

10-12-20

Venue: Hawthorne Council Meeting Oct. 13 item 28

Subject: Red Light Cameras

Honorable Mayor and Councilmembers:

Eight years ago - the March 13, 2012 council meeting - was the last time the council discussed the City's red light cameras, and during that meeting (now) former Hawthorne Police Captain Keith Kauffman testified:

*"The hope is that driving behavior is corrected, not just through that intersection but through the rest of the time you're driving here." "You need to study accidents overall. Some of the data that you don't have is accidents for their entirety in our city. **You know what, you're right, they're not going down. I wish they were.**"* Beginning at 0:53:55 in the video of the meeting, available on the City's website, emphasis added.

Aside from Capt. Kauffman's admission that accidents aren't going down, there is the question of whether some of the locations chosen for cameras ever had an accident history justifying the installation of cameras and the heavy enforcement that follows. In 2004 I completed and published a study of the 1995 - 2004 (pre-camera) accident history at Rosecrans/Hindry, the site of two cameras which currently generate more than 3/4 of Hawthorne's camera tickets. My study, which you will find below, showed no - zero - accidents attributable to red light runners moving in the directions covered by the cameras - left turns from westbound Rosecrans and right turns from northbound Hindry.

Over the years, the length of the yellow for the left turn from westbound Rosecrans has been the subject of much discussion, with many claiming that its present setting of 3.0 seconds is too short. Jay Beeber, who spoke at length at your 2012 meeting, is a member of the Institute of Transportation Engineers and has been working with ITE policy makers who, in March this year adopted formulas providing longer yellows for left turns. I have attached some of Beeber's recent writings about the new formulas. If your decision this week is to fund the continuation of the camera program, I ask that you direct your traffic engineers to report back to you - at the earliest opportunity - about applying the new ITE formulas.

Sincerely,

Jim

Pasted below: Beeber on yellow light formulas

Pasted below: My study of Rosecrans/Hindry accidents (the source documents for the study's table are a large file and are available online at a link in Set # 5 on the Hawthorne Docs page at highwayrobbery [dot] net )

*Untitled*

*Re: Hawthorne council meeting of 10-13-20*

*Jay Beeber's explanation of why left turn yellows should be longer than 3.0 seconds*

*1. Page from study Beeber submitted to the Ventura city council on 5-18-20. The full study is available on the City of Ventura website and at a link in Set # 2 on the Ventura Docs page at highwayrobbery (dot) net.*

*2. Portion of follow-up email Beeber submitted to the Ventura city council on 9-21-20. The full email is available on the City of Ventura website.*

## **Yellow Change Interval Timing**

While we have been unable to confirm the current yellow interval timing at the photo enforced intersections in Ventura, it is almost a certainty that the timing for the left turn movements is insufficient for the safe and legal movement of vehicles, especially at the four intersection approaches discussed above.

Note that we are not suggesting that the timing does not comply with the minimum 3.0 second standard defined in the California Manual on Uniform Traffic Control Devices (CA-MUTCD). Rather, we are relating that this standard is no longer considered a “best practice”, especially with regards to yellow signal timing for turning lanes. Even if the city employs a longer yellow time than legally required, the yellow signal timing for these photo enforced turning lanes is likely significantly deficient. Yellow signal timing for turning lanes has never been based on proper engineering principles and the CA-MUTCD only requires a minimum of 3.0 seconds regardless of the approaching traffic’s speed or length and number of turning lanes.

However, in March 2020, the Institute of Transportation Engineers (ITE) published a new Recommended Practice on yellow change interval timing. Jay Beeber of Safer Streets L.A. played a significant role in creating the updated guidelines, especially for yellow times in turning lanes. Within the Recommended Practice, ITE has adopted a new formula for setting yellow signal times that was created and promoted by our team. Mr. Beeber also authored an article explaining the use of this new formula which appeared in the March 2020 issue of the ITE Journal. The article, which might prove instructive for city staff, is included at the end of this report.

