AGENDA
REGULAR BUSINESS MEETING OF CITY COUNCIL

Wednesday, March 26, 2025

9:30 a.m.

Council Chamber, City Hall

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. NATIONAL ANTHEM AND 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

13 - 26

Recommendation
That the minutes of the Regular Business Meeting of City Council held on February 26, 2025, be approved.

5. PUBLIC ACKNOWLEDGMENTS

5.1 In Remembrance of Bruce Harmon

5.2 Council Members

This is a standing item on the agenda in order to provide Council Members an opportunity to provide any public acknowledgements.

6. QUESTION PERIOD

7. UNFINISHED BUSINESS

8. CONSENT AGENDA

Recommendation
That the Committee recommendations contained in Items 8.1.1 to 8.1.4; 8.2.1; 8.3.1 to 8.3.6; 8.4.1 to 8.4.10; and 8.5.1 to 8.5.4 be adopted as one motion.

8.1 Standing Policy Committee on Environment, Utilities & Corporate Services

8.1.1 Proposed Amendments to The Waste Bylaw, 2022 [CCB2023-1108 GPC2023-0813] 27 - 32

Recommendation

1. That the proposed amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*, as outlined in the March 4, 2025 report of the Utilities and Environment Division, be approved; and
2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*.

8.1.2 Natural Resource Canada Commercial and Institutional Building Sector Funding [EUCS2025-0301] 33 - 36

Recommendation

1. If the application for the NRCan ISO 50001 in the Commercial and Institutional Buildings Sector Fund is approved, City Council authorize the Mayor and City Clerk to execute the Agreement under the Corporate Seal;
2. If required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program;
3. If the application is successful, Capital Project P.10004 Energy Management Program be increased by

$100,714 to incorporate NRCan funding.

8.1.3 Elm Wood Disposal Initiative Next Steps [EUCS2023-0202] 37 - 58

Recommendation

1. That the 2025 proper elm wood disposal plan be approved as outlined in the report of the Utilities and Environment Division dated March 4, 2025;
2. That the Administration prepare the 2026/2027 business plan and budget without revenues for entrance and tipping fees for all loads of elmwood, along with any other operating or capital requirements to support DED prevention, for City Council's consideration;
3. That the establishment of capital project DED Response, in the amount of $100,000, be funded from the Urban Forestry and Pest Management Capital Reserve; and
4. That the City Solicitor's Office be requested to amend Bylaw No. 9844, *The Waste Bylaw, 2022,* as outlined in the March 4, 2025, report of the Utilities and Environment Division.

8.1.4 Saskatoon Environmental Advisory Committee - 2025 Work Plan [ADV2025-0301] 59 - 62

Recommendation

That the 2025 Work Plan for the Saskatoon Environmental Advisory Committee be received as information.

8.2 Standing Policy Committee Transportation

8.2.1 22nd Street and Confederation Drive Intersection Improvements – March 2025 Update [TS2024-0802] 63 - 345

Recommendation

That Option 3 – A New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from a Right turn out to a Right turn in, and Fairmont Drive and Fairlight Drive Intersections Upgrades for the 22nd Street West and Confederation Drive Intersection Improvements Functional Design be approved.

8.3 Standing Policy Committee on Planning, Development & Community Services

346 - 352

8.3.1 Proposed Amendments to Bylaw 7860, The Animal Control Bylaw, 1999 [PDCS2024-0105]

Recommendation

1. That proposed amendments to Bylaw No. 7860, *The Animal Control Bylaw, 1999*, be approved; and

2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 7860, *The Animal Control Bylaw, 1999*.

8.3.2 Coyote and Feeding of Wildlife Update [CC2024-0607] 353 - 369

Recommendation

1. That Administration be directed to proceed as outlined in the report of the Community Services Division, dated March 5, 2025; and

2. That the City Solicitor's Office be instructed to draft a bylaw to prohibit the feeding of wildlife, as outlined in the report of the Community Services Division, dated March 5, 2025.

8.3.3 2024 Annual Report - Public Art Advisory Committee [ADV2025-0103] 370 - 376

Recommendation

That the information be received.

8.3.4 2024 Annual Report - Development Appeals Board [PDCS2025-0302] 377 - 380

Recommendation

That the information be received.

8.3.5 2024 Annual Report - Municipal Heritage Advisory Committee [ADV2025-0102] 381 - 388

Recommendation

That the information be received.

8.3.6 2025 Work Plan - Municipal Heritage Advisory Committee [ADV2025-0201] 389 - 391

Recommendation

That the information be received.

8.4 Standing Policy Committee on Finance

8.4.1 2025 Budget Approval – Business Improvement Districts [FI2025-0301] 392 - 406

Recommendation

1. That the 2025 budget submissions from the Downtown Saskatoon Business Improvement District, Broadway Business Improvement District, Riversdale Business Improvement District, Sutherland Business Improvement District, and 33rd Street Business Improvement District be approved; and
2. That the City Solicitor be requested to prepare the 2025 Business Improvement District Levy Bylaws for submission to City Council for consideration at the same meeting that the Mill Rate Bylaws are presented.

8.4.2 2025 Reassessment Appeal Contingencies [FI2025-0302] 407 - 410

Recommendation

1. That an appeal contingency of $40,000 be added to the property tax levy for the residential property class for 2025;
2. That an appeal contingency of $250,000 be added to the property tax levy for the multi-residential property sub-class for 2025; and
3. That an appeal contingency of $3,000,000 be added to the property tax levy for the commercial/industrial property class for 2025.

8.4.3 Preliminary Year-End Results – December 31, 2024 [FI2025-0305 GPC2023-0503] 411 - 433

Recommendation

1. That $158,798.02 of the year-end surplus be transferred to the Printing and Mail Equipment Replacement Reserve;
2. That the City Solicitor be directed to prepare a Bylaw Amendment for an exemption to allow the printer savings in 2024 and also savings expected for 2025 to be transferred to Printing and Mail Equipment Replacement Reserve;

3. That $414,528 of the year-end surplus be transferred to the Self-Insured Retention Reserve; and

4. That the remainder of the 2024 year-end surplus be transferred to the Fiscal Stabilization Reserve in the amount of $11,698,989.

8.4.4 Budget Adjustment – Federation of Canadian Municipalities Green Municipal Funding [FI2025-0306] 434 - 437

Recommendation
That the projects outlined in the March 5, 2025, report of the Corporate Financial Services be adjusted for funding received from the Federation of Canadian Municipalities under the Green Municipal Funding.

8.4.5 Creation of Capital Project for Repair and Maintenance of Downtown Event and Entertainment District Auxiliary Properties [DEED2023-01] 438 - 442

Recommendation
That Capital Project P.10115 (DEED Auxiliary Properties - Repair and Maintenance) be approved and funded through a transfer of $225,000 from the Property Realized Reserve (PRR).

8.4.6 Canada Housing Infrastructure Fund and Deep Retrofits Accelerator Initiative Funding Applications [CC2024-1202] 443 - 447

Recommendation
1. That City Council approve and direct Administration to submit applications to the Canada Housing Infrastructure Fund and the Deep Retrofit Accelerator Initiative;

2. That if the applications are successful, the Mayor and City Clerk be authorized to execute the Agreement(s) under the Corporate Seal; and

3. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program(s).

8.4.7 Lease Extension for Existing SaskTel Cell Tower in Churchill Park [FI2024-0805] 448 - 455

Recommendation

1. That Administration be authorized to enter into a 10-year lease agreement with SaskTel for the exiting cell tower in Churchill Park at 1015 Wilson Crescent on ISC Surface Parcel No.120042931, Parcel A Plan G921, as per the terms outlined in the March 5, 2025, report of the Corporate Financial Services Division; and

2. That Her Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

8.4.8 Acquisition of Land for Joint High School / East Side Leisure Centre Site in the Holmwood [PDCS2024-0504] 456 - 460

Recommendation

1. That the Administration be authorized to purchase a 13-acre portion of ISC Parcel No. 203232259 from Dream Asset Management Corporation for $10,842,000 on the terms identified within the March 5, 2025, report of the Corporate Financial Services Division; and

2. That the City Solicitor be requested to have the agreement executed by Her Worship the Mayor and the City Clerk under the Corporate Seal.

8.4.9 Notice of Annual General Meeting - Saskatchewan Place Association Inc. [FI2025-0310] 461 - 465

Recommendation

That the City of Saskatoon, being a member of the Saskatchewan Place Association Inc., appoint Mayor Cynthia Block, or in her absence, Councillors Troy Davies or Randy Donauer, of the City of Saskatoon, in the Province of Saskatchewan, as its proxy to vote for it on its behalf at the Annual General Meeting of the members of the Saskatchewan Place Association Inc., to be held on the 17th day of April, 2025, or at any adjournment or adjournments thereof.

8.4.10 Notice of Annual General Meeting - Saskatoon Centennial Auditorium & Convention Centre Corporation [FI2025-0308] 466 - 472

Recommendation

That the City of Saskatoon, being a member of both the Saskatoon Centennial Auditorium Convention Centre

Corporation Board of Directors and the Saskatoon Centennial Auditorium Foundation Board of Directors appoint Mayor Cynthia Block, or in her absence, Councillor Bev Dubois or Councillor Holly Kelleher of the City of Saskatoon, in the Province of Saskatchewan, as its proxy to vote for it on its behalf at the Annual General Meetings of the members of the Saskatoon Centennial Auditorium Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation, to be held on the 25th day of April, 2025, or at any adjournment or adjournments thereof.

8.5 Governance and Priorities Committee

8.5.1 Blake Tait – Denounce 1 Million March 4 Children GPC2023-1103 — 473 - 477

Recommendation
As the City of Saskatoon is a place where all people deserve to live with dignity, safety and respect, no matter their gender identity or expression, that Saskatoon be declared a safe city for the 2SLGBTQQIA+ community.

8.5.2 Appointment – Municipal Heritage Advisory Committee — 478

Recommendation
That Jamie Harder be appointed as an agency representative of the Meewasin Valley Authority to the Municipal Heritage Advisory Committee to the end of 2026.

8.5.3 Appointment – Saskatoon Accessibility Advisory Committee — 479

Recommendation
That Susan Mulligan be appointed as an agency representative for Council on Aging to the Saskatoon Accessibility Advisory Committee to the end of 2026.

8.5.4 Appointment – Council Representatives – SUMA Cities Caucus and SUMA Board of Directors — 480

Recommendation
1. That Councillor Bev Dubois be appointed to the SUMA Cities Caucus for 2025; and
2. That Councillor Randy Donauer be appointed to the SUMA Board of Directors for 2025.

9. COMMITTEE REPORTS (not on Consent Agenda)

9.1 Standing Policy Committee on Environment, Utilities & Corporate Services

9.2 Standing Policy Committee Transportation

9.2.1 Broadway Community Patio – Temporary Reserve Parking Program Background [TS2025-0301] 481 - 491

The supplemental information that was requested at the Standing Policy Committee on Transportation meeting is provided as part of the Committee Report.

Recommendation
That the parking fee be reduced from $11,975 to $4,622 per year over five years.

9.3 Standing Policy Committee on Planning, Development & Community Services

9.4 Standing Policy Committee on Finance

9.4.1 2025 Property Tax Phase-in Plan [FI2025-0304] 492 - 518

Recommendation

1. That the City of Saskatoon proceed with Option 2:
    a. That the tax impact of the 2025 provincial reassessment for the multi-residential subclass and the non-residential classes be phased-in equally over a four-year period; and
    b. That there be a two-year phase-in of property tax changes for the remainder of the residential property class; and
2. That the City Solicitor be requested to prepare the 2025 Property Tax Phase-in Plan Bylaw for submission to City Council for consideration at the same meeting that the Mill Rate Bylaws are presented.

9.4.2 Municipal Tax Policy – Distributing the Non-Residential to Residential Municipal Property Tax Burden, 2025-2029 [FI2025-0309] 519 - 576

Recommendation
That City Council set the non-residential to residential tax ratio in accordance with Option 3, the previous policy ratio of 1.75 to

1, effective for the 2025 to 2029 period.

9.5 Governance and Priorities Committee

10. ADMINISTRATIVE REPORTS

10.1 Transportation & Construction

10.2 Utilities & Environment

10.3 Community Services

10.3.1 Potential Roles and Responsibilities for the City of Saskatoon – Saskatoon Homelessness Action Plan [CC2025-0105] 577 - 587

Recommendation
That the information be received.

10.4 Saskatoon Fire

10.5 Corporate Financial Services

10.5.1 Short Term Rental Enforcement Fund Budget Adjustment [CC2025-0302] 588 - 589

Recommendation
That Capital Project P.10116 Short Term Rental Enforcement be increased by $380,000 to be funded through Housing, Infrastructure and Communities Canada Short Term Rental Enforcement Fund.

10.6 Strategy & Transformation

10.6.1 2026-2029 Strategic Plan – City Council Priority Areas [CC2025-0304] 590 - 614

Recommendation

1. That City Council adopt City Council's Priority Areas for the 2026-2029 Strategic Plan, along with the Council-designated Leads for each area, as outlined in the March 26, 2025, report of the Strategy and Transformation Division; and
2. That City Council approve the revisions to *Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative* as attached to the March 26,

2025, report of the Strategy and Transformation Division.

10.7 Human Resources

10.8 Public Policy & Government Relations

10.9 City Manager's Office

10.9.1 Terms of Reference – Council Subcommittee on Homelessness [CC2025-0105] 615 - 628

Recommendation

1. That City Council approve the Terms of Reference for the Council Subcommittee on Homelessness; and
2. That Capital Project P.02609 Council Strategic Priority Areas be used to support the engagement activities required for the Subcommittee to carry out its mandate with total funding of $80,000, of which $29,000 is existing funding within that project, and an increase of $51,000 is made to P.02609 funded by the Reserve for Capital Expenditures.

11. LEGISLATIVE REPORTS

11.1 Office of the City Clerk

11.2 Office of the City Solicitor

12. OTHER REPORTS

13. INQUIRIES

14. MOTIONS (NOTICE PREVIOUSLY GIVEN)

14.1 Councillor S. Timon - Temporary Reserved Parking (TRP) Program [CC2025-0303]

In accordance with Section 65 of *The Procedures and Committees Bylaw, 9170,* TAKE NOTICE that Councillor Timon provided the following Notice of Motion:

"Whereas the City of Saskatoon administers the Temporary Reserved Parking (TRP) Program in cases where pay parking spaces are being used for construction purposes or other non-standard uses.

Whereas TRP fees are intended to encourage the return of pay parking spaces back to standard use and recoup foregone parking revenue.

Whereas some projects, through site access and right-of-way alterations result in allowances for additional pay parking spaces with there being no Policy provisions for TRP fee reductions.

Therefore, I move that Administration be directed to report back no later than May 2025 on policy considerations to facilitate TRP fee reductions for construction projects, that upon completion, result in allowances for additional pay parking spaces, including analysis on financial implications for the City, financial risk and potential process."

15. URGENT BUSINESS

16. GIVING NOTICE

17. IN CAMERA SESSION (OPTIONAL)

18. ADJOURNMENT

MINUTES

REGULAR BUSINESS MEETING OF CITY COUNCIL

Wednesday, February 26, 2025, 9:30 a.m.
Council Chamber, City Hall

PRESENT: Her Worship, Mayor C. Block, in the Chair
Councillor T. Davies, via teleconference
Councillor R. Donauer
Councillor B. Dubois
Councillor S. Ford
Councillor Z. Jeffries, via teleconference
Councillor H. Kelleher
Councillor K. MacDonald, via teleconference
Councillor J. Parker
Councillor R. Pearce
Councillor S. Timon

ALSO PRESENT: City Manager J. Jorgenson, via teleconference
City Solicitor C. Yelland
Chief Financial Officer C. Hack
General Manager, Community Services C. Anger
General Manager, Transportation & Construction T. Schmidt
General Manager, Utilities & Environment A. Gardiner, via teleconference
City Clerk A. Tittemore
Committee Assistant H. Janzen

1. NATIONAL ANTHEM AND CALL TO ORDER

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

2. CONFIRMATION OF AGENDA

Moved By: Councillor Donauer
Seconded By: Councillor Timon

1. That the letter submitting comments from Stevie Horn, Chair, Municipal Heritage Advisory Committee, dated February 22, 2025, be added to Item 8.3.1;
2. That the following letters be added to Item 8.3.2:
    - Requesting to Speak
        - Angela Bishop, Camponi Housing, dated February 21, 2025;
        - Ahmad Majid, Saskatoon Open Door Society, dated February 24, 2025;
    - Submitting Comments
        - David Morrison, Arbutus Properties, dated February 24, 2025;
        - Jamie Kirkpatrick, dated February 24, 2025;
3. That the items with speakers be considered immediately following consideration of the Consent Agenda;
    - 8.3.2
        - Angela Bishop, Camponi Housing;
        - Ahmad Majid, Saskatoon Open Door Society; and
4. That the agenda be confirmed as amended.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

3. DECLARATION OF CONFLICT OF INTEREST

There were no declarations of conflict of interest.

4. ADOPTION OF MINUTES

Moved By: Councillor Dubois
Seconded By: Councillor Ford

That the minutes of the Regular Business Meeting of City Council held on January 29, 2025, be approved.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

5. PUBLIC ACKNOWLEDGMENTS

5.1 In Remembrance of Ed Schultz

Mayor Block recognized the loss of Ed Schultz and spoke to his time at the City of Saskatoon. She passed along condolences to family, friends and IT department, followed by a moment of silence.

5.2 Council Members

This is a standing item on the agenda in order to provide Council Members an opportunity to provide any public acknowledgements.

Mayor Block

Mayor Block acknowledged that February is Black History Month, a time to celebrate the rich history and culture of the Black Community in Saskatoon but also reflect on the progress made and recognize the work to still be done to create a more diverse and inclusive City.

Mayor Block congratulated the four graduates from the City of Saskatoon Civic Internship Program.

She also acknowledged that February 26th is Pink Shirt Day and recognized the pink shirts and pink buttons in the Council Chambers.

Councillor Timon

Councillor Timon also acknowledged February as Black History Month and that it is not only a time to celebrate but also a time to recognize the challenges and work ahead of us.

6. QUESTION PERIOD

Councillor Dubois - Snow Removal

Councillor Dubois asked for an update on the current snow removal, snow melt and if further PSAs could be sent out.

General Manager, Transportation and Construction Schmidt responded that on February 21, 2025, a city-wide snow grading operation for residential and industrial streets started. This was initiated due to the changing temperatures to help with the slush and rutting. Multiple PSA's have been sent out and will continue to be sent out.

Councillor Dubois - Eastview Garbage Collection

Councillor Dubois asked about the community engagement regarding the possibility of moving garbage pickup from the back lanes to the front.

General Manager, Utilities and Environment Gardiner responded that the engagement process is underway, letters had been sent out, an information session was held, and an online survey was available. The online survey will be reopened to allow for further engagement.

Councillor Timon - Housing Accelerator Funds

Councillor Timon asked for an update regarding the housing accelerator funding.

Senior Project Planner Gutmann responded that 25% of the housing accelerator funding has been received and the annual report has been submitted to receive the second allocation, which will make it 50% of the funding received.

Councillor Pearce - Back Alley Snow Removal

Councillor Pearce asked about snow removal in back alleys.

General Manager, Transportation and Construction responded that he did not have the information on hand but will provide it offline.

7. UNFINISHED BUSINESS

8. CONSENT AGENDA

Item 8.3.2 was removed from the Consent Agenda.

Moved By: Councillor Donauer
Seconded By: Councillor Pearce

That the Committee recommendations contained in Items 8.2.1 to 8.2.3; 8.3.1, 8.3.3; 8.4.1 to 8.4.2; and 8.5.1 to 8.5.5 be adopted as one motion.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Item 8.3.2 was considered next.

8.1 Standing Policy Committee on Environment, Utilities & Corporate Services

8.2 Standing Policy Committee Transportation

8.2.1 Temporary Reserved Parking Program – Council Policy [TS2025-0201]

1. That the Temporary Reserved Parking Program Council Policy be approved; and
2. That the City Clerk's Office be requested to introduce City Council Policy No. CO-XXXX

CARRIED UNANIMOUSLY

8.2.2 2024 Annual Report –Saskatoon Accessibility Advisory Committee [ADV2025-0101]

That the 2024 Annual Report for the Saskatoon Accessibility Advisory Committee be received as information.

CARRIED UNANIMOUSLY

8.2.3 2025 Work Plan - Saskatoon Accessibility Advisory Committee [ADV2025-0104]

That the 2025 Work Plan for the Saskatoon Accessibility Advisory Committee be received as information.

CARRIED UNANIMOUSLY

8.3 Standing Policy Committee on Planning, Development & Community Services

8.3.1 Heritage Conservation Program Strategy – Interim Options Report [PDCS2025-0201]

A letter submitting comments from Stevie Horn, Chair, Municipal Heritage Advisory Committee, dated February 22, 2025, was provided.

1. That Option 2 be approved for further development; and
2. That Administration be directed to bring forward a final Heritage Conservation Program Strategy built on Option 2, along with a detailed implementation and funding plan for consideration during the 2026/2027 Business Plan and Budget Deliberations.

CARRIED UNANIMOUSLY

8.3.2 City-Owned Land Incentives 2025 [FI2024-0308, GPC2023-0503]

The following letters were provided:

Requesting to Speak

- Angela Bishop, Camponi Housing, dated February 21, 2025; and
- Ahmad Majid, Saskatoon Open Door Society, dated February 24, 2025.

Submitting Comments

- David Morrison, Arbutus Properties, dated February 24, 2025; and
- Jamie Kirkpatrick, dated February 24, 2025.

This item was removed from the Consent Agenda.

Council heard from the following:

- Angela Bishop, Camponi Housing, who responded to questions of Council; and
- Ahmad Majid, Saskatoon Open Door Society, who also responded to questions of Council.

Housing Manager King, Senior Project Planner Williamson and City Manager Jorgenson responded to questions of Council.

Moved By: Councillor Donauer
Seconded By: Councillor Pearce

1. That Five-year incremental tax abatements for three projects, for the development of 256 new affordable rental units, estimated at a total of $1,938,067.30, as outlined in Appendix 1, be approved;

2. That Corporate Revenue be requested to submit an application under the Provincial Government's Education Property Tax Exemption/Abatement Program seeking approval for a five-year tax abatement, equivalent to 100% of the incremental Education property taxes, for the development of affordable housing units at 231 23rd Street East and 155 3rd Avenue North and a portion of 1635 McKercher Drive;

3. That an exception to Council Policy No. C09-002 Innovative Housing Incentives to waive all offsite levies for a portion of 1635 McKercher Drive, as outlined in this report, be approved; and

4. That the City Solicitor be requested to prepare the appropriate agreements and that Her Worship the Mayor and City Clerk be authorized to execute the agreements under the Corporate Seal.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Item 11.2.1 was considered next.

8.3.3 Mobile Food Truck and Trailer and Parking Patio Parking Fees [PDCS2025-0202]

1. That the City Clerk be instructed to make the proposed amendments to Council Policy C09-039, Mobile Food Truck

Policy, as outlined in the February 5, 2025 report of the Community Services Division; and

2. That the City Clerk be instructed to make the proposed amendments to Council Policy C09-013, Use of Sidewalks, Boulevards and Parking Stalls Vending, as outlined in the report.

CARRIED UNANIMOUSLY

8.4 Standing Policy Committee on Finance

8.4.1 January 2025 Government Funding Applications [FI2025-0202]

1. That if the application for the Short-Term Rental Enforcement Fund is approved, City Council authorize the Mayor and City Clerk to execute the Agreement under the Corporate Seal; and

2. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program.

CARRIED UNANIMOUSLY

8.4.2 Property Tax Liens 2024 [FI2025-0203]

That that the City Solicitor be instructed to take the necessary actions under provisions of *The Tax Enforcement Act* with respect to properties with 2024 tax liens.

CARRIED UNANIMOUSLY

8.5 Governance and Priorities Committee

8.5.1 City Council Travel and Training Expenses - 2024 [GPC2025-0202]

That the February 12, 2025, report of the City Clerk's Office be received as information, in accordance with *Council Policy C01-023, the City Councillors' Travel and Training Policy.*

CARRIED UNANIMOUSLY

8.5.2 City Council Car Allowance - 2024 [GPC2025-0203]

That the February 12, 2025, report of the City Clerk's Office be received as information, in accordance with *Council Policy C01-023, the City Councillors' Travel and Training Policy*.

CARRIED UNANIMOUSLY

8.5.3 Appeals Boards – Appointment of Secretary [GPC2025-0205]

That the City Clerk, or their designate, be appointed as Secretary to the following appeals boards and as outlined in the February 12, 2025, report of the City Clerk's Office:

- The Saskatoon Appeal Board
- The Board of Revision
- The Development Appeals Board

CARRIED UNANIMOUSLY

8.5.4 2025 Appointments - Saskatoon Appeal Board

That the following be appointed to the Saskatoon Appeal Board to the end of 2026:

- Cheryl Cook
- Roy Fleming
- Sandra Maxwell
- Don Stiller

CARRIED UNANIMOUSLY

8.5.5 2025 Appointments - Saskatchewan Place Association Board of Directors (Sasktel Centre)

That the City's representative be instructed to vote the City's proxy at the 2025 Annual General Meeting of the Saskatchewan Place Association Inc. Board of Directors for the appointment of E.J. Babey throughout a term expiring at the conclusion of the 2027 Annual General Meeting.

CARRIED UNANIMOUSLY

9. COMMITTEE REPORTS (not on Consent Agenda)

9.1 Standing Policy Committee on Environment, Utilities & Corporate Services

9.2 Standing Policy Committee Transportation

9.3 Standing Policy Committee on Planning, Development & Community Services

9.4 Standing Policy Committee on Finance

9.5 Governance and Priorities Committee

10. ADMINISTRATIVE REPORTS

10.1 Transportation & Construction

10.2 Utilities & Environment

10.3 Community Services

10.4 Saskatoon Fire

10.5 Corporate Financial Services

10.6 Strategy & Transformation

10.7 Human Resources

10.8 Public Policy & Government Relations

11. LEGISLATIVE REPORTS

11.1 Office of the City Clerk

11.2 Office of the City Solicitor

11.2.1 The Temporary Sign Amendment Bylaw, 2025 and The Recreation Facilities and Parks Usage Amendment Bylaw, 2025 - Proposed Bylaw Nos. 10057 and 10058 [GPC2023-0501 PDCS2024-0602]

City Solicitor Yelland presented the report.

Moved By: Councillor Pearce
Seconded By: Councillor Timon

That permission be granted to introduce Bylaw No. 10057, *The Temporary Sign Amendment Bylaw, 2025*; and Bylaw No. 10058, *The Recreation Facilities and Parks Usage Amendment Bylaw, 2025;* and give same their FIRST reading.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Dubois
Seconded By: Councillor Ford

That Bylaw Nos. 10057 and 10058 now be read a SECOND time.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Kelleher
Seconded By: Councillor Parker

That permission be granted to have Bylaw Nos. 10057 and 10058 read a third time at this meeting.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Timon
Seconded By: Councillor Dubois

That Bylaw Nos. 10057 and 10058 now be read a THIRD time, that the bylaw be passed and the Mayor and the City Clerk be authorized to sign same and attach the corporate seal thereto.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Donauer
Seconded By: Councillor Parker

That City Council instruct the City Clerk to:

- repeal Council Policy No. C10-001*, Soliciting in Public Parks*; and
- amend Council Policy No. C10-026, *Seasonal Commercial Enterprise in Parks*, as outlined in the report.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

11.2.2 The Saskatchewan Housing Corporation Tax Exemption Bylaw, 2025 - Proposed Bylaw No. 10055 [GPC2023-1002 CC2024-0202]

City Solicitor Yelland presented the report.

Moved By: Councillor Dubois
Seconded By: Councillor Kelleher

That permission be granted to introduce Bylaw No. 10055*, The Saskatchewan Housing Corporation Tax Exemption Bylaw, 2025*; and give same its FIRST reading.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Pearce
Seconded By: Councillor Ford

That Bylaw No. 10055 now be read a SECOND time.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Donauer
Seconded By: Councillor Pearce

That permission be granted to have Bylaw No. 10055 read a third time at this meeting.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

Moved By: Councillor Pearce
Seconded By: Councillor Kelleher

That Bylaw No. 10055 now be read a THIRD time, that the bylaw be passed and the Mayor and the City Clerk be authorized to sign same and attach the corporate seal thereto.

In Favour: (11): Mayor Block, Councillor Davies, Councillor Donauer, Councillor Dubois, Councillor Ford, Councillor Jeffries, Councillor Kelleher, Councillor MacDonald, Councillor Parker, Councillor Pearce, and Councillor Timon

CARRIED UNANIMOUSLY (11 to 0)

12. OTHER REPORTS

13. INQUIRIES

13.1 Councillor R. Pearce - Financial Impact of Carbon Tax [CC2025-0202]

Councillor Pearce made the following inquiry:

"Would the Administration report back on the estimated financial impact the Carbon Tax has had on the City of Saskatoon from 2020 to 2024."

14. MOTIONS (NOTICE PREVIOUSLY GIVEN)

15. URGENT BUSINESS

16. GIVING NOTICE

17. IN CAMERA SESSION (OPTIONAL)

18. ADJOURNMENT

The meeting adjourned at 10:49 a.m.

_____ _____

Mayor City Clerk

STANDING POLICY COMMITTEE ON ENVIRONMENT, UTILITIES AND CORPORATE SERVICES

Proposed Amendments to The Waste Bylaw, 2022

Recommendation of the Committee

1. That the proposed amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*, as outlined in the March 4, 2025 report of the Utilities and Environment Division, be approved; and
2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*.

History

The Standing Policy Committee on Environment, Utilities and Corporate Services, at its meeting held on March 4, 2025, considered a report of the Utilities and Environment Division regarding the above.

Attachment

March 4, 2025 report of the Utilities and Environment Division.

Proposed Amendments to The Waste Bylaw, 2022

ISSUE

The purpose of this report is to obtain approval to amend sections of Bylaw No. 9844, *The Waste Bylaw, 2022* ("Bylaw"). The proposed amendments align with operational efficiency improvements as well as program-based adjustments that will enable the Industrial, Commercial, and Institutional (ICI) sectors to better comply with the Bylaw. The proposed amendments will also improve clarity of certain sections as well as enable Environmental Protection Officers ("EPO") to enforce sections of the Bylaw more effectively.

RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposed amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*, as outlined in this report, be approved; and
2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 9844, *The Waste Bylaw, 2022*.

BACKGROUND

At its January 27, 2020 Regular Business Meeting, City Council considered the Regulatory Approaches to Enhance Waste Diversion in the Industrial, Commercial and Institutional Sector report, and resolved, in part:

1. That Option 1 - Waste Bylaw Enforcement plus Separate Waste Containers be approved for implementation; and
2. That the City Solicitor amend Bylaw No. 8310, The Waste Bylaw to enact Option 1.

At its December 20, 2021 Regular Business Meeting, City Council considered a report of the General Manager, Utilities and Environment Department dated December 6, 2021 and resolved:

1. That Bylaw No. 8310, The Waste Bylaw, 2004 be repealed and replaced with a new waste bylaw as proposed in the report of the General Manager, Utilities and Environment Department dated December 6, 2021; and
2. That the City Solicitor be requested to prepare the new waste bylaw.

This amendment included housekeeping items, consequential changes resulting from the direction to implement the organics program, and general improvements.

At the 2024/25 Preliminary Corporate Business Plan and Budget meetings held on November 28, 29, 30 and December 1, 2023, City Council received reports of the Chief Financial Officer requesting approval to establish rates and fees and resolved in part:

- That the City Solicitor be instructed to draft the appropriate amendments to Bylaw No. 9844, The Waste Bylaw, 2022.

This amendment established a new fee structure for residential garbage collection, set rates and fees for the years 2024 and 2025, and made minor housekeeping amendments.

DISCUSSION/ANALYSIS

The following changes are proposed with a view to improve the Bylaw by providing greater clarity and enabling better enforcement of the Bylaw. The following list identifies the proposed amendments:

1. Clarify Recycling Options for Industrial, Commercial, and Institutional (ICI) Premises

The Bylaw currently permits the General Manager to allow small businesses to use residential recycling depots. However, no formal permissions have been granted to any ICI properties, including small businesses, to use these depots. Additionally, two material recovery facilities in the city, operated by Loraas Disposal North Ltd. (Loraas) and Cosmo Industries (Cosmo), accept self-hauled recyclable material from ICI properties, eliminating the need for them to use residential recycling depots.

Administration recommends repealing subsection 58(3) to accurately reflect the recycling disposal options available to all ICI properties. Consequently, subsection 58(2) should be amended to remove the reference to subsection 58(3).

2. Update ICI Waste Container Standards

The description of an "adequate waste container" in Part IV of the Bylaw includes the requirement that it "is equipped with a lid that is capable of being locked". In practice, some waste containers provided by processing facilities for cooking oil/grease, as well as smaller containers for organics and recycling, do not have lids that are capable of being locked. Due to current services in the field, and with evolving waste diversion services being offered to the ICI sector, an amendment is necessary to permit exceptions to or remove the lockable lid requirement.

Administration recommends repealing clause 43(2)(d) thereby removing the requirement that a waste container must be equipped with a lid that is capable of being locked. This amendment will assist EPOs in enforcing the Bylaw, help ICI properties comply with the requirements, and allow for the use of smaller containers that can be emptied more frequently, as opposed to larger containers that may hold waste for extended periods.

3. Waste Hauler Regulations

Section 49 of the Bylaw requires private waste haulers operating within the city to provide annual reports of the volume and types of waste collected within city limits.

Throughout 2024, City of Saskatoon (City) staff met with Waste Haulers and informed them in writing that material tonnage and types for 2024 will be required to be reported in 2025, as per the Bylaw.

Administration recommends amending section 49 to ensure timely production of the information and ensure its accuracy. Offences and corresponding penalties for a failure to comply will be established.

It is also recommended to relocate section 49 to Part II, which deals with general provisions for the collection and disposal of waste. Placing this provision in a more general section of the Bylaw, rather than within the ICI-specific section, helps communicate the requirement to report waste transported by waste haulers from all sectors.

4. Add New Definitions

Administration recommends establishing definitions for the terms "sanitary" and “waste hauler”.

- “sanitary”

While several sections of the Bylaw state that waste containers must be maintained in a sanitary condition, the term “sanitary” is not currently defined. Adding a definition for “sanitary” to the Bylaw will better equip EPOs to communicate expectations to properties that are not properly managing their waste. This defined term will also help property owners understand the specific expectations when “sanitary” is referenced by an EPO, ensuring clearer enforcement and compliance.

- “waste hauler”

Administration recommends establishing a definition of "waste hauler". Adding a definition would provide clarity for both the waste haulers and those responsible for enforcing the bylaw.

5. Construction, Renovation and Demolition Waste Recycling

Currently, the Bylaw states that any person carrying out construction, alteration, or demolition of a building, structure, or landscaping feature must place all waste in a waste container. Clarification is required to ensure adequate waste containers are available for the placement of recyclable material as required by all Industrial, Commercial and Institutional premises.

Administration recommends amending clause 50(1)(a) to ensure that adequate waste containers are available for the separate storage and disposal of (a) garbage; and (b) recyclable material. This amendment will help reduce the amount of recyclable material currently sent to landfill, aligning with the City’s ICI waste diversion goals and the intent of the Bylaw, while also clearly communicating expectations.

6. Construction Waste Container Clarification

Due to the unique nature of construction waste, it is typically collected and

transported in roll-off containers. City collection vehicles are not designed to handle this type of waste because the compaction mechanisms on the trucks can be damaged by large objects, and it reduces the efficiency of collection when material cannot be compacted. Bylaw clarification is required to ensure construction waste is not disposed of in residential waste containers. This amendment will ensure that only suitable containers are used, reducing the maintenance and repair of City collection trucks.

Administration recommends amending the Bylaw to prohibit the disposal of construction waste in residential garbage containers. This addition would help EPO's more effectively educate the public and enforce the bylaw.

7. Introduce a Fine for Unauthorized Use of Waste Containers

In 2024, more than 65 reports of unauthorized use of a waste container (residents or businesses using waste containers that are not theirs) were received by the City. The Bylaw currently does not provide a penalty for the unauthorized use of a waste container.

Introducing a fine for this offense would help manage and discourage this behavior by enabling EPOs to issue a Notice of Violation. Incidents of unauthorized container use increased by approximately 2% from 2023 to 2024.

Administration recommends amending Schedule "H" to include a fine for unauthorized use of waste containers as defined in section 12. This amendment is particularly important as unauthorized use of containers may rise with the recent introduction of variable cart sizes.

8. Addressing Cervid Product Concerns for Composting

Recreational hunting and resulting home butchering activities are common for Saskatoon residents who use City waste services. This is a concern for composting facilities that process Green Cart material as there is inconclusive evidence that Chronic Wasting Disease (CWD) in cervid populations (deer, elk, moose and caribou) is destroyed during the composting process. Since testing is not mandatory, the provincial government recommends that all deer (cervid) tissue be disposed of either in a landfill or at a government-approved disposal site.

Administration recommends adding cervid products to Schedule "A," which lists items not considered organic material, and therefore, not permitted to be placed in a green cart. The addition of this subsection will assist EPOs in enforcing the Bylaw and preventing the spread of CWD.

FINANCIAL IMPLICATIONS

The proposed amendments are not anticipated to have meaningful financial implications.

OTHER IMPLICATIONS

The proposed amendments to the Waste Bylaw will help to achieve the City's waste diversion targets by clarifying requirements to direct waste to the proper stream and supporting EPO's in addressing violations

There is no additional privacy, legal or social implications identified.

NEXT STEPS

Should City Council approve the proposed recommendations, the City Solicitor will draft the necessary bylaw amendments to be tabled at a future meeting of City Council.

Report Approval

Written by:	Chelsey Studer, Environmental Protection Officer
	Ben Brodie, Project Manager – Environmental
Reviewed by:	Katie Burns, Community Leadership and Program Development Manger
	Dan Gauthier, Environmental Projects & Protection Manager
	Brock Storey, Environmental Operations Manager
	Brendan Lemke, Director of Water and Waste Operations
Approved by:	Angela Gardiner, General Manager, Utilities and Environment

Admin Report - Proposed Amendments to The Waste Bylaw, 2022.docx

STANDING POLICY COMMITTEE ON ENVIRONMENT, UTILITIES AND CORPORATE SERVICES

Natural Resource Canada Commercial and Institutional Building Sector Funding

Recommendation of the Committee

1. If the application for the NRCan ISO 50001 in the Commercial and Institutional Buildings Sector Fund is approved, City Council authorize the Mayor and City Clerk to execute the Agreement under the Corporate Seal;
2. If required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program;
3. If the application is successful, Capital Project P.10004 Energy Management Program be increased by $100,714 to incorporate NRCan funding.

History

The Standing Policy Committee on Environment, Utilities and Corporate Services, at its meeting held on March 4, 2025, considered a report of the Utilities and Environment Division regarding the above.

Attachment

March 4, 2025 report of the Utilities and Environment Division.

Natural Resource Canada Commercial and Institutional Building Sector Funding

ISSUE

Administration applied for funding under the Natural Resources Canada (NRCan) ISO 50001 in the Commercial and Institutional Buildings Sector Fund. City Council approval is required to authorize the Mayor and City Clerk to execute the Contribution Agreement under the Corporate Seal if the application is successful.

RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council that:

1. If the application for the NRCan ISO 50001 in the Commercial and Institutional Buildings Sector Fund is approved, City Council authorize the Mayor and City Clerk to execute the Agreement under the Corporate Seal;
2. If required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program;
3. If the application is successful, Capital Project P.10004 Energy Management Program be increased by $100,714 to incorporate NRCan funding.

BACKGROUND

The ISO 50001 Energy Management Standard (ISO 50001) is an internationally recognized voluntary standard that provides a framework to improve energy performance by making better use of high energy assets. To help implement these energy standards in commercial and institutional buildings, NRCan has provided financial assistance for organizations to complete feasibility studies or conduct gap analyses to determine the viability of implementing an ISO 50001 Energy Management System (EnMS).

City Council at its Regular Business Meeting on December 20, 2023, approved Saskatoon Water (SW) to enter into an agreement with NRCan to perform an ISO 50001 gap analysis on the current EnMS at Water Treatment Operating Facilities and explore ways to improve the EnMS. The ISO 50001 gap analysis was completed in March 2024, and cost $10,100, which was 100% covered by NRCan.

In September 2024, NRCan began accepting applications under their ISO 50001 in the Commercial and Institutional Buildings Sector Fund for not-for-profit organizations, to receive financial assistance to implement an ISO 50001 EnMS. The fund provides up to 75% of eligible costs to a maximum of $200,000 for an organization to achieve ISO 50001 compliance or certification.

DISCUSSION/ANALYSIS

Since 2022, the Saskatoon Water Department (SW) has been managing energy use through their Energy Management Program. The Energy Management Program, which is administered by SW's Energy Manager, is responsible for managing energy performance ensuring the energy data is understood by the department and City of Saskatoon (City). This enables SW to strategically plan and perform actions to systematically drive energy waste, variability, and use down.

The ISO 50001 gap analysis, completed in March 2024, was conducted by SW's Energy Manager utilizing the United States Department of Energy 50001 Ready Energy Management Assessment tool. The tool incorporates the steps and processes for all the categories required in the ISO 50001 into tasks and sub tasks for evaluations. From the evaluation, corrective actions were identified for SW's EnMS at Water Treatment Operating Facilities that would bring the EnMS into compliance with ISO 50001. Implementation of the corrective actions and obtaining external verification services to achieve ISO 50001 compliance is estimated to cost $134,285 in staff time and external auditing fees.

SW has submitted a proposal under NRCan's Commercial and Institutional Buildings Sector Fund to obtain a total of $100,714 to address the corrective actions identified for the Water Treatment Operating Facilities EnMS to achieve ISO 50001 compliance. Under the proposal, SW has also committed $33,571 from Capital Project P.10004 Energy Management Program. The following tasks will be completed under the project:

- A review of the ISO 50001 gap analysis completed in March 2024, and proposed corrective actions identified.
- Implementation of the proposed corrective actions in the following EnMS areas:
    - Context of Organization;
    - Leadership;
    - Planning;
    - Support;
    - Operation;
    - Performance Evaluation; and
    - Improvement.
- Review of the corrective actions implemented to identify any additional actions needed.
- Completion of a Post Gap ISO 50001 Analysis and Report to NRCan to demonstrate ISO 50001 compliance.

If funding is approved by NRCan, the project is planned to begin in April 2025 and be completed by March 2026. Upon completion of this project SW will be able to prove that their Water Treatment Operating Facilities EnMS is a sustainable and internationally recognized energy management system through ISO 50001 compliance. This will help SW manage their energy use more effectively, apply for future external funding opportunities, and contribute to the City's goals of reducing emissions and driving down energy waste.

FINANCIAL IMPLICATIONS

The total cost of this proposed project is $134,285, which was approved by City Council during the 2024/2025 budget deliberations. If approved, NRCan will cover $100,714, with the remaining $33,571 funded through the Capital Project P.10004 Energy Management Program. Successful funding from NRCan would allow $100,714 to be reallocated to other projects within the Energy Management Program at the Water Treatment Plant.

OTHER IMPLICATIONS

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

NEXT STEPS

No follow-up is required.

Report Approval

Written by:	Bibian Rajakumar, Energy Manager, Saskatoon Water
Reviewed by:	Mitch McMann, Engineering Services Manager, Saskatoon Water
	Jeremy Meinema, Senior Financial Business Partner, Finance
	Alan Rankine, Senior Legal Counsel, City Solicitor's Office
	Russ Munro, Director of Saskatoon Water
Approved by:	Angela Gardiner, General Manager, Utilities and Environment

Admin Report - Natural Resource Canada Commercial and Institutional Building Sector Funding.docx

STANDING POLICY COMMITTEE ON ENVIRONMENT, UTILITIES AND CORPORATE SERVICES

Elm Wood Disposal Initiative Next Steps

Recommendation of the Committee

1. That the 2025 proper elm wood disposal plan be approved as outlined in the report of the Utilities and Environment Division dated March 4, 2025;
2. That the Administration prepare the 2026/2027 business plan and budget without revenues for entrance and tipping fees for all loads of elmwood, along with any other operating or capital requirements to support DED prevention, for City Council's consideration;
3. That the establishment of capital project DED Response, in the amount of $100,000, be funded from the Urban Forestry and Pest Management Capital Reserve; and
4. That the City Solicitor's Office be requested to amend Bylaw No. 9844, *The Waste Bylaw, 2022,* as outlined in the March 4, 2025, report of the Utilities and Environment Division.

History

The Standing Policy Committee on Environment, Utilities and Corporate Services, at its meeting held on March 4, 2025, considered a report of the Utilities and Environment Division regarding the above.

The Committee also received presentations from Robin Adair, Arbour Crest Tree Services and Tom Gode, SOS Tree Coalition.

Attachment

March 4, 2025 report of the Utilities and Environment Division.

Elm Wood Disposal Initiative Next Steps

ISSUE

The disposal fee for elm wood at the Saskatoon Regional Waste Management Centre (landfill) was waived for residents from April 25, 2024, to December 31, 2024. This initiative expanded on the measures taken in 2023 to reduce barriers of proper elm disposal and to help address the rising risk of Dutch elm disease (DED) and was combined with an education campaign to help bring attention to DED and the importance of proper disposal of elm wood.

This report summarizes the outcomes of the 2024 strategy, provides a plan for elm wood disposal, increased DED monitoring, and elm wood sweeps for 2025, and provides an update on longer-term actions that will be brought forward in coordination with the City of Saskatoon's (City) Solid Waste Reduction and Diversion Plan.

RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council that:

1. The 2025 proper elm wood disposal plan be approved as outlined in this report;
2. The Administration prepare the 2026/2027 business plan and budget without revenues for entrance and tipping fees for all loads of elmwood, along with any other operating or capital requirements to support DED prevention, for City Council's consideration; and
3. The establishment of capital project DED Response, in the amount of $100,000, be funded from the Urban Forestry and Pest Management Capital Reserve.

BACKGROUND

With the rise of DED in Saskatoon, initiatives to support proper disposal of elm wood were expanded in 2021. Landfill rates, education, and community outreach have been explored as part of a strategy to reduce the burden of proper elm disposal and limit the spread of DED. Further information can be found in Appendix 1 (Background on Proper Elm Disposal).

City Council, at its Regular Business Meeting held on April 24, 2024, considered the Update on Elm Wood Disposal Initiative and Next Steps report and resolved that the 2024 elm wood disposal plan be approved as outlined in the report. City Council also resolved that:

1. The Administration investigate options to advance best practices and regulatory updating with respect to composting chipped elm in advance of the establishment of a long-term organics processing solution; and
2. As part of the 2024 DED Strategy, Administration convene a stakeholder group to further discuss the elm disposal process, ensure clear and consistent understanding of current processes, and further discuss any additional initiatives to help support effective disposal of elm material.

Sustained enhanced communications and education was approved through the 2024/25 Multi-Year Business Plan and Budget, through the advertising budgets for Material Recovery Centre and Green Cart combined with existing advertising for DED awareness. The funding plan for ongoing enhanced elm disposal education leverages all three of these advertising budgets to raise awareness that proper disposal of elm wood is at the landfill, that the Green Cart program does not accept elm wood, and to continue to raise awareness of other behaviours to mitigate the spread of DED.

In the 2024/25 Multi-Year Business Plan and Budget, City Council approved funding from the Waste Minimization Reserve to Project P.10086 Proper Disposal of Elm Wood. The approved budget for this project is $75,000 (2024 and 2025), which allows for $150,000 over a two-year span.

CURRENT STATUS

The 2024 elm wood disposal plan has been implemented as outlined in the report of April 24, 2024, which included waiving fees for residential loads of elm wood under 1000kg and an enhanced education program. Waiving the elm wood disposal fees at the landfill has continued in early 2025, as the 2024 capital funding has not been fully exhausted. At this time, a plan for 2025 and direction on whether to make this an ongoing level of service is required.

DED poses a significant risk to Saskatoon's urban forest, which is approximately one quarter elm trees. It is spread by several species of elm bark beetle that are attracted to decaying and freshly cut elm. Prohibiting pruning at times when the beetle is active, as well as restricting the storage, transportation and use of elm wood are the primary methods to reduce the spread of DED.

A City-owned organics processing facility is being constructed and is scheduled to open in 2026. As part of regulatory approvals, the City will make a request to the Ministry of Environment to process chipped elm wood during the months that the elm pruning ban is lifted (September 1 to March 31).

DISCUSSION/ANALYSIS

2024 DED Cases Summary

In 2024, the Parks Department confirmed 11 positive cases of DED in Saskatoon and continued to carry out the DED Response Plan. Parks staff have been conducting elm wood sweeps and increased surveillance for symptomatic trees around impacted areas. Elm wood sweeps include checking every property for elm firewood or brush and removing it if found. If residents are not home, staff remove the elm wood and leave an Elm Infraction Notice with a note indicating the wood was removed and the reason for removal.

Provincial regulations prohibit the storage or use of elm wood and require that it be transported to the nearest designated disposal site, for the municipality in which the tree is located, no later than the next operating hours of the disposal site following pruning or removal of the tree. Despite these regulations, the Parks Department staff retrieved 12,724kg of elm wood in 2024. Proper and timely elm disposal and the prohibition of transporting elm firewood is key to mitigating the spread of DED. More information on the recent cases of DED and the results of elm wood stored on private property are available in Appendix 2.

Preventing the transport and storage of elm material is a critical step in preventing DED from entering the city. Saskatoon is currently not within the endemic range for DED (see Appendix 3 - Map) and is located just outside the native range for elm. This means that DED cases in Saskatoon are most likely due to transmission from firewood illegally transported into the city from infected areas of the province.

2024 Elm Wood Disposal Plan Summary

In 2024, the goals of the elm wood disposal plan were to:

- Eliminate the cost barrier for the proper disposal of elm wood;
- Increase awareness of DED and the importance of proper elm wood disposal; and
- Reduce the amount of elm wood stored in backyards.

In 2024, the City waived elm disposal fees for residents (no entry fee or tipping fee) from April 25, 2024, to December 31, 2024. A cap of 1000 kg per visit and a self-declaration process were used to help ensure only residential loads were utilizing the waived tipping fee.

The waived elm disposal fees for residents (and enhanced communication) resulted in close to 400 tonnes of residential elm wood being properly disposed of during 2024, over a four-fold increase compared to the previous two years when elm disposal was tracked. This was brought to the landfill in nearly 2,500 residential visits, compared to 700 visits the previous year and under 600 the year before. The average size of residential loads also increased. These results indicate that the waived disposal fee combined with the enhanced education in 2024, had a positive impact on the targeted resident behaviour of improper storage or disposal of elm wood.

Stakeholder Feedback

A small group of industry stakeholders, including arborists and SOS Trees Coalition provided feedback through discussions in 2024. Key feedback includes:

- Urgent and immediate action is required;
- Confusion is created by only waiving the elm wood disposal fee at the landfill for residents but not for arborists hauling residential loads; and
- Excluding commercial customers from the waived fees makes it difficult for those customers that need to hire someone to prune or dispose of elm wood.

Further details on the 2024 pilot and stakeholder feedback can be found in Appendix 4.

Elm Wood Disposal Plan for 2025

The proposed 2025 plan expands on the 2024 initiative by waiving all disposal fees on elm wood for loads received at the landfill for the remainder of this year, including commercial and residential customers. All internal City loads will continue to pay the regular entrance fee and tipping fee to ensure proper internal funding allocations are in place.

Waiving entrance and tipping fees for elm wood will result in an estimated revenue reduction of $130,000 to $200,000 of landfill fees that will not be collected on elm wood loads. This estimate is based on 2024 landfill tonnage data, and accounts for potential fluctuations in commercial use and Dutch Elm Disease (DED) cases.

Enhanced DED monitoring and Elm Wood Sweeps for 2025

Saskatoon has an escalated response plan for DED which includes increased surveillance of the neighbourhoods where any trees have tested positive. Any elm wood that is found during a search is disposed of at the landfill. With the number of positive cases in 2024, Parks is requesting access to funding from the Urban Forestry and Pest Management Capital Reserve to resource enhanced monitoring, testing, and elm wood sweeps for Dutch Elm Disease (DED) in 2025. The Reserve was created to support the capital cost of urgent urban forest priorities, strategic plan development and implementation, and to control pests and disease affecting the urban forest. Currently, Urban Biological Services laborers perform DED monitoring under the supervision of technical staff.

The additional funding for 2025 will allow for more technician support for DED inspections, better sampling of suspected DED-infected trees, and quicker mobilization of the DED response plan if there is a rise in positive cases. The funds will also support increased capacity to remove improperly stored elm wood in high-risk mature canopy areas of Saskatoon.

Elm Wood Disposal Plan for 2026+

The proposed plan for 2026 and onward is to remove all disposal fees for loads of elm wood received at the landfill. Pending Ministry of Environment Approval, this could also be extended to the City's new compost facility. This initiative will include commercial and residential customers. All internal City loads will continue to pay the regular entrance fee and tipping fee to ensure adequate internal funding allocations are in place.

In 2026, the costs to cover the uncollected fees from elm disposal will be included as part of the indicative budget process through the Waste Handling Service Line which includes operations of the Landfill and Material Recovery Centre. The final approval of this change will be part of City Council's deliberations of the 2026/2027 Multi-Year Business Plan and Budget in Q4 of 2025. If approved by City Council, Schedule F in Bylaw No. 9844, The Waste Bylaw, 2022, would be amended to remove all entrance and tipping fees for loads of elm wood.

Risk Mitigation

While the pilots to date have demonstrated positive changes to resident behaviour, there are several risks that have been identified for the elm disposal plan for 2025:

- Disposal of healthy trees
- Elm wood disposal coming from outside of Saskatoon
- Lost landfill revenue exceeds estimates

Plans to monitor and mitigate these risks are provided in Appendix 5.

Future Composting Options

Composting elm wood may be a viable option available with the new City-owned organics processing facility. The City will continue to work with the Ministry of Environment to explore composting options as part of the design and commissioning of the organics processing facility that is underway. Composting chipped elm wood waste

when the pruning ban is lifted has been approved by the Ministry of Environment at other composting sites.

DED Communication Plan Update

The annual Communication Plan for 2024 included various tactics to address the rising threat of DED. Renderings of potential devastations were added to social media campaigns to highlight the severity of what can happen from DED. Additional tactics were initiated as part of the DED response plan that resulted from positive cases, including news releases and distribution of door hangers to targeted areas.

The 2025 DED Communication Plan will highlight the following:

- Importance and value of trees
- Risk of not taking DED serious and experiences of other municipalities
- Role of proper elm wood disposal and not storing firewood

Further details on communication and education can be found in Appendix 6 (DED Education and Communication).

FINANCIAL IMPLICATIONS

Landfill

During 2024, tonnages of elm received at the landfill translated to approximately $131,200 in potential revenue. Elm disposal costs for loads under 1,000 kg (i.e. included in the pilot program) amounted to $61,800, funded through capital project P.10086 Proper Disposal of Elm Wood. 2024 revenues generated for elm disposal that were not included in the pilot were $69,400.

It is projected that proper disposal of elm may increase when the cost of disposal is eliminated. In 2025, the costs of expanding the current program to include both residential and commercial customers is projected to result in unrealized landfill revenues of $130,000 - $200,000. To ensure the approved landfill operating budget is not impacted by this change, interim funding will be provided via existing capital projects. Capital funding to cover the change in fee structure supporting the proper disposal of elm wood in 2025 is proposed as follows:

Funding Source	Low Projection Funding	High Projection Funding
P.10086 - Proper Disposal of Elm Wood	$88,200	$88,200
P.01964 – Waste Reduction Initiatives	$41,800	$111,800
Total	**$130,000**	**$200,000**

No new funding is requested for this initiative in 2025. There is $88,200 remaining in the Proper Disposal of Elm Wood project, which will be applied to this initiative first. The remaining funding is available through the Waste Reduction Initiatives – Waste Strategy Implementation project, which is for the development and implementation of Solid Waste Reduction and Diversion Plan initiatives. The two projects have sufficient funding available in 2025 to cover the amounts outlined in the table above.

The impact of the uncollected fees on landfill revenue will be included as part of the Waste Handling service line in the 2026/2027 Multi-Year Business Plan and Budget for Council's consideration.

Enhanced DED monitoring and Elm Wood Sweeps

This report recommends a capital budget adjustment of $100,000 to be funded from the Urban Forestry and Pest Management Capital Reserve to increase DED monitoring and elm wood sweeps in 2025. The Urban Forestry and Pest Management Capital Reserve has a projected unallocated balance at the end of 2025 of $1,383,000.

Any future operating impacts or capital funding requests will be addressed during the 2026/2027 Multi-Year Business Plan and Budget, to ensure adequate resourcing for DED monitoring and mitigation.

Natural Asset Value

Financial barriers to the proper disposal of elm wood may have a negative impact on the City's urban canopy, which is part of the City's natural assets. The City's tree canopy is made up of almost 25% elm trees. Unlike other infrastructure, trees increase in value over time. In 2019, the value of public trees (excluding shelterbelts and afforestation areas) was estimated at more than $530 million. Proactive approaches to limiting the spread of DED are low compared to costs associated with accelerated spread of the disease and resulting tree removal and replacement costs.

ENVIRONMENTAL IMPLICATIONS

Non-compliance with legislated elm disposal requirements has been identified during intensive neighbourhood DED response investigations. Given the extent of elm trees in Saskatoon's urban forest, there is an ongoing risk of additional disease spread through improperly disposed or stored elm wood that over time could result in the decimation of a significant portion of the urban forest. Transportation of elm firewood into Saskatoon is believed to be a significant threat for DED spread and storage of elmwood in backyards further increases the risk of spreading DED.

The City's Parks Department manages approximately 110,000 trees on boulevards, centre medians, in parks and at civic facilities, with 25% of these trees being elms. The Urban Forest Management Plan (2021) estimates that 682,000 tonnes CO_2 is sequestered by Saskatoon's urban forest.

NEXT STEPS

If approved, the Administration will implement the waived fee for all loads of residential and commercial elm wood as outlined in this report.

Through the preparation of the 2026/2027 Multi-Year Business Plan and Budget, the cost of the uncollected fees will be included in the indicative budget, for Council's consideration during budget deliberations. As well, additional operating or capital funding requests may be brought forward in the 2026/2027 Multi-Year Business Plan and Budget to ensure adequate resourcing for DED monitoring and mitigation.

Administration will carry out an education campaign in 2025. The DED Communications Plan will be updated to reflect the current situation of DED in Saskatoon.

The Solid Waste Reduction and Diversion Plan funded bulky/special waste program development project will be initiated in 2025 to address the barrier of transporting loads of elm wood to the landfill. A key consideration is that elm wood cannot be stockpiled, so that will need to be prioritized over other materials for collection, especially in the higher generation periods.

APPENDICES

1. Background on Proper Elm Disposal
2. 2024 DED Summary
3. 2023 Known Extent of DED in Saskatchewan – Map
4. 2024 Elm Disposal Pilot Summary
5. Elm Disposal Risk Mitigation (2025)
6. Education and Communications (2024)

Report Approval

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Approved by: Angela Gardiner, General Manager, Utilities and Environment

Admin Report - Elm Wood Disposal Initiative Next Steps.docx

Background on Proper Elm Disposal

Date	Reports, Resolutions and Additional Information
December 16, 2019	The Landfill Infrastructure Replacement and Recovery Park Site Design Options report provided options for the design of Recovery Park (now named the Material Recovery Centre) including a prioritized list of materials to be accepted. The design option approved by City Council included space designated for elm wood collection.
March 22, 2021	City Council approved the Urban Forestry Management Plan in principle. The Urban Forestry Plan examines the current state of the urban forest and outlines a strategy to plan, grow, manage, and protect the trees and tree canopy. It identifies DED as one of the main risks to the overall canopy cover and resilience of the urban forest.
August 9, 2021	The Standing Policy Committee – Environment, Utilities and Corporate Services received correspondence on Landfill Fees for the Disposal of Elm Trees and resolved: That the Administration report back to the appropriate committee regarding near-term options to reduce the burden of proper elm disposal and other forestry materials required for prevention of disease spread on citizens, including waiving landfill fees.
October 4, 2021	The Standing Policy Committee – Environment, Utilities and Corporate, Services received the Near-Term Options to Reduce the Burden of Proper Elm Disposal resolved that: That Administration report further on option 3D, including what types of Elm loads this would apply to and how it would be coordinated with further education efforts. Option 3D was outlined in the report as the elimination of the Special Handling Fee and a $50 maximum fee per load of elm wood.
December 20, 2021	City Council received the Implementation of a $50 Flat Fee for Elm Disposal at the Landfill and Enhanced Education report and resolved: That the Administration proceed with the approach outlined in this report including: research and implementation of $50 flat fee for landfill loads that are primarily elm wood; enhanced education to mitigate the spread of DED; and piloting a comprehensive behaviour change program targeting proper elm wood disposal.
October 31, 2022	City Council approved the Pathway to a Sustainable Urban Forest: Implementation of the Urban Forest Management Plan 2022-2031 in principle. It included the in-progress work on barriers to proper elm disposal as well as the Elm Inventory Capital project and proposed future work to diversify the urban forest and develop an invasive species management strategy.

February 22, 2023	City Council received the Additional Information on Elm Wood Disposal and Pilot Program Results report and resolved: 1. That elm wood drop-off be included in Recovery Park; 2. That further information on the level of service, costs, and fee options for elm wood be brought forward in a future report on Recovery Park; 3. That business plan options for 2024-25 be prepared to sustain enhanced communication and education programs and develop additional programs to further reduce barriers to proper elm wood disposal.
June 28, 2023	City Council approved the Material Recovery Centre (Recovery Park) – Program Update and Changes to Fee Structure Report. This report identified that elm wood would be collected in the Scale & Pay section of the Material Recovery Centre and that an additional city-wide pilot on reduced tipping fees would be undertaken.
October 2023	A Phase 2 of the Enhanced Education and Elm Disposal Pilot was developed in response to increases in cases of DED utilizing remaining funding from the initial pilot. This pilot free disposal at the landfill in October 2023, with the following goals: • Eliminate the cost barrier for the proper disposal of elm wood; • Increase awareness of DED and the importance of proper elm wood disposal; and • Reduce the amount of elm wood stored in backyards.
November 28, 2023	Sustained enhanced communications and education was approved through the 2024/25 Business Plan and Budget, through the advertising budgets for Material Recovery Centre and Green Cart combined with existing advertising for DED awareness. The funding plan for ongoing enhanced elm disposal education leverages all three of these advertising budgets to raise awareness that proper disposal of elm wood is at the Material Recovery Centre, that the Green Cart program does not accept elm wood, and to continue to raise awareness of other behaviours to mitigate the spread of DED. In the 2024/25 Business Plan and Budget, City Council approved funding from the Waste Minimization Reserve to Project P.10086 Proper Disposal of Elm Wood. The 2024 approved budget for this project is $75,000 and the 2025 approved budget is $75,000, which allows for $150,000 over a two-year span.
April 24, 2024	City Council received the Update on Elm Wood Disposal Initiatives and Next Steps report and resolved: That the 2024 elm wood disposal plan be approved as outlined in the report of the Environment and Utilities Division dated April 2, 2024.

	The plan consisted of waiving fees for residential loads with a cap of 1000kg per load to target available funding towards small amounts of elm wood stored by residents. Two additional resolutions regarding this report were made at the April 2, 2024 Standing Policy Committee on Environment, Utilities and Corporate Services. That the Administration investigate options to advance best practices and regulatory updating with respect to composting chipped elm in advance of the establishment of a long-term organics processing solution. That as part of the 2024 DED Strategy Administration convene a stakeholder group to further discuss the elm disposal process, ensure clear and consistent understanding of current processes, and further discuss any additional initiatives to help support effective disposal of elm material. At the same April 24, 2024 meeting, City Council received the Long Term Organics Processing Options report and resolved: That the Administration pursue Option 3 – Build a City-owned Organics Processing Facility.

2024 DED Summary

Monitoring and Enforcement
The following details are provided from information gathered during **regular** (non-DED response sweep) duties:

- in 2024 Urban Biological Service (UBS) staff retrieved **12,724kg of elm wood**.
- Landfill disposal fees were **$4,400.85**.
- **92 elm samples** were collected and submitted to the Crop Protection Lab in Regina for culturing and analysis.
- 11 samples were confirmed positive for DED.

The summary of positive trees is outlined in the table below:

Neighbourhood	Address	Ownership	UBS Sample no.	CPL Sample no.	Species	Comments
Varsity View	1004 Osler St.	Private	S24-421	DD-2387	Siberian	Tree is located in cell 14, in backyard.
Westmount	Leif Erickson Park	City	S24-211	DD-2526	American	3rd tree on Ave P N (from south side); just south of new (2021) plantings. 2nd American elm from south side
Westmount	Leif Erickson Park	City	S24-210	DD-2527	American	2nd tree on Ave P N (from south side); just south of previously detected DED-positive elm. 1st elm on the south end. Tested +'ve for dothiorella in 2016
Varsity View	1008 Osler St.	City	S24-310	DD-2529	American	City tree on sidewalk boulevard. Located in front of 1008 Osler St., just to the west of front walkway.
Varsity View	1009 Temperance St.	City	S24-319	DD-2530	American	Large, city-maintained, American elm straddling 1009 Temperance St and 1011 Temperance St.

Sutherland	110 104th St. W	Private	S24-424	DD-2538	American	In front of the Sutherland Evangelical Church rectory house. 3rd easternmost elm
Caswell Hill	422 24th St. W	City	S24-124	DD-2539	American	Tree on the corner of 24th St. W & Ave E N. In the northeast corner of 422 24th St. W. On city boulevard, between road and sidewalk
Sutherland	Anna McIntosh Park	City	S24-423	DD-2541	American	Elm along 105th St W near the back alley of Central ave and 105th St. W
North Park	402 33rd St. E	City	S24-123	DD-2544	American	Only elm in front of 402 33rd St E (on city boulevard)
Varsity View	1004 University Dr.	City	S24-323	DD-2570	American	City tree on boulevard near fire hydrant
Varsity View	1225 Aird St.	City	S24-327	DD-2572	American	City-maintained boulevard tree, next to driveway. In close proximity to large private elm.

DED Positive Trees and Response

All 11 DED-positive elm were removed by Urban Forestry crews as soon as possible following the positive test results. Adjacent trees, where DED symptoms were present or where proximity presented a high probability of disease transmission via root grafting were also removed.

In total 19 trees were removed as a result of the 11 positive cases.

- 12 City owned trees
- 7 Privately owned trees

The eleven positive cases resulted in **four** elm wood sweep response areas. Volume of wood recovered and associated costs are outlined in the table below:

Neighbourhood Elm Sweep	Locations	Weight (kg)	Disposal Cost
Varsity View	63	3300	$ 663.90
North Park	56	1520	$ 758.40
Westmount/Caswell Hill	76	3805	$ 902.55
Sutherland (microsweep)	7	310	$ 930.00
Various (elm recovery not associated with DED-positive sweeps)	68	3789	$ 1,146.00
Total	**270**	**12724**	**$ 4,400.85**

Appendix 3

2023 Known Extent of Dutch Elm Disease in Saskatchewan

Meadow Lake
Lloydminster
Spiritwood
Prince Albert
North Battleford
Unity
Melfort
Tisdale
Nipawin
Cumberland House
Hudson Bay
Porcupine Plain
Saskatoon
Humboldt
Wynyard
Watrous
Canora
Kamsack
Yorkton
Kindersley
Rosetown
Outlook
Davidson
Southey
Fort Qu'Appelle
Melville
Regina
Indian Head
Grenfell
Swift Current
Moose Jaw
Moosomin
Gull Lake
Maple Creek
Gravelbourg
Weyburn
Shaunavon
Assiniboia
Carlyle
Estevan

KNOWN DED DISTRIBUTION 2023
RANGE OF NATIVE ELMS IN SASK
PARK
PROVINCIAL FOREST

0 12.5 25 50 75 100 Kilometers

N
W E
S

Saskatchewan

Source: Saskatchewan Ministry of Environment, October 2023
Note: This data is intended to show general areas of DED in rural SK and does not claim to be 100% accurate.

2024 Elm Disposal Pilot Summary

Pilot Description

Elm wood must be disposed of immediately and properly to help prevent the spread of Dutch Elm Disease. It is illegal to store, use, sell or transport elm wood. It must be disposed of at a designated elm wood disposal site such as the landfill immediately. In Saskatoon, it must be disposed of at the landfill at the transfer bins in Scale & Pay.

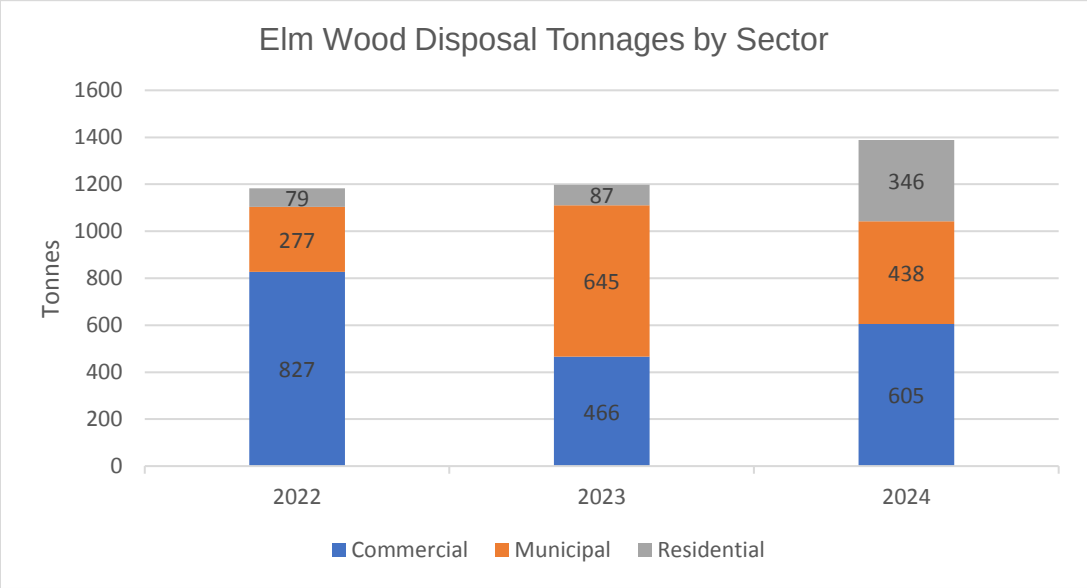
Starting in April 2024, residents were able to dispose of elm wood at the Landfill at no cost (for loads up to 1,000kg) through to the end of 2024. This initiative aimed to encourage the prompt and proper disposal of elm wood, reducing the risk of disease transmission to healthy elm trees.

This initiative built off the previous year's successful one-month pilot in October 2023 that saw all elm disposal fees waived. The 2024 pilot's design however was constrained by the $75,000 capital funding to cover lost landfill revenue. In addition, the key behaviour that the City identified as a risk to DED spread was the smaller amounts of stored elm wood discovered during DED sweeps. Therefore, the proper elm disposal pilot project focused its limited funds on improving the behaviour of residents with smaller quantities of wood to dispose of.

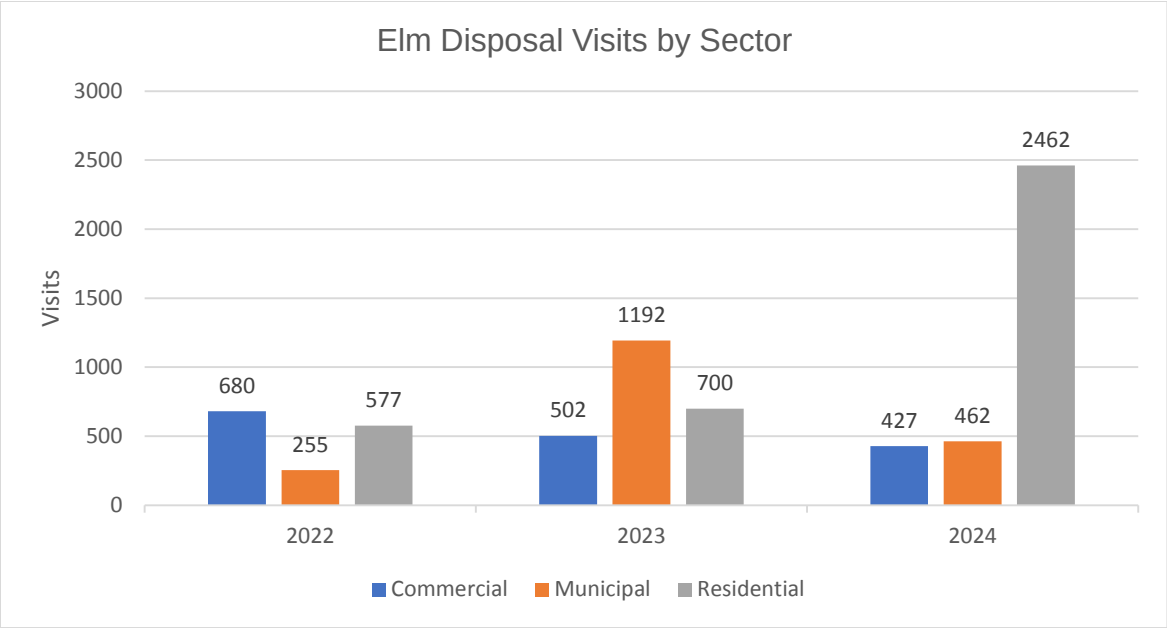
While the elm pruning ban was in place April 1 until August 31; the pilot meant that any elm wood that has been completely removed, previously been cut, has fallen or was intended as firewood could be disposed of for free by residents.

Participation Summary

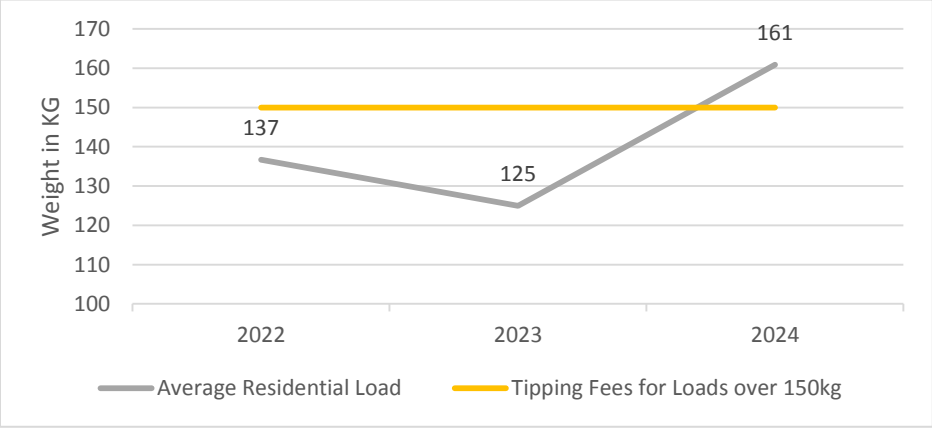
Total elm wood disposal in 2024 was higher than the two previous years. While there was fluctuation between commercial and municipal loads over this period, the total quantities from these two sectors was relatively stable. For residential loads there was over a four-fold increase in tonnages received by the landfill in 2024 when compared to the two previous years.



Total residential visits also increased significantly. 2024 saw 3.5 times the number of residential visits than 2023, when elm fees were only waived for the month of October and over 4 times the number residential visits than 2022 when landfill entrance and tipping fees applied to residential loads of elm.



The average amount per-load for residential elm disposal increased in 2024 from previous years. In 2022 and 2023 the average sized residential load was under the threshold of 150kg, where only the entrance fee applies. In 2024, with all fees waived, the load size increased to be 11kg over the 150kg threshold where tipping fees would have applied.



These results indicate a significant improvement in residents properly disposing of elm wood compared to previous years, with improvements to the tonnage, number of visits and average size of loads.

Financial Summary

The pilot project projected approximately $70,000 of uncollected landfill fees as outlined in the pilot design. The actual total for 2024 was $61,849. The uncollected landfill fees were covered through the Proper Disposal of Elm Wood – Program Development capital project (P.10086.01).

The table below shows the actual uncollected landfill fees and tonnages for each month of the 2024 pilot project.

	Uncollected Fees (Actual)	**Tonnage**
April 25th -30th	$664	3.17
May	$4,084	24.79
June	$4,037	22.01
July	$6,177	32.62
August	$6,530	35.77
September	$19,444	107.6
October	$16,431	94.67
November	$4,345	25.37
December	$137	0.79
TOTAL	**$61,849**	**346.79**

When compared to projections, there was fewer uncollected fees when the pruning ban was in effect and during the winter months and greater uncollected fees than projected during September and October. These results will be used to refine the projections for future program operations.

Summary of 2024 Pilot Feedback

Customer Feedback

Resident feedback for the pilot project for proper elm disposal and the enhanced education was generally positive. Areas of concern that were raised during the pilot reflected the limitations of the pilot's capital funding, which restricted the scope to only include residential loads of elm under 1000kg. Complaints were received for customers that had to use an arborist and could only have the fee waived if they brought the elm wood themselves. Arborists and contractors hauling residential loads were also frustrated that the fee was not waived for them in this situation.

Stakeholder Meeting

A small group of industry stakeholders, including arborists and an advocacy group provided feedback through discussions in 2024. Key feedback from discussions included:

- The importance of taking near-term actions to limit the spread of DED as inaction will lead to higher costs and a greater loss of trees;
- Confusion when residential elm wood disposal is free but has a cost if a certified arborist is hired to dispose of elm wood from a residential property;
- Importance of communicating pruning ban to residents along with elm disposal measures; and
- Other measures that could be taken to improve disposal process, such as looking at grinding wood and working with arborists to improve process at landfill.

Elm Disposal Risk Mitigation (2025)

The following risks have been identified with waiving the elm disposal fee for residential and commercial customers.

Disposal of healthy trees

Waiving the disposal fee for elm wood can encourage the disposal of healthy trees by making the cost to dispose lower. Steps can be taken to ensure that only certified arborists can obtain disposal permits for larger quantities of elm wood but research of approaches in other municipalities shows that this can be challenging to administer. Research shows that a waived elm disposal fee has not led to significant quantities of healthy elm trees being cut down and disposed. Education on the value and importance of trees can further mitigate this concern. The risks of DED in a scenario where proper action is not taken to limit the spread are greater than the risk of residents/ commercial companies disposing of healthy elm trees.

Elm wood disposal from outside of Saskatoon

Regulations currently allow transport of elm wood to a designated disposal site approved by the local municipality. There is a risk that more loads of elm wood from outside of Saskatoon come to the Saskatoon landfill. This risk is currently covered by Provincial regulations that require every person who prunes or removes an elm tree to dispose of the elm tree by transporting it to the nearest elm tree disposal site for the municipality in which the elm tree is located[1]. The Saskatoon landfill can take steps to ensure this is happening by asking for proof of address or a postal code to confirm that is within Saskatoon City limits.

Waived landfill fees exceed estimates

Following the October 2023 pilot, the City saw a large spike in elm wood tonnage brought to the Saskatoon landfill in that month. The 2024 plan saw that offering a waived disposal fee throughout the year did not lead to a significant spike for annual tonnages. From 2022 to 2024, elm disposal tonnage fluctuated but remained within the expected range.

Monitoring actions:

- Tracking annual elm wood tonnage at the landfill.
- Contacting other landfills that accept elm wood near Saskatoon and seeing if there is a fee for disposal.

Mitigation actions:

- Educate residents on the value and benefits of trees and the urban canopy.
- Work with the Province to coordinate DED response and advocate for strong education campaigns for all of Saskatchewan

[1] The Dutch Elm Disease Regulations, 2005 (Saskatchewan)

2024 DED Education and Communications

The 2024 Dutch Elm Disease Communication Plan includes various tactics to address the rising threat of DED. The goals of the DED Communications Plan include:

- Educate Saskatoon residents on how to prevent the spread of DED.
- Focus DED messaging on knowledge gaps identified in research:
  - Elm tree/ wood identification
  - Signs and characteristics of DED
  - Handling and disposal regulations
  - What to do with elm wood if a tree/ wood is infected
- In the event of a positive DED case, keep residents informed and updated on the City's DED Response Plan.

The Parks Department has an annual campaign to inform and educate residents on how they can help prevent DED, including reminding them of the provincial pruning ban and the City's DED Response Plan.

The following table details the education, communication, and enforcement activities carried out in 2024.

	Activity	Details
Annual Communication Plan Tactics	PSAs	PSA's at the beginning and end of the pruning ban (April 1 and August 31). Includes information on the preventative measures to stop the spread of DED in Saskatoon.
	News Release	News Release on July 5th on free residential elm disposal at the Landfill.
	Social Media	Run organic and boosted posts throughout the spring/summer to remind Saskatoon residents of the preventative measures they can take to stop the spread of DED in Saskatoon. Shared renderings of what two streets in Saskatoon with great elm canopies would look like if all were lost to DED.
	Utility Bill Inserts	Utility bill inserts included in June and August 2024. Remind Saskatoon residents of preventative measures they can take against DED. Overrun of utility bill inserts could possibly be distributed at the City Landfill to targeted customers and by Parks staff.
	Photography	New Parks photography happened in August 2024 included new elm photos for DED campaign use.
	Billboard Campaign	Utilized two distinct creatives with messages like "Protect our Elm. Dispose of elm wood at the Saskatoon landfill" and "Protect our Elm. It is illegal to store elm wood and branches."
	Community Associations	Provide content to Community Associations that have a high concentration of elm trees for their social media and newsletters regarding DED.
	Stakeholder Communication	Work with Sustainability to include information in the Greener Together e-newsletter.

DED Response Plan	News Releases	A news release was shared following positive cases and implementation of the DED Response Plan.
	Media Advisory and Scrum	Met with media in Leif Erickson park September 5 to talk about the confirmed cases.
	Social Media	Paid and organic social media following announcement of confirmed cases reminding people of free disposal and measures to take to prevent the spread of DED.
	Door Hangers	Place door hangers on residences within a 1km radius of the infected tree informing residents of the DED Response Plan and that inspectors may be on their property in the coming months for surveillance and sampling purposes.
	Community Associations	Provide Community Associations located near the positive DED tree with information to include in their newsletters and on their social media and websites.
2025	Radio ads	Update radio ads for 2025
	Waste Reduction Wagon Education	Using new photos and renderings, update all materials
	Value of Trees Campaign	Work with Sustainability on a campaign that highlights the value of trees in our community.

Image 1: Door Hanger

Image 2: DED Web and Social

Image 3: DED Billboard

STANDING POLICY COMMITTEE ON ENVIRONMENT, UTILITIES AND CORPORATE SERVICES

Saskatoon Environmental Advisory Committee - 2025 Work Plan

Recommendation of the Committee
That the 2025 Work Plan for the Saskatoon Environmental Advisory Committee be received as information.

History
The Standing Policy Committee on Environment, Utilities and Corporate Services, at its meeting held on March 4, 2025, considered the 2025 Work Plan of the Saskatoon Environmental Advisory Committee.

Attachment
2025 Work Plan of the Saskatoon Environmental Advisory Committee.

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SEAC 2025 WORK PLAN

Deputy City Clerk, Standing Policy Committee on Environment, Utilities and Corporate Services

Re: 2025 Work Plan – Saskatoon Environmental Advisory Committee (File No. CK. 175-9)

Work Plan for 2025

In 2025 SEAC will do the following, aligned with the City of Saskatoon strategic plan:

1. Environmental Leadership

- Encourage City Council to take a proficient proactive stance in Municipal issues relating to environment and sustainability applicable to the City size.
- Continue to advise City Council in the implementation of the Low Emissions Community Plan and the Corporate Climate Adaptation Strategy, including renewable energy such as solar and supporting infrastructure.
- Consideration of climate resilience infrastructure (landfills, utilities, etc.).
- Advise City Council on environmental best practices.
- Continue to advise City Council on Waste Reduction and Diversion, including Green Bin and organics programs, and advise Council on programs like SK Recycles and Sarcan's new flexible plastic, styrofoam, and non-deposit glass program.
- Advise City Council on water conservation and quality management (request an update on the water conservation strategy and the smart metering system).
- Continue to advise City Council in their adoption and implementation of the Triple Bottom Line Policy.
- Advise City Council in the sustainable development of new facilities, such as the new central library.
- Instituting change is difficult and changing behaviour even more so. It requires clear, concise, consistent communication. SEAC will encourage and assist city council in developing a broadcast environmental communication plan and

platform to inform, educate and engage all citizens in the merits of changing behaviours that help conserve and protect any and all facets of the environment.

2. Sustainable Growth

- Stay informed on all components of the Plan for Growth and encourage City Council to ensure it is environmentally sustainable.
- Advise on the alignment of building and construction standards with waste, water, transportation, and emissions reduction goals with the upcoming Federal building code update.
- Advise on the protection of natural areas, including the Swales, through initiatives such as the Natural Areas Policy, the Green Infrastructure Strategy, and the Natural Capital Asset Valuation program.
- Provide feedback on the Natural Areas Policy management plans for the Small Swale and Richard St. Barbe areas.
- Provide feedback on management of the current park spaces on naturalizing the areas and adding diverse vegetation.
- Advise City Council on development of the National Urban Park including advising on co-creation with Indigenous communities and integration of traditional ecological knowledge into the planning and management of the park.
- Research and advise on urban heat island effects in development projects and strategies for mitigation.

3. Moving Around Sustainably

- Continue to support the development of a Bus Rapid Transit system and implementation of the Active Transportation Plan, which are critical components of the Saskatoon Low Emissions Community Plan.
- Continue to advise on alternative transportation methods such as development of the electric scooter program.
- Advise on accessibility for sustainable systems.

4. Quality of Life

Sustainability and Health

- Advise City Council on food security and community garden programs.
- Advise City Council on implications of climate change on community health and well-being including research and advise on blue-green infrastructure strategies to enhance community resilience to climate change.
- Research Planetary boundary – if 6 of 9 boundaries have been crossed, what will that mean for the City.
- Advise City Council on sustainability metrics reporting.
- Advise City Council on noise/light/air pollution mitigation.

Community Engagement

- Continue to support community and education initiatives, such as the Student Action for a Sustainable Future program.
- Support the Environmental Cash Grants program.
- Encourage community groups to attend SEAC meetings.
- Arrange for training opportunities in the meetings (i.e., Meewasin presentation, etc.).
- Maintain our education-based social media programming including information on the following:
    - Emergency preparedness checklist (storm, fire, water)
    - Water restrictions during a drought
    - Turning lawns to gardens and xeriscape.

STANDING POLICY COMMITTEE ON TRANSPORTATION

22nd Street and Confederation Drive Intersection Improvements – March 2025 Update

Recommendation of the Committee
That Option 3 – A New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from a Right turn out to a Right turn in, and Fairmont Drive and Fairlight Drive Intersections Upgrades for the 22nd Street West and Confederation Drive Intersection Improvements Functional Design be approved.

History
The Standing Policy Committee on Transportation, at its meeting held on March 4, 2025, considered a report of the Transportation and Construction Division regarding the above.

Attachment
March 4, 2025 report of the Transportation and Construction Division.

22nd Street and Confederation Drive Intersection Improvements – March 2025 Update

ISSUE

Three transportation functional design options have been developed to address safety and operations issues for eastbound traffic on 22nd Street West between Diefenbaker Drive and Confederation Drive. Approval of one option is required to include a request for funding the detailed design and construction of the project in future multi-year business plan and budget processes.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council that Option 3 – A New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from a Right turn out to a Right turn in, and Fairmont Drive and Fairlight Drive Intersections Upgrades for the 22nd Street West and Confederation Drive Intersection Improvements Functional Design be approved.

BACKGROUND

History

At its Regular Business Meeting held on November 21, 2022, City Council received the Circle Drive West Functional Planning Study Final Report and resolved, in part:

> "That the Recommended Plan of the Circle Drive West Functional Planning Study be added to the Saskatoon Transportation Master Plan (STMP) Infrastructure List for future prioritization."

The study recommended geometric changes to the corridor to address traffic safety and operational issues and identified an eastbound slotted left-turn lane at the 22nd Street West and Confederation Drive intersection as a short-term improvement that should be implemented prior to the construction of the recommended Circle Drive and 22nd Street West interchange.

At its Special Meeting held on October 10, 2023, the Standing Policy Committee on Transportation received the Saskatoon Transportation Master Plan – 2023 Prioritized Infrastructure List. The 22nd Street West and Confederation Drive Upgrades project is ranked as number 26 on the prioritized list.

At its Regular Meeting held on August 6, 2024, the Standing Policy Committee on Transportation received the 22nd Street and Confederation Drive Intersection Improvements report and resolved:

> "That the matter be referred back to the Administration to report back on the implications of removing the right out on Fairlight Crescent."

At its Regular Meeting held on February 4, 2025, the Standing Policy Committee on Transportation received the 22nd Street and Confederation Drive Intersection Improvements – February 2025 Update report and resolved:

> "That the Administration bring forward the recommended configuration, considering all inputs to date, to the March 4, 2025 meeting of the Standing Policy Committee on Transportation."

Current Status

Queuing on 22nd Street West eastbound frequently backs up from the Confederation Drive intersection past the Fairmont Drive access. While there is no dedicated right-turn lane, drivers frequently use the shoulder to bypass the queue and make a right turn onto the on-ramp.

The 22nd Street West and Fairmont Drive intersection is located 115 metres west of the 22nd Street West and Confederation Drive intersection. Traffic entering 22nd Street from Fairmont Drive must weave across three lanes of traffic to make an eastbound to northbound left turn at Confederation Drive. Site observations and resident feedback confirm that drivers will make unsafe maneuvers to complete this weaving movement. Several temporary measures have been installed along 22nd Street West in an attempt to prevent this movement. These included concrete barriers, low profile barrier, and Tuff Curb with delineator posts. Each of the measures were removed due to operational issues.

A review of collision data from 2019–2023 shows records of 188 collisions that occurred at the intersection of 22nd Street West and Confederation Drive. There were no recorded collisions at the intersection of 22nd Street West and Fairmont Drive; however, it is likely that collisions occurring between the two intersections may have been attributed to the 22nd Street West and Confederation Drive intersection. While the data cannot determine the exact number of collisions that occurred due to weaving from the Fairmont Drive intersection, eastbound traffic accounted for a disproportionately high percentage of side swipe and rear end collisions. Eastbound traffic made up 32% of the total number of collisions while only accounting for 25% of the traffic volume.

Based on the collision records, there were no fatal or severe injury collisions, 40 minor injury collisions, and 148 property damage only collisions. In terms of vulnerable road users, there were two minor injury collisions involving pedestrians and one minor injury collision with a cyclist.

Public Engagement

Engagement activities for this project included a City of Saskatoon engage page, public open house, and online survey. Eighteen people attended the open house. Most of the attendees supported the proposed recommendations for the changes to the intersection of 22nd Street West and Confederation Drive. There were 124 survey responses submitted. Both open house attendees and survey respondents had mixed feedback on

the changes to the Fairmont Drive access. Some residents did not want any changes, others wanted to remove the access, many residents supported the idea of changing Fairmont Drive to a right turn in access, and some residents suggested building a new right turn out access at Fairlight Crescent.

The "What We Learned Summary" from engagement events is included in the technical report in Appendix 1.

DISCUSSION/ANALYSIS

OPTIONS

Three options have been developed that will address the safety and operational issues on 22nd Street West near Confederation Drive. The options differ in how access is provided to 22nd Street West from the Fairhaven neighbourhood and whether traffic signal and geometric improvements at the intersection of Fairmont Drive and Fairlight Drive are included.

Option 1 – A New Fairlight Crescent Right turn out Access and Changing the Existing Fairmont Drive Access from Right turn out to Right turn in (No upgrades to the intersection of Fairmont Drive and Fairlight Drive)

This option includes a new right turn out access from Fairlight Crescent for traffic entering 22nd Street West and changing the existing Fairmont Drive from a right turn out to a right turn in access for traffic from 22nd Street West. No upgrades to the intersection of Fairlight Crescent and Fairmont Drive are included in this option. The technical report for Option 1 can be found in Appendix 1.

Option 2 – No New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from Right turn out to Right turn in, and Fairmont Drive and Fairlight Drive Intersection Upgrades

This option changes the existing Fairmont Drive access from a right turn out to a right turn in from 22nd Street West but does not include the new right turn out access from Fairlight Crescent to 22nd Street West. It includes upgraded traffic signal infrastructure and geometric changes at the Fairmont Drive and Fairlight Drive intersection to accommodate the change in traffic patterns. The technical report for Option 2 can be found in Appendix 2.

Option 3 – A New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from Right turn out to a Right turn in, and Fairmont Drive and Fairlight Drive Intersection Upgrades

This option combines the previous two options and includes the new right turn out access from Fairlight Crescent to 22nd Street West, changing the existing Fairmont Drive Access from a right turn out to a right turn in access from 22nd Street West, and the traffic signal infrastructure and geometric changes at the intersection of Fairmont Drive and Fairlight Drive.

Functional plans for each option are shown in Appendix 3. The table below summarizes the pros and cons of each option.

Option	**Option 1** **A New Fairlight Crescent Right turn out Access and Changing the Existing Fairmont Drive Access from Right turn out to Right turn in (No upgrades to the intersection of Fairmont Drive and Fairlight Drive)**	**Option 2** **No New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from Right turn out to Right turn in, and Fairmont Drive and Fairlight Drive Intersection Upgrades**	**Option 3** **A New Fairlight Crescent Right turn out Access, Changing the Existing Fairmont Drive Access from Right turn out to a Right turn in, and Fairmont Drive and Fairlight Drive Intersection Upgrades**
Safety	• Improved safety at the 22nd Street West and Confederation Drive intersection • Improved safety on 22nd Street West between Diefenbaker Drive and Confederation Drive • New Fairlight Crescent access introduces new conflict points	• Improved safety at the 22nd Street West and Confederation Drive intersection • Improved safety on 22nd Street West between Diefenbaker Drive and Confederation Drive • Improved pedestrian safety at the Fairmont Drive and Fairlight Drive intersection	• Improved safety at the 22nd Street West and Confederation Drive intersection • Improved safety on 22nd Street West between Diefenbaker Drive and Confederation Drive • New Fairlight Crescent access introduces new conflict points • Improved pedestrian safety at the Fairmont Drive and Fairlight Drive intersection
Traffic Operations	• Improved traffic operations for all intersections on 22nd Street West in the study area • Increased delay at the Fairmont Drive and Fairlight Drive intersection	• Improved traffic operations for all intersections on 22nd Street West in the study area • Improved traffic operations at the Fairmont Drive and Fairlight Drive intersection	• Improved traffic operations for all intersections on 22nd Street West in the study area • Improved traffic operations at the Fairmont Drive and Fairlight Drive intersection
Alignment with Approved Plans	• Aligns with the approved Circle Drive West Functional Planning Study	• Does not align with the approved Circle Drive West Functional Planning Study	• Aligns with the approved Circle Drive West Functional Planning Study
Standards and Policies	• Does not align with City of Saskatoon intersection spacing standards • Does not meet TAC* standards for weaving distances	• Aligns with City of Saskatoon intersection spacing standards • Meets the TAC standards for weaving distances	• Does not align with City of Saskatoon intersection spacing standards • Does not meet TAC standards for weaving distances
Community Access	• Provides an entrance and exit for Fairhaven to/from 22nd Street West between Diefenbaker	• Provides an entrance to Fairhaven from 22nd Street West between	• Provides an entrance and exit for Fairhaven to/from 22nd Street West between Diefenbaker

	Drive and Confederation Drive	Diefenbaker Drive and Confederation Drive • Exiting traffic must re-route to Diefenbaker Drive to access 22nd Street West	Drive and Confederation Drive
Cost	$2,615,000	$2,900,000	$2,970,000

*Transportation Association of Canada (TAC)

RATIONALE

All of the options are viable and supported by the Administration.

Option 3 is recommended because it meets the project goals of improved safety and operations, aligns with future plans for 22nd Street West as outlined in the approved Circle Drive West Functional Planning Study, maintains connectivity between the Fairhaven community and 22nd Street West, and addresses traffic operations and accessibility issues at the Fairmont Drive and Fairlight Drive intersection.

Additional details on the rationale for the recommended option are as follows:

- Option 1 – Does not address traffic operations and accessibility issues at the Fairmont Drive and Fairlight Drive intersection. If this option is selected, these recommendations would be included in future construction projects for these streets.
- Option 2 – Does not provide the new access at Fairlight Crescent. If this option is selected, drivers wanting to access 22nd Street West from the Fairhaven neighbourhood would have to use the Diefenbaker Drive intersection.
- Option 3 –Recommended because it maintains the connectivity to the Fairhaven neighbourhood and addresses traffic operations and accessibility issues at the Fairmont Drive and Fairlight Drive intersection.

Based on the engagement feedback, there was no clear consensus on the Fairmont Drive access. Many residents recognized the safety issues with the current Fairmont Drive access and supported changing Fairmont Drive from a right turn out to a right turn in from 22nd Street West. Some residents suggested introducing a new right turn out access from Fairlight Crescent which would provide drivers from the Fairhaven neighbourhood with another option to access 22nd Street West that would not require them to reroute to Diefenbaker Drive.
Although a new right turn out to 22nd Street West from Fairlight Crescent does not meet the recommended intersection spacing or weaving distance standards, the spacing from the new Fairlight Crescent access would be 300 metres to Confederation Drive, over twice as far as the current right turn out access from Fairmont Drive which is 115 metres from Confederation Drive. This extra distance will provide drivers with more time to position themselves in their desired lane before reaching the Confederation Drive intersection.

Option 3 includes the following elements:

22nd Street West

- Construct an eastbound slotted left-turn lane and an exclusive eastbound right-turn lane at the intersection of 22nd Street West and Confederation Drive.
- Convert the existing right turn out access at Fairmont Drive to a right turn in access from 22nd Street West.
- Construct a new right turn out access to 22nd Street West from Fairlight Crescent.
- Relocate the existing overhead guide sign and roadside safety system located between Confederation Drive and Fairmont Drive farther west.
- Construct a third eastbound travel lane with curb and gutter between Diefenbaker Drive and Confederation Drive.
- Realign the pedestrian crosswalk, adjust pedestrian accessible ramps, and correct drainage deficiencies on the southwest corner of the intersection at 22nd Street West and Confederation Drive.
- Install a shared-use pathway on the south side of 22nd Street West between Diefenbaker Drive and Confederation Drive.

Intersection of Fairmont Drive and Fairlight Drive

- Upgrade the traffic signal infrastructure to the latest standards.
- Add a curb extension in the southwest corner and remove the existing right turn channelization.
- Improve the pedestrian accessibility by:
    - Realigning the west and south pedestrian crosswalks.
    - Reconstructing the pedestrian accessible ramps on the northwest and southwest intersection corners.
    - Addressing any drainage deficiencies in the pedestrian accessible ramps.

FINANCIAL IMPLICATIONS

The total estimated cost for construction of the 22nd Street West and Confederation Drive Intersection Improvements project is $2,970,000. Information on the cost estimate is included in Appendix 4.

The detailed design and construction of the project is currently unfunded. The Administration will look for opportunities to leverage alternative funding programs that could be applicable to this project, such as Saskatchewan Government Insurance (SGI) Safety Grants.

OTHER IMPLICATIONS

There are no privacy or legal implications identified. The social and environmental implications have not been quantified.

NEXT STEPS

1. A funding request for the detailed design and cost estimate refinement will be included in future Multi-Year Business Plan and Budget processes for consideration.

2. The project will remain on the Transportation Master Plan list of prioritized transportation infrastructure projects awaiting funding.
3. Apply for alternate sources of funding for the detailed design and construction if applicable and available.
4. Construction will proceed once the detailed design is complete and adequate capital funding is available to complete the project.

APPENDICES

1. August 2024 - 22nd Street West and Confederation Drive Intersection Improvements Technical Report (with Fairlight Crescent access)
2. February 2025 - 22nd Street West and Confederation Drive Intersection Improvements Technical Report Update (Fairmont Drive Upgrades with no Fairlight Crescent Access)
3. Functional Plans - 22nd Street West and Confederation Drive Intersection Improvements
4. Cost Estimates - 22nd Street West and Confederation Drive Intersection Improvements Options

Report Approval

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

Admin Report - 22nd Street and Confederation Drive Intersection Improvements – March 2025 Update.docx

City of Saskatoon

22nd Street West and Confederation Drive Intersection Improvements

Functional Design Report

July 3, 2024

Executive Summary

Safety and operational issues exist on 22nd Street West between Diefenbaker Drive and Confederation Drive in the eastbound direction. This location has long-standing concerns with the operation of vehicles attempting to maneuver from Fairmont Drive across the three traffic lanes to turn left from 22nd Street West eastbound to Confederation Drive northbound. To address these issues and capitalize on an opportunity to align with the planned future state of the roadway, the following improvements are recommended:

- Construct an eastbound slotted left-turn lane and an exclusive eastbound right-turn lane at the intersection of 22nd Street West and Confederation Drive.
- Construct a new right-out access to 22nd Street West from Fairlight Crescent and convert the existing access at Fairmont Drive to a right-in access from 22nd Street West.
- Relocate the existing overhead guide sign and roadside safety system located between Confederation Drive and Fairmont Drive farther west.
- Construct a third eastbound travel lane with curb and gutter between Diefenbaker Drive and Confederation Drive.
- Realign the pedestrian crosswalk, adjust pedestrian accessible ramps, and correct drainage deficiencies on the southwest corner of the intersection at 22nd Street West and Confederation Drive.
- Install a shared-use pathway on the south side of 22nd Street West between Diefenbaker Drive and Confederation Drive.

These improvements were presented to the public at an open house drop-in event on May 30, 2024. Feedback on the proposed improvements was generally positive and resulted in changes to the recommendations for Fairmont Drive.

A high-level cost estimate for each of the recommended improvements is shown below:

Improvement	Cost Estimate
Construct an eastbound slotted left-turn lane	$ 800,000
Construct an eastbound right-turn lane	$ 390,000
Convert Fairmont Drive access to a right-in configuration from 22nd Street West	$ 150,000
Construct new right-out access from Fairlight Crescent to 22nd Street West	$ 70,000
Relocate overhead guide sign and roadside safety system	$ 595,000
Install curb, gutter, and a third eastbound through lane	$ 345,000
Correct pedestrian accessible ramps and drainage deficiencies	$ 15,000
Install shared-use pathway on the south side of 22nd Street West	$ 250,000
Total	**$ 2,615,000**

It is recommended that the functional plan for these improvements be approved, and the project proceed to the detailed design and construction phases when funding is available.

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1. INTRODUCTION

1.1 Background

Safety and operational issues exist on 22nd Street West between Diefenbaker Drive and Confederation Drive in the eastbound direction. This location has long-standing concerns with the operation of vehicles attempting to maneuver from Fairmont Drive across the three traffic lanes to turn left from 22nd Street West eastbound to Confederation Drive northbound. This movement is shown in Figure 1-1.

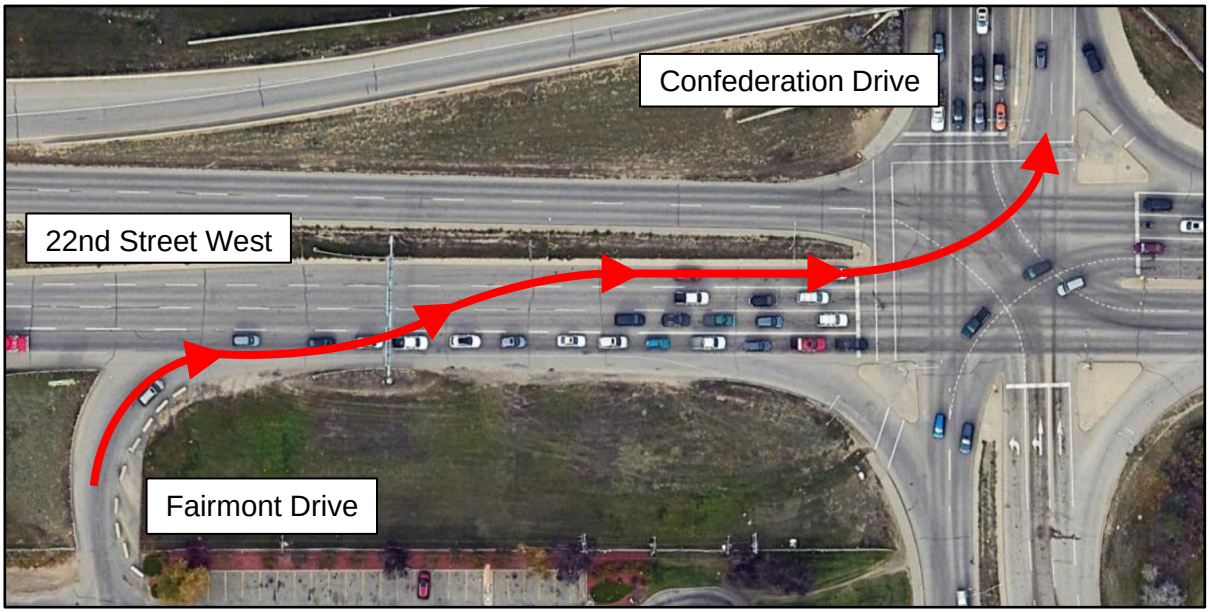


Figure 1-1: Weaving Movement from Fairmont Drive to Confederation Drive

Several measures have been installed along 22nd Street West in an attempt to prevent this movement. These include concrete barriers, low-profile barrier, and Tuff Curb with delineator posts. Each of the measures has been removed due to ongoing concerns and operational issues. For example, Figure 1-2 shows a tractor-trailer mounted on the low-profile barrier that was installed from 2014 to 2016.

Figure 1-2: An eastbound tractor-trailer got hung-up on the low-profile barriers – conditions at the time were early morning (dark) and rain. Photo credit: Global Saskatoon, August 17, 2016

This segment of 22nd Street West between Diefenbaker Drive and Confederation Drive was also included in the scope of the 2022 Circle Drive West Functional Planning Study.

At its Regular Business Meeting held on November 21, 2022, City Council received the Circle Drive West Functional Planning Study Final Report and resolved, in part,

> "That the Recommended Plan of the Circle Drive West Functional Planning Study be added to the Saskatoon Transportation Master Plan (STMP) Infrastructure List for future prioritization."

The study recommended geometric changes to the corridor to address these concerns and identified an eastbound slotted left-turn lane at the 22nd Street West and Confederation Drive intersection as a short-term improvement that should be implemented prior to the construction of the recommended Circle Drive and 22nd Street West interchange.

At its Special Meeting held on October 10, 2023, the Standing Policy Committee on Transportation received the Saskatoon Transportation Master Plan – 2023 Prioritized Infrastructure List. The 22nd Street West and Confederation Drive Upgrades project is ranked as number 26 on the prioritized list.

1.2 Study Area

This study primarily focuses on 22nd Street West between Diefenbaker Drive and Confederation Drive.

