STATE OF NORTH CAROLINA	**IN THE GENERAL COURT OF JUSTICE SUPERIOR COURT DIVISION**
COUNTY OF WAKE	**10-CVS-019930**
BRIAN CECCARELLI, ,	
individually and as class representative,	**PLAINTIFF'S BRIEF IN OPPOSITION TO DEFENDANT'S MOTION FOR SUMMARY JUDGMENT**
Plaintiff,	
v.	
TOWN OF CARY	
Defendant.	

Plaintiff, BRIAN CECCARELLI, individually and as proposed class representative (hereinafter referred to as "Plaintiff"), hereby submit this Brief in Opposition to the Motion for Summary Judgment filed by the Defendant Town of Cary, as follows:

STATEMENT OF THE CASE

Plaintiffs filed this action in Wake County Superior Court on November 30, 2010, including a motion for class certification. (See Tab 1, Complaint.) After extensions, on February 1, 2011, Defendant filed an Answer, including a motion to dismiss for lack of personal jurisdiction and motion to dismiss for failure to state a claim for relief. (See Tab 2, Answer.) Thereafter, on or around February 24, 2011, Defendant filed an Amended Answer. (See Tab 3, Amended Answer.)

The hearing on Defendant's Motions to Dismiss took place on the 25th day of April, 2011. On June 3, 2011, Judge Carl Fox ordered: (1) that the Motion to Dismiss Plaintiff Ceccarelli's claim be denied; (2) Plaintiffs Casperson and Metters' claims be dismissed with prejudice; and (3) Plaintiff Millette's claims be dismissed without prejudice, with permission to re-file. (See Tab 4, Motion to Dismiss Order.) (The difference was that while none of the three alleged exhaustion of administrative remedies, Plaintiff Millette actually had so exhausted but

had not alleged it. Judge Fox recognized that she could cure this issue by repleading. See ¶¶ 8 & 11 of Judge Fox's Order of June 3, 2011.)

On October 18, 2011, Plaintiff Ceccarelli filed a Motion for Leave to Amend Complaint and an Amended Complaint. (See Tab 5, Motion to Amend Complaint.) On November 5, 2011, Plaintiff received Defendant's Motion for Summary Judgment and an Affidavit of Greg Fuller, P.E. (See Tab 6, Defendant's Motion for Summary Judgment.) On November 16, 2011, Plaintiff filed a Notice of hearing for December 12, 2011on Plaintiff's Motion for Leave to Amend Complaint and Motion for Class Certification. (See Tab 7, Notice of Hearing on Plaintiff's Motions.) On December 2, 2011, Plaintiffs served and noticed a Second Amended Complaint with added Plaintiffs Berglund and Mendler to the Third Claim for Relief. (See Tab 8, Second Amended Complaint.)

STATEMENT OF THE FACTS

(1) First Claim for Relief:

A traffic control photographic system is used at the intersection of Cary Towne Boulevard and Convention Drive. On November 6, 2009 at 9:27 PM, Plaintiff Ceccarelli drove his vehicle eastbound on Cary Towne Boulevard crossing its intersection with Convention Drive. (Ceccarelli Aff.¶ 3.) The speed limit on the relevant portion of Cary Towne Boulevard was 45 mph. (Ceccarelli Aff.¶ 4; Spencer Dep. 22:11-21, 6/24/11; Bailey Dep. 4:12-14 & 9:3-8, 6/24/11.) However, the NCDOT traffic signal plan of record was based on the incorrect speed limit of 35 mph. (Ceccarelli Aff.¶¶ 13-14; Spencer Dep. 20:22-23, 22:11-21, 23:20 – 24:23, 6/24/11.) The yellow light duration was less than an accurate calculation of clearance time. (Spencer Dep. 23:20 – 24:23, 6/24/11.) Plaintiff Ceccarelli was unable to safely stop his vehicle before the traffic signal turned red in his respective path of travel. (Ceccarelli Aff.¶ 5; Spencer Dep. 24:6-12, 6/24/11.)

Cary and NCDOT already knew of the signal plan error when they caught Plaintiff Ceccarelli on November 6, 2009.[1] (Ceccarelli Aff. ¶¶ 5 & 18.) However, Plaintiff Ceccarelli was issued a Notice of Violation of Cary Town Code 34-303 on November 10, 2009 by the

[1] On November 30, 2009, Cary traffic engineer David Spencer emailed NCDOT Signals Engineer, G. G. Murr "that the signal plan done in 1991 used the wrong speed limit so the yellow time is incorrect. The singal plan used a speed limit of 35 mph on Cary Towne Blvd when the speed limit was 45 mph at that time (and still is)." (See Resp. to Pl.'s 1st RFPD, Def 001896.)

Town of Cary. (Ceccarelli Aff.¶ 6.) He paid the civil penalty of $50 demanded by the Town of Cary. (Ceccarelli Aff.¶ 7.) Plaintiff Ceccarelli appealed this violation on December 2, 2009 and appeared before a panel established by the Town of Cary. (Ceccarelli Aff.¶ 8.) On January 20, 2010, the panel found he violated Cary Town Code 34-303. (*Id.*) Plaintiff Ceccarelli has exhausted his administrative appeals.

The inaccurate traffic signal plan of record dated May 31, 1991 was used until March 2010. This error caused the duration of the yellow light to be less than the interval specified in the Design Manual developed by the Signal and Geometrics Sections of the NCDOT. (Ceccarelli Aff.¶ 15; Spencer Dep. 23:20 – 24:23, 6/24/11.)

(2) <u>Second Claim for Relief:</u>

On May 7, 2010 at 5:18 PM Plaintiff Millette was traveling north on Kildaire Farm Road and turned left at the intersection of Kildaire Farm Road and Cary Parkway. (Millette Aff.¶ 3.) The speed limit at all relevant times and on the relevant portions of Kildaire Farm Road was 45 mph. (Millette Aff.¶ 4.) The left turn yellow light arrow durations are determined using the assumption that vehicles turning left will be traveling 20 to 30 mph. (Ceccarelli Aff.¶ 20.)

After seeing the yellow light, Plaintiff Millette was unable to safely stop her vehicle before the traffic signal turned red in her respective path of travel. (Millette Aff.¶ 5.) Plaintiff Millette got her citation while Cary was experimenting with a 3.0 second yellow light duration. (Ceccarelli Aff., Exh. E.) Shortly thereafter, Cary stopped issuing citations at this intersection. (*Ibid.*)

Plaintiff Millette was issued a Notice of Violation of Cary Town Code 34-303 on May 21, 2010 by the Town of Cary. (Millette Aff.¶ 6.) Plaintiff Millette paid the civil penalty of $50 demanded by the Town of Cary. (Millette Aff.¶ 7.) She appealed this violation and appeared before a panel established by the Town of Cary on August 18, 2010. (Millette Aff.¶ 8.) The panel found that Plaintiff violated Cary Town Code 34-303. (*Id.*) Plaintiff Millette has exhausted her administrative appeals.

<u>SUMMARY JUDGMENT</u>

Rule 56(c) of the North Carolina Rules of Civil Procedure states the following:

> The judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that any party is entitled to a judgment as a matter of law....Summary judgment, when appropriate, may be rendered against the moving party.

ARGUMENT

I. Defendant Town Of Cary May Not Use Red Light Cameras To Enforce Violations At Intersections Where The Yellow Light Duration Is Less Than Allowed by Legislative Authority And Its Own Charter.

a. Authority regarding yellow light duration.

In 2001 the General Assembly enacted a law authorizing municipalities in Wake County to implement traffic control photographic systems. (N.C.S.L. Ch. 2001-286, Section 3.) This was an act to "authorize municipalities to use red light cameras for safety, for schools, but not for profit." (*See id.*) The law specified that the yellow light duration must be a certain length for the municipality to use photo enforcement:

> The duration of the yellow light change interval at intersections where traffic control photographic systems are in use shall be no less than the yellow light change interval duration specified in the Design Manual developed by the Signals and Geometrics Section of the North Carolina Department of Transportation (emphasis added).

(N.C.S.L. Ch. 2001-286, Section 3(e).) In 2004 this law was rewritten giving more authority to municipalities in Wake County:

> The duration of the yellow light change interval at intersections where traffic control photographic systems are in use shall be no less than the yellow light change interval duration on the traffic signal plan of record signed and sealed by a licensed North Carolina Professional Engineer in accordance with Chapter 89C of the General Statues, and shall be in full conformance with the requirements of the Manual an Uniform Traffic Control Devices ["MUTCD"] (emphasis added).

(N.C.S.L. Ch. 2004-141, Section 3.) Therefore, the municipality is under a statutory duty to ensure the yellow light duration is (1) equal to or greater than the signal plan of record and (2) in full conformance with the MUTCD.

The Town of Cary, a municipality located within Wake County, adopted an ordinance to implement a traffic control photographic system. From 2004 to 2010, the Town Charter held Cary to a more comprehensive self-imposed duty:

> The duration of the yellow light change interval at intersections where traffic control photographic systems are in use shall be no less than the yellow light change interval duration specified in the Design Manual developed by the Signals and Geometrics Section of the North Carolina Department of Transportation (emphasis added).

(Code of Ordinances, Town of Cary, Charter Art. VIII, § 8.15(e).) Accordingly, in Cary, a traffic control photographic system was only allowed to operate at intersections where the yellow light duration was: (1) equal to or greater than the signal plan of record; (2) in full conformance with the MUTCD; ***and*** (3) equal to or greater than the interval specified in the Design Manual developed by the Signals and Geometrics Section of the NCDOT. While Cary held more authority in 2004, it did not utilize this until 2010 when its Charter was amended.[2]

b. The yellow light duration at the intersection of Cary Towne Boulevard and Convention Drive was less than yellow light change interval specified in the Design Manual developed by the Signals and Geometrics Section of the NCDOT.

The First Claim for Relief seeks a declaratory judgment (and consequentially, damages) that the application of the Cary Code of Ordinances Sections 34-303 & 34-304 to Plaintiff Ceccarelli and the Plaintiff class similarly situated are void and unenforceable in that the penalties imposed thereunder are beyond the scope and violative of Defendant's enabling authority. (Complaint, prayer for judgment ¶ 2.) Defendant collected fines that did not meet the requirements imposed by its enabling authority. (*See* Cary Code of Ordinances § 8.15(e) & N.C.G.S § 160A-300.2(e).)

From 2004 until March 2010, the yellow light duration at the intersection of Cary Towne Boulevard and Convention Drive was impermissibly less than the interval required by the Design

[2] Session Law 2010-132, Section 18 was rewritten by the General Assembly again as follows: "The duration of the yellow light change interval at intersections where traffic control photographic systems are in use shall be no less than the yellow light change interval duration specified on the traffic signal plan of record signed and sealed by a professional engineer, licensed in accordance with the provisions of Chapter 89C of the General Statutes, and shall comply with the provisions of the Manual on Uniform Traffic Control Devices (emphasis added)." Same language adopted by Town of Cary Charter, App. 2.8(e).)

Manual developed by the Signals and Geometrics Section of the NCDOT ("Design Manual"). (Code of Ordinances, Town of Cary, Charter Art. VIII, § 8.15(e); Ceccarelli Aff. ¶ 15.) Based on the actual 45 mph speed limit, the yellow light duration should have been 4.5 seconds at this intersection. (Ceccarelli Aff. ¶¶ 15, 18; George Aff. ¶¶ 8-9.) However, the yellow light duration was only 4.0 seconds from 2004 until it was changed in March 2010. (Ceccarelli Aff. ¶¶ 13 – 18.) The Town's Charter precluded the operation of a photo enforcement system in this manner. (See Cary Charter § 8.15(e).) Defendant is liable for the unauthorized collection of these fees.

c. The yellow light duration at the intersection of Cary Towne Boulevard and Convention Drive was not in full conformance with the controlling Manual on Uniform Traffic Control Devices ("MUTCD") from 2004 to 2010.

Defendant is under a duty to ensure cameras are only used at intersections where the yellow light duration was in full conformance with MUTCD specifications. (N.C.S.L. Ch. 2004-141, Section 3.) The MUTCD requires (1) the yellow change interval to be determined using engineering practices and (2) the yellow light duration to be consistent with this determined value.[3] (MUTCD, Section 4D.26, ¶¶ 3, 8.) The yellow light duration was not in full conformance with the MUTCD from 2004 until March 2010 because the yellow change interval was based on the incorrect speed limit. (Ceccarelli Aff. ¶¶ 15 – 16.)

The actual speed limit was 45 mph, but the interval was calculated using 35 mph. This error resulted in a yellow light duration that was less than the determined value. The Town of Cary's own traffic engineer stated:

> [C]learance times are calculated to provide a safe time to allow people to make that decision when the light shows up, whether to go or to stop, and we always want to make sure that it meets--it meets those standards. So the clearance time in itself is a safety issue. We want to make sure that it's up to date and accurate, and if it's not, that's a safety issue.

(Spencer Dep. 24:6-12, 6/24/11.) When the yellow light duration is set to a speed that is slower than the speed drivers are traveling, they cannot stop safely. (George Aff. ¶¶ 7-9.)

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[3] "Engineering practices for determining the duration of yellow change . . . intervals can be found in ITE's 'Traffic Control Devices Handbook' and in ITE's 'Manual on Traffic Signal Design…' (MUTCD, Section 4D.26, ¶7.)

Defendant acknowledges that this type of error does not comport with the purpose of this act, "to increase safety." (*See* N.C.S.L. 2001-286.)

II. Defendant's Motion for Summary Judgment Should Be Denied Because There Are Genuine Issues as to Material Facts Regarding The Yellow Light Duration At The Intersection Of Cary Towne Boulevard And Convention Drive.

a. There is a dispute as to which plans were the official NCDOT Signal Plans of Record at the intersection of Cary Towne Boulevard.

Identification of the NCDOT Signal Plans of Record is a disputed question of material fact. Defendant claims to provide the official NCDOT Signal Plans of Record, including the yellow times shown, for the time period of 2004 through 2010. (See Fuller Aff., ¶ ¶ 8-9.) However, the only two plans for this intersection were sealed 11/04/09 and 3/19/10 respectively. (See Fuller Aff., Exh. "A.") Thus, NCDOT failed to provide the signal plans from 2004 to one month before 2010.

Defendant produced documents in discovery that show the NCDOT Traffic Signal Plan of Record sealed on 5/31/91 was used through 2010. (See Resp. to Pl.'s 1st RFPD, Def 002039 & 002223, Def 003457; Cecarrelli Aff. ¶ 13, 17.) This plan was referenced and provided by Cary at its depositions. (See Spencer Dep., 20-21, 6/24/11 & Bailey Dep., Exh. 14, 6/24/11.) Later, Cary refused to provide an account of dated signal plans of record and asserted it does not keep a log of changes made to these records. (Def. Responses to 1st Set Interrogatories, ¶¶ 1(a), 2(a).) Therefore, there is a genuine issue as to which plans were actually relied on by the Town of Cary and when they were physically implemented by the Town.

b. There is a dispute as to the speed limit when traveling eastbound on Cary Towne Boulevard crossing Convention Drive from 2004 to 2010.

Based on the signal plans provided, Greg Fuller, employee of the NCDOT, swore that the speed limit on Cary Towne Boulevard crossing its intersection with Convention Drive was 45 mph from 2004 through 2010. (See Fuller Aff., Exh. "A.") Cary's Director of Engineering confirmed this in his deposition. (See Bailey Dep., 4:12-14 & 9:3-7, June 24, 2011.) However, Defendant ***denied*** that the speed limit was 45 mph from 2004 to present. (See Def.'s Resp. to 1st RFA, #22.) Therefore, there is a genuine issue of material fact as to what the speed limit was at

this intersection. If this denial is disregarded as simply incredible, that does not avail for the Defendant since it helps establish Plaintiff's claim on the merits.

c. Plaintiff disputes that the yellow light duration was equal to or greater than the signal plan of record from 2004 through March of 2010.

i. *There is a genuine question of material fact as to whether the NCDOT Signal Plans of Record in effect between 2004 and 2010 were actually implemented by the Town of Cary.*

It is the responsibility of the Town of Cary to implement any changes in the NCDOT plans of record. (Spencer Dep. 12:8-21, 6/24/11.) However, the Town of Cary does not actually provide those changes until there is funding for it. (Spencer Dep. 12:8-21, 6/24/11.) Furthermore, Cary does not keep a log of changes made to the NCDOT signal plan of record. (Def.'s Resp. 1st Int., ¶¶1(a), 2(a).)

NCDOT provided a plan sealed 11/4/09, however, the Town was still relying on the previous plan on 11/24/09 and later.[4] (Ceccarelli Aff. ¶ 13.) Plaintiffs have proof that the duration was not lengthened at this intersection to match the signal plans until March 2010. (Ceccarelli Aff. ¶ 17.) There is a genuine question of material fact as to when the Town of Cary actually updated its traffic control systems to be in accordance with the NCDOT plan of record. In fact, Plaintiff Ceccarelli was caught when they knew they were in error.

ii. *There is a dispute as to the duration of the yellow light at the intersection of Cary Towne Boulevard and Convention Drive from 2004 to 2010.*

When traveling eastbound on Cary Towne Boulevard crossing its intersection with Convention Drive, Defendant alleges that the yellow light duration was 4.5 seconds from 2004 through 2010. (See Fuller Aff., ¶ ¶ 8-9 & Exh. "A.") Specifically, the timing did not change between the plans provided by the NCDOT dated 2009 and 2010. (*Id.*) However, Cary provided documents indicating that the traffic timing was changed at this intersection on 3/15/10 by its own public works and utilities department. (See Resp. to Pl.'s 1st RFPD, Def 003457.) If the 2009 plan was implemented on the date it was sealed, there would be no need to change the

[4] Ceccarelli testified as follows: "After inquiring with the Town of Cary about the timing of the yellow light at the Cary Towne Blvd and Convention Drive intersection, I received an email from Michael J. Bajorek, Assistant Town Manager for the Town of Cary. On November 24, 2009, he confirmed (a) the yellow light duration was 4.0 seconds per the design plan dated 5/31/1991 and (b) that the posted speed limit was 45 mph." (Ceccarelli Aff. ¶ 13.)

timing at this later date. However, Defendant produced documents that show the yellow time at this intersection was only 4.0 seconds through November 2009. (See Resp. to Pl.'s 1st RFPD, Def 002039 & 002223.) On 11/24/2009, the Town confirmed that they were still relying on the 5/31/1991 signal plan with the shortened yellow light duration. (Ceccarelli Aff. ¶ 13 & Exh. "B.")

At minimum, there is a question of material fact whether the yellow light duration was less than the 11/4/09 NCDOT signal plan of record. Furthermore, there is a question of material fact as to whether the yellow light duration was less than the 3/19/10 NCDOT signal plan of record and for how long.

III. For Left-Turn Intersections, Defendant Town Of Cary Unlawfully Collected Fines From At the Drivers Traveling Legal Speed Limit When They Were Unable To Stop Within the Allotted Yellow Light Duration Interval.

The Second Claim for Relief seeks a declaratory judgment (and consequently, damages) that the application of the Cary Code of Ordinances Sections 34-303 & 34-304 to Plaintiff Millette and the Plaintiff class similarly situated is void and unenforceable in that the penalties imposed thereunder are beyond the scope and violative of Defendant's enabling authority. (Compl., prayer for judgment ¶ 2.) Plaintiffs allege that the methodology and plans used to determine the yellow light duration for left hand turns are arbitrary and capricious with regard to the identified intersections.[5] (Compl., ¶¶ 1-9, 23-34.)

The methodology is unlawful because the yellow light change interval assumed a certain speed at these intersections, which is much lower than the posted legal speed limit.[6] Traffic

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[5] Left-turn Intersections at issue: (i) Maynard Road & Kildaire Farm Road (WB lf); (ii) Cary Parkway & Kildaire Farm Road (WB lf); (iii) Kildaire Farm Road & Cary Parkway (NB lf); (iv) Cary Parkway & High House Road (NB lf); and (v) Walnut Street & Meeting Street (SB lf). (See Tab 1, Compl., Exh. C.)

[6] See Ceccarelli Aff., ¶ 20: "a) The Town of Cary determines left turn yellow light arrow durations using the assumption that all vehicles approach the intersection at 20 to 30 mph, even though the legal speed limit is 45 mph. The assumption comes from a typo error beginning in the March 2002 edition of the North Carolina Department of Transportation Signals Design Manual. In editions prior to March 2002, the specification applies that assumption only to the computation of the all-red clearance interval, not to the yellow change interval. 20 to 30 mph is the speed vehicles travel while they are *within* the intersection, not as they approach the intersection. For further explanation see comments tracing the error chronologically in the NCDOT Change and Clearance Intervals formula of the Signals & Geometrics Section, Traffic Engineering and Safety Systems Branch attached as Exhibit "E."

