with a pedestrian crossing device to facilitate pedestrian movements across 20th Street West. The existing pedestrian crossing devices are listed in Table 2-1 and the locations are shown in Figure 2-1.

Table 2-1: Study Intersections

Intersection	Pedestrian Crossing Device
20 th Street West and Avenue O South	Pedestrian actuated signal
20 th Street West and Avenue N South	Active pedestrian corridor
20 th Street West and Avenue M South	Pedestrian actuated signal



Figure 2-1 - Existing Pedestrian Crossing Devices

3. Methodology

The safety review of the pedestrian crossings included the following steps to determine what additional mitigation measures would be required to ensure the safety of people crossing 20th Street West upon the removal of the 30 km/hr school zone:

1. Collection and analysis of relevant traffic, pedestrian, and safety data including:
 - Speed and traffic volume measurements,
 - Intersection turning movement counts,
 - Pedestrian counts,
 - Collision data, and
 - Site observations.

2. Analysis of possible mitigation measures using:
 - City of Saskatoon Policies, bylaws, and guidelines,
 - Transportation engineering design guidelines and technical documents, and
 - Professional engineering judgement.

3. Engagement with stakeholders to present the proposed recommendations and obtain feedback. Stakeholders include the following:
 - St. Mary's Wellness and Education Centre,
 - Greater Saskatoon Catholic School Division,
 - Pleasant Hill Community Association, and
 - St. Mary's Wellness and Education Centre Community Council.

4. Finalize recommendations with consideration to the feedback received from stakeholders.

4. Analysis

The following sections provide details on the data analysis and assessments for traffic volume and speed, traffic signal, pedestrian crossing devices, collision history, and site observations.

4.1. Traffic Volume and Speed

A seven-day traffic volume and vehicle speed study was conducted on 20th Street West between Avenue M South and Avenue N South in September 2022. The AADT was measured to be 9,150 vehicles per day, which is consistent with the AADT of 9,000 vehicles per day that was measured in 2019 prior to the COVID-19 pandemic. Vehicle speeds were measured to determine the 85th percentile speed, which is the speed at which 85 percent of vehicles are travelling at or below. The results of the vehicle speed study are shown in Table 4-1.

Table 4-1: 85th Percentile Speeds on 20th Street West

Time Period	Eastbound	Westbound	Both Directions
School Hours 7:00 am – 7:00 pm	43	43	43
Non-School Hours 7:00 pm – 7:00 am	50	56	54
All Hours	47	50	48

The results of the speed study indicate speeding is a concern in both directions during school hours and is a concern in the westbound direction outside of school hours. A summary of the traffic volume, pedestrian volume and speed study data can be found in **Appendix A**.

4.2. Traffic Signal Warrant Analysis

The need for traffic signals was assessed in adherence to the Transportation Association of Canada Traffic Signal and Pedestrian Signal Head Warrant Handbook. A warrant system assigns points for a variety of conditions including:

- number of traffic lanes,
- posted speed limit of the street,
- distance to the nearest traffic signal, and
- number of pedestrians and vehicles at the location.

Traffic signals are considered when the warrant analysis results in 100 points or higher for the intersection.

Pedestrian and traffic data was collected during the six peak hours of: 8:00 am to 10:00 am, 12:00 pm to 2:00 pm, and 3:00 pm to 5:00 pm.

A summary of the traffic signal warrant analysis results is provided in Table 4-2. Details of the traffic signal warrant analysis are provided in **Appendix B**.

Table 4-2: Traffic Signal Warrant Analysis Results

Location	Traffic Signal Warrant Points	Results
20 th Street West and Avenue O South	43	Not Warranted
20 th Street West and Avenue N South	58	Not Warranted
20 th Street West and Avenue M South	29	Not Warranted

4.3. Pedestrian Crossing Devices

Pedestrian assessments were conducted to determine the need for pedestrian crossing devices in adherence to the City of Saskatoon Council Policy C07-018 Traffic Control at Pedestrian Crossings.

Pedestrian crossing devices include:

- standard crosswalk,
- zebra crosswalk,
- rectangular rapid flashing beacon (ground mounted flashing lights),
- actuated pedestrian corridor (overhead flashing amber lights), and
- pedestrian actuated signals.

The City follows national guidance for locating pedestrian devices and selecting the type of pedestrian device using a treatment matrix which considers traffic volume, posted speed limit, and number of lanes for pedestrian crossing.

A summary of the pedestrian device warrant analysis is provided in Table 4-3 and details are provided in **Appendix C**.

20th St. W. Crossing Safety Review near St. Mary's Wellness and Education Centre

Table 4-3: Pedestrian Assessments

Location	Pedestrian Desire Confirmation	Results
20 th Street West and Avenue O South	Yes	Active Pedestrian Corridor (Existing Pedestrian Actuated Signals are adequate but pedestrian and driver delays could be reduced with an Active Pedestrian Corridor)
20 th Street West and Avenue N South	Yes	Active Pedestrian Corridor (Existing Active Pedestrian Corridor is adequate and will remain in place)
20 th Street West and Avenue M South	Yes	Active Pedestrian Corridor (Existing Pedestrian Actuated Signals are adequate but pedestrian and driver delays could be reduced with an Active Pedestrian Corridor)

4.4. Collision History

The most recently available five-year collision data (2017 to 2021) was provided by Saskatchewan Government Insurance (SGI). Midblock and intersection collision data for 20th Street West was reviewed between Avenue P South and Avenue L South and is summarized in Table 4-4.

Table 4-4: Collision History Summary

Location	2017	2018	2019	2020	2021	Total	Total Injuries	Vulnerable Road Users ¹
20 th Street West and Avenue O South	1	2	1	1	1	6	0	0
20 th Street West (Avenue N South to Avenue O South)	1	1	1	2	0	5	0	0
20 th Street West and Avenue N South	2	0	2	2	1	7	3	1
20 th Street West (Avenue M South to Avenue N South)	1	1	0	0	1	3	1	1
20 th Street West and Avenue M South	2	2	2	1	1	8	0	0

¹ Vulnerable Road Users includes motorcycles, bicycles, mopeds/electric bicycles, and pedestrians.

20th St. W. Crossing Safety Review near St. Mary's Wellness and Education Centre

Total	7	6	6	6	4	29	4	2
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One pedestrian collision occurred at the intersection of 20th Street West and Avenue N South. The pedestrian was crossing the north leg of the intersection (Avenue N South). Details of the collision analysis are provided in **Appendix D**.

4.5. Site Observations

A site visit was conducted to identify any issues with signage, traffic operations, or the condition of the roadway. Issues identified are shown in Figure 4-1 and Table 4-5.

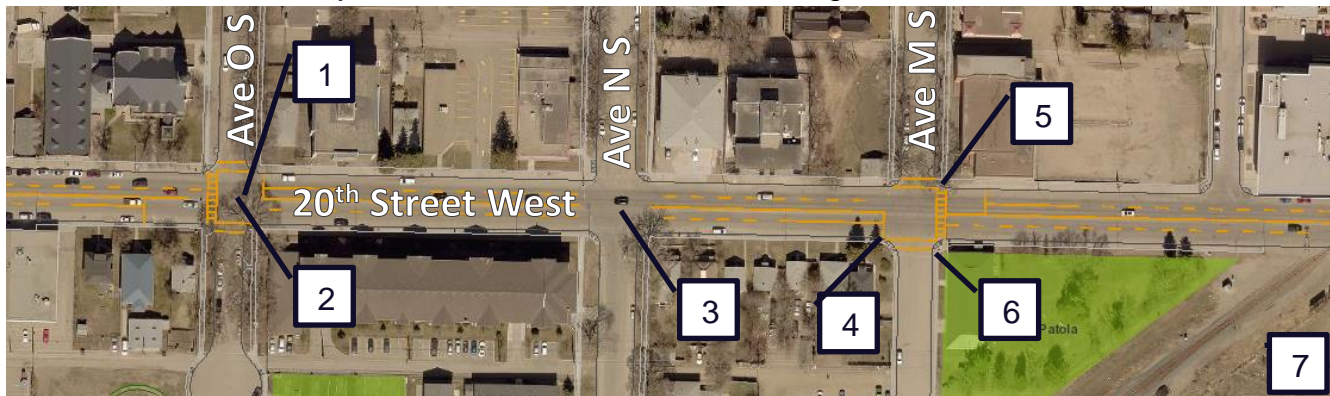


Figure 4-1 - Site Observations - Locations

Table 4-5: Site Observations - Descriptions

Location	Type	Description
1	Users	Approximately one third of pedestrians try to cross on east leg rather than west leg where the Pedestrian Actuated Signal is located.
2	Sidewalks	All ramps incorrectly installed or missing.
3	Sidewalks	All ramps incorrectly placed and not properly aligned.
4	Signage	“Cross Other Side” sign facing the wrong direction.
5	Sidewalks	Northeast ramp incorrectly installed and unusable.
6	Infrastructure	Utility box in southeast quadrant is an obstacle for people with mobility devices to access the sidewalk.
7	Users	Wheelchair users were seen using the street rather than sidewalk.

5. Recommendations

The primary purpose of this report is to identify any mitigation measures that are required to ensure the safety of pedestrians upon the removal of the 30 km/hr school zone on 20th Street West between 45 m west of Avenue O South and Avenue L South.

The locations of the recommendations are shown in Figure 5-1. Table 5-1 lists the recommended improvements required to ensure the safety of all road users upon removal of the 30 km/hr school zone, and recommended improvements that will improve the general safety of the corridor but are not considered required, to remove the 30 km/hr school zone. Functional plans of the recommendations can be found in **Appendix E**.

The recommendations shall be added to the Neighbourhood Traffic Management Permanent Implementation Plan and installed as funding allows. The school zone on 20th Street West will be removed once the traffic calming curb extensions are installed permanently in concrete.



Figure 5-1 - Recommendation Locations

Table 5-1: Recommended Improvements

Location	Recommendation	Justification	Required prior to School Zone Removal
1 20 th Street West and Avenue O South	Install curb extensions on northeast and southwest corners of 20 th Street West and Avenue O South	Improve pedestrian safety	Yes
	Replace Pedestrian Actuated Signal on west leg with Active Pedestrian Corridor on east and west legs	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on the northwest corner	Improve pedestrian accessibility	No
2 20 th Street West and Avenue N South	Install curb extensions on the northwest and southwest corners and relocate active pedestrian to accommodate curb extensions	Improve pedestrian safety	Yes
	Adjust ramps on the northeast and southeast corner	Improve pedestrian accessibility	No
3 20 th Street West and Avenue M South	Install curb extension on the northeast and southeast corners	Improve pedestrian safety	Yes
	Relocate Bus Stop	Accommodate bus operations east of new curb extension	Yes
	Replace Pedestrian Actuated Signal with Active Pedestrian Corridor	Reduce pedestrian wait times and driver delays	No
	Adjust ramps on southwest corner	Improve pedestrian accessibility	No

6. Engagement

The recommended improvements were presented to stakeholders in meetings that were held in December 2022. Meetings included representatives from the following:

- Pleasant Hill Community Association,
- St. Mary's Wellness and Education Centre,
- Greater Saskatoon Catholic School Division, and
- St. Mary's Wellness and Education Centre Community Council.

A summary of the meeting outcomes is as follows:

- Stakeholders were generally supportive of the recommendations.
- Stakeholders would like to see recommendations implemented prior to the removal of the school zone.
- Greater Saskatoon Catholic School Division would like to see the reduced speed limit school zone of 30km/hr remain in place on 20th Street West.

The meeting notes and materials are provided in **Appendix F**.

7. Cost Estimate

The estimated costs of the recommendations are outlined in Table 7-1.

Table 7-1: Cost Estimate

Location	Recommendation	Cost estimate
20 th Street West and Avenue O South	Curb extension (2)	\$90,000
	Pedestrian ramp (2)	\$7,000
	Replace pedestrian actuated signal with active pedestrian corridor	\$60,000
20 th Street West and Avenue N South	Curb extension and active pedestrian corridor pole relocations (2)	\$115,000
	Pedestrian ramp (2)	\$7,000
20 th Street West and Avenue M South	Curb extension (2)	\$90,000
	Pedestrian ramp (2)	\$7,000
	Replace pedestrian actuated signal with active pedestrian corridor	\$30,000
Total		\$406,000

The implementation of these recommendations will be implemented as funding allows.

Appendix A

Data Summary

DATA SUMMARY FOR 20TH STREET WEST (BETWEEN AVENUE M SOUTH AND AVENUE O SOUTH) NEAR ST. MARY'S WELLNESS AND EDUCATION CENTRE

Speed Study

Speed study was completed on 20th Street in fall 2022. Data was collected for 24 hours / day for 7 days.

	Eastbound (km/hr)	Westbound (km/hr)	Both Directions (km/hr)
All Hours	47	50	48
Outside School Hours (7 pm to 7 am)	50	56	54
During School Hours (7 am to 7 pm)	43	43	43


Vehicles

Total Volume = 9,155 vehicles/day


- Eastbound = 4,298 vehicles/day
- Westbound = 4,857 vehicles/day

Pedestrians


Avenue M South and 20th Street West

	North Leg 641 pedestrians 61 cyclists	
West Leg 29 pedestrians 2 cyclists		East Leg 141 pedestrians 8 cyclists 
	South Leg 349 pedestrians 32 cyclists	

Avenue N South and 20th Street West

		North Leg 505 pedestrians 38 cyclists
West Leg 145 pedestrians 16 cyclists		East Leg 57 pedestrians 4 cyclists
		South Leg 287 pedestrians 22 cyclists

Avenue O South and 20th Street West

		North Leg 648 pedestrians 85 cyclists
West Leg 313 pedestrians 25 cyclists		East Leg 122 pedestrians 13 cyclists
		South Leg 528 pedestrians 53 cyclists

Collision Data

In the past five years, there has been one pedestrian collision within the study area. The collision occurred on north leg of the Avenue N and 20th Street intersection and resulted in a “Minor injury”. The pedestrian was crossing Avenue N.

Appendix B

Traffic Signal Warrants

City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	20th Street
Side Street (name)	Avenue O
Quadrant / Int #	4
	CHECK SHEET

for Warrant Calculation Results, please hit 'Page Down'

Direction (EW or NS)	EW
	NS
Comments	Enter Comments about the analysis here.

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 06, Thu
Count Date:	2022 Sep 21, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	Up-Stream Signal (m)	# of Thru Lanes
20th Street	WB		1			1		300	2
20th Street	EB		1			1		255	2
Avenue O	NB				1				
Avenue O	SB				1				

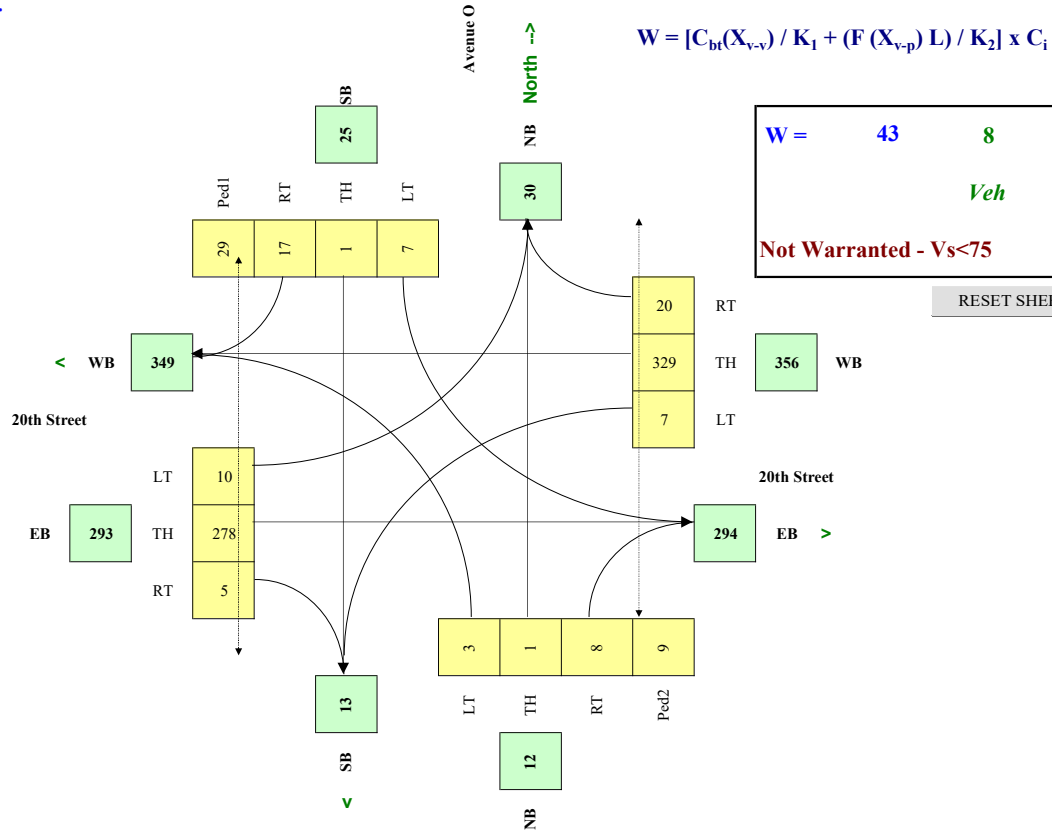
Are the Avenue O NB right turns significantly impeded by through movements? (y/n) **n**
 Are the Avenue O SB right turns significantly impeded by through movements? (y/n) **n**

Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	y
Metro Area Population	(#)	
Central Business District	(y/n)	y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
20th Street	EW	50		y	
Avenue O	NS			n	