When considering the operational impacts of the proposed improvements, the following signalized intersections were also included in the analysis:

1. 22nd Street West and Diefenbaker Drive
2. Fairlight Drive and Diefenbaker Drive
3. Fairlight Drive and Fairmont Drive

Each of the primary and secondary study intersections are identified in Figure 1-3.

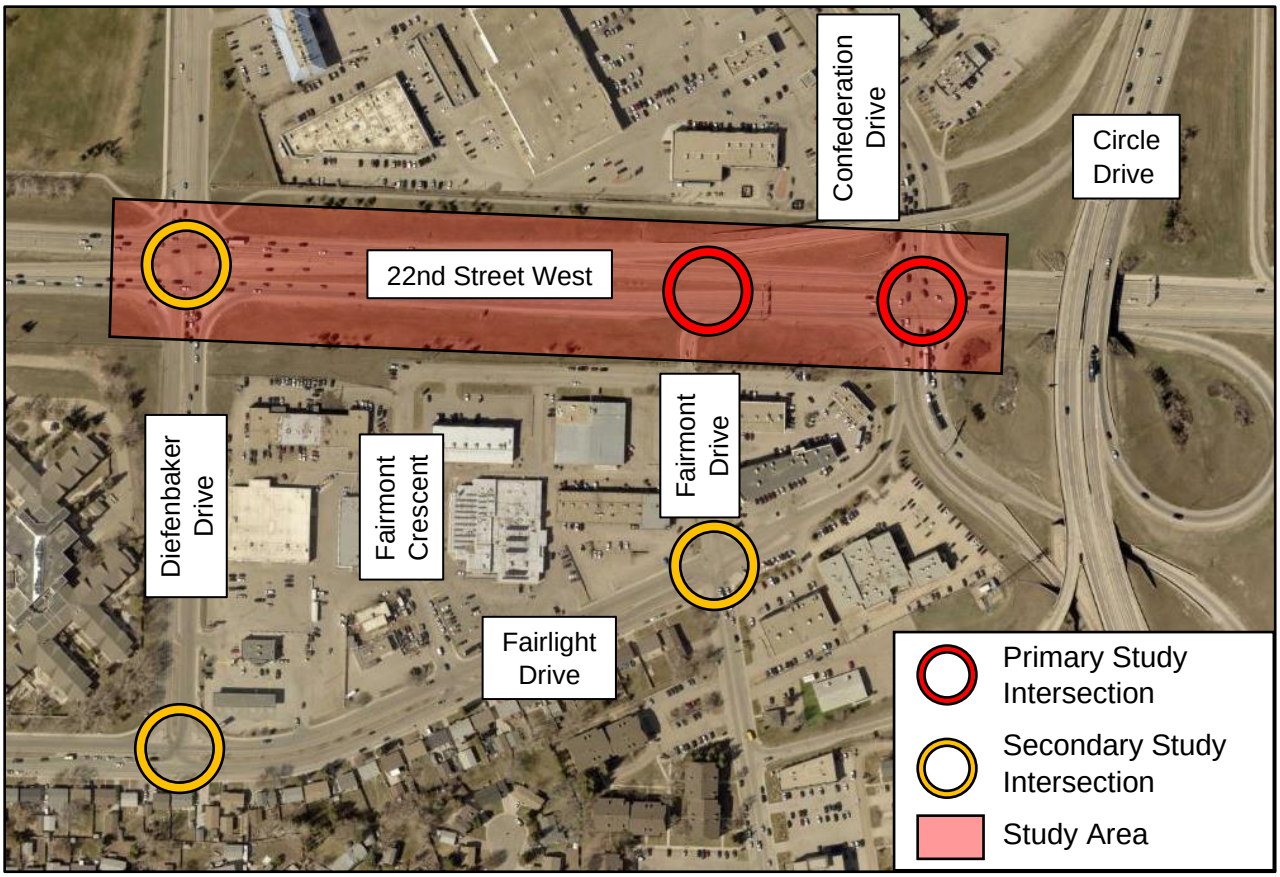


Figure 1-3: Study Area

1.3 Study Objectives

The objective of this study is to create a functional plan for 22nd Street West eastbound to address safety and operational concerns at the Fairmont Drive and Confederation Drive intersections. To achieve this goal, the following tasks were completed:

- Review any relevant reports, in-service safety audits, and functional planning studies.
- Assess traffic operations at all study intersections using the current conditions.
- Review and analyze the most recent five years of available collision data from Saskatchewan Government Insurance (SGI) for the primary study intersections.
- Create a draft traffic plan based on the recommendations of previous reports, traffic operations assessment, and collision history review.
- Conduct public engagement to gather feedback on the draft traffic plan.
- Finalize the recommended traffic plan based on feedback gathered.
- Generate a high-level estimate for the construction costs of the recommended improvements.

2. EXISTING CONDITIONS

2.1 Road Network

22nd Street West is of one the major east-west roadways connecting the west side of Saskatoon with the central business district. It is the primary route to many communities west of Saskatoon through its connections with Highway 14 and Highway 7. 22nd Street West between Confederation Drive and Diefenbaker Drive is classified as an expressway, has a posted speed limit of 60 km/h, and has an Average Annual Daily Traffic (AADT) of 26,600 vehicles per day.

2.1.1 22nd Street West and Confederation Drive / Fairlight Drive

The 22nd Street West and Confederation Drive intersection is signalized with crosswalks on the west and north approaches. There is a shared-use pathway on the north side of 22nd Street West. Sidewalk is present on both sides of Confederation Drive, on the north side of 22nd Street West east of the intersection, and on the west side of the Circle Drive on/off-ramps south of the intersection.

In the eastbound direction, there are three through lanes, a channelized right-turn lane and a left-turn lane. Queuing on 22nd Street West eastbound frequently backs up from past the Fairmont Drive access. There are typically larger queues in the curb lane due to its alignment with the Circle Drive North on-ramp located 100 metres east of the intersection. While there is no dedicated right-turn lane, drivers frequently use the shoulder to bypass the queue and make a right-turn onto the Circle Drive on-ramp.

Figure 2-1: Damage to the eastbound shoulder due to vehicles bypassing the vehicle queue

In the westbound direction, there are two through lanes, a right-turn lane, and two left-turn lanes. To accommodate the two left-turn lanes, both the eastbound and westbound left-turn movements are programmed with protected-prohibited signal phases.

Figure 2-2: Westbound protected-prohibited left-turn phase

In the southbound direction, there is a shared through/right-turn lane, one through lane, and two left-turn lanes.

In the northbound direction, traffic approaches the intersection via a Circle Drive northbound off-ramp. The single lane leaving Circle Drive splits into a right-turn lane, a through lane, a through/left-turn lane, and a second left-turn lane. The northbound and southbound movements have split phasing due to the high volume of left-turn movements.

2.1.2 22nd Street West and Fairmont Drive

Fairmont Drive intersects 22nd Street West as a single lane right-out only access with yield-control. The movement tends to operate as a zipper merge when congested. While signage is in place prohibiting the Fairmont Drive – Confederation Drive weaving movement, there is currently no physical barriers preventing drivers from performing this maneuver.

A guard rail on the west side and concrete jersey barriers on the east side have been installed on the short section of Fairmont Drive between 22nd Street West and Fairlight Crescent.

Figure 2-3: Signage at the Fairmont Drive and 22nd Street West intersection

2.1.3 22nd Street West and Diefenbaker Drive

The intersection of 22nd Street West and Diefenbaker Drive is a signalized intersection with crosswalks on all approaches. The northbound direction has one left-turn lane, two through lanes and one channelized right-turn lane, while the southbound direction has one left-turn lane, two through lanes and one shared through/right-turn lane with channelization for the right-turn movement. The eastbound direction has one slotted left-turn lane, a through lane, and a shared through/right lane with a channelized right-turn island. The westbound direction has one slotted left-turn lane, two through lanes, and a shared through/right lane with channelization for the right-turn movement.

There is a shared-use pathway on the north side of 22nd Street. Both the east and west sides of Diefenbaker Drive have sidewalk installed, but there is no sidewalk or shared-use path on the south side of 22nd Street West.

2.1.4 Fairlight Drive and Diefenbaker Drive

Fairlight Drive and Diefenbaker Drive is a signalized T-intersection. Diefenbaker Drive has one left-turn lane and two channelized right-turn lanes. One right-turn lane is continuous and one is yield-controlled. Fairlight Drive has one left-turn bay and two through lanes in the eastbound direction, whereas the westbound direction has two through-lanes and one channelized right-turn lane. The north and east legs have crosswalks.

Two driveways provide access to the commercial property located in the northeast quadrant, one on Fairlight Drive and one on Diefenbaker Drive. The south side of Fairlight Drive has residential frontage with driveways. On-street parking is permitted on the south side of Fairlight Drive.

2.1.5 Fairlight Drive and Fairlight Crescent

Fairlight Drive and Fairlight Crescent is a stop-controlled T-intersection. Fairlight Crescent has one shared left/through/right lane and has the stop condition. There is one commercial driveway access in the northwest quadrant approximately 10 metres north on Fairlight Crescent.

Fairlight Drive has three westbound through lanes and two eastbound through lanes. Fairlight Drive has residential frontage with driveways on the south side. On-street parking is permitted on the south side of Fairlight Drive.

2.1.6 Fairlight Drive and Fairmont Drive

Fairlight Drive and Fairmont Drive is a signalized intersection with crosswalks at all approaches. Fairlight Drive has one left-turn lane, one through lanes and one channelized right-turn lane in the eastbound direction. The through lane dead-ends 40 metres downstream of the intersection and provides access to a commercial area and health centre. There is one left-turn lane, two through lanes, and one through/right lane in the westbound direction. The northbound direction has one left-turn lane and one through/right-turn lane. The southbound direction has one shared left/though/right lane.

Commercial driveways placed close to the intersections and on-street angle parking in the southeast quadrant serve adjacent land uses.

The Circle Drive southbound exit ramp to Fairmont Drive intersects 100 metres to the south. In the northbound direction, overhead signage to 22nd Street West eastbound designates curb lane use.

2.2 Traffic Operations

22nd Street and Confederation Drive

To assess the existing traffic operations at the 22nd Street West and Confederation Drive intersection, estimates for the current turning movements volumes were generated by taking the most recent traffic count conducted in 2019 and projecting those volumes to the year 2024. A 2% annual growth factor was used to generate the 2024 estimates, which are shown in Figure 2-4 and Figure 2-5.

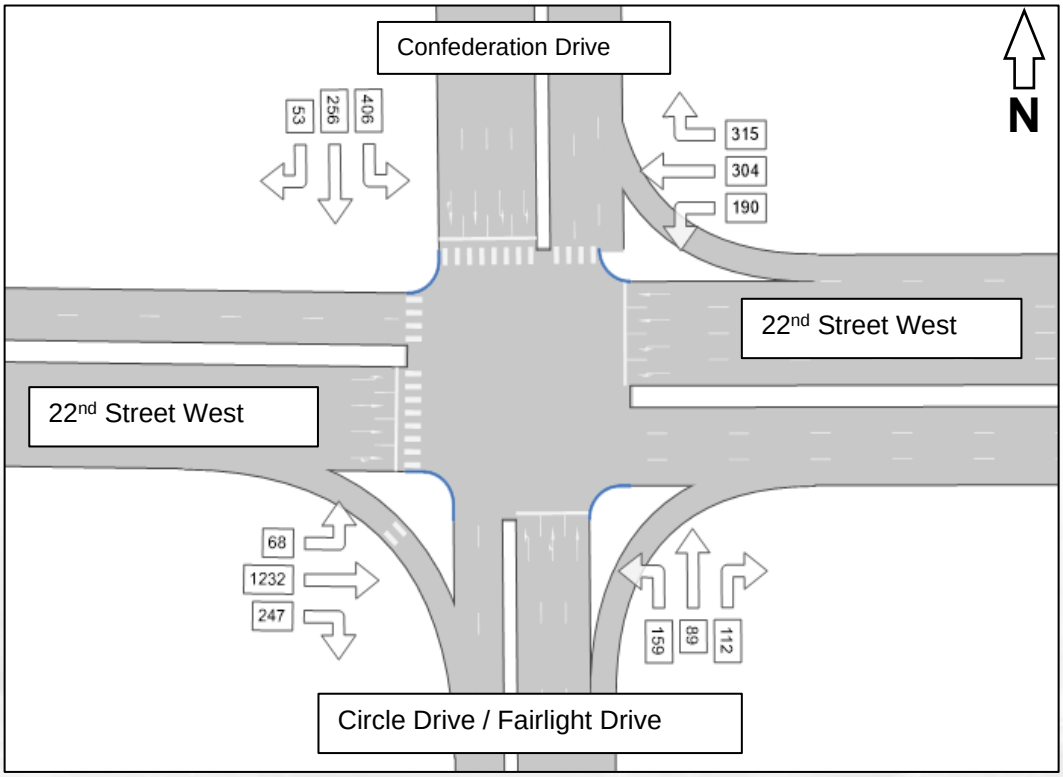


Figure 2-4: 22nd Street West and Confederation Drive 2024 AM Peak Hour Traffic Volume Estimates

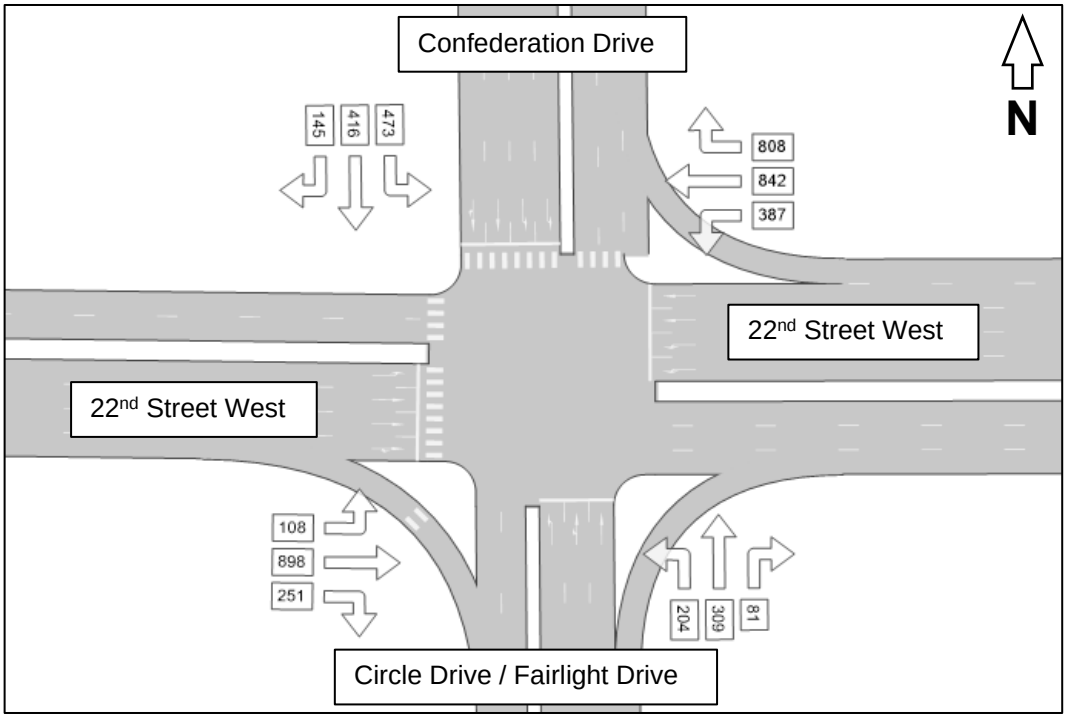


Figure 2-5: 22nd Street West and Confederation Drive 2024 PM Peak Hour Traffic Volume Estimates

These turning movement counts were used in combination with PTV Vistro traffic modelling software to produce a traffic analysis of the intersection during the AM and PM peak hours. Table 2-2 shows the operational performance for each approach of the intersection. Delay (seconds) and Highway Capacity Manual Level of Service (LOS), as well as volume/capacity ratio is presented. Complete summary reports are included in Appendix A.

The intersection of 22nd Street West and Confederation Drive operates at LOS D in the morning and afternoon peak hours. In both the morning and afternoon, the eastbound left turn is the worst performing movement with a LOS E and average delay of 62 seconds. Other than the free-flowing westbound right turn, the movements with the lowest delays are the eastbound and westbound through movements. Given the higher traffic volumes and expressway classification of 22nd Street West, it is appropriate that these two movements are given a higher priority at this intersection.

Table 2-1: Level-of-Service Definition for Signalized Intersections

Average Control Delay (sec/veh)	Level of Service	General Description
<= 10	A	Free Flow
>10 - 20	B	Stable Flow (slight delays)
>20 - 35	C	Stable Flow (acceptable delays)
>35 - 55	D	Approaching unstable flow (tolerable delay, occasional wait through more than one signal cycle before proceeding)
>55 - 80	E	Unstable flow (intolerable delay)
>80	F	Forced flow (jammed)

Table 2-2: 22nd Street West and Confederation Drive Intersection Performance

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West and Confederation Drive	SB	LT	D	51	0.83	75	D	48	0.80	83
		Thru	D	48	0.60	60	E	60	0.92	109
		RT	D	48	0.60	57	E	61	0.92	102
	NB	LT	D	54	0.52	33	D	54	0.71	66
		Thru	D	55	0.52	33	D	53	0.70	67
		RT	E	55	0.56	35	E	57	0.77	70
	EB	LT	E	62	0.69	30	E	63	0.80	47
		Thru	C	27	0.63	121	D	38	0.69	115
		RT	C	28	0.63	121	D	42	0.69	115
	WB	LT	E	56	0.84	38	D	54	0.86	73
		Thru	B	18	0.18	33	C	38	0.64	114
		RT	A	-	-	-	A	-	-	-
	Intersection Summary		D	**36**	**0.50**	**-**	D	**46**	**0.59**	**-**

****How to read the table? The North American Traffic Engineering standard for measuring the performance of a signalized intersection is to measure the *average delay* in seconds a driver will experience in completing a maneuver. The software used to analyze the intersection calculates an average delay to each movement based on the traffic volumes, permitted movements and signal timing. This average delay corresponds to established Levels of Service (LOS). The LOS can range from A to F (the shorter the average delay the better the LOS, the longer the average delay the worse the LOS). Generally, the City prefers to avoid LOS E and F. However, a LOS E or F does not indicate the need for, or trigger, improvements. Other considerations include: the traffic volume performing the problematic movement with LOS E or F, intersection geometrics and signal operation, intersection spacing, road classification, availability of alternate routes, pedestrian movements, access management, type of adjacent land use, future development in the area and of course, cost.

22nd Street and Fairmont Drive

An assessment of the northbound right-turn movement at Fairmont Drive and 22nd Street West intersection was also completed. Using the same process as the Confederation Drive intersection, traffic volumes from the most recent traffic count conducted in 2014 were projected to 2024. The 2024 turning volume estimates for the northbound right turn are 245 vehicles in the AM peak hour and 239 vehicles in the PM peak hour.

Table 2-3: Level-of-Service Definition for Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service	General Description
<= 10	A	Free Flow
>10 - 15	B	Stable Flow (slight delays)
>15-25	C	Stable Flow (acceptable delays)
>25-35	D	Approaching unstable flow (tolerable delay, occasional wait through more than one signal cycle before proceeding)
>35-50	E	Unstable flow (intolerable delay)
>50	F	Forced flow (jammed)

Synchro traffic modelling software was used to assess the traffic operations for this yield-controlled access. Table 2-4 summarizes the performance of the movement. The intersection operates with the LOS C in the AM peak hour and LOS B in the PM peak hour. Complete summary reports are included in Appendix A.

Table 2-4: 22nd Street West and Fairmont Drive Intersection Performance

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West and Fairmont Drive	NB	RT	C	18	0.49	21	B	15	0.41	15

2.3 Collision History

An analysis of the most recent five-year collision history available for the intersection was completed using records from the Saskatchewan Traffic Accident Information System managed by SGI. Collision data from 2018 – 2022 contains records of 183 collisions that occurred at the intersection of 22nd Street West and Confederation Drive. There were no recorded collisions at the intersection of 22nd Street West and Fairmont Drive; however, it is likely that collisions occurring between the two intersections may have been attributed to the 22nd Street West and Confederation Drive intersection. A summary of the collision data is shown in Appendix B.

Based on the records, there were no fatal or severe injury collisions, 41 minor injury collisions, and 142 property damage only collisions. In terms of vulnerable road users, there were two minor injury collisions involving pedestrians, one minor injury collision with a cyclist, and one property damage only collision with a cyclist.

As shown in Figure 2-6, the collision configurations were dominated by rear end collisions followed by side swipe collisions. Both rear ends and side swipes are typically collisions configurations that occur at a higher rate in areas where traffic is weaving across multiple travel lanes. While the data cannot determine the exact number of collisions that occurred due to weaving from the Fairmont Drive intersection, eastbound traffic accounted for a disproportionately high percentage of side swipe and rear end collisions. Eastbound traffic made up 37% of the total number of collisions while only accounting for 25% of the traffic volume.

This pattern of excess rear end and side swipe collisions also extends to a comparison of 22nd Street West and Confederation Drive against other similar intersections in the city. When looking at a typical 4-legged signalized intersection in Saskatoon, city-wide collision data shows that approximately 38% of collisions are caused by a rear end and 10% are side swipes between two vehicles going in the same direction. As shown in Figure 2-7, the intersection of 22nd Street West and Confederation Drive exceeds the average for those collision types with 15% side swipe – same direction and 58% rear ends. The intersection is below the City-wide average in every other type of configuration.

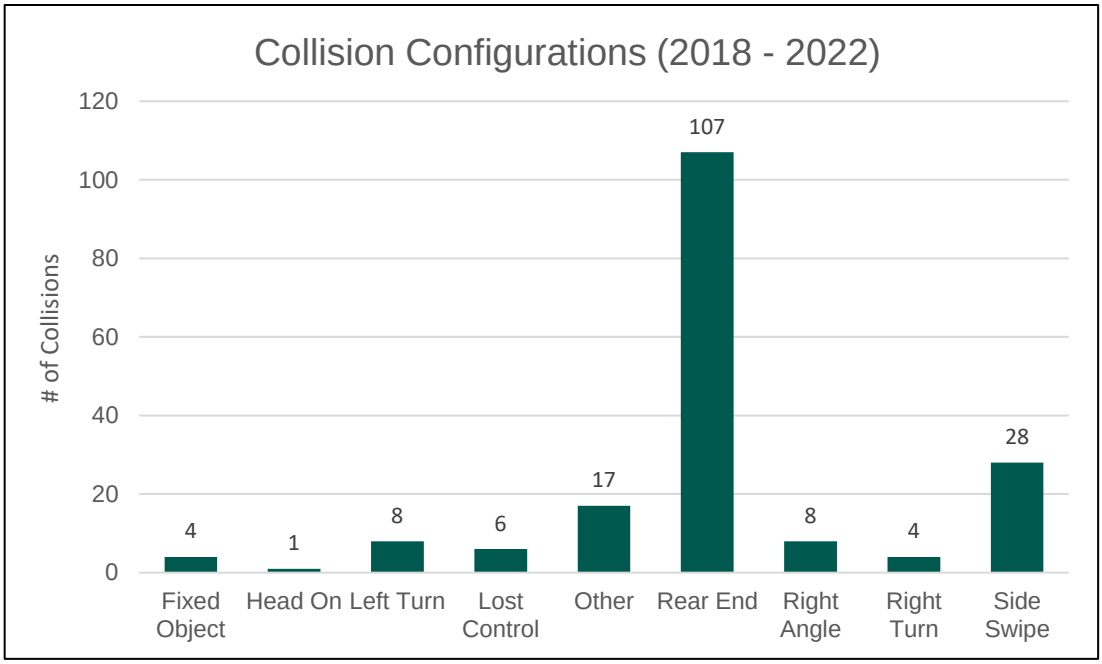


Figure 2-6: Collision Configurations at 22nd Street West and Confederation Drive (2018 - 2022)

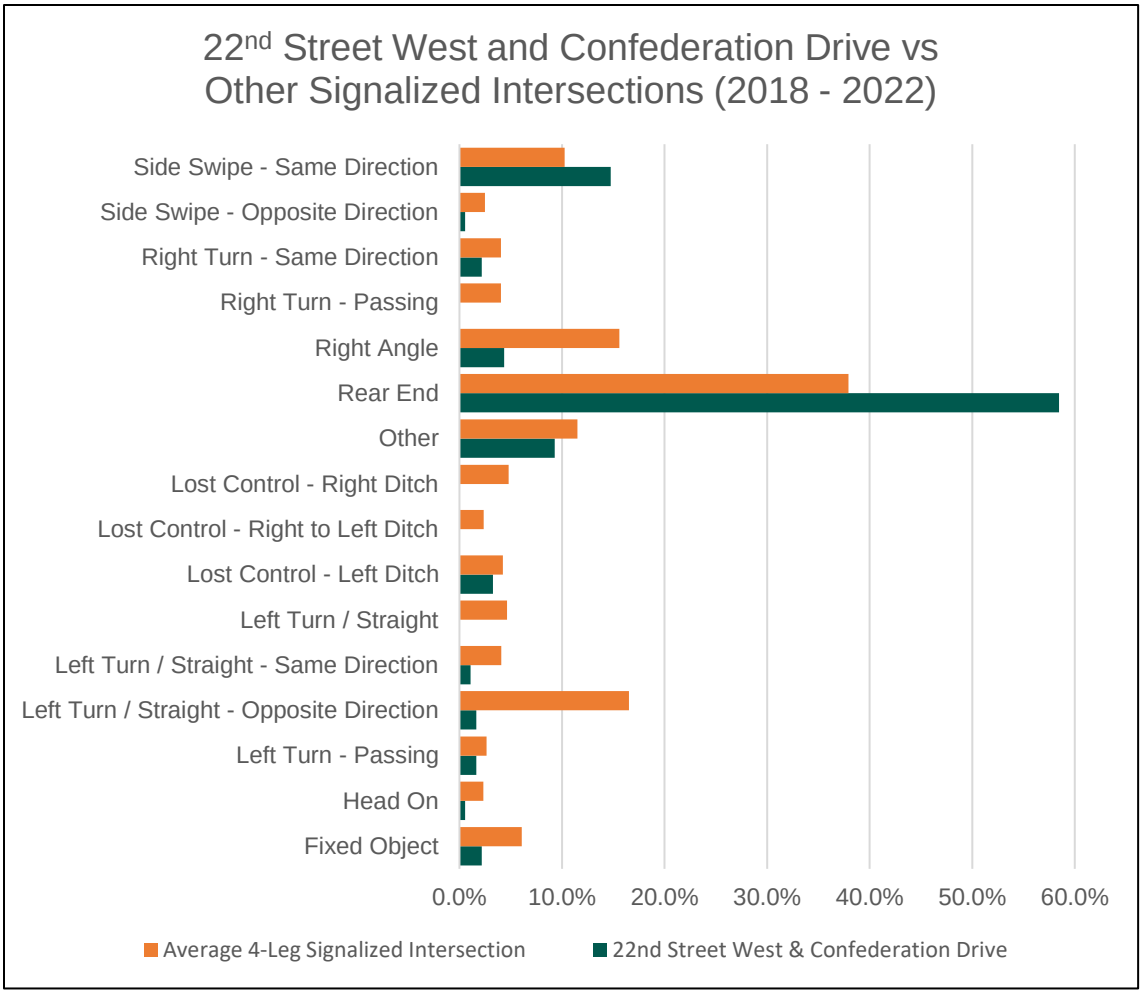


Figure 2-7: City-wide Collision Configuration Comparison

2.4 Field Observations

A field investigation confirmed that traffic weaving between Fairmont Drive to make a left turn at Confederation Drive is contributing to the higher incidence of rear end and side swipe collisions at the intersection.

During a one-hour period of observation during the AM peak hour on June 7, 2024, multiple instances of near misses and unsafe weaving maneuvers were noted. For example, Figure 2-8 shows a driver bypassing queued vehicles on Fairmont Drive to make an unsafe maneuver into the eastbound left turn lane at the Confederation Drive intersection.

Figure 2-8: Unsafe Maneuvers at Fairmont Drive

It was also noted that queuing on Fairmont Drive would frequently back up through the Fairmont Drive and Fairlight Crescent intersection. Vehicles turning onto 22nd Street West would also zipper merge onto the roadway once the queues from Confederation Drive had backed up past the Fairmont Drive access.

3. DRAFT TRAFFIC PLAN

3.1 Overview

Multiple studies including the 2022 Circle Drive West Functional Planning Study, a 2018 Intersection Improvement Report, and a 2016 In-Service Safety Review have assessed traffic safety and operations at the Confederation Drive and Fairmont Drive intersections on 22nd Street West. Based on the findings of the current analysis and the previous reporting, a draft traffic plan that addresses the identified deficiencies was developed. Table 3-1 identifies each of the safety and operational issues, deficiencies in current infrastructure, and opportunities to align the roadway with the planned future state.

Table 3-1: Challenges and Opportunities

#	Challenge / Opportunity
1	Fairmont Drive traffic can weave across three lanes to make an eastbound to northbound left turn at Confederation Drive.
2	Drivers frequently travel on the shoulder when making an eastbound right-turn to avoid the vehicle queue.
3	Yield traffic control and a low entry angle lead to faster entry speeds for traffic entering 22nd Street West from Fairmont Drive.
4	The overhead guide sign does not accommodate any additional widening for turning bays at its current location.
5	Opportunity to move towards the planned urban cross-section with the addition of curb and gutter on the south side of 22nd Street West.
6	Skewed pedestrian ramps and inadequate drainage infrastructure make pedestrian access to the crosswalks challenging.
7	Lack of infrastructure for people walking or cycling on the south side of 22nd Street West.

3.2 Proposed Improvements

The following improvements were recommended in the draft traffic plan. A plan showing the proposed improvements is included in Appendix C.

Proposed Improvement
Construct an eastbound slotted left-turn lane
Construct an eastbound right-turn lane
Realign Fairmont Drive and install stop signs
Relocate overhead guide sign and roadside safety system
Install curb, gutter, and a third eastbound through lane
Realign crosswalk, adjust pedestrian accessible ramps and correct drainage deficiencies
Install shared-use pathway on the south side of 22nd Street West

3.2.1 Eastbound Slotted Left-Turn Lane

To address the Fairmont Drive weaving movements, a slotted left-turn lane for eastbound traffic is recommended at the Confederation Drive intersection. The raised median separating the left-turn bay from the through lanes will create a physical barrier that will eliminate the weaving movements from Fairmont Drive. This recommendation also aligns with the Circle Drive West Functional Planning Study, which identified an eastbound slotted left-turn lane as a requirement for implementing the new Circle Drive and 22nd Street West interchange.

3.2.2 Eastbound Right-Turn Lane

The operational analysis indicates that there is significant queuing for the eastbound right-turn movement. Constructing an eastbound right-turn lane will improve storage capacity, reduce damage to the shoulder, and aligns with community feedback regarding this turning movement.

3.2.3 Realign Fairmont Drive and Install Stop Signs

If the eastbound slotted left-turn lane is able to physically eliminate the Fairmont Drive – Confederation Drive weaving movement, the remaining issue at Fairmont Drive is the high entry angle and yield control that leads to higher entry speeds for drivers turning onto 22nd Street West. Realigning Fairmont Drive to intersect 22nd Street West at a 90-degree angle, reducing the corner radius, and changing the existing yield signs to stop signs will encourage drivers to come to a complete stop, identify a safe gap in oncoming traffic, and enter 22nd Street West at an appropriate speed.

3.2.4 Relocate the Existing Overhead Guide Sign and Roadside Safety System

The current location of the overhead guide sign falls within the footprint of the proposed eastbound slotted left-turn lane. Relocating the guide sign approximately 160 metres to the west will eliminate this conflict and will provide drivers with additional time to identify and place themselves in the correct lane to access Circle Drive, Fairlight Drive, Confederation Drive, etc.

3.2.5 Install Curb, Gutter, and Three Through Lanes

In the eastbound direction, 22nd Street West currently has two travel lanes that widens into a third travel lane between Diefenbaker Drive and Fairmont Drive. Extending the third travel lane to Diefenbaker Drive and installing curb and gutter on the south side of the road will align with the future state recommended in the Circle Drive West Functional Planning Study.

3.2.6 Realign Crosswalk, Adjust Pedestrian Accessible Ramps and Correct Drainage Deficiencies

The pedestrian and drainage infrastructure in the southwest corner of the 22nd Street West and Confederation Drive intersection currently interfere with each other. There is a non-standard drainage channel that has forced the pedestrian crossing to be configured at a skewed angle. Aligning the crosswalk to the standard location and installing proper drainage infrastructure will reduce crossing times and improve drainage. The pedestrian accessible ramps will also be adjusted to meet current design standards.

3.2.7 Install a Shared-Use Pathway on the South Side of 22nd Street West

There is a gap in active transportation infrastructure on the south side of 22nd Street West between Confederation Drive and Diefenbaker Drive. Connecting these two intersections with a shared-use pathway will provide improved access to the commercial area, reduce the need for pedestrians to take long detours to access a safe facility, and make it easier for pedestrians to access safe crossing locations on 22nd Street West.

3.3 Traffic Operations

Most of the proposed improvements are designed to improve safety rather than traffic operations. While a slotted left-turn lane is a safer design than a typical left-turn lane due to the improved sight lines, they function very similarly from a traffic operations perspective.

The proposed eastbound right-turn lane will noticeably improve traffic operations. Traffic modeling shows that the queue for right-turn movements is expected to lower from 121 metres to 61 metres. Since there will be less queuing in the through lanes, there will also be a benefit to the average delays for through and right-turn movements. Average delays will be reduced from 28 seconds to 26 seconds for through movements and from 24 seconds to 22 seconds for right-turn movements. The full traffic operations analysis has been included in Appendix C.

3.4 Traffic Safety

One of the primary methods of evaluating potential safety improvements is through crash modification factors (CMFs). These factors are calculated through academic studies and are used to estimate the reduction in collisions that can be expected with the implementation of different safety improvements.

In situations where multiple improvements are being implemented simultaneously, combining CMFs may result in an over-estimation of the safety benefits. For example, adding a positive offset to a left-turn lane (i.e., slotted left turn) is expected to reduce left-turn collisions by 38%, while adding a protected left-turn signal phase is expected to reduce left-turn collisions by 24%. Combining both improvements does not result in a 52% reduction as there is a significant overlap in the type of collisions that are being prevented.

A summary of the available CMFs for the proposed improvements is shown in Table 3-2. The remaining improvements do not have recorded CMFs at this time.

Table 3-2: Crash Modification Factors of Proposed Improvements

Improvement	CMF	% Collision Reduction	Collision Type	Severity
Eastbound Slotted Left-Turn Lane	0.662	34%	All	All
Eastbound Right-Turn Lane	0.96	4%	All	All
Realign Fairmont Drive	0.7	30%	All	All

Each of these improvements addresses a different type of collision so there should be minimal overlap in the potential collisions that are being prevented. In this case, the CMFs can be combined multiplicatively to get an overall estimate of a 66% reduction in eastbound collisions. This is likely a high estimate but does indicate that there will be a significant safety benefit if the proposed improvements are implemented.

4. PUBLIC ENGAGEMENT

4.1 Engagement Activities

One round of public engagement was scheduled to gather community feedback on the proposed changes in the draft traffic plan.

A public open house drop-in session was hosted on May 30, 2024 at St. Marguerite School in Parkridge. To advertise the open house and the project in general, an Engage page was create on Saskatoon.ca/Improving22ndandConfed and a flyer was sent out to residents in the Parkridge, Fairhaven, and Confederation Suburban Centre neighbourhoods.

Feedback on the proposed changes was collected through the following methods:

1. In-person at the public open house,
2. Direct mail/email/phone communications to City of Saskatoon staff, and
3. An online survey.

4.2 Public Feedback

Eighteen residents attended the public open house and most were generally supportive of the draft traffic plan. Attendees confirmed the issue of Fairmont Drive traffic weaving across 22nd Street West to turn onto Confederation Drive. The majority were supportive of the proposed slotted left-turn lane that would create a physical barrier to prevent this movement.

One of the most frequent comments from residents was regarding the eastbound right-turn lane. Many residents raised the issue of long queues and people driving on the shoulder. There were multiple requests to extend the proposed right-turn lane past Fairmont Drive to further increase the storage capacity.

The most contentious change was the configuration of Fairmont Drive. Some residents wanted to close the Fairmont Drive access to 22nd Street West entirely while other residents were not supportive of any changes to the access. Through discussion with a group of attendees at the open house, a third option was discussed. This option would convert the existing Fairmont Drive access to a right-in access and a new right-out access would be created on Fairlight Crescent approximately 175 metres to the west.

The online public survey was another source of resident feedback. There was a total of 124 responses to the public survey. The survey showed that 46% of respondents supported the proposed changes, 34% were opposed, and 20% preferred other options or modifications to the draft plan.

Other comments received from the public include:

- Confirmation of the issues with ponding and drainage on the southwest corner of 22nd Street West and Confederation Drive.
- A request for a gate or gap in the fence that runs along the north side Fairlight Crescent to provide access to the commercial area from the proposed shared-use pathway.
- Reports of frequent jaywalking across 22nd Street West due to a lack of pedestrian access.

- Concerns with access in and out of the adjacent communities if any changes are made to the Fairmont Drive access.
- A request for protected left turns during every phase at the 22nd Street and Diefenbaker Drive intersection.
- Questions around snow clearing on the proposed pathway.

A complete What-We-Learned report summarizing the engagement feedback and copies of the engagement materials from the public open house have been included in Appendix D.

5. FAIRMONT DRIVE ACCESS

Based on the feedback received through the public engagement process, the plans for the realignment of Fairmont Drive were updated. The revised plan reconfigures Fairmont Drive as a right-in access for traffic turning from 22nd Street West onto Fairmont Drive. It also proposes a new right-out access approximately 175 m west of Fairmont Drive that will allow turning movements onto 22nd Street West from Fairlight Crescent.

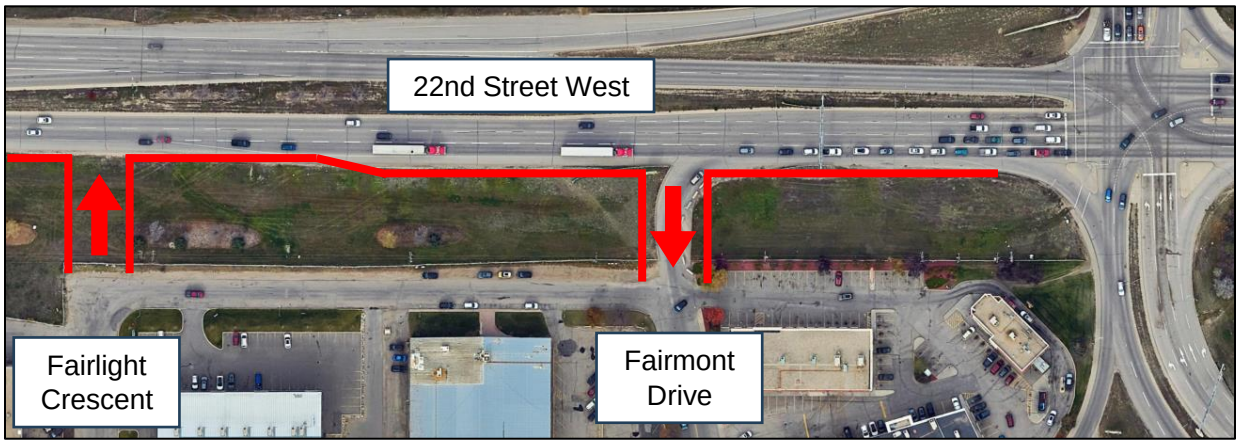


Figure 5-1: Updated Fairmont Drive Access Configuration

This configuration aligns with the planned accesses to 22nd Street West that were outlined in the Circle Drive West Functional planning study. Aligning with the Circle Drive West recommendations at this time will eliminate the need to reconfigure the roadway again in the future. Reconfiguring Fairmont Drive as a right-in access from 22nd Street West also allows for an extended right-turn lane at the Confederation Drive intersection that extends past Fairmont Drive. Traffic entering the right turn bay will be able to turn at either Fairmont Drive or Circle Drive on-ramp without conflicting with other movements.

These changes will improve traffic operations at the Confederation Drive intersection, as the additional storage capacity provided by the right-turn lane will reducing queuing and allow for a better separation of the right-turn and through movements. On the other hand, moving the access onto 22nd Street to Fairlight Crescent will reroute some of the existing traffic and may impact operations at other nearby intersections.

To quantify these impacts, PTV Vistro software was used to model the potential changes in traffic patterns and how they will impact traffic operations at the study intersections. A summary of the significant changes in traffic operations is shown below. The full summary reports are included in Appendix E.

- Confederation Drive eastbound through and right-turn movements improve from LOS D to LOS C in the PM peak hour. The AM peak hour maintains a LOS of C but does show improvements in average delay per vehicle.
- Delay reductions for eastbound left turns at the Fairlight Drive and Diefenbaker Drive intersection due to traffic rerouting to the new right-out access.

- LOS for northbound left turns at the Fairlight Drive and Fairmont Drive intersection deteriorates from LOS B to C in the AM peak hour and LOS E to F in the PM peak hour. This was caused by traffic rerouting to the new right-out access. These impacts may be mitigated by adjustments to the signal timing at this intersection.

From a safety perspective moving the right-out access further to the west gives drivers more time to turn onto 22nd Street and get into their desired lane to access their desired downstream connections.

6. RECOMMENDED TRAFFIC PLAN

6.1 Overview

Based on the feedback received through the public engagement activities, the recommended traffic plan includes all the proposed changes from the draft traffic plan with the exception of the revisions to the Fairmont Drive access. Rather than realigning it as proposed, it is recommended to create a right-out access at Fairlight Crescent and right-in access at Fairmont Drive. This change to Fairmont Drive reduces the risk of weaving type collisions on 22nd Street West, improves traffic operations at multiple intersections, creates a new access into the commercial area south of 22nd Street West, and was supported by some of the residents at the public open house. This configuration also aligns with the recommended plans in the Circle Drive West Functional Planning Study.

The recommended plan, including the changes outlined for the Fairmont Drive configuration, is shown in Appendix F.

6.2 Cost Estimate

Table 6-1 summarizes the high-level cost estimates for each of the improvements included in the recommended plan. These estimates include costs for internal project management and a 15% contingency.

Table 6-1: Recommended Plan Cost Estimate

Improvement	Cost Estimate
Construct an eastbound slotted left-turn lane	$ 800,000
Construct an eastbound right-turn lane	$ 390,000
Convert Fairmont Drive access to right-in configuration from 22nd Street West	$ 150,000
Construct new right-out access from Fairlight Crescent to 22nd Street West	$ 70,000
Relocate overhead guide sign and roadside safety system	$ 595,000
Install curb, gutter, and a third eastbound through lane	$ 345,000
Correct pedestrian accessible ramps and drainage deficiencies	$ 15,000
Install shared-use pathway on the south side of 22nd Street West	$ 250,000
Total	**$ 2,615,000**

Appendix A – Traffic Operations Analysis

Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	36.4
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.502

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	1	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	100.00	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	22	28	102	64	13	17	308	62	48	76	79
Total Analysis Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	7.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	10	10	10	16	16	16	6	51	51	8	53
g / C, Green / Cycle	0.09	0.09	0.09	0.14	0.14	0.14	0.05	0.45	0.45	0.07	0.47
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.05	0.12	0.08	0.09	0.04	0.28	0.28	0.05	0.09
s, saturation flow rate [veh/h]	1781	1786	1702	3459	1870	1760	1781	3560	1715	3459	3560
c, Capacity [veh/h]	157	158	150	491	265	250	98	1588	765	258	1658
d1, Uniform Delay [s]	49.68	49.67	49.85	47.55	45.86	45.88	52.93	24.31	24.31	51.64	17.79
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.62	4.59	5.59	3.74	2.18	2.34	8.91	1.91	3.96	4.15	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.52	0.56	0.83	0.60	0.60	0.69	0.63	0.63	0.74	0.18
d, Delay for Lane Group [s/veh]	54.30	54.26	55.43	51.29	48.04	48.21	61.84	26.22	28.27	55.79	18.03
Lane Group LOS	D	D	E	D	D	D	E	C	C	E	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.43	2.43	2.52	5.84	4.38	4.15	2.15	10.54	10.59	2.80	2.38
50th-Percentile Queue Length [m/ln]	18.54	18.55	19.21	44.51	33.35	31.62	16.39	80.34	80.73	21.34	18.11
95th-Percentile Queue Length [veh/ln]	4.38	4.38	4.54	9.81	7.81	7.47	3.87	15.87	15.93	5.04	4.28
95th-Percentile Queue Length [m/ln]	33.37	33.40	34.58	74.72	59.50	56.91	29.51	120.92	121.40	38.41	32.60

Movement, Approach, & Intersection Results

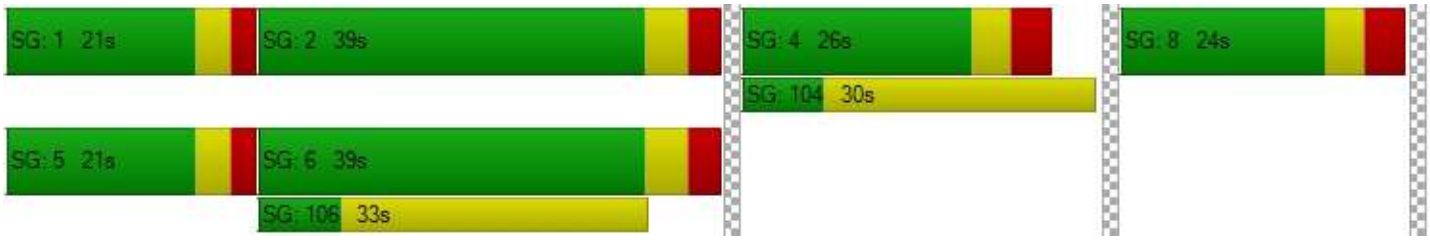
d_M, Delay for Movement [s/veh]	54.28	55.37	0.00	51.29	48.10	48.21	61.84	26.61	28.27	55.79	18.03	0.00
Movement LOS	D	E		D	D	D	E	C	C	E	B	
d_A, Approach Delay [s/veh]	54.67			49.92			28.42			32.55		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	36.39											
Intersection LOS	D											
Intersection V/C	0.502											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.803	3.023	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	1.764	2.149	2.410	1.967
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	45.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.591

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	1	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	100.00	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	77	20	118	104	36	27	225	63	97	211	202
Total Analysis Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	94.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	20	38	0	22	40	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	7.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	15	15	15	19	19	19	9	36	36	15	42
g / C, Green / Cycle	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.32	0.32	0.13	0.37
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.10	0.14	0.16	0.16	0.06	0.22	0.22	0.11	0.24
s, saturation flow rate [veh/h]	1781	1850	1702	3459	1870	1707	1781	3560	1669	3459	3560
c, Capacity [veh/h]	237	246	226	589	318	290	136	1129	529	452	1322
d1, Uniform Delay [s]	47.28	47.24	47.71	45.47	46.55	46.55	51.78	34.07	34.09	48.51	29.50
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	6.24	9.48	2.68	13.13	14.33	10.79	3.57	7.62	5.04	2.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.70	0.77	0.80	0.92	0.92	0.80	0.69	0.69	0.86	0.64
d, Delay for Lane Group [s/veh]	53.94	53.48	57.19	48.15	59.68	60.88	62.57	37.64	41.71	53.55	31.88
Lane Group LOS	D	D	E	D	E	E	E	D	D	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	4.96	5.08	5.34	6.63	9.30	8.59	3.43	9.92	9.92	5.68	9.79
50th-Percentile Queue Length [m/ln]	37.81	38.73	40.68	50.51	70.84	65.42	26.17	75.60	75.57	43.25	74.59
95th-Percentile Queue Length [veh/ln]	8.62	8.78	9.13	10.85	14.30	13.39	6.18	15.09	15.08	9.58	14.92
95th-Percentile Queue Length [m/ln]	65.65	66.91	69.55	82.68	108.94	102.04	47.11	114.97	114.93	73.02	113.69

Movement, Approach, & Intersection Results

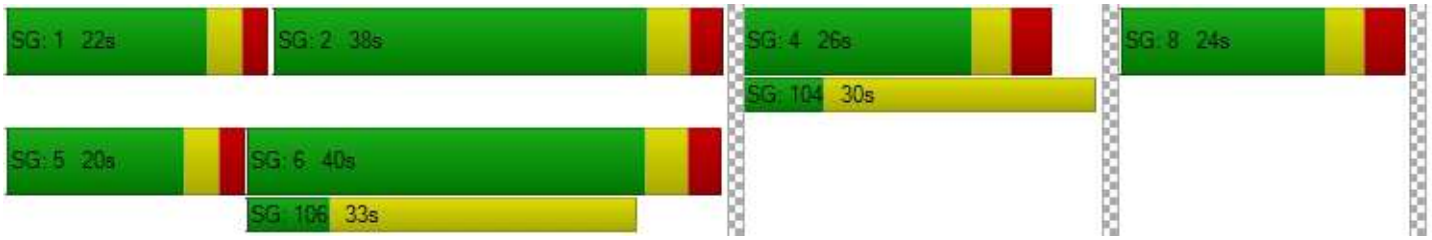
d_M, Delay for Movement [s/veh]	53.86	55.57	0.00	48.15	60.03	60.88	62.57	38.17	41.71	53.55	31.88	0.00
Movement LOS	D	E		D	E	E	E	D	D	D	C	
d_A, Approach Delay [s/veh]	54.89			54.72			40.97			38.70		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	45.57											
Intersection LOS	D											
Intersection V/C	0.591											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.933	3.127	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	558	593
d_b, Bicycle Delay [s]	40.93	39.25	29.64	28.21
l_b,int, Bicycle LOS Score for Intersection	1.983	2.413	2.251	2.574
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1303	0	0	0	0	245
Future Volume (Veh/h)	1303	0	0	0	0	245
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1416	0	0	0	0	266
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			1416		1416	472
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1416		1416	472
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	51
cM capacity (veh/h)			477		128	538

Direction, Lane #	EB 1	EB 2	EB 3	NB 1
Volume Total	472	472	472	266
Volume Left	0	0	0	0
Volume Right	0	0	0	266
cSH	1700	1700	1700	538
Volume to Capacity	0.28	0.28	0.28	0.49
Queue Length 95th (m)	0.0	0.0	0.0	20.6
Control Delay (s)	0.0	0.0	0.0	18.0
Lane LOS				C
Approach Delay (s)	0.0			18.0
Approach LOS				C

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1019	0	0	0	0	239
Future Volume (Veh/h)	1019	0	0	0	0	239
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1108	0	0	0	0	260
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			1108		1108	369
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1108		1108	369
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	59
cM capacity (veh/h)			626		204	628

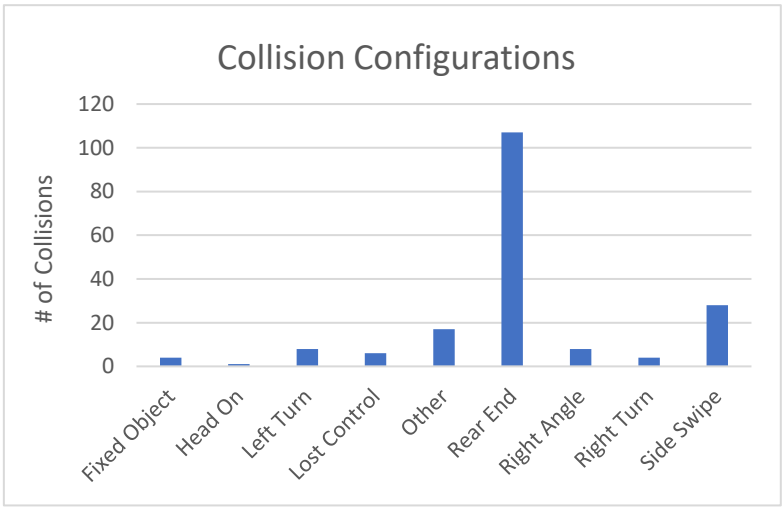
Direction, Lane #	EB 1	EB 2	EB 3	NB 1
Volume Total	369	369	369	260
Volume Left	0	0	0	0
Volume Right	0	0	0	260
cSH	1700	1700	1700	628
Volume to Capacity	0.22	0.22	0.22	0.41
Queue Length 95th (m)	0.0	0.0	0.0	15.4
Control Delay (s)	0.0	0.0	0.0	14.7
Lane LOS				B
Approach Delay (s)	0.0			14.7
Approach LOS				B

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

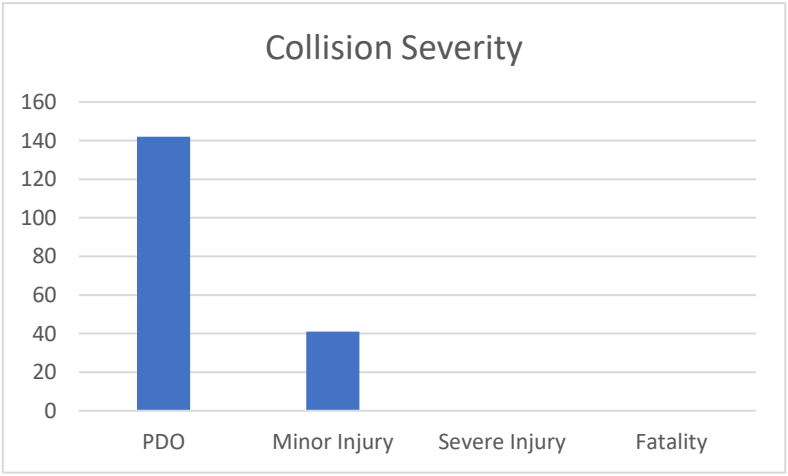
Appendix B – SGI Collision Data Summary

22nd Street West and Confederation Drive Collision Analysis

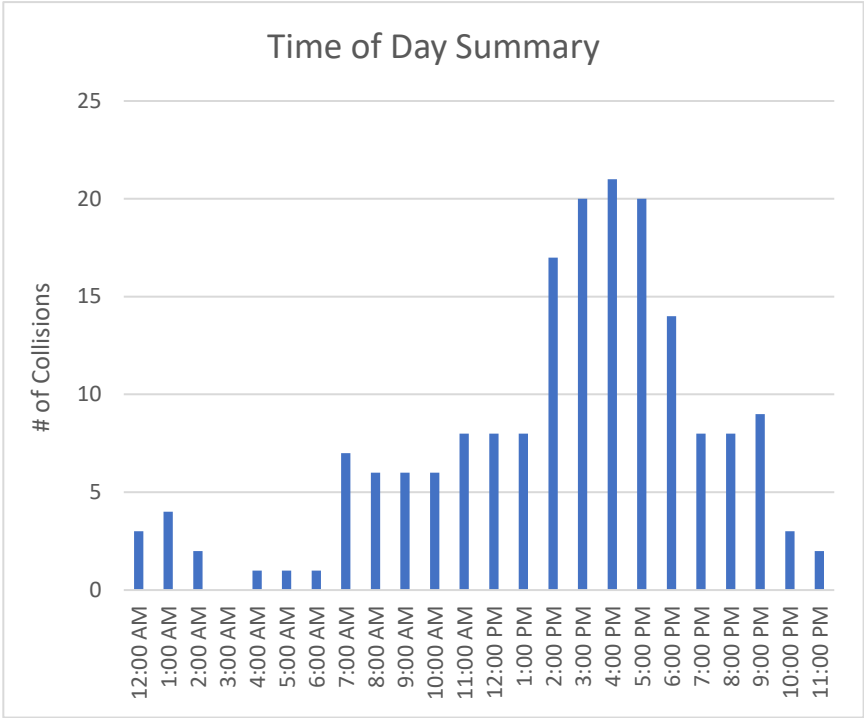
Configuration	# of Collisions
Fixed Object	4
Head On	1
Left Turn	8
Lost Control	6
Other	17
Rear End	107
Right Angle	8
Right Turn	4
Side Swipe	28



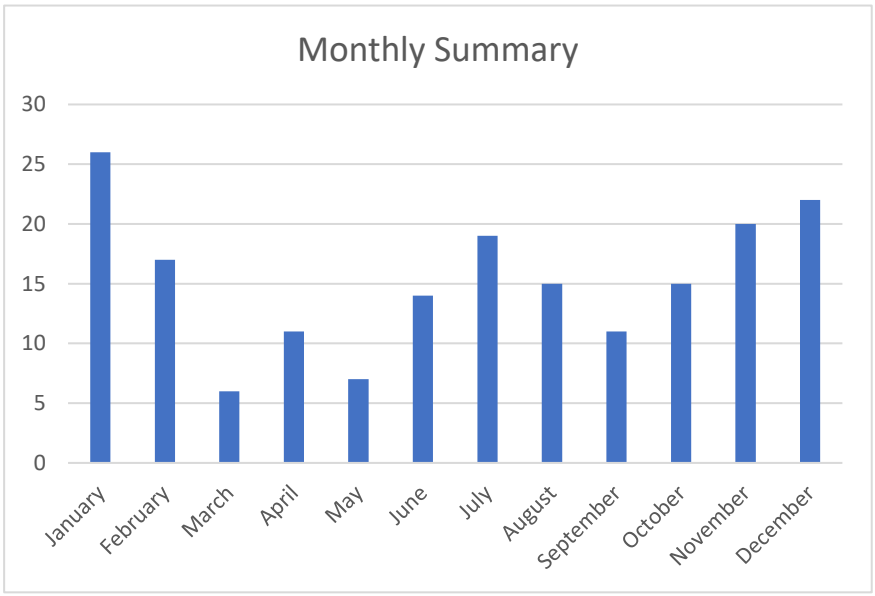
Collision Severity	# of Collisions
PDO	142
Minor Injury	41
Severe Injury	0
Fatality	0



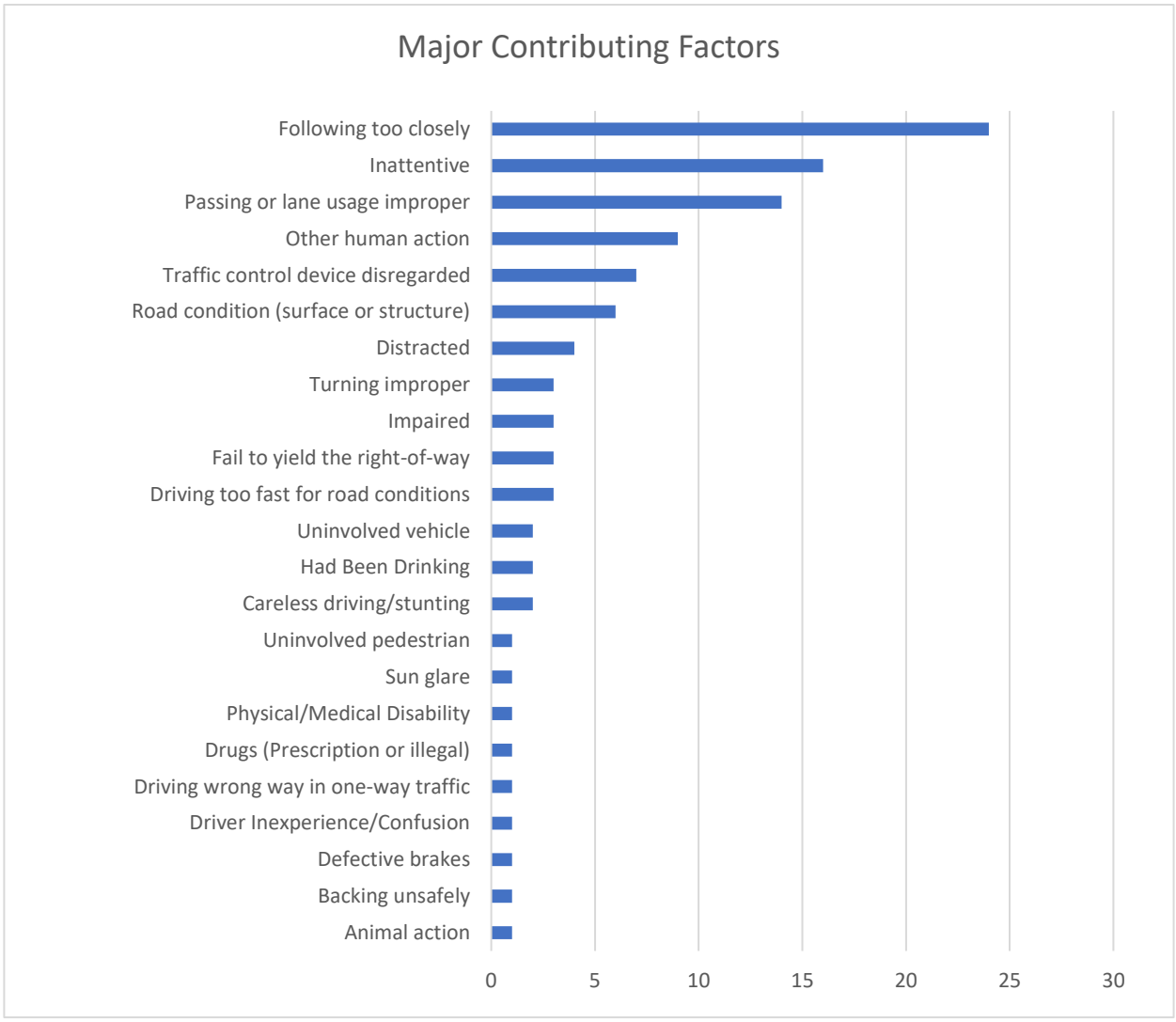
Time of Day	# of Collisions
12:00 AM	3
1:00 AM	4
2:00 AM	2
3:00 AM	0
4:00 AM	1
5:00 AM	1
6:00 AM	1
7:00 AM	7
8:00 AM	6
9:00 AM	6
10:00 AM	6
11:00 AM	8
12:00 PM	8
1:00 PM	8
2:00 PM	17
3:00 PM	20
4:00 PM	21
5:00 PM	20
6:00 PM	14
7:00 PM	8
8:00 PM	8
9:00 PM	9
10:00 PM	3
11:00 PM	2



Month	# of Collisions
January	26
February	17
March	6
April	11
May	7
June	14
July	19
August	15
September	11
October	15
November	20
December	22



Major Contributing Factors	# of Collisions
Following too closely	24
Inattentive	16
Passing or lane usage improper	14
Other human action	9
Traffic control device disregarded	7
Road condition (surface or structure)	6
Distracted	4
Driving too fast for road conditions	3
Fail to yield the right-of-way	3
Impaired	3
Turning improper	3
Careless driving/stunting	2
Had Been Drinking	2
Uninvolved vehicle	2
Animal action	1
Backing unsafely	1
Defective brakes	1
Driver inexperience/confusion	1
Driving wrong way in one-way traffic	1
Drugs (Prescription or illegal)	1
Physical/Medical Disability	1
Sun glare	1
Uninvolved pedestrian	1

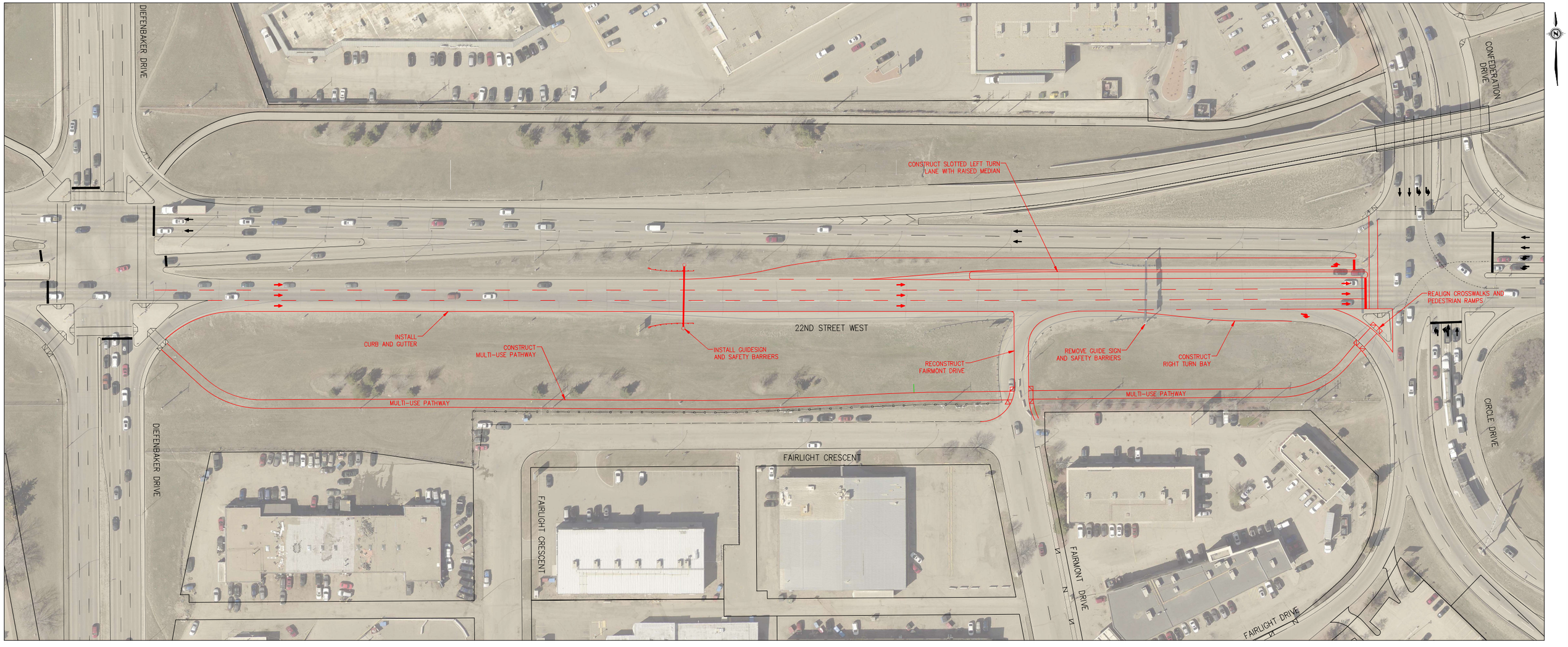

Major Contributing Factors
Following too closely
Inattentive
Passing or lane usage improper
Other human action
Traffic control device disregarded
Road condition (surface or structure)
Distracted
Turning improper
Impaired
Fail to yield the right-of-way
Driving too fast for road conditions
Uninvolved vehicle
Had Been Drinking
Careless driving/stunting
Uninvolved pedestrian
Sun glare
Physical/Medical Disability
Drugs (Prescription or illegal)
Driving wrong way in one-way traffic
Driver Inexperience/Confusion
Defective brakes
Backing unsafely
Animal action
0
5
10
15
20
25
30

Appendix C – Draft Traffic Plan

Proposed Traffic Plan

saskatoon.ca / **Improving22ndAndConfed**

City of Saskatoon



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	44.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.556

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	1	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	75.00	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	77	20	118	104	36	27	225	63	97	211	202
Total Analysis Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	94.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	20	38	0	22	40	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	15	15	15	19	19	19	9	36	36	15	42
g / C, Green / Cycle	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.32	0.32	0.13	0.37
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.10	0.14	0.16	0.16	0.06	0.18	0.16	0.11	0.24
s, saturation flow rate [veh/h]	1781	1850	1702	3459	1870	1707	1781	5094	1589	3459	3560
c, Capacity [veh/h]	237	246	226	589	318	290	135	1615	504	452	1323
d1, Uniform Delay [s]	47.28	47.24	47.71	45.47	46.55	46.55	51.80	32.28	31.58	48.51	29.48
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	6.24	9.48	2.68	13.13	14.33	10.95	1.39	3.53	5.04	2.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.70	0.77	0.80	0.92	0.92	0.80	0.56	0.50	0.86	0.64
d, Delay for Lane Group [s/veh]	53.94	53.48	57.19	48.15	59.68	60.88	62.75	33.67	35.11	53.55	31.86
Lane Group LOS	D	D	E	D	E	E	E	C	D	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.96	5.08	5.34	6.63	9.30	8.59	3.44	7.00	6.07	5.68	9.78
50th-Percentile Queue Length [m/ln]	37.81	38.73	40.68	50.51	70.84	65.42	26.21	53.34	46.22	43.25	74.56
95th-Percentile Queue Length [veh/ln]	8.62	8.78	9.13	10.85	14.30	13.39	6.19	11.34	10.10	9.58	14.91
95th-Percentile Queue Length [m/ln]	65.65	66.91	69.55	82.68	108.94	102.04	47.18	86.41	76.99	73.02	113.65

Movement, Approach, & Intersection Results

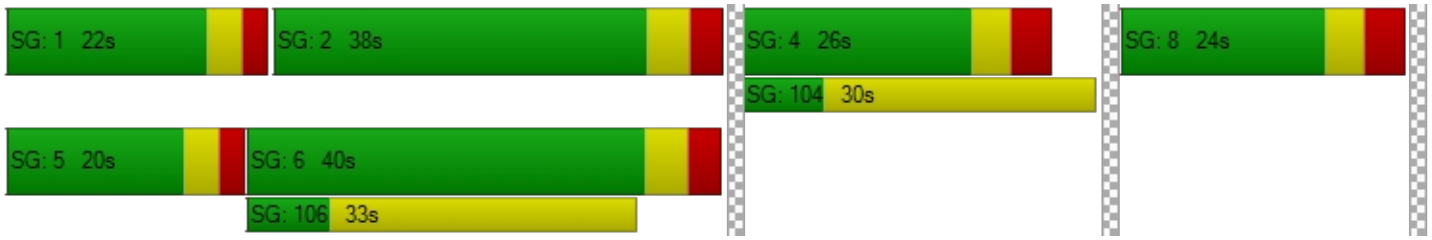
d_M, Delay for Movement [s/veh]	53.86	55.57	0.00	48.15	60.03	60.88	62.75	33.67	35.11	53.55	31.86	0.00
Movement LOS	D	E		D	E	E	E	C	D	D	C	
d_A, Approach Delay [s/veh]	54.89			54.72			36.46			38.69		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	44.16											
Intersection LOS	D											
Intersection V/C	0.556											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.933	3.173	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	558	593
d_b, Bicycle Delay [s]	40.93	39.25	29.64	28.21
l_b,int, Bicycle LOS Score for Intersection	1.983	2.413	2.251	2.574
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	34.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.531

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	90	64	41	62	54	45	183	50	58	280	76
Total Analysis Volume [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Unsigna	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	31	0	23	30	0	23	33	0	23	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	50	38	50	38	38	52	37	37	52	39	39
g / C, Green / Cycle	0.46	0.34	0.46	0.35	0.35	0.47	0.34	0.34	0.47	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.14	0.10	0.14	0.13	0.14	0.27	0.26	0.26	0.26	0.27	0.27
s, saturation flow rate [veh/h]	1092	3560	1175	1870	1589	669	1870	1735	897	3560	1673
c, Capacity [veh/h]	502	1228	560	654	556	321	627	581	379	1265	594
d1, Uniform Delay [s]	18.46	26.26	18.27	26.84	26.92	22.82	32.78	32.80	22.51	31.38	31.40
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.44	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.33	0.61	1.32	1.69	2.06	6.13	9.42	10.20	7.24	4.55	9.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.29	0.29	0.38	0.39	0.56	0.77	0.77	0.61	0.76	0.77
d, Delay for Lane Group [s/veh]	18.79	26.87	19.59	28.53	28.98	28.95	42.20	42.99	29.75	35.93	41.05
Lane Group LOS	B	C	B	C	C	C	D	D	C	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.32	3.55	2.67	5.19	4.57	3.18	12.97	12.17	4.26	11.93	12.09
50th-Percentile Queue Length [m/ln]	17.65	27.04	20.37	39.56	34.81	24.26	98.80	92.77	32.49	90.94	92.09
95th-Percentile Queue Length [veh/ln]	4.17	6.39	4.81	8.93	8.07	5.73	18.87	17.90	7.65	17.60	17.79
95th-Percentile Queue Length [m/ln]	31.77	48.67	36.67	68.04	61.52	43.67	143.80	136.38	58.29	134.11	135.53

Movement, Approach, & Intersection Results

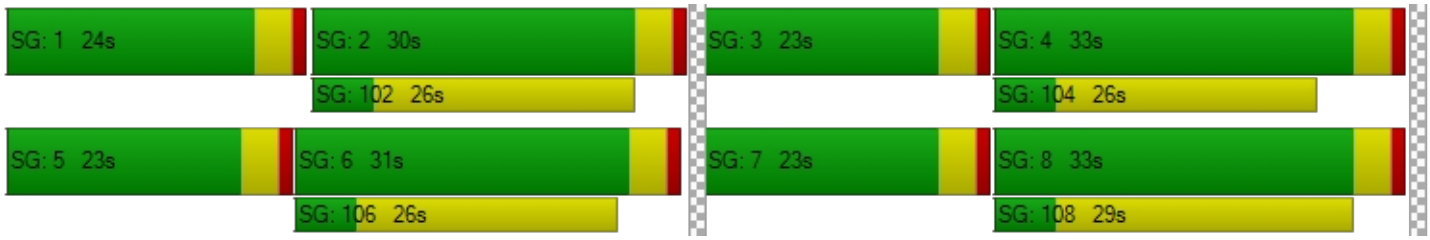
d_M, Delay for Movement [s/veh]	18.79	26.87	0.00	19.59	28.53	28.98	28.95	42.47	42.99	29.75	36.63	41.05
Movement LOS	B	C		B	C	C	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	24.49			26.36			40.38			36.48		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	34.39											
Intersection LOS	C											
Intersection V/C	0.531											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.987	2.944	3.222	3.260
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	491	473	527	527
d_b, Bicycle Delay [s]	31.31	32.07	29.82	29.82
l_b,int, Bicycle LOS Score for Intersection	1.982	2.078	2.475	2.468
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	36.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.680

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	88	662	597	95	544	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	662	597	95	544	270
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	166	149	24	136	68
Total Analysis Volume [veh/h]	88	662	597	95	544	270
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	18	0	0	10	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	57	57	28
g / C, Green / Cycle	0.28	0.28	0.63	0.63	0.31
(v / s)_i Volume / Saturation Flow Rate	0.05	0.26	0.51	0.03	0.17
s, saturation flow rate [veh/h]	1603	2532	1168	3204	3204
c, Capacity [veh/h]	445	703	746	2029	997
d1, Uniform Delay [s]	24.84	31.78	12.47	6.23	25.72
k, delay calibration	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.00	31.56	9.43	0.04	2.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.94	0.80	0.05	0.55
d, Delay for Lane Group [s/veh]	25.83	63.34	21.91	6.28	27.89
Lane Group LOS	C	E	C	A	C
Critical Lane Group	No	Yes	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.54	9.88	7.93	0.32	5.00
50th-Percentile Queue Length [m/ln]	11.70	75.31	60.44	2.44	38.08
95th-Percentile Queue Length [veh/ln]	2.76	15.04	12.55	0.58	8.66
95th-Percentile Queue Length [m/ln]	21.06	114.59	95.63	4.39	66.01

Movement, Approach, & Intersection Results

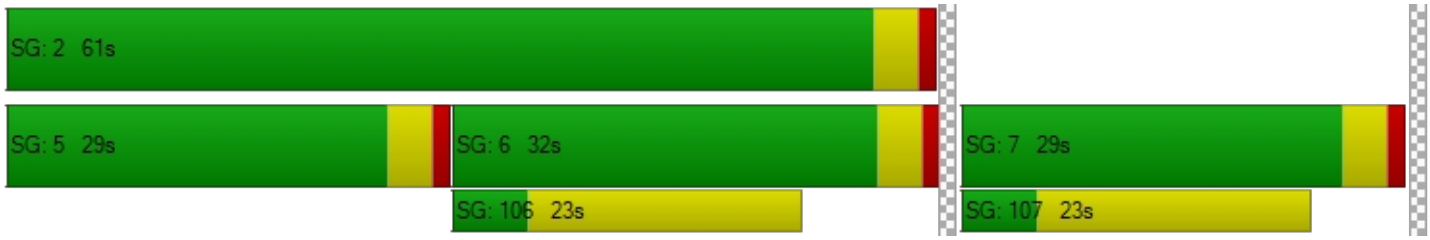
d_M, Delay for Movement [s/veh]	25.83	63.34	21.91	6.28	27.89	0.00
Movement LOS	C	E	C	A	C	
d_A, Approach Delay [s/veh]	58.94		19.76		27.89	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	36.78					
Intersection LOS	D					
Intersection V/C	0.680					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	36.45
l_p,int, Pedestrian LOS Score for Intersection	3.090	0.000	2.530
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	1267	622
d_b, Bicycle Delay [s]	23.47	6.05	21.36
l_b,int, Bicycle LOS Score for Intersection	1.560	2.131	2.119
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	14.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.057

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	24	54	21	207	555	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	54	21	207	555	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	14	5	52	139	8
Total Analysis Volume [veh/h]	24	54	21	207	555	30
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.09	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.65	12.16	10.85	0.00	0.00	0.00
Movement LOS	B	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.51	0.51	0.04	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	3.92	3.92	0.27	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	12.92		1.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.39					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	31.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.595

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	105	58	10	1	16	21	19	7	37	63	96	15
Total Analysis Volume [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	27	0	0	27	0	17	18	0	15	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	0	0	9	0	0	6	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	23	23	23	29	14	14	29	12	12
g / C, Green / Cycle	0.38	0.38	0.38	0.48	0.23	0.23	0.48	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.37	0.16	0.10	0.06	0.02	0.10	0.19	0.09	0.09
s, saturation flow rate [veh/h]	1119	1642	1529	1241	1683	1431	1318	3204	1572
c, Capacity [veh/h]	438	630	647	703	393	334	796	641	314
d1, Uniform Delay [s]	20.31	13.65	12.63	8.62	17.93	19.68	9.52	21.14	21.18
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	53.98	2.14	0.82	0.30	0.35	4.33	1.05	2.38	5.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.43	0.23	0.11	0.07	0.45	0.32	0.46	0.47
d, Delay for Lane Group [s/veh]	74.29	15.80	13.45	8.92	18.28	24.01	10.57	23.52	26.18
Lane Group LOS	E	B	B	A	B	C	B	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.95	2.76	1.36	0.50	0.32	2.05	1.95	1.90	2.13
50th-Percentile Queue Length [m/ln]	91.07	21.06	10.36	3.83	2.44	15.60	14.88	14.50	16.23
95th-Percentile Queue Length [veh/ln]	17.62	4.97	2.45	0.91	0.58	3.68	3.52	3.43	3.83
95th-Percentile Queue Length [m/ln]	134.27	37.91	18.64	6.90	4.39	28.08	26.79	26.10	29.21

Movement, Approach, & Intersection Results

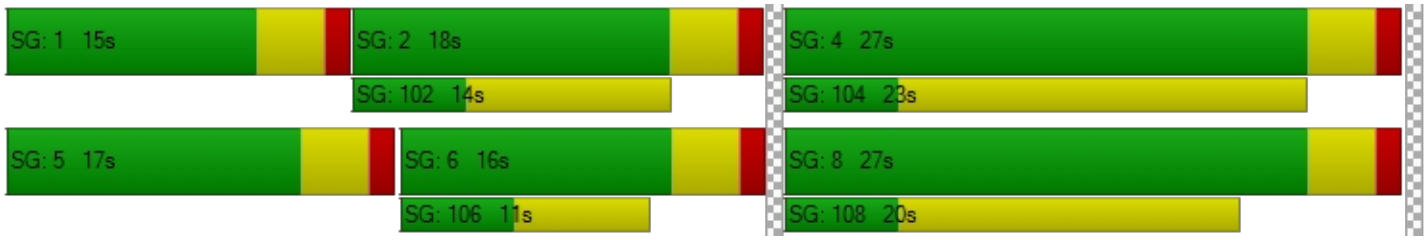
d_M, Delay for Movement [s/veh]	74.29	15.80	15.80	13.45	13.45	13.45	8.92	18.28	24.01	10.57	24.13	26.18
Movement LOS	E	B	B	B	B	B	A	B	C	B	C	C
d_A, Approach Delay [s/veh]	51.37			13.45			18.92			19.36		
Approach LOS	D			B			B			B		
d_I, Intersection Delay [s/veh]	31.18											
Intersection LOS	C											
Intersection V/C	0.595											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.620	2.123	3.326	2.524
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	767	767	467	400
d_b, Bicycle Delay [s]	11.41	11.41	17.63	19.20
l_b,int, Bicycle LOS Score for Intersection	2.807	1.804	1.974	1.941
Bicycle LOS	C	A	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.463

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	1	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	75.00	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	22	28	102	64	13	17	308	62	48	76	79
Total Analysis Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	10	10	10	16	16	16	6	51	51	8	53
g / C, Green / Cycle	0.09	0.09	0.09	0.14	0.14	0.14	0.05	0.45	0.45	0.07	0.47
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.05	0.12	0.08	0.09	0.04	0.24	0.16	0.05	0.09
s, saturation flow rate [veh/h]	1781	1786	1702	3459	1870	1760	1781	5094	1589	3459	3560
c, Capacity [veh/h]	157	158	150	491	265	250	98	2272	709	258	1658
d1, Uniform Delay [s]	49.68	49.67	49.85	47.55	45.86	45.88	52.93	23.07	20.71	51.64	17.79
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.62	4.59	5.59	3.74	2.18	2.34	8.91	0.94	1.36	4.15	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.52	0.56	0.83	0.60	0.60	0.69	0.54	0.35	0.74	0.18
d, Delay for Lane Group [s/veh]	54.30	54.26	55.43	51.29	48.04	48.21	61.84	24.01	22.07	55.79	18.03
Lane Group LOS	D	D	E	D	D	D	E	C	C	E	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.43	2.43	2.52	5.84	4.38	4.15	2.15	8.10	4.54	2.80	2.38
50th-Percentile Queue Length [m/ln]	18.54	18.55	19.21	44.51	33.35	31.62	16.39	61.74	34.56	21.34	18.11
95th-Percentile Queue Length [veh/ln]	4.38	4.38	4.54	9.81	7.81	7.47	3.87	12.77	8.03	5.04	4.28
95th-Percentile Queue Length [m/ln]	33.37	33.40	34.58	74.72	59.50	56.91	29.51	97.31	61.17	38.41	32.60

Movement, Approach, & Intersection Results

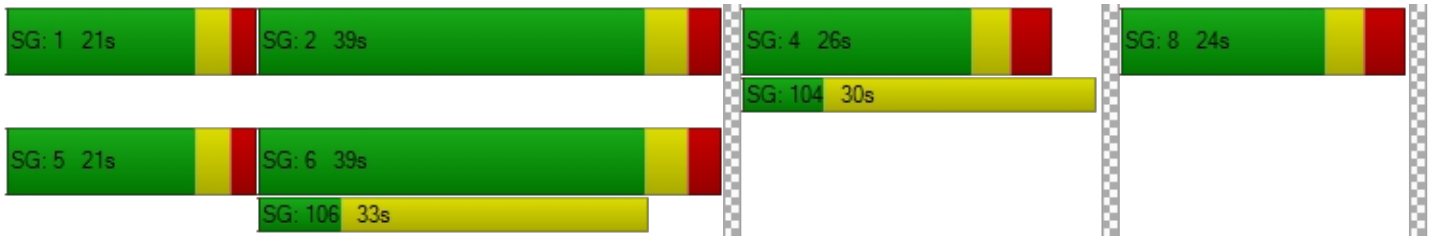
d_M, Delay for Movement [s/veh]	54.28	55.37	0.00	51.29	48.10	48.21	61.84	24.01	22.07	55.79	18.03	0.00
Movement LOS	D	E		D	D	D	E	C	C	E	B	
d_A, Approach Delay [s/veh]	54.67			49.92			25.36			32.55		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	34.81											
Intersection LOS	C											
Intersection V/C	0.463											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.803	3.084	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	1.764	2.149	2.410	1.967
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	28.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.582

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	68	97	48	41	74	32	185	40	27	183	24
Total Analysis Volume [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Unsigna	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	31	0	23	30	0	23	33	0	23	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	50	37	50	32	32	52	42	42	52	41	41
g / C, Green / Cycle	0.46	0.33	0.46	0.29	0.29	0.47	0.38	0.38	0.47	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.24	0.08	0.15	0.09	0.19	0.15	0.25	0.25	0.14	0.15	0.16
s, saturation flow rate [veh/h]	1201	3560	1263	1870	1589	846	1870	1756	791	3560	1764
c, Capacity [veh/h]	497	1186	614	548	466	419	718	674	343	1340	664
d1, Uniform Delay [s]	21.47	26.47	18.46	30.12	33.79	17.46	27.76	27.77	19.16	25.31	25.35
k, delay calibration	0.36	0.50	0.50	0.50	0.50	0.12	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.61	0.45	1.33	1.39	6.68	0.43	4.54	4.84	2.37	0.94	1.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.23	0.31	0.30	0.64	0.30	0.65	0.65	0.31	0.41	0.41
d, Delay for Lane Group [s/veh]	25.07	26.91	19.79	31.51	40.46	17.89	32.31	32.60	21.53	26.25	27.26
Lane Group LOS	C	C	B	C	D	B	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.23	2.63	3.19	3.56	7.68	1.85	10.72	10.13	1.73	5.44	5.62
50th-Percentile Queue Length [m/ln]	39.82	20.05	24.30	27.11	58.52	14.07	81.71	77.17	13.21	41.46	42.80
95th-Percentile Queue Length [veh/ln]	8.98	4.74	5.74	6.40	12.22	3.32	16.09	15.35	3.12	9.27	9.50
95th-Percentile Queue Length [m/ln]	68.39	36.09	43.74	48.80	93.15	25.33	122.63	116.94	23.78	70.61	72.42

Movement, Approach, & Intersection Results

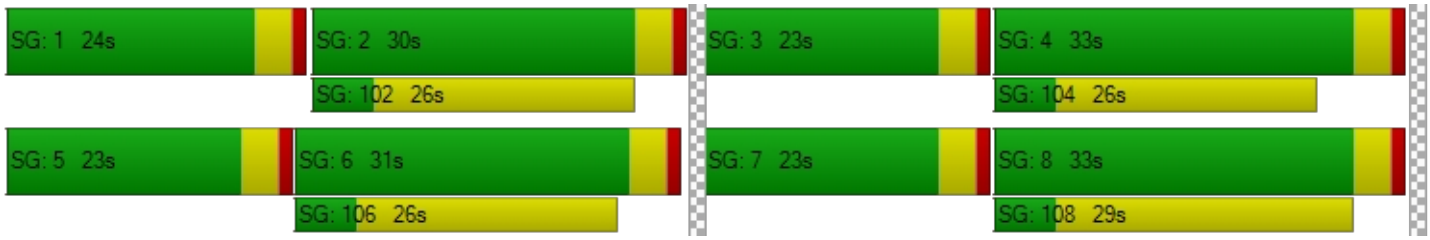
d_M, Delay for Movement [s/veh]	25.07	26.91	0.00	19.79	31.51	40.46	17.89	32.42	32.60	21.53	26.50	27.26
Movement LOS	C	C		B	C	D	B	C	C	C	C	C
d_A, Approach Delay [s/veh]	25.96			32.12			30.66			26.01		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.76											
Intersection LOS	C											
Intersection V/C	0.582											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.888	2.833	3.203	3.119
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	491	473	527	527
d_b, Bicycle Delay [s]	31.31	32.07	29.82	29.82
l_b,int, Bicycle LOS Score for Intersection	2.020	2.097	2.405	2.073
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	21.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.439

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	72	200	784	119	121	147
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	72	200	784	119	121	147
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	50	196	30	30	37
Total Analysis Volume [veh/h]	72	200	784	119	121	147
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	18	0	0	10	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	57	57	28
g / C, Green / Cycle	0.28	0.28	0.63	0.63	0.31
(v / s)_i Volume / Saturation Flow Rate	0.04	0.08	0.58	0.04	0.04
s, saturation flow rate [veh/h]	1603	2532	1361	3204	3204
c, Capacity [veh/h]	445	703	947	2029	997
d1, Uniform Delay [s]	24.58	25.49	12.52	6.28	22.19
k, delay calibration	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.78	1.02	8.91	0.06	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.28	0.83	0.06	0.12
d, Delay for Lane Group [s/veh]	25.36	26.50	21.43	6.34	22.44
Lane Group LOS	C	C	C	A	C
Critical Lane Group	No	Yes	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.24	1.75	11.98	0.40	0.94
50th-Percentile Queue Length [m/ln]	9.45	13.31	91.32	3.08	7.13
95th-Percentile Queue Length [veh/ln]	2.23	3.14	17.66	0.73	1.68
95th-Percentile Queue Length [m/ln]	17.01	23.96	134.58	5.54	12.84

Movement, Approach, & Intersection Results

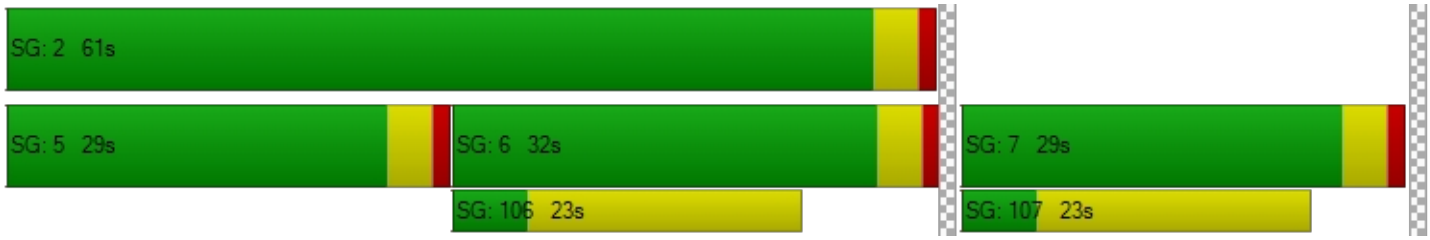
d_M, Delay for Movement [s/veh]	25.36	26.50	21.43	6.34	22.44	0.00
Movement LOS	C	C	C	A	C	
d_A, Approach Delay [s/veh]	26.20		19.44		22.44	
Approach LOS	C		B		C	
d_I, Intersection Delay [s/veh]	21.14					
Intersection LOS	C					
Intersection V/C	0.439					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	36.45
l_p,int, Pedestrian LOS Score for Intersection	3.111	0.000	2.399
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	1267	622
d_b, Bicycle Delay [s]	23.47	6.05	21.36
l_b,int, Bicycle LOS Score for Intersection	1.560	2.305	1.770
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.015

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	9	18	23	178	290	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	18	23	178	290	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	6	45	73	5
Total Analysis Volume [veh/h]	9	18	23	178	290	19
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.40	10.12	9.35	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.04	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	0.95	0.95	0.30	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	10.55		1.07		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.93					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	16.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.304

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	49	18	0	13	24	16	18	25	31	34	7
Total Analysis Volume [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	27	0	0	27	0	17	18	0	15	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	0	0	9	0	0	6	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	23	23	23	29	14	14	29	12	12
g / C, Green / Cycle	0.38	0.38	0.38	0.48	0.23	0.23	0.48	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.18	0.16	0.10	0.05	0.04	0.07	0.09	0.03	0.04
s, saturation flow rate [veh/h]	1118	1608	1511	1361	1683	1431	1320	3204	1543
c, Capacity [veh/h]	437	616	640	799	393	334	773	641	309
d1, Uniform Delay [s]	15.28	13.65	12.64	8.36	18.43	18.97	8.72	19.87	19.90
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.37	2.18	0.84	0.19	1.05	2.34	0.44	0.56	1.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.43	0.23	0.08	0.19	0.30	0.16	0.17	0.18
d, Delay for Lane Group [s/veh]	18.65	15.83	13.48	8.56	19.48	21.31	9.17	20.43	21.16
Lane Group LOS	B	B	B	A	B	C	A	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.34	2.71	1.35	0.42	0.87	1.29	0.87	0.63	0.70
50th-Percentile Queue Length [m/ln]	17.80	20.64	10.31	3.19	6.62	9.84	6.59	4.81	5.33
95th-Percentile Queue Length [veh/ln]	4.20	4.88	2.44	0.75	1.56	2.33	1.56	1.14	1.26
95th-Percentile Queue Length [m/ln]	32.03	37.16	18.56	5.74	11.92	17.72	11.87	8.65	9.59

Movement, Approach, & Intersection Results

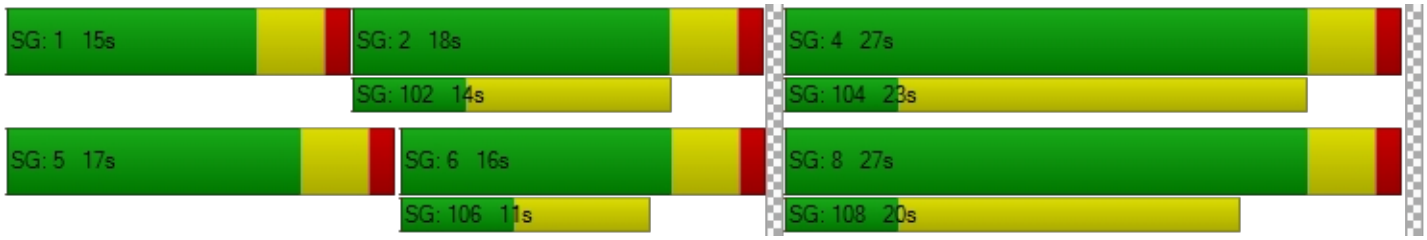
d_M, Delay for Movement [s/veh]	18.65	15.83	15.83	13.48	13.48	13.48	8.56	19.48	21.31	9.17	20.58	21.16
Movement LOS	B	B	B	B	B	B	A	B	C	A	C	C
d_A, Approach Delay [s/veh]	17.04			13.48			17.35			15.69		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	16.30											
Intersection LOS	B											
Intersection V/C	0.304											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.354	2.055	2.887	2.417
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	767	767	467	400
d_b, Bicycle Delay [s]	11.41	11.41	17.63	19.20
l_b,int, Bicycle LOS Score for Intersection	2.431	1.802	1.951	1.717
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix D – Engagement Summary

May 13th, 2024

Have Your Say: 22nd Street and Confederation Drive Intersection Improvements

The City of Saskatoon is gathering your feedback on proposed changes to 22nd Street West between Diefenbaker Drive and Confederation Drive.

Residents are invited to provide ideas by phone, email, mail, or in-person at the open house on May 30th, 2024. The draft plan and public open house materials will be posted to **Saskatoon.ca/Improving22ndAndConfed.**

Don't leave yourself out of the conversation! There are multiple ways to participate and provide us with your ideas.

In-Person Public Open House:

When:
Thursday, May 30th, 2024
6:30 p.m. – 8:30 p.m.

Where:
St. Marguerite School Gym
1235 McCormack Road

By mail:
Transportation Customer Service
222 – 3rd Avenue North
Saskatoon, SK S7K 0J5

By email/phone:
TransportationSurvey@Saskatoon.ca or
306-975-2476

Online survey:
An online survey will be available at **Saskatoon.ca/Improving22ndAndConfed** or scan the QR code below:

Next Steps

- ✓ SUMMER 2024: Gather community feedback.
- ✓ FALL 2024: Present report to the Standing Policy Committee on Transportation.

22nd Street West and Confederation Drive

Intersection Improvements

saskatoon.ca / **Improving22ndAndConfed**

City of Saskatoon

Background

- Concerns with vehicles attempting to maneuver from Fairmont Drive to the eastbound left turn bay at 22nd Street & Confederation Drive.
- Various countermeasures have been implemented and ultimately removed because they were ineffective.
- Previous studies have recommended the construction of an eastbound slotted left turn to address the issue.

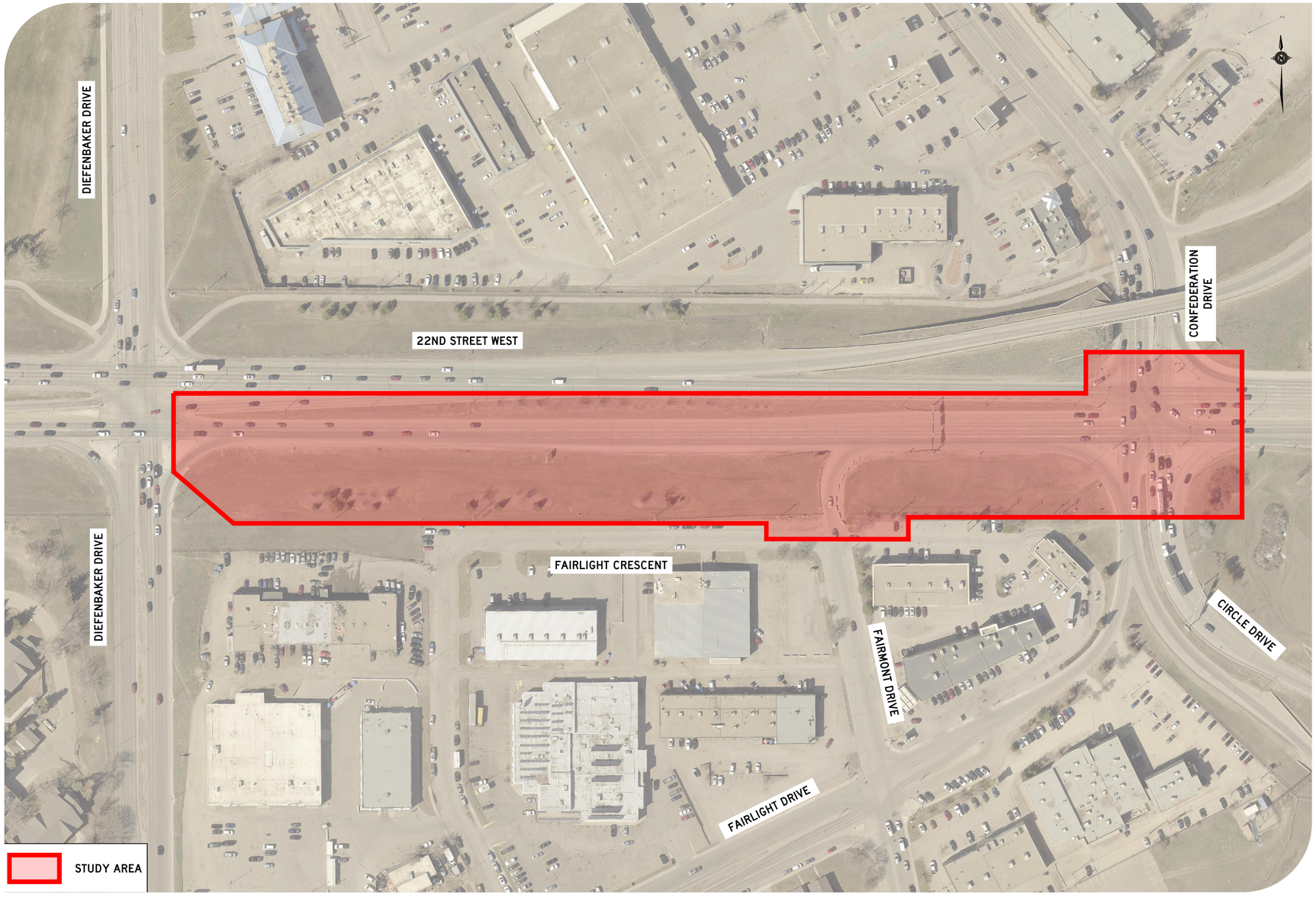
saskatoon.ca / **Improving22ndAndConfed**

City of Saskatoon

Purpose:

To gather public feedback on the proposed changes to the intersection of 22nd Street West and Confederation Drive prior to finalizing the functional plan.

Study Area:



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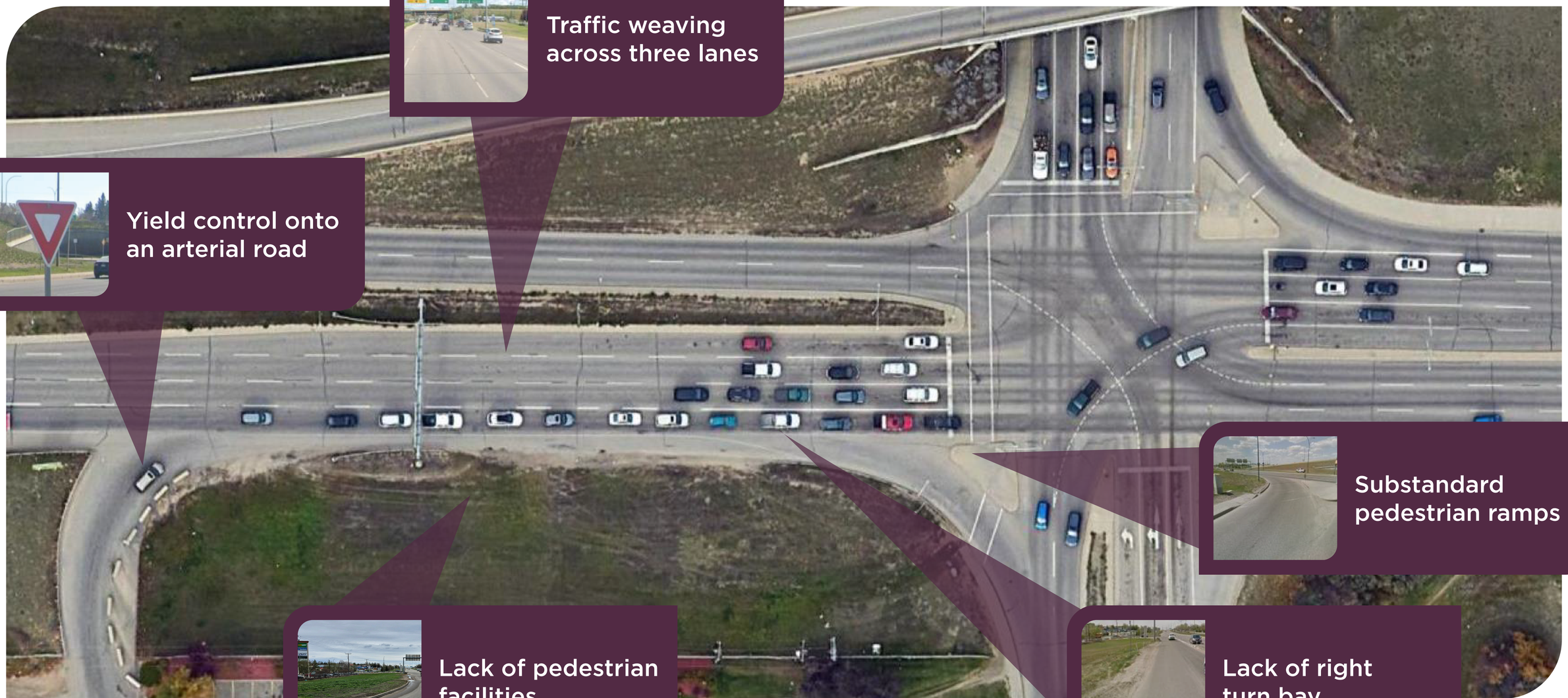
Challenges / Opportunities



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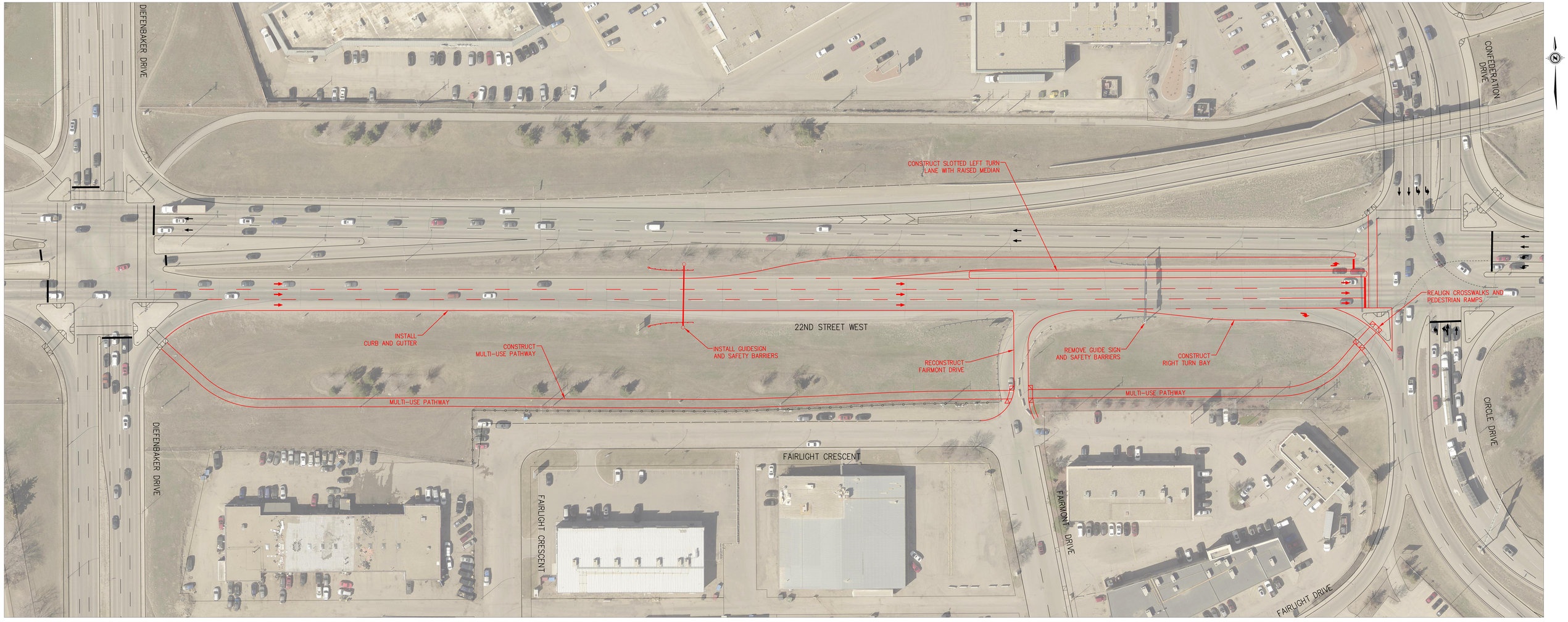
Proposed Traffic Plan

#	Recommenation	Estimated Cost
1	Construct an eastbound slotted left turn lane with a raised median	$800,000.00
2	Construct an eastbound right turn lane	$160,000.00
3	Realign Fairmont Drive between 22nd Street and Fairlight Crescent	$150,000.00
4	Relocate existing overhead guide sign to the west	$480,000.00
5	Construct curb and gutter on the south side of 22nd Street West	$160,000.00
6	Realign crosswalk and pedestrian ramps	$10,000.00
7	Install Multi-use Pathway	$200,000.00
	TOTAL:	**$1,960,000.00**

Proposed Traffic Plan



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City of Saskatoon

Next Steps

May / June 2024

› Conduct public engagement

July 2024

› Summarize public feedback

› Finalize recommended functional plan

August 2024

› Report to Standing Policy Committee on Transportation (SPCT) and City Council

Have Your Say

Scan the QR code to share your feedback

› Collect a paper survey from City Staff
› Or visit saskatoon.ca/Improving22ndAndConfed
› Please take our survey before June 14

saskatoon.ca / **Improving22ndAndConfed**

City of Saskatoon

City of Saskatoon
Communications & Public Engagement

ENGAGE

22nd Street West & Confederation Drive Intersection Improvements

What We Learned - Engagement Summary

July 8, 2024

Project Overview

The City of Saskatoon is examining the intersection of 22nd Street West and Confederation Drive to identify a permanent design that addresses safety and operational issues that exist in the eastbound direction.

