## **Glasgow Street Traffic Review**

#### Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:

- 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.

#### **Topic and Purpose**

The purpose of this report is to provide an update on the Glasgow Street traffic review and to provide information on recently completed community engagement.

#### **Report Highlights**

- 1. Traffic data was collected and confirmed that shortcutting on Glasgow Street is an issue.
- 2. The pinch points on Glasgow Street have not been effective in reducing shortcutting.
- 3. A resident survey was conducted to obtain feedback on two alternative options.
- Given that Glasgow Street is classified as a local street, left-turn restrictions are recommended at the intersection of Clarence Avenue and Glasgow Street to restore the traffic conditions to that of a local residential street.

#### **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 Avalon Neighbourhood Traffic Review (NTR) was approved by City Council in 2016 and included installations of pinch points at the following locations to address shortcutting concerns:

- On Glasgow Street between Maceachern Avenue and Mendel Crescent (across from 711 Glasgow Street)
- On Glasgow Street between Clarence Avenue and Mendel Crescent (in front of 917 and 919 Glasgow Street)

Installation of the pinch points was on a trial basis, with an effectiveness review outlined in the Avalon NTR.

#### Report

#### Public Meetings and Traffic Study Data Results

At the public meetings held in October of 2014 and April of 2015, residents identified travel speed and traffic volume as the main concerns on Glasgow Street between Broadway Avenue and Clarence Avenue. In 2015, traffic studies were undertaken and numerous field observations were completed to quantify these concerns.

The peak hour traffic volumes are included as Attachment 1. A review of this information yields that there are 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 Street onto Clarence Avenue.

The data also confirmed that the dog park located at the south end of Broadway Avenue is not the main traffic generator, and that the primary travel pattern is between Clarence Avenue and Broadway Avenue, via Glasgow Street.

In May of 2015, daily traffic volumes were counted at the following locations:

- Reviewed two locations (between Clarence Avenue and Broadway Avenue on Glasgow Street) where vehicle trips were respectively 3,200 and 3,700. In Saskatoon, according to the <u>New Neighbourhood Design Guidelines</u>, the upper limit expected for a local residential street is 1,000 vehicle trips per day. Conversely, collector streets have up to 15,000 trips per day and arterial streets such as Clarence Avenue and 8<sup>th</sup> Street can expect well over 20,000 vehicle trips per day.
- Reviewed Wilson Crescent where there was a daily traffic volume of 2,300
  vehicle trips. Wilson Crescent is a collector street with traffic signals and is
  designed to accommodate more traffic, yet has much less volume than Glasgow
  Street.
- Reviewed vehicle speeds along Glasgow Street that ranged between 49 kph and 54 kph, which is typical for a local street with a posted speed limit of 50 kph.

Through a review of the traffic data, it was confirmed that the primary issue was shortcutting traffic on Glasgow Street.

#### Pinch Point Effectiveness Review

An evaluation of the pinch points was completed including the collection of traffic data before and after the temporary trial installation. Based on the review shown in Attachment 2, it has been determined that the pinch points have not been effective in reducing shortcutting and the Administration is recommending that they be removed.

#### Resident Survey Results

To determine the level of support for the alternative options, a survey was hand delivered to residents on January 27, 2017. A copy of the survey is included as 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
- Cascade Crescent to the west (residences on Cascade Crescent were included)

Residents were asked which option they preferred. A graphical summary of the feedback is included in Attachment 4. The tabular summary is provided below:

Table - Summary of Survey Results

Zone	Surveys Distributed	A – No Left Turns at Clarence	B – Do Nothing	C – Other
1	64	6	35	11
2	19	3	-	1
3	60 <sup>1</sup>	-	-	-
4	108	3	15	18
5	13	1	-	-
6	41	15	5	5
7	116	5	47	18
8	25	1	2	2
TOTALS	446	34	104	55

<sup>&</sup>lt;sup>1</sup> Apartment units

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/Clarence Avenue on a pilot project basis.
- Residents not on Glasgow Street are opposed to restricting left turns at the intersection of Glasgow Street/Clarence Avenue on a pilot project basis.
- Of the 55 other suggestions there were: 17 speed humps; 17 Stop signs; 9 reduced speed zone; 6 traffic signals at Clarence and Glasgow; 3 keep pinch points; and 1 each for roundabout at Clarence and Glasgow, to restrict traffic at Turner Avenue and Broadway Avenue, and adjust signal timings at Clarence Avenue/Wilson Crescent.