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
8:00 - 9:00	0	1	4	6	0	10	6	282	18	10	238	4	19	5	42	14
9:00 - 10:00	1	0	6	2	1	21	7	264	18	5	214	3	33	9	60	42
12:00 - 13:00	4	2	15	5	1	20	4	310	26	8	263	9	24	4	67	52
13:00 - 14:00	2	0	8	11	1	20	6	324	20	14	272	4	17	9	66	43
15:00 - 16:00	6	0	10	10	0	14	10	360	21	6	315	5	48	18	46	59
16:00 - 17:00	5	0	7	9	1	16	10	436	15	17	366	3	32	8	43	44
Total (6-hour peak)	18	3	50	43	4	101	43	1,976	118	60	1,668	28	173	53	324	254
Average (6-hour peak)	3	1	8	7	1	17	7	329	20	10	278	5	29	9	54	42

Average 6-hour Peak Turning Movements



City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	20th Street	Direction (EW or NS)	EW	Comments Enter Comments about the analysis here.
Side Street (name)	Avenue N	Direction (EW or NS)	NS	
Quadrant / Int #	4			
for Warrant Calculation Results, please hit 'Page Down'		CHECK SHEET		

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 06, Thu
Count Date:	2022 Sep 21, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	Up-Stream Signal (m)	# of Thru Lanes
20th Street	WB		1			1		300	2
20th Street	EB		1			1		255	2
Avenue N	NB				1				
Avenue N	SB				1				

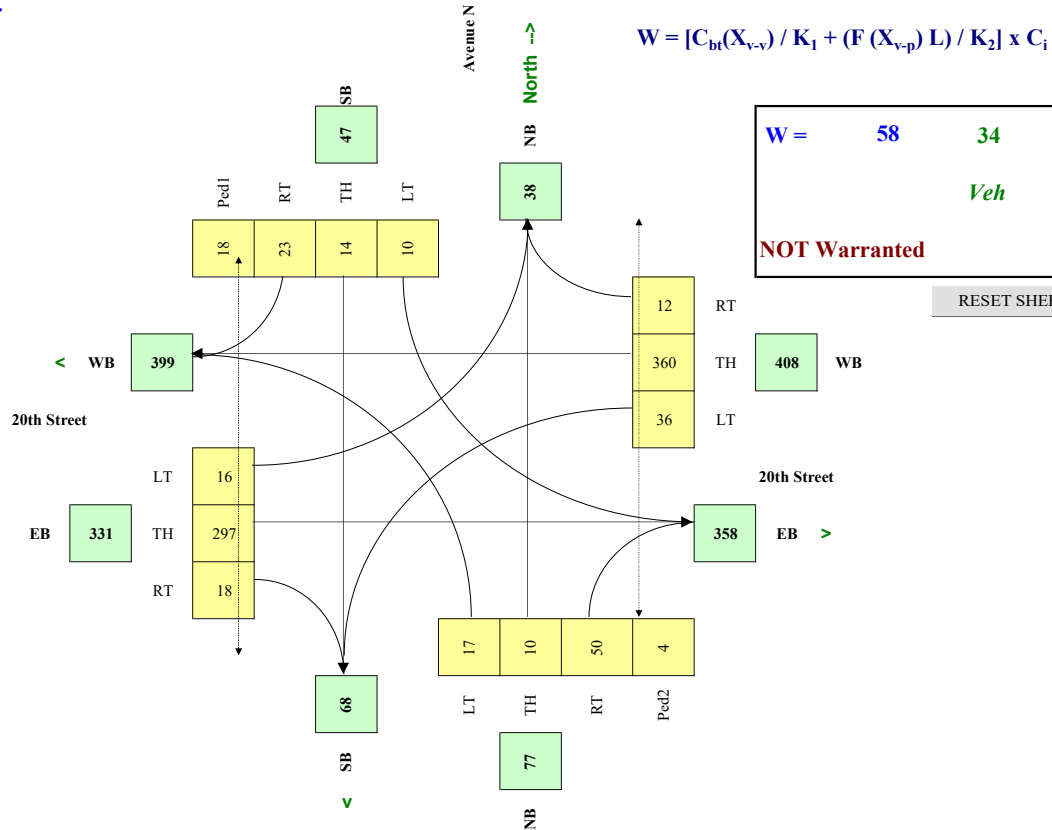
Are the Avenue N NB right turns significantly impeded by through movements? (y/n) n
 Are the Avenue N SB right turns significantly impeded by through movements? (y/n) n

Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	y
Metro Area Population	(#)	
Central Business District	(y/n)	y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
20th Street	EW	50		y	
Avenue N	NS			n	

Set Peak Hours	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
8:00 - 9:00	12	8	48	8	26	20	57	310	5	12	243	21	18	3	33	18
9:00 - 10:00	16	11	28	6	7	23	29	301	10	17	247	15	17	4	37	18
12:00 - 13:00	12	13	38	9	20	26	28	403	14	22	314	16	7	8	50	49
13:00 - 14:00	14	8	50	14	11	32	35	385	24	17	300	13	8	2	57	33
15:00 - 16:00	26	12	80	10	13	23	47	368	9	14	301	28	45	5	60	29
16:00 - 17:00	20	7	58	13	9	13	20	391	10	14	378	14	11	4	37	26
Total (6-hour peak)	100	59	302	60	86	137	216	2,158	72	96	1,783	107	106	26	274	173
Average (6-hour peak)	17	10	50	10	14	23	36	360	12	16	297	18	18	4	46	29

Average 6-hour Peak Turning Movements



City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	20th Street
Side Street (name)	Avenue M
Quadrant / Int #	4
	CHECK SHEET

for Warrant Calculation Results, please hit 'Page Down'

Direction (EW or NS)	EW
	NS
Comments	Enter Comments about the analysis here.

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 06, Thu
Count Date:	2022 Sep 21, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	Up-Stream Signal (m)	# of Thru Lanes
20th Street	WB		1			1		300	2
20th Street	EB		1			1		255	2
Avenue M	NB				1				
Avenue M	SB				1				

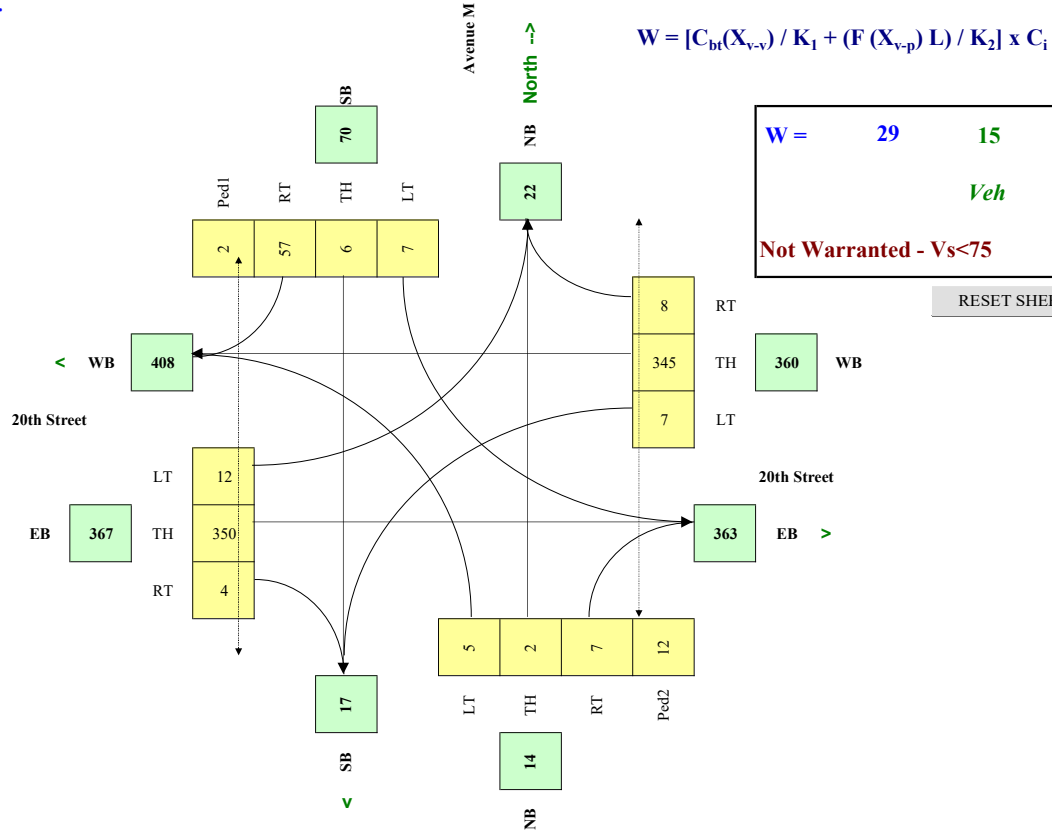
Are the Avenue M NB right turns significantly impeded by through movements? (y/n) **n**
 Are the Avenue M SB right turns significantly impeded by through movements? (y/n) **n**

Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	y
Metro Area Population	(#)	
Central Business District	(y/n)	y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
20th Street	EW	50		y	
Avenue M	NS			n	

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
8:00 - 9:00	4	3	2	3	11	69	7	299	3	11	283	4	1	9	34	23
9:00 - 10:00	2	1	8	5	3	55	11	297	6	6	282	0	0	9	41	31
12:00 - 13:00	9	2	6	10	10	61	5	376	9	11	358	9	2	16	66	53
13:00 - 14:00	7	0	5	5	9	75	7	347	15	12	360	2	3	15	58	35
15:00 - 16:00	6	3	7	8	3	43	3	377	14	12	380	7	2	15	50	36
16:00 - 17:00	3	1	12	8	0	41	8	374	3	20	438	4	2	9	38	26
Total (6-hour peak)	31	10	40	39	36	344	41	2,070	50	72	2,101	26	10	73	287	204
Average (6-hour peak)	5	2	7	7	6	57	7	345	8	12	350	4	2	12	48	34

Average 6-hour Peak Turning Movements



Appendix C

Pedestrian Warrants

20th Street West and Avenue O South

Preliminary Assessment Decision Point	Pedestrian Crossing	
Traffic Signal Warrant	Points	43
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume \geq 15 EAU's AND vehicular volume \geq 1,500 veh/day?	Average Hourly Pedestrian Volume	14
	Vehicular Volume	9,150
	Answer (Y/N)	N
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	125 m to Traffic Signal at 20 th Street West and Avenue O South
	Answer (Y/N)	N
Is average hourly latent pedestrian crossing demand \geq 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	Y
	Required connection?	Connection to St. Mary's School and Wellness Education Centre and Grace Adam Metawewinihk Park and St. Mary's Church.
	Answer (Y/N)	Y
Treatment Selection	Table 1 in Pedestrian Crossing Guide	Active Pedestrian Crossing (Existing Pedestrian Actuated Signal)

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children \leq 12 years – 2.0 EAUs; Older pedestrians \geq 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

20th Street West and Avenue N South

Preliminary Assessment Decision Point	Pedestrian Crossing	
Traffic Signal Warrant	Points	58
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume ≥ 15 EAU's AND vehicular volume ≥1,500 veh/day?	Average Hourly Pedestrian Volume	16
	Vehicular Volume	9,150
	Answer (Y/N)	Y
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	135 m to existing PAS on 20 th Street West at Avenue O South
	Answer (Y/N)	N
Is average hourly latent pedestrian crossing demand ≥ 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	Y
	Required connection?	Connection to St. Mary's Wellness and Education Centre
	Answer (Y/N)	Y
Treatment Selection	Table 1 in Pedestrian Crossing Guide	Active Pedestrian Corridor currently installed is adequate.

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children ≤ 12 years – 2.0 EAUs; Older pedestrians ≥ 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

20th Street West and Avenue M South

Preliminary Assessment Decision Point	Pedestrian Crossing	
Traffic Signal Warrant	Points	29
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume \geq 15 EAU's AND vehicular volume \geq 1,500 veh/day?	Average Hourly Pedestrian Volume	16
	Vehicular Volume	9,150
	Answer (Y/N)	Y
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	235 m to existing PAS on 20 th Street West at Avenue O South
	Answer (Y/N)	Y
Is average hourly latent pedestrian crossing demand \geq 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	
	Required connection?	
	Answer (Y/N)	
Treatment Selection	Table 1 in Pedestrian Crossing Guide	Active Pedestrian Corridor (Existing Pedestrian Actuated Signals)

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children \leq 12 years – 2.0 EAUs; Older pedestrians \geq 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

Appendix D

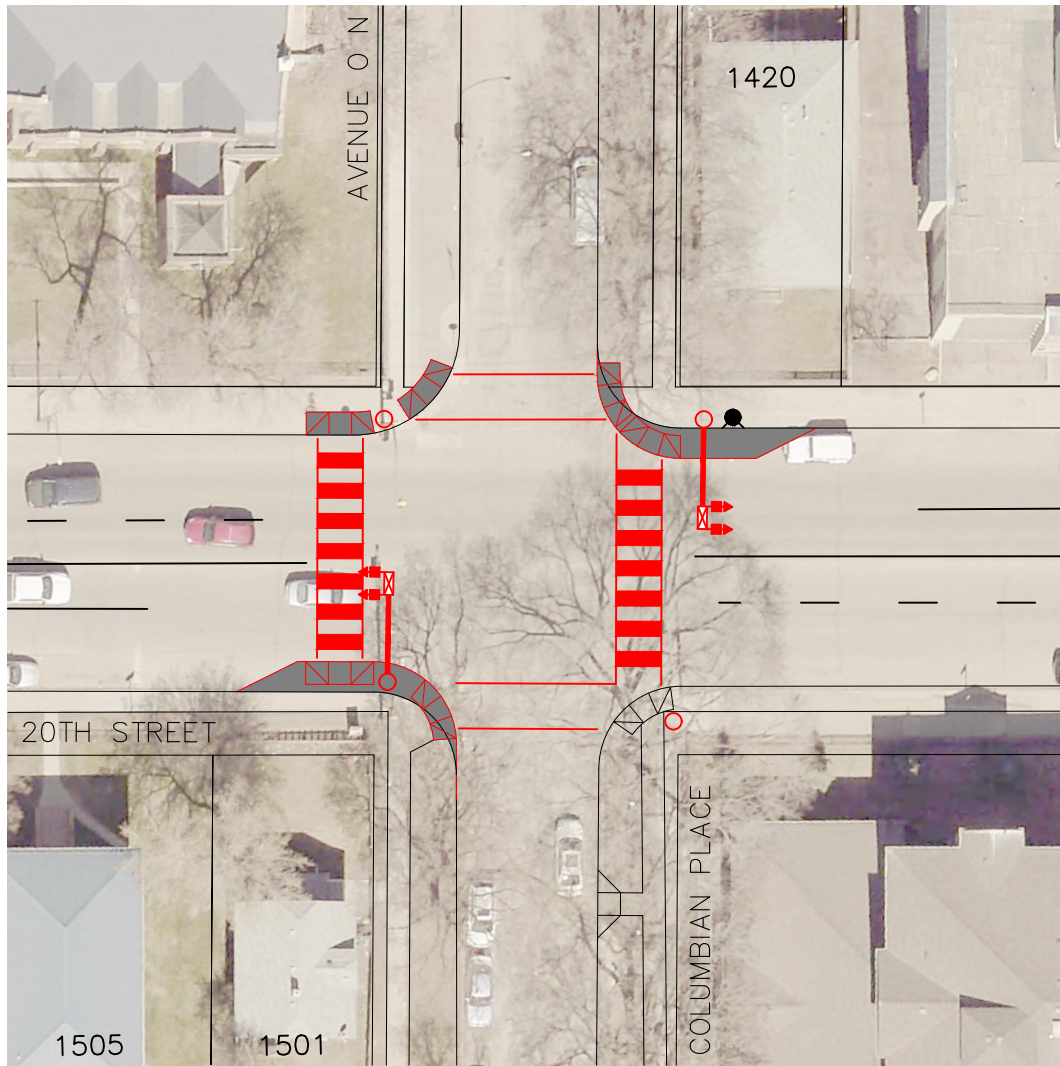
Collision Data

Table D-1: 20th Street West 5-year Collision Data by Configuration

Configuration	Location						
	AVE L - AVE M	AVE M	AVE M - AVE N	AVE N	AVE N - AVE O	AVE O	AVE O - AVE P
Fixed/Movable Object	0	2	0	1	0	0	0
Lost Control	0	0	0	1	1	0	0
Rear End	0	2	1	2	0	2	1
Sideswipe	1	0	1	0	0	1	0
Head on	0	1	0	0	0	0	0
Right Angle	0	1	0	3	0	0	0
Right Turn	0	1	0	0	0	0	0
Left Turn	0	0	1	0	0	0	1
Other	0	1	0	0	4	3	6
Total	1	8	3	7	5	6	8