This location has long-standing concerns with the operation of vehicles attempting to maneuver from Fairmont Drive to the eastbound left turn bay at 22nd Street West and Confederation Drive. In the past, several measures have been implemented, and ultimately removed, along 22nd Street West to prevent this movement. Measures included concrete barriers, low profile barrier, and Tuff Curb with delineator posts. These measures were not effective at resolving the issue.

Currently multiple improvements are being proposed to address these issues, including:

- The construction of an eastbound slotted left turn bay at the intersection of 22nd Street West and Confederation Drive
- A formalized eastbound right turn lane at the intersection of 22nd Street West and Confederation Drive to access the Circle Drive southbound on-ramp
- Construction of a shared-use pathway on the south side of 22nd Street West
- Relocating the existing guide sign on the south side of 22nd Street West that will be impacted by the proposed changes, and
- Changes to the road alignment and traffic control at the intersection of 22nd Street West and Fairmont Drive

Engagement Summary

From May to June 2024, engagement activities took place for the proposed improvements for the 22nd Street West and Confederation Drive intersection.

The goal of the engagement activities was to involve and consult with the community and businesses on the proposed changes. A description of engagement events is outlined in Table 1 (see next page).

Table 1: Summary of Engagement Events

Engagement Activity		Engagement Purpose	Targeted Audience	Engagement Goal
1	Open House May 30, 2024	Communicate the proposed changes and gather feedback	• Fairhaven Residents/Businesses • Parkridge Residents/Businesses • Fairhaven Community Association • Parkridge Community Association • Confederation Suburban Centre • General Public	Share the proposed changes to the intersection of 22nd Street West and Confederation Drive and gather feedback.
2	Online survey May 22 to June 14, 2024	Gather feedback	General Public	Gather feedback on the proposed changes to the intersection of 22nd Street West and Confederation Drive.

Flyers were mailed to residents and business owners in the Parkridge and Fairhaven neighbourhoods and in the Confederation Suburban Centre. The flyer described the engagement activities, how to participate in them, and had a QR code linked to the engage page and online survey. The Community Associations for Parkridge and Fairhaven were contacted through the City's community consultants. The engagement activities were also promoted through the City's social media accounts and on the project's Engage Page.

Open House

An open house was held at St. Marguerite School Gym on May 30, 2024. Eighteen people attended the meeting. Engagement boards outlining the proposal and a roll plan were set up in the meeting space. Project team members were available to discuss the project and answer questions. Sticky notes were used to capture attendees' thoughts on the proposed changes to the intersection. Attendees were provided with evaluation forms to share their comments on the project and to let us know how the event went for them.

What We Learned

Most attendees provided their feedback directly to project team members. Some people wrote their comments on sticky notes and pasted them on the roll plan. Attendees who provided their feedback to the project team were also invited to submit comments on the evaluation form. Eleven evaluation forms were filled out. Those who filled out a form were either business owners, employees, or residents.

Six of the evaluation forms had comments regarding the project. Two attendees expressed their support for the proposed changes. One attendee commented that the proposed changes will shift traffic onto Diefenbaker Drive. Another attendee indicated that they supported the proposed changes but had an unspecified reservation.

Common themes from the sticky notes were:

- Some advocated for the closure of Fairmont Drive at 22nd Street West.
- Keep Fairmont Drive open at 22nd Street West by extending the right turn lane past Fairmont Drive.

Other themes on the sticky notes were:

- To relocate Fairmont Drive exit like the Circle Drive West plan.
- Put a gate in the fence for cyclists.
- Ensure proper drainage at the proposed realigned crosswalk and pedestrian ramp on the 22nd and Confederation intersection because there are water pools when it rains.
- Making a longer merge lane from Diefenbaker Drive onto 22nd Street.
- A path to join the proposed multiuse pathway from Diefenbaker Drive.

In relation to the format of the open house, the attendees said that they were satisfied with the engagement event.

Online Survey

Another engagement tool that was used was an online survey. The survey was available between May 22 and June 14, 2024. During this time 124 people accessed the survey with 122 respondents completing the survey. The six-question survey was developed to gather feedback on the proposed changes to the intersection. Respondents were asked to review the project materials on the Engage Page before completing the survey. Not all the respondents answered all the questions, and respondents had the option to select more than one answer for some of the questions.

The majority of the respondents were residents that will be impacted by the proposed changes (n=116). Three respondents were business owners or employees impacted by the project, three were not going to be impacted by the project.

When asked why respondents travel through the intersection of 22nd Street West and Confederation Drive (n=121), 36% responded to using the intersection to get to shops and restaurants, 29% to travel to community services, 24% to travel to work and 10% use the intersection to travel to school or to other activities.

When asked the mode of transport and the frequency of travel the majority of respondents answered, “using driving -passenger vehicle about daily” (see Figure 1, next page).

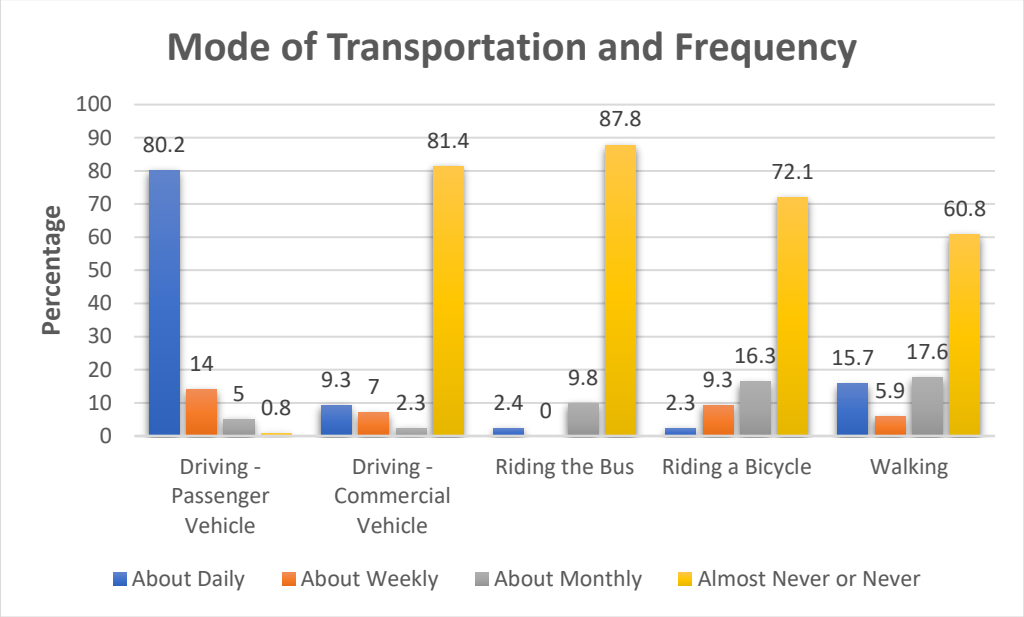


Figure 2: Summary of mode of transportation and frequency

What We Learned – Online Survey

Proposed changes to 22nd Street West between Diefenbaker Drive and Confederation Drive

When asked if respondents agree with the proposed option (n=113), 46% (n=53) supported the proposed changes, 34% (n=40) were not in support and 20% (n=20) were either unsure or proposed other options.

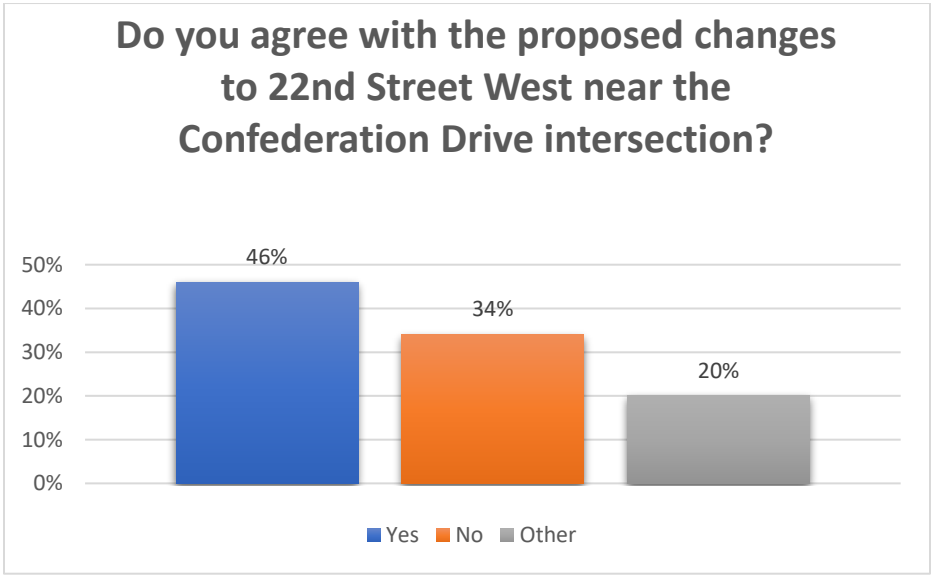


Figure 2: Summary of responses to proposed changes

Question five was an open-ended question that asked respondents to share their views on the proposed changes. Responses (n=75) were analysed for themes. Five themes emerged – why change is needed, why change is not needed, mention of Fairmont Drive and/or Circle Drive, alternatives to the proposed changes and links to other modes of transportation. The following is a sample of respondents' answers.

Why change is needed

- "I am glad that there is a plan to address the shoulder that gets used as a third lane already. That will make it safer".
- "Moving the merge lane back 2-3 blocks will allow drivers to merge and then slowly make there way over so they can turn left on Confed[eration] Dr".
- "Please do option 1, we need a left turning lane onto Confed. Dr. and a proper merge from Fairmont Dr".
- "This would solve a lot of the issues! Thank you!! It's been a TERRIBLE corner for way too long"!
- "I think this is a good more permanent plan to deter the long-term issues with this section".
- "The fact that vehicles will not be able to be three abreast coming off of Fairmont Drive onto 22nd street and that Fairmont traffic can no longer shoot across four lanes of traffic to turn left onto Confederation Drive are huge improvements".

Of those in support of the changes, some respondents also expressed concerns about how long it will take for construction to start.

Why change isn't needed

- "It's a waste of time, and more importantly taxpayer money. The intersection functions just fine as is".
- "It will make it harder to enter and leave my community".
- "I think the intersection should be left as it is now! When those pegs were up it…caused nothing but a traffic snarl. There is not enough room to do a proper circle so don't make it any worse by doing what was done on Diefenbaker and 22nd".

The reasons for why the changes are not needed included cost, other civic priorities, etc.

Mention of Fairmont Drive and/or Circle Drive

- "This is not addressing the issue of turning right off Fairmont onto 22nd and people crossing multiple lanes".
- "My frustration is how Saskatoon designs access to Circle Drive".
- "The cut through from Fairmont Drive onto 22nd street needs to be closed off completely as no matter whatever alterations are done, the DANGER of vehicles crossing multiple lanes of traffic to turn left at Confederation drive is extremely unsafe".

Some of the respondents mentioned Fairmont Drive connecting to Circle Drive as being an issue. For example, ten respondents shared that a full closure of Fairmont Drive onto 22nd Street West would be a better option. Some of these respondents added that traffic can be rerouted to Diefenbaker Drive.

- "There is not enough change to make a difference with the flow of traffic trying to access circle drive which is the main issue with this intersection. Add into the mix the circle drive traffic having to come into a residential neighbourhood and then attempt to get through that traffic to get on to 22nd street. Its all a terrible design."
- "I would like to see the exit from Tim Hortons onto 22nd street closed off".
- "I concur with all changes however, I strongly believe that the Fairmont Drive access between 22nd Street and Fairlight Crescent should be closed. Traffic can easily re-route to Diefenbaker Drive".
- "I think there should be more of an overpass built for east bound traffic to get onto Circle North and Circle South. If that was built then the traffic from Fairmont to get onto 22nd would not be as bad. Its the people trying to get onto Circle Dr that are causing the issue".

Possible Alternative Solutions

- "The only time everyone is aware of the two lanes turning is for a couple of months after the lines are freshly painted on the roadway and thus visible. Simple signage facing the right lane on Confederation would deal with the problem year round".
- "There should be 5 lanes. One specific to traffic traveling to south circle. One specific to traffic accessing north circle. Two for traveling downtown and one for left turning".

Alternatives could be traffic light sequencing. Four respondents indicated that turning left onto Confederation Drive should be longer to get more vehicles through and keep the flow of traffic moving.

Linkage to other modes of transportation

- "The multi-use pathway should connect to the future Diefenbaker BRT station on the RED Line".
- "Its not needed but the shown extra multi user path would be nice".
- "Spend the $ on better pedestrian & bike access".

How did the respondents learn about the survey?

Most of the survey respondents (n=73) heard about the survey through the flyer, followed by information from a Community Association (n=23). See Figure 3, below for more details.

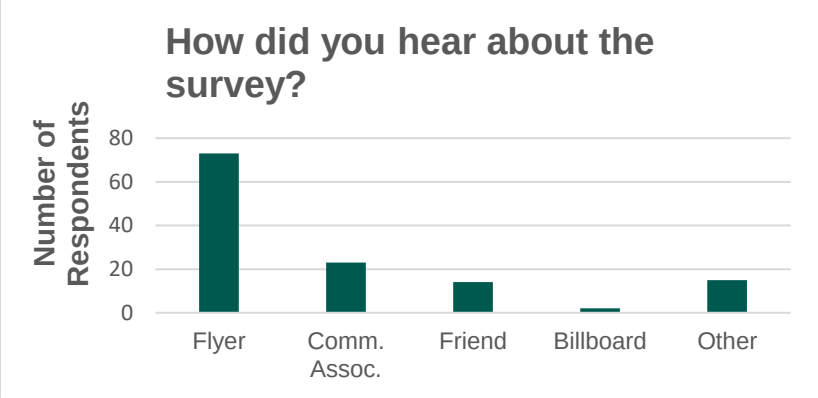


Figure 3: Summary of how respondents heard about the survey

Limitations

Some participants may have limited access to internet or technology that presented challenges in accessing the online survey. The number of attendees at the open house and survey respondents may not represent most people that use the intersection given the daily volume of traffic at that intersection.

Next Steps

Engagement results will be shared with the project team in the Transportation Department to determine next steps. The summary of this evaluation will also be provided to City Council in Fall 2024.

Appendix E – Fairmont Drive Access Analysis

Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	35.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.463

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	159	89	112	406	256	53	68	1232	185	190	304	315
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	159	89	112	406	256	53	68	1232	185	190	304	315
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	22	28	102	64	13	17	308	46	48	76	79
Total Analysis Volume [veh/h]	159	89	112	406	256	53	68	1232	185	190	304	315
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	10	10	10	16	16	16	6	51	51	8	53
g / C, Green / Cycle	0.09	0.09	0.09	0.14	0.14	0.14	0.05	0.45	0.45	0.07	0.47
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.05	0.12	0.08	0.09	0.04	0.24	0.12	0.05	0.09
s, saturation flow rate [veh/h]	1781	1786	1702	3459	1870	1760	1781	5094	1589	3459	3560
c, Capacity [veh/h]	157	158	150	491	265	250	98	2272	709	258	1658
d1, Uniform Delay [s]	49.68	49.67	49.85	47.55	45.86	45.88	52.93	23.07	19.80	51.64	17.79
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.62	4.59	5.59	3.74	2.18	2.34	8.91	0.94	0.90	4.15	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.52	0.56	0.83	0.60	0.60	0.69	0.54	0.26	0.74	0.18
d, Delay for Lane Group [s/veh]	54.30	54.26	55.43	51.29	48.04	48.21	61.84	24.01	20.69	55.79	18.03
Lane Group LOS	D	D	E	D	D	D	E	C	C	E	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.43	2.43	2.52	5.84	4.38	4.15	2.15	8.10	3.23	2.80	2.38
50th-Percentile Queue Length [m/ln]	18.54	18.55	19.21	44.51	33.35	31.62	16.39	61.74	24.63	21.34	18.11
95th-Percentile Queue Length [veh/ln]	4.38	4.38	4.54	9.81	7.81	7.47	3.87	12.77	5.82	5.04	4.28
95th-Percentile Queue Length [m/ln]	33.37	33.40	34.58	74.72	59.50	56.91	29.51	97.31	44.33	38.41	32.60

Movement, Approach, & Intersection Results

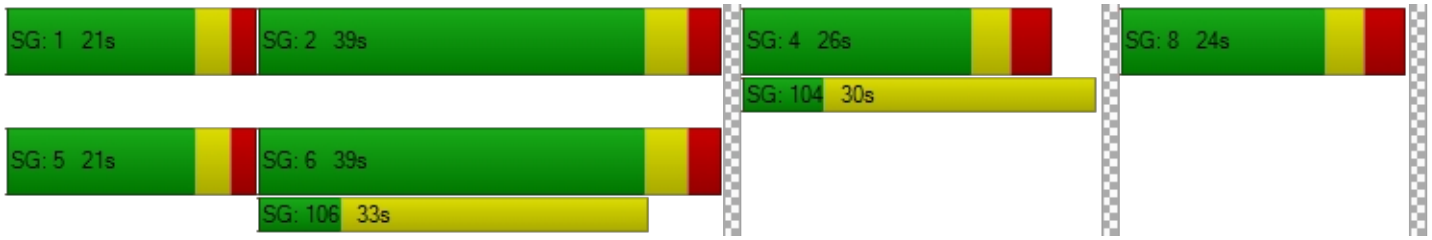
d_M, Delay for Movement [s/veh]	54.28	55.37	0.00	51.29	48.10	48.21	61.84	24.01	20.69	55.79	18.03	0.00
Movement LOS	D	E		D	D	D	E	C	C	E	B	
d_A, Approach Delay [s/veh]	54.67			49.92			25.33			32.55		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	34.99											
Intersection LOS	C											
Intersection V/C	0.463											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.803	3.070	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	1.764	2.149	2.376	1.967
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	28.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.580

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	288	270	389	192	163	296	126	780	120	107	732	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	270	389	192	163	296	126	780	120	107	732	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	68	97	48	41	74	32	195	30	27	183	24
Total Analysis Volume [veh/h]	288	270	389	192	163	296	126	780	120	107	732	94
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Unsigna	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	31	0	23	30	0	23	33	0	23	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	50	37	50	32	32	52	42	42	52	41	41
g / C, Green / Cycle	0.46	0.33	0.46	0.29	0.29	0.47	0.38	0.38	0.47	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.24	0.08	0.15	0.09	0.19	0.15	0.25	0.25	0.14	0.15	0.16
s, saturation flow rate [veh/h]	1201	3560	1263	1870	1589	846	1870	1784	791	3560	1764
c, Capacity [veh/h]	497	1186	614	548	466	419	718	685	344	1340	664
d1, Uniform Delay [s]	21.47	26.47	18.46	30.12	33.79	17.46	27.71	27.71	19.11	25.31	25.35
k, delay calibration	0.36	0.50	0.50	0.50	0.50	0.12	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.61	0.45	1.33	1.39	6.68	0.43	4.46	4.68	2.35	0.94	1.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.23	0.31	0.30	0.64	0.30	0.64	0.64	0.31	0.41	0.41
d, Delay for Lane Group [s/veh]	25.07	26.91	19.79	31.51	40.46	17.89	32.17	32.38	21.46	26.25	27.26
Lane Group LOS	C	C	B	C	D	B	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.23	2.63	3.19	3.56	7.68	1.85	10.62	10.18	1.73	5.44	5.62
50th-Percentile Queue Length [m/ln]	39.82	20.05	24.30	27.11	58.52	14.07	80.94	77.54	13.20	41.46	42.80
95th-Percentile Queue Length [veh/ln]	8.98	4.74	5.74	6.40	12.22	3.32	15.97	15.41	3.12	9.27	9.50
95th-Percentile Queue Length [m/ln]	68.39	36.09	43.74	48.80	93.15	25.33	121.67	117.41	23.77	70.61	72.42

Movement, Approach, & Intersection Results

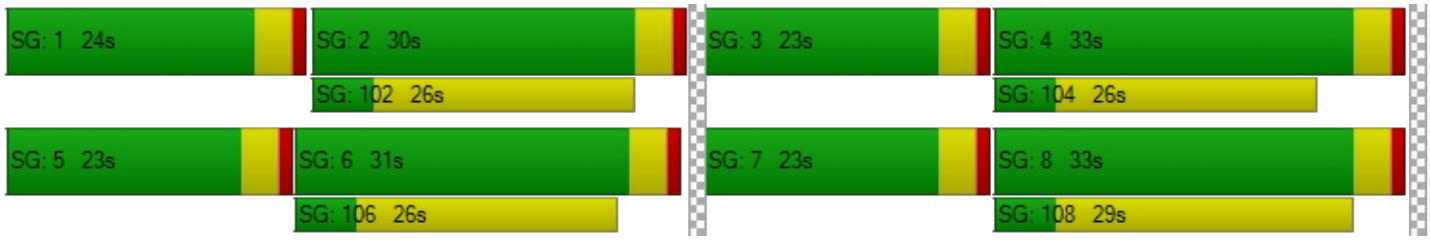
d_M, Delay for Movement [s/veh]	25.07	26.91	0.00	19.79	31.51	40.46	17.89	32.25	32.38	21.46	26.50	27.26
Movement LOS	C	C		B	C	D	B	C	C	C	C	C
d_A, Approach Delay [s/veh]	25.96			32.12			30.50			26.00		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.71											
Intersection LOS	C											
Intersection V/C	0.580											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.879	2.833	3.204	3.128
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	491	473	527	527
d_b, Bicycle Delay [s]	31.31	32.07	29.82	29.82
l_b,int, Bicycle LOS Score for Intersection	2.020	2.097	2.406	2.073
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	21.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.439

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	72	200	784	119	121	147
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	72	200	784	119	121	147
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	50	196	30	30	37
Total Analysis Volume [veh/h]	72	200	784	119	121	147
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	18	0	0	10	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	57	57	28
g / C, Green / Cycle	0.28	0.28	0.63	0.63	0.31
(v / s)_i Volume / Saturation Flow Rate	0.04	0.08	0.58	0.04	0.04
s, saturation flow rate [veh/h]	1603	2532	1361	3204	3204
c, Capacity [veh/h]	445	703	947	2029	997
d1, Uniform Delay [s]	24.58	25.49	12.52	6.28	22.19
k, delay calibration	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.78	1.02	8.91	0.06	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.28	0.83	0.06	0.12
d, Delay for Lane Group [s/veh]	25.36	26.50	21.43	6.34	22.44
Lane Group LOS	C	C	C	A	C
Critical Lane Group	No	Yes	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.24	1.75	11.98	0.40	0.94
50th-Percentile Queue Length [m/ln]	9.45	13.31	91.32	3.08	7.13
95th-Percentile Queue Length [veh/ln]	2.23	3.14	17.66	0.73	1.68
95th-Percentile Queue Length [m/ln]	17.01	23.96	134.58	5.54	12.84

Movement, Approach, & Intersection Results

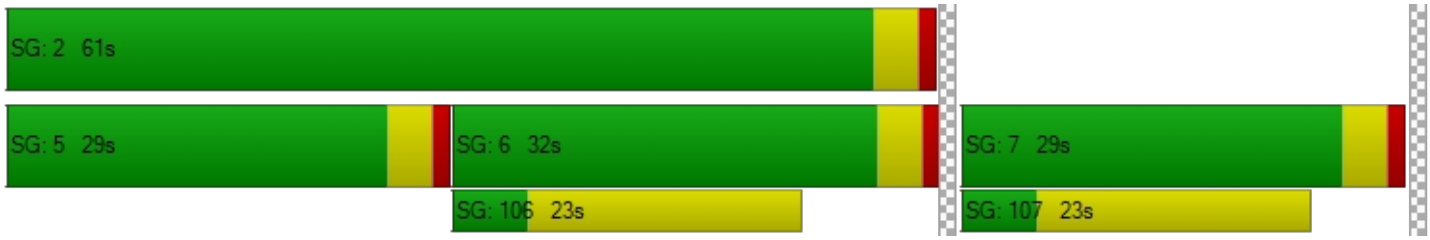
d_M, Delay for Movement [s/veh]	25.36	26.50	21.43	6.34	22.44	0.00
Movement LOS	C	C	C	A	C	
d_A, Approach Delay [s/veh]	26.20		19.44		22.44	
Approach LOS	C		B		C	
d_I, Intersection Delay [s/veh]	21.14					
Intersection LOS	C					
Intersection V/C	0.439					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	36.45
l_p,int, Pedestrian LOS Score for Intersection	3.111	0.000	2.399
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	1267	622
d_b, Bicycle Delay [s]	23.47	6.05	21.36
l_b,int, Bicycle LOS Score for Intersection	1.560	2.305	1.770
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	9	18	31	178	290	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	18	31	178	290	64
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	8	45	73	16
Total Analysis Volume [veh/h]	9	18	31	178	290	64
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.03	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.77	10.31	9.58	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.05	0.03	0.00	0.00
95th-Percentile Queue Length [m/ln]	0.99	0.99	0.40	0.20	0.00	0.00
d_A, Approach Delay [s/veh]	10.79		1.42		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.00					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	16.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.339

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	242	149	70	1	52	94	55	73	101	114	104	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	242	149	70	1	52	94	55	73	101	114	104	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	37	18	0	13	24	14	18	25	29	26	4
Total Analysis Volume [veh/h]	242	149	70	1	52	94	55	73	101	114	104	14
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	27	0	0	27	0	17	18	0	15	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	0	0	9	0	0	6	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	23	23	23	29	14	14	29	12	12
g / C, Green / Cycle	0.38	0.38	0.38	0.48	0.23	0.23	0.48	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.22	0.14	0.10	0.04	0.04	0.07	0.09	0.02	0.03
s, saturation flow rate [veh/h]	1118	1593	1511	1382	1683	1431	1320	3204	1585
c, Capacity [veh/h]	437	611	640	818	393	334	773	641	317
d1, Uniform Delay [s]	16.16	13.23	12.64	8.31	18.43	18.97	8.66	19.68	19.70
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.08	1.65	0.84	0.16	1.05	2.34	0.40	0.39	0.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.36	0.23	0.07	0.19	0.30	0.15	0.12	0.13
d, Delay for Lane Group [s/veh]	21.25	14.87	13.48	8.47	19.48	21.31	9.06	20.07	20.52
Lane Group LOS	C	B	B	A	B	C	A	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.10	2.16	1.35	0.36	0.87	1.29	0.79	0.45	0.50
50th-Percentile Queue Length [m/ln]	23.66	16.43	10.31	2.76	6.62	9.84	6.01	3.44	3.83
95th-Percentile Queue Length [veh/ln]	5.59	3.88	2.44	0.65	1.56	2.33	1.42	0.81	0.91
95th-Percentile Queue Length [m/ln]	42.58	29.58	18.56	4.97	11.92	17.72	10.83	6.19	6.90

Movement, Approach, & Intersection Results

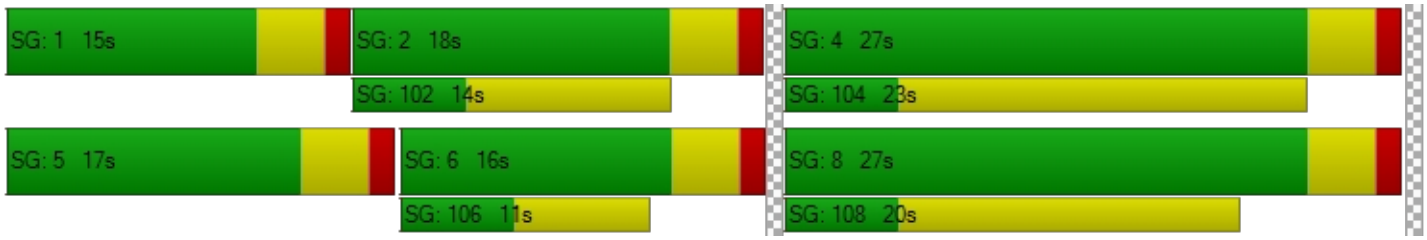
d_M, Delay for Movement [s/veh]	21.25	14.87	14.87	13.48	13.48	13.48	8.47	19.48	21.31	9.06	20.18	20.52
Movement LOS	C	B	B	B	B	B	A	B	C	A	C	C
d_A, Approach Delay [s/veh]	18.22			13.48			17.64			14.74		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	16.69											
Intersection LOS	B											
Intersection V/C	0.339											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.345	2.000	2.953	2.400
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	767	767	467	400
d_b, Bicycle Delay [s]	11.41	11.41	17.63	19.20
l_b,int, Bicycle LOS Score for Intersection	2.431	1.802	1.937	1.687
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	44.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.556

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			48.28			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	204	309	81	473	416	145	108	898	188	387	842	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	309	81	473	416	145	108	898	188	387	842	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	77	20	118	104	36	27	225	47	97	211	202
Total Analysis Volume [veh/h]	204	309	81	473	416	145	108	898	188	387	842	808
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	94.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	0	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	0.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	20	38	0	22	40	0
Vehicle Extension [s]	0.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	0.0	7.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	15	15	15	19	19	19	9	36	36	15	42
g / C, Green / Cycle	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.32	0.32	0.13	0.37
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.10	0.14	0.16	0.16	0.06	0.18	0.12	0.11	0.24
s, saturation flow rate [veh/h]	1781	1850	1702	3459	1870	1707	1781	5094	1589	3459	3560
c, Capacity [veh/h]	237	246	226	589	318	290	135	1615	504	452	1323
d1, Uniform Delay [s]	47.28	47.24	47.71	45.47	46.55	46.55	51.80	32.28	30.16	48.51	29.48
k, delay calibration	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	6.24	9.48	2.68	13.13	14.33	10.95	1.39	2.12	5.04	2.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.70	0.77	0.80	0.92	0.92	0.80	0.56	0.37	0.86	0.64
d, Delay for Lane Group [s/veh]	53.94	53.48	57.19	48.15	59.68	60.88	62.75	33.67	32.28	53.55	31.86
Lane Group LOS	D	D	E	D	E	E	E	C	C	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.96	5.08	5.34	6.63	9.30	8.59	3.44	7.00	4.28	5.68	9.78
50th-Percentile Queue Length [m/ln]	37.81	38.73	40.68	50.51	70.84	65.42	26.21	53.34	32.63	43.25	74.56
95th-Percentile Queue Length [veh/ln]	8.62	8.78	9.13	10.85	14.30	13.39	6.19	11.34	7.68	9.58	14.91
95th-Percentile Queue Length [m/ln]	65.65	66.91	69.55	82.68	108.94	102.04	47.18	86.41	58.49	73.02	113.65

Movement, Approach, & Intersection Results

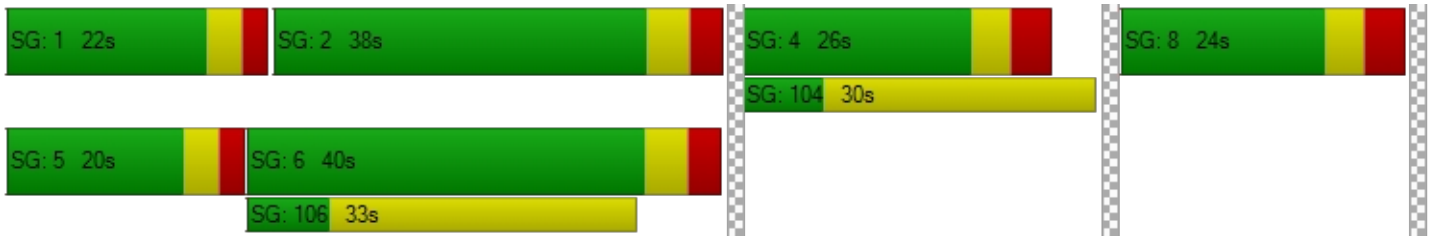
d_M, Delay for Movement [s/veh]	53.86	55.57	0.00	48.15	60.03	60.88	62.75	33.67	32.28	53.55	31.86	0.00
Movement LOS	D	E		D	E	E	E	C	C	D	C	
d_A, Approach Delay [s/veh]	54.89			54.72			36.08			38.69		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	44.17											
Intersection LOS	D											
Intersection V/C	0.556											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.933	3.159	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	558	593
d_b, Bicycle Delay [s]	40.93	39.25	29.64	28.21
l_b,int, Bicycle LOS Score for Intersection	1.983	2.413	2.216	2.574
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	34.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.532

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	151	361	255	163	249	216	179	793	148	230	1118	303
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	361	255	163	249	216	179	793	148	230	1118	303
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	90	64	41	62	54	45	198	37	58	280	76
Total Analysis Volume [veh/h]	151	361	255	163	249	216	179	793	148	230	1118	303
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Unsigna	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	31	0	23	30	0	23	33	0	23	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	50	38	50	38	38	52	37	37	52	39	39
g / C, Green / Cycle	0.46	0.34	0.46	0.35	0.35	0.47	0.34	0.34	0.47	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.14	0.10	0.14	0.13	0.14	0.27	0.26	0.26	0.26	0.27	0.27
s, saturation flow rate [veh/h]	1092	3560	1175	1870	1589	669	1870	1769	893	3560	1673
c, Capacity [veh/h]	502	1228	560	654	556	321	627	593	378	1265	594
d1, Uniform Delay [s]	18.46	26.26	18.27	26.84	26.92	22.82	32.79	32.81	22.54	31.38	31.40
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.44	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.33	0.61	1.32	1.69	2.06	6.13	9.47	10.05	7.30	4.55	9.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.29	0.29	0.38	0.39	0.56	0.77	0.77	0.61	0.76	0.77
d, Delay for Lane Group [s/veh]	18.79	26.87	19.59	28.53	28.98	28.95	42.27	42.86	29.84	35.93	41.05
Lane Group LOS	B	C	B	C	C	C	D	D	C	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.32	3.55	2.67	5.19	4.57	3.18	13.00	12.41	4.27	11.93	12.09
50th-Percentile Queue Length [m/ln]	17.65	27.04	20.37	39.56	34.81	24.26	99.03	94.55	32.52	90.94	92.09
95th-Percentile Queue Length [veh/ln]	4.17	6.39	4.81	8.93	8.07	5.73	18.91	18.18	7.66	17.60	17.79
95th-Percentile Queue Length [m/ln]	31.77	48.67	36.67	68.04	61.52	43.67	144.08	138.56	58.34	134.11	135.53

Movement, Approach, & Intersection Results

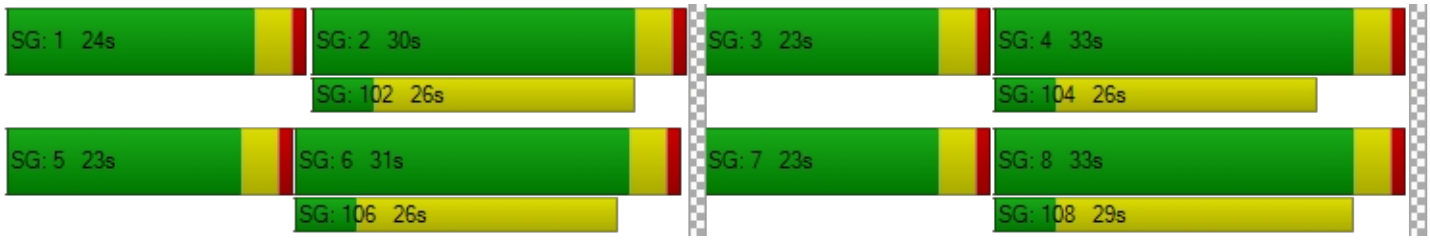
d_M, Delay for Movement [s/veh]	18.79	26.87	0.00	19.59	28.53	28.98	28.95	42.50	42.86	29.84	36.63	41.05
Movement LOS	B	C		B	C	C	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	24.49			26.36			40.38			36.49		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	34.41											
Intersection LOS	C											
Intersection V/C	0.532											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.976	2.944	3.224	3.274
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	491	473	527	527
d_b, Bicycle Delay [s]	31.31	32.07	29.82	29.82
l_b,int, Bicycle LOS Score for Intersection	1.982	2.078	2.484	2.468
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	36.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.680

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	88	662	597	95	544	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	662	597	95	544	270
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	166	149	24	136	68
Total Analysis Volume [veh/h]	88	662	597	95	544	270
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	18	0	0	10	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	57	57	28
g / C, Green / Cycle	0.28	0.28	0.63	0.63	0.31
(v / s)_i Volume / Saturation Flow Rate	0.05	0.26	0.51	0.03	0.17
s, saturation flow rate [veh/h]	1603	2532	1168	3204	3204
c, Capacity [veh/h]	445	703	746	2029	997
d1, Uniform Delay [s]	24.84	31.78	12.47	6.23	25.72
k, delay calibration	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.00	31.56	9.43	0.04	2.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.94	0.80	0.05	0.55
d, Delay for Lane Group [s/veh]	25.83	63.34	21.91	6.28	27.89
Lane Group LOS	C	E	C	A	C
Critical Lane Group	No	Yes	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.54	9.88	7.93	0.32	5.00
50th-Percentile Queue Length [m/ln]	11.70	75.31	60.44	2.44	38.08
95th-Percentile Queue Length [veh/ln]	2.76	15.04	12.55	0.58	8.66
95th-Percentile Queue Length [m/ln]	21.06	114.59	95.63	4.39	66.01

Movement, Approach, & Intersection Results

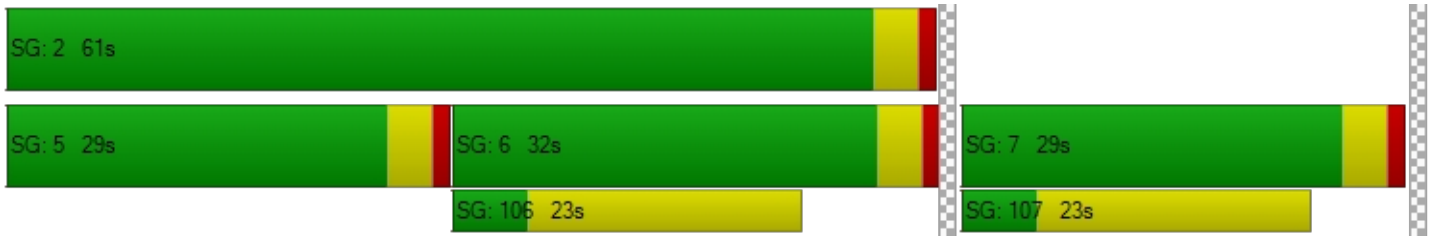
d_M, Delay for Movement [s/veh]	25.83	63.34	21.91	6.28	27.89	0.00
Movement LOS	C	E	C	A	C	
d_A, Approach Delay [s/veh]	58.94		19.76		27.89	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	36.78					
Intersection LOS	D					
Intersection V/C	0.680					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	36.45
l_p,int, Pedestrian LOS Score for Intersection	3.090	0.000	2.530
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	1267	622
d_b, Bicycle Delay [s]	23.47	6.05	21.36
l_b,int, Bicycle LOS Score for Intersection	1.560	2.131	2.119
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.066

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	24	54	41	207	555	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	54	41	207	555	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	14	10	52	139	33
Total Analysis Volume [veh/h]	24	54	41	207	555	130
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.10	0.07	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	16.28	12.91	11.55	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.07	0.03	0.00	0.00
95th-Percentile Queue Length [m/ln]	4.42	4.42	0.53	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	13.94		1.91		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.54					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	101.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.655

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	499	152	38	3	63	82	54	28	149	228	372	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	499	152	38	3	63	82	54	28	149	228	372	31
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	38	10	1	16	21	14	7	37	57	93	8
Total Analysis Volume [veh/h]	499	152	38	3	63	82	54	28	149	228	372	31
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	27	0	0	27	0	17	18	0	15	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	0	0	9	0	0	6	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	23	23	23	29	14	14	29	12	12
g / C, Green / Cycle	0.38	0.38	0.38	0.48	0.23	0.23	0.48	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.45	0.12	0.10	0.04	0.02	0.10	0.17	0.08	0.08
s, saturation flow rate [veh/h]	1119	1626	1530	1256	1683	1431	1318	3204	1618
c, Capacity [veh/h]	438	623	648	715	393	334	796	641	324
d1, Uniform Delay [s]	20.73	12.92	12.63	8.46	17.93	19.68	9.34	20.94	20.97
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	281.63	1.27	0.82	0.21	0.35	4.33	0.91	2.00	4.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.14	0.30	0.23	0.08	0.07	0.45	0.29	0.42	0.42
d, Delay for Lane Group [s/veh]	302.36	14.18	13.45	8.67	18.28	24.01	10.25	22.94	25.00
Lane Group LOS	F	B	B	A	B	C	B	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	40.03	1.81	1.36	0.36	0.32	2.05	1.72	1.70	1.92
50th-Percentile Queue Length [m/ln]	305.05	13.79	10.36	2.75	2.44	15.60	13.13	12.93	14.62
95th-Percentile Queue Length [veh/ln]	55.22	3.26	2.45	0.65	0.58	3.68	3.10	3.06	3.45
95th-Percentile Queue Length [m/ln]	420.76	24.82	18.64	4.95	4.39	28.08	23.63	23.28	26.31

Movement, Approach, & Intersection Results

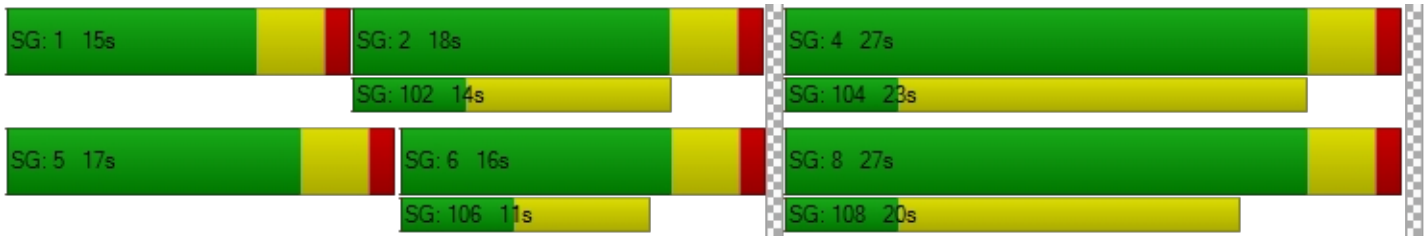
d_M, Delay for Movement [s/veh]	302.36	14.18	14.18	13.45	13.45	13.45	8.67	18.28	24.01	10.25	23.52	25.00
Movement LOS	F	B	B	B	B	B	A	B	C	B	C	C
d_A, Approach Delay [s/veh]	222.89			13.45			19.73			18.80		
Approach LOS	F			B			B			B		
d_I, Intersection Delay [s/veh]	101.23											
Intersection LOS	F											
Intersection V/C	0.655											

Other Modes

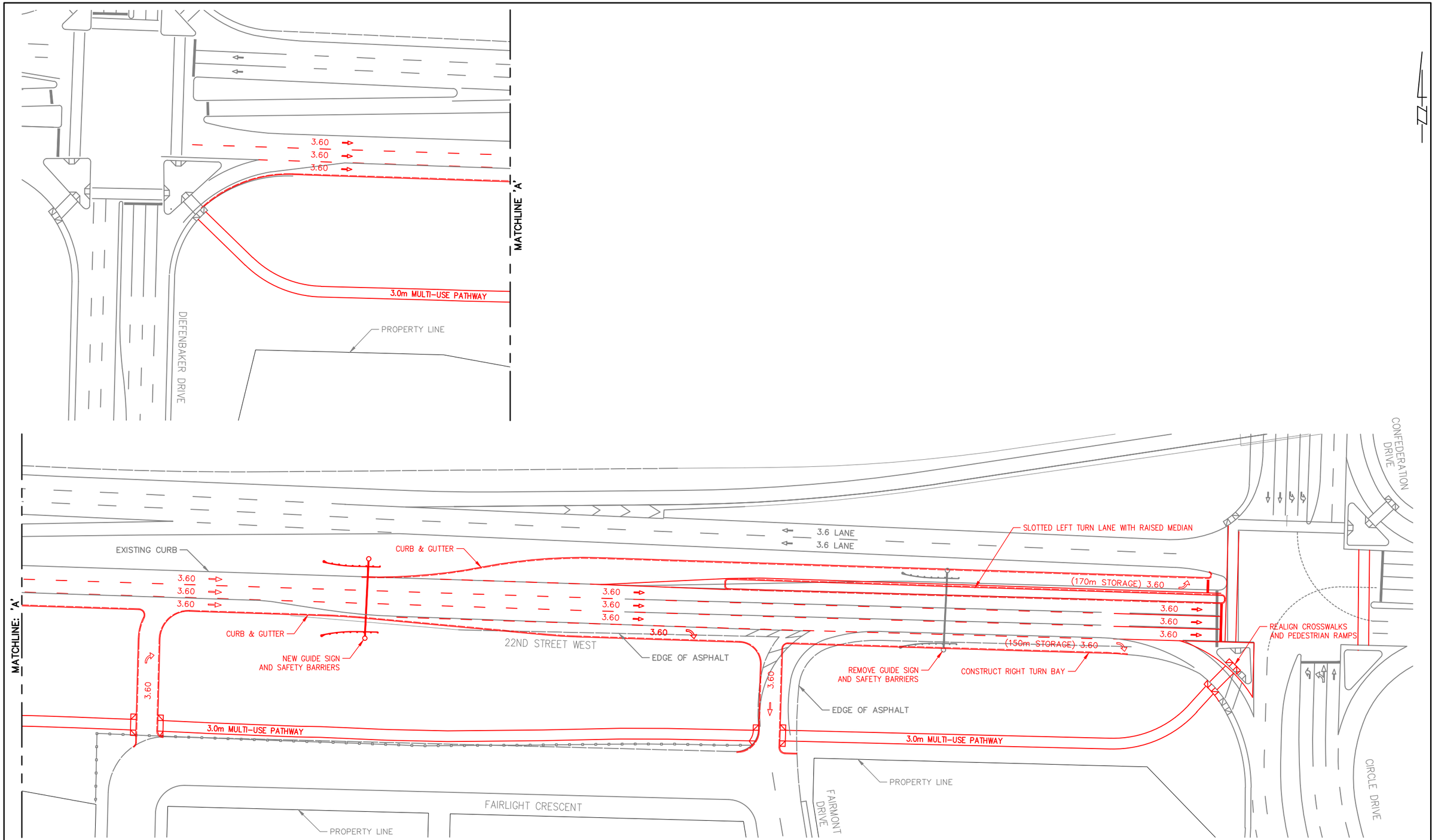
g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.598	2.016	3.453	2.504
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	767	767	467	400
d_b, Bicycle Delay [s]	11.41	11.41	17.63	19.20
l_b,int, Bicycle LOS Score for Intersection	2.807	1.804	1.941	1.907
Bicycle LOS	C	A	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix F – Recommended Traffic Plan



FUNCTIONAL

LANE WIDTH LABELLING

LANE WIDTH LABELLING IS EXCLUSIVE OF GUTTER AND OFFSET DIMENSIONS

22ND STREET WEST
ROADWAY CLASSIFICATION: EXPRESSWAY
POSTED SPEED: 60 km/h (Ds: 70 km/h)
DESIGN VEHICLE: WB-20
CONTROL VEHICLE: WB-20

CHECKED BY:	CHECKED BY:
DATE	DATE

DRAWN BY SJK DATE 2024-JUN-17

City of Saskatoon Transportation

FUNCTIONAL

22ND STREET WEST
DIEFNBAKER DRIVE TO CONFEDERATION DRIVE
RECOMMENDED OPTION

ENGINEER

SCALES : HOR. 1:1000 VERT. 1:1000

DATE

SHEET NO. 1 OF 1

PLAN NO. 249-0128-103r001

City of Saskatoon

22nd Street West and Confederation Drive Intersection Improvements – Follow-up

Functional Design Report

January 13, 2025

Executive Summary

Safety and operational issues exist on 22nd Street West between Diefenbaker Drive and Confederation Drive in the eastbound direction.

At its regular meeting held on August 6, 2024, SPCT received the 22nd Street and Confederation Drive Intersection Improvements report and passed the following motion: “That the matter be referred back to the Administration to report back on the implications of removing the right out on Fairlight Crescent.”

The transportation network would generally operate well with the removal of the Fairlight Crescent access to 22nd Street West except for a significant increase in the queue lengths for northbound left-turns at the Fairmont Drive and Fairlight Drive intersection. To mitigate this impact, additional recommendations for the intersection of Fairmont Drive and Fairlight Drive, including a left-turn signal for northbound traffic, have been included in the traffic plan.

The recommended improvements for the 22nd Street West and Confederation Drive intersection improvements include:

- Construct an eastbound slotted left-turn lane and an exclusive eastbound right-turn lane at the intersection of 22nd Street West and Confederation Drive.
- Convert the existing access at Fairmont Drive from a right-out access to a right-in access from 22nd Street West.
- Relocate the existing overhead guide sign and roadside safety system located between Confederation Drive and Fairmont Drive farther west.
- Construct a third eastbound travel lane with curb and gutter between Diefenbaker Drive and Confederation Drive.
- Realign the pedestrian crosswalk, adjust pedestrian accessible ramps, and correct drainage deficiencies on the southwest corner of the intersection at 22nd Street West and Confederation Drive.
- Install a shared-use pathway on the south side of 22nd Street West between Diefenbaker Drive and Confederation Drive.

The following improvements are recommended for the Fairlight Drive and Fairmont Drive intersection to accommodate the anticipated changes in travel patterns:

- Traffic signal upgrades, and
- Geometric changes for the eastbound right turn.

A high-level cost estimate for each of the improvements is shown below:

Improvement	Cost Estimate
Construct an eastbound slotted left-turn lane	$ 800,000.00
Construct an eastbound right-turn lane	$ 390,000.00
Convert Fairmont Drive access to right-in configuration from 22nd Street West	$ 150,000.00
Relocate overhead guide sign and roadside safety system	$ 595,000.00
Construct third eastbound through lane with curb and gutter	$ 345,000.00
Correct pedestrian accessible ramps and drainage deficiencies	$ 15,000.00
Install shared-use pathway on the south side of 22nd Street West	$ 250,000.00
Install signal upgrades and geometric changes for eastbound right turn at Fairlight Drive and Fairmont Drive	$ 355,000.00
Total	**$ 2,900,000.00**

It is recommended that the functional plan for these improvements be approved, and the project proceed to the detailed design and construction phases when funding is available.

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Appendix A – Traffic Operations Analysis of Existing Conditions

Appendix B – Traffic Operations Analysis of Proposed Changes

Appendix C – Proposed Traffic Plan

1. INTRODUCTION

1.1 Background

At its regular meeting held on August 6, 2024, the Standing Policy Committee on Transportation (SPCT) received the 22nd Street and Confederation Drive Intersection Improvements report. The traffic plan that was presented at this meeting included a recommendation to reconfigure Fairmont Drive as a right-in access for traffic turning from 22nd Street West onto Fairmont Drive and included a new right-out access approximately 175 m west of Fairmont Drive that would allow turning movements onto 22nd Street West from Fairlight Crescent, as shown in Figure 1-1.

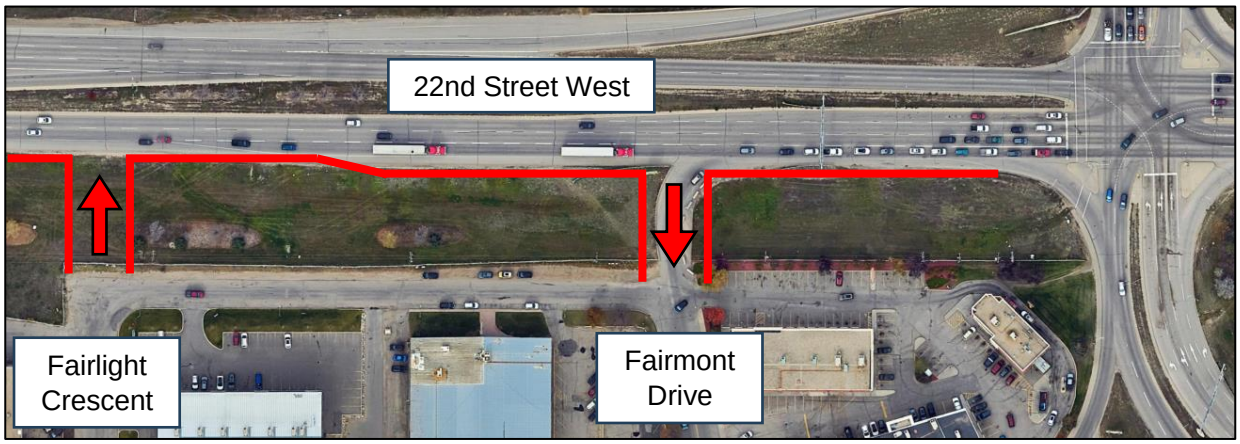


Figure 1-1: Fairmont Drive Access Configuration

After presenting the recommended plan, members of the SPCT raised concerns with creating a new right-out access at Fairlight Crescent and questioned if it was necessary with the nearby intersection of Diefenbaker Drive and 22nd Street West. Following this discussion, the SPCT passed the following motion:

> "That the matter be referred back to the Administration to report back on the implications of removing the right out on Fairlight Crescent."

This new right-out access at Fairlight Crescent was recommended based on feedback received during the public engagement period and to align with the approved plans from the Circle Drive West functional planning study. With the Fairlight Crescent access, traffic would have three routes to access the eastbound lanes on 22nd Street West from Fairmont Drive:

1. Northbound left from Fairmont Drive onto Fairlight Drive and turn right onto Diefenbaker Drive to the channelized right-turn at 22nd Street West (yellow route shown in Figure 1-2).
2. Northbound on Fairmont Drive, turn left onto Fairlight Crescent, and right onto the new access (blue route shown in Figure 1-2).
3. Northbound left from Fairmont Drive onto Fairlight Drive and turn right onto Fairlight Crescent to the new access (green route shown in Figure 1-2).

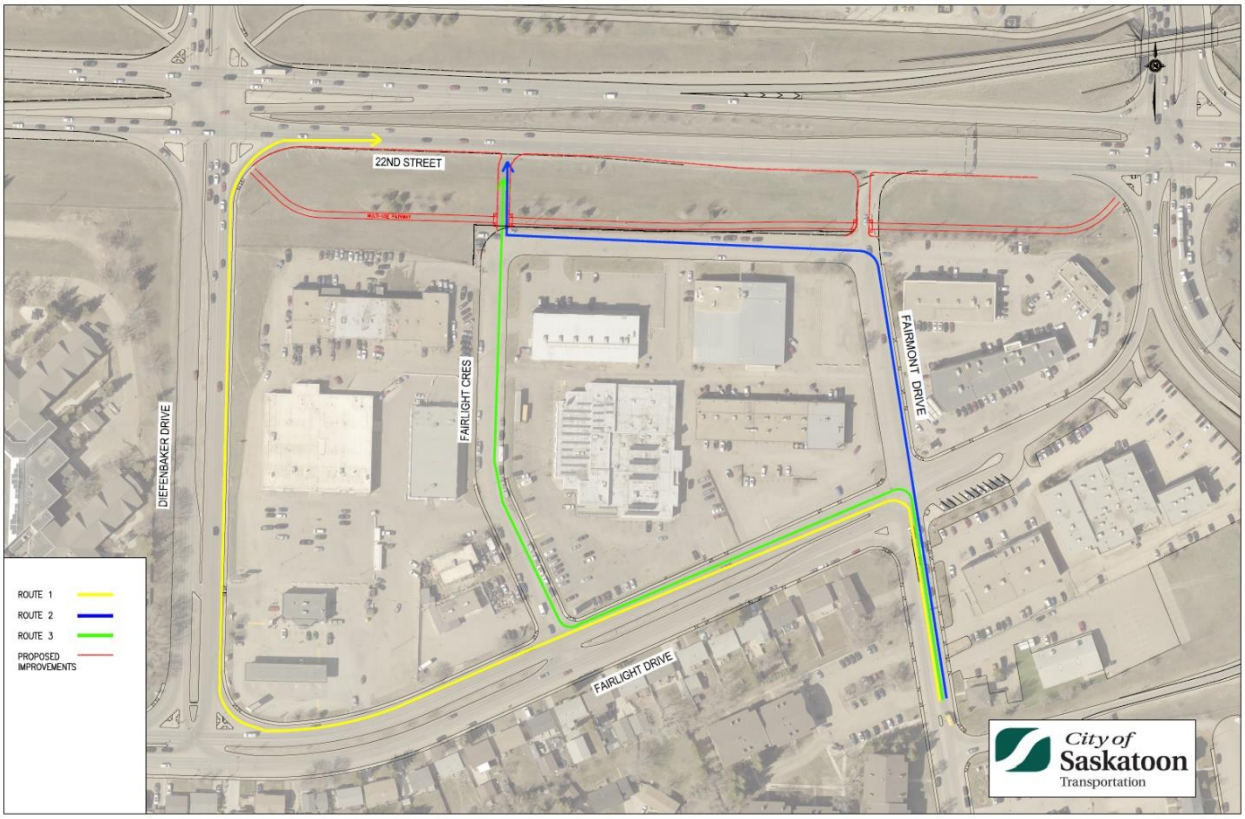


Figure 1-2: Routes to 22nd Street West with Fairlight Crescent Access

1.2 Study Objectives

The objective of this study is to analyze the implications that removing the right out on Fairlight Crescent from the proposed functional plan would have on the transportation network.

2. DATA COLLECTION UPDATE

2.1 Traffic Data

Removing the Fairlight Crescent access would force drivers to use Route 1, the yellow route shown on Figure 1-2, to access 22nd Street West rather than splitting the volumes between Routes 1, 2, and 3. Additionally, changing the 22nd Street West and Fairmont Drive intersection from a right out to a right in access will reverse the traffic patterns along Fairmont Drive near 22nd Street West from predominantly northbound movements to southbound movements.

Traffic volumes at the major intersections along these routes were either collected in 2024 or projected to 2024 using the most recent traffic counts and applying a 2% annual growth factor. A summary of the existing turning movement volumes are shown in **Error! Reference source not found.**.

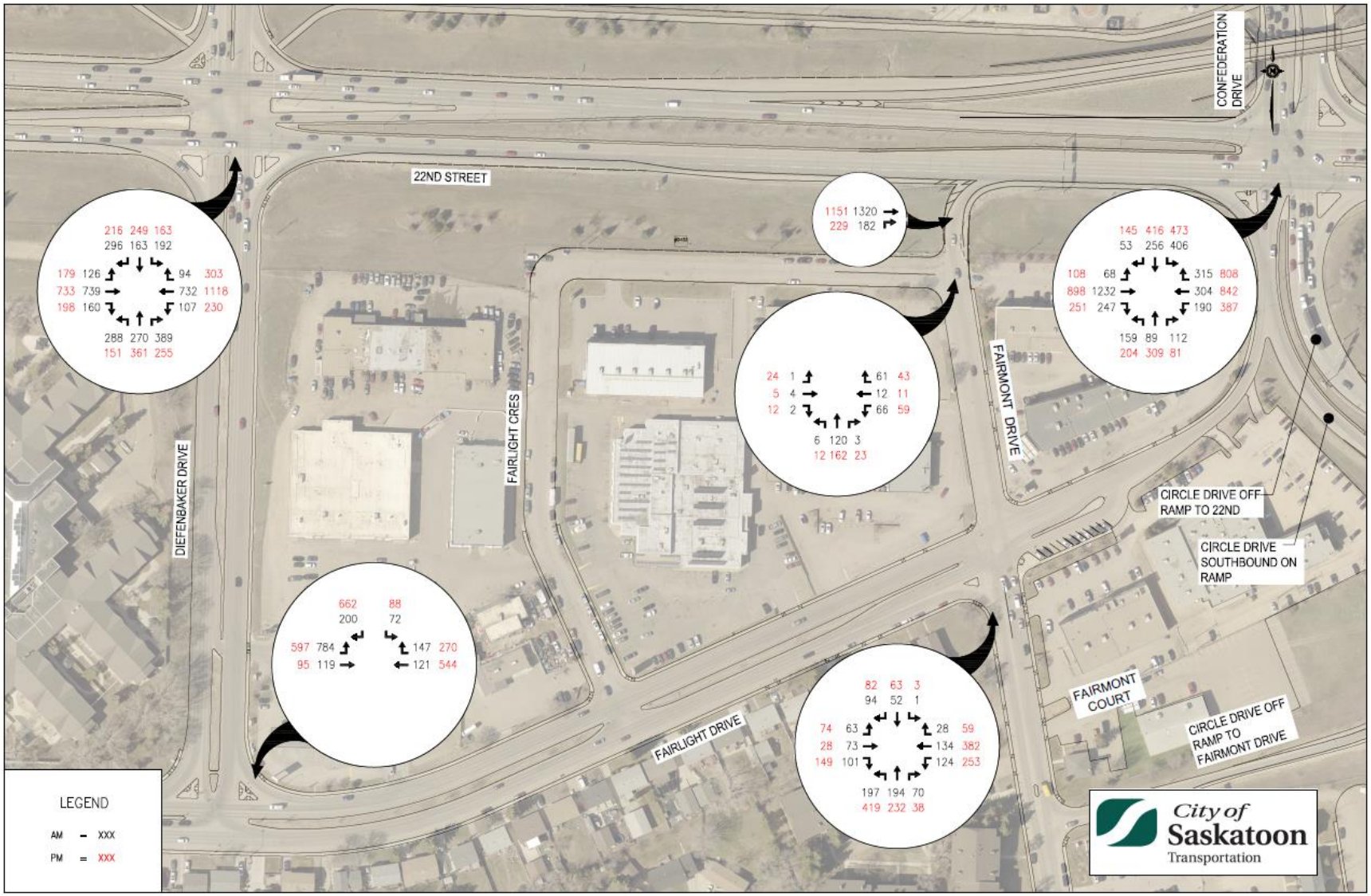


Figure 2-1: Existing Traffic Volumes (2024)

2.2 Traffic Routing

To analyse the impacts of the proposed changes without the Fairlight Crescent access, a model was developed to estimate the change in traffic patterns and traffic volumes in the study area. The model used the existing traffic volumes, the adjacent land uses, and the overall traffic patterns to reroute traffic through the proposed road network.

For example, a percentage of drivers on 22nd Street West that currently make eastbound right turns at Diefenbaker Drive to access the commercial area were reassigned to the new right in access at the 22nd Street West and Fairmont Drive intersection. This change in traffic patterns is illustrated in Figure 2-2.

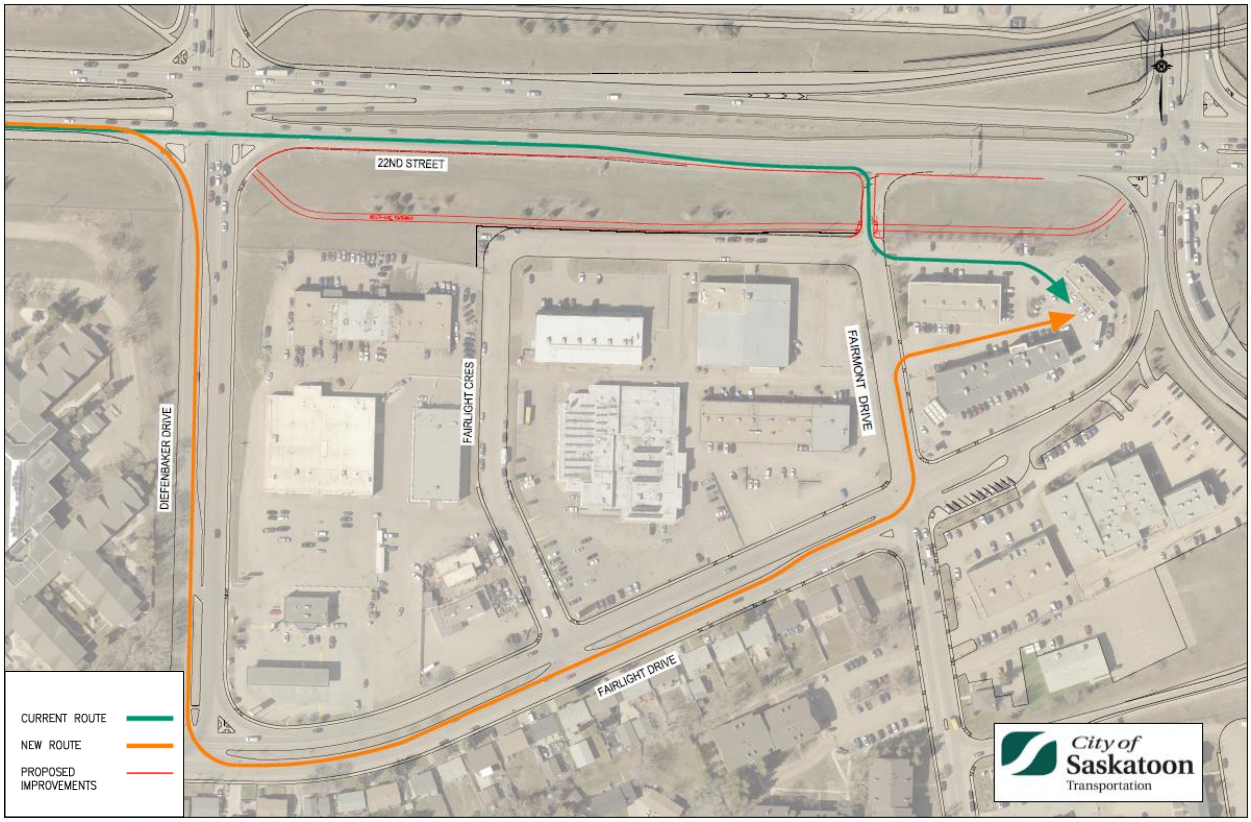


Figure 2-2: Example of Traffic Rerouting

Figure 2-3 shows the estimated traffic volumes at each of the study intersections if the proposed changes were implemented.

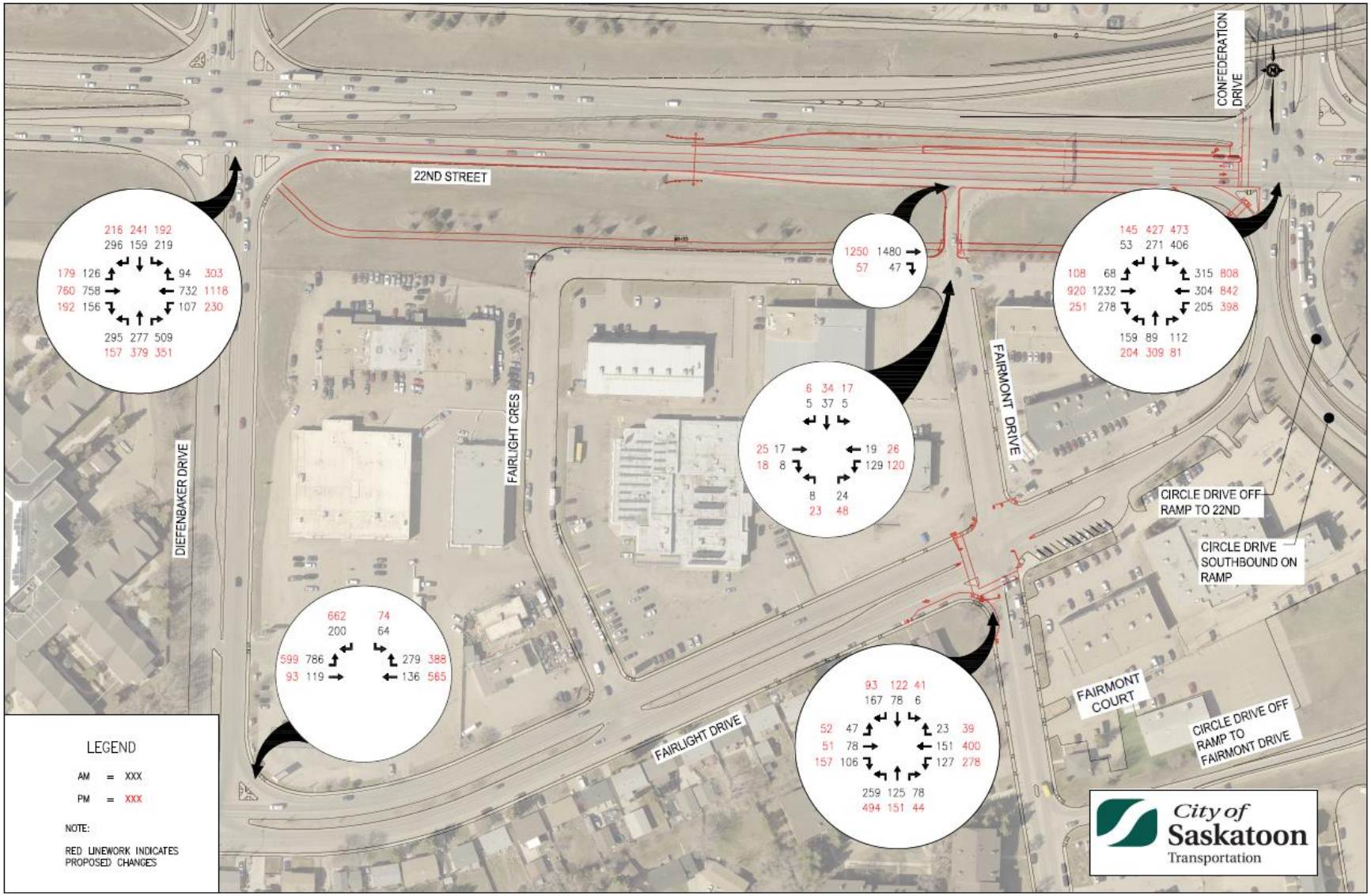


Figure 2-3: Traffic Volumes with the Proposed Changes

3. TRAFFIC OPERATIONS

3.1 Existing Conditions

To analyse the impact of the proposed changes, an assessment of the existing conditions of all effected intersections was completed. The level of service values for signalized and unsignalized intersections are defined in Table 3-1 and Table 3-2.

Table 3-3 to 3-8 summarize the existing traffic operations at each of the study intersections. Complete summary reports are included in Appendix A.

Table 3-1: Level-of-Service Definition for Signalized Intersections

Average Control Delay (sec/veh)	Level of Service	General Description
<= 10	A	Free Flow
>10 - 20	B	Stable Flow (slight delays)
>20 - 35	C	Stable Flow (acceptable delays)
>35 - 55	D	Approaching unstable flow (tolerable delay, occasional wait through more than one signal cycle before proceeding)
>55 - 80	E	Unstable flow (intolerable delay)
>80	F	Forced flow (jammed)

Table 3-2: Level-of-Service Definition for Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service	General Description
<= 10	A	Free Flow
>10 - 15	B	Stable Flow (slight delays)
>15-25	C	Stable Flow (acceptable delays)
>25-35	D	Approaching unstable flow (tolerable delay, occasional wait through more than one signal cycle before proceeding)
>35-50	E	Unstable flow (intolerable delay)
>50	F	Forced flow (jammed)

**How to read the tables? The North American Traffic Engineering standard for measuring the performance of a signalized intersection is to measure the *average delay* in seconds a driver will experience in completing a maneuver. The software used to analyze the intersection calculates an average delay to each movement based on the traffic volumes, permitted movements and signal timing. This average delay corresponds to established Levels of Service (LOS). The LOS can range from A to F (the shorter the average delay the better the LOS, the longer the average delay the worse the LOS). Generally, the City prefers to avoid LOS E and F. However, a LOS E or F does not indicate the need for, or trigger, improvements. Other considerations include: the traffic volume performing the problematic movement with LOS E or F, intersection geometrics and signal operation, intersection spacing, road classification, availability of alternate routes, pedestrian movements, access management, type of adjacent land use, future development in the area and of course, cost.

Table 3-3: Existing Conditions - 22nd Street West & Confederation Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West & Confederation Drive	NB	LT	D	51	0.45	18	D	54	0.69	38
		Thru	D	52	0.49	19	D	56	0.76	41
		RT	E	59	0.70	27	E	48	0.38	17
	SB	LT	D	51	0.83	44	D	50	0.82	52
		Thru	D	48	0.60	33	E	64	0.94	74
		RT	D	48	0.60	32	E	65	0.94	69
	EB	LT	E	62	0.69	16	E	63	0.78	26
		Thru	C	28	0.65	83	D	41	0.72	79
		RT	C	30	0.65	83	D	45	0.72	79
	WB	LT	E	56	0.74	21	D	55	0.86	44
		Thru	B	19	0.19	19	C	34	0.66	78
		RT	A	-	-	-	A	-	-	-
	Intersection Summary		D	**38**	**0.52**	**-**	D	**48**	**0.59**	**-**

Table 3-4: Existing Conditions - 22nd Street West & Fairmont Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West & Fairmont Drive	NB	RT	D	32	0.614	27	C	22	0.472	18

Table 3-5: Existing Conditions - 22nd Street West & Diefenbaker Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West & Diefenbaker Drive	NB	LT	C	34	0.56	48	C	32	0.42	25
		Thru	C	32	0.28	22	D	42	0.53	35
		RT	D	47	0.89	84	D	50	0.84	56
	SB	LT	C	23	0.40	26	C	30	0.43	26
		Thru	D	37	0.38	29	D	44	0.69	50
		RT	D	45	0.81	62	D	45	0.70	44
	EB	LT	C	21	0.35	16	C	26	0.59	22
		Thru	D	37	0.69	89	C	26	0.58	77
		RT	D	37	0.69	84	C	27	0.58	72
	WB	LT	C	22	0.31	13	C	22	0.56	27
		Thru	C	28	0.42	43	C	25	0.61	75
		RT	C	29	0.43	45	C	27	0.61	74
	Intersection Summary		C	**34**	**0.61**	**-**	C	**31**	**0.56**	**-**

Table 3-6: Existing Conditions - Diefenbaker Drive & Fairlight Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Diefenbaker Drive & Fairlight Drive	SB	LT	F	166	0.9	34	F	364	1.10	69
		RT	A	-	-	-	A	-	-	-
	EB	LT	C	29	0.88	105	C	28	0.85	69
		Thru	A	7	0.06	3.3	A	7	0.05	2.6
	WB	Thru	C	23	0.13	7.3	C	29	0.57	39
		RT	A	-	-	-	-	-	-	-
	Intersection Summary		C	**29**	**0.43**	**-**	C	**33**	**0.44**	**-**

Table 3-7: Existing Conditions - Fairmont Drive & Fairlight Crescent

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Fairmont Drive & Fairlight Crescent	NB	LT	A	-	-	-	A	-	-	-
		Thru	A	-	-	-	A	-	-	-
		RT	A	-	-	-	A	-	-	-
	EB	LT	A	10	0.00	0.03	B	11	0.04	0.17
		Thru	A	10	0.01	0.03	B	11	0.01	0.17
		RT	A	8	0.00	0.03	A	9	0.01	0.17
	WB	LT	B	10	0.08	0.58	B	11	0.08	0.51
		Thru	B	11	0.02	0.58	B	11	0.02	0.51
		RT	A	10	0.07	0.58	A	10	0.05	0.51
	Intersection Summary		B	**5.3**	**0.02**	**-**	B	**4.5**	**0.02**	**-**

Table 3-8: Existing Conditions - Fairmont Drive & Fairlight Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Fairmont Drive & Fairlight Drive	NB	LT	B	16	0.37	17	C	33	0.80	57
		Thru	B	16	0.38	24	B	17	0.40	26
		RT	B	16	0.38	24	B	17	0.40	26
	SB	LT	B	17	0.24	14	B	19	0.25	15
		Thru	B	17	0.24	14	B	19	0.25	15
		RT	B	17	0.24	14	B	19	0.25	15
	EB	LT	B	14	0.10	5.3	B	14	0.14	6.4
		Thru	C	23	0.16	8.6	C	23	0.07	3.3
		RT	C	25	0.27	13	C	29	0.41	20
	WB	LT	B	14	0.19	10	B	16	0.37	24
		Thru	C	22	0.12	5.8	C	23	0.31	17
		RT	C	22	0.12	6.2	C	24	0.32	18
	Intersection Summary		B	**18**	**0.29**	**-**	C	**23**	**0.38**	**-**

3.2 Recommended Plan Without Fairlight Crescent Access

Using the traffic model that incorporated the proposed changes and rerouted traffic volumes, the intersections were analyzed to determine the impact of those changes. Table 3-9 to 3-13 summarize the traffic operations with the proposed changes at each of the intersections. Complete summary reports are included in Appendix B.

The reconfigured 22nd Street West and Fairmont Drive intersection is not included because the right in movement is free flowing and does not experience any delays or queuing in the model.

Table 3-9: Proposed Changes - 22nd Street West & Confederation Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West & Confederation Drive	NB	LT	D	52	0.45	18	D	53	0.69	37
		Thru	D	52	0.49	19	E	55	0.76	40
		RT	E	59	0.70	27	D	47	0.38	17
	SB	LT	D	51	0.83	44	D	48	0.48	50
		Thru	D	49	0.83	35	E	63	0.94	74
		RT	D	49	0.63	33	E	64	0.94	69
	EB	LT	E	62	0.69	16	E	63	0.80	26
		Thru	C	26	0.56	64	C	34	0.58	55
		RT	C	24	0.41	41	D	36	0.50	47
	WB	LT	E	56	0.75	23	D	54	0.87	45
		Thru	B	19	0.19	19	C	32	0.64	75
		RT	A	-	-	-	A	-	-	-
	Intersection Summary		D	**35**	**0.49**	**-**	D	**45**	**0.56**	**-**

The proposed eastbound right-turn lane at 22nd Street West and Confederation Drive will noticeably improve traffic operations for the eastbound through and right-turn movements. In the PM peak hour, average queue lengths will be reduced from 79 m for both movements to 55 m for through movements and 47 m for right turns. The LOS for through movements will improve from a LOS D to a LOS C, while the average delay for right turns will improve from 45 s to 36 s.

Table 3-10: Proposed Changes - 22nd Street West & Diefenbaker Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
22nd Street West & Diefenbaker Drive	NB	LT	D	36	0.68	51	D	35	0.47	28
		Thru	C	34	0.31	23	D	46	0.69	39
		RT	A	-	-	-	A	-	-	-
	SB	LT	C	25	0.40	31	C	34	0.51	32
		Thru	D	38	0.40	29	D	50	0.79	52
		RT	D	50	0.87	65	D	52	0.83	48
	EB	LT	C	20	0.34	16	C	23	0.56	20
		Thru	D	35	0.68	88	C	24	0.56	74
		RT	D	35	0.68	83	C	24	0.56	70
	WB	LT	C	21	0.30	13	C	20	0.54	25
		Thru	C	27	0.41	42	C	23	0.57	70
		RT	C	28	0.41	44	C	24	0.57	69
	Intersection Summary		C	**33**	**0.60**	**-**	C	**30**	**0.54**	**-**

The third through lane proposed for the eastbound direction on 22nd Street West starts at Diefenbaker Drive and will allow free-flowing movements for the northbound right-turns. This

eliminates any delays or queuing for this movement. The northbound left-turn delay increases from 34 s to 36 s, which operates at a LOS D. This increase in delay is due to the changes in traffic routing.

Table 3-11: Proposed Changes - Diefenbaker Drive & Fairlight Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Diefenbaker Drive & Fairlight Drive	SB	LT	F	120	0.80	24	F	182	0.93	37
		RT	A	-	-	-	A	-	-	-
	EB	LT	C	25	0.85	120	C	25	0.83	66
		Thru	A	7	0.06	3.3	A	6.8	0.05	2.5
	WB	Thru	C	24	0.14	8.3	C	30	0.60	41
		RT	A	-	-	-	-	-	-	-
	Intersection Summary		C	**28**	**0.37**	**-**	C	**33**	**0.44**	**-**

While the southbound left-turn maintains a LOS of F, the delay goes down from 166 s to 120 s in the AM peak hour and from 364 s to 182 s in the PM peak hour. The volume to capacity ratio has also improved to 0.93 in the PM peak hour. These improvements are mainly due to the new right in movement at Fairmont Drive that has redistributed the traffic volumes previously making this southbound left-turn.

Table 3-12: Proposed Changes - Fairmont Drive & Fairlight Crescent

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Fairmont Drive & Fairlight Crescent	SB	LT	A	-	-	-	A	-	-	-
		Thru	A	-	-	-	A	-	-	-
		RT	A	-	-	-	A	-	-	-
	EB	Thru	A	9.3	0.02	0.69	B	10	0.03	0.16
		RT	A	9.3	0.01	0.09	A	8.7	0.02	0.16
	WB	LT	B	10	0.15	0.63	B	11	0.16	0.73
		Thru	B	10	0.02	0.63	B	11	0.04	0.73
	Intersection Summary		B	**7.2**	**0.04**	**-**	B	**7**	**0.04**	**-**

There are no significant changes in the traffic operations at the Fairmont Drive and Fairlight Crescent intersection other than vehicles heading southbound from 22nd Street West rather than northbound to 22nd Street West.

Table 3-13: Proposed Changes - Fairmont Drive & Fairlight Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Fairlight Drive & Fairmont Drive	NB	LT	B	19	0.58	25	F	306	1.14	307
		Thru	B	15	0.30	18	B	17	0.29	18
		RT	B	15	0.30	18	B	17	0.29	18
	SB	LT	B	19	0.41	26	C	21	0.43	28
		Thru	B	19	0.41	26	C	21	0.43	28
		RT	B	19	0.41	26	C	21	0.43	28
	EB	LT	B	14	0.08	3.9	B	13	0.10	4.4
		Thru	C	24	0.18	9.2	C	24	0.12	6.3
		RT	C	25	0.28	13	C	30	0.43	22
	WB	LT	B	14	0.20	10	B	17	0.41	28
		Thru	C	21	0.12	6.1	C	22	0.29	16
		RT	C	21	0.13	6.5	C	23	0.29	18
	Intersection Summary		B	**19**	**0.30**	**-**	F	**94**	**0.41**	

With no access to 22nd Street West from Fairlight Crescent or Fairmont Drive, the volumes making the northbound left-turn movement at the intersection of Fairlight Drive and Fairmont Drive is estimated to increase to 260 vehicles in the AM peak hour and 500 vehicles in the PM peak hour. The LOS will be maintained at LOS B in the AM peak hour; however, the LOS deteriorates from LOS C to LOS F in the PM peak hour. The queue lengths for the northbound left turn will be approximately 307 m, extending beyond the Circle Drive off-ramp, in the PM peak hour.

To alleviate the impact from the additional northbound left turns, a protected left-turn phase and signal timing upgrades are recommended. As shown in Table 3-14, adding a northbound protected left-turn phase will help to balance delays across all movements at the intersection. This will keep all movements at LOS D or better and will reduce the queue lengths for the northbound left turns to 71 m in the PM peak hour. While a 71 m queue would extend past the Fairmont Court intersection, it would not extend past the Circle Drive ramp intersection located 100 m to the south.

Table 3-14: Traffic Signal Upgrades at Fairmont Drive & Fairlight Drive

Intersection	Movement		Weekday AM Peak Hour				Weekday PM Peak Hour			
			LOS	Delay (s)	v/c ratio	Queue (m)	LOS	Delay (s)	v/c ratio	Queue (m)
Fairmont Drive & Fairlight Drive	NB	LT	B	15	0.46	25	C	25	0.76	71
		Thru	B	13	0.26	18	B	13	0.22	19
		RT	B	13	0.26	18	B	13	0.57	19
	SB	LT	C	26	0.47	33	D	35	0.57	45
		Thru	C	26	0.47	33	D	35	0.57	45
		RT	C	26	0.47	33	D	35	0.57	45
	EB	LT	B	19	0.09	5.1	C	25	0.13	7.4
		Thru	C	30	0.20	11	D	37	0.16	9.3
		RT	C	32	0.32	16	D	48	0.57	34
	WB	LT	B	20	0.23	14	C	32	0.54	47
		Thru	C	27	0.14	7.6	D	36	0.38	26
		RT	C	27	0.15	8.2	D	38	0.39	27
	Intersection Summary		C	**21**	**0.40**	**-**	C	**31**	**0.62**	**-**

Any changes to the traffic signal infrastructure at the Fairmont Drive and Fairlight Drive intersection, such as adding a protected left-turn signal, will also require upgrading the entire intersection to current standards. These upgrades will be factored into the cost estimate for the installation of the left-turn signal.

4. OTHER OPERATIONAL ISSUES

4.1 Weaving on 22nd Street West

A right-out access connecting from Fairlight Crescent to 22nd Street West would still be able to weave across three lanes to make an eastbound left-turn onto Confederation Drive but with a longer distance to make the movement than from the existing access at Fairmont Drive. The existing Fairmont Drive access is approximately 120 m from the intersection with Confederation Drive while the Fairlight Crescent access would be approximately 300 m from the intersection with Confederation Drive.

The Transportation Association of Canada (TAC) recommends access points be 400 m upstream from the intersection to allow adequate distance and time to make safe lane changes. The Fairlight Crescent access at 300 m from Confederation Drive would not meet the recommended spacing for access.

If there was no access from Fairlight Crescent to 22nd Street West, traffic would use the northbound channelized right-turn on Diefenbaker Drive to gain access onto 22nd Street West. The spacing between Diefenbaker Drive and Confederation Drive is approximately 400 m, which means that drivers would have adequate space to safely perform the weaving movement into the eastbound left turn lane at Confederation Drive.

4.2 Access Management for 22nd Street West

The section of 22nd Street West between Diefenbaker Drive and Confederation Drive is classified as an expressway. The City of Saskatoon Design and Development Standards state that expressways should form connections with arterial streets and that access to individual properties is prohibited. The standards also show that the minimum spacing between intersections on an expressway is 800 m. The 400 m spacing between the Diefenbaker Drive and Confederation Drive intersections does not meet the minimum spacing requirements.

An additional access to 22nd Street West at Fairlight Crescent would further reduce the intersection spacing and may impact traffic mobility for eastbound through movements.

Although the right-in access at Fairmont Drive will also reduce the intersection spacing, the access will utilize the proposed eastbound right-turn lane at Confederation Drive. It will have negligible impacts on eastbound through movements at Confederation Drive and will reduce delays for eastbound right turns.

4.3 Accessibility of Fairlight Drive and Fairmont Drive Intersection

The existing conditions at the intersection of Fairlight Drive and Fairmont Drive does not meet the current standards for pedestrians crossing the west or south legs of the intersection as recommended by TAC. Removing the channelized island in the southwest corner and extending the curb farther into the intersection will increase pedestrian safety and accessibility. This will allow for the pedestrians to have a shorter crossing distance along the west and south legs and not have to cross a channelized right turn lane. Removing the channelized right-turn will not have an impact on this intersection since the channelized right-turn was not free-flow. With the curb being extended out farther, the traffic signal upgrades will allow for accessible pedestrian

pushbuttons. Pedestrian ramps will also be installed in the new curb and in the northwest corner.

While these geometric changes were originally outside of the scope of this study, installing the protected left-turn signal at the Fairlight Drive and Fairmont Drive intersection will also require upgrading the traffic signal infrastructure at this location to current standards. Combining the geometric improvements and the traffic signal upgrades would result in cost savings and would eliminate the need to relocate the signals if the geometric changes were to be completed later.

5. RECOMMENDED TRAFFIC PLAN

5.1 Overview

After investigating the impact that removing the access to 22nd Street West from Fairlight Crescent would have on the traffic network, it was found that the transportation network would generally operate well with the removal of the Fairlight Crescent access to 22nd Street West except for a significant increase in the queue lengths for northbound left-turns at the Fairmont Drive and Fairlight Drive intersection. To mitigate this impact, additional recommendations for the intersection of Fairmont Drive and Fairlight Drive, including a left-turn signal for northbound traffic, have been included in the traffic plan.

Based on the results of the analysis, it is recommended to remove the right-out access to 22nd Street West from Fairlight Crescent from the recommended plan for the following reasons:

- The distance between the access and the Confederation Drive intersection would not meet the TAC spacing standards for vehicles weaving across three lanes of traffic.
- The intersection of Fairlight Drive and Fairmont Drive will be able to handle the increased traffic volumes that will be re-routing to Diefenbaker Drive for access to 22nd Street West.
- The section of 22nd Street West between Diefenbaker Drive and Confederation Drive is classified as an expressway and adding an access would not meet the City of Saskatoon standards for that classification of roadway.

The recommended improvements for the 22nd Street West and Confederation Drive intersection improvements include:

- Construct an eastbound slotted left-turn lane and an exclusive eastbound right-turn lane at the intersection of 22nd Street West and Confederation Drive.
- Convert the existing access at Fairmont Drive from a right-out access to a right-in access from 22nd Street West.
- Relocate the existing overhead guide sign and roadside safety system located between Confederation Drive and Fairmont Drive farther west.
- Construct a third eastbound travel lane with curb and gutter between Diefenbaker Drive and Confederation Drive.
- Realign the pedestrian crosswalk, adjust pedestrian accessible ramps, and correct drainage deficiencies on the southwest corner of the intersection at 22nd Street West and Confederation Drive.
- Install a shared-use pathway on the south side of 22nd Street West between Diefenbaker Drive and Confederation Drive.

The following improvements are recommended for the Fairlight Drive and Fairmont Drive intersection to accommodate the anticipated changes in travel patterns:

- Traffic signal upgrades and geometric changes for the eastbound right turn.

The recommended functional plan, including the removal of the Fairlight Crescent access, is shown in Appendix C.

5.2 Cost Estimate

Removing the recommendation for a right-out access from Fairlight Crescent would reduce the previous estimated cost of the project by $70,000.

The traffic signal and geometric upgrades recommended for the Fairlight Drive and Fairmont Drive intersection will cost increase the estimated cost by $355,000.

Table 5-1 summarizes the high-level cost estimates for each of the improvements included in the recommended plan. These estimates include costs for internal project management and a 15% contingency.

Table 5-1: Recommended Plan Cost Estimate

Improvement	Cost Estimate
Construct an eastbound slotted left-turn lane	$ 800,000.00
Construct an eastbound right-turn lane	$ 390,000.00
Convert Fairmont Drive access to right-in configuration from 22nd Street West	$ 150,000.00
Relocate overhead guide sign and roadside safety system	$ 595,000.00
Construct third eastbound through lane with curb and gutter	$ 345,000.00
Correct pedestrian accessible ramps and drainage deficiencies	$ 15,000.00
Install shared-use pathway on the south side of 22nd Street West	$ 250,000.00
Install signal upgrades and geometric changes for eastbound right turn at Fairlight Drive and Fairmont Drive	$ 355,000.00
Total	**$ 2,900,000.00**

Appendix A – Traffic Operations Analysis of Existing Conditions

Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.523

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	1	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	100.00	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	22	28	102	64	13	17	308	62	48	76	79
Total Analysis Volume [veh/h]	159	89	112	406	256	53	68	1232	247	190	304	315
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	3.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	4.0	4.0	0.0	0.0	6.0	0.0	6.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	C	L	C
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	11	11	11	11	16	16	16	6	49	49	8	52
g / C, Green / Cycle	0.10	0.10	0.10	0.10	0.14	0.14	0.14	0.05	0.43	0.43	0.07	0.45
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.05	0.07	0.12	0.08	0.09	0.04	0.28	0.28	0.05	0.09
s, saturation flow rate [veh/h]	1781	1786	1702	1589	3459	1870	1760	1781	3560	1715	3459	3560
c, Capacity [veh/h]	180	180	172	160	490	265	249	98	1544	744	257	1614
d1, Uniform Delay [s]	48.29	48.29	48.47	49.56	47.58	45.89	45.91	52.93	25.39	25.40	51.67	18.63
k, delay calibration	0.19	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.09	3.07	3.72	9.44	3.79	2.19	2.35	8.91	2.12	4.40	4.22	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.45	0.49	0.70	0.83	0.60	0.60	0.69	0.65	0.65	0.74	0.19
d, Delay for Lane Group [s/veh]	51.38	51.36	52.20	59.01	51.36	48.08	48.26	61.84	27.52	29.79	55.88	18.89
Lane Group LOS	D	D	D	E	D	D	D	E	C	C	E	B
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.34	2.35	2.44	3.50	5.83	4.37	4.14	2.15	10.85	10.92	2.80	2.45
50th-Percentile Queue Length [m/ln]	17.86	17.89	18.61	26.66	44.46	33.30	31.57	16.39	82.67	83.23	21.36	18.63
95th-Percentile Queue Length [veh/ln]	4.22	4.23	4.40	6.30	9.80	7.80	7.46	3.87	16.25	16.34	5.04	4.40
95th-Percentile Queue Length [m/ln]	32.15	32.19	33.49	47.98	74.65	59.43	56.83	29.51	123.83	124.53	38.44	33.54

Movement, Approach, & Intersection Results

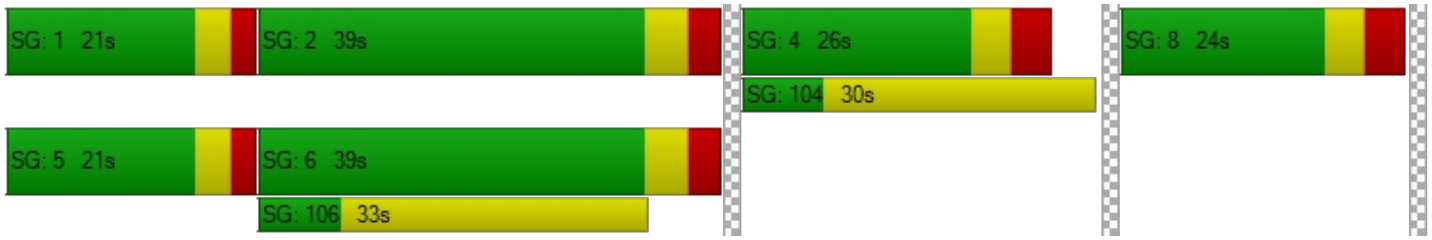
d_M, Delay for Movement [s/veh]	51.37	52.15	59.01	51.36	48.15	48.26	61.84	27.95	29.79	55.88	18.89	0.00
Movement LOS	D	D	E	D	D	D	E	C	C	E	B	
d_A, Approach Delay [s/veh]	53.94			49.98			29.73			33.12		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	37.71											
Intersection LOS	D											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.810	3.023	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	1.857	2.149	2.410	1.967
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	34.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.606

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	68	97	48	41	74	32	185	40	27	183	24
Total Analysis Volume [veh/h]	288	270	389	192	163	296	126	739	160	107	732	94
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	10	35	0	10	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	3.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.8	0.0	1.0	3.8	0.0	1.0	2.5	0.0	2.0	2.5	0.0
Split [s]	20	54	0	13	47	0	12	33	0	11	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	32	0	0	32	0	0	15	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	5.1	0.0	2.0	5.1	0.0	2.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	7.10	7.10	7.10	7.10	7.10	7.10	6.20	6.20	6.20	6.20	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	5.10	5.10	0.00	5.10	5.10	0.00	4.20	4.20	0.00	4.20	4.20
g_i, Effective Green Time [s]	45	31	31	45	26	26	52	40	40	52	41	41
g / C, Green / Cycle	0.40	0.27	0.27	0.40	0.23	0.23	0.46	0.36	0.36	0.46	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.23	0.08	0.24	0.18	0.09	0.19	0.18	0.25	0.25	0.13	0.15	0.16
s, saturation flow rate [veh/h]	1253	3560	1589	1044	1870	1589	689	1870	1756	837	3560	1764
c, Capacity [veh/h]	443	979	437	475	432	367	360	671	631	349	1304	646
d1, Uniform Delay [s]	26.27	31.85	38.98	22.79	36.28	40.69	18.46	30.59	30.59	20.36	26.61	26.64
k, delay calibration	0.50	0.11	0.12	0.11	0.11	0.11	0.50	0.50	0.50	0.34	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.45	0.15	7.73	0.56	0.55	4.35	2.69	5.92	6.30	1.55	1.01	2.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.28	0.89	0.40	0.38	0.81	0.35	0.69	0.69	0.31	0.42	0.43
d, Delay for Lane Group [s/veh]	33.72	32.00	46.70	23.35	36.82	45.04	21.16	36.50	36.89	21.91	27.61	28.70
Lane Group LOS	C	C	D	C	D	D	C	D	D	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.34	2.90	11.08	3.47	3.82	8.10	2.14	11.62	10.99	1.72	5.67	5.85
50th-Percentile Queue Length [m/ln]	48.30	22.07	84.41	26.43	29.14	61.73	16.32	88.58	83.71	13.12	43.20	44.60
95th-Percentile Queue Length [veh/ln]	10.47	5.21	16.54	6.24	6.88	12.77	3.85	17.22	16.42	3.10	9.57	9.82
95th-Percentile Queue Length [m/ln]	79.76	39.73	126.00	47.58	52.46	97.30	29.37	131.19	125.13	23.62	72.96	74.84

Movement, Approach, & Intersection Results

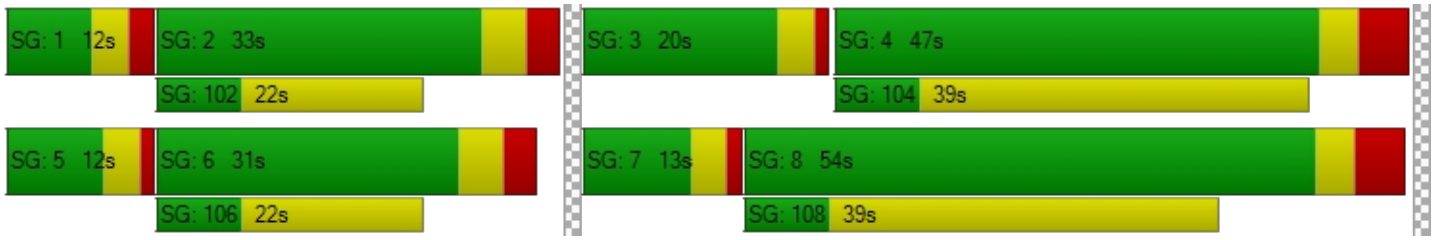
d_M, Delay for Movement [s/veh]	33.72	32.00	46.70	23.35	36.82	45.04	21.16	36.65	36.89	21.91	27.88	28.70
Movement LOS	C	C	D	C	D	D	C	D	D	C	C	C
d_A, Approach Delay [s/veh]	38.56			36.58			34.78			27.28		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	34.15											
Intersection LOS	C											
Intersection V/C	0.606											

Other Modes

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	11.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.61	38.61	45.54	45.54
l_p,int, Pedestrian LOS Score for Intersection	2.964	2.823	3.177	3.132
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	838	713	479	443
d_b, Bicycle Delay [s]	18.92	23.21	32.41	33.95
l_b,int, Bicycle LOS Score for Intersection	2.341	2.097	2.405	2.073
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.360

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	Yes		Yes		Yes	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	72	200	784	119	121	147
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	72	200	784	119	121	147
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	50	196	30	30	37
Total Analysis Volume [veh/h]	72	200	784	119	121	147
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Unsignalized	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	4	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	10	0	9	15	15	0
Maximum Green [s]	30	0	20	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.9	0.0	2.1	1.9	1.9	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	Yes	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	0.0	3.6	3.4	3.4	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	25.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	6.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	L	C	C
C, Cycle Length [s]	90	90	90	90
L, Total Lost Time per Cycle [s]	0.00	4.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	0.00	3.40	3.40
g_i, Effective Green Time [s]	0	56	56	27
g / C, Green / Cycle	0.00	0.62	0.62	0.30
(v / s)_i Volume / Saturation Flow Rate	0.07	0.57	0.04	0.04
s, saturation flow rate [veh/h]	1026	1366	3204	3204
c, Capacity [veh/h]	80	928	1980	947
d1, Uniform Delay [s]	45.00	13.79	6.83	23.21
k, delay calibration	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	121.07	10.18	0.06	0.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.84	0.06	0.13
d, Delay for Lane Group [s/veh]	166.07	23.96	6.89	23.49
Lane Group LOS	F	C	A	C
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	4.40	12.86	0.43	0.96
50th-Percentile Queue Length [m/ln]	33.55	98.01	3.26	7.33
95th-Percentile Queue Length [veh/ln]	7.84	18.74	0.77	1.73
95th-Percentile Queue Length [m/ln]	59.77	142.83	5.87	13.20

Movement, Approach, & Intersection Results

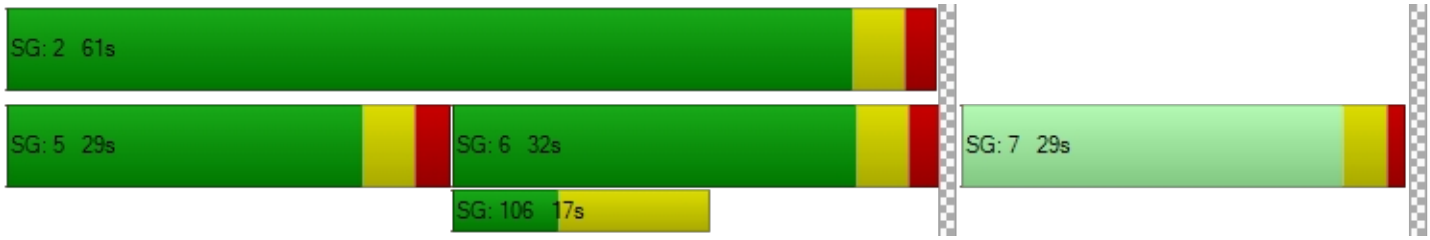
d_M, Delay for Movement [s/veh]	166.07	0.00	23.96	6.89	23.49	0.00
Movement LOS	F		C	A	C	
d_A, Approach Delay [s/veh]	166.07		21.71		23.49	
Approach LOS	F		C		C	
d_I, Intersection Delay [s/veh]	31.39					
Intersection LOS	C					
Intersection V/C	0.360					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	3.057	0.000	2.500
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1236	591
d_b, Bicycle Delay [s]	45.00	6.57	22.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.305	1.770
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.015

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	9	18	23	178	290	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	18	23	178	290	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	6	45	73	5
Total Analysis Volume [veh/h]	9	18	23	178	290	19
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.40	10.12	9.35	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.04	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	0.95	0.95	0.30	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	10.55		1.07		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.93					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.290

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	49	18	0	13	24	16	18	25	31	34	7
Total Analysis Volume [veh/h]	197	194	70	1	52	94	63	73	101	124	134	28
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	9	15	0	9	15	0
Maximum Green [s]	30	31	0	0	31	0	12	21	0	12	21	0
Amber [s]	3.0	3.5	0.0	0.0	3.5	0.0	3.0	3.5	0.0	3.0	3.5	0.0
All red [s]	1.0	2.2	0.0	0.0	2.2	0.0	2.0	2.1	0.0	2.0	2.1	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	15	0	0	7	0	0	7	0	0	10	0
Pedestrian Clearance [s]	0	15	0	0	23	0	0	13	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	0.0	3.7	0.0	3.0	3.6	0.0	3.0	3.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	4.0	4.0	0.0	0.0	2.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	6.0	6.0	0.0	0.0	4.0	0.0	6.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	5.70	5.70	5.70	5.60	5.60	5.60	5.60	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.70	3.70	0.00	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	34	34	30	34	21	21	34	23	23
g / C, Green / Cycle	0.43	0.43	0.38	0.43	0.26	0.26	0.43	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.17	0.16	0.10	0.05	0.04	0.07	0.10	0.03	0.04
s, saturation flow rate [veh/h]	1139	1608	1511	1244	1683	1431	1260	3204	1543
c, Capacity [veh/h]	540	687	613	637	442	376	637	908	437
d1, Uniform Delay [s]	15.45	15.68	17.25	13.47	22.68	23.35	14.05	21.23	21.27
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50	0.13	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	0.35	0.20	0.31	0.80	1.75	0.17	0.27	0.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.38	0.24	0.10	0.16	0.27	0.19	0.12	0.12
d, Delay for Lane Group [s/veh]	15.86	16.03	17.45	13.78	23.49	25.10	14.22	21.50	21.86
Lane Group LOS	B	B	B	B	C	C	B	C	C
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.27	3.17	1.82	0.69	1.13	1.64	1.34	0.76	0.81
50th-Percentile Queue Length [m/ln]	17.28	24.15	13.84	5.27	8.57	12.53	10.18	5.76	6.15
95th-Percentile Queue Length [veh/ln]	4.08	5.71	3.27	1.25	2.03	2.96	2.41	1.36	1.45
95th-Percentile Queue Length [m/ln]	31.11	43.48	24.92	9.49	15.43	22.56	18.33	10.36	11.08

Movement, Approach, & Intersection Results

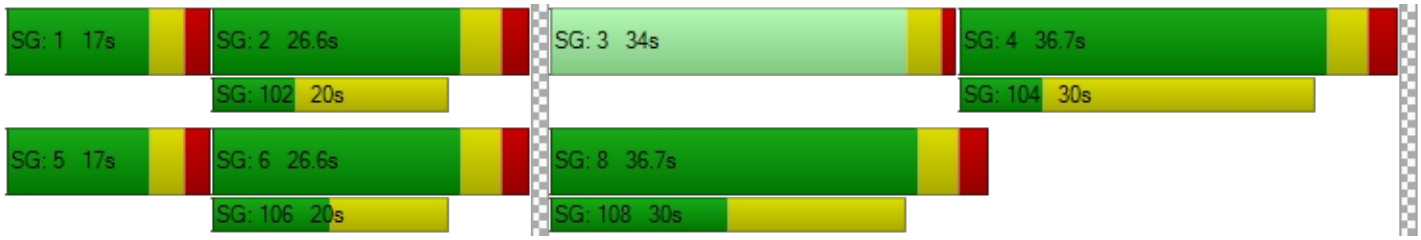
d_M, Delay for Movement [s/veh]	15.86	16.03	16.03	17.45	17.45	17.45	13.78	23.49	25.10	14.22	21.57	21.86
Movement LOS	B	B	B	B	B	B	B	C	C	B	C	C
d_A, Approach Delay [s/veh]	15.96			17.45			21.60			18.41		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	17.95											
Intersection LOS	B											
Intersection V/C	0.290											

Other Modes

g_Walk,mi, Effective Walk Time [s]	21.0	24.0	11.0	19.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.66	19.51	29.66	23.16
l_p,int, Pedestrian LOS Score for Intersection	2.358	2.058	2.782	2.420
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	777	777	526	526
d_b, Bicycle Delay [s]	14.92	14.92	21.66	21.66
l_b,int, Bicycle LOS Score for Intersection	2.431	1.802	1.951	1.717
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	47.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.591