### Left-turn Restriction Advantage and Disadvantage

#### Advantage:

Given that Glasgow Street is a local street, the Administration is recommending that left turns be restricted at Clarence Avenue and Glasgow Street on a trial basis. The overall level of safety on Glasgow Street would increase by lowering traffic volumes.

#### Disadvantage:

 Traffic volumes will increase on Mcaskill Crescent, Maceachern Avenue, and Turner Avenue. It is difficult to predict the exact traffic volume increase, but it is estimated that up to 200 vehicle trips per day may be re-assigned to those streets. Traffic data along Mcaskill Crescent was collected in July 2015 and had a daily traffic volume of 205.  Travel distances will increase as motorists may have to drive a few more blocks to arrive, or depart, from their residence.

If approved, the recommended scope and schedule for the trial project is as follows:

- Install the temporary restriction in May of 2017.
- Conduct traffic counts on Glasgow Street, Wilson Crescent, Mcaskill Crescent, and Maceachern Avenue in June of 2017.
- Complete an effectiveness review in September of 2017.
- Share the results of the effectiveness review with the area residents in October of 2017.
- Report back to City Council in late 2017 on the effectiveness of the pilot project and resident feedback.

#### **Options to the Recommendation**

There is an option to do nothing and reclassify Glasgow Street to a collector street which would match the current traffic conditions of the roadway. The benefit of this option is that traffic volumes on Mcaskill Crescent, Maceachern Avenue, and Turner Avenue will remain the same. This option would not resolve residents' traffic concerns on Glasgow Street.

A summary of other options discussed with residents is shown in Attachment 5.

#### Public and/or Stakeholder Involvement

The public has been engaged throughout this process as follows:

Date	Timeline
September 26, 2014	City Council received a petition from over 300 area residents.
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 shortcutting 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.

#### **Communication Plan**

The direction of City Council will be shared with the residents impacted by the decision using several methods: the City website, the Community Association, communication forums (i.e. website, newsletter), and by a direct mail-out.

#### **Financial Implications**

There is sufficient funding within Capital Project #1512 – Neighbourhood Traffic Management to remove the pinch points and implement measures to restrict left turns at Clarence Avenue and Glasgow Street.

#### **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**

The Administration will prepare a follow-up report to evaluate the impact of the left-turn restrictions at the intersection of Clarence Avenue and Glasgow Street in late 2017.

#### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

#### **Attachments**

- Glasgow Street Peak Hour Traffic Volumes
- 2. Pinch Point Effectiveness Review
- 3. Shaping Saskatoon Glasgow Street Traffic Review Update and Survey
- 4. Graphical Summary of Survey Results
- 5. Options to the Recommendation

#### Report Approval

Written by: Jay Magus, Engineering Section Manager, Transportation

Reviewed by: Angela Gardiner, Director of Transportation

Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities

Department

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"Approved by Jeff Jorgenson, GM of T & U Department, March 7, 2017"

#### **Pinch Point Effectiveness Review**

Traffic data prior to the pinch points being installed was collected in May of 2015, and traffic data after the pinch points were installed was collected in October of 2015. Traffic data was collected at two locations on Glasgow Street, and one location on Wilson Crescent. Wilson Crescent was included so that the impacts on this adjacent collected could be monitored. A comparison of the traffic volumes is provided in Table 1.

Table 1 – Pinch Point Effect on Traffic Volumes

	Traffic Volumes and Travel Speeds (85th		
Location	Percentile Speed)		
	Before (May 2015)	After (Oct 2016)	
Glasgow Street – Mendel Crescent (east) to Turner	3,700 vpd	3,400 vpd	
Avenue	54 kph	53 kph	
Glasgow Street – MacEachern Avenue to Mendel	3,200 vpd	2,600 vpd	
Crescent (west)	47kph	51 kph	
Wilson Crangent Albert Avenue to Clare Crangent	2,300 vpd	2,500 vpd	
Wilson Crescent – Albert Avenue to Clare Crescent	49 kph	49 kph	

vpd = vehicles per day kph = kilometres per hour

A review of the traffic volumes in the table indicates that the traffic volumes have dropped slightly, and the 85<sup>th</sup> percentile speed has not significantly been impacted.

Anecdotally, Transportation received numerous phone calls and e-mails from residents complaining about the pinch-points. Typically these were from residents that did not live on Glasgow Street. However, more correspondence was beginning to also be received from residents that live on Glasgow Street complaining about the pinch-points.

Based on the effectiveness review, it is recommended that the pinch-points be removed.