Appendix E

Functional Plans



LEGEND



ACTIVE PEDESTRIAN CORRIDOR



APC PUSH BUTTON POST

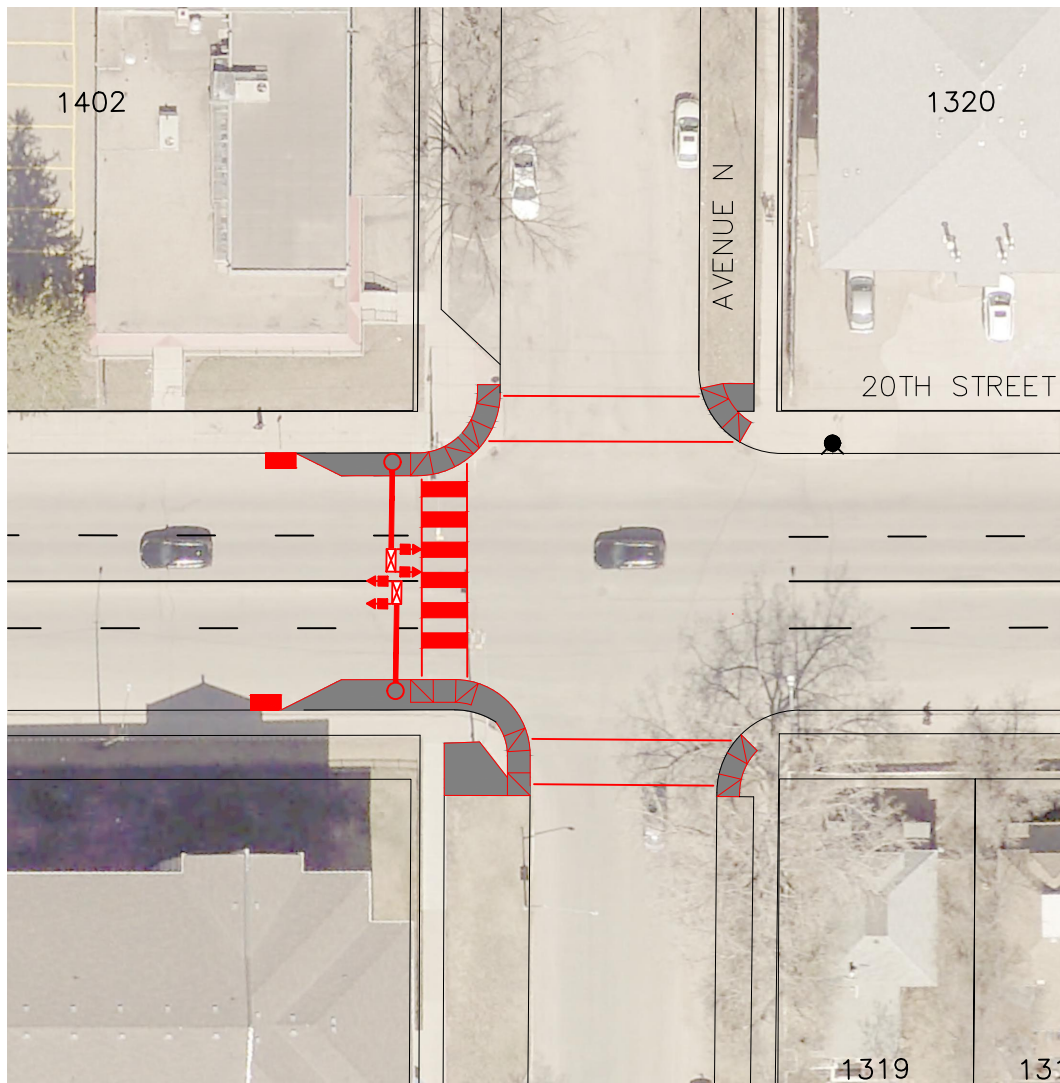


PEDESTRIAN CROSSWALK






NEW CONCRETE

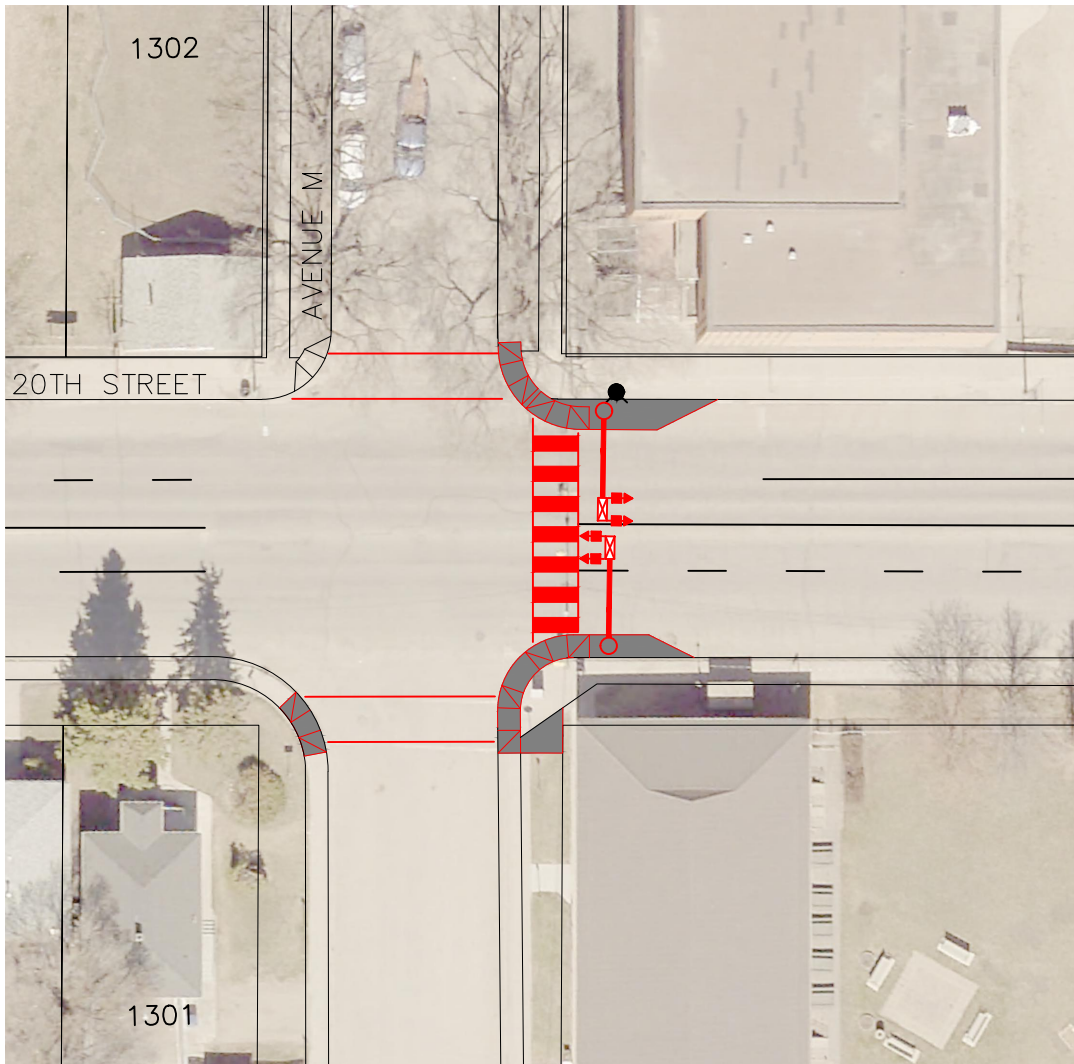
PLAN DESCRIPTION/REVISIONS X DESCRIPTION OF PLAN/REVISION 20YY-MON-DD xxx	 <p>RECOMMENDATIONS 20TH STREET & AVENUE O S</p>	APPROVED ENGINEER _____ ENGINEER _____ PLAN NO. APPENDIX E-1
DRAWN BY <u>XXX</u> DATE <u>20YY-MON-DD</u> SCALE : HOR. 1:500 VERT. _____	71	



LEGEND

-  ACTIVE PEDESTRIAN CORRIDOR
-  PEDESTRIAN CROSSWALK
-  NEW CONCRETE

PLAN DESCRIPTION/REVISIONS		 City of Saskatoon Transportation	APPROVED
			ENGINEER _____
X	DESCRIPTION OF PLAN/REVISION 20YY-MON-DD xxx	RECOMMENDATIONS 20TH STREET & AVENUE N S 72	ENGINEER _____
DRAWN BY XXX			ENGINEER _____
DATE 20YY-MON-DD			PLAN NO. APPENDIX E-2
SCALE : HOR. 1:500 VERT. _____			



LEGEND



ACTIVE PEDESTRIAN CORRIDOR



PEDESTRIAN CROSSWALK



NEW CONCRETE

PLAN DESCRIPTION/REVISIONS			APPROVED
			ENGINEER _____
X	DESCRIPTION OF PLAN/REVISION 20YY-MON-DD xxx	RECOMMENDATIONS 20TH STREET & AVENUE M S 73	ENGINEER _____
	DRAWN BY XXX		ENGINEER _____
	DATE 20YY-MON-DD		PLAN NO. APPENDIX E-3
SCALE : HOR. 1:500 VERT. _____			

Appendix F

Stakeholder Meeting Notes and Materials

Pleasant Hill Community Association Meeting

Wednesday, November 30, 2022, St. Mary's Wellness and Education Centre

In Attendance:

Katie Sapieha, Transportation Engineer, City of Saskatoon
Nathalie Baudais, Sr. Transportation Engineer, City of Saskatoon
Amanda Lindgren, Public Engagement Consultant, City of Saskatoon
Members of the Pleasant Hill Community Association

St. Mary's Wellness and Education Centre Safety Review

Katie Sapieha talked about the background for the safety review for the pedestrian crossings on 20th Street near St. Mary's Wellness and Education Centre. The review was prompted by City Council and the approved changes to school zones to align with the Transportation Association of Canada, including the removal of the school zone currently on 20th Street from Avenue O to Avenue L.

The school zone on 20th Street is more than 50 m away from the school site and does not front or flank the school. Best practice for school zones focus on the frontage or flankage of the school site, and discourage school zones on walk to school routes, arterial roadways, and when the school is located more than 50 m away.

Data collection for the safety review included traffic volumes, vehicle speeds, collision history, pedestrian volumes, and site observations.

Recommended measures based on the review include:

20th Street and Avenue M

- Install curb extensions on northeast and southeast corners
- Adjust pedestrian ramps
- Replace Pedestrian Actuated Signal with Active Pedestrian Corridor (overhead amber flashing beacons)
- Relocate bus stop farther east

20th Street and Avenue N

- Install curb extensions on southwest and northwest corner
- Adjust pedestrian ramps

20th Street and Avenue O

- Install curb extensions on southwest and northeast corners
- Adjust pedestrian ramps
- Replace west side Pedestrian Actuated Signal with Active Pedestrian Corridor (overhead amber flashing beacons) on both sides

Question: Clarification that the Active Pedestrian Corridor (APC) at Avenue M will have the flashing beacons when people push the button, instead of the current signal.

Answer: Yes. This type of device is more responsive to pedestrians as the lights flash right after pushing the button. It can also help reduce impatient drivers waiting at a red light after the pedestrians have finished crossing the street.

Comment: Like that the push button is more responsive and the curb extensions will help slow down traffic coming up to the intersection.

Comment: In favour of the pedestrian push buttons on both sides of Avenue O, especially with Columbia Manor and many seniors living nearby.

Answer: We saw pedestrian demand on both sides of the intersection at Avenue O so are recommending the Active Pedestrian Corridor (APC) on both sides.

Question: Are the portable school zone signs meant to be in front of schools for the full 7:00 am-7:00 pm?

Answer: The signs should only be out for the hours of school operation and brought in at the end of the school day. The posted signs with the speed limit are sufficient for enforcement purposes.

Question: When would these changes be implemented?

Answer: The aim is to present a report with the findings of the review and engagement to the Standing Policy Committee on Transportation (SPCT) in early 2023. Depending on the funding needed for temporary or permanent installation of the measures, a budget request may be needed for the 2024-2025 budget cycle. Permanent installation would be beneficial for improved accessibility with ramps.

Other questions discussed:

- West Central Multi-Use Corridor (WCMUC) construction planned for 2023 along the north side of the CP rail tracks near the school.
- Another project is exploring a pathway connection on the south side of the tracks to provide a connection between Avenue M and 19th Street to the east side of Avenue N .
- Parking concerns near the cul-de-sac on Columbian Place. Parking Services can be called in to ticket if people are parking improperly in this area.
- Parking and visibility is also a concern on the residential streets near St. Paul's hospital.

Next Steps

The results of this review and engagement will be presented to the Standing Policy Committee on Transportation in early 2023. Additional feedback on the review and recommendations can be sent directly to Katie by December 16th.

Amanda will follow up with information on the Industrial-Residential Interface Study as well.

School, School Division and Community Council Meeting

Thursday, December 1, 2022, St. Mary's Wellness and Education Centre

In Attendance:

Katie Sapieha, Transportation Engineer, City of Saskatoon
Nathalie Baudais, Sr. Transportation Engineer, City of Saskatoon
Andrew Novecosky, Principal, St. Mary's Wellness and Education Centre
Joel Lloyd, Chief Financial Officer, St. Paul's R.C.S.S.D #20
Kashina Alexson, Community Council Representative

St. Mary's Wellness and Education Centre Safety Review

Nathalie Baudais talked about the background for the safety review for the pedestrian crossings on 20th Street near St. Mary's Wellness and Education Centre. The review was prompted by City Council and the approved changes to school zones to align with the Transportation Association of Canada, including the removal of the school zone currently on 20th Street from Avenue O to Avenue L.

The school zone on 20th Street is more than 50 m away from the school site and does not front the school. Best practice for school zones focus on the frontage of the school site, and discourage school zones on walk to school routes, arterial roadways, and when the school is located more than 50 m away.

Katie Sapieha talked about the safety review for the pedestrian crossings on 20th Street near St. Mary's Wellness and Education Centre. Data collection for the safety review included traffic volumes, vehicle speeds, collision history, pedestrian volumes, and site observations.

Recommended measures based on the review include:

20th Street and Avenue M

- Install curb extensions on northeast and southeast corners
- Adjust pedestrian ramps
- Replace Pedestrian Actuated Signal with Active Pedestrian Corridor (overhead amber flashing beacons)
- Relocate bus stop farther east

20th Street and Avenue N

- Install curb extensions on southwest and northwest corner
- Adjust pedestrian ramps

20th Street and Avenue O

- Install curb extensions on southwest and northeast corners
- Adjust pedestrian ramps
- Replace west side Pedestrian Actuated Signal with Active Pedestrian Corridor (overhead amber flashing beacons) on both sides

Comments: Really like the curb extensions, feels that it will help the children be safer when crossing, especially at Avenue N.

Question: Clarification that the Active Pedestrian Corridor (APC) at Avenue M will have the flashing beacons when people push the button, instead of the current signal.

Answer: Yes. This type of device is more responsive to pedestrians as the lights flash right after pushing the button. It can also help reduce impatient drivers waiting at a red light after the pedestrians have finished crossing the street.

Question: What are the speeds that were noted on 20th Street?

Answer: The 85th percentile speed, which is the speed that 85 percent of drivers drive at or below, was 54 km/hr outside of school hours and was 43 km/hr during school hours.

Question: When was the speed study taken? Was it taken before or after the school zone changes?

Answer: The speed study was taken in the fall 2022 after the new school zone changes were implemented and in effect.

Question: What was the speed data before implementation of the changes to the school zone.

Answer: We did not review data prior to changes of the school zone. Upon returning to the office, we reviewed available data. There was a previous speed study for 20th Street between Avenue N and Avenue O from 2019 which found that the 85th percentile speed was 52 km/hr outside of school hours and 50 km/hr during school hours. Data prior to the installation of the school zone could not be found.

Question: Has there been any pedestrian accidents on 20th Street?

Answer: There has been one pedestrian collision crossing Avenue N (Correction from Avenue O mentioned in the meeting.).

Question: How many pedestrians are crossing at the intersections?

Answer: 24 hour counts at the intersections indicated that approximately:

- 150 pedestrians crossing the east leg of Avenue O and 20th Street,
- Over 300 pedestrians crossing the west leg of Avenue O and 20th Street,
- 150 pedestrians crossing the west leg of Avenue N and 20th Street, and
- 140 to 160 pedestrians crossing the east leg of Avenue M and 20th Street.

We can provide the actual numbers after the meeting.

Question: When would these changes be implemented?

Answer: The aim is to present a report with the findings of the review and engagement to the Standing Policy Committee on Transportation (SPCT) in early 2023. Depending on the funding needed for temporary or permanent installation of the measures, a budget

request may be needed for the 2024-2025 budget cycle. Permanent installation would be beneficial for improved accessibility with ramps.

Other questions discussed:

- West Central Multi-Use Corridor (WCMUC) construction planned for 2023 along the north side of the CP rail tracks near the school.
- Another project is exploring a pathway connection on the south side of the tracks to provide a connection between Avenue M and 19th Street to the east side of Avenue N.

