To Millbrae city staff: Please circulate this email, and its three attachments, to the mayor, councilmembers, and to the public.

11-8-20

Subject: Red light cameras, item 7 Nov. 10 meeting

Honorable Mayor and Councilmembers:

I've written to you, extensively, about the City's red light camera program. Many of those emails are in the thread below so today I will keep it brief and talk about the changes - or problems that remain - since I last wrote to you in 2018.

Safety Should Be Paramount

At the Thanksgiving week 2015 meeting when the council approved the five-year contract which is now about to end, the Director of Public Works admitted, "Really, I cannot say for certain if the red light traffic cameras make a difference or not." (At 0:41:50 in the City's online video of the 11-24-15 meeting.) Now, five years later, staff again offers no statistical demonstration of a safety justification for the use of the cameras, such as fewer crashes in Millbrae, despite the City's issuance of 140,000 tickets bearing \$70 million in fines over 14 years. For more discussion of safety stats, see my emails of August 6, 2018 and July 5, 2018, copies in thread below.

I would like to believe that the council's goal is truly to diminish or stop rolling rights - not just letting them increase year after year with the City taking pictures and making money from the tickets. And there is a way to accomplish that goal: Watch the intersections where the rolling right problem is the worst and determine when during the red phase the riskiest of the rolling right violations occur, then install electrical Blank Out signs capable of displaying the universal "no right turn" symbol and, finally, program those signs to light up and display that symbol during the high risk portion of the signal cycle. The signs cost about \$3000, depending upon size, and as you can imagine, are extraordinarily effective. Many are in use in conjunction with the red light cameras along the Metro Expo Line in Los Angeles. Here is a picture of one right out of the box.



Contract Price, and Termination

The City of Covina, also an ATS/Verra customer, pays \$2312 per camera, including live video, while you are being asked to pay \$3750. Elk Grove, a Redflex customer, pays \$2239 for each of its five cameras.

The proposed modification (staff report, sixth paragraph) to Millbrae's termination notification period is an improvement upon the present language, but not much. For comparison, the City of Covina is allowed to terminate "for any reason, or no reason." And your neighbors Menlo Park and San Mateo had escape clauses allowing them to end their programs on short notice, for any reason.

On August 6, 2018 (copy in thread below) I wrote to you about an instance where the contract terms presented to and approved by the Millbrae council in November 2015 were modified, in a significant way; the two-year extension changed from potential or optional to automatic, by the time the contract was signed two weeks after the council meeting. The staff report (fourth paragraph) prepared for the upcoming meeting restates that erroneous information. May I suggest that any contract arising from the upcoming meeting be checked carefully to make sure it follows the council's orders?

You Control the Amount of the Fine

In my July 5, 2018 email (copy in thread below) I pointed out that you control the amount of the fine for rolling rights. Please consider lowering the fine for right turns.

Other Cities That Have Quit

Since I wrote to you in 2018 San Mateo, Menlo Park, Cathedral City, Encinitas and West Hollywood have closed their camera programs. California once had over 100 camera programs, but now it is down to 26.

Facilitate Public Input

If the council directs staff to make or commission detailed safety stats about the cameras and the usual process is followed in which that report is to be made public no earlier than the Friday before the council meeting at which the report is to be discussed and/or acted upon, or if staff desires to wait until the time of the meeting and do a PowerPoint or verbal presentation of statistics or materials that have not been made public before the meeting, doing either would have the effect of defeating any in-depth analysis and effective input by the public or the press. I am sure you want such input, so I ask that you please publish all of any new report well ahead of time so that the public and the press can have more than a weekend to read it, fact check, and comment.

Sincerely,

Jim

THREAD OF PREVIOUS EMAILS:

To Millbrae city staff: Please circulate this email, and its three attachments, to the councilmembers and to the public.

8-6-18

Subject: Red light camera deadline to act is next Thursday, Aug. 9

Honorable Councilmembers:

Here are some more reasons to modify or cancel the red light camera program - two of which I did not discuss in my email of July 5 (copy below) as they have just come to my attention.

1. Yesterday, someone told me that they had heard a councilmember say that the contract does not renew automatically, so I double checked the various documents and noticed that the contract signed in December 2015 differs from what the council approved a couple weeks before. To wit:

The staff report and draft resolution presented to the council in November 2015 (attached) said the following about the term of the proposed contract:

A. In two places the staff report said, "... a three year term... with a <u>potential</u> two year further extension if desired by the City." (Emphasis added.)

B. The draft resolution said, " ... the <u>option</u> to extend the agreement for an additional two years." (Emphasis added.)

The contract as signed on Dec. 9, 2015 made the renewal automatic:

"TERM: This agreement shall commence upon the Effective Date and shall continue for a term of three years. This agreement will <u>automatically</u> extend for a consecutive two year term. However, Customer or ATS may terminate this agreement at the expiration of any term by providing written notice of its intent not to extend the agreement one hundred twenty days prior to the expiration of the then-current term." (Emphasis added.)

- 2. I also want to pass along a Case Western study which came to national attention via a July 19 article in phys (dot) org. The study was published (posted) in the Social Science Research Network on November 30 last year. The authors made an in-depth statistical analysis of the camera programs in Houston (which shut its cameras down in 2012) and Dallas and found, "... the cameras changed the composition of accidents, but no evidence of a reduction in total accidents or injuries." (Abstract, page 1 of the pdf of the study, emphasis added.) The study further found, "... the model suggests that the camera program led to a decrease in social welfare." (Page 5 of the pdf of the study, line 5, emphasis added.) (The study is a large file so I have not attached it here. It is available on the University's website; Google the title, Criminal Deterrence when thereare Offsetting Risks: Traffic Cameras, Vehicular Accidents, and Public Safety.)
- 3. During the looming two year extension the City will continue to pay \$4195 per camera per month, which will add up to an overpayment of \$311,400 when compared to the Elk Grove prices of \$2000 and \$1500 shown in that City's price schedule which can be found in my November 2015 email, copy below. To make that extra money Millbrae will need to issue 3114 extra tickets during the two years.
- 4. In their red light camera contracts Menlo Park and San Mateo have escape clauses, or Termination for Convenience allowing those cities to end their programs on short notice, with no penalty while Millbrae will have no way out once the two year extension occurs four days from now.

