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 <u>List</u>. 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 <u>report</u> 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 22 nd Street West and Confederation Drive intersection Improved safety on 22 nd 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 22 nd Street West between Diefenbaker	Provides an entrance to Fairhaven from 22 nd Street West between	Provides an entrance and exit for Fairhaven to/from 22 nd 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 rightturn 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:
 - o Realigning the west and south pedestrian crosswalks.
 - Reconstructing the pedestrian accessible ramps on the northwest and southwest intersection corners.
 - o 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

 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

- 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

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