Next Steps

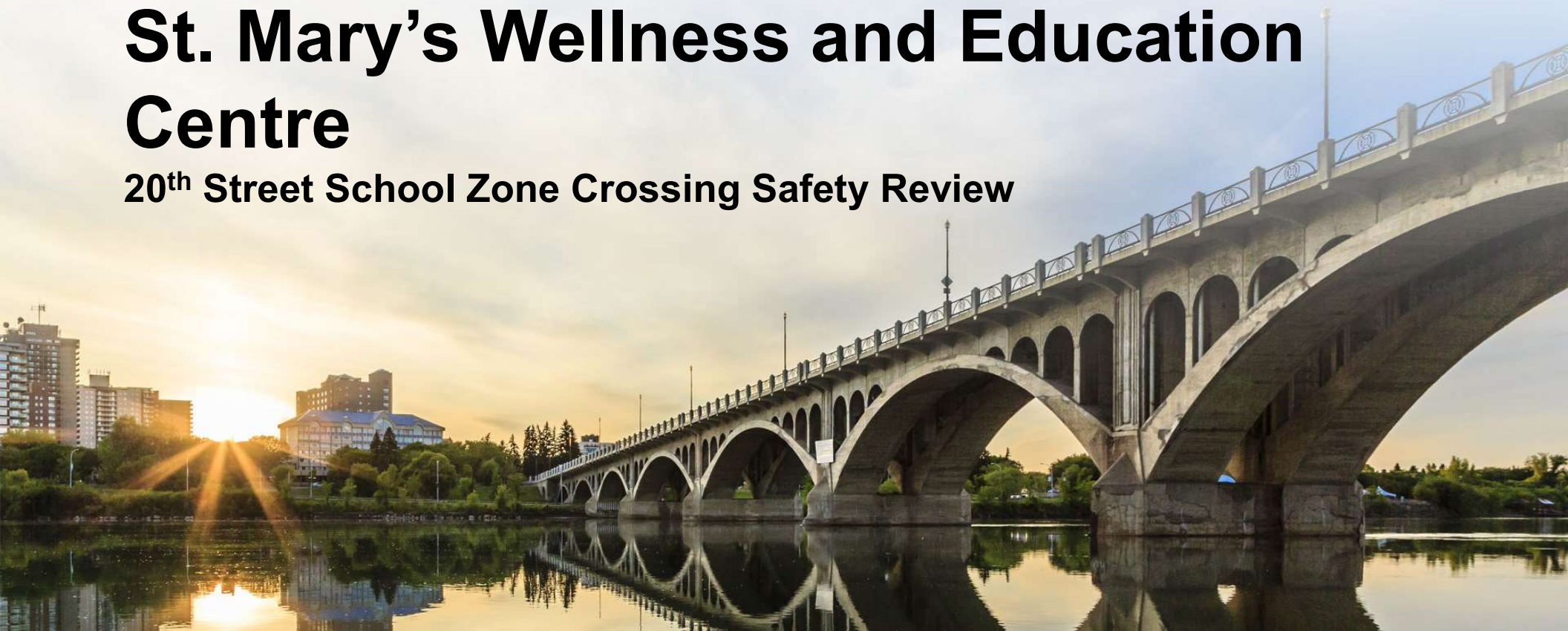
The results of this review and engagement will be presented to the Standing Policy Committee on Transportation in early 2023. Additional feedback on the review and recommendations can be sent directly to Katie before December 20th or can be provided directly to the Standing Policy Committee on Transportation.

Nathalie will provide pedestrian and speed data prior to the School Community Council meeting on December 6th and School Board Meeting on December 12th.



St. Mary's Wellness and Education Centre

20th Street School Zone Crossing Safety Review



Background

Residential Speed Limit Review

- Approved by Council in November 2021
- Adjust school zones to align with TAC guidelines
- 7am to 7pm, 365 days/year

“That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects”.

Regular Business Meeting of City Council – November 21st 2021

Crossing Safety Review

1. Data Collection

- Vehicle Speeds
- Traffic Volumes
- Pedestrian Volumes
- Site Observations
- Collision History

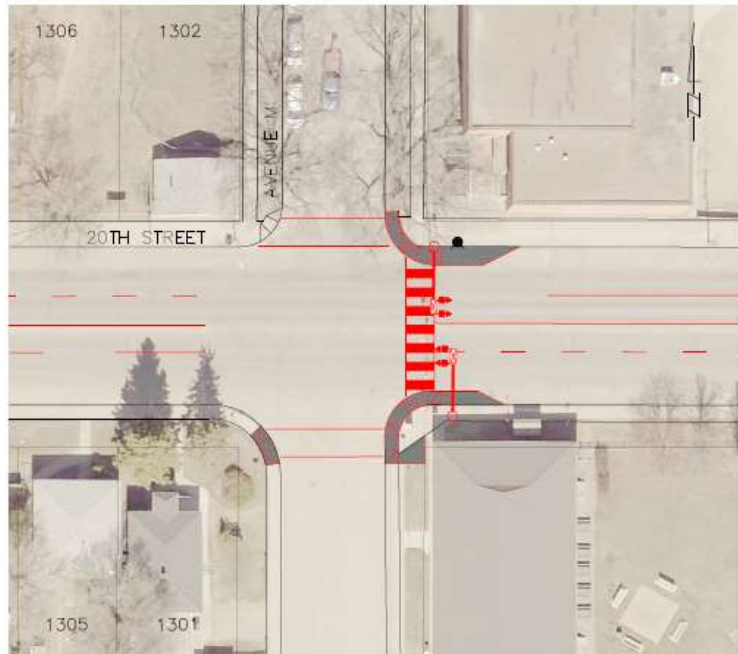
2. Analysis

- Traffic Calming
- Pedestrian Crossing Devices
- Traffic Control
- Signage & Pavement Markings
- Sidewalk Improvements

Study Limits

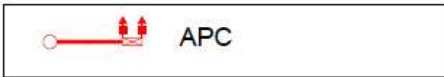
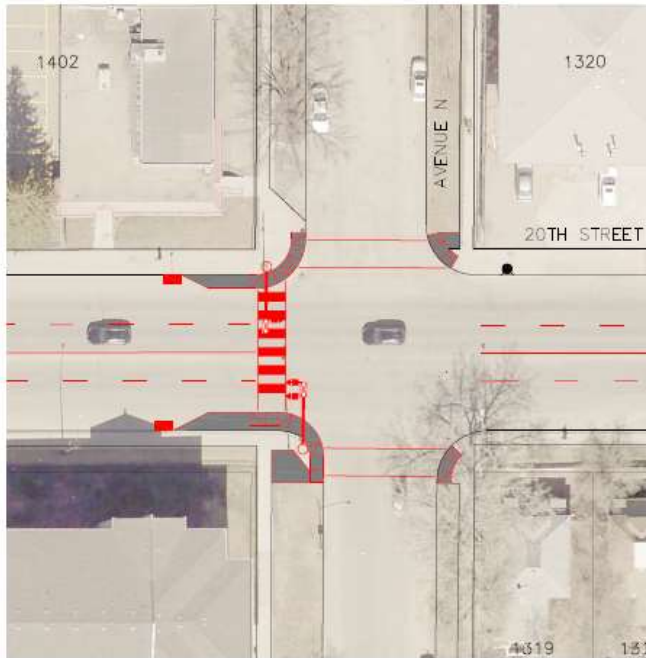


20th Street and Avenue M



- Install curb extensions
- Repair ramps
- Replace Pedestrian Actuated Signal with Active Pedestrian Corridor
- Relocate bus stop east

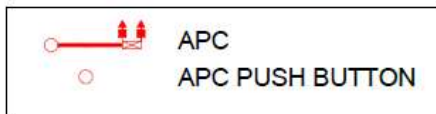
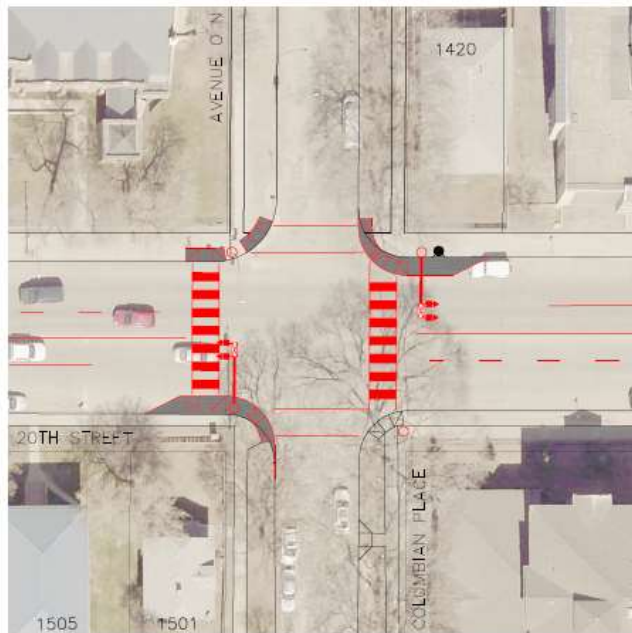
20th Street and Avenue N



- Install curb extensions
- Repair ramps



20th Street and Avenue O



- Install curb extensions
- Repair ramps
- Replace west side Pedestrian Actuated Signal with Active Pedestrian Corridor on both sides.

Next Steps

- Finalize technical report
- Gather community feedback
 - Send comments to Katie.Sapieha@Saskatoon.ca
- Present recommendations to the Standing Policy Committee on Transportation (SPCT)
 - Targeting the Feb 7th SPCT meeting
 - Comments can also be submitted directly to SPCT

33rd St. W. Crossing Safety Review near École Henry Kelsey



Authorization

Prepared By:



Julian Petras, P.Eng.
Transportation Engineer



Nathalie Baudais, P.Eng.
Senior Transportation Engineer

Checked By:



David LeBoutillier
Transportation Engineering Manager

Executive Summary

As part of the Speed Limit Review, in November 2021, City Council approved changes around school and playgrounds with the following resolution, “That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects.”

In March 2022, at its Regular Business Meeting, City Council approved the amendments to Council Policy C07-015, Reduced Speed Zones for Schools with the following resolution, “That the Administration delay the removal of the school zones at École Henry Kelsey and St. Mary’s Community School until after the safety audits, including public engagement, are conducted and align speed zone hours at these locations in the meantime when overall speed zone implementation takes place.”

To complete the review, collection and analysis of relevant traffic, pedestrian, and safety data was completed including the following:

- Speed and traffic measurements,
- Intersection turning movement counts,
- Pedestrian counts,
- Collision data, and
- Site observations.

Recommendations were created based on the analysis of the collected data and are shown in Table ES-1 and Figure ES-1.

Meetings were held in November and December 2022 with representatives from École Henry Kelsey, Saskatoon Public School Division, École Henry Kelsey School Community Council, and Hudson Bay Park | Mayfair | Kelsey Woodlawn Community Association. The recommendations were presented, and each group was generally supportive of the recommendations. The École Henry Kelsey administration did indicate their desire to maintain the 30 km/hr school zone on 33rd Street West.

Upon approval, the recommended improvements will be added to the Neighbourhood Traffic Management Program and will be installed as funding allows. The school zone will be removed from 33rd Street West once the recommendations in Table ES-1 have been installed.

33rd St. W. Crossing Safety Review near École Henry Kelsey

Table ES-1 - Recommended Improvements

Location	Recommendation	Justification	Required Prior to School Zone Removal
33 rd Street West	Remove the existing pavement markings that show two through lanes in each direction on 33 rd Street West	Clarify proper street use	Yes
	Contact SGI to discuss the relocation of the Photo Speed Enforcement camera	Meet program requirements and driver expectations	No
33 rd Street West and Valens Drive / Faulkner Crescent	Rebuild the pedestrian ramp in the northeast corner to meet City of Saskatoon standards	Improve pedestrian accessibility	Yes
	Construct a pedestrian landing area in the southeast corner of the intersection	Improve pedestrian accessibility	Yes
33 rd Street West and Avenue L North	Construct curb extensions on the east leg of the intersection	Improve pedestrian safety	Yes
	Install standard parking restriction and pedestrian crosswalk signage	Improve pedestrian safety	Yes
	Relocate existing transit stop and bench approximately 45 m to the east	Improve pedestrian safety	No
33 rd Street West and Avenue K North	Install a pedestrian ramp on the northwest corner of the intersection	Improve pedestrian accessibility	Yes
	Trim the tree obstructing sight lines of the eastbound advanced pedestrian crossing warning sign	Improve visibility of sign	No
	Install standard parking restrictions in advance of the crosswalk	Improve pedestrian safety	Yes

Figure ES-1: Study Location



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Appendix D – Collision Data
Appendix E – Functional Plans
Appendix F – Stakeholder Meeting Minutes

1. Introduction

In November 2021, City Council approved the following changes around schools and playgrounds in Saskatoon:

1. New playground zones with reduced speed limits of 30 km/h;
2. Year-round lower speed limits in both school and playground zones seven days a week from 7:00 a.m. to 7:00 p.m.;
3. Adjustments to posted signs and length of current school zones to align with national guidance provided by the Transportation Association of Canada (TAC); and
4. Removal of lower speed school zones from high schools, designating them a “school area” where U-turns are still restricted.

At the regular business meeting on November 22nd 2021, City Council resolved in part:

“That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects”.

Prior to the implementation of the revised school zones in the summer of 2022, City Council requested safety reviews for pedestrian crossings at two locations where the school zones would be removed from arterial streets adjacent to elementary school sites. At its Regular Business Meeting on March 28, 2022, City Council resolved in part:

“That the Administration delay the removal of the school zones at École Henry Kelsey and St. Mary’s Community School until after the safety audits, including public engagement, are conducted and align speed zone hours at these locations in the meantime when overall speed zone implementation takes place.”

This report presents the findings and recommendations resulting from the pedestrian crossing safety review related to the removal of the École Henry Kelsey school zone located on 33rd Street West between Valens Drive / Faulkner Crescent and Avenue K North.

2. Existing Conditions

École Henry Kelsey is located on Valens Drive within the Hudson Bay Park neighbourhood. A 30 km/hr school zone is currently in place on 33rd Street West beginning 60 m west of Valens Drive / Faulkner Crescent and ending at the southern intersection of 33rd Street West and Avenue K North. The speed limit on 33rd Street West outside of the school zone is 50 km/hr.

33rd Street West is classified as a major arterial roadway and forms one of the major connections between the west side of Saskatoon and the downtown core. Through the study area, 33rd Street West has one travel lane and one parking lane in either direction. According to the City of Saskatoon 2021 Average Annual Daily Traffic (AADT) program, this section of 33rd Street West accommodates 9,700 vehicles per day.

There are three intersections that are located within the study area. Each of these intersections has been upgraded with a pedestrian crossing device to facilitate pedestrian movements across 33rd Street West. The existing pedestrian crossing devices are listed in Table 2-1 and the locations are shown in Figure 2-1.

Table 2-1: Pedestrian Crossing Devices

Intersection	Pedestrian Crossing Device
33 rd Street West and Valens Drive / Faulkner Crescent	Traffic signals
33 rd Street West and Avenue L North	Zebra crosswalk
33 rd Street West and Avenue K North	Active pedestrian corridor

Figure 2-1: Existing Pedestrian Crossing Devices



3. Methodology

The safety review of the pedestrian crossings included the following steps to determine what additional mitigation measures would be required to ensure the safety of people crossing 33rd Street West upon the removal of the 30 km/hr school zone:

1. Collection of relevant traffic, pedestrian, and safety data including:
 - Speed and traffic volume measurements,
 - Intersection turning movement counts,
 - Pedestrian counts,
 - Collision data, and
 - Site observations.
2. Analysis of possible mitigation measures using:
 - City of Saskatoon Policies, bylaws, and guidelines,
 - Transportation engineering design guidelines and technical documents, and
 - Professional engineering judgement.
3. Engagement with stakeholders to present the proposed recommendations and obtain feedback. Stakeholders include the following:
 - École Henry Kelsey Administration,
 - École Henry Kelsey School Community Council,
 - Saskatoon Public School Division, and
 - Hudson Bay Park | Mayfair | Kelsey Woodlawn Community Association.
4. Finalize recommendations with consideration to the feedback received from stakeholders.

4. Analysis

The following sections provide details on the data analysis and assessments for traffic volume and speed, traffic signal, pedestrian crossing devices, collision history and site observations.

4.1. Traffic Volume and Speed Assessments

A seven-day traffic volume and speed survey was conducted on 33rd Street West between Valens Drive / Faulkner Crescent and Avenue L North in September 2022. The AADT was estimated to be 9,032 vehicles per day, which is a 9% drop compared to the AADT of 9700 vehicles per day that was measured in 2021. Vehicle speeds were measured to determine the 85th percentile speed, which is the speed at which 85 percent of vehicles are travelling at or below. The results of the vehicle speed study are shown in Table 4-1.

Table 4-1: 85th Percentile Speeds on 33rd Street

Time Period	Eastbound (km/hr)	Westbound (km/hr)	Both Directions (km/hr)
School Hours 7:00 am – 7:00 pm	35	30	32
Non-School Hours 7:00 pm – 7:00 am	53	49	51
All Hours	45	40	43

The results of the speed survey show a significant difference between eastbound and westbound traffic. For both school hours and non-school hours, the 85th percentile speeds for westbound traffic was at or below the posted speed limit while the eastbound traffic was above the posted speed limit. A summary of the traffic volume, pedestrian volume, and speed study data can be found in **Appendix A**.

4.2. Traffic Signal Warrant Analysis

The need for traffic signals was assessed in adherence to the Transportation Association of Canada Traffic Signal and Pedestrian Signal Head Warrant Handbook. A warrant system assigns points for a variety of conditions including:

- number of traffic lanes,
- posted speed limit of the street,
- distance to the nearest traffic signal, and
- number of pedestrians and vehicles at the location.

Traffic signals are considered when the warrant analysis results in 100 points or higher for the intersection.

33rd St. W. Crossing Safety Review near École Henry Kelsey

Pedestrian and traffic data was collected between the hours of 6:00 am and 8:00 pm.

A summary of the traffic signal warrant analysis results is provided in Table 4-2. Details of the traffic signal warrant analysis are provided in **Appendix B**.

Table 4-2: Traffic Signal Warrant Analysis Results

Location	Traffic Signal Warrant Points	Results
33 rd Street West and Valens Drive / Faulkner Crescent	21	Not Warranted (Traffic signals currently installed)
33 rd Street West and Avenue L North	8	Not Warranted
33 rd Street West and Avenue K North	8	Not Warranted

4.3. Pedestrian Crossing Devices

Pedestrian assessments were conducted to determine the need for pedestrian crossing devices in adherence to the City of Saskatoon Council Policy C07-018 Traffic Control at Pedestrian Crossings.

Pedestrian crossing devices include:

- standard crosswalk,
- zebra crosswalk,
- rectangular rapid flashing beacon (ground mounted flashing lights),
- active pedestrian corridor (overhead flashing amber lights), and
- pedestrian actuated signals.

