

# Presentation to Infrastructure, Investment and Development Services - Red Signal/Light Camera Investigation

PRESENTED BY

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June 8, 2016



# Why are we here?

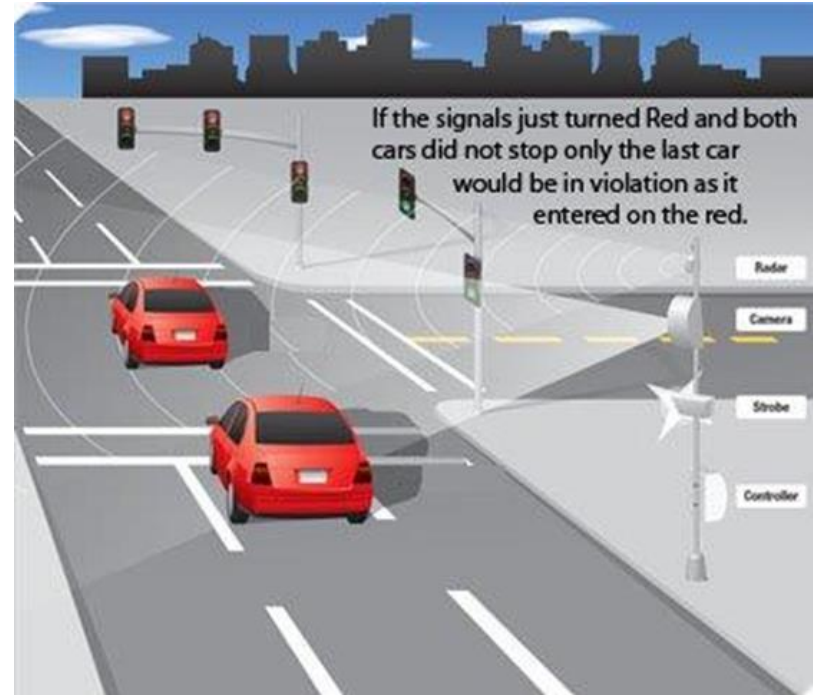
In 2015, Council approved motion 15-G-202

## **INVESTIGATION OF THE FEASIBILITY OF IMPLEMENTING RED LIGHT CAMERAS**

That staff in the Roads, Parks and Fleet Department in consultation with representatives of the Barrie Police Service and Legislative and Court Services Department report to General Committee on the feasibility of implementing red light cameras effective January 2017

# What is a red light running violation?

- Occurs when a driver enters an intersection after the light has turned red.
- Vehicle travelling a min. of 27 km/hr for a violation to be issued
- No matter who was driving, licence plate holder receives ticket
- Does not distinguish emergency vehicles, parades, funeral processions



# What is the goal of a RLC Program?

- Improve driver and pedestrian safety by reducing the # of right angle (T-bone) collisions at intersections (by approx. 25%)
- Right angle collisions often most severe - result in a side impact to a vehicle from the vehicle travelling quickly and colliding with another vehicle or pedestrian
- Does increase # of rear-end collisions at least initially (by approx. 15%) – less severe type of collision
- Engineering alternatives should be checked first - more immediate and may be simpler and easier to implement than cameras

# Steps required to implement RLCs

1. Receive initial approval from Council and write to Minister requesting to participate in RLC program
2. Develop a business case, conduct traffic studies to determine site locations and report back to Council
3. Obtain approval from Council for the funding and to enter into agreements (MTO, JPC and camera vendor)
4. Request to be added as RLC program participant - obtain confirmation
5. Execute agreement with Toronto Joint Processing Centre for processing violations
6. Enter into agreement with camera vendor for hardware, installation and maintenance + confirm site suitability

# Steps required to implement RLCs

7. Sign agreement with MTO with commitment to undertake public info campaign
8. MTO initiates process to amend HTA Reg as RLC participant
9. Cameras installed by vendor + location specific upgrades completed
10. Notify MAG to ensure access for registering violations + JP availability
11. Implement public information campaign
12. Administer and train court staff on infraction notices related to RLC convictions

Anticipate up to 24 months or longer to complete. Will be required to provide regular + on-going reporting

# Barrie Collision Information

- Approx. 2,000 collisions annually in Barrie
- On avg. 75 result in charge associated with running a red signal (3.75%)
- 2015 - 2,582 collisions involving 5,500 people – 91 charges typically associated with running a red signal (3%)
- Of the 91:
  - No fatalities, major personal injuries , 6 minor personal injuries and 9 minimal personal injuries
  - 16 minor/minimal damage to vehicles
- No fatalities associated with the right angle collisions in 2013 or 2014

