

## CITY OF HAMILTON

# PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT Transportation Planning and Parking Division

TO:	Chair and Members Public Works Committee			
COMMITTEE DATE:	June 18, 2018			
SUBJECT/REPORT NO:	Cannon Street Bi-Directional Cycle Track Pilot Project (PED18136) (Wards 2 and 3)			
WARD(S) AFFECTED:	Wards 2 and 3			
PREPARED BY:	Daryl Bender (905) 546-2424 Ext. 2066			
SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department			
SIGNATURE:				

#### RECOMMENDATION

- (a) That the Cannon Cycle Track pilot project (Hess Street to Sherman Avenue) be confirmed and that the facility be recognized as a permanent cycling infrastructure;
- (b) That the allocation of the remaining Cannon Cycle Track pilot project funds (4041417125) for the enhancement of the existing cycle track separators in conjunction with the Cannon Street resurfacing project be approved.

#### **EXECUTIVE SUMMARY**

The City has been operating the Cannon Cycle Track as a three-year pilot project since September 2014. Analysis of the facility during this pilot period indicates that street operations are satisfactory; including safety, traffic flow, maintenance, and budget impacts. Future operations of the street were also considered and operations are projected to continue to be satisfactory. The majority of community feedback on the project has been positive and the City has been approached by other municipalities to learn from the Hamilton experience. The project is therefore recognized as a positive initiative.

A significant portion of Cannon Street that includes the cycle track is planned to be resurfaced as part of the current Priority Maintenance Roadway strategy (James Street to Sherman Avenue). The approval of the cycle track as permanent infrastructure will confirm existing cycling infrastructure as part of this street resurfacing project and enable enhancements to be made.

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## Alternatives for Consideration – See Page 7

#### FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: The original cost estimate to complete the Cannon Street Cycle Track was \$867,200. Total expenditure on this project, including minor modification after the initial installation is \$524,100. Project cost savings were realized in the following areas:

- reduced traffic modifications (markings, signage and signals);
- reduced consultant design work; and,
- did not require the use of the allotted contingency.

Approximately \$340,000 of unspent funds allocated to this project are planned to be used to help finance the enhancement of the existing cycle track separators at select intersections as part of the Council-approved Priority Maintenance Roadway Strategy.

Staffing: N/A

Legal: N/A

## HISTORICAL BACKGROUND

On March 26, 2014, Council approved the implementation of the Cannon Street Bi-Directional Cycle Track three-year pilot project (PW14031). The pilot was initiated as a result of a community initiative entitled "Yes We Cannon" that included approximately 1000 signatories to an on-line petition supporting the bicycle lanes. This facility was opened for public use on September 12, 2014. City staff was required to submit updates on this project, and have provided Information Reports on June 17, 2015 (PW14031(a)) and April 3, 2017 (PW14031(b)).

## POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The Council-approved Cycling Master Plan (2009) recommended cycling infrastructure on Cannon Street, thus the approval of the cycle track as a permanent facility is consistent with the Cycling Master Plan. The Cycling Master Plan update currently in progress continues to recommend bicycle lanes on Cannon Street.

#### **RELEVANT CONSULTATION**

The review of operations included City staff in Traffic Engineering, Transit, Road Operations, Parking, Waste Collection, Horticulture, Geomatics and Corridor Management, and Hamilton Fire, Police Services and Paramedics. The review also included consideration of future LRT implementation.

#### ANALYSIS AND RATIONALE FOR RECOMMENDATION

## Cycling Ridership

The table below provides an overview of cycling volumes along the Cannon St. Cycle track. Cycling activity along Cannon St. has increased from 2015 to 2017.

	2015	2016	2017
Peak summer ridership	580 cyclists daily	700 cyclists daily	972 cyclists daily
Peak winter ridership	75 cyclists daily	200 cyclists daily	396 cyclists daily

Two permanent bicycle counters were installed to provide daily ridership data along the street. These two locations are west of Bay Street and west of Victoria Avenue, with current full-year daily average ridership of 164 and 435 respectively. Although the Victoria Avenue location typically has higher ridership counts, the introduction of the Bay Street bicycle lanes are projected to generate increased ridership closer to Bay Street.

#### **Planters**

The project includes 30 planters installed between Sherman Avenue and Victoria Avenue, which are used to separate the bicycle traffic from vehicular traffic on Cannon Street. The planters are removed in early fall to facilitate snow clearing through winter and are reinstalled with planted materials, in late May.

There have been some incidents involving damage to the planters that either required the removal, repositioning or minor maintenance of the planters. The planters have proven to operate acceptably and additional planters will be considered as part of the permanent modifications.

#### Barrier Design

Plastic bollards and rubber curbing were utilized in the project to provide separation between motor vehicles and cyclists. The separation of the cycling facility from vehicular traffic on Cannon Street has been positively received by the users. The

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success of the separated facility is demonstrated by some of the highest ridership numbers in the city. The bollards and rubber curbing do require regular maintenance.

Concrete curbs are proposed to be added at the start of every block westbound as part of the planned 2018 street resurfacing to further enhance the separation and comfort level for cyclists. Replacing the rubber curbing at intersections with concrete curbs should also reduce maintenance requirements since these are the locations were rubber curbs are most often damaged or shifted. Concrete curbs would be similar to the median divisional islands that exist at many intersections in the City.

