

INTRADEPARTMENTAL CORRESPONDENCE

March 9, 2010
16.2
CB #09-0077

BPC No. 10-0122

TO: The Honorable Board of Police Commissioners

FROM: Chief of Police

SUBJECT: TRAFFIC COLLISION ANALYSIS REGARDING THE AUTOMATED PHOTO RED LIGHT PROGRAM

RECOMMENDED ACTIONS

1. That the Board REVIEW and APPROVE this report in response to the City Council Motion (Zine –Smith) relative to the Automated Photo Red Light Program, Council File No. 07-1202-S8; and,
2. That the Board TRANSMIT the report to the Public Safety Committee.

DISCUSSION

A recent news report raised questions about whether the Photo Red Light (PRL) Program has had an increase or decrease in accident rates at affected intersections. The report asserted that some intersections had experienced an increase in traffic collisions following the installation of the red light cameras. However, the conclusions of the report conflicted with the statistics that the Los Angeles Police Department (Department) had previously reported on the City's PRL Program.

On November 24, 2009, Councilmembers Dennis Zine and Greig Smith introduced a Motion requesting that the Los Angeles Department of Transportation (LADOT) and the Department report to the Public Safety Committee on the results of a study of traffic collisions at the City's 32 automated enforced intersections. They requested that the study include the following:

- The number of traffic collisions six months prior to and six months after installation of the automated enforced cameras; and,
- The number of traffic collisions related to red light, left turn, speed, following too close, unsafe lane and turning movements and other traffic collisions.

BACKGROUND

On November 9, 2009, Mr. David Goldstein, Investigative Reporter, CBS2/KCAL9, presented a report on the City's PRL Program. The conclusion of the report was that PRL enforcement has caused a significant increase in traffic collisions, specifically rear end traffic collisions.

On October 8, 2009, Mr. Goldstein contacted Emergency Operations Division (EOD) and requested a list of the City's 32 automated enforced intersections, activation dates for each intersection, and traffic collision data on the PRL Program. Mr. Goldstein requested data on traffic collisions six months prior to and six months after each PRL activation. He also requested that the Department conduct an analysis of the data. Mr. Goldstein was informed that it would take approximately four to six weeks to complete the study and that due to budget constraints; the Department did not have the personnel to conduct the study. He was advised that he could obtain collision data through a California Public Records Act request.

On October 13, 2009, Mr. Goldstein contacted the Discovery Section and requested the above information on the City's 32 automated enforced intersections. On October 26, 2009, the Discovery Section provided Mr. Goldstein traffic collision data that was received from Information Technology Division (ITD) for each of the intersections. The information provided by ITD indicated that there were 269 traffic collisions reported prior to the activations and 334 traffic collisions six months after the activations for a total of 603 traffic collisions. Based on his analysis, there was an overall 24 percent increase in traffic collisions. This information was obtained from his on-air report of the PRL Program (see attached PRL Collision Statistics, "Goldstein Gross Totals").

The information provided to Mr. Goldstein included the date and time, accident activity code, Division of Reporting (DR) Number and the location where the traffic collision occurred. The information provided to Mr. Goldstein included all traffic collisions that occurred on both the primary and secondary streets. Traffic collisions are classified by primary and secondary streets. A primary street is defined as the street on which the vehicle in violation was travelling. In order to get all traffic collisions occurring at the intersection, ITD must run a query using the primary street and then the secondary street. No traffic collision reports were provided to Mr. Goldstein for his analysis.

The information provided by ITD uses the Police Arrest Crime Management Information System (PACMIS) database which tracks events/collisions by DR numbers. The Department analysis used the Access database which contains all traffic collision reporting fields including the primary collision factor and cross referenced it with the PACMIS database to ensure completeness.

Mr. Goldstein's analysis did not distinguish whether the traffic collisions occurred in proximity to the intersection or mid block. One key piece of information that ITD did not provide Mr. Goldstein was the primary collision factor (PCF) of the traffic collision. The PCF is the one element that best describes the primary or main cause of a traffic collision. Usually, a California Vehicle Code section is listed as the main cause of the collision by the investigating officer. The information listed by the investigating officer would indicate whether or not there was an at-scene investigation. In order to conduct a proper analysis, Mr. Goldstein would have had to review each of the traffic collision reports. These facts would have identified where the collisions occurred and what was the primary cause of the traffic collision.

