
Proposed Closure of Right-of-Way – Restrict Left-Turns at Clarence Avenue at Glasgow Street

Recommendation

1. That City Council consider Bylaw No. 9521, The Street Closing Bylaw 2018 (No. 6); and
2. That after closure, this lane remain road allowance but be closed to vehicular traffic.

Topic and Purpose

This report requests approval to permanently restrict vehicular left-turns at the intersection of Clarence Avenue and Glasgow Street in the Avalon neighbourhood. The closed portion of Clarence Avenue would remain public right-of-way, but be permanently closed to left-turning vehicles.

Report Highlights

1. An historical summary of the issues is provided.
2. The vehicular left-turn restriction at the intersection of Clarence Avenue and Glasgow Street has reduced short-cutting traffic on Glasgow Street (west of Clarence Avenue).
3. A resident survey was conducted to obtain feedback on making the temporary turning restrictions permanent.
4. Feedback was requested from: Saskatoon Police Service, Saskatoon Fire Department, MD Ambulance, and the Greater Saskatoon Catholic Schools.
5. Other considerations such as a neighbourhood discussion, school zone concerns, U-turns, and traffic signals are addressed.
6. Recommendation is to make the temporary vehicular left-turns restriction permanent as the trial project reduced short-cutting traffic.

Strategic Goal

This report supports the Strategic Goal of Moving Around by providing improvements for the safety of all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work and raise a family.

Background

The project background is provided in Attachment 1.

Report

Effectiveness Assessment

An evaluation of the restriction of vehicular left-turns trial project was completed. The traffic evaluation included the following highlights:

- Glasgow Street traffic volumes have decreased from 3,700 to 1,900 vehicles per day.

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- McAskill Crescent traffic volumes have increased from 270 to 620 vehicles per day; however, the volumes are still within the typical range of expected daily traffic volumes for local roads (<1,000).
- Wilson Crescent traffic volumes have increased from 2,550 to 3,900 vehicles per day but are within the typical range of expected daily traffic volumes for collector roads (<5,000).
- The 85th percentile operating speeds are within 5% of posted speed limits with the exception of the school zone on Wilson Crescent.
- The additional travel time between the intersection of Clarence Avenue South & Calder Crescent and the intersection of Glasgow Street & Mendel Crescent (east), observed through several different routes and time periods, ranged from two to five minutes per trip.

Additional details on the effectiveness assessment are included in Attachment 2.

Resident Feedback

To determine the level of community support for the vehicular left-turn restriction at Clarence Avenue South and Glasgow Street (west), a survey was hand delivered to 456 households on May 10, 2018. A copy of the survey is included in Attachment 3. The survey area was bound by these locations:

- Circle Drive to the south;
- Clarence Avenue to the east (residences on Clarence Avenue were included);
- Wilson Crescent to the north; and
- Cascade Crescent to the west (residences on Cascade Crescent were not included).

Residents were asked if they supported making the directional closure permanent or removing the vehicular left-turn restriction and doing nothing as all reasonable options have been investigated. A graphical summary of the feedback is included in Attachment 4. The results of the survey are tabulated below:

Zone	No. of Surveys Distributed	Permanent Directional Closure	Removal of Directional Closure
1	43	7	41
2	19	6	-
3	60 ¹	-	-
4	108	2	37
5	14	1	7
6	41	27	10
7	146	5	71
8	25	1	7
TOTAL	456	49	173

¹ Apartment units

A review of the survey results yields the following observations:

- There was a 48% return rate on the survey forms.
- Majority of respondents do not support a permanent restriction.
- Majority of Glasgow Street residents support a permanent restriction.

Many residents included comments on the survey forms regarding the directional closure pilot project (Attachment 5).

The residents were also provided with the option to make other suggestions:

- Speed humps (12)
- All-way stops on Glasgow Street (8)
- Speed radar and/or photo enforcement (6)
- Speed limit reduction (particularly near Avalon Park) (3)
- Traffic signals or roundabout at Clarence Avenue & Glasgow Street (south) (6)
- Speed display board (1)

Stakeholder Feedback

The Administration requested feedback on the directional closure from the Saskatoon Police Service, Saskatoon Fire Department, MD Ambulance and the Greater Saskatoon Catholic Schools. No concerns were raised by the Saskatoon Police Service or MD Ambulance. The Saskatoon Fire Department responded that a vehicular left-turn restriction adds approximately 1 minute and 35 seconds to the response time for trucks responding from #1 Station (Idylwyld Drive) to a “Level 1” incident (i.e. a house fire). However, with the relocation of #3 Station (to Clarence Avenue just north of Wilson Crescent), the response time to that area will be significantly reduced compared to the current response times with the #3 Station location at Taylor Street and York Avenue. Georges Vanier School’s Principal provided a letter outlining their concerns with the directional closure (Attachment 6).