The City follows national guidance for locating pedestrian devices and selecting the type of pedestrian device using a treatment matrix which considers traffic volume, posted speed limit, and number of lanes for pedestrian crossing.

A summary of the pedestrian device warrant analysis is provided in Table 4-3 and details are provided in **Appendix C**.

33rd St. W. Crossing Safety Review near École Henry Kelsey

Table 4-3: Pedestrian Assessments

Location	Pedestrian Desire Confirmation	Results
33rd Street West and Valens Drive / Faulkner Crescent	Yes	RRFB (Existing Traffic signals to remain)
33rd Street West and Avenue L North	Yes	Unmarked crosswalk (Existing Zebra crosswalk to remain)
33rd Street West and Avenue K North	Yes	RRFB (Existing Active Pedestrian Corridor to remain)

4.4. Collision History

The most recently available five-year collision data (2017 to 2021) was provided by Saskatchewan Government Insurance (SGI). Key findings from the collision analysis are summarized below:

- There were 11 collisions throughout the entire corridor over the previous five years.
- 7 of the 11 collisions occurred at the intersection of 33rd Street and Valens Drive / Faulkner Crescent. Of those seven collisions, four were categorized as rear end collisions.
- Speed was identified as a contributing factor in one collision; however, the main contributing factor to that collision was an impaired driver.
- 2 of the 11 collisions resulted in minor injuries and the remaining 10 collisions resulted in property damage only.
- No collisions within the last five years involved vulnerable road users such as pedestrians or cyclists.

Details of the collision analysis are provided **Appendix D**.

4.5. Site Observations

A site visit was conducted to identify any issues with signage, traffic operations, or the condition of the roadway. Figure 4-1 and Table 4-4 show each of the issues that were identified during the site visit.

Figure 4-1: Site Observations - Locations

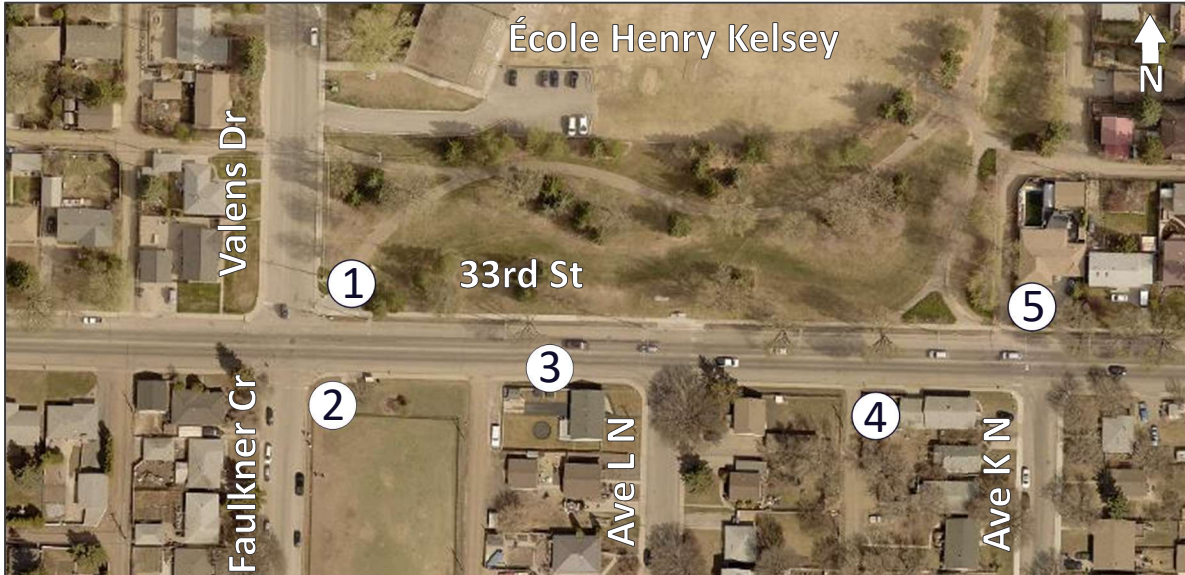


Table 4-4: Site Observations - Descriptions

Location	Type	Description
1	Sidewalks	Missing texturing on pedestrian ramp.
2	Sidewalks	Substandard pedestrian landing area.
3	Pavement Markings	Old in-laid pavement markings show two through lanes.
4	Signage	Tree is obstructing view of advanced pedestrian crossing warning sign.
5	Sidewalks	Missing pedestrian ramp on the north side of 33 rd Street West.

5. Recommendations

The primary purpose of this report is to identify any mitigation measures that would be required to ensure the safety of pedestrians upon the removal of the 30 km/hr school zone on 33rd Street West between Valens Drive / Faulkner Crescent and Avenue K North.

The existing pedestrian crossing devices at the intersections with Valens Drive / Faulkner Crescent, Avenue L North, and Avenue K North all provide a higher level of safety than the devices recommended by TAC for a 50 km/hr speed limit on this corridor. No changes to the pedestrian crossing devices are recommended; however, curb extensions at the 33rd Street West and Avenue L North intersection are recommended to maintain compliance with a 50 km/hr speed limit and to enforce the single travel lane and parking lane configuration. Additionally, the analysis identified infrastructure and signage deficiencies that should be addressed prior to the removal of the 30 km/hr school zone. Plans of the recommended improvements can be found in **Appendix E**.

Table 5-1 summarizes each of the recommended improvements. The recommendations shall be added to the Neighbourhood Traffic Management Plan and be installed as funding allows. The school zone on 33rd Street West will be removed once the marked recommendations in Table 5-1 have been completed.

33rd St. W. Crossing Safety Review near École Henry Kelsey

Table 5-1: Recommended Improvements

Location	Recommendation	Justification	Required Prior to School Zone Removal
33 rd Street West	Remove the existing pavement markings that show two through lanes in each direction on 33 rd Street West	Clarify proper street use	Yes
	Contact SGI to discuss the relocation of the Photo Speed Enforcement camera	Meet program requirements and driver expectations	No
33 rd Street West and Valens Drive / Faulkner Crescent	Rebuild the pedestrian ramp in the northeast corner to meet City of Saskatoon standards	Improve pedestrian accessibility	Yes
	Construct a pedestrian landing area in the southeast corner of the intersection	Improve pedestrian accessibility	Yes
33 rd Street West and Avenue L North	Construct curb extensions on the east leg of the intersection	Improve pedestrian safety	Yes
	Install standard parking restriction and pedestrian crosswalk signage	Improve pedestrian safety	Yes
	Relocate existing transit stop and bench approximately 45 m to the east	Improve pedestrian safety	No
33 rd Street West and Avenue K North	Install a pedestrian ramp on the northwest corner of the intersection	Improve pedestrian accessibility	Yes
	Trim the tree obstructing sight lines of the eastbound advanced pedestrian crossing warning sign	Improve visibility of sign	No
	Install standard parking restrictions in advance of the crosswalk	Improve pedestrian safety	Yes

6. Engagement

The recommended improvements were presented to stakeholders in meetings that were held in November and December 2022. Meetings included representatives from the following:

- École Henry Kelsey Administration,
- École Henry Kelsey School Community Council,
- Saskatoon Public School Division, and
- Hudson Bay Park | Mayfair | Kelsey Woodlawn Community Association.

A summary of the meeting outcomes is as follows:

- Stakeholders were generally supportive of the recommendations.
- Stakeholders would like to see recommendations implemented prior to removal of the school zone.
- The École Henry Kelsey Administration would like the 30 km/hr school zone to remain on 33rd Street West.
- Two members of the public contacted City Administration to indicate their opposition to the removal of the 30 km/hr school zone on 33rd Street West.

The meeting minutes, presentation, and public feedback are provided in **Appendix F**.

7. Cost Estimate

The recommendations involving sidewalk and roadway improvements will be completed through a planned roadway and sidewalk preservation project on 33rd Street West between Avenue H North and Avenue P North that is currently scheduled for summer 2023. The parking restriction and crosswalk signs will be implemented once the construction of the curb extensions and ramps is complete.

City staff will arrange the required signage changes on 33rd Street and Valens Drive following the presentation of this report to the Standing Policy Committee on Transportation. The tree trimming will be completed as part of regular maintenance work through the tree trimming program.

The estimated costs of the recommendations are outlined in Table 7-1.

Table 7-1: Cost Estimates

Location	Recommendation	Cost Estimate
33 rd Street West	Remove pavement markings	\$0
	Contact SGI	\$0
33 rd Street West and Avenue K North	Install pedestrian ramp	\$3,500
	Tree Trimming	\$0
	Install parking restriction signage	\$750
33 rd Street West and Avenue L North	Construct curb extensions	\$90,000
	Install parking restriction and crosswalk signage	\$1,500
	Relocate transit stop	\$10,000
33 rd Street West and Valens Drive / Faulkner Crescent	Rebuild pedestrian ramp	\$3,500
	Construct pedestrian landing	\$1,000
Total		\$110,250

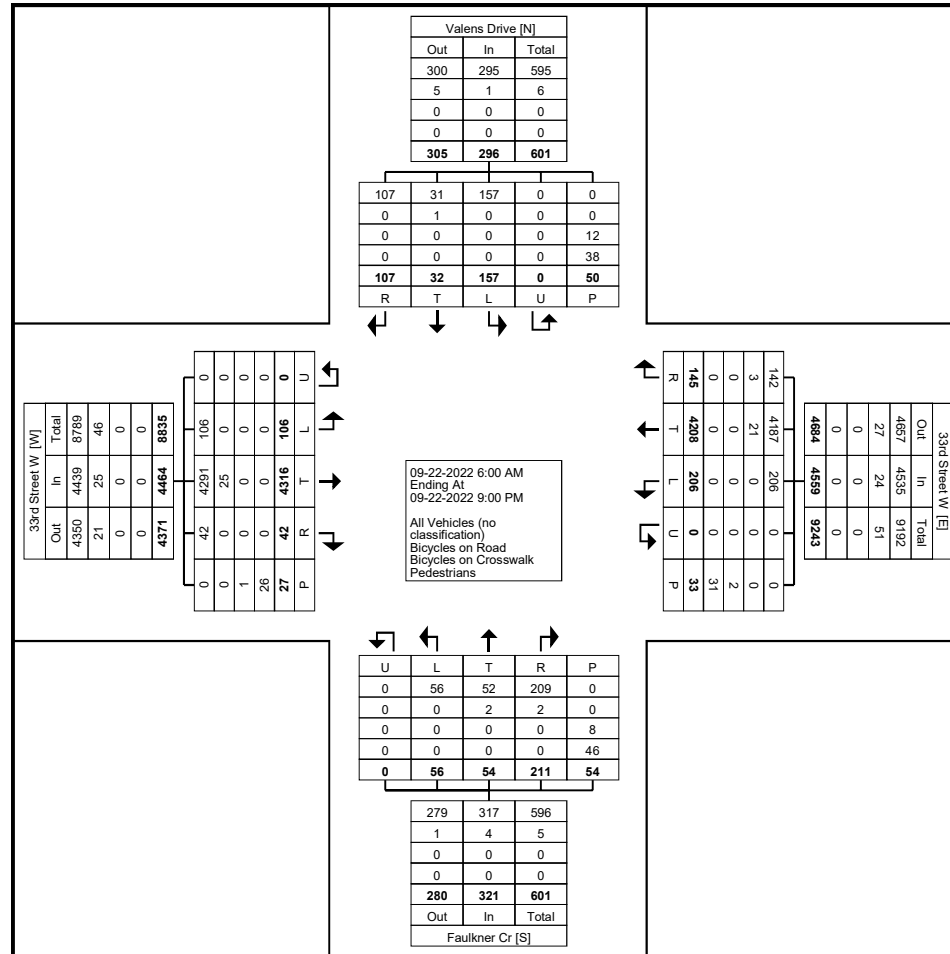
Appendix A

Data Summary

City of Saskatoon
222 3rd Ave. North

Saskatoon, Saskatchewan, Canada S7K 0J5
(306) 975-2454 Virginia.Matt@saskatoon.ca

Count Name: 33rd Street W and Valens Dr /
Faulkner Cr
Site Code:
Start Date: 09-22-2022
Page No: 4

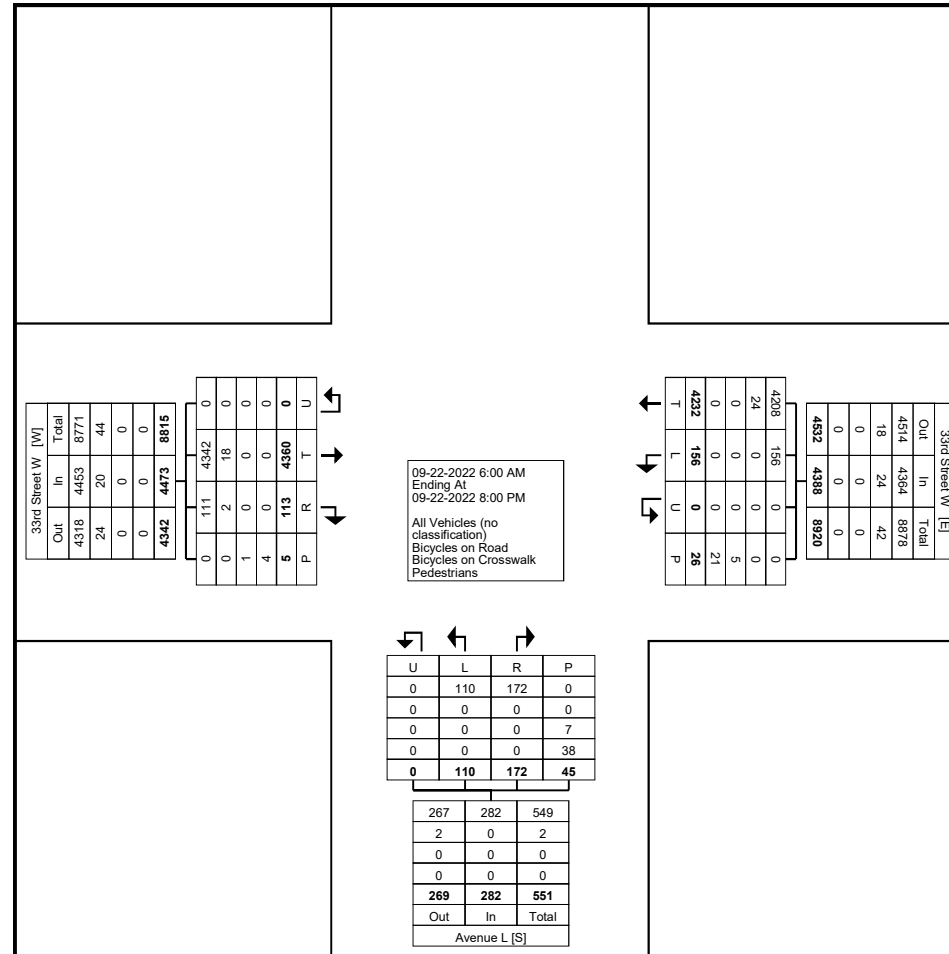


Turning Movement Data Plot

City of Saskatoon
222 3rd Ave. North

Saskatoon, Saskatchewan, Canada S7K 0J5
(306) 975-2454 Virginia.Matt@saskatoon.ca

Count Name: Ave L and 33rd Street
Site Code:
Start Date: 09-22-2022
Page No: 3

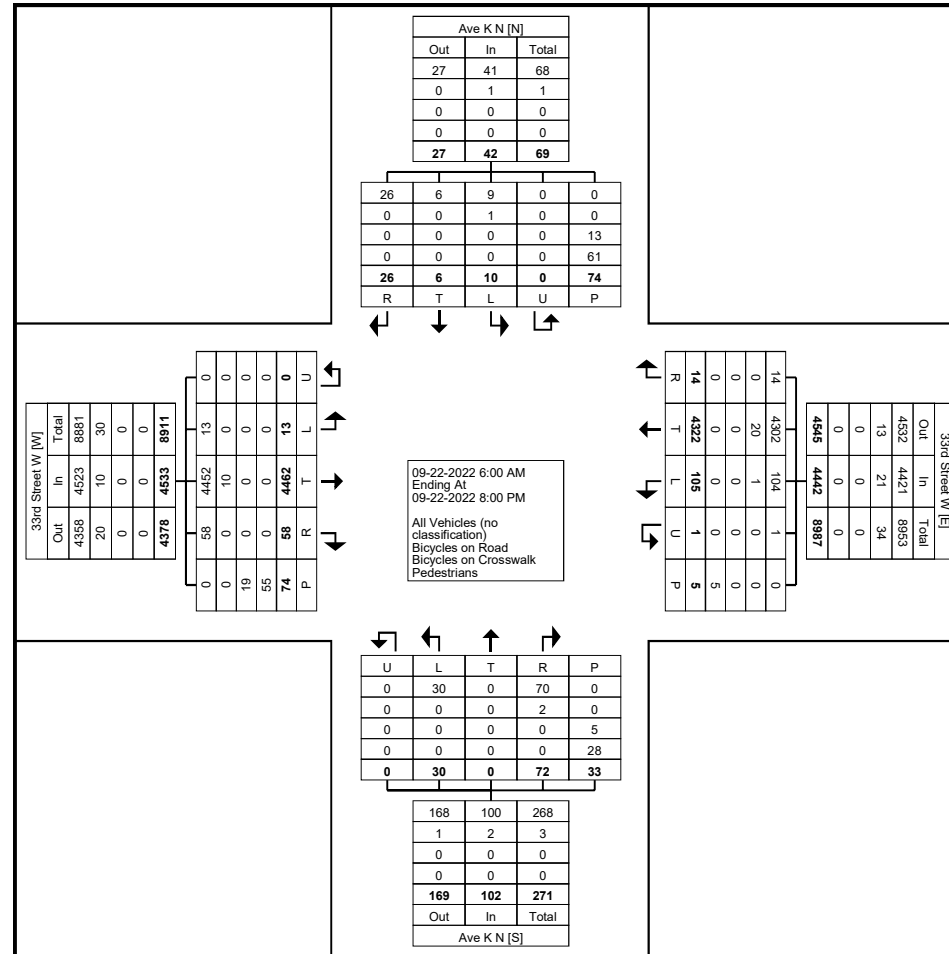


Turning Movement Data Plot

City of Saskatoon
222 3rd Ave. North

Saskatoon, Saskatchewan, Canada S7K 0J5
(306) 975-2454 Virginia.Matt@saskatoon.ca