Since the Recommended Practice was released just two months ago, the CA-MUTCD and state law have not yet been updated. However, once this update occurs, yellow signal times in turning lanes will likely need to be increased. Revising the yellow times per the ITE Recommended Practice will likely eliminate the vast majority of left turn violations occurring at these intersections. This will have a positive effect on safety, as we have consistently seen a significant reduction in red light running when yellow times have been increased to more appropriate levels. However, with lower violations, the city will likely see a decrease in the revenue generated by the red light cameras and could end up operating the program with a deficit, especially since over 65% of the ticket revenue comes from left turn violations.

For this reason, we strongly suggest that the city not extend the Redflex contract under the current terms. While the contract does provide for cancellation if there is a change in state law, it does not extend this provision for changes to regulations such as those appearing in the CA-MUTCD. It is possible that the standards for yellow light timing could change within the CA-MUTCD without requiring any change to state law. Based on the current contract language, Redflex may not consider a change to the CA-MUTCD as a valid reason for canceling or renegotiating the contract. Note also that many cities with long-term contracts have negotiated the option to cancel for convenience with 30 days notice. The City of Hawthorne has obtained such a provision from Redflex. The City of Ventura should not renew a contract which provides less favorable terms than other nearby cities.

## **A \$490 Citation**

As noted above, ticketing for “rolling-right-turns” has more than doubled over the past six years. While these types of violations are “easy pickins” for enforcement, they generally pose little to no

*Untitled*

*Portion of 9-21-20 email from Jay Beeber to the  
Ventura city council*

*C. with regard to the yellow timing for dedicated left turn lanes (left arrow), the MUTCD currently provides no specific minimum time other than the blanket 3.0 second minimum for any traffic signal. As explained previously, this 3.0 sec. standard is no longer considered a "best practice", especially with regards to yellow signal timing for turning lanes (see detailed discussion in attachment). Even though the city employs a longer yellow time than legally required, the yellow signal timing for these photo enforced turning lanes is deficient.*

*In March 2020, the Institute of Transportation Engineers (ITE) published a new Recommended Practice on yellow change interval timing. My article explaining this new protocol appears at the end of the attached document. Within the Recommended Practice, ITE has adopted a new formula for setting yellow signal times that requires yellow signal times in turning lanes to be significantly increased. Revising the yellow times per the ITE Recommended Practice will likely eliminate the vast majority of left turn violations occurring at intersections in Ventura. As a reminder, over 65% of the city's ticket revenue comes from left turn violations, meaning that up to 65% of the tickets issued are going to drivers who may have had no intention of violating the red light and only did so because the yellow time was too short for their otherwise legal movement.*

Jim's 2004 study of accidents at Rosecrans/Hindry, updated in 2013. Published on the Hawthorne Docs page at highwayrobbery dot net.

Hawthorne's Rosecrans/Hindry intersection with its heavy enforcement on left and right turns, is an example of an intersection where there is scant safety justification for the use of the cameras. The table below shows the number of accidents the police attributed to red light running (northbound rolling right, westbound left turn).

### Rearenders Way Up

The table also shows the number of accidents the police coded as "rear end" - which rose after the cameras were installed in 2004. (Were we to "cherry pick" the data and leave out the 1995 and 1996 rearenders, the with-camera increase in rearenders would be 154%. Otherwise - including the data from 1995 and 1996 - the increase was 81%.)

	Rosecrans / Hindry CVC 21453(a) or (c) Accidents (northbound rolling right or westbound left)	Rearenders (all directions)
1995	0	4
1996	0	4
1997	0	0
1998	0	1
1999	0	3
2000	0	1
2001	0	1
2002	0	2
2003	0	2
2004	0	0
2005	0	1

2006	0	2
2007	0	5
2008	0	7
2009	0	6
2010	0	3
2011	0	5
2012		
2013		

Next page: Source Documents for the table above