The data provided to Mr. Goldstein listed all traffic collisions without qualification. This included collisions that occurred mid-block or on private property, as well as pedestrian, bicycle, hit and run, sideswipe and several other traffic collisions not relevant to the PRL Program. As part of the intersection selection process, the Department conducted an extensive citywide traffic collision analysis. After the new PRL contractor was selected in November 2005, it was decided to retrofit nine of the preexisting PRL intersections that were enforced under the prior contract and to select 23 additional new intersections. In 2006 the Department analyzed traffic collision data at all major intersections in the City for a three-year period starting in January 2003 through December 2005. The purpose of the traffic collision analysis was to identify the new intersections that should receive automated enforcement cameras. The Department examined red light, speed, following too close, left turn, and Driving Under the Influence (DUI)-related traffic collisions. The analysis and selection of additional intersections was approved by the Public Safety Committee on October 16, 2006, and the full City Council on November 1, 2006.

It is important to note that the PRL Program does not have cameras at all four approaches to an intersection. Automated enforcement cameras were only placed on primary, not secondary streets. By placing cameras only on the primary street, the City could double the number of intersections for the same cost.

Traffic collision percentages can be very misleading. A relatively small number of traffic collisions can show a significant percentage increase or decrease. The Department reviewed the same data that was provided to Mr. Goldstein. At one of the intersections, La Brea Avenue and Rodeo Road, Mr. Goldstein only compared a 94-day pre-installation period, as compared to a 180-day post installation period. This unbalanced sample size artificially inflated the percentage increase. At another intersection, Manchester Avenue and Figueroa Street, the Department was unable to ascertain how Mr. Goldstein came up with his statistics. Mr. Goldstein reported that there were five traffic collisions that occurred prior to the activation and 16 traffic collisions after the activation, which showed a 220 percent increase. The Department identified 18 traffic collisions that occurred prior to the activation and 17 traffic collisions after the activation, for a six percent decrease.

The Department reviewed 679 traffic collision reports that were identified as occurring at the 32 intersections (see attached PRL Collision Statistics, "LAPD Gross Totals"). There were 331 traffic collisions that were identified as occurring six months prior to the activations and 348 traffic collisions six months after the activations, showing a five percent increase. However, this is misleading in relationship to the PRL program, as a significant number of these collisions occurred outside of the intersection or did not meet the PRL criteria.

Currently, there is no database that records the exact location of a collision in relation to the intersection. Each of the 679 reports were reviewed by a trained collision investigator to determine which collisions were unrelated to the PRL Program such as those that occurred on private property, mid-block, caused by a pedestrian or other unrelated circumstances. Based on the analysis, it was determined that at the 32 intersections, there were 133 traffic collisions that occurred six months prior to the activation and 121 traffic collisions that occurred six months after, for a total of 254 collisions directly related to the PRL Program. The analysis also revealed a nine percent decrease in traffic collisions at the City's 32 automated enforced intersections after the activation (see attached PRL Collision Statistics, "LAPD Adjusted Totals"). These were collisions that occurred at or within 75 feet of the intersection and fit the criteria mandated by the Public Safety Committee and City Council regarding PRL traffic collisions.

Mr. Goldstein's report stressed that there was an increase in rear end traffic collisions at the City's PRL intersections. Our analysis revealed that although 11 intersections show one or two more rear end collisions after the activation of the cameras, the red light collisions at most of these intersections either decreased or remained the same. The Department's analysis showed no overall increase in rear end collisions for all 32 intersections combined (see attached PRL Collision Statistics, "PRL Related: Sorted by Type, Rear End").

Although the Department's analysis showed a minor increase at 12 intersections, most of the intersections increased by only one or two additional collisions with the exception of two intersections that increased by five collisions. Four intersections showed no change while 16 intersections showed a decrease. Based on the volume of vehicles that travel through these 32 intersections on a regular basis (two million vehicles during a 24 hour period), the increase over a six month period is relatively minor. The traffic volume count was provided by LADOT.

