City Council/Successor Agency/Public Financing Authority/Housing Authority Regular Meeting March 1, 2016

Attached is a document related to Agenda Item NB 1: *Red-Light Photo Enforcement System contract options,* which was received and distributed following the posting and distribution of the March 1, 2016, Agenda:

- Covina Red-Light Camera Program Analysis

The following comments are provided with respect to the City of Covina's red light camera program.

CITATION ANALYSIS:

Staff Report: The community' s recidivism rate is only seven percent, which means ninety-three percent of all violators who receive a ticket do not commit a second violation.

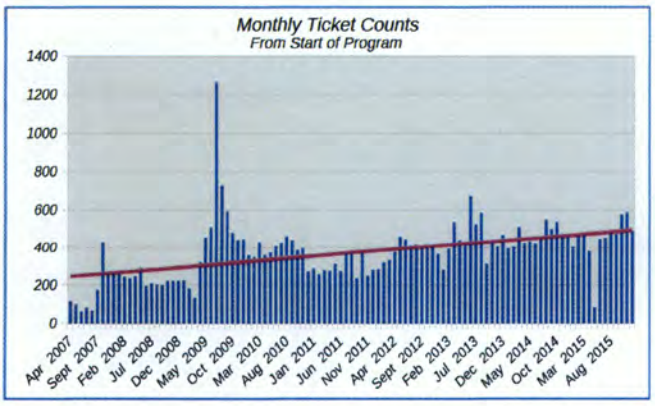
This is a common red-herring statistic often cited by the red light camera companies and we see it often in reports written or "assisted" by the red light camera companies. The fact is that most people rarely get traffic tickets, automated or otherwise. It would be expected that most drivers only receive one ticket. Further, this is the recidivism rate for the City of Covina program. As stated later in the staff report, the vast majority of tickets are issued to those who do not reside in Covina. The city has no way of knowing if those ticketed by Covina "re-offend" in other cities or in places without a red light camera. Finally, drivers learn to avoid intersections with red light cameras so the chance of getting caught again is reduced. The fact that *"ninety-three percent of all violators who receive a ticket do not commit a second violation"* says nothing about whether red light cameras change driver behavior or make streets safer.

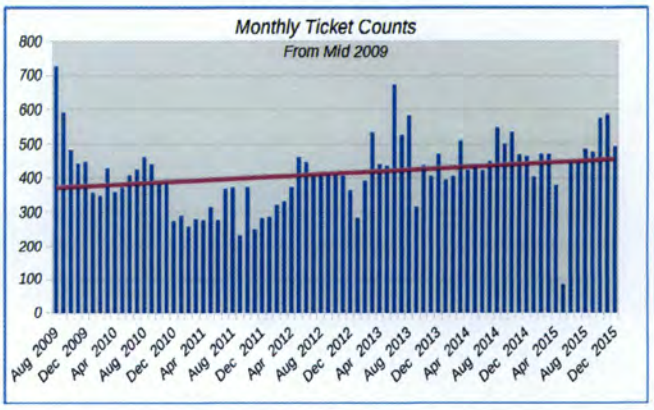
Staff Report: ...therefore the majority of violators are not city of Covina residents.

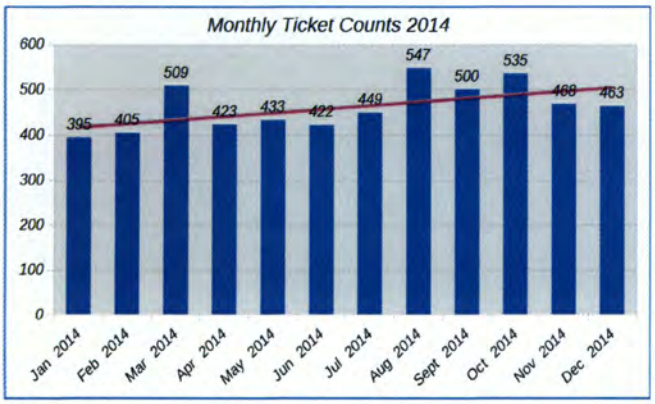
This is true in every city with red light cameras. It is meaningless because the vast majority of drivers on Covina roadways are not local citizens. This is especially true on the major thoroughfares on which the red light cameras are located.