Sincerely,

Jim

cc: Media, Council Candidates

----- Forwarded Message ------

Subject: Millbrae council: Red light camera deadline to act is this month

Date: Thu, 5 Jul 2018 14:16:56 -0700

From:Jim < jim>

Reply-To:

To:rholober@ci.millbrae.ca.us, aoliva@ci.millbrae.ca.us, gpapan@ci.millbrae.ca.us, aschneider@ci.millbrae.ca.us, aschneider@ci.millbrae.ca.us, alouis@ci.millbrae.ca.us, ESuazo@ci.millbrae.ca.us

To Millbrae city staff: Please circulate this email, and its four attachments, to the councilmembers and to the public.

7-5-18

Venue: Council meetings of July 10 and 24

Subject: Red light camera deadline to act is this month

Honorable Councilmembers:

August 9 is the deadline for you to notify ATS should the City wish to modify the terms of the red light camera contract - or even cancel it - rather than allowing it to automatically extend for another two years. Here are some of the reasons to consider modifying or cancelling.

Have the Cameras Made Us Safer?

There's been no statistical demonstration of a safety improvement – fewer crashes – despite Millbrae's issuance of 109,000 tickets bearing \$55 million in fines over 12 years. At the Nov. 24, 2015 meeting when the council approved 5 - 0 the three year extension which is now about to end, the Director of Public Works admitted, "Really, I cannot say for certain if the red light traffic cameras make a difference or not." (At 0:41:50 in the City's online video of the meeting.)

After I read the staff report prepared for that meeting, I wrote to you (on Nov. 22, full copy below):

"I was also surprised to see [in the staff report, copy attached] no detailed discussion of accident rates over the years. All I found was, "...the automated enforcement program has contributed to maintaining the low frequency of collisions at these intersections." (Third paragraph on page two of the staff report.) Staff's use of the word "maintaining" is telling, as in my June 2015 examination (copy attached) of the pre-camera accidents staff listed in the City's

2009 applications for the two Caltrans Encroachment Permits (needed to operate the cameras on El Camino and the 101), I found a very low rate of accidents; out of the 26 accidents staff claimed in that application only three were attributable to red light running. In five years! Thus, if the accident rate still is very low – staff hasn't said what it is now – it would not be proper to give the credit to the cameras." [The City's 2009 applications for Caltrans Encroachment Permits are large files so cannot be attached. They are available on the Millbrae Docs page at highwayrobbery (dot) net.]

"I also noticed the statement, "Repeat violations are extremely low which indicates success in changing driver behavior." (Fourth paragraph on page two of the staff report.) That statement, if true, would be significant were it not for the possibility that the (claimed) low repeat rate is because Millbrae's cameras are on routes used by the ever-changing - and huge - population of people who use SFO. May I suggest that you ask staff to give you a breakdown of the tickets by the distance the violator lives from Millbrae? And may I further suggest that if that breakdown shows a high percentage of non-locals, that you consider the engineering alternatives I discussed in my email of February 2013 (copy in thread below)." [Also see the Aug. 2014 letter, copy below.]

In 2016 Caltrans asked all red light camera cities to submit better justification for their Encroachment Permits, and late that year the City submitted a report by DKS Engineering, which included this graph.

Crashes/Yr Along Millbrae Ave (Btwn El Camino Real and US 101)

Crashes/Yr (No ARLE)
Crashes/Yr (ARLE all lints)

Crashes/Yr (ARLE All lints)

20
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014
Year

FIGURE 2: SUMMARY OF TOTAL CRASHES ALONG MILLBRAE AVENUE BETWEEN EL CAMINO REAL AND US101)

In the text following the above graph, the Licensed Professional Engineer who wrote the study suggested that the cameras were responsible for the drop in crashes: "The overall number of crashes per year are generally lower with the ARLE program in operation...." The engineer made that claim even though the graph shows that crashes were down for 2+ years before late 2006 when the first of the cameras were installed. Also, he did not address why, after the late 2009 installation of the prolific cameras at El Camino/Millbrae and 101/Millbrae, crashes rose instead of declining. [The DKS report is available at a link in Set # 3 on the Millbrae Docs page at highwayrobbery (dot) net. A full copy of the report was attached to the 7-5-18 send of this email, but it not attached to the 8-6-18 send [or the 11-8-20 send], due to the report's large file size.]

Can the Fine Be Lower?

In 2015 76% of the City's camera tickets were for right turns. (In 2016 it was 81%.) During the Nov. 24 council meeting staff claimed that the City cannot reduce the \$500.00 fine for right turns, but the City of Los Angeles was able to cut the fine in half by citing under CVC 21453(b), which has a considerably lower base fine than does 21453(a). Millbrae can easily afford to reduce the fine, as in the typical month the program nets the City more than double the cost to operate it; in the last 12 months the monthly remittance from the court to the City has averaged \$86,000 while the (still too high) monthly rent you pay to ATS has been \$20,975 and you have paid \$18,550 per month to the City of San Mateo, for day-to-day administration of the program.

Achieving Safety

During the Nov. 24 council meeting a councilmember asked staff about what he called an "uptick" in running over the years (instead of the hoped for reduction), and staff suggested that increased traffic volume might be to blame. If traffic volume was the explanation, ticketing would have gone up gradually rather than making the sudden doublings seen in May 2014 (1525 tickets in May, up from 669 in April) and March 2016 (1943 tickets in March, up from 914 in February). In 2013 and 2014 I wrote to you (copies below) recommending that you make certain improvements to the intersections, ones that have been studied and are known to actually reduce running and accidents. Now would be the time to make those improvements, since the present strategy has failed to reduce running or even keep it level.

