

**Date:** 2023-02-15

**Subject:** **Recording of Traffic Cameras at Intersections (RM 58/2022)**

**Contact:** Shane Loftus, Manager, Transportation Right of Way & Safety,  
Road Maintenance, Operations and Fleet, Public Works and  
Engineering Department

**Report Number:** Public Works & Engineering-2023-202

**Recommendations:**

1. That the report from Shane Loftus, Manager, Transportation Right of Way & Safety, Road Maintenance, Operations and Fleet to the Committee of Council Meeting of February 22, 2023 re: **Recording of Traffic Cameras at Intersections** be received.

**Overview:**

- **A recommendation of the Committee of Council Meeting of December 7, 2022 was approved by Council on December 14, 2022: RM: 58/2022**
- **That staff be requested to report on options and costs with regard to use of traffic cameras for accident investigations and careless driving deterrence**

**Background:**

Historically the cameras at City of Brampton traffic intersections are used by the City of Brampton Traffic Service Management department to view current traffic, and road conditions.

The ability to record video feeds from traffic detection equipment has previously been tabled, but was not implemented due to concerns over privacy and risk.

Since this time, other municipalities have engaged in recording of intersection cameras for the aide of investigating intersection collisions. With the increase in serious collisions at select intersections within the City of Brampton, this recommendation for staff to report back on options and costs was approved by Council.

### **Current Situation:**

There are currently twenty (20) traffic camera devices deployed across the City. These devices are Pan, Tilt and Zoom (PTZ) cameras, currently running on Digital Video Recording (DVR) devices, residing within Security Services, without hard drives for recording installed.

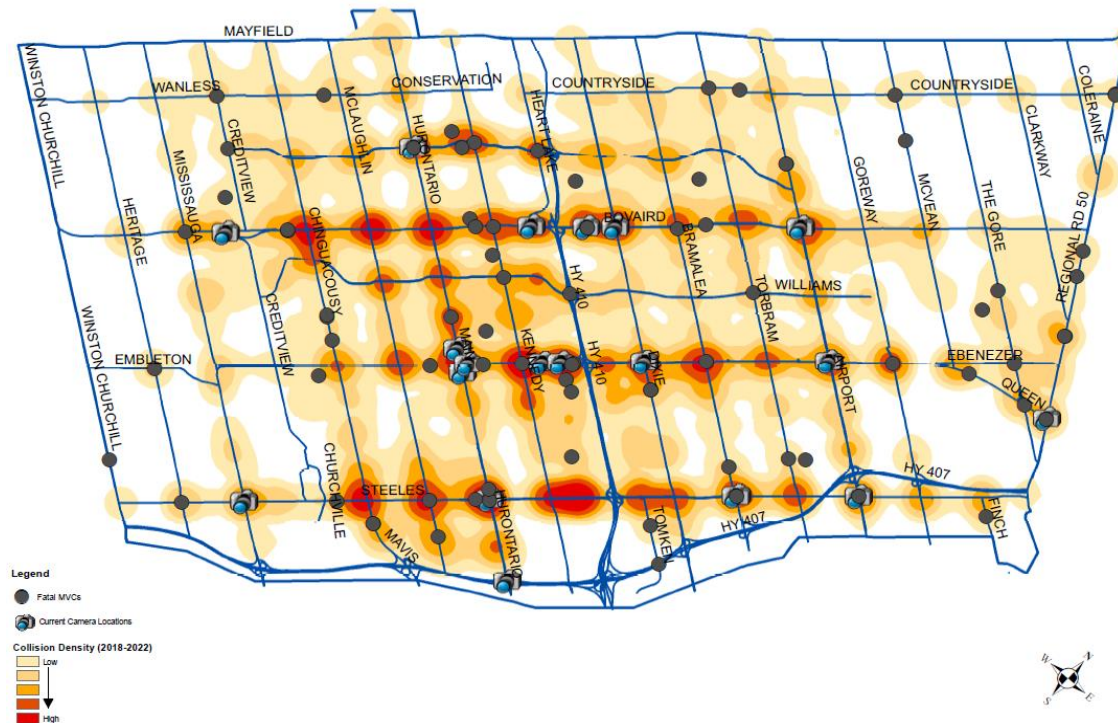
The current PTZ cameras deployed within the City are not ideal for investigative purposes and would require replacement with 360 degree fixed cameras to suit both the needs of Traffic Management (traffic condition monitoring) as well as Security (accident investigation). If agreeable, the replacement of cameras (and the potential deployment to new intersections) will be procured using a public procurement process.

Once the existing cameras have been converted to 360 degree cameras, DVR equipment upgraded and hard drives installed, the cameras would be able to provide basic investigatory capabilities. Please see Section 4. Recording of Traffic Cameras Impact on Security Services report for further details (Attachment 1).