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	1	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	100.00	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	77	20	118	104	36	27	225	63	97	211	202
Total Analysis Volume [veh/h]	204	309	81	473	416	145	108	898	251	387	842	808
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	22	40	0	22	40	0
Vehicle Extension [s]	3.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	7.0	7.0	0.0	0.0	7.0	0.0	7.0	0.0	0.0	7.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	C	L	C
C, Cycle Length [s]	116	116	116	116	116	116	116	116	116	116	116	116
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20
g_i, Effective Green Time [s]	16	16	16	16	19	19	19	9	35	35	15	42
g / C, Green / Cycle	0.14	0.14	0.14	0.14	0.17	0.17	0.17	0.08	0.31	0.31	0.13	0.36
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.10	0.05	0.14	0.16	0.16	0.06	0.22	0.22	0.11	0.24
s, saturation flow rate [veh/h]	1781	1850	1702	1589	3459	1870	1707	1781	3560	1669	3459	3560
c, Capacity [veh/h]	241	250	230	215	578	313	285	138	1089	510	450	1277
d1, Uniform Delay [s]	47.86	47.83	48.32	45.71	46.59	47.70	47.71	52.56	35.81	35.84	49.41	31.24
k, delay calibration	0.19	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.18	5.85	8.81	1.88	2.99	16.33	17.78	10.00	4.18	8.89	5.16	2.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.69	0.76	0.38	0.82	0.94	0.94	0.78	0.72	0.72	0.86	0.66
d, Delay for Lane Group [s/veh]	54.04	53.68	57.12	47.58	49.58	64.03	65.48	62.56	39.99	44.73	54.57	33.96
Lane Group LOS	D	D	E	D	D	E	E	E	D	D	D	C
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.00	5.14	5.39	2.24	6.79	9.73	9.00	3.47	10.37	10.41	5.79	10.25
50th-Percentile Queue Length [m/ln]	38.13	39.20	41.09	17.07	51.73	74.15	68.58	26.42	78.99	79.32	44.13	78.07
95th-Percentile Queue Length [veh/ln]	8.67	8.86	9.20	4.03	11.06	14.85	13.92	6.24	15.65	15.70	9.74	15.49
95th-Percentile Queue Length [m/ln]	66.08	67.55	70.11	30.73	84.29	113.13	106.07	47.55	119.22	119.64	74.21	118.07

Movement, Approach, & Intersection Results

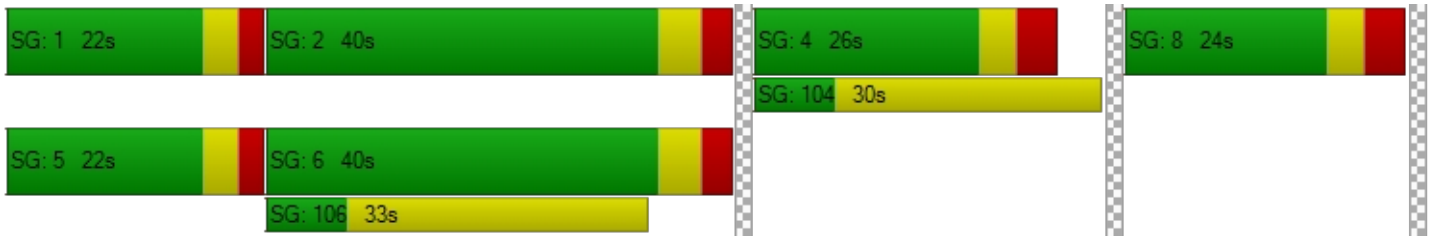
d_M, Delay for Movement [s/veh]	53.98	55.62	47.58	49.58	64.46	65.48	62.56	40.60	44.73	54.57	33.96	0.00
Movement LOS	D	E	D	D	E	E	E	D	D	D	C	
d_A, Approach Delay [s/veh]	53.96			57.80			43.31			40.45		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	47.63											
Intersection LOS	D											
Intersection V/C	0.591											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	50.28	47.52	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.945	3.128	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	300	334	583	583
d_b, Bicycle Delay [s]	41.91	40.22	29.12	29.12
l_b,int, Bicycle LOS Score for Intersection	2.050	2.413	2.251	2.574
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.561

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	90	64	41	62	54	45	183	50	58	280	76
Total Analysis Volume [veh/h]	151	361	255	163	249	216	179	733	198	230	1118	303
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	10	35	0	10	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	3.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.8	0.0	1.0	3.8	0.0	1.0	2.5	0.0	2.0	2.5	0.0
Split [s]	20	54	0	13	47	0	12	33	0	11	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	32	0	0	32	0	0	15	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	5.1	0.0	2.0	5.1	0.0	2.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	7.10	7.10	7.10	7.10	7.10	7.10	6.20	6.20	6.20	6.20	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	5.10	5.10	0.00	5.10	5.10	0.00	4.20	4.20	0.00	4.20	4.20
g_i, Effective Green Time [s]	35	21	21	35	22	22	62	50	50	62	50	50
g / C, Green / Cycle	0.31	0.19	0.19	0.31	0.19	0.19	0.55	0.44	0.44	0.55	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.13	0.10	0.16	0.14	0.13	0.14	0.39	0.26	0.26	0.29	0.27	0.27
s, saturation flow rate [veh/h]	1202	3560	1589	1131	1870	1589	457	1870	1735	792	3560	1673
c, Capacity [veh/h]	359	678	303	383	363	308	305	831	771	411	1593	749
d1, Uniform Delay [s]	29.93	40.85	43.72	29.64	41.97	42.11	17.48	23.29	23.30	16.65	23.46	23.48
k, delay calibration	0.33	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.38	0.65	6.73	0.75	2.34	2.94	8.33	2.99	3.23	5.52	1.74	3.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.53	0.84	0.43	0.69	0.70	0.59	0.58	0.58	0.56	0.61	0.61
d, Delay for Lane Group [s/veh]	32.31	41.50	50.45	30.39	44.31	45.04	25.81	26.28	26.53	22.17	25.20	27.18
Lane Group LOS	C	D	D	C	D	D	C	C	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.29	4.55	7.35	3.40	6.61	5.80	2.91	10.06	9.40	3.55	9.86	9.70
50th-Percentile Queue Length [m/ln]	25.10	34.64	55.98	25.93	50.38	44.19	22.16	76.63	71.62	27.08	75.14	73.91
95th-Percentile Queue Length [veh/ln]	5.93	8.04	11.79	6.13	10.83	9.75	5.23	15.26	14.43	6.40	15.01	14.81
95th-Percentile Queue Length [m/ln]	45.18	61.28	89.85	46.68	82.51	74.29	39.88	116.26	109.93	48.74	114.39	112.84

Movement, Approach, & Intersection Results

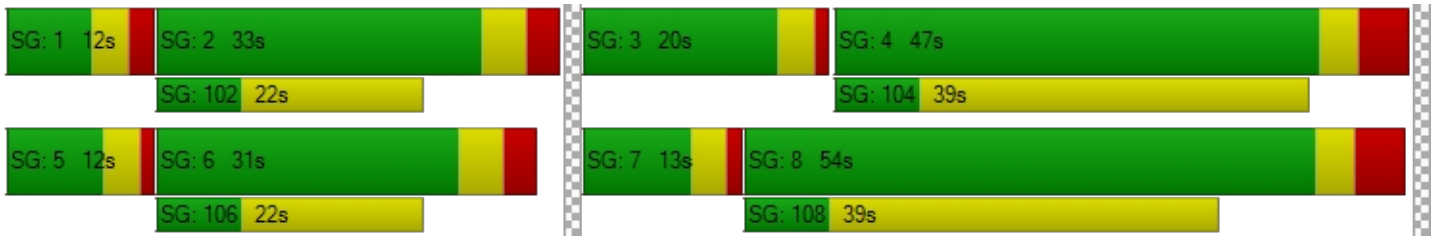
d_M, Delay for Movement [s/veh]	32.31	41.50	50.45	30.39	44.31	45.04	25.81	26.37	26.53	22.17	25.47	27.18
Movement LOS	C	D	D	C	D	D	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	42.67			40.95			26.31			25.32		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	31.15											
Intersection LOS	C											
Intersection V/C	0.561											

Other Modes

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	11.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.61	38.61	45.54	45.54
l_p,int, Pedestrian LOS Score for Intersection	3.073	2.959	3.187	3.244
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	838	713	479	443
d_b, Bicycle Delay [s]	18.92	23.21	32.41	33.95
l_b,int, Bicycle LOS Score for Intersection	2.192	2.078	2.475	2.468
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	47.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.424

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	Yes		Yes		Yes	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	88	662	597	95	544	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	662	597	95	544	270
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	166	149	24	136	68
Total Analysis Volume [veh/h]	88	662	597	95	544	270
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Unsignalized	ProtPerm	Permissive	Permissive	Unsignalized
Signal Group	4	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	10	0	9	15	15	0
Maximum Green [s]	30	0	20	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.9	0.0	2.1	1.9	1.9	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	Yes	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	0.0	3.6	3.4	3.4	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	25.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	6.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	L	C	C
C, Cycle Length [s]	90	90	90	90
L, Total Lost Time per Cycle [s]	0.00	4.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	0.00	3.40	3.40
g_i, Effective Green Time [s]	0	56	56	27
g / C, Green / Cycle	0.00	0.62	0.62	0.30
(v / s)_i Volume / Saturation Flow Rate	0.12	0.51	0.03	0.17
s, saturation flow rate [veh/h]	711	1177	3204	3204
c, Capacity [veh/h]	80	731	1980	947
d1, Uniform Delay [s]	45.00	13.26	6.78	26.90
k, delay calibration	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	319.46	10.60	0.05	2.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.10	0.82	0.05	0.57
d, Delay for Lane Group [s/veh]	364.46	23.86	6.82	29.45
Lane Group LOS	F	C	A	C
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	9.09	8.50	0.34	5.16
50th-Percentile Queue Length [m/ln]	69.29	64.78	2.58	39.33
95th-Percentile Queue Length [veh/ln]	14.04	13.28	0.61	8.89
95th-Percentile Queue Length [m/ln]	106.97	101.21	4.65	67.72

Movement, Approach, & Intersection Results

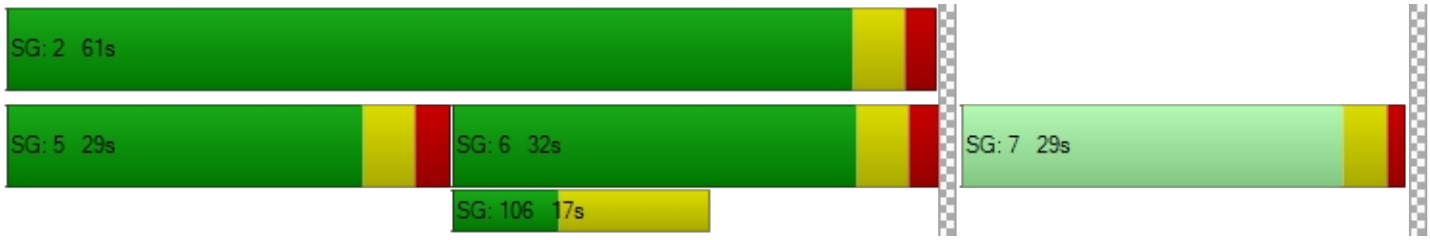
d_M, Delay for Movement [s/veh]	364.46	0.00	23.86	6.82	29.45	0.00
Movement LOS	F		C	A	C	
d_A, Approach Delay [s/veh]	364.46		21.52		29.45	
Approach LOS	F		C		C	
d_I, Intersection Delay [s/veh]	47.57					
Intersection LOS	D					
Intersection V/C	0.424					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	2.901	0.000	2.653
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1236	591
d_b, Bicycle Delay [s]	45.00	6.57	22.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.131	2.119
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.047

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	20	54	21	207	555	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	54	21	207	555	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	14	5	52	139	8
Total Analysis Volume [veh/h]	20	54	21	207	555	30
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.09	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.55	12.06	10.85	0.00	0.00	0.00
Movement LOS	B	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.48	0.48	0.04	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	3.62	3.62	0.27	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	12.73		1.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.32					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.382

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	105	58	10	1	16	21	19	7	37	63	96	15
Total Analysis Volume [veh/h]	419	232	38	3	63	82	74	28	149	253	382	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	9	15	0	9	15	0
Maximum Green [s]	30	31	0	0	31	0	12	21	0	12	21	0
Amber [s]	3.0	3.5	0.0	0.0	3.5	0.0	3.0	3.5	0.0	3.0	3.5	0.0
All red [s]	1.0	2.2	0.0	0.0	2.2	0.0	2.0	2.1	0.0	2.0	2.1	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	15	0	0	7	0	0	7	0	0	10	0
Pedestrian Clearance [s]	0	15	0	0	23	0	0	13	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	0.0	3.7	0.0	3.0	3.6	0.0	3.0	3.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	4.0	4.0	0.0	0.0	2.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	6.0	6.0	0.0	0.0	4.0	0.0	6.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	82	82	82	82	82	82	82	82	82
L, Total Lost Time per Cycle [s]	5.70	5.70	5.70	5.60	5.60	5.60	5.60	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.70	3.70	0.00	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	34	34	30	37	21	21	37	24	24
g / C, Green / Cycle	0.42	0.42	0.37	0.45	0.26	0.26	0.45	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.37	0.16	0.10	0.07	0.02	0.10	0.20	0.09	0.09
s, saturation flow rate [veh/h]	1140	1642	1529	1065	1683	1431	1279	3204	1572
c, Capacity [veh/h]	522	682	603	540	430	366	685	949	465
d1, Uniform Delay [s]	21.84	16.80	18.31	13.41	23.14	25.40	14.92	22.40	22.44
k, delay calibration	0.40	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.85	0.37	0.21	0.53	0.29	3.37	1.54	0.85	1.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.40	0.25	0.14	0.07	0.41	0.37	0.31	0.32
d, Delay for Lane Group [s/veh]	32.69	17.17	18.52	13.94	23.43	28.77	16.46	23.25	24.22
Lane Group LOS	C	B	B	B	C	C	B	C	C
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.49	3.44	1.93	0.83	0.44	2.68	3.21	2.24	2.36
50th-Percentile Queue Length [m/ln]	57.10	26.24	14.70	6.35	3.32	20.44	24.47	17.08	17.99
95th-Percentile Queue Length [veh/ln]	11.98	6.20	3.47	1.50	0.78	4.83	5.78	4.03	4.25
95th-Percentile Queue Length [m/ln]	91.31	47.23	26.46	11.43	5.97	36.79	44.05	30.74	32.39

Movement, Approach, & Intersection Results

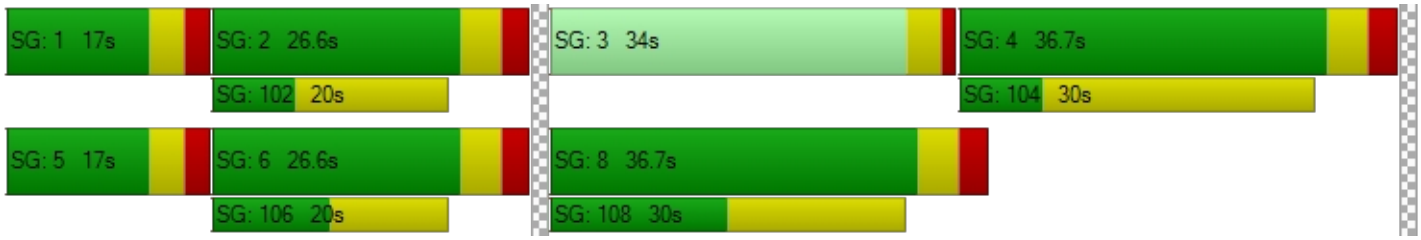
d_M, Delay for Movement [s/veh]	32.69	17.17	17.17	18.52	18.52	18.52	13.94	23.43	28.77	16.46	23.48	24.22
Movement LOS	C	B	B	B	B	B	B	C	C	B	C	C
d_A, Approach Delay [s/veh]	26.61			18.52			23.80			20.98		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	23.35											
Intersection LOS	C											
Intersection V/C	0.382											

Other Modes

g_Walk,mi, Effective Walk Time [s]	21.0	24.0	11.0	19.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.70	20.52	30.75	24.21
l_p,int, Pedestrian LOS Score for Intersection	2.627	2.130	3.226	2.529
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	756	756	512	512
d_b, Bicycle Delay [s]	15.87	15.87	22.70	22.70
l_b,int, Bicycle LOS Score for Intersection	2.807	1.804	1.974	1.941
Bicycle LOS	C	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑					↱
Traffic Vol, veh/h	1303	0	0	0	0	135
Future Vol, veh/h	1303	0	0	0	0	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1416	0	0	0	0	199

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	-	-	708
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	0	323
Stage 1	-	0	0	-
Stage 2	-	0	0	-
Platoon blocked, %	-			
Mov Cap-1 Maneuver	-	-	-	323
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Ctrl Dly, s/v	0	32.31
HCM LOS		D

Minor Lane/Major Mvmt	NBLn1	EBT
Capacity (veh/h)	323	-
HCM Lane V/C Ratio	0.614	-
HCM Ctrl Dly (s/v)	32.3	-
HCM Lane LOS	D	-
HCM 95th %tile Q(veh)	3.8	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑					↱
Traffic Vol, veh/h	1019	0	0	0	0	182
Future Vol, veh/h	1019	0	0	0	0	182
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	95
Heavy Vehicles, %	2	2	2	2	2	3
Mvmt Flow	1108	0	0	0	0	192

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	-	-	554
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.93
Pot Cap-1 Maneuver	-	0	0	406
Stage 1	-	0	0	-
Stage 2	-	0	0	-
Platoon blocked, %	-			
Mov Cap-1 Maneuver	-	-	-	406
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Ctrl Dly, s/v	0	21.56
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT
Capacity (veh/h)	406	-
HCM Lane V/C Ratio	0.472	-
HCM Ctrl Dly (s/v)	21.6	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	2.5	-

Appendix B – Traffic Operations Analysis of Proposed Changes

Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.489

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	159	89	112	406	271	53	68	1232	278	205	304	315
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	159	89	112	406	271	53	68	1232	278	205	304	315
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	22	28	102	68	13	17	308	70	51	76	79
Total Analysis Volume [veh/h]	159	89	112	406	271	53	68	1232	278	205	304	315
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	3.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	4.0	4.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20	4.20
g_i, Effective Green Time [s]	11	11	11	11	16	16	16	6	49	49	9	52	52
g / C, Green / Cycle	0.10	0.10	0.10	0.10	0.14	0.14	0.14	0.05	0.43	0.43	0.08	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.05	0.07	0.12	0.09	0.09	0.04	0.24	0.17	0.06	0.09	0.20
s, saturation flow rate [veh/h]	1781	1786	1702	1589	3459	1870	1765	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	180	180	172	160	491	265	250	98	2186	682	273	1613	720
d1, Uniform Delay [s]	48.29	48.29	48.47	49.56	47.55	46.07	46.09	52.93	24.50	22.51	51.41	18.64	21.26
k, delay calibration	0.19	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.09	3.07	3.72	9.45	3.75	2.46	2.63	8.91	1.06	1.81	4.27	0.26	1.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.45	0.49	0.70	0.83	0.63	0.63	0.69	0.56	0.41	0.75	0.19	0.44
d, Delay for Lane Group [s/veh]	51.38	51.36	52.20	59.01	51.31	48.53	48.71	61.84	25.56	24.32	55.67	18.90	23.20
Lane Group LOS	D	D	D	E	D	D	D	E	C	C	E	B	C
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.34	2.35	2.44	3.50	5.83	4.61	4.38	2.15	8.41	5.44	3.02	2.45	6.03
50th-Percentile Queue Length [m/ln]	17.86	17.89	18.61	26.66	44.44	35.12	33.36	16.39	64.10	41.47	23.02	18.64	45.98
95th-Percentile Queue Length [veh/ln]	4.22	4.23	4.40	6.30	9.79	8.13	7.81	3.87	13.17	9.27	5.44	4.40	10.06
95th-Percentile Queue Length [m/ln]	32.15	32.20	33.49	47.98	74.61	61.95	59.51	29.51	100.35	70.63	41.43	33.55	76.67

Movement, Approach, & Intersection Results

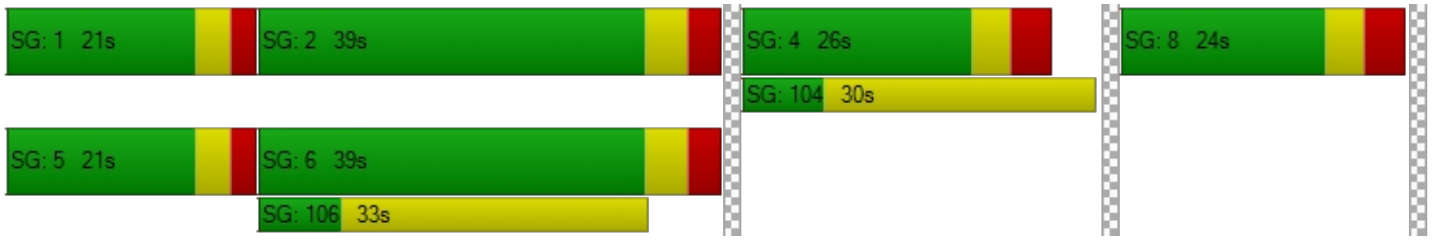
d_M, Delay for Movement [s/veh]	51.37	52.15	59.01	51.31	48.60	48.71	61.84	25.56	24.32	55.67	18.90	23.20
Movement LOS	D	D	E	D	D	D	E	C	C	E	B	C
d_A, Approach Delay [s/veh]	53.94			50.11			26.91			29.69		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	35.20											
Intersection LOS	D											
Intersection V/C	0.489											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.887	3.091	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	1.857	2.162	2.428	2.239
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	40.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.692

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	295	277	509	219	159	296	126	758	156	107	732	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	277	509	219	159	296	126	758	156	107	732	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	69	127	55	40	74	32	190	39	27	183	24
Total Analysis Volume [veh/h]	295	277	509	219	159	296	126	758	156	107	732	94
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	10	35	0	10	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	3.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.8	0.0	1.0	3.8	0.0	1.0	2.5	0.0	2.0	2.5	0.0
Split [s]	20	54	0	13	47	0	12	33	0	11	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	32	0	0	32	0	0	15	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	5.1	0.0	2.0	5.1	0.0	2.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	7.10	7.10	7.10	7.10	7.10	7.10	6.20	6.20	6.20	6.20	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	5.10	5.10	0.00	5.10	5.10	0.00	4.20	4.20	0.00	4.20	4.20
g_i, Effective Green Time [s]	53	39	39	53	35	35	44	32	32	44	32	32
g / C, Green / Cycle	0.47	0.35	0.35	0.47	0.31	0.31	0.39	0.28	0.28	0.39	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.25	0.08	0.32	0.23	0.09	0.19	0.19	0.25	0.25	0.12	0.15	0.16
s, saturation flow rate [veh/h]	1189	3560	1589	938	1870	1589	668	1870	1761	871	3560	1764
c, Capacity [veh/h]	518	1239	553	508	588	500	307	534	502	287	1034	512
d1, Uniform Delay [s]	20.44	25.81	35.02	17.84	28.77	32.34	23.85	38.23	38.23	26.18	33.37	33.42
k, delay calibration	0.50	0.11	0.25	0.15	0.11	0.11	0.50	0.50	0.50	0.32	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.57	0.09	16.55	0.81	0.25	1.13	4.08	22.83	24.16	2.34	1.98	4.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.22	0.92	0.43	0.27	0.59	0.41	0.88	0.88	0.37	0.53	0.54
d, Delay for Lane Group [s/veh]	25.01	25.90	51.56	18.65	29.01	33.47	27.94	61.05	62.39	28.52	35.36	37.48
Lane Group LOS	C	C	D	B	C	C	C	E	E	C	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.42	2.63	15.58	3.48	3.24	6.86	2.53	15.57	14.85	2.02	6.54	6.83
50th-Percentile Queue Length [m/ln]	41.29	20.04	118.72	26.49	24.71	52.28	19.30	118.65	113.16	15.40	49.87	52.07
95th-Percentile Queue Length [veh/ln]	9.24	4.74	22.05	6.26	5.84	11.16	4.56	22.04	21.17	3.64	10.74	11.12
95th-Percentile Queue Length [m/ln]	70.38	36.08	168.05	47.69	44.48	85.02	34.75	167.96	161.32	27.73	81.83	84.73

Movement, Approach, & Intersection Results

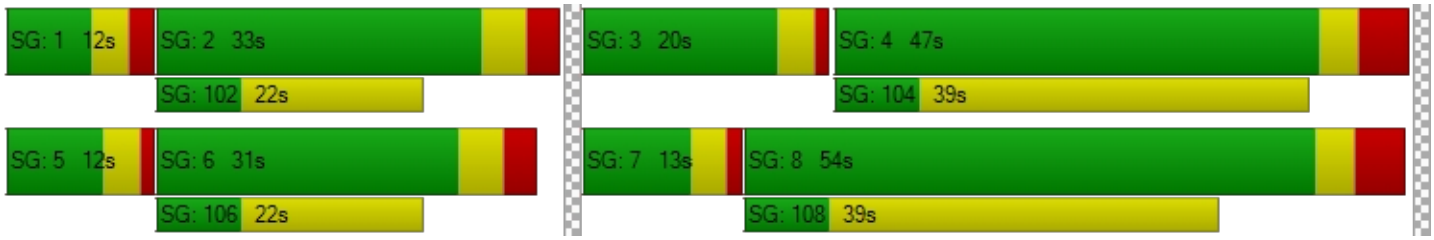
d_M, Delay for Movement [s/veh]	25.01	25.90	51.56	18.65	29.01	33.47	27.94	61.56	62.39	28.52	35.88	37.48
Movement LOS	C	C	D	B	C	C	C	E	E	C	D	D
d_A, Approach Delay [s/veh]	37.74			27.60			57.61			35.20		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	40.81											
Intersection LOS	D											
Intersection V/C	0.692											

Other Modes

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	11.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.61	38.61	45.54	45.54
l_p,int, Pedestrian LOS Score for Intersection	2.981	2.817	3.221	3.260
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	838	713	479	443
d_b, Bicycle Delay [s]	18.92	23.21	32.41	33.95
l_b,int, Bicycle LOS Score for Intersection	2.451	2.116	2.418	2.073
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	32.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.517

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	Yes		Yes		Yes	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	64	200	786	119	136	279
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	200	786	119	136	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	50	197	30	34	70
Total Analysis Volume [veh/h]	64	200	786	119	136	279
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Permissive
Signal Group	4	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	10	0	9	15	15	0
Maximum Green [s]	30	0	20	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.9	0.0	2.1	1.9	1.9	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	Yes	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	0.0	3.6	3.4	3.4	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	25.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	6.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	0.00	0.00	4.00	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	0.00	0.00	3.40	3.40	3.40
g_i, Effective Green Time [s]	0	0	56	56	27	27
g / C, Green / Cycle	0.00	0.00	0.62	0.62	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.06	0.08	0.64	0.04	0.04	0.20
s, saturation flow rate [veh/h]	1012	2532	1228	3204	3204	1431
c, Capacity [veh/h]	80	0	847	1980	947	423
d1, Uniform Delay [s]	45.00	0.00	15.14	6.83	23.32	27.74
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	74.56	0.00	23.25	0.06	0.32	8.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	10000.00	0.93	0.06	0.14	0.66
d, Delay for Lane Group [s/veh]	119.56	0.00	38.39	6.89	23.64	35.89
Lane Group LOS	F	F	D	A	C	D
Critical Lane Group	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.17	0.00	15.76	0.43	1.09	6.06
50th-Percentile Queue Length [m/ln]	24.14	0.00	120.09	3.26	8.29	46.19
95th-Percentile Queue Length [veh/ln]	5.70	0.00	22.27	0.77	1.96	10.10
95th-Percentile Queue Length [m/ln]	43.45	0.00	169.70	5.87	14.92	76.96

Movement, Approach, & Intersection Results

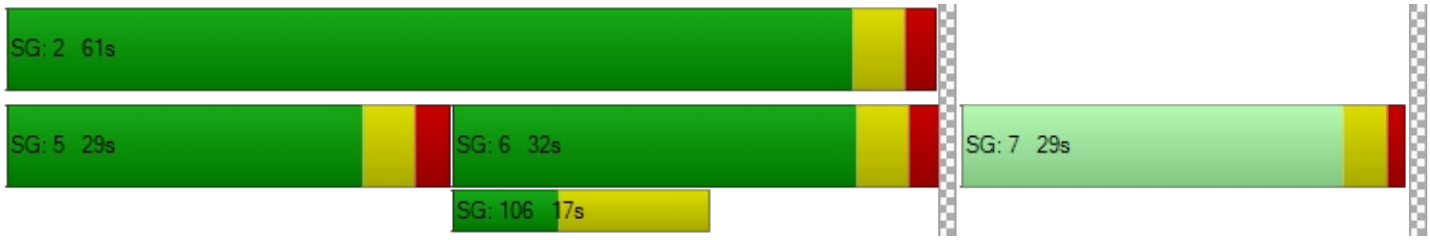
d_M, Delay for Movement [s/veh]	119.56	0.00	38.39	6.89	23.64	35.89
Movement LOS	F	A	D	A	C	D
d_A, Approach Delay [s/veh]	28.98		34.25		31.88	
Approach LOS	C		C		C	
d_I, Intersection Delay [s/veh]	32.75					
Intersection LOS	C					
Intersection V/C	0.517					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	3.183	0.000	2.578
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1236	591
d_b, Bicycle Delay [s]	45.00	6.57	22.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.306	2.013
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	12.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.035

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	17	28	25	167	426	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	28	25	167	426	51
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	7	6	42	107	13
Total Analysis Volume [veh/h]	17	28	25	167	426	51
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.04	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.90	11.07	10.21	0.00	0.00	0.00
Movement LOS	B	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.25	0.25	0.04	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	1.93	1.93	0.32	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	11.76		1.33		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.10					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	21.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.399

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	259	125	78	6	78	167	47	78	106	127	151	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	259	125	78	6	78	167	47	78	106	127	151	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	31	20	2	20	42	12	20	27	32	38	6
Total Analysis Volume [veh/h]	259	125	78	6	78	167	47	78	106	127	151	23
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	9	15	0	9	15	0
Maximum Green [s]	30	31	0	0	31	0	12	21	0	12	21	0
Amber [s]	3.0	3.5	0.0	0.0	3.5	0.0	3.0	3.5	0.0	3.0	3.5	0.0
All red [s]	1.0	2.2	0.0	0.0	2.2	0.0	2.0	2.1	0.0	2.0	2.1	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	15	0	0	7	0	0	7	0	0	10	0
Pedestrian Clearance [s]	0	15	0	0	23	0	0	13	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	0.0	3.7	0.0	3.0	3.6	0.0	3.0	3.6	0.0
Minimum Recall	No	No			No		No	No		No	No	
Maximum Recall	No	No			No		No	Yes		No	Yes	
Pedestrian Recall	No	Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	4.0	4.0	0.0	0.0	2.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	6.0	6.0	0.0	0.0	4.0	0.0	6.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92
L, Total Lost Time per Cycle [s]	5.70	5.70	5.70	5.60	5.60	5.60	5.60	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.70	3.70	0.00	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	46	46	30	35	21	21	35	23	23
g / C, Green / Cycle	0.50	0.50	0.33	0.38	0.23	0.23	0.38	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.22	0.13	0.17	0.04	0.05	0.07	0.10	0.04	0.04
s, saturation flow rate [veh/h]	1182	1576	1501	1228	1683	1431	1256	3204	1575
c, Capacity [veh/h]	565	785	532	545	386	328	548	816	401
d1, Uniform Delay [s]	13.75	13.23	24.87	18.29	28.55	29.40	19.31	26.40	26.44
k, delay calibration	0.21	0.11	0.11	0.50	0.50	0.50	0.20	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.12	0.17	0.65	0.31	1.18	2.62	0.40	0.36	0.77
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.26	0.47	0.09	0.20	0.32	0.23	0.14	0.15
d, Delay for Lane Group [s/veh]	14.87	13.41	25.53	18.60	29.73	32.02	19.70	26.76	27.22
Lane Group LOS	B	B	C	B	C	C	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.23	2.34	4.38	0.67	1.49	2.15	1.84	1.00	1.07
50th-Percentile Queue Length [m/ln]	24.60	17.83	33.36	5.13	11.38	16.40	14.04	7.62	8.15
95th-Percentile Queue Length [veh/ln]	5.81	4.21	7.81	1.21	2.69	3.87	3.32	1.80	1.93
95th-Percentile Queue Length [m/ln]	44.28	32.10	59.51	9.23	20.49	29.52	25.28	13.71	14.67

Movement, Approach, & Intersection Results

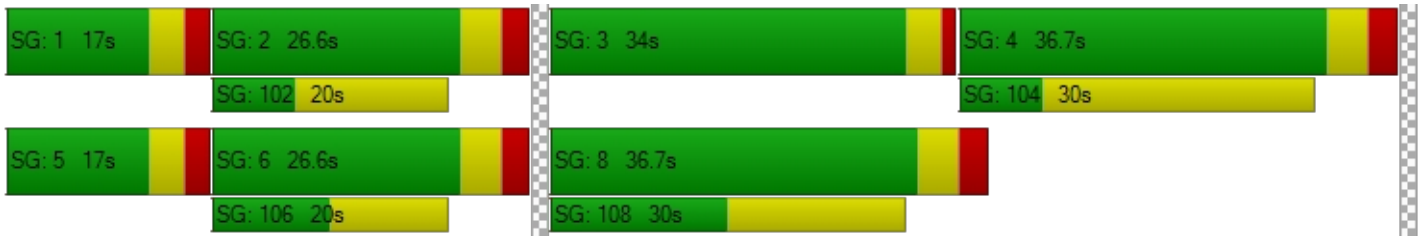
d_M, Delay for Movement [s/veh]	14.87	13.41	13.41	25.53	25.53	25.53	18.60	29.73	32.02	19.70	26.87	27.22
Movement LOS	B	B	B	C	C	C	B	C	C	B	C	C
d_A, Approach Delay [s/veh]	14.23			25.53			28.52			23.87		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	21.49											
Intersection LOS	C											
Intersection V/C	0.399											

Other Modes

g_Walk,mi, Effective Walk Time [s]	21.0	24.0	11.0	19.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.19	24.93	35.44	28.75
l_p,int, Pedestrian LOS Score for Intersection	2.380	2.070	2.793	2.446
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	677	677	459	459
d_b, Bicycle Delay [s]	20.03	20.03	27.19	27.19
l_b,int, Bicycle LOS Score for Intersection	2.433	1.974	1.941	1.725
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: 22nd Street & Confederation Drive

Control Type:	Signalized	Delay (sec / veh):	155.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.831

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	2	0	1	1	0	0	0	0	0	2	0	0
Entry Pocket Length [m]	50.00	30.48	50.00	80.00	30.48	30.48	30.48	30.48	30.48	100.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	204	309	81	473	427	145	108	920	251	398	842	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	309	81	473	427	145	108	920	251	398	842	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	77	20	118	107	36	27	230	63	100	211	202
Total Analysis Volume [veh/h]	204	309	81	473	427	145	108	920	251	398	842	808
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	0	35	0	15	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	0.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.3	0.0	0.0	3.3	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Split [s]	0	24	0	0	26	0	21	39	0	21	39	0
Vehicle Extension [s]	3.0	4.5	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	0	0	0	7	0	0	0	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.6	0.0	0.0	4.6	0.0	3.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	Yes		No	Yes	
Pedestrian Recall		No			No		No	No		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	4.0	4.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	114	114	114	114	114	114	114	114	114	114	114	114	114
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60	6.60	6.60	6.60	6.60	5.00	6.20	6.20	5.00	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	3.00	4.20	4.20	3.00	4.20	4.20
g_i, Effective Green Time [s]	15	15	15	15	19	19	19	9	36	36	15	42	42
g / C, Green / Cycle	0.13	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.31	0.31	0.13	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.10	0.05	0.14	0.16	0.16	0.06	0.18	0.16	0.12	0.24	0.51
s, saturation flow rate [veh/h]	1781	1850	1702	1589	3459	1870	1710	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	240	250	230	214	589	318	291	136	1598	499	457	1316	587
d1, Uniform Delay [s]	47.06	47.04	47.51	44.95	45.47	46.71	46.72	51.78	32.77	31.88	48.52	29.68	35.94
k, delay calibration	0.19	0.19	0.19	0.19	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.23	5.90	8.89	1.89	2.68	16.31	17.75	10.81	1.53	3.64	5.62	2.42	687.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.69	0.76	0.38	0.80	0.94	0.94	0.80	0.58	0.50	0.87	0.64	1.38
d, Delay for Lane Group [s/veh]	53.30	52.93	56.40	46.83	48.15	63.02	64.47	62.58	34.29	35.53	54.14	32.10	723.19
Lane Group LOS	D	D	E	D	D	E	E	E	C	D	D	C	F
Critical Lane Group	No	No	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.92	5.06	5.31	2.20	6.62	9.74	9.03	3.43	7.26	6.11	5.88	9.83	127.98
50th-Percentile Queue Length [m/ln]	37.48	38.53	40.42	16.77	50.41	74.23	68.80	26.17	55.33	46.54	44.79	74.88	975.22
95th-Percentile Queue Length [veh/ln]	8.56	8.75	9.08	3.96	10.83	14.86	13.96	6.18	11.68	10.16	9.85	14.97	179.44
95th-Percentile Queue Length [m/ln]	65.20	66.64	69.21	30.18	82.55	113.23	106.34	47.11	89.00	77.42	75.09	114.05	1367.30

Movement, Approach, & Intersection Results

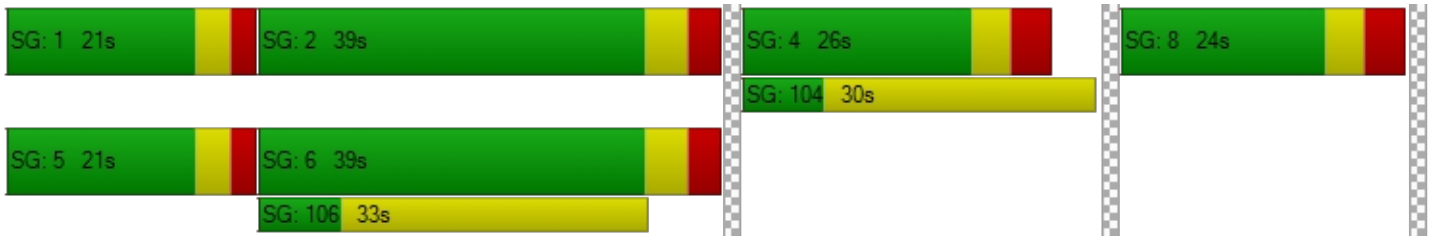
d_M, Delay for Movement [s/veh]	53.24	54.88	46.83	48.15	63.46	64.47	62.58	34.29	35.53	54.14	32.10	723.19
Movement LOS	D	D	D	D	E	E	E	C	D	D	C	F
d_A, Approach Delay [s/veh]	53.22			56.67			36.92			309.04		
Approach LOS	D			E			D			F		
d_I, Intersection Delay [s/veh]	155.25											
Intersection LOS	F											
Intersection V/C	0.831											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	8.0	11.0	0.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	49.28	46.53	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.134	3.179	0.000
Crosswalk LOS	F	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	305	340	575	575
d_b, Bicycle Delay [s]	40.93	39.25	28.92	28.92
l_b,int, Bicycle LOS Score for Intersection	2.050	2.422	2.263	3.249
Bicycle LOS	B	B	B	C

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: 22nd St & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	35.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.642

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	40.00	30.48	30.48	70.00	30.48	30.48	130.00	30.48	30.48	150.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	157	379	351	192	241	216	179	760	192	230	1118	303
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	157	379	351	192	241	216	179	760	192	230	1118	303
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	95	88	48	60	54	45	190	48	58	280	76
Total Analysis Volume [veh/h]	157	379	351	192	241	216	179	760	192	230	1118	303
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	64.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	15	0	7	15	0
Maximum Green [s]	10	35	0	10	35	0	10	35	0	15	35	0
Amber [s]	3.0	3.3	0.0	3.0	3.3	0.0	3.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.0	3.8	0.0	1.0	3.8	0.0	1.0	2.5	0.0	2.0	2.5	0.0
Split [s]	20	54	0	13	47	0	12	33	0	11	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	32	0	0	32	0	0	15	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	5.1	0.0	2.0	5.1	0.0	2.0	4.2	0.0	3.0	4.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	Yes		No	Yes	
Pedestrian Recall	No	No		No	No		No	Yes		No	Yes	
Detector Location [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	7.10	7.10	7.10	7.10	7.10	7.10	6.20	6.20	6.20	6.20	6.20	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	5.10	5.10	0.00	5.10	5.10	0.00	4.20	4.20	0.00	4.20	4.20
g_i, Effective Green Time [s]	42	28	28	42	29	29	54	42	42	54	42	42
g / C, Green / Cycle	0.38	0.25	0.25	0.38	0.26	0.26	0.49	0.38	0.38	0.49	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.14	0.11	0.22	0.19	0.13	0.14	0.40	0.26	0.26	0.28	0.27	0.27
s, saturation flow rate [veh/h]	1153	3560	1589	1030	1870	1589	448	1870	1742	808	3560	1673
c, Capacity [veh/h]	428	894	399	430	491	417	278	708	659	352	1347	633
d1, Uniform Delay [s]	24.57	35.15	40.31	24.72	34.96	35.25	22.42	29.36	29.38	21.92	29.71	29.73
k, delay calibration	0.38	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.84	0.32	6.89	0.73	0.76	1.00	11.48	5.75	6.21	9.48	3.37	7.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.42	0.88	0.45	0.49	0.52	0.64	0.70	0.70	0.65	0.72	0.72
d, Delay for Lane Group [s/veh]	26.42	35.47	47.20	25.45	35.73	36.25	33.90	35.11	35.59	31.41	33.08	36.89
Lane Group LOS	C	D	D	C	D	D	C	D	D	C	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.05	4.37	9.97	3.63	5.65	5.13	3.50	12.14	11.41	4.40	11.55	11.55
50th-Percentile Queue Length [m/ln]	23.26	33.33	75.97	27.65	43.04	39.05	26.67	92.48	86.96	33.50	87.98	87.97
95th-Percentile Queue Length [veh/ln]	5.50	7.80	15.15	6.53	9.55	8.84	6.30	17.85	16.95	7.83	17.12	17.12
95th-Percentile Queue Length [m/ln]	41.87	59.46	115.43	49.77	72.74	67.34	48.01	136.02	129.18	59.70	130.45	130.44

Movement, Approach, & Intersection Results

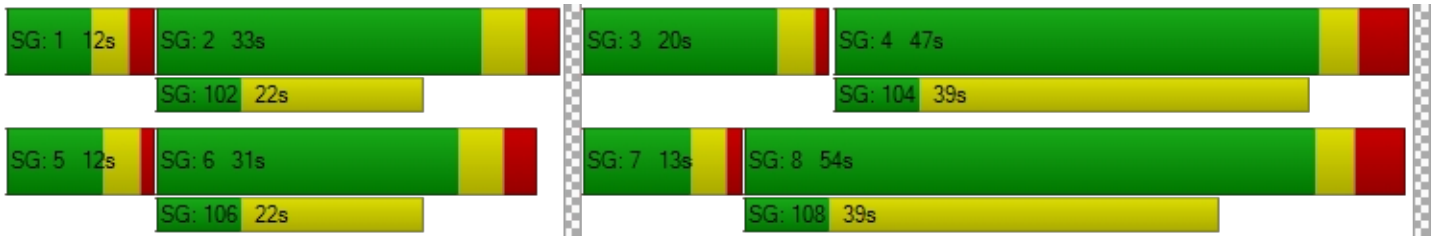
d_M, Delay for Movement [s/veh]	26.42	35.47	47.20	25.45	35.73	36.25	33.90	35.28	35.59	31.41	33.59	36.89
Movement LOS	C	D	D	C	D	D	C	D	D	C	C	D
d_A, Approach Delay [s/veh]	38.51			32.86			35.11			33.89		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	35.01											
Intersection LOS	D											
Intersection V/C	0.642											

Other Modes

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	11.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.61	38.61	45.54	45.54
l_p,int, Pedestrian LOS Score for Intersection	3.075	2.952	3.212	3.340
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	838	713	479	443
d_b, Bicycle Delay [s]	18.92	23.21	32.41	33.95
l_b,int, Bicycle LOS Score for Intersection	2.291	2.095	2.493	2.468
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Fairlight Dr & Diefenbaker Dr

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.526

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [m]	30.48	30.48	50.00	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Curb Present	Yes		Yes		Yes	
Crosswalk	Yes		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	74	662	599	93	565	388
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	662	599	93	565	388
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	166	150	23	141	97
Total Analysis Volume [veh/h]	74	662	599	93	565	388
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	ProtPerm	Permissive	Permissive	Permissive
Signal Group	4	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	10	0	9	15	15	0
Maximum Green [s]	30	0	20	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.9	0.0	2.1	1.9	1.9	0.0
Split [s]	29	0	29	61	32	0
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	Yes	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	0.0	3.6	3.4	3.4	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	Yes	Yes	
Pedestrian Recall	No		No	No	Yes	
Detector Location [m]	0.0	0.0	25.0	0.0	0.0	0.0
Detector Length [m]	0.0	0.0	6.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	0.00	0.00	4.00	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	0.00	0.00	3.40	3.40	3.40
g_i, Effective Green Time [s]	0	0	56	56	27	27
g / C, Green / Cycle	0.00	0.00	0.62	0.62	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.57	0.03	0.18	0.27
s, saturation flow rate [veh/h]	698	2532	1051	3204	3204	1431
c, Capacity [veh/h]	80	0	685	1980	947	423
d1, Uniform Delay [s]	45.00	0.00	15.97	6.77	27.11	30.64
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	137.48	0.00	17.03	0.04	2.80	37.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	10000.00	0.87	0.05	0.60	0.92
d, Delay for Lane Group [s/veh]	182.48	0.00	33.00	6.82	29.91	68.45
Lane Group LOS	F	F	C	A	C	E
Critical Lane Group	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.89	0.00	9.62	0.33	5.42	12.28
50th-Percentile Queue Length [m/ln]	37.23	0.00	73.31	2.53	41.29	93.59
95th-Percentile Queue Length [veh/ln]	8.51	0.00	14.71	0.60	9.24	18.03
95th-Percentile Queue Length [m/ln]	64.85	0.00	112.08	4.55	70.39	137.38

Movement, Approach, & Intersection Results

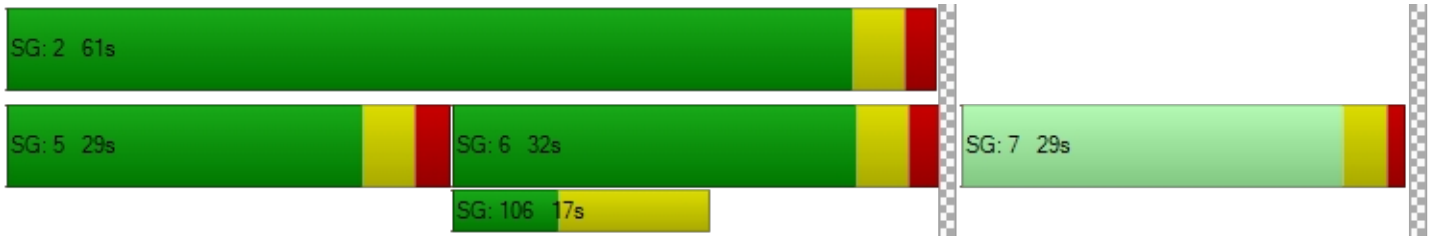
d_M, Delay for Movement [s/veh]	182.48	0.00	33.00	6.82	29.91	68.45
Movement LOS	F	A	C	A	C	E
d_A, Approach Delay [s/veh]	18.35		29.48		45.60	
Approach LOS	B		C		D	
d_I, Intersection Delay [s/veh]	32.49					
Intersection LOS	C					
Intersection V/C	0.526					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	3.174	0.000	2.756
Crosswalk LOS	C	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1236	591
d_b, Bicycle Delay [s]	45.00	6.57	22.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.131	2.457
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Fairlight Dr & Fairmont Cr

Control Type:	Two-way stop	Delay (sec / veh):	18.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.190

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [m]	30.48	30.48	30.48	30.48	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28		48.28		48.28	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	69	62	20	192	686	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	62	20	192	686	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	16	5	48	172	12
Total Analysis Volume [veh/h]	69	62	20	192	686	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.12	0.04	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	18.57	15.36	11.88	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	1.31	1.31	0.03	0.02	0.00	0.00
95th-Percentile Queue Length [m/ln]	9.95	9.95	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	17.05		1.12		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.29					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Fairlight Dr & Fairmont Dr

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.623

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [m]	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [m]	90.00	30.48	30.48	30.48	30.48	30.48	40.00	30.48	30.48	20.00	30.48	30.48
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [m]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [km/h]	48.28			48.28			48.28			48.28		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	494	151	44	41	122	93	52	51	157	278	400	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	494	151	44	41	122	93	52	51	157	278	400	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	124	38	11	10	31	23	13	13	39	70	100	10
Total Analysis Volume [veh/h]	494	151	44	41	122	93	52	51	157	278	400	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	10	0	9	15	0	9	15	0
Maximum Green [s]	30	31	0	0	31	0	12	21	0	12	21	0
Amber [s]	3.0	3.5	0.0	0.0	3.5	0.0	3.0	3.5	0.0	3.0	3.5	0.0
All red [s]	1.0	2.2	0.0	0.0	2.2	0.0	2.0	2.1	0.0	2.0	2.1	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	15	0	0	7	0	0	7	0	0	10	0
Pedestrian Clearance [s]	0	15	0	0	23	0	0	13	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			Yes			Yes	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	0.0	3.7	0.0	3.0	3.6	0.0	3.0	3.6	0.0
Minimum Recall	No	No			No		No	No		No	No	
Maximum Recall	No	No			No		No	Yes		No	Yes	
Pedestrian Recall	No	Yes			Yes		No	Yes		No	Yes	
Detector Location [m]	4.0	4.0	0.0	0.0	2.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Detector Length [m]	6.0	6.0	0.0	0.0	4.0	0.0	6.0	0.0	0.0	4.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	108	108	108	108	108	108	108	108	108
L, Total Lost Time per Cycle [s]	5.70	5.70	5.70	5.60	5.60	5.60	5.60	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.70	3.70	0.00	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	59	59	30	38	21	21	38	26	26
g / C, Green / Cycle	0.54	0.54	0.28	0.35	0.19	0.19	0.35	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.38	0.12	0.17	0.05	0.03	0.11	0.22	0.09	0.09
s, saturation flow rate [veh/h]	1289	1619	1496	1055	1683	1431	1272	3204	1608
c, Capacity [veh/h]	649	882	453	399	326	277	516	764	384
d1, Uniform Delay [s]	16.22	12.76	33.83	23.93	36.27	39.51	27.64	34.53	34.57
k, delay calibration	0.50	0.11	0.13	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.65	0.13	1.39	0.68	1.02	8.37	4.06	1.45	2.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.22	0.57	0.13	0.16	0.57	0.54	0.38	0.39
d, Delay for Lane Group [s/veh]	24.87	12.89	35.22	24.61	37.30	47.88	31.70	35.97	37.50
Lane Group LOS	C	B	D	C	D	D	C	D	D
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.28	2.43	5.96	0.97	1.22	4.41	6.17	3.36	3.57
50th-Percentile Queue Length [m/ln]	70.71	18.50	45.40	7.38	9.26	33.60	47.04	25.57	27.19
95th-Percentile Queue Length [veh/ln]	14.28	4.37	9.96	1.74	2.19	7.85	10.25	6.04	6.42
95th-Percentile Queue Length [m/ln]	108.78	33.29	75.90	13.28	16.67	59.84	78.09	46.03	48.94

Movement, Approach, & Intersection Results

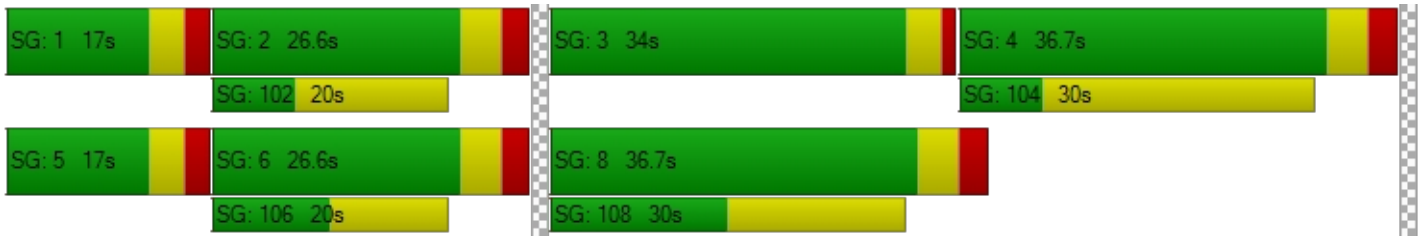
d_M, Delay for Movement [s/veh]	24.87	12.89	12.89	35.22	35.22	35.22	24.61	37.30	47.88	31.70	36.39	37.50
Movement LOS	C	B	B	D	D	D	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	21.48			35.22			41.15			34.63		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	30.88											
Intersection LOS	C											
Intersection V/C	0.623											

Other Modes

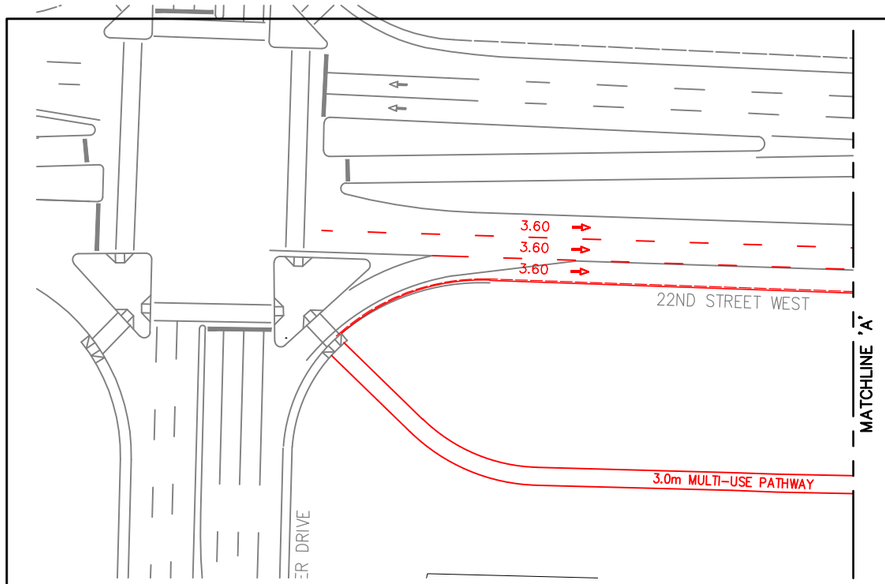
g_Walk,mi, Effective Walk Time [s]	21.0	24.0	11.0	19.0
M_corner, Corner Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [m²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	35.15	32.78	43.68	36.78
l_p,int, Pedestrian LOS Score for Intersection	2.676	2.122	2.996	2.628
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	573	573	388	388
d_b, Bicycle Delay [s]	27.56	27.56	35.15	35.15
l_b,int, Bicycle LOS Score for Intersection	2.807	1.982	1.989	1.954
Bicycle LOS	C	A	A	A

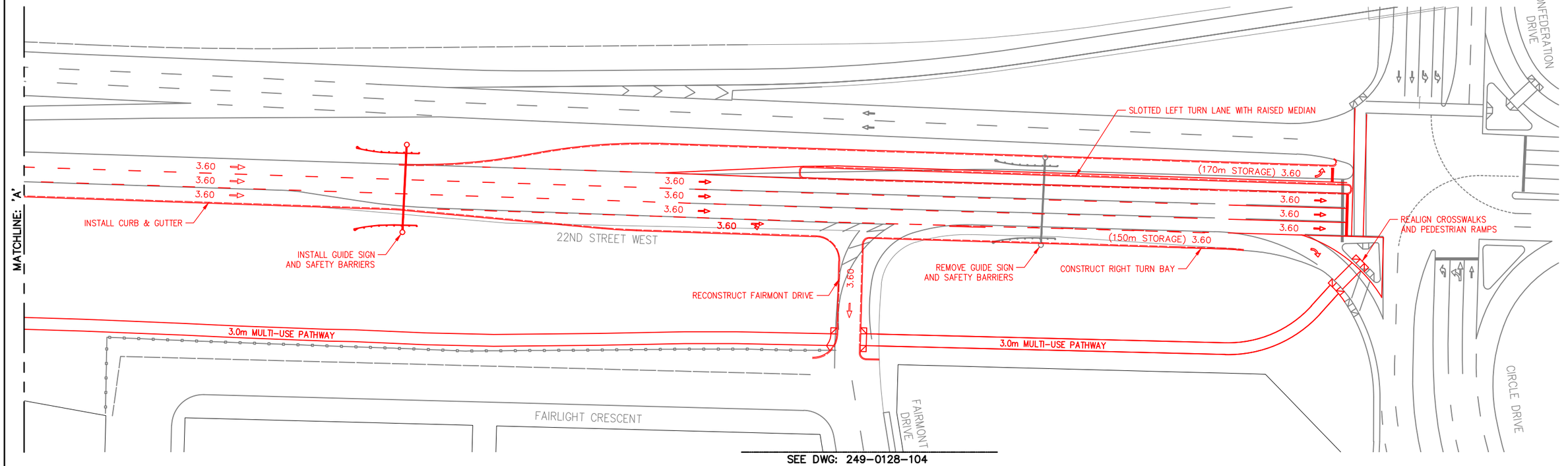
Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C – Proposed Traffic Plan





SEE DWG: 249-0128-104

FUNCTIONAL

CHECKED BY:	CHECKED BY:
DATE	DATE

DRAWN BY SJK DATE 2024-JUN-17

City of Saskatoon Transportation

FUNCTIONAL

22ND STREET WEST
DIEFNBAKER DRIVE TO CONFEDERATION DRIVE
RECOMMENDED OPTION

ENGINEER

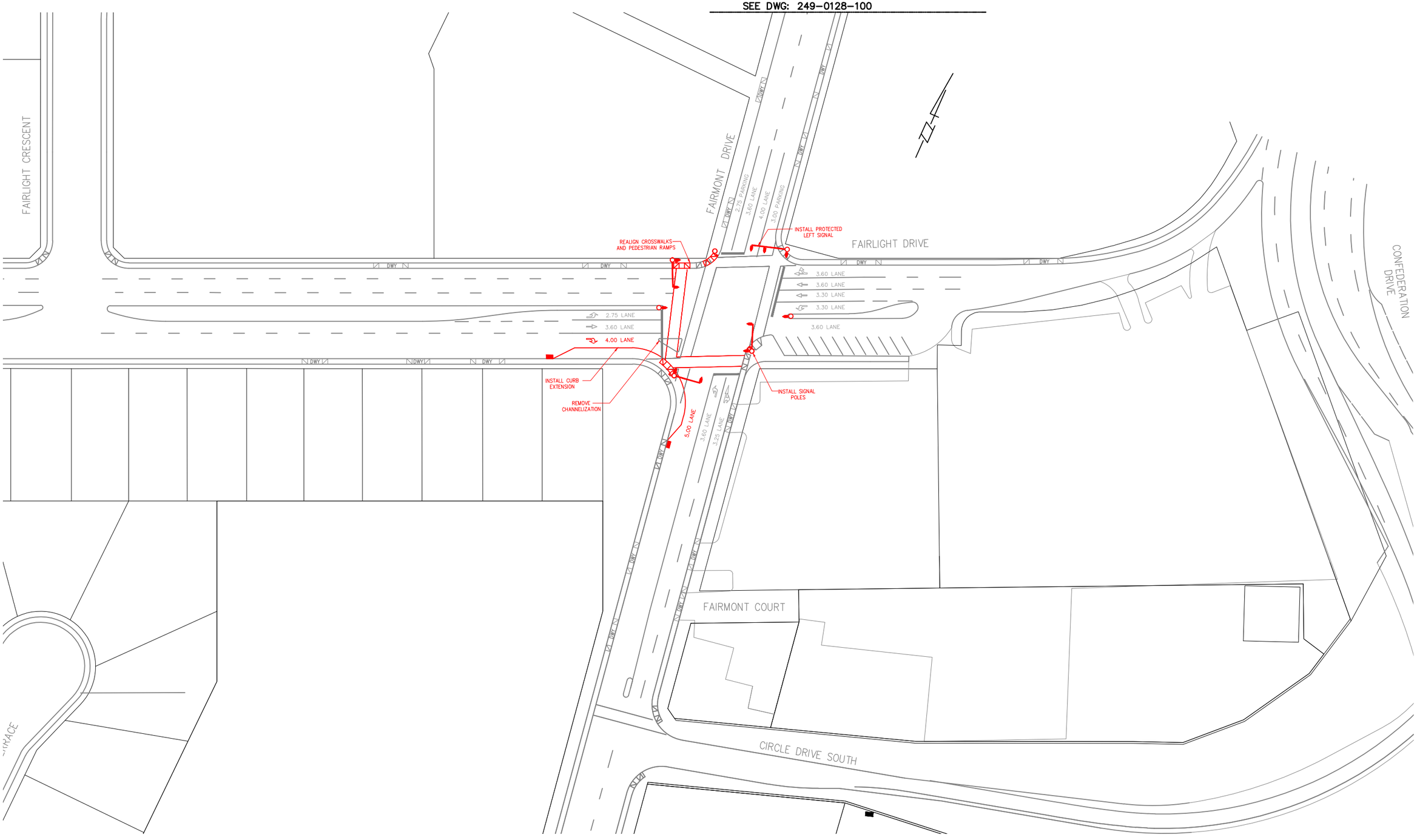
SCALES :
HOR. 1:1000
VERT. 1:1000

DATE

SHEET NO. 1 OF 1

PLAN NO. 249-0128-100r001

SEE DWG: 249-0128-100



FUNCTIONAL

CHECKED BY:	CHECKED BY:
DATE	DATE
DRAWN BY SJK	DATE 2024-JUN-17

City of Saskatoon
Transportation

FUNCTIONAL

FAIRLIGHT DRIVE & FAIRMONT DRIVE
RECOMMENDED PLAN

ENGINEER

SCALES :
HOR. 1:1000
VERT. 1:1000

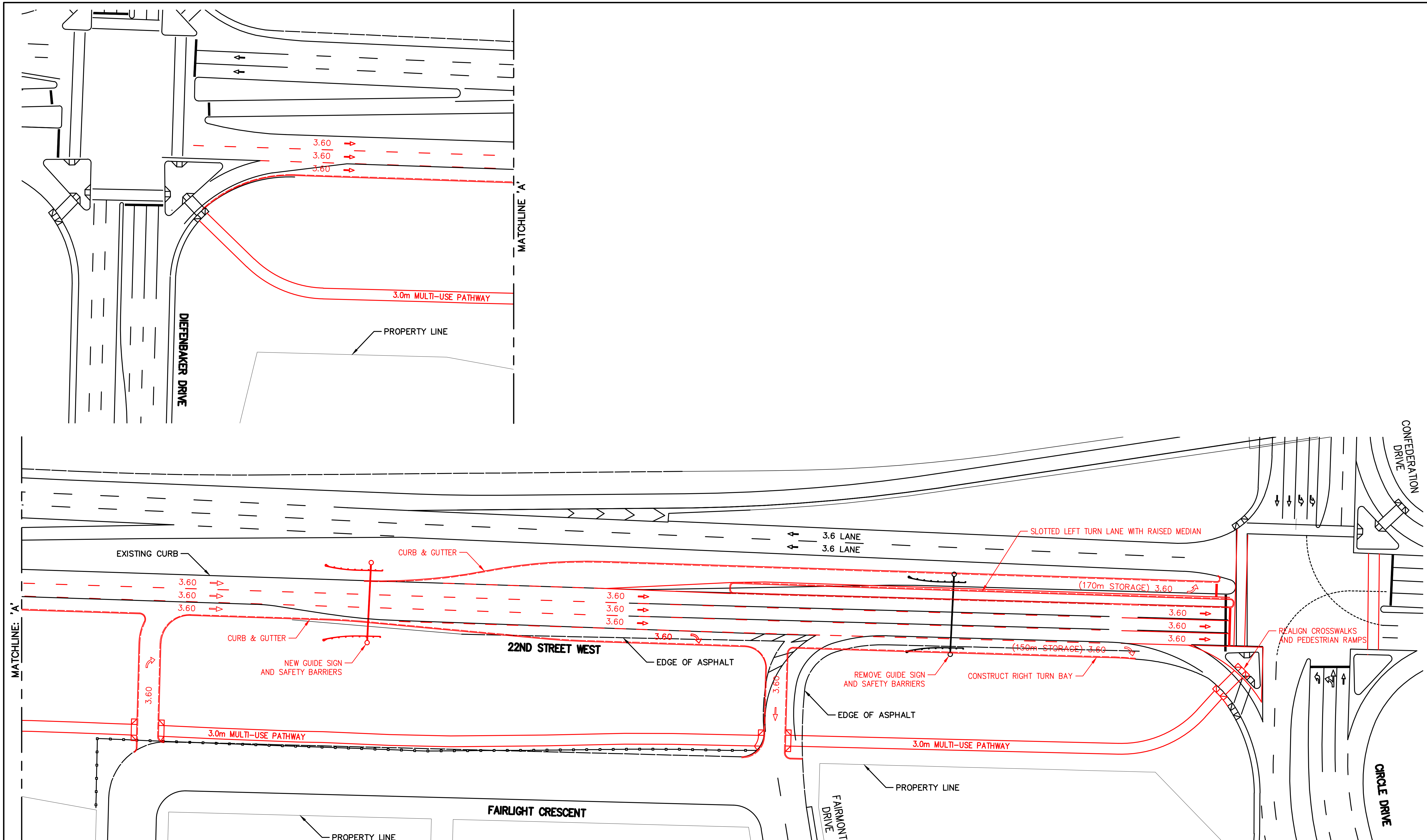
DATE

SHEET NO. 1 OF 1

PLAN NO. 249-0128-104r001

Appendix 3: Functional Plans - 22nd Street West and Confederation Drive Intersection Improvements

OPTION 1 – FAIRLIGHT CRESCENT ACCESS



FUNCTIONAL

LANE WIDTH LABELLING

LANE WIDTH LABELLING IS EXCLUSIVE OF GUTTER AND OFFSET DIMENSIONS

22ND STREET WEST
ROADWAY CLASSIFICATION: EXPRESSWAY
POSTED SPEED: 60 km/h (Ds: 70 km/h)
DESIGN VEHICLE: WB–20
CONTROL VEHICLE: WB–20

CHECKED BY:	CHECKED BY:
DATE	DATE
DRAWN BY SJK	DATE 2024–JUN–17

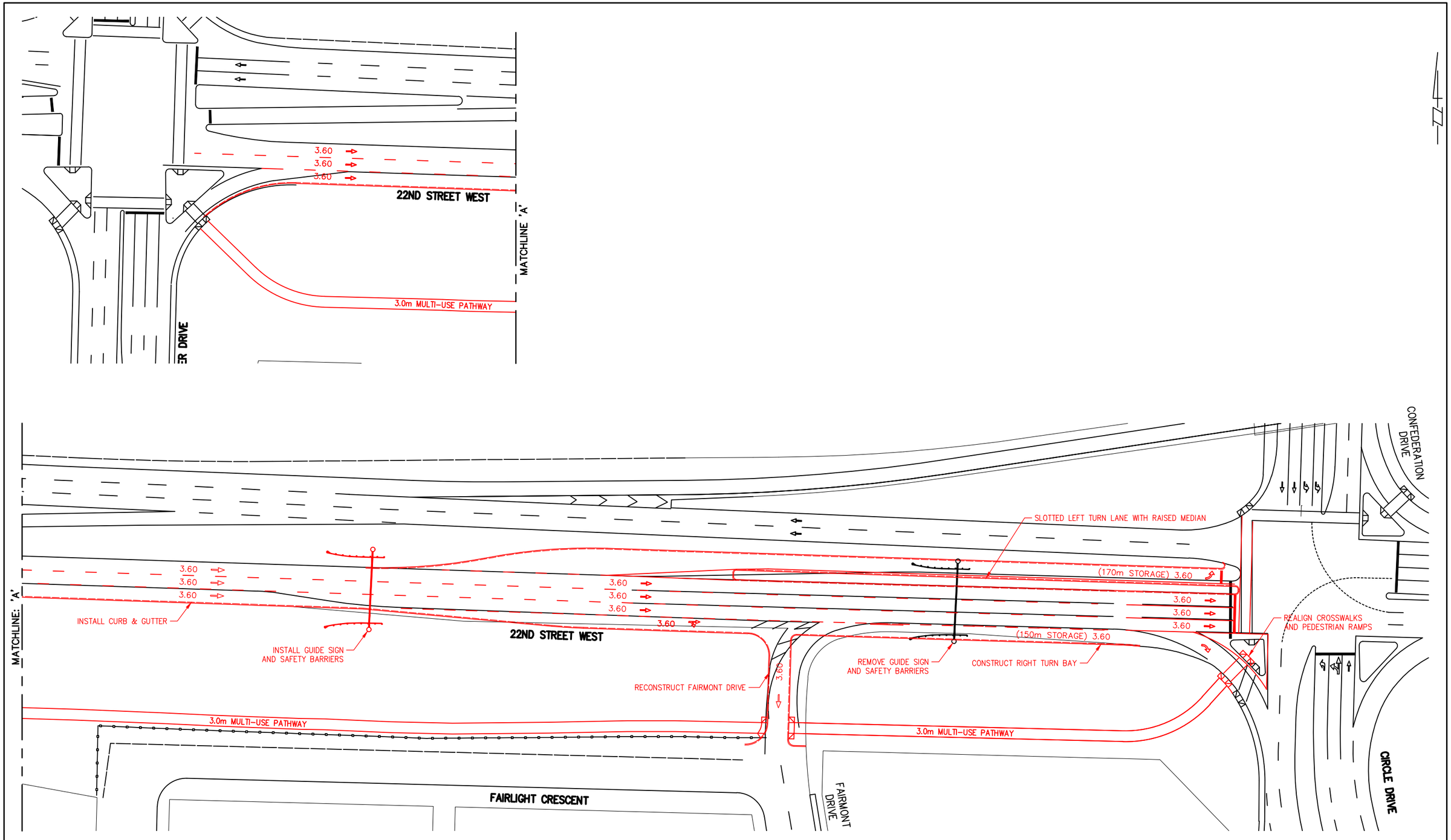
City of Saskatoon
Transportation

FUNCTIONAL

22ND STREET WEST
DIEFNBAKER DRIVE TO CONFEDERATION DRIVE
OPTION 1 – FAIRLIGHT CRESCENT ACCESS

ENGINEER
SCALES : HOR. 1:1000 VERT. 1:1000
DATE
SHEET NO. 1 OF 1
PLAN NO. PROPOSED

OPTION 2 – FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES (NO FAIRLIGHT CRESCENT ACCESS)



FUNCTIONAL

LANE WIDTH LABELLING

LANE WIDTH LABELLING IS EXCLUSIVE OF GUTTER AND OFFSET DIMENSIONS

22ND STREET WEST
ROADWAY CLASSIFICATION: EXPRESSWAY
POSTED SPEED: 60 km/h (Ds: 70 km/h)
DESIGN VEHICLE: WB-20
CONTROL VEHICLE: WB-20

CHECKED BY:	CHECKED BY:
DATE	DATE

DRAWN BY SJK DATE 2024-JUN-17

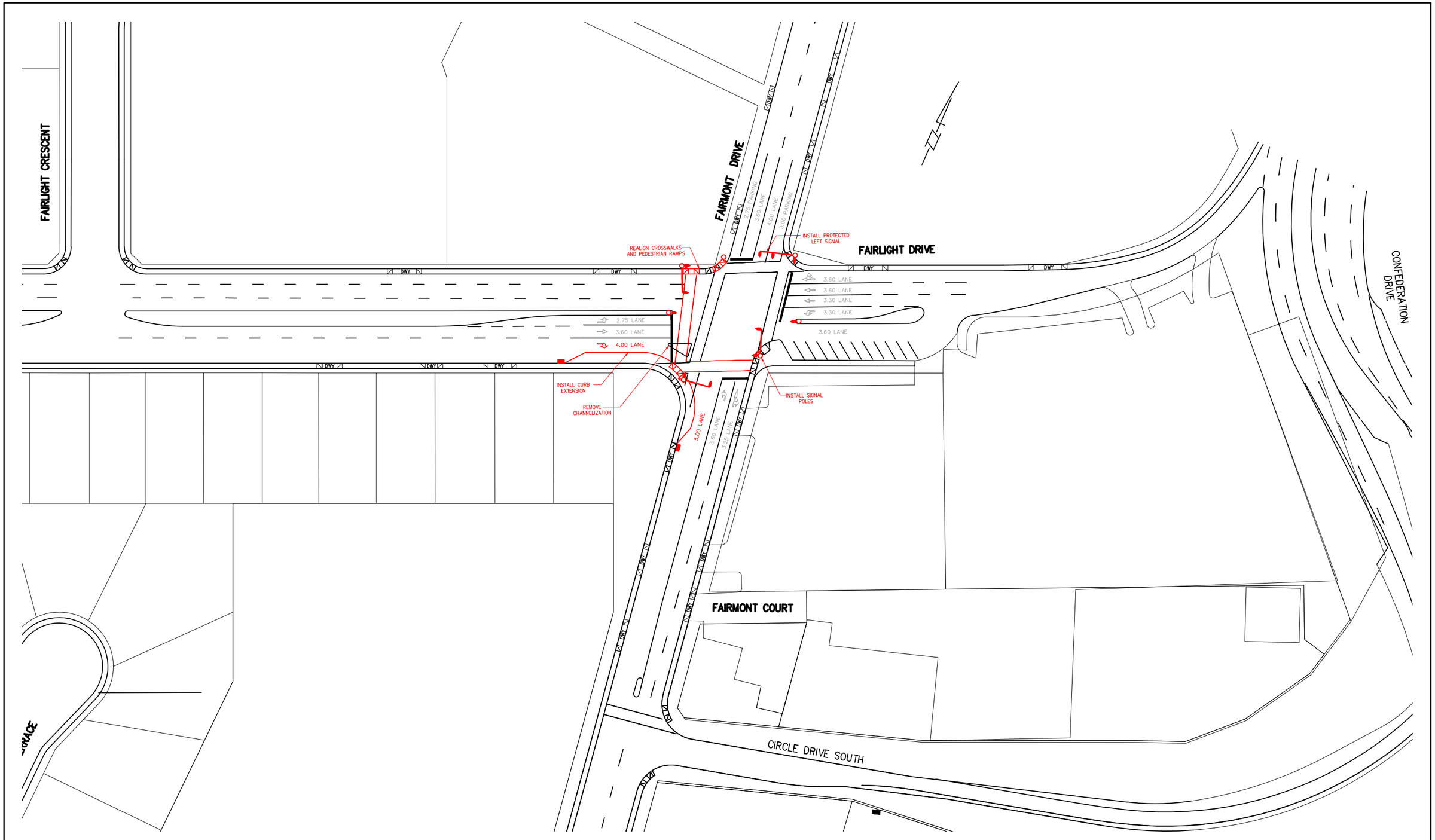
City of Saskatoon
Transportation

FUNCTIONAL

22ND STREET WEST
DIEFNBAKER DRIVE TO CONFEDERATION DRIVE
OPTION 2 – FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES
(NO FAIRLIGHT CRESCENT ACCESS)

ENGINEER DATE
SCALES : HOR. 1:1000 VERT. 1:1000
SHEET NO. 1 OF 1 PLAN NO. PROPOSED

OPTION 2 – FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES (NO FAIRLIGHT CRESCENT ACCESS)



FUNCTIONAL

LANE WIDTH LABELLING

LANE WIDTH LABELLING IS EXCLUSIVE OF GUTTER AND OFFSET DIMENSIONS

22ND STREET WEST
ROADWAY CLASSIFICATION: EXPRESSWAY
POSTED SPEED: 60 km/h (Ds: 70 km/h)
DESIGN VEHICLE: WB–20
CONTROL VEHICLE: WB–20

CHECKED BY:	CHECKED BY:
DATE	DATE
DRAWN BY SJK	DATE 2024-JUN-17

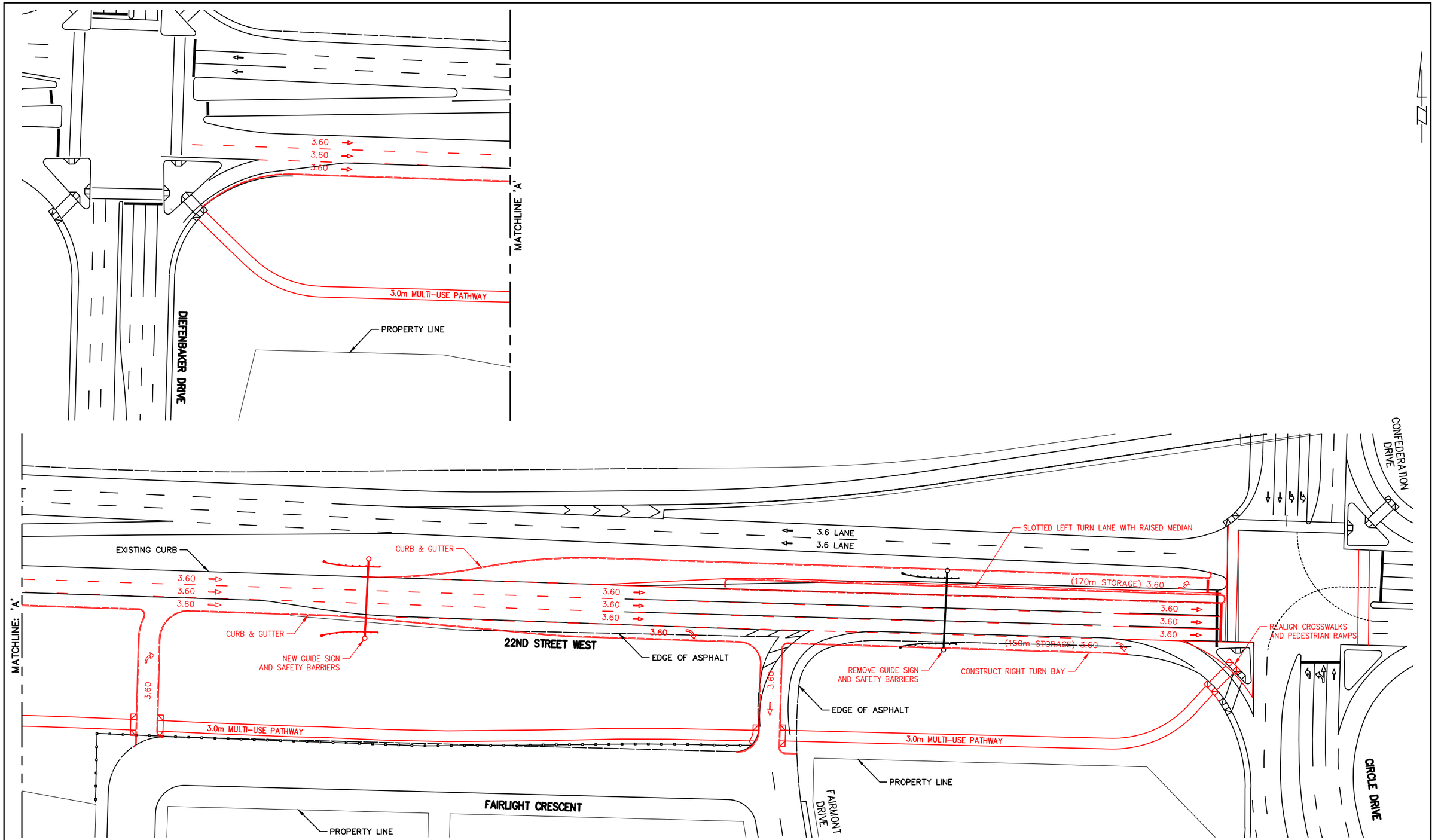
City of Saskatoon
Transportation

FUNCTIONAL

FAIRLIGHT DRIVE & FAIRMONT DRIVE
OPTION 3 – FAIRLIGHT CRESCENT ACCESS PLUS
FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES

ENGINEER
SCALES : HOR. 1:1000 VERT. 1:1000
DATE
SHEET NO. 1 OF 1
PLAN NO. PROPOSED

OPTION 3 – FAIRLIGHT CRESCENT ACCESS PLUS FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES



FUNCTIONAL

LANE WIDTH LABELLING

LANE WIDTH LABELLING IS EXCLUSIVE OF GUTTER AND OFFSET DIMENSIONS

22ND STREET WEST
ROADWAY CLASSIFICATION: EXPRESSWAY
POSTED SPEED: 60 km/h (Ds: 70 km/h)
DESIGN VEHICLE: WB-20
CONTROL VEHICLE: WB-20

CHECKED BY:	CHECKED BY:
DATE	DATE

DRAWN BY S.K DATE 2024-JUN-17

City of Saskatoon Transportation

FUNCTIONAL

22ND STREET WEST
DIEFNBAKER DRIVE TO CONFEDERATION DRIVE
OPTION 3 – FAIRLIGHT CRESCENT ACCESS PLUS FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES

ENGINEER

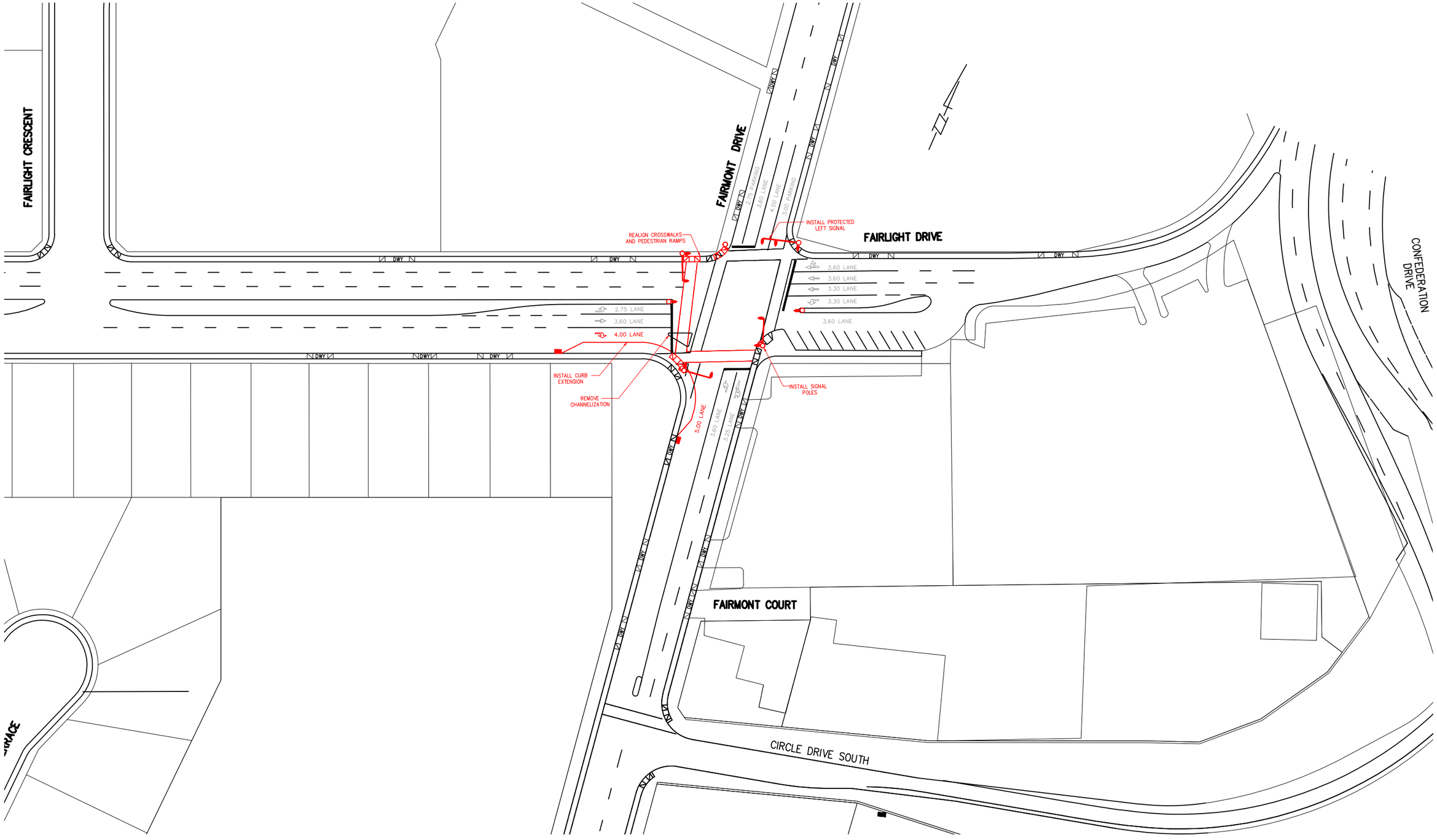
SCALES : HOR. 1:1000 VERT. 1:1000

DATE

SHEET NO. 1 OF 1

PLAN NO. PROPOSED

OPTION 3 – FAIRLIGHT CRESCENT ACCESS PLUS FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES



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CHECKED BY:	CHECKED BY:
DATE	DATE
DRAWN BY SJK	DATE 2024-JUN-17

City of Saskatoon
Transportation

FUNCTIONAL

FAIRLIGHT DRIVE & FAIRMONT DRIVE
OPTION 3 – FAIRLIGHT CRESCENT ACCESS PLUS
FAIRMONT DRIVE AND FAIRLIGHT DRIVE UPGRADES

ENGINEER

SCALES :
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DATE

SHEET NO. 1 OF 1

PLAN NO. PROPOSED

Appendix 4: Cost Estimates - 22nd Street West and Confederation Drive Intersection Improvements

Improvement	Option 1 - Fairlight Crescent Access	Option 2 - Fairmont Drive and Fairlight Drive Upgrades (no Fairlight Crescent Access)	Option 3 - Fairlight Crescent Access plus Fairmont Drive and Fairlight Drive Upgrades
Construct an eastbound slotted left-turn lane	$ 800,000.00	$ 800,000.00	$ 800,000.00
Construct an eastbound right-turn lane	$ 390,000.00	$ 390,000.00	$ 390,000.00
Convert Fairmont Drive access to right-in configuration from 22nd Street West	$ 150,000.00	$ 150,000.00	$ 150,000.00
Relocate overhead guide sign and roadside safety system	$ 595,000.00	$ 595,000.00	$ 595,000.00
Construct third eastbound through lane with curb and gutter	$ 345,000.00	$ 345,000.00	$ 345,000.00
Correct pedestrian accessible ramps and drainage deficiencies	$ 15,000.00	$ 15,000.00	$ 15,000.00
Install shared-use pathway on the south side of 22nd Street West	$ 250,000.00	$ 250,000.00	$ 250,000.00
Install signal upgrades and geometric changes for eastbound right turn at Fairlight Drive and Fairmont Drive	$ -	$ 355,000.00	$ 355,000.00
Construct new right-out access from Fairlight Crescent to 22nd Street West	$ 70,000.00	$ -	$ 70,000.00
Total	**$ 2,615,000.00**	**$ 2,900,000.00**	**$ 2,970,000.00**

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

Proposed Amendments to Bylaw No. 7860, The Animal Control Bylaw, 1999

Recommendation of the Committee

1. That proposed amendments to Bylaw No. 7860, *The Animal Control Bylaw, 1999*, be approved; and
2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 7860, *The Animal Control Bylaw, 1999*.

History

The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered a report of the Community Services Division regarding the above.

Attachment

March 5, 2025 report of the Community Services Division.

Proposed Amendments to Bylaw 7860, The Animal Control Bylaw, 1999

ISSUE

The report is requesting approval to amend Bylaw No. 7860, The Animal Control Bylaw, 1999.

RECOMMENDATION

That the Standing Policy Committee on Planning, Development and Community Services recommend to City Council:

1. That proposed amendments to Bylaw No. 7860, The Animal Control Bylaw, 1999, be approved; and
2. That the City Solicitor be requested to make the necessary amendments to Bylaw No. 7860, The Animal Control Bylaw, 1999.

BACKGROUND

On a bi-annual basis, Administration reviews Bylaw No. 7860, The Animal Control Bylaw, 1999 (Animal Control Bylaw) and Bylaw No. 8176, The Dangerous Animals Bylaw, 2003 (Dangerous Animal Bylaw). The Administration previously reported on this subject to City Council, at its Regular Business meeting held on October 31, 2022.

Administration is supported by the Animal Services Working Group, a group of specialists, animal experts and representatives of the community at large, who provide consultative and collaborative feedback to help inform the Administration. More specifically, this group is comprised of representatives from:

- Saskatoon Animal Control Agency;
- Saskatoon Society for the Prevention of Cruelty to Animals;
- Saskatchewan Population & Public Health Authority;
- A Clinical Associate from the University of Saskatchewan, Western College of Veterinary Medicine; and
- A member of the general public.

One of the roles of the Animal Services Working Group is to assist with the bi-annual review of the Animal Control Bylaw and Dangerous Animals Bylaw.

The Standing Policy Committee on Planning, Development and Community Services, at its meeting on January 10, 2024, considered a communication expressing concern about the number of animals permitted in a residential home and resolved:

> "That the correspondence with respect to limiting the number of animals in a household be sent to administration for inclusion in the annual review of the

Animal Control Bylaw for a report back to the Standing Policy Committee on Planning, Development and Community Services."

DISCUSSION/ANALYSIS

Proposed Amendments

Animal Control Bylaw

After a review of the Animal Control Bylaw, comments and concerns raised by a variety of sources, such as the Animal Services Working Group and members of the public, Administration is recommending two amendments to the bylaw. The amendments are designed to align with and improve upon existing enforcement mechanisms and enhance responsible pet ownership. The two proposed amendments are:

1. Not allow an animal other than a dog to enter into or remain in an off-leash area. The justification for this change is to avoid conflict with dogs within off leash areas. For example, there have been instances where horses have been known to ride within the Chief Whitecap Off Leash Area which can cause conflict and safety issues between animals and owners. The applicable fines are proposed to be the same as provided in Schedule 7(d); prohibited dog in off-leash area: $100 for the first offense, $200 for second and $300 for each subsequent offense.
2. Prohibit false information by a person when applying for a license. The justification for this change is to avoid false information on dog and cat licences, such as spayed or neutered status. The applicable fines are proposed to be the same as provided in Schedule 7(a); failure to license cat or dog: $250 for first offense, $300 for second and $350 for each subsequent offense.

The Dangerous Animals Bylaw

After a review of the Dangerous Animals Bylaw, Administration is not recommending any changes.

Trap Neuter Release Program

In June 2023, SCAT Street Cat Rescue Inc. presented to the Animal Services Working Group with a request to facilitate a Trap Neuter Release (TNR) program within the city to assist with the community cat population. The Administration has conducted some preliminary research of other municipalities. Additional research is required to determine all the implications, risks, and costs associated with a TNR program. Administration will report on a potential TNR program as an option for consideration during the 2026/2027 Business Plan and Budget Deliberations.

Household Animal Limits

The City of Saskatoon (City) does not currently limit the number of animals allowed in a residential home. The correspondence received at the Standing Policy Committee on Planning, Development and Community Services, at its meeting on January 10, 2024, with respect to limiting the number of animals in a household focused on addressing the potential for animal neglect and hoarding.

In July 2024, Administration sent a survey to 22 Canadian municipalities with 13 municipalities providing a response (see Appendix 1). It should be noted that each province has slightly different legislation related to animal cruelty which impacts municipal

roles. As a result, there is a range of service providers involved in animal cruelty investigations and enforcement, including municipalities directly, police, third party service providers or provincial agencies filling the role, as noted here in Saskatchewan. Included below is a summary of the responses collected from the 13 municipalities:

- Twelve (12) of the 13 municipalities have set a limit for the number of animals residing in a single dwelling;
- The City of Regina is the only city that replied, which currently does not have a limit for the number of animals per household;
- The City of Lethbridge has a limit on dogs per household, not cats;
- The City of London provides various layers of limits; cats versus dogs, spayed/neutered versus not spayed/neutered, as well as different limits for residential dwellings versus multi-unit dwellings;
- Average limit per household is 4 dogs, 6 cats or a combined total average of 8 (limits range from 3 to 12);
- Eight (8) of 13 municipalities manage bylaw enforcement internally and 5 contract a third-party for bylaw enforcement; and
- Several municipalities reported additional civic resources including staff for bylaw enforcement of household animal limits.

Municipalities that implemented these changes allowed for grandfathering rights to be in effect until the end of the animals' life or provided a grace period where animals were required to be given up. Although municipalities have implemented a threshold limit, it does not eliminate animal welfare issues from arising.

Administration, in consultation with the Animal Services Working Group, is not recommending any changes to the Animal Control Bylaw to limit the number of pets per household for the following reasons:

- In Saskatoon, Animal Protection Services of Saskatchewan (APSS) enforces *The Animal Protection Act, 2018,* and provides animal welfare legislation, education and investigative services. The APSS have dedicated, knowledgeable and experienced Animal Protection Officers with administrative staff stationed in Saskatoon and elsewhere, to assist with the resolution of concerns about animal welfare across Saskatchewan. Residents with concerns about animal welfare or neglect are directed to contact APSS;
- Implementing a pet limit per household would require additional financial resources. Administration recognizes the significant financial challenges facing the City and the 2025 Animal Services operating budget does not include the financial resources required to implement and enforce a household pet limit. Additional financial resources would be required through the operating budget for investigation and enforcement of a household pet limit by way of the contract with Saskatoon Animal Control for Bylaw Enforcement.
- The concern raised assumes that households with multiple pets results in animal cruelty; and

- Implementing a household limit would require further research to determine how to manage foster situations, legitimate breeder operations, boarders, etc. and to develop an implementation strategy.

Administration will continue to focus on responsible pet ownership messaging and directing residents with animal welfare concerns to APSS to enforce *The Animal Protection Act, 2018*, and provide animal welfare legislation education.

If directed by City Council, Administration could provide a report for consideration during the 2026/2027 Business Plan and Budget Deliberations for the implementation of a limit to the number of pets per household, including costs, implementation plan, bylaw amendments, enforcement, fines and criteria for exemptions.

OTHER IMPLICATIONS

There are no financial, social or environmental implications identified.

NEXT STEPS

Pending approval by City Council of the proposed amendments, the City Solicitor's Office will bring forward the amendments to the Animal Control Bylaw for approval to a future meeting of City Council.

To promote public awareness of these amendments, they will be highlighted and referenced on the Animal Services webpage.

APPENDICES

1. Animal Services Survey Summary – Animal Limits

REPORT APPROVAL

Written by:	Melissa Meacham, Open Space Consultant
Reviewed by:	Mark Campbell, Recreation Services Manager
	Mike Libke, Special Use Facilities and Capital Planning Manager
	Andrew Roberts, Director of Recreation and Community Development
Approved by:	Kara Fagnou, Acting General Manager, Community Services

SP/2025/PDCS/RCD/Proposed Amendments to Bylaw 7860, The Animal Control Bylaw, 1999/sk & mt

Animal Services Survey Summary - Animal Limits

City	Animal Limits in Bylaw (Y/N)	Dog Limit	Cat Limit	Combined # of Dogs/Cats	Bylaw Enforcement (Internal/External)	Extra Staff Needed (Y/N)	Grandfathered Rights (Y/N)	Comments
Ottawa, ON	Y	3	5	5	Internal	Y	Y	
Medicine Hat, AB	Y	3	6	9	Internal	Y	Unknown	
Winnipeg, MB	Y	4	6	6	Internal	Y	Y	
Victoria, BC	Y	6	6	6	External	N	Unknown	
Chatham-Kent, ON	Y	3	5	8	External	N	N	
Toronto, ON	Y	3	6	9	Internal	Y	Unknown	
Lethbridge, AB	Y	4	No Limit	No Limit	External	Y	Y	A Dog Fancier's Licence allows an owner to keep a maximum of four dogs in the same household. Without this license, only 2 are allowed. Cats are not included in their Animal Control Bylaw.
Brandon, MB	Y	2	2	4	Internal	N	Y	
London, ON	Y	3	3 to 8	3 to 8	External	Y	Y	3 pet max if NOT spayed/neutered if all spayed/neutered: Single Family dwelling: 8 cats max (if 0 dogs) Multi-Family dwelling (apartment): 5 cats max (if 0
Surrey, BC	Y	3	5	6	Internal	N	N	
Regina, SK	N	No Limit	No Limit	No Limit	External	N/A	N/A	
Calgary, AB	Y	6	6	12	Internal		Y	Information Found in Bylaw
Edmonton	Y	3	6	9	Internal		Unknown	Information Found in Bylaw

City	TNR Allowed (Y/N)	TNR in Bylaw (Y/N)	Program executed by (Internal/External)	City Approval Required for TNR (Y/N)	TNR City Grant Funding (Y/N)	Comments
Ottawa, ON	Y	N	External	N	N	
Medicine Hat, AB	Y	Y	External	Y	N	
Winnipeg, MB	Y	Y	External	N	N	
Victoria, BC	N	N/A	N/A	N/A	N/A	
Chatham-Kent, ON	Y	N	External	N	Y	Has provided funding grant in past
Toronto, ON	Y	Y	Internal	N	N	
Lethbridge, AB	Y	N	Internal	N	N	
Brandon, MB	N	N/A	N/A	N/A	N/A	
London, ON	Y	Y	Internal	N	Y	Internal Budget
Surrey, BC	Y	N	External	N	N	
Regina, SK	N	N/A	N/A	N/A	N/A	
Calgary, AB	Y	Y	External	Y	N	Information Found in Bylaw
Edmonton, AB	Y	N	Internal	N	N	Information Found in Bylaw

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

Coyote and Feeding of Wildlife Update

Recommendation of the Committee

1. That Administration be directed to proceed as outlined in the report of the Community Services Division, dated March 5, 2025; and
2. That the City Solicitor's Office be instructed to draft a bylaw to prohibit the feeding of wildlife, as outlined in the report of the Community Services Division, dated March 5, 2025.

History

The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered a report of the Community Services Division regarding the above.

Attachment

March 5, 2025 report of the Community Services Division.

Coyote and Feeding of Wildlife Update Approval Report

ISSUE

Coyote sightings and interactions have increased within city limits in recent years. This report provides an update on the City of Saskatoon's current approach to coyote management, provides information on approaches that have been implemented in other municipalities, and outlines the Administration's proposed path forward.

RECOMMENDATION

That the Standing Policy Committee on Planning, Development and Community Services recommend to City Council that:

1) Administration be directed to proceed as outlined in this report, and;
2) The City Solicitor's Office be instructed to draft a bylaw to prohibit the feeding of wildlife, as outlined in this report.

BACKGROUND

City Council, at its Regular Business meeting held on July 31, 2024, passed the following motions:

> "That the Administration report on best practices regarding wildlife in the city, specifically aggressive coyotes, with options to keep our residents and wildlife safe from harm. Provide options for how residents can precipitate an elevated response when safety concerns become more significant."
>
> "That the Administration report back on a bylaw to ban or restrict the feeding of wildlife within the City of Saskatoon."

Administration conducted a review which included meetings with other law enforcement agencies and other cities to help identify options on potential coyote response levels. A legal analysis was also conducted to evaluate considerations related to the development of municipal bylaws aimed at restricting the feeding of wild animals.

DISCUSSION/ANALYSIS

Coyote Data and Distribution

Coyote sightings within city limits has markedly increased in recent years. In 2024, the Urban Biological Services (UBS) team within the Parks Department received 214 calls regarding coyotes; see Appendix 1 for definitions and data maps. This compares to 78 in 2023 and 16 in 2022. A variety of ecological and human factors may have contributed to the high numbers of coyote calls in 2024, such as weather, prey population, other available food sources including reports of Saskatoon residents providing food, and legislative changes leading to increased coyote populations.

In Saskatoon in 2024, 64% of the coyote-related calls were resident sighting reports requiring no immediate response, while 36% of the coyote calls received required some form of response. A "response" is anything from a callback, site visit, or sign placement. Since 2014, UBS has received five calls classified as "conflicts" based on the incident description given in the call. Out of these five, four are classified as an "Incident" where no human contact occurred but the behavior was concerning to the resident. In the fall of 2024, Administration was made aware of one interaction where the Saskatoon Police Service was engaged to euthanize a coyote, believed to be the one related to the pet-attack.

Figure 2 in Appendix 1 shows the distribution of coyote-related calls received in 2024. Distribution is widespread (note that duplicate addresses show as a single plot point and that there were some callers who did not provide location information).

Current Approach in Saskatoon

When the UBS team of the Parks Department receives wildlife and coyote-related calls, the focus has been on education and co-existence. The UBS team provides information and advice, records the sightings and places signage in appropriate areas.

The City does not currently conduct hazing, aversion conditioning or euthanize in response to aggressive interactions with coyotes. Hazing and aversion conditioning are both activities intended to modify and discourage undesirable coyote behavior, further information is provided in Appendix 1. Both the Provincial Conservation Officer team and Saskatoon Police Service are called to attend to and deal with dangerous coyotes.

Administration has improved collaboration and information sharing to and from other partners, specifically Meewasin and the RM of Corman Park. Collaboration has also increased with the Saskatoon Police Service and the Provincial Conservation Officer teams to ensure that if there is a serious complaint about a coyote, there will be a timely response.

Refer to Appendix 2 – City of Saskatoon Coyote Information Sheet for additional background on coyotes and the current approach.

Provincial Conservation Officers

Province of Saskatchewan Conservation Officers have on occasion provided aid within city limits under limited circumstances, usually for larger animals such as moose and deer. In Saskatchewan, responsibility for coyote management typically falls to municipalities, as coyotes are not protected animals; however, Conservation Officers will continue to provide assistance, when able, in escalated situations where the animal is a threat, rabid, or displaying clear signs of illness.

Saskatoon Police Service

The Saskatoon Police Service has several officers trained in animal euthanasia. In cases where an animal is injured or actively aggressive and there is an immediate danger, SPS will respond. Nuisance animal calls, including for coyotes, are not part of their mandate given other police priorities. As stated earlier, in the fall of 2024, the

Saskatoon Police Service with the assistance of Conservation Officers attended and euthanized a coyote that was behaving erratically, this response would continue to be available as needed.

Approaches in Other Jurisdictions

Administration met with the cities of Regina, Edmonton, Calgary and Winnipeg. All other major prairie cities have seen urban wildlife interactions increase, especially related to coyotes. All cities surveyed promote coexistence as a primary method for interactions with coyotes, but also employ a variety of methods as summarized below:

- Regina: Scare coyotes away from city limits where possible; trap and release outside of city in specific circumstances; euthanize only as last resort;
- Calgary: In-house team handles calls/provides information; contractor checks activity, conducts hazing, and euthanizes if necessary;
- Edmonton: Utilizes a hybrid Park Ranger/contractor approach to provide education, identify hot spots, and conduct aversion conditioning. Approximately 20-30 coyotes are euthanized per year; and.
- Winnipeg: Coyote management is under the responsibility of Provincial Conservation Officers.

A detailed external scan, and a summary of relevant considerations on the methods employed by other cities can be found in Appendix 3.

Potential Implications for the City of Saskatoon

Considering all factors, the Administration believes that the City's approach needs to be fortified to be more in line with other larger Western Canadian cities. Specifically, engaging the services of wildlife specialists to add components such as aversion conditioning and targeted euthanasia to the City's current education and coexistence approach.

A wildlife specialist is typically involved in education, data collection, tracking, predicting areas of concern, hazing, aversion conditioning, and euthanizing as a last resort following an investigation. Further work needs to be done to define the scope and costs of such a program. Contractor costs are unknown at this time, and Administration's preliminary discussions with various industry professionals has shown that conducting this type of work within an urban area is a very specific skill, in particular euthanasia. However, progress is being made, and with every meeting Administration feels that we are getting closer to a comprehensive solution.

Bylaw Considerations

In Saskatchewan, *The Wildlife Act Regulations, 1981* (Regulations), speaks to the feeding of wildlife, which can be viewed in Appendix 4. The Province of Saskatchewan (Province) passed a general prohibition against intentionally feeding dangerous wildlife (unless exempted). This amendment to the Regulations was introduced in 2021 and was intended to alleviate the increased concerns related to dangerous wildlife encounters with humans. The Regulations make it an offence for a person to

intentionally feed a dangerous animal, which is defined as a bear, cougar, coyote or wolf or any other prescribed wildlife.

This prohibition, although clearly written, has been sparingly used in Saskatoon. We have seen incidents where homeowners have left out food in a park or on private property that has attracted deer and coyotes; however, the Conservation Officer team were not confident that these incidents met the test of intentionally feeding dangerous wildlife.

Broadly speaking, while the feeding of wildlife in the city has not historically been a significant issue, Administration notes that the implementation and enforcement of such a bylaw would be a useful tool in helping to deter residents from feeding wildlife and in helping to deter some of the unintended downstream impacts. As such, Administration recommends the development of a bylaw to prohibit the feeding of wildlife in the city. Key considerations of the Bylaw are noted below:

- The scope of the Bylaw would apply to feeding of wildlife on private property, public property and within city park spaces;
- The definition of "wildlife" would not include domesticated animals under the control of humans;
- The Bylaw is intended to address situations where wild animals are directly being fed or where food or waste is placed or left out as an attractant;
- The Bylaw would be administered and enforced by the Community Services Division;
- Enforcement options identified in the Bylaw included the issuance of Orders and Notice of Violations (tickets), and prosecution where necessary; and
- The Bylaw is not intended to address situations where bird feed is provided in a neat and clean manner.

Administration notes that challenges with the enforcement of the Bylaw are anticipated in that in some cases it may be difficult to identify the responsible party with certainty. Though on balance, with the implementation of the Bylaw and enhanced public education on the topic, it's anticipated that these will be useful measures in helping reduce coyote activity within city limits. A detailed summary of wildlife legislation and bylaws in other jurisdictions can be found in Appendix 5.

FINANCIAL IMPLICATIONS

It is noted that any costs associated with the implementation and enforcement of a bylaw to prohibit the feeding of wildlife are anticipated to be negligible as such work will be undertaken by existing staff and complaint volumes are anticipated to be minor. In the event that complaint volumes associated with feeding wildlife significantly increased, Administration would identify the need for additional staffing resources through the multi-year business plan and budget process at the appropriate time.

Administration intends to engage a wildlife specialist in the short-term utilizing funds from within existing budgets. For future years, Administration will bring forward service level options to the 2026/2027 Business Plan and Budget process.

OTHER IMPLICATIONS

There are no privacy, legal, or social implications as a result of this report.

