

VISIONZERO



RED LIGHT CAMERA AND OPPORTUNITY FOR SPEED ENFORCEMENT

Canadian Association of Road Safety Professionals

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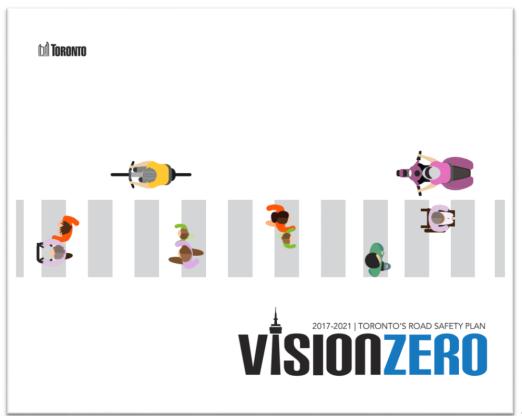
OVERVIEW OF THE VISION ZERO ROAD SAFETY PLAN IN THE CONTEXT OF AUTOMATED ENFORCEMENT

Vision Zero: Toronto's Road Safety Plan CITY OF TORONTO

VISION ZERO ROAD SAFETY PLAN

• A five year \$80M plan to reduce the number of traffic-related deaths and serious injuries on Toronto's roads

- 45 Countermeasures associated with each Emphasis Area to be implemented over the 5 year plan
- Unanimously approved by Toronto City Council, July 2016



HOW WILL WE ACHIEVE VISION ZERO?



EngineeringSafety Measures



EducationSafety Measures



EvaluationSafety Measures



TechnologicalSafety Measures



EnforcementActivities



EngagementActivities

RED LIGHT CAMERA PROGRAM

WHAT IS RED LIGHT CAMERA?

- Car runs red light at signalized intersection
- Camera automatically takes picture
- Owner of the vehicle receives ticket
- Purpose to reduce instances of "Angle Collisions"
- Angle Collisions being most severe often resulting in fatality



ONTARIO RED LIGHT CAMERA HISTORY

- In December 1998, the provincial government enacted Bill 102, Red Light Cameras Pilot Projects Act
- In August 2004, the province passed legislation allowing the six municipalities to operate red light cameras indefinitely
- In January 2010, the Province of Ontario increased the fine for red light running from \$180.00 to \$325.00, recognizing that seriousness and often fatal consequences of red light running

PARTNERING MUNICIPALITIES

Program now expanded to eight municipalities beginning in 2017

















- Currently there are 205 intersections in operation around the province
 - 77 of which are in Toronto
 - Toronto program to be expanded to nearly 150 sites by the end of 2017

Vision Zero: Toronto's Road Safety Plan CITY OF TORONTO

PROGRAM MANAGEMENT



- Ministry of Transportation
 Program regulated by MTO
 License plate ownership information provided to municipalities under contract with MTO



Red Light Camera Contractor

Red Light Cameras are rented from a vendor who maintains and transfers the data



City of Toronto Joint Processing Centre (JPC)

Evidence is processed by Provincial Offence Officers



Court Services

- Charges filed in municipally operated courts Court challenges managed by municipally operated courts
- Fines collected by municipally operated courts

RED LIGHT CAMERA OPERATION

MANAGING THE PROGRAM

- Traffic Safety Unit's primary purpose is to administer the Vision Zero Road Safety Plan (RSP) for the City of Toronto
- Critical aspect of the RSP lies in automated enforcement

