

Clarence Avenue and Main Street Intersection Improvements

ISSUE

This report presents the findings of the safety review of the intersection of Clarence Avenue and Main Street, summarizes the stakeholder feedback received, and requests City Council approval for the recommended channelization to improve public safety.

RECOMMENDATION

1. That City Council consider Bylaw No. 9877 – The Street Closing Bylaw, 2023;
2. That channelization be installed on Main Street to prohibit the eastbound and westbound through and left turn movements at Clarence Avenue;
3. That the channelization include a bicycle signal on Main Street; and
4. That the existing pedestrian-actuated signal be modified to allow pedestrians to cross the south side of Clarence Avenue.

BACKGROUND

In 2002, the Administration completed a review of intersections within the Nutana neighborhood in response to requests from residents that measures be taken to reduce traffic volumes and speed, and to improve safety.

At its Regular Business Meeting held on June 9, 2003, City Council adopted the recommendation that the eastbound and westbound through and left turn movements on Main Street at Clarence Avenue be prohibited in a temporary manner for a period of six months, and that the Administration report back on the project. Following the City Council meeting, opposition was received from nearby residents. As a result, the recommended changes were not implemented.

In 2005, a pedestrian-actuated signal was installed at the north crosswalk on Clarence Avenue to address pedestrian safety concerns. The crosswalk on the south side of Clarence Avenue was removed to encourage pedestrians to use the pedestrian crossing device.

At its Regular Business Meeting held on September 12, 2011, the following inquiry was made by former Councillor Charlie Clark:

“Would the Administration please do an intersection analysis of Main Street at Clarence Avenue to assess the safety and functionality of the intersection and to reduce the traffic using Main Street as an arterial roadway.”

On August 15, 2013, an information report was presented by the Administration to the Finance Committee in response to former Councillor Clark’s inquiry. The report indicated:

“From a traffic safety perspective, it has been determined that the most effective and practical measure is to prohibit through and left turn movements on Main Street at Clarence Avenue.”

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This recommendation was presented to the Nutana and Varsity View neighbourhoods during the Neighbourhood Traffic Review initial public consultation in October 2013 and January 2014, respectively. Mixed support was received from the neighbourhoods and as a result, the recommended changes were not made.

The Administration continues to receive concerns from residents about safety at the intersection of Clarence Avenue and Main Street and shortcutting on Main Street by non-local traffic.

DISCUSSION/ANALYSIS

Current Status

The intersection of Clarence Avenue and Main Street is two-way stop-controlled with vehicles on Main Street required to stop. Clarence Avenue is classified as a major arterial street and Main Street is a local street. The primary function of a local street is to provide access for residents with an origin or destination along its length. Main Street is not intended to be a thoroughfare or alternative to 8th Street.

An October 2021 traffic count indicated that traffic volumes along Main Street near Clarence Avenue have decreased since the 2013 review, with average daily traffic volumes of approximately 1,000 vehicles per day east of the intersection and 1,500 vehicles per day west of the intersection. However, traffic volumes west of the intersection are still higher than desirable for a local residential street. The traffic count also indicated that approximately 40% of drivers on Main Street are continuing straight through the intersection. This demonstrates that short-cutting on Main Street remains an issue.

While traffic volumes on Main Street near the intersection have decreased, a high proportion of right-angle collisions continue to occur. Right-angle collisions have the potential for severe outcomes, such as injury or death. A summary of right-angle collisions at the intersection since 2016 is provided in the table below.

Year(s)	Total Number of Collisions	Right-angle Collisions	Injuries Resulting from Right-angle Collisions
2016-2020	35	17	4
2021	11	9	4
Total	46	26	8

Sight lines for both the through and left turn movements from Main Street are obstructed by the mature trees adjacent to the intersection. The collision data above further demonstrates the difficulties Main Street drivers experience when crossing Clarence Avenue.

Proposed Improvements

To address safety concerns and collisions at the intersection, it is recommended to channelize Main Street, as shown in Appendix 1. Channelization involves modifying the

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existing medians on both Main Street approaches to create right turn only lanes. Drivers on Main Street will be required to turn right at the intersection and will no longer be able to drive straight through or turn left onto Clarence Avenue. This will eliminate the potential for right-angle collisions, address the existing sight line issues for the left turn and through movements, and reduce short-cutting on Main Street.

Alternatives Considered

The Administration considered, but does not recommend, the alternatives included in the table below.