Formal Management is Needed

The program appears to be operating without written rules, controls, guidelines, or audits. On May 15 this year I sent the City a request for public records for a variety of red light camera documents, including the following:

- P(1)(a). The latest version or revision of the "uniform guidelines" and the "procedures to ensure compliance with those guidelines," as required by CVC 21455.5(c)(1).
- P(1)(b). The latest version or revision of the "controls" required by CVC 21455.5(c)(2)(F).
- P(1)(c). A copy of the current "Business Rules," or equivalent, for the operation of the red light camera program.
- P(2). A copy of the most recent audit (or equivalent quality control report) of the red light camera program's ticket processing and issuance, where the subject matter may have included, but was not limited to:
- (a). Tickets issued to registered owners who were an obvious age and/or gender mismatch with the driver shown in the "face" photo, or
- (b). The handling of violations where a plate number was legible but ATS was unable to obtain from the DMV the name and address of the registered owner and referred the incident to the police department (marked "incomplete details" or the equivalent) so that a name and address could be obtained from the DMV by police department personnel.

On June 12 the City sent me 18 documents in response to the May 15 request, but they were responsive to other parts of the request, such as monthly totals of the tickets issued by each camera; there were no documents responsive or related to the "P" items above.

Conclusion

Given all of the above, please notify ATS to stop the automatic renewal. (The deadline to make that request is Aug. 9.) And then ask your staff to commission a professional

examination of the program by an outside firm not dependent upon repeat business from the City.
Sincerely,
Jim
Attachments:
TrcDocsMillbraeEngrPerm2015MyLtr.pdf (My 2015 letter to Caltrans regarding the City's Encroachment Permits)
TrcDocsMillbraeEngrPermJustifCollDiagRecd2010Sep6.pdf (A collision diagram the City submitted to Caltrans in 2009)
TrcDocsMillbraeEngrPermCorrRecd2016oct28.pdf (Includes the DKS report the City submitted to Caltrans in 2016) [Very large file, no longer included. See note above.]
TrcDocsMillbraeContr2015novExtendStaffRep.pdf (Staff's report for the 11-24-15 council meeting)

Subject:Red light camera contract renewal, Millbrae agenda of Nov. 24

Date:Sun, 22 Nov 2015 11:52:01 -0800

From:Jim <jim>

Reply-To:

To:rholober@ci.millbrae.ca.us, aoliva@ci.millbrae.ca.us, rgottschalt@ci.millbrae.ca.us, gpapan@ci.millbrae.ca.us, gina@ginapapan.com, gina.papan@doj.ca.gov, aschneider@ci.millbrae.ca.us, ann@vote4annschneider.com, alouis@ci.millbrae.ca.us

To Millbrae city staff: Please circulate this email, and its attachment, to the councilmembers (present, and elect), and to the public.

11-22-15

Venue: Red light camera item, agenda of Nov. 24

Honorable Councilmembers:

I've written to you a couple times before about the way-over-market rent you have been paying to ATS (see thread below) so was surprised to see [in the Nov. 24, 2015 staff report] that not only have you ignored my advice that you are entitled to a much lower price but now you are about to agree to pay \$7550 per camera per month [\$453,180 divided by 12 months and 5 cameras], 40% more than the already excessive rent you've been paying and the highest, by far, of any city anywhere. [The draft resolution gives the figure of \$5395 per month.] Considering the age of your cameras you should pay ATS no more than \$2000 per camera per month, or \$120,000 per year. Many California cities pay less than that; as an example, in August 2014 I found this table in the April 2014 contract between the City of Elk Grove and its camera vendor.

[] = Clarifying notes immediately above were added in August 2018.

Years in service	Fixed price not to exceed / Designated Intersection Approach per month
0-4.99	\$4696.00
5.0-6.99	\$4196.00
7.0-9.99	\$2000,00
10.0+	\$1500.00

I was also surprised to see no detailed discussion of accident rates over the years. All I found was, "...the automated enforcement program has contributed to maintaining the low frequency of collisions at these intersections." (Third paragraph on page two of staff report.) Staff's use of the word "maintaining" is telling, as in my examination (copy attached) of the pre-camera accidents staff listed in the City's application for Caltrans Encroachment Permits (needed to operate the cameras on El Camino and the 101), I found a very low rate of accidents; out of the 26 accidents staff claimed in that application only three were attributable to red light running. In five years! Thus, if the accident rate still is very low – staff hasn't said what it is now – it would not be proper to give the credit to the cameras.

I also noticed the statement, "Repeat violations are extremely low which indicates success in changing driver behavior." (Fourth paragraph on page two of staff report.) That statement, if true, would be significant were it not for the possibility that the

(claimed) low repeat rate is because Millbrae's cameras are on routes used by the ever-changing - and huge - population of people who use SFO. May I suggest that you ask staff to give you a breakdown of the tickets by the distance the violator lives from Millbrae? And may I further suggest that if that breakdown shows a high percentage of non-locals, that you consider the engineering alternatives I discussed in my email of February 2013 (copy in thread below).

In the staff report I did not see a discussion of San Mateo's recent refund of nearly 1000 tickets, and whether Millbrae might need to do the same since Millbrae's cameras are operated by San Mateo.

Finally, I want to pass along a statement found in a Dec. 26, 2014 Wall Street Journal interview of the president of Redflex, another major company in the camera industry:

"Mr. [James] Saunders suggests jurisdictions refrain from issuing a [rolling right] ticket except when a pedestrian is in the crosswalk." The headline was, "Can the Red-Light Camera Be Saved? - Money-hungry politicians discredit a hopeful safety innovation." (A Jan. 22, 2015 column in the Dallas Morning News confirmed the statement the Journal had attributed to Saunders: "When I asked Redflex spokeswoman Jody Ryan about her boss' comments urging cities to lighten up on rolling reds, she answered, "It only makes sense that Jim is going to say, 'Look, we need people to be thoughtful about how they are implementing these programs and how they are issuing citations.' It wasn't that shocking.")