TRAFFIC SAFETY UNIT

Road Safety Planning

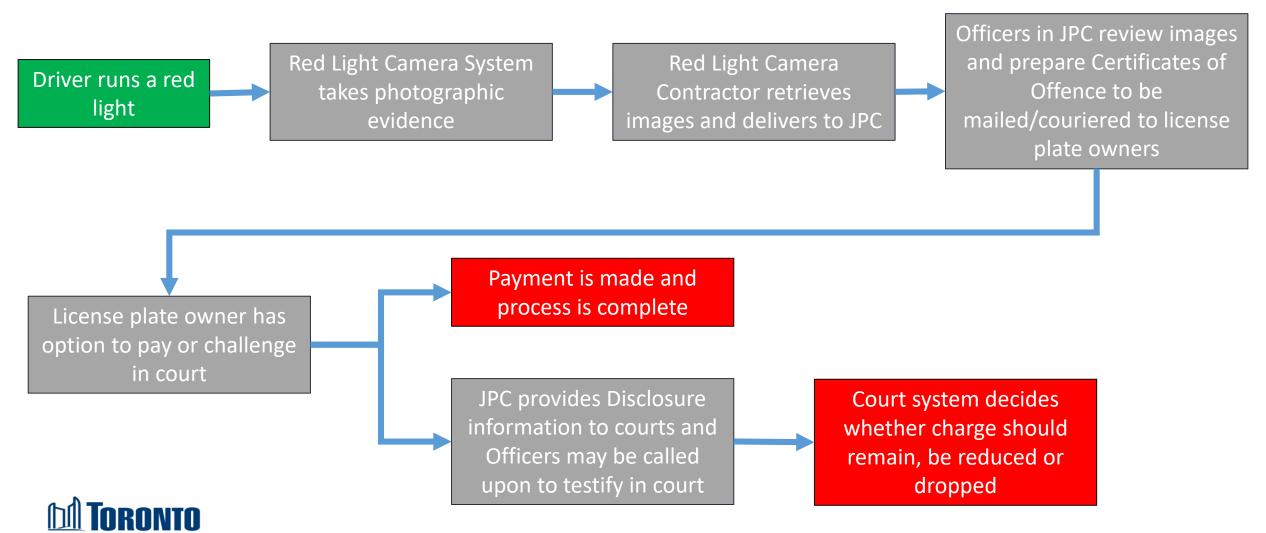
Road Safety Delivery

Big Data Innovations,
Data Collection,
Validation, Evaluation
and Reporting

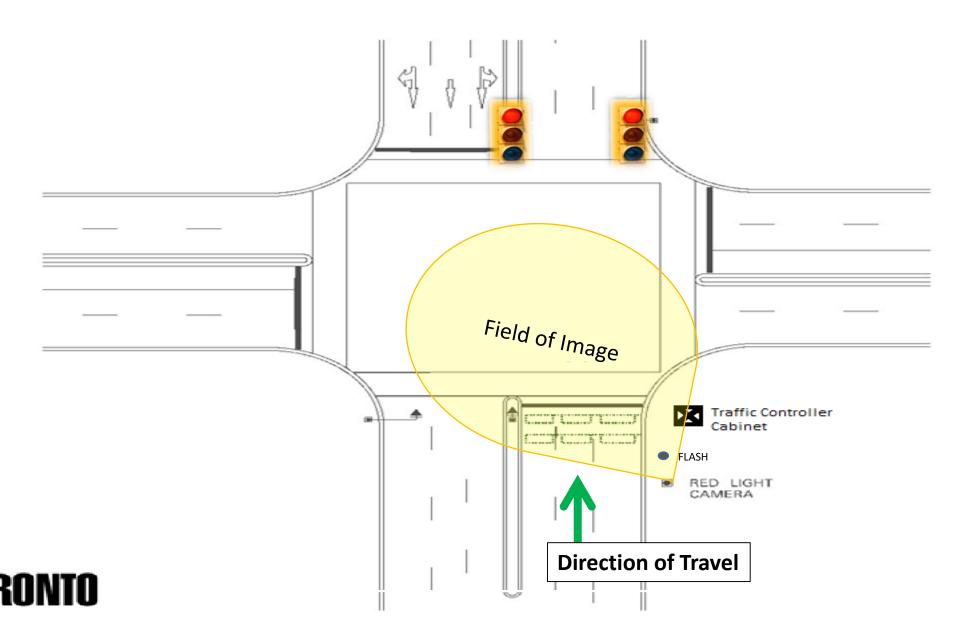
Automated Enforcement Joint Processing Centre



OVERALL PROCESS - CONTINUITY OF EVIDENCE



RED LIGHT CAMERA - TYPICAL LAYOUT



CONTINUITY OF EVIDENCE

- Critical to maintain continuity of evidence
- Images captured from camera on USB memory stick
- USB memory stick with images hand-delivered by Contractor to the Joint Processing Centre in a locked collection box
- Charged mailed directly to license plate owners
- Disclosure packages hand delivered to municipalities
- Single point of contact with municipalities