The all-red clearance interval is the amount of time all drivers in all approaches to the intersection see a red light. The all-red comes immediately after a yellow. The all-red interval gives the necessary time for all vehicles to clear

signal plans for each of the above intersections arbitrarily assume the car is traveling at 20-30 mph, much less than the posted speed limit. (See Ceccarelli Aff., ¶ 20.) This assumption, not the posted speed limit of 45 mph, is used to calculate the yellow light duration. (*Ibid.*) This results in yellow light durations that are too short.[7] (*Ibid.* at ¶ 19; George Aff., ¶ 10 -11.) Therefore, the driver of the car that is in the dilemma zone when green turns to amber is not physically able to safely stop before the light changes. (See Ceccarelli Aff., ¶¶ 19-21.)

The Town of Cary was only authorized to operate traffic control photographic systems at intersections where the yellow light change interval was no less than the one specified by the ITE Manual, NCDOT traffic signal plan and MUTCD. (See N.C.S.L. 2001-286, 2004-141, and Cary Ord. § 8.15(e).) However, the duration could be ***equal to or greater*** than these durations. While

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the intersection. Engineers set the all-red interval so that the slowest moving vehicle that had entered the intersection just as the light turned red, has time to clear the intersection before opposing traffic gets a green. The slowest vehicles within the intersection are the left turning vehicles. Engineers correctly assume that these left turning vehicles move at 20 to 30 mph within the intersection.

b) But by misapplying 20 to 30 mph as the approach speed for the yellow change interval, the Town of Cary creates a type I dilemma zone in the left lane. The Town of Cary sets the left turn yellow change interval to 3.0 seconds. Any driver approaching at the posted speed limit of 45 mph, who is from 293 feet to 198 feet from the intersection when the light turns yellow, will be forced to run a red light. The driver neither has the distance to stop safely, nor the time to proceed at the speed limit into the intersection while the light is still yellow.

Since drivers do need to slow down before initiating a turn, the dilemma zone is even larger. In the very least, the Town of Cary expects drivers to enter the intersection from 20 to 30 mph. But when the light turns yellow, Cary's 3.0 second yellow only allows the driver the time to decelerate to 33.5 mph. No less. Given the expected entry speed of 33.5 mph, the location of the dilemma zone is between 293 feet and 152 feet from the intersection. When the light turns yellow, the Town of Cary will force any vehicles within 293 feet and 152 feet from the intersection to run a red light.

c) By working the ITE Yellow Change Interval formula backwards, a 3.0 second yellow interval reduces the posted speed limit of 45 mph to an effective limit of 22.9 mph. The Town of Cary sets the speed limit in the left lane to 22.9 mph without notifying the driver of this reduction in the legal speed limit. That is, a driver who intends to follow all of the traffic laws will have to reduce his or her speed to 22.9 mph even when still a distant 293 feet from the intersection."

[7] Ceccarelli Aff. ¶ 19: "The signal plans of record for left turns at the intersections of (a) Kildaire Farm Road/Cary Parkway and (b) Walnut Street/Meeting Place set the yellow light to a duration so short that it creates a type I dilemma zone. A type I dilemma zone is a region on the road where, if the driver is in the zone, then upon seeing the light turn yellow, there is no solution to the question whether to stop or go. Either choice the driver makes results in running a red light. When the light turns yellow, there is not enough distance for a driver to stop, nor is there enough yellow time for the driver to proceed into the intersection before it turns red. If the yellow light is of longer duration, there is no dilemma zone."

the NCDOT determines what the yellow time should be at a state-owned intersection, "any municipality may request that Yellow Times at State-owned intersections be altered...the Signal Plan of Record then may be amended to reflect that change." (See Fuller Aff., ¶ 13.)

Here, the law enforcing the ITE Yellow Change Interval is *not* in agreement with the immutable laws of nature.[8] A certain proportion of those travelling within the lawful speed limit will be unable to stop during the yellow light duration, thus are forced to run a red light. (Ceccarelli Aff., ¶ 19; George Aff., ¶ 10 -11.) Accordingly, the Town should have amended the traffic signal plans for left-hand turn intersections to comply with the laws of nature.

IV. Plaintiffs Are Entitled To A Refund Of Fees.

When a trial court declares a municipal fee to be unlawful, void, and without legal effect, the appropriate remedy is to order a refund of the collected and separately maintained fees.[9] *Durham Land Owners Ass'n v. County of Durham*, 177 N.C.App. 629, 640 (2006). In an analogous case, the Court awarded plaintiffs a refund of fees paid pursuant to a city ordinance enacted without proper enabling legislation. *Smith Chapel Baptist Church v. City of Durham*, 350 N.C. 805, 819 (1999). There, a judgment that fees were unlawfully collected warranted the refund of fees collected by the municipality:

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[8] The origin of law is 'right reason' as addressed by Marcus T. Cicero:

> True law is right reason in agreement with nature; it is of universal application, unchanging and everlasting; it summons to duty by its commands, and averts from wrong-doing by its prohibitions. And it does not lay its commands or prohibitions upon good men in vain, though neither have any effect on the wicked. It is a sin to try to to [sic] alter this law, nor is it allowable to attempt to repeal any part of it, and it is impossible to abolish it entirely. We cannot be freed from its obligations by senate or people, and we need not look outside ourselves for an expounder or interpreter of it. And there will not be different laws at Rome and at Athens, or different laws now and in the future, but one eternal and unchangeable law will be valid for all nations and all times, and there will be one master and ruler, that is, God, over us all, for he is the author of this law, its promulgator, and its enforcing judge. Whoever is disobedient is fleeing from himself and denying his human nature, and by reason of this very fact he will suffer the worst penalties, even if he escapes what is commonly considered punishment.

(MARCUS TULLIUS CICERO, *De Re Publica*, Book 3, Paragraph 22. *De Re Publica, De Legibus*, trans. Clinton W. Keyes, p. 211.) While this type of "law" does not include policy matters over which the legislature has discretion, it certainly applies to the laws of physics, which man is not able to ~~not~~ violate even if he chooses. King Canute discovered this principle.

[9] *Durham Land Owners Ass'n v. County of Durham* required the county to refund all illegally collected fees, totaling $8.7 million.

> [B]ecause we have already held that the City's SWU ordinance and the fees charged thereunder are invalid as a matter of law, we further hold that plaintiffs are entitled to a full refund of the illegally collected fees from the City.

Smith Chapel at 819. The action against the municipality was likened to the common law doctrine of an action for money had and received. *Id.* at 818. "[T]he common law action could 'be maintained whenever the defendant has money in his hands which belongs to the plaintiff, and which in equity and good conscience he ought to pay to the plaintiff.'" *Smith Chapel* at 818, quoting *Wilson v. Lee*, 211 N.C. 434, 436 (1937).[10]

Similarly, here, Plaintiffs: (1) allege Defendant acted beyond its enabling authority and (2) seek a refund of any penalties as in an action for money had and received. (Complaint, ¶ 39 & prayer for judgment, ¶¶ 2-3.) Plaintiffs claim a full refund of the illegally collected fees from Defendant as damages. (Complaint, prayer for judgment, ¶ 3.)

This the 7 day of December, 2011

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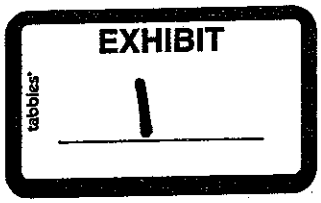
[10] Coincidentally, both *Durham Land Owners* and *Smith Chapel* were represented by Plaintiff's attorneys, strengthening their claim that the proposed class will be adequately represented by experienced counsel.

STATE OF NORTH CAROLINA **COUNTY OF WAKE** **BRIAN CECCARELLI, ,** **individually and as class representative,** **Plaintiff,** **v.** **TOWN OF CARY** **Defendant.**	**IN THE GENERAL COURT OF JUSTICE** **SUPERIOR COURT DIVISION** **10-CVS-019930** **DOCUMENTS TO SUPPORT PLAINTIFF'S OPPOSITION TO DEFENDANT'S MOTION FOR SUMMARY JUDGMENT**

Plaintiff, BRIAN CECCARELLI, individually and as proposed class representative (hereinafter referred to as "Plaintiff") submit the following documents in Opposition to the Motion for Summary Judgment filed by the Defendant Town of Cary. These documents prove there is an issue of material fact. Plaintiff will provide certified, sealed copies of the depositions at its hearing.

1	**Affidavit of Brian Ceccarelli**
2	**Affidavit of Elizabeth George**
3	**Affidavit of Lori Millette**
4	**Spencer Deposition, 6/24/11**
5	**Bailey Deposition, 6/24/11**
6	**Defendant's Responses to Plaintiffs' First Request for Production of Documents**
7	**Defendant's Responses to Plaintiffs' First Set of Interrogatories and Third Request for Production of Documents**
8	**Defendant's Response to First Request for Admissions**



STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
10-CVS-019930

BRIAN CECCARELLI,
individually and as class representative,

Plaintiffs,

v.

TOWN OF CARY

Defendant.

AFFIDAVIT OF BRIAN CECCARELLI

BRIAN CECCARELLI, being first duly sworn, deposes and says:

1. The undersigned affiant is a Plaintiff herein. I have personal knowledge of the facts hereinafter stated and am competent to testify as a sworn witness to the matters contained herein. I am over the age of 18 years.

2. I am a resident of Wake County, North Carolina.

3. On November 6, 2009 at 09:27 PM I drove my vehicle east bound on Cary Towne Boulevard crossing its intersection with Convention Drive.

4. I observed from the signage that the speed limit on the relevant portion of Cary Towne Boulevard was 45 mph.

5. After seeing the yellow light I was unable to safely stop my vehicle before the traffic signal turned red in my path of travel.

6. I was issued a Notice of Violation of Cary Town Code 34-303 on November 10, 2009 by the Town of Cary. A true and correct copy of the Notice of Violation is attached to this Affidavit as Exhibit "A."

7. I paid the civil penalty of $50 demanded by the Town of Cary.

8. I appealed this violation on December 2, 2009 and appeared before a panel established by the Town of Cary on January 20, 2010 which found that I did violate Cary Town Code 34-303.

9. I have retained Stam & Danchi, PLLC and William W. Peaslee, Attorney at Law PLLC to represent me in this class action.

10. Based on my education, training, and work experience, I am able to testify to the following principles regarding timing of the yellow light change interval and consequences of shortening its duration.

11. I received a received a B.S. degree in Physics from the University of Arizona in 1983.

12. I have worked as a physicist and engineer. My work experience includes consultation to

the North Carolina Department of Transportation's Engineering Department for a 6 month period.

13. After inquiring with the Town of Cary about the timing of the yellow light at the Cary Towne Blvd and Convention Drive intersection, I received an email from Michael J. Bajorek, Assistant Town Manager for the Town of Cary. On November 24, 2009, he confirmed (a) the yellow light duration was 4.0 seconds per the design plan dated 5/31/1991 and (b) that the posted speed limit was 45 mph. A true and correct copy of this email is attached to this Affidavit as Exhibit "B."

14. The signal plan dated 5/31/1991 for the intersection of Cary Towne Blvd and Convention Drive was based on an inaccurate speed limit of 35 mph on Cary Towne Blvd, rather than the actual speed limit of 45 mph. See Deposition Exhibit 14, Bailey Dep., 6/24/2011.

15. Using the actual speed limit of 45 mph, the yellow light duration at this intersection should have been 4.5 seconds. However, the yellow light duration was only 4.0 seconds based on the out-of-date sign plan. This duration was less than yellow light change interval specified by the Design Manual developed by the Signals and Geometrics Section of the North Carolina Department of Transportation.

16. The duration of the yellow light change interval at the intersection of Cary Towne Blvd and Convention Drive was not in full compliance with the Manual of Uniform Traffic Control Devices (MUTCD) because it was not determined with up-to-date, accurate information required by engineering practices.

17. Based on Safelight Cary citation totals from 2008-2010, it is clear that changing the yellow light duration affects red light violations. Graphing the number of citations by month shows that lengthening the yellow light duration at Cary Town Blvd and Convention Drive by 0.5 seconds in March 2010 decreased red light runners by 80%. A true and accurate graphical representation of the citations is attached to this Affidavit as Exhibit "C."

18. The Town of Cary already knew of the problem at this intersection when I was caught on 11/6/09. NCDOT sealed a signal plan on 11/4/09 with the correct speed limit and yellow light duration of 4.5 seconds. See Defendant's Exhibit A, Affidavit of Greg Fuller, P.E. This new plan had been requested by Cary engineers. However, the Town of Cary relied on the design plan dated 5/31/1991 through March 2010.

19. The signal plans of record for left turns at the intersections of (a) Kildaire Farm Road/Cary Parkway and (b) Walnut Street/Meeting Place set the yellow light to a duration so short that it creates a type I dilemma zone. A type I dilemma zone is a region on the road where, if the driver is in the zone, then upon seeing the light turn yellow, there is no solution to the question whether to stop or go. Either choice the driver makes results in running a red light. When the light turns yellow, there is not enough distance for a driver to stop, nor is there enough yellow time for the driver to proceed into the intersection before it turns red. If the yellow light is of longer duration, there is no dilemma zone. For further explanation see "Isaac Newton vs. Red Light Cameras: Short Yellow and Turns," Brian Ceccarelli, redlightrobber.com, 9/21/2011 attached as Exhibit "D."

20. a) The Town of Cary determines left turn yellow light arrow durations using the assumption that all vehicles approach the intersection at 20 to 30 mph, even though the legal speed limit is 45 mph. The assumption comes from a typo error beginning in the March 2002 edition of the North Carolina Department of Transportation Signals Design Manual. In editions prior to March 2002, the specification applies that assumption only to the computation of the all-red clearance interval, not to the yellow change interval. 20 to 30 mph is the speed vehicles travel while they are *within* the intersection, not as they approach the intersection. For further explanation see comments tracing the error chronologically in the NCDOT Change and Clearance Intervals formula of the Signals & Geometrics Section, Traffic Engineering and Safety Systems Branch attached as Exhibit "E."

The all-red clearance interval is the amount of time all drivers in all approaches to the intersection see a red light. The all-red comes immediately after a yellow. The all-red interval gives the necessary time for all vehicles to clear the intersection. Engineers set the all-red interval so that the slowest moving vehicle that had entered the intersection just as the light turned red, has time to clear the intersection before opposing traffic gets a green. The slowest vehicles within the intersection are the left turning vehicles. Engineers correctly assume that these left turning vehicles move at 20 to 30 mph within the intersection.

b) But by misapplying 20 to 30 mph as the approach speed for the yellow change interval, the Town of Cary creates a type I dilemma zone in the left lane. The Town of Cary sets the left turn yellow change interval to 3.0 seconds. Any driver approaching at the posted speed limit of 45 mph, who is from 293 feet to 198 feet from the intersection when the light turns yellow, will be forced to run a red light. The driver neither has the distance to stop safely, nor the time to proceed at the speed limit into the intersection while the light is still yellow.

Since drivers do need to slow down before initiating a turn, the dilemma zone is even larger. In the very least, the Town of Cary expects drivers to enter the intersection from 20 to 30 mph. But when the light turns yellow, Cary's 3.0 second yellow only allows the driver the time to decelerate to 33.5 mph. No less. Given the expected entry speed of 33.5 mph, the location of the dilemma zone is between 293 feet and 152 feet from the intersection. When the light turns yellow, the Town of Cary will force any vehicles within 293 feet and 152 feet from the intersection to run a red light.

c) By working the ITE Yellow Change Interval formula backwards, a 3.0 second yellow interval reduces the posted speed limit of 45 mph to an effective limit of 22.9 mph. The Town of Cary sets the speed limit in the left lane to 22.9 mph without notifying the driver of this reduction in the legal speed limit. That is, a driver who intends to follow all of the traffic laws will have to reduce his or her speed to 22.9 mph even when still a distant 293 feet from the intersection.

21. Based on Safelight Cary citation totals from 2008-2010, it is clear that changing the yellow light duration affects red light violations. Graphing the number of citations by month shows that shortening the yellow light for left turn lanes increased red light

runners by 1,000%. A true and accurate graphical representation of the citations is attached to this Affidavit as Exhibit "F."

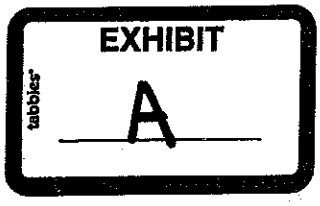
This the 2 day of December, 2011.

Brian Ceccarelli

STATE OF NORTH CAROLINA,
COUNTY OF WAKE
Sworn to and subscribed before
me this 2 day of December, 2011.

Notary Public
My Commission Expires: 8-5-202

DARLENE S. KEITH
NOTARY
PUBLIC
WAKE COUNTY, NC



Cary Police Department
Safelight Cary
315 N. Academy St. Suite 204
Cary, NC 27513

IN ORDER TO PAY THE FINE, make sure this address appears in the window of the enclosed envelope.

Safelight Cary
Payment Center
P.O.Box 76674
Cleveland, OH 44101

BRIAN NELLO CECCARELLI
4605 WOODMILL RUN
APEX NC 27539

Notice of Traffic Violation

Tear Here *Tear Here* *Tear Here*

IF YOU WERE NOT THE DRIVER, make sure this address appears in the window of the enclosed envelope.

Redflex Enforcement Office
315 N. Academy St. Ste. 204
Cary, NC 27513

Fold Here *Fold Here* *Fold Here*

PTION A: MAKE A PAYMENT

SAFELIGHT CARY

Violator Name: BRIAN NELLO CECCARELLI **Citation #:** CA09099020

Thank you in advance for responding to this notice by 12/31/2009 so that we can avoid additional fines and civil action against you.

☐ **Check or Money Order** Please make check or Money Order payable to "SAFELIGHT CARY"
(ensure address on reverse side appears in the window of the envelope)

☐ **Credit Card** ☐ Visa Card# _____ Expiration Date: Month _____ Year_____

Security Code (from the back of the Card _____

☐ MasterCard

Credit card payments can also be made online at: www.photonotice.com (Enter City code: CNC)

Payments CAN NOT be made in person. Please mail payments to the address on the reverse side.

Name as it appears on card : _____

Mailing Address:_____ City _____ State _____ Zip _____

Signature_____Date_____

FINE AMOUNT: $ 50 **PAID: $ 50**

Tear Here *Tear Here* *Tear Here*

SAFELIGHT CARY

OPTION B: AFFIDAVIT OF NON-LIABILITY - IDENTIFY NEW OWNER OR DRIVER **(see instructions on Page 4)**

Violator Name: BRIAN NELLO CECCARELLI **Citation #:** CA09099020

New Owner

Name (Last, First, Middle): _____Driver's License #: _____

Address (Number & Street):_____Driver's License State:_____

City, State, Zip Code:_____Date of Birth: _____

☐ **Driver / Lessee**

Name (Last, First, Middle): _____Driver's License #: _____

Address (Number & Street):_____Driver's License State:_____

City, State, Zip Code:_____Date of Birth: _____

☐ **Stolen**

Police Dept. Reported To: _____Date: _____

Police Report #: _____Signature:_____

Subscribed and Sworn to before me, a Notary of the State of _____, on this _____day of _____20_____

_____

Notary Public

You may also fax this form to 919-380-9498

SAFELIGHT CARY
TOWN OF CARY, NC
NOTICE OF VIOLATION

NOTICE NUMBER: CA09099020

Unfortunately, and as you can see from the photos to the right, the vehicle registered in your name and described below appears to have run a red light. Such action violates Cary Town Code 34-303.

DATE OF VIOLATION	TIME OF VIOLATION	
06-Nov-2009	9:27 PM	
REGISTERED OWNER OR LESSEE		
BRIAN NELLO CECCARELLI		
ADDRESS		
4605 WOODMILL RUN		
CITY	STATE	ZIP CODE
APEX	NC	27539
VEH. LIC. NO	STATE	VEH. YEAR
MXV2881	NC	1999
VEH. MAKE	BODY STYLE	
OLDSMOBILE	4 door Automobile	

PLEASE NOTE THAT RECORDED IMAGES DO CONSTITUTE EVIDENCE OF A VIOLATION OF CARY TOWN CODE 34-303 (FAILURE TO STOP AT A RED LIGHT)

LOCATION OF VIOLATION

Cary Towne & Convention EB

THIS VIOLATION WAS NOT COMMITTED IN MY PRESENCE. BASED UPON MY REVIEW AND INSPECTION OF THE RECORDED IMAGES, I STATE THAT A VIOLATION OF CARY TOWN CODE 34-303 DID OCCUR. I DECLARE, UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, THAT THE FOREGOING IS TRUE AND CORRECT.