Peel Regional Police (PRP) have furnished a list of the Top twenty (20) incident related intersections that the City could deploy equipment in an additional future phase (Option 1 Extended) by analyzing collision data.

The below graphic indicates the current location of traffic cameras as well as a heat map from collision related data.

Fatal Collisions and Collision Hotspots in Brampton (2018-2022)



Additional intersections over and above these could be determined on an annual basis in consultation between Peel Regional Police, Traffic Operations and Security Services.

## Cost Estimates:

### Option 1:

The estimated start-up costs for year one to only upgrade the existing twenty (20) camera locations, recording equipment and add additional staffing would be approximately \$760,000 combined Capital and Operating.

New employees (1 x Tech + 2 x Video reviewer) (Table 2 + Table 3)	\$419,000
Hardware and software (Table 4)	\$297,500
Contingency	\$43,500
<b>Total estimated program start-up cost</b>	<b>\$760,000</b>

### Option 1 Extended:

This option would include the conversion of the existing cameras (Option 1) as well as the addition of the top twenty (20) locations as identified by PRP based on collision data. The estimated cost for the extended option would be approximately \$1,036,825.

Description	Unit Cost	Qty.	Extended
<b>Start-Up Costs (Existing Cameras)</b>			
Start-Up Cost Sub-Total (Estimated)			\$760,000
<b>Camera Package (20 PRP Locations)</b>			
Cameras	\$5,000	20	\$100,000
Third Party Contractor Installation (Cameras and Related Infrastructure)	\$5,000	20	\$100,000
15% Contingency	\$750	20	\$15,000
Camera Package Sub-Total (Estimated)			\$215,000
<b>DVR Package (20 PRP Locations)</b>			
Digital Video Recorders	\$25,500	2	\$51,000
DVR Racks (half rack with UPS and network switch)	\$5,000	1	\$5,000
Installation	\$2,000	1	\$2,000
15% Contingency	\$3,825	1	\$3,825
DVR Package Sub-Total (Estimated)			\$61,825
<b>Estimated Total</b>			<b>\$1,036,825</b>

The above options can be subdivided into three (3) phases:

Year 1: Replace existing Cameras/Equipment, hire/train additional staff

Year 2: Install equipment at top ten (10) intersection locations as identified by PRP

Year 3: Install equipment at second ten (10) intersection locations as identified by PRP

### **Corporate Implications:**

### Financial Implications:

Staff estimate that funding of approximately \$760,000 would be required under Option 1 for start-up operating and capital costs to upgrade the cameras, recording equipment and add additional staffing to operate, maintain and coordinate/report back on Freedom of Information (FOI) requests.

An additional funding of approximately \$277,000 would be required if Option 1 is extended to include Top twenty (20) intersections identified by Peel Regional Police.

The table below summarizes the estimated costs for Option 1 and Option 1 Extended:

<b>Costs</b>	<b>Option 1</b>	<b>Option 1 Extended</b>	<b>Comments</b>
Labour Costs	\$319,000	\$0	Three FTE's
Operating Costs	\$14,000	\$0	Cell Phones, Training, PPE
Capital Costs	\$427,000	\$277,000	Option 1 - Desktop PC, Tools, Laptop, Vehicle, Cameras and Digital Video Recorders. Option 1 Extended - Cameras and Digital Video Recorders.
<b>Total</b>	<b>\$760,000</b>	<b>\$277,000</b>	

Total required funding for Option 1 and Option 1 Extended adds to approximately \$1,037,000.

#### Other Implications:

#### FOI Requests:

With the addition of recording capabilities, it is anticipated that the number of FOI requests from PRP and the general public will be significantly higher than the actual number of collisions and police incidents at intersections. Because of this, it is recommended that Security Services receive and process these requests directly.

#### Privacy:

There are significant personal privacy concerns with implementation of general video surveillance and recording systems. A Privacy Impact Assessment will be required for any proposed program regarding the collection, retention, use and disclosure of personal information. Although in the public realm, it would need to be determined what type and location of signage would be required (if required) to notify the public that the intersections are being recorded and for what purpose. Additionally, measures would need to be taken to blur/block/conceal private information that does not pertain to the specific request before any disclosure could take place.

#### Legal:

There will be legal considerations for recording and disclosure that need to be considered before implementing the program. Legal Services, including the Prosecutions group, will be required by law to provide disclosure of the recordings in certain circumstances. Processes for provision of disclosure of information are currently in place, however it is unknown at this time the extent to which this will impact staff resources.

#### **Conclusion:**

The identified monetary amount of \$1,036,825 be allocated to upgrade the existing twenty (20) camera locations to allow for video recording as well as add the top twenty

(20) intersections identified by Peel Regional Police for a total of forty (40) recorded intersection locations.

Once the initial cameras are installed and operational, staff can re-evaluate their effect and determine whether expansion to additional intersections is cost effective.

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Chief Administrative Officer

Attachment 1: Recording of Traffic Cameras Impact on Security Services