Count Name: 33rd Street W and Ave K N
Site Code:
Start Date: 09-22-2022
Page No: 3



Turning Movement Data Plot

Location	33rd St West - Ave L North to Valens Drive
Start Date	20-Sep-22
End Date	28-Sep-22

Speed Study Results - Non-School Hours
(7:00 pm - 7:00 am)

Direction	85th Percentile Speeds
Eastbound	53.2 km/hr
Westbound	48.7 km/hr
Both Directions	51.4 km/hr

Speed Study Results - School Hours
(7:00 am - 7:00 pm)

Direction	85th Percentile Speeds
Eastbound	34.7 km/hr
Westbound	29.9 km/hr
Both Directions	32.2 km/hr

Appendix B

Traffic Signal Warrants

City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	33rd St	Direction (EW or NS)	EW
Side Street (name)	Faulkner Cr	Direction (EW or NS)	NS
Quadrant / Int #	#####	Comments	JP
for Warrant Calculation Results, please hit 'Page Down'			
CHECK SHEET			

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 05, Wed
Count Date:	2022 Sep 22, Thu
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
33rd St	WB				1			510	1
33rd St	EB				1			360	1
Faulkner Cr	NB				1				
Faulkner Cr	SB				1				

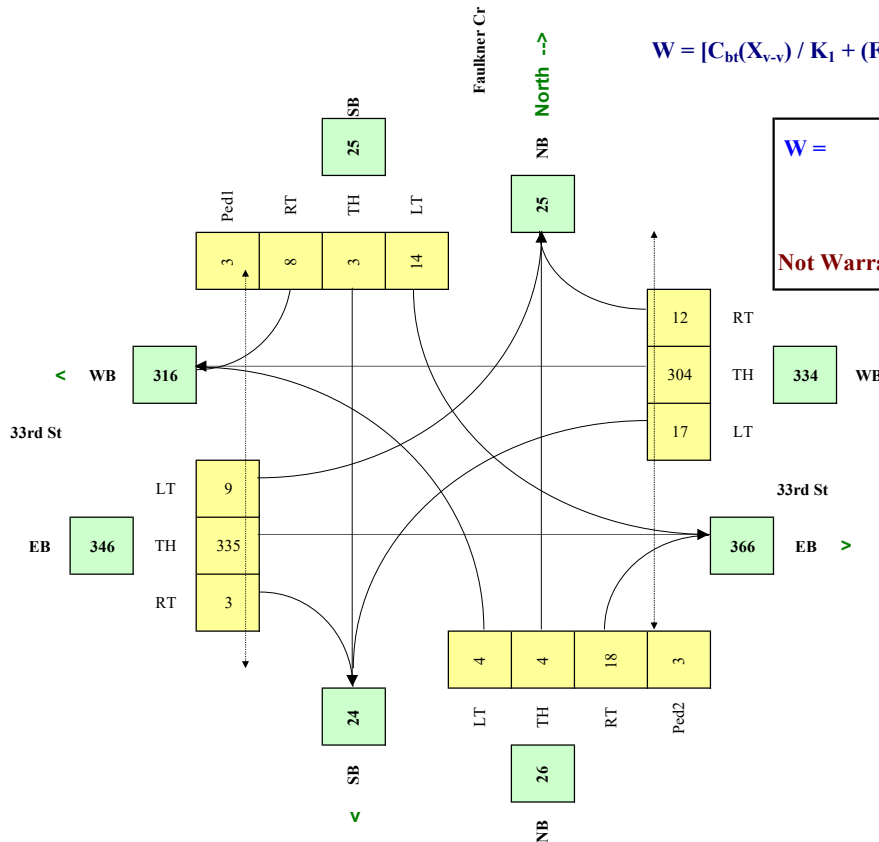
Are the Faulkner Cr NB right turns significantly impeded by through movements? (y/n) **n**
 Are the Faulkner Cr SB right turns significantly impeded by through movements? (y/n) **n**

Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	y
Metro Area Population	(#)	266,100
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
33rd St	EW	50	2.0%	y	0.0
Faulkner Cr	NS		2.0%	y	

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	2	3	21	21	4	9	8	149	5	11	407	1	0	2	2	2
8:00 - 9:00	2	8	15	18	7	17	18	195	20	26	382	4	5	7	3	6
11:30 - 12:30	2	2	13	10	3	6	13	255	6	1	279	4	1	1	1	3
12:30 - 13:30	7	3	18	7	0	3	11	268	12	6	284	3	6	5	8	3
16:00 - 17:00	5	5	21	8	2	4	28	510	11	3	323	3	4	3	5	8
17:00 - 18:00	5	5	20	18	2	9	25	449	18	4	332	5	0	2	7	5
Total (6-hour peak)	23	26	108	82	18	48	103	1,826	72	51	2,007	20	16	20	26	27
Average (6-hour peak)	4	4	18	14	3	8	17	304	12	9	335	3	3	3	4	5

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p})L) / K_2] \times C_i$$

W =	21	16	5
		Veh	Ped

Not Warranted - Vs < 75

RESET SHEET

City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	33rd St	Direction (EW or NS)	EW
Side Street (name)	Ave L N	Direction (EW or NS)	NS
Quadrant / Int #	#####	Comments	JP
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET		

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 05, Wed
Count Date:	2022 Sep 22, Thu
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
33rd St WB			1					300	1
33rd St EB						1		100	1
Ave L N NB					1				
Ave L N SB									

Are the Ave L N NB right turns significantly impeded by through movements? (y/n)

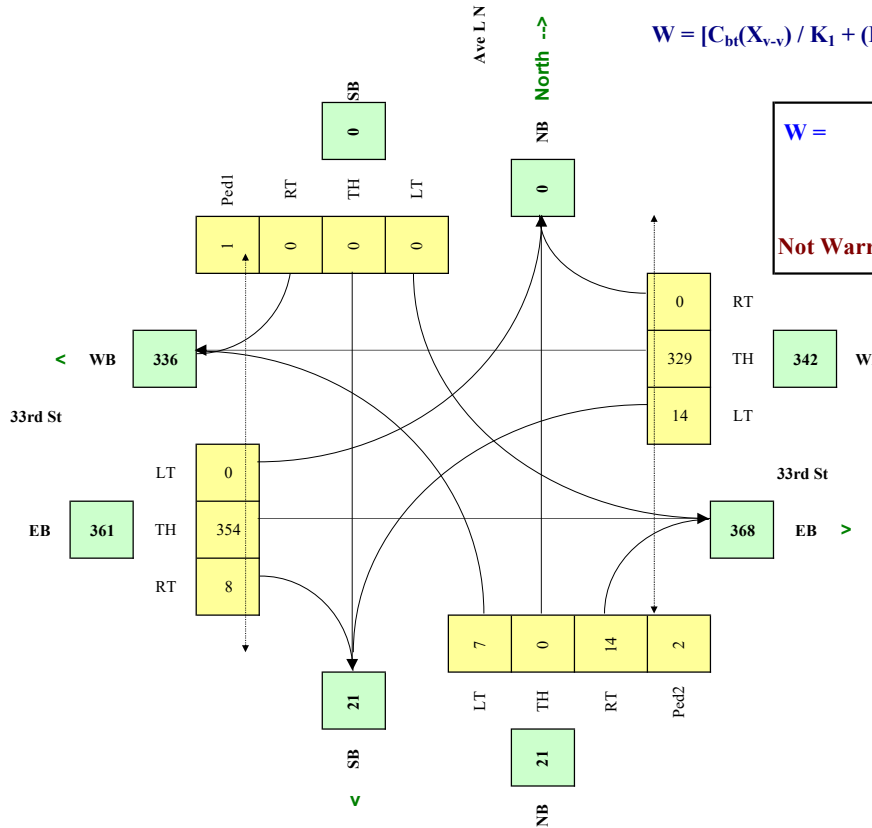
	n
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Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	y
Metro Area Population	(#)	266,100
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
33rd St	EW	50	2.0%	y	0.0
Ave L N	NS		2.0%	y	

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
	7:00 - 8:00	5	0	19	0	0	0	7	157	0	0	444	4	0	0	0
8:00 - 9:00	12	0	15	0	0	0	14	228	0	0	401	4	1	5	0	3
11:30 - 12:30	6	0	12	0	0	0	9	263	0	0	287	7	0	0	0	4
12:30 - 13:30	1	0	10	0	0	0	10	299	0	0	288	6	2	0	0	3
16:00 - 17:00	9	0	18	0	0	0	24	538	0	0	349	7	0	3	0	5
17:00 - 18:00	10	0	10	0	0	0	17	486	0	0	353	17	0	5	0	5
Total (6-hour peak)	43	0	84	0	0	0	81	1,971	0	0	2,122	45	3	13	0	20
Average (6-hour peak)	7	0	14	0	0	0	14	329	0	0	354	8	1	2	0	3

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p})L) / K_2] \times C_i$$

W =	8	6	2
		Veh	Ped

Not Warranted - Vs < 75

RESET SHEET

City of Saskatoon Canadian Matrix Traffic Signal Warrant Analysis

Main Street (name)	33rd Street	Direction (EW or NS)	EW
Side Street (name)	Ave K N (South Leg)	Direction (EW or NS)	NS
Quadrant / Int #	#####	Comments	JP
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET		

Road Authority:	City of Saskatoon
City:	Saskatoon
Analysis Date:	2022 Oct 05, Wed
Count Date:	2022 Sep 22, Thu
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
33rd Street	WB		1					310	1
33rd Street	EB					1		186	1
Ave K N (South Leg)	NB				1				
Ave K N (South Leg)	SB								

Are the Ave K N (South Leg) NB right turns significantly impeded by through movements? (y/n)

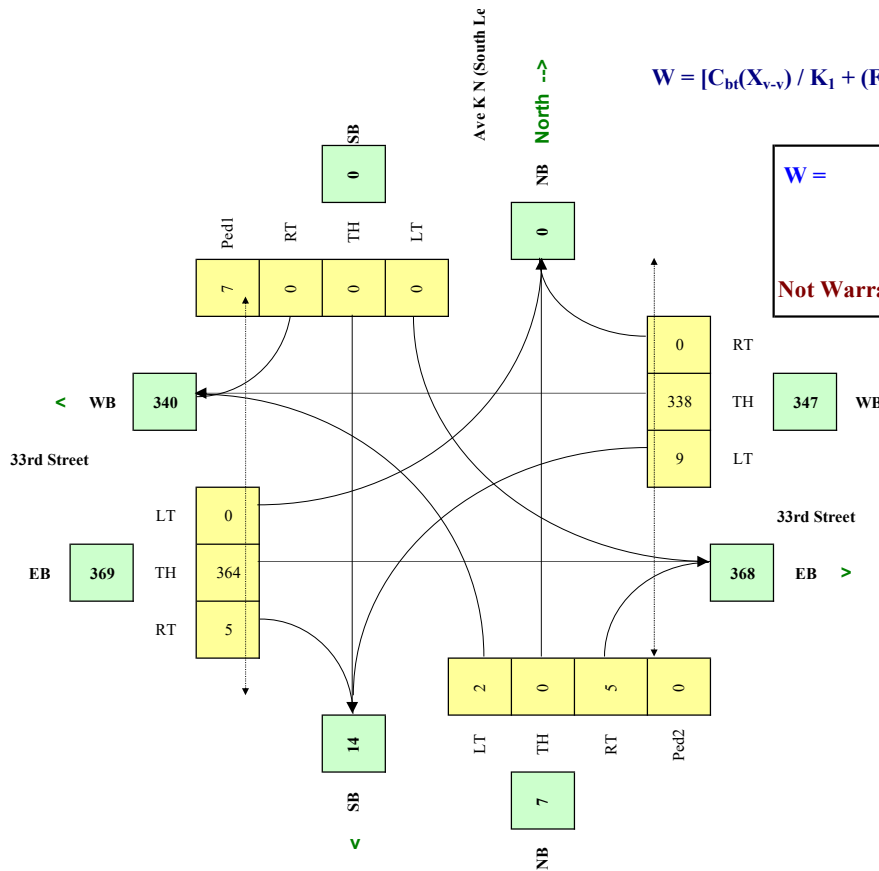
	n
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Demographics		
Elem. School/Mobility Challenged	(y/n)	y
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	y
Metro Area Population	(#)	266,100
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
33rd Street	EW	50	2.0%	y	0.0
Ave K N (South Leg)	NS		2.0%	y	

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
	7:00 - 8:00	1	0	5	0	0	0	3	163	0	0	450	4	3	0	0
8:00 - 9:00	1	0	5	0	0	0	4	232	0	0	410	4	9	0	0	1
11:30 - 12:30	3	0	3	0	0	0	12	277	0	0	298	4	4	0	0	5
12:30 - 13:30	1	0	4	0	0	0	10	309	0	0	316	7	4	0	0	1
16:00 - 17:00	3	0	8	0	0	0	15	545	0	0	361	3	11	1	0	4
17:00 - 18:00	5	0	2	0	0	0	9	502	0	0	348	9	8	0	0	2
Total (6-hour peak)	14	0	27	0	0	0	53	2,028	0	0	2,183	31	39	1	0	14
Average (6-hour peak)	2	0	5	0	0	0	9	338	0	0	364	5	7	0	0	2

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p})L) / K_2] \times C_i$$

W =	8	3	5
		Veh	Ped

Not Warranted - Vs < 75

RESET SHEET

Appendix C

Pedestrian Warrants

33rd Street West & Valens Drive / Faulkner Crescent – East Side of Intersection

Preliminary Assessment Decision Point		Pedestrian Crossing
Traffic Signal Warrant	Points	18
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume ≥ 15 EAU ¹ s AND vehicular volume ≥ 1,500 veh/day?	Average Hourly Pedestrian Volume	3
	Vehicular Volume	9,600 vehicles per day
	Answer (Y/N)	N
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	>200m (Traffic signals at Avenue P North)
	Answer (Y/N)	Y
Is average hourly latent pedestrian crossing demand ≥ 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	N
	Required connection?	Connection to Ecole Henry Kelsey, transit stop, and parks
	Answer (Y/N)	Y
Treatment Selection	Table 1 in Pedestrian Crossing Guide	RRFB (Traffic Signals Currently Installed)

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children ≤ 12 years – 2.0 EAUs; Older pedestrians ≥ 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

33rd Street & Avenue L North – East Side of Intersection

Preliminary Assessment Decision Point	Pedestrian Crossing	
Traffic Signal Warrant	Points	7
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume ≥ 15 EAU ¹ 's AND vehicular volume ≥ 1,500 veh/day?	Average Hourly Pedestrian Volume	9
	Vehicular Volume	8200 vehicles per day
	Answer (Y/N)	N
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	95m (Traffic signals at Valens Dr / Faulkner Cr)
	Answer (Y/N)	N
Is average hourly latent pedestrian crossing demand ≥ 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	Y
	Required connection?	Connection to Ecole Henry Kelsey and transit stop, and parks
	Answer (Y/N)	Y
Treatment Selection	Table 1 in Pedestrian Crossing Guide	Unmarked Crosswalk (Currently Zebra Crosswalk Installed)

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children ≤ 12 years – 2.0 EAUs; Older pedestrians ≥ 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

33rd Street & Ave K North (South Leg) – West Side of Intersection

Preliminary Assessment Decision Point	Pedestrian Crossing	
Traffic Signal Warrant	Points	8
	Warranted (Y/N)	N
Average Hourly Pedestrian Volume ≥ 15 EAU ¹ s AND vehicular volume ≥ 1,500 veh/day?	Average Hourly Pedestrian Volume	21
	Vehicular Volume	9,800 vehicles per day
	Answer (Y/N)	Y
Is this site > 200 metres from the nearest traffic control device?	Distance from the nearest traffic control device	>200m (Traffic signals at Valens Dr / Faulkner Cr)
	Answer (Y/N)	Y
Is average hourly latent pedestrian crossing demand ≥ 15 EAUs OR is there requirement for system connectivity?	Latent pedestrian crossing demand	Y
	Required connection?	Connection to Ecole Henry Kelsey and transit stop, and parks
	Answer (Y/N)	Y
Treatment Selection	Table 1 in Pedestrian Crossing Guide	RRFB (Special Crosswalk Currently Installed)

¹ EAU – Equivalent Adult Units to account for pedestrian age and physical ability. Adults – 1.0 EAU; Children ≤ 12 years – 2.0 EAUs; Older pedestrians ≥ 65 years – 1.5 EAUs; Pedestrian with impairment – 2.0 EAUs.