Sincerely,

Jim

Attachments:

Email thread

Email to Caltrans re Encroachment Permit (attachments to that email are available in Set # 3 on the Millbrae Docs page at highwayrobbery.net)

cc: Media
----- Original Message ------

Subject: Most Millbrae/101 camera tickets go to visitors

Date:Thu, 14 Aug 2014 14:54:09 -0700

From:Jim <jim>

Reply-To:

To:fnelson@ci.millbrae.ca.us, dkonkol@ci.millbrae.ca.us

For the Millbrae City Council:

Please consider asking your staff for the following information: The percentages of Millbrae/101 camera tickets going to visitors to town, and cars rented at SFO. Why?

Most likely, staff's report will reveal that the huge majority of the tickets are going to visitors, including many from other states. (In the nine cities discussed in FAQ # 22 on the website highwayrobbery dot net, visitors ranged from 69% up to 98.5%.) That's important because operating cameras in an area with high turnover will never stop the running; there's always fresh meat, sorry, new visitors, making mistakes, being distracted or lost (unless you keep them out by installing a dome, like the one they have in Chester's Mill, Maine). And the red light camera business model says it has to be that way because, without a continuing flow of tickets the camera company and/or the City can't have the continuous flow of revenue it needs. So, the cameras are often put in at intersections on regional transit routes, or near regional draws such as colleges, major airports, major hospitals, shopping centers and sports facilities.

Since even heavy ticketing cannot affect the behavior of visitors, cities that genuinely want to minimize running do the following things to make their problematic intersections stand out, look more important.

Put up more visible signal lights (larger diameter, with bigger backboards, with more of them placed on the "near" side of the wider intersections).

Paint "signal ahead" on the pavement.

Install lighted overhead street signs for the cross street (also placed on the "near" side), and larger bulbs in the streetlights at the intersection.

Right turns like those at Millbrae/101 can require additional measures. Per the official statistics (at a link in Set # 1 on the Millbrae page at the highwayrobbery website) at least 81% of the Millbrae/101 tickets are for right turns. I submit that if the number and severity of accidents caused by rolling right turns there is high and has not declined despite years of photo enforcement, the City should study its records to determine when during the red phase most of those accidents occur and then install "blank out" signs programmed to light up and prohibit right turns during the high risk periods. If on the other hand the number and severity of accidents is below average - as appears to be the case at Millbrae/101 (see the attached accident chart, which the City submitted to CalTrans) - the City should consider whether the heavy handed enforcement associated with the use of cameras is justified, at all.

Regards,

Jim

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----- Original Message -----
 Subject:Big Money wasted in Millbrae - Why?
    Date:Fri, 25 Apr 2014 13:51:37 -0700
   From:Jim < jim>
Reply-To:
      To:fnelson@ci.millbrae.ca.us, media
4-25-14
For the Millbrae City Council -
Last year I wrote you, twice, recommending that you negotiate the price
for your red light cameras. Copies are attached.
Now I have received a copy of a letter by which City staff extended the
contract for two years, to Oct. 2015, without getting any price
concession whatsoever, thereby wasting enough money to buy five patrol
vehicles.
Why?
Sincerely,
Jim
----- Original Message -----
 Subject:For the Millbrae City Council - red light camera deadline
    Date:Sat. 08 Jun 2013 12:47:58 -0700
   From:Jim < jim>
Reply-To:
      To:dkonkol@ci.millbrae.ca.us, alouis@ci.millbrae.ca.us
6-8-13
Honorable Mayor and Councilmembers:
Per the contract requirement for 120 days notice, the deadline to cancel your contract
with ATS is coming up in the next few days. Hence, I am sending you, pasted below,
another copy of the email I sent you in February.
Regards,
Jim
cc: Media
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----- Original Message -----

From: - Sun Feb 17 16:45:41 2013

X-Mozilla-Status: 1001 X-Mozilla-Status2: 10800000

X-Mozilla-Keys:

Message-ID:<512179AD.3060803>

Date:Sun, 17 Feb 2013 16:45:33 -0800

From: Jim < jim>

Reply-To:

User-Agent: Thunderbird 2.0.0.22 (Windows/20090605)

MIME-Version: 1.0

To: dkonkol@ci.millbrae.ca.us, alouis@ci.millbrae.ca.us

Subject:For the Millbrae City Council - red light cameras

Content-Type:multipart/mixed; boundary="---------040305000105050605080005"

2-17-13 (updated 6-8-13 as to the exact monthly rent and the number of cameras operating)

To City staff: Please distribute this email to the members of the City Council, and place it on the next Council agenda under written communications from the public.

Honorable Mayor and Councilmembers:

The red light camera contract between the City and ATS will be expiring in October. That may seem a long way off, but your contract with ATS requires you to give 120 days notice if you don't wish to extend the contract further. So, City staff and ATS may be in discussions, right now.

Monthly ticket counts available online at

http://highwayrobbery.net/redlightcamsdocsMillbraeMain.html show, since 2010, no significant decrease in the number of tickets issued by the City's red light camera program. That lack of a decrease in ticketing suggests that the cameras are not making City intersections any safer. (With red light cameras, ticketing is supposed to decrease over time.)

If despite that, the Council decides to continue the program, here are some things to consider before acting on a contract renewal.

1. The City is currently paying \$5395 per month for each of five cameras. Many cities are paying much less than that. Four California cities are paying less than half of that. (To see a list of cities and how much they pay, see FAQ # 17 on this page: http://highwayrobbery.net/redlightcamslinksref.htm#FAQ. The same website contains copies of the contracts from more than 80 cities.) In my opinion, and experience, no city should agree to pay more than \$3000 once its cameras are five years old - and four of the

City's cameras will be <u>seven</u> years old by October. If in the upcoming months the City renews for two more years and accepts the typically-offered 10% discount off the previous \$5395 price, the City will overpay by \$222,720 compared to a \$3000 target price. That is enough money to purchase and equip five new patrol cars.

2. Adding to the importance of negotiating a sharp price is that in November a respected government-funded study group (National Cooperative Highway Research Program ("NCHRP") of the Transportation Research Board of the National Academy of Sciences) published a study recommending substantially longer minimum yellows. The minimums recommended by the study were 0.4 to 0.6 sec. greater than California's present minimums for thru movements.