10-Nov-2009	Brad Hudson	Brad Hudson
DATE ISSUED	SIGNATURE	CARY POLICE REPRESENTATIVE

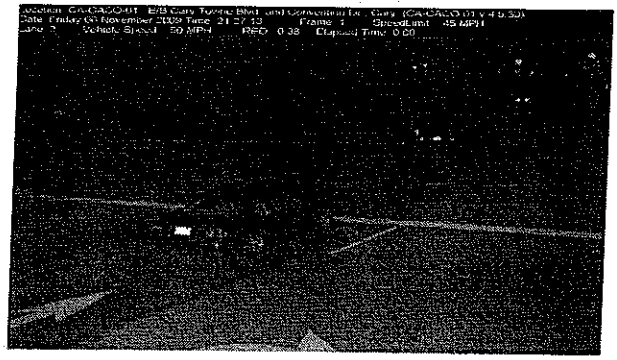
Please respond to this notice in one of the following ways:

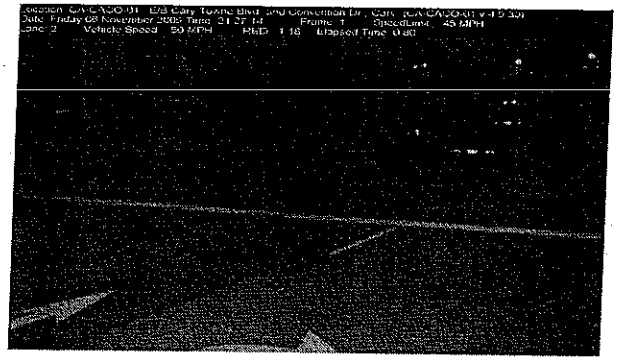
1. Submit the $50 payment for the civil penalty. (See payment Option A page 2)
2. Provide information as to the driver of the vehicle. (See Affidavit coupon on Option B page 2)
3. Request a hearing to review the notice. (See page 4)

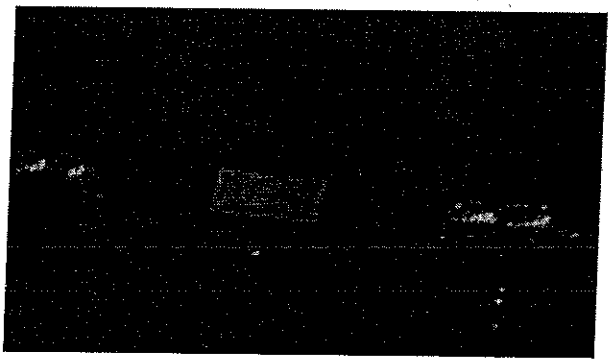
You must respond no later than 12/31/200 to avoid an additional penalty of $50.00 and civil actions against you.

For questions regarding payment, contact the customer service call center toll free at 1-877-847-2338 between 7:00am and 5:00pm (MST).

preguntas con respecto al pago, contacte el peaje del centro de ...amada del servicio de cliente liberta en 1-877-847-2338 entre ?0am y 5:00pm (MST).







To view the video of this violation, visit www.photonotice.com (City Code CNC)

·OWN OF CARY

INSTRUCTION PAGE

RED MEANS STOP

1. **Reason You Received This Notice:**

A vehicle registered in your name was photographed failing to stop for an official red traffic control signal, or the registered owner of the vehicle depicted on this citation has submitted an Affidavit naming you as the driver of the vehicle at the time of the offense. This is a violation of the Cary Town Code 34-303.

2. **You Must Select One of the Following Options. Complete the coupon on the Options Page for the option you select and return the coupon in the enclosed envelope. Make sure the mailing address on the reverse side of the coupon appears in the window of the enclosed envelope.**

A. **Payment Methods.** As the registered owner of the vehicle described in this Notice, we have no choice but to hold you responsible for paying this fine by 12/31/2009, any profits from which go to our public school system. No points will be assessed to your driving record, and no record of this violation will be sent to your insurance company or the Division of Motor Vehicles. Of course, if you were not the driver at the time of the offense, you may choose to complete the affidavit on Option B of the mail-in coupon on page 2 of this Notice and indicate who was driving.

1. Please do not send cash.
2. Make Check or Money Order payable to "Safelight Cary".
3. Payments by Personal Check, Money Order or Visa/MasterCard are accepted. Please mail in the enclosed envelope along with the payment coupon found on Option A of page 2.
4. A $25.00 administrative fee will be assessed for rejected or declined payments.
5. Credit Card payments can also be made online at: **https://www.photonotice.com (Enter city code : CNC)**

B **Identify another Driver.** It is sufficient evidence of a violation of Cary Town Code 34-303, that the person registered as the owner of the vehicle was operating at the time of the violation. However, liability of the owner may be removed if the Affidavit of Non-Responsibility (Option B of the mail-in coupon on page 2) is completed and returned in the enclosed envelope by 12/10/2009

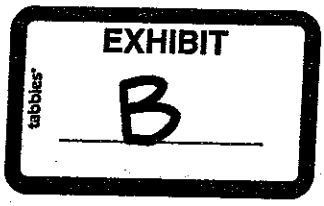
1. Your responsibility can only be transferred if the driver you identified accepts the responsibility.
2. This notice may be withdrawn before or after the penalty is paid.
3. No points will be assessed to your driving record and no record of this offense will be sent to your insurance company or to the Division of Motor Vehicles.

3. **Your Right to View Video**

- The violation has been captured on video and is available to be viewed on the internet at: www.photonotice.com (Enter City Code CNC) The video is available for 60 days from date of violation.
- You may also view the video (BY APPOINTMENT ONLY) by calling the Safelight-Cary Customer Service Office at 919.388.9129 to schedule a viewing. The Office Hours are: Monday, Wednesday and Friday 10:00 AM to 2:00 PM, Tuesday and Thursday 1:00 PM to 5:00 PM.

4. **Right to a Hearing.** You have the right to a hearing:

- If you choose to have the matter reviewed by the Town's Hearing Board, **YOU MUST SUBMIT A $50.00 BOND PAYMENT** prior to scheduling a hearing.
- To schedule a hearing you must contact **THE SAFELIGHT CARY PHOTO VIEWING OFFICE AT 919-388-9129.** At that time, the Photo Viewing Representative will schedule a date and time for you to appear.
- Hearings are held at 318 North Academy Street Bldg B Cary, NC 27512. **BY APPOINTMENT ONLY.**
- **IF YOU FAIL TO PAY YOUR FINE OR SUBMIT THE BOND PAYMENT BY 12/31/2009YOU WILL FORFEIT YOUR RIGHT TO A HEARING.**



On Tue 24/11/09 8:50 AM , Mike.Bajorek@TownofCary.org sent:

Mr. Ceccarelli,

Tim Bailey, our Town Engineer, looked into the intersection you mentioned in your email and sent the following information. The east bound through movement is the one with the red light camera. The timing was confirmed to be 4.0 second for amber and 1.7 seconds for all red. This matches the design plan sealed by the engineer, Troy Peoples, State Traffic Engineer 5-31-1991. We don't have authority to arbitrarily change the amber and red times. The standards have decreased the amber minimum since the original design and many intersections in Cary posted 45 MPH have a shorter amber timing.

The attachment you mention must have been stripped from the email chain. If you would like us to review your information, please feel free to send it to me and I'll pass it along to the correct folks.

Sincerely,

Mike

Michael J. Bajorek
Assistant Town Manager
Town of Cary
PO Box 8005
Cary, NC 27512
919-469-4003

----- Forwarded by Mike Bajorek/Cary on 11/24/2009 09:39 AM -----

Ben Shivar/Cary

11/21/2009 03:46 PM

To Mike Bajorek/Cary

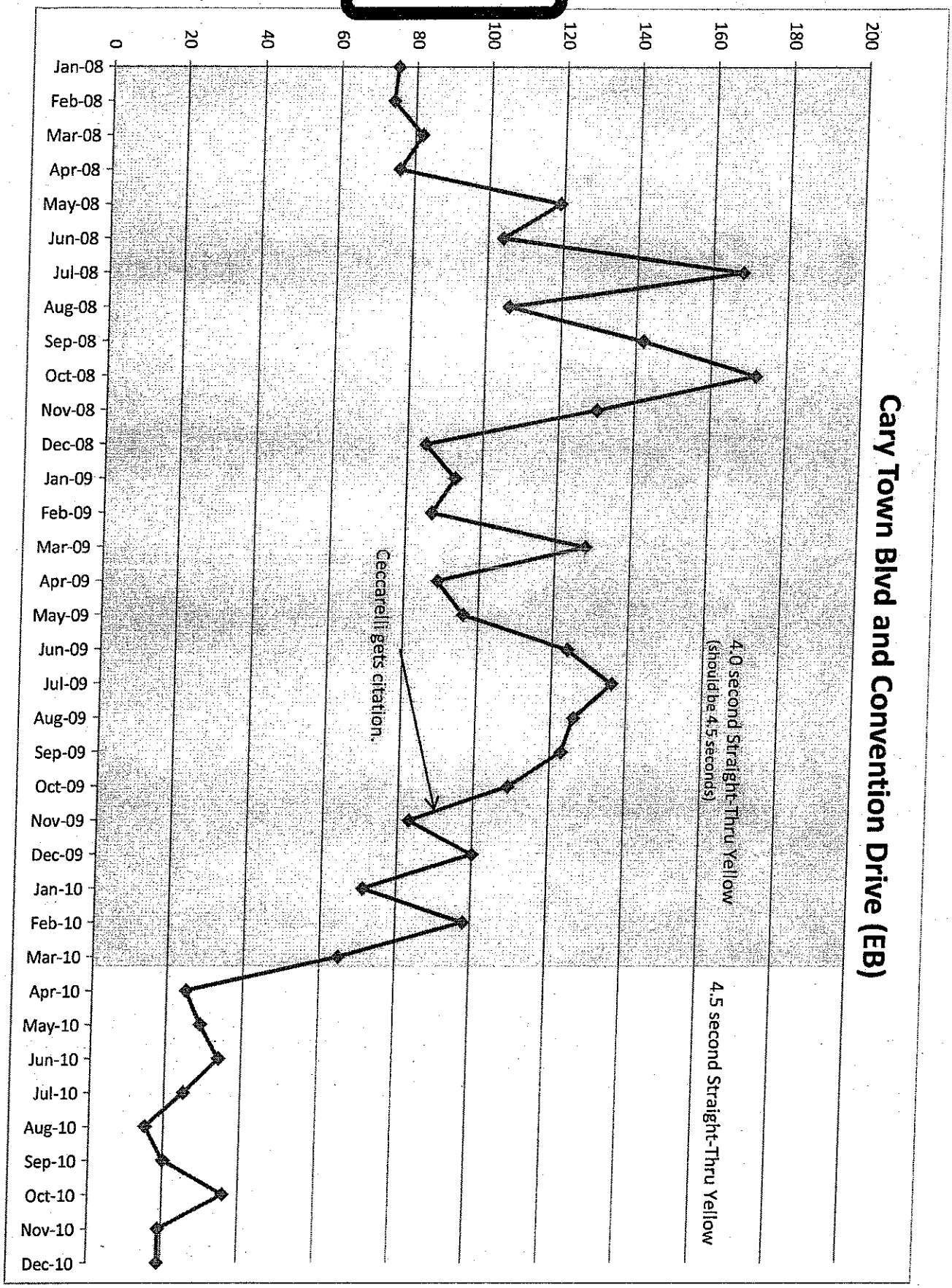
cc

Subject Fw: Illegal Red Camera Light in Cary. Legal Quandry. Please help!

Mike: will you follow up on this 1st thing Monday morning? I have already responded to

EXHIBIT

C


Cary Town Blvd and Convention Drive (EB)
0
20
40
60
80
100
120
140
160
180
200
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
Jul-08
Aug-08
Sep-08
Oct-08
Nov-08
Dec-08
Jan-09
Feb-09
Mar-09
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Oct-10
Nov-10
Dec-10
4.0 second Straight-Thru Yellow
(should be 4.5 seconds)
4.5 second Straight-Thru Yellow
Ceccarelli gets citation.

SAFELIGHT CARY CITATION TOTALS 2008 - 2010

Intersection Location	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
Cary Town Blvd and Convention Drive (EB)	75	74	82	76	119	104	166	106	142	172	130	85	93	87	128	89	96	124	136	126	123	109	83	100	71	98	65	25	29	34	25	15	20	36	19	19
Kildaire Farm Road and High Meadow Drive (SB)	26	27	25	30	25	50	50	24	37	33	53	41	36	22	31	28	33	43	57	32	21	34	13	13	10	10	25	27	59	55	51	0	18	22	0	0
High House Road and Prestonwood Drive (WB)	43	39	85	63	94	94	99	84	63	89	75	48	53	33	47	66	75	72	88	63	76	76	76	58	62	10	11	6	15	32	66	52	67	84	113	62
NW Maynard Road and Chapel Hill Road (NB)	6	5	7	10	8	8	5	6	10	12	11	8	4	9	6	8	12	7	11	9	4	8	3	7	8	5	12	15	10	7	9	17	12	14	21	8
Maynard Road and Walnut Street (SB)	18	12	29	30	22	37	51	48	63	47	45	68	27	40	35	33	11	22	21	23	40	24	20	28	12	25	14	16	20	8	21	28	20	24	18	16
Tryon Road and Crescent Green Way (EB)	25	32	29	30	27	38	43	25	37	28	23	33	25	36	28	23	38	50	42	33	20	40	21	15	23	24	17	20	27	37	33	30	40	16	0	0
Tryon Road and Regency Parkway (WB)	13	16	19	39	28	69	55	36	40	25	10	11	31	43	36	77	75	90	69	82	74	53	67	35	44	29	25	48	31	114	0	30	58	42	52	34
Walnut Street and Dillard Drive (NB)	50	50	84	83	90	99	118	93	56	86	32	56	48	38	47	50	55	40	43	59	47	45	47	24	24	25	26	0	0	20	58	30	52	61	43	16
Maynard Road and Kildaire Farm Road (WB)	119	105	143	109	154	153	166	193	213	181	223	312	167	180	191	219	251	226	160	354	334	157	249	300	202	206	238	226	260	223	253	242	242	263	257	285
Kildaire Farm Road and Maynard Road (SB)	58	69	98	114	119	142	70	73	48	106	88	125	72	77	78	63	84	78	55	90	74	91	77	73	82	95	33	57	85	44	55	0	0	0	0	0
Cary Parkway and Kildaire Farm Road (WB)	105	45	97	127	109	100	96	77	84	80	135	71	62	74	71	82	129	113	59	92	74	71	34	69	184	134	210	213	201	220	202	147	106	230	217	168
Kildaire Farm Road and Cary Parkway (NB)	65	70	60	64	72	65	69	71	51	59	55	102	87	71	81	45	67	88	66	80	92	63	52	103	261	352	372	442	413	318	274	0	0	0	0	0
Cary Parkway and High House Road (NB)	204	221	266	257	262	236	166	171	173	335	154	205	126	81	152	116	139	211	154	30	32	24	23	42	56	60	88	75	55	55	51	62	67	77	84	66
Harrison Avenue and Maynard Road (SB)	21	17	17	23	20	25	25	25	27	25	25	16	16	13	20	19	17	15	20	19	20	17	7	20	19	16	19	21	19	21	20	20	16	21	18	49
Harrison Avenue and Weston Parkway (SB)	84	72	94	72	139	91	82	128	123	112	70	71	79	78	53	51	66	92	91	71	108	143	117	60	58	61	51	129	170	131	108	73	52	14	29	49
Walnut Street and Meeting Street (SB)	573	333	600	471	656	223	36	30	0	844	1036	1037	719	553	312	600	596	523	570	594	947	1032	824	1218	718	713	482	0	0	70	269	258	169	244	291	329
Cary Parkway and High Meadow (WB)					15	198	170	116	136	129	135	102	97	154	94	37	98	118	96	126	125	121	82	91	69	79	94	94	87	87	96	66	83	98	78	91	94
	1485	1187	1704	1595	1959	1730	1488	1308	1305	2163	2300	2391	1742	1589	1411	1608	1842	1913	1738	1883	2211	2108	1795	2257	1893	1902	1782	1415	1471	1479	1590	1090	1022	1228	1240	1194

Notes

1. The Y-axis is number of citations given that month.
2. On the graphs, hills are period of high citations. Hills lasting months indicate short yellows.
3. Hills are obvious problems. Hills indicate that Cary is playing around with the signals.
4. But valleys are also a problem. The valleys you see above, though they are valleys relative to the hills, are hilltops themselves.

5. In the Kildaire Farm and Cary Parkway (NB) graph , note that Cary turned off the camera on Aug 1, 2010.
6. Cary decreased the yellow at Kildaire Farm and Cary Parkway (NB) on January 2010 to 3.0s. By August, Cary realized they caused a problem.
7. Though the Cary turned off the red light camera at Kildaire Farm and Cary Parkway (NB) , Cary did not increase the yellow duration to what it should be: 4.5 seconds.
8. Cary also convicted Lori Millette of running the red light at this intersection even when Cary knew their engineering was causing people to run red lights.

9. Some event happened at Walnut and Meeting Pl the last half of March 2010. Cary turned off this camera here for two months.
10. By July 2010, Cary turned on the Walnut and Meeting Pl camera. It is again flashing people at a rate of 280/month. 280/month is still 20x higher than intersections like Cary Town Blvd and Convention. The yellow must still be short.

11. The first graph, Cary Towne Blvd and Convention after April 2010, shows the number of citations a properly-timed yellow yields. At this intersection, it's 25 citations per month.
12. But is 25 citations per month *normal*? Is it possible that the 25 violations per month is yet another engineering defect?
13. Yes. It is not only possible, but it is true. The remaining citations are all caused by another engineering defect. The dilemma zone.
14. Engineers create a dilemma zone because they fail to paint a line at the safe braking distance from the intersection, as required by their standard (the ITE yellow light equation).
15. A yellow light means this: If the light turns yellow and you are farther from the intersection than the safe braking distance line, you must stop. If you are closer, then you must go.
15. By omitting the line, engineers force usto guess. Many of us in the zone will choose to go because we are not sure if we can stop or scared we'll get rear-ended.
16. Many choose to go, but the light will turn red just a fraction of a second before we enter the intersection. It's a given. How many of us can guess exactly where 194.5 ft is?
17. Engineers thus guarantee a steady stream of cars running red lights, though only by fractions of a second.
16. The red light camera companies exploit the dilemma zone. It is the embryonic fluid and sustenance behind every red light camera company.