Other Considerations

The Administration acknowledges that the recommendation is not perfect, but views it as a compromise that addresses the concerns of residents on Glasgow Street without significantly impacting residents on surrounding streets.

To further address the impacts of the left-turn restrictions, the following additional measures can be implemented:

1. A request will be made of the Saskatoon Police Service to increase enforcement activities to deter U-turns on Clarence Avenue at Glasgow Street, as well as in the school zone on Wilson Crescent.
2. A request will be made of the Saskatoon Police Service to increase enforcement activities to address speeding through the school zone on Wilson Crescent.
3. The Transportation division will work closely with the Georges Vanier School’s Principal and School Parent Council to educate parents of acceptable driver behaviour in the school zone.
4. The Transportation division will lead the formation of a small working group consisting of interested residents on Glasgow Street, McAskill Crescent, and

Mendel Crescent. The primary objective of the working group will be to educate and promote the people living on Mendel Crescent and Glasgow Street to not use McAskill Crescent when destined north of Wilson Crescent.

There is a large opportunity for a successful neighbourhood outcome, but it does require the participation and cooperation of each resident on Glasgow Street, McAskill Crescent, and Mendel Crescent. The left-turn restrictions, with the additional measures outlined above, represent an overall compromise to minimize the impact of short-cutting traffic through the Avalon neighbourhood.

Other considerations are discussed in Attachment 7.

Street Closing Bylaw

The temporary changes have shown to be effective in reducing short-cutting. The Administration is recommending the temporary restriction of left-turns at the intersection of Clarence Avenue and Glasgow Street be made permanent due to the significant lowering of daily traffic on Glasgow Street which outweighs the detriments to McAskill Crescent and Mendel Crescent.

To complete this transaction, the Administration requires City Council to approve Bylaw No. 9521, The Street Closing Bylaw, 2018 (No. 6), Attachment 8.

A dead end road situation will not be created as a result of this proposed closure of right-of-way.

Options to the Recommendation

Removal of the left-turn restrictions would allow traffic patterns to resume and would not address the short-cutting traffic and speeding concerns on Glasgow Street. The directional closure traffic calming measure was the last acceptable traffic calming device to curb short-cutting traffic outlined in the Neighbourhood Traffic Management Guidelines and Tools. As such, no other traffic calming measures are appropriate for Glasgow Street.

Additional options to the recommendation which have been explored previously are outlined in Attachment 9.

Public and/or Stakeholder Involvement

There were several opportunities for public and stakeholder engagement through the Avalon Neighbourhood Traffic Review (NTR) process, including:

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Date	Timeline
September 26, 2014	City Council received a petition from over 300 area residents to address traffic concerns on Glasgow Street.
October 2014	A neighbourhood meeting was held to discuss traffic issues on Glasgow Street (estimated attendance was 40).
April 16, 2015	As part of the Avalon NTR, a public meeting was held with residents to discuss traffic issues in Avalon, including Glasgow Street (estimated attendance was 70).
October 29, 2015	As part of the Avalon NTR, a public meeting was held with residents to discuss the draft traffic plan to improve vehicular and pedestrian safety (estimated attendance was 90). To address short-cutting concerns along Glasgow Street, a recommendation to restrict left turns at the intersection of Clarence Avenue and Glasgow Street was presented to residents with little support. The recommendation was removed at that time from the Traffic Plan pending further consultation.
January 14, 2016	As part of the Avalon NTR, a public meeting was held with residents to discuss Glasgow Street and Clarence Avenue (estimated attendance was 90). The recommendation to install pinch points on Glasgow Street on a trial basis was generally supported by those in attendance.
January 19, 2017	A public meeting was held with residents to discuss Glasgow Street (attendance was 185). Results of the pinch point trial were presented and two alternative options were discussed.
January 27, 2017	A survey was distributed to area residents to determine the level of support for each alternative. City Council decided to proceed with a pilot project for a directional closure to restrict left-turns at the intersection of Clarence Avenue and Glasgow Street (south).
May 9, 2018	A survey was distributed to area residents to determine the level of support for the directional closure.

In addition, numerous informational flyers, small-in-size informal in-person meetings, phone calls, and e-mails have occurred between residents and the Administration discussing the issue.

The Ministry of Highways and Infrastructure has confirmed that no compensation is required to the Crown.

Communication Plan

The direction of City Council will be shared with the residents impacted by the decision using several methods: City website, Community Association and by direct mail-out.

Financial Implications

There is sufficient funding within Capital Project #1512 – Neighbourhood Traffic Management to continue with the temporary street closure. If City Council's direction is to make the closure permanent, the Administration's annual status report on the NTR program will provide further details on the design, cost, and timing of the permanent changes.