On Jan. 7 the Virginia DOT adopted the NCHRP standards.

Minimum Yellows	Straight Thru Movement		Left Turn	
Posted Speed	California, eff. 2005	NCHRP recc. 2012	California, eff. 2005	NCHRP recc. 2012
25	3.0	3.4	3.0	3.0
30	3.2	3.7	3.0	3.0
35	3.6	4.1	3.0	3.2
40	3.9	4.5	3.0	3.6
45	4.3	4.8	3.0	3.9
50	4.7	5.2	3.0	4.3
55	5.0	5.6	3.0	4.7
Table by highwayrobbery.net. See pgs. 57 & 58 of NCHRP report				

Right now the average red light violator is about 0.4 sec. late, so the extra yellow time will cut violations in half. An article about the study is at http://www.thenewspaper.com/news/39/3941.asp and the full study is at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp rpt 731.pdf.

If, on the other hand, the Council discusses terminating the program, you will hear that without the cameras, there will be mayhem in the streets of Millbrae. Whether or not you believe that, I suggest that at the same time - or before - the City removes the cameras, it should improve the engineering at the intersections with the quick and cheap countermeasures suggested in the following passage (mostly from the Alternatives page at highwayrobbery.net):

Anyone who watches the crash videos circulated by the Industry will notice that most of the crashes occur many seconds into the red. In 2004 the Texas Transportation Institute (TTI), with sponsorship by the Texas DOT, studied 41 crash videos obtained from red light cameras and confirmed what the public has been noticing: "With one exception, all

of the right-angle crashes occurred after 5 seconds or more of red." They also reported that the average was 8.9 seconds into the red. (Link to the study: http://thenewspaper.com/rlc/docs/04-alternatives.pdf See pages 5-15 and 5-16.)

These real late runners (5+ secs. late) aren't doing it on purpose. Recent evidence suggests that most of them are visitors who, because they don't live in town, simply don't know that there's a signal up ahead. They are lost or distracted, and by the time they notice that the signal is there, it is too late to stop. (On July 22, 2012 the mayor of Hallandale, Florida disclosed that 78% of the tickets there go to visitors. See last paragraph at: http://www.sun-sentinel.com/news/opinion/fl-guest-cooper-cameras-mon0723-20120722,0,6873108.story. In Washington DC about 80% of tickets go to visitors.)

A minority of the violations are by "locals" who forgot there's a camera up ahead because they were distracted, or impaired.

Because they won't know or won't remember that there's a camera up ahead, the presence of a camera won't keep the visitors or the distracted/impaired locals from making the real late runs. To cut those real late runs, a city should install visual cues to make its most dangerous intersections more prominent and to warn motorists, "signal ahead." Most of these engineering countermeasures are cheap and quick to do. And none of them carry the camera side effect of increased rearenders.

2005 research sponsored by the Florida Department of Transportation concluded that improving street markings (painting "signal ahead" on the pavement) near intersections would reduce red light running by up to 74 percent.

(http://thenewspaper.com/rlc/docs/05-simulator.pdf Section 3.4, p. 69 of the document, or p. 84 of the pdf.) A large red light camera study sponsored by the San Diego Police Department rated engineering countermeasures such as better markings as "most effective" in reducing unintentional running, while enforcement, including cameras, was considered "less effective."

(http://www.highwayrobbery.net/redlightcamsdocsSanDiegoMain.html#SDdocs2 Table 6.3, p. 80 of the document, or p. 97 of the pdf.)

The 2004 TTI study (at page 5-9, link above) noted that countermeasures like increasing the diameter of signal lamps from 8" up to 12"or adding signal heads had the potential to decrease crashes by 47 percent. The 2005 Florida research recommended the installation of a signal pole on the "near" side of intersections. (The link is above. See p. 135 of the document, or p. 150 of the pdf.)

The 2004 TTI study (at page 5-9, link above) noted that adding backboards (back plates) to the signals had the potential to decrease crashes by 32 percent. [Or, enlarge the backboards you have.]

I suggest putting up larger and lighted name signs for the cross street, and larger bulbs in the street lights, at known dangerous intersections.

In Summation

Before signing up for more years of cameras, ask staff to report to the Council about the effect the NCHRP yellows will have on the quantity of violations and the the financial viability of the camera system. Ask staff to report about countermeasures as alternatives to cameras - or even try some of them. The City can easily afford to do the countermeasures, as the latest CAFR audit (copy attached) says that the City has \$3.3 million of unassigned money, available for spending at the Council's discretion. And, ask staff to seek a better price on the camera rent.

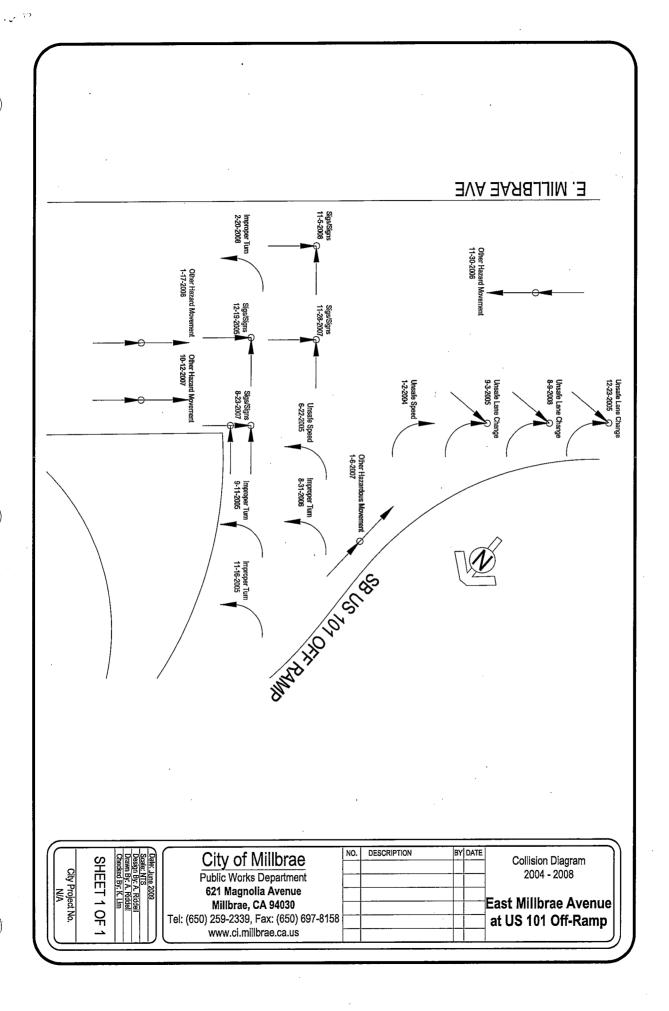
The cameras haven't reduced ticketing, so should be replaced by measures that are known to work.