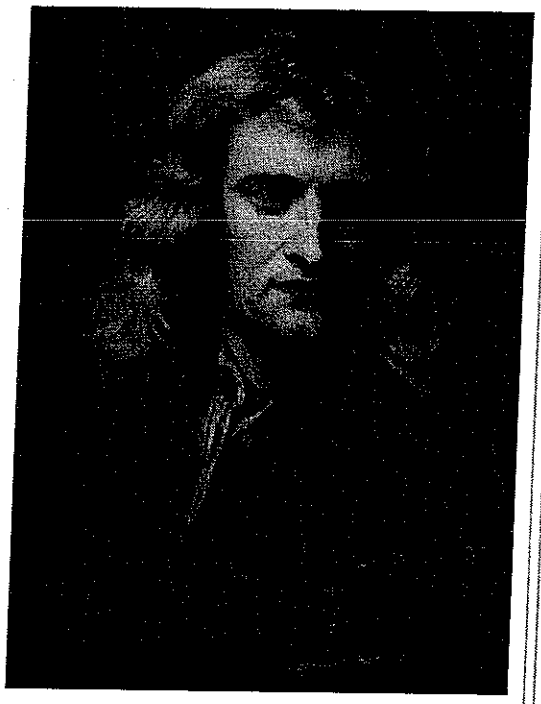
EXHIBIT

tabbies

D

2011

Isaac Newton vs. Red Light Cameras



Short Yellow and Turns
Exposing the Traffic Engineer's Mistakes

Brian Ceccarelli

redlightrobber.com

9/21/2011

Table of Contents

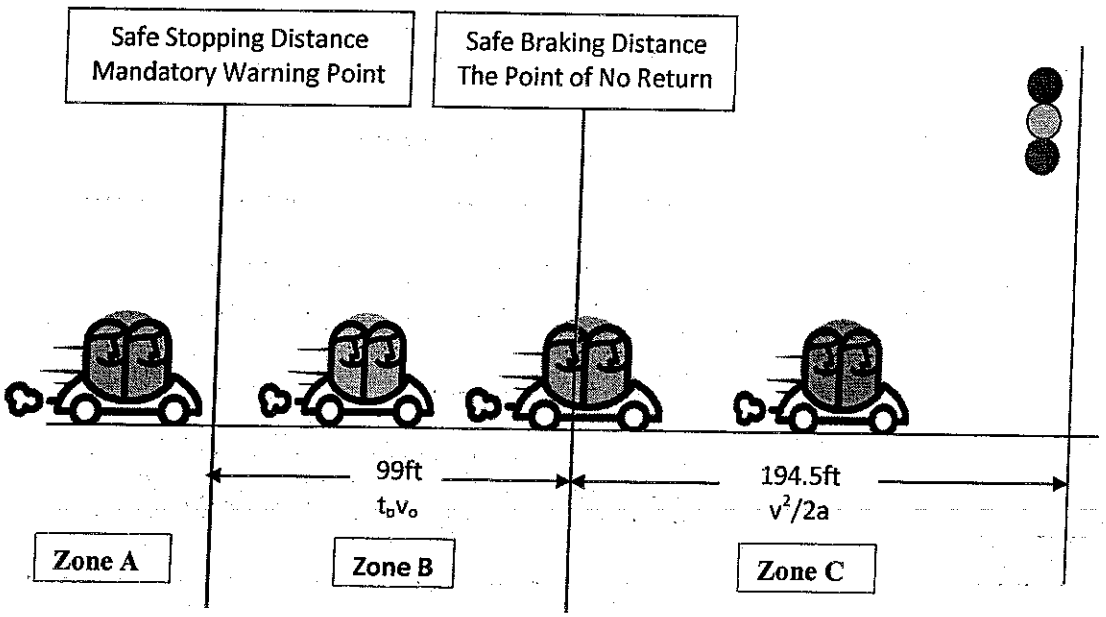
Yellow Light Defined

The yellow light interval equals the time it takes for a driver to perceive the light turning from green to yellow plus the time it takes for a driver to traverse the safe braking distance at the speed limit.[1]

The thing to get out of that definition is that the yellow time is *not* the time it takes for a driver to stop. That comes as a surprise to most people. The yellow time in fact, provides only half the time it takes a driver to stop. And that is the source of all the problems.

Problems with Short Yellows and Yellows for Turns

Figure 1 – Zones A, B and C



When the engineer shorts a yellow, the warning that a red light is about to appear comes too late. The driver may already be inside the Safe Stopping Distance (aka, the critical distance), where the driver has no option but to go, but the light can turn to yellow and then to red before the driver enters the intersection. The

region on the road where engineer confronts the driver with an unsolvable decision problem is called a *type I dilemma zone*. No matter whether the driver decides to stop or to go, the driver will run a red light. This paper contains a mathematical proof of this statement.

Turning presents a similar problem. Turning is like shortening a yellow but by different means. When a driver approaches an intersection with intent to turn, he generally needs to slow down to initiate his turn. But his very act of slowing down consumes yellow time. Since the yellow light definition handles only cars proceeding at the speed limit; that is, with no provision for a car slowing down, the same thing happens to the turning driver as with the driver with a short yellow. The driver may already be inside the Safe Stopping Distance, where the driver has no option but to go, the light can turn to yellow and then to red before the driver enters the intersection. A yellow light duration set to ITE's yellow light equation automatically creates a *type I dilemma zone* in a turn lane. This paper contains a mathematical proof of this statement.

There is also the problem of the *type II dilemma zone*. In a nutshell, a type II dilemma zone begins where the type I dilemma zone leaves off. While a solution is possible, the solution is not clear to the driver. The driver can easily and unintentionally choose incorrectly. This paper does not cover type II dilemma zones. It deserves its own paper.[7]

Engineers could prevent all the problems from ever happening by abandoning their faulty yellow light equation (equation 2), an equation which violates Newton's Second Law of Motion. All they would have to do to their equation is remove the "2" from the denominator. As it stands now, the equation is not an equation of motion. That is the source of all the problems.

I broke down the rest of this paper into two parts. The first part presents a typical poorly designed intersection from the Town of Cary. You can use this example to work the numbers for yourself. You will be able to see the problem.

The second part presents the General Case algebraically. With the equations from the General Case, given any speed limit, yellow time, perception time,

deceleration constant and grade of road, you can determine the position and length of the segment on the approach, where if a driver so happens to be in it when the light turns yellow, the engineer will force him to run the red light. I have provided a spreadsheet[9] which computes the location of the segment for you.

Example: Westbound Cary Parkway at Kildaire Farms Rd.

Cary has a cornucopia of problematic traffic signals. For this example, I will use westbound Cary Parkway approaching Kildaire Farms Rd. The speed limit on Cary Parkway is 45 mph. The left-turn yellow is 3.0 seconds, 1.5 seconds too short according to Cary's yellow light equation. Refer to figure 1. When the light turns yellow . . .

1. Cary will force about 95% of the drivers in Zone B to run the red light.
2. Cary will force additional drivers in Zone B and C to run the red light when they choose to decelerate while in the lane.
3. Drivers in Zone A are okay. Cary expects them to stop. Drivers have enough distance. Cary should tell them where Zone A ends and B begins in order to avoid the dilemma zone.

Yellow Light Interval Equation Defined

The yellow light interval equals the time it takes for a driver to perceive the light turning from green to yellow plus the time it takes for a driver to traverse the safe braking distance at the speed limit.[1]

Definition by Words

$$\textbf{\textit{Yellow Interval}} = \textbf{\textit{Perception Time}} + \frac{[\textbf{\textit{Safe Braking Distance}}]}{\textbf{\textit{Speed Limit}}}$$

Definition by Math[2]

1. $$Y = t_p + \frac{\left[\frac{v^2}{2a+2Gg}\right]}{v}$$

2. $Y = t_p + \left[\frac{v}{2a+2Gg}\right]$

Where:

t_p = perception time in seconds
v = speed limit in ft/s
a = safe deceleration of car in ft/s^2
G = Acceleration due to Earth's gravity (32.2 ft/s^2)
g = grade of the road in %/100, downhill is negative grade

Safe Braking Distance—Expression of Newton's Law of Motion[5]

3. $S_b = \left[\frac{v^2}{2a+2Gg}\right]$

The Short Left-Turn Yellow

At the intersection of Cary Parkway and Kildaire Farms Rd, the Town of Cary sets the westbound thru-movement yellow interval to 4.5 seconds but shortens the left-turn yellow interval to 3.0 seconds. Can Cary do that?

No.

When Cary sets the yellow interval to 3.0 seconds, Cary decreases the amount of braking distance in which a driver must stop. Into what braking distance does 3.0 seconds confine a 45 mph car? Is it safe?

4. $Y = t_p + \left[\frac{S_b}{v}\right]$
5. $S_b = v(Y - t_p)$
6. v = 45 mph = (45 mile/h) * (5280 ft/mile) * (1 h/3600 s) = 66 ft/s

7. $S_b = (66 \text{ ft/s}) (3.0\text{s} - 1.5\text{s})$

8. $S_b = 99 \text{ ft}$

Cary expects a 45 mph car in the left lane to stop within 99 feet.

According to Cary, what is the required *safe* braking distance for a 45 mph car?

9. $S_b = \left[\frac{v^2}{2a}\right]$

10. $S_b = \left[\frac{66^2}{2(11.2)}\right]$

11. $S_b = 194.5 \text{ ft}$

According to Cary, the safe braking distance for a 45 mph car is 194.5 feet. But for left-turn lanes, Cary sets the braking distance for the same 45 mph car to 99 ft. According to Cary, it is not safe.

Cary believes that the immutable Laws of Physics change from lane to lane.

To brake *safely,* what speed limit does Cary's 3.0 second yellow interval represent?

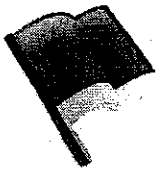
Yellow time *Y* and safe braking distance S_b are a function of speed limit *v*. First solve for v, then solve for S_b. To make the arithmetic easier, we set the grade of the road to 0%. 0% means a level road.

12. $Y = t_p + \left[\frac{v}{2a}\right]$

13. $\left[\frac{v}{2a}\right] = Y - t_p$

14. $v = 2a(Y - t_p)$
15. t_p = 1.5 seconds. Cary, NCDOT and AASHTO standard
16. Y = 3.0 seconds according to the signal plan by R. Ziemba, 4/28/2009
17. $v = 2a(3.0s - 1.5s)$
18. $v = 2a(1.5s)$
19. a = 11.2 ft/s^2. Cary, NCDOT and AASHTO standard
20. v = 2(11.2 ft/s2)(1.5s)
21. v = 3(11.2ft/s)
22. v = 33.6 ft/s
23. v = 33.6 ft/s * (3600 s/h) * (1 mile / 5280 ft)
24. v = 22.9 mph

Cary's 3.0 seconds represents the yellow interval for a 22.9 mph car. 3.0 seconds provides a safe braking distance for cars approaching the intersection at 22.9 mph or less.



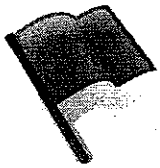
The Town of Cary assumes that all cars travelling down the left-turn lane at westbound Cary Parkway at Kildaire Farms Rd. approach the intersection at a maximum speed of 22.9 mph.

How far back on the approach does Cary assume the car is travelling at 22.9 mph? In other words, what is the Safe Stopping Distance for a 22.9 mph car?

25. $S_s = vt_p + v\left[\frac{v}{2a+2Gg}\right]$
26. $S_s = 33.6 * 1.5 + \left[\frac{33.6^2}{2(11.2)}\right]$ = 50.4 + 50.4
27. $S_s = 100.8\,ft$

Cary assumes that all cars in the left turn lane approach the intersection at a maximum of 22.9 mph as far back as 100.8 feet. In order for a 3.0 second yellow to work, cars in the left lane cannot exceed 22.9 mph starting from 100.8 feet from the intersection.

Even in a 45 mph zone.



This means that the Town of Cary does not allow a driver to go the legal speed limit.

If a driver is going 22.9 mph, 100.8 feet back from the intersection, with a clear path to the intersection, with a green left-turn arrow beckoning to him, he will have a train of rightfully frustrated tailgaters honking behind him.

The Thru-Movement Yellow Light Interval and Safe Braking Distance

According to Cary, the safe braking distance for a 45 mph driver is 194.5 feet (equation 11):

28. $S_b = 194.5 \text{ ft}$

What is Cary's required yellow interval for a 45 mph level road?

29. $Y = t_p + \left[\frac{v}{2a}\right]$

30. v = 45 mph = (45 mile/h) * (5280 ft/mile) * (1 h/3600 s)

31. v = 66 ft/s

32. $Y = 1.5s + \left[\frac{66\ ft/s}{2(11.2\ ft/s^2}\right]$

33. $Y = 4.5s$

For a 45 mph level road, the Town of Cary must set the yellow interval to at least 4.5 seconds.

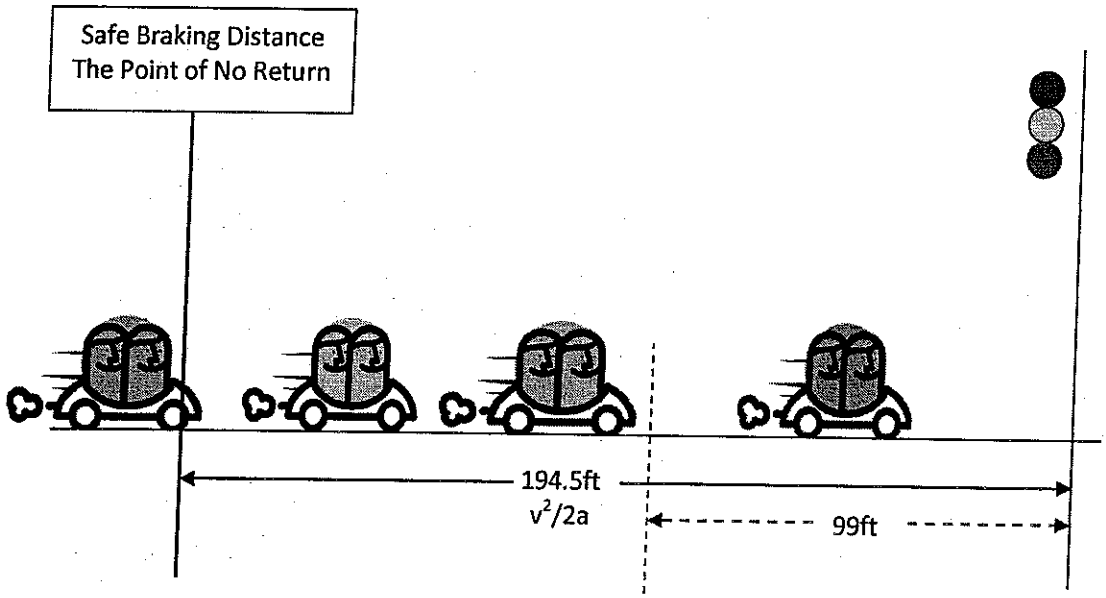
The safe braking distance equation (eq. 3), unlike Cary's other equations, is not arbitrary. One must use this equation without compromise. The safe braking distance equation part of the Yellow Light Equation is derived from Newton's Second Law of Motion. Everyone has no choice but to obey it.

Which Cars Does Cary Force to Run Red Lights?

Cary forces left-turn lane drivers that approach the intersection at the speed limit, unhindered by slow cars in front of them, to run red lights.

That is because when Cary's traffic engineers set a left-turn yellow arrow time, they consider only cars waiting *in a queue*. Engineers assume that all cars turning left were once waiting at a red light. So when plugging in approach speeds to determine the yellow interval for the left-turn lane, engineers use speed of these queued cars, cars which enter the intersection very slowly--at 14-30 mph.[3]

The 45 mph left-turn lane with a 3.0 second yellow:



1. A 45 mph driver needs to apply his brakes at least 194.5 feet from the intersection in order to come to a stop. 194.5 feet is the Point of No Return. 194.5 feet is called the Safe Braking Distance. If the driver waits until he is closer to the intersection than 194.5 feet to stop, the driver will either stop too

quickly causing a rear end crash, or he will skid through the intersection on a red.

2. It takes 1.5 seconds, Cary's perception time constant, for the driver to see the light turn yellow, decide what to do and then act. By the time the driver acts, there is only 1.5 seconds left of yellow remaining.

   $Y - t_p$ = time remaining

   3.0s – 1.5s = 1.5s

   Consider a driver who has passed the Point of No Return, he must proceed to through intersection, and with 1.5 seconds of yellow remaining . . .

   What is the maximum distance the driver can travel before the light turns red?

   a. rate * time = distance
   b. 66 ft/s * 1.5s = 99 ft

   The maximum distance the driver can travel before the light turns red is 99 feet. If the driver is within 99 feet from the intersection, then he can make it to the light before it turns red, but only *if he goes at least the speed limit.*

   Therefore, just when the perception time has passed, Cary forces all drivers who are between the Point of No Return and the point 99 feet from the intersection to run red lights. This is true for a short 3.0 second yellow on a 45 mph level road, for any lane.

3. Cary forces additional drivers to run red lights in turn lanes. Drivers in turn lanes usually must decelerate while in the lane before reaching the intersection. The little yellow time that remains, a driver eats up by decelerating.

According to the NCDOT[2], the average initial left-turn *movement* speed is 25 mph. 25 mph is the speed at which the NCDOT expects the driver to start his turn. In the remaining yellow time of 1.5 seconds, at the NCDOT deceleration of a, is it possible for a driver to decelerate to 25 mph before the light turns red? What is lowest speed, $v_{e\text{-}min}$, to which a driver can decelerate when he enters the intersection?

a. $t = (v_o - v_e)/a$

b. $at = v_o - v_e$

c. $-v_{e\text{-}min} = -v_o + at$

d. $v_{e\text{-}min} = v_o - at$

e. $v_{e\text{-}min} = 66\ ft/s - 11.2\ ft/s^2 * 1.5s$

f. $v_{e\text{-}min} = 49.2\ ft/s$

g. $v_{e\text{-}min} = 49.2\ ft/s * (1\ mile / 5280\ ft) * (3600\ s / 1\ h)$

h. $v_{e\text{-}min} = 33.5\ mph$

The driver's minimum possible speed at which a driver can enter the intersection is 33.5 mph. He cannot decelerate below 33.5 mph or Cary will force him to run a red light.

Cary expects drivers to enter the intersection at 25 mph. If a driver tries to do what Cary expects, Cary will either give him a ticket for

skidding into the intersection or Cary will cause the car behind him to run into him.

4. What is farthest distance from the intersection where the driver can begin decelerating to 33.5 mph?

   a. distance = rate * time

   b. $d_e = (v_o + v_e)/2 * 1.5s$; Where $(v_o + v_e)/2$ = average speed

   c. $d_e = [(66 ft/s + 49.2 ft/s)/2] * 1.5s$

   d. $d_e = 86.4$ ft

   If the driver is going to slow down to 33.5 mph, the driver can start hitting the brakes at 86.4 feet from the intersection. He cannot hit the brakes any sooner.

If the driver is anywhere between 194.5 feet and 86.4 feet when the light turns yellow, and wishes to slow down, Cary will force him to run the red light.

If the driver is anywhere between 194.5 feet and the 99 feet when the light turns yellow, slow down or no, when the light turns yellow, Cary will force him to run the red light.

The Case Made

Shorting yellow lights forces drivers to run red lights. Shorting yellow lights in left-turn lanes further forces drivers to run red lights because deceleration while approaching the intersection consumes more yellow time. Shorting yellow lights applies to right-turn lanes as well. The Town of Cary will force even more right-turning drivers to run red lights because a right-turn is a sharper turn than a left-turn. Right turns require more deceleration.

Cary bestows upon these drivers unavoidable penalties and puts these drivers in harm's way.

Further Proof

To see graphs of this engineering failure, refer to *How Yellow Intervals Affect Red Light Running*.[8] By shorting yellows, the Town of Cary forces from 300% to 1000.0% more drivers to run red lights.

Seeing Is Believing

To witness the engineering failure firsthand, Cary offers a splendid vista at three intersections:

1. For westbound Cary Parkway at Kildaire Farms, park at Trader Joes.
2. For southbound Walnut St. at Meeting Place, park at McDonald's.
3. For westbound Maynard at Kildaire Farms, park at Rite-Aid.

Watch the cameras flash all the unhindered left-turn lane drivers. Cary shorted all the left-turn yellows at these intersections.

You will get the idea in 10 minutes.

Why does Cary Change the Yellow Light Rules for Left Turners?

For unjustifiable reasons.

1. Traffic engineers sacrifice safety on behalf of traffic capacity. It's their motto. If traffic engineers can squeeze a few more cars through the intersection, even if means forcing cars to run red lights, they will do it.[4, 5]

2. There are technical writer errors in the NCDOT specs which imply to traffic engineers all over North Carolina that left-turn movement speeds within the intersection measured for all-red clearance intervals can be used for yellow interval approach speeds.

3. There is the MUTCD spec 4D.12 stating that 3.0 seconds is the minimum yellow time. Red light camera companies encourage legislators to put this MUTCD statement directly into the laws. Many traffic engineers take this out of context by applying it to *all* yellows.

   For an analogy of misuse, the USDA states that the minimum temperature to cook meat is 145°F. Steaks need 145°F. Ground beef needs 160°F. Chicken needs 165°F. The minimum temperature is 145°F.

   Chicken is on the menu and Cary's traffic engineers have set the oven to 145°F. Cary gives everyone botulism.

   Yellow time must increase with speed limit. This is a basic fact of Nature.

   The MUTCD's statement, in proper context, says this: If the computed yellow interval from the equation results in less than 3.0 seconds, then bump up the yellow interval to 3.0 seconds. This increase engages for speed limits less than 22.9 mph on a level road; for example, in school zones.

