

## **CITY OF HAMILTON** PUBLIC WORKS DEPARTMENT Transportation Operations and Maintenance Division

| то:                | Chair and Members<br>Public Works Committee  |  |
|--------------------|--|--|
| COMMITTEE DATE:    | June 17, 2019  |  |
| SUBJECT/REPORT NO: | Update on Safety Measures on Aberdeen Avenue from Queen<br>Street to Longwood Road (PW17021a) (Ward 1)<br>(Outstanding Business List Item) |  |
| WARD(S) AFFECTED:  | Ward 1   |  |
| PREPARED BY:       | David Ferguson (905) 546-2424 Ext. 2433<br>Robert Decleir (905) 546-2424 Ext. 4391   |  |
| SUBMITTED BY:      | Edward Soldo<br>Director, Transportation Operations & Maintenance<br>Public Works Department   |  |
| SIGNATURE:         |  |  |

## RECOMMENDATION

- (a) That the following changes along Aberdeen Avenue be implemented:
  - Timing modifications to the intersection of Aberdeen Avenue and Dundurn Street to implement a pedestrian lead phase for pedestrians crossing the east leg (north to south);
  - That a "No Right Turn on Red" be installed during the morning hours to align with the School Crossing Guard operations that take place on the west leg of the intersection;
  - (iii) Working under the principles of Vision Zero, staff are recommending permitting parking on both the north and south sides of Aberdeen Avenue between Queen Street and Dundurn Avenue; and,
  - (iv) That a flashing 40 km/h zone along Aberdeen Avenue from Queen Street to Longwood Road during school arrival and dismissal hours be implemented;
- (b) That the Outstanding Business List Item Full Review of Aberdeen Avenue from Queen Street to Longwood Road be removed from the Public Works Committee Outstanding Business List.

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## EXECUTIVE SUMMARY

At the March 29, 2017 City Council meeting, staff were provided direction to implement a number of roadway safety measures in order to improve the overall pedestrian environment along Aberdeen Avenue and to undertake a review of traffic calming measures to monitor their effectiveness and determine any further action required.

Following Council approval, enhancements were completed along the corridor which included a new intersection pedestrian signal (IPS), parking modifications, pavement marking modifications and traffic signal phasing adjustments. Since these modifications were made, these improvements have increased the overall safety and operations for the various road-users, specifically pedestrians and motorists.

Since these modifications were made, staff has been monitoring operations along Aberdeen Avenue and have concluded that additional measures can be implemented to further enhance safety of road users and specifically enhance the pedestrian environment.

In summary, there are four action items recommended for implementation in 2019 and these recommended changes can be accommodated within the existing Transportation Operations & Maintenance budget.

#### Alternatives for Consideration – See Page 6

## FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: The recommended changes can be accommodated within the existing Transportation Operations & Maintenance budget as follows:

| Signal Modifications       | Capital Signal Modernization Budget | *\$2,000   |
|----------------------------|-------------------------------------|------------|
| No Right Turn on Red       | Operations Sign Budget              | *\$500     |
| Parking Regulation Changes | Operations Sign Budget              | *\$600     |
| Flashing 40 km/hr Zone     | Engineering Priorities Acct# 55973  | \$20,000   |
|                            |                                     | *estimated |

Staffing: There are no staffing implications associated with this report.

Legal: Municipal by-law amendment will be required for Parking Operation, "No Right Turn on Red" modifications and for the implementation of flashing 40 km/h zones. The by-law will be submitted to a future Council meeting for approval once the design details are completed.