Sincerely,

Jim

cc: Media

ATTACHMENTS:



To: Caltrans Encroachment Permits, Oakland

Subject: Are Millbrae red light camera Encroachment Permits justified by the collision history?

The City of Millbrae operates red light cameras at three intersections, two of which are on or adjacent to State highways and are operated under Caltrans Encroachment Permits issued in September 2009.

On September 5, 2014 I asked Caltrans for copies of "all current issued encroachment permits for red light cameras in Millbrae" and for "the justification the City provided." On October 2, 2014, Caltrans mailed responsive documents to me. PDFs of all those documents are attached to this email (excluding copies of the large format construction plans).

As justification for the Permit to install the red light camera monitoring the two southbound El Camino Real (RT 82) to eastbound Millbrae Avenue left turn lanes, the City created and submitted to Caltrans a one-page document entitled Collision Diagram 2005-2009, which showed nine collisions in five years. One of those nine collisions (date 9-4-2005) involved a 'Sig/Signs" violation by a left-turning motorist; all the other collisions depicted on the Diagram involved other movements or violations other than CVC 21453. At a very busy intersection is one collision in five years sufficient to justify the installation of a red light camera which to cover its rent during a five year period must generate at least 3000* tickets bearing \$1,500,000 in fines and which during just the last calendar year (2014) generated 1744 tickets bearing \$872,000 in fines?

As justification for the Permit to install the red light camera monitoring turns from the southbound RT 101 offramp at Millbrae Avenue, the City created and submitted to Caltrans a one-page document entitled Collision Diagram 2004-2008, which showed 17 collisions in five years. Caltrans also sent me a copy of that same Diagram bearing hand-annotations by an unknown person. The City submitted Traffic Collision Reports for 12 of the 17 collisions plus two more Reports for collisions whose dates were not shown on the City's Diagram.** Copies of the Diagrams and the Reports are attached.

Of the 14 collisions, one (date 1-13-04) involved a CVC 21453 (red light) violation by a motorist using the southbound offramp. That motorist struck a bicyclist, with no injury.

Another of the 14 (date 11-5-08) was listed on the City's Collision Diagram 2004-2008 as "sig/signs" but SWITRS shows the Primary Collision Factor as "ALC/DRG." SWITRS shows two injuries with Extent: "comp pn."

The remaining 12 collisions involved other locations or violations other than "sig/signs" and CVC 21453. Is two collisions (with two minor injuries) in five years at a very busy intersection sufficient to justify the installation of a red light camera which to cover its

rent during a five year period must generate at least 3000* tickets bearing \$1,500,000 in fines and which during just the last calendar year generated 3891 tickets - mostly for right turns - bearing \$1,946,500 in fines?

Please consider the revocation of both permits.

Sincerely,

Jim

*Millbrae pays rent of \$5395 per camera per month and receives approximately \$100 of revenue for each ticket issued.

**Per Mr. Lim's 8-20-09 email to Caltrans, three of the 17 collisions shown on the US101/Millbrae collision diagram involved only property damage, so no collision reports were written.

Details of My US101/Millbrae Avenue Collision Analysis

Number in () refers to sequence in attached PDF of Millbrae/101 Traffic Collision Reports.

- 1-2-04: Date is shown on City's Collision Diagram 2004-2008 but no Traffic Collision Report was received by me. SWITRS does not show a collision on Millbrae Avenue or RT 101 near Millbrae Avenue on that date.
- 1-3-04: Date is not shown on City's Collision Diagram 2004-2008 but I received a Traffic Collision Report. Both vehicles were proceeding straight westbound. PCF was unsafe speed. CVC 14603 was noted as at fault driver was age 16. No injuries. (12)
- 1-13-04: Date is not shown on City's Collision Diagram 2004-2008 but I received a Traffic Collision Report. Driver at fault entered intersection from middle lane of southbound offramp, hit bicycle. PCF: CVC 21453 and CVC 21201 (no bike headlight?). No injuries. (13)
- 6-22-05: Location was at offramp from northbound RT 101. (14)
- 11-16-05: Location was 321 feet east of offramp from southbound RT 101. (4)
- 12-9-05: On City's Collision Diagram 2004-2008 date is shown in error as 12-19-05. Driver at fault was westbound on Millbrae Avenue and ran signal controlling entry to intersection of Millbrae Avenue and the southbound offramp. (3)
- 8-31-06: Driver at fault entered intersection from southbound offramp at excessive speed, rolled. PCF: CVC 22350. (5)