Sight Line Improvements	Removing a significant number of trees near the intersection would improve sight lines for Main Street drivers and may reduce collisions; however, the potential for right-angle collisions would still exist.
All-way Stop	The intersection does not meet the criteria outlined in Council Policy C07-007 Traffic Control - Use of Stop and Yield Signs, and the installation of an All-way Stop would increase short-cutting on Main Street and delay traffic on Clarence Avenue.
Traffic Signals	A traffic signal warrant was completed, and the results indicate that signals are not warranted. Installing traffic signals at the intersection to address the collision patterns would also require the removal of several trees. In addition, Clarence Avenue traffic would be delayed, and traffic volumes and short-cutting on Main Street would increase.

Stakeholder Feedback

Two phases of public engagement took place between August 2022 and February 2023 to inform residents of the recommended channelization and collect feedback, as summarized in the table below.

Phase	1	2
	Local Feedback	Community Feedback
Engagement Activities	Flyers mailed to 105 Main Street residents living within one block of the intersection (Appendix 2)	Flyers mailed to 343 residents living near the intersection on 9 th St E, Main Street, and 10 th St E (Appendix 3)
	Emails to Varsity View and Nutana Community Associations	Emails to Varsity View and Nutana Community Associations
	On site meeting – August 23, 2022	Community drop-in session – February 1, 2023 Engage Page
Engagement Goal	Share the recommendation with local residents and collect feedback	Share the updated recommendation with the community and collect feedback
Participants	Approximately 50	Approximately 20

The feedback received indicates most local residents are supportive of channelization on Main Street, as shown in the table on the following page. All feedback received from residents during both phases of engagement is included in the attached Engagement

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Summary (Appendix 4). No concerns regarding the recommended channelization were received from internal stakeholders.

	Local Resident (Main Street, within 1 block of Clarence Avenue)	Community Resident (Nutana or Varsity View)	Resident Elsewhere
Supportive	18	6	2
Unsupportive	10	11	4
Unknown/Other Questions or Comments	3	4	5

Based on feedback received during the first phase of engagement, the Administration updated the recommendation to include modifying the existing pedestrian-actuated signal to allow pedestrians to cross the south side of Clarence Avenue, as shown in Appendix 5.

The intersection review is included as Appendix 6.

The updated recommendation was shared with local residents and the broader community during the second phase of engagement. The presentation boards from the drop-in community session on February 1, 2023 are included in Appendix 7. Following the second engagement it is recommended that the channelization design include a bicycle signal on Main Street.

FINANCIAL IMPLICATIONS

The costs are summarized in the following table:

Item	2023
Channelization Installation	\$80,000
Bicycle Signal	\$20,000
Pedestrian-actuated Signal Modification	\$50,000

Sufficient funding is available within Capital Project P.02288 -Transportation Safety to complete the channelization.

Sufficient funding is available within Capital Project P.02468 – Active Transportation Plan Implementation to complete the installation of the bicycle signal on Main Street. This addresses stakeholder feedback to better accommodate cyclists.

Sufficient funding is available within Capital Project P.02290 – Traffic Control Systems to add a pedestrian-actuated signal and crosswalk to facilitate pedestrians crossing on the south side of the intersection. The result is increased accessibility, with an intersection where pedestrians can cross Clarence Avenue on either the north or south side of Main Street.

OTHER IMPLICATIONS

Channelization on Main Street is considered a road closure with the closed portion to remain as right-of-way. The Administration requires that City Council approve Bylaw No. 9877- The Street Closing Bylaw, 2023 (Appendix 8).

Public Notice is required for consideration of this matter, pursuant to Section 3 (subsection b) of Policy No. C01-021, The Public Notice Policy. The following notice was provided:

- Advertised in The StarPhoenix on March 11, 2023 and March 13, 2023 (Appendix 9);
- Posted on City Hall Notice Board on March 10, 2023;
- Posted on the City of Saskatoon website March 10, 2023; and
- Mailed to nearby residents and property owners (413) March 3, 2023.

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

NEXT STEPS

If adopted by City Council, the recommendations will all be made in 2023.

APPENDICES

1. Proposed Channelization – Main Street
2. Intersection Improvements – Clarence Avenue and Main Street Flyer #1
3. Intersection Improvements – Clarence Avenue and Main Street Flyer #2
4. What We Heard - Engagement Summary
5. Recommended Option
6. Intersection Review – Clarence Avenue and Main Street
7. Presentation Boards – Engagement Event #2
8. Bylaw No. 9877 – The Street Closing Bylaw, 2023
9. Public Notice

Report Approval

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