Environmental Implications

The overall impact of the recommendations on traffic characteristics, including the impacts on greenhouse gas emissions, has not been quantified at this time.

Other Considerations/Implications

There are no policy, privacy or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

There will be no follow up report.

Public Notice

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

- Advertised in The StarPhoenix and Bridges on the weekend of June 16, 2018 (Attachment 10).
- Posted on the City Hall Notice Board on June 15, 2018;
- Posted on the City of Saskatoon website on June 15, 2018; and
- Notices were hand delivered to the adjacent land owners on June 13, 2018.

Attachments

1. Background
2. Effectiveness Assessment
3. Engage - Glasgow Street Traffic Review Update and Survey – May 2018
4. Graphical Survey Results
5. Resident Feedback – Clarence Avenue Directional Closure at Glasgow Street
6. Letter – Laura Cey, Principal – Georges Vanier School, Greater Saskatoon Catholic Schools - May 18, 2018
7. Other Considerations
8. Bylaw No. 9521, The Street Closing Bylaw, 2018 (No. 6)
9. Options to the Recommendation
10. Copy of Public Notice

Report Approval

Written by: Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

Admin Report - Proposed Closure of Right-of-Way – Restrict Left-Turns at Clarence Avenue at Glasgow Street.docx

Background

On September 26, 2014, City Council received a petition from over 300 area residents requesting action on speeding and short-cutting traffic on Glasgow Street. This focus on Glasgow Street continued through the public meeting regarding this specific issue in October 2014 and the initial Neighbourhood Traffic Review (NTR) public meeting held in April 2015. In 2015, traffic studies were undertaken and numerous field observations were completed to quantify these concerns.

A review of the traffic data collected at that time indicated two primary traffic shortcut movements:

- Northbound left-turn from Clarence Avenue to Glasgow Street and the westbound right-turn from Glasgow Street onto Broadway Avenue; and conversely,
- Southbound left-turn from Broadway Avenue to Glasgow Street and the eastbound right-turn from Glasgow onto Clarence Avenue.

The traffic data also indicated:

- That the dog park located at the south end of Broadway Avenue is not the main traffic generator.
- On Glasgow Street there was a daily traffic volume of 3,700 vehicle trips.
- On Wilson Crescent there was a daily traffic volume of 2,300 vehicle trips, much less traffic than on Glasgow Street.
- Vehicle speeds along Glasgow Street ranged between 49 kph and 54 kph, which is typical for a local street with a posted speed limit of 50 kph.

Through this detailed review of the 2015 traffic data, it was confirmed that the primary issue was short-cutting traffic on Glasgow Street.

As part of the standard NTR process, a second public meeting was held in October 2015. Typically most issues are resolved at the second public meeting when the recommendations are shared with the neighbourhood. However, the following two issues remained unresolved in the opinion of the area residents:

- Traffic calming on Glasgow Street
- Geometric changes to Clarence Avenue

Accordingly, a third NTR meeting was held in January 2016 and a recommendation made to trial pinch points as a method to reduce the amount of short-cutting traffic, which was generally supported by the meeting attendees.

The Avalon NTR was approved by City Council in April 2016 and included the recommendation to evaluate pinch points as a trial at two locations along Glasgow Street between Clarence Avenue and Broadway Avenue.

The trial pinch points were installed in the summer of 2016, and evaluated over a ten-month period. The effectiveness review indicated that traffic volumes on Glasgow

Street dropped slightly (3,700 to 3,400 daily vehicle trips), the vehicle travel speeds had not significantly been impacted.

A public meeting was held in January 2017 where the results of the pinch point trial were presented and two alternatives, either leaving the intersection of Glasgow Street / Clarence Avenue as is, or restricting the left-turning movements.

To determine the support for the alternative options, a survey was hand delivered to residents on January 27, 2017. A review of the survey results yields the following observations:

- Residents on Glasgow Street are in favour of restricting left-turns at the intersection of Glasgow Street and Clarence Avenue on a pilot project basis.
- Residents on adjacent streets are strongly opposed to restricting left-turns at the intersection of Glasgow Street and Clarence Avenue on a pilot project basis.
- The other suggestions included: 17 – speed humps; 17 – stop signs; 9 – reduced speed zone; 6 – traffic signals; restrict traffic at Turner Avenue and Broadway; and adjust the signal timings at Clarence Avenue/Wilson Crescent.

On March 27, 2017, City Council received a report summarizing the Glasgow Street Traffic Review, and resolved:

- “1. That the Administration proceed with removing the pinch points installed in a temporary fashion on Glasgow Street; and
2. That left-turns be restricted at the intersection of Glasgow Street and Clarence Avenue on a trial basis.”