- 1-6-07: On southbound offramp, rearender, DUI and speed. PCF: CVC 23152(a). (6)
- 8-23-07: Location was at offramp from northbound RT 101. (7)
- 10-12-07: On southbound offramp, rearender, speed, wet road. PCF: CVC 22350. (8)
- 11-28-07: Location was at offramp from northbound RT 101. (9)
- 1-17-08: Location was at RT 101 overpass. (10)
- 2-20-08: No Collision Coding page received by me. City's Collision Diagram 2004-2008 shows a left turn from ramp and "improper turn" while hand-annotated copy of same Diagram indicates a left turn from ramp and wet speeding hit curb." SWITRS (copy attached) shows PCF as "unsafe speed," no injuries. (11)
- 8-9-08: No Collision Coding page received by me. City's Collision Diagram 2004-2008 shows a right turn from ramp and "unsafe lane change" while hand-annotated copy of same Diagram says "fail to yield." SWITRS (copy attached) shows both vehicles westbound prior to the crash, the PCF as "ROW Auto," the Collision Type as "sideswipe," and one injury with Extent "comp pn." Without a Collision Coding page I cannot tell if the at fault driver, or the other driver, or both drivers, approached from the southbound offramp. (1)
- 11-5-08: No Collision Coding sheet received by me. City's Collision Diagram 2004-2008 shows a straight ahead movement from ramp and "sigs/signs." SWITRS (copy attached) shows the at fault vehicle was southbound, the PCF as "Alc/Drug," the Collision Type as "broadside," and two injuries with Extent "comp pn." (2)

Total Count: 171

Report Run On: 06/09/2015

Jurisdiction(s): ALL

Include State Highways cases 2 DRVR 23 M O PROC ST Ε 0100 **SUBAR 2006** 3 DRVR 44 F PROC ST F D 2200 CHEVR 2004 -Primary Rd EAST MILLBRAE AV Distance (ft) 0 Direction Secondary Rd RT 101 NCIC 4110 State Hwy? Y Route 101 Postmile Prefix - Postmile 18.032 Side of Hwy S CalTrans 4 Badge 101 Collision Date 20080220 Time 0823 Day WED City Millbrae County San Mateo Population 3 Rpt Dist 15 Beat 004 Type 0 UNSAFE SPEED Violation 22350 Collision Type OTHER Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20081203 Primary Collision Factor Weather1 RAINING Rdwv Surface WET Weather2 Rdwv Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Ramp/Int 4 Loc Type R Party Info Victim Info Party Type Age Sex Race Sobrietv1 Sobrietv2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Ini AGE Sex Seat Pos Safety FQUIP 1F DRVR 41 F O HNBD LFT TURN E 0100 BMW 1994 -3 Ν G Primary Rd EAST MILLBRAE AV Distance (ft) 0 Direction Secondary Rd RT 101 NCIC 4110 State Hwy? Y Route 101 Postmile Prefix - Postmile 18.031 Side of Hwv S City Millbrae County San Mateo Population 3 Rpt Dist Beat 004 0 CalTrans 4 Badge 111 Collision Date 20080809 Time 0628 Day SAT Type R-O-W AUTO Violation 21800A SIDESWIPE #Killed 0 #Injured 1 Tow Away? Y Process Date 20090430 Primary Collision Factor Collision Type Severity INJURY Weather1 CLEAR Rdwv Surface DRY NO UNUSL CND Rdwy Cond2 Spec Cond 0 Weather2 Rdwv Cond1 Motor Vehicle Involved With OTHER MV Ped Action Cntrl Dev FNCTNG Hit and Run Lighting DAYLIGHT Loc Type R Ramp/Int 4 Victim Info Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Ini AGE Sex Seat Pos Safety EQUIP Eiected 1F DRVR 22 M В **HNBD** MERGING w - 00 **MAZDA 1994** 3 G DRVR COMP PN 22 G 2 DRVR 41 M B **HNBD** CHANG LN W 1000 **OTHER 2005** 3 М G Primary Rd EAST MILLBRAE AV Distance (ft) 0 Direction Secondary Rd RT 101 NCIC 4110 State Hwy? Y Route 101 Postmile Prefix - Postmile 18.063 Side of Hwv N Beat 001 City Millbrae County San Mateo Population 3 Rpt Dist 15 Type 0 CalTrans 4 Badge 110 Collision Date 20080831 Time 0300 Day SUN Primary Collision Factor DRVR ALCIDRG Violation 23152A Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20090410 Weather1 CLEAR Weather2 Rdwv Surface DRY Rdwv Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved WithFIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev FNCTNG Loc Type R Ramp/Int 3 Victim Info Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 SafetyEquip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Eiected ACURA 1998 -1F DRVR 22 M HBD-UI RAN OFF RD E 0100 3 A 22107 H Primary Rd EAST MILLBRAE AV Distance (ft) 77 Direction S Secondary Rd RT 101 NCIC 4110 State Hwy? Y Route 101 Postmile Prefix - Postmile 18.031 Side of Hwv S City Millbrae County San Mateo Population 3 Rpt Dist 15 Beat 004 Type 0 CalTrans 4 Badge 103 Collision Date 20081105 Time 1453 Day WED Primary Collision Factor DRVR ALCIDRG Violation 23152A Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 2 Tow Away? Y Process Date 20090629 Weather1 CLEAR Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Weather2 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type R Ramp/Int 4 Victim Info Party Info SW Veh CHP Veh Make Year SP Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP **Ejected** 1F DRVR 24 M H HBD-UI **RGT TURN** S Α 0100 HONDA 1997 -3 М G DRVR COMP PN 24 М 1 G 2 DRVR 29 M W HNBD PROC ST D 2200 FORD 2007 -3 М G DRVR COMP PN 29 1 n G Primary Rd EAST MILLBRAE AV Distance (ft) 0 Direction Secondary Rd RT 82 NCIC 4110 State Hwy? Y Route 82 Postmile Prefix - Postmile 15.946 Side of Hwv S Collision Date 20080126 Rpt Dist CENT Type 0 Badge 108 Time 2248 Day SAT City Millbrae County San Mateo Population 3 Beat 003 CalTrans 4 #Killed **0** #Injured **1** Tow Away? **Y** Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY Process Date 20080926 Weather1 RAINING Weather2 Rdwv Surface WET Rdwv Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved WithFIXED OBJ Lighting DARK - ST Ped Action **Cntrl Dev FNCTNG** Loc Type I Ramp/Int 5 Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP **Ejected**

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CITY COUNCIL AGENDA REPORT



CITY OF MILLBRAE 621 Magnolia Avenue Millbrae, CA 94030

SUBJECT: Agreement with American Traffic	Report No. 5685
Solutions, Inc. for Automated Red Li Traffic Enforcement.	For Agenda of: November 24, 2015
Trame Emorcement.	Department: Public Works
ATTACHMENTS:	Originator: Peter Vorametsanti
Resolution Authorizing Execution of Agreem Automated Red Light Traffic Enforcement with Art Traffic Solutions, Inc.	
Budget Action Yes: _X No:	Finance Review:
REPORT TYPE: ACTIONX INFORMATIONX INFORMATIONX_ PUBLIC HEARING	ONAL

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to execute an Agreement with American Traffic Solutions, Inc. in a form approved by legal counsel for automated red light traffic enforcement for a three (3) year term expiring November 30, 2018, with a potential two (2) year further extension if desired by the City.