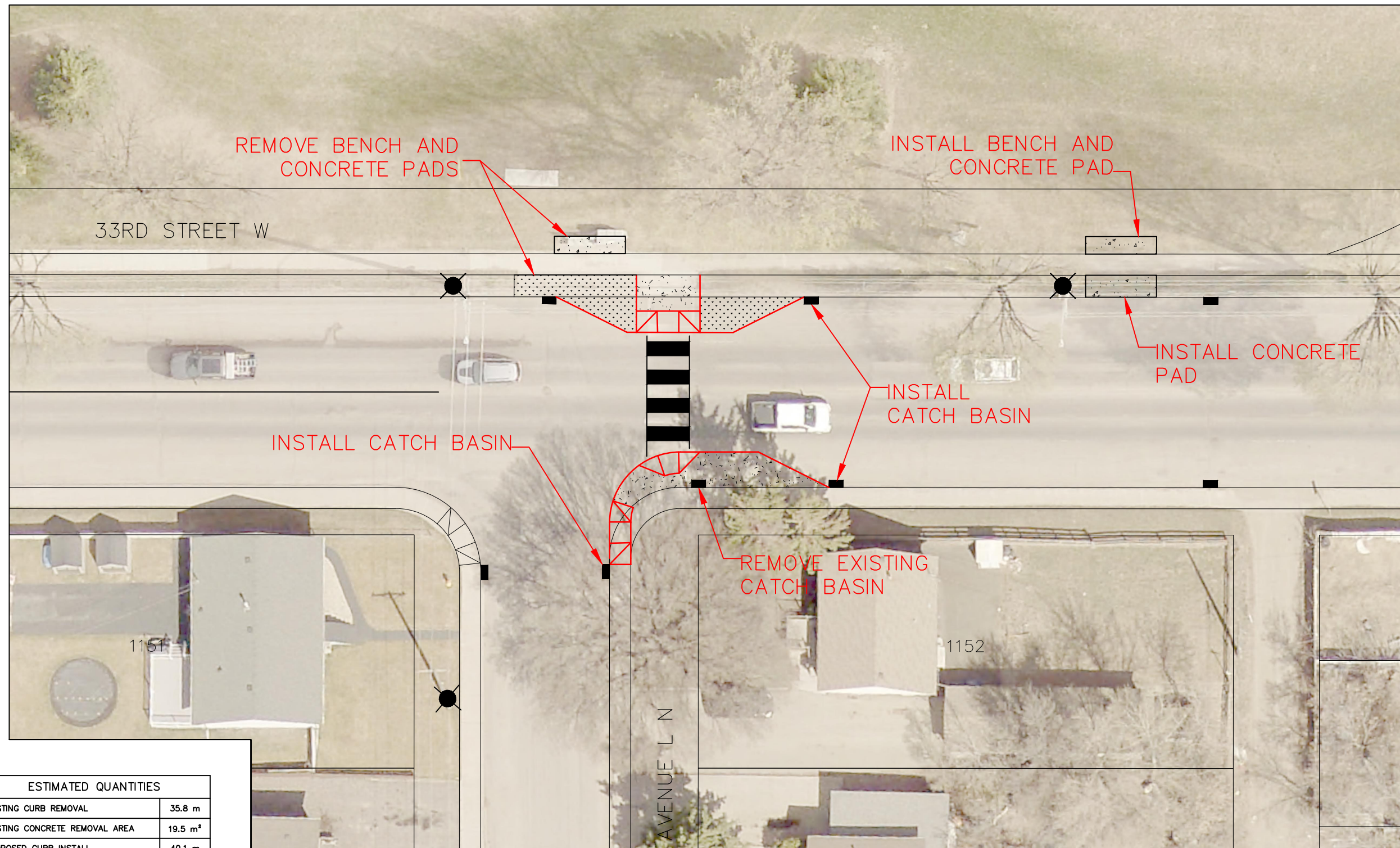
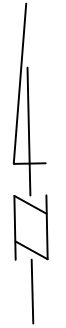
Appendix D

Collision Data

Location	Configuration					
	Rear End	Lost Control	Side Swipe	Fixed / Moveable Object	Right Turn	Total
Valens Drive / Faulkner Cr	4	1	0	1	1	7
Between Valens Dr / Faulkner Cr and Ave L North	0	0	1	0	0	1
Ave L North	1	0	0	0	0	1
Between Ave L North and Ave K North	1	1	0	0	0	2
Ave K North	0	0	0	0	0	0
					Total	11

Appendix E

Functional Plans



LEGEND

	STORM MANHOLE
	CATCH BASIN
	WATER VALVE
	FIRE HYDRANT
	SANITARY MANHOLE
	TREE
	POLE
	CONCRETE
	GRASS

ESTIMATED QUANTITIES

EXISTING CURB REMOVAL	35.8 m
EXISTING CONCRETE REMOVAL AREA	19.5 m ²
PROPOSED CURB INSTALL	40.1 m
PROPOSED CONCRETE AREA	51.2 m ²
PROPOSED RAMP AREA	17.3 m ²
PROPOSED GRASS AREA	33.4 m ²

NOT FOR CONSTRUCTION

PLAN DESCRIPTION/REVISION	DATE	BY	SEAL

CHECKED BY:	CHECKED BY:
DATE	DATE
DRAWN BY: XXX	DATE: 20XX-XX-XX



TRAFFIC CALMING
 AVENUE L AND 33RD STREET

ENGINEER	
SCALES: 1:1000	DATE
HOR: 1:1000	
VERT:	
SHEET NO.	PLAN NO.
	Appendix E

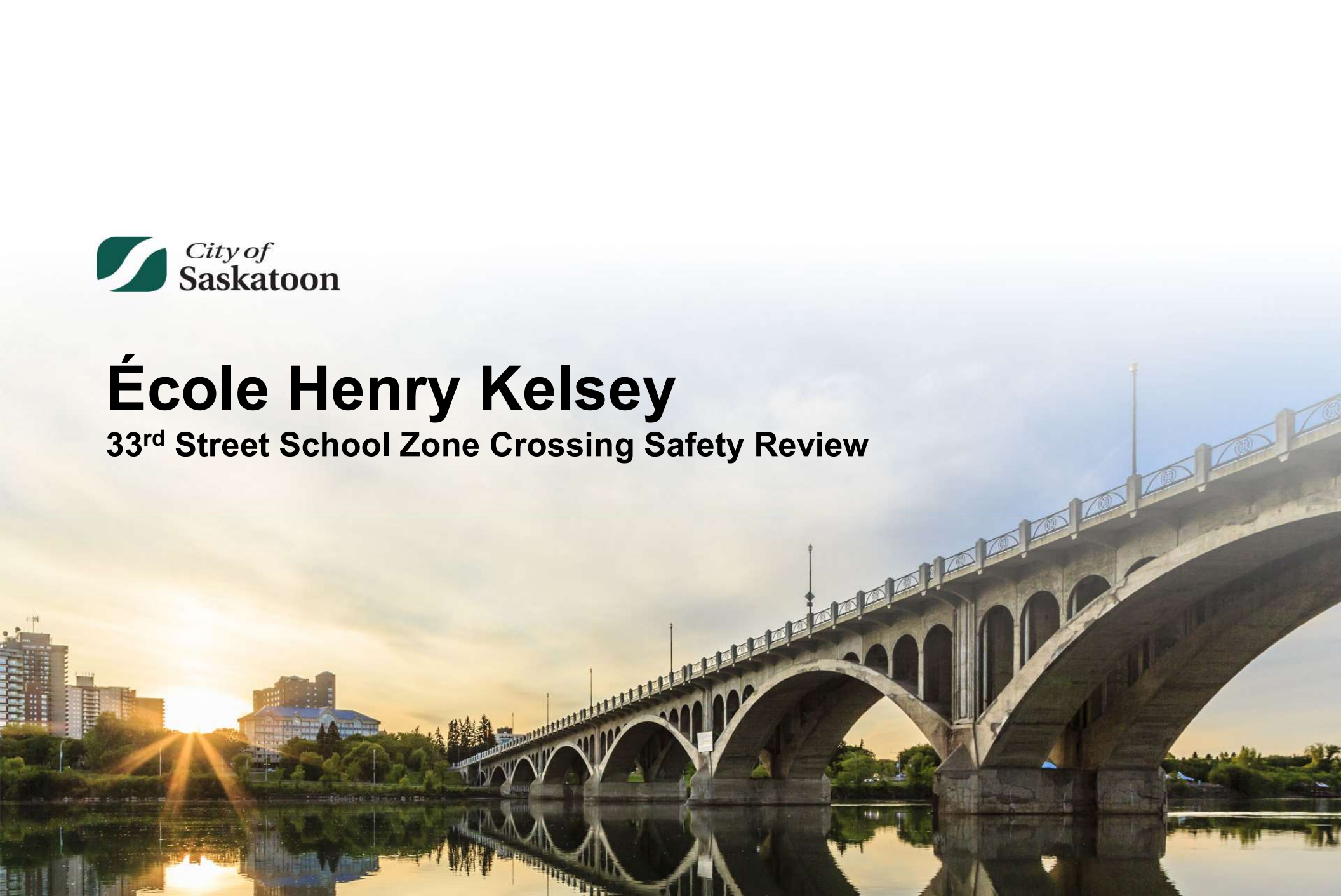
Appendix F

Stakeholder Meeting Notes and Material



École Henry Kelsey

33rd Street School Zone Crossing Safety Review



Background

Residential Speed Limit Review

- Approved by Council in November 2021
- 30 km/hr school zones
- Adjust school zones to align with TAC guidelines

“That following implementation, the Administration conduct a crossing safety review in each area where school speed zones will be removed from arterial roads near elementary schools and that the resulting recommendations be prioritization alongside Neighbourhood Traffic Review implementation projects”.

Regular Business Meeting of City Council – November 21st 2021

Crossing Safety Review

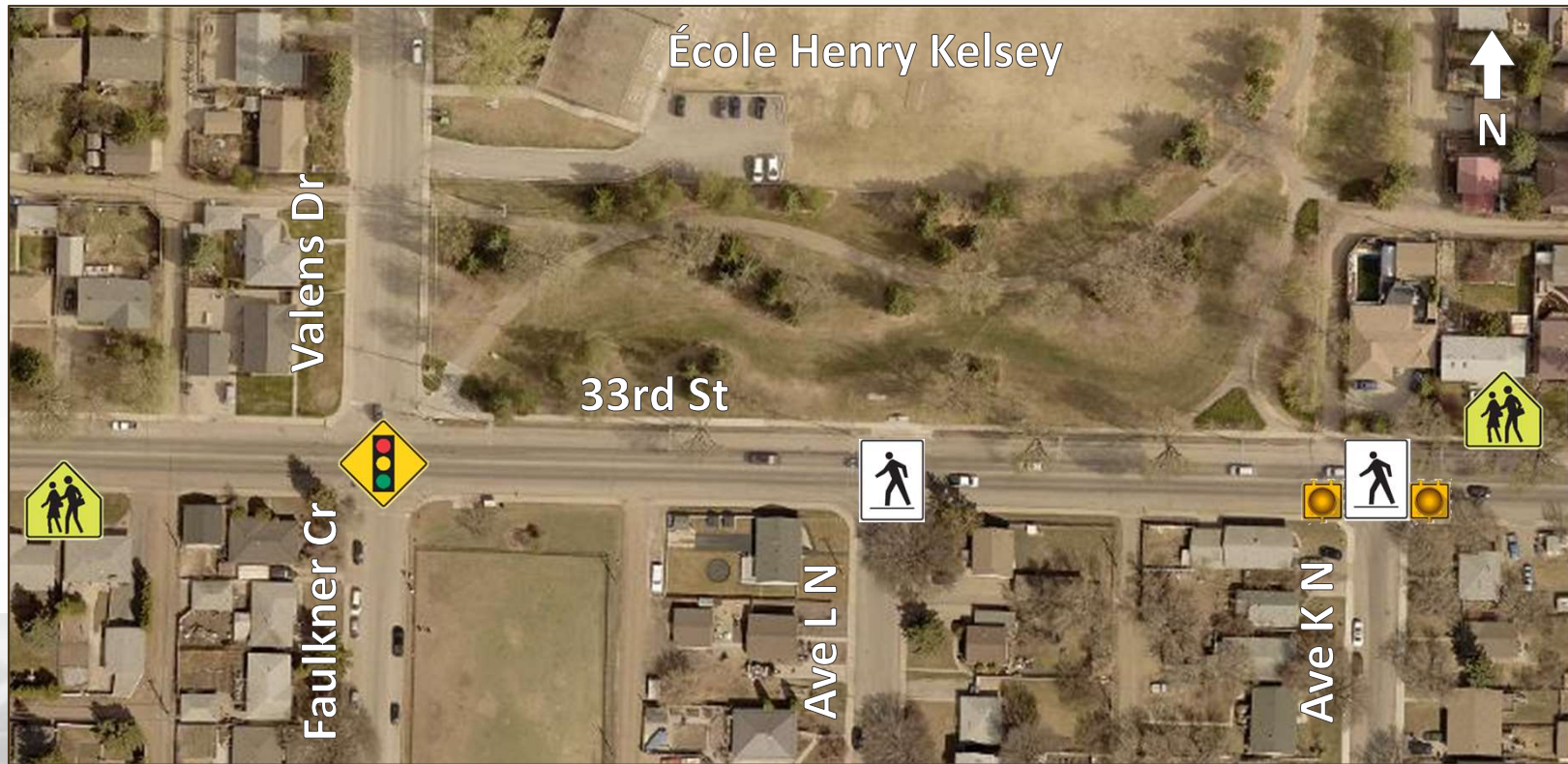
1. Data Collection

- Vehicle Speeds
- Traffic Volumes
- Pedestrian Volumes
- Site Observations
- Collision History

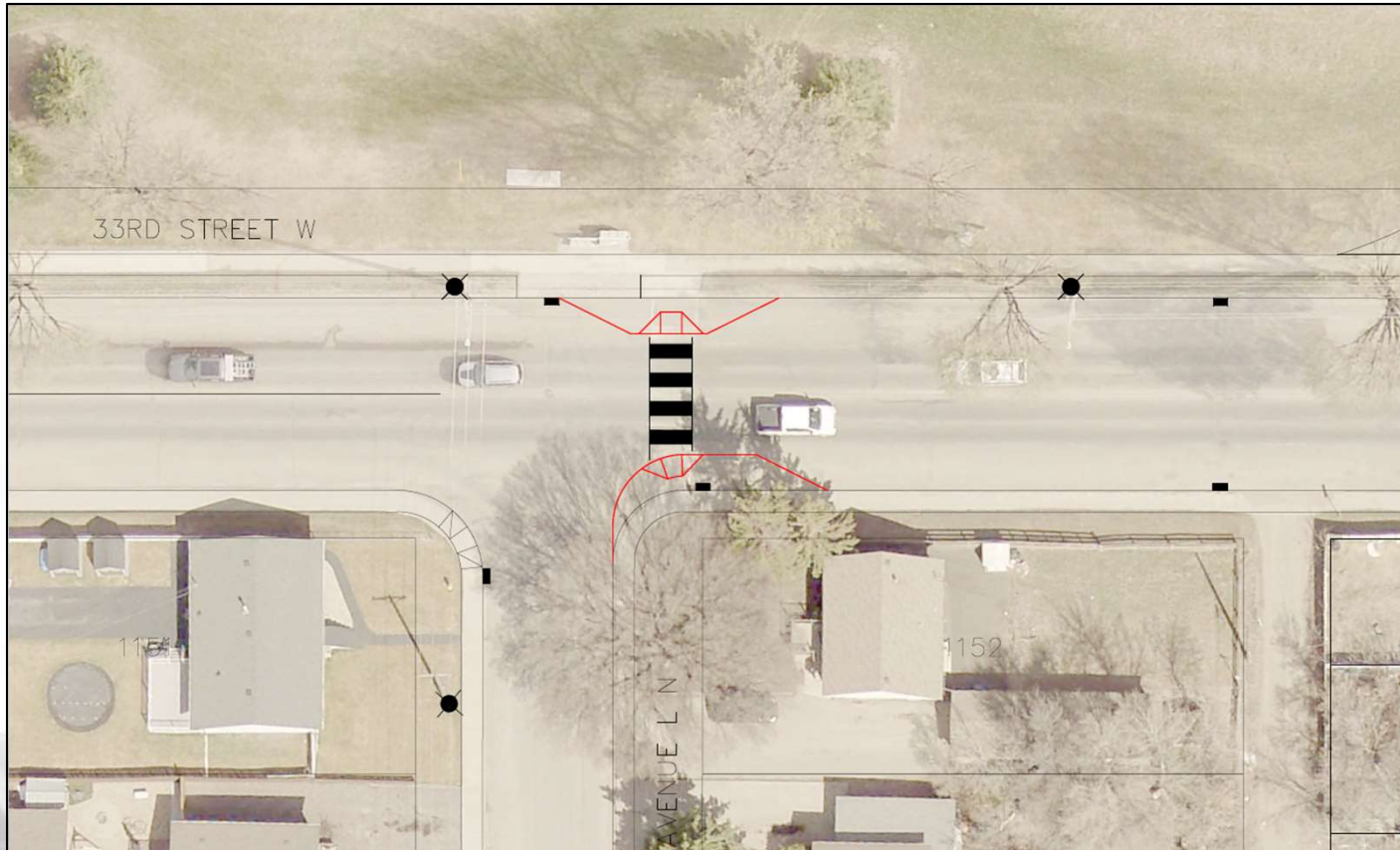
2. Analysis

- Traffic Calming
- Pedestrian Crossing Devices
- Traffic Control
- Signage & Pavement Markings
- Sidewalk Improvements

Study Limits



RECOMMENDATIONS



Next Steps

- Finalize technical report
- Gather community feedback
 - Send comments to Julian.Petras@Saskatoon.ca
- Present recommendations to the Standing Policy Committee on Transportation (SPCT)
 - Targeting the Feb 7th SPCT meeting
 - Comments can also be submitted directly to SPCT

Hudson Bay Park, Mayfair, Kelsey-Woodlawn (HBPMKW) Community Association Meeting

Tuesday, November 29, 2022, Zoom Meeting

In Attendance:

Julian Petras, Transportation Engineer, City of Saskatoon
Nathalie Baudais, Sr. Transportation Engineer, City of Saskatoon
Amanda Lindgren, Public Engagement Consultant, City of Saskatoon
Members of the HBPMKW Community Association

École Henry Kelsey School Zone Safety Review

The Community Association welcomed members of the City of Saskatoon Transportation team to present findings from the safety review for the pedestrian crossings on 33rd Street near École Henry Kelsey.

