



Challenge: Reduce red light running collisions and the resulting injuries, deaths and damages

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Red light running (RLR) is a serious issue in our community. During the past 5 years, there was an average of 68 right-angle (T-bone/side-on) collisions per year at signalized intersections in Kingston. 35% involved serious injuries and fatalities. Injuries from T-bone collisions are amongst the most severe of all vehicle collisions, and include drivers, motorcyclists, pedestrians, bicyclists, and passengers in other vehicles who were hit by red light runners.

Increasingly, residents of Kingston are voicing their concern and seeking ways to improve road safety. The proposed red light camera (RLC) program is one tool in the Vision Zero Kingston Road Safety toolkit to help address some of the more dangerous intersections now. Work would continue to put in place long term sustainable methods, such as engineering works and effective speed reduction through road design, to make roads safer for everyone.

Direct costs

- severe human injuries and fatalities
- severe vehicle and property damage

Indirect costs

- ongoing medical expenses, increased insurance costs, and loss of income, productivity and quality of life during recovery of those injured
- demand for first responders (e.g. emergency services including ambulance, fire, police, and “Jaws of Life”)
- post collision traffic delays, including rerouting of public transit and commercial vehicles

RLC are used world-wide and across Canada. Canadian and international experience, since cameras were first developed and introduced in the Netherlands in the 1960's, consistently shows that RLC can provide a safety benefit with a significant reduction in collisions, injuries and fatalities at intersections. RLC programs have strong support from law enforcement, transportation and community leaders world-wide, and are considered a road safety best practice.

RLC have been operating in Ontario since 2000 and have been installed in Toronto, Ottawa, Hamilton, Waterloo, Peel, Halton, York, and London. The results in Ontario municipalities show that in Kingston it can be expected that RLR collisions be reduced by a minimum of 25%. Many have experienced at least a 50% reduction. York installed red light cameras in 2013, where the number of right-angle collisions was reduced from 71 per year to 20 per year, a 70% decrease.

Further evidence of their effectiveness can be seen where camera programs have been discontinued, crash rates go up. In 14 US cities that shut down their programs during 2010-14, (largely due to driver push back) the fatal red light running crash rate was 30 percent higher than would have been expected if they had left the cameras on. The rate of fatal crashes at signalized intersections was 16 percent higher.

The estimated cost to operate the proposed program is approximately \$53,000 per camera per year. Based on a program with 10 cameras, the estimated total cost is \$530,000 per year. An average of one violation per camera per day is required to cover all costs to operate a red light program. In Ontario, the set fine for running a red light is currently \$325. This charge includes \$260 that would be forwarded to the City of Kingston, a \$60 victim surcharge for the Ministry of Transportation Ontario and a \$5 court cost for the local provincial court.

What is the cost of injuries? The cost of a life? Hard to put estimates on that.

It is common for RLC programs to see an initial surge in fines in the first year as drivers adapt to the RLC. However, after the initial year, most cities have experienced a steady decline in fines as the RLR behaviour diminishes over time, towards a steady state of revenue neutrality. To date all of the cities who participate in the Ontario program have continued to collect sufficient revenue to cover costs for the program. It is common practice in Ontario and other jurisdictions for surplus funds to be used on road safety programs such as road design changes, enhanced public education campaigns and community grants. KCAT strongly endorses the use of surplus funds from the Kingston RLC program be used in this manner.