Below is a summary from 2006 to 2008 of the gross numbers of traffic collision reports that have occurred at the City's 32 automated enforced intersections.

Traffic Collision Primary Causes												
Year	Total T/C	PCT Change	Red Light	Left Turn	Speed	FTC *	Unsafe Lane	Unsafe Turn	DUI	OID *	Unk	Other
2006	610	N/A	69	98	110	20	35	14	31	46	89	98
2007	667	9.3%	50	104	111	37	44	21	34	42	110	114
2008	649	-2.7%	30	130	135	43	43	16	37	41	74	100
Total	1,926	N/A	149	332	356	100	122	51	102	129	273	312

* "FTC" denotes following too close," OID" denotes other improper driving

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Every year the PRL Program showed a decrease in red light-related traffic collisions with a 40 percent reduction in 2008. In 2007, there were 13 serious injury related traffic collisions as compared to nine in 2008, which is a 31 percent decrease.

From 2004 through 2006, which was prior to the installation of the cameras, there were nine reported traffic fatalities, five of which were red light related that occurred at the current PRL intersections. It should be noted that there have been no red light-related fatalities at any of the intersections since April 2006 when the first cameras were activated.

If you have any questions regarding this matter, please contact Captain Thomas J. McDonald, Commanding Officer, Emergency operations Division, at (213) 486-0680.

Respectfully,

A handwritten signature in black ink, appearing to read 'C. Beck', written in a cursive style.