TECHNOLOGY

- The exact Red Light Camera technology in terms of make and model number is specified in the regulation
- Ensures consistency between the various municipalities in operation



Only specific make and model found in Provincial regulations may be used

IMAGE PRIVACY

The RLC system takes images of the license plate from the back of the vehicle

Ensures privacy for the driver

Legislation is set such that the "owner" of the vehicle is charged and not the driver at

the time

Owner is fined but, no loss of points



Image taken of back of license plate only; owner of vehicle charged

USE OF STATIC SIGNS

- The Ministry of Transportation requires that static signs be installed on all four approaches of an intersection with a Red Light Camera
- Raises awareness and helps to solidify argument regarding the motorist running the red light



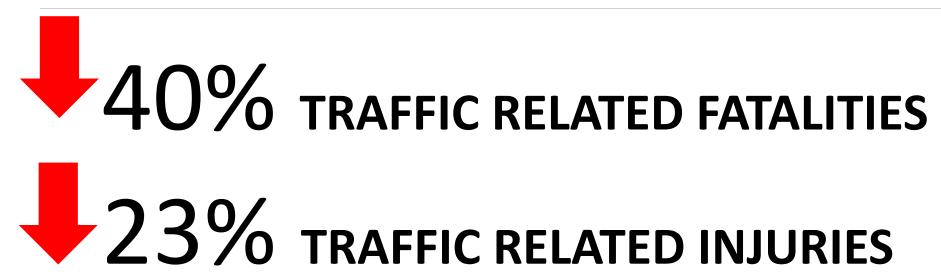
Static signs installed on all four approaches to the Red Light Camera intersection

BENEFITS OF RED LIGHT CAMERA PROGRAM AND LESSONS LEARNED

KEY PERFORMANCE INDICATORS

- Number of charges really not the best indicator:
 - Number of charges laid at a particular site can vary significantly from year-to-year because:
 - Toronto a highly dynamic city whereby any number of changes or events can dramatically increase or decrease the number of people violating
 - Construction and partial decommissioning of sites can occur during the year
 - Construction within the area resulting in temporarily less violations
- As per the Vision Zero Road Safety Plan prefer to look at:
 - Change in Fatal Collisions
 - Change in Injury Collisions
 - Change in Angle Collisions Overall

RED LIGHT CAMERA IS A HIGHLY EFFECTIVE COUNTERMEASURE IN TORONTO



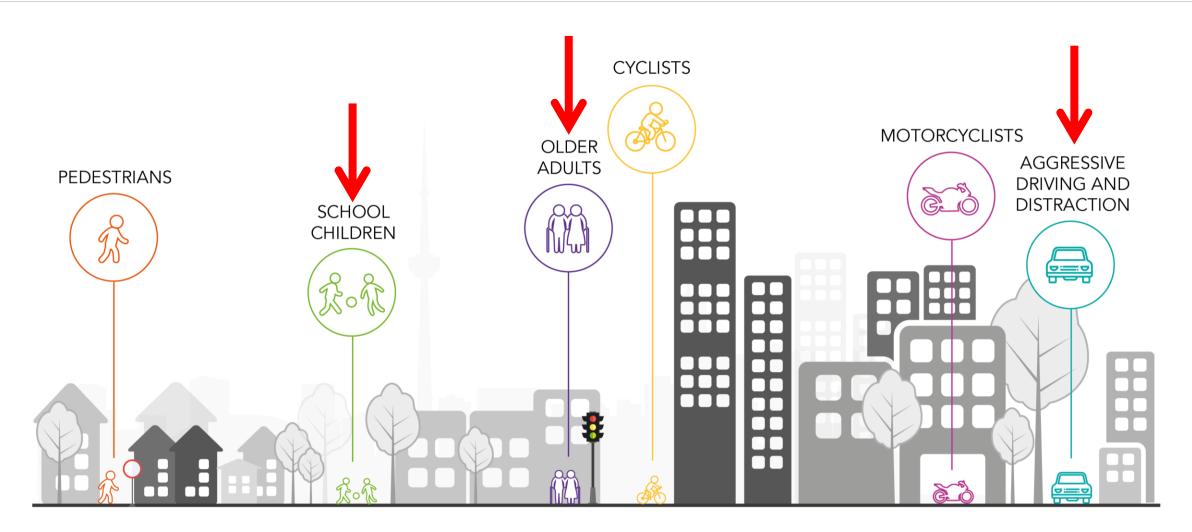
DOUBLE-DIGIT REDUCTIONS IN ANGLE COLLISIONS