# Intersections with collisions

- Traffic staff studied 13 intersections in Jan and Feb/16
- Intersections chosen based on collision history, intersection characteristics and traffic patterns
- Traffic movements recorded at intersection on 1 day during peak hours (7:30 – 8:30 am and 4:30 – 5:30 pm)
- Red signal running observed during each hour and for each direction recorded



# Intersection Observations

Intersection	Red Signal Running	Intersection	Red Signal Running
Mapleview + Veterans	max 3 in any direction	Ferndale + Livingstone	max 2 in any direction
Bayfield + Hanmer	max 3 in any direction	Huronia + McKay	max 2 in any direction
Fairview + Essa	max 3 in any direction	Dunlop + Miller	max 1 in any direction
Mapleview + Yonge	max 3 in any direction	St Vincent + Hanmer	1 NB in AM
Mapleview @ Costco	max 2 in any direction	Dunlop + High	1 EB in PM
Bayfield + Heather	max 3 in any direction	Ferndale @ Ops Centre	0
Big Bay Point + Yonge	max 1 in any direction		

# Cost to implement

- 5 year lease of cameras
- Min # of cameras required (approx. 10 cameras)
- 1 camera/1 direction only, max. 2 lanes covered
- Processing fee based on # of cameras + proportionate share of total charges
- Fee from MTO for plate info
- Additional staff resources
- Communications strategy
- Based on various reports, the operating cost of a RLC program with 10 cameras is in the range of \$520,000 - \$600,000 annually (not including staff resources)

# Staff Resources

- RLC Program has Mgt committee with 6 dedicated specialist subcommittees – all participants expected to contribute to committees
- Requires dedicated time for the project
- Some municipalities develop internal teams:
  - Traffic: (est. 3-6 person months of effort prior to project start up and ongoing for a Project Mgr alone) + day to day billing, submit reports, interface with traffic signal equipment, inspect installations
  - Legal + Purchasing – procurement and agreements
  - Finance – establish cost centres, reserves if appropriate,
  - Communications – RLC education program
  - Prosecution, Court Administration – administer and prosecute charges and trial activities, fine payments, collection activities
  - Police consultation

# Penalty and revenues

- Fine - \$325 no demerit points by RLC, Province receives \$60 of \$325 in Victim Fine Surcharge
- Remaining revenue – **if and when paid**, subject to cost sharing arrangement
- Toronto – only 34% paying without disputing charge or other process, 45% dispute charge, 21% fail to respond
- At trial, 75% conviction rate – majority resolved on trial date, likely reduced fine amount applied
- Could take several years to recover initial set up costs
- Revenues difficult to predict + excess revenues not a certainty (if red light running decrease due to cameras, revenues reduced over time)

# Potential Revenue Scenarios

A number of assumptions utilized to develop the following scenarios:

	<u>Scenario #1</u> 2 violations per day from 8 of 10 cameras	<u>Scenario #2</u> 2 violations per day from each of the 10 cameras	<u>Scenario #3</u> 5 violations per day from 8 of 10 cameras	<u>Scenario #4</u> 5 violations per day from each of the 10 cameras
Potential Revenues	\$ 594,000	\$ 742,337	\$ 1,499,274	\$ 1,855,842

Note: Revenues associated with disputed convictions and where a defendant has failed to respond may take over a year (or longer) to be collected.

# Barrie Police Service

Oct 2014

- Supports use of any options that will enhance road safety
- City responsibility to implement and manage
- Many of the municipalities involved have indicated collisions and injuries reduced at RLC intersections
- No empirical data to suggest that Barrie needs RLC
- RLCs do not prevent or reduce risk of other serious collisions, not a substitute for on-site police enforcement

# Barrie Police Service

May 2016

- Agreed that #s are not there to build a case to implement the program
- Other alternatives – BPS prefers to have Officers on potential scenes as they get all directions and all offenses (not just RLC) – don't believe additional resources will be required

# Conclusion

- Less than 5% of collision experience results in charges related to red light running – therefore limited safety benefit
- Expensive to initiate – pay whether or not there are violations – may take years to recoup the initial costs
- Other traffic safety initiatives may be more effective and less costly – traffic operations/engineering solutions, road diets, monthly enforcement blitz, public education, etc.



# Questions/comments