CHARLIE BECK
Chief of Police

Attachment

PRL Collision Statistics
(+/-) 6 months from Activation Date

			GOLDSTEIN						LAPD						COLLISION ANALYSIS												LAPD			
			GROSS TOTALS (CLETS)						GROSS TOTALS (ACCESS + CLETS)						PRL Related: Sorted by Type						Unrelated						ADJUSTED TOTALS			
			Prior	After	%	Prior	After	%	Prior	After	Prior	After	Prior	After	Prior	After	Private Prop	Driveway / Mid-block	Pedestrian	Other Unrelated	Prior	After	Diff	%						
B	Activation Date																													
La Brea / Rodeo	S	4/4/06	7	20	186%	20	21	5%	0	0	5	2	1	1	0	1	4	1	10	12	0	1	0	3	6	4	-2	-33%		
Victory / Lauren Canyon	V	6/8/06	9	16	78%	14	17	21%	1	3	5	4	2	1	1	0	1	2	1	3	0	1	3	3	9	8	-1	-11%		
DeSoto / Roscoe	V	8/7/06	9	13	44%	18	14	-22%	1	0	1	0	2	2	0	0	3	3	8	8	0	0	3	1	4	2	-2	-50%		
Sepulveda / National	W	8/15/06	7	10	43%	7	11	57%	0	0	0	0	0	1	0	1	2	3	5	5	0	1	0	0	0	2	2	200%		
Van Nuys / Nordhoff	V	9/28/06	13	18	38%	13	17	31%	0	1	3	1	2	4	0	0	1	4	6	5	0	0	1	2	5	6	1	20%		
Main / Griffin	C	11/20/06	1	2	100%	1	2	100%	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0%		
Vernon / Broadway	C	2/7/07	10	16	60%	16	11	-31%	1	0	4	2	2	1	2	1	1	1	3	5	0	0	3	1	9	4	-5	-56%		
Balboa / Vanowen	V	3/8/07	8	9	13%	8	10	25%	3	0	2	4	0	1	0	0	1	1	2	2	0	0	0	2	5	5	0	0%		
Western / Washington	W	3/29/07	8	17	113%	8	17	113%	1	0	1	6	1	1	0	0	0	5	9	2	0	1	2	2	3	7	4	133%		
Pico / Bundy	W	5/2/07	8	12	50%	10	12	20%	2	1	1	2	1	0	0	0	1	0	3	3	0	0	2	6	4	3	-1	-25%		
Sepulveda / Victory	V	5/10/07	17	21	24%	17	20	18%	1	2	0	0	3	1	0	1	2	2	5	7	0	0	6	7	4	4	0	0%		
Sherman Way / Louise	V	5/14/07	8	10	25%	8	9	13%	0	3	2	2	3	1	0	0	1	0	2	3	0	0	0	0	5	6	1	20%		
Whittier / Lorena	C	5/23/07	8	13	63%	8	13	63%	0	1	0	1	0	0	0	0	3	3	3	5	2	0	0	3	0	2	2	200%		
Coldwater Cyn / Oxnard	V	6/25/07	9	12	33%	7	12	71%	1	1	3	4	0	1	0	0	1	1	1	3	0	0	1	2	4	6	2	50%		
Manchester / Airport	W	8/9/07	5	9	80%	5	10	100%	0	0	1	3	1	1	0	0	1	3	2	2	0	0	0	1	2	4	2	100%		
Sunset / Cahuenga	W	8/9/07	6	8	33%	6	8	33%	3	0	0	1	0	1	1	1	0	2	1	2	0	1	1	0	4	3	-1	-25%		
Van Nuys / Arleta	V	8/17/07	1	2	100%	5	8	60%	0	1	0	0	1	0	1	0	0	1	2	5	0	0	1	1	2	1	-1	-50%		
Normandie / Gage	S	9/26/07	3	7	133%	3	7	133%	1	3	0	2	0	1	0	0	0	0	1	1	0	0	1	0	1	6	5	500%		
Manchester / Figueroa	S	12/5/07	5	16	220%	18	17	-6%	1	1	2	2	2	1	0	0	2	0	10	6	0	0	1	7	5	4	-1	-20%		
Wilshire / Westwood	W	12/12/07	3	9	200%	4	9	125%	1	0	0	0	1	0	0	0	0	1	1	3	0	0	1	5	2	0	-2	-100%		
Western / Beverly	W	10/10/06	9	9	0%	9	9	0%	0	1	2	2	2	3	0	0	1	1	2	0	0	0	2	2	4	6	2	50%		
Grand / Venice	C	6/7/07	2	2	0%	2	2	0%	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	2	1	100%		
Alvarado / Temple	C	11/29/07	13	13	0%	13	12	-8%	1	0	1	0	3	2	0	1	0	3	4	5	1	0	3	1	5	3	-2	-40%		
Soto / Olympic	C	9/1/06	16	11	-31%	16	10	-38%	2	1	4	0	0	3	2	0	1	0	4	4	0	1	3	1	8	4	-4	-50%		
Imperial / Figueroa	S	10/19/06	16	11	-31%	15	11	-27%	3	1	2	3	0	1	1	0	1	0	2	3	0	0	6	3	6	5	-1	-17%		
Florence / Figueroa	S	11/20/06	14	11	-21%	14	11	-21%	0	0	2	3	0	1	0	0	2	1	6	3	0	0	4	3	2	4	2	100%		
Olympic / Highland	W	6/18/07	7	4	-43%	8	4	-50%	4	0	1	0	0	1	0	0	0	0	2	2	0	0	1	1	5	1	-4	-80%		
M.L. King / Western Ave	S	7/5/07	10	7	-30%	21	17	-19%	1	1	5	2	3	5	1	0	0	3	7	4	0	0	4	2	10	8	-2	-20%		
Olympic / Alvarado	C	7/19/07	6	5	-17%	5	5	0%	0	0	0	1	1	0	0	0	0	1	0	0	0	0	4	3	1	1	0	0%		
Century / Figueroa	S	10/16/07	14	12	-14%	15	12	-20%	4	0	2	2	5	3	0	0	1	0	1	4	0	0	2	3	11	5	-6	-55%		
Alameda / Cesar Chavez	C	11/2/07	9	3	-67%	9	4	-56%	2	0	1	1	1	0	0	0	0	0	2	0	0	0	3	3	4	1	-3	-75%		
Anaheim / Wilmington	S	11/19/07	8	6	-25%	8	6	-25%	0	1	1	2	0	0	0	0	1	0	4	1	0	0	2	2	1	3	2	200%		
TOTAL:			269	334	24%	331	348	5%	34	23	51	54	38	38	10	6	31	42	103	108	3	6	61	71	133	121	-12	-9%		
COMBINED TOTAL:			603		% Ch	679		% Ch	-32%		6%		0%		-40%		35%		5%		100%		16%		254		% Ch			
Additional Collision Analysis: Speeding: 2 (in "Other"), Unsafe Turn: 0, Unsafe Lane Change: 0, PRL claimed as factor: 2 (One "Rear End" and one "Other")																														
*Left turn at intersection where possible red-light violation caused the collision. (ie. statements conflicted regarding signal phase, stale yellow, etc.)																														
** Rear end collisions within 75 feet prior to the intersection, PFC listed as 22350 VC (speed) or 21703 VC (following too close)																														
*** "Other"- Misc collisions relevant to PRL, but not falling into another category, (ie. ped in x-walk, "speeding," no report reviewed, etc).																														