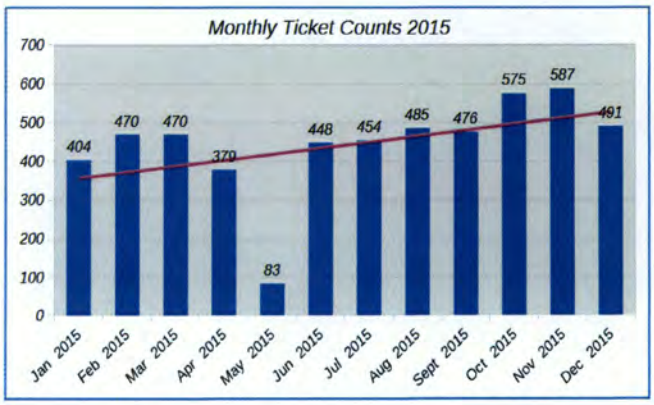
Staff Report: Figure #3 represents the total citations by year from 2007- 2015.

See the following charts:









We graphed the ticket counts for four different periods and inserted trend lines to determine if the number of citations was increasing or decreasing. For all periods, we noted an upward trend in citations issued which suggests that the red light ameras do not have a positive effect on driver behavior. Note that in 2009 the city began issuing right turn on red tickets where they had not previously done so. This accounts for the spike in ticketing seen in 2009. Overall, the city issues over 5000 red light camera tickets per year.

Right Turn on Red Violations

Currently, right-turn-on-red tickets account for about 72% of the tickets being issued in Covina. However, at some intersections, the number is as high as 96%. The usual stated purpose of installing red light cameras is to prevent serious broadside collisions. These generally only occur when a motorist drives straight through a red light. However, the city issues very few tickets for straight through violations (see table below), instead, concentrating on rolling-right-turn violations to subsidize the program.

	Nbd Azusa @ Cypress						Nbd Barranca @ Rowland					Ebd Rowland @ Barranca						Wbd Rowland @ Barranca						Nbd Grand @ Badillo						Sbd Grand @ Badillo						Ebd Badillo @ Grand						All RLC Int		
Lane #	1	2	3	4	Total	% RT	1	2	3	Total	% RT	1	2	3	4	Total	%	1	2	3	4	Total		1	2	3	4	Total		1	2	3	4	Total		1	2	3	4	Total		Total	Total RT	
Ave # Citations	10	15	16	79	120	66%	10	12	10	33	0.0%	4	3	2	77	86	90%	3	9	5	5	22	22%	19	3	7	119	148	80%	3	2	2	30	37	81%	1	0	1	53	55	96%	502	364	72%

Are Rolling-Right-Turn Violations Dangerous?

Some may claim that rolling-right-turns are dangerous maneuvers, especially for pedestrians. However, all the available evidence shows that rolling-right-turns pose little danger to other roadway users, even "vulnerable" road users like pedestrians and bicyclists.

Previously, Safer Streets L.A. conducted research in the City of Los Angeles into the relative danger of drivers making a slow rolling-right-turn without stopping as required. Our full research paper is available at http://saferstreetsla.org/wp-content/uploads/reports/HOW%20DANGEROUS%20IS%20A%20ROLLING%20RIGHT%20TURN.pdf Our findings were as follows:

We determined that the chance that a rolling-right-turn might cause a collision was less than 1 in 345,000. Rolling-right-turns represented just 0.079% (79/1000th of 1%) of all types of collisions per year in the City of Los Angeles, an extremely low percentage.

Upon a further analysis of the danger of rolling right turns to pedestrians, we determined that since at least 2002 (the earliest records available) there has never been a fatal collision in Los Angeles involving a pedestrian where a driver made a rolling-right-turn. For injury collisions, we found that in 2013, rolling-right-turns accounted for 0.15% (4 out of 2639) of the pedestrian injury collisions and 0.008% (8/1000th of 1%) of all collisions in the City. A pedestrian is four times more likely to get struck by lighting than to get struck by a vehicle making a rolling-right-turn. Further, one of the four collisions was caused by a driver fleeing the police. Two of the collisions did not result in any visible injuries and two resulted in minor injures. None was listed as causing a serious injury.