4. In the end, one thing is certain. Traffic engineers do not know basic physics.

The General Case

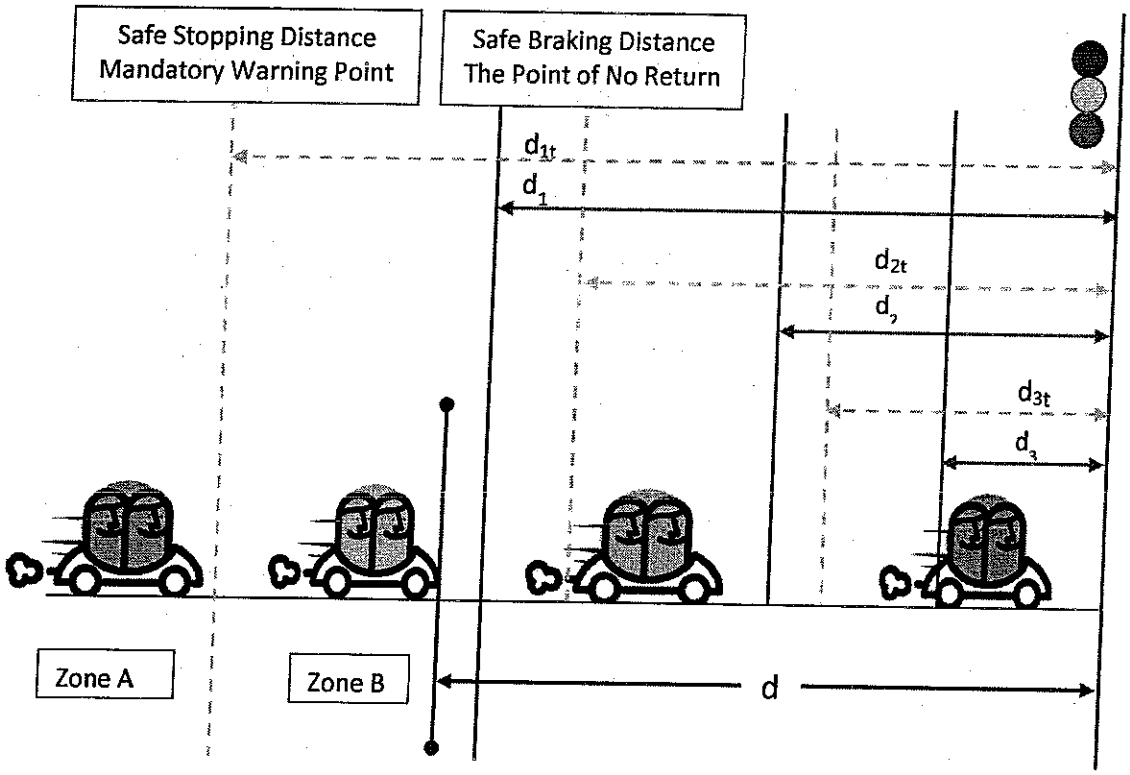


Table 1 – Short Yellows Force Drivers to Run Red Lights

#	Formula	Meaning
30	$d_{1t} = vt_p + \frac{v^2}{2a}$	A green light must turn yellow at distance $\mathbf{d_{1t}}$ or farther for a driver to stop. $\mathbf{d_{1t}}$ is called the safe stopping distance. $\mathbf{d_{1t}}$ is the distance from intersection to the safe stopping distance. $\mathbf{d_{1t}}$ is the distance the driver travels at the speed limit during the time he perceives the signal changing to yellow, plus the safe braking distance.

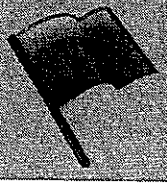
31	$d_1 = \frac{v^2}{2\alpha}$	$\mathbf{d_1}$ is the distance from the intersection where the driver must begin to apply his brakes in order to stop safely at the intersection. $\mathbf{d_1}$ is called the safe braking distance. $\mathbf{d_1}$ is a derivation of distance travelled according to Newton's Second Law of Motion.[5] This equation does not allow any compromises.
32	$d_{2t} = vt_p + \mathbf{v}(\mathbf{T} - t_p)$	$\mathbf{d_{2t}}$ is the maximum distance a driver can travel during the yellow light. When the Town of Cary sets **T** according to the ITE Yellow Light Interval Equation[1,5]; in other words, Cary does not short the yellow, then: $d_{1t} = d_{2t}$
33	$d_2 = \mathbf{v}(\mathbf{T} - t_p)$	$\mathbf{d_2}$ is the maximum distance a driver can travel during the yellow light after he perceived the light turning from green yellow.
34 	$d_{1t} \leq d \leq d_{2t}$	At the time the light changes to yellow, the Town of Cary will force all drivers at distance **d** from the intersection to run a red light.

Table 2 - Turning Forces Drivers to Run Red Lights

#	Formula	Meaning
35	$d_{3t} = vt_p + \overline{v}(T - t_p)$	d_{3t} is the maximum distance a driver can travel during the yellow light. $\overline{v}$ is his average speed.
36	$d_3 = \overline{v}(T - t_p)$	d_3 is the distance a driver travels during the yellow light after he perceived the light turning from green yellow. $\overline{v}$ is his average speed. When turning, a driver decelerates on his approach in preparation to turning. Generally speaking, very few drivers can enter the intersection at the speed limit and still make the turn.
37	$v_e \leq v$	The driver's speed when he enters the intersection. For legal purposes, entry speed must be <= speed limit.
38	$\overline{v} = \frac{v + v_e}{2}$	Average speed from v decelerating to v_e
39	$v_{e-min} = v - \alpha(T - t_p)$	v_{e-min} is the minimum speed which with a driver can enter the intersection.
40 	$v_e < v_{e-min}$	The Town of Cary will force all drivers who safely decelerated from the speed limit, but who enter the intersection at a speed less than v_{e-min} to run a red light.

41 	$d_{1t} \leq d \leq d_{3t}$	At the time the light changes from green to yellow, the Town of Cary will force all drivers at distance **d** from the intersection to run a red light.

Table 3 - Deceleration

#	Formula	Meaning
42	$\alpha = \mathbf{a} + \mathbf{G}\sin(\tan^{-1} g)$	For any grade **g**.
43	$\alpha = \mathbf{a} + \mathbf{G}\mathbf{g}$	For -10.0% <= grades <= 10.0%

Table 4 - Variables

Var	Meaning
d_{1t}	Distance from intersection to safe stopping distance
d_1	Distance from intersection to safe braking distance
d_{2t}	Maximum distance a driver can travel during the yellow light
d_2	Maximum distance a driver can travel during the yellow light after he perceived the light turning from green to yellow
d_{3t}	Distance a driver travels during the yellow light
d_3	Distance a driver travels during the yellow light after he perceived the light turning from green yellow
v	Speed limit. Traffic engineers often call this the approach speed. For the purpose of yellow intervals, the approach speed >= speed limit. Approach speed cannot be < speed limit because drivers can legally go the

	speed limit.
v_e	The speed the car enters the intersection
$\bar{v}$	The average speed of the car from v to v_e
$v_{e\text{-}min}$	The minimum speed the car can enter the intersection. Any safe deceleration from the speed limit to a speed slower than this minimum speed will force the driver to run the red light.
t_p	Perception time. North Carolina uses 1.5 seconds for this value. This value comes from AASHTO[6].
α	Deceleration. Deceleration is a positive value.
G	Earth's gravitational acceleration constant. 32.2 ft/s^2
g	The grade of road. A grade of 1% means g = 0.01. Inclines are positive. Declines are negative.

Table 5 - Notes

#	Note
1	I assume that the driver uses all his perception time and only his perception time for perceiving.
2	I assume that the driver decelerates at the Town of Cary's accepted safe deceleration constant of 11.2 ft/s^2. Any deceleration greater than this will cause a rear-end collision or put the driver's head through the windshield.
3	The underlying physics premise of the safe braking distance equation is that a vehicle's brakes can always exert a force **F** capable of decelerating the vehicle at 11.2 ft/s^2 on a level road.

34	The yellow light equation always assumes the road is dry. The safe braking distance equation does not compensate for rain or snow. In physics-speak, the safe braking distance equation does not include the coefficient of friction between the road and the tires of the car. In wet or icy conditions, the Town of Cary will force drivers to run red lights.

References

[1]*Traffic Engineering Handbook*, 6th Edition, Publication TB-010B, Institute of Transportation Engineers, 2010, p. 412

[2]The basic equation is found in every State, Federal and International Department of Transportation's signals manual. The "2" in the denominator is the give-away. The equation originated with the *Traffic Engineering Handbook*, 3rd Edition, Institute of Traffic Engineers, 1965, p. 407. Here are some examples:

[2]*Traffic Signal Timing Manual*, Publication FHWA-HOP-08-024, Federal Highway Administration, 2008, p. 138

[2]*Traffic Engineering Handbook*, 6th Edition, Publication TB-010B, Institute of Traffic Engineers, 2010, p. 412

[2]*Intelligent Traffic Signal Systems Unit Design Manual*, North Carolina Department of Transportation, 2009, Standard 5.2.2, Sheet 4 of 4

[2]*Caltrans Traffic Manual*, California Depart of Transportation, Table 4D-102

[2]*Signal Policy and Guidelines*, Oregon Department of Transportation, 2009, Appendix K

[3]*Application of the ITE Change and Clearance Interval Formulas in North Carolina*, Steven M. Click, Ph.D, ITE Journal, January 2008, p. 20

[4]*Traffic Engineering Handbook*, 6th Edition, Publication TB-010B, Institute of Traffic Transportation, 2010, p. 412. In the fourth paragraph from the bottom of the

page, ITE recommends that traffic engineers cut short the yellow light even when knowing it will force cars to enter the intersection on a red. For compensation, ITE recommends to increase the red clearance interval.

[5]*Derivation of the Yellow Light Interval Equation*, redlightrobber.com, Brian Ceccarelli, 2011. The yellow time is half the time required for a car to stop. Half the time you are stopping, the light is already red. This predisposes drivers to beat the light.

[6]*A Policy on Geometric Design of Highways and Streets*, American Association of State Highway and Traffic Officials, 2004, p. 110

[7]*Dilemma Zone*, redlightrobber.com, Brian Ceccarelli, 2011

[8]*How Yellow Intervals Affect Red Light Running*, redlightrobber.com, Brian Ceccarelli, 2011

[9]*Short Yellows and Turns Spreadsheet*, redlighrobber.com, Brian Ceccarelli, 2011

EXHIBIT

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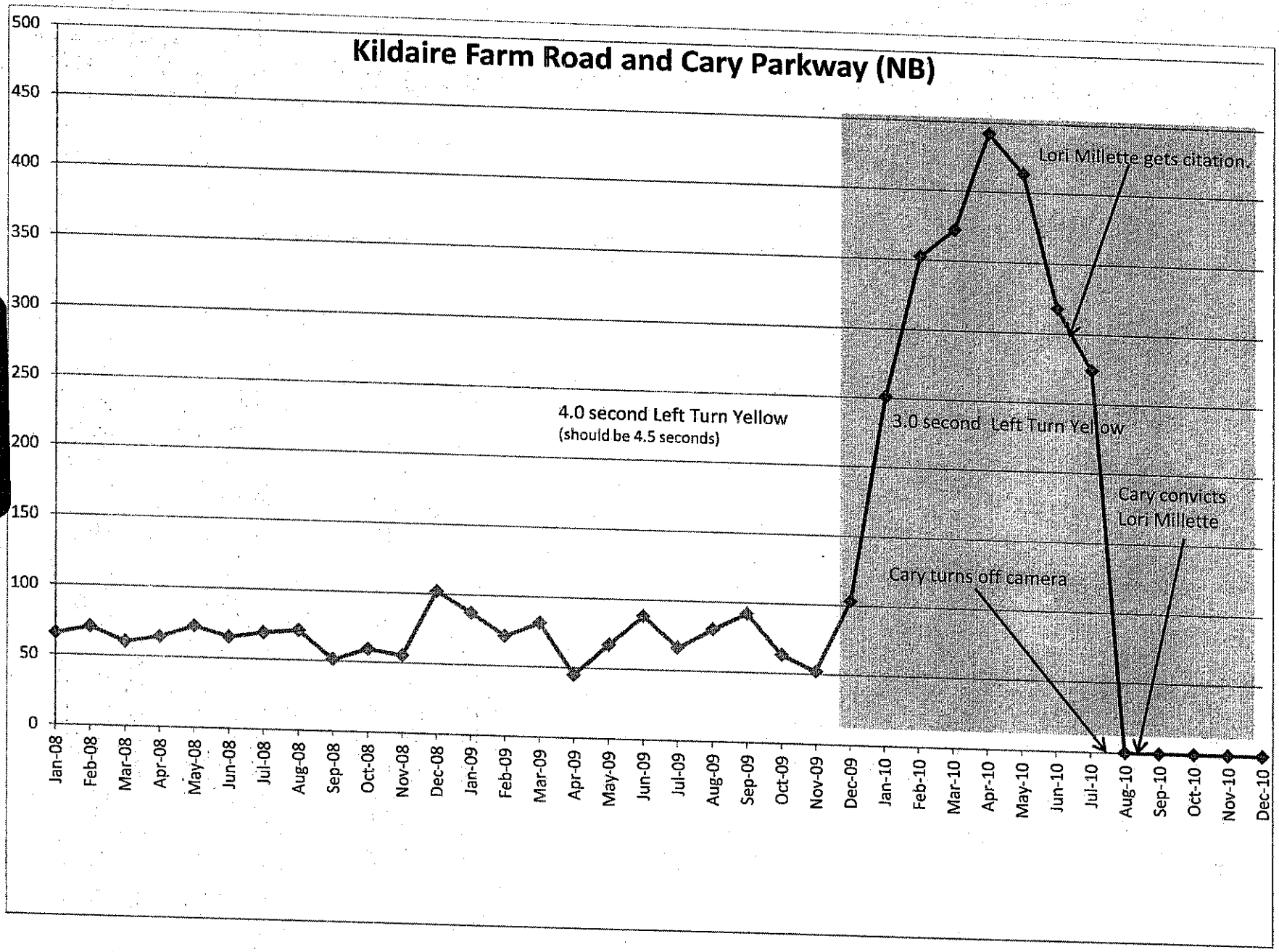
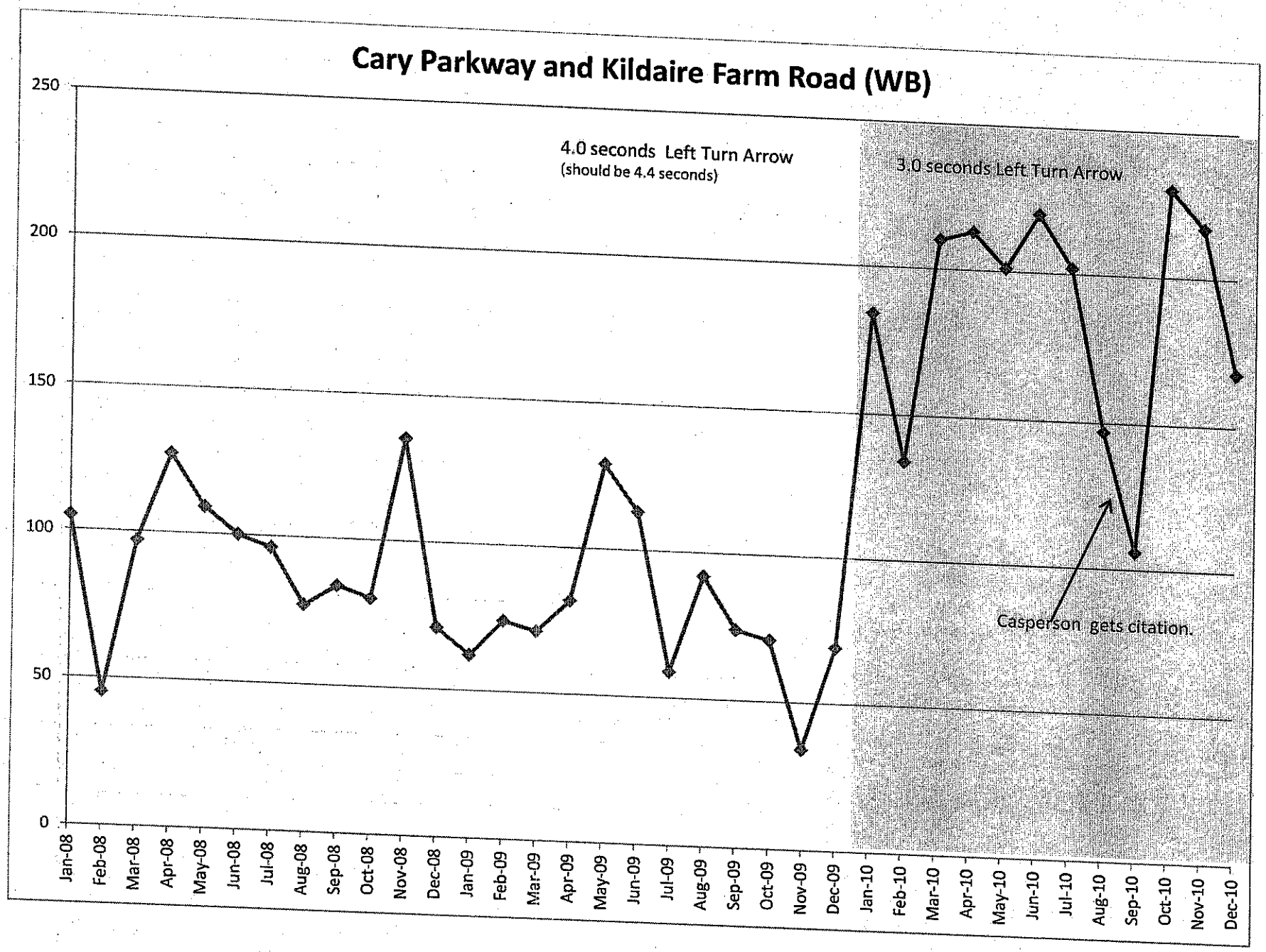
tabbies




Cary Parkway and Kildaire Farm Road (WB)
4.0 seconds Left Turn Arrow
(should be 4.4 seconds)
3.0 seconds Left Turn Arrow
Casperson gets citation.
250
200
150
100
50
0
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
Jul-08
Aug-08
Sep-08
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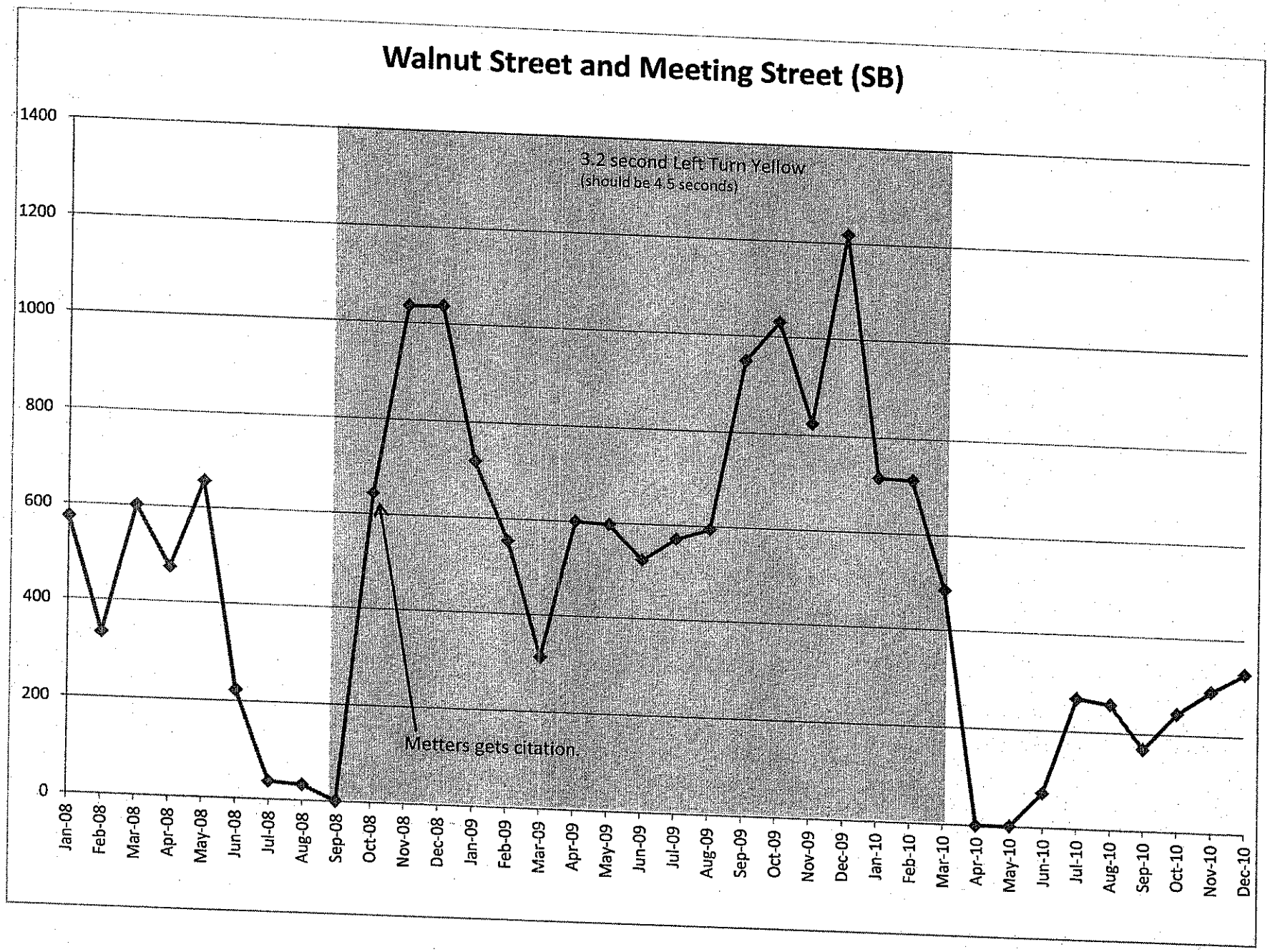
Walnut Street and Meeting Street (SB)
3.2 second Left Turn Yellow
(should be 4.5 seconds)
Metters gets citation.
1400
1200
1000
800
600
400
200
0
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
Jul-08
Aug-08
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Dec-10