#### Road Maintenance

Road Operations staff have successfully developed methods to address summer and winter maintenance along Cannon Street with the construction of the bike lane. The annual winter and summer maintenance costs for this segment of Cannon Street (3 kms) have not seen significant cost increases, however the May 2018 release of the updated Minimum Maintenance Standards (MMS) now includes specific winter control standards within roadway bike lanes. As a result of these changes to the MMS standards, a further review of our current programs and any possible cost impacts will be undertaken. Any significant increase to winter control operations as a result of this review will be reflected in the 2019 budget submission.

#### Waste Collection

Waste Collection staff has developed various means to provide waste collection services to properties along the south side of Cannon Street. The current practice is to undertake waste collection activities early in the morning or during off-peak traffic periods.

The overall financial operating impact resulting from the construction of the bi-directional cycle track is little to no increase in operating costs at this time because limited overnight resources were available.

#### **HSR Operations**

Occasional delays to the #3 Cannon schedule occur, but it is uncertain whether these incidents are a result of the cycle track or other traffic operations. As part of the Ten Year Local Transit Strategy, additional Weekday service was added to the #3 Cannon route to improve on-time performance. Schedule adherence on this route has remained acceptable after the cycle track was introduced to the corridor. The HSR is not considering any additional bus allocations to Cannon Street as a result of the Cannon Cycle Track. During LRT construction (2019 thru 2024) portions of Cannon Street are being reviewed as possible detour routings for Routes #1 King and #10 B-Line.

## **Traffic Operations**

With the installation of the Cannon Cycle Track, traffic signal timing adjustments were completed to provide for improved operations. To date, the overall level of service (LOS) is operating within the Council approved level of service (LOS D, minor congestion at peak hours or better). Bicycle signal heads were added at 13 intersections to introduce eastbound bicycle traffic through these existing signalized intersections.

Travel times along the street conducted in late 2016 indicate that the operations of motor traffic continue to be good with the installation of the cycle track. Typical travel times are shorter in the AM peak period and almost unchanged in the PM peak period. Motor traffic volumes have decreased following the installation of the bicycle lanes.

## Collisions

The following table summarizes collision data by year and by collision type, and the data indicates an increase in collisions for both bicycles and eBikes. This can be attributed, in part, to the significant increase in cycling activity in the Cycle Track. Peak summer ridership increased by 67% between 2015 and 2017 while peak winter ridership increased by over 400%. A downward trend in eBike/automobile and pedestrian/automobile collisions is noted.

Collisions data between cyclists and automobiles indicates an undesirable increase in collisions in Year 3. Approximately 80% of the recorded cyclist/automobile collisions are at Mary Street, Wellington Street, and Wentworth Street suggesting that these are location specific problems and not representative of the majority of the corridor. Staff will perform a detailed review of this collision data to identify the appropriate measures to improve safety for all users.

## Collision Frequency per Year

	Pedestrian/ Automobile	Cyclists/ Automobile	eBike/ Automobile	Automobile/ Automobile	Total
Previous 5 Year Annual Average	4.6	6.2	0.6	46.6	58
Year 1 of Cycle Track (2015)	6	11	12	43	72
Year 2 of Cycle Track (2016)	6	11	9	39	65

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Year 3 of	4	24	8	46	82
Cycle Track					
(2017)					

Hamilton Fire, Police Services and Paramedics

Consultation with staff has not identified any major concerns related to the operations of emergency services along the corridor. Traffic staff has worked in partnership with Hamilton Police Services to address enforcement and community education.

## Rapid Transit/ LRT Planning

The modelling of auto traffic patterns as part of the LRT analysis incorporated the Cannon Cycle Track as part of the future street network. The analysis confirmed that future diverted traffic volumes will operate acceptably with the continuation of the Cannon Cycle Track. Auto traffic volume increases are forecasted to be modest along Cannon Street between Victoria Avenue and Bay Street.

## Community Feedback

The City has received over 200 submissions related to the installation of the Cannon Cycle Track. About 50% of this feedback was received within the first few months of the pilot project and 20% of this initial feedback was negative. As the three-year pilot period for the project approached, the cycling community forwarded a lot of positive feedback including general comments describing the improved feel of Cannon Street for pedestrians and residents, to encourage the City to make the facility permanent.

#### External Interest in the Cannon Cycle Track Pilot

The Cannon Cycle Track was a subject of interest beyond Hamilton, with communities including Ottawa, Burlington, Waterloo Region, Peterborough, Bellingham (Washington) Boston (Massachusetts), Rochester (New York), and Toronto seeking information on the project.

#### Conclusion

Overall; through observation, facility usage, data collection, and user feedback; the installation of the Cannon Street Cycle Track has had a positive impact on the community and aligns with the Strategic Priorities established by City Council. As a result of the evaluation of the data and through observations and bicycle counts, the Bidirectional Cycle Track Pilot Project is considered a success.

## **ALTERNATIVES FOR CONSIDERATION**

Council could choose to remove the bicycle lanes from Cannon Street; however this would create a significant gap in the east-west cycling connectivity in the lower city. Council could also choose to relocate the bicycle lanes to a different street, but alternatives have barriers including parking and traffic volume concerns and concerns regarding safety and network connectivity.

#### **ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

## **Healthy and Safe Communities**

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

## **Clean and Green**

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

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

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

## APPENDICES AND SCHEDULES ATTACHED

N/A

DB:jp