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# Glasgow Street Traffic Review Update and Survey

On April 25, 2016, City Council adopted the Avalon Traffic Management Plan.

Public consultation began in April 2015 at a public meeting to discuss traffic concerns and potential solutions within the Avalon neighbourhood. Comments from the residents gathered during the meeting and the months to follow were used to coordinate traffic studies, conduct traffic assessments, and develop a neighbourhood-wide plan. The plan was presented at a follow-up meeting and online in October 2015, allowing residents to provide input. An additional follow-up meeting was held in January 2016 to finalize the plan.

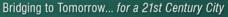
The final plan included a number of measures to improve traffic conditions within the Avalon neighbourhood, including a series of pinch points and temporary traffic calming along Glasgow Street. Installations began in the summer of 2016 and traffic data was collected, including the Average Daily Traffic (vehicles per day) and 85<sup>th</sup> percentile speed (speed at which 85% of drivers are travelling at or below). Results are as follows:

Location	Before (May 2015)	After (Oct 2016)
Glasgow St – Mendel Cres (east) to Turner Ave	3,700 vpd; 54 kph	3,400 vpd; 53 kph
Glasgow St – MacEachern Ave to Mendel Cres (west)	3,200 vpd; 47 kph	2,600 vpd; 51 kph
Wilson Cres – Albert Ave to Clare Cres	2,300 vpd; 49 kph	2,500 vpd; 49 kph

On January 19, 2017 a public meeting was held to share with the area residents the process to date and provide traffic volume information. As a follow up to the recent public meeting we are surveying area residents for input regarding the issue of speeding and increased traffic flow along Glasgow Street. The results will be included in an upcoming report provided to Transportation Committee and City Council that summarized the process and work to date and suggest



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recommendations including the removing of pinch-points on Glasgow Street and one of the following two options:

- Do not allow left turns at the Clarence Avenue / Glasgow Street intersection on a trial basis
- Do nothing as all reasonable options have been investigated

The council dates we are targeting are March 13 (Transportation Committee) followed by March 27 (City Council); or April 10 (Transportation Committee) followed by April 24 (City Council). Please visit the City website for the agenda published the Thursday prior to each meeting.

For information: shapingsaskatoon.ca/discussions/glasgow-street-traffic-review

	SURVEY
Nam	ne:
Addı	ress:
Pleas	se indicate your support for one of the following options:
	Remove the pinch points and do not allow left turns at the Clarence Avenue / Glasgow Street intersection on a trial basis
	Do nothing as all reasonable options have been investigated
	Other (please describe):

Please return your survey by **February 8, 2017** to transportation@saskatoon.ca (suggest taking a picture and emailing).

or mail: Transportation Customer Service or drop-off: Transportation Desk 222 – 3<sup>rd</sup> Avenue North 3<sup>rd</sup> Floor, City Hall

222 – 3<sup>rd</sup> Ave North Saskatoon, SK S7K 0J5



## **Options to the Recommendation**

Two options to slow vehicle speeds, but not significantly reduce traffic volumes, that may be available for City Council's consideration in the future are:

- Automated Speed Enforcement (ASE) During the public engagement many residents raised automated speed enforcement on Glasgow Street. Currently the ASE is a pilot project initiated by SGI with cooperation from the City of Saskatoon. The pilot project has been extended two years, and after this time more information will be known on the future of ASE.
- 2. Incorporation of a 30kph playground speed zone Only feasible if all playground zones within the City have a reduced speed limit. There are numerous issues to be reviewed prior to full consideration, namely the scope of the reduced speed zones in terms of time of day, which days of the week, which months of the year, coordination with the reduced speeds in school zones, cost to implement, and an implementation plan.

Two items that are not recommended, but consistently raised by residents are as follows:

- 1. Speed humps These are not recommended as they are not a tool in reducing cut-through traffic.
- Stop signs The Administration has reviewed the intersections along Glasgow Street between, and including, Broadway Avenue and Clarence Avenue and no intersection meets Council Policy for the installation of all-way stops. Installing stop signs where they are not warranted can create an unsafe condition. Also, installing an all-way stop at the intersection of Glasgow Street / Broadway Avenue, in addition to lowering the safety of this intersection, will also do nothing to reduce short-cutting nor vehicle speeds as the cut-through traffic is either turning right (from westbound on Glasgow Street to northbound on Broadway Avenue) or turning left (from Broadway Avenue to eastbound on Clarence Avenue) anyways. These vehicles either stop or slow down significantly to make these turns.