NEXT STEPS

It is clear that the City's current and past approach is not addressing the rising concerns around increased coyote sightings and interactions within city limits. In summary, below are the next steps Administration intends to take going forward unless otherwise directed by City Council:

1. Administration will continue to monitor and refine the City's customer service response, which includes working with the Saskatoon Police Service and the Provincial Conservation Officer teams, so that if there is a serious complaint about a coyote there will be a timely response;
2. Given that spring is a very active time for coyotes and other wildlife, the Administration will activate an awareness campaign in Spring/early Summer on feeding wildlife and coyote encounters;
3. Although not successful to this point, Administration will continue to seek to engage a contractor to provide the more advanced components of a coyote management plan including aversion conditioning and euthanasia.
4. The Administration will bring forward a coyote management and response plan to be presented as a service option for the 2026/2027 budget deliberations; and
5. Based on the input from Committee and City Council, provide a bylaw amendment or bylaw to address the issue of feeding wildlife on public and/or private property.

APPENDICES

1. Coyote Ecology and Data Maps
2. City of Saskatoon Coyote Information Sheet
3. Coyote Approaches in Other Cities
4. The Wildlife Act Regulations, 1981 (Saskatchewan)
5. Feeding of Wildlife Bylaws in Other Jurisdictions

REPORT APPROVAL

Written by:	Konrad Andre, Parks, Operations Manager
Reviewed by:	Thai Hoang, Director of Parks
	Matt Grazier, Director of Community Standards
Approved by:	Celene Anger, General Manager, Community Services

SP/2025/PK/PDCS/Coyote and Feeding of Wildlife Update Approval Report/aw

Coyote Ecology and Data Maps

Coyotes are opportunistic, intelligent, and social animals that will eat most of what they find. They usually travel and hunt alone but sometimes join in loose pairs to take down prey.[1] They are territorial by nature and rely on established homelands to safely raise their offspring, secure shelter, and acquire food. Coyotes are part of a balanced ecosystem, are adept at surviving in urban environments, and they play an important role in controlling rodent and rabbit populations.

Minimizing human-coyote conflict must address problematic behaviours of both the coyote (e.g. aggression towards people and pets) and humans (e.g. intentionally or unintentionally feeding coyotes, not removing pet feces from parks or yards, improper garbage disposal, etc.) that contribute to the conflict.[2]

The term ‘hazing’ refers to actions that can be carried out by all residents such as waving arms, shouting, using noisemakers, using a garden hose, and/or throwing projectiles towards (but not at) a coyote.

The term ‘aversion conditioning’ is defined as work carried out by trained professionals and includes more intensive activities intended to modify and direct coyote behavior. This may include installing deterrents, shooting non-lethal projectiles, and proximity work with coyotes to attempt to get them to regain their fear of humans and limit their presence in the area.

Culling or terminating coyotes can create a vacancy in the ecological niche, which can result in new coyotes taking their place, inadvertently increasing populations. Coyotes are also extremely difficult to live trap as they are very suspicious of baited cages and, once relocated, often suffer poor outcomes. These implications must be taken into account when developing a coyote management program and procuring a wildlife contractor.

[1] US National Park Service.
[2] City of Calgary Coyote Conflict Resolution Guide; Page 6.

Fig 1. Volume of coyote calls received in 2024 by the City of Saskatoon

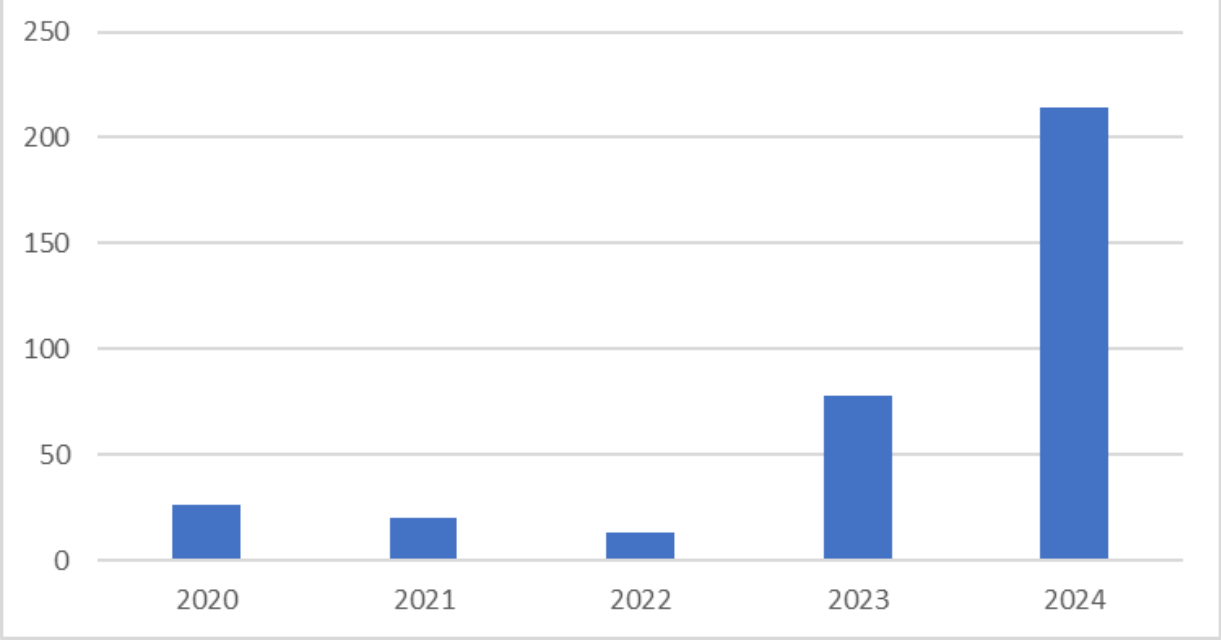
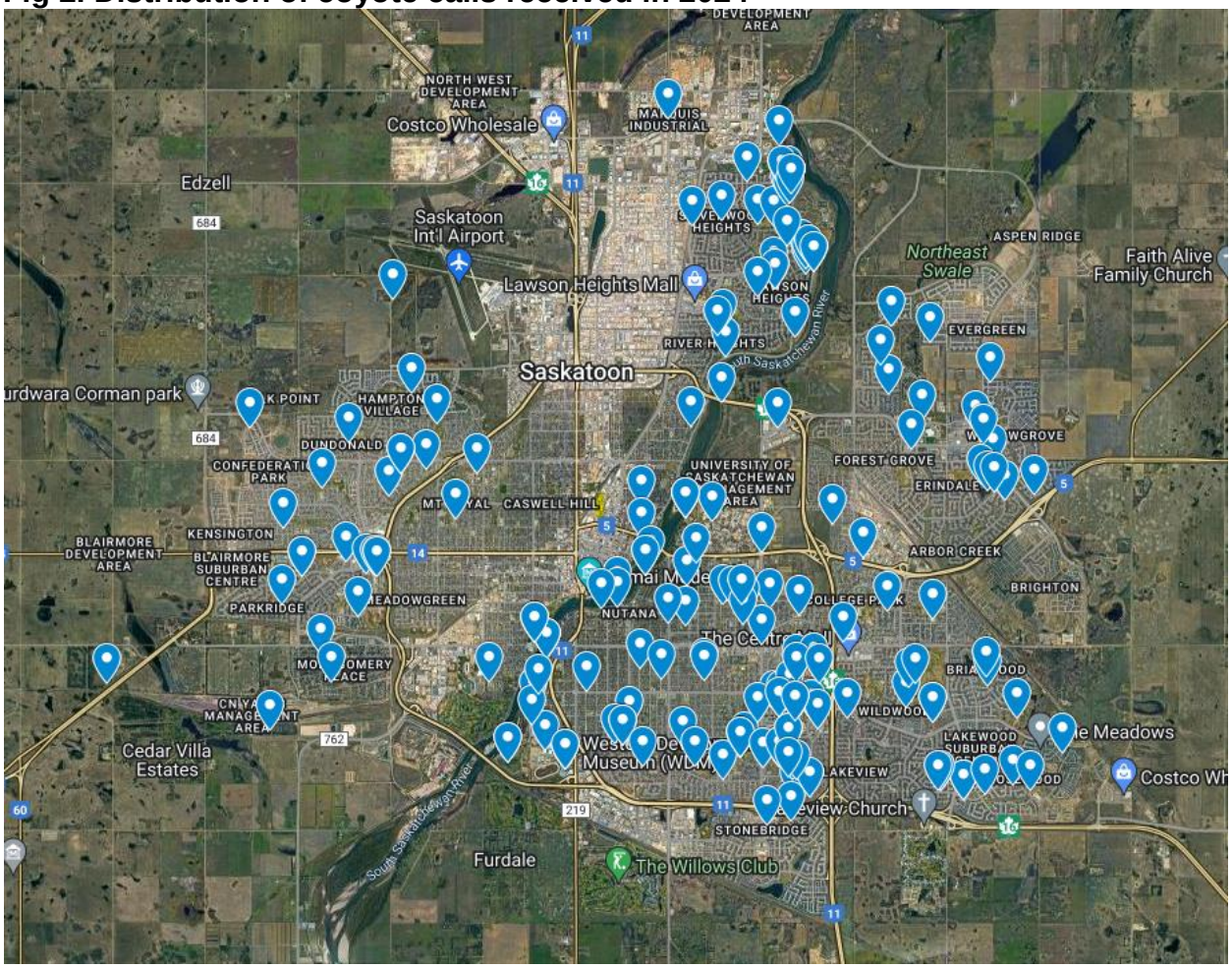


Fig 2. Distribution of coyote calls received in 2024



LIVING WITH URBAN WILDLIFE

Coyotes

If you encounter a coyote that is acting unusual (approaching people, staggering or acting confused) call Customer Care at 306-975-2476

If the coyote is acting aggressive contact the Saskatoon Police Service non-emergency line at 306-975-8300. If you are in immediate danger, call 911

DO NOT call the Saskatoon Animal Control Agency

Coyote Behaviour & Habitat

- Urban areas and green spaces are important habitats for coyotes.
- Coyotes help maintain a healthy and balanced ecosystem by controlling small pest populations.
- Coyotes are alert and curious by nature.
- When left to thrive, coyotes mate for life and are attentive parents.

What to Do If You Encounter a Coyote

- **Allow the Coyote to Leave:** Provide an open escape route.
- **Do Not Approach or Feed:** Maintain a safe distance.
- **Avoid Turning Your Back or Running:** This may trigger a chase response.
- **Keep Pets Away:** This reduces stress for both the coyote and your pet.
- **Use Hazing Actions:** Encourage the coyote to leave with these techniques:
  - *Be Assertive:* Maintain eye contact, stand tall, wave your arms and shout (but don't scream).
  - *Use Noisemakers:* Use an air horn, clanging pots and pans, a whistle or a can filled with coins or pebbles. You can also snap open an empty garbage bag or open and close an umbrella.
  - *Throw Projectiles:* Throw sticks, clumps of dirt, small rocks or a tennis ball toward (but not at) the coyote.
  - *Use Liquids in Warm Months:* Spray with a garden hose, water gun or water balloons.

Co-existing with Coyotes

Coyotes can become problematic if they lose their natural wariness of humans. Remember:

- **Never Feed Coyotes:** Feeding them makes them less afraid of humans.
- **Secure Food Sources:** Store garbage, compost, birdseed and pet food out of reach.
- **Clean Up Fallen Fruit:** Remove potential food sources from your yard.
- **Avoid Taming Behaviors:** Treat coyotes as wild animals and do not approach them.
- **Keep Pets Safe:** Always have pets under your control and on a leash in areas known to have coyotes.

Seasonal Patterns

- *January and February:* Courtship and mating season.
- *Spring to fall:* Den selection followed by pup rearing.
- *April and May:* Birth of pups.
- Juveniles or yearlings may disperse from their home range at any point during their lifetime.

Coyote Approaches in Other Cities

City	Main Approach	Other Considerations
Regina	Staff attempt to scare away from city limits.	Euthanize if they have mange or are deemed to not survive the winter from exposure.
Calgary	Manages coyotes through an in-house team that receives calls, provides information, and conducts public engagement; a contractor then checks for coyote activity, conducts hazing/aversion; after an investigation the contractor euthanizes as a last resort.	The cost of the coyote contractor in Calgary is approximately $260,000-$280,000 per year.
Edmonton	The City of Edmonton utilizes a Park Ranger approach, with two uniformed peace officers within their Community Services Department that provide education, identify hot spots, and conduct non-lethal aversion conditioning, including shooting coyotes with pepper balls. Additionally, employ a contractor for wildlife response services including coyotes.	Aversion conditioning and euthanizing has resulted in a reduction in coyote activity; approximately 20-30 coyotes per year are euthanized each year (only as a last resort.
Winnipeg	Coyote management in the City of Winnipeg is under provincial jurisdiction.	City of Winnipeg staff will contact provincial Conservation Officers who manage coyote interactions and conduct aversion conditioning (pepper balls), trapping, and euthanizing.

The Wildlife Act Regulations, 1981 (Saskatchewan)

[NOTE: the Province has a seasonal regulation on feeding deer on Crown lands and a general prohibition against feeding coyotes anywhere and anytime.]

Placing of bait

18.1(1) No person, for the purpose of hunting big game, shall place bait, except in accordance with this section and sections 18.2, 18.3, 18.4, 18.41 and 18.42:

(a) on any land in a provincial forest as defined in *The Forest Resources Management Act*;

(b) on any unoccupied Crown land; or

(c) on any land within a provincial park or recreation site constituted pursuant to *The Parks Act* unless authorized by the minister responsible for the administration of *The Parks Act.*

Restrictions on feeding ungulates

18.42 No person shall feed wild ungulates between January 1 and July 31 in any year on lands described in subsection 18.1(1) unless authorized by the director.

Prohibition re attracting dangerous wildlife

18.44(1) In this section:

(a) "**attractant**" means any of the following:

(i) food or food waste, compost or other waste or garbage that could attract dangerous wildlife;

(ii) a carcass or part of a carcass of an animal or fish, or other meat;

(iii) any other substance or thing designated by the minister as an attractant in the Act or these regulations;

(b) "**dangerous wildlife**" means a bear, cougar, coyote or wolf;

(c) "**leave**", in relation to a person who is an owner, tenant or occupant of land or premises, includes failing to remove an attractant from or allowing an attractant to remain in, on or about that land or those premises.

(2) Subject to subsection (3), no person shall:

(a) intentionally feed or attempt to feed dangerous wildlife;

(b) provide, leave or place an attractant in, on or about any land or premises with the intent of attracting dangerous wildlife; or

(c) provide, leave or place an attractant in, on or about any land or premises where there are or where there are likely to be people in a manner that a wildlife officer is satisfied could:

(i) attract dangerous wildlife to the land or premises; and

(ii) be accessible to dangerous wildlife.

(3) Subsection (2) does not apply to a person:

(a) providing, leaving or placing an attractant in, on or about any land or premises for the purposes of hunting or trapping in accordance with the Act and these regulations;

(b) conducting an agricultural operation, as defined in section 2 of *The Agricultural Operations Act*, in Saskatchewan;

(c) operating a facility for the disposal of waste, that is operated in accordance with *The Environmental Management and Protection Act, 2010* and the regulations made pursuant to that Act.

Saskatchewan Cities and Towns

White City Bylaw No. 695-23, *Community Standards Bylaw*

[NOTE: White City has chosen to pass a general bylaw that would apply to all animals on private land. For enforcement, White City provides both a $100 fine option and an order to remedy option.]

Wildlife

35 A person shall not:

(1) feed, attempt to feed, or permit the feeding of, or deposit food for consumption by wildlife on land they own or occupy;

(2) feed, attempt to feed, or permit the feeding of, or deposit food on land they own or occupy for consumption by wildlife, feral cats or birds in a way that leads to a public safety risk or nuisance condition;

(3) provide, leave or permit an attractant on their property in a manner that attracts or may attract wildlife.

(a) For the purpose of greater certainty, a nuisance, in respect of wildlife, feral cats or birds means:

(i) excessive accumulation of accessible edible materials on the property, including but not limited to raw or cooked meat, harvested fruits, harvested vegetables, bird seed or suet;

(ii) accumulation of rotten, spoiled or moldy food left openly accessible or improperly contained;

(iii) habituation, food conditioning or increased presence of wildlife to the area generally, or to the specific property due to the availability of food on the property; and/or

(iv) property damage to neighbouring property, or parkland, by wildlife due to the availability of food on the property.

(4) A person shall not provide, leave or place an attractant on a property in a matter that attracts or could attract wildlife.

36 Section 35 does not apply to a person who feeds birds on private property with a birdfeeder that is generally inaccessible to other wildlife, provided the area is kept clean.

Candle Lake Bylaw No. 08-2024, *The Animal Control Bylaw*

[NOTE: Candle Lake has chosen to pass a general bylaw that would apply to all animals but has not limited it to private lands. For enforcement, the bylaw provides for $100 fine option and does not have an order to remedy option.]

Feeding of Wildlife:

21a. No personal shall intentionally feed a wild animal or leave food or attractants of any type or in any form out of doors in such a manner as to attract, or be acceissble by a wild animal, feral or stray domestic animal on private or public property.

b. Section 21(a) does not apply to the feeding of songbirds on a property, provided the following feeding requirements are met by the owner or occupier:

(1) seed is placed in a bird feeding devic that is sufficiently above grade as to not attract or be accessible by wild animals; and

(2) bird feeding practices do not attract large flocks of homing birds such as wild, feral or domestic pigeons; and

(3) spillage of seed upon the ground is removed by the property owner or occupier forthwith and disposed of in such a manner that it does not attract wild animals, feral or stray domestic animals

City of Vancouver

Vancouver By-law No. 13321, the *Wildlife Feeding Regulation By-law*

[Note: Vancouver has passed a general bylaw that would apply to all animals on either private or public property and the enforcement mechanism is to rely on the ability to issue an order to remedy; however, if the feeding takes place in a park or on a public beach one could receive a fine of $500 under the provisions of By law No. 9360, the *Ticket Offences By-law*.]

SECTION 2
DEFINITIONS

2. In this By-law:

"ATTRACTANT" means food or food waste, meat, a carcass or part of a carcass of an animal or fish, compost or any other waste that could attract wildlife.

"WILDLIFE" means all amphibians, reptiles, birds, and mammals, both native and not native to the Province, excluding any domesticated animal under the control of a human.

SECTION 3
OFFENCES

Feeding Wildlife

3.1 In order to avoid creating a nuisance, a person must not:

(a) feed or attempt to feed wildlife; or

(b) provide, leave or place an attractant on any property in a manner that attracts or could attract wildlife.

3.2 Section 3.1 does not apply to a person who feeds hummingbirds on private property or feeds other birds with a birdfeeder that is inaccessible to other wildlife, provided the area is kept clean.

SECTION 4
ENFORCEMENT

4.1 The Manager of Property Use and any Property Use Inspector or Street Use Inspector may issue a written order to a person directing that the person take necessary steps to comply with a provision of this By-law by a date specified in the order.

4.2 No person shall fail to comply with an order issued pursuant to section 4.1.

Feeding of Wildlife Bylaws in Other Jurisdictions

City	Feeding of Wildlife Bylaw	Provincial Status
Saskatoon	No bylaw	Broad dangerous animal feeding prohibition
Regina	No bylaw	
Vancouver	Prohibition to feed all wildlife- bylaw states that no person can feed or attempt to feed wildlife or place any food or food waste in a manner that attracts or could attract wildlife	Broad dangerous animal feeding prohibition
Calgary	Community Standards Bylaw that restricts attractants for wildlife	Targeted legislation – illegal to feed wildlife in provincial parks or recreation areas – allowing municipalities to make laws of their own
Edmonton	In Edmonton, the intentional feeding of wildlife and excessive accumulation of edible materials on private and personal property is prohibited under the Community Standards Bylaw 14600, the Public Places Bylaw 14614 and the Parkland Bylaw 2202	
Winnipeg	In 2022, Winnipeg amended the Responsible Pet Ownership Bylaw to prohibit the intentional feeding of all wildlife, with the exception of birds, trapping, animal rescue or for research purposes	Targeted legislation – In Manitoba in 2015, the Province passed legislation making it illegal to feed wildlife along provincial roads and highways, however, the ban did not apply to municipal roads

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

2024 Annual Report - Public Art Advisory Committee

Recommendation of the Committee
That the information be received.

History
The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered the 2024 Annual Report of the Public Art Advisory Committee.

Attachment
2024 Annual Report of the Public Art Advisory Committee dated February 11, 2025.

Office of the City Clerk
222 3rd Avenue North
Saskatoon SK S7K 0J5

www.saskatoon.ca
tel (306) 975.3240
fax (306) 975.2784

February 11, 2025

Deputy City Clerk, SPC on Planning, Development and Community Services

Re: 2024 Annual Report – Public Art Advisory Committee [ADV2025-0103]

The mandate and function of the Public Art Advisory Committee is to:

1. Adjudicate and approve works of art and the placement of public art on behalf of City Council and the Administration for placement in open space, civic facilities and other City-owned property (with the exception of the Remai Modern Art Gallery), in accordance with Policy No. C10-025, Public Art Policy.
2. Provide advice to City Council on the:
    - purchase and donation of works of art
    - revision or development of any City policies regarding public art, memorials or commemorations
3. Provide advice to the Administration concerning the de-accessioning of artworks.
4. Educate artists and community groups regarding the City's Public Art Program.
5. Review location for appropriateness for memorials or commemorations, appoint members to the Commemorative Review Committee, and review and comment on artistic merit of a proposed commemorative work or proposed memorial in accordance with Policy C09-038, *Commemorations and Monuments Policy*.
6. Consider the Calls to Action of the Truth and Reconciliation Commission in adjudicating, approving and placing works of public art or commemorations or memorials on behalf of City Council.

Committee Membership

Membership on the Committee for the year 2024 was as follows:

Members

- Müveddet Al-Katib
- Brendan Copestake
- Kehan Fu
- James Hawn
- Ritesh Mistry
- Lia Storey-Gamble
- Obii Udemgba
- One vacancy (First Nation or Métis community representative)

Resource Members

- Councillor Mairin Loewen
- Public Art Consultant Henry Lau

Work Plan Goals and Accomplishments

The work plan goals of the Committee in 2024 were as follows:

- Adjudication of public art
- Education of artists and the community of the City's Public Art Program.

In 2024, there were not adjudication of public art.

The Advisory Committee, in September of 2024, partnered with Nuit Blanche Saskatoon to have an educational table at the event providing information on the public art program and to co-host an educational workshop.

In addition, Appendix 1 provides a summary of key topics and resolutions by meeting, and Appendix 2 provides a summary of 2024 expenditures.

2024 Reports and Communications

Matters Referred by SPC or City Council

1. Kelsey Ford - Nuit Blanche Saskatoon - Exploring a Partnership with Public Art Advisory Committee for Public Art Outreach and Engagement [PDCS2024-0202] – SPC on Planning Development and Community Services
    - *Considered March 8, 2024*

Reports/Recommendations Submitted to City Council:

There were no matters submitted to City Council

Reports/Recommendations Submitted to the Standing Policy Committee on Planning, Development and Community Services:

1. Report – 2024 Work Plan – Public Art Advisory Committee [ADV2024-0304] – April 3, 2024, SPC on PDCS meeting.

    "That the Standing Policy Committee on Planning, Development and Community Services recommend that the 2024 Work Plan for the Public Art Advisory Committee be forwarded to City Council for information."

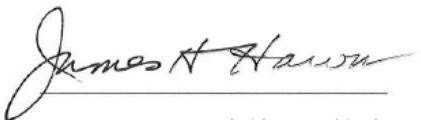
Communication by Committee Representatives (Chair, Vice-Chair, or designate) to the local media:

There were no matters communicated by Chair, Vice-Chair or designate to the local media for 2024.

ATTACHMENTS

1. Appendix 1 – 2024 Meeting Summary
2. Appendix 2 – 2024 Expenditures

Yours truly,



James Hawn
Chair
Public Art Advisory Committee

Appendix 1 – 2024 Meeting Summary – Key Topics and Resolutions

Meeting	Summary – Key Topics and Resolutions
January	• James Hawn was appointed as Chair, and Brendan Copestake was appointed as Vice-Chair for 2024 • Committee members received an orientation. • Updates from Administration deferred to February meeting • The Committee annual report was discussed, as well as subcommittee memberships. • The Committee budget allocation was discussed.

February	• Committee received a verbal update from the Chair.
	• Committee received verbal update from Arts and Culture Consultant on the following:
	  ○ Placemaker plinth leases
	  ○ February 25, 2024 gathering at Persephone Theatre
	  ○ Bus rapid transit public art project and possible timeline for 2024
	  ○ Recovery Park art installation
	• Two subcommittees were created – Public Education and Professional Development.
	• The Terms of Reference of the Committee was discussed.
	• In-camera discussion held on the Placemaker Artwork Evaluation

March	• Committee received a verbal update from the Chair. • Committee received verbal update from Culture and Inclusion Manager on the following: ○ Recovery Park Project • Referral from SPC on PDCS - Kelsey Ford - Nuit Blanche Saskatoon - Exploring a Partnership with Public Art Advisory Committee for Public Art Outreach and Engagement • Subcommittee Committees was discussed.
April	**Cancelled** – insufficient agenda items.

May	• Committee received a verbal update from the Chair.
	• Committee received verbal update from Manager of Community Development on the following:
	  ○ Staffing Update
	  ○ Oskāyak High School Community Art Project Cancellation
	• Committee received verbal update from Arts and Grants Consultant on the following:
	  ○ LeuWebb Presentation on Sidewalk Stamps
	  ○ Artist Mentorship Update
	• Meeting dates were discussed. A regular scheduled meeting will be held on November 15th

June	• Public Art Consultant Lau joined the Committee as a resource member.
	• Committee received verbal updates from Public Art Consultant Lau regarding:
	  ○ LeuWebb Bus Rapid Transit Shelter Paving Art Update
	  ○ Recovery Park Public Art Project
	  ○ Persephone Public Art
	  ○ Saskatoon Public Art Map
	• Nuit Blanche Workshop was discussed verbally. A formal proposal was requested, and a special meeting was called due to timelines to consider the matter formally.

August	**Special Meeting** • Nuit Blanche Workshop
September	• Public Education Subcommittee discussed the Nuit Blanche Workshop materials and budget request.

Appendix 2 – 2024 Expenditures

Date	Description	Amount
September 30, 2024	Nuit Blanche – Festival Partnership – Event Items	$2,500.00
October 30, 2024	Nuit Blanche – Workshop	$2,000.00
October 30, 2024	Educational Material for Nuit Blanche Event	$212.00
	Total	**$4,712.00**

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

2024 Annual Report - Development Appeals Board

Recommendation of the Committee
That the information be received.

History
The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered the 2024 Annual Report of the Development Appeals Board.

Attachment
2024 Annual Report of the Development Appeals Board dated February 12, 2025.

Development Appeals Board
c/o Office of the City Clerk
222 – 3rd Avenue North
Saskatoon SK S7K 0J5

www.saskatoon.ca
tel (306) 975-3240
fax (306) 975-2784

February 12, 2025

Deputy City Clerk, Standing Policy Committee on
Planning, Development & Community Services

Dear Her Worship the Mayor and Members of City Council:

Re: 2024 Annual Report - Saskatoon Development Appeals Board [File No. CK 430-30]

In accordance with the Development Appeals Board Policy and Procedures, as Chair of the Development Appeals Board (DAB), I hereby submit the DAB's 2024 Annual Report for City Council's information.

Background

The DAB operates as a quasi-judicial body consisting of members of the public who have been appointed by City Council to serve in a neutral position on the DAB. Sections 219 and 221 of *The Planning and Development Act, 2007*, (PDA) provide for the right of appeal and guides the DAB in making decisions on appeals, respectively. The DAB adjudicates on appeals such as those related to minor variances, misapplication of the Zoning Bylaw in issuing a development permit, refusal to issue a development permit, refusal of a subdivision application, conditions of a zoning order issued for a property, and removal of the holding symbol.

DAB Membership

Membership on the DAB for the year 2024 was as follows:

- Len Kowalko, Chair
- Nick Sackville, Vice-Chair
- June Bold, Member
- Corwyn Shomachuk, Member

The 2025 membership on the DAB is as follows:

- Nick Sackville, Chair
- Corwyn Shomachuk, Vice-Chair
- Len Kowalko, Member
- Evan Reekie, Member appointed January 29, 2025

Appeals and Hearings - 2024

In 2024, the DAB received 21 appeal applications of which 18 decisions were made. The number of appeals received decreased from 2023 where 40 appeals were received and heard. The DAB notes that the number of appeals has stayed relatively consistent over the last number of years but has declined in the last year attributed in part to amendments made to the *Zoning Bylaw* that provide flexibility in development review. Decisions of the DAB can be further appealed to the Planning Appeals Committee, Saskatchewan Municipal Board (SMB). Below is a summary of appeals made to the DAB and SMB in 2024.

	Total DAB Appeals Received	DAB Appeals Withdrawn	DAB Appeals Granted	DAB Appeals Denied	DAB Appeals Revoked	DAB Appeals Rescinded	DAB Appeals Upheld and Time Extension	Total Number of DAB Appeals filed to SMB
Permit Denial	11	1	9	1	--	--	--	1
Order to Remedy Contravention	5	--	3	--	--	--	2	--
Sign Permit	3		3	--	--	--	--	--
No Denial Issued	2	--	--	--	--	--	--	--
Grand Total	21	1	15	1	0	0	2	1

The DAB heard appeals related to denial of sign and development permits and on Orders to Remedy Contravention. Appeals dealt with a contravention of *Zoning Bylaw* regulations related to signs, hard surfacing of parking spaces, and landscaping. Some of the appeals were of a minor nature. Several appeals related to material requirements for landscaping and hard surface parking in industrial areas.

The City undertook text amendments to increase flexibility in the *Zoning Bylaw* regulations which allows for timely development review. The DAB encourages City Planning staff to continue to consider amendments that may provide more administrative flexibility in development review with a potential to reduce appeal applications. Minimizing the number of appeals would reduce the DAB involvement and thereby, staff time of the offices of the City Clerk and Community Services Department. It would also help to expedite development for developers and residents.

In 2024, the DAB was re-examined as part of City Council's governance review of various Boards and Committees. The DAB's Terms of Reference was updated to include a recruitment process that requires applicants for DAB membership be interviewed by the City Agency Recruitment and Evaluation Committee (CARE) using a recruitment and performance evaluation matrix, along with increasing remuneration for DAB members, and implementing mandatory training for members of the DAB. These updates came into effect January 1, 2025.

Remuneration, as determined by City Council on June 26, 2024, and effective on January 1, 2025, is as follows:

Panel Chairperson	$150 for up to and including 4 hours per day; $25 per hour for each additional hour per day as required;
Panel Member	$100 for up to and including 4 hours per day; $25 per hour for each additional hour per day as required.

In addition, the member who writes the decision of the DAB shall receive a further $50.00 for each decision written by the member.

The remuneration is supportive of the updated recruitment process and time commitment of members.

In implementing member training, the Secretary to the DAB pursued sources of training for members with the Ministry of Government Relations. The training will ensure that new and continuing members have a sound understanding of the DAB mandate and enabling legislation. It is expected that member training will be provided early in 2025.

As in past years, the DAB appreciates the assistance given by the Community Services staff, for the thoroughness and comprehensive manner in which appeals are presented to the DAB, and to the staff of the City Clerk's Office for the administrative support.

Sincerely,

Len Kowalko
DAB Chair, 2024

LK:drs

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

2024 Annual Report - Municipal Heritage Advisory Committee

Recommendation of the Committee
That the information be received.

History
The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered the 2024 Annual Report of the Municipal Heritage Advisory Committee.

Attachment
2024 Annual Report of the Municipal Heritage Advisory Committee dated February 11, 2025.

City of Saskatoon

Office of the City Clerk
222 3rd Avenue North
Saskatoon SK S7K 0J5

www.saskatoon.ca
tel (306) 975.3240
fax (306) 975.2784

ANNUAL REPORT

February 11, 2025

Secretary, Standing Policy Committee on Planning, Development and Community Services

Re: 2024 Annual Report– Municipal Heritage Advisory Committee [ADV2025-0102]

The mandate of the Municipal Heritage Advisory Committee (the Committee) is to provide advice and guidance on matters relating to Heritage and heritage related matters.

Committee Membership

Membership on the Committee for the year 2024 was as follows:

Members

- Stevie Horn, Saskatoon Public Library
- Louis Aussant, Saskatchewan Association of Architects
- Stephanie Clovechok, Discover Saskatoon
- Daniel Ash, Public
- Sarah Marchildon, Downtown Saskatoon Business Improvement District
- Anne-Marie Cey, Broadway Business Improvement District
- Magel Sutherland, Meewasin Valley Authority
- Randy Pshebylo, Riversdale Business Improvement District
- Syed Amin Sadat, Public Member
- Lenore Swystun, Saskatoon Heritage Society
- Lloyd Moker, Sutherland Business Improvement District
- Taylor Morrison, Saskatchewan REALTORS Association
- Alyshia Reesor, Saskatoon Archaeological Society
- Michelle Loi, Public
- Vacant, Saskatchewan Indigenous Cultural Centre

Resource Members

- Councillor C. Block
- City Archivist J. O'Brien
- Heritage and Design Coordinator K. Grant

Work Plan Goals and Accomplishments

The Committee had submitted the following work plan goals for 2024 to the Standing Policy Committee on Planning, Development and Community Services on April 3, 2024.

In 2024, Committee will:

1. Review Heritage Policies and Plan
2. Funding for the Heritage Conservation Program
3. Explore best practices around tangible and intangible heritage of other cities.
4. Continue to look at having more properties designated.
5. Indigenous Heritage
6. Heritage elements in the downtown area
7. Heritage Awards Program

The Committee had four subcommittees to carry out 2024 work plan goals.

The subcommittees were as follows:

- **Events Subcommittee**
  - *This subcommittee was established to assist in the planning of the Municipal Heritage Awards and Doors Open Event.*
- **Policy and Planning Subcommittee**
  - *This subcommittee was established to explore revisions to policy including, but not limited to The Heritage Property Act or the regulations thereunder and on Policy C10-020, Civic Heritage Policy.*
- **Education and Awareness Subcommittee**
  - *This subcommittee was established to support heightened awareness of the value and issues regarding preservation of Saskatoon's historic resources and promote and publicize the heritage of Saskatoon (both intangible and tangible) and provide support to partners who tell the Saskatoon story.*
- **Intangible Heritage Subcommittee**
  - *This subcommittee was established to develop a scope of work to further investigate intangible heritage and recommend an Intangible Cultural Heritage program for the City of Saskatoon.*

The subcommittees focused on updating the heritage building concerns Hose and Hydrant Building and Capital Theater artifacts and reviewed the Civic Register of Historic Places. They also reviewed the downtown area for heritage elements.

In addition, Appendix 1 provides a summary of key topics and resolutions by meeting, and Appendix 2 provides a summary of 2024 expenditures.

2024 Reports and Communications

Matters Referred by SPC, GPC or City Council

Referrals from the Standing Policy Committee

- **Update to Saskatoon's City Centre and District Plan [DEED2023-01]**
  The Administration provided a report to the Committee on the matter.
  - Resolution: That the information was received.
    - Matter considered June 18, 2024
- **Heritage Conservation Program Strategy [MHAC2024-0601]**
  The Administration provided a report to the Committee on the matter.
  - Resolution: That the information was received.
    - Matter considered June 18, 2024

Reports/Recommendations Submitted to City Council:

There were no reports from the Municipal Heritage Advisory Committee submitted directly to City Council.

Reports/Recommendations Submitted to the Standing Policy Committee on Planning, Development and Community Services:

There were no reports from the Municipal Heritage Advisory Committee submitted directly to Standing Policy Committee on Planning, Development and Community Services.

Reports/Recommendations Submitted to the Governance and Priority Committee:

There were no reports/recommendations from the Municipal Heritage Advisory Committee.

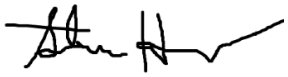
Communication by Committee Representatives (Chair, Vice-Chair, or designate) to the local media:

There were no matters communicated by Chair, Vice-Chair or designate to the local media for 2024.

ATTACHMENTS

1. Appendix 1 – 2024 Meeting Summary
2. Appendix 2 – 2024 Expenditures

Yours truly,



Stevie Horn
Chair
Municipal Heritage Advisory Committee

Appendix 1 – 2024 Meeting Summary – Key Topics and Resolutions

Meeting	Summary – Key Topics and Resolutions
January	- Stevie Horn was appointed as Chair - 2024 Membership was confirmed. - 2024 meeting dates were confirmed. - Verbal Updates on the following: o Heritage Festival - Policy and Planning Subcommittee verbal updates: o Hose and Hydrant Building o Capital Theater Artifacts - Education and Awareness verbal updates: o Civic Register of Historic Places o Downtown area heritage elements - 2024 Workplan discussion was deferred. - Subcommittee membership was deferred. - 2024 budget allocation was deferred. - Meeting format and dates were confirmed. - Membership Renewals for Heritage Saskatchewan and Saskatoon Heritage Society were approved. - Heritage Festival od Saskatoon booth registration was approved.
February	- Sarah Marchildon was appointed as Vice Chair - Verbal updates on the following: o Chair matters. o Heritage Conservation Project Update - Workplan was confirmed for submission to the Standing Policy Committee on Planning, Development and Community Services. - Subcommittee membership was confirmed. - National Trust Conference Attendee presentation. - 2024 budget allocation was deferred.
March	- The workplan was discussed and approved for submission. - 2024 budget allocation was approved.
April	**Meeting Cancelled due to no items.**
May	**Meeting Cancelled due to no items.**
June	- Subcommittee Updates were provided. - Memo – Albert Community Centre – Upgrade. - Report – Update to Saskatoon's City Centre and District Plan - Report - Heritage Conservation Program Strategy

September	- Verbal updates on the following: o Heritage Conservation Program Strategy - Workplan items were discussed. - Memo – Rugby Chapel – Repositioning - Memo – Albert Community Centre – Upgrade Project - Memo – Mann House – Verandah Roof
October	**No meeting due to Civic Election.**
November	- - Verbal updates on the following: o Doors Open Event Update o Heritage Festival of Saskatoon - Memo – Civic Conservatory – Structural Assessment

Appendix 2 – 2024 Expenditure

Date	Description	Amount
February 2024	Heritage Saskatchewan Membership Renewal	$52.50
February 2024	Saskatoon Heritage Society Membership Renewal	$30.00
February 2024	Heritage Festival Registration	$60.00
	Total	**$ 142.50**

STANDING POLICY COMMITTEE ON PLANNING, DEVELOPMENT AND COMMUNITY SERVICES

2025 Work Plan - Municipal Heritage Advisory Committee

Recommendation of the Committee
That the information be received.

History
The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on March 5, 2025, considered the 2025 Work Plan of the Municipal Heritage Advisory Committee.

Attachment
2025 Work Plan of the Municipal Heritage Advisory Committee dated February 10, 2025.

Office of the City Clerk
222 3rd Avenue North
Saskatoon SK S7K 0J5

www.saskatoon.ca
tel (306) 975.3240
fax (306) 975.2784

February 10, 2025

Deputy City Clerk, Standing Policy Committee on Planning Development and Community Services

Re: 2025 Work Plan – Municipal Heritage Advisory Committee (ADV. 2025-0201)

The function and mandate of the Municipal Heritage Advisory Committee ("MHAC") shall be to:

1. Provide advice to City Council relating to the following:
   - any matter arising out of *The Heritage Property Act* or the regulations thereunder and on Policy C10-020, *Civic Heritage Policy*
   - changes to the criteria for evaluation of properties of architectural or historical value or interest with respect to heritage designation
   - revisions to the list of buildings, sites or structures and areas worthy of conservation as set out in the *Holding Bylaw* or under the heritage database.
   - buildings, properties and artifacts to be designated under *The Heritage Property Act* or placed on the Saskatoon Register of Historic Places
   - policies related to conserving heritage buildings, sites or structures and areas.
   - proposed changes or recommended changes to municipal legislation to conserve heritage buildings, sites or structures and areas.
   - ways to increase public awareness and knowledge of heritage conservation issues, and if the Committee so wishes and if a budget is provided by City Council, provide education and awareness programs within the mandate of the MHAC, provided that the Administration is consulted prior to implementation of each program to ensure there is no duplication of services and that the proposed program supports the relevant policy.
   - any other matters relating to buildings, sites or structures and areas of architectural or historical significance.
   - buildings, sites or structures and artifacts owned by the City.
2. Provide advice to the City's Administration with respect to approval of alterations to designated heritage property or property for which a notice of intention has been registered pursuant to Bylaw No. 8356, *The Heritage Property (Approval of Alterations) Bylaw, 2004.*
3. Prepare and update, in consultation with the Administration, a brochure and/or information on the City's website describing the Committee's mandate, membership, qualifications, recent activities, regular meeting schedule and how the public can contact the Committee.

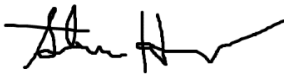
Work Plan for 2025

The Committee at its meeting held on February 18, 2025, discussed relevant matters within the Committee's mandate to include in the 2025 work plan.

In 2025, Committee will:

1. Review Heritage Policies and Plan
    - Continual support and prioritize with the Administration. Potential to support on targeted research.
2. Funding for the of Heritage Conservation Program
    - Support the Administration on securing additional funding for the Heritage Conservation Program.
        - Support and prioritize with the Administration. Research on external grants and programs could be undertaken.
3. Continue to explore having more properties designated.
    - Create a process when approaching properties that aren't designated.
        - Lead in a process creation and could prioritize properties for further conversations and support Administration in the conversations.
4. Heritage Awards Program – The Future
    - Review and recommend the future steps to the Heritage Awards Program.
5. Intangible Heritage
    - Support and prioritize with the Administration.
    - Research on Saskatchewan Cities' Intangible Programs
    - Work with the Administration with continual teachings and learnings.

Yours truly,



Stevie Horn
Chair
Municipal Heritage Advisory Committee

STANDING POLICY COMMITTEE ON FINANCE

2025 Budget Approval - Business Improvement Districts

Recommendation of the Committee

1. That the 2025 budget submissions from the Downtown Saskatoon Business Improvement District, Broadway Business Improvement District, Riversdale Business Improvement District, Sutherland Business Improvement District, and 33rd Street Business Improvement District be approved; and
2. That the City Solicitor be requested to prepare the 2025 Business Improvement District Levy Bylaws for submission to City Council for consideration at the same meeting that the Mill Rate Bylaws are presented.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

2025 Budget Approval – Business Improvement Districts

ISSUE

City Council approval is required for the 2025 budgets for each of Saskatoon's five Business Improvement Districts (BIDs).

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That the 2025 budget submissions from the Downtown Saskatoon Business Improvement District, Broadway Business Improvement District, Riversdale Business Improvement District, Sutherland Business Improvement District, and 33rd Street Business Improvement District be approved; and
2. That the City Solicitor be requested to prepare the 2025 Business Improvement District Levy Bylaws for submission to City Council for consideration at the same meeting that the Mill Rate Bylaws are presented.

BACKGROUND

The BID Bylaws require the submission of the annual budget to City Council for approval. The budget requirements determine the amount of the BID levy to be charged to commercial properties within the respective BID areas. There are five Saskatoon BIDs which were established by Bylaw in the following years:

1. 1986 – Downtown BID Bylaw No. 6710
2. 1986 – Broadway BID Bylaw No. 6731
3. 1989 – Riversdale BID Bylaw No. 7092
4. 1999 – Sutherland BID Bylaw No. 7891
5. 2014 – 33rd Street BID Bylaw No. 9235

Under Bylaw No. 9435, approved by City Council resolution on March 27, 2017, the name of the Downtown BID was changed to the Downtown Saskatoon BID.

At its Public Hearing Meeting, held on October 31, 2022, City Council passed Bylaw No. 9845, The Business Improvement Districts Bylaw, 2022, which provides a consistent and comprehensive governance regime for all the BIDs. This consolidation still allows for the establishment and management of the individual BIDs but did allow the individual BID Bylaws to be repealed.

DISCUSSION/ANALYSIS

In accordance with the BID Bylaws, each BID has submitted its 2025 budget(s) (Appendices 1 – 5) for City Council approval. The 2025 budgeted levy request for each BID was approved by its Board of Management and is summarized below.

BID	2025 Levy Request	Increase from 2024		Reason for Adjustment
		$	%	
Downtown Saskatoon	$880,693	$13,015	1.5%	Inflationary increase.
Broadway	$212,120	$4,175	2.0%	Inflationary increase.
Riversdale	$206,915	$5,057	2.0%	Inflationary increase.
Sutherland	$55,510	$0	0%	No increase from previous year.
33rd Street	$40,000	$5,000	14.3%	Increase in Administrative costs.

FINANCIAL IMPLICATIONS

The financial implications are outlined in this report for the additional levy to commercial properties within each of the respective BID areas.

OTHER IMPLICATIONS

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

NEXT STEPS

The BIDs' budget submissions require City Council approval by the end of March 2025 to ensure adequate time for the City Solicitor to prepare the 2025 BID Levy Bylaws for City Council approval before the end of April 2025.

APPENDICES

1. Downtown BID – Letter Date February 13, 2025 and Proposed Budget
2. Broadway BID – Letter Dated February 5, 2025 and 2025 Proposed Budget
3. Riversdale BID – Letter Dated February 13, 2025 and 2025 Proposed Budget
4. Sutherland BID - Letter Dated November 20, 2024 and 2025 Proposed Budget
5. 33rd Street BID - Letter Dated February 5, 2025 and 2025 Proposed Budget

REPORT APPROVAL

Written by: Maegan Piche, Revenue Accounting Manager
Reviewed by: Mike Voth, Director of Corporate Revenue
Approved by: Clae Hack, Chief Financial Officer

Admin Report - 2025 Budget Approval – Business Improvement Districts.docx

February 13, 2025

Her Worship the Mayor and City Councillors
c/o Maegan Piche, MPAcc, CPA
Revenue Accounting Manager
Corporate Revenue, Corporate Financial Services
City of Saskatoon
222 3rd Avenue North
Saskatoon, SK S7K 0J5

Re: Downtown Saskatoon BID Board Approved 2025 Operating Budget

Dear Mayor Block and City Councillors,

Please find enclosed the 2025 Operating Budget for the Downtown Saskatoon Business Improvement District. This budget was approved by the Downtown Saskatoon Board of Management for submission to the City of Saskatoon at its meeting held on Thursday, February 13th, 2025.

For 2025, the Board has approved a budget with a 3.89% increase over the 2024 fiscal year. This increase is primarily due to Accounting and Professional services more accurately reflecting realized figures. The number proposed best matches what was actual in 2024. Additionally, the organization is undergoing a renewal cycle for software, resulting in higher yearly subscriptions. Furthermore, there has been an increase in Salaries and Benefits, attributed to a 2.2% cost of living allowance for most staff and a 6% rise in group benefits premiums year over year.

The Board has approved a 22.99% increase in Event Sponsorship for 2025. This rise reflects the actual 2024 figures. These initiatives have bolstered both new and established events and programs within our business district. These programs are crucial to our business partners, as they have led to measurable increases in visitation and spending in our retail and dining sectors.

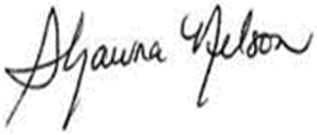
We believe the services we provide are vital to those who work, visit, and live in Downtown Saskatoon. Some of these services framed around our strategic priorities include:

- **Providing Safe and Welcoming Streets:** Eight full time Clean Team Ambassadors work to keep the district clean by picking up garbage on sidewalks and in alleys, augmenting sidewalk snow clearing efforts with two tractors, street sweeping along curbs, watering the plants and washing down the sidewalks, removing graffiti, picking up needles and providing a presence 7 days a week.
- **Enhancing a Strong Community**: Bikes in every Downtown hotel available for guests to use free of charge to explore the many experiences we have to offer in our district. Organizing the Downtown Saskatoon SideWalk Sale, supporting with sponsorship the Fireworks Festival, Saskatchewan Jazz Festival, Saskatoon PRIDE Parade, to name a few.

- **People are Priority:** Dedicated professional staff are committed to promoting and animating the district through event planning, programming, and placemaking. They also focus on building and developing relationships with our 1,000+ businesses, understanding how to serve them best. As well as collaborating with organizations such as the other 4 Saskatoon BIDS, Discover Saskatoon, the Greater Saskatoon Chamber of Commerce, SREDA, and others.
- Continued **Advocacy** encompasses a range of vital topics: from future planning, such as the support and implementation of the City Centre District Plan, support of the Downtown Events & Entertainment District, to the critical need to address mental health and homelessness issues in our district, our approach for innovative public safety measures and enhancements to public amenities and facilities. By collaborating extensively with a multitude of organizations—civic, non-profit, and private alike—we aim to transform Downtown Saskatoon into a premier destination for residential, retail, cultural, and business development.

There's so much to be excited about in Downtown Saskatoon! We are proud to showcase our leadership in championing the diverse, inclusive community that thrives within our district and throughout the city. Our efforts are making a truly impactful difference and experience for all who work, live and visit Downtown Saskatoon.

Submitted on behalf of the Board of Management,



Shawna Nelson
Executive Director

Attachment: 2025 Downtown Saskatoon Operating Budget

cc: Sara Wheelwright, Board Chair
Clae Hack, CFO, City of Saskatoon

Downtown Saskatooon Business Improvement District

2025 Operating Budget

Approved by Board
on Feb 13, 2025

	2024 Budget	2025 Budget	% Change
REVENUES			
DBID Levy	867,678.00	880,693.17	1.50%
Parking Reserve Revenue	157,600.00	161,560.00	2.51%
Special Event Revenue	10,000.00	20,000.00	100.00%
Street Maintenance Revenue	30,790.00	30,790.00	0.00%
Other Revenue	7,000.00	15,000.00	114.29%
Interest Revenue	8,000.00	20,253.16	153.16%
Community Support Program Administration	5,000.00	0.00	-100.00%
Total Revenues	**$1,086,068.00**	**$1,128,296.33**	3.89%
EXPENSES			
Administration			
Accounting & Professional Services (Legal, IT, Payroll)	21,000.00	38,000.00	80.95%
Office Rent & Maintenance	71,500.00	71,500.00	0.00%
Office Expenses	46,535.00	46,535.00	0.00%
Salaries & Benefits	427,833.00	438,606.33	2.52%
Total Administration	**566,868.00**	**594,641.33**	4.90%
Marketing, Research & Education			
Marketing, Advertising & Research	119,100.00	120,100.00	0.84%
Professional Development	23,000.00	23,000.00	0.00%
Heritage Programming	2,000.00	2,000.00	0.00%
Total Marketing, Research & Education	**144,100.00**	**145,100.00**	0.69%
Board & Committees			
Board Meetings & Related	3,500.00	3,500.00	0.00%
Committees	1,200.00	1,200.00	0.00%
Memberships	4,500.00	4,500.00	0.00%
Total Board & Committees	**9,200.00**	**9,200.00**	0.00%
Special Events			
Event Sponsorship	35,250.00	43,000.00	21.99%
Total Special Events	**35,250.00**	**45,000.00**	27.66%
Street Enhancement Program			
Street Maintenance Equipment & Supplies	24,100.00	24,100.00	0.00%
Street Maintenance Program Summer/Winter	303,000.00	306,705.00	1.22%
Total Street Enhancement Program	**330,650.00**	**334,355.00**	1.12%
Total Expenses	**$1,086,068.00**	**$1,128,296.33**	3.89%
Revenues less Expenses	**$0.00**	**$0.00**	
Draw to/from Reserve	0.00	0.00	
Surplus (Deficit) after Draw to/from Reserve	**$0.00**	**$0.00**	

Approved by Downtown Saskatoon BID Board of Management

Date: Feb 13, 2025

Chair:

Board Member: Lyndon Lepitre

Executive Director:

Broadway Business Improvement District | 306.664.6463 | Unit A 613 9th Street East, Saskatoon SK S7H 0M4

Her Worship Mayor Block and Members of City Council
City of Saskatoon
c/o Meagan Piche, Revenue Accounting Manager
Corporate Financial Services, 222 3rd Avenue North
Saskatoon, SK S7K 0J5

Wednesday, February 5, 2025

Re: Broadway Business Improvement District 2025 Budget

Her Worship the Mayor and City Councillors,

On behalf of the Broadway Business Improvement District (BBID), I would like to extend my gratitude for your continued support of our district. Broadway remains a vibrant cultural and commercial hub in Saskatoon, and we are committed to fostering a dynamic and welcoming environment for businesses, residents, and visitors alike.

Please find attached the 2025 Broadway Business Improvement District Budget, approved by the Board of Directors on January 16, 2025.

The BBID plays a crucial role in enhancing the economic vitality of the area through placemaking initiatives, marketing programs, and community engagement efforts. As we look ahead to 2025, we are excited to implement several key projects that will further strengthen our district:

- **Broadway Door Décor Project** – Transforming ten alley and business doors into vibrant art installations to enhance the cultural appeal of the district.
- **Lighting** – working with the City of Saskatoon's Urban Design team to enhance lighting installations on Broadway.
- **Broadway Ambassador Program** – Developing a community ambassador initiative focused on enhancing safety, cleanliness and walkability in the area.
- **Broadway App, Brochure & Map** – Showcasing key attractions, businesses, cultural landmarks and sponsors in print and online.
- **Bites on Broadway** – A food, art and culture event celebrating the district's culinary scene through a passport-style tasting experience.
- **Street Activations & Events** – Supporting and expanding community programming, collaborations, and ongoing street activities.

- **Façade & Security Grant Program** – Supporting businesses in improving storefront aesthetics and enhancing security measures.

To support the successful implementation of these initiatives, we have budgeted for a **2% levy increase**. We have also identified the need for additional funding to expand our staff team and increase salaries to remain competitive while providing living wages. This will help ensure that we have the capacity to execute the ideas outlined in our 2025-2028 strategic operations plan effectively.

These initiatives reflect our ongoing commitment to making Broadway a premier destination for shopping, dining, and cultural experiences. We greatly appreciate your collaboration and investment in our shared vision for the district's future.

Thank you for your time and consideration. We look forward to working together to ensure Broadway continues to thrive. Please do not hesitate to reach out if you require any additional information.

Sincerely,

Anne-Marie Cey
Executive Director
Broadway Business Improvement District

BROADWAY BUSINESS IMPROVEMENT DISTRICT 2025 OPERATING BUDGET

	2024 Budget	2025 Budget
REVENUES		
BBID Levy	$ 207,960.00	$ 212,120.00
Parking Revenue	$ 78,800.00	$ 80,800.00
City of Saskatoon Grants	$ 8,500.00	$ 9,000.00
Other Grants	$ 1,000.00	$ 9,000.00
Urban Design Projects	$ 4,700.00	$ 50,000.00
Special Event Revenue	$ 45,000.00	$ 50,000.00
Sponsorship Revenue	$ 10,600.00	$ 15,000.00
Transfer from Reserves/Previous Year	$ 11,269.36	$ -
Miscellaneous/Red Ball	$ 325.00	$ -
Total Revenues	**$368,154.36**	**$425,920.00**
EXPENDITURES		
Administration		
Salaries & Benefits	$ 179,739.64	$ 230,350.00
Accounting & Legal	$ 13,477.00	$ 11,000.00
Insurance	$ 2,000.00	$ 2,500.00
Rent, including Utilities & Parking	$ 19,800.00	$ 21,000.00
Office Expenses	$ 16,801.00	$ 16,450.00
Total	**$231,817.64**	**$281,300.00**
Marketing & Programming		
Marketing, Advertising & Promotion	$ 15,030.00	$ 15,000.00
Education & Business Development	$ 11,530.00	$ 9,000.00
Memberships & Committees	$ 909.00	$ 1,250.00
Graffiti Maintenance	$ 1,200.00	$ 1,000.00
Grants to Members	$ 3,000.00	$ 7,000.00
Urban Design Projects	$ 12,000.00	$ 15,000.00
Total	**$ 43,669.00**	**$ 48,250.00**
Special Projects and Events		
BBID Projects and Events	$ 63,229.00	$ 66,000.00
Non-BBID Event Sponsorships	$ 20,219.00	$ 22,500.00
Total	**$ 83,448.00**	**$ 88,500.00**
Board Expenses		
Board Expenses	$ 350.00	$ 350.00
Discretionary Fund	$ -	$ 5,000.00
Board Development	$ 1,000.00	$ 1,000.00
Total	**$ 1,350.00**	**$ 6,350.00**
Reserves		
Transfer to Reserves	$ -	$ -
Depreciation Expense	$ 10,000.00	$ 10,000.00
Total Expenses	**$360,284.64**	**$424,400.00**
Revenues Less Expenses	**$ 7,869.72**	**$ 1,520.00**
Draw to/from Reserves	$ 7,869.72	$ 1,520.00
Surplus (Deficit) after Draw to Reserve	$ -	$ -

February 13, 2025

Her Worship the Mayor and Members of City Council
ATTENTION: City Clerk
City of Saskatoon
222 3rd Avenue North
Saskatoon, Saskatchewan
S7K 0J5

Her Worship the Mayor and Members of City Council:

Re: Riversdale Business Improvement District 2025 Budget

The Riversdale Business Improvement District (RBID) Board of Management has approved the 2025 budget for its 36th year of operation. We are celebrating the formation of the RBID February 12, 1990, and working to continually improve the District as external forces weigh heavily on businesses here.

The Board is embarking on a new Strategic Plan for the RBID this year. They are also seeking more private investment to follow the major infrastructure projects planned and waiting since 2008 on Avenues B, D, and 21st Street West. It will again create more synergies with an expanded TCU Place, BRT and the Downtown Event and Entertainment District. The infancy stages of a revamped marketing plan are underway to continue changing perceptions of the area and attracting more customers and businesses.

The RBID Board is requesting an increase to the RBID levy of 2% for 2025 to reflect the pressures of the cost-of-living increases, and a need to maintain levels of service business and property owners require. So many scenarios continue to present themselves to the District that the Board believes being prepared to adapt quickly, will maintain the small successes we need more of here.

Should you have any questions, please contact our office at (306) 242-2711.

On behalf of the Board Management

Randy Pshebylo

Randy Pshebylo, BDM
Executive Director
Riversdale Business Improvement District

2025 Operating Budget - for Council Approval

	2024 Budget	2025 Levy Increase 2.0%
REVENUES		
BID Levy	$202,858.29	$206,915.46
Parking Grant	$78,800.00	$80,500.00
Interest Income	$3,000.00	$3,000.00
Other Income/Grant	$6,000.00	$6,000.00
Flower Pot Program	$9,300.00	$9,300.00
Riversdale Street Fair	$3,400.00	$3,400.00
Service Canada Grant	$3,000.00	$3,000.00
Total Revenue	**$306,358.29**	**$312,115.46**
EXPENSES		
Administration		
Rent/Utilities	$9,000.00	$16,000.00
Wages and Benefits	$178,864.00	$187,161.00
Office Expense	$15,000.00	$15,500.00
Insurance	$2,000.00	$2,200.00
D & O Insurance		$1,452.00
Building Maintenance		$6,800.00
Accounting and Legal	$10,500.00	$7,000.00
Total Administration	**$215,364.00**	**$236,113.00**
MARKETING AND RESEARCH		
Marketing, Advertising, and Promo	$10,000.00	$10,000.00
Total Marketing and Research	**$10,000.00**	**$10,000.00**
PROGRAMMING		
Clean and Safe/Vehicle and Fuel Expense	$48,100.00	$49,303.00
Programs	$41,180.00	$30,000.00
Heritage Projects/Special Events & Projects	$15,000.00	$15,000.00
Total Programming	**$104,280.00**	**$94,303.00**
BOARD EXPENSE		
Travel and Conference	$10,000.00	$0.00
Meeting/Board and Staff Education	$6,000.00	$4,000.00
Total Board Expenses	**$16,000.00**	**$4,000.00**
Total Expenses	$345,844.00	$344,416.00
Net Income (Loss)	($39,485.71)	($32,300.54)
Cash Reserves		$32,300.54
Total Revenues	$306,358.29	$312,115.46
Total Surplus/Deficit	**($39,485.71)**	**($0.00)**

SUTHERLAND
BUSINESS IMPROVEMENT DISTRICT

810 Central Avenue, Saskatoon, SK S7N2G6
Telephone: (306) 477-1277

www.sutherlandbid.ca

November 20, 2024

Her Worship Mayor Block & Members of City Council
City of Saskatoon
City Hall
222-3rd Avenue North
Saskatoon, SK S7K 0J5

Your Worship and Councillors:

Re: Sutherland Business Improvement District 2025 Budget Submission

Attached is the proposed 2025 budget for the Sutherland Business Improvement District (SBID). This budget has been approved by our Board of Management for submission to the City of Saskatoon.

Phases 1, 2 and 3 of our Streetscape Projects are now complete. We will now work with COS Urban Design to complete our Gateway Feature in 2025.

In 2025 we will place emphasis on operational maintenance programs within our district.

We will continue discussions on Phase 4 of our Streetscape Project which will encompass 112th street to 115th street along Central Avenue, as well as Gray Avenue.

Respectfully submitted on behalf of the Board of Management,

Sheldon Wasylenko, Chair
Enclosure

Sutherland Business Improvement District

2025 Operating Budget for Council Approval

	2024 Budget	2024 Actuals estimated	2025 Budget (Proposed)
REVENUE			
Business Levy	$ 55,510.00	$ 55,510.00	$ 55,510.00
Sponsorship/Programs	$ 2,989.00	$ 2,928.00	$ 2,928.00
BID Grant	$ 25,500.00	$ 27,000.00	$ 28,000.00
Total Revenue	**$ 83,938.00**	**$ 85,439.00**	**$ 86,498.00**
EXPENDITURES			
Administration			
Executive Director (Contract)	$ 35,000.00	$ 33,150.00	$ 33,000.00
Administrative Support	$ 2,000.00	$ 580.00	$ 1,000.00
Audit Fees	$ 2,300.00	$ 2,220.00	$ 2,300.00
Total Administration	**$ 39,300.00**	**$ 35,950.00**	**$ 36,300.00**
Programming			
Welcome Train Sign/repairs	$ 1,000.00	$ 3,255.00	$ 2,000.00
Website maintenance	$ 300.00	$ -	$ 200.00
Member development	$ 1,000.00	$ 840.00	$ 840.00
Total Programming	**$ 2,300.00**	**$ 4,095.00**	**$ 3,040.00**
Special Projects			
Urban Camp Proj/repairs	$ 800.00	$ 688.00	$ 700.00
Street signs	$ 500.00	$ 1,528.00	$ 500.00
Street maintenance	$ 35,000.00	$ 46,000.00	$ 41,000.00
Graffiti project	$ -	$ 140.00	$ -
Total Special Projects	**$ 36,300.00**	**$ 48,356.00**	**$ 42,200.00**
Board Expense			
Board Meetings	$ 300.00	$ 137.00	$ 400.00
Strategic Planning	$ -	$ 750.00	$ 500.00
Training,Conferences,Events	$ 1,500.00	$ 1,143.00	$ 1,200.00
Memberships	$ 400.00	$ 1,077.00	$ 1,200.00
Total Board Expense	**$ 2,200.00**	**$ 3,107.00**	**$ 3,300.00**
Total Expenditures	**$ 80,100.00**	**$ 91,508.00**	**$ 84,840.00**
Annual Operating Surplus/Deficit	$ 3,290.00	-$ 6,069.00	$ 1,658.00
RESERVES			
Start of year	$ 61,821.00	$ 64,649.00	$ 58,580.00
Contribution to reserve	$ 3,290.00	$ -	$ 1,658.00
Reserves used	$ -	$ 6,069.00	$ -
Year End Surplus/Deficit	**$ 65,111.00**	**$ 58,580.00**	**$ 60,238.00**

Dated: November 20, 2024

Feb 5, 2025

His Worship the Mayor and City Council
Attention: City Clerk
City of Saskatoon
222 3rd Ave. North
Saskatoon, Sask. S7K 0J5

RE: 33rd Street BID 2025 Budget Submission

His Worship the Mayor and Members of Council:

The 33rd Business Improvement District Board of Directors has unanimously approved the 2024 operating budget on Jan 9, 2025 for submission to the City of Saskatoon.

We look forward to another great year in 2025.

We continue to work on our street scaping and special events held throughout the year. More and more people are commenting on the improvements and inquiring about the upcoming events. Our social media continues to build with new followers.

Thank you for your ongoing support of 33rd Street.

Respectfully submitted on behalf of the Board of Directors

Judy M. Denham – Chairperson

33RD STREET BUSINESS IMPROVEMENT DISTRICT

2025 Proposed Operation Budget for Council Approval

		2024 Budget	2024 Pre Audit Actuals	2025 Proposed
REVENUES				
Bid Levy		35000	35000	40000
Street Fair		5000	7693.49	7500
GST Refund		750		500
Grants			9000	4000
	Total Revenues	**40750**	**51693.49**	**52000**
EXPENDITURES				
Administration				
Directors Insurance		875	889.34	900
E.D. Salaries		16000	15999.96	20000
Bank Fees		100	51.75	100
Accounting/Legal, Professional Services		1500	2275.5	2500
Miscellaneous Office Expenses		350	62.15	300
(Additional Cloud Storage, Canva Membership,				
	Total Administration	***$ 18,825.00***	***$ 19,278.70***	***$ 23,800.00***
Special Projects & Events				
Street Fair		10000	16815.17	10000
Street Fair Coordinator		4000	4000	4000
Holiday Crawl		500	521.09	
Other (Spring Events,Holiday Events)		500	485.67	1000
	Total Special Projects & Events	***$ 15,000.00***	***$ 21,821.93***	***$ 15,000.00***
Marketing/Research/Education				
Web Site				
Other (posters, fliers, social media, etc)		1000	948.89	1200
	Total Marketing/Research/Educatic	***$ 1,000.00***	***$ 948.89***	***$ 1,200.00***
Street Enhancement				
Maintenance		1000		1200
Flower Pot Program		10000	7714.67	10000
Annual Mural		0	0	0
Street Scaping (flower pot wraps, bus shelter mural, window murals)		1500	0	0
	Total Street Enhancement	***$ 12,500.00***	***$ 7,714.67***	***$ 11,200.00***
	TOTAL EXPENDITURES	**$ 47,325.00**	**$ 49,764.19**	**$ 51,200.00**
	Surplus/Deficit	**$ (6,575.00)**	**$ 1,929.30**	**$ 800.00**
Reserve				
Start of Year		$ 24,034.06	24034.06	25963.36
Contribution to Reserve		-6575	1929.3	$ 800.00
Reserve Used				
Year End Reserve Balance		**$ 17,459.06**	**$ 25,963.36**	**$ 26,763.36**

STANDING POLICY COMMITTEE ON FINANCE

2025 Reassessment Appeal Contingencies

Recommendation of the Committee

1. That an appeal contingency of $40,000 be added to the property tax levy for the residential property class for 2025;
2. That an appeal contingency of $250,000 be added to the property tax levy for the multi-residential property sub-class for 2025; and
3. That an appeal contingency of $3,000,000 be added to the property tax levy for the commercial/industrial property class for 2025.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

2025 Reassessment Appeal Contingencies

ISSUE

It has been a longstanding practice for the City of Saskatoon to collect an additional levy to smooth out the effects of appeal losses. As these appeals can be for significant amounts and may take several years to be resolved, the Administration is requesting City Council approval to add a $40,000 appeal contingency to the property tax levy for the residential property class, $250,000 to the property tax levy for the multi-residential property sub-class, and a $3,000,000 appeal contingency to the property tax levy for the commercial/industrial property class for 2025.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That an appeal contingency of $40,000 be added to the property tax levy for the residential property class for 2025;
2. That an appeal contingency of $250,000 be added to the property tax levy for the multi-residential property sub-class for 2025; and
3. That an appeal contingency of $3,000,000 be added to the property tax levy for the commercial/industrial property class for 2025.

BACKGROUND

In past reassessment years, an appeal contingency has been levied against residential property classes as substantially more appeals are filed in the first year of an assessment cycle. The non-residential appeal contingency amount recommended to City Council is reviewed and levied annually based on estimates for the outstanding commercial assessment appeal decisions. The residential, multi-residential and commercial appeal contingencies have been established to offset large spikes which occur in the event of significant appeal decisions.

Residential and multi-residential appeal contingency levies have ranged from $0 to $348,500 in the past, whereas the annual commercial appeal contingency levy has ranged from $500,000 to $3,000,000.

Since 2011, Administration has meet with the Greater Saskatoon Chamber of Commerce (Chamber) and the North Saskatoon Business Association (NSBA) annually prior to the presentation of this report to Committee.

This meeting continues to be held annually and provides attendees with the opportunity to discuss the commercial contingency account balance, receive an annual update on the impact of appeals, and communicate the Administration's recommended annual contingency amount to be levied.

DISCUSSION/ANALYSIS

Residential Appeal Contingency

Historically, an appeal contingency has been levied in reassessment years on the residential property class and the multi-residential property sub-class to mitigate the risk of potential tax losses due to reassessment.

The following table illustrates the contingency amounts levied and the appeal losses during the previous reassessment cycle, as well as the starting and ending balance in the contingency reserves for the residential property class and the multi-residential property sub-class.

Property Class	Balance Jan 1, 2021 Surplus/(Deficit)	Levy 2021 – 2024	Appeal Losses	Balance Dec 31, 2024 Surplus/(Deficit)
Residential/Condo	($7,450)	$30,000	$ 31,919	($9,369)
Multi-Residential	($1,237)	$50,000	$252,572	($203,809)

Residential/Condominium: The contingency balance is a deficit of $9,369. A contingency of $30,000 was levied in the last reassessment cycle which was reasonable to offset appeal losses. For the current reassessment cycle, the Administration is recommending a $40,000 contingency to cover future potential losses in this reassessment cycle. If approved, the 2025 appeal contingency levy rate for residential properties would be $0.001 per $1,000 of residential assessment, which results in an additional $0.46 property tax requirement for the median single-family home above the 2025 budget requirement.

Multi-Residential: The contingency balance is a deficit of $203,809. During the last reassessment cycle, the multi-residential property sub-class saw 117 appeals. Administration is recommending a $250,000 contingency for 2025 to cover the current deficit, which leaves $46,000 for any future potential losses in this reassessment cycle. If approved, the 2025 appeal contingency levy rate for multi-residential properties would be $0.08 per $1,000 of multi-residential assessment, which results in an additional $147.80 property tax requirement for a median value multi-residential property above the 2025 budgetary requirement.

Commercial Appeal Contingency

In 2024, the increase in the commercial contingency levy, along with the successful defense of several Assessment appeals, resulted in progress towards reducing the commercial contingency deficit balance from a $5,268,235 deficit to a $2,281,058 deficit. An additional contingency amount of $3,000,000 would not only eliminate the remaining deficit, but also provide a reasonable cushion to help mitigate the risk of commercial appeal losses that occur in 2025.

If approved, the 2025 appeal contingency levy rate for commercial properties would be $0.31 per $1,000 of commercial assessment, which results in an additional $365.85 property tax requirement for a median value commercial property above the 2025

budgetary requirement. Also, it should be noted that as the commercial contingency is applied on top of the commercial tax ratio, it is forecasted that a $3,000,000 contingency amount would increase the assumed ratio from 1.590 to 1.635, which is still significantly below the Canadian average of 2.83[1].

The following shows the actual 2023 & 2024 balance and the estimated 2025 balance for the commercial appeal contingency.

Commercial Appeal Contingency	**2023**	**2024**	**2025 Projection**
Opening Balance Surplus/(Deficit)	$(3,493,890)	$(5,268,235)	$(2,281,058)
Contingency Levy	$ 1,500,000	$ 3,000,000	$ 3,000,000
Appeal Decisions	$ 3,274,345	$ 12,823	$ 1,000,000*
Closing Balance Surplus/(Deficit)	$(5,268,235)	$(2,281,058)	$ (281,058)

** Estimated 2025 appeal losses*

FINANCIAL IMPLICATIONS

The financial implications are outlined within this report.

OTHER IMPLICATIONS

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

NEXT STEPS

The contingency amount will be added to the residential property class, multi-residential property sub-class, and commercial/industrial property class tax rates, and will be included in the 2025 Property Tax Levy Bylaw for City Council approval before the end of April 2025.

REPORT APPROVAL

Written by: Maegan Piche, Revenue Accounting Manager
Reviewed by: Mike Voth, Director of Corporate Revenue
Approved by: Clae Hack, Chief Financial Officer

Admin Report - 2025 Reassessment Appeal Contingencies.docx

[1] Altus Group. (2024, November 20) *Canadian Property Tax Rate Benchmark Report: Altus Group's comparative analysis of property tax rates for commercial real estate in Canada*. https://assets.ctfassets.net/8jgyidtgyr4v/10K5oUs2wflXLjLgS8s44T/7dd2acc41dd82873f2e3e459f176e1f7/ENG_-_2024_Canadian_Tax_Rate_Benchmark_Report.pdf

STANDING POLICY COMMITTEE ON FINANCE

Preliminary Year-End Results - December 31, 2024

Recommendation of the Committee

1. That $158,798.02 of the year-end surplus be transferred to the Printing and Mail Equipment Replacement Reserve;
2. That the City Solicitor be directed to prepare a Bylaw Amendment for an exemption to allow the printer savings in 2024 and also savings expected for 2025 to be transferred to Printing and Mail Equipment Replacement Reserve;
3. That $414,528 of the year-end surplus be transferred to the Self-Insured Retention Reserve; and
4. That the remainder of the 2024 year-end surplus be transferred to the Fiscal Stabilization Reserve in the amount of $11,698,989.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

A letter from Sherry Tarasoff was considered along with the matter.

Attachments

1. March 5, 2025 report of the Corporate Financial Services Division.
2. Letter from Sherry Tarasoff dated March 3, 2025.

Preliminary Year-End Results – December 31, 2024

ISSUE

This report is to inform City Council of the preliminary year-end financial results for the fiscal year ending December 31, 2024. Administration is also requesting City Council approval of the following recommendations, subject to the confirmation of the external audit.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That $158,798.02 of the year-end surplus be transferred to the Printing and Mail Equipment Replacement Reserve;
2. That the City Solicitor be directed to prepare a Bylaw Amendment for an exemption to allow the printer savings in 2024 and also savings expected for 2025 to be transferred to Printing and Mail Equipment Replacement Reserve;
3. That $414,528 of the year-end surplus be transferred to the Self-Insured Retention Reserve; and
4. That the remainder of the 2024 year-end surplus be transferred to the Fiscal Stabilization Reserve in the amount of $11,698,989.

BACKGROUND

Prior to the annual external audit of the City of Saskatoon's (City) year-end financial statements, the Administration tables a report to inform City Council and the public on the preliminary year-end financial results.

At its June 26, 2024 Regular Business Meeting, while considering a report titled Harry Bailey Aquatic Centre Rehabilitation and Upgrades – Capital Budget Adjustment, City Council resolved that:

"1. The budget for Capital Project No. 10014, to support essential rehabilitation and upgrades at the Harry Bailey Aquatic Centre facility, be increased by $5,950,000 to $29,982,700; and

5. That the additional funding be allocated as outlined in the HBAC Funding Plan included in this report, which includes an exception to Reserve for Future Expenditures Council Policy C03-003 for a $500,000 allocation from the Fiscal Stabilization Reserve related to the 2023 operational savings at the HBAC."

At its December 18, 2024 Regular Business Meeting, while considering a report titled Housing Accelerator Fund Interest, City Council resolved:

> "That the Administration direct the Housing Accelerator Fund Interest to General Revenue and report back as part of the 2024 Year-End Preliminary Financial Results on the 2024 Interest made on Housing Accelerator Funds and options on how to allocate these."

At its January 29, 2025 Regular Business Meeting, City Council received a Financial Review Audit Report from the City Auditor.

DISCUSSION/ANALYSIS

Appendix 1 provides a summary of the financial results by business line for the year ending December 31, 2024. Appendix 2 provides a detailed overview of the 2024 Preliminary Year-End Financial Civic Operating or Property Tax Supported Budget results, and recommendations for allocation of the surplus funds, while Appendix 3 is a detailed overview of the Utility programs.

Property Tax Supported Civic Operating Budget Results

A surplus of $12.27 million is expected in the Civic operations which is a 1.96% variance from the approved civic budget of $626.18 million. This surplus is mainly due to $9.14 million higher than anticipated investment income, details of which is outlined in the following section.

Investment Income

The $9.14 million surplus in investment income in 2024 is due to several factors, which include:

- The interest rate earned through the bank was stronger than anticipated with an average rate of 4.90% compared to an expected average rate of 3.50%. The City's bank interest is directly tied to Canada's prime rate and the 2024 budget had anticipated rate decreases to happen earlier in 2024 than what occurred. The City's interest rate forecast was based off the projections of many major financial institutions.
- Interest on bond investments remained resilient in 2024 and was higher than expected with an average yield earned on new investments of 3.80% compared to a budgeted yield of 2.00% as experienced in prior years.

While the bond earnings and bank interest resulted in a $9.14 million surplus in 2024, it is anticipated that in 2025 investment income from these portfolios should be much closer to budget for the following reasons:

- The approved 2025 civic operating budget included an increase of $4.03 million in net investment income based on these favourable results and projection.
- The Bank of Canada targeted overnight rate began 2024 at 5.00% but started declining in June 2024. On January 29, 2025, the Bank of Canada further reduced the target for the overnight rate by 0.25% bringing that rate to 3.00%. This reduction has impacted the amount of interest earned in the City's bank account; and
- The bond market is currently experiencing some uncertainty and reductions in returns for various reasons including interest rate reductions and the introduction of more political uncertainty than in previous years including the impact of potential tariffs.

The investment earnings include $500,600 earned on the Housing Accelerator Funds (HAF) as previously reported at the December 18, 2024 Regular Business Meeting

through the Housing Accelerator Fund Interest report. City Council can choose to allocate the interest on the HAF in various ways as described in Appendix 4. If City Council chooses to allocate these funds to areas other than the transfer to the Fiscal Stabilization Reserve, direction and changes to the recommendations in this report would be required.

Remaining Property Tax Supported Civic Operating Budget Results

After accounting for the $9.14 million investment income surplus, the remaining civic operating budget surplus is $3.13 million which is a 0.50% variance from the approved civic budget of $626.18 million and is due to several favourable and unfavourable variances in various areas. Some of the more significant variances include:

- Snow & Ice Management experienced a deficit of $6.48 million. The Emergency Response Plan (ERP) activation in March 2024 resulted in a $5.50 million deficit and additional snow events in the remainder of the year are causing the additional overage. A total of nine snow events occurred in 2024 compared to the budgeted number of events of five to six annually.
- Transit Operations had a surplus of $4.96 million. Revenues were $2.10 million favourable due to increased ridership and higher than expected UPass revenue. In addition, expenditure savings of $2.86 million were primarily due to fuel and salary savings and vacant positions; and
- As part of a corporate-wide objective to help offset budgetary pressures, Administration realized savings, in staff training and travel, staff vacancies, materials, office supplies and other expenditures, of approximately $4.87 million in 2024 amongst the Civic Operating or Property Tax supported Business Lines.

A more detailed overview of all favourable and unfavourable variances can be found in Appendix 2.

Property Tax Supported Civic Operating Budget Recommendations

If the recommendations of this report are approved, the 2024 surplus will allow for a contribution to the Fiscal Stabilization Reserve which has been significantly relied upon in recent years. The stabilization reserves are critical tools the City uses to address unforeseen financial challenges such as years with higher-than-normal snowfall, volatile prices in various areas such as fuel and other operating budget fluctuations. The Administration's recommendation is to utilize the surplus of $12.27 million, as follows:

- $158,798 of the year-end surplus be transferred to the Printing and Mail Equipment Replacement Reserve. This recommendation is intended to retain 2024 printer lease savings for future use when the City's printer fleet requires replacement and is currently under funded. More information can be found in Appendix 2.
- $414,528 of the year-end surplus be transferred to the Self-Insured Retention Reserve. This recommendation is a result of $638,116 in insurance savings in 2024 compared to budget from Administration revising existing insurance contracts. A partial $414,528 transfer into the Self-Insured Retention Reserve

would bring the reserve balance to the maximum amount allowable of $2.50 million as per Council Policy C03-003, Reserves for Future Expenditures.

- The remaining $11.70 million of the civic surplus is recommended to be allocated to the Fiscal Stabilization Reserve which will bring the balance to approximately $17.04 million which will be available to offset future operating budget deficits or challenges. As presented in the City Auditor report on January 29, 2025, the City's Fiscal Stabilization and Snow and Ice Management Contingency Reserves are underfunded and the Fiscal Stabilization Reserve fails to meet the minimum targeted balance of 5% of the current year's tax-supported expenditures as outlined in Council Policy No. C03-003 Reserves for Future Expenditures. For 2024, 5% of the budgeted tax-supported expenditures would have been approximately $31.3 million. The recommended transfer would bring the Fiscal Stabilization Reserve to $17.04 million and would also leave the existing funds of $6.90 million within the Snow and Ice Management Contingency Reserve.

Utilities

As shown in Appendix 3, the following City Utility surpluses or deficits were realized in 2024, resulting in an overall 2.46% surplus in the City's Utilities:

Utility Program	(Surplus)/Deficit
Saskatoon Light & Power	$145,820
Storm Water Utility	($220,129)
Water Utility	($5,803,741)
Waste Water Utility	($4,099,153)
Waste Services Utility	($757,018)
Total	**($10,734,221)**

The majority of the 2024 surplus is related to Saskatoon Water and Wastewater which experienced revenue which was higher than expected from higher sales volumes and also experienced savings in chemicals, and maintenance and equipment from lower water main breaks.

For additional context, the Water/Wastewater Utilities have seen three deficits and four surpluses in the past seven years (including 2024). The City's operating budget, including Utilities, is always based on a variety of assumptions including weather fluctuations which impact the financial performance of the utilities significantly. Over the past seven years (2018 – 2024) Saskatoon Water/Wastewater has generated an approximate 2.00% positive variance from budget which has been utilized to fund the infrastructure renewal and replacement plans for the utility reducing the impact on future rates and borrowing.

The 2024 Utility surpluses or deficits have been transferred to or from their respective utility stabilization, capital or replacement reserves as outlined in Council Policy No. C03-003, Reserves for Future Expenditures. More information can be found in Appendix 3 on the Utility surplus.

Statutory Boards and Controlled Corporation Results

The Saskatoon Police Service's surplus of $1.72 million, and the subsequent transfer to the Police Fiscal Stabilization Reserve is included in the City's year-end results. The remaining Statutory Boards and Controlled Corporations are not included in the City's year-end results but are summarized as follows:

- SaskTel Centre is reporting a preliminary surplus of $1.35 million (The guaranteed amount from the SEG agreement) before contribution to the Civic Buildings Comprehensive Maintenance Reserve and the write off of capital assets.
- TCU Place is reporting a preliminary deficit of $920,000 for the fiscal year ended December 31, 2024. The deficit will be covered through the TCU Stabilization Reserve.
- Remai Modern is reporting a preliminary operating surplus of $512,100 for the fiscal year ended December 31, 2024, which will be used primarily for planned allocations to their stabilization reserve and capital funds.

FINANCIAL IMPLICATIONS

The financial implications are included within the report.

OTHER IMPLICATIONS

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

NEXT STEPS

The external audit of the financial statements is expected to be completed in June. Following the external audit, the audited financial statements will be presented to City Council for approval. At that time, the year-end financial results will be confirmed or adjusted based on recommendations of the external audit.

APPENDICES

1. Preliminary Financial Results – Year Ending December 31, 2024
2. Civic Operating/Property Tax Supported Preliminary Year-End Financial Results
3. Utility Preliminary Year-End Financial Results
4. Options for the Housing Accelerator Fund Interest

REPORT APPROVAL

Written by: Kari Smith, Director of Finance
Approved by: Clae Hack, Chief Financial Officer

Admin Report - Preliminary Year-End Results – December 31, 2024.docx

2024 Preliminary Year-End Results (in 000's)			
Business Line	**2024 Total Budget**	**2024 Year-End Actuals**	**Variance (Surplus)/ Deficit**
Arts, Culture & Events Venues	9,873.1	9,839.5	(33.6)
Community Support	18,865.5	18,412.0	(453.5)
Corporate Asset Management	15,908.4	15,842.1	(66.3)
Corporate Governance & Finance	80,714.9	80,993.3	278.4
Environmental Health	12,239.6	10,758.6	(1,481.0)
Land Development	-	-	-
Recreation & Culture	39,099.9	36,861.9	(2,238.0)
Saskatoon Fire	60,964.5	61,568.0	603.5
Saskatoon Police Service	121,593.3	121,593.3	-
Taxation & General Revenues	(512,166.2)	(519,649.4)	(7,483.2)
Transportation	144,752.9	144,040.2	(712.7)
Urban Planning & Dev.	8,154.1	7,468.2	(685.9)
Mill Rate Operating Surplus Prior to Transfers	-	**(12,272.3)**	**(12,272.3)**
Transfer to Printing and Mail Equipment Reserve	-	158.8	158.8
Transfer to Self-Insured Retention Reserve	-	414.5	414.5
Operating Surplus to be transferred to Fiscal Stabilization	**-**	**(11,699.0)**	**(11,699.0)**

Utility Programs	**2024 Total Budget**	**2024 Year-End Actuals**	**Variance (Surplus)/ Deficit**
Saskatoon Light & Power	-	145.8	145.8
Storm Water Utility	-	(220.1)	(220.1)
Water Utility	-	(5,803.7)	(5,803.7)
Waste Water Utility	-	(4,099.2)	(4,099.2)
Waste Services Utility	-	(757.0)	(757.0)
Utility Surplus prior to Transfers	**-**	**(10,734.2)**	**(10,734.2)**
Transfer to Utility Reserves	-	10,734.2	10,734.2
Operating Deficit (Surplus) After Transfers to Reserves	-	-	**-**

Detailed Overview of Preliminary Year-End Financial Results

City of Saskatoon General Fund – 2024 Summary				
	2024 Budget	**2024 Actuals**	**Variance**	**Percentage**
Revenues	626,182,850	650,737,278	(24,554,428)	(3.92%)
Expenditures	626,182,850	638,464,963	12,282,113	1.96%
(Surplus)/Deficit	**-**	**(12,272,315)**	**(12,272,315)**	**(1.96%)**

2024 YEAR-END MILL RATE RESULTS

The preliminary surplus for the year ended December 31, 2024, is $12.27 million equivalent to a 1.96% variance from budget. Included in these totals is:

- $951,989 transfer to the Parks Division Grounds Maintenance Stabilization Reserve as per Council Policy No. C03-003, Reserve for Future Expenditures;
- $1,631,168 transfer to the Saskatoon Police Service Fiscal Reserve and $90,000 transfer to the Saskatoon Police Service Capital Reserve; and
- $71,722 transfer to the Internal Audit Program Reserve.

The Administration is recommending that the surplus of $12.27 million be allocated as follows:

- $158,798 of the year-end surplus be transferred to the Printing and Mail Equipment Replacement Reserve. This will require City Council approval for an exception to Bylaw No. 6774, The Capital Reserve Bylaw, 1993 as noted in the recommendation.
- $414,528 of the year-end surplus be transferred to the Self-Insured Retention Reserve.
- The remaining $11.70 million of the civic surplus be allocated to the Fiscal Stabilization Reserve which will bring the balance to approximately $17.04 million which will be available to offset future operating budget deficits or challenges.

More information surrounding these recommendations can be found in the following sections of the appendix.

Stabilization Reserves

Even though the Snow and Ice Management program experienced a deficit of $6.48 million as outlined under the “Transportation” section of this appendix, Administration is recommending leaving the Snow and Ice Management Contingency Reserve balance with the existing funds of $6.90 million due to the overall Civic Budget surplus. If the recommendation is approved, this means that less money will go into the Fiscal Stabilization Reserve than if a transfer was made from the Snow and Ice Management Contingency Reserve but would allow both reserves to have funds to offset future unforeseen challenges and/or potential deficits.

The Snow and Ice Management Contingency Reserve was fully depleted as of December 31, 2022. In 2023 as part of the regular operating budget an amount of $488,500 was put into this reserve, as well as the one-time allocation from the 2023 year-end of $5.7 million to help to build this funding for future snow events. In addition to this one-time allocation, within the 2024 and 2025 budget a total of $175,400 and $166,800, respectively was approved to start building additional ongoing annual funding

into this reserve for response to future emergency snow events. This has increased the annual contribution to this reserve from $488,500 in 2023 to $830,700 in 2025.

The Fiscal Stabilization Reserve was also fully depleted as of December 31, 2022. As part of the 2023 Preliminary Business Plan and Budget meeting held on November 28 2022, City Council transferred an amount of $1.6 million from the Reserve for Capital Expenditures into the Fiscal Stabilization Reserve. The 2023 year-end transfer of an additional $4.2 million and, if approved, the 2024 year-end transfer of $11.70 million transfer in this report will bring the balance to $17.04 million within the Fiscal Stabilization Reserve as of December 31, 2024, which will be available for future years to address unforeseen budget challenges and/or deficits.

As presented in the Financial Review Audit Report the City's Fiscal Stabilization and Snow and Ice Management Contingency Reserves are underfunded and the Fiscal Stabilization Reserve fails to meet the minimum target balance of 5% of the current year's tax-supported expenditures as outlined in Council Policy No. C03-003 Reserves for Future Expenditures. For 2024, 5% of the budgeted tax-supported expenditures would be approximately $31.3 million. If the recommendations in this report are approved, the 2024 year-end balance in the Fiscal Stabilization Reserve would be equivalent to approximate 2.72% of the current year's tax supported expenditures.

It is important to note that if City Council approves the transfer into the Fiscal Stabilization Reserve, and a priority project were to arise within 2025 or beyond, City Council could request an exception to the Council Policy No. C03-003 to transfer funds from the Fiscal Stabilization to another reserve or to a capital project.

Printer Savings

In 2024, at the end of the five-year lease term, the City exercised the option to buy out 271 printers in the managed print fleet. Most of these printers remain in good working condition, providing the City with excellent value over the next few years. However, starting in 2025 and continuing annually, a portion of the fleet will need replacement. The option to buy out the leases resulted in savings of $158,798.02 in 2024. Administration is recommending the 2024 savings and 2025 expected savings of $286,800 due to the buyout of the leases be added to the Printing and Mail Equipment Replacement Reserve to fund ongoing printer replacements. As per Bylaw No. 6774, The Capital Reserve Bylaw, 1993, the targeted balance for the Printing and Mail Equipment Replacement Reserve is the estimated annual cash flow requirements projected for the next five-year period. The annual targeted amount based on the estimated five-year requirement is $350,000 to replace approximately 40 printers annually. Currently there is $45,693 within this reserve and the annual contribution for 2025 to the reserve is $23,500. As these funds were approved for printer expenditures within the current 2024 and 2025 budgets, Administration is recommending the funds remain within the printer replacement program. If these savings are not allocated to the Printing and Mail Equipment Replacement Reserve to fund future printer replacements, Administration would need to find and potentially report back to City Council an alternative funding source.

Insurance Savings

In 2024 the Risk Management program realized savings of $638,166 in insurance costs. Administration revised insurance contracts with insurance providers, including more self-insuring of various programs which resulted in these savings. Due to the increase in self-insured programs, Administration is recommending that a transfer of $414,528 be made into the Self-Insured Retention Reserve to bring the reserve balance to the maximum amount allowable amount of $2.50 million as per Council Policy C03-003, Reserves for Future Expenditures.

Preliminary Year-End Comparison to 3rd Quarter Forecast

The 2024 Financial Forecast presented to the Standing Policy Committee on Finance meeting on January 15, 2025, estimated a surplus of $5.2 million for the 2024 year-end civic operating results. The increased surplus at year end is due to many factors with some of the larger items being:

- Lower deficit than anticipated in the Snow and Ice Management Service Line of $1.00 million due to costs being lower than expected for the snow events that occurred later in 2024.
- Higher investment income by $600,000 due to lower-than-expected interest expenditures and higher interest rates.
- Higher surplus than anticipated in Transit and Access Transit of $3.74 million due in part to continued increases in revenue from higher than forecasted ridership and lower expenditures for fuel, technology and transit ticket sales commissions.
- At the 3rd quarter report Corporate Governance was expecting a $3.2 million deficit, however this Business Line ended the year at a $278,465 deficit. This is due to additional staff vacancies and savings in insurance, training, or office expenditures but also due to the corporate expenditures which are forecasted throughout the year in this Business Line but are realized within other Business Lines. For example, this Business Line will hold forecasts for contract settlements as an aggregate but at year end those amounts are dispersed throughout the appropriate Business Lines.

For further information, where applicable, explanations for the significant variances by business line, and service line are provided in greater detail below.

Arts, Culture and Events – Surplus of $33,572

The surplus in the Arts Culture and Events business line is $33,572. The surplus is due to lower-than-expected insurance costs which are covered by the City for the Remai Modern.

Community Support - Surplus of $453,483

Expenditure savings were realized due to savings from lower school usage of facilities per the reciprocal use agreement (offset by lower revenues in Leisure Facilities), lower uptake in waste as a utility subsidy, and recreation and sport facilities grants, and favorable variances in the City's property tax abatement and grant programs.

Corporate Asset Management – Surplus of $66,326

Energy management experienced a surplus due to natural gas and electrical rates lower than anticipated as well as lower electrical consumption. This was partially offset by a deficit within the Facilities Management group due to higher staffing, partially offset from reduced contractor costs, also an unbudgeted health and safety position and custodial costs supporting enhanced cleaning levels and expanded services, some of which are directly offset through cost recoveries.

Corporate Governance & Finance – Deficit of $278,465

This business line contains the budget for $3.75 million of global reduction or targeted savings. Many of these savings are recognized in various other business lines and summarized in the Overall Saving section of this Appendix. This business line also contains the budget for overall staffing payroll costs/benefits, CBA increases, etc. which would also be recognized throughout the various other business lines. Some of the other key variances in this Business Line include:

- Human Resources related expenditures were favourable by a variance of $1.09 million due to staffing vacancies, targeted training and office expenditure savings.
- Information Technology (IT) related expenditures were favourable by a variance of $952,900 million due to savings realized for software licensing, and lower equipment maintenance than expected.
- City Solicitor's realized a favourable variance of $947,986 due in large part to the savings in insurance costs from revised insurance contracts and staffing vacancies. Administration is recommending that a portion of these savings be moved into the Self-Insured Retention Reserve.
- As per Policy, any unexpended funds, if applicable, in the Independent Office of the City Auditor program (Office) would get transferred to the Internal Audit Program Reserve or over expenditures would be funded from the reserve. During 2024, the Internal Audit program was underspent by $71,722 largely due to staff vacancies which was transferred to the Internal Audit Program Reserve. Following the transfer to reserve, the Internal Audit Program Reserve has a balance of $470,280 as of December 31, 2024.

Environmental Health – Surplus of $1.48 million

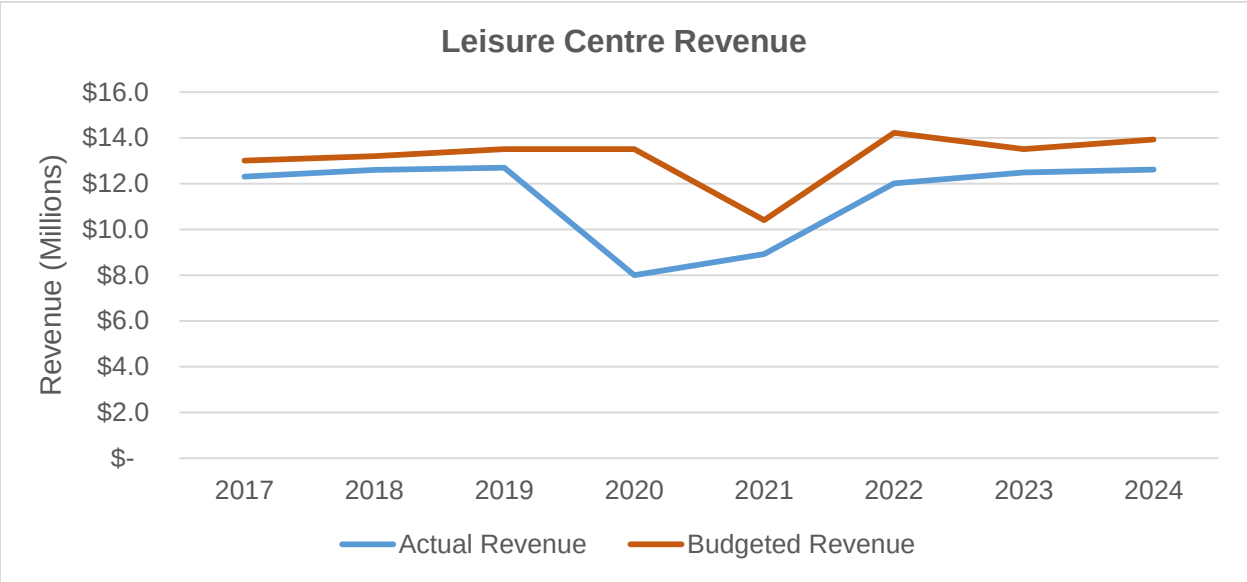
The service line of Waste Handling Services, which includes Landfill Operations, had a favourable revenue variance of approximately $336,000 due to overall garbage collection volumes at the landfill exceeding budget as well as additional revenue through the Sort & Go Facility. Within the multi-unit and commercial collection programs expenditures were favourable due to lower tonnage, as well as lower volumes than expected resulting in lower costs for material diversion at the landfill.

Sustainability had a favourable variance due to staff vacancies and savings in training and office related expenditures. Urban Biological Services also had a favourable variance mostly due to reduced purchase of chemicals, and staff vacancies.

Recreation & Culture – Surplus of $2.24 million

- Outdoor Pools had a surplus of $173,998 due to increased admissions and a large uptake in the summer registrations.
- Outdoor Sports Fields realized a surplus of $116,386 due to higher external rental revenues as well as savings in electrical, maintenance and fuel expenditures.
- Golf Courses ended 2024 with a surplus of $430,316 which was transferred to the Golf Course Stabilization Reserve, Golf Course Capital Reserve and Holiday Park Redevelopment Reserve to balance the service line to $0. This was a result of favourable revenues, partially offset by additional maintenance costs and increased contractual staff.
- Gordie Howe Campsite realized a deficit of $16,020 due to lower rental revenue offset by savings in utilities and maintenance. The deficit was balanced through a decreased contribution to the Campsite Reserve.
- Leisure Centres had a surplus of $1.82 million. Overall revenues for leisure centres are below budget by $1.32 million as shown in Chart 1. However, this revenue deficit includes reduced revenues due to the temporary closure of the Harry Bailey Aquatic Centre, starting April 1, 2023, for a major upgrade. These unfavourable revenue variances are offset, by reduced expenditures at Harry Bailey Aquatic Centre, reduced training, staff vacancies and lower utility expenditures resulting in an overall surplus for the Leisure Centres of $1.82 million.

Chart 1 – Leisure Centre Revenue



- Parks Maintenance & Design operations had a surplus of $951,989 due to global reduction in staffing and staff vacancies, lower irrigation requirements and changes to the greenhouse short-term operating model as approved at the June 28, 2023 City Council meeting. In accordance with

Council Policy No C03 003, the unexpended funds in Parks Maintenance & Design are to be transferred to the Parks Division Grounds Maintenance Stabilization Reserve or taken from the reserve in years of deficit to stabilize the program. A contribution of $951,989 was transferred to the reserve resulting in a December 31, 2024, balance of $1.43 million remaining in the Parks Grounds Maintenance Stabilization Reserve.

- River Landing is a service line which is balanced to $0 with a transfer to (or from) the Reserve of Capital Expenditures (RCE). Lower than expected parking revenue was partially offset by savings in salaries, lower property taxes than expected and reduced advertising and training costs resulting in an overall surplus of $87,565 which was transferred to RCE to balance this service line to $0.

Saskatoon Fire – Deficit of $603,536

The deficit for Saskatoon Fire is partially due to an estimated amount for contract settlement which would be offset, in part, by the organizational contingency which was held in Corporate Governance and Finance and savings from staff vacancies. Additional expenditures for apparatus maintenance due to older apparatus, and building maintenance also contributed to the deficit.

Saskatoon Police Service – Surplus of $1.72 million

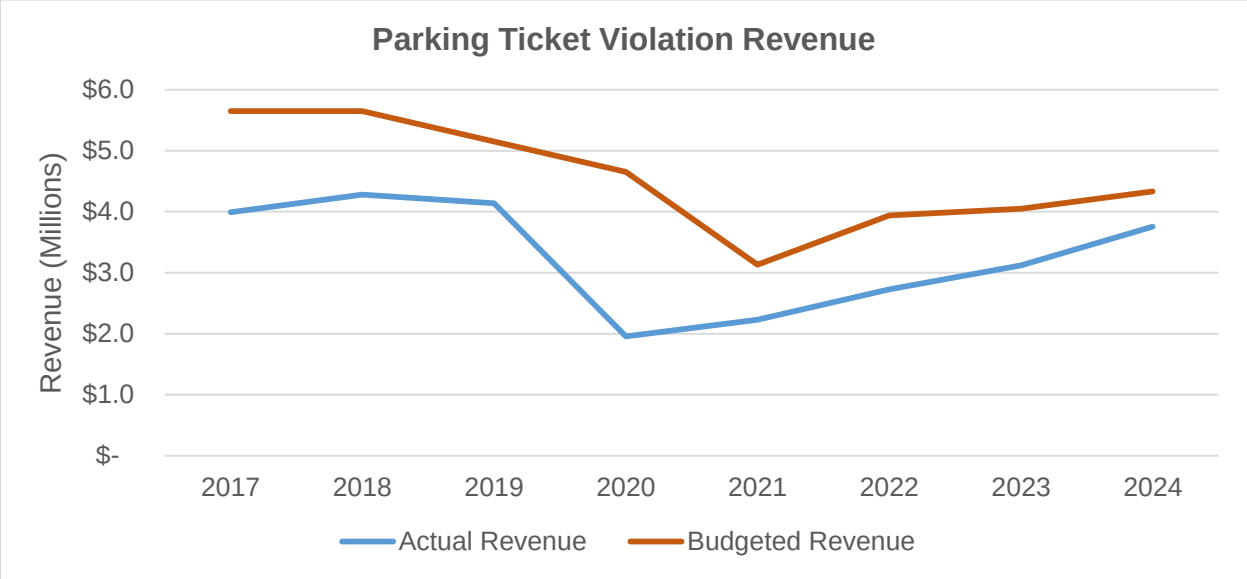
Saskatoon Police Service (SPS) had been projecting to be on budget on Q3 2024. This was due, in no small part, to the outstanding Binding Arbitration Decision between the Board and the Saskatoon Police Association.

In the end, the SPS ended 2024 with a $1.72 million surplus. The surplus has been placed in the SPS Capital Reserves ($90,000) and the SPS Fiscal Stabilization Reserve ($1.63 million). Those savings will help relieve pressure on the 2025 SPS Operating Budget which will not fully cover the expense arising from the Binding Arbitration Decision.

Taxation & General Revenues – Surplus of $7.48 million

- Fines & Penalties had a $1.50 million deficit due to parking ticket violation revenue which had an unfavourable variance of $573,000 (87% of budgeted revenue) as well as additional expenditures for provincial administrative fees and collections. The disparity between budget and actual revenue for parking tickets is a long-standing base budget issue as demonstrated in Chart 2, that shows the base budget for parking ticket violation revenue has been too high for normal operations.

Chart 2 – Parking Ticket Violation Revenue



- Other levies had a surplus of $596,710 due to additional Municipal Service Agreement revenue from the Urban Reserves as well as additional tax penalty revenue received throughout the year.
- General Revenues had a $8.01 million surplus mostly due to favourable amounts in investment income of $9.14 million due to stronger than anticipated interest rates. This was partially offset by lower-than-expected franchise fees from SaskEnergy.
- Grants-in-Lieu of Taxes (GIL) had a deficit of $803,803 from lower amounts received from Saskatoon Light and Power due to an expected rate increase which did not occur.
- Municipal Revenue Sharing (MRS) revenue is received from the provincial government and is based on Provincial Sales Tax revenue. The amount received was slightly lower than budgeted by $25,400.
- Additional supplementary assessments and supplementary property tax bills resulted in a surplus of $1.21 million.

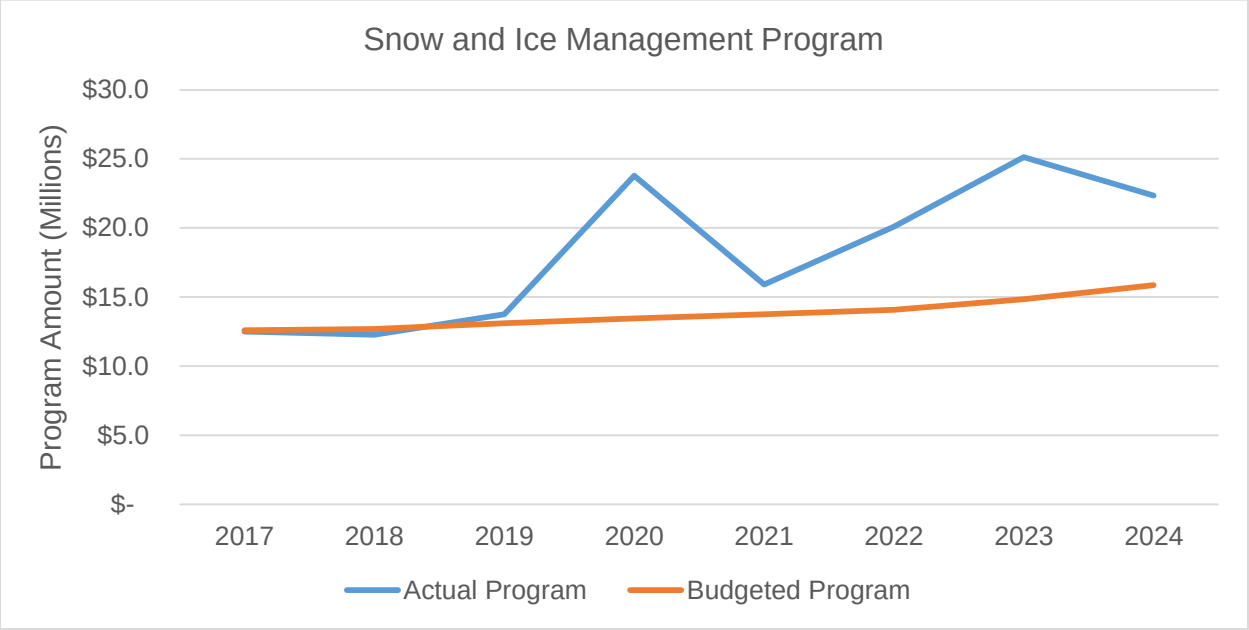
<u>Transportation – Surplus of $712,751</u>

- Road Maintenance had a deficit of $227,781 tied to an increase in the number of potholes reported through the app which were then inspected and repaired. These increased expenditures were partially offset through deferred hiring, and fuel savings.
- Access Transit had a surplus of $457,745 due mostly to salary, training and fuel savings.
- Transit Operations had a surplus of $4.96 million. Revenues were $2.10 million favourable due to increased ridership and higher than expected UPass revenue. Expenditure savings of $2.86 million were primarily due to fuel, salary savings and vacant positions, uniform and license expenditures partially offset by higher fleet maintenance expenditures.