OPPORTUNITY FOR AUTOMATED SPEED ENFORCEMENT IN ONTARIO

SAFER SCHOOL ZONES ACT, 2017 – AUTOMATED SPEED ENFORCEMENT

- On May 30, 2017 the Province of Ontario passed Bill 65, Safer School Zones Act, 2017 that essentially amends the Highway Traffic Act:
 - It addresses the ability of municipalities to set speed limits within their borders and the use of automated speed enforcement systems and red light camera systems.
 - Enables the reintroduction of automated speed enforcement in School Zones and in Community Safety Zones where the speed is below 80km/hr
 - Removes the restriction in subsection 205.15 (1) that red light camera systems may be used only in areas of the province designated by regulation.

OPPORTUNITIES FOR AUTOMATED SPEED ENFORCEMENT



SCHOOL CHILDREN: SCHOOL SAFETY ZONES - ENGINEERING AND ENFORCEMENT



New Rapid Flashing Beacons at Crosswalks



Watch Your Speed Driver Feedback Signs



Designation as Community
Safety Zones



Speed Reductions



School Stencil Pavement Markings



Enhanced Pedestrian Crosswalk Markings



Automated Speed Enforcement (FUTURE)



OLDER ADULTS: SENIOR SAFETY ZONES - ENGINEERING AND ENFORCEMENT



New Seniors Safety Zone "Drive Slowly" Signs at Entry Points



Watch Your Speed Driver Feedback Signs



Designation as Community Safety Zones



Speed Reductions



Enhanced Pedestrian Crosswalk Markings



Consideration for No Right Turn on Red



Increased Pedestrian Walk
Times and Advanced Green for
Pedestrians



Automated Speed Enforcement (FUTURE)



AGGRESSIVE DRIVING AND DISTRACTION - ENGINEERING AND ENFORCEMENT



Mobile Watch Your Speed Driver Feedback Sign Strategy



Red Light Cameras



Data Driven Enforcement



Automated Speed Enforcement (FUTURE)



New Distraction Educational Campaign

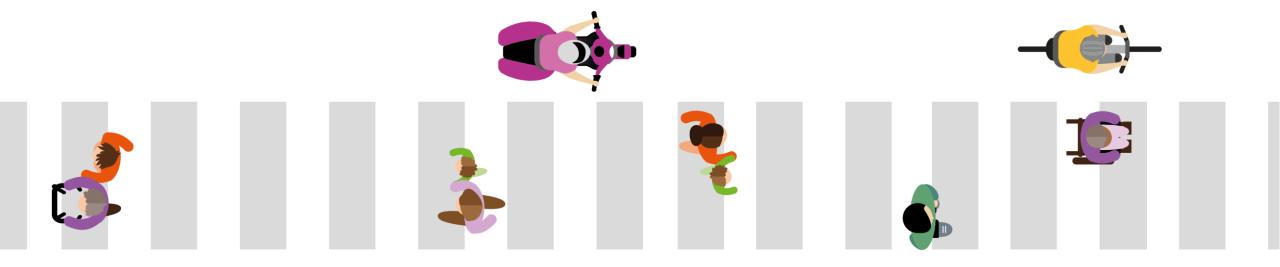
LESSONS LEARNED

LESSONS LEARNED

Success of the program stems primarily because of the integrity of the program:

- Consistency
 - Equipment used
 - How potential charges are reviewed and laid
- Continuity of evidence
 - No ability through the process for tampering
- Benefits of having a single Joint Processing Centre
 - Cost sharing
 - Consistency/Continuity of evidence
 - Allows partnering municipalities to focus on site selection

QUESTIONS?



VISIONZERO