SAFELIGHT CARY CITATION TOTALS 2008 - 2010

Intersection Location	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
Cary Town Blvd and Convention Drive (EB)	75	74	82	78	119	104	168	106	142	172	130	85	93	87	128	89	96	124	136	126	123	109	83	100	71	98	65	25	29	34	25	15	20	38	19	19
Kildaire Farm Road and High Meadow Drive (SB)	26	27	25	30	26	50	50	24	37	33	53	41	36	22	31	28	33	43	57	32	21	34	13	13	10	10	25	27	59	58	51	0	18	22	0	0
High House Road and Prestonwood Drive (WB)	43	39	85	63	94	94	99	84	63	89	75	48	53	33	47	66	75	72	88	63	76	78	78	58	62	10	11	6	15	32	66	52	67	84	113	62
NW Maynard Road and Chapel Hill Road (NB)	6	5	7	10	5	8	5	6	10	12	11	8	4	9	8	8	12	7	11	9	4	6	3	7	8	5	12	16	10	7	9	17	12	14	21	8
Maynard Road and Walnut Street (SB)	18	12	29	30	22	37	51	48	63	47	45	68	27	40	35	33	11	22	21	23	40	24	20	28	12	26	14	15	20	8	21	28	20	24	18	18
Tryon Road and Crescent Green Way (EB)	25	32	29	30	27	38	43	26	37	28	23	33	25	38	29	23	38	50	42	33	20	40	21	16	23	24	17	20	27	37	33	30	40	16	0	0
Tryon Road and Regency Parkway (WB)	13	16	19	39	28	69	55	36	40	25	10	11	31	43	36	77	75	90	69	82	74	53	67	35	44	29	25	48	31	114	0	30	58	42	52	34
Walnut Street and Dillard Drive (NB)	50	50	64	83	90	99	118	93	58	86	32	58	48	38	47	50	55	40	43	59	47	45	47	24	24	25	26	0	0	20	58	30	52	61	43	16
Maynard Road and Kildaire Farm Road (WB)	119	105	143	109	154	153	166	193	213	181	223	312	167	180	191	219	261	229	160	354	334	157	249	300	202	206	238	228	290	223	253	242	242	263	257	285
Kildaire Farm Road and Maynard Road (SB)	58	69	98	114	119	142	70	73	48	106	88	125	72	77	78	63	84	76	95	90	74	91	77	73	62	55	33	57	65	44	55	0	0	0	0	0
Cary Parkway and Kildaire Farm Road (WB)	109	45	97	127	109	100	96	77	84	80	135	71	92	74	71	82	129	113	59	92	74	71	34	69	184	134	210	213	201	220	202	147	106	230	217	168
Kildaire Farm Road and Cary Parkway (NB)	65	70	60	64	72	65	69	71	51	59	55	102	87	71	81	45	67	88	68	80	92	63	52	103	251	352	372	442	413	318	274	0	0	0	0	0
Cary Parkway and High House Road (NB)	204	221	255	257	262	236	165	171	173	335	154	205	126	81	152	116	139	211	154	30	32	24	23	42	58	60	86	76	55	56	51	62	67	77	84	66
Harrison Avenue and Maynard Road (SB)	21	17	17	23	20	25	25	25	27	25	25	16	16	13	20	19	17	15	20	19	20	17	7	20	19	16	19	21	19	21	20	20	16	21	18	49
Harrison Avenue and Weston Parkway (SB)	84	72	94	72	139	91	82	128	123	112	70	71	79	78	53	51	66	92	91	71	108	143	117	60	58	61	51	129	170	131	108	73	52	14	29	49
Walnut Street and Meeting Street (SB)	573	333	600	471	656	223	36	30	0	844	1036	1037	719	553	312	600	596	523	570	594	947	1032	824	1218	716	713	482	0	0	70	269	258	189	244	291	329
Cary Parkway and High Meadow (WB)					15	196	170	116	136	129	135	102	97	154	94	37	98	118	98	128	125	121	82	81	85	79	94	94	87	87	95	88	83	98	78	91
	1485	1187	1704	1598	1959	1730	1488	1306	1305	2103	2300	2391	1742	1589	1411	1606	1842	1913	1735	1883	2211	2106	1795	2257	1893	1902	1782	1415	1471	1479	1590	1090	1022	1226	1240	1194

Notes

1. The Y-axis is number of citations given that month.
2. On the graphs, hills are period of high citations. Hills lasting months indicate short yellows.
3. Hills are obvious problems. Hills indicate that Cary is playing around with the signals.
4. But valleys are also a problem. The valleys you see above, though they are valleys relative to the hills, are hilltops themselves.

5. In the Kildaire Farm and Cary Parkway (NB) graph , note that Cary turned off the camera on Aug 1, 2010.
6. Cary decreased the yellow at Kildaire Farm and Cary Parkway (NB) on January 2010 to 3.0s. By August, Cary realized they caused a problem.
7. Though the Cary turned off the red light camera at Kildaire Farm and Cary Parkway (NB) , Cary did not increase the yellow duration to what it should be: 4.5 seconds.
8. Cary also convicted Lori Millette of running the red light at this intersection even when Cary knew their engineering was causing people to run red lights.

9. Some event happened at Walnut and Meeting Pl the last half of March 2010. Cary turned off this camera here for two months.
10. By July 2010, Cary turned on the Walnut and Meeting Pl camera. It is again flashing people at a rate of 280/month. 280/month is still 20x higher than intersections like Cary Town Blvd and Convention. The yellow must still be short.

11. The first graph, Cary Towne Blvd and Convention after April 2010, shows the number of citations a properly-timed yellow yields. At this intersection, it's 25 citations per month.
12. But is 25 citations per month *normal*? Is it possible that the 25 violations per month is yet another engineering defect? The dilemma zone.
13. Yes. It is not only possible, but it is true. The remaining citations are all caused by another engineering defect.
14. Engineers create a dilemma zone because they fail to paint a line at the safe braking distance from the intersection, as required by their standard (the ITE yellow light equation).
15. A yellow light means this: If the light turns yellow and you are farther from the intersection than the safe braking distance line, you must stop. If you are closer, then you must go.
15. By omitting the line, engineers force usto guess. Many of us in the zone will choose to go because we are not sure if we can stop or scared we'll get rear-ended.
16. Many choose to go, but the light will turn red just a fraction of a second before we enter the intersection. It's a given. How many of us can guess exactly where 194.5 ft is?
17. Engineers thus guarantee a steady stream of cars running red lights, though only by fractions of a second.
16. The red light camera companies exploit the dilemma zone. It is the embryonic fluid and sustenance behind every red light camera company.

EXHIBIT F

tabbies

Determination of Yellow Change and Red Clearance Intervals

Yellow Change Interval

Speed Limit mph (km/hr)	Yellow Change Interval seconds
≤ 40 (64)	4.0
45-50 (72-80)	4.7
55 (88)	5.1

Red Clearance Interval

Calculate recommended clearance intervals using the Clearance Spreadsheet. Subtract the appropriate yellow change interval (using the above chart) from the spreadsheet recommended total clearance time and put the remaining time in red clearance, rounding up to the nearest 0.5 second.

These paragraphs refer to red clearance intervals, not yellow intervals. The next 2 editions makes this clear.

Notes

-In general, for the usual NEMA phase designation, use the same clearance times for:

Phase 2 and Phase 6
Phase 4 and Phase 8

And, if they do not vary greatly:

Phase 1 and Phase 5
Phase 3 and Phase 7

-Red clearance intervals of less than 1.0 second and greater than 3.0 seconds require special circumstances.

-For most left turn lanes, assume a speed of 20 mph (32 kph). For high speed locations with turning angles greater than 90 degrees, a higher speed may be used.

Determination of Yellow Change and Red Clearance Intervals

Yellow Change Interval

Speed Limit or Estimated Traveling Speed mph (km/hr)	Yellow Change Interval seconds
≤ 40 (64)	4.0
45-50 (72-80)	4.7
55 (88)	5.1

Red Clearance Interval

Calculate recommended clearance intervals using the Clearance Spreadsheet. Subtract the appropriate yellow change interval (using the above chart) from the spreadsheet recommended total clearance time and put the remaining time in red clearance, rounding up to the nearest 0.5 second.

Protected left phases are intersections with green arrows. Note that the yellow interval is 4 seconds, not 3. When a left lane does not have a green arrow, then the yellow interval is the same as that for forward movement. There is no other choice for this.

→

-Use a 4.0 second yellow change interval for protected left phases.

Notes

-In general, for the usual NEMA phase designation, use the same clearance times for:

Phase 2 and Phase 6
Phase 4 and Phase 8

And, if they do not vary greatly:

Phase 1 and Phase 5
Phase 3 and Phase 7

-Red clearance intervals of less than 1.0 second and greater than 3.0 seconds require special circumstances.

-For most left turn lanes, assume a speed of 20 mph (32 kph). For high speed locations with turning angles greater than 90 degrees, a higher speed may be used.

In this edition, the NCDOT introduced the "ITE Yellow Light Interval Equation."

Determination of Yellow Change and Red Clearance Intervals

Yellow Change Interval

Design Speed* mph (km/hr)	Yellow Change Interval** seconds
≤ 40 (64)	4.0
45-50 (72-80)	4.7
55 (88)	5.1

Mentioning "20 mph" means nothing for yellow intervals in 2002. Because anything less than 20 mph always get 4 seconds.

*Design speed is the speed limit unless a speed study determines that the 85th percentile speed is faster or intersection geometrics compel vehicles to traverse the intersection slower. When designing for something other than the speed limit, use the ITE formula to calculate values for design speed and the speed limit. Use the highest yellow interval and enough red clearance to total the highest total clearance interval.

**If the yellow change interval calculated by the ITE formula is higher than the table value, use the calculated value.

For most left turn lanes, assume a speed of 20 mph (32 kph). For locations with unusual conditions a higher or lower speed may be appropriate.

For separate left turn phases, use 4.0 seconds for the yellow change interval. For left turns without a separate phase, use the yellow change interval calculated for the adjacent through lanes.

Red Clearance Interval

Calculate recommended clearance intervals using the ITE formula. Subtract the appropriate yellow change interval (using the above chart) from the ITE formula recommended total clearance time and put the remaining time in red clearance, rounding up to the nearest 0.5 second.

Red clearance intervals of less than 1.0 second and greater than 3.0 seconds require special circumstances.

Notes

-In general, for the usual NEMA phase designation, use the same clearance times for:

Phase 2 and Phase 6
Phase 4 and Phase 8

And, if they do not vary greatly:

Phase 1 and Phase 5
Phase 3 and Phase 7

The top paragraph just moved, by technical writer error, to under the yellow change interval. But this paragraph still applies only to red clearance intervals as confirmed by the next paragraph. The next paragraphs covers all left turn lanes. Note that separate phase left turns get 4.0 (not 3) seconds and all other lefts get the same as the forward yellows. .

Change and Clearance Intervals

SIGNALS & GEOMETRICS SECTION
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Determination of Yellow Chang and Red Clearance Intervals

ERROR and CONFUSION introduced in this edition. As opposed to previous editions, engineers now incorrectly apply paragraph "For most left turn lanes ..." to yellows too. The next sentence makes the engineer think that 20 mph of the previous sentence applies to both yellow and red, wherein by historical context, we know it only applies to red. Without the out-of-context top paragraph, this edition would make the left turn yellows the same as the forward yellows.

Yellow Change Interval

$$\text{Yellow interval} = t + \frac{v}{2a + 64.4g}$$

t = perception reaction time, typically 1.5 seconds
v = design speed*, in ft/s
a = deceleration rate, typically 11.2 ft/s$_2$
g = grade

Round up to nearest 0.1 second.

Minimum yellow change interval is 3.0 seconds.

Hold stakeholder discussion** when calculated yellow change interval is longer than 6.0 seconds.

Red Clearance Interval

$$\text{Red interval} = \frac{w}{v}$$

w = width of intersection, in feet
v = design speed*, in ft/s

If the initial calculation results in an all red time longer than 3.0 seconds, recalculate the red time as follows:

$$\text{Recalculated red interval} = \frac{1}{2}\left(\frac{w}{v} - 3\right) + 3$$

Round up to nearest 0.1 second.

Minimum red clearance interval is 1.0 seconds.

Hold stakeholder discussion** when recalculated red clearance interval is longer than 4.0 seconds.

* Design speed is the sp
that the 85th percenti
geometrics compel vehi

** The purpose of a stake
notification and involvement to stakeholders and provide an opportunity to consider possible countermeasures.

For most left turn lanes, assume a speed of 20 mph (32 kph) to 30 mph (48 kph). For locations with unusual conditions a higher or lower speed may be appropriate.

For separate left turn phases, calculate yellow and red intervals.

For left turns without a separate phase, calculate yellow and red times for both the through movement and the left turn movement. Use the highest yellow and enough red to equal the highest total time.

Where existing times are higher than calculated times, use the calculated values unless there is a documented history of the need for higher times. If approach is high speed and existing times are significantly higher than the calculated times, use the calculated values but consider adding a note to the plan to direct field forces to reduce the time incrementally. Include in the note how much and how often to reduce time until the final value is reached. (Ex. Existing Yellow Change Interval for phase 2 may be decreased by 0.2 seconds per week until the required value is reached.)

Where revising a location or adding a new signal along a corridor, consider comparing clearance times at adjacent intersections to new calculations to meet driver expectations.

Sources:
Traffic Engineering Handbook, Fifth Edition, Institute of Transportation Engineers, 1999.

A Policy on Geometric Design of Highways and Streets, Fourth Edition, American Association of State Highway and Transportation Officials, 2001.

There is nothing new in this edition. The same confusion introduced in 7-2005 continues here. Remember, the March 2002 edition explicitly reveals the mistake.

Determination of Yellow Change and Red Clearance Intervals

Yellow Change Interval

$$\text{Yellow interval} = t + \frac{v}{2a + 64.4g}$$

t = perception reaction time, typically 1.5 seconds
v = design speed*, in ft/sec
a = deceleration rate, typically 11.2 ft/sec^2
g = grade

Round up to nearest 0.1 second.

Minimum yellow change interval is 3.0 seconds.

Hold stakeholder discussion** when calculated yellow change interval is longer than 6.0 seconds.

Red Clearance Interval

$$\text{Red interval} = \frac{W}{V}$$

W = width of intersection, in feet
V = design speed*, in ft/sec

If the initial calculation results in an all red time longer than 3.0 seconds, recalculate the red time as follows:

$$\text{Recalculated red interval} = \frac{1}{2}\left(\frac{W}{V} - 3\right) + 3$$

Round up to nearest 0.1 second.

Minimum red clearance interval is 1.0 seconds.

Hold stakeholder discussion** when recalculated red clearance interval is longer than 4.0 seconds.

Notes

*Design speed is the speed limit unless a speed study determines that the 85th percentile speed is faster or intersection geometrics compel vehicles to traverse the intersection slower.

**The purpose of a stakeholder discussion is to provide advance notification and involvement to stakeholders and provide an opportunity to consider possible countermeasures.

For most left turn lanes, assume a speed of 20 mph (32 kph) to 30 mph (48 kph). For locations with unusual conditions a higher or lower speed may be appropriate.

For separate left turn phases, calculate yellow and red intervals.

For left turns without a separate phase, calculate yellow and red times for both the through movement and the left turn movement. Use the highest yellow and enough red to equal the highest total time.

Where existing times are higher than calculated times, use the calculated values unless there is a documented history of the need for higher times. If approach is high speed and existing times are significantly higher than the calculated times, use the calculated values but consider adding a note to the plan to direct field forces to reduce the time incrementally. Include in the note how much and how often to reduce time until the final value is reached. (Ex. Existing Yellow Change Interval for phase 2 may be decreased by 0.2 seconds per week until the required value is reached.)

Where revising a location or adding a new signal along a corridor, consider comparing clearance times at adjacent intersections to new calculations to meet driver expectations.

Sources:
Traffic Engineering Handbook, Fifth Edition, Institute of Transportation Engineers, 1999.

A Policy on Geometric Design of Highways and Streets, Fourth Edition, American Association of State Highway and Transportation Officials, 2001.

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
10-CVS-019930

BRIAN CECCARELLI,
individually and as class representative,

Plaintiffs,

v.

TOWN OF CARY

Defendant.

AFFIDAVIT OF ELIZABETH GEORGE

ELIZABETH GEORGE, being first duly sworn, deposes and says:

1. Based on my education, training, and work experience, I have knowledge of the facts hereinafter stated and am competent to testify as a sworn witness to the matters contained herein. I am over the age of 18 years.

2. I received a Ph.D. in Physics in 1993 from the University of Wisconsin – Madison.

3. I am currently employed by Wittenberg University as an Associate Professor and Chair of the Physics Department and have been with the university since 1998.

4. My Curriculum Vitae, including a list of publications, is attached to this Affidavit as Exhibit "A."

5. Based on my education and training in physics, I am qualified to testify regarding the dilemma zones created by the yellow light duration formula used by traffic engineers.

6. My conclusions are based on basic principles that I teach in my physics courses.

7. When a traffic light changes from green to yellow, a vehicle traveling at a given speed requires a certain distance to stop safely. If the vehicle is closer to the intersection than this critical distance, the driver cannot safely stop short of the intersection and has to continue through the intersection instead of stopping. When the yellow light duration is too short for a vehicle traveling at this speed to clear the intersection before the light turns red, a Type I dilemma zone is created, in which a driver cannot stop safely, but also cannot get through the intersection before the light turns red without speeding up.

8. When the yellow light duration is set to the ITE yellow light change interval based on a design speed lower than the speed limit, Type I dilemma zones are created for vehicles traveling between the design speed and the speed limit. Drivers in a dilemma zone do not have enough room to stop safely, and also do not have enough time to clear the intersection before the light turns red without speeding.

9. The eastbound Cary Towne Blvd. and Convention Drive intersection under the 1991

signal plan is an intersection with such a dilemma zone. With a yellow light duration of 4.0 seconds and a speed limit of 45 mph, a driver needs to be at least 293 feet from the intersection to perceive that the light has turned yellow and stop safely. Drivers closer than this distance must continue through the intersection, but at 45 mph a driver can travel only 264 feet in the 4.0 seconds that the light is yellow. (Standard NCDOT values for perception time and deceleration rate have been used in this calculation.) Thus, drivers traveling at the speed limit between 264 and 293 feet from the intersection at the instant the light turns yellow can neither stop safely nor reach the intersection at the speed limit before the light turns red. If drivers are required to completely clear the intersection before the light turns red, the dilemma zone is even larger.

10. When the yellow light duration in a turn lane is set to the ITE yellow light change interval based on the speed limit for vehicles traveling straight through, a similar Type I dilemma zone is created. Drivers in this zone are too close to the intersection to stop safely, but because they have to slow down below the speed limit in order to turn safely, the yellow light interval is not long enough to allow drivers to clear the intersection while making a turn before the light turns red.