- Street Lighting experienced a surplus of $936,793 due to an expected rate increase that did not occur in 2024.
- Parking experienced a deficit of $578,501. Revenues were under budget by $914,600 due to parking revenue achieving only 86% of the budgeted revenue partially offset by higher late ticket fees. The deficit in revenues was partially offset by reduced commissionaire costs in the residential parking permit program, reduced terminal maintenance, storage and bus barn rental costs and inversely offset by higher bank charges and software licensing charges. The deficit in this service line is partially offset by the reduced transfer to the Streetscape BID Reserve in the Urban Planning and Development service line.
- Snow & Ice Management experienced a deficit of $6.48 million. The Emergency Response Plan (ERP) activation in March 2024 resulted in an unfavourable variance of $5.50 million deficit and additional snow events in the remainder of the year are causing the additional overage. A total of nine snow events occurred in 2024 compared to the budgeted number of events of five to six annually. Administration is recommending that no transfer take place from the Snow and Ice Management Contingency Reserve leaving $6.90 million within this reserve for future years.

  Chart 3 shows the variability in a program which is weather dependant and the fluctuations that can occur.

Chart 3 – Snow & Ice Management Program



- Transportation Services had a favourable variance of $1.30 million due to additional external rental revenue and permit fees. Staffing vacancies, lower external contracted services and high capital work also contributed to the overall surplus.

Urban Planning & Development – Surplus of $685,928

- Urban Design had a surplus of $392,915 due to the reduced transfer to the Streetscape Reserve because of the reduced parking revenue as well as savings from staff vacancies.
- Attainable Housing had a surplus of $235,219 mostly due to savings from the Pleasant Hill revitalization project and the Public Housing Subsidy. The surplus was transferred to the Attainable Housing Reserve.
- Building and Plumbing Permits & Standards is a self-balancing program which had a $4.03 million surplus that was transferred to the Building Standards Stabilization Reserve mostly due to increased building and plumbing permit revenues, and savings in training and software expenditures.
- Long Range Planning, Neighbourhood Planning, Planning Project Services, Regional Planning, and Research and Mapping had a combined surplus of $320,953 due to savings in salaries, engagement, car allowance, travel and training and office expenditures.

Training and Discretionary Spending Savings

As part of a corporate-wide objective to help offset the budgetary pressures, Administration realized savings, in staff training and travel, staff vacancies, materials, office supplies and other expenditures, of approximately $4.87 million in 2024 amongst the Civic Operating or Property Tax supported Business Lines.

The savings are due to approximately $217,700 in savings from training, $2.66 million savings from deferred hiring and $2.00 million from office, maintenance or other expenditure deferrals. These savings are split amongst the business lines and are already included in the numbers mentioned in this report.

Detailed Overview of Utilities Preliminary Year-End Financial Results

Utility Program	(Surplus)/Deficit
Saskatoon Light & Power	$145,820
Storm Water Utility	($220,129)
Water Utility	($5,803,741)
Waste Water Utility	($4,099,153)
Waste Services Utility	($757,018)
Total	**($10,734,221)**

Utility Year-End Results

- Saskatoon Light & Power (SL&P) reported a deficit of $145,820. SL&P revenues were lower than budgeted largely due to an expected rate increase which did not occur. Additionally, the sales volumes were also the lowest total recorded in the last 20 years despite a growth in customers, due to conservation and more energy efficient products that are reducing demand. The decreased revenues were partially offset by decreased bulk power costs, less GIL transferred to the mill rate program, salary costs savings and decreased materials, supplies, tool costs and general equipment.

  This deficit was offset by a transfer from the Electrical Revenue Stabilization Reserve which brought the balance in the Electrical Revenue Stabilization Reserve of $2.55 million.

- Storm Water Management Utility reported a year-end surplus of $220,129. Reduced contractor costs due to more in-house work resulted in savings in construction equipment, materials and supplies which were partially offset by higher salaries expenditures. This surplus was transferred to the Storm Water Management Stabilization Reserve resulting in a balance of $1.50 million within this reserve.

- Water Utility reported a year-end surplus of $5.80 million. Meter revenue was higher than expected however most of the savings for the Water Utility were realized from savings in expenditures like equipment and materials due to a focus on more capital work than anticipated, decreased external contracting costs from lower-than-expected water main breaks and lower amounts of chemicals utilized. Both the Water Utility surplus and the Wastewater Utility surplus were transferred to the Water and Wastewater Stabilization Reserve, which brought the reserve balance over the maximum allowable by the policy, therefore, an amount of $5.53 million from the Water Utility and $3.84 million from the Wastewater Utility was subsequently transferred from this stabilization reserve to the Waterworks Capital Projects Reserve and the Wastewater Treatment Capital Reserve, leaving a balance of $9.68 million within the Water and Wastewater Stabilization Reserve. The transfer of surplus funding into the Capital reserves will help to fund future Water and Wastewater projects and could reduce borrowing or rate increase requirements in future years.

- Wastewater Utility reported a year-end surplus of $4.10 million. Sales revenues were above budget due higher than expected volumes as well as increased levels of use in Sewer Surcharge, and Heavy Grit and Liquid Waste Disposal resulting in higher revenue. Expenditure savings were also realized due to less unplanned failures, savings in utility costs and lower contractor prices than budgeted. As mentioned, both the Water and the Wastewater Utility surpluses were transferred to the Water and Wastewater Stabilization Reserve and the amount over the maximum allowable by the policy was subsequently transferred to the Waterworks Capital Projects Reserve and the Wastewater Treatment Capital Reserve.
- Waste Services Utility reported a year end surplus of $757,018. A surplus in total revenue was realized largely due to higher-than-expected billable units but the variable garbage collections program also realized increased revenues as the number of shared carts between tenants or landlords and tenants was lower than expected. This revenue was partially offset with lower revenue due to more residents taking advantage of the smallest cart size than anticipated. Overall expenditures were below budget despite additional processing costs and increased tipping fees which were offset by reduced salaries, advertising, fuel and equipment expenditures which were all less than anticipated. The surplus within Waste Services was transferred to the Waste Utilities Stabilization Reserve which resulted in a year-end balance for this reserve of $2.53 million.

Training and Discretionary Spending Savings

As part of a corporate-wide objective to help offset the budgetary pressures, Administration realized savings, in staff training and travel, staff vacancies, materials, office supplies and other expenditures, of approximately $1.21 million in 2024 amongst the Utility Business Lines.

The savings are due to approximately $377,600 million savings from deferred hiring and $831,500 from office, maintenance or other expenditure deferrals. These savings are split amongst the business lines and are already included in the numbers mentioned in this report.

Options for the Housing Accelerator Fund Interest

At its December 18, 2024 Regular Business Meeting, while considering a report titled Housing Accelerator Fund Interest, City Council resolved:

> "That the Administration direct the Housing Accelerator Fund Interest to General Revenue and report back as part of the 2024 Year-End Preliminary Financial Results on the 2024 Interest made on Housing Accelerator Funds and options on how to allocate these."

During 2024 there was $500,600 interest earned on the Housing Accelerator Funds (HAF). City Council can choose to do a variety of things with these funds as outlined below.

1. Leave the funds as part of the year-end surplus which would then become part of the transfer to the Fiscal Stabilization Reserve. This is already part of the Administration recommendation, therefore there would be no additional action to enact this option.

2. Transfer the interest earned on unspent Housing Accelerator Funds to the Affordable Housing Reserve for the 2024 year-end. If City Council chooses this option, direction and changes to the recommendations in this report would be required, as well as an additional recommendation for an exception to Policy No. C03-003 to transfer the funds into the Affordable Housing Reserve.

3. Complete a one-time transfer to the Reserve for Capital Expenditures (RCE). This transfer will allow funds to be placed into RCE which City Council can use at their discretion for priority capital projects. The current funding remaining in RCE is $570,000. If City Council chooses this option, direction and changes to the recommendations in this report would be required, as well as an additional recommendation for the transfer to RCE and an exception to Policy No. C03-003.

4. Many of the City's most recent Asset Management Plans are showing a funding gap and City Council could choose to allocate one-time funding to any of the reserves that support these plans. The most recent funding plans as presented prior to the 2024/2025 Multi-Year Business Plan and Budget meetings are listed below for information. If City Council chooses this option, direction and changes to the recommendations in this report would be required, as well as a possible additional recommendation for City Solicitors to prepare a Bylaw for an exception of Bylaw No. 6774, The Capital Reserve Bylaw, 1993 depending on the reserve where the money would be transferred.

Asset Management Plan – 2023 Update	Annual Funding Gap
Facilities	$5.5 million
Roadways and Sidewalks	$8.3 million
Bridges and Structures	$1.5 million
Water, Wastewater and Storm Water	Water Distribution $7.7 million Wastewater Collection $1.1 million
Saskatoon Light & Power	$11.0 million
Parks	$4.85 million
Saskatoon Transit	$10.0 million

Janzen, Heather

Subject: FW: Email - Communication - Sherry Tarasoff - Preliminary Year-End Results – December 31, 2024 - CK 750-1 x 1860-1 x 1702-1
Attachments: 2025 03 05 SPC-Finance re Preliminary Year-End Results (Transit).pdf

From: Web NoReply <web-noreply@Saskatoon.ca>
Sent: Monday, March 3, 2025 4:31 PM
To: City Council <City.Council@Saskatoon.ca>
Subject: Email - Communication - Sherry Tarasoff - Preliminary Year-End Results – December 31, 2024 - CK 750-1 x 1860-1 x 1702-1

--- Replies to this email will go to [redacted] ---

Submitted on Monday, March 3, 2025 - 16:30

Submitted by user: [redacted]

Submitted values are:

I have read and understand the above statements.: Yes

I do not want my comments placed on a public agenda. They will be shared with members of Council through their online repository.: No

I only want my comments shared with the Mayor or my Ward Councillor.: No

Date: Monday, March 03, 2025

To: Her Worship the Mayor and Members of City Council

First Name: Sherry

Last Name: Tarasoff

Email: [redacted]

I live outside of Saskatoon: No

Saskatoon Address and Ward:
Address: [redacted] Peterson Cres
Ward: Ward 4

What do you wish to do ?: Submit Comments

What meeting do you wish to speak/submit comments ? (if known):: STANDING POLICY COMMITTEE ON FINANCE - March 5, 2025

What agenda item do you wish to comment on ?: 6.2.4 Preliminary Year-End Results – December 31, 2024

Comments:
Please find my comments attached. Thank you.

Attachments:

- 2025 03 05 SPC-Finance re Preliminary Year-End Results (Transit).pdf171.83 KB

Will you be submitting a video to be vetted prior to council meeting?: No

STANDING POLICY COMMITTEE ON FINANCE - March 5, 2025
6.2.4 Preliminary Year-End Results – December 31, 2024

Hello SPC-Finance members,

For the third year in a row[1], Transit operations has had higher revenues than budgeted due to increased ridership. In 2024, revenues were $2.10 million favourable due to increased ridership and higher than expected UPass revenue. Fare revenue has increased despite regular service alerts and reduced frequency, riders not paying fare, overcrowded buses stranding riders and safety concerns for drivers and riders.

I propose that this surplus should stay within Transit to improve operations and promote ridership. Some options that may be considered:

1. Bring the frequency of all routes up to the minimum standards as required by the Saskatoon Transit Service Standards.[2]
2. Implement express routes to allow direct service between major terminals, similar to the Jingle Bell Express that only runs on weekends in December.[3]
3. Expand hours or frequency on the weekends to mirror weekday operations on routes that show high usage.

Transit operations has had higher revenues than budgeted for the last three years (totalling almost $7.5 million). Is the budgeted revenue for 2025 still accurate?

Thank you,
Sherry Tarasoff

[1] Detailed Overview of Preliminary Year-End Financial Results for 2022 (https://pub-saskatoon.escribemeetings.com/filestream.ashx?DocumentId=182311#page=8) indicated that "Revenues were $2.09 million favourable due to increased ridership."
Civic Operating and Property Tax Supported Preliminary Year-End Financial Results for 2023 (https://pub-saskatoon.escribemeetings.com/filestream.ashx?DocumentId=206681#page=7) indicated that "Revenues were $3.3 million favourable due to increased ridership."

[2] Frequency changes took place on June 27, 2021 and included some changes to daytime frequency from 30- to 40-minute service on routes 26, 27, 30, 35, 43, 44, 45, 46, 50 and 55. Saskatoon Transit's Service Standards for residential frequency during the weekday requires a minimum of 30 minutes.

[3] During the weekday now, a bus trip from Confederation Mall Terminal to Centre Mall Terminal takes 40 minutes, as it must travel through downtown. The same trip on the Jingle Bell Express along Circle Drive took 25 minutes, including a stop at Market Mall.
During the weekday now, a bus trip from Lawson Mall Terminal to Market Mall Terminal takes 48 minutes, as it must travel through downtown. The same trip on the Jingle Bell Express along Circle Drive took 28 minutes, including a stop at Centre Mall.

STANDING POLICY COMMITTEE ON FINANCE

Budget Adjustment - Federation of Canadian Municipalities Green Municipal Funding

Recommendation of the Committee
That the projects outlined in the March 5, 2025, report of the Corporate Financial Services be adjusted for funding received from the Federation of Canadian Municipalities under the Green Municipal Funding.

History
The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment
March 5, 2025 report of the Corporate Financial Services Division.

Budget Adjustment – Federation of Canadian Municipalities Green Municipal Funding

ISSUE

A budget adjustment is required to add Federation of Canadian Municipalities (FCM) Funding to capital projects that were successful in their applications under the Green Municipal Fund (GMF).

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council that the projects outlined in this report be adjusted for funding received from the Federation of Canadian Municipalities under the Green Municipal Funding.

BACKGROUND

At its regular business meeting on January 25th, 2023 while considering FCM Funding: Deep Retrofits for Civic Facilities - Feasibility Study, City Council resolved, in part:

> "1. That City Council approve and direct the Administration to submit an application to the Federation of Canadian Municipalities Green Municipal Fund under the Community Buildings Retrofit initiative;
>
> 2. That, if successful, the Mayor and City Clerk be authorized to execute the agreement from FCM under the Corporate Seal;"

At its regular business meeting on June 28th, 2023 while considering Federation of Canadian Municipalities Green Municipal Fund – Pilot Funding Nitrification Expansion, City Council resolved:

> "That the Mayor and City Clerk be authorized to execute a funding agreement with the FCM under the Corporate Seal if the formal application to the Green Municipal Fund is approved by FCM".

At its regular business meeting July 31st, 2024 while considering Federation of Canadian Municipalities – Adaption in Action Program City Council resolved, in part:

> "1. That the Administration be directed to submit the applications outlined in this report to the Federation of Canadian Municipalities Adaptation in Action Program;
>
> 2. That if the applications are successful, the Mayor and City Clerk be authorized to execute the agreements under the Corporate Seal;"

At its public hearing meeting September 25th, 2024 while considering Intent to Borrow, City Council resolved, in part:

> "That City Council authorize the following planned borrowings:
>
> 3. Up to $1,650,000 for the Civic Water Conservation (Capital Project P.02197)"

DISCUSSION/ANALYSIS

P.02585 Bioreactor Expansion

In January 2024 a grant application for funding the Nitrification Expansion Pilot was approved by the FCM. The Nitrification Expansion Pilot is a one-year pilot project to identify if mobile organic biofilm (MOB) is the preferred technology to achieve year-round nitrification at the H.M. Weir Wastewater Treatment Plant. Administration is recommending that Capital Project P.02585 Bioreactor Expansion budget be increased by $476,470, funded through the FCM for the Nitrification Expansion Pilot.

P.10031 Deep Energy Civic Buildings Retrofits

In November 2024 a grant application for funding a feasibility study with the goal to identify four buildings for deep retrofits, with at least one being a community building was approved by the FCM. The study will explore pathways to reduce greenhouse gas emissions through alternative fuel sources, mechanical upgrades, renewable energy generation using solar PV, building commissioning, and reducing embodied carbon. Administration is recommending that Capital Project P.10031 Deep Energy Civic Buildings Retrofits budget be increased by $200,000, funded through the FCM for Studying Emission Reduction Opportunities for Four Buildings in Saskatoon.

P.02197 Civic Water Conservation

In February 2025 the administration received confirmation that one of the grant applications submitted in October 2024 has been approved for funding by the FCM. The project will improve water conservation by replacing spray nozzles & improvements to controllers at spray pad sites and will improve adaptation to extreme heat events by adding shade structures, water fountains, and misting stations at 6 civic locations. Administration is recommending that the funding within Capital Project P.02197 Civic Water Conservation be adjusted by decreasing the amount of borrowing by $700,000 and increasing FCM funding by $700,000, resulting in a $0 impact to the projected costs for the Saskatoon Retrofitting Spray Pads for Water Conservation and Extreme Heat Preparedness project.

FINANCIAL IMPLICATIONS

P.02585 Bioreactor Expansion

The total project cost is estimated to be $952,950. The Green Municipal Fund is contributing 50% of eligible costs to a maximum of $476,470. The City has sufficient funding within Capital Project P.02585 Bioreactor Expansion to cover the City's costs.

P.10031 Deep Energy Civic Buildings Retrofits

The total project cost is estimated to be $360,000. The Community Buildings Retrofit initiative provides up to 80% of eligible costs to a maximum of $200,000. The City's has sufficient funding within Capital Project P.10031 Deep Energy Civic Buildings Retrofits to cover the City's costs.

P.02197 Civic Water Conservation

The total project cost is estimated to be $1,650,000. The City was approved for funding of 70% of eligible costs to a maximum of $700,000 through the Adaptation in Action initiative. The City's share of the costs will be funded through a Green Loan as approved by City Council in September 2024.

OTHER IMPLICATIONS

There is no privacy, legal, or social implications identified.

NEXT STEPS

If approved, Administration will make the appropriate additions to the capital projects for the additional FCM funding.

REPORT APPROVAL

Written by: Kole Paziuk, Financial Analyst
Reviewed by: Kari Smith, Director of Finance
Approved by: Clae Hack, Chief Financial Officer

Admin Report - Budget Adjustment – Federation of Canadian Municipalities Green Municipal Funding.docx

STANDING POLICY COMMITTEE ON FINANCE

Creation of Capital Project for Repair and Maintenance of Downtown Event and Entertainment District Auxiliary Properties

Recommendation of the Committee
That Capital Project P.10115 (DEED Auxiliary Properties - Repair and Maintenance) be approved and funded through a transfer of $225,000 from the Property Realized Reserve (PRR).

History
The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment
March 5, 2025 report of the Corporate Financial Services Division.

Creation of Capital Project for Repair and Maintenance of Downtown Event and Entertainment District Auxiliary Properties

ISSUE

Properties in the downtown were acquired to support and enhance the development of a Downtown Event and Entertainment District (DEED). Most of the properties have buildings with tenants in them and depending on the timing of the DEED project will require various levels of building systems repair and replacement or parking lot upgrades in the short term. To facilitate the critical repair and maintenance of these assets City Council approval is required to create a capital project and have funds transferred into the project.

RECOMMENDATION

Administration is requesting that Standing Policy Committee on Finance recommend to City Council:

1. That Capital Project P.10115 (DEED Auxiliary Properties – Repair and Maintenance) be approved and funded through a transfer of $225,000 from the Property Realized Reserve (PRR).

BACKGROUND

City Council approved the purchase of the following properties:

- 25 – 22nd Street on February 14, 2024
- 50 – 23rd Street, 39 – 23rd Street and 149 Pacific Avenue December 19, 2022.
- 141 Pacific Avenues and 145 – 1st Avenue North August 30, 2021
- 123 Auditorium Avenue February 22, 2021
- 120/126 Idylwyld Drive in 2013

These properties (locations shown on Appendix 1) are owned by the City of Saskatoon (City) and could potentially support the future DEED project. Administration had previously indicated to City Council they would either use these properties to address civic needs or work with commercial real estate companies to find tenants to lease any vacant spaces in the properties until such time as the properties are required for a project. In the case of 25 – 22nd Street (YMCA Property) the plan was to allow the existing organization to continue use of the property through a delayed closing.
141 Pacific Avenue and 120/126 Idylwyld Drive are vacant properties and are operating as a pay parking lots.

DISCUSSION/ANALYSIS

At the time of purchase due diligence review of properties concluded there was no significant issues that would cause the City not to move forward with the potential purchases.

With the final project timing approval for DEED ongoing, the City will continue to hold these properties and generate revenue from tenants in the buildings or parking customers on the lots until the properties are required for the project. To maintain these properties to a standard which retains and attracts tenants, minimal building systems' repair and maintenance will be required. As these buildings will likely be demolished at a future date to support the DEED project it is the Administration's intent to only consider the repair maintenance of critical building components necessary to keep the properties in a satisfactory state of repair that meets contractual obligations in the tenant leases.

Typical building components which require repair and replacement include:

- building envelopes such as roof and claddings, heating, cooling and ventilation components;
- plumbing and electrical systems;
- exterior windows and doors;
- access control systems and site paving; and
- parking lot repair and replacement including paving, landscaping and lighting.

In order to proceed with these necessary building repairs, a capital project is required as the estimated cost meets the City's tangible capital asset threshold.

The heating/cooling systems and roof repair at 39 – 23rd Street is one example where straightforward maintenance opportunities are not able to address the tenant requirements to regulate the buildings temperatures. A mechanical engineer has reviewed the 39 – 23rd Street heating and cooling systems and identified that components are dated, have deficiencies which need addressing, and that replacement parts are becoming more expensive and difficult to source. A roofing consultant has identified the roof leaks are from several compromised roofing and flashing components are in need of repair.

Critical repairs for 39 – 23rd Street in 2025 totals approximately $205,000 and includes:

1. Replacement of three-way valves at the VAV (variable air volume) box reheat coils at an estimated cost of $70,000.
2. Roof work includes: flashing and membrane repair/replacement at an estimated cost of $50,000.
3. Air conditioner work includes: repair of a leaking cooling coil, replacement of a condenser, cooling coil, and interconnecting refrigerant piping at an estimated cost $70,000.
4. Access control system for main entrance door at an estimated cost of $15,000.

Given the work identified for the 39 – 23rd Street property, Administration is recommending a new capital project be set up and that $225,000 be allocated to the project from the PRR for the estimated repairs.

FINANCIAL IMPLICATIONS

The $225,000 in funding for 2025 expenditures will be funded from the Property Realized Reserve and will be recovered when the properties are sold or transferred into the DEED project.

NEXT STEPS

Subject to City Council approval, Administration would work towards having the building systems repair and replacement items completed at 39 – 23rd Street. Administration would identify any necessary future funding as part of future Capital budget planning for the 2026-27 budget cycles.

APPENDICES

1. Location of Properties

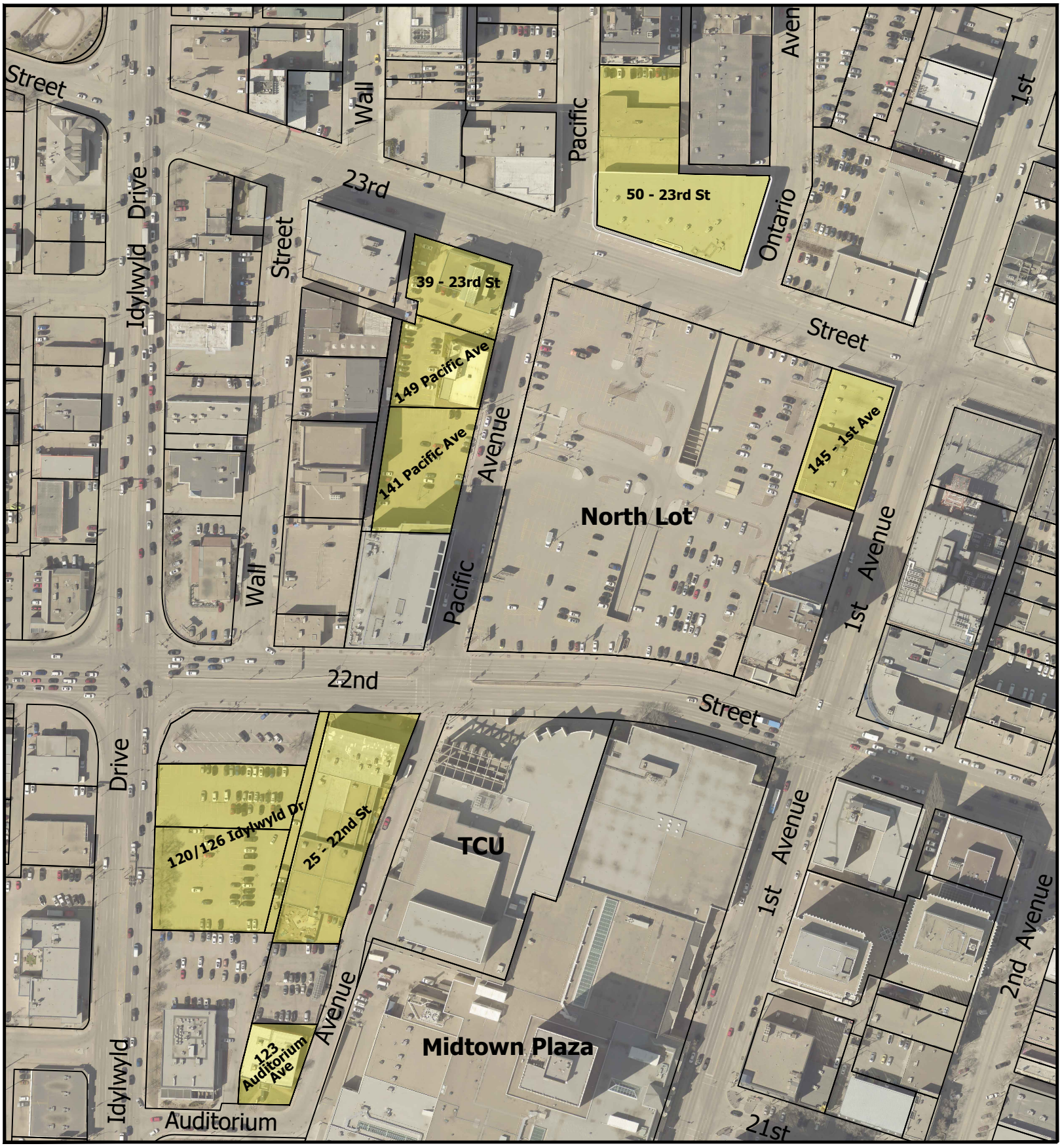
REPORT APPROVAL

Written by:	Scott McCaig, Real Estate Manager
	Matt Noordhof, Finance and Sales Manager, Saskatoon Land
Reviewed by:	Frank Long, Director of Saskatoon Land
	Jeremy Meinema, Senior Financial Business Partner
	Kari Smith, Director of Finance
Approved by:	Clae Hack, Chief Financial Officer

Admin Report - Creation of Capital Project for Repair and Maintenance of Downtown Event and Entertainment District Auxiliary Properties.docx

Location of Properties

Appendix 1



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Properties for Inclusion in Capital Project

City of Saskatoon
Real Estate Services - February 2025
Note: The City does not guarantee the accuracy of this drawing. To ensure accuracy, please refer to the Registered Plan of Survey. This drawing is not to scale. Distances are in metres unless shown otherwise. Do not scale.

STANDING POLICY COMMITTEE ON FINANCE

Canada Housing Infrastructure Fund and Deep Retrofits Accelerator Initiative Funding Applications

Recommendation of the Committee

1. That City Council approve and direct Administration to submit applications to the Canada Housing Infrastructure Fund and the Deep Retrofit Accelerator Initiative;
2. That if the applications are successful, the Mayor and City Clerk be authorized to execute the Agreement(s) under the Corporate Seal; and
3. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program(s).

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

Canada Housing Infrastructure Fund and Deep Retrofits Accelerator Initiative Funding Applications

ISSUE

Housing, Infrastructure and Communities Canada (HICC) and Natural Resources Canada (NRCan) are accepting applications under the Canada Housing Infrastructure Fund (CHIF) and Deep Retrofits Accelerator Initiative (DRAI). The Administration is requesting City Council approval to submit applications for the projects identified in this report.

RECOMMENDATION

That the Standing Policy Committee on Finance Recommend to City Council:

1. That City Council approve and direct Administration to submit applications to the Canada Housing Infrastructure Fund and the Deep Retrofit Accelerator Initiative;
2. That if the applications are successful, the Mayor and City Clerk be authorized to execute the Agreement(s) under the Corporate Seal; and
3. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program(s).

BACKGROUND

At its Regular Business Meeting on December 18, 2024, City Council resolved in part:

> "That City Council approve and direct Administration to submit application(s) to the Canada Housing Infrastructure Fund and the Youth Gang Prevention Fund;"

Since the December 18, 2024, report approval, applications have been submitted to CHIF for the new Organics Facility and the Infill & Redevelopment Water and Sewer Capacity Improvement Projects under the Direct Delivery Stream. The purpose of CHIF is to "accelerate new construction, rehabilitation and expansion of housing-enabling drinking water, wastewater, stormwater, and solid waste infrastructure, directly supporting the creation of new housing supply and improved densification." If approved, the Government of Canada would cover up to 40% of the project's eligible costs.

During the 2020/2021 business plan and budget deliberations, Capital Project P.10033 - ICI Building Energy Efficiency and Generation was allocated $375,000 to establish an energy education and incentive/financing program for the industrial, commercial, and institutional (ICI) and multi-unit residential (MUR) building sector. As part of this project, a Feasibility Study was developed, which was received by City Council March 27, 2024. Remaining capital in P.10033 will fund the first phase (benchmarking) of a Benchmarking, Labelling and Disclosure (BLD) program for commercial buildings and a

$25M Community Energy Loan Program for the residential, multi-unit residential and commercial building sectors was approved.

Natural Resource Canada is accepting applications under the Deep Retrofit Accelerator Initiative, which covers up to 100% of eligible costs for projects that facilitate the development of deep retrofits in commercial, institutional, and mid- or high-rise multi-unit residential buildings. The objectives of the program are to:

- build capacity for, and address barriers to, deep retrofit project development and implementation;
- facilitate the development of deep retrofit projects in Canada; and
- contribute to transforming the buildings sector in support of the Government of Canada's climate goals.

DISCUSSION/ANALYSIS

Canada Housing Infrastructure Fund

Administration has begun design work on a new water treatment plant which will allow Saskatoon to grow to a population of 500,000. The current total estimated cost of the project which includes, new major watermains, new water treatment plant and new reservoir is $560 million. However, before work can begin on the Water Treatment Plant and Reservoir, new major watermains are required on the South and East sides of the city. Administration is requesting approval to submit an application for these new major watermains, which has a current estimated cost of $160 million. This project will connect the planned new water treatment plant to the existing water treatment plant and distribution system, adding capacity for growth within existing redevelopment areas and new developing sectors of the city.

Deep Retrofit Accelerator Initiative

The City of Saskatoon (City) engaged with the ICI and MUR building sectors during the development of the ICI Building Energy and Water Retrofit Feasibility Study to identify the barriers and opportunities they experience around performing deep energy retrofits. Barriers identified included high up-front costs with a low return on investments, a lack of awareness, knowledge, and decision-making capacity, difficulty implementing energy efficiency improvements, and a lack of existing programs to support low carbon building retrofits.

Financing, and financial incentives, followed by BLD programs, were found to provide the most significant combined benefits due to their direct ability to encourage retrofits and remove financial barriers. BLD programs for commercial buildings were identified to be a crucial initial step to encouraging energy efficiency in commercial buildings, with wide-spread adoption across Canada and includes energy benchmarking, labelling and data disclosure.

Benchmarking - involves collecting and analyzing a building's energy use to compare it with similar buildings, past performance, or baseline levels. This helps building owners understand and manage their energy use.

Labelling - assigns an energy score to a building after an energy audit, which can range from simple walk-throughs to detailed investigations. The building is then rated on its energy performance, allowing comparisons with other buildings.

Data Disclosure - of energy usage can be voluntary or mandatory, promoting transparency and demonstrating a commitment to responsible asset management and emissions reductions. It helps cities monitor building stock and inform future policies, aiding in the transition to high-performance, low-carbon buildings.

The proposed project to DRAI will enhance the usability of the BLD program (currently being developed) with an interactive map, virtual auditing tool, decarbonization plan and participant support. An enhanced BLD program is expected to support adoption of the Community Energy Loan program - a property assessed clean energy (PACE) loan program for the residential, commercial and MUR building sector anticipated to launch in 2026.

The Virtual Decarbonization Planning program will provide virtual audits and customized decarbonization plans to help commercial and MURB's develop business cases to support their applications for financing programs and implement deep retrofit projects. Virtual audits and energy decarbonization plans will provide a lower-cost way for building owners to identify where to start and make decisions, what the costs and energy savings associated with recommended retrofits are and identify programs to aid in implementation and financing. Additionally, the concierge program will provide further support as participants get used to the online tools.

The virtual audits and decarbonization plans provided through the software are expected to identify, using a data-driven and evidence-based approach, the retrofits required for participants to achieve deep energy retrofits. The customized energy roadmap will help prioritize retrofits by identifying the most impactful (highest energy reductions) and most crucial retrofits first, as well as how they fit into the building's overall asset management plan to aid in efficient use of dollars. The program will be integrated with the City's Community Energy Loan program so that participants can easily apply for funding for their deep energy retrofits and lean on the concierge service to help guide them and identify other programs or financing options.

Administration is proposing to apply for up to $427,000 in funding over the 2026 and 2027 fiscal years. If successful, NRCan would contribute 100% of costs for the project.

FINANCIAL IMPLICATIONS

CHIF will provide up to 40% of eligible costs for the Water Capital Development Expansion Project. Current funding plans for this project include borrowing and transfers from the Waterworks Capital Projects Reserve; receiving this funding will reduce the need for borrowing and/or transfers from the reserve.

As DRAI is fully funded by NRCan, there are no financial impacts to the City if approved for funding.

OTHER IMPLICATIONS

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

NEXT STEPS

If the recommendation is approved, Administration will continue to finalize the project applications and apply for the government funding outlined in this report. If applications are approved, the Administration will report back to City Council at the appropriate time to add the funding from the government programs to the project(s).

REPORT APPROVAL

Written by:	Jeremy Meinema, Senior Financial Business Partner
Reviewed by:	Kari Smith, Director of Finance
	Angela Gardiner, General Manager, Utilities and Environment
	Celene Anger, General Manager, Community Services
Approved by:	Clae Hack, Chief Financial Officer

Admin Report - Canada Housing Infrastructure Fund and Deep Retrofits Accelerator Initiative Funding Applications.docx

STANDING POLICY COMMITTEE ON FINANCE

Lease Extension for Existing SaskTel Cell Tower in Churchill Park

Recommendation of the Committee

1. That Administration be authorized to enter into a 10-year lease agreement with SaskTel for the exiting cell tower in Churchill Park at 1015 Wilson Crescent on ISC Surface Parcel No.120042931, Parcel A Plan G921, as per the terms outlined in the March 5, 2025, report of the Corporate Financial Services Division; and
2. That Her Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

Lease Extension for Existing SaskTel Cell Tower in Churchill Park

ISSUE

Administration has negotiated a new lease agreement with Saskatchewan Telecommunications (SaskTel) for the continued lease of a portion of land in Churchill Park for an existing SaskTel 31.25m tall cell tower. The leasing of park land/space and cell tower lease agreements with SaskTel at rates less than market value require City Council approval and public notice.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That Administration be authorized to enter into a 10-year lease agreement with SaskTel for the exiting cell tower in Churchill Park at 1015 Wilson Crescent on ISC Surface Parcel No.120042931, Parcel A Plan G921, as per the terms outlined in this report; and
2. That Her Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

BACKGROUND

On January 21, 2013, Saskatoon City Council adopted the updated Council Policy No. C09-037, Antenna Systems (Antenna Systems Policy). This Antenna Systems Policy provides a set of requirements and guidelines the City of Saskatoon (City) uses to evaluate antenna supporting structures, including such items as public consultation and land use review.

The Antenna Systems Policy is consistent with Innovation, Science and Economic Development Canada's (ISED) requirements regarding the development of antenna supporting structures. The Antenna Systems Policy does not deal with any negotiation aspects of the land lease agreement between the two parties. Items such as lease rate, lease term, and any specific terms of the lease agreement are negotiated between landowners and the cell tower company. The Antenna Systems Policy and public consultation process for cell towers is managed by the City's Development Review Section of the Planning and Development Department.

Council Policy No. C09-012, Administration of Civic Properties, requires that leases of City owned property be at market value. At its Regular Business Meeting on August 28, 2024, City Council authorized Administration to enter into four, 10-year cell tower lease agreements with SaskTel at a non-market rental rate of $15,000/year with a 2% annual increase throughout the term. The non-market rental rate was deemed acceptable given the business nature of the City and SaskTel's relationship, SaskTel's status as a Saskatchewan Crown Corporation, and the community need for cellular coverage.

The August 2024 report noted that new cell tower lease agreements with SaskTel at rents less than market value, and those on Municipal Reserve (or park land) regardless of value, would require public notice before being considered by City Council as per the Public Notice Policy.

DISCUSSION/ANALYSIS

Since June 2015, the City has had a cell tower lease with SaskTel for the existing 31.25m cell tower located in Churchill Park (see Appendix 1 for location/visual). The term of the existing lease ends May 31, 2025. Instead of executing their five-year renewal option in the current lease, SaskTel has requested a new 10-year lease. Administration and SaskTel have negotiated a new 10-year lease with updated terms. The new lease would be consistent with the terms of the recent agreements which the City has entered into with SaskTel.

Notable terms of the new lease agreement with SaskTel would include:

- Lease term of 10 years (June 1, 2025 to May 31, 2035);
- Annual rent of $16,892.68 plus GST. Rent has been calculated based on a 2024 base rent of $15,000 with a 2% annual increase throughout the term and equally paid out;
- SaskTel to keep the site in clean condition and will dispose of all garbage and other refuse within a reasonable period of time;
- Upon expiration of the lease, SaskTel shall remove its structures from the surface of the lands and any items installed under the surface to a depth of 1 meter;
- The site cannot be fenced; and
- Vandalism and graffiti must be removed by SaskTel in a timely manner.

As per policy, revenue from leases on park lands are deposited in the City's Dedicated Lands Account, which is used for parks and recreation related expenditures.

As per Bylaw No.8171 The Public Notice Policy Bylaw, 2003, two public notices were issued February 22, 2025. One indicating the City's intent on entering into a lease agreement with SaskTel for an existing cell tower in Churchill Park and one notifying the annual rent of the Lease would be considered below market value.

FINANCIAL IMPLICATIONS

The current annual rental rate for the Churchill Park cell tower is $5,000. The new annual rent of $16,892.68 would result in $168,926.80 being deposited into the Dedicated Lands Account over the term of the lease.

APPENDICES

1. Location of Existing SaskTel Cell Tower in Churchill Park
2. Copy of Public Notice Advertisements for the intent to lease City-owned property for less than fair market and the intent to lease City-owned park land to Saskatchewan Telecommunications for cellular Antenna Towers.

REPORT APPROVAL

Written by: Scott McCaig, Real Estate Manager
Reviewed by: Frank Long, Director of Saskatoon Land
Andrew Roberts, Director of Recreation and Community Development
Andrew Glum, Senior Legal Counsel, City Solicitor's Office
Approved by: Clae Hack, Chief Financial Officer

Admin Report - Lease Extension for Existing SaskTel Cell Tower in Churchill Park.docx

Location of Existing Sasktel Cell Tower in Churchill Park

Appendix 1

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City of Saskatoon

Real Estate Services - February 2025

Note: The City does not guarantee the accuracy of this drawing. To ensure accuracy, please refer to the Registered Plan of Survey. This drawing is not to scale. Distances are in metres unless shown otherwise. Do not scale.

Visit **saskatoon.ca**

City of Saskatoon

PUBLIC MEETINGS

(*Closed meetings will be noted if there are any scheduled, otherwise all meetings are open to the public).

City Council and its Committees hold in-person meetings, including public attendance except where stated "teleconference meeting". Virtual attendance will be accommodated. *Submissions providing comments and/or requesting to speak will be accepted for public meetings using the online form at Saskatoon.ca/write-letter-councilcommittees. If your submission includes a request to speak, you will be contacted by a representative from the City Clerk's Office with further information.*

TUESDAY, FEBRUARY 25, 2025
Municipal Planning Commission
Committee Room E, Ground Floor, City Hall, at 12:00 p.m. (live streamed at saskatoon.ca/meetings)

WEDNESDAY, FEBRUARY 26, 2025
City Council
Regular Business Meeting
Council Chamber, City Hall, at 9:30 a.m. (live streamed at saskatoon.ca/meetings)

Public Hearing Meeting
Council Chamber, City Hall, at 6:00 p.m. (live streamed at saskatoon.ca/meetings)

The next Regular Business and Public Hearing Meetings of City Council are scheduled for Wednesday, February 26, 2025, beginning at 9:30 a.m. and 6:00 p.m., respectively.

Regular and Public Hearing meetings of City Council are broadcast live on Rogers tv (Channel 10), and Rogers Ignite (Channel 105), starting at 9:30 a.m. and 6:00 p.m. Public meetings of City Council, including public meetings of the Governance and Priorities Committee and Standing Policy Committees, are also live streamed on the City's website, as well as archived for future viewing. Go to saskatoon.ca/meetings.

Agendas for public meetings may be viewed by visiting our website at saskatoon.ca/meetings.

For further information regarding these meetings or information on communicating with City Council or its Committees, visit our website at saskatoon.ca/city-hall.

***CLOSED MEETINGS**
Closed meetings may be held but are not open to the public because they deal with issues that are sensitive in nature and meet the requirements of *Part III of The Local Authority Freedom of Information and Protection of Privacy Act*. No final decisions may be made at closed meetings. If there are closed meetings, they will be noted in the above listing.

PUBLIC NOTICE

INTENT TO LEASE CITY OWNED PARK LAND TO SASKATCHEWAN TELECOMMUNICATIONS FOR CELLULAR ANTENNA TOWERS

City Council will consider a report from the Administration during the Regular Meeting of the Standing Policy Committee on Finance to be held on Wednesday, March 5th, 2025, at 9:30 a.m., in Council Chambers, City Hall.

The report recommends that the City of Saskatoon enter into a lease agreement with Saskatchewan Telecommunications (SaskTel) for the existing cell tower at:

- **1015 Wilson Crescent (Churchill Park in Adelaide/Churchill)**

The lease would allow SaskTel to operate a 35m cell tower on the City-owned land for a lease term of 10 years with an annual base year rent of $16,892.68 throughout the term of the lease.

Bylaw No. 8171, The Public Notice Policy Bylaw requires that City Council give public notice before it considers leasing PARK LANDS.

For more information, contact the City Clerk's Office: **306-975-3240**.

PUBLIC NOTICE

INTENT TO LEASE CITY OWNED PROPERTY FOR LESS THAN FAIR MARKET VALUE: SASKATCHEWAN TELECOMMUNICATIONS (SASKTEL) CELLULAR ANTENNA TOWER.

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Bylaw No. 8171, The Public Notice Policy Bylaw requires that City Council give public notice before it considers leasing land for less than fair market value and without a public offering.

For more information, contact the City Clerk's Office: **306-975-3240**.

PUBLIC NOTICE

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For more information, contact the City Clerk's Office: **306-975-3240**.

STANDING POLICY COMMITTEE ON FINANCE

Acquisition of Land for Joint High School/East Side Leisure Centre Site in Holmwood

Recommendation of the Committee

1. That the Administration be authorized to purchase a 13-acre portion of ISC Parcel No. 203232259 from Dream Asset Management Corporation for $10,842,000 on the terms identified within the March 5, 2025, report of the Corporate Financial Services Division; and
2. That the City Solicitor be requested to have the agreement executed by Her Worship the Mayor and the City Clerk under the Corporate Seal.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

Acquisition of Land for Joint High School / East Side Leisure Centre Site in the Holmwood Sector

ISSUE

A site totalling approximately 36 acres is required to accommodate the new joint high schools and East Side Leisure Centre project in the Holmwood sector, immediately east of Brighton. The parcel is composed of 23 acres which is required to be dedicated by the developer, Dream Asset Management Corporation (Dream), as municipal reserve and an additional 13 acres to be purchased to support the project.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That the Administration be authorized to purchase a 13-acre portion of ISC Parcel No. 203232259 from Dream Asset Management Corporation for $10,842,000 on the terms identified within this report; and
2. That the City Solicitor be requested to have the agreement executed by Her Worship the Mayor and the City Clerk under the Corporate Seal.

BACKGROUND

On May 29, 2024, City Council approved an increase of $10,842,000 to Capital Project P.02600 Indoor Recreation Facilities for the purchase of 13 acres of land required for the new joint high schools and East Side Leisure Centre (Leisure Centre) in Holmwood. The report noted the details of the purchase agreement with Dream would be provided in a subsequent report to City Council through the Standing Policy Committee on Finance.

DISCUSSION/ANALYSIS

Since May 2024, Administration has been working with Dream on a land acquisition agreement which would have the City of Saskatoon (City) purchase 13 acres of land from Dream. After several months of negotiating, a consensus on the terms of the agreement has been reached. Notable terms are as follows:

- Acquisition Area – 13-acre portion of ISC Parcel No. 203232259 (9 acres for school site and 4 acres for the Leisure Centre). The location of the joint high school site and leisure center is shown in Appendix 1.
- Purchase Price - $10,842,000 ($834,000/acre) to be paid as follows:
    - $2,000,000 first deposit due within 20 days of signing the agreement.
    - $4,700,000 second deposit due upon completion of site grading or commencement of underground services, whichever is earlier.
    - $2,000,000 third deposit due within 10 days of execution of the Servicing Agreement for the neighbourhood.
    - $2,142,000 balance payment due on closing.

- The agreement is conditional upon:
    - Dream receiving senior management approval of the agreement by February 28, 2025.
    - City Council approval by March 31, 2025.
    - Planning and Development approval of the subdivision on or before December 31, 2025. If this date is not met, the conditional approval date will automatically extend by six months' and can be further extended by mutual agreement if required.
- Dream is required to subdivide, grade and service the site. The City has agreed, in principle, to defer payment of development charges since timelines for the development of the schools and Leisure Centre construction are necessitating the site development. Full details of this arrangement will be negotiated in the neighbourhood Servicing Agreement between the City and Dream.
- Due to time constraints, Dream is completing pre-development work as permitted under section 5.1.18 of Bylaw No. 9990 – Zoning Bylaw, 2024 and will incur the associated grading and eventual servicing costs. The City has agreed the first, second, and third deposits shall be non-refundable unless Dream fails to complete the sale of the land in accordance with the terms of the agreement, and subject to the following:
    - The first deposit shall become non-refundable upon the earlier of satisfaction or waiver of all conditions, or upon Dream entering into an agreement for the grading of the land. This deposit is non-refundable only to the extent of Dream's actual grading costs incurred, with any remaining portion being refundable to the City.
    - The second deposit shall become non-refundable upon the earlier of satisfaction or waiver of all conditions, or upon Dream commencing servicing with respect to the land. This deposit is non-refundable only to the extent of Dream's actual servicing costs incurred, with any remaining portion being refundable to the City.
- Closing to be 90 days following issuance of a Transform Approval Certificate pursuant to the subdivision application.

Although the agreement is complex due to tight project timelines and the sequence of events related to development, Administration feels the payment of the deposits is warranted due to the costs Dream will incur in advance of having serviced, saleable sites in the rest of the neighborhood. In the unlikely event the sale cannot proceed due to conditions not being removed, the City is only exposed to the extent of actual costs incurred by Dream associated with grading and servicing the site.

Administration considers the negotiated sale price to be a fair price for the City. The sale price is agreeable to the developer (Dream) since they recognize the benefit of the joint high schools and Leisure Centre to the area, and were therefore willing to accept $834,000/acre, a figure that represents a 15% discount to comparable market priced multi-family development sites in the area.

FINANCIAL IMPLICATIONS

To support this acquisition, a $10,842,000 increase to Capital Project P.02600 Indoor Recreation Facilities was approved by Council on May 29, 2024. The increase is to be funded as follows: $3,753,000 from the High School Land Levy, $3,753,000 from the Government of Saskatchewan, and $3,336,000 from the Parks and Recreation Levy. The High School Land Levy will be in a deficit position until the newly established levy collects the $3,753,000 put towards this project.

OTHER IMPLICATIONS

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

NEXT STEPS

If approved, once the agreement is fully executed, Dream and the City would work toward their respective obligations to satisfy the conditions and obligations imposed by the agreement.

APPENDICES

1. Drawing Showing Site Location

REPORT APPROVAL

Written by:	Jeremy Sibley, Real Estate Services
Reviewed by:	Frank Long, Director of Saskatoon Land
	Celene Anger, General Manager Community Services Division
Approved by:	Clae Hack, Chief Financial Officer

Admin Report - Acquisition of Land for Joint High School / East Side Leisure Centre Site in the Holmwood.docx

Drawing Showing Site Location

SCALE BAR

0 500m 1000m

DRAWING TO BE PRINTED IN COLOUR

CATTERALL & WRIGHT
CONSULTING ENGINEERS
1231 – 8th STREET EAST | SASKATOON, SK S7H 0S5
TEL: (306) 343-7280 | www.cwce.ca

HOLMWOOD
BRIGHTON

OWNER/CLIENT
dream development

PROJECT
HOLMWOOD BUSINESS PARK, NEIGHBOURHOOD 2 AND URBAN CENTRE

LOCATION
SASKATOON

SHEET TITLE
CONCEPT PLAN

DRAWING / FIGURE NUMBER
1.1

STANDING POLICY COMMITTEE ON FINANCE

Notice of Annual General Meeting - Saskatchewan Place Association Inc.

Recommendation of the Committee
That the City of Saskatoon, being a member of the Saskatchewan Place Association Inc., appoint Mayor Cynthia Block, or in her absence, Councillors Troy Davies or Randy Donauer, of the City of Saskatoon, in the Province of Saskatchewan, as its proxy to vote for it on its behalf at the Annual General Meeting of the members of the Saskatchewan Place Association Inc., to be held on the 17th day of April, 2025, or at any adjournment or adjournments thereof.

History
The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a letter from Lori O'Brien, Executive Assistant, SaskTel Centre regarding the above.

Attachment
Letter from Lori O'Brien, Executive Assistant, SaskTel Centre, dated March 3, 2025.

March 3, 2025

His Worship the Mayor and City Council
City Clerk's Office
City Hall
222 3rd Avenue North
Saskatoon SK S7K 0J5

Dear Sirs/Mesdames:

NOTICE OF ANNUAL GENERAL MEETING
SASKATCHEWAN PLACE ASSOCIATION INC.

Please take note of the above-mentioned meeting as follows:

Date: Thursday, April 17, 2025

Time: 9:30 a.m.

Location: The Saskatoon Club

Please confirm your attendance with Lori O'Brien by email (lobrien@sasktelcentre.com) or telephone (306-291-5432).

Kind regards,

Lori O'Brien, Executive Assistant
SaskTel Centre

cc: John Howden, Chief Executive Officer
Board of Directors, Saskatchewan Place Association Inc.
Jarrett Walter, MNP

Enclosures: Agenda
Minutes of Annual General Meeting on April 4, 2024

#101-3515 Thatcher Avenue | Saskatoon, SK, Canada S7R 1C4 | sasktelcentre.com

SASKATCHEWAN PLACE ASSOCIATION INC.

ANNUAL GENERAL MEETING

Thursday, April 17, 2025

9:30 A.M.

A G E N D A

1. Reading of the Notice of Meeting
2. Call to Order
3. Approval of Agenda
4. Proxies
5. Minutes of Previous Meeting
6. Business arising
7. Chair’s Report
8. Treasurer’s Report
9. Approval of Auditor’s Report
10. Resignation of Directors
11. Appointment of Directors
12. Appointment of Auditor
13. Appointment of Solicitor
14. Ratification of Board of Directors’ Actions
15. Other Business
16. Motion for Adjournment

SASKATCHEWAN PLACE ASSOCIATION INC. BOARD OF DIRECTORS

ANNUAL GENERAL MEETING
THURSDAY, APRIL 4, 2024
SASKTEL CENTRE BOARD ROOM

MINUTES

PRESENT: Bryan McCrea, Chair
Darla Deguire
Ann Iwanchuk
Ashfaque Ahmed
Trevor Jacek
Randy Singler
Councillor Troy Davies
Councillor Randy Donauer

REGRETS: Mark Arcand

ALSO PRESENT: John Howden, Chief Executive Officer
Lori O'Brien, Recording Secretary

1. **Reading of the Notice of Meeting**
   Moved, seconded and approved by Chair Davies

2. **Call to Order**
   Chair Davies called the meeting to order at 4:26 p.m.

3. **Approval of Agenda**
   Chair Davies moved, seconded and approved the agenda as provided.

4. **Proxy Designated by Mayor Clark**
   Chair Davies moved, seconded and carried himself as Proxy.

5. **Minutes of April 6, 2023 Annual General Meeting**
   Chair Davies moved, seconded and adopted the minutes as provided.

6. **Business Arising from the Minutes**
   There was no business arising from the minutes.

7. **Chair's Report**
   Chair Davies moved, seconded and adopted the Chair's Report as provided.

8. **Treasurer's Report**
   Chair Davies moved, seconded and adopted the Treasurer's Report as provided.

9. Auditor's Report
Chair Davies moved, seconded and adopted the Auditor's Report as provided.

10. Resignation of Directors
Chair Davies moved, seconded and accepted the resignation of Director Mr. Jaspar.

11. Appointment of Directors
Chair Davies moved, seconded and carried the reappointment of Darla Deguire, Trevor Jacek and Randy Singler

12. Appointment of Auditor
Chair Davies moved, seconded and carried the reappointment of MNP LLP as the auditor.

13. Appointment of Solicitor
Chair Davies moved, seconded and carried the motion that the City Solicitor's Office be reappointed as the Solicitor.

14. Ratification of Board of Director's Actions
Chair Davies moved, seconded and carried ratification of the Board of Director's actions.

15. Other Business
There was no other Business.

16. Motion of Adjournment
The meeting was adjourned at 4:27 p.m.

Councillor Davies, Chair

STANDING POLICY COMMITTEE ON FINANCE

Notice of Annual General Meeting - Saskatoon Centennial Auditorium and Convention Centre Corporation

Recommendation of the Committee
That the City of Saskatoon, being a member of both the Saskatoon Centennial Auditorium Convention Centre Corporation Board of Directors and the Saskatoon Centennial Auditorium Foundation Board of Directors appoint Mayor Cynthia Block, or in her absence, Councillor Bev Dubois or Councillor Holly Kelleher of the City of Saskatoon, in the Province of Saskatchewan, as its proxy to vote for it on its behalf at the Annual General Meetings of the members of the Saskatoon Centennial Auditorium Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation, to be held on the 25th day of April, 2025, or at any adjournment or adjournments thereof.

History
The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a letter from Tammy Sweeney, Chief Executive Officer, TCU Place Saskatoon's Arts and Convention Centre, regarding the above.

Attachment
Letter from Tammy Sweeney, Chief Executive Officer, TCU Place Saskatoon's Arts and Convention Centre, dated February 21, 2025.

TCU PLACE

THIS IS YOUR PLACE

February 21, 2025

To: City Council

Re: Notice of Meeting

The Annual General Meeting of the Saskatoon Centennial Auditorium & Convention Centre Corporation Membership will be held on Thursday April 24, 2025, at 12:00 pm at TCU Place.

The Annual General Meeting of the Saskatoon Centennial Auditorium Foundation Membership will be held on Thursday April 24, 2025, at 12:15 pm at TCU Place.

Sincerely,

Tammy Sweeney
Chief Executive Officer
TCU Place – Saskatoon's Arts & Convention Centre
tsweeney@tcuplace.com
(306) 975-7779

TCU PLACE

THIS IS YOUR PLACE

AGENDA
ANNUAL GENERAL MEETING OF THE MEMBERSHIP
THE CENTENNIAL AUDITORIUM & CONVENTION CENTRE CORPORATION, &
THE SASKATOON CENTENNIAL AUDITORIUM FOUNDATION (inactive)
Thursday, April 24, 2025, at 12:00 pm
TCU Place – Gallery A

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1. Call to order

2. Notice of meeting

3. Confirmation of agenda

4. Approval of April 25, 2024, AGM minutes

5. CEO's report - Corporation

6. President's report – Corporation

7. Treasurer's report – Corporation

8. President's and Treasurer's reports – Foundation (inactive)

9. Approval of Audited Financial Statements
    9.1. Corporation – 2024 Audited Financial Statements
    9.2. Foundation – Inactive (no statements)

10. Appointment of auditors

11. Appointment of directors

12. Confirmation of proceedings

13. Adjournment

THIS IS YOUR PLACE

MINUTES
ANNUAL GENERAL MEETING OF THE MEMBERSHIP
THE CENTENNIAL AUDITORIUM & CONVENTION CENTRE CORPORATION, &
THE SASKATOON CENTENNIAL AUDITORIUM FOUNDATION (inactive)
Thursday, April 25, 2024, at 12:00 pm
TCU Place – Gallery A

PRESENT: Jordan Hamel, Chair
Elanne Krainyk, Vice Chair
Evan Sharp, Treasurer
Trevor Batters
Ross Johnson
Fraiba Jalal
Councillor David Kirton
Councillor Mairin Loewen
Sarah Alford
Lois Standing
Namarta Kochar
Kit McGuinness

REGRETS:

INCUMBENTS: N/A

1. **CALL TO ORDER**
   Councillor David Kirton called the meeting to order at 12:05 pm.

2. **NOTICE OF MEETING**
   Saskatoon City Council received notice of the Annual General Meeting of the Saskatoon Centennial Auditorium & Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation. Notice was provided to the City of Saskatoon on **February 21, 2024**. The City of Saskatoon has designated its representative, Councillor David Kirton, to conduct the meeting and vote on its behalf.

   Motion: That the Notice of Meeting be accepted as received.
   Moved by: Councillor Kirton
   Seconded by: Councillor Loewen
   Carried unanimously

3. CONFIRMATION OF AGENDA

Motion: That the Agenda be confirmed as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

4. APPROVAL OF APRIL 27, 2023, MINUTES

Motion: That the minutes of the April 27, 2023, Annual General Meeting of the Centennial Auditorium & Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation membership be approved as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

5. CEO'S REPORT – CORPORATION
Tammy Sweeney presented the CEO Report.

Motion: That the CEO's report be accepted as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

6. PRESIDENT'S REPORT – CORPORATION
Jordan Hamel presented the President's Report.

Motion: That the President's report be accepted as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

7. TREASURER'S REPORT – CORPORATION
Evan Sharp presented the Treasurer's Report.

Motion: That the Treasurer's Report be accepted as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

8. PRESIDENT'S REPORT AND TREASURER'S REPORT – FOUNDATION
Motion: Be it moved that as the Foundation is inactive, the President's and Treasurer's reports be dispensed with.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

9. APPROVAL OF AUDITED FINANCIAL STATEMENTS

9.1 Corporation

Motion: That the 2023 Centennial Auditorium & Convention Centre Corporation Audited Financial Statements be approved as presented.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

9.2 Foundation

Motion: Be it moved that as the Saskatoon Centennial Auditorium Foundation has been inactive during 2023, there are no financial statements to approve.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

10. APPOINTMENT OF AUDITORS

Motion: That KPMG be appointed as auditors for the Centennial Auditorium & Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation for the 2024 fiscal year.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

11. APPOINTMENT OF DIRECTORS

Motion: That the appointment of directors for the Centennial Auditorium & Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation for the upcoming year as presented by the City of Saskatoon be approved as follows:

Councillor Mairin Loewen	Lois Standing
Councillor David Kirton	Trevor Batters
Evan Sharp	Ross Johnson
Sarah Alford	Elanne Krainyk
Kit McGuinness	Fraiba Jalal
Namarta Kochar	Jordan Hamel

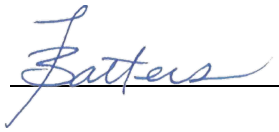
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

12. CONFIRMATION OF PROCEEDINGS

Motion: That all bylaws, contracts, acts, and proceedings of the Board of Directors of the Centennial Auditorium & Convention Centre Corporation and the Saskatoon Centennial Auditorium Foundation enacted, made, done, or taken since the last Annual Meeting of the members be approved, ratified, and confirmed.
Moved by: Councillor Kirton
Seconded by: Councillor Loewen
Carried unanimously

13. ADJOURNMENT

Motion: That the meeting be adjourned at 12:35pm.
Moved by: Councillor Kirton
Carried unanimously

Approval of the minutes:  **Date:** 2024-04-29

GOVERNANCE AND PRIORITIES COMMITTEE

Blake Tait – Denounce 1 Million March 4 Children

Recommendation of the Committee
As the City of Saskatoon is a place where all people deserve to live with dignity, safety and respect, no matter their gender identity or expression, that Saskatoon be declared a safe city for the 2SLGBTQQIA+ community.

History
The Governance and Priorities Committee, at its meeting held on March 12, 2025, considered a report of the City Solicitor's Office regarding the above.

The Committee also resolved to receive the information.

The Committee heard from Blake Tait on the matter.

Attachment
March 12, 2025 report of the City Solicitor's Office

Blake Tait – Denounce 1 Million March 4 Children

ISSUE
Should the City of Saskatoon declare itself a 2SLGBTQQAI+ Sanctuary City?

BACKGROUND
At its meeting held on November 8, 2023, the Governance and Priorities Committee ("GPC") considered this matter which came from a communication from the public and resolved, in part:

> That the Administration report back on the request to declare Saskatoon a 2SLGBTQ+ Sanctuary City

CURRENT STATUS
Some cities in the United States have declared themselves 2SLGBTQQAI+ Sanctuary Cities. The Administration could not find an example from Canada where a municipality has declared itself a 2SLGBTQQAI+ Sanctuary City.

The issue of declaring Saskatoon a Sanctuary City was previously considered by the Standing Policy Committee on Planning, Development and Community Services ("SPC-PDCS") at its meeting on April 3, 2017. At that meeting, SPC-PDCS considered communications from members of the public regarding whether or not the City of Saskatoon should declare itself a Sanctuary City for undocumented refugees or migrants. SPC-PDCS received the communications as information and took no further action on the issue.

DISCUSSION/ANALYSIS
The term "Sanctuary City" has generally been used in the context of a municipality's treatment or handling of undocumented immigrants. Sanctuary Cities commonly limit or deny cooperation with the national government in enforcing its immigration laws.

Sanctuary Cities are more common outside of Canada in countries such as the United States, though a handful of Canadian cities such as Toronto and Hamilton have declared themselves to be Sanctuary Cities with respect to undocumented immigrants.

There is limited information available with respect to 2SLGBTQQAI+ Sanctuary Cities.

In general, the 2SLGBTQQAI+ Sanctuary City declarations in the United States are comparable to Sanctuary City declarations in the context of immigration in that they frequently involve cities choosing not to enforce certain federal laws, or otherwise encouraging low prioritization of enforcement of laws considered anti-2SLGBTQQAI+. As noted above, to date, it appears that no Canadian city has declared itself a 2SLGBTQQAI+ Sanctuary City.

It is unknown what it means to be a 2SLGBTQQAI+ Sanctuary City in Canada at this time. It could be argued that such a declaration would be purely symbolic in nature, but as there is limited information available in this area, the long-term implications are unknown at this time.

To date, the City has instead focused on specific initiatives to promote diversity and inclusion in Saskatoon. Attached as Appendix 1 is a summary of recent initiatives.

OTHER IMPLICATIONS

There are no financial, or legal implications identified in this report. However, actions taken by City Council as a result of this report may have financial and legal implications.

NEXT STEPS

The City will continue with its plans to encourage diversity and inclusion at the City and in the wider community beyond. However, in terms of the Sanctuary City declaration, the Administration is planning no further action at this time.

APPENDICES

1. 2SLGBTQQAI+ City of Saskatoon Recent Initiatives Overview

Report Approval

Written by:	Cindy Yelland, City Solicitor
	Celene Anger, General Manager, Community Services
Reviewed by:	Stryker Calvez, Director Reconciliation, Equity, Diversity & Inclusion
	Richard Phillips, Chief Strategy & Transformation Officer
	Chelsea Mack, Director HR Shared Services
	Marno McInnes, Chief Human Resources Officer
	Jeff Jorgenson, City Manager
Approved by:	Cindy Yelland, City Solicitor

Admin Report - Blake Tait – Denounce 1 Million March 4 Children.docx

2SLGBTQQAI+ City of Saskatoon Recent Initiatives Overview

The following is a list of recent and current initiatives aimed at building and providing support and services to the 2SLGBTQQAI+ Community in Saskatoon.

Building support for 2SLGTQQAI+

- Public acknowledgements of pronouns by City Council and by Administration.
- Public endorsement of Annual Pride Month through social media posts and application of Pride logos on City Vehicles.
    - Employee opportunities for planning and participation in various activities during Pride Month.
- Gender inclusive washrooms and access policy at Leisure Centres.
    - Continuing support to provide safe and inclusive recreation experiences for transgender individuals.
- A statement of inclusion signage rolled out at all Leisure Centres.
- Staff training and awareness sessions for Leisure Centre staff regarding 2SLGBTQQAI+ Community.
- The Transgender Inclusion Working Group was established for ongoing engagement related to programs, services and infrastructure with our recreation and leisure facilities.
- Recreation and Community Development hosted a workshop in partnership with Saskatchewan Parks & Recreation Association: Inclusion in Action – Gender Equity in Recreation and Parks.
- Staff participated in the webinar 2SLGBTQQAI+ Inclusion in Parks & Recreation.

Strategic Plan Priority Area Outcomes

Goal: The City's workforce is reflective of the population of Saskatoon.

- Educational Sessions includes a 2SLGBTQQAI+ 101 course for all employees.
- Developing tools and processes for job descriptions and job postings that use inclusive language and remove systemic barriers and bias.
- Establishing community and academic partnerships to support inclusive recruitment.
    - City of Saskatoon recruitment information sessions specifically focused on reaching equity-seeking groups.

Goal: The City is successful at identifying and eradicating systemic and institutionalized oppression, racism and discrimination.

- Respectful and Harassment Free Workplace policy that includes language related to gender identity and sexual orientation.
- Piloted a Systemic Barriers Training Project for City employees to develop methodologies to identify and dismantle systemic barriers.
    i. Undergoing a systematic sector review of municipal best practices and literatures to identify best practices in identifying and dismantling systemic barriers.

- Equity Tools and resources using the Triple Bottom Line Equity Toolkit for Projects.
- Collaborate with union working groups to address barriers to diversity and inclusion in collective agreements.

Goal: City Council, Administration, and community decision-making bodies are reflective of the Saskatoon community.

- Diversity, Equity and Inclusion Advisory Committee of City Council – provides advice to City Council on policy matters relating to diversity, equity and inclusion in the community, including 2SLGBTQQAI+.
- City Strategic Plans include a Strategic Goal "to offer an inclusive workplace that embraces diverse backgrounds".
    - Our values of People Matter and Respect One Another speak to the valuing of diversity and bringing your whole self to the workplace.
    - Commitment to continuously build equitable and accessible services.

GOVERNANCE AND PRIORITIES COMMITTEE

Appointment – Municipal Heritage Advisory Committee

Recommendation of the Committee
That Jamie Harder be appointed as an agency representative of the Meewasin Valley Authority to the Municipal Heritage Advisory Committee to the end of 2026.

History
The Governance and Priorities Committee, at its meeting held on March 12, 2025, considered an agency representative to the Municipal Heritage Advisory Committee.

GOVERNANCE AND PRIORITIES COMMITTEE

Appointment – Saskatoon Accessibility Advisory Committee

Recommendation of the Committee
That Susan Mulligan be appointed as an agency representative for Council on Aging to the Saskatoon Accessibility Advisory Committee to the end of 2026.

History
The Governance and Priorities Committee, at its meeting held on March 12, 2025, considered an agency appointment to the Saskatoon Accessibility Advisory Committee.

GOVERNANCE AND PRIORITIES COMMITTEE

Appointment – Council Representatives – SUMA Cities Caucus and SUMA Board of Directors

Recommendation of the Committee

1. That Councillor Bev Dubois be appointed to the SUMA Cities Caucus for 2025; and
2. That Councillor Randy Donauer be appointed to the SUMA Board of Directors for 2025.

History

The Governance and Priorities Committee, at its meeting held on March 12, 2025, considered a request of SUMA regarding the above matter.

STANDING POLICY COMMITTEE ON TRANSPORTATION

Broadway Community Patio – Temporary Reserved Parking Program Background

Recommendation of the Committee
That the parking fee be reduced from $11,975 to $4,622 per year over five years.

History
The Standing Policy Committee on Transportation, at its meeting held on March 4, 2025, considered a report of the Community Services Division regarding the above. The recommendation being put forward by Committee was not voted on unanimously.

The Committee also received a letter dated February 27, 2025, as well as a presentation from Anne-Marie Cey, Broadway Business Improvement District.

Your Committee also resolved that, at the time this matter is before City Council, Administration bring forward additional information on how the Broadway Community Patio could be implemented without impacting the other BIDs in the city. This supplementary information is attached to this Committee report.

Attachments
1. March 4, 2025 report of the Community Services Division.
2. Letter from Anne-Marie Cey, Broadway Business Improvement District, dated February 27, 2025.
3. Supplementary Information provided by the Administration

Supplementary Information

This information is provided in response to the following motion of the Standing Policy Committee on Transportation at their March 4, 2025 meeting:

> "That at the time this matter is before City Council, Administration bring forward additional information on how the Broadway Community Patio could be implemented without impacting the other BIDs in the city."

Temporary Reserve Parking Fees

The formula used to charge parking rental fees under the Temporary Reserve Parking Program (TRP) achieves several purposes:

1. Recover lost parking revenue from the spaces being unavailable;
2. Promote the return of parking spaces for public use; and
3. Compensate the community for the exclusive use of public space.

Parking Revenue Allocation

Overall parking revenue, including pay parking, TRP and patio fees, is allocated as follows:

1. Fixed Allocations - Parking Services operating budget expenses, Parking Capital Reserve contribution, BID Grants (4 BIDs), and Community Support Program funding;
2. Percentage of Remaining Balance – Contributions to Streetscape Reserve (50%), Contributions to General Revenue (50%).

Foregone parking revenue being considered for the Broadway BID's patio project solely impacts remaining revenue contributed to the Streetscape Reserve and General Revenue.

Components Funded under Parking Revenue Formula	**Funding Amount** ($ amount based on	**Revised Funding Amount***	**$ Change**
Estimated Total Parking Revenue - 2025	$7,175,500	$7,168,147	$7,353
Fixed Allocations: as approved for 2024/25 budget cycle			
Parking - Operating Budget	$1,447,000	$1,447,000	-
Contribution to Parking Capital	$475,000	$475,000	-
BID Grant (4 BIDs)	$350,100	$350,100	-
Community Support Program	$600,100	$600,100	-
Total Fixed	$2,872,200	$2,872,200	-
Balance to be Allocated: remainder of parking revenue after funding the Fixed Allocations	$4,303,300	$4,295,947	$7,353
Streetscape Reserve - 50%	$2,151,650	$2,147,941	$3,677
Less $63,500 Council directed reduction	($63,500)		
Streetscape Reserve - 50% less $63,500	$2,088,150	$2,084,474	$3,677[1]
Mill Rate Support - 50% plus $63,500	$2,215,150	$2,211,474	$3,677

Note 1: Less funding to reserve for Urban Design Program

Streetscape Reserve Allocation

The Streetscape Reserve primarily funds the Urban Design Program operations, including salaries, maintenance and replacement of assets in the public realm, as well as streetscaping improvement projects across the Downtown, Riversdale, Broadway, and Sutherland BID areas. The Reserve is not formally divided between BID areas and is instead allocated based on planned projects, maintenance, and service level requirements. Streetscaping projects are chosen based on priority of need and ability to align with other planned work in the area such as water main replacements and sidewalk rehabilitation/reconstruction projects.

Impact to Other BIDs

The BID organizations are not impacted by minor changes to parking revenue. Revenue changes impact the Urban Design Program operations and funding for streetscape and capital projects occurring in the respective BIDs.

Parking revenues can vary significantly depending on factors such as weather and planned construction in an area, which may impact parking availability. In theory, if parking revenues remained constant outside of this request, there would be a reduction of $3,677/year to the BID Streetscape Reserve. For context, the estimated BID Streetscape Reserve contribution from parking revenue in 2025 is $2.15 million. Reductions to the Streetscape Reserve are mitigated by prioritizing required staffing operations, maintenance as well as streetscaping and capital projects in the BID areas.

Broadway Community Patio – Temporary Reserve Parking Program Background

ISSUE

The Broadway Business Improvement District has submitted a request to waive parking fees associated with their community patio project. The patio is subject to the full parking fees under the Temporary Reserve Parking Program.

BACKGROUND

In 2023, the Broadway Business Improvement District (BBID) sought financial support through the Urban Design Program to create a community patio at the terminus of 12th Street East. The patio would occupy four paid parking spaces within the public right of way and is intended to operate as a community space, allowing Broadway businesses the opportunity to book the space for activities and/or be an open space for people to gather and enjoy the outdoors. The BBID has expressed interest in having the patio in place from June 1 to September 15, for five years. The conditional approval for the project stipulated that the BBID be responsible for any operational costs associated with the project, including any parking fees charged by the City of Saskatoon (City) for the use of the public parking spaces.

CURRENT STATUS

Patio construction has been completed off-site with the intent to move it to the subject location for June 1, 2025. Installation and design changes may be required to accommodate an adjacent Link platform.

DISCUSSION/ANALYSIS

The reservation of paid parking spaces is administered by the Temporary Reserve Parking Program (TRP). The TRP program charges rental fees based on hourly parking rates for the exclusive use of paid parking spaces. Previously, Council has approved reduced parking fees associated with other program types on the basis of other City goals that these uses help support.

Programs with reduced parking fees are outlined below. It is also noted that the Standing Policy Committees on Planning, Development and Community Services and Transportation respectively considered administrative reports on a TRP Policy approach which utilizes the hourly parking rate as a base rate in order to derive TRP fees. The proposed base rates are outlined below, though at the time of writing of this report, this approach has not yet been approved by City Council.

- Mobile Food Truck Program – paid parking space rental of 13% of the base rate;
- Parking Patio Program – paid parking space rental of 18% of the base rate; and
- Special Events – paid parking space rental associated with an approved special event is a flat rate of $18/stall/day.

The BBID community patio does not meet the criteria of any other program to be eligible for a reduced rental rate. The BBID has requested a full waiver of all parking fees, citing the benefits of the patio to the Broadway area. Administration's current policy does not support this request.

FINANCIAL IMPLICATIONS

Applicable TRP fees for four paid parking spaces are $11,975/year plus GST. Over 5 years, the BBID would pay $59,875 in TRP fees. If City Council chooses to reduce fees to a similar amount under the Parking Patio Program, applicable fees would reduce from $11,975/year to approximately $4,622/year at current pay parking base rates; over 5 years, the BBID would pay $23,110 in TRP fees. Revenue from the TRP forms part of the general Parking revenues, which is distributed according to a set formula. In accordance with Bylaw No. 6774, The Capital Reserve Bylaw, 1993, the Streetscape Reserve – Core BID receives approximately 50% of the parking revenues after allocations, while the remaining 50% is directed towards General Revenue. The table below shows the financial implications for the standard and parking patio TRP fee categories for the use of four paid parking spaces.

TRP Fee Category	TRP Annual Amount	Streetscape Reserve	General Revenue	5 year Amount	Streetscape Reserve	General Revenue
Standard	$ 11,975.00	$ 5,987.50	$ 5,987.50	$ 59,875.00	$ 29,937.50	$ 29,937.50
Parking Patio	$ 4,622.00	$ 2,311.00	$ 2,311.00	$ 23,110.00	$ 11,555.00	$ 11,555.00
$ Rate Difference	$ 7,353.00	$ 3,676.50	$ 3,676.50	$ 36,765.00	$ 18,382.50	$ 18,382.50

OTHER IMPLICATIONS

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

NEXT STEPS

The BBID will continue to work with Urban Design to finalize the patio design for installation in 2025.

APPENDICES

1. Letter from Broadway Business Improvement District

REPORT APPROVAL

Written by: Veronica Blair, Policy Manager
Reviewed by: Wayne Sum, Parking Services Manager
Matt Grazier, Director of Community Standards
Approved by: Celene Anger, General Manager, Community Services Division

SP/2025/CS/Transportation/Broadway Community Patio – Temporary Reserve Parking Program Background/mt

Broadway Business Improvement District | 306.664.6463 | Unit A 613 9th Street East, Saskatoon SK S7H 0M4

Her Worship Mayor Block and Saskatoon City Council
City of Saskatoon
222 3rd Avenue North
Saskatoon, SK S7K 0J5

Dear Mayor Block and Council Members:

On behalf of the Broadway Business Improvement District (BBID), we are requesting a waiver of fees for a community patio (parklet) installation during the summer months, June to September, for the next five summers.

Development of the parklet was a joint initiative of the BBID, the City of Saskatoon's Urban Design department and Healthy Communities Canada. The shared vision is to create a seasonal space that enhances community engagement, supports local businesses, and contributes to the safety, inclusivity and vibrancy of Broadway Avenue.

Details:

Location	Using four parking spaces at five corners on Broadway (12th St.)
Duration	Three and a half months (approx. June 1 to September 15) starting in 2025.
Purpose	A public gathering space for visitors to relax and enjoy. It benefits the entire business district and will encourage pedestrian activity, shopping and community activations.
Permanency	This request is for five consecutive summers, starting in 2025.

We are requesting a **full waiver of the parking space fees** for five years. The Broadway BID operates on a break-even budget, relying on grants and sponsorships to help fund installations, activations and other activities designed to create vibrant, people-centered spaces. A waiver would allow us to focus resources on delivering a high-quality activated parklet that enhances the area without imposing additional financial burdens. This initiative has strong support from business and community members, aligns with the City of Saskatoon's placemaking goals, and contributes positively to the area's cultural and economic vitality.

The cost savings to the BBID are approximately **$11,975.00/yr.** The following images will help to illustrate the impact this community patio will have to the Broadway community.

We appreciate your consideration of this request and welcome the opportunity to discuss it further.

Sincerely,

Anne-Marie Dey
Executive Director, BBID
Cell: (306) 221-3208

Dr. Wade Phillips
Board Chair, BBID
Cell: (306) 262-3111

Actual patio construction in progress (Aug 2024).

Rendering (for illustration purposes, will not be exactly as shown).

Thompson, Holly

From: City Council
Subject: 6.3.1 Communication - Anne-Marie Cey - Broadway Business Improvement District - Broadway Community Patio – Temporary Reserve Parking Program Background - CK 6120-1
Attachments: BBID Parking fee waiver request.pdf

From: Web NoReply <web-noreply@Saskatoon.ca>
Sent: Thursday, February 27, 2025 9:50 PM
To: City Council <City.Council@Saskatoon.ca>
Subject: Email - Communication - Anne-Marie Cey - Broadway Business Improvement District - Broadway Community Patio – Temporary Reserve Parking Program Background - CK 6120-1

--- Replies to this email will go to annemariecey@broadwayyxe.com ---

Submitted on Thursday, February 27, 2025 - 21:33

Submitted by user: [redacted]

Submitted values are:

I have read and understand the above statements.: Yes

I do not want my comments placed on a public agenda. They will be shared with members of Council through their online repository.: No

I only want my comments shared with the Mayor or my Ward Councillor.: No

Date: Thursday, February 27, 2025

To: His Worship the Mayor and Members of City Council

First Name: Anne-Marie

Last Name: Cey

Phonetic spelling of first and/or last name: Say

Phone Number : 306[redacted]

Email: annemariecey@broadwayyxe.com

I live outside of Saskatoon: No

Saskatoon Address and Ward:
Address: Unit A 613 9th Street East
Ward: Ward 6

Name of the organization or agency you are representing (if applicable): The Broadway Business Improvement District

What do you wish to do ?: Request to Speak

If speaking will you be attending in person or remotely: In person

What meeting do you wish to speak/submit comments ? (if known):: Transportation Committee

What agenda item do you wish to comment on ?: 6.3.1

Comments:
The Broadway Business Improvement District (BBID) is recognized as a vital resource and support, and serves as an advocate for the business interests of its members. The BBID maintains strong collaborative relationships and is a voice of opinion with the City of Saskatoon and other stakeholders, and remains responsive to the needs and priorities of the broader community.

The BBID operates on a limited budget funded through a tax levy, parking revenue, grants, sponsorships and special event revenues. We are asking the city to waive the annual parking patio expense so the BBID can redirect these funds towards creating activations, installations and innovative programming that will further enhance the visitor experience on Broadway Avenue, benefitting both Broadway businesses and the Nutana community.

Attachments:

Will you be submitting a video to be vetted prior to council meeting?: No

Broadway Business Improvement District | 306.664.6463 | Unit A 613 9th Street East, Saskatoon SK S7H 0M4

Her Worship Mayor Block and Saskatoon City Council
City of Saskatoon
222 3rd Avenue North
Saskatoon, SK S7K 0J5

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STANDING POLICY COMMITTEE ON FINANCE

2025 Property Tax Phase-in Plan

Recommendation of the Committee

1. That the City of Saskatoon proceed with Option 2:
   a. That the tax impact of the 2025 provincial reassessment for the multi-residential subclass and the non-residential classes be phased-in equally over a four-year period; and
   b. That there be a two-year phase-in of property tax changes for the remainder of the residential property class; and
2. That the City Solicitor be requested to prepare the 2025 Property Tax Phase-in Plan Bylaw for submission to City Council for consideration at the same meeting that the Mill Rate Bylaws are presented.

History

The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the Corporate Financial Services Division regarding the above.

The Committee did not vote unanimously on the recommendation.

Attachment

March 5, 2025 report of the Corporate Financial Services Division.

2025 Property Tax Phase-in Plan

ISSUE

Provincial legislation in Saskatchewan requires the reassessment of all properties every four years to reflect a more current assessment value. Historically, the tax impact resulting from the difference in assessed value between reassessment cycles has been phased in. City Council approval is required for the tax phase-in plan due to the 2025 Reassessment for the residential and commercial tax classes.

BACKGROUND

Provincial legislation in Saskatchewan requires that a reassessment of all properties be completed every four years to determine new assessment values. This four-year cycle began in 1997, and 2025 is the eighth reassessment under this schedule.

As per *The Cities Act*, City Council may phase-in a tax change resulting from a reassessment for a taxable property, a class, or a subclass of property. City Council has approved a phase-in of property tax for each reassessment beginning in 1997. The phase-in plan must be structured so it is completed within the current reassessment cycle. Summarized below are the phase-in terms for the four most recent cycles.

	Residential / Condominium Property Tax Class	**Multi-Residential Property Tax Class**	**Commercial Property Tax Class**
2009	2-year	4-year	4-year
2013	4-year	4-year	4-year
2017	2-year	4-year	4-year
2021	No phase-in used		2-year

CURRENT STATUS

For this reassessment cycle, the residential property class saw an average increase of 13%, while the commercial and industrial class saw an average decrease in assessment of 2%, as seen below.

Property Class	**2024 Assessed Value**	**2025 Assessed Value**	**Aggregate Fair Value Shift (%)**	**2024 % of Total Assessment**	**2025 % of Total Assessment**
Residential	$33.4B	$37.6B	13%	77%	80%
Non-Residential	$9.8B	$9.6B	-2%	23%	20%

Property tax phase-in is most impactful when reassessment has resulted in significant distribution within property tax classes relative to the average. Individual properties with a change close to the average will have smaller phase-in amounts, while properties with changes larger, or smaller, than the average will have larger phase-in amounts.

Residential Properties Class Data Analysis

The residential property class makes up 80% of the assessment distribution for the 2025 reassessment cycle and represents 96% of taxable properties in Saskatoon. The following table displays the eligible phase-in amounts for each residential property subclass, provided the property has the median assessed value for its respective subclass.

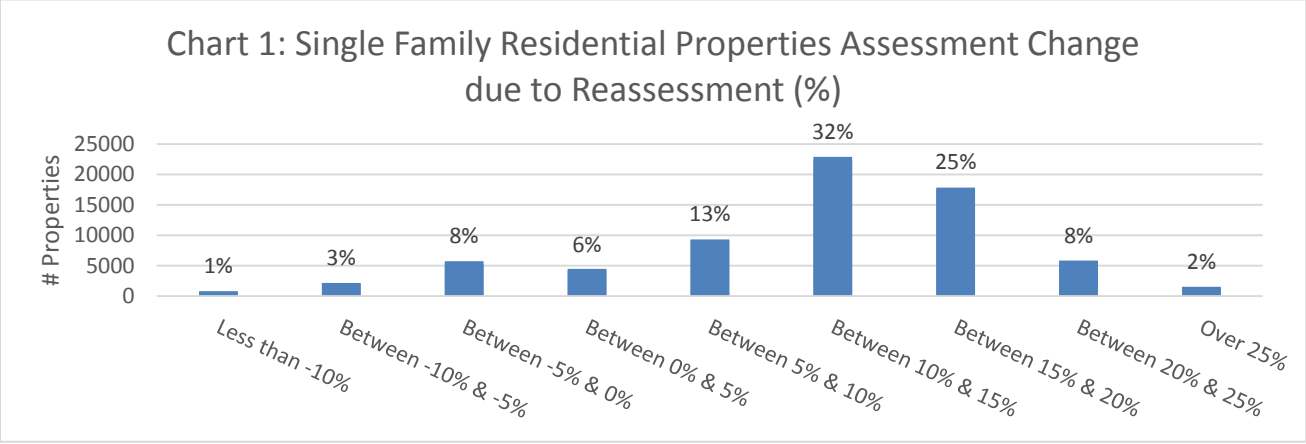
Property Subclass	2024 Fair Value Assessment	2025 Shifted Fair Value Assessment	% Change in Assessed Value	Tax Change due to Reassessment*
Single-Family Residential	$ 348,800	$ 394,200	13%	$9.15 (0.4%)
Residential Condominium	$ 206,200	$ 216,500	5%	$-98.65 (-7%)
Multi-Residential	$1,581,900	$1,966,000	24%	$1,162.66 (10%)

*Eligible amount to be phased in by calculating the difference between the revenue neutral tax and the 2024 tax bases.

Appendix 1 provides a further analysis of the potential impacts a residential phase-in would have (Tables 1 & 2 present data on a full residential phase-in, whereas Table 3 presents data on multi-residential only).

Single-Family Residential Property Subclass Data Analysis

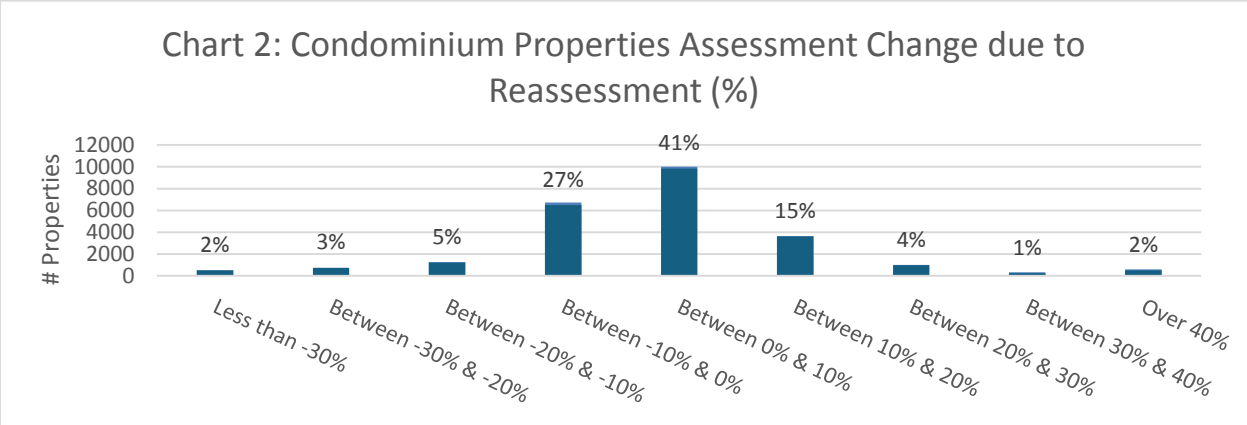
The single-family residential property subclass makes up 73% of the residential class, and approximately 80% of all single-family residential properties experienced a change of +/- 10% of the single-family subclass average (13%). Chart 1 demonstrates the distribution of assessed value changes within the subclass and is located below:



The narrow distribution of value changes from reassessment means the overall dollar impact eligible for phase-in will be smaller than if there was a wider distribution.

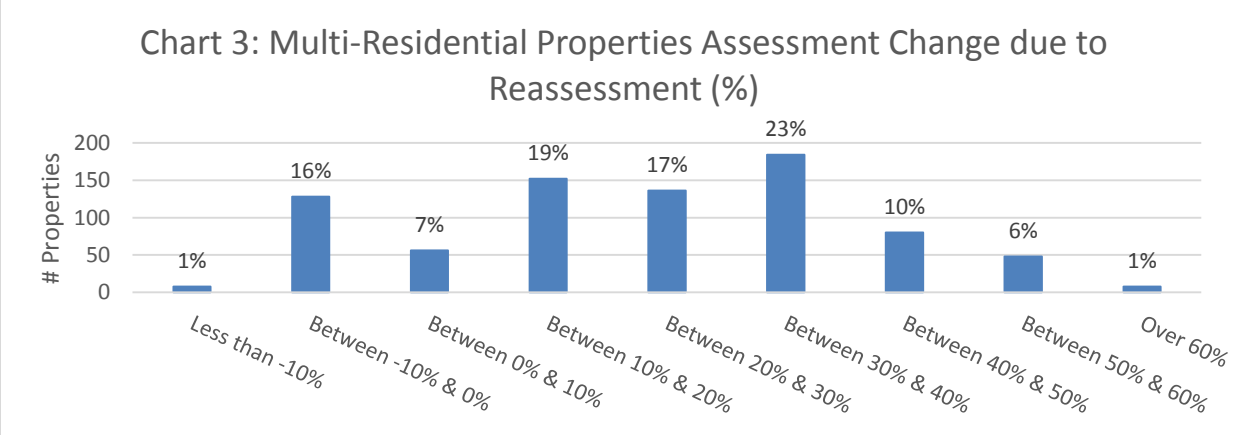
Condominium Residential Property Subclass Data Analysis

The condominium residential property subclass makes up 26% of all residential properties. 68% of condominium properties experienced a change in value within +/- 10% of the average (5%) due to reassessment. As shown in Chart 2, and like the single-family residential properties, a narrow distribution of the change implies that the dollar amount eligible for phase-in will be smaller than if there was a wider distribution.



Multi-Residential Properties Subclass Data Analysis

The multi-residential property subclass makes up less than 1% of all properties within the residential class; however, due to the higher assessed value of those properties, the subclass makes up almost 9% of the total residential class value. Approximately 50% of the of multi-residential properties saw an increase within 10% of the average (24%) assessment change. Unlike the first two subclasses, the wide distribution indicates a larger amount eligible for phase-in. Chart 3 demonstrates the distribution within this subclass typically ranges between a 10% decrease and a 60% increase. Due to the wider distribution, phase-in would be more impactful to multi-residential properties.



Commercial Properties Class Data Analysis

The commercial property class makes up 20% of the assessment distribution for the 2025 reassessment cycle and represents 4% of taxable properties in Saskatoon. Within the current reassessment cycle, the -2% average change in commercial values sees

significant variance by subgroup. Please see the chart below for additional information on the impacts reassessment has had for a median valued property within the subgroups:

Property Subgroup	2024 Fair Value Assessment	2025 Shifted Fair Value Assessment	% Change in Assessed Value	Tax Change due to Reassessment*
Retail	$1,548,400	$1,393,600	-10%	-$1,405.47 (-8%)
Office	$1,596,400	$1,325,000	-17%	-$2,735.53 (-15%)
Warehouse/ Industrial	$1,366,000	$1,502,550	10%	$1,902.85 (12%)
Hotel	$9,827,100	$8,549,600	-13%	-$12,314.99 (-11%)

Implementing a phase-in for commercial properties will result in retail, office and hotel/motels proeprties seeing a delay in receiving their tax decrease and warehouse and other industrial commercial properties seeing a delay in receiving their tax increase.

Public Engagement & Approaches in other Jurisdictions

In the summer of 2024, Property Tax Phase-In and Reassessment Engagement was undertaken (Appendix 2). Property owners were asked about their preferred phase-in options, communication methods, and topics of interest. Some key highlights from this engagement include:

- Most participants favoured the City using a four-year phase-in (45%);
- At the same time, 32% of respondents also highlighted they wanted to see any potential decreases in property taxes reflected as soon as possible; and
- Participants found the City's property tax process, including phase-in, to be somewhat confusing (average three out of five).

Over the last three assessment cycles, the City of Regina has used three-year phase-in for commercial properties and no phase-in for residential properties. The cities of Prince Albert and Swift Current do not use phase-in for the purpose of distributing the property tax load following a reassessment cycle.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

It is important to note that not all property owners benefit from phase-in, as the increases in property tax due to reassessment are offset by the decreases within each class and subclass. Property owners with larger increases are typically in favor of phase-in; however, property owners with larger decreases typically do not favor phase-in and want to see the impact of the decrease immediately.

In addition, phase-in adds another level of complexity for property owners to understand their property tax bill. For example, property owners often do not realize the budget, tax policy and contingency amounts are not eligible for phase-in. For many properties,

these changes account for a larger portion of the tax increase which is not phased-in than the reassessment shift that is phased-in.

OPTIONS

Option 1 – No Phase-in for any Property Class

Under this option, the City would not use property tax phase-in for any property class.

Pros:

- More Closely follows Ad Valorem, owners are paying taxes based on the most up-to-date value of their property.
- Easier for taxpayers to understand, reduces the confusion and questions that result from the phase-in charge or credit appearing on tax bills for the remainder of the assessment cycle.

Cons:

- Provide the least amount of time for property owners to prepare for their tax shift.
- Not consistent with precedent, as historically the City has implemented tax phase-in policy for each cycle.
- Not consistent with the public engagement results where respondents indicated a preference for some level of phase-in.

Option 2 – 4-year phase-in for multi-residential and commercial classes and 2-year phase in for the remainder of the residential class.

Under this option, the City would use a four-year property tax phase-in for the commercial class and multi-residential subclass where property tax changes due to reassessment are the most significant and utilize a shorter two-year phase-in for less significant shifts in the remainder of the residential class.

Pros:

- Consistent with historical practice. Four-year multi-residential and commercial phase-ins have been applied in three of the last four cycles whereas a two-year phase-in for single-family and condominium has also occurred in cycles experiencing similar assessment shifts.
- Provides additional time for property owners to prepare for their tax shifts as the full change in property tax will not be realized until 2026 or 2028 respectively.
- Considers the assessment distribution within the property classes/subclasses and has applied a longer phase-in where it will be the most impactful.
- Two-year phase-in for residential properties most closely aligns with the engagement results whereas a preference for some level of phase-in was identified but also ensuring decreases in property taxes for individual properties are reflected as soon as possible

Cons:

- For properties with a four-year phase-in the impact of reassessment and corresponding property tax changes will be delayed from the January 2023 valuation until 2028.

- Phase-in can be complicated to explain to property owners and the impact it has on their property tax bill.

Option 3 – 4-year phase-in for all property classes.

Under this option, all property owners would have their property tax increase phased-in over the full four-year period.

Pros:

- Somewhat consistent with historical precedent to phase-in all classes; however, phase-in for single family and condominium properties has not been consistent as three different phase-in options have all been used in the last four cycles.
- Provides the most time possible for all property owners to prepare for their tax shift as the full property tax change will not be realized until 2028.

Cons:

- Least closely follows the Ad Valorem principals, as all properties will not be taxed at their January 2023 valuation until 2028.
- Does not address the engagement results indicated preference to have decreases in property taxes related to reassessment reflected as soon as possible.
- Phase-in can be complicated to explain to property owners and the impact on their property tax bill.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council:

1. That the City of Saskatoon proceed with Option 2:
    a. That the tax impact of the 2025 provincial reassessment for the multi-residential subclass and the non-residential classes be phased-in equally over a four-year period; and
    b. That there be a two-year phase in of property tax changes for the remainder of the residential property class; and
2. That the City Solicitors be requested to prepare the 2025 Property Tax Phase-in Plan Bylaw for submission to City Council for consideration at the same meet that the Mill Rate Bylaws are presented.

RATIONALE

For the residential single-family home and condominium property subclasses, the Administration is recommending a two-year phase-in for this reassessment cycle as most property owners will see a relatively small change in property tax due to reassessment. This also simplifies the tax calculation and allows eligible residential property owners to realize their decrease due to reassessment sooner (i.e. 2026).

For the commercial property class and multi-residential properties, the Administration is recommending continuation of past practice by phasing in tax shifts due to reassessment over four years. The four-year phase-in will evenly distribute the tax shifts due to reassessment so that 25% is realized in 2025, 50% is realized in 2026, 75% is realized in 2027 and the remainder realized in in 2028. This will alleviate significant tax increases for those property owners that had greater than average assessment change, although property owners who saw a lower-than-average change will be waiting the four years to fully realize the decrease.

NEXT STEPS

Once a decision has been made regarding these recommendations, the Property Tax Phase-in Plan bylaw for the 2025 tax year can be prepared and will be presented at the April meeting of City Council. A strategic Communication Plan has been developed to support 2025 Property Tax mail-out to residents, which include:

- Along with other information found on the 2025 Property Tax Notice, a helpful guide explaining how the concept of phase-in works will accompany the mailing and will also be made available on the City's website.
- The City's website will be updated with 2025 Property Tax and Phase-in information and important dates.
- Corporate Revenue Customer Service team, Service Saskatoon Customer Care and City Councilors will be provided information explaining the phase-in process.
- Dedicated social media to support the 2025 Property Tax process, including additions to the reassessment video series which answer frequently asked questions, and where to find additional information or assistance if a property owner wishes to contact the City.
- Social media will also promote two easy-to-use online tools that allow residents to find additional assessment and tax-related information including the Revenue Neutral Property Tax Estimator (does not include 2025 budget changes) and the Property Assessment & Tax Tool

APPENDICES

1. Potential Impacts of Residential Phase-in
2. Public Property Tax Phase-In and Reassessment Engagement

REPORT APPROVAL

Written by: Maegan Piche, Revenue Accounting Manager
Reviewed by: Mike Voth, Director of Corporate Revenue
Approved by: Clae Hack, Chief Financial Officer

Admin Report - 2025 Property Tax Phase-in Plan.docx

PART 1) Full Residential Class Phase-In

Table 1: Amount Eligible for Phase-In on Median *Residential Properties (Full Four-Year Phase-in)*							
		Growth	**Assessed Value**	**2024 Base Municipal Taxes**	**Rev. Neutral Municipal Tax**	**Amount Eligible for Phase-In**	**Four Year Phase-in Adjustment**
Single-Family	2024 Base Property		$348,800	$2,471.06			
	Below Average Growth	3%	$359,400		$2,261.26	-$209.80	52.45
	Average Growth	13%	$394,200		$2,480.21	$9.15	-2.29
	Above Average Growth	23%	$429,100		$2,699.80	$228.74	-57.18
It is estimated that 80% of single-family residential properties are within 3% and 23% (10% of the average).							
Condominium	2024 Base Property		$206,600	$1,463.66			
	Below Average Growth	-5%	$195,900		$1,232.55	-$231.11	57.78
	Average Growth	5%	$216,500		$1,362.17	-$101.49	25.37
	Above Average Growth	15%	$237,200		$1,492.41	$28.75	-7.19
It is estimated that 68% of Residential Condominiums are within -5% and 15% (10% of average).							
Multi-Residential	2024 Base Property		$1,581,900	$11,206.94			
	Below Average Growth	14%	$1,807,800		$11,374.24	$167.30	-41.83
	Average Growth	24%	$1,966,000		$12,369.60	$1,162.66	-290.67
	Above Average Growth	34%	$2,124,200		$13,364.95	$2,158.01	-539.5
It is estimated 50% of Multi-Family Residential properties are within 14% and 34% (10% of the average).							

	Table 2: Annual and Monthly Phase-In for Median Residential Properties (Full Four Year Phase-in)							
		Growth	**Year 1 Adjustment (Annual)**	**Year 2 Adjustment (Annual)**	**Year 3 Adjustment (Annual)**	**Year 1 Adjustment (Monthly)**	**Year 2 Adjustment (Monthly)**	**Year 3 Adjustment (Monthly)**
Single Family	Below Average Growth	3%	157.35	104.9	52.45	13.11	8.74	4.37
	Average Growth	13%	-6.87	-4.58	-2.29	-0.57	-0.38	-0.19
	Above Average Growth	23%	-171.54	-114.36	-57.18	-14.3	-9.53	-4.77
Condominium	Below Average Growth	-5%	173.34	115.56	57.78	14.45	9.63	4.82
	Average Growth	5%	76.11	50.74	25.37	6.34	4.23	2.11
	Above Average Growth	15%	-21.57	-14.38	-7.19	-1.8	-1.2	-0.6
Multi-Residential	Below Average Growth	14%	-125.49	-83.66	-41.83	-10.46	-6.97	-3.49
	Average Growth	24%	-872.01	-581.34	-290.67	-72.67	-48.45	-24.22
	Above Average Growth	34%	-1618.5	-1079	-539.5	-134.88	-89.92	-44.96

Multi-Residential Phase-In

Table 3: Amount Eligible for Phase-In on Median Multi-*Residential Property (Partial Phase-In [Option 2])*							
		Growth	**Assessed Value**	**2024 Base Municipal Taxes**	**Rev. Neutral Municipal Tax**	**Amount Eligible for Phase-In**	**Four Year Phase-in Adjustment**
Multi-Residential	2024 Base Property		$1,581,900	$11,206.94			
	Below Average Growth	4%	$1,649,600		$9,403.51	-$1,803.43	$450.86
		14%	$1,807,800		$10,305.33	-$901.61	$225.40
	Average Growth	24%	$1,966,000		$11,207.15	$0.21	-$0.05
	Above Average Growth	34%	$2,124,200		$12,108.96	$902.02	-$225.51
		44%	$2,282,400		$13,010.77	$1,803.83	-$450.96

Commercial Properties

Table 4: Amount Eligible for Phase-In on Median *Commercial Properties (Full Phase-in)*							
		Growth	**Assessed Value**	**2024 Base Municipal Taxes**	**Rev. Neutral Municipal Tax**	**Amount Eligible for Phase-In**	**Four Year Phase-in Adjustment**
	2024 Base Property		$1,190,900	$13,414.68			
	Below Average Growth	-22%	$927,600		$10,673.94	-$2,740.74	685.19
		-12%	$1,046,700		$12,044.42	-$1,370.26	342.57
	Average Growth	-2%	$1,165,800		$13,414.92	$0.24	-0.06
	Above Average Growth	8%	$1,284,900		$14,785.40	$1,370.72	-342.68
		18%	$1,404,000		$16,155.89	$2,741.21	-685.3
It is estimated that 38% of commercial properties are within -12% and 8% (10% of the average).							

City of Saskatoon
ENGAGE

PROPERTY TAX PHASE-IN

Engagement Report

January 13, 2024

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ENGAGEMENT SUMMARY

INTRODUCTION

In 2024 the City of Saskatoon (City) engaged the community on the Property Tax Phase-In project to determine whether the City should implement a two-year, four-year or no-phase-in for the next legislated property reassessment cycle in 2025.

We explored the following:

- **Whether the City should implement a two-year, four-year or no-phase-in** for the next legislated property reassessment cycle in 2025.
- **Residents' feedback on the benefits, concerns and/or preferences** for the phase-in process and how it is conducted.
- **Residents' preferred communication methods** to receive reassessment information in 2025 and going forward.

Why Are We Doing This Work?

As provincially mandated, the City of Saskatoon's (City) Property Assessment Office reassesses all property types every four years so that your property's market value reflects a more up-to-date, accurate and fair property value. Along with the City's budgeting process and taxation policy, a property's updated market value (i.e., reassessment) is then used to calculate the amount of property tax an owner is required to pay for the next four years.

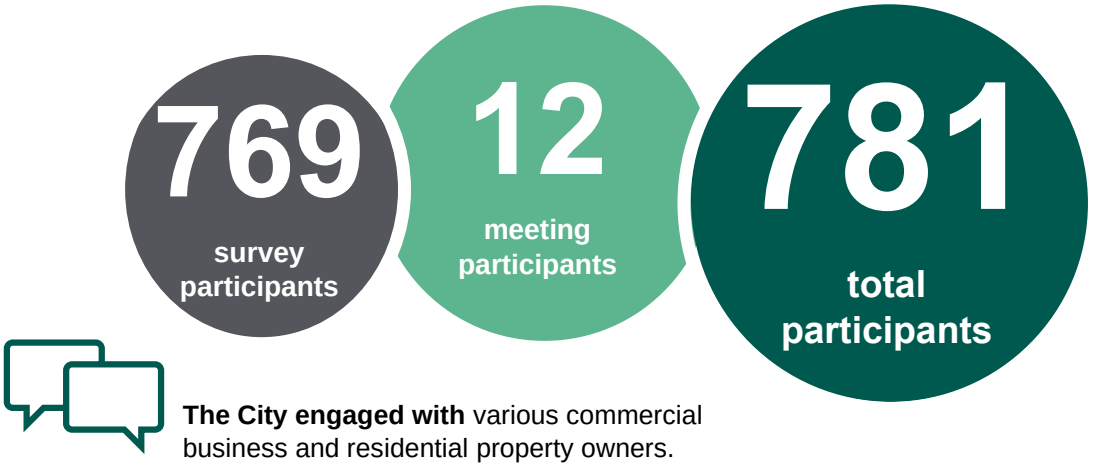
In 2021, City Council received correspondence from representatives of the business community asking for the City to review its assessment and tax collection policies. Following this request, City Administration provided a report to the Governance and Priorities Committee with information on the recommendations identified by the business community, the feasibility of a permanent four-year assessment phase-in policy and how the City can best share important information about assessments with property owners. City Council called on City Administration to engage property owners on their preference for how their change in property tax (i.e., increase or decrease), as a result of reassessment, should be phased in. Since the next provincially legislated reassessment year for all property types is 2025, the City explored options to implement a phase-in for the next property reassessment cycle in 2025.

Using What We Learned

Based on what we heard from participants, in addition to internal considerations, City Administration will develop the Tax Policy and Phase-In Report which will be presented to City Council in March 2025.

This condensed report outlines the feedback from all activities that informed the engagement goals for the project. For more information and detailed results please see the Engagement Report below.

WHAT WE DID



The City engaged with various commercial business and residential property owners.