Further evidence of that rolling-right-turns do not pose a safety hazard comes from a Transportation Research Board research project from the Texas Transportation Institute, "Synthesis on the Safety of Right Turn on Red in the United States and Canada". The report concluded:

> *The outcome of this study shows that the RTOR is not a dangerous maneuver at signalized intersections for either vehicles or pedestrians in most circumstances. The people interviewed in this study have corroborated this outcome. In short, the proportion of RTOR crashes is usually very low (less than 0.5% of all crashes in a given jurisdiction) and, in the event of crash, the outcome is generally not severe.*

The extremely trivial nature of rolling-right-turn violations does not make them good candidates for automated enforcement as no amount of additional enforcement is likely to further reduce the numbers of the exceedingly rare and minor collisions that may result from this violation. In addition, the $490 penalty is substantially out of line with the nature of the violation. For those in our society with lesser means, these tickets are a huge burden for a relatively minor infraction. Someone just barely getting by might have to make the choice of paying rent or putting food on their table rather than paying a $490 ticket for a slow rolling-right-turn. If they don't pay, they will lose their license making it more difficult for them to earn a living and escape from the cycle of poverty they are caught in. This happens all too often in California due to the skyrocketing price of traffic tickets.

According to a report from the Western Center on Law and Poverty (WCLP), "Not Just a Ferguson Problem – How Traffic Courts Drive Inequality in California" (http://www.lccr.com/not-just-ferguson-problem-how-traffic-courts-drive-inequality-in-california/), over four million Californians do not have valid driver's licenses because they cannot afford to pay hefty traffic fines and fees. While the City of Covina does not set the price of the tickets, there is no reason city officials should contribute to this problem by using automated enforcement to target this minor violation.

Collision Analysis

It was not possible to conduct an independent analysis of collisions as the City has not been reporting all collisions that occur in the city to the Statewide Integrated Traffic Reporting System. However, upon analyzing the collision statistics in the staff report, we note the following:

- Red light violation collisions at the photo enforced intersections averaged 3 per year before the cameras were installed and 2 per year after. The staff reports lists this as a 50% reduction. However, the numbers of collisions both before and after are so small that a change of 1 collision is magnified to appear as a large percentage reduction. In reality, the change is not statistically significant.
- Citywide, the percent change in the number of red light running collisions is approximately -44%, closely mirroring the change at the red light camera intersections. The difference between the photo enforced and non-photo enforced intersections is not statistically significant meaning that the intersections with red light cameras performed no better than other intersections throughout the city.
- The staff report makes the implicit assumption that any reduction in collisions is due to the presence of the red light cameras. This is certainly untrue for those collisions which are not caused by red light running and may also not be true even for those collisions which are caused by red light running. Numerous factors affect the number of collisions which might occur from year to year such as traffic volume (most of the "after" years were during the recession), changes in traffic patterns, engineering improvements implemented and other random events. The staff report does not take any of these other factors into consideration.
- The staff report does not provide and analysis of rear end collisions occurring the red light camera intersections although these types of collisions have been shown to increase in the presence of automated enforcement.
- Although the staff report provides statistics for "all collisions", injury collisions, and property damage collisions, both at the enforced intersections and citywide, these statistics are meaningless as these various types of collisions may have no relationship to red light running or red light running enforcement.
- Overall the staff report does not provide compelling evidence that the red light cameras have improved safety in Covina. On the contrary, the fact that red light running citations are increasing suggests that the cameras are an ineffective safety measure.

For an explanation of why red light cameras cannot reduce the most dangerous kinds of red light running collisions, please see: https://www.motorists.org/blog/the-red-light-camera-miracle/

Was There a Safety Need for Camera Enforcement at Rowland & Baranca?

We could find no RLR collisions at Barranca & Rowland going all the way back to 2004 (2003 had 1 RLR collision) so there was no RLR problem at this intersection for a number of years before the cameras were installed in 2007 and therefore there could be no improvement in safety from the cameras. Further, there has never been a fatality at any of the RLC intersections either before or after the cameras were installed.

Experience in Los Angeles After Ending the Red Light Camera Program

Since the Photo Red Light program was eliminated, the annual number of red light running collisions in the City of Los Angeles has gone down. Comparing the final full year of the program - 2010 - to calendar year 2013, there was a greater than 10% reduction in the number of red light running collisions since the cameras were eliminated. As a percentage of all collisions in the city, red light running collisions went down by almost 5%. While the elimination of the program likely did not cause the reduction in collisions, it can certainly be said that the program, and the massive ticketing that went with it, was not necessary as collisions dropped absent the program.

This further shows the folly of employing massive ticketing campaigns rather than using proven engineering countermeasures to improve roadway safety. Through our work at the state level, we have changed the protocols for yellow signal timing which have been incorporated into the most recent edition of the California MUTCD. We have shown how a sufficient yellow interval substantially improves safety by significantly reducing red light running.

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