## HISTORICAL BACKGROUND

At the March 20, 2017, Public Works Committee meeting, Report PW17021 Interim Safety Measures on Aberdeen Avenue from Queen Street to Longwood Road was approved:

- a) That an IPS be installed on Aberdeen Avenue at Cottage Street at a cost of approximately \$100,000, subject to funding being approved through the 2018 Capital Budget approval process.
- b) That the traffic calming measures proposed in Appendix A be approved for implementation in 2017, at a cost of approximately \$80,000, to be funded from the 2017 Ward 1 Area Rating funds, No. 4241509108;
- c) That a Pedestrian Crossover (Type D), be installed in 2017 at a cost of approximately \$10,000, at the southbound to westbound right turn channel at Queen Street and Aberdeen Avenue, and that the installation be funded through the Red-Light Camera Reserve No.112203.

These recommendations were amended at the March 29, 2017 Council meeting as follows:

- a) That an IPS be installed on Aberdeen Avenue at Cottage Street at a cost of approximately \$100,000, subject to funding being approved through the 2018 Capital Budget approval process;
- b) That the traffic calming measures proposed in Appendix "A" to Report PW17021a be approved for implementation in 2017, as amended, for the Aberdeen Avenue at Dundurn Street location by deleting "7 a.m. to 9 a.m." and "This will allow vehicles to park in the area of Aberdeen Avenue throughout the day" under the Proposed Interim Improvement at a cost of approximately \$80,000, to be funded from the 2017 Ward 1 Area Rating funds, No. 4241509108;
- c) That a Pedestrian Crossover (Type D), be installed in 2017 at a cost of approximately \$10,000, at the southbound to westbound right turn channel at Queen Street and Aberdeen Avenue, and that the installation be funded through the Red-Light Camera Reserve No.112203;
- d) That staff be directed to conduct an eight-month review of the traffic calming measures, with a report back to the Public Works Committee.

The IPS was installed at the intersection of Cottage Street and Aberdeen Avenue and the parking modifications were implemented in the area of Dundurn Avenue.

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Due to safety issues and insufficient sightlines for motorists, a Pedestrian Crossover (PXO) could not be installed at Aberdeen and Queen. As a result, modifications to narrow the width of the right turn channel to reduce travel speeds and to insure motorists were not passing transit vehicles was completed.

In addition, after a review of the collision history along Aberdeen staff implemented a southbound left-turn lane at Queen and Aberdeen. This was installed to improve lane continuity and the ability for southbound motorists to judge gaps in northbound traffic to complete their left turn safely.

## POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

None

## **RELEVANT CONSULTATION**

Public Works staff worked with the Kirkendale Neighbourhood Association to assist in addressing their concerns.

The Ward Councillor has been consultant and is in agreement with this report.

## ANALYSIS AND RATIONALE FOR RECOMMENDATION

The new IPS at Aberdeen Avenue and Cottage Street was activated on September 19, 2018. The traffic signal operates in a pedestrian actuated mode. Observations indicate the traffic signal is being moderately used by the public and transit users and has provided a safe crossing location for pedestrians. No further changes are recommended at this location.

Parking restriction modifications on the north side of Aberdeen Avenue west of Dundurn Street were completed in July 2017. In addition to parking regulation changes, staff revisited the pavement markings leading to the intersection of Aberdeen Avenue and Dundurn Street to allow for exclusive eastbound and westbound left-turn lanes. In conjunction with the pavement marking changes, staff modified the traffic signal phasing to remove the three-phase signal operation to permit east/west and north/south movements to a standard operation. The signal timing and phasing changes at this intersection have also allowed staff to remove the need for pedestrian push-buttons at this location. The new phasing has reduced pedestrian wait times, increased pedestrian crossing time and has increased pedestrian safety.

A recent review of the five-year collision history at the intersection of Aberdeen Avenue and Dundurn Street has identified a vehicle/pedestrian conflict on the east crosswalk with southbound left turning vehicles. As a result, staff are recommending further signal timing

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modifications to this intersection to implement a pedestrian lead phase for pedestrians crossing the east leg (north to south). By providing pedestrians an opportunity to begin their movement to cross the road before motorists can proceed will allow the pedestrian to be more visible to the motorists.