11. Such a dilemma zone exists at the northbound Cary Parkway and Kildaire Farms intersection with the yellow light duration set to 3.0 seconds in the left turn lane. Drivers approaching at the speed limit of 45 mph who are closer than 293 feet from the intersection at the instant the light turns yellow cannot stop safely and must continue through the intersection, but even if they do not need to slow to make the turn they can travel only 198 ft at the speed limit before the light turns red. Slowing to make the turn makes the distance that can be traveled in 3.0 seconds even shorter than 198 feet, so there is a very large dilemma zone for drivers who plan to turn left at this intersection. Even for drivers who have already slowed to 30 mph when the light turns yellow there is still a dilemma zone in the region between 132 and 152 feet from the intersection.

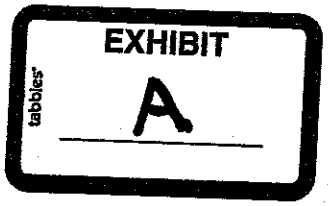
This the 5th day of December, 2011.

Elizabeth George

STATE OF OHIO
COUNTY OF Clark
Sworn to and subscribed before
me this 5th day of December, 2011.

Connie Ross
Notary Public
My Commission Expires: Connie S. Ross
Notary Public, State of Ohio
My Commission Expires 1/29/2016

11/23/2011; last update 11/22/11



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Education:

Ph.D. Physics, University of Wisconsin—Madison, 1993
Minor: Distributed (Mathematics and Computer Science)
Thesis: "A New Determination of the Asymptotic *D*-state to *S*-state Ratio of the ^{3}H → n+d Cluster Wavefunction Using Sub-Coulomb $(\vec{d}, t)$ Reactions"
Thesis advisor: Lynn Knutson

M.S. (Radiology [Medical Physics]) University of Colorado, 1986
Thesis: "Application of Fractal Geometry to the Evaluation of Lung Airway Morphology and Anatomy"

B.S. Physics, University of Arizona, 1983 (With Highest Distinction)
Minor: Mathematics

Professional experience:

2010-	Interim Assistant Provost (part-time), Wittenberg University
2003-	Chair, Physics Department, Wittenberg University
2002-	Associate Professor, Wittenberg University
1998-2002	Assistant Professor, Wittenberg University
1995-8	Assistant Professor, University of Wisconsin—Whitewater
1993-5	Visiting Assistant Professor, Richard Stockton College of New Jersey
1987-93	Research Assistant, University of Wisconsin—Madison (Physics)
1986-7	Teaching Assistant, University of Wisconsin—Madison (Physics)
1982-4	(summers) Undergraduate Research Assistant, University of Missouri Research Reactor

Professional affiliations, offices held:

- American Physical Society
  Secretary, Ohio-Region Section 2004-10
- American Association of Physics Teachers
  Executive Committee, Southern Ohio Section, 2000-
- Project Kaleidoscope Faculty for the 21st Century, class of 1997
- Advanced Lab Physics Association (ALPhA)
  Board member, 2011-

Academic honors and awards:

- Finalist, Sigma Xi Graduate Research Award, University of Wisconsin, 1993
- Phi Beta Kappa, elected 1982 (Alpha of Arizona)
- Outstanding Student, Faculty of Sciences, University of Arizona, 1983

Peer-reviewed publications:

"A superconducting beta spectrometer," L.D. Knutson, G.W. Severin, S.L. Cotter, L. Zhan, P.A. Voytas, and E.A. George, Rev. Sci. Instrum. **82**, 073302 (2011)

"The half-life of ^{66}Ga," G.W. Severin, L.D. Knutson, P.A. Voytas, and E.A. George, Phys. Rev. C **82**, 067301 (2010)

"Scattering lengths for p-^{3}He elastic scattering from an effective-range phase shift analysis," E.A. George and L.D. Knutson, Phys. Rev. C **67**, 027001 (2003)

"The A_y problem for p-^{3}He elastic scattering," M. Viviani, A. Kievsky, S. Rosati, E.A. George, and L.D. Knutson, Phys. Rev. Lett. **86**, 3739 (2001)

"Determination of the ^{6}Li $\rightarrow \alpha + d$ *D*- to *S*-state ratio by a restricted phase-shift analysis," E.A. George and L.D. Knutson, Phys. Rev. C **59**, 598 (1999)

"Cross section and analyzing powers for ^{6}Li-^{4}He elastic scattering at 5.5 and 19.6 MeV," E.A. George, D.D. Pun Casavant, and L.D. Knutson, Phys. Rev. C **56**, 270 (1997)

"Measurement of the longitudinal analyzing power for noncoplanar *p-d* breakup," E.A. George, J. Frandy, M.K. Smith, Y. Zhou, L.D. Knutson, J. Golak, H. Witała, W. Glöckle, and D. Hüber, Phys. Rev. C **54**, 1523 (1996)

"New determination of the asymptotic *D*-state to *S*-state ratio of the triton using $(\vec{d},t)$ reactions at sub-Coulomb energies," E.A. George and L.D. Knutson, Phys. Rev. C **48**, 688 (1993)

"Neutron interferometric search for quaternions in quantum mechanics," H. Kaiser, E.A. George, and S.A. Werner, Phys. Rev. A **29**, 2276 (1984)

"Direct measurement of the longitudinal coherence length of a thermal neutron beam," H. Kaiser, S.A. Werner, and E.A. George, Phys. Rev. Lett. **50**, 560 (1983)

b) Peer-reviewed and invited publications in conference proceedings:
"Observing students' use of computer-based tools during collision experiments," Elizabeth A. George, Maan J. Broadstock, and Jesús Vázquez-Abad, Proceedings of the 2001 Physics Education Research Conference, Rochester, NY, July 2001

"Learning energy, momentum, and conservation concepts with computer support in an undergraduate physics laboratory," Elizabeth A. George, Maan Jiang Broadstock, and Jesús Vázquez Abad, International Conference of the Learning Sciences, Ann Arbor, MI, June 2000

Selected Conference Presentations (* denotes undergraduate student):
"Investigation of Light-Induced Atom Desorption," Timothy Uher*, Paul Voytas, and Elizabeth George, Ohio-Region Section APS meeting, Flint, MI, April 2010

"Upper-level lab sequence at Wittenberg University: paths to student independence," Elizabeth George, Paul Voytas, and Jeremiah Williams, Topical Conference on Advanced Laboratories, Ann Arbor, MI, July 2009 (peer-reviewed)

"Determining the half-life of ^{40}K from the activity of salt substitute," Elizabeth George and Paul Voytas, Topical Conference on Advanced Laboratories, Ann Arbor, MI, July 2009 (peer-reviewed)

"Investigating Tangential Acceleration in the Laboratory with a Rotation Wheel," Elizabeth George and Paul Voytas, Summer AAPT meeting, Ann Arbor, MI, July 2009

"Buck Creek River Flow Analysis," Yasas Dhanapala*, Elizabeth George, and John Ritter, Ohio-Region Section APS meeting, Ada, OH, April 2009

"Achieving Nanosecond Timing with the Vernier Method," Rebecca Cooper*, Elizabeth George, Paul Voytas, Ohio-Region Section APS meeting, Ada, OH, April 2009

"Calibration of a superconducting beta spectrometer using ^{66}Ga," Gregory Severin, Lynn Knutson, Elizabeth George, Paul Voytas, Sean Cotter, APS Division of Nuclear Physics meeting, Oakland, CA, October 2008

"Recent Results on the Branching Ratio in the Beta Decay of Oxygen-14," Matthew Kowalski*, Elizabeth George, Paul Voytas, Lynn Knutson, Gregory Severin, Sean Cotter, Ohio-Region Section APS meeting, Miami University, Oxford, OH, October 2007

"Modeling a new superconducting beta spectrometer for a CVC test in ^{14}O beta decay," P.A. Voytas, E.A. George, L.D. Knutson, and S.L. Cotter, APS Division of Nuclear Physics meeting, Chicago, IL, October 2004

"Design and Calibration of a Superconducting Beta Spectrometer," S.L Cotter, L.D. Knutson, E.A. George, and P.A. Voytas, APS Division of Nuclear Physics meeting, Chicago, IL, October 2004

"Properties of Biological Media Determined from Polarization Properties of Backscattered Light," Landon Locke*, Ohio Section APS meeting, Athens, OH, April 2004

"Studying the Motion of Rising Bubbles with Video Capture," E.A. George, Ryan Greer*, P.A. Voytas, Summer AAPT meeting, Madison, WI, August 2003

"Adapting RealTime Physics," Elizabeth A. George, Daniel A. Fleisch, Paul A. Voytas, William E. Dollhopf, Ohio Section APS/Southern Ohio Section AAPT Joint Meeting, Columbus, OH, October 2001

"Observing students' use of computer-based tools during collision experiments," Elizabeth A. George, Maan J. Broadstock, and Jesús Vázquez-Abad, Summer AAPT meeting, Rochester, NY, July 2001 (invited talk)

"Student understanding of momentum, mechanical energy, and conservation principles in a computer-supported undergraduate physics laboratory," Jesús Vázquez-Abad, Elizabeth A. George, and Maan J. Broadstock, AERA annual meeting, Seattle, WA, April 2001 (peer-reviewed)

"Learning momentum and energy conservation principles with computer support in an undergraduate physics laboratory," Maan J. Broadstock, Elizabeth A. George, and Jesús Vázquez-Abad, NARST annual meeting, St. Louis, MO, March 2001 (peer-reviewed)

"Learning momentum and energy conservation in a computer-based laboratory," Elizabeth A. George, Maan J. Broadstock, and Jesús Vázquez-Abad, NSTA annual meeting, St. Louis, MO, March 2001 (peer-reviewed)

"Student learning in motion detector- and video-based collision laboratories," Elizabeth A. George, Maan J. Broadstock, and Jesús Vázquez-Abad, Summer AAPT meeting, Guelph, Ontario, August 2000

"Learning momentum and energy conservation principles with motion detectors and video," Elizabeth A. George, Theresa Conway*, Maan Jiang Broadstock, and Jesús Vázquez-Abad, Winter AAPT meeting, Kissimmee, FL, January 2000

"Four Strategies for Exploiting Computers in a Science Core Course," D. Waechter-Brulla, E. Drexler, L. Urven, F. Luther, R. Helwig, E. George, and J. Bak, 162nd National Meeting of the AAAS, Washington, DC, Jan. 1996 (peer-reviewed)

Other presentations:
"Nuclear beta decay and the weak interaction," Wright State University Physics Department seminar, May 5, 2006

"Phase shift analyses and scattering lengths for p-^{3}He," seminar at Institute for Nuclear and Particle Physics, Ohio University, January 27, 2004

"Using spinning nucleons to investigate the strong force," Physics Department seminar at Denison University, Jan. 31, 2002

Grant proposals funded:
Co-principal investigator (lead investigator: Paul Voytas) for "A mono-energetic neutron facility for investigating radiation damage to Si and SiC devices," submitted to Analex, a support service contractor to NASA Glenn Research Center, funded August 2004-September 2005

Principal investigator for "Computer-aided active engagement learning in an introductory physics sequence for science majors," National Science Foundation, Division of Undergraduate Education, CCLI-A&I program, funded 2000-2003 (co-principal investigators: W.E. Dollhopf, P.A. Voytas)

Principal investigator for "Effects of instructional technologies on student learning in the undergraduate physics laboratory," National Science Foundation, Division of Research, Evaluation and Communication, REPP program, funded 1998-2001 (co-principal investigator: Jesús Vázquez-Abad, Université de Montréal)

Courses taught at Wittenberg:
General education courses: Physics Through Experimentation; Chaos and Fractals (first-year seminar); Patterns in Nature (first-year seminar)
Honors course: Chaos and Fractals (team-taught)
Introductory physics courses: Mechanics and Waves; Topics in Contemporary Physics (algebra-based course); Thermodynamics and Optics; Intermediate Physics Lab; Special Relativity and Applications; Modern Physics
Upper-level physics courses: Wave Phenomena; Electronics; Digital Electronics; Nuclear Physics; Particle Physics; Junior/Senior Seminar

Community and professional service contributions:
- Reviewer, American Journal of Physics (2005-)
- Reviewer, Europhysics Letters (2011-)
- Reviewer for nine chapters of third edition of Knight, Physics for Scientists and Engineers, 2010
- Reviewer, U.S. Civilian Research and Development Foundation 2005 Cooperative Grants Program
- National Science Foundation review panels: Division of Research, Evaluation and Communication CAREER program, October 1999; Information Technology Research program, February 2001; Assessing Student Achievement program, July 2001 and January 2002
- Steering Committee, 2009 and 2012 Advanced Labs Topical Conferences, American Association of Physics Teachers
- Member of Audit Panel for K-12 science education review, Oakwood School District, 2010-11
- Coordinated and led physics activities for Girl Scout Science Night at Wittenberg, 2001-4, 2007-9
- Helped organize SOS/AAPT meeting at Wittenberg, March 2002

University committees and task forces:
- Diversity Advisory Committee, 2011-
- Strategic Planning Implementation Task Group A, 2008-10
- Provost's Advisory Committee, 2009-10
- Hearing Board on Academic Freedom and Tenure, 2002-5; 2008- (Chair, 2003-2005, 2009-11)

- Faculty Executive Board, Fall 2007 (sabbatical replacement)
- Curriculum Review Committee, 2006-7
- Task group on the Mission Statement, 2004-6
- Strategic Planning task groups on Attracting High-Performing Students and on Promoting Student Excellence, Persistence and Success, 2003-4
- Committee on Admissions/Financial Aid, 2001-3
- Facilities and Environment Committee, 2001-3 (Chair, 2002-3)
- Library Policies Committee, 1999-2001 (Chair, Spring 2000)

Other contributions to the University:

- Chief Information Officer search committee, 2009
- Panelist/ co-presenter for the following Wittenberg Faculty Development events: "Keys to a successful sabbatical," 2007; "The arc of a teaching career," 2009; "Radical pedagogies," 2010; "How Do We Respond? A Collection of Response Strategies for Papers and Oral Presentations," 2010; "3 principles and 9 strategies for the bimodal classroom," 2011
- Faculty Retreat planning group and co-presenter of session on "Research-based teaching strategies," 2008; co-organizer of session on "Faculty Workload," 2011
- Academic advising: Advised four groups of 6-18 first-year students; currently major advisor for 10 students

Responsibilities as Interim Assistant Provost (2010-11)

- Led faculty groups developing new Environmental Science major and investigating the feasibility of an Environmental Sustainability major
- Supervised International Education office
- Responsible for departmental non-staffing budget requests
- Provost's office liaison for grant administration; Grant administrator (Fall 2011)
- Interim Director for Computational Science minor program
- Ex-officio member of Facilities and Environment Committee

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
10-CVS-019930

BRIAN CECCARELLI,
individually and as class representative,

Plaintiffs,

v.

TOWN OF CARY

Defendant.

AFFIDAVIT OF LORI MILLETTE

LORI MILLETTE, being first duly sworn, deposes and says:

1. The undersigned affiant is a potential Plaintiff herein. I have personal knowledge of the facts hereinafter stated and am competent to testify as a sworn witness to the matters contained herein. I am over the age of 18 years old.

2. I am a resident of Wake County, North Carolina.

3. On May 7, 2010 at 05:18 PM Iwas traveling North on Kildaire Farm Road and turned left at the intersection of Kildaire Farm Road and Cary Parkway.

4. The speed limit at all relevant times and on the relevant portions of Kildaire Farm Road at all relevant times was 45 mph.

5. After seeing the yellow light I was unable to safely stop my vehicle before the traffic signal turned red in my respective path of travel.

6. I was issued a Notice of Violation of Cary Town Code 34-303 on May 21, 2010. A true and correct copy of the Notice of Violation is attached to this Affidavit as Exhibit "A."

7. I paid the civil penalty of $50 demanded by the Town of Cary.

8. I appealed this violation and appeared before a panel established by the Town of Cary on August 18, 2010 which found that I did violate Cary Town Code 34-303.

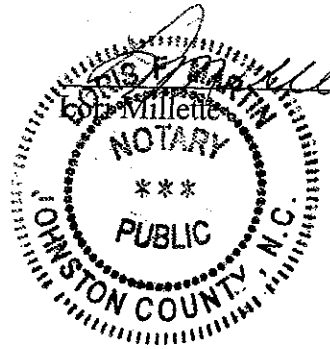
9. I have retained Stam & Danchi, PLLC and William W. Peaslee, Attorney at Law PLLC to represent me in this class action.

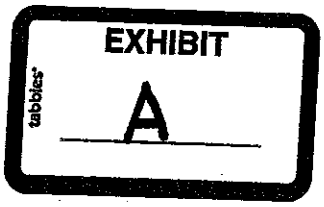
This the 29th day of November, 2011.

Lori Millette

STATE OF NORTH CAROLINA,
COUNTY OF WAKE
Sworn to and subscribed before
me this 29th day of November, 2011.

Notary Public
My Commission Expires: 2/2/2012





Cary Police Department
Safelight Cary
315 N. Academy St. Suite 204
Cary, NC 27513

IN ORDER TO PAY THE FINE, make sure this address appears in the window of the enclosed envelope.

Safelight Cary
Payment Center
P.O.Box 76674
Cleveland, OH 44101

LORI MILLETTE
126 RIVERWALK CI
CARY NC 27511

Notice of Traffic Violation

Tear Here *Tear Here* *Tear Here*

IF YOU WERE NOT THE DRIVER, make sure this address appears in the window of the enclosed envelope.

Redflex Enforcement Office
315 N. Academy St. Ste. 204
Cary, NC 27513

Fold Here *Fold Here* *Fold Here*

OPTION A: MAKE A PAYMENT

SAFELIGHT CARY

Violator Name: LORI MILLETTE

Citation #: CA10110173

Thank you in advance for responding to this notice by 7/12/2010 so that we can avoid additional fines and civil action against you.

☐ **Check or Money Order** Please make check or Money Order payable to "SAFELIGHT CARY"
(ensure address on reverse side appears in the window of the envelope)

☐ **Credit Card** ☐ Visa Card# _____ Expiration Date: Month _____ Year _____

☐ MasterCard Security Code (from the back of the Card) _____

Credit card payments can also be made online at: www.photonotice.com (Enter City code: CNC)

Payments CAN NOT be made in person. Please mail payments to the address on the reverse side.

Name as it appears on card : _____

Mailing Address: _____ City _____ State _____ Zip _____

Signature _____ Date _____

FINE AMOUNT: $ 50 **PAID: $ 51.95**

Tear Here *Tear Here* *Tear Here*

SAFELIGHT CARY

OPTION B: AFFIDAVIT OF NON-LIABILITY - IDENTIFY NEW OWNER OR DRIVER **(see instructions on Page 4)**

Violator Name: LORI MILLETTE

Citation #: CA10110173

☐ **New Owner**

Name (Last, First, Middle): _____ Driver's License #: _____

Address (Number & Street): _____ Driver's License State: _____

City, State, Zip Code: _____ Date of Birth: _____

☐ **Driver / Lessee**

Name (Last, First, Middle): _____ Driver's License #: _____

Address (Number & Street): _____ Driver's License State: _____

City, State, Zip Code: _____ Date of Birth: _____

☐ **Stolen**

Police Dept. Reported To: _____ Date: _____

Police Report #: _____ Signature: _____

Subscribed and Sworn to before me, a Notary of the State of _____, on this _____ day of _____ 20_____

_____
Notary Public

You may also fax this form to 919-380-9498

SAFELIGHT CARY
TOWN OF CARY, NC
NOTICE OF VIOLATION

NOTICE NUMBER: CA10110173

Unfortunately, and as you can see from the photos to the right, the vehicle registered in your name and described below appears to have run a red light. Such action violates Cary Town Code 34-303.