In April 2017, the pinch points on Glasgow Street were removed.

In May 2017, a flyer was hand delivered updating residents on the outcome of the March 27, 2017 City Council meeting, and providing a schedule of the trial to restrict left-turns.

In August 2017, Clarence Avenue between Glasgow Street and Wilson Crescent was widened.

In September 2017, traffic counts were completed on Glasgow Street, Wilson Crescent, and McAskill Crescent to obtain baseline data for evaluation of the trial to restrict left-turns.

At the end of September 2017, the median opening at Glasgow Street was closed effectively restricting the left-turn movements and a flyer was also hand delivered at this time updating residents on the trial project.

Effectiveness Assessment

Traffic Data

Traffic data was collected prior to the installation of the directional closure and post-directional closure in October 2017 and again in May 2018 to ensure that the counts captured were not affected by the Clarence Avenue construction and opening of Stonebridge School.

The average daily traffic (vehicles per day) and operating speeds (speed at which 85% of drivers are travelling at or below) for the area are as follows:

Location	Road Class	Traffic Volumes and Operating Speeds (85 th percentile speed)			
		Before any measures May 2015	Before closure September 2017	After closure October 2017	After closure May 2018
Glasgow Street - Turner Avenue to Mendel Crescent (east)	Local	3,700 vpd 54 kph	3,700 vpd 54 kph	2,900 vpd 54 kph	1,900 vpd 54 kph
Glasgow Street - MacEachern Avenue to Mendel Crescent (west)	Local	3,200 vpd 47 kph	3,050 vpd 52 kph	1,650 vpd 50 kph	1,650 vpd 55 kph
McAskill Crescent - east of Turner Ave	Local	N/A	270 vpd 44 kph	600 vpd 43 kph	620 vpd 42 kph
Wilson Crescent - Albert Avenue to Clare Crescent (school zone)	Collector	2,300 vpd 49 kph	2,550 vpd 54 kph 41 kph (school hours)	4,500 vpd 53 kph 43 kph (school hours)	3,900 vpd 49 kph 45 kph (school hours)
MacEachern Avenue - Glasgow Street to Wilson Crescent	Local	N/A	N/A	N/A	180 vpd 37 kph
Calder Crescent - Clarence Avenue to Ferguson Avenue	Local	N/A	N/A	N/A	750 vpd 44 kph

As shown in the above table, traffic volumes on Glasgow Street have decreased by 1,400 to approximately 1,800 vehicles per day. McAskill Crescent traffic volumes have increased to 620 vehicles per day; however, are still within the typical range of expected daily traffic volumes for local roads (<1,000). Wilson Crescent traffic volumes have increased to 3,900 vehicles per day but are within the typical range of expected daily traffic volumes for collector roads (<5,000).

The 85th percentile operating speeds are within 5% of posted speed limits with the exception of the school zone on Wilson Crescent.

Travel Time

To better understand the amount of delay experienced by residents who are now rerouted by the directional closure, travel time surveys were conducted. Each individual trip time will vary due to a number of factors, including but not limited to: origin, destination, traffic conditions and route.

To ensure survey consistency, the origin point of the travel time surveys was taken as the intersection of Clarence Avenue South & Calder Crescent and the destination point was taken as the intersection of Glasgow Street & Mendel Crescent (east). The travel time survey findings are summarized below:

Route	Date	Time Period	Travel Time (minutes)
Right on Calder Crescent Left on Ferguson Avenue Left on Glasgow Street (east) Left on Clarence Avenue South Right on Glasgow Street (west)	May 3, 2018	1 hour PM peak (3:00 pm - 4:00 pm)	4
	May 8, 2018	1 hour AM peak (7:00 am - 8:00 am)	2
	May 8, 2018	2 hour PM peak (4:00 pm - 6:00 pm)	2 to 3
Clarence Avenue South Left on Wilson Crescent Left on McAskill Crescent (east) Left on Turner Avenue Left Glasgow Street	May 3, 2018	1 hour PM peak (3:00 pm - 4:00 pm)	4
	May 8, 2018	1 hour AM peak (7:00 am - 8:00 am)	3
	May 8, 2018	2 hour PM peak (4:00 pm - 6:00 pm)	2 to 4
Clarence Avenue South Left on Wilson Crescent Left on MacEachern Left on Glasgow Street	May 3, 2018	1 hour PM peak (3:00 pm - 4:00 pm)	5
	May 8, 2018	1 hour AM peak (7:00 am - 8:00 am)	4
	May 8, 2018	2 hour PM peak (4:00 pm - 6:00 pm)	4 to 5

As shown by the above, the delay caused by the directional closure is typically less than 5 minutes.