PRL Collision Statistics
 (+/-) 6 months from Activation Date

	COMMENTS
La Brea / Rodeo	Goldstein failed to include thirteen TC's from 10-4-05 to 12-31-05.
Victory / Lauren Canyon	Goldstein's failed to include five TC's that occurred 12/8/05 - 12/31/05.
DeSoto / Roscoe	Goldstein miscounted "Prior" column. Dates out of sequence (sorted by DR#).
Sepulveda / National	Goldstein's stats missing one collision in "After" column.
Van Nuys / Nordhoff	Goldstein listed two collisions in "After" column that occurred outside of time period (10-19-07 and 9-24-07). Also missing one collision.
Main / Griffin	No issue.
Vernon / Broadway	Goldstein miscounted. His stats do not reflect his reported numbers.
Balboa / Vanowen	Goldstein miscounted "After" column. Dates out of sequence, sorted by DR#.
Western / Washington	No issue.
Pico / Bundy	Goldstein failed to count one collision in "Prior" column. His stats were also missing one collision.
Sepulveda / Victory	DR# 07-09-24551, duplicate 556 from 2/22/07.
Sherman Way / Louise	DR# 08-09-25762 has an incorrect date of 8-27-07 (should be 8-27-08). Goldstein included it in "After" column.
Whittier / Lorena	No issue.
Coldwater Cyn / Oxnard	Goldstein miscounted. His stats show 7 prior, 11 after. LAPD Access database more complete.
Manchester / Airport	Goldstein's Stats missing one collision in "After" column.
Sunset / Cahuenga	No issue.
Van Nuys / Arleta	Goldstein's stats are incomplete. Only collisions with Arleta Ave as primary are listed.
Normandie / Gage	DR# 08-12-04669 is a crime report, not a collision. Also, Goldstein's stats missing DR# 08-12-11184 (in "After" column).
Manchester / Figueroa	Goldstein's stats out of sequence (sorted by DR), therefore he miscounted. Goldstein's data also missing six TC's.
Wilshire / Westwood	DR# 08-08-06175, (1/12/08), added to Access database. Goldstein's stats missing DR# 07-08-22280, (11-20-07).
Western / Beverly	No issue.
Grand / Venice	No issue.
Alvarado / Temple	Three TC's: 8-6-07, 8-16-07, 8-26-07 added to Access database. Also, Goldstein miscounted "After" column.
Soto / Olympic	No issue.
Imperial / Figueroa	DR # 06-18-13948 (5-15-06) occ'd on 113th street, not counted. Also, DR # 06-18-25184 (10-3-06) added to Access database.
Florence / Figueroa	DR# 06-12-00727 (11/19/06) added to Access database.
Olympic / Highland	Goldstein missing DR#: 060736521, (12-27-10).
M.L. King / Western Ave	Goldstein's stats incomplete. Missing eleven TC's.
Olympic / Alvarado	Goldstein's stats list improper date of "2-18-07" for DR# 07-02-33866. Should be "12-18-07."
Century / Figueroa	Goldstein's stats missing DR# 07-18-17893, (6-4-07).
Alameda / Cesar Chavez	Goldstein's stats missing DR# 08-01-05180. DR# 07-01-18094 added to Access database.
Anaheim / Wilmington	No issue.