Julian Petras presented the background for the safety review. The review was prompted by City Council and the approved changes to school zones to align with the Transportation Association of Canada, including the removal of the school zone currently on 33rd Street from Valens Drive to Avenue K North.

The school zone on 33rd Street is more than 50 m away from the school site and does not front the school. Best practice for school zones focus on the frontage of the school site, and discourage school zones on walk to school routes, arterial roadways, and when the school is located more than 50 m away.

Data collection for the safety review included traffic volumes, vehicle speeds, collision history, pedestrian volumes, and site observations.

Recommended measures based on the review include:

33rd Street and Avenue K

- Fix pedestrian ramp on northwest corner
- Install parking restrictions
- No changes to the existing Active Pedestrian Corridor crossing device
- Correct pavement markings (one travel lane and one parking lane in each direction)

33rd Street and Avenue L

- Install curb extensions on east leg
- Adjust signage and install parking restrictions
- Relocate transit stop and bench
- Work with SGI to remove photo enforcement camera

33rd Street and Valens Drive

- Fix pedestrian ramp and landing area on southeast corner
- Install ramp texturing

- Existing signals provide the highest level of pedestrian protection

Question: Expression of support for curb extensions on 33rd Street, though the extensions sometimes push cyclists into the traffic lane. Is there a way to design these so that bikes can go up and over them?

Answer: Some cities have explored curb extensions with a ramp design for cyclists. Currently that is not part of our design standard in Saskatoon. Providing ramps onto the curb extension could create conflicts between cyclists and pedestrians. Another concern is ensuring that the ramp design is clear for people with low-vision or other accessibility needs. Ideally, cyclists are meant to travel in the traffic lane rather than the parking lane.

Question: Has there been coordination with the Saskatoon Police Service (SPS) about speeding on 33rd Street, especially following the tragic accident with Baeleigh?

Answer: The City and SPS have been working on reviewing traffic improvements on 33rd near the location of that collision. This study collected speeds for the section of 33rd Street between Valens Drive and Avenue K North. The 85th percentile speed of drivers was approximately 2 to 3 km under the speed limit in the westbound direction, and 2 to 3 km above the speed limit in the eastbound direction.

Question: Does the corner of Avenue K and 33rd Street have an accessible crossing?

Answer: Yes, this has been upgraded with a ramp in recent years.

Question: The intersection near the dog park sees a lot of pedestrian traffic and there are no sidewalks on that side of the street. This is an issue for mobility and safety, especially with the build up of snow along the fence.

Answer: This would fall under the City's Sidewalk Infill Program. Locations for sidewalk infill are prioritized based on a set of criteria that include risk reduction and pedestrian potential. There are additional points assigned for pedestrian desire based on resident requests or a visible 'desire line' where people have been walking. These locations can be added to the resident requests for sidewalks.

Comment: 38th Street between Avenue I and Idylwyld Drive has significant pedestrian desire.

Response: We will ensure that the pedestrian desire points have been added to Faulkner Crescent (between 33rd Street West and McMillan Avenue back lane) and 38th Street West from Avenue I North to Idylwyld Drive.

Question: Question clarifying whether 33rd Street is meant to be four traffic lanes versus two lanes once the pavement markings have been corrected?

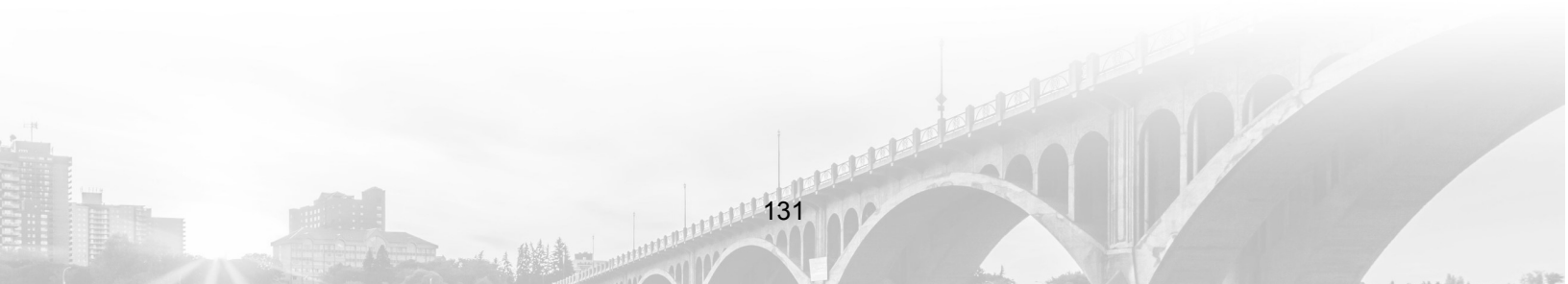
Answer: 33rd Street is two traffic lanes (one in each direction) on this section of street. It returns to four lanes of traffic west of Avenue P.

It was noted that the curb extensions will also narrow the parking lane and encourage drivers to slow down as there are many pedestrians crossing this section of 33rd Street.

Comment: The curb extensions will prevent westbound drivers from passing on the right if someone is turning left onto Avenue L from 33rd Street.

Next Steps

Julian noted the results of this review and engagement will be presented to the Standing Policy Committee on Transportation in early 2023. Additional feedback on the review and recommendations can be sent directly to Julian.



École Henry Kelsey School Community Council (SCC) Meeting

Monday, December 12, 2022, Teams Meeting

In Attendance:

Julian Petras, Transportation Engineer, City of Saskatoon
Nathalie Baudais, Senior Transportation Engineer, City of Saskatoon
Amanda Lindgren, Public Engagement Consultant, City of Saskatoon
Members of the École Henry Kelsey School Community Council

École Henry Kelsey School Zone Safety Review

Principal Kruger welcomed members of the City of Saskatoon Transportation team to present findings from the safety review for the pedestrian crossings on 33rd Street near École Henry Kelsey.

Julian Petras presented the background for the safety review. The review was prompted by City Council as a result of the approved changes to school zones that would align them with the guidance from the Transportation Association of Canada. These changes include the removal of the school zone currently on 33rd Street between Valens Drive and Avenue K North.

The school zone on 33rd Street is more than 50 m away from the school site and does not front the school. Best practice for school zones focus on the frontage of the school site, and discourage school zones on walk to school routes, arterial roadways, and when the school is located more than 50 m away.

Data collection for the safety review included traffic volumes, vehicle speeds, collision history, pedestrian volumes, and site observations.

Recommended measures based on the review include:

33rd Street and Avenue K

- Install a pedestrian ramp on northwest corner
- Install parking restrictions in advance of the crosswalk
- No changes to the existing Active Pedestrian Corridor crossing device
- Correct pavement markings (one travel lane and one parking lane in each direction)

33rd Street and Avenue L

- Install curb extensions on 33rd Street on the east side of the intersection
- Adjust signage and install parking restrictions
- Relocate the transit stop and bench farther east
- Discuss changes to the photo enforcement camera with SGI
- Correct pavement markings (one travel lane and one parking lane in each direction)

33rd Street and Valens Drive

- Fix the pedestrian ramp and landing area on southeast corner
- Rebuild the pedestrian ramp in the northeast corner to meet City of Saskatoon standards

- No changes to the existing signals as they are the highest level pedestrian crossing device available
- Correct pavement markings (one travel lane and one parking lane in each direction)

Question: Is there a possibility of adding curb extensions at Avenue K as well? People do use that part of 33rd Street as two-lane traffic and a curb extension would prevent drivers pulling around on the right to potentially collide with a pedestrian. Drivers sometimes speed up approaching this intersection as they are past the speed camera. This behaviour was noted in both directions but particularly for eastbound traffic.

Answer: The access points (back lane and driveway) on the north side of Avenue K make curb extensions not feasible to install at that location. It may be possible for a curb extension to be installed on the south side only.

An asset preservation project is scheduled for this stretch of 33rd street in 2023. The lane markings will be corrected to reflect one lane of traffic in either direction as part of this contract.

Question: Could a speed bump be considered there instead, like at Howell Avenue?

Answer: Typically we do not recommend vertical (raised) traffic calming on arterial roads like 33rd street, on transit routes, or primary emergency routes. They are more difficult for buses and emergency vehicles to drive over. Horizontal measures like curb extensions are used to calm traffic and increase pedestrian safety by shortening the distance to cross the street. Vertical traffic calming is only considered if horizontal measures are not effective. This section of 33rd street did not have excessive speeding so curb extensions were recommended to improve pedestrian safety.

Question: Will speeds on 33rd Street be monitored once the speed camera and school zone are removed? Have you seen any difference in speeds near high schools where school zones were removed?

Answer: The City does not have a formal monitoring plan once the school zones are removed. At this time, no complaints have been received about speeding near high schools since the school zones were removed on September 1st.

Question: Can a speed monitoring plan be recommended once the school zones are removed?

Answer: There are no plans to recommend a monitoring plan however this is something that Committee and City Council could direct the Administration to do. This was also requested at the 20th street school zone location.

Comment: It is better to be preventive with the measures rather than wait for an incident or tragedy to occur on 33rd Street.

Reply: One of the reasons the national guidance does not recommend school zones for arterial roads is driver compliance. We want drivers to respect school zones where we use them and for all drivers to comply equally so that both pedestrians and drivers know what to expect.

Question: What is the timeline for the implementation of these measures, and will the school zone stay in place until the curb extensions are in place?

Answer: If approved by Committee and City Council, these measures could be in place in 2023 to coincide with the asset preservation project that is planned for 33rd Street. The signage would then be removed once the construction and curb extensions are complete.

Next Steps

Julian noted the results of this review and engagement will be presented to the Standing Policy Committee on Transportation (SPCT) in early 2023. Additional feedback on the review and recommendations can be sent directly to Julian as soon as possible. Feedback received before the end of 2022 will be considered in the report to SPCT.

Petras, Julian

From: [REDACTED]
Sent: Friday, December 16, 2022 2:02 PM
To: Petras, Julian
Subject: School zone 33rd street

[Warning: This email originated outside our email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi,

I live in Hudson Bay Park just off of 33rd street on [REDACTED]. I just read in the community association newsletter that the school zone on 33rd will be removed and residents can send feedback/questions to this email address. I've lived here for 4 years and have 3 kids, one of which attends Henry Kelsey. I am very concerned about my kids safety around the school if the school zone is removed. My oldest currently gets a bus to school but I'm guessing one day she may want to walk. Currently there is a cross walk on avenue I that we have used many times with our kids. Frequently when we attempt to use it, with 5 of us standing there, no one stops. People speed by and I'm usually afraid to step out in the road even if one lane has stopped because often time the other lane will not. We often tell the kids to cross in the school zone at the lights. It's frustrating that the city will remove this school zone when 33rd street is already not safe for children. With a recent death of a child on the street I find it surprising that the city thinks we need less speed restrictions. I do not understand how removing school zones on the busiest streets will make my kids safer when drivers are already careless as it is.

Petras, Julian

From: [REDACTED]
Sent: Saturday, December 17, 2022 12:54 AM
To: Petras, Julian
Subject: School Zone outside of Henry Kelsey on 33rd

Follow Up Flag: Follow up
Flag Status: Completed

[Warning: This email originated outside our email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

I don't agree with the removal of the school zone on 33rd. My daughter goes to Henry Kelsey school and I'm already worried about her safety crossing 33rd to go to school

[REDACTED]

Petras, Julian

From: [REDACTED]
Sent: Wednesday, January 11, 2023 8:49 PM
To: Petras, Julian
Subject: Ecole henry Kelsey school zone

Follow Up Flag: Follow up
Flag Status: Flagged

[Warning: This email originated outside our email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Good evening,

I am very concerned in regards to the removal of this school zone (33rd and Valens specifically) as even in a vehicle I have almost been hit many times from people going through the red light. There are many kids that cross there!!!! There has been a death of a child in the past there, I know things happen but clearly that has got to show something about the intersection. Why is there no other option going there like a crossing guard to ensure the safety of all the kids including mine?

Regards
[REDACTED]

Sent from my iPhone

At Saskatoon Public Schools every student is **Known • Valued • Believed In**



December 15, 2022

Julian Petras
City of Saskatoon
222 Third Avenue North
Saskatoon, SK S7K 0J5

RE: École Henry Kelsey – 33rd Street School Zone Crossing Safety Review

Dear Mr. Petras:

On behalf of Saskatoon Public Schools, we wish to reaffirm the school division's opposition to the removal of speed reductions on 33rd Street between Valens Drive and Avenue K North.

The safety of all students attending our schools is our top priority. We believe that the presence of 30 km/hour school zones around all schools is an important safety measure. While the location of the school is not directly on 33rd Street, there are students who currently walk and cycle to school using the pedestrian crosswalks along 33rd Street.

In the past, the City of Saskatoon and the Saskatoon City Police have cited research indicating that a lower speed significantly reduces the chance of vehicle pedestrian collisions. While some may view the school zone as an inconvenience, the difference between 50 km/hour and 30 km/hour through a school zone is fewer than 40 seconds for an average driver's commute. We believe any measure that supports safety for students and others in our community far outweighs any minor inconvenience experienced by a motorist.

We appreciate the work and diligence of the city to review and make recommendations to the current safety of the crosswalks on 33rd Street. The recommended measures of improvement were shared in detail and from our understanding, these measures will be completed soon. This decision will directly impact students, staff, and the school community and we are disappointed that our input was not considered before this decision was made. We feel that Saskatoon Public Schools is a valued partner,



Shane Skjerven, Director of Education

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December 16, 2022

Julian Petras

not just a stakeholder. In such, we ask for the support of this committee and City Council to reconsider their decision and retain 30 km/hour along 33rd Street between Valens Drive and Avenue K North.

Sincerely,

Jennifer Haywood
Superintendent of Education

Kathy Kruger
Principal of École Henry Kelsey

JH: ntp

Electronic Copy:

Shane Skjerven, Director of Education, Saskatoon Public Schools
skjervens@spsd.sk.ca

Nathalie Baudais, Senior Transportation Engineer, City of Saskatoon
nathalie.baudais@saskatoon.ca



Saskatoon Public Schools
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Shane Skjerven, Director of Education

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École Henry Kelsey School Administration Meeting

Monday, December 8, 2022, École Henry Kelsey

In Attendance:

Julian Petras, Transportation Engineer, City of Saskatoon

Nathalie Baudais, Senior Transportation Engineer, City of Saskatoon

Katherine Kruger, École Henry Kelsey Principal

Jennifer Haywood, Saskatoon Public School Superintendent for École Henry Kelsey

École Henry Kelsey School Zone Safety Review

Julian Petras presented the background for the safety review. The review was prompted by City Council as a result of the approved changes to school zones that would align them with the guidance from the Transportation Association of Canada. These changes include the removal of the school zone currently on 33rd Street between Valens Drive and Avenue K North.

The school zone on 33rd Street is more than 50 m away from the school site and does not front the school. Best practice for school zones focus on the frontage of the school site, and discourage school zones on walk to school routes, arterial roadways, and when the school is located more than 50 m away.

Data collection for the safety review included traffic volumes, vehicle speeds, collision history, pedestrian volumes, and site observations.

Recommended measures based on the review include:

33rd Street and Avenue K

- Install a pedestrian ramp on northwest corner
- Install parking restrictions in advance of the crosswalk
- No changes to the existing Active Pedestrian Corridor crossing device
- Correct pavement markings (one travel lane and one parking lane in each direction)

33rd Street and Avenue L

- Install curb extensions on 33rd Street on the east side of the intersection
- Adjust signage and install parking restrictions
- Relocate the transit stop and bench farther east
- Discuss changes to the photo enforcement camera with SGI
- Correct pavement markings (one travel lane and one parking lane in each direction)

33rd Street and Valens Drive

- Fix the pedestrian ramp and landing area on southeast corner
- Rebuild the pedestrian ramp in the northeast corner to meet City of Saskatoon standards
- No changes to the existing signals as they are the highest level pedestrian crossing device available
- Correct pavement markings (one travel lane and one parking lane in each direction)

Question: Do the traffic signals at Valens Drive allow enough walk-time for the students to cross 33rd Street before the signals change?

Answer: The City will check the traffic signal timing plans to verify that there is sufficient walk time to cross 33rd Street.

Question: Can SGI provide any data on the volume of tickets issued by the speed enforcement camera on 33rd Street? Can they share any information on vehicles speeds or the amount of people speeding?

Answer: SGI typically does not share data specific to one photo enforcement location. The City will reach out to SGI to see if they are able to share any data that they have collected from the 33rd Street camera.

Next Steps

Julian noted the results of this review and engagement will be presented to the Standing Policy Committee on Transportation (SPCT) in early 2023. Additional feedback on the review and recommendations can be sent directly to Julian as soon as possible. Feedback received before the end of 2022 will be considered in the report to SPCT.