

----- Original message -----

From: Edward Tiedje <etiedje@redflex.com>

Date: 09/11/2017 9:24 AM (GMT-07:00)

To: Dan Goldberg <dgoldberg@cosb.org>, Keith Underwood <kunderwood@redflex.com>

Cc: Mo Sammak <msammak@cosb.org>

Subject: RE: Eight more years of red light cams in Solana Beach? (Sept. 12 agenda item.)

Dan,

Below is what I found in reference to L's comments.

Right Turns

- While the 2016 percentage of issued Right Turn citations L's mentions is correct, he leaves out some important data
 - While 1465 right turn citations were issued in 2016, an additional 1191 captured right turn incidents were rejected by the PD.
 - The PD rejected 45% of the right turn incidents captured by the system as they felt the violation was not egregious enough to warrant a citation.
 - The PD rejecting 45% of right turns does not appear to support L's theory of issuing rolling right turns.

Volume

- L mentions that incident volume is not decreasing and is actually increasing. Lystner fails to take into account the change in traffic volume.
 - June 2015-May 2016 6.3 million vehicles crossed the Redflex sensors resulting in 3042 citations
 - June 2016-May 2017 7.1 million vehicles crossed the Redflex sensors resulting in 3337 citations
 - **Traffic increased 12.69% and citations increased 9.69%**
 - Jan 2016-Aug 2016 4.1 million vehicles crossed the Redflex sensors resulting in 2330 citations
 - Jan 2017-Aug 2017 6.2 million vehicles crossed the Redflex sensors resulting in 2281 citations
 - **Traffic increased 51% and citations decreased 2.1%**

Pricing

- L mentions Del Mar and Elk Grove pricing but leaves out some important points.
 - The Elk Grove contract calls for no upgrades or changes to equipment
 - Elk Grove has outdated camera equipment resulting in 81% of incidents captured being rejected while Solana Beach averages 46% rejected.
 - The 35% difference in usable incidents is due to constant free upgrades provided to Solana Beach such as HD video and higher grade cameras.
- Redflex bases its pricing on several factors with incident volume being one of them.
 - Solana Beach averages twice the volume of incidents per approach vs. Del Mar.
 - Each incident is reviewed by 3 employees which leads to higher costs

- o Each approved incident also leads to printing and mailing costs
- o Higher incident volume results in additional wear and tear on the approach equipment which is replaced at Redflex's expense as it wears out.

I have attached an informational sheet which includes some recent positive articles reference photo enforcement and its effectiveness. We can discuss these items on the 1:30 call if, talk to you then.



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From: Dan Goldberg [dgoldberg@cosb.org]
Sent: Monday, September 11, 2017 7:53 AM
To: Keith Underwood; Edward Tiedje
Cc: Mo Sammak
Subject: FW: Eight more years of red light cams in Solana Beach? (Sept. 12 agenda item.)

Keith/Ed,

Below and attached is information from L regarding the proposed new contract for the city's red light camera program with Redflex that is scheduled to be considered by the City Council at the Council meeting on Tuesday September 12 (tomorrow). Once you have reviewed it, please contact me to arrange a conference call to discuss the information in the e-mail. Since the Council meeting is tomorrow, we need to get this arranged fairly quickly. If possible, it would be best to have the conference call sometime today. Please let me know what works best for you. Thanks.

Dan Goldberg

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Please consider the environment before printing this e-mail

September 11, 2017

Subject: Information Supporting Red Light Camera Enforcement

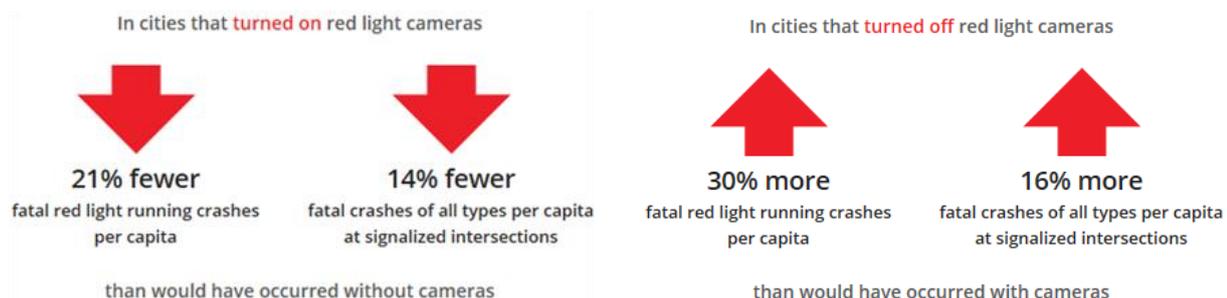
Dear Dan Goldberg,

There are numerous studies conducted to support the use of red light cameras that date back to the 1990's. I have compiled information below:

The Insurance Institute for Highway Safety published a report in July 2016. (Attached). This extensive study used a more rigorous methodology that accounted for trends in fatal crash rates over time within cities and unemployment rates, and by including four times as many cities with red light cameras as in the original study (Hu et al. 2011). The study discovered compelling data that supports the use of red light Cameras:

During 2014:

- Police reported more than 2.5 million collisions (43% of reported collisions) in the United States occurred at intersections
- Police reported 55,000 serious injuries and 7,697 deaths
- 709 people were killed and estimated 126,000 people injured in red-light running collisions
- More than half of the persons killed were pedestrians, bicyclists, or occupants of vehicles struck by red-light runners
- During this study 117 cities were studied
 - 57 cities turned on red-light cameras during 1992 and 2014
 - 38 cities had no cameras during the time period
 - 20 cities turned on and later turned off red-light cameras
 - 2 cities that turned off cameras and later turned them on



In November 2016 The Insurance Institute for Highway Safety published a response to critics of the above mentioned study. (Attached). The response provided research-based responses that counter the following claims made by some individuals:

- Automated enforcement does not change driver behavior
- Automated enforcement does not prevent crashes
- There are better ways to reduce violation rates
- Strict enforcement targets relatively good drivers rather than the few dangerous drivers
- The equipment used may not be reliable

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- Alleged violators are not promptly notified
 - Driver are unaware of increased enforcement
 - Automated enforcement is motivated by revenue generation rather than safety
 - Automated enforcement locations are chosen so as to maximize violation rates
 - Automated enforcement is unfair

In December 2016 the National Highway Traffic Safety Administration Strategic Plan for 2016-2020 included a plan to encourage High Visibility Law Enforcement. Although not specifically naming red light cameras, the plan states, "Research has consistently demonstrated that highly visible enforcement, and integration of traffic enforcement into routine operations, results in reductions of crashes, fatalities and serious injuries." The plan continues, "Place-based and data-driven enforcement operations further enhances law enforcement's ability to focus limited resources where they can have the greatest impact for improving safety outcomes."

- California Red Light Camera Programs are highly visible. The cameras and warning signs posted within 200' of the enforced approach are highly visible. The enforcement locations have been picked by Police Departments after careful analysis of several intersections.

<https://www.nhtsa.gov/press-releases/traveling-three-lanes-road-zero>

In November 2016 the Washington Post published an article regarding the number one killer of children in the United States; preventable childhood injury. During the American Academy of Pediatrics October 2016 National Conference & Exhibition in San Francisco, a correlation between rising child traffic fatalities and weak red-light camera enforcement laws was found during a study of the 2010-2014 National Highway Traffic Safety Administration crash data.

https://www.washingtonpost.com/news/tripping/wp/2016/11/04/red-light-cameras-save-childrens-lives-study-finds/?utm_term=.912ebd2411e5

In August 2016 the White House, Department of Transportation, and NHTSA issued a call to action because the nation lost 35,092 people in traffic crashes in 2015. This ended a 5-decade trend of declining fatalities. They reported a 7.2% increase in deaths from 2014. Pedestrian and pedalcyclist fatalities climbed to a level not seen in 20 years. The call to action was to involve a wide range of stakeholders in helping to determine the cause, including using data collection technologies. Dr. Mark Rosekind, National Highway Traffic Safety Administration (NHTSA) Administrator, was quoted as saying, "While there have been enormous improvements in many of these areas, we need to find new solutions to end traffic fatalities."

<https://www.nhtsa.gov/press-releases/traffic-fatalities-sharply-2015>

In January 2015, the Foundation for Traffic Safety published their 2014 Traffic Safety Culture Index. During polling 9,927 respondents participated (548 from California). The results revealed:

- More than 5 in 6 drivers supported their state adopting a vision to reduce traffic fatalities to zero
- 83.8% of drivers rated running a red light as either a very serious or somewhat serious threat
- 94% considered it unacceptable to run a red light when the driver could have stopped
- 72.7% considered it completely unacceptable to run a red light when the driver could have stopped
- 84.1% said that most other people where they lived considered it unacceptable
- 35.6% admitted to running a red light
- 54.6% of drivers supported using red light cameras in urban areas
- 53.3% of drivers supported using red light cameras on residential streets

<https://www.aaafoundation.org/2014-traffic-safety-culture-index>

On January 6, 2014, 'The Bakersfield Californian' published the attached article stating, "Well, new data are in and the evidence is strong: Red light cameras are doing their job." The article explained the accident rates had fallen at almost all Bakersfield red light camera equipped intersection. It continued, yearly decline rates ranged from 47% to 73%, depending on the intersection. The article also advised, "It's hard to argue against the privacy-diminishing obtrusiveness of mounted cameras when nearly a decade of data make such a powerful case for the safety benefits of said obtrusiveness."

In September 2007, the National Highway Traffic Safety Administration published the attached "Automated Enforcement: A Compendium of Worldwide Evaluations of Results." The compendium details automated enforcement systems implemented around the world and found, "for red light enforcement, the key studies supported that red light cameras can reduce crash severity at high red light running intersections."

A study in Philadelphia, Pa., evaluated effects on red light cameras and extending the yellow signal timing by about a second and then introducing red light cameras. While the extended yellow signal timing reduced red light violations by 36%, adding camera enforcement reduced violations by an additional 96%. (Retting, R.A.; Ferguson, S.A.; and Farmer, CM. [Accident Analysis & Prevention 40(1); 327-33 – March 2007].

<http://www.sciencedirect.com/science/article/pii/S000145750700111X>

In 2006 the U.S. Department of Transportation Federal Highway Administration (FHWA) issued a brief titled, "Red Light Cameras." https://www.fhwa.dot.gov/resourcecenter/teams/safety/safe_mrt_redlight.pdf

The conclusions of the FHWA study found the following:

- In 2004, intersection crashes accounted for more than 40% of crashes
- Red light running caused 854 fatalities and over 168,000 injuries
- Provided the findings from a comprehensive FHWA study (FHWA's Safety Evaluation of Red-Light Cameras; FHWA-HRT-05-048), which included data from seven jurisdictions across the U.S. (attached)
 - 25% decrease in total right-angle crashes
 - 16% reduction in injury right-angle crashes
 - 15% increase in total rear-end crashes
 - 24% increase in injury rear-end crashes
 - Costs for economic impact of cameras saved society from \$39,000 to \$50,000 annually at installed intersections, including hospital bills, property damage to vehicles, insurance expenses, value of lost quality of life, and other costs.
 - Clarified in another study conducted for the National Cooperative Highway Research Program, researchers found the majority of jurisdictions reported downward trends in RLR crashes and violations because of red light cameras.

<https://www.fhwa.dot.gov/publications/research/safety/05049/05049.pdf>

In March 2006, the National Highway Traffic Safety Administration published a study conducted in Sacramento, California where data was collected from 1999 until 2003 (DOT HS 810 580) in conjunction with the Volpe Center. The goal of this study was to understand the correlation between red light violations and various driver, intersection, and environmental factors. Approx. 47,000 red light violation records were analysed. During the analysis, it was discovered most violations after 2 seconds of red light onset occurred at the intersection with the highest yellow light time and red light times combined.

<https://ntl.bts.gov/lib/35000/35000/35063/DOT-VNTSC-NHTSA-05-01.pdf>

One of the most referred to studies used by red light camera opponents is the Texas Transportation Institute study from September 2004 (Report 0-4196-2). In this study it actually found estimated violation and crash reductions by 40 violations and 36 crashes by implementing camera enforcement. Camera enforcement effectiveness reduced red light violations from 40 to 59 percent. (Attached)

During a subsequent Texas Transportation Institute study (Evaluation of Automated Traffic Enforcement Systems in Texas, August 2011), it was found an overall reduction in all red light related crash types for 90% of communities using the cameras. The state-wide reduction in red light running crashes of all types was 26.4%. This study revealed clear evidence there was a reduction in red light running violations while intersections had active cameras and increases in red light running violations when the cameras were inactive.

https://ftp.dot.state.tx.us/pub/txdot-info/trf/red_light/auto_traffic.pdf

Sincerely,

A handwritten signature in black ink, appearing to read 'Ed Tiedje', with a long horizontal flourish extending to the right.

Ed Tiedje
Account Manager