Who We Engaged With:

- Advocacy groups
- Businesses and associations
- Commercial property owners
- Landlords
- Multi-unit and affordable housing providers
- Property managers
- Residents and community members

How We Gathered Input:

- Community survey
- Meetings with internal departments
- Meetings with external stakeholders

Questions we asked participants:

- Do they find the City's property tax process confusing?
- Would they prefer the City to use a two-year, four-year or no-phase-in for the next legislated property reassessment cycle in 2025?
- Which assessment-related topics would they like more information about?
- What are their preferred communication methods to receive reassessment information from the City?

WHAT WE HEARD

Phase-In Options

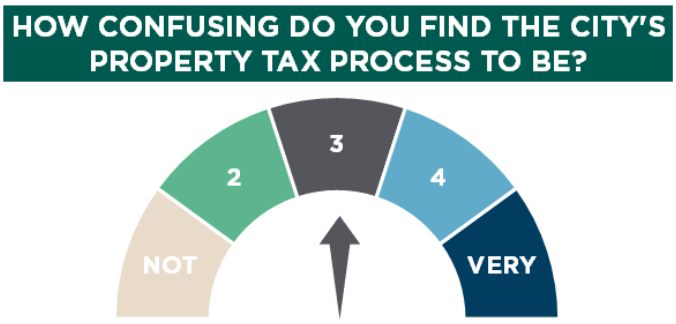
- Most participants favoured the City using a four-year phase-in (45%) for the next legislated property reassessment cycle in 2025.

- When asked to identity the most important factors that led to their decision, participants provided the following ranking:

1. I want a **consistent process** so I can plan my budget (54%)
2. I want as **much time as possible** to prepare for tax shifts (42%)
3. I want to have my decrease in property tax **reflected as soon as possible** (32%)
4. I want to **pay the change** in my property tax as soon as possible (15%)
5. I am willing to delay the decrease in the amount of property tax I owe to **help another property owner** delay their increase (13%).

Knowledge and Communications

- Participants found the City's property tax process to be somewhat confusing (average three out of five).



- Most respondents (73%) found the information provided (i.e., within the survey, on the City's Engage Page and through infographics) helpful in understanding the phase-in options.

- Throughout the survey many participants stressed the need for communication and awareness programs, including on the City's website (60%), utility billing information inserts (59%) and social media information posts on the City's channels (35%).

Information and knowledge gaps:

When asked which of the identified assessment-related topics they would like more information about, participants provided the following ranking:

1. How my **assessment is calculated** (59%)
1. How my **property's assessment differs from my property appraisal** (44%)
2. How **reassessment affects your 2025 property tax** (32%)
3. The difference between **mass appraisal vs single property appraisal** (31%)
4. Where to **find information** about my property (29%)
5. Why does my **property's assessment change** (29%)

Other Considerations

From the various comments provided throughout the engagement activities, participants emphasized the following topics:

Equity: some respondents felt that a phased approach could disproportionately benefit wealthier property owners; respondents stressed the need for a fair system in which everyone pays their fair share based on their property's value.

Fairness: some respondents felt that a phase-in approach was especially important for low-income residents and those on a fixed income, with some willing to delay their decrease in property taxes to assist low-income households; others felt that it is unfair for those with decreasing property values to subsidize those with increasing values.

Spending concerns: many respondents felt that property taxes are already too high and should not be increased; some respondents were concerned about how the City is spending taxpayer money, with calls for more responsible and transparent spending.

Swings: several respondents felt that the current process allows for property assessment values to "swing" and lead to large changes in property taxes.

Timing: respondents suggested gradually implementing future changes to the property reassessment process to reduce the impacts to all residents, especially low-income residents and those on a fixed income.

NEXT STEPS

Based on what we heard from the community, in addition to best practices and internal considerations, City Administration will present the Tax Policy and Phase-In Report to City Council in March 2025.

For more information about when the report will be presented to City Council, please visit our Engage Page.

We thank all participants who provided their feedback for this and other City of Saskatoon projects.

ENGAGEMENT REPORT

1 BACKGROUND

As provincially mandated, the City of Saskatoon's (City) Property Assessment Office reassesses all property types every four years so that your property's market value reflects a more up-to-date, accurate and fair property value. Along with the City's budgeting process and taxation policy, a property's updated market value is then used to calculate (i.e., reassessment) the amount of property tax an owner is required to pay for the next four years. Although *The Cities Act* does not allow for the City to change the current four-year reassessment cycle, the City can determine its own tax policies for the variety of property classes in Saskatoon. This includes determining how changes in one's property tax, as a result of a property's reassessed value increasing/decreasing, are phased in.

In 2021, City Council received correspondence from representatives of the business community asking for the City to review its assessment and tax collection policies. Following this request, City Administration provided a report to the Governance and Priorities Committee with information on the recommendations identified by the business community, the feasibility of a permanent four-year assessment phase-in policy and how the City can best share important information about assessments with property owners. Following the approval of this report, City Council called on City Administration to engage property owners on their preference for how their change in property tax (i.e., increase or decrease), as a result of reassessment, should be phased in. Since the next provincially legislated reassessment year for all property types will take place in 2025, the City engaged property owners in 2024 to determine:

- Whether the City should implement a two-year, four-year or no-phase-in for the next legislated property reassessment cycle in 2025
- Their feedback on the benefits (ex. smoothing out shifts in property values), concerns (ex. delaying a potential property tax decrease, confusion with the process, etc.) and/or preferences for the phase-in process and how it is conducted
- Their preferred communication methods to receive reassessment information in 2025 and going forward.

Based on what we heard from the community, in addition to best practices and internal considerations, City Administration will present the Tax Policy and Phase-In Report to City Council in March 2025.

1.1 Summary of Engagement Strategy

Participants were provided the opportunity to inform the following engagement goals:

- Inform the community of proposed property tax phase-in options
- Determine support and impacts for the various options
- Determine opportunities for future communication efforts related to property reassessments.

A summary of the participants, level of influence, engagement objectives, engagement goals and engagement activities completed are provided below (Table 1).

Table 1: Summary of engagement goals

Participants	Level of Influence	Objective	Engagement Goal	Engagement Activities
Commercial and residential property owners	Consult	Inform the community, identify potential impacts and determine preference for phase-in options	Understanding	*Correspondence Meetings Survey

** Correspondence refers to emails and phone calls received by the project team.*

A summary of engagement activities, activity dates, intended audience, and number of participants engaged is provided below (Table 2).

Table 2: Summary of engagement activities

Participants	Activity	Timeframe	Participants
Stakeholders	Meetings	Summer 2023	12
All participants	Survey	Fall 2024	769
		Total Participants:	**781**

1.2 Participants

The participants outlined below were identified due to their knowledge, interest in or their potential to be impacted by the program. These groups included:

1.2.1 Impacted Groups

Those who may be impacted or disproportionately impacted by the program and its outcomes, including the following groups:

- Business and commercial property owners
- Business associations
    - Business Improvement Districts
    - Greater Saskatoon Chamber of Commerce
    - North Saskatoon Business Association
- Property managers
- Residential property owners

Engagement with all participants aimed to be inclusive in terms of neighbourhood, age, gender, culture, citizenship, income and other factors.

2 ENGAGEMENT ACTIVITIES

Participants provided their feedback through a survey, stakeholder meetings or by contacting the project team. All engagement activities are described in detail below.

2.1 Survey

The City conducted an online survey in August 2024. The survey included 12 closed- and open-ended questions to help identify the level of support for the different phase-in options and to determine considerations related to the property tax reassessment process. Respondents were able to write-in an “other” preference for numerous questions and provide explanations for their preferences.

2.1.1 Intended Audience

The survey was intended for all commercial and residential property owners in Saskatoon.

2.1.2 Communication Support

The following communication tools were used to reach the intended audiences.

1. City of Saskatoon Website (saskatoon.ca)
    a. An Engage Page was created to encourage participation in the online survey.
    b. The Engage Page as cross-promoted on saskatoon.ca/assessment.
    c. A series of infographics were created to support understanding of the phase-in and assessment process.
2. Email/eBlast
    a. Personalized emails were sent to various stakeholders and business associations asking for their participation in the survey and to share the information with their members.
    b. Saskatoon Chamber of Commerce eBlasts were used to promote the survey to the business community to encourage participation and to share assessment information; this included reminders for the survey closing date.
3. Social Media
    a. A social media campaign ran across the City’s channels to promote participation by members of the general public.
4. News Release/Public Service Announcements
    a. Information was shared with media to promote participation in the survey; included reminders for survey closing date.

2.1.3 Analysis

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses. The results were analyzed for the following indicators:

- Most popular opportunities and barriers (count)
- Level of support for the various options (count)
- Thematic analysis of considerations related to the different options.

2.1.4 What We Heard

Demographics

A total of 769 community members participated in the survey with 99% living in Saskatoon. The largest group of respondents were residential property owners (95%), followed by commercial property owners (6%), multi-unit property owners (6%), and those participating on behalf of a business (2%). Of the respondents, 78% stated that they had not interacted with the City's Property Assessment and Valuation Office before, followed by those that had (13%).

Almost every neighbourhood was represented, with the largest number of responses coming from the Rosewood (6%), Caswell Hill (5%), Silverwood Heights (4%), Stonebridge (4%) and Evergreen (4%).

Phase-In Options

Out of the proposed options most participants favoured the City using a four-year phase-in (45%) for the next legislated property reassessment cycle in 2025 (Figure 1).

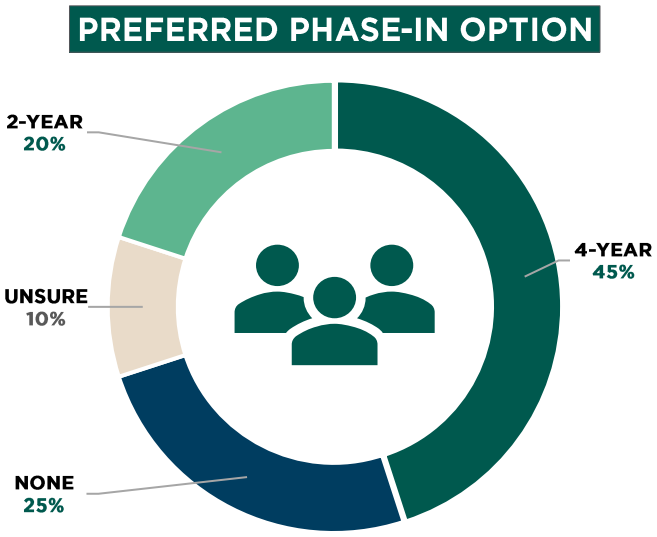


Figure 1: Phase-in preference for the 2025 property reassessment cycle

When asked to identity the most important factors that led to their decision, participants provided the following ranking:

1. I want a consistent process so I can plan my budget (54%)
2. I want as much time as possible to prepare for tax shifts (42%)
3. I want to have my decrease in property tax reflected as soon as possible (32%)
4. I want to pay the change in my property tax as soon as possible (15%)
5. I am willing to delay the decrease in the amount of property tax I owe to help another property owner delay their increase (13%)
6. I do not understand why this work is needed (11%)
7. I find the concept of revenue neutral hard to understand (10%)
8. I find phase-in hard to understand (9%)

Knowledge and Communication

Participants found the City's property tax process to be somewhat confusing (average three out of five, Figure 2).

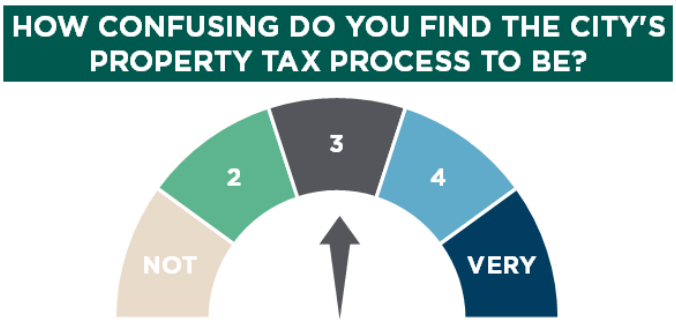


Figure 2: How confusing is the City's property tax process

Most respondents (73%) found the information provided (i.e., within the survey, on the City's Engage Page and through infographics) helpful in understanding the phase-in options, followed by those who did not (12%). When asked which assessment-related topics they would like more information about, participants provided the following ranking:

Importance

1. How my assessment is calculated (59%)
2. How my property's assessment differs from my property appraisal (44%)
3. How reassessment affects your 2025 property tax (32%)
4. The difference between mass appraisal vs single property appraisal (31%)
5. Where to find information about my property (29%)
5. Why does my property's assessment change (29%)
6. Understanding my assessment and property tax notice (27%)
6. What does it mean if my property's assessment increases or decreases (27%)
7. How to appeal my assessment (19%)
7. What is City's role and what can we change about reassessment (19%)
7. Important assessment and tax dates/deadlines (19%)
8. Why reassessment only occurs every four years (15%)
8. Revenue neutral (15%)
9. Reassessment base date (13%)
10. None (12%)

Other topics suggested by respondents included the following:

- How location effects property tax and why neighbourhoods are taxed differently
- How property taxes are related to the City's level of services
- How to prevent large changes in individual commercial assessments
- Rates of success in reassessment appeals and rationale
- Updated details on sold properties, since the data on the assessment site is outdated
- What exactly does the reassessment include and how are the various aspects determined
- What is the City's mill rate?
- Why are taxes on new properties not significantly higher to reflect the increased cost of services into new areas?

Throughout the survey many participants stressed the need for communication and awareness programs. Participants provided the following ranking for the proposed communication methods:

1. City of Saskatoon website including videos, guides, infographics (60%)
2. Utility billing information insert (59%)
3. Social media information posts on the City's channels (35%)
4. Subscription based newsletter dedicated to assessment-related information (23%)
5. Online event where you could learn from City Assessors (19%)
6. Sharing more assessment-related information through related community organizations (17%)
7. One-on-one meeting with a City Assessor (in-person or virtual) (14%)
8. Radio campaign to inform on key assessment dates (13%)
9. None (4%)

Other suggestions for communication methods provided by respondents included the following:

- Community association newsletters
- Emails to property owners
- Mailed to property owners
- Television ads
- Text messages to property owners

Final Thoughts

Final comments provided by respondents included the following main themes:

Equity: some respondents felt that a phased approach could disproportionately benefit wealthier property owners; respondents stressed the need for a fair system where everyone pays their fair share based on their property value; many respondents felt that it is increasingly more difficult to pay the increasing property taxes when their costs of living are so high.

Fairness: some respondents felt that a phase-in approach was especially important for low-income residents and those on fixed incomes, with some willing to delay their decrease in property taxes to assist low-income households; others believed that taxes should be paid as assessed without phasing, arguing that it is unfair for those with decreasing property values to subsidize those with increasing values

Spending concerns: many respondents felt that property taxes are already too high and should not be increased further; some respondents were concerned about how the city is spending taxpayer money, with calls for more responsible and transparent spending; examples included the quality of infrastructure, garbage collection and the impact of new developments on property values.

"Taxes are way too high as it is."

Swings: some respondents felt that the current process allows for property assessment values to "swing", leading to large changes in the corresponding property taxes; it was identified that landlords have regulations related to waiting periods (ex. up to 12 months) for rent increases and an immediate increase in property tax would impact property owners since as their costs are not recoverable.

"Larger shifts require longer phase-in to provide the same degree of relief that a shorter phase-in would provide to a smaller shift."

Timing: some respondents suggested gradually implementing any changes in the way property taxes are collected to reduce the impacts to all residents, especially low-income residents and those on a fixed income.

3 EVALUATION OF ENGAGEMENT

Evaluation is discussed in terms of feedback received during engagement activities and through informal comments, data limitations and opportunities for improvement.

3.1 Survey Evaluations

Survey participants indicated support for both the level of engagement conducted and the opportunities provided. Participants generally agreed with the information that was provided being clear and understandable (49%) with feeling they were able to provide their feedback accurately (54%) and understanding how their input would be used (45%, Figure 3).

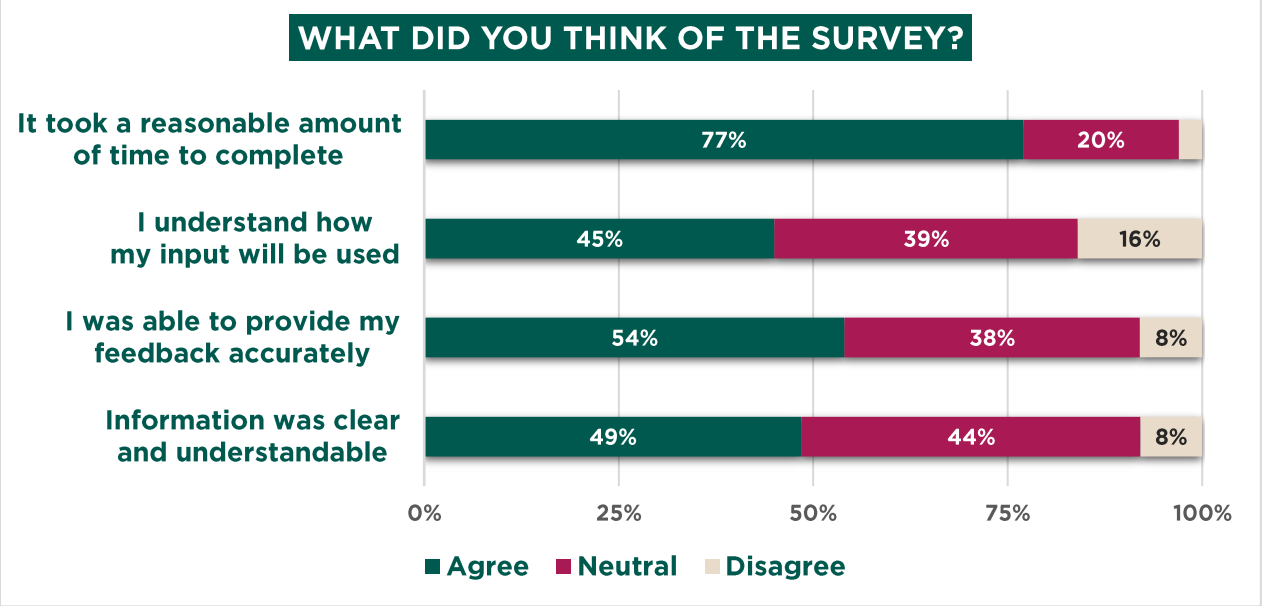


Figure 3: Survey review

Participants expressed their support for the process, the length of the survey and the opportunity to provide their feedback:

"Thanks for the opportunity to provide feedback."

"Well thought out, easy to understand & participate in."

Some participants found the topic of property reassessment and taxes to be confusing and/or complicated in nature. One respondent suggested it would be more useful if the City provided more information on how the different phase-in options could affect them directly over time. A few respondents suggested embedding all the additional information within the actual survey, rather than having links to the City's website.

"I'd also like a better understanding of how the different options could impact me (positives and negatives), so I can provide more informed feedback."

“Putting more graphics and explanation in line with the survey, instead of linking to a website, would've been better.”

A few participants felt that the survey was biased towards supporting a phased approach and that their input would not influence City Council’s decision:

“The survey feels like it "pushes" for a phase-in.”

“Does our opinion really matter and taken into account? End of the day this Council will do what they want.”

3.2 Data Limitations

Some participants may not have been able to fully participate in the engagement activities conducted; however, the results are considered to provide the best available indication of how the community and participants perceive the program at the time.

Some participants identified that they did not have the experience and/or level of knowledge to provide valid feedback on the property reassessment process, the phase-in options or the potential impacts to their property taxes. This lack of understanding may have impacted the ability of participants to fully provide their feedback. It also helped to identify topics for future communication efforts to address.

3.3 Opportunities for Improvement

Based on participant feedback, the following opportunities for improvement will be considered for future engagement activities:

- Any written or verbal information uses plain language and easy-to-understand terms
- Educating the community on the property reassessment process, phase-in process and how they relate to their property taxes is important for future communications and awareness
- Reducing the number of secondary links and website information.

4 NEXT STEPS

Based on what we heard from the community, in addition to best practices and internal considerations, City Administration will present the Tax Policy and Phase-In Report to City Council in March 2025. For more information about when the report will be presented to City Council, please visit our Engage Page.

We thank all participants who provided their feedback for this and other City of Saskatoon projects.

STANDING POLICY COMMITTEE ON FINANCE

Municipal Tax Policy - Distributing the Non-Residential to Residential Municipal Property Tax Burden, 2025-2029

Recommendation of the Committee
That City Council set the non-residential to residential tax ratio in accordance with Option 3, the previous policy ratio of 1.75 to 1, effective for the 2025 to 2029 period.

History
The Standing Policy Committee on Finance, at its meeting held on March 5, 2025, considered a report of the City Manager's Office regarding the above.

The Committee heard from Jason Aebig, Greater Saskatoon Chamber of Commerce, on the matter.

The Committee did not vote unanimously on the recommendation.

The Committee also unanimously resolved:

> That the Administration engage the community and stakeholders with a view to setting overall guidelines and goals for our tax policy, and finding ways to make our policy more clearly understandable to stakeholders and the public.

Attachment
March 5, 2025 report of the City Manager's Office.

Municipal Tax Policy – Distributing the Non-Residential to Residential Municipal Property Tax Burden, 2025-2029

ISSUE

Property taxes are used to pay for local public services that largely provide collective benefits to households, individuals, and organizations in a city. Thus, a fundamental role of a city government is to distribute the property tax burden among various taxpayers as fairly and efficiently as possible. While this is often a value a judgement that involves assessing the tradeoffs, cities take different approaches in doing this. The City of Saskatoon (City), for example, sets an explicit tax ratio between residential and non-residential properties and adjusts it from time to time based on changes to property values following a mandated property reassessment. Assuming City Council continues to set an explicit tax ratio, what should that ratio be? What are the implications to property types resulting from various property tax distribution policy scenarios?

BACKGROUND

2.1 History

Saskatoon City Council's tax policy approach emerged in 1998, coinciding with the adoption of a new provincial property assessment framework. Saskatoon adopted a fixed ratio municipal tax that applied a higher tax rate to non-residential properties relative to residential properties.[1] More specifically, in 2001, Saskatoon City Council passed a resolution to have a targeted non-residential to residential property tax ratio of 1.75 to 1, meaning that the municipal (and library) tax rate would be set at 1.75 times higher than that for residential properties, phased in over several years. The 1.75:1 tax ratio was achieved in 2010 and remained the policy until 2017.

In 2012, a proposal from business organizations, led by the Greater Saskatoon Chamber of Commerce, recommended a reduction in the municipal tax ratio to 1.43 to 1. Their argument centered on horizontal equity considerations in that the tax policy should treat like properties in like circumstances. City Council suggested that this be addressed after the 2017 property revaluation.

In 2017, after a provincial-mandated reassessment, Saskatoon City Council revisited its municipal tax ratio policy and agreed to reduce the non-residential – residential tax ratio to 1.59 to 1. This decision was the result of a compromise between the status quo ratio of 1.75:1 and the Greater Saskatoon Chamber of Commerce's 2010 proposal of 1.43:1.

[1] The term non-residential is used to mean commercial and industrial (or business) properties. Residential is used to refer to single-family homes, condominiums, and multi-family homes.

> In 2021, City Council once again considered the municipal property tax ratio and resolved to maintain the status quo by keeping it at 1.59 to 1 for the 2021 tax year and beyond.[2]

At its September 13, 2023, meeting, the Governance and Priorities Committee considered a Notice of Motion and resolved:

> "That the Administration provide a report to the 2024/25 Preliminary Corporate Business Plan and Budget deliberations in November regarding Saskatoon's business tax ratio and any other related business property tax measures, including comparisons to other jurisdictions."

The information provided in that report, concluded that "Based on several measures, Saskatoon's non-residential property taxes are among the lowest in Western Canada."[3]

2.2 Current Status

At its February 2025 meeting, the Standing Policy Committee (SPC) on Finance received an information briefing from the City Assessor regarding changes to property values, resulting from the 2025 provincially mandated property reassessment.[4] That briefing noted the value shifts among different property types relative to the 2021 reassessment cycle. It specifically indicated that residential property values rose by 13 percent relative to the last assessment while non-residential properties, in aggregate, fell by two percent. These results were reflective of market conditions as of January 1, 2023.

A note of caution is needed on using "total" or "average" changes due to substantial influences high value properties have on the valuation shifts among and within the major property classes. Appendix 1, for example, provides a table of descriptive statistics and histograms for various non-residential property classes to better illustrate the valuation shifts within the broad property classes. The statistics here show large discrepancies between average value changes and median value changes indicating that few high value properties have a large influence on the change in overall property values for different types of properties.

Although the assessed values in the overall non-residential property class fell by two percent in 2025 relative to the previous cycle, office properties fell by 16.7 percent on average. However, the median value fell by 4.6 percent. The primary difference between the two is that the highest valued property fell by 31% in 2025

[2] For details please see, item 8.2.5 at https://pub-saskatoon.escribemeetings.com/Meeting.aspx?Id=c042f0ca-8b92-450f-9f74-b26656045721&Agenda=PostMinutes&lang=English. Note that that the actual ratio is 1.63 to 1 due to changes in property assessments and contingencies.

[3] For more please see https://pub-saskatoon.escribemeetings.com/filestream.ashx?DocumentId=212365

[4] More information and details can be found at item 6.3.2, https://pub-saskatoon.escribemeetings.com/Meeting.aspx?Id=8ba97fda-2738-4587-994b-cb209c59a9d5&Agenda=Agenda&lang=English&Item=22&Tab=attachments.

relative to the close of the previous valuation cycle. Given these valuation changes, the City's tax policy may need adjustment to account for the potential tax shifts resulting from the 2025 reassessment.

2.3 City of Saskatoon's Current Approach

The City distributes the property tax burden among different property classes by using a tax ratio approach that pegs the tax rate for non-residential properties at some point higher than residential properties. At the end of 2024, this ratio was set at 1.63:1. Although 1.59:1 is the official ratio, it changes over the course of assessment due to the addition of an appeal contingency.

As explained earlier, the City first adopted this approach in 1998 and has maintained the explicit ratio approach since. The original intent of the City's property tax ratio policy was to achieve (horizontal) equity among residential and non-residential properties of similar assessed values (Saskatoon Tax Policy Review Committee, 1997). This was achieved by estimating the amount of property taxes that a business could deduct for income tax purposes. Canada's Income Tax Act allows businesses to deduct property taxes as an expense for the purposes of filing their corporate income tax returns each year. More on this is explained in the research paper at found in Appendix 2.

Importantly, the property tax burden for any property is a function of three main elements: (1) the tax base, (2) the budgetary requirements, and (3) tax policy. The tax base is simply the taxable assessed value of the jurisdiction. Cities with larger tax bases can offer lower statutory tax rates, all things equal, to generate the revenue needed to fund the city's tax supported operations. The budgetary requirements are what cities decide they need to deliver the projects, programs and services to the residents and business in their community. Finally, tax policy addresses how property taxes are distributed among the property classes (i.e., residential, and non-residential). Tax policy can be addressed by setting a relative tax ratio (like Saskatoon) or by setting budgetary tax requirements by property classes.

2.4 Approaches in Other Jurisdictions

Very few Canadian jurisdictions set an explicit tax ratio as is their core policy. Instead, they use a "revenue neutral" or "tax shares" approach where the property classes pay for a share of the budgeted tax requirements. It could be (hypothetically) that residential properties pay 50% and non-residential properties pay 50% of the total tax requirements. In such cases, the tax rates are set to reflect this revenue split and the tax ratio is simply the outcome of that tax policy choice. In other words, the tax ratio is implicit.

However, some provinces have legislated such ratios. For example,

- In Ontario, all municipalities must adopt a bylaw that sets tax ratios for each property class. All property tax rates are compared to the residential

tax rate. The Government of Ontario has set "allowable ranges of fairness" for tax ratios. The City of Toronto, for instance, has committed to lower its non- residential to residential tax ratio to 2.5 to 1.[5]

- In New Brunswick, legislation prescribed that the non-residential property tax must not be greater than 1.5 times the rate on residential property.[6]
- In Alberta, the province's *Municipal Government Act* sets the non-residential to residential tax ratio at no greater than 5:1.
- In Saskatchewan, regulations adopted in 2023 sets the ratio between the highest effective tax rate and lowest effective tax rate of any property class to be no more than 7:1.[7]

With this context in mind, Appendix 3 to this report describes how various cities distribute municipal property taxes and how selected cities approach local tax policy. It also provides comparative analysis of various tax characteristics, such as the municipal tax ratio, how property taxes are distributed among property classes, and the tax to assessment gap to illustrate the degree of tax fairness.

2.5 Public Engagement

Administration consulted with officials from the Greater Saskatoon Chamber of Commerce and the North Saskatoon Business Association on the property assessment shifts and the potential tax policy changes under consideration.

OPTIONS

This section of the report offers five options for consideration. The primary assumption is that the City will continue to set an explicit non-residential to residential tax ratio to distribute the municipal property tax burden. Given this assumption, the options differ in terms of property tax implications for the various property classes. As such, the objective is to recognize the various trade-offs that may exist in distributing the municipal property tax burden to the property classes.

In addition to the primary assumption, some secondary assumptions are applied to the options as follows:

- The overall tax burden is fixed, given City Council's approved budget for 2025. As a result, there are no financial implications to the City resulting from any of the options. However, the distribution of the tax burden on residential and non-residential properties will change depending on the option adopted. The tax ratio is simply another way to distribute the tax burden. These implications are explained in each option.

[5] See https://www.toronto.ca/city-government/budget-finances/city-finance/property-tax-policy/

[6] https://www2.gnb.ca/content/gnb/en/departments/finance/taxes/real_property.html#:~:text=Effective%20January%201%2C%202023%2C%20the,%241.8560%20per%20%24100%20of%20assessment.

[7] For more, please see https://www.saskatchewan.ca/government/municipal-administration/taxation-and-service-fees/municipal-property-tax-tools

- The advantages and disadvantages of the tax ratio approach are largely similar regardless of what the ratio is. However, the distribution of the tax burden over (and within) the two primary property classes may slightly alter this analysis. That said, this section does not evaluate the advantages and disadvantages for each option, but rather, illustrates the differing tax implications for each property class. The pros and cons of the tax ratio approach are explained in Appendix 2.
- Implementation of any one option requires the passage of the Property Tax Bylaw, which typically occurs at the end of April.

This section offers a comparative analysis for each option in two ways: (1) from the changes in assessment only; and (2) from the changes in assessment and the 2025 budgetary tax increase. These are shown in the tables in Appendix 4.

To explain the differences between the two tables, Saskatoon City Council approved an overall property tax increase of 4.96% for 2025. The second table applies this overall tax increase to the analysis of the various tax policy options.

- The tax implications are expressed in terms of the change in effective tax rates (ETR). This means that adjustments for percentages of value and mill rate factors have been made to generate an ETR, expressed as the rate per $1,000 of taxable assessment. The calculations exclude the library and education property taxes. It is important to note that a lower or higher ETR does not necessarily mean a lower or higher overall property tax for a class or property. The ETR needs to consider the assessment or impact of reassessment it is being applied to, to understand the actual tax impact.
- Potential illustrative tax calculations for the various property types within each property class are provided in Appendix 5. The analysis here uses median values (rather than averages or overall values) to illustrate the potential municipal property tax implications for each tax ratio scenario.[8]
- The options analysis starts with the revenue neutral ratio, which is set at 1.88 to 1 in 2025. This means that due to the overall valuation changes, the City would collect the same amount of property tax revenue (68% from residential properties and 32% from non-residential properties) from each class prior to reassessment as it does post-reassessment. Because the tax scenario analysis in Appendix 5 uses the change in median assessed values for individual property types it will show different results from using overall values.

Option 1: The Revenue Neutral Proposal, Ratio of 1.88

This option proposes that the City adjust the tax ratio to the revenue neutral ratio of 1.88 to 1. That is, the non-residential property tax rate would be set at 1.88 times higher than the residential property tax rate. The tax implications to the overall property

[8] The median represents the midpoint of a dataset, where 50% of the values fall below and 50% fall above. It is a measure of central tendency that is less sensitive to extreme values, making it a more stable indicator of typical values compared to the mean, especially in datasets with outliers or skewed distributions. It is ideal for measuring tax changes from one period to another because it is a more representative measure, reflects a typical property, and reduces distortions in the results.

classes are shown in Appendix 4. For individual property types (based on median values) they are shown in Appendix 5.

Using the results from Appendix 4, the combined assessment and budgetary changes results in a $0.40 reduction in the residential ETR relative to 2024. On the other hand, the ETR for non-residential properties increases by $0.81 from $10.35 in 2024 to $11.16 in 2025.

Using sample results from Appendix 5, the effects of this ratio in 2025 show that the median single family residential property in 2025 would see its taxes rise by $171 annually (+7.8 percent) relative to 2024. On the other hand, a typical retail property would see its tax burden rise by $885 annually (+5.6 percent) relative to 2024. These results are reflective of both a change in median assessed values and distributing the budgetary tax burden in the same ratio as used in 2024.

Option 2: The Prairie Median Ratio of 2.13

This option proposes that the City adjust the tax ratio to the revenue neutral ratio of 2.13 to 1. This would set the City's tax ratio at the midpoint relative that of seven other prairie cities (see Appendix 3). The potential tax implications to the overall property classes are shown in Appendix 4. For individual property types (based on median values) they are shown in Appendix 5.

Using the results from Appendix 4, the combined assessment and budgetary changes results in a $0.64 reduction in the residential ETR relative to 2024.[9] On the other hand, the ETR for non-residential properties increases by $1.77 from $10.35 in 2024 to $12.12 in 2025.

Using sample results from Appendix 5, the effects of this ratio in 2025 show that the median single family residential property in 2025 would see its municipal property taxes rise by $75 annually (+3.4 percent) relative to 2024. On the other hand, a typical retail property would see its municipal tax burden rise by just above $2,300 annually, (+14.6 percent) relative to 2024. These results are reflective of both a change in median assessed values and distributing the budgetary tax burden in accordance with the proposed ratio.

Option 3: The Previous Policy Ratio of 1.75

This option proposes that the City adjust the tax ratio to 1.75 to 1. This ratio reflects previous policy set after the 2017 property revaluation cycle. Like the other options, the tax implications to the overall property classes are shown in Appendix 4. For individual property types (based on median values) they are shown in Appendix 5.

Using the results from Appendix 4, the combined assessment and budgetary changes results in a $0.26 reduction in the residential ETR relative to 2024, falling from $6.35 to

[9] Note: results in the appendix may differ slightly due to rounding to decimal places.

$6.08. On the other hand, the ETR for non-residential properties increases by $0.28 from $10.35 in 2024 to $10.63 in 2025.

Using sample results from Appendix 5, the effects of this ratio in 2025 show that the median single family residential property in 2025 would see its municipal property tax rise by $225 annually (+10.2 percent) relative to 2024. On the other hand, a typical retail property would see its municipal property tax burden rise by $89 annually (-0.6 percent) relative to 2024. In contrast, a hotel property would see its municipal tax burden fall by just over $5,000 annually (-5.3 percent). Again, these results are reflective of both a change in median assessed values and distributing the budgetary tax burden in accordance with the proposed ratio.

Option 4: The Current Policy Ratio of 1.63

This option proposes that the City maintain its current tax policy ratio at 1.63 to 1. As explained earlier, although this ratio is slightly higher the 1.59 to 1 ratio set in 2021, it is reflective of within cycle property valuation changes. Like the other options, the tax implications to the overall property classes are shown in Appendix 4. For individual property types (based on median values) they are shown in Appendix 5.

Using the results from Appendix 4, the combined assessment and budgetary changes results in a $0.14 reduction in the residential ETR relative to 2024, falling from $6.35 to $6.20. On the other hand, the ETR for non-residential properties decreases by $0.21 from $10.35 in 2024 to $10.14 in 2025.

Using sample results from Appendix 5, the effects of this ratio in 2025 show that the median single family residential property in 2025 would see its municipal property tax rise by $275 annually (+12.5 percent) relative to 2024. On the other hand, a typical retail property would see its municipal property tax burden fall by $646 annually (-4.1 percent relative to 2024). In contrast, a hotel property would see its municipal tax burden fall by just over $9,260 annually (-9.7 percent). Again, these results are reflective of both a change in median assessed values and distributing the budgetary tax in accordance with the proposed ratio.

Option 5: The Chamber Legacy Policy Ratio of 1.43

This option proposes that the City adopt the Greater Saskatoon Chamber of Commerce legacy proposed ratio of 1.43 to 1. Like the other options, the tax implications to the overall property classes are shown in Appendix 4. For individual property types (based on median values) they are shown in Appendix 5.

Using the results from Appendix 4, the combined assessment and budgetary changes results in a $0.10 increase in the residential ETR relative to 2024, rising from $6.35 to $6.44. By contrast, the ETR for non-residential properties decreases by $1.14 from $10.35 in 2024 to $9.21 in 2025.

Using sample results from Appendix 5, the effects of this ratio in 2025 show that the median single family residential property in 2025 would see its municipal property tax rise by $369 annually (+16.7 percent) relative to 2024. On the other hand, a typical retail property would see its municipal property tax burden fall by $2,032 annually (-12.9 percent relative to 2024). In contrast, a hotel property would see its municipal tax burden fall by almost $17,200 annually (-17.9 percent). Again, these results are reflective of both a change in median assessed values and distributing the budgetary tax in accordance with the proposed ratio.

RECOMMENDATION

That the Standing Policy Committee on Finance recommend to City Council that it set the non-residential to residential tax ratio in accordance with Option 3, the previous policy ratio of 1.75 to 1, effective for the 2025 to 2029 period.

RATIONALE

The tax policy options provided in the previous section attempt to illustrate the trade-offs involved by distributed the municipal property burden. The analysis aims to show the incremental tax changes that may result from selecting one of the five proposed options. The supporting data and supplementary analysis contained in the appendices show that business property taxes, especially at the levels proposed in this report, have minimal effects on business investment. In other words, the literature is inconclusive in terms of the impact that a tax ratio policy has on business decisions and whether there is an optimum tax ratio.

Ultimately, the choice of the option comes down to how well they support public policy principles. Appendix 2 explains such principles and indicates that there are trade-offs that emerge in the decision-making process. For example, a fundamental principle in Saskatoon's tax policy approach is tax fairness or equity. Here, it implies that the burden of a tax should be shared fairly among individuals so that there is an equitable distribution of the cost of government to society.

In 1997, Saskatoon's Local Tax Review Committee was concerned by the tax rate differential and believed that there was no basis for charging businesses higher tax rates when in fact the residential properties received more services for the taxes than paid. This, combined with the ability for business property owners or non-residential property owners to deduct property taxes from their corporate income tax requirements, formed the basis for the adoption of a targeted non-residential to residential tax ratio of 1.75 to 1, which has since fallen to 1.63 to 1, reflecting the changes in property values due to a provincially mandated reassessment every four years.

In 2021, City Council elected to maintain the tax ratio (at 1:59 to 1) even though non-residential properties values rose by eight percent in aggregate, while residential fell by seven percent. This decision was made during a global pandemic so other factors may have influenced the decision to hold the ratio.

Despite the 2021 decision, the implied approach by City Council was to mitigate the impacts of a faster rising assessment environment for non-residential properties during this time relative to residential properties. Given that the results have switched in that residential property values have risen by 13 percent in 2025 and non-residential values have fallen by two percent, it makes sense to consider a ratio adjustment.

During the 2017 tax policy decision, where policy stood at 1.75 to 1 and the revenue neutral ratio was at 1.47 to 1, City Council decided to "split the difference" and adopt a ratio of 1.59. This compromise balanced the results from a substantial change in property values non residential property values relative to the previous cycle and ensuring that the resulting tax burden was distributed reasonably fairly among the two main property classes.

Although an increase of the municipal tax ratio from 1.63 to 1.75 can be seen as an unfriendly business decision on the surface, the ratio should not be viewed in a vacuum and needs to consider the reassessment environment it is being applied to. Moreover, while a pegged ratio may be a symbolic gesture it does not necessarily mean that the effective tax rates or burdens are lower. Comparative data provided in Appendix 3 reflect this.

In addition, the 2025 reassessment is the first time since the introduction of the market value approach (2005) to assessment where the value of residential properties has risen faster than the value of commercial properties. This means that historically the revenue neutral ratio since this time has been lower than the existing ratio, due to the fast-growing non-residential values, assisting in the lowering of the ratio from 2.41 in 1998 to the current 1.59 ratio. As the 2025 reassessment experienced faster growing residential assessments, there is an opposite and upward pressure on the ratio with a revenue neutral value of 1.88. The proposed 1.75 ratio is consistent with historical City Council's decisions in that ratios were established in the direction of the revenue neutral ratio to smooth out large shifts between residential and commercial properties while at the same time respecting the outcome and implications of a reassessment cycle.

A 1.75 to 1 tax ratio is among the lowest in Western Canada, and the effective tax rate on non-residential will also be one of the lowest in Canada. Despite the proposed ratio shift, many businesses in Saskatoon will see a decrease in their actual taxes paid comparable to 2024 due to reassessment despite the increase's ratio. As 1.88 is the revenue neutral ratio, anything below this amount will still see a shift from commercial properties to residential resulting in less overall commercial property taxes in 2025 as compared to 2024.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

The tax scenario analysis in this report excludes education property taxes and library property taxes, which account for 35 percent and 6 percent respectively of the total property tax bill. The Government of Saskatchewan will set education property tax rates

in the 2025/26 provincial budget which is set to be released March 19, 2025. Any changes emerging from this process may generate additional tax implications.

It should also be noted that the analysis or recommendations in this report in no way attempts to generate a cleavage between residential and non-residential property owners. But as the analysis shows, there are substantial differences in value changes within each major property class. As a result, tax policy decisions need to understand and contemplate these uneven effects.

The 2025 results are reflective of the economic distortions created by the COVID-19 pandemic. Some property types have seen substantial values drops especially some of the highest valued properties (in retail and office). It is hard to predict whether these lower declines will turn quickly or slowly, given the imminent threat of US tariffs on Canadian exports and any retaliation efforts provided by the Canadian government. If these are large and prolonged, they could also have negative long-run effects on non-residential property values. The point is tax policy should consider the macro environment.

APPENDICES

1. Descriptive Statistics for Non-Residential Properties
2. Discussion Paper – Business Property Taxation by Cities: What We Know, What We Don't, and What We Should
3. Comparative Tax Policy Analysis
4. Aggregate Property Tax Scenario Analysis
5. Median Property Tax Implications by scenario and property type.

REPORT APPROVAL

Written by: Mike Jordan, Chief Public Policy and Government Relations Officer
Reviewed and Approved by: Clae Hack, Chief Financial Officer.

Admin Report - Municipal Tax Policy – Distributing the Non-Residential to Residential Municipal Property Tax Burden, 2025-2029.docx

Descriptive Statistics for Non-Residential Properties by Type

Descriptive Statistics for Saskatoon's Non-Residential Property Assessments - By Property Type

Automotive Properties

Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 2,648,236	$ 2,226,301	19.0%
Median	**$ 1,573,100**	**$ 1,447,700**	**8.7%**
Standard Deviation	$ 3,243,714	$ 2,288,249	41.8%
Range	$ 22,526,600	$ 16,597,100	35.7%
Min. Value	$ 141,400	$ 186,100	-24.0%
Max. Value	$ 22,668,000	$ 16,783,200	35.1%
Total Value	**$ 643,521,400**	**$ 540,991,100**	**19.0%**
# of Properties	**243**	**243**	

Warehouse Properties

Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 2,315,352	$ 2,108,102	9.8%
Median	**$ 1,501,500**	**$ 1,407,950**	**6.6%**
Standard Deviation	$ 3,422,312	$ 2,851,535	20.0%
Range	$ 64,754,600	$ 52,511,600	23.3%
Min. Value	$ 70,200	$ 86,600	-18.9%
Max. Value	$ 64,824,800	$ 52,598,200	23.2%
Total Value	**$ 3,084,049,100**	**$ 2,807,991,437**	**9.8%**
# of Properties	**1332**	**1332**	

Retail Properties

Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 4,486,318	$ 5,003,241	-10.3%
Median	**$ 1,491,200**	**$ 1,525,850**	**-2.3%**
Standard Deviation	$ 11,797,112	$ 17,042,791	-30.8%
Range	$ 167,479,300	$ 312,637,200	-46.4%
Min. Value	$ 90,100	$ 116,200	-22.5%
Max. Value	$ 167,569,400	$ 312,753,400	-46.4%
Total Value	**$ 2,790,489,950**	**$ 3,112,015,672**	**-10.3%**
# of Properties	**622**	**622**	

Restaurant Properties

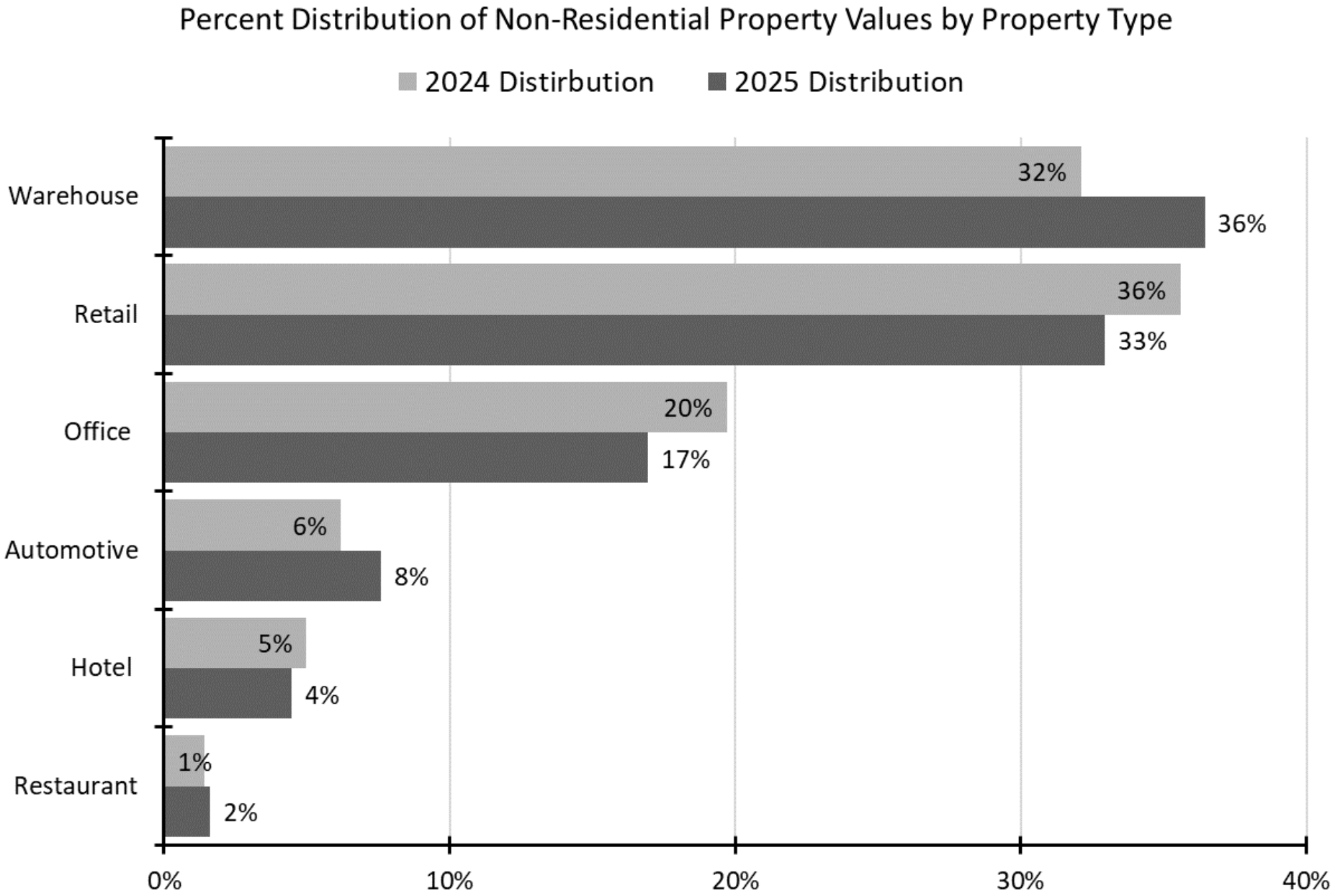
Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 1,437,382	$ 1,320,512	8.9%
Median	**$ 1,209,050**	**$ 1,176,650**	**2.8%**
Standard Deviation	$ 867,272	$ 844,153	2.7%
Range	$ 3,985,500	$ 4,086,800	-2.5%
Min. Value	$ 282,800	$ 240,000	17.8%
Max. Value	$ 4,268,300	$ 4,326,800	-1.4%
Total Value	**$ 135,113,900**	**$ 124,128,100**	**8.9%**
# of Properties	**$ 94**	**94**	

Office Properties

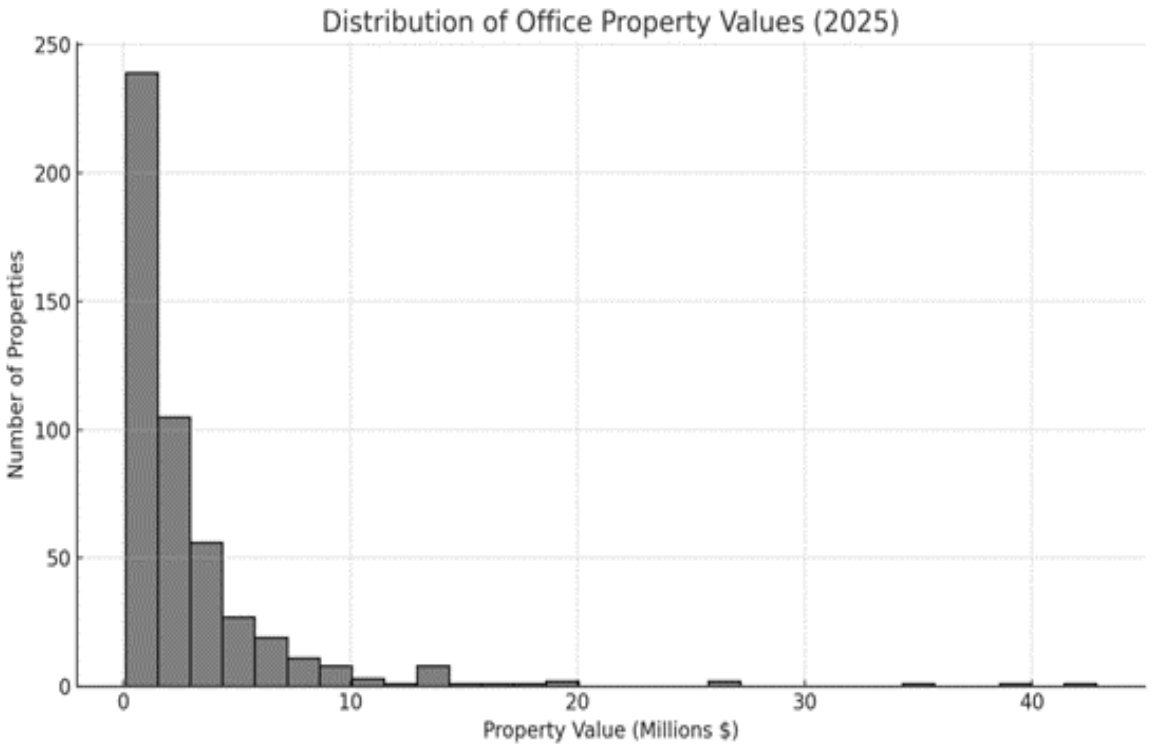
Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 2,948,770	$ 3,540,744	-16.7%
Median	**$ 1,542,200**	**$ 1,615,800**	**-4.6%**
Standard Deviation	$ 4,448,141	$ 6,467,960	-31.2%
Range	$ 42,757,300	$ 61,783,600	-30.8%
Min. Value	$ 82,800	$ 202,300	-59.1%
Max. Value	$ 42,840,100	$ 61,985,900	-30.9%
Total Value	**$ 1,436,051,204**	**$ 1,724,342,420**	**-16.7%**
# of Properties	**487**	**487**	

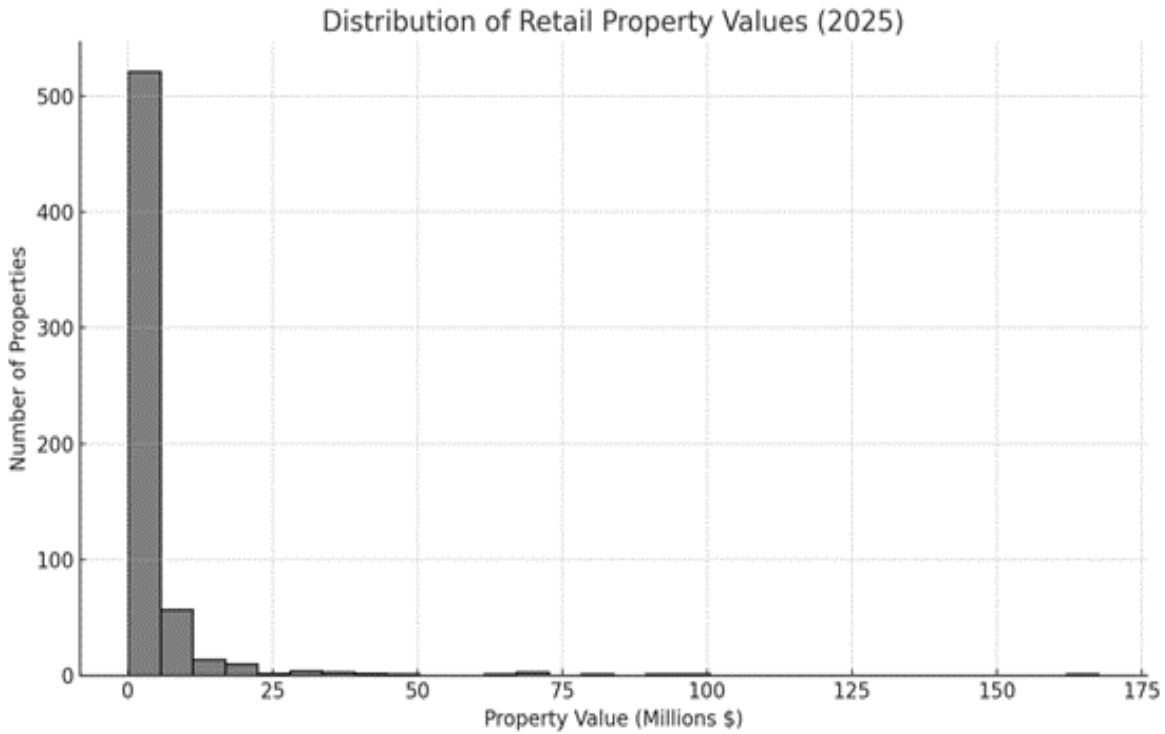
Hotel/Motel Properties

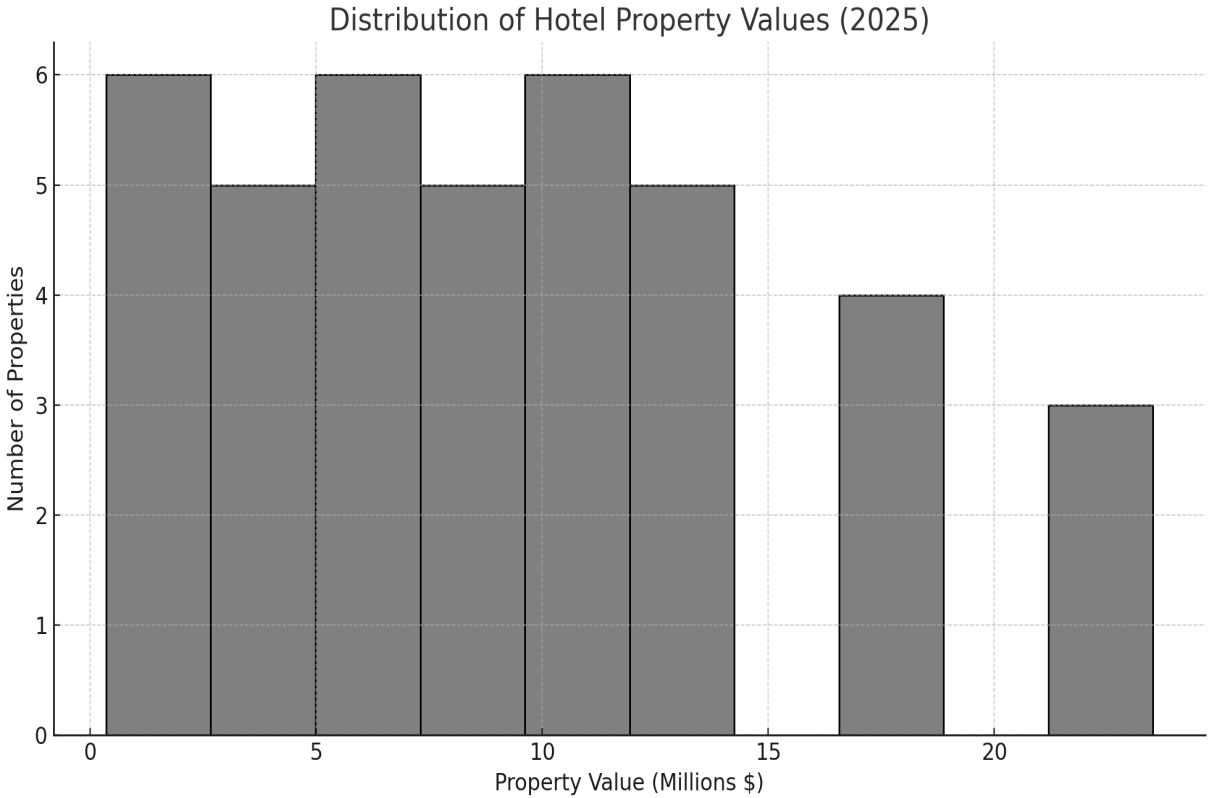
Descriptive Statistics	2025 Values	2024 Values	Percent Change
Mean	$ 9,434,228	$ 10,883,100	-13.3%
Median	**$ 8,549,600**	**$ 9,268,350**	**-7.8%**
Standard Deviation	$ 6,325,668	$ 8,946,674	-29.3%
Range	$ 23,160,000	$ 32,933,600	-29.7%
Min. Value	$ 349,700	$ 342,700	2.0%
Max. Value	$ 23,509,700	$ 33,276,300	-29.4%
Total Value	**$ 377,369,100**	**$ 435,324,000**	**-13.3%**
# of Properties	**40**	**40**	

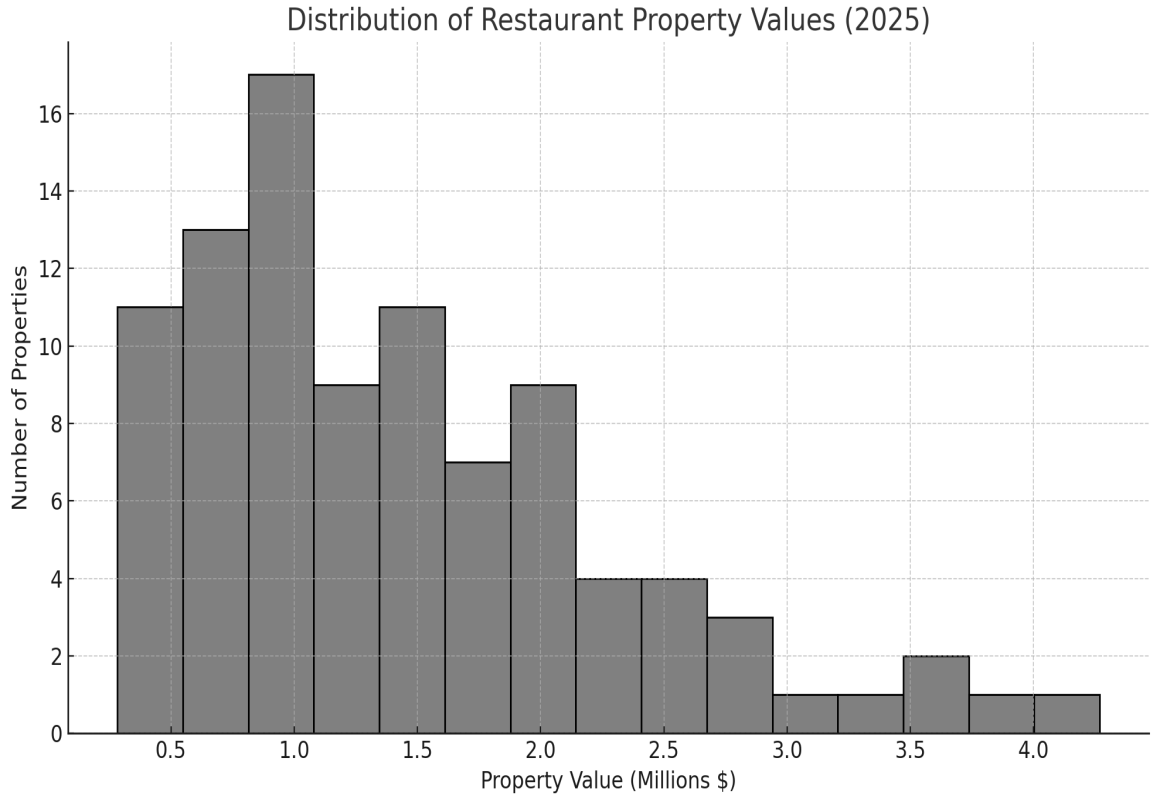

Percent Distribution of Non-Residential Property Values by Property Type
2024 Distirbution
2025 Distribution
Warehouse
32%
36%
Retail
36%
33%
Office
20%
17%
Automotive
6%
8%
Hotel
5%
4%
Restaurant
1%
2%
0%
10%
20%
30%
40%

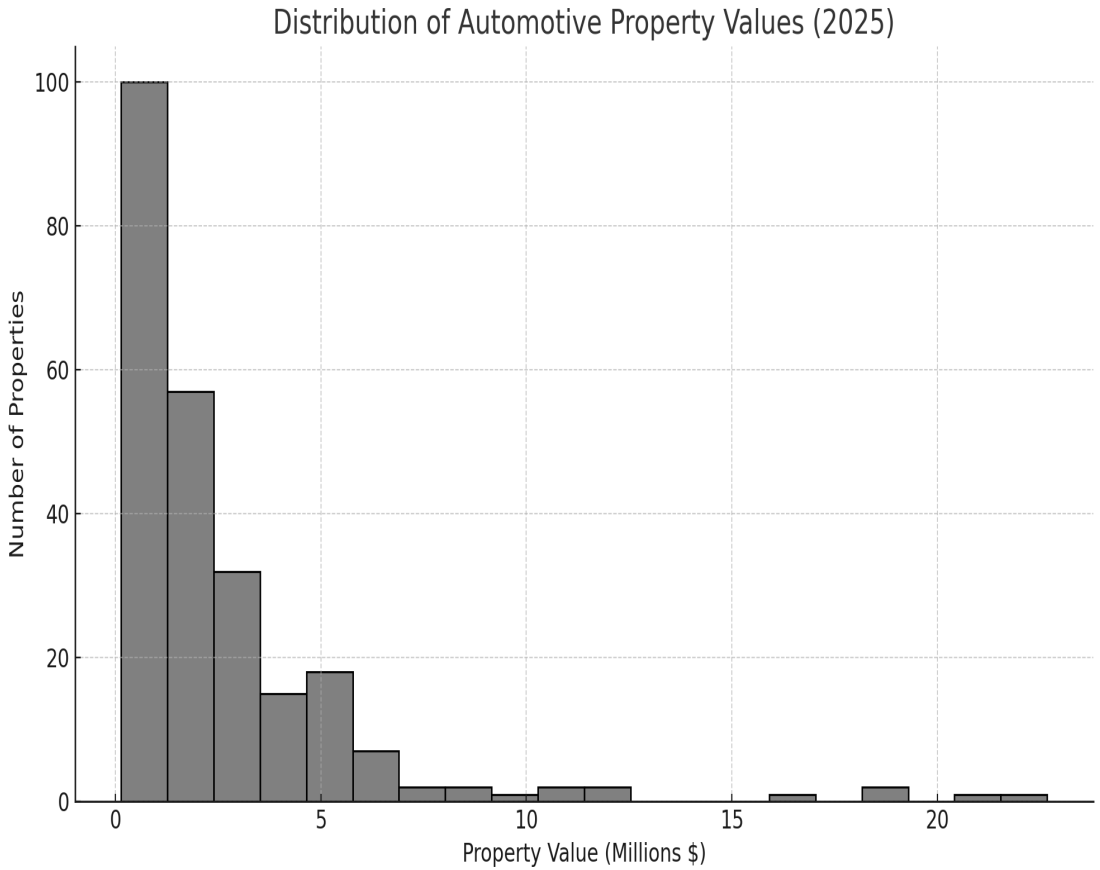
Appendix XX – Distribution of Property Values by Non-Residential Properties Types

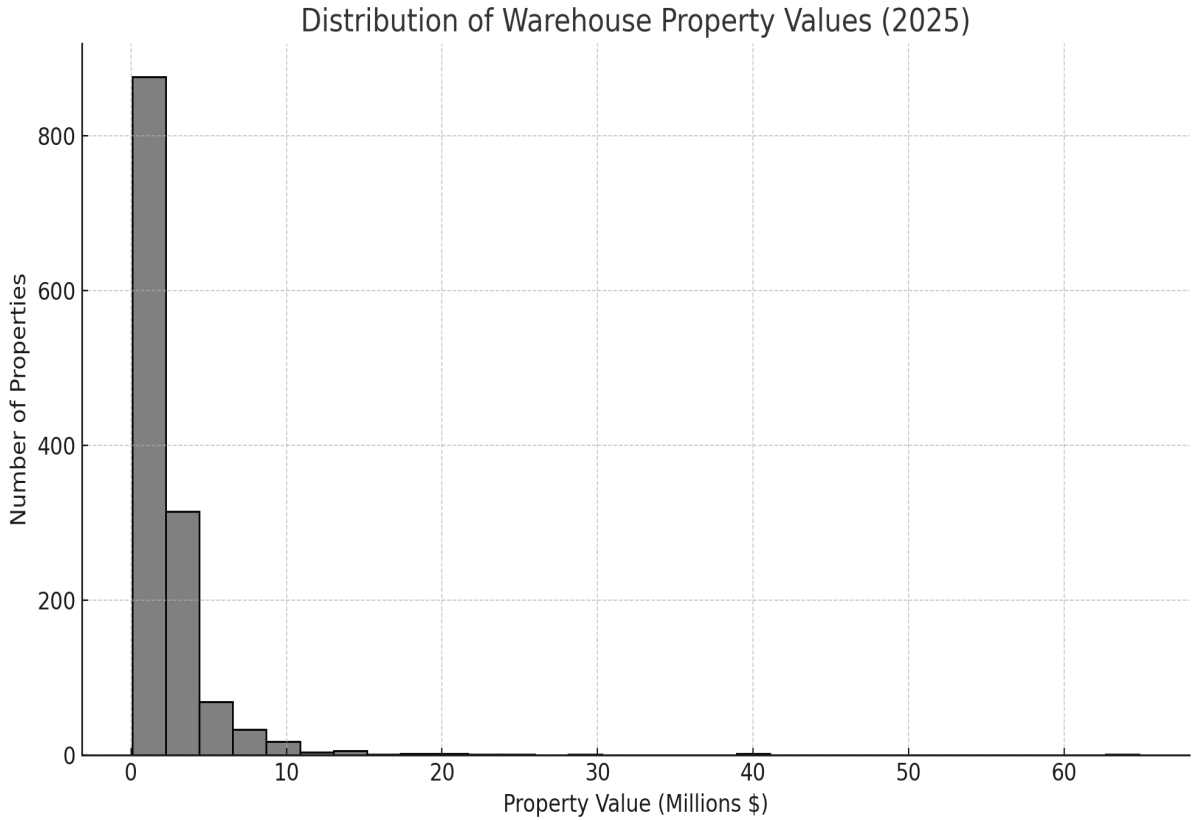





Distribution of Hotel Property Values (2025)
Number of Properties
Property Value (Millions $)
0
1
2
3
4
5
6
0
5
10
15
20


Distribution of Restaurant Property Values (2025)
Number of Properties
Property Value (Millions $)
0
2
4
6
8
10
12
14
16
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0


Distribution of Automotive Property Values (2025)
Number of Properties
Property Value (Millions $)
0
20
40
60
80
100
0
5
10
15
20


Distribution of Warehouse Property Values (2025)
Number of Properties
Property Value (Millions $)
0
200
400
600
800
0
10
20
30
40
50
60

BUSINESS PROPERTY TAXATION BY CITIES

WHAT WE KNOW, WHAT WE DON'T, AND WHAT WE SHOULD

Updated Version

A DISCUSSION PAPER

Prepared by Mike Jordan

Chief Public Policy and Government Relations Officer

February 2025

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1. INTRODUCTION

1.1 Background

Perhaps no city in Canada has placed more focus on the relationship between residential and non-residential (i.e., business) property tax rates than Saskatoon. Almost two decades ago, in 1998, Saskatoon City Council adopted a resolution to set the non-residential property tax rate at 1.75 times higher than the residential property tax rate. At that time, the non-residential to residential property tax ratio was 2.11:1. This meant that on a property of equal value, for every one dollar paid in property taxes from residential property owners, over two dollars was paid by non-residential property owners.

The Council resolution was the result of a recommendation from Saskatoon's Tax Review Committee (1997).[1] The Committee was concerned by the tax rate differential and believed that:

- property taxes are an important variable on business location decisions;
- the existing business property tax rate could have an adverse effect on the location of businesses in the city, especially small and medium sized businesses; and
- higher property tax rates on business properties is not justified on the basis of equity. [2]

In fact, the equity issue, combined with the ability for non-residential property owners to deduct property taxes from their corporate income tax requirements resonated with the Committee. This formed the basis for their recommendation of a targeted (or pegged) non-residential to residential tax ratio:

> *The target effective tax rate we recommend…was determined taking into account the benefit that most small medium sized businesses receive from the deductibility of property taxes in the determination of income for income tax purposes…this suggests an income tax rate of greater than 40%. We believe the effective income tax rate in Saskatoon on the majority of businesses in much less than this.*
> (Saskatoon Tax Review Committee, 1997)

The Committee's rationale was further influenced by a paper from local public finance economists, (Gilchrist and St. Louis, 1997) commissioned and sponsored by Saskatoon Business Groups. They concluded that Saskatoon's business property taxes: (a) could be more transparent with explicitly stated mill rates; (b) are high relative to other prairie cities; and (c) violate standards of fairness in taxation policy.

[1] The Tax Review Committee was appointed by the City in 1996 and was required to submit recommendations to City Council by December 1997. It reported to City Council in December 1997, making 19 recommendations on property assessment and tax policy. The 1.75 ratio was a result of the calculations on property tax deductions that business are entitled to under the *Income Tax Act*, for Corporate Income Tax purposes, which at that time was roughly 43 percent.
[2] More precisely, it relates to the concept of horizontal equity, which means treating equal taxpayers equally. This concept is addressed in more detail in Section 2 of this paper.

Thus, in 2001, the City of Saskatoon took steps to reduce the non-residential property tax rate differential until it reached 1.75:1 in 2010; resulting in one of the lowest tax ratios among major Canadian cities. However, the issue did not end there.

About two years after the property tax ratio reached the 1.75 target, local business groups began advocating to Saskatoon City Council for a further reduction in the property tax ratio, this time arguing for a ratio of 1.43:1 by 2020 (Greater Saskatoon Chamber of Commerce 2012).[3] This new position was based on the principle advanced by the Tax Review Committee of equity and income tax deductibility, and spurred by various federal and provincial corporate income tax changes and rate reductions. In 2013, the City Council of the day, however, deferred the matter until after the 2017 property reassessment.

This issue sat dormant until it was revived three years later during Saskatoon's 2016 civic election campaign. Again, local business groups were advocating for the ratio between the non-residential property tax rate and the residential tax rate be reduced to 1.43 from 1.75. (MacPherson-a, September 29, 2016). They argue that a lower tax ratio will create more employment opportunities, attract new businesses, allow firms to reinvest in existing properties, and ultimately, make local business more competitive (MacPherson-b, October 31, 2016).

By contrast, opponents to a lower tax ratio argue that the City already has one of the most competitiveness business property tax regimes in Canada and that a further reduction in the ratio would increase the tax burden on residential property owners (CBC News, Saskatoon October 22, 2013). Part of their argument was strongly supported by a December 2016 report by the C.D. Howe Institute, concluding that Saskatoon had the most competitive business tax environment when comparing the largest city in each province (Found and Tomlinson, 2016).[4]

In 2017, Saskatoon City Council passed a resolution to reduce the non-residential municipal property tax ratio to 1.59 to 1. That is, the municipal property tax rate on commercial and industrial properties would be 1.59 times higher than that for residential properties.

Given this outcome, a fundamental question becomes: if Saskatoon already has the most competitive business tax regime for capital investment, then should the City's non-residential to residential tax ratio be lowered further? Does the original principle of (horizontal) equity and tax deductibility still resonate? f the answer is yes, then: (a) What is the appropriate ratio? and (b) Is there evidence to suggest that a lower tax ratio is a catalyst to additional business investment? If the answer is no, then (a) Is there a "better" alternative? and (b) Will maintaining or even increasing the tax ratio result in reduced commercial and industrial investment?

[3] It is the author's understanding that the 1.43 ratio came from a report by the Canada West Foundation, called "A Tax Framework for Saskatchewan's Continuing Prosperity." The authors state: The reform is also complimentary to other recent tax changes, particularly the cuts in the corporate income tax rate from 17% to 12%, and the earlier elimination of the general corporate capital tax.

[4] The analysis was based on a measure called the Marginal Effective Tax Rate (METR). In this particular analysis, the METR was limited to capital investment and is defined as "the effective tax rate on the revenue generated by the last unit of capital invested." Stated another way, it measures the percentage increase in the rate of return an investor needs to cover the cost of taxes.

1.2 Focus and Purpose of Paper

This paper attempts to address the questions posed at the end of subsection 1.1 and other fundamental issues relating to business property taxation by City governments. It does so by integrating theoretical frameworks in the economic literature with practical analysis of how selected cities approach the issue of business property taxation. The motivation for this paper is to advance various property tax policy issues (and options) so that the reader has a more complete understanding of how property taxes—especially business property taxes—work and why high taxation of business properties can be harmful to capital investment.

1.3 Scope of Paper

While the primary focus of this paper is on municipal business property taxation, the analysis also integrates the impact on municipal residential property taxes where necessary. The inclusion is needed because the two are very closely linked when it comes to local tax policy.

Although the research and topics addressed in this paper attempt to be as comprehensive as possible, there are several tax policy issues that go beyond the scope of this analysis. For example, this paper does not address in any detail:

- Property tax exemptions, rebates, and abatements;
- Education property taxes;
- Evaluation of other types of taxes, such as income, consumption or excise taxes;
- Evaluation of alternative financing mechanisms, such as user fees, tolls, and tax increment financing; and
- Local expenditures or service levels.

1.4 Key Findings of the Paper

Based on the principles of tax theory, the economic literature, and the practical applications of local tax policy, the research reveals that:

- Property taxes on business align with the “capital tax view,” meaning that the tax is borne by the owners of capital;
- High business property taxes can have an impact on capital investment and location decisions, but there is no definition of what “high” is;
- Saskatoon is the only City of those included in the research with a targeted tax ratio between residential and non-residential properties. Others use a “tax share” approach.
- The literature does not reach a consensus or advance an optimum tax ratio;
- Saskatoon’s existing tax ratio is among the lowest in Canada, however, there is no concrete proof to suggest that this is the cause for increases in business investment.
- Business property owners in Saskatoon face the second lowest municipal property tax burden among all cities, and the most competitive marginal tax rate in Canada.

1.5 Organization of Paper

The remainder of this paper is organized as follows:

- Section 2 presents generally accepted public finance criteria to help provide an evaluation framework to apply to the various options for the subsequent analysis.
- Section 3 provides an overview of the property tax, and briefly addresses its key features, good and bad. It also distinguishes between residential and business property taxes and investigates the economic incidence of the tax (meaning who pays it).
- Section 4 addresses whether business property taxes have an impact on business competitiveness, location decisions, and investment.
- Section 5 offers three policy options or approaches for consideration. These options, or variants of them, are used by the cities to distribute the property tax burden. This section also evaluates the options by using the criteria set out in section three.
- Section 6 summarizes the findings of this work and offers some concluding observations and issues that should be explored further as they concern business property taxation in Saskatoon.

2. What Makes a Good Property Tax? Criteria to Consider

2.1 Introduction

The purpose of this section is to provide an overview of key criteria or principles for evaluating taxes. The central objective is to identify and explain generally accepted criteria that are fundamental to the implementation and operation of a good tax system. While it may be impossible for any tax system to meet all of the criteria in establishing a good tax system, it is important to have some standard of measure so that a determination can be made on the efficacy of various property tax options that are advanced later in this paper.

2.2 Equity

The concept of “equity” is a fundamental principle of taxation. For taxation purposes, it implies that the burden of a tax should be shared fairly among individuals so that there is an equitable distribution of the cost of government to society. Since taxes are essentially the cost of government, “any measure of the equity or fairness of the tax system obviously involves weighing the burden borne by one taxpayer against the burden borne by another” (Boadway and Kitchen, 1999). There are two fundamental principles of equity: (1) the benefits principle, and (2) the ability to pay principle. The paper addresses each concept below.

2.2.1 The Benefits Principle

The benefits principle holds that the tax burden should be distributed in accordance with the benefits that taxpayers receive from a particular service. In other words, proponents of this principle argue that the financing of government goods or services should be linked to the benefits that individual or business taxpayers receive from the service. However, the benefits principle is not applicable to situations where government provides a public good, such as parks and sidewalks, or where the distribution of income or wealth is desired (Rosen et.al, 2003).

2.2.2 The Ability to Pay Principle

In contrast to the benefits principle, the ability to pay principle maintains that taxes should be distributed according to some measure of a taxpayer’s ability to pay. Ability to pay can be measured by income, consumption, and wealth to determine a taxpayer’s well-being. Taxes based on an ability to pay are appropriate in circumstances where collective benefits are provided to taxpayers. That is, they are appropriate where no clear link exists between the benefit received and the taxes paid. The ability to pay principle has two important dimensions: horizontal equity and vertical equity.

2.2.2.1 Horizontal Equity:

Horizontal equity is simply the equal treatment of equals. In other words, a tax is said to be horizontally equitable if taxpayers who have the same level of well-being before the tax is imposed have the same level of well-being after it is imposed (Rosen et.al, 2003). With respect to property taxes, horizontal equity can be achieved when taxpayers with similar types of properties are treated equally; that is, the same tax rates are applied to all properties in the residential and non-residential property classes.

2.2.2.2 Vertical Equity[5]:

Vertical equity, on the other hand, refers to the unequal treatment of unequal taxpayers. In other words, it determines the treatment of individuals with different levels of well-being. Vertical equity is thus achieved when taxpayers who have unequal economic abilities pay annual taxes that differ to achieve some collective notion of fairness (Hyman & Strick, 2001). Simply, a tax that achieves vertical equity is generally a progressive tax (e.g., federal personal income tax).

2.3 Efficiency/Neutrality

Taxes are said to be efficient or neutral when they do not require firms or individuals to alter their production, consumption, work, or savings patterns in order to comply with the tax. In other words, an efficient tax does not distort the economic decisions of firms or individuals (Boadway and Kitchen, 1999). Thus, it is desirable to impose high taxes on markets that do not respond significantly to price changes, since the imposition of the tax will be reflected in market prices. Taxes also play an important role on the level of economic growth in an economy, by either impeding investment or enhancing investment.

2.4 Ease of Administration

Compliance costs are imposed on firms and individuals in order to ensure that they comply with the tax system. Similarly, administrative costs are imposed on the public sector in administering the tax system. Obviously, the more complicated the tax or tax system, the more costly to administer. A major objective of any tax or tax system, therefore, is to ensure that compliance and administration costs are kept to a minimum.

2.5 Accountability/ Transparency/ Simplicity

A transparent and simple tax system provides taxpayers with the ability to determine if they are receiving appropriate levels of public services for the amount of taxes they pay, which will improve accountability. In addition, a transparent tax system is more difficult to evade than a more convoluted one. Transparent and visible taxes offer fewer incentives for taxpayers to avoid paying taxes, thereby reducing the administrative and compliance costs associated with the tax system (Boadway and Kitchen, 1999).

Accountability is also affected by how much of tax is exported to other jurisdictions. In other words, the greater ability to export taxes to other jurisdictions, the local tax becomes less accountable (Kitchen and Slack, 2014).[6]

2.6 Stability & Predictability

A good tax, or tax system, should provide stable and predictable revenues to help governments pay for the demand of public services and meet the ongoing costs of delivering those services. For taxpayers, it means that the tax should not result in unanticipated changes over time. Thus, stable and predictable taxes are important for ratepayers in planning their finances, and for cities in planning their budgets.

[5] Vertical equity also classifies taxes as regressive, proportional and regressive. This paper addresses these issues briefly in Section 2.

[6] This paper address tax exporting in the context of business property taxation in Section 4.

So how do the above criteria apply to the property tax? According to the economic literature, (Kitchen and Slack 2012; Bird and Slack, 2004; and Bird and Bahl, 2008) the best local taxes are those that have the following characteristics:

- They are based on an immobile tax base, and therefore, borne primarily by local residents (not exported);
- They do not create problems with harmonization or harmful competition between local governments or local governments and other orders of government;
- They generate sufficient, stable and predictable revenues;
- They are visible to ensure accountability and transparency; and
- They are perceived to be fair and they are easy to administer at the local level.

The residential property tax meets the above criteria better than any other tax. The non-residential property tax, conversely, does not (Kitchen and Tassonyi, 2012). The next section of this paper will address the reasons why.

3. AN OVERVIEW OF PROPERTY TAXATION

3.1 Introduction

The purpose of this section is to provide an overview of the property tax. In particular, it addresses the objective of the property tax, how it works, what types exist, and the incidence, or who bears the burden of the property tax. This section concludes by addressing some criticisms of the property tax and attempts to determine if they can be justified.

3.2 The Objectives of the Property Tax

Local governments use property taxation as a primary source of funding for services that have been requested by their taxpayers. They are the backbone of local finance and play a vital role in funding the services citizens and businesses receive from local governments. The goal is to ensure that the amount of tax paid reflects the cost of services received by the property owner and that municipal governments' service-level decisions

Thus, the major objective of the property tax is to raise revenues to help finance services provided by local governments. While the property tax is used to fund local services, public perception is that there is a direct linkage between the amount of property taxes paid and services received. Although this is true, it is important to distinguish between what types of services are funded by the property tax.

If structured correctly, the property tax should pay for those services that provide collective benefits for the residents and businesses of the community, meaning, police and fire protection, maintenance and repair of roadways and public parks, and social services. It also should help to subsidize those services that provide benefits to the individual user and collective benefits to the community, such as public transit and recreation. However, it should not fund those services that provide direct benefits to a consumer of a service (Kitchen, 2015).

3.3 The Mechanics of the Property Tax

The property tax is an ad valorem ("according to value") tax that is levied on the value of real property (including both land and structures). Because the property tax is essentially a local tax in Canada, and since local governments are under the control of the provinces, the definition of real property, the valuation process, and taxing ability varies from province to province.[7]

The value of real property is determined by the property assessment process. While property assessment and taxation are two distinct processes, they have an important relationship. Assessment is the process of estimating a dollar value on a property for taxation purposes so that the property tax burden can be distributed equitably. Taxation is the process of applying a tax rate to a property's assessed value to determine the taxes payable by the owner of that property.

[7] In Canada, a property tax is also levied at the provincial level in order to fund education. See Section 5 of this paper for an overview of the differences among provinces and cities.

In Canada, the property tax is levied on properties that are subject to taxation.[8] Although it is different in various provinces, properties not subject to taxation are typically federal, provincial and municipal government owned properties (buildings), places of worship, and education and higher education institutes. In lieu of paying property taxes, federal and provincial governments will provide a municipality with a "payment in lieu of taxes," which is considered to be tax revenue, just not "property tax revenue." Almost all properties that are exempt from taxation are non-residential properties, which, in turn, reduces the non-residential tax base.

3.4 Criticisms of the Property Tax

Despite its usefulness as a primary funding source for local governments, it is likely that no tax receives as much criticism as the property tax (especially the residential property tax).[9] The criticisms are largely levelled in the following ways (Slack 2001):

- The property tax is regressive because it is perceived as affecting lower income property owners more adversely than higher income property owners (this point is addressed in more detail in subsection 3.7).
- The property tax is unfair because it is levied against capital (stock) as opposed to income or consumption (flows).
- The property tax is inadequate because it does not provide enough revenues to finance local government activities.
- The property tax doesn't grow with the economy, like income or sales taxes.
- The property tax is considered to be too high because it is billed in one single instalment, instead of being deducted at the source, like income tax. Its highly salient (or visible) nature has made the property tax an unpopular revenue source for financing local government activities.
- The way properties are valued, or assessed, for tax purposes has led to the criticism that market value assessment discourages property improvements and leads to unpredictable tax burdens in volatile property markets. The perception is, therefore, that an increase in the assessed value of the property leads to an automatic increase in the property tax burden for the property owner.[10]

Nonetheless, the obvious question becomes: are the criticisms of the property tax justified and factual? The general consensus is no, but it depends on the type of the property tax.

With respect to the residential property tax, economists and policy analysts generally agree that it is a good revenue source to fund local government services. As one economist puts it, "the property tax is…a good local tax. It is far from perfect, but perfection in taxation is not of this

[8] Provincial legislation will allow certain types of properties to be exempt from taxation. Typically, these are provincially and federally owned properties, churches, and universities.
[9] Perhaps the Canadian Goods and Services Tax (GST) is more hated, but it is interesting to note that the most salient (visible) taxes are also the most hated. For more see Cabral & Hoxby, 2012.
[10] An increase in property taxes does not automatically stem from the assessment process, but the budgetary and service delivery decisions of a City (or municipal) Council. The assessment process is used to simply distribute, or redistribute in the case of reassessment, the local tax burden among property owners.

world…relative to other tax bases available to local government…the property tax gets high marks" (Oates, 2001). However, a distinction needs to me made between residential and non-residential property taxes.

3.5 The Two Sides of the Property Tax Coin: Residential and Non-Residential

In the study of local public finance, much attention is paid to how the property tax affects households or people. Moreover, local governments generally communicate property tax increases in terms of their impact on a household with an average or median assessed value, and the amount more per month that such households may pay.

This is to be expected, given that the residential properties (single family homes and condominiums) comprise over 70 percent of the assessment base and 90 percent of the total amount of properties in most Canadian cities.[11] The consensus in the economic literature is that the residential property tax is a good local tax (OECD, 2010; Slack, 2011; Dahlby, 2012; and Norregaard, 2013).

Among the reasons for this conclusion are: (a) the connection between the types of services funded at the local level and the benefit to property values[12]; and (b) residential property cannot be moved or hidden to avoid paying the tax. However, property taxes on residential properties only tell part of the local property tax story.

The other part of the property tax story concerns the treatment of non-residential properties (e.g., commercial and industrial) or more succinctly, "business" properties. In Canada, the United States and in most of the world, business properties face higher property tax rates than residential properties (Bird and Slack, 2004) although they receive less benefits from services.[13] There are several reasons for this, but one of the most commonly cited is that residential property owners vote (Bird, Slack, and Tassonyi, 2012).

Non-residential property taxes are levied on commercial (a retail store or office building) and industrial (manufacturing plant) properties. Unlike the Corporate Income Tax (CIT), business property taxes are paid regardless if the business turned a profit or not. However, non-residential property owners, or businesses, can deduct property taxes from their CIT filings, something that residential property owners cannot do. This sometimes justifies higher non-residential property tax rates by way of achieving horizontal equity in tax policy.

Nonetheless, the prevailing view in the literature is that that business property taxes are not good local taxes because (a) there is a poor link to benefits received; (b) business properties are more mobile; and thus, business investment is more responsive to tax increases; and (c) the

[11] In Saskatoon, residential properties make up about 80 percent of the total taxable property assessment base, while non-residential properties account for 20 percent in 2016. This share has been relatively consistent over the last 20 years. Based on the 2017 preliminary assessment data, residential properties in Saskatoon represent slightly above 96 percent of total taxable properties.

[12] For example, residential property owners benefit from the access to roads and transit, parks or green spaces, etc; thus, it can be argued that he benefits of local programs are reflected in local property values.

[13] See Section 4 for more on this topic.

tax can be exported to owners of capital and consumers who live in other jurisdictions (Slack, 2011; Kitchen and Slack, 2012).

As several recent studies have concluded, property taxes on commercial and industrial property increase the marginal effective tax rate on capital, discouraging investment in structures, and reducing the competitiveness of the business sector (Dahlby, 2012; Found, 2014; Found and Tomlinson 2016).

3.6 Who Pays the Property Tax?

There is a widely held perception that the property tax is a regressive tax (Calgary Sun, December 4, 2013). The allegation is that the property tax takes a greater percentage of income from low-income earners than high-income earners. However, as one study has noted, "despite a series of books and papers stretching over a period of nearly 50 years, there is nothing approaching a consensus on this issue" (Fischel, Oates, and Youngman, 2011).

This lack of consensus stems from the fact that there are three different views or theories about how the property tax interacts in the economy, or what the economic incidence of the property tax is. In other words, who bears the burden of the property tax is fundamental to its understanding. There are two prevailing theories about the incidence of the property tax.[14]

One view, or theory, the so called "benefit view" surmises that the property tax is simply "the payment that households make for the bundle of local public services that they have chosen to consume (Fischel, 2001; Zodrow, 2007). In this case, the incidence of the property tax is irrelevant, because the tax is equivalent to a user fee for public services. This view may be applicable to residential properties, but not for business properties (Found 2014). Empirically, businesses seem to react little to business property taxes, which supports the "benefit tax view" (Smart, 2013).

Another theory, the so called "capital tax view" (or new view) argues that the property tax is predominantly shifted to the owners of capital in the economy. It considers real estate property as an input factor for the business and calls for taxation in line with other input factors to avoid a misallocation of input factors. In this view, business property taxation falls on capital, thus disincentivizing investment and creating location distortions; it is a distortionary tax that has an impact on capital investment (Gilchrist and St. Louis 1997; Dahlby, 2012; Found 2014). As such, this view holds that the property tax is a progressive tax because the economic incidence falls on consumers of capital. This lends support to claims that business property owners are sensitive to higher property taxes.

[14] A third theory, called the "traditional view," which no longer holds much merit, claims that the property tax is an excise tax that falls on both land and structures (Fischel, Oates, and Youngman, 2011). The tax burden is borne by local housing consumers in the form of higher housing prices. According to this view then, the property tax is considered to be regressive because housing constitutes a relatively larger share of consumption for poorer individuals. This view relies on partial equilibrium model whereby capital is assumed to be immobile (meaning non-responsive to tax changes) and it assumes that the property tax has no connection to benefits local taxpayers receive.

4. BUSINESS PROPERTY TAXES and COMPETITIVENESS

4.1 Introduction

The objective of this section is to address the issues pertaining to business property taxes and their impact on competitiveness.[15] More specifically this section will address the following question: do business property taxes impact the ability of a city to attract or retain investment, improve economic activity (including employment opportunities) and ultimately, influence business location decisions? But before it does, it reviews whether business properties are overtaxed relative to the benefits they receive from municipal services.

4.2 Business Property Taxes and Benefits Equity

As described in Section 3, one way to measure equity is through the benefits principle, meaning that the cost burden should be linked to the benefits that taxpayers receive from the delivery of local services. Benefits equity is generally covered by charging user fees for the service, but there is a residual cost for the remaining bundle of city services that is financed by property taxes (residential and non-residential).

Over the years, studies have attempted to quantify the amount of services that businesses receive from the municipality relative to residential property owners. Their intent is to determine if businesses are overtaxed relative to the benefits they receive.

The bulk of the studies have been conducted in the United States, but a few have been done in the provinces of British Columbia and Ontario. They generally conclude that the residential sector receives proportionately more benefits from local government services than the non-residential sector. For example, and as summarized in (Kitchen and Slack, 2012):

- A review of property taxes and municipal expenditures in eight municipalities in Ontario in 1990 concluded that non-residential property taxes ranged from 28 to 51 percent of total local property taxes but accounted for only 31 to 40 percent of municipal expenditures (Kitchen & Slack, 1993).
- A study in the City of Vancouver (MMK Consulting, 2007) compared the consumption of services to taxes paid by the different property classes and concluded that the non-residential sector paid $2.42 in taxes for each $1 of benefit received, while the residential sector paid $0.56 for each $1 of benefit. The study also concluded that the non-residential share of services consumed was 24 percent of the total; the residential share was 76 percent.
- In C.D. Howe Institute Commentary (Mintz and Roberts, 2006), the authors concluded that the non-residential sector is over-taxed relative to the residential sector when compared with the benefits that each of these sectors receives.

[15] For the purpose of this section, “competitiveness” refers to the ability to make a jurisdiction more attractive to create wealth and enhance economic prosperity.

In addition to these studies, analysis conducted by Gilchrist and St.Louis (1997) in the Saskatoon context concluded that non-residential property taxes exceed the benefits that non-residential properties receive.

Looking at the statutory tax rates in Canada and elsewhere, there is no denying that business properties are taxed at higher rates than residential properties. Higher property taxation of commercial and industrial properties is generally done in one of three ways: (1) through assessing business properties at higher values than residential properties with the same tax rate applied to both property types (see Winnipeg); (2) through the application of higher tax rates on business properties (see Calgary and Edmonton); and (3) or both (see Saskatoon and Regina). So, is this justified?

In theory, higher taxation of business properties creates efficiency and equity concerns. Efficiency in municipal service levels will not be achieved if revenues collected from property taxes on business properties are used to subsidize services consumed by the residential sector. Equity is violated because those benefiting from the services are not paying their full costs (Kitchen & Slack, 2012).

4.3 Business Property Taxes and Competitiveness

Over the last two decades, the issues of competitiveness and business property taxes have generated a significant amount of interest from business group advocates and economists through the literature. Business group advocates have placed their focus squarely on the difference in tax rates—or the tax ratio—that cities levy on residential and non-residential properties. Their aim, naturally, focuses on reducing the tax rate differential between the two property classes, and thus, the overall tax burden for business properties.

The focus of the economic literature is broader and has generally tried to investigate whether or not local business property taxes affect competitiveness, investment and location decisions and whether or not higher business property rates are equitable (Smart, 2012; Kitchen & Slack, 2012; Found 2014). The consensus is that high business property taxes can affect competitiveness, but the literature does not define what “high” is.

For example, the tax ratio between commercial properties and residential properties in Vancouver is 4.23 to 1 and for industrial properties it is 21.7 to 1 (based on 2016 general levy rates).[16] A November 2016 report by B.C.’s Commission on Tax Competitiveness found that, “the overall level of business property taxation in B.C…does not represent a competitiveness issue or a significant impediment to economic performance.”[17] They do caution however, that high property tax rates on industrial properties can have “devastating effects on unprofitable plants.”

[16] Rates obtained from http://vancouver.ca/home-property-development/tax-rates.aspx and compares the “general purpose tax levy only.

[17] See Commission on Tax Competitiveness, “Improving British Columbia’s Business Tax Competitiveness,” November 15, 2016, pg 5. Obtained from https://engage.gov.bc.ca/app/uploads/sites/76/2016/11/4637_CommissionOnTaxCompetitiveness_Final_Report_Nov-2016.pdf

That said, there have been very few studies on the relationship (or influence) of non-residential property taxes on competitiveness. The conclusion is that the impact of non-residential business investment depends on several factors: (1) the business cycle (e.g., economic expansion vs recession); (2) the business decision (e.g., investment vs operations); (3) the nature of the business (small vs. large multi-national); (4) access to skilled labour; and (5) access to infrastructure (Kitchen and Slack, 2012). In jurisdictions that have higher statutory property tax rates than Saskatoon, such as Calgary, capital investment flow and firms locate there. According to one report, Calgary was the number one destination for inflows of foreign capital investment into Canadian cities (Calgary Financial Task Force, 2020).

Some studies use the marginal effective tax rate (METR)[18] to measure tax competitiveness. For example, the CD Howe Institute publishes annually a review of the METR for a several business-related taxes. In their most recent review, they showed that Saskatoon had the lowest METR at 36.4, on general corporate capital investment in Canada, compared to the largest city in each province (CD Howe, April 2020). When it comes to for municipal business tax burdens, "they are highest in Montreal, Halifax and St. John's, while near the group average (17.3 percent) in Calgary, Charlottetown and Moncton. Vancouver showcases the most competitive municipal business tax environment, followed by Saskatoon, Toronto and Winnipeg."

4.4 Business Property Taxes and Location Decisions

Businesses generally locate where they can maximize profits, so in theory, property taxes can influence a firm's location decision in the same way as any other cost of production. As noted elsewhere in this paper, property taxes on business properties increase the marginal effective tax rate on capital, thereby discouraging investment on structures and reducing the competitiveness of the business sector (Dahlby 2012; Found 2014). However, according to Slack and Kitchen (2014) there is no general agreement about the importance of property taxes in location decisions.

The available evidence—largely drawn from the United States—suggests that property tax differentials are relatively unimportant in inter-municipal or inter-regional location decisions but do play a role in intra-municipal or intra-regional location decisions (Kitchen and Slack, 2012). In other words, differences in property taxes are unlikely to play a significant role in a firm's decision whether to locate in the metropolitan areas of Vancouver, Calgary, or Toronto. They are likely to play a role, however, once a firm or business decides to locate in a certain region such as the Greater Toronto Area, Metro Vancouver or the Region around Montreal.

More recently, a very technical and comprehensive study by Found (2014), in the context of Ontario, reveals that capital investment in commercial structures and commercial property values are highly sensitive to the property tax and builds on the growing consensus that property taxes on business impose a substantial economic cost. This cost then can influence a firm's decision to locate in a particular jurisdiction. However, as Kitchen and Slack (2014)

[18] The METR measures the percentage of the gross-of-tax return needed to pay business taxes on the marginal investment. For example, if the minimum acceptable rate of return on investment net-of-tax is 6 percent, and if investors need a gross-of-tax return of 10 percent to pay taxes and leave shareholders with a 6 percent return, net-of-tax, the METR would be (10 – 6) / 10 = 40 percent

report, “stakeholders in Halifax told us that there is no concrete evidence that the tax differential between commercial and residential properties is having much impact on business location….:” In other words, economic models do indicate that business property taxes can influence location decisions, however, practical or empirical analysis may suggest otherwise.

4.5 Business Property Taxes and Exporting the Burden

As this paper notes in Section 2, the ability to export a tax that is levied in one jurisdiction and paid for by taxpayers in another jurisdiction weaken accountability of the tax and may reduce equity. A good explanation of tax exporting is provided in (Kitchen and Slack, 2012): “Tax exporting refers to situations in which some portion of the local tax burden is borne by people who live elsewhere either through a change in relative commodity prices or a change in the net return to non-locally owned factors of production.” The ability of businesses to export the property tax depends on what the price elasticity (meaning sensitivity to price) of the demand for the product(s) is. However, according to (Kitchen and Slack 2012) there is very little evidence of tax exporting in Canada.

5. BUSINESS PROPERTY TAX POLICY OPTIONS FOR CONSIDERATION

5.1 Introduction

The purpose of this section is to provide an overview of three general policy approaches (or options) that may be considered for implementation in Saskatoon. These three approaches are as follows: (1) Targeted tax ratio approach; (2) Revenue neutral approach; and (3) Tax share or (budget based) approach. To some degree, each of these options exist in Canadian cities.

5.2 Options & Approaches

Option 1: The Targeted Tax Ratio Approach:

This option is the City of Saskatoon's approach of having a targeted (or pegged) non-residential to residential property tax ratio. The City's existing ratio, as described earlier in the report, is set at 1 59 to 1, meaning the non-residential property tax rate is 1.59 times higher than the residential property tax rate. Only a few cities use this approach (including Toronto).

Advantages:

- Maintains a long-established existing policy that is easy to administer.
- Sends clear signal and certainty to investors about the tax rate.
- Tax rate is simple and transparent.
- Depending on the ratio, may not distort market decisions;
- Depending on the ratio, could achieve horizontal equity.

Disadvantages:

- Depending on the ratio could increase tax burden on non-residential properties, relative to previous year
- Depending on the size of the ratio, may result in lower investment/profitability for some business properties.
- Holding a tax ratio consistent reduces ability to distribute tax revenue equally from all classes of property.

Option 2: Revenue Neutral Approach

This option proposes to let market forces dictate the tax ratio. More precisely, it lets the assessment valuation changes determine the tax ratio, so that the tax change is revenue neutral. This is largely the approach Regina uses.

Under this option, the only tax increase to either property class would result from the budget process. A primary challenge with this option is to maintain the revenue neutral ratio in non-reassessment years, as property values do not change in non-assessment years, other than with the growth in inventory.

Advantages:

- Maintains the property tax burden for both property classes.
- Achieves reasonable sense of equity, in that no additional burden is placed on either property class through the assessment process.
- Market forces determine the tax ratio, so tax policy limits distortions.

Disadvantages:

- Results in change to existing policy (assuming the existing policy is the appropriate one).
- Does not provide certainty to investors about the potential tax rate as revenue neutrality is a function of inventory growth and market value changes.
- Does not reduce residential tax burden.

Option 3: The Tax Shares (or Budget) Approach

This option lets the budget process to determine the tax implications for non-residential and residential properties. This option follows the approaches used in Edmonton and Calgary and works optimally under a system that has more frequent property assessments.

In this case, the tax ratio would be the result of three factors: market values, inventory growth, and budgetary requirements. For this option to work, the City of Saskatoon would need to establish how much of the property tax is allocated to residential properties and non-residential properties for budgetary purposes.

To illustrate, let's assume that the City needs to collect an additional $10 million in property taxes to balance its operating budget. Let's also assume that the City wants to fill that gap by requiring the residential sector to pay $5 million and the non-residential sector to pay $5 million. In other words, the annual property tax budget requirement is split equally between the residential and non-residential property classes.

The tax ratio is then the outcome of this process. Over a period of time, the tax mix differential between the residential and non-residential properties would become more evenly split, instead of the close to 70/30 split that currently exists in Saskatoon.

Advantages:

- Reduces the property tax burden for residential properties.
- Distributes tax burden equally among all property classes.
- Easy to administer.
- Provides stable and predictable revenues.

Disadvantages:

- Results in change to existing policy (assuming the existing policy is the appropriate one).
- Violates equity as it increases the non-residential tax burden over time and has no relationship to its share of taxable assessment.
- May reduce accountability and transparency of tax policy, especially with respect to business properties.

5.4 Evaluation of Options/Approaches

The previous subsection offered three general tax policy approaches that are used by various cities in Western Canada. At one end of the spectrum is a targeted tax ratio approach and at the other end is targeted tax share approach. In the middle is the revenue neutral approach. The revenue neutral approach, as used by Regina, is essentially a hybrid of revenue neutral tax policy and a targeted tax share approach. Despite its use in Regina, the revenue neutral approach is not covered in the literature, but the tax ratio approach and the tax share approach are. As such, this section dismisses the revenue neutral approach and reviews some conclusions in the literature on the other two approaches.

5.4.1 Tax Share Approach

In 2014, the City of Vancouver's Property Tax Policy Review Commission (City of Vancouver, 2014) released a report that, among things, addressed the debate over the tax ratio approach and the tax share approach. At the time, the City of Vancouver used—and still uses—the tax share approach to allocate its municipal tax burden among property classes.[19] This is the same approach used in Calgary and Edmonton.

In distributing the City's local tax burden, Vancouver implements equal tax increases to residential and business tax classes. Moreover, Vancouver's business to residential tax ratio at that time was 4.32:1. However, the Commission had no major concerns over this approach and stated that, "the Commission does not believe that there is a compelling case for a further shift in the municipal tax burden from Class 6 (business) to Class 1 (residential) at this point in time." (City of Vancouver, 2014). At the time, the total tax share from business properties was 43 percent and residential properties was 57 percent.[20]

Nonetheless, on the tax ratio approach, the Commission states that it is: "one of the legitimate ways to view equity and to allocate the tax burden across types of property…the share of taxes collected from each class of property will change in response to market changes in property assessments." The tax ratio approach is often cited as a key factor in influencing business location decisions and capital investment (Saskatoon Chamber of Commerce, 2012).

However, despite Vancouver's high business to residential tax rate ratio—at least relative to Saskatoon's—the Commission concluded that it, "finds no evidence of an increasing business tax differential, or of business investment leaving to other municipalities in Metro. Accordingly, the Commission recommends that the City leave the tax shares unchanged at this time" (City of Vancouver, 2014).

However, an earlier report seems to contradict the conclusion reached by the Vancouver Commission. In a 1997 report for Saskatoon business groups, Gilchrist and St. Louis

[19] This approach is actually used by most BC municipalities.
[20] The Commission also did not recommend an appropriate share of taxes from each sector. But if the goal is an equal allocation of the tax burden, over time, the total tax share would equal 50/50.

conclude the tax share approach violates equity and is contrary to competitiveness and efficiency goals. As they state: “to predetermine a business share, or to insist on the continuation of an historical share, is indefensible on equity grounds. It insists on a levy that is insensitive to the relative size of the business sector.” (Gilchrist and St. Louis, 1997 page 26).

5.4.2 Tax Ratio Approach

As noted in Section 5, the tax ratio approach is used in Saskatoon, but in no other cities in Western Canada. However, there is evidence of provincial jurisdictions mandating a tax ratio approach:

- In Ontario, all municipalities must adopt a bylaw that sets the tax ratios for each class of property. All property tax rates are compared to the residential tax rate. The Province has set “allowable ranges of fairness” for tax ratios.
- In New Brunswick, municipalities set a rate on residential property and the rate on non-residential property must be 1.5 times the rate on residential property.
- In Alberta, the province’s *Municipal Government Act* sets the non-residential to residential tax ratio at 5:1. This means the non-residential tax rate cannot be more than five times higher than the residential rate.

As the above points illustrate, the tax ratio approaches used, or proposed, in various jurisdictions have large variations. In fact, other than the Saskatoon Chamber of Commerce (2012) and the Canada West Foundation (2010), the literature does not recommend a specific tax ratio between non-residential and residential properties.

For example, in a 2014 report on Nova Scotia’s property tax and assessment system, Kitchen and Slack (page 69) state: “Unfortunately, there is no single means of determining the appropriate tax rate ratio for business relative to residential properties.” They make two additional points worth mentioning: (1) they were not able to obtain empirical evidence of businesses leaving the province because of property taxes; and (2) they are unable to make a recommendation on the appropriate ratio because the setting of tax rates and ratios requires judgement by decision makers.

Kitchen and Slack’s arguments were bolstered recently by a report from the B.C. Commission on Tax Competitiveness (November 2016). Even though tax ratios for some property classes (e.g., industrial) are 20 times higher than residential properties, the Commission could not recommend a specific tax ratio. They concluded that a specific tax ratio substantially reduces the fiscal flexibility of local governments.[21]

[21] They did caution, however, that excessive property taxes on major industrial and/or utilities properties creates investment uncertainty and competitiveness concerns about what the future level of property tax will be.