BACKGROUND:

The City of Millbrae utilizes automated red light enforcement equipment to monitor three intersections within the city. These intersections are among the most heavily traveled in the city and include Millbrae Avenue at El Camino Real, Millbrae Avenue at Rollins Road, and Millbrae Avenue at the off-ramp from Interstate 101. The equipment at Millbrae Avenue and Rollins Road were installed and activated on September 7, 2006. The equipment at the two other intersections were installed and activated on November 6, 2009. Vehicular traffic in the area of the city where these intersections are located is by far the heaviest. Their proximity to three major transportation hubs including the San Francisco International Airport, the end of line Bay Area Rapid Transit (BART) Station, and CalTrain Station, as well as their intersect with Interstate 101, present a unique and challenging environment for vehicular traffic and traffic safety.

ANALYSIS:

In 2006, the Council approved the use of automated red light traffic enforcement cameras given increased vehicle traffic, roadway congestion, and traffic collisions in the E. Millbrae Avenue traffic corridor. Red light safety cameras are located at three intersections with a total of seven cameras. Along with being very congested and well-traveled, these intersections are among the largest in the city and include multiple lanes. In one of these intersections, there are three left turn lanes in addition to existing right of way access. There is no space to safely pull violators over for enforcement at any of the

intersections. To rely solely on traditional enforcement efforts in these areas present extreme challenges in achieving law enforcement objectives and enhancing safety for the motoring public.

It would not be feasible for law enforcement to continuously monitor the intersections currently equipped with automated red light enforcement equipment. Even if it were possible to provide the same level of enforcement through traditional enforcement efforts, associated court appearances would make it difficult to staff daily patrol shifts. The cost to the city to transition from automated to staff enforcement would likely be extremely high. Even then, the current level of enforcement could not be maintained.

Despite the size of the listed intersections and the amount of daily traffic, collision statistics are low. The level of awareness associated with the automated enforcement program has contributed to maintaining the low frequency of collisions at these intersections.

Since the program began, the automated red light enforcement program has resulted in the issuance of between 250 and 1200 citations per month. The numbers have increased over the years due to the high volume of traffic and community growth, as well as upgraded technology. Trained police officers carefully review every photograph to ensure the vehicle is in violation before a citation is issued. This process is administered under contract with the San Mateo Police Department. Ninety-six percent (96%) of the citations issued as a result of the automated red light equipment are upheld in the San Mateo County court system. Repeat violations are extremely low which indicates success in changing driving behavior.

The use of automated enforcement equipment has become a topic that is regularly discussed and scrutinized. These programs are not appropriate for all communities and intersections. In fact, there are no other intersections in the city where this program is warranted. Given the unique traffic and safety challenges the intersections in question present, the presence of automated enforcement equipment enhances public safety and fills a gap that could not otherwise be filled with the use of traditional enforcement measures.

FISCAL IMPACT:

The fees paid under this contract covers the equipment installation, rental, operation and maintenance. The fee for the first year of the contract is \$453,180 and it will drop to \$352,380 for the subsequent two years. The City of San Mateo police department process the potential violation for Millbrae under a separate contract. The fees for processing potential violation is \$62,700 per year with an escalation clause based on the Consumer Price Index. In 2014, these expenses are covered by the fines collected.

COUNCIL ACTION:

Authorize the City Manager to execute an Agreement with American Traffic Solutions, Inc. in a form approved by legal counsel for automated red light traffic enforcement, for a three (3) year term expiring November 30, 2018, with a potential two (2) year extension if desired by the City.

CITY OF MILLBRAE, COUNTY OF SAN MATEO STATE OF CALIFORNIA

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILLBRAE
AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT WITH
AMERICAN TRAFFIC SOLUTIONS, INC. FOR
AUTOMATED RED LIGHT TRAFFIC ENFORCEMENT FOR UP TO A FIVE (5)
YEAR TERM

WHEREAS, the City of Millbrae supports the use of red light cameras at the specific intersections of Millbrae Avenue at El Camino Real, Millbrae Avenue at Rollins Road, and Millbrae Avenue at the off-ramp from Interstate 101, for more effective and efficient traffic enforcement; and

WHEREAS, the City of Millbrae recognizes that the proximity of these intersections to three major transportation hubs, including Bay Area Rapid Transit (BART), Cal Train, and the San Francisco International Airport, as well as their connections with and proximity to Interstate 101, present a unique and challenging environment for traffic safety; and

WHEREAS, the City of Millbrae now wishes to enter into an Agreement with American Traffic Solutions, Inc. ("ATS"), whereby ATS will continue to provide automated red light traffic enforcement services for a three year period through November 30, 2018 with monthly fees starting at \$5,395 per camera per month the first year and decreasing to \$4,195per camera per month the second two years of the Agreement and the option to extend the Agreement for an additional two years.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Millbrae approves the Agreement with American Traffic Solutions, Inc. for automated red light traffic enforcement services, for a three-year period commencing November 30, 2015 until November 30, 2018, with a two-year further extension if desired by the City, in accordance with the monthly fees referenced above and other costs described in the Agreement; and

BE IT FURTHER RESOLVED that the City Manager or designee is hereby authorized to execute the Agreement with American Traffic Solutions, Inc. in a form acceptable to the City Attorney.

REGULARLY PASSED AND ADOPTED this 24th day of November 2015.

Mayor

ATTEST: