

City's red-light cameras are mitigation tools, not 'cash-extracting' machines

By The Bakersfield Californian

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I would like to comment on The Californian's recent editorial about the red-light cameras operating in our city street system ("Revenue tool or safety aid? Jury out on cameras," Aug. 26). I detected some slight misrepresentation of facts and a flawed syllogism in your editorial's thought process that might have contributed to its cynical view on these "invasive" traffic machines.

First and foremost, red-light cameras are primarily installed to monitor red-light violations, data from which mitigation measures may be devised. They are not primarily "cash-extracting" machines nor are they designed to "stop" the occurrence of red-light violations. At times, they might serve as deterrents for some motorists to run through a red light -- but no traffic apparatus can stop a drunken Lothario with raging hormones from running through a series of red lights just to be on time for a weekend fling. This "human factor," which cannot be incorporated into engineering formulas, is the pesky variable that only traffic engineering, among the civil engineering disciplines, has to deal with.

There are eight intersections in our city with red-light cameras, not "at least nine" as stated in the article. Their selection was based on turning movements and accident histories. At any given point in time, we always have the most-recent five-year accident trail in almost all intersections, not only the signalized ones. From these traffic collision reports, we classify and visualize the accidents by coding them and by constructing the accident diagrams.

Not all signal phases are being watched by the red-light camera. In the pioneer intersection and pilot project at Chester Avenue and Brundage Lane, for example, only the northbound through lane is being monitored. That means you will not get a camera-based ticket if you run a red light through the other signal phases. In the "congested" intersection of Coffee Road and Truxtun Avenue only the southbound through and southbound left-turn phases are monitored. The reason why we singled out these lanes is because the accident reports indicated the incidence of an "extra-high" number of red-light violations.

Red-light violations are induced by various reasons, some beyond our control. We cannot do anything about an impaired motorist who may just inadvertently cruise through an intersection oblivious of the red light and everything around him or her. But on every road section approaching a signalized intersection, we have what we call the "dilemma zone," that section of road where you are caught with the yellow light. In a quick instant, the motorist has to decide

whether to "floor" the accelerator or apply the brakes, thus the motorist has that "dilemma."

In the law of motion, distance equals the velocity or rate of speed multiplied by elapsed time. In every signalized intersection, we have different yellow intervals based on the 85th percentile approach speed -- the higher the speed, the longer would be the "dilemma zone" or amber time to extend the driver's "decision time" and minimize the incidence of red-light violations.

I only have peripheral knowledge about the revenue aspects of red-light cameras. All I know is that the money is shared (not equally) by the courts, the city of Bakersfield and the company that installed them. The court system and the city have to get a small percentage because of overhead or administrative costs. Justifiably, the company that installed them has to get the bigger share to recover its initial investment and, of course, for profit.

Whether the money generated is too high or too low or fair enough, that would be subjective. All I know is that at some point in time, a God-man was bought for only 30 pieces of silver.

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