It appears that the tax share approach is used in those jurisdictions that have more frequent—meaning annual—property assessments (e.g., Edmonton, Calgary, and Vancouver). The tax ratio approach appears to be used in jurisdictions that have less frequent assessment cycles (e.g., Saskatoon and Toronto) although New Brunswick is an outlier.

Nonetheless, the major benefit to the tax ratio approach is that it does provide certainty to investors about what the potential tax implications will be for new investments. However, there is no optimal tax ratio. On the other hand, the tax ratio approach can reduce a city's fiscal flexibility.

5.5 Implications of Options/ Approaches

The options and approaches described in subsection 6.3 can have various tax policy implications for residential and non-residential properties. Table 9 shows the implications that four different tax ratio options would produce both in terms of their impacts on residential and non-residential properties and the City of Saskatoon's non-residential and residential property tax mix. It also shows what the implications would be for revenue neutral approach and the tax share approach.

At this point, it may be useful to explore Saskatoon's approach in more detail. The original intent of the City of Saskatoon's property tax ratio policy was to achieve (horizontal) equity among residential and non-residential properties of similar assessed values (Saskatoon Tax Policy Review Committee, 1997). This was achieved by estimating the amount of property taxes that a business could deduct for income tax purposes. Canada's *Income Tax Act* allows businesses to deduct property taxes as an expense for the purposes of filing their corporate income tax (CIT) returns each year.

In Canada, CIT's are levied by both federal and provincial governments on the net profits (before taxes) of a business. The federal and provincial governments each establish their own CIT rates and different rates are applied to different types of business. In Saskatchewan, for example, a small business (meaning income up to $600,000 per year) would face a combined federal and provincial tax rate of 9 percent (9 percent federal rate and 0 percent provincial rate) in 2020.[22] However, larger corporations (income thresholds above $600,000 per year) in Saskatchewan face a higher combined income tax rate of 27 percent in 2020 (15 percent federal rate and 12 percent provincial rate).[23] Manufacturing and processing firms see a statutory tax rate of 10 percent in Saskatchewan.

[22] Saskatchewan temporarily reduced its small business income tax rate to 0 in 2020. https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/provincial-taxes-policies-and-bulletins/corporation-income-tax

[23] This is known as the "General Corporation" Income Tax rate applied to active business income. It is the rate that has been used by Saskatoon's Tax Policy Review Committee in recommending the 1.75 property tax ratio and further advance by the Canada West Foundation and Saskatoon Business Groups to arrive at the 1.43 property tax ratio. (Canada West Foundation, 2010).

Since 1997, federal and provincial governments have taken steps to reduce CITs.[24] For example the combined general corporate income tax rate in Saskatchewan was approximately 43 percent in 1997. In 2010, it was 30 percent and, as noted, in 2017 it was 27 percent. It remains at 27 in 2020. Lower CIT rates also reduce the amount of property tax expenses that businesses can deduct for income tax purposes.

The table below illustrates how the CIT rate changes affect the business property tax liability and thus, can influence property tax equity. It suggests that business property taxes should be levied at a higher rate than residential properties. According to this approach, the municipal property ratio in 2020 would be equivalent to 1.37 to 1.

Property Tax Equity and Corporate Income Tax Deduction

	2020		2017		2010		1997	
	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential
Taxable Property Value	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Property Tax Liability	**$1,500**	$2,055	$1,500	$2,055	$1,500	$2,143	$1,500	$2,632
CIT Deduction Allowance (%)	**0**	**27%**	0	27%	0	30%	0	43%
CIT Deduction	**0**	$554.85	0	$554.85	0	$643	0	$1,132
Net Tax Liability	**$1,500**	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Property Tax Ratio	**1**	**1.37**	**1**	**1.37**	**1**	**1.43**	**1**	**1.75**

[24] Economic research concludes that higher CIT's (and raining CIT rates) are harmful to the economy because capital investment is highly mobile. See, (BC Tax Competitiveness Commission, 2016).

6. SUMMARY AND CONCLUDING OBSERVATIONS

The primary focus of this paper is to provide a comprehensive overview of business property taxation issues in selected Canadian cities. Given that context, a secondary objective is to help educate and inform decision makers about the complex issues on business property taxation. It does so by integrating theoretical frameworks in the economic literature with practical analysis of how selected cities approach the issue of business property taxation.

As section one of this paper details, Saskatoon has a storied history with respect to business property taxation. It is one of the only cities in Canada with a targeted non-residential to residential tax ratio. Section one also revealed that Saskatoon's tax ratio approach was the result of integrating income tax deductibility and (horizontal) equity. The tax ratio, now at 1.59 to 1, was credited as helping to reduce Saskatoon's marginal effective tax rate on commercial and industrial investment, although no empirical evidence supports this.

Hence, a fundamental question that emerges is: if Saskatoon already has the most competitive business tax regime for capital investment, then should the City's non-residential to residential tax ratio be lowered further? If the answer is yes, then: (a) What is the appropriate ratio? (b) Is there evidence to suggest that a lower tax ratio is a catalyst to additional business investment? f the answer is no, then (a) Is there a "better" alternative? and (b) Will maintaining or even increasing the tax ratio result in reduced commercial and industrial investment? Moreover, does the original principle of (horizontal) equity and tax deductibility still resonate? Should Saskatoon City Council continue to uphold this principle?

In attempting to answer these questions, this paper had to first set the stage by reviewing some fundamental criteria with respect to evaluating tax policies. As section two reveals, while it may be impossible for any tax system to meet all of the criteria in establishing a good tax system, it is important to have some standard of measure so that a determination can be made on the efficacy of various property tax policy options that can be implemented.

In section three, the paper provides a review of the property taxation, including how it works, what types exist, the criticism (and adulation) of it, and the incidence, or who pays the burden of the property tax. On the last point, we fundamentally agree that the residential property tax is generally consistent with the "benefit view" and the non-residential property tax is consistent with the "capital view", indicating that the tax burden is generally borne by owners of capital.

In section four, the paper turns to focus more exclusively on business property taxation. In this section the objective is to determine the nature and extent to which the business property taxes help or hinder competitiveness. The section reveals:

- On the basis of benefits received, the empirical evidence in Canada suggests that the non-residential sector is over taxed relative to the residential sector. This over-taxation is potentially harmful if it reduces the level of economic activity;
- Studies suggest that the impact of property taxes on business competitiveness depends on a number of factors – the nature of the business decision (investment in new facilities, on-going operations, etc.), the business in question, plus other factors. More

specifically, property taxes on business properties are not a concern unless the firm is in financial distress and the tax is a large component of its fixed cost.

- The literature, almost all of it based on U.S. studies, suggests that property tax differentials are relatively unimportant in inter-municipal or inter-regional location decisions but do play a role in intra-municipal or intra-regional location decisions. Two Canadian studies on tax competition find no evidence of harmful competition for capital and that neighboring jurisdictions show more similarity in their tax policies than non-neighboring jurisdictions.

Section reviews and evaluates three policy options or approaches that are typically used to for tax rate policy: (1) targeted tax ratio approach; (2) revenue neutral approach; and (3) tax share (or budget) approach. As a result, two possible approaches emerge: the tax ratio approach and the tax share approach.

In some ways, the two approaches are inversely related. Under the tax ratio approach, the tax share is the outcome. Under the tax share approach the tax ratio is the outcome. So the question is what is more important?

Well, the evidence suggests that equity can be achieved under both approaches. It can be argued that the tax ratio approach provides transparency, accountability to business investors as the tax rate is essentially fixed, while the tax share approach provides more fiscal flexibility and generally limits the tax impact to residential property owners.

However, as Kitchen and Slack (2014) argue:

> *Ultimately, the task of setting tax rates and ratios requires judgement on the part of decision-makers. Local governments should monitor tax changes in their municipality and neighbouring municipalities as well as the attractiveness of their municipality for business investment. This information should help to determine whether tax ratios need to be changed, keeping in mind that a lower commercial tax rate will be borne by higher residential tax rates".*

Ultimately, the issue comes down to managing trade-offs that emerge in tax policy. The size of the tax pie is determined through the budget process, but the distribution of that pie is determined via tax policy and thus, the political process. As the research in this paper has explained, there is no right balance or optimal level, but the outcomes are largely a reflection of local values.

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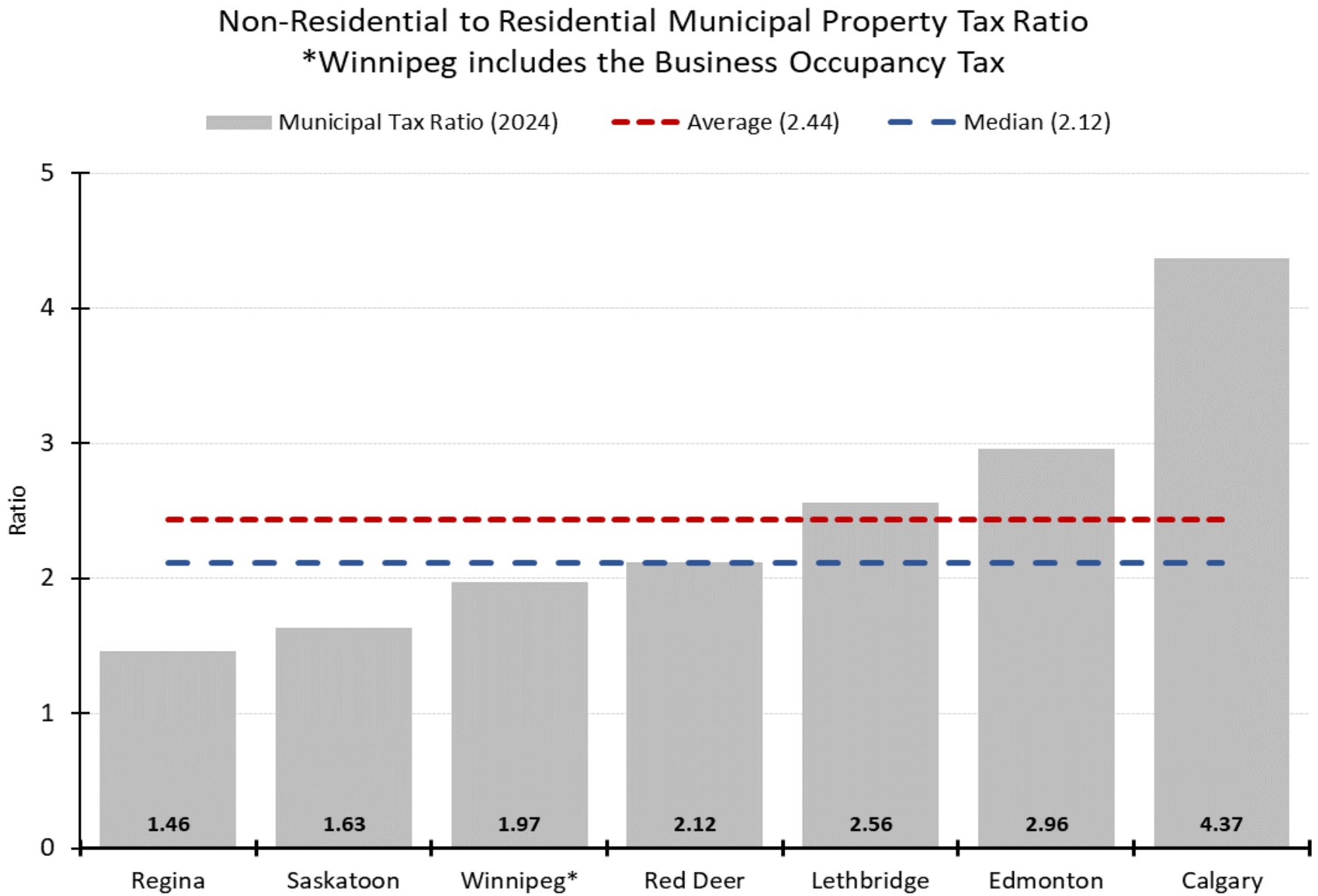
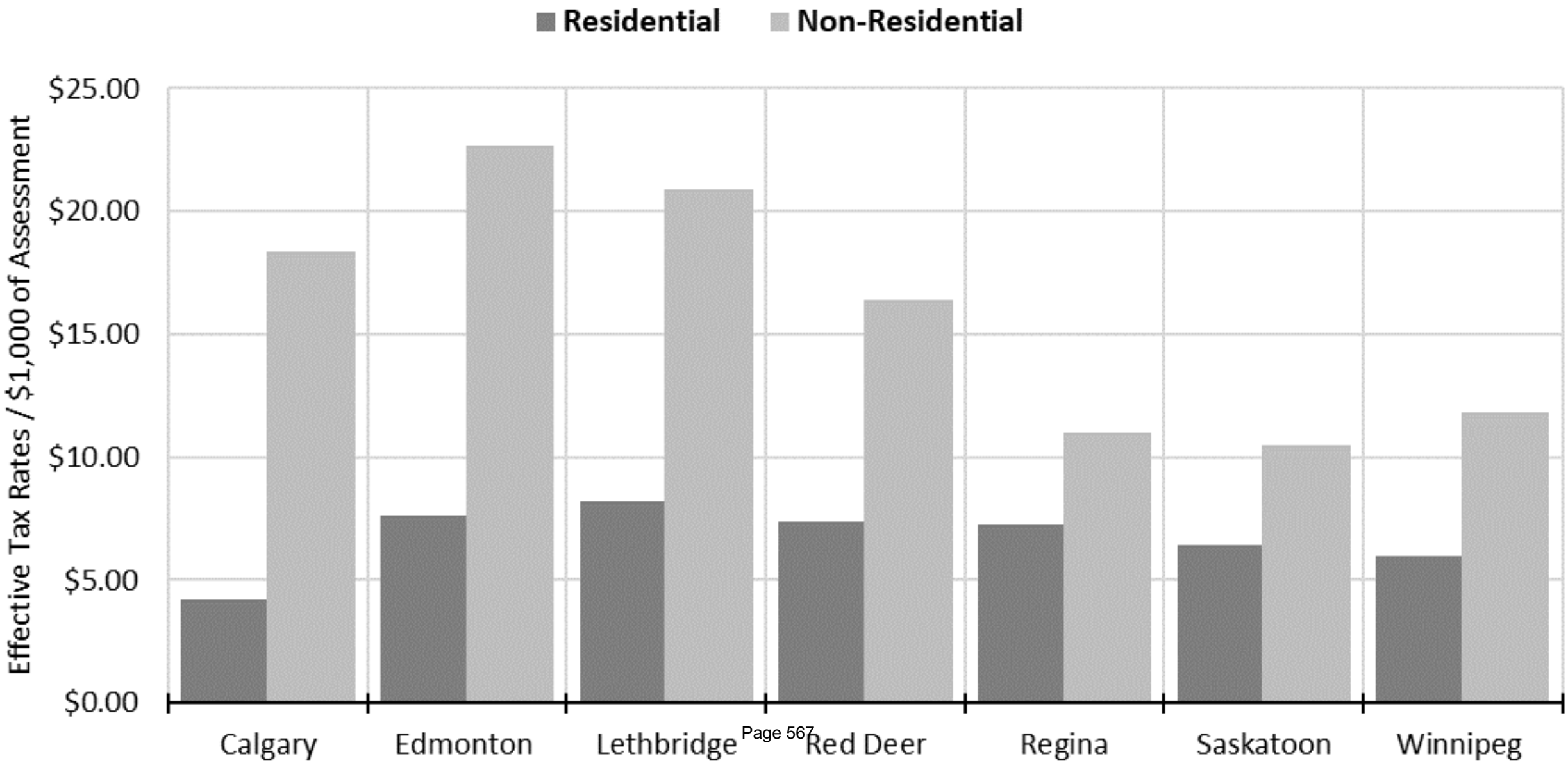
Appendix 3

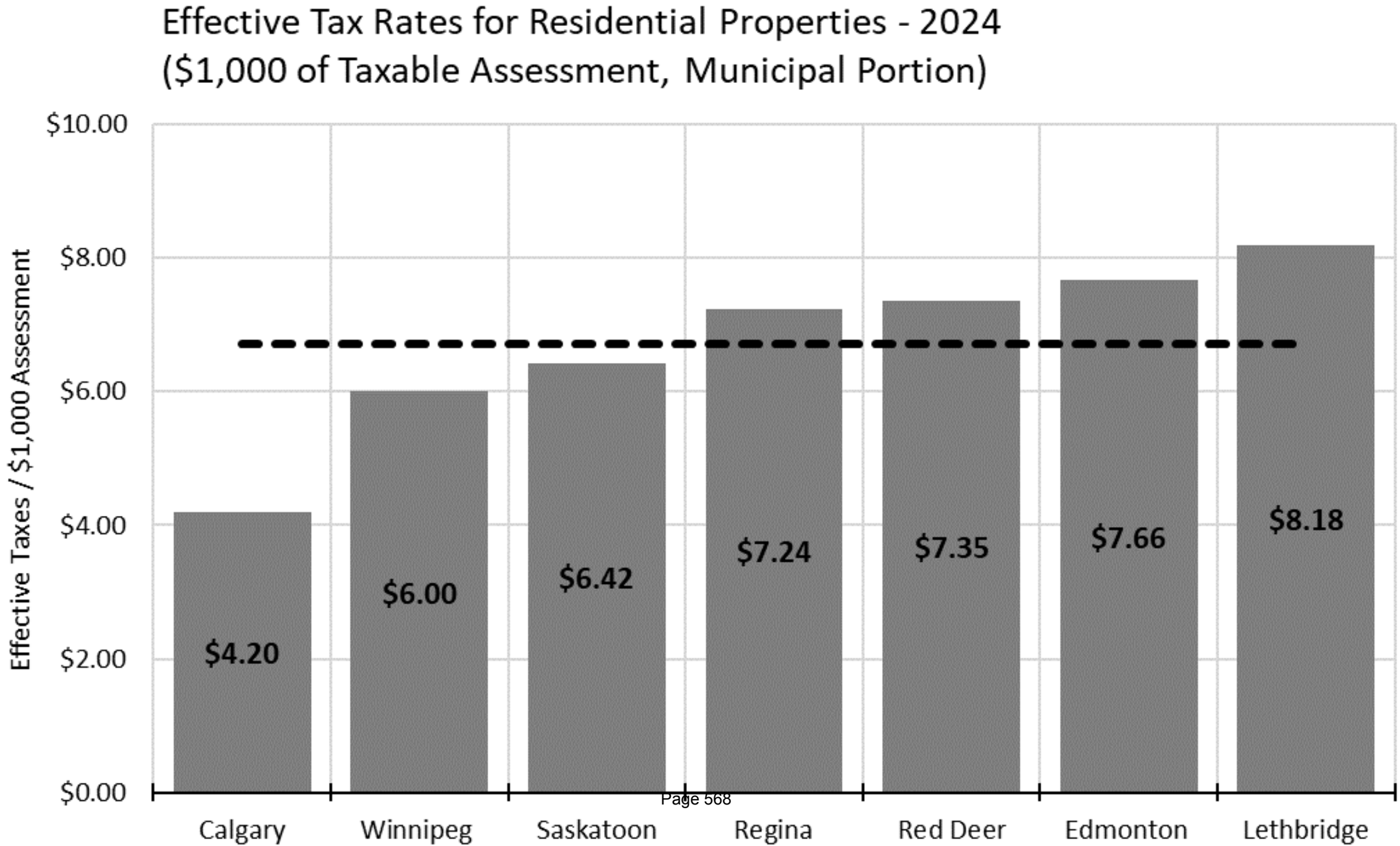
Comparative Property Tax and Assessment Data for Prairie Cities


Non-Residential to Residential Municipal Property Tax Ratio
*Winnipeg includes the Business Occupancy Tax
Municipal Tax Ratio (2024)
Average (2.44)
Median (2.12)
Ratio
5
4
3
2
1
0
1.46
1.63
1.97
2.12
2.56
2.96
4.37
Regina
Saskatoon
Winnipeg*
Red Deer
Lethbridge
Edmonton
Calgary

Municipal only -$1,000 of Taxable Assessment

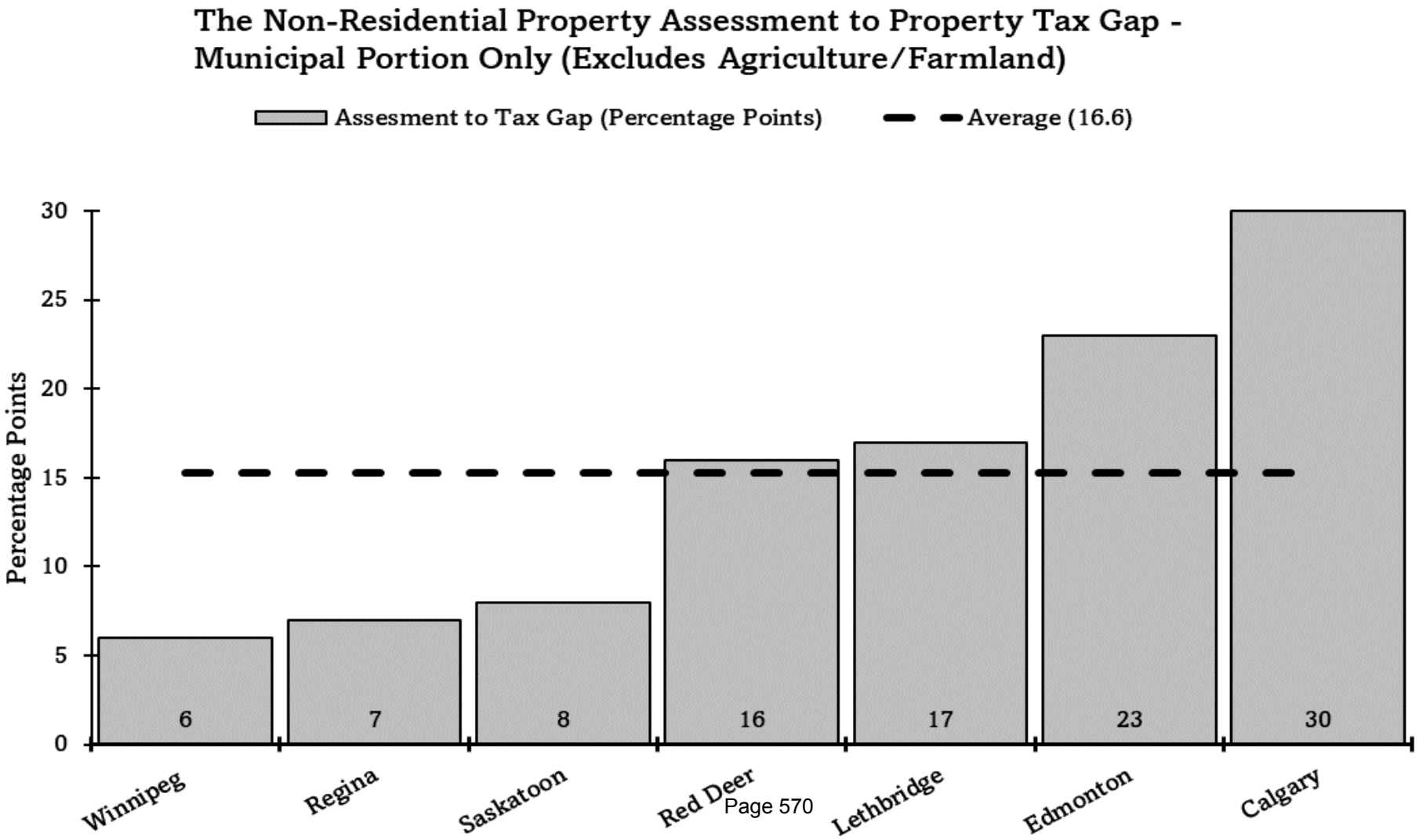
*(*Winnipeg includes Business tax but not Frontage levies)*




Effective Tax Rates for Residential Properties - 2024
($1,000 of Taxable Assessment, Municipal Portion)
Effective Taxes / $1,000 Assessment
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
$4.20
$6.00
$6.42
$7.24
$7.35
$7.66
$8.18
Calgary
Winnipeg
Saskatoon
Regina
Red Deer
Edmonton
Lethbridge


Effective Tax Rates for Non-Residential Properties - 2024
($1,000 of Taxable Assessment, Municipal Portion)
Effective Taxes / $1,000 Assessment
$25.00
$20.00
$15.00
$10.00
$5.00
$0.00
$10.48
$10.97
$11.82
$16.40
$18.36
$20.90
$22.66
Saskatoon
Regina
Winnipeg
Red Deer
Calgary
Lethbridge
Edmonton

This chart measures the gap between the share of non-residential assessment relative to the share of non-residential property taxes collected for budgetary purposes. A smaller gap means the tax burden is distributed more fairly among residential and non-residential property tax classes. (e.g. , Saskatoon's non-residential assessments account for 24% of the total assessments, while the non-residential property tax share is 32%, resulting in an 8-percentage point gap.)



Aggregate Tax Policy Scenarios for Residential and Non-Residential Property Class

Table 1- Municipal Property Tax Ratios and Tax Shares by Various Scenarios - Major Property Class. Includes 2025 Reassessment Shifts and Budgetary tax increase.

Panel A	Property Types		
Scenario 1 Revenue Neutral (1.88 Ratio)	**Residential**	**Non-residential**	**Total**
Taxable assessment	$ 30,110,330,882	$ 8,103,164,337	$ 38,213,495,219
Tax revenue	$ 223,624,567	$ 106,399,883	$ 330,024,450
Percent share of tax revenue	68%	32%	100%
Statutory tax rate	0.742684%	1.313066%	
Effective Tax Rate	0.594147%	1.116106%	
Tax Burden Per $1,000	$ 5.94	$ 11.16	
Tax ratio	**1.00**	**1.88**	

Panel B	Property Types		
Scenario 2 Prairie Median (2.13 Ratio)	**Residential**	**Non-residential**	**Total**
Taxable assessment	$ 30,110,330,882	$ 8,103,164,337	$ 38,213,495,219
Tax revenue	$ 214,515,893	$ 115,508,558	$ 330,024,450
Percent share of tax revenue	65.00%	35.00%	100%
Statutory tax rate	0.712433%	1.425475%	
Effective Tax Rate	0.569946%	1.211653%	
Tax Burden Per $1,000	$ 5.70	$ 12.12	
Tax ratio	**1.0**	**2.13**	

Panel C	Property Types		
Scenario 3 (1.75 Ratio)	**Residential**	**Non-residential**	**Total**
Taxable assessment	$ 30,110,330,882	$ 8,103,164,337	$ 38,213,495,219
Tax revenue	$ 228,706,944	$ 101,317,506	$ 330,024,450
Percent share of tax revenue	69.30%	30.70%	100%
Statutory tax rate	0.759563%	1.250345%	
Effective Tax Rate	0.607650%	1.062793%	
Tax Burden Per $1,000	$ 6.08	$ 10.63	
Tax ratio	**1.0**	**1.75**	

Panel D	Property Types		
Scenario 4 (1.63 Ratio) Current	**Residential**	**Non-residential**	**Total**
Taxable assessment	$ 30,110,330,882	$ 8,103,164,337	$ 38,213,495,219
Tax revenue	$ 233,393,291	$ 96,631,159	$ 330,024,450
Percent share of tax revenue	70.7%	29.28%	100%
Statutory tax rate	0.775127%	1.192511%	
Effective Tax Rate	0.620102%	1.013635%	
Tax Burden Per $1,000	$ 6.20	$ 10.14	
Tax ratio	**1.0**	**1.63**	

Panel F	Property Types		
Scenario 5 (1.43 Ratio)	**Residential**	**Non-residential**	**Total**
Taxable assessment	$ 30,110,330,882	$ 8,103,164,337	$ 38,213,495,219
Tax revenue	$ 242,237,946	$ 87,786,504	$ 330,024,450
Percent share of tax revenue	73.4%	26.60%	100%
Statutory tax rate	0.804501%	1.083361%	
Effective Tax Rate	0.643601%	0.920857%	
Tax Burden Per $1,000	$ 6.44	$ 9.21	
Tax ratio	**1.0**	**1.43**	

Table 2: Effective Tax Rate (Municipal Only) - Taxes per $1,000 of Assessment. Includes 2025 Budgetary Tax Requirements							
Scenario	**Residential ($ per $1,000)**	**Change ($) from 2024**	**Change (%) from 2024**	**Non-Residential ($ per $1,000)**	**Change ($) from 2024**	**Change (%) from 2024**	**Non- Residential to Residential Ratio**
Revenue Neutral (1.88)	$5.94	($0.40)	-6.30%	$11.16	$0.81	7.80%	**1.88**
Prairie Median (2.13)	$5.70	($0.64)	-10.10%	$12.12	$1.77	17.10%	**2.13**
Previous Policy (1.75)	$6.08	($0.26)	-4.20%	$10.63	$0.28	2.70%	**1.75**
Current Policy (1.63)	$6.20	($0.14)	-2.20%	$10.14	($0.21)	-2.10%	**1.63**
Chamber Legacy Proposal (1.43)	$6.44	$0.10	1.50%	$9.21	($1.14)	-11.00%	**1.43**

Appendix 5 : Estimated 2025 Municipal Property Tax Implications by Various Scenarios and Property Types (Excludes Education and Library Property Taxes)									
	Residential			Non-Residential					
Characteristics	**Single Family**	**Condominium**	**Multi Residential**	**Automotive**	**Warehouse**	**Retail**	**Restaurant**	**Office**	**Hotel/Motel**
2024 Median Assessment	**$ 347,500**	**$ 205,675**	**$ 1,494,160**	**$ 1,447,700**	**$ 1,407,950**	**$ 1,525,850**	**$ 1,176,650**	**$ 1,615,800**	**$ 9,268,350**
2024 Effective Taxes	*$ 2,202*	*$ 1,303*	*$ 9,467*	*$ 14,983*	*$ 14,571*	*$ 15,792*	*$ 12,178*	*$ 16,723*	*$ 95,922*
2025 Effective Tax Scenarios									
2025 Median Assessment	**$ 399,400**	**$ 216,500**	**$ 1,966,000**	**$ 1,573,100**	**$ 1,501,500**	**$ 1,494,200**	**$ 1,209,050**	**$ 1,542,200**	**$ 8,549,600**
Change in Median Assessment ($)	*$ 51,900*	*$ 10,825*	*$ 471,840*	*$ 125,400*	*$ 93,550*	*$ (31,650)*	*$ 32,400*	*$ (73,600)*	*$ (718,750)*
Change in Median Assessment (%)	**14.9%**	**5.3%**	**31.6%**	**8.7%**	**6.6%**	**-2.1%**	**2.8%**	**-4.6%**	**-7.8%**
Scenario 1 (1.88 - Revenue Neutral)	**$ 2,373**	**$ 1,286**	**$ 11,681**	**$ 17,557**	**$ 16,758**	**$ 16,677**	**$ 13,494**	**$ 17,213**	**$ 95,423**
Change from 2024 ($)	*$ 171*	*$ (17)*	*$ 2,214*	*$ 2,575*	*$ 2,187*	*$ 885*	*$ 1,317*	*$ 490*	*$ (499)*
Change from 2024 (%)	*7.8%*	*-1.3%*	*23.4%*	*17.2%*	*15.0%*	*5.6%*	*10.8%*	*2.9%*	*-0.5%*
Scenario 2 (2.13 - Prairie Median)	**$ 2,276**	**$ 1,234**	**$ 11,205**	**$ 19,061**	**$ 18,193**	**$ 18,105**	**$ 14,649**	**$ 18,686**	**$ 103,592**
Change from 2024	*$ 75*	*$ (69)*	*$ 1,738*	*$ 4,078*	*$ 3,622*	*$ 2,313*	*$ 2,472*	*$ 1,964*	*$ 7,670*
Change from 2024 (%)	*3.4%*	*-5.3%*	*18.4%*	*27.2%*	*24.9%*	*14.6%*	*20.3%*	*11.7%*	*8.0%*
Scenario 3 (1.75 - Previous Ratio)	**$ 2,427**	**$ 1,316**	**$ 11,946**	**$ 16,719**	**$ 15,958**	**$ 15,880**	**$ 12,850**	**$ 16,390**	**$ 90,865**
Change from 2024 ($)	*$ 225*	*$ 12*	*$ 2,479*	*$ 1,736*	*$ 1,386*	*$ 89*	*$ 672*	*$ (332)*	*$ (5,057)*
Change from 2024 (%)	*10.2%*	*0.9%*	*26.2%*	*11.6%*	*9.5%*	*0.6%*	*5.5%*	*-2.0%*	*-5.3%*
Scenario 4 (1.63 - Current Ratio)	**$ 2,477**	**$ 1,343**	**$ 12,191**	**$ 15,945**	**$ 15,220**	**$ 15,146**	**$ 12,255**	**$ 15,632**	**$ 86,662**
Change from 2024 ($)	*$ 275*	*$ 39*	*$ 2,724*	*$ 963*	*$ 648*	*$ (646)*	*$ 78*	*$ (1,090)*	*$ (9,260)*
Change from 2024 (%)	*12.5%*	*3.0%*	*28.8%*	*6.4%*	*4.4%*	*-4.1%*	*0.6%*	*-6.5%*	*-9.7%*
Scenario 5 (1.43 - Chamber Legacy Proposal)	**$ 2,571**	**$ 1,393**	**$ 12,653**	**$ 14,486**	**$ 13,827**	**$ 13,759**	**$ 11,134**	**$ 14,201**	**$ 78,730**
Change from 2024	*$ 369*	*$ 90*	*$ 3,186*	*$ (497)*	*$ (745)*	*$ (2,032)*	*$ (1,044)*	*$ (2,521)*	*$ (17,192)*
Change from 2024	*16.7%*	*6.9%*	*33.7%*	*-3.3%*	*-5.1%*	*-12.9%*	*-8.6%*	*-15.1%*	*-17.9%*

Janzen, Heather

Subject: FW: Email - Request to Speak - Jason Aebig - Greater Saskatoon Chamber of Commerce - Property Tax Ratio - CK 1915-1

From: Web NoReply <web-noreply@Saskatoon.ca>
Sent: Monday, February 24, 2025 1:09 PM
To: City Council <City.Council@Saskatoon.ca>
Subject: Email - Request to Speak - Jason Aebig - Greater Saskatoon Chamber of Commerce - Property Tax Ratio - CK 1915-1

--- Replies to this email will go to [redacted]---

Submitted on Monday, February 24, 2025 - 13:09

Submitted by user: [redacted]

Submitted values are:

I have read and understand the above statements.: Yes

I do not want my comments placed on a public agenda. They will be shared with members of Council through their online repository.: No

I only want my comments shared with the Mayor or my Ward Councillor.: No

Date: Monday, February 24, 2025

To: His Worship the Mayor and Members of City Council

First Name: Jason

Last Name: Aebig

Phone Number : [redacted]

Email: [redacted]

I live outside of Saskatoon: No

Saskatoon Address and Ward:
Address: 110- 2nd Ave N
Ward: Ward 1

Name of the organization or agency you are representing (if applicable): Greater Saskatoon Chamber of Commerce

What do you wish to do ?: Request to Speak

If speaking will you be attending in person or remotely: In person

What meeting do you wish to speak/submit comments ? (if known):: March 5th - Finance

What agenda item do you wish to comment on ?: Property Tax Ratio

Comments:
I would like to request to speak at the March 5th Finance Committee meeting regarding the property tax ratio report.

Will you be submitting a video to be vetted prior to council meeting?: No

Potential Roles and Responsibilities for the City of Saskatoon – Saskatoon Homelessness Action Plan

ISSUE

The City of Saskatoon's involvement in addressing homelessness has historically been limited in scope. However, complex challenges of poverty and social inequalities have been rising, contributing to the increasing number of individuals experiencing homelessness in Saskatoon. The City of Saskatoon has been working with community partners to develop the community-led Saskatoon Homelessness Action Plan. This initial report provides a preliminary overview of the plan and potential considerations for the City of Saskatoon as it reassesses its role in responding to homelessness.

BACKGROUND

City Council, at its Regular Business meeting held on January 29, 2025 unanimously resolved:

> "…that the Administration be directed to report back no later than March 2025, with an evaluation of, and potential role for the City, with respect to the new plan to address homelessness in Saskatoon that is currently under development; and
>
> That the Administration be directed to develop and bring forward a comprehensive process to ensure the community has the opportunity to have their voices heard by Council regarding the plan; and
>
> That the Administration be directed to bring forward a proposed Terms Of Reference and governance model for a Council Sub-Committee, whose mandate would be to activate partnerships to accelerate the plan."

This report addresses the first recommendation regarding the City of Saskatoon's (City) potential role, with respect to the new plan to address homelessness in Saskatoon.

CURRENT STATUS

Saskatoon Homelessness Action Plan (SHAP)

The previous SHAP concluded at the end of 2023. To address the evolving needs and priorities of the sector, a new SHAP was necessary.

In summer of 2024, a SHAP Executive Council was created with representatives from the Saskatoon Tribal Council, Métis Nation-Saskatchewan, Saskatoon Housing Initiative Partnership (SHIP) and City Administration. Their role is to lead and oversee the governance and development of a new SHAP.

In fall of 2024, a SHAP Advisory Committee was established with approximately 30 organizations and individuals including representation from the following groups/sectors: education and awareness; Elders; finance; health; housing; justice; those with lived experience; newcomers; poverty; prevention; support systems and integration and youth. Key responsibilities of the Advisory Committee include providing expert guidance, supporting engagement and the development of strategies, promoting collaboration and advocacy.

The vision, mission, priorities and objectives of the SHAP were identified and developed through a series of consultations in 2024. These included the SHAP Forum, Housing Needs Assessment focus groups and interviews, Advisory Committee meetings and SHIP's Community Approaches to Housing and Homelessness conference.

Appendix 1 provides an outline of the SHAP draft foundational elements completed to-date. An advisory committee meeting was held on March 5, 2025, to further identify key action items and address gaps. These action items are currently being compiled and will be included in future reporting.

<u>The City's Current Response to Homelessness</u>

In addition to supporting the development of SHAP, the City's current response to Homelessness also includes:

- Affordable housing development - recently supported the creation of 757 new affordable rental housing units in Saskatoon;
- 2024 Point-in-Time Count (PiT) - leading efforts to assess homelessness in the community;
- Extreme Cold Weather Emergency Response Plan - securing and coordinating winter warming locations;
- Expanded Access to Public Washrooms and Drinking Water - including the Public Washroom Trailer Pilot project;
- Community Encampment Response Plan – recently adopted to enhance winter warming, public washrooms, expanded outreach, investment in a permanent emergency shelter, new supportive housing units and a feasibility study for a Community Navigation Centre;
- 1500 Block 20th Street West – engagement project;
- Housing Needs Assessment;
- Identifying shelter sites in collaboration with the Province;
- Overdose Outreach Teams – Saskatoon Fire Department with the Saskatchewan Health Authority;
- Encampment outreach and inspections by the Community Risk Reduction teams; and
- Community Safety and Well-being framework – in development.

DISCUSSION/ANALYSIS

The PiT Homelessness Count, 2024

Saskatoon's PiT Count was conducted on October 8, 2024, as a community-level measurement of sheltered and unsheltered homelessness. The information gathered helps to identify overrepresented populations, understand pathways into homelessness, strengthen prevention efforts, improve cross-sector collaboration, build public support and allocate resources effectively.

A few highlights from the 2024 Saskatoon PiT Count:

- Individuals without permanent shelter totalled 1,499, including 315 children and 175 youth.
- Those experiencing unsheltered homelessness or in encampments totalled 472 individuals.
- Individuals reported as being sheltered in emergency shelters or in hotels/motels in lieu of shelter space totalled 216.
- Those reported as being sheltered in transitional homes totalled 442 individuals.
- The number of individuals experiencing "hidden homelessness" totalled 339.
- Insufficient income was cited as the major reason for housing loss (32.8% of survey respondents).
- Roughly half of all survey respondents reported welfare or social assistance as their source of income.
- Most respondents indicated that having more money (88.2%) and getting help to find affordable housing (81.6%) were most important. Other needs included assistance with housing applications (71.7%), help with transportation to view housing (69.8%), and help getting identification (59.1%), giving a strong sense of the barriers those in poverty face.
- A total of 82.3% reported dealing with a substance abuse issue, 60.6% had a mental health issue, 57.3% managed an illness or medical condition, and 52.9% experienced residential school / intergenerational trauma.

It is anticipated the full 2024 PiT Count report and Community Version will be released publicly in April 2025.

Information from Other Municipalities

Municipalities across Canada assume a diverse range of responsibilities related to homelessness programs, spanning a broad spectrum of critical functions. These include the provision of essential services, administering housing and homelessness programs, overseeing urban planning, enforcing building standards and enacting bylaws. Appendix 2 provides more specific examples of these responsibilities and roles.

Assessing a New Role for the City in Addressing Homelessness

Given the current pressures in Saskatoon, the SHAP presents an opportunity for the City to reassess its role in addressing homelessness. Evaluating this role supports the City's 2022-2025 Strategic Plan by aligning internal plans to reflect community gaps, community-level housing, homelessness plans and Federal and Provincial investment strategies. The aim is for the City to define a clear set of functions that will contribute to on-going efforts within the community.

There are a range of potential roles that the City could include in its work to further support affordable housing and homelessness solutions. The following are preliminary options for consideration, organized according to the SHAP priorities identified by the community.

SHAP Priority No.1 – Increase Affordable Housing Supply
Potential City role:

- Affordable Housing Strategy and Program Development;
- Support in exploring a community land trust;
- Incentives;
- Land development efforts (e.g., acquisition and disposition of City-Owned Land for affordable, supportive and transitional housing, land leases, etc.); and
- Land-use planning to ensure zoning and development policies support housing solutions.

SHAP Priority No.2 - Addressing Systemic Barriers to Prevent Homelessness
Potential City role:

- Advocacy to Provincial and Federal Governments (e.g., SIS/SAID, low-barrier shelter, etc.);
- Undertake a feasibility study for a community navigation centre; and
- Educational materials and resources (e.g., housing handbooks for tenants).

SHAP Priority No.3 - Increase and Support Community Collaboration
Potential City role:

- Data Gathering, Monitoring and Sharing (e.g., dashboard, housing needs assessment, PiT Count, etc.);
- Coordination of specific city-wide homelessness initiatives (SHAP implementation, Emergency Management Organizations emergency response activities);
- Partnership Development and Collaboration; and
- Homelessness Project Development and Innovation – (Public washroom pilot, Community Navigation Centre, Tiny Homes).

Certain SHAP actions could be led by the City, while others may involve the City in a supportive or partnership role. In some instances, a combination of approaches could be taken.

Appendix 3 outlines a detailed list of the City's current roles. It also more broadly identifies additional areas where the City could assume a leadership role, collaborate as a partner or provide support.

FINANCIAL IMPLICATIONS

As outlined above, the City expends significant resources through many programs and initiatives related directly to homelessness in Saskatoon.

The Attainable Housing Program, funded through the Housing Reserve, provided $135,000 annually from 2017 through 2023, via a service contract with SHIP, towards the implementation of the previous Homelessness Action Plan. Since the end of 2023, no financial allocations for the implementation of a Homelessness Action Plan have been made.

Current activities led or supported by the City have been achieved through pilot projects, assembly of related projects and capital funding and through in-kind support within various City departments.

OTHER IMPLICATIONS

There are no other implications associated with this report

NEXT STEPS

This is the first of a series related reports that will be brought forward to City Council throughout 2025. Upcoming reporting will include:

- Finalized SHAP for consideration and possible endorsement by City Council;
- Proposed Implementation Plan of the City's portion of the SHAP
- Affordable Housing Strategy report that will include a Housing Needs Assessment

Through these reports, and the work that is planned to be done by the Council Subcommittee on Homelessness, options for the City's potential future role in supporting the SHAP will become more clearly defined throughout 2025.

APPENDICES

1. Saskatoon Homelessness Action Plan Foundation Elements
2. Information About Roles of Other Municipalities
3. Overview of Potential City Roles in Homelessness

REPORT APPROVAL

Written by: Sarah King, Housing Manager
Ian Williamson, Senior Project Planner
Michelle Beveridge, Strategic Partnerships and Projects Advisor
Reviewed by: Chris Schulz, Acting Director of Planning and Development
Approved by: Celene Anger, General Manager, Community Services

Saskatoon Homelessness Action Plan (SHAP) Foundational Elements

The vision, mission, priorities and objectives of the SHAP were identified and developed through a series of consultations in 2024. As the action items are currently being finalized, a selection of sample actions have been included below for context.

Vision:

Prevent and reduce homelessness in Saskatoon.

Mission

Make homelessness uncommon, brief and non-recurring by promoting shared responsibility among stakeholders, and effectively coordinate the resources needed for the success of the SHAP.

Priorities

PRIORITY 1: INCREASE AFFORDABLE HOUSING SUPPLY

Objective 1.1: Increase the availability and stock of affordable housing with a focus on supportive and transitional housing.

Sample Actions:

- Work with the City of Saskatoon (City) to reduce barriers for affordable, transitional and supportive housing through alignment with the City's Affordable Housing Strategy;
- Dedicate land for affordable housing in all new neighbourhood concept plans; and
- Explore/Establish a community land trust.

Objective 1.2: Maximize the use of vacant buildings throughout Saskatoon for housing and support services.

Sample Actions:

- Explore options to incentivize the use of vacant and boarded up properties;
- Partner with developers to repurpose underutilized commercial space into affordable housing; and
- Develop a rental repair and renovation incentive program.

Objective 1.3: Adapt and utilize unused government-owned housing inventory and land to serve community needs.

Sample Actions:

- Develop a framework for City-owned land acquisition and disposition for affordable, supportive and transitional housing; and

- Work with the Provincial and Federal governments to develop affordable housing on government owned land.

PRIORITY 2: ADDRESSING SYSTEMIC BARRIERS TO PREVENT HOMELESSNESS

Objective 2.1: Collaborate with the Province of Saskatchewan (Province) to mitigate systemic barriers that contribute to homelessness.

Sample Actions:

- Advocate, through the Province, for the reintroduction of direct payments to landlords to facilitate housing access and reduce evictions; and
- Create a Community Safety and Well-Being Framework.

Objective 2.2: Determine the availability of appropriate facilities to meet community needs.

Sample Actions:

- Initiate the development of a year-round basic low-barrier shelter;
- Undertake a feasibility study for a community navigation centre and approach to essential services; and
- Enhance mobile outreach programs to provide immediate aid/support to unhoused individuals.

Objective 2.3: Ensure accountability among landlords to uphold fair and ethical practices, promoting housing quality, safety and security for tenants.

Sample Action: Advocate for renters concerning landlord accountability, rental policies, and protections for tenants against unfair evictions and excessive rent increases through the Province and Rental Housing Saskatchewan.

Objective 2.4: Implement proactive measures and support systems to prevent individuals and families from becoming homeless.

Sample Actions:

- Provide educational materials through a revamped Housing Handbook (providing information including housing options, tenant rights, etc.);
- Determine the resources needed to transition individuals along the housing continuum and address existing service gaps; and
- Engage with current shelter users to identify systemic gaps and barriers contributing to homelessness.

PRIORITY 3: INCREASE AND SUPPORT COMMUNITY COLLABORATION

Objective 3.1: Foster partnerships and communication among community organizations, stakeholders and government to enhance collaboration and upstream approaches to service delivery, resource and information sharing.

Sample Actions:

- Improve data collection, monitoring and analysis across the sector;
- City of Saskatoon to regularly update their Housing Needs Assessment; and
- Create bi-annual forums and educational courses with housing and homelessness sector organizations.

Objective 3.2: Explore and advocate for funding opportunities and create mechanisms to align resources across all funders and sectors.

Sample Actions:

- Provide support to organizations in navigating and applying for funding programs and development processes; and
- Engage with the private sector to identify community champions and to explore additional funding opportunities.

Objective 3.3: Expand Homeless Individuals and Families Information System (HIFIS) and coordinated access, ensuring effective use and community buy in.

Sample Action: Create educational materials on HIFIS and Coordinated Access to help organizations (including private landlords) understand misconceptions.

Appendix 2

Information About Roles of Other Municipalities

The City of Edmonton commissioned a research study titled Comparative municipal spending on housing and homelessness in Canada's major cities. This study examined homelessness-related services and affordable housing expenditures, including both capital and operating costs across major Canadian municipalities. Key findings include:

- **Per-Capita Spending Variations**: Annual per-capita municipal expenditures on homelessness services ranged from $9 to $256, while housing-related spending varied between $25 and $277.
- **Influence of Provincial-Municipal Relationships**: The relationship between municipalities and provincial governments significantly influenced spending levels. For example, in Ontario, municipalities assume more responsibilities due to provincial policies and funding transfers, affecting their homelessness and housing expenditures.
- **Role of Municipal Housing Entities**: The presence of municipal housing corporations, or reliance on non-profit agencies/organizations and provincial bodies, influenced spending patterns. Municipalities with active housing corporations often had higher expenditures due to direct involvement in housing development and management.
- **Community Entity Designation**: Municipalities acting as the Community Entity for federal homelessness funding typically spent more on homelessness services, as their role extended beyond fund administration to broader system planning. In Saskatoon, SHIP serves as the Community Entity.
- **Funding Sources**: Federal funding for affordable housing generally surpassed provincial contributions in most cities, while provincial funding often exceeded federal support for homelessness services, highlighting the complexities of intergovernmental funding.

These findings highlight the many factors shaping municipal investments in housing and homelessness services, emphasizing the need for policies tailored to local contexts and intergovernmental dynamics.

Overview of Potential City Roles in Homelessness

The table below outlines the City's current and potential roles in addressing homelessness, specifying where a leading role and/or supporting role. If a role is listed under 'current', the City's current role is also indicated.

Potential Action	Current	Potential New Role	
		Support	Lead
Affordable Housing Strategy and Program Development			
City's Affordable Housing Strategy	*		*
explore/establish a community land trust		*	
streamline program application requirements		*	*
federal funding disbursement (i.e. RHI)	*	*	*
sell land at reduced rate			*
acquire/Assemble/Sell land		*	*
provide land at no cost		*	*
capital grants for renovation		*	
capital grants for new construction	*	*	
land Pre-designation	*		*
pre-Zoning for Supportive Housing			*
Homelessness Project Development and Innovation			
public washroom pilot	*		*****
long -term public washroom strategy and drinking water access		*****	*****
Community Navigation Centre		*****	*
development of a low-barrier shelter		*****	
enhance mobile outreach programs		*	

Potential Action	Current	Potential New Role	
		Support	Lead
City-wide Coordination Efforts			
information sharing networks	*	*	*
establish working groups	*	*	*
Implementation of the Saskatoon Homelessness Action Plan (SHAP)		*	*
EMO emergency response activities	*		*
Overdose outreach team	*	*	*
winter warming locations/operations	*	*	
development of a Community Safety and Well- Being framework		*	*
Partnership development and collaboration		*	*
Advocacy to Governments			
legislative changes		*	*****
increased financial support for housing and supports		*****	*****
Community Navigation Centre feasibility study	*		*****
rental policies and protections		*****	
educational material (housing/rental handbook)		*****	*
Data Gathering, Monitoring and Sharing			
Point in Time homelessness count		*	*****
HIFIS/centralized intake		*****	
centralized waitlists		*	
Housing Needs Assessment			*****
Encampment and enforcement monitoring	*		*****

Potential Role - If both Support and Lead are identified, it means either option could be taken.

Short Term Rental Enforcement Fund Budget Adjustment

ISSUE

The City of Saskatoon's (City) application to Housing, Infrastructure and Communities Canada (HICC) was approved for the Short-Term Rental Enforcement Fund (STREF). City Council approval is required to create a capital project to run the program and properly track costs for reporting back to HICC.

RECOMMENDATION

That Capital Project P.10116 Short Term Rental Enforcement be increased by $380,000 to be funded through Housing, Infrastructure and Communities Canada Short Term Rental Enforcement Fund.

BACKGROUND

On December 16, 2024, HICC began accepting applications for the STREF which provides $50 million over three years to address non-compliant short-term rentals. The STREF will support up to 100% of eligible costs which are direct and necessary for projects, with a minimum of $100,000 in year one. To qualify, applicants must have an existing short-term regulatory regime in place. Applications were due January 24, 2025.

On August 31, 2020, City Council at its Public Hearing Meeting, approved the proposed regulations for Short-Term Accommodations under Bylaws No. 9683, the Zoning Amendment Bylaw and Bylaw No. 9684, the Business License Amendment Bylaw.

At its regular business meeting on February 26, 2025 while considering January 2025 Government Funding Applications, City Council resolved:

> "1. That if the application for the Short-Term Rental Enforcement Fund is approved, City Council authorize the Mayor and City Clerk to execute the Agreement under the Corporate Seal; and
>
> 2. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the program."

DISCUSSION/ANALYSIS

The application for STREF was approved for up to $380,000 over three years. The project will result in the City implementing activities to enhance its existing strict regulatory regime to support the local enforcement of short-term rental restrictions to make more long-term housing units available. This includes supporting the planning, implementation, enhancement, and review of short-term rental enforcement and compliance measures as well as increasing short-term rental enforcement and compliance capacity.

The objective of the project is to address bylaw contraventions and prioritize the availability of long-term rental housing by helping the City to better enforce its short-term accommodation regulations. This objective will be accomplished by adding additional resources and tools to the existing enforcement efforts for short-term accommodation regulations already in place.

The STREF program will be introducing an enhanced pro-active component to the City's existing education and complaint driven enforcement strategy. The City will review all data received on short-term accommodation listings and identify non-compliant properties and property owners. Those in violation will be informed of the bylaw and will be provided strict deadlines to cease operating or obtain the appropriate licence. Administration will continue to monitor compliance using listing data and should property owners not comply, enforcement will be pursued under the City's existing Business Licence Bylaw and/or Zoning Bylaw.

FINANCIAL IMPLICATIONS

The STREF funding of $380,000 will cover 100% of the eligible costs for the program. Any of the approximately $25,000 of in-kind costs for management and supervision of the program will be funded through existing operating budgets.

OTHER IMPLICATIONS

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

NEXT STEPS

If approved, Administration will create the capital project and make the appropriate additions for the STREF funding. The Administration will begin to procure listing data services from a third-party vendor upon approval of the capital budget.

REPORT APPROVAL

Written by:	Kole Paziuk, Financial Analyst
Reviewed by:	Jeremy Meinema, Senior Financial Business Partner
	Mark Wilson, Licensing and Permitting Manager
	Kari Smith, Director of Finance
Approved by:	Clae Hack, Chief Financial Officer

Admin Report - Short Term Rental Enforcement Fund Budget Adjustment.docx

2026-2029 Strategic Plan – City Council Priority Areas

ISSUE

The City of Saskatoon's current Strategic Plan will conclude at the end of 2025. A new Strategic Plan, which will run from 2026-2029, is being prepared. On January 16, 2025, City Council held a strategic planning session to identify the key areas that the Mayor and Councillors will be focusing on over the duration of the new strategic plan ("Priority Areas").

Based on *Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative*, Members of City Council can be designated as Leads for the different Priority Areas. This empowers Council members to undertake a leadership role in addressing certain challenges facing the City and the community in these areas.

Having had Priority Areas and Council Leads in place for the past 8 years, revisions to the Policy are proposed to clearly outline the expectations of the Council Leads and the approach to Priority Areas.

City Council's approval is required to adopt the new City Council Priority Areas, the Leads for each area, and updates to *Council Policy C01-029*.

RECOMMENDATION

1. That City Council adopt City Council's Priority Areas for the 2026-2029 Strategic Plan, along with the Council-designated Leads for each area, as outlined in this report; and

2. That City Council approve the revisions to *Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative* as attached to this report.

BACKGROUND

The City of Saskatoon's Strategic Plan includes many elements such as *Vision, Mission, Values, Purpose, Strategic Goals, Pillars, Outcomes and Key Actions*. The pillars are an important component of the plan that highlight the work that the City has chosen to prioritize over the designated four-year period to help achieve its Strategic Goals. The three pillars are:

1. Advance City Council's Priorities
2. Deliver Excellence in Core Services and Operational Priorities
3. Drive Corporate Transformational Change

As part of the City of Saskatoon's strategic planning process, City Council identifies its key focus areas under the *Advance City Council's Priorities* pillar. City Administration builds on City Council's direction to define other important priorities under the other two pillars that are required to meet the City's Strategic Goals. The second pillar above ensures a focus on operational excellence in delivering our core services, while the third

ensures that Administration is strengthening its capability to deliver on Council's priorities and the public's needs.

DISCUSSION/ANALYSIS

City Council held a strategic planning meeting on January 16, 2025, to identify the key areas of focus under the *Advance City Council's Priorities* pillar.

Nine priority areas were identified by City Council, with *Community Safety and Well-being* designated as Council's paramount priority in the 2026-2029 Strategic Plan. This means that City Council deems it an area of critical importance to address significantly over the duration of Council's current term. The *Community Safety and Well-being* priority will centre on two major elements – (1) *Housing & Homelessness*, and (2) *Community Safety*.

A full list of the City Council Priority Areas for the 2026-2029 Strategic Plan is outlined below, in random order other than Community Safety & Well-being.

2026-2029 Strategic Priority Area	Councillors Lead(s)
Community Safety & Well-being • Housing & Homelessness • Community Safety	Mayor Block • Councillor Pearce • Councillor Ford
Reconciliation, Equity, Diversity and Inclusion (REDI)	Councillor Timon
Parks, Recreation and Culture	Councillor Kelleher
Growth: Urban and Regional	Councillor Donauer
Downtown	Councillor Davies
Environment	Councillor Parker
Transportation	Councillor MacDonald
Core Services	Councillor Dubois
Economic Development / Business Friendly Initiatives	Councillor Jeffries

Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative has been revised based on the strategic planning work done to date. Revisions are proposed to the Policy to clarify the roles and responsibilities of members of Council as Leads and to update how the strategic priority areas are outlined in the Policy. A blacklined version of the Policy detailing the proposed amendments is attached as Appendix 1 to this report. A clean version of the policy for City Council approval is also included as Appendix 2.

FINANCIAL IMPLICATIONS

All costs associated with this work are within the scope of approved program budgets.

OTHER IMPLICATIONS

There are no privacy, policy, social, CPTED, or environmental implications identified.

NEXT STEPS

Following the adoption of this report's recommendation, each Council Member Lead will work with Administration to define a strategic direction for the priority area for which they are responsible. City Council will then work together as a team to review and refine each section, and the final 2026-2029 Strategic Plan will be considered and debated at City Council in late 2025.

APPENDICES

1. Blackline Version of *Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative*
2. Clean Version of *Council Policy C01-029 – City Council Strategic Priority & Leadership Initiative*

Report Approval

Written by:	Meka Okochi, Director of Organizational Strategy Execution
Reviewed by:	Richard Phillips, Chief Strategy and Transformation Officer
Approved by:	Jeff Jorgenson, City Manager

Admin Report - 2026-2029 Strategic Plan – City Council Priority Areas.docx

CITY OF SASKATOON COUNCIL POLICY

NUMBER
C01-029

POLICY TITLE *City Council Strategic Priority & Leadership Initiative*	**ADOPTED BY:** *City Council*	**EFFECTIVE DATE** *November 18, 2019* **UPDATED TO**
ORIGIN/AUTHORITY *City Council Resolution of April 24, 2017; City Council Resolution of November 27/28, 2017 (Business Plan & Budget Deliberations), item 9.5.2 of Governance and Priorities Committee Report Nov 18, 2019.*	**CITY FILE NO.** CK 116-001	**PAGE NUMBER** *1 of 9*

1. POLICY STATEMENT/ PREAMBLE

City Council may~~has~~ adopt~~ed a new approach to leadership. In doing so, it has identified~~ and approve~~d ten (10)~~ Strategic Priority Areas. It may~~has~~ designate~~d~~ a Council Member Lead for each Strategic Priority Area to undertake a leadership role to address certain challenges facing the City of Saskatoon and the community. This ~~new~~ approach empowers Council Members to take a leadership role~~s~~ with respect to ~~Projects in~~ achieving the City's objectives in their Priority Areas.

2. PURPOSE

The purpose of this Policy is to establish:

a) A designation process for Council Member Leads to the Strategic Priority Areas;

b) The role and limits of authority for the Council Member Leads;

c) A reporting procedure for Council Member Leads to report to City Council with respect to their designated Strategic Priority Area;

d) A fund to be accessed by Council Member Leads in relation to their identified Strategic Priority Areas; and

e) An approval process for Council Member Leads to access funding in relation to Ss~~s~~pecial Projects they wish to undertake pursuant to their Strategic Priority Areas~~, including the establishment of parameters for special working groups~~.

3. DEFINITIONS

3.1 "Council Member Lead" means the member(s) of City Council designated as the lead in a Strategic Priority Area.

3.2 "Governance and Priorities Committee" means the Committee established pursuant to section 76 of City of Saskatoon Bylaw 9170, *The Procedures and Committees Bylaw, 2014*.

3.3 "Special Project~~s~~" means engagement with stakeholders, activities, actions, meetings, forums or other similar initiatives.

3.4 "Strategic Priority Areas" means the set of issues, services, or program areas as established in this Policy ~~and described in Schedule "A"~~.

3.5 "The Strategic Priority Fund" means the capital project fund that City Council may approve or allocate, from time to time, that is specifically related to financing projects related to Strategic Priority Areas as established by this Policy.

4. ESTABLISHING STRATEGIC PRIORITY AREAS

City Council may complete a strategic planning exercise ~~on a four (4) year cycle~~ to establish City Council's ~~four (4) year~~ Strategic Priority Areas. The Strategic Priority Areas are determined and assigned to the Mayor or Councillors through resolution of City Council.~~as described on Schedule "A" to this Policy.~~

5. DESIGNATION OF COUNCIL MEMBER LEADS

City Council may, by ~~public~~ resolution, designate Council Member Leads to each Strategic Priority Area. ~~Such designations shall be made not later than one (1) year after the start of a new Council term.~~ Subject to City Council approval, more than one (1) Council M~~m~~ember Lead may be designated to lead a Strategic Priority Area.

6. ROLE OF COUNCIL MEMBER LEADS

6.1 Council Authority

In accordance with *The Cities* Act, the City is required to act through City Council. City Council may exercise its powers by passing bylaws or resolutions. This Policy does not authorize a Council Member Lead to deviate from the provisions of *The Cities Act.* All Special Projects undertaken by the Council Member Lead must be approved by City Council in advance or be in accordance with the bylaws, resolutions, or direction of City Council.

6.2 Spokesperson

Council Member Leads are intended to act as a spokesperson and leader in their Strategic Priority Area. However, Council Member Leads are speaking on behalf of City Council, in relation to their designated Strategic Priority Area. Council Member Leads must follow the bylaws, resolutions or direction of City Council when engaging with stakeholders, undertaking Special Projects, or speaking on behalf of City Council.

Members of Council may have personal views that differ from the direction of City Council. When speaking as the Council Member Lead of a Strategy Priority Area, the Council Member Lead must follow the bylaws, resolutions or direction of City Council. However, outside of that role, members of City Council may express their personal view subject to the relevant policies, rules and bylaws of City Council with respect to conduct of City Council, but the Council Member Lead should make it clear that

they are not speaking as the Council Member Lead of their Strategic Priority Area when expressing their personal views.

6.3 Strategic Plan Leadership Role~~Future Direction~~

During the strategic planning process, once City Council has determined their Strategic Priority Areas and assigned a Council Member Lead to an area, the Council Member Lead will work with the Administration to develop the section of the strategic plan pertaining to their Strategic Priority Area.

Drafts will be presented to and discussed with their City Council colleagues periodically throughout the process, and the Council Member Lead will work with the Administration to evolve that section of the strategic plan to reflect the feedback received.

When the strategic plan is ready to be presented publicly to City Council, each Council Member Lead will introduce their section of the plan. The strategic plan is subject to the approval of City Council.

~~In accordance with section 6.1, Council Member Leads cannot commit the City or Council to a future direction in their designated Strategic Priority Area.~~

6.4 No Direction of City Staff

Council Member Leads are not permitted to direct City staff to undertake work~~Projects~~ in their Strategic Priority Area. The Council Member Lead and the administrative staff assigned to the area will work collaboratively together to achieve City Council's vision and objectives as described in the strategic plan. ~~unless City Council approval has been given for the Project. In the event the Project has been approved by City Council, the use of City staff may be allowed with permission of the City Manager or designate.~~

Should the Council Member Lead receive approval from City Council to undertake a Special Project, utilization of City staff is allowable as described in the Special Project report.

6.5 Communications & Engagement

All communication from Council Member Leads shall follow the standards set by the City's Communications & Public Engagement Department~~Division~~.

6.6 Regular Meetings

Each Council Member Lead shall meet with the Administration at least quarterly to discuss their Strategic Priority Area. The Council Member Lead may request more frequent meetings and a schedule shall be agreed to by the Council Member Lead and the Administration.

7. REPORTING PROCEDURE

7.1 For Updates and Approval of Initiatives, Projects or Activities

7.1.1 ~~Quarterly~~ Public Updates

Council Member Leads may provide a verbal or written report to City Council through the Governance and Priorities Committee, a minimum of once and a maximum of twice per year,~~on a quarterly basis,~~ to provide a high-level update on the Special Projects in their Strategic Priority Area.

The updates are intended to provide City Council and the public with an update on various initiatives completed, underway or upcoming related to achievement of City Council's vision as outlined in the strategic plan.

~~The first annual quarterly update may also include an outline of the:~~

~~a) Outcome measures used for each Strategic Priority Area and associated Projects;~~

~~b) Any established indicators which provide a basis for performance measurement in future reports; and~~

~~c) Other strategic plans used in the Strategic Priority Area and the results thereof.~~

7.1.2 Approval of Projects & Engagement

Should a Council Member Lead~~s must~~ wish to undertake a Special Project, they must first provide a written report to City Council through the Governance and Priorities Committee for the approval of Special Projects related to their designated Strategic Priority Area ~~if City Council has not already approved the Project~~. The Special Project will only proceed should City Council formally approve the application.

~~8. WORKING GROUPS~~

~~Council Member Leads may engage in a Project related to their designated Strategic Priority Area and may form special working groups to assist in a Project. Council Member Leads will be responsible for determining the mandate and the make-up of the special working groups. Special working groups may include: the Council Member Lead, members of the Administration, and any external stakeholders or partners the relevant Project may have. The working groups are subject to all other provisions of this Policy.~~

~~9~~8. STRATEGIC PRIORITY FUND

~~9~~8.1 Establishment

City Council hereby establishes the Strategic Priority Fund. The Strategic Priority Fund is separate and apart from the Communications and Constituency Relations Allowance established by Policy No. C01-027, *Communications and Constituency Relations Allowance*. The Strategic

Priority Fund is intended to assist Council Member Leads in fulfilling their role as a spokesperson for City Council with respect to approved Special Projects in their designated Strategic Priority Area. Council Member Leads should not apply to the Strategic Priority Fund instead of using their Communications and Constituency Relations Allowance where that fund would be more appropriate.

~~9~~8.2 Unused Funds

Any unused monies advanced from the Strategic Priority Fund will be returned to the Fund at the completion of the Special Project.

~~9~~8.3 Applications

Council Member Leads will be able to apply to the Governance and Priorities Committee for funding from the Strategic Priority Fund for a Special Project related to their designated Strategic Priority Area.

~~9~~8.4 Application Form

Council Member Leads will use the application form attached as Schedule "A~~B~~" to apply for funding from the Strategic Priority Fund. The application form will set out, among other things:

a) The sponsor(s) of the Special Project;

b) The amount of money requested and a detailed budget of the Special Project;

c) The purpose of the Special Project;

d) The importance of the Special Project and how it advances the work within one (1) or more Priority Areas;

e) The timeline of the Special Project;

f) A list of external partners or stakeholders for the Special Project, including any funds/resources that have been allocated from the partner(s) or stakeholder(s) to the Special Project; and

g) Any preliminary work already completed on the Special Project.

~~9~~8.5 City Clerk's Office

The City Clerk will provide updates at the Governance and Priorities Committee meetings outlined in subsection 7.1.1 of this Policy on the Special Projects that have already been funded in each Strategic Priority Area and the balance of the Strategic Priority Fund.

~~10~~9. RESPONSIBILITIES

~~10~~9.1 City Council

City Council shall be responsible for:

a) Designating Council Member Leads to each Strategic Priority Area by public resolution;

b) Reviewing and, where appropriate, approving any reports from Council Member Leads relating to their Strategic Priority Area;

c) Reviewing the Strategic Priority Areas on an ongoing basis and, if appropriate, amending this Policy; and

d) Reviewing and, where appropriate, approving amendments to this Policy.

~~10~~9.2 Council Member Leads

Council Member Leads will be responsible for:

a) Taking a role in stakeholder and public~~citizen~~ engagement in their designated Strategic Priority Area in accordance with section 6 of this Policy;

b) Reporting to City Council for approval of Special Projects within their Strategic Priority Area should they wish to initiate a Special Project;

~~c) Establishing any working groups that may be required in accordance with section 8 of this Policy;~~

c~~d~~) Providing quarterly written updates, as required, to City Council through the Governance and Priorities Committee on their designated Strategic Priority Area outlining the high-level activities and future plans within their Strategic Priority Area as outlined in subsection 7.1.1 of this Policy;

d~~e~~) Submitting applications to the Governance and Priorities Committee for approval of spending out of the Strategic Priority Fund relating to Special Projects approved by City Council, pursuant to section 9.4 of this Policy.

~~10~~9.3 City Clerk's Office

The City Clerk's Office shall be responsible for:

a) Reporting to the Governance and Priorities Committee as required pursuant to this Policy; and

b) Administering the Strategic Priorities Fund and the process of applying to the Governance and Priorities Committee for funding.

~~10~~9.4 Governance and Priorities Committee

The Governance and Priorities Committee shall be responsible for reviewing applications to the Strategic Priorities Fund and, where applicable, approving such applications.

Schedule "A"

Strategic Priority Areas
City Council Term 2016 – 2020

City Council has resolved that the Strategic Priority Areas for the 2016-2020 Council term are as follows:

1 Community Safety and Wellbeing

City Council is prioritizing an integrated and effective system of services to promote community safety and wellbeing.

2 Core Services

City Council is prioritizing continued improvement on the efficacy of core public services to maximize the benefit for citizens and visitors in the City.

3 Economic Development

City Council is prioritizing strategic economic development that will position the City to succeed in a rapidly evolving 21st century global economy.

4 Environmental Sustainability

City Council is prioritizing the reduction of, among other things, green-house gas emissions from the boundaries of the City and the promotion of energy conservation, renewable energy and waste diversion.

5 Information Technology

City Council is prioritizing information technology as a means to improve citizens' interactions with the City and City operations through both short-term continuous improvement to existing systems and through long-term strategies.

6 Reconciliation, Inclusion and Diversity

City Council is prioritizing work to foster inclusive community, while promoting new paths towards greater partnerships, cooperation and respect among all citizens and visitors within the City.

7 Recreation, Culture and Leisure

City Council is prioritizing the development of recreation, culture and leisure to support the citizen health and enjoyment within the City, throughout all seasons.

8 Regional Planning

City Council is prioritizing the development of a vibrant, competitive and well planned region, built on partnerships with surrounding municipalities and First Nations and Métis groups.

9 Transportation

City Council is prioritizing the development of a mobility strategy that will serve our city and support enhanced transportation options.

10 Downtown Development

City Council is prioritizing creating the conditions to bring more people, jobs, stores, restaurants and amenities into the downtown area of the City.

Schedule "AB"

APPLICATION FORM
STRATEGIC PRIORITY FUND
CITY COUNCIL STRATEGIC PLANNING & LEADERSHIP INITIATIVE

COUNCIL LEAD(S): Click here to enter text.

PROJECT TITLE: Click here to enter text.

PROJECT SPONSOR: Click here to enter text.

AMOUNT REQUESTED: Click here to enter text.

DATE OF APPLICATION: Click here to enter a date.

PROJECT DESCRIPTION

PURPOSE OF THE PROJECT: Click here to enter text.

HOW IT ADVANCES THE WORK WITHIN THE PRIORITY AREA(S): Click here to enter text.

PARTNER(S) INVOLVED: Click here to enter text.

FUNDING PROVIDED BY PARTNER(S): Click here to enter text.

DETAILED BUDGET OF THE PROJECT: Click here to enter text.

PRELIMINARY WORK COMPLETED: Click here to enter text.

COMPLETION TIMELINE: Click here to enter text.

OTHER: Click here to enter text.

City Clerk's Office Use only:

The Governance and Priorities Committee considered this application at its meeting held on Click here to enter a date. and resolved:

"_____"

CITY OF SASKATOON COUNCIL POLICY

NUMBER
C01-029

POLICY TITLE *City Council Strategic Priority & Leadership Initiative*	**ADOPTED BY:** *City Council*	**EFFECTIVE DATE** *November 18, 2019* **UPDATED TO** *March 26, 2025*
ORIGIN/AUTHORITY *City Council Resolution of April 24, 2017; City Council Resolution of November 27/28, 2017 (Business Plan & Budget Deliberations), item 9.5.2 of Governance and Priorities Committee Report Nov 18, 2019.*	**CITY FILE NO.** CK 116-001	**PAGE NUMBER** *1 of 9*

1. POLICY STATEMENT/ PREAMBLE

City Council may adopt and approve Strategic Priority Areas. It may designate a Council Member Lead for each Strategic Priority Area to undertake a leadership role to address certain challenges facing the City of Saskatoon and the community. This approach empowers Council Members to take a leadership role with respect to achieving the City's objectives in their Priority Areas.

2. PURPOSE

The purpose of this Policy is to establish:

a) A designation process for Council Member Leads to the Strategic Priority Areas;

b) The role and limits of authority for the Council Member Leads;

c) A reporting procedure for Council Member Leads to report to City Council with respect to their designated Strategic Priority Area;

d) A fund to be accessed by Council Member Leads in relation to their identified Strategic Priority Areas; and

e) An approval process for Council Member Leads to access funding in relation to Special Projects they wish to undertake pursuant to their Strategic Priority Areas.

3. DEFINITIONS

3.1 "Council Member Lead" means the member(s) of City Council designated as the lead in a Strategic Priority Area.

3.2 "Governance and Priorities Committee" means the Committee established pursuant to section 76 of City of Saskatoon Bylaw 9170, *The Procedures and Committees Bylaw, 2014*.

3.3 "Special Project" means engagement with stakeholders, activities, actions, meetings, forums or other similar initiatives.

3.4 "Strategic Priority Areas" means the set of issues, services, or program areas as established in this Policy.

3.5 "The Strategic Priority Fund" means the capital project fund that City Council may approve or allocate, from time to time, that is specifically related to financing projects related to Strategic Priority Areas as established by this Policy.

4. ESTABLISHING STRATEGIC PRIORITY AREAS

City Council may complete a strategic planning exercise to establish City Council's Strategic Priority Areas. The Strategic Priority Areas are determined and assigned to the Mayor or Councillors through resolution of City Council.

5. DESIGNATION OF COUNCIL MEMBER LEADS

City Council may, by resolution, designate Council Member Leads to each Strategic Priority Area. Subject to City Council approval, more than one (1) Council Member Lead may be designated to lead a Strategic Priority Area.

6. ROLE OF COUNCIL MEMBER LEADS

6.1 Council Authority

In accordance with *The Cities* Act, the City is required to act through City Council. City Council may exercise its powers by passing bylaws or resolutions. This Policy does not authorize a Council Member Lead to deviate from the provisions of *The Cities Act.* All Special Projects undertaken by the Council Member Lead must be approved by City Council in advance or be in accordance with the bylaws, resolutions, or direction of City Council.

6.2 Spokesperson

Council Member Leads are intended to act as a spokesperson and leader in their Strategic Priority Area. However, Council Member Leads are speaking on behalf of City Council, in relation to their designated Strategic Priority Area. Council Member Leads must follow the bylaws, resolutions or direction of City Council when engaging with stakeholders, undertaking Special Projects, or speaking on behalf of City Council.

Members of Council may have personal views that differ from the direction of City Council. When speaking as the Council Member Lead of a Strategy Priority Area, the Council Member Lead must follow the bylaws, resolutions or direction of City Council. However, outside of that role, members of City Council may express their personal view subject to the relevant policies, rules and bylaws of City Council with respect to conduct of City Council, but the Council Member Lead should make it clear that they are not speaking as the Council Member Lead of their Strategic Priority Area when expressing their personal views.

6.3 Strategic Plan Leadership Role

During the strategic planning process, once City Council has determined their Strategic Priority Areas and assigned a Council Member Lead to an area, the Council Member Lead will work with the Administration to

develop the section of the strategic plan pertaining to their Strategic Priority Area.

Drafts will be presented to and discussed with their City Council colleagues periodically throughout the process, and the Council Member Lead will work with the Administration to evolve that section of the strategic plan to reflect the feedback received.

When the strategic plan is ready to be presented publicly to City Council, each Council Member Lead will introduce their section of the plan. The strategic plan is subject to the approval of City Council.

6.4 No Direction of City Staff

Council Member Leads are not permitted to direct City staff to undertake work in their Strategic Priority Area. The Council Member Lead and the administrative staff assigned to the area will work collaboratively together to achieve City Council's vision and objectives as described in the strategic plan.

Should the Council Member Lead receive approval from City Council to undertake a Special Project, utilization of City staff is allowable as described in the Special Project report.

6.5 Communications & Engagement

All communication from Council Member Leads shall follow the standards set by the City's Communications & Public Engagement Department.

6.6 Regular Meetings

Each Council Member Lead shall meet with the Administration at least quarterly to discuss their Strategic Priority Area. The Council Member Lead may request more frequent meetings and a schedule shall be agreed to by the Council Member Lead and the Administration.

7. REPORTING PROCEDURE

7.1 For Updates and Approval of Initiatives, Projects or Activities

7.1.1 Public Updates

Council Member Leads may provide a verbal or written report to City Council through the Governance and Priorities Committee, a minimum of once and a maximum of twice per year, to provide a high-level update on the Special Projects in their Strategic Priority Area.

The updates are intended to provide City Council and the public with an update on various initiatives completed, underway or upcoming related to achievement of City Council's vision as outlined in the strategic plan.

7.1.2 Approval of Projects & Engagement

Should a Council Member Lead wish to undertake a Special Project, they must first provide a written report to City Council through the Governance and Priorities Committee for the approval of Special Projects related to their designated Strategic Priority Area. The Special Project will only proceed should City Council formally approve the application.

8. STRATEGIC PRIORITY FUND

8.1 Establishment

City Council hereby establishes the Strategic Priority Fund. The Strategic Priority Fund is separate and apart from the Communications and Constituency Relations Allowance established by Policy No. C01-027, *Communications and Constituency Relations Allowance*. The Strategic Priority Fund is intended to assist Council Member Leads in fulfilling their role as a spokesperson for City Council with respect to approved Special

Projects in their designated Strategic Priority Area. Council Member Leads should not apply to the Strategic Priority Fund instead of using their Communications and Constituency Relations Allowance where that fund would be more appropriate.

8.2 Unused Funds

Any unused monies advanced from the Strategic Priority Fund will be returned to the Fund at the completion of the Special Project.

8.3 Applications

Council Member Leads will be able to apply to the Governance and Priorities Committee for funding from the Strategic Priority Fund for a Special Project related to their designated Strategic Priority Area.

8.4 Application Form

Council Member Leads will use the application form attached as Schedule "A" to apply for funding from the Strategic Priority Fund. The application form will set out, among other things:

a) The sponsor(s) of the Special Project;

b) The amount of money requested and a detailed budget of the Special Project;

c) The purpose of the Special Project;

d) The importance of the Special Project and how it advances the work within one (1) or more Priority Areas;

e) The timeline of the Special Project;

f) A list of external partners or stakeholders for the Special Project, including any funds/resources that have been allocated from the partner(s) or stakeholder(s) to the Special Project; and

g) Any preliminary work already completed on the Special Project.

8.5 City Clerk's Office

The City Clerk will provide updates at the Governance and Priorities Committee meetings outlined in subsection 7.1.1 of this Policy on the Special Projects that have already been funded in each Strategic Priority Area and the balance of the Strategic Priority Fund.

9. RESPONSIBILITIES

9.1 City Council

City Council shall be responsible for:

a) Designating Council Member Leads to each Strategic Priority Area by public resolution;

b) Reviewing and, where appropriate, approving any reports from Council Member Leads relating to their Strategic Priority Area;

c) Reviewing the Strategic Priority Areas on an ongoing basis and, if appropriate, amending this Policy; and

d) Reviewing and, where appropriate, approving amendments to this Policy.

9.2 Council Member Leads

Council Member Leads will be responsible for:

a) Taking a role in stakeholder and public engagement in their designated Strategic Priority Area in accordance with section 6 of this Policy;

b) Reporting to City Council for approval of Special Projects within their Strategic Priority Area should they wish to initiate a Special Project;

c) Providing quarterly written updates, as required, to City Council through the Governance and Priorities Committee on their designated Strategic Priority Area outlining the high-level activities and future plans within their Strategic Priority Area as outlined in subsection 7.1.1 of this Policy;

d) Submitting applications to the Governance and Priorities Committee for approval of spending out of the Strategic Priority Fund relating to Special Projects approved by City Council, pursuant to section 9.4 of this Policy.

9.3 City Clerk's Office

The City Clerk's Office shall be responsible for:

a) Reporting to the Governance and Priorities Committee as required pursuant to this Policy; and

b) Administering the Strategic Priorities Fund and the process of applying to the Governance and Priorities Committee for funding.

9.4 Governance and Priorities Committee

The Governance and Priorities Committee shall be responsible for reviewing applications to the Strategic Priorities Fund and, where applicable, approving such applications.

Schedule “A”

APPLICATION FORM
STRATEGIC PRIORITY FUND
CITY COUNCIL STRATEGIC PLANNING & LEADERSHIP INITIATIVE

COUNCIL LEAD(S): Click here to enter text.

PROJECT TITLE: Click here to enter text.

PROJECT SPONSOR: Click here to enter text.

AMOUNT REQUESTED: Click here to enter text.

DATE OF APPLICATION: Click here to enter a date.

PROJECT DESCRIPTION

PURPOSE OF THE PROJECT: Click here to enter text.

HOW IT ADVANCES THE WORK WITHIN THE PRIORITY AREA(S): Click here to enter text.

PARTNER(S) INVOLVED: Click here to enter text.

FUNDING PROVIDED BY PARTNER(S): Click here to enter text.

DETAILED BUDGET OF THE PROJECT: Click here to enter text.

PRELIMINARY WORK COMPLETED: Click here to enter text.

COMPLETION TIMELINE: Click here to enter text.

OTHER: Click here to enter text.

City Clerk’s Office Use only:

The Governance and Priorities Committee considered this application at its meeting held on Click here to enter a date. and resolved:

“_____“

Terms of Reference – Council Subcommittee on Homelessness

ISSUE

Homelessness, and the resultant impacts on our community, requires urgent attention in Saskatoon, as it does in many other North American communities. Homelessness and the perception of crime and safety were the most prevalent issues identified by Saskatoon residents during the most recent civic services satisfaction survey.

RECOMMENDATION

1. That City Council approve the Terms of Reference for the Council Subcommittee on Homelessness; and
2. That Capital Project P.02609 Council Strategic Priority Areas be used to support the engagement activities required for the Subcommittee to carry out its mandate with total funding of $80,000, of which $29,000 is existing funding within that project, and an increase of $51,000 is made to P.02609 funded by the Reserve for Capital Expenditures.

BACKGROUND

At its January 29, 2025 meeting, City Council unanimously resolved:

> "1. That the Administration be directed to report back no later than March 2025, with an evaluation of, and potential role for the City, with respect to the new plan to address homelessness in Saskatoon that is currently under development; and
>
> 2. That the Administration be directed to develop and bring forward a comprehensive process to ensure the community has the opportunity to have their voices heard by Council regarding the plan; and
>
> 3. That the Administration be directed to bring forward a proposed Terms Of Reference and governance model for a Council SubCommittee, whose mandate would be to activate partnerships to accelerate the plan."

This report addresses recommendations 2 and 3 above.

DISCUSSION/ANALYSIS

To achieve the objectives stated in Council's resolutions 2 and 3 above, the Administration is proposing that a subcommittee of City Council be formed. Typically, the Administration, or a contracted engagement professional, would be responsible to lead an engagement process and report back to Council. However, due to the significance of this issue in our community, it is important that elected officials be at the forefront of the approach to hear community voices directly.

The proposed Terms of Reference is included as Appendix 1.

Chaired by the Mayor, the proposed Council Subcommittee on Homelessness (Subcommittee) will include the Mayor and three other Councillors. The Councillors will be selected by City Council through their typical appointment process.

Key governance aspects of the Terms of Reference are that the Subcommittee will:

1. Carry out a comprehensive strategy to hear community voices.
2. Develop a strategy to activate partnerships to achieve the Plan.
3. Provide a summary "what we heard" document to Council at the conclusion of the engagement process.
4. Provide recommendations to Council related to homelessness in Saskatoon, and specifically the City's role with respect to activation of the Plan.

The Subcommittee will lead all aspects of the comprehensive engagement process, which is outlined in Appendix 2 "Homelessness Subcommittee of Council: 2025 Approach to Hear Community Voices", with support from the Administration. Key Administrative members involved will be the City Manager, City Clerk, General Manager of Community Services, Director of Indigenous Initiatives, and a Project Manager.

The engagement plan will be refined by the Subcommittee once its membership has been finalized. It is understood that the Subcommittee has discretion to adjust the engagement plan as it sees fit, and if significant deviations are made, a report will be provided to Council.

CURRENT STATUS

The following are examples of work the City of Saskatoon (the City) has undertaken in response to the homelessness and housing crisis facing Saskatoon.

The City has been working in support of the Province to select an additional enhanced emergency shelter site. A temporary location has been approved and is expected to be operational in April of 2025. The City and Province are in the final stages of identifying a permanent site. A more detailed update report will be brought to the April meeting of the Governance and Priorities Committee.

The City has adopted a coordination role with multiple service providers and stakeholders. One of the most recent outcomes of this work was the opening of two overnight warming locations for the winter of 2024/2025, with capacity for up to 400 people. Funding for these warming locations was provided through private contributions and funding from all three orders of government, the Métis Nation of Saskatchewan, the United Way and the Saskatoon Foundation. This funding was used to support community partners including The Salvation Army and St. Mary's Parish (operating the overnight men's warming location at St. Mary's Church), The Saskatoon Indian and Métis Friendship Centre (operating the evening coed warming and overnight women's warming location), and The Saskatoon Tribal Council Saweyihtotan Program (providing additional evening and overnight outreach to ensure transitioning between evening and overnight locations) in a whole community approach to the Saskatoon Winter Emergency Response Plan.

In the summer of 2024, the City operated what was initially termed a “washroom project” but is more accurately described as a pilot navigation program. Through collaboration between the City, the Saskatoon Tribal Council, and the Central Urban Métis Federation (CUMFI), a 24/7-access washroom, washing facility, and support service station was established at 315 Avenue M (CUMFI), which operated between August 27 and October 30. The navigation hub proved to be extremely successful, was viewed as a positive by many in the surrounding community and was accessed 14,300 times during its operational period. People had access, not just to bathrooms, but vital resources including hygiene products, emergency shelter referrals, mental health and addiction support, and access to transitional housing through the Saweyihtotan Outreach Workers and Peacekeepers on site.

Saskatoon Fire has been working to support residents and homeless individuals through its Fire Bylaws. The Fire Bylaw Inspectors enforce the Saskatoon Fire Department bylaws addressing unsafe and inadequate housing through the Property Maintenance and Nuisance Abatement Bylaw 8175. Following a people-first approach, this bylaw provides provisions to mitigate risks, shut down immediate concerns, offer supports to individuals in need, and remove junk/garbage.

The Community Support Program has been operational since 2012, and oversight responsibility was moved from DTNYXE to Saskatoon Fire in July of 2024. The twelve Fire Community Support Officers provide support to the Downtown, Riversdale, and Broadway Business Improvement Districts, and to Saskatoon Transit. Supports consist of foot and mobile patrol to bring a uniformed and supportive presence in the community focusing on safety and de-escalation.

In 2013, City Council approved the 2013-2022 Housing Business Plan which outlined a commitment to expanding and supporting housing options across the attainable housing continuum. This initiative led to the development of 3,310 new attainable housing units, encompassing purpose-built rental properties, affordable ownership and rental units, secondary suites, and entry-level homeownership. Building on this success, in 2024, the City of Saskatoon secured $41.3 million in federal funding through the Housing Accelerator Fund (HAF) to further enhance housing supply. Of this funding, City Council allocated $26.08 million to support the creation of 757 new affordable housing units, including 256 units to be built on City-owned land, all scheduled for completion by the end of 2027.

A number of community partners have been working collaboratively to develop Saskatoon’s Homelessness Action Plan (the Plan), which is the subject of a separate report on this agenda.

FINANCIAL IMPLICATIONS

The estimated cost to implement the work of the Subcommittee is estimated to be $80,000, not including the Administrative time that will be dedicated by already-funded staff positions. The Administration recommends that the remaining balance of $29,000 currently available within P.02609 City Council Strategic Priority Area be used for this

project, augmented with a contribution of $51,000 from the Reserve for Capital Expenditures, which currently has a balance of $657,700.

OTHER IMPLICATIONS

There are no communications, Triple Bottom Line, Policy, Privacy, or CPTED implications or considerations at this time. These will be considered in other future reports as required.

NEXT STEPS

Should City Council approve the recommendations of this report, the Administration will work with the Subcommittee to carry out its mandate.

APPENDICES

1. Proposed Terms of Reference – Council Subcommittee on Homelessness
2. Homelessness Subcommittee of Council: 2025 Approach to Hear Community Voices

Report Approval

Written by:	Jeff Jorgenson, City Manager
	Adam Tittemore, City Clerk
	Carla Blumers, Director, Communications and Public Engagement
Reviewed by:	Celene Anger, General Manager, Community Services
Approved by:	Jeff Jorgenson, City Manager

Admin Report - Terms of Reference – Council Subcommittee on Homelessness.docx

Appendix 2

City of Saskatoon
Communications & Public Engagement

HOMELESSNESS SUBCOMMITTEE OF COUNCIL: 2025 APPROACH TO HEAR COMMUNITY VOICES

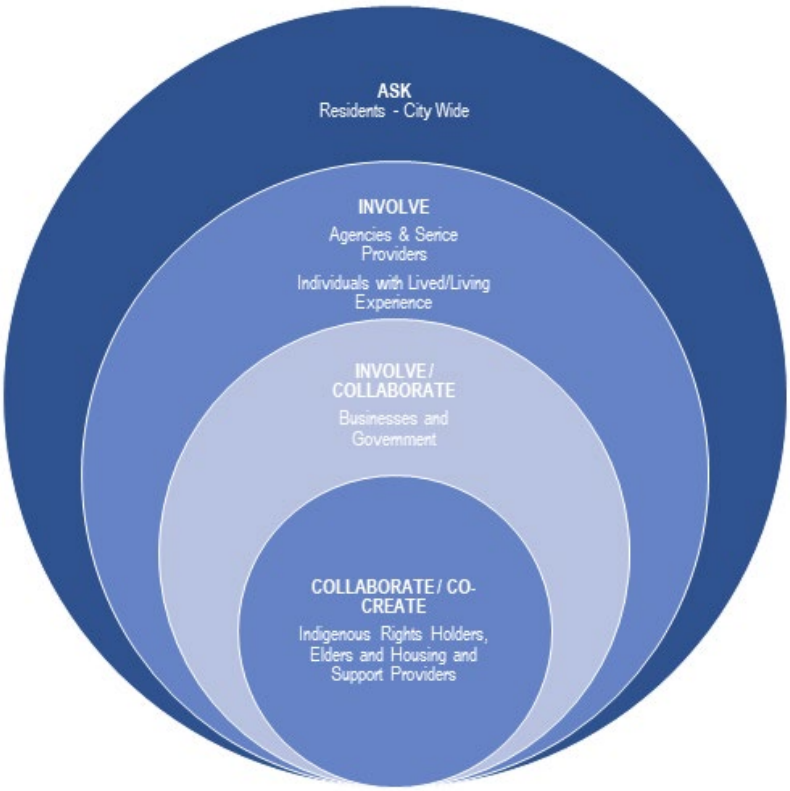
March 12, 2025

GOALS TO HEAR COMMUNITY VOICES

While elected officials evaluate and explore potential role(s) for the City, with respect to the new Plan that is currently under development to address homelessness in Saskatoon, an important component of the Plan will be informed by community members through engagement activities. The Plan is centred on the voices of those most impacted – those with lived experience of homelessness and those organizations who support them. In addition, the engagement activities will provide ample opportunity for the broader community to be heard. It is crucial for the success of the engagement portion of the project to have defined, agreed-upon goals that can be achieved in a manner that upholds the guiding principles of the City's Public Engagement policy (C02-046) – namely that engagement processes have the ability to influence decisions and the activities that contribute to the building of trust and respect, which in turn can lead to partnerships. The engagement goals for this project are:

- Implement a comprehensive engagement process that allows for the diverse voices to be heard by City Council and the Council Subcommittee who are overseeing the City's role with respect to the new Plan to address homelessness in Saskatoon.
- Residents who are concerned about the homelessness situation can contribute their thoughts on the City's efforts to positively address the situation.
- To acknowledge that those with lived experience of homelessness and allied-service providers are subject matter experts and should play a pivotal role in influencing what the City should lead and/or support within the new Plan.
- Homelessness impacts not only those experiencing it, but others in the wider community, such as people who own businesses, provide programming, and for those who live in areas of the City where there is a greater degree of homelessness. This cross-section of the population experiences homelessness in different ways, and as such, they can make a positive contribution by providing insights into homelessness and exploring opportunities for partnerships.

The Orbits of Participation shown on the next page visualizes the need for opportunities for the various sectors to be engaged at varying degrees through different engagement techniques. Some participants might be willing to work collaboratively, but others may prefer to only give input or be informed.



In sum, the overarching goal is to provide many opportunities for the community (e.g., those experiencing homelessness, Saskatoon residents, businesses, and service providers, Indigenous Rights Holders, Elders) to participate in the creation of the Plan while the engagement processes contribute to the building of partnerships, through mutual respect and trust.

PROPOSED APPROACH

To accomplish the outlined goals, it is key to acknowledge who are the subject-matter experts and sequence the opportunities for engagement in a manner that maximizes resources and the sharing of information. Throughout the different engagement processes/tactics it is important that there is transparency regarding the intent of the tactic and opportunities for participation.

Based on the City's Public Engagement Spectrum, different groups of participants will be engaged in different ways. For example, in recognition of what the subject-matter experts can contribute, their role will be associated with collaboration (co-creating). Whereas residents on a city-wide basis will be informed of the Plan and asked for their thoughts on specific matters. It is important to involve agencies and community-based groups who are addressing homelessness in Saskatoon.

Table 1 on the following page provides further details on who is to be engaged to hear the voices of the community, and a process of how they could be effectively engaged along with some other considerations.

TABLE 1: ENGAGEMENT APPROACH AND KEY PARTICIPANTS

City Council and the Council Subcommittee would hold the primary responsibility of the various proposed engagement approaches but will be supported by City Administration where required.

WHO IS INVOLVED	POTENTIAL TACTICS/TOOLS	POTENTIAL MATERIALS REQUIRED
Residents – City Wide *Level of Engagement:* Ask *Focus of the work:* • Facilitate information sharing, increase public awareness about homelessness, the Saskatoon Homelessness Action plan (SHAP), and the potential role that the City may play. • Measure public support related to the potential roles of the City of Saskatoon. • Collect ideas from residents based on successes they've seen in other communities or innovative approaches the City could consider.	Phase 1: • Online Survey – promoted city-wide Phase 2: • 1 Special Council Open House/Town Hall Meeting (Council Chambers) with Lobby Display. • 4-6 Community Based Open Houses/Town Halls. (The approach would be to have two or three Wards collaborate to offer one community session). • Individual Open House/Ward Meetings if strongly preferred by Ward Councillors.	**Survey:** • Depending on volume of participants, this may require an external research firm to consolidate feedback and provide a summary report. **Presentation Materials:** • PowerPoint • Display Panels • Sign-In Sheets • Other Print Materials • Feedback form to report on what was heard. **Advertising:** • Social media and print assets, news release, PSAs, Engage page **Event Planning:** • Room Rental, Food/Beverage • Safety & Security Event Guide
Agencies & Service Providers *Level of Engagement:* Involve *Focus of the work:* Understand the realities of current service providers. Understand the different types of services provided and assess what the City should lead and/or support within the Plan. Explore ideas and innovative approaches the City could take for each potential role, explore opportunities for partnerships.	Stakeholder Meeting(s): • Attend or host virtual stakeholder meeting(s) with agencies and services providers. Potential to leverage the SHAP Advisory Committee represented by over 20 agencies and community service providers. Self-Guided Kits: • Offer Self-Consultation Kits for Service Providers who cannot attend the stakeholder meeting(s).	**Presentation Materials:** • PowerPoint • Display Panels • Sign-In Sheets • Other Print Materials • Feedback form to report what was heard. **Event Planning:** • Room Rental, Food/Beverage **Self-Consultation Kits:** • Design • Print materials

Indigenous Elders, Indigenous Rights Holders and Indigenous support organizations/housing providers *Level of Engagement:* Collaborate/Co-create *Focus of the work:* a) Gather feedback on preferred approach for hosting an Indigenous Gathering with an emphasis on Youth. b) Understand perceptions of the City's roles/responsibilities and assess what the City should lead and/or support within the Plan. c) Explore ideas and innovative approaches the City could take for each potential role, explore opportunities for partnerships.	The format of these discussions could take place in the form of meetings, talking circles and/or interviews.	**Presentation Materials:** • PowerPoint • Display Panels • Other Print Materials • Feedback form to report what was heard **Event Planning:** • Room Rental, Food/Beverage **Remuneration:** • Remuneration for Elders and for those with lived experience
Lived and Living Experience with Homelessness *Level of Engagement:* Involve *Focus of the work:* a) In collaboration with support organizations host focused discussions on targeted activities that the City may take a lead or support within the Plan. b) Host an Indigenous Gathering to engage the Indigenous community with an emphasis on youth representation to understand their experiences and challenges. Discussions on targeted activities that the City may take a lead or support within the plan that may have the biggest impact.	Focused Discussions: • 2-3 focus group/discussion tables Indigenous Gathering • Half day or full day event.	**Presentation Materials:** • PowerPoint • Display Panels • Other Print Materials • Feedback form to report what was heard **Advertising:** • Social media and print assets, news release, PSAs, Engage page **Event Planning:** • Room Rental, Food/Beverage **Remuneration and Ceremony** • Remuneration for Elders and for those with lived experience • Ceremonialist
Business & Government Urban Reserves, Businesses, Landlords, Provincial and Federal Governments *Level of Engagement:* Involve/Collaborate *Focus of work:* Share information, seek out partnerships and innovative approaches, and build community champions to support homelessness initiatives.	In-depth discussions: • Group or individual in-depth discussions with various businesses. • In-depth discussions with various levels of government.	**Presentation Materials:** • PowerPoint • Other Print Materials • Feedback form to report what was heard **Event Planning:** • Room Rental, Food/Beverage

ESTIMATED COSTS

Engagement Activity	Estimated Cost
Residents	
City-Wide Survey	$10,000
Special Council Open House/Town Hall Meetings Community Based Open Houses/Town Hall Meetings and/or Individual Open House/Ward Meetings	Funded by Councillor Ward Budgets
Agency and Service Provider	
Stakeholder Meeting(s)	$1,000
Self-Consultation Kits	$1,000
Indigenous	
Meetings, Talking Circles and/or Interviews	$7,500
Lived and Living Experience	
Focus Groups/Discussions	$7,500
Indigenous Gathering	$30,000
Business	
In-Depth Discussions	$5,000
Estimated Subtotal Engagement Activities	$62,000
Communications and Incidental Costs	$18,000
Combined Estimated Costs (Excluding Administrative staff time)	**$80,000**

IMPLEMENTATION TIMELINES

Once City Council approves an approach to the comprehensive engagement process, detailed engagement plans will be prepared for the various engagement activities. The detailed engagement plans will identify estimated timelines and actual costs.

Terms of Reference
Council Subcommittee on Homelessness

1.0 Overview

The City of Saskatoon (City), multiple service providers, Indigenous Rights Holders, Elders, people with lived experience of homelessness, and stakeholders have been working collaboratively to develop a new plan to address homelessness in Saskatoon. The City is committed to ensuring Saskatoon residents and businesses have the opportunity to participate in developing solutions to homelessness.

The Council Subcommittee on Homelessness (the Subcommittee) is being established to activate partnerships to accelerate plans to address homelessness, and to ensure the community has the opportunity to have their voices heard by Council on the plan.

2.0 Mandate

The mandate of the Subcommittee is to:

- Support rapid, successful, implementation of initiatives to address homelessness in Saskatoon;
- Engage and collaborate with Indigenous Rights Holders from the onset, ensuring their direction, input, and leadership are integral to the Subcommittee work;
- Engage with community, stakeholders, and other levels of government;
- Provide a summary of “what we heard” from engagement activities, and advice, input, and recommendations to City Council for consideration respecting issues surrounding homelessness in the community, including:
  - Engagement and relationships with community;
  - Identification of gaps within current strategies;
  - Supporting existing work by the City, community partners, and other levels of government;
  - Funding strategies; and
  - Other issues identified by the Subcommittee or City Council.

The Subcommittee shall communicate its advice, input, and recommendations directly with the City Council and Administration, and not with other parties.

3.0 Reporting Relationship

The Subcommittee acts in an advisory and recommendation capacity and cannot make decisions on behalf of the City. The City Administration may seek the Subcommittee’s advice, input, and recommendations regarding various aspects of projects related to Homelessness. Formal recommendations from the Subcommittee shall be presented in the form of public reports to City Council.

4.0 Composition

- Members:
  - Mayor of the City of Saskatoon – Chair of the Subcommittee;
  - City Council Strategic Priority Area Lead on Housing and Homelessness;
  - City Council Strategic Priority Area Lead on Community Safety; and
  - One (1) additional member of City Council as appointed by City Council.
- Representatives from the City Administration, including the City Manager, City Clerk, and appropriate members of the Administration as determined by the City Manager will provide information and support to the Subcommittee.

5.0 Appointment and Term

- Members:
  - Appointed by City Council and considered on an annual basis, or sooner where may be recommended by the Subcommittee.

6.0 Principles

The Advisory Group will operate under the following principles in carrying out its mandate:

- *Integrity* – a commitment to interact with honesty and to provide advice, input, and recommendations in the best interest of supporting successful outcomes;
- *Respect* – appreciation of individual participation in the Subcommittee process in a manner acceptable among members, and a shared respect in leveraging each other's expertise to ensure positive outcomes for the whole community;
- *Consensus* – a commitment to work towards general agreement on matters where members openly discuss ideas, perspectives, and viewpoints; seek to develop common ground; and narrow areas of disagreement to the best of their ability. Consensus-based decision-making does not require unanimity but is such that everyone can agree they can abide by the decision. Differing viewpoints and opinions will be documented in meeting minutes; and
- *Communication* – a commitment to attend meetings and respond to any other communication in a timely manner.

Where a member breaks any of the principles, the Chair will establish a mediation session to resolve the breach. The Subcommittee will address each situation on a case-by-case basis where a member is not amenable to mediation, with ultimate authority with City Council as per relevant legislation.

7.0 Confidentiality

- Members are bound to maintain the confidentiality of information received in their capacity as members of the Subcommittee. Information that is confidential, proprietary to any Stakeholder, Civic Board, Commission, Authority, Committee, the City of Saskatoon or non-public must not be divulged to anyone other than persons who are authorized to receive the information.
- City Administration will be clear when sharing confidential information and will remind the Subcommittee members not to share this information publicly.
- Subcommittee members are asked to distinguish between things that the Subcommittee and City are considering and things that are already decided.

8.0 Conflict of Interest

- Members must avoid any conflict of interest, or the appearance of a conflict between their own personal interests or the interests of any closely connected person, and the interests

of the Subcommittee or the City. Members must attempt to avoid not only actual conflict, but the potential for conflict.
- A member is in a conflict of interest where the member, a closely connected person, or a corporation in which the member or closely connected person has a controlling interest or a monetary interest in a matter before the Subcommittee, in accordance with The Cities Act.

9.0 Role of the Chair

The role of the Chair is to:
- Set the agenda for meetings;
- Preside at the meetings and keep the discussion on topic;
- Provide leadership to the Subcommittee to encourage that its activities remain focused on its mandate;
- Designate an alternative Subcommittee member to act as Chair in cases where they are unable to join a scheduled meeting;
- Act as the spokesperson for the Subcommittee for media and other inquiries; and
- Address City Council or Committees of City Council on behalf of the Advisory Group.

10.0 Role of Members

The role of Subcommittee members is to:
- Conduct affairs using the principles set out in these terms of reference;
- Ensure the mandate of the Subcommittee is fulfilled;
- Attempt to anticipate potential problems and offer options for resolving them;
- Prepare to actively participate in discussion items at Subcommittee meetings;
- Review documents and reports related to the mandate of the Subcommittee;
- Conduct research and analysis to inform the Subcommittee's advice;
- Write letters or reports to communicate the Subcommittee's advice;
- Consult with the Chair to request agenda items be added to meetings; and
- Notify the Chair if they are unable to attend meetings in order to ensure quorum will be available for all meetings.

11.0 Role of Administration

The role of the Administration is to:
- Prepare materials, reports, and presentations for the Subcommittee's review, advice, input, and recommendations as directed by City Council.

12.0 Media

- The City, in consultation with the Subcommittee and Council, will arrange and conduct all media relations with respect to the project, notwithstanding the role of the Chair to act as the spokesperson for media inquiries.

13.0 Quorum

- Quorum is met by 3 members of the Subcommittee, not withstanding the ability of the members to assign aspects of community and/or stakeholder consultation to a smaller group.

14.0 Meetings

- Meetings will be at the call of the Chair. The duration of each meeting is subject to the contents of the agenda and ensuing discussion. Meetings are not public, unless determined by the Subcommittee.

15.0 Meeting Support

- The City Clerk's Office shall provide administrative support to meetings of the Subcommittee as may be required.

16.0 Remuneration

- The Subcommittee has the authority, with approval from the City Clerk's Office, in consultation with Indigenous Initiatives Department, to provide honorariums consistent with standard practice to members of the indigenous community providing traditional knowledge and guidance.

17.0 Amendment of Terms of Reference

- These terms of reference are approved by City of Saskatoon City Council and can only be amended by a majority vote of City of Saskatoon City Council.

18.0 Resource Documents

- *The Cities Act*.
- Policy No. C01-003, *Appointments to Civic Boards, Commissions, Authorities, and Committees*, which includes the attached *City of Saskatoon Code of Conduct for Members of Civic Boards, Commissions, Authorities and Committees* and *City of Saskatoon Anti-Harassment Policy for Members of Civic Boards, Commissions, Authorities and Committees.*
- Any other policies as required.