It is further proposed, that a "No Right Turn on Red" be installed during the morning hours to align with the school crossing guard operations that take place on the west leg of the intersection. Through observations completed by staff and in consultation with area residents and the Ward Councillor, it has been identified that vehicles are making turns during the school crossing hours and creating potential for an incident to occur. Adding this restriction during the school crossing hours reduces the potential for a serious incident to occur.

The installation of a PXO at the southbound to westbound right turn channel at Queen Street and Aberdeen Avenue was reviewed. Staff reviewed the location in detail and determined that due to insufficient sightlines for motorists, it could not be installed as it was not a suitable safe location. In lieu of the Pedestrian Crossover, the width of the right turn channel was narrowed to reduce travel speeds and to ensure motorists were not passing transit vehicles that were stopped for the loading and unloading of passengers. Observations have identified the modifications have provided for a shorter and safer crossing condition for pedestrians and a reduction in vehicle speeds.

In the spring of 2018, staff identified a collision pattern with the southbound approach of Queen Street at Aberdeen Avenue. As a result, a southbound left-turn lane was installed to improve lane continuity and the ability for southbound motorists to judge gaps in northbound traffic to complete their left turn safely. Since implementation, no collisions have occurred resulting in southbound left turning vehicles and have improved the overall operations of the intersection as sightlines have improved for motorists for all movements. Staff have conducted various observations along Aberdeen Avenue because of ongoing concerns being raised by area residents. As a result of observations, complaints and working under the principles of Vision Zero, staff are recommending the following additional changes to Aberdeen Avenue.

The Kirkendale Neighbourhood Association has identified the concerns of residents regarding narrow sidewalk and the lack of a buffer between pedestrians on the sidewalk and vehicles in the curb lanes. This issue is particularly concerning for parents who walk children to schools located in the nearby area. Staff has conducted a review of these concerns and concur with the issues raised, however the best opportunity to address these issues would be during future reconstruction of Aberdeen Avenue. It should be noted that additional lands might be required at that time.

Staff has reviewed the pedestrian collision history on Aberdeen Avenue between Longwood Road and Queen Street for the period of 2005 to 2018. Over this period of

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time, there have been eighteen (18) pedestrian related collisions. As outlined in the Annual Collision Report, 90% of collisions that involve pedestrians result in injuries.

Working under the principles of Vision Zero, staff are recommending permitting parking on both the north and south sides of Aberdeen Avenue between Queen Street and Dundurn Avenue. Design details will need to be completed and it is recommended that these changes be implemented and monitored by staff to determine the impacts to Level of Service along the corridor. The changes proposed will provide a buffer between pedestrians and live traffic. These changes further support the principles of the Vision Zero Action Plan and the Hamilton Public Health's Safe Routes to School Program.

To further address the concerns raised with pedestrian safety and specifically school aged children that walk along or cross Aberdeen Avenue on their route to and from school, staff recommend the implementation of a flashing 40 km/h zone along Aberdeen Avenue from Queen Street to Longwood Road during school arrival and dismissal times.

## ALTERNATIVES FOR CONSIDERATION

Public Works Committee has made significant investment into improving roadway safety and staff have aggressively pursued and implemented various programs to assist in reducing injury collisions throughout the City of Hamilton.

Committee could choose to remove part or all of the proposed changes and continue to operate the roadway as status-quo, however this would fail to meet the Council approved programs and policies of the Vision Zero Action Plan, the Hamilton Strategic Road Safety Program and the Transportation Master Plan.

A secondary option would be to implement the proposed changes for a dedicated period of time and request staff to evaluate the impact of the changes and report back to Committee.

## ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

## **Economic Prosperity and Growth**

*Hamilton has* a prosperous and diverse local economy where people have opportunities to grow and develop.

## Healthy and Safe Communities

*Hamilton is* a safe and supportive city where people are active, healthy, and have a high quality of life.

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#### **Built Environment and Infrastructure**

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## APPENDICES AND SCHEDULES ATTACHED

None