DATE OF VIOLATION	TIME OF VIOLATION	
07-May-2010	5:18 PM	
REGISTERED OWNER OR LESSEE		
LORI MILLETTE		
ADDRESS		
126 RIVERWALK CI		
CITY	STATE	ZIP CODE
CARY	NC	27511
VEH. LIC. NO	STATE	VEH. YEAR
LXH3774	NC	2006
VEH. MAKE	BODY STYLE	
HONDA	4 door Automobile	

PLEASE NOTE THAT RECORDED IMAGES DO CONSTITUTE EVIDENCE OF A VIOLATION OF CARY TOWN CODE 34-303 (FAILURE TO STOP AT A RED LIGHT)

LOCATION OF VIOLATION

Intersection of Kildaire Farm Rd / Cary Parkway NB

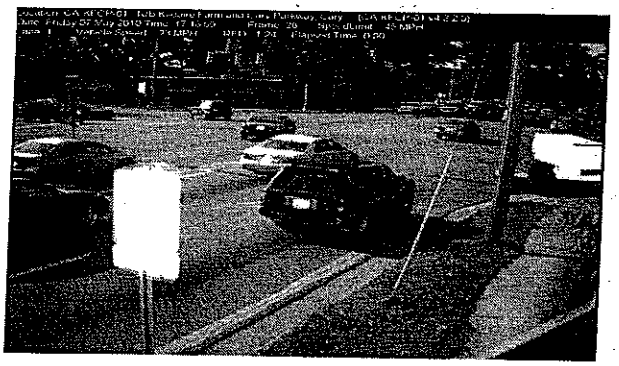
THIS VIOLATION WAS NOT COMMITTED IN MY PRESENCE. BASED UPON MY REVIEW AND INSPECTION OF THE RECORDED IMAGES, I STATE THAT A VIOLATION OF CARY TOWN CODE 34-303 DID OCCUR. I DECLARE, UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, THAT THE FOREGOING IS TRUE AND CORRECT.

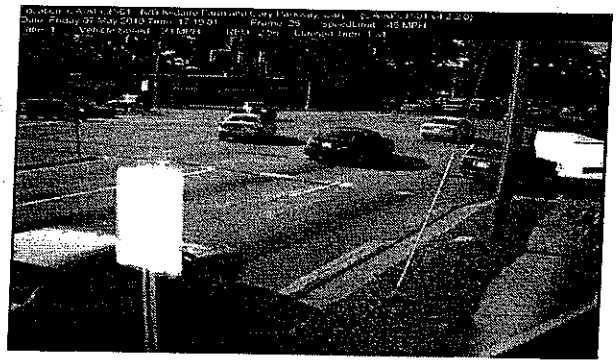
21-May-2010	Brad Hudson	Brad Hudson
DATE ISSUED	SIGNATURE	CARY POLICE REPRESENTATIVE

Please respond to this notice in one of the following ways:

1. Submit the $50 payment for the civil penalty. (See payment Option A page 2)
2. Provide information as to the driver of the vehicle. (See Affidavit coupon on Option B page 2)
3. Request a hearing to review the notice. (See page 4)

You must respond no later than 7/12/2010 to avoid an additional penalty of $50.00 and civil action against you.





For questions regarding payment, contact the customer service call center toll free at 1-877-847-2338 between 7:00am and 5:00pm (MST).

Para preguntas con respecto al pago, contacte el peaje del centro de la llamada del servicio de cliente liberta en 1-877-847-2338 entre 00am y 5:00pm (MST).

To view the video of this violation, visit www.photonotice.com (City Code CNC)

TOWN OF CARY

INSTRUCTION PAGE

RED MEANS STOP

1. **Reason You Received This Notice:**

A vehicle registered in your name was photographed failing to stop for an official red traffic control signal, or the registered owner of the vehicle depicted on this citation has submitted an Affidavit naming you as the driver of the vehicle at the time of the offense. This is a violation of the Cary Town Code 34-303.

2. **You Must Select One of the Following Options. Complete the coupon on the Options Page for the option you select and return the coupon in the enclosed envelope. Make sure the mailing address on the reverse side of the coupon appears in the window of the enclosed envelope.**

A. **Payment Methods.** As the registered owner of the vehicle described in this Notice, we have no choice but to hold you responsible for paying this fine by 7/12/2010 , any profits from which go to our public school system. No points will be assessed to your driving record, and no record of this violation will be sent to your insurance company or the Division of Motor Vehicles. Of course, if you were not the driver at the time of the offense, you may choose to complete the affidavit on Option B of the mail-in coupon on page 2 of this Notice and indicate who was driving.

1. Please do not send cash.
2. Make Check or Money Order payable to "Safelight Cary".
3. Payments by Personal Check, Money Order or Visa/MasterCard are accepted. Please mail in the enclosed envelope along with the payment coupon found on Option A of page 2.
4. A $25.00 administrative fee will be assessed for rejected or declined payments.
5. Credit Card payments can also be made online at: **https://www.photonotice.com (Enter city code : CNC)**

B **Identify another Driver.** It is sufficient evidence of a violation of Cary Town Code 34-303, that the person registered as the owner of the vehicle was operating at the time of the violation. However, liability of the owner may be removed if the Affidavit of Non-Responsibility (Option B of the mail-in coupon on page 2) is completed and returned in the enclosed envelope by 6/20/2010

1. Your responsibility can only be transferred if the driver you identified accepts the responsibility.
2. This notice may be withdrawn before or after the penalty is paid.
3. No points will be assessed to your driving record and no record of this offense will be sent to your insurance company or to the Division of Motor Vehicles.

3. **Your Right to View Video**

- The violation has been captured on video and is available to be viewed on the internet at: www.photonotice.com (Enter City Code CNC) The video is available for 60 days from date of violation.
- You may also view the video (BY APPOINTMENT ONLY) by calling the Safelight-Cary Customer Service Office at 919.388.9129 to schedule a viewing. The Office Hours are: Monday, Wednesday and Friday 10:00 AM to 2:00 PM, Tuesday and Thursday 1:00 PM to 5:00 PM.

4. **Right to a Hearing.** You have the right to a hearing:

- If you choose to have the matter reviewed by the Town's Hearing Board, **YOU MUST SUBMIT A $50.00 BOND PAYMENT** prior to scheduling a hearing.
- To schedule a hearing you must contact **THE SAFELIGHT CARY PHOTO VIEWING OFFICE AT 919-388-9129.** At that time, the Photo Viewing Representative will schedule a date and time for you to appear.
- Hearings are held at 318 North Academy Street Bldg B Cary, NC 27512. **BY APPOINTMENT ONLY.**
- **IF YOU FAIL TO PAY YOUR FINE OR SUBMIT THE BOND PAYMENT BY** 7/12/2010 **YOU WILL FORFEIT YOUR RIGHT TO A HEARING.**

NORTH CAROLINA	IN THE GENERAL COURT OF JUSTICE
WAKE COUNTY	SUPERIOR COURT DIVISION

BRIAN CECCARELLI, individually and as class representative,	)	
Plaintiffs,	)	
v.	)	No. 10 CvS 019930
TOWN OF CARY,	)	
Defendant.	)	

DEPOSITION OF TOWN OF CARY
BY ITS DESIGNEE DAVID HOWARD SPENCER, JR., P.E.
and
DEPOSITION OF DAVID HOWARD SPENCER, JR., P.E.

FRIDAY, JUNE 24, 2011

Room 10030

Cary Town Hall

316 North Academy Street

Cary, North Carolina

9:00 a.m.

Volume 1 of 1

Pages 1 through 81

Q And then what would--you could. And then do you submit that to the NCDOT?

A Yes.

Q And then they--do they approve that plan or how does that work?

A Yes. They have to approve it. If it's a NCDOT owned intersection they have to approve it.

Q And once they approve it, how does it come back to the Town of Cary, or how is the plan actually implemented? I guess that's what I'm trying to ask.

A NCDOT will review the plan and if it's acceptable, they will sign off on the plan and submit it back to us, and then it's our responsibility under our agreement to provide those changes.

Q And when you say "our" agreement, do you mean between the Town of Cary and the NCDOT?

A Yes.

Q And then what is the procedure for implementing those changes once approved?

A The Town is responsible for going out and adding those in when we have funding for it.

Q Back to the yellow change interval, since the Town of Cary can draft a plan, what would be a reason why you would need to change the yellow duration?

Ms. Martineau: Are you talking about in and of

itself absent any other change?

Ms. Nickel: I'm sorry.

Ms. Martineau: Because I don't think they've ever done that. I mean I think hypothetically they could. I don't know if they've ever done that. Go ahead.

A Yeah. Typically the clearance times as well as other features of the signal plan are updated to meet the current standards whenever we do any type of change.

When we did the crosswalks at that one intersection, for example, we would go through and check to make sure the clearance times and the red light intervals and the pedestrian walking times were updated to the current standards as well as anything else.

Q Is there ever a circumstance where you're going to change those clearance intervals without adding a crosswalk or doing some sort of---

A (interposing) Not typically.

Q Not typically. Is your department responsible for ensuring that those intervals are consistent with the plan of record?

A Yes.

Q And what's your procedure for that?

A Our signal system timing group in our traffic management center--all of our signals are connected via fiber optic networks. And from our traffic management center they can--

once it's implemented, they will pull the traffic signal plan and check to make sure what's in our system and what's in the controller matches the plan.

Q And how often is that done?

A That's usually done whenever changes are made.

Q And then is there a follow-up to that? Once the change is made, do you have any policy where you go and physically time it with a stopwatch to make sure?

A No, nothing routine.

Q Nothing routine. You mentioned the fiber optic system with 2004 being the first date. Has that always been in place?

A That system was constructed beginning around that time. It was completed in 2008, I believe.

Q So beginning in 2008 that's when you could check it?

A The system was completed in 2008. It was officially turned over to the Town around 2008, but we had capabilities prior to that.

Q So with regard to the yellow light duration starting back in 2004 to date, you said if the standards change. Can you give me what standards the Town of Cary relies on?

A We will utilize NCDOT's standard sign manual for most of our timing purposes. Other--the METCD as well.

Ms. Nickel: I'd like to introduce Plaintiffs Deposition Exhibit Number 3. It is a document produced by

By Ms. Nickel:

Q What is this a chart of?

Ms. Martineau: He has not seen this before I don't think, so go ahead and take time to look at that. Is he a recipient of this?

Ms. Nickel: He is.

Ms. Martineau: Okay. Refresh your recollection and then just let her know when you're ready.

(Witness peruses document.)

The Witness: Okay. What was the question again?

Ms. Martineau: There was no question.

The Witness: Okay.

By Ms. Nickel:

Q So looking at this with regard to the Cary Towne Boulevard and Convention Drive eastbound intersection, Phase 2, that we just referenced, on the plan of record, was 4.0 seconds based on the signal plan for May 31st, 1991? Am I reading that properly?

A Yes.

Q And then on the current signal plan of record that's increased. Are you aware of why that increased?

A I believe the 1991 plan used a speed limit of 35 miles an hour on Cary Towne Boulevard, and the recent plan used a speed limit of 45. Also between 1991 and 2010, some of the parameters for the equations for calculating yellow and red

times had been modified as well.

Q And when you said the signal plan was made for 35 miles an hour instead of 45, was that because the speed limit changed or was that an error in the signal plan?

A I don't know.

Q And then--all right. So was the original signal plan, the '91 one, done incorrectly, meaning that the yellow light duration was .5 seconds too short?

Ms. Martineau: Objection to the form of the question.

A In 1991 I'm not aware of what was on the ground and what was utilized for that signal plan, so I'm not sure if it was done incorrectly.

Q And then that was--this e-mail is dated 2009. And so we can assume until the 2009 plan that was superseded that the 4.0 seconds was in place that entire period?

Ms. Martineau: I can get you a copy of the signal plan from that time so you can see exactly what that signal plan was.

Ms. Nickel: Okay.

Ms. Martineau: We recently were able to locate it and I have it. We can give it to you so you can see exactly what it says. I don't have it with me. It's on a computer somewhere.

Ms. Nickel: Okay. And then next I'd like to

introduce Plaintiffs Deposition Exhibit Number 5.

(Plaintiffs Exhibit 5 was marked for identification.)

By Ms. Nickel:

Q This is a document produced by the Town stamped 1892, and it is an e-mail from David Spencer to Laura Cove dated 11/30/2009. I'll allow you a moment to look over it, and just let me know when you're ready.

(Witness peruses document.)

A Okay.

Q So on 11/30/2009 the second sentence of this e-mail says, "I confirmed this with Ron Garrett so it's official that the signal plan was done with the incorrect speed limit," meaning that up until that point, as we discussed before, the 35 mile per hour speed limit was wrong?

Ms. Martineau: I'm going to object to that question. Go ahead.

The Witness: Okay.

A There was an ordinance in place at that time for 45, and I confirmed the ordinance was 45 with Ron Garrett from NCDOT. So if the ordinance was at 45, I guess it would depend on what was actually posted on that road as well because the signal plan was done with whatever speed limit the engineer that did the plan did it at the time. That was all that I knew about that, was that an ordinance was in

place at that time.
Q Okay.
Ms. Nickel: Next I'd like to introduce Plaintiffs Deposition Exhibit Number 6.
(Plaintiffs Exhibit 6 was marked for identification.)
Ms. Martineau: Do you have one more copy by chance?
Ms. Nickel: I do.
(Document handed to counsel.)
Ms. Martineau: Thanks.
Q This is a document produced by defendant stamped 1894 through 1897. It is a series of e-mails from David Spencer to Laura Cove dated 11/30/2009. If you would, look through that document and familiarize yourself with it and let me know when you're finished.
(Witness peruses document.)
A Okay.
Q If you could turn to page 1896, the third page?
(Witness complies.)
Q This is an e-mail from David Spencer dated November 30th, 2009. The third to the last sentence says:
"We based our yellow times for the red light camera on this info but since it wasn't done correctly to begin with, it leaves us in a bind. We plan on implementing the EVP plans at this intersection very soon but we

may change the clearance times in the interim since this seems to be a safety issue."

When you mention a safety issue with it being 4.0 seconds yellow time duration as opposed to the now current 4.5, what did you mean by that? Could you explain?

A Well, clearance times are calculated to provide a safe time to allow people to make that decision when the light shows up, whether to go or to stop, and we always want to make sure that it meets--it meets those standards. So the clearance time in itself is a safety issue. We want to make sure that it's up to date and accurate, and if it's not, that's a safety issue.

Q And just to clarify, the yellow change interval formula that we discussed before would be--would have been the formula--the proper formula to use for this intersection; correct?

A Yes.

Q And so because it was 4.0 it was too short for that formula?

A The signal plan at the time had 4.0. If it was posted 45, it should have been designed for 45.

Q Making it 4.5 seconds?

A Correct.

Q Okay. These next few intersections we can go through more quickly.

EXHIBIT 5

NORTH CAROLINA — IN THE GENERAL COURT OF JUSTICE

WAKE COUNTY — SUPERIOR COURT DIVISION

BRIAN CECCARELLI, individually and as class representative,

Plaintiffs,

v.

TOWN OF CARY,

Defendant.

No. 10-CvS-019930

COPY

DEPOSITION OF TIM BAILEY, P.E.

FRIDAY, JUNE 24, 2011

Room 10030

Cary Town Hall

316 North Academy Street

Cary, North Carolina

9:00 a.m.

Volume 1 of 1

Pages 1 through 13

PROCEEDINGS 2:54 p.m.

(This deposition was taken pursuant to the North Carolina Rules of Civil Procedure.)

(Whereupon,

TIM BAILEY, P.E.

was called as a witness, duly sworn, and testified as follows:)

DIRECT EXAMINATION 2:54 p.m.

By Ms. Nickel:

Q Will you please state your name for the record and your position with the Town?

A Tim Bailey, Director of Engineering.

Q How long have you been with the Town?

A 22 years.

Q Okay. Can you describe the progression of your duties and responsibilities starting in 2004 to the present, mainly with regard to traffic, the traffic engineering aspect?

A I've been the director of engineering that entire time. I oversee the entire department, which is about 60 people, with functions of stormwater, transportation, traffic engineering, utilities, real estate, some field services, those types of things, so traffic engineering is one piece of what I'm involved in.

Q And in this time period what is your involvement with actually drafting the plans and the technical logistics as

you would investigate? Is there a reaction policy?

Ms. Martineau: Objection to the form of the question. Go ahead and answer if you know.

A The Town has a policy that we investigate any complaint pretty much at some level, so yes, we would. There's really no--there's no direct policy related to traffic signals.

Ms. Nickel: I'd like to introduce into evidence Plaintiffs Deposition Exhibit Number 14. This is a Western Boulevard Extension and Convention Drive signal upgrade dated 5/31/91.

(Plaintiffs Exhibit 14 was marked for identification.)

By Ms. Nickel:

Q Can you identify this document?

A That's what the title block indicates.

Q And then for the speed limit on Western Boulevard Extension, it says it's 35 miles per hour; correct?

(Witness peruses document.)

Ms. Martineau: She's just asking you. Is that what you see?

A Right there (indicating)?

Q Yes.

A I was looking for it. Yes.

Q I guess this is now known as Cary Towne Boulevard?

Ms. Martineau: What is now known?

Ms. Nickel: I'm sorry.

Q Western Boulevard Extension is now Cary Towne Boulevard. Do you recall the speed limit being 45 miles per hour?

Ms. Martineau: When?

Q As long as you've been with the Town.

A Yes.

Mr. Stam: Since we didn't have this before, is this a business record of the Town of Cary? I think you're going to respond to that.

Ms. Martineau: Right. If you would ask us that in an interrogatory we can respond to that.

Mr. Stam: All right.

Ms. Nickel: Can I confer with counsel?

Ms. Martineau: Oh, sure, absolutely.

Ms. Nickel: Thank you.

The Reporter: Off the record. 3:00 p.m.

(A brief recess was taken.)

The Reporter: On the record. 3:06 p.m.

By Ms. Nickel:

Q Back to the appeals board for the red light camera enforcement, does the appeals board actually come to the engineering department and report complaints or if there's a certain number of complaints?

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	4.6332069	1	4
F. A. PROJ. NO.	N/A		
PROJECT ID. NO.	N/A		

PLAINTIFF'S DEPOSITION EXHIBIT 14 Bailey 6/12/91

PRINCIPAL LANE
25 MPH
SR 1497 (WESTERN BOULEVARD EXT.) 35 MPH
SR 1497 (WESTERN BOULEVARD EXT.) 35 MPH
25 MPH
CONVENTION DRIVE
MALL ENTRANCE

NOTES

1. SIGNAL UPGRADE.
2. REUSE EXISTING EQUIPMENT AS SHOWN.
3. WHEN IN FLASH MODE, ALL SIGNAL FACES FOR SAME APPROACH SHALL FLASH CONCURRENTLY.
4. CONTROLLER SHOULD BE PROGRAMMED TO START UP IN PHASE 2+6 GREEN.
5. SIGNAL TO FLASH FROM 11:00 PM UNTIL 6:00 AM UNLESS OTHERWISE DIRECTED BY AREA TRAFFIC ENGINEER.
6. PAVEMENT MARKING PLANS TO BE PREPARED BY OTHERS.
7. STOPBAR LOCATIONS ON ALL APPROACHES ARE EXISTING.
8. NO COUNTS AVAILABLE.

LEGEND

PROPOSED		EXISTING
	TRAFFIC SIGNAL FACE	
N/A	MODIFIED TRAFFIC SIGNAL FACE	
	PEDESTRIAN SIGNAL FACE WITH PUSH BUTTON & SIGN	
	SIGNAL POLE WITH GUY	
	SIGNAL POLE WITH SIDEWALK GUY	
	INDUCTIVE LOOP DETECTOR	
	CONTROLLER & CABINET	
	LOOP DETECTOR PULL BOX	
	2" UNDERGROUND PVC	
	INTERCONNECT CABLE (HARDWIRE)	
	RIGHT OF WAY WITH MARKER	
	DIRECTIONAL ARROW	
	PAVEMENT MARKING ARROW	

(A) LEFT ARROW "ONLY" SIGN (30"X36") R3-5L
(B) COMBINATION VERTICAL AND LEFT ARROW SIGN (30"X36") R3-6L
(C) "LEFT TURN SIGNAL" SIGN (30"X36") R10-10L
(D) U "TURN MUST YIELD" SYMBOL SIGN (24"X30") R3-27

LOOP INSTALLATION CHART

LOOP NO.	SIZE	TURNS	DIST. FROM STOPBAR	FUNCTION	ATTACHED TO AMP. NO.	AMPLIFIER STATUS	SPECIAL FEATURES	AMP. TIMING DELAY/ STRETCH	LOOP STATUS
1	6' x 32'	2	70'	02	1	EXISTING	———	——— SEC.	EXISTING
2	6' x 32'	2	70'	06	9	NEW	———	——— SEC.	EXISTING
3,4	6' x 60'	1	5' BEYOND	04	2	EXISTING	———	——— SEC.	EXISTING
5	6' x 15'	2	5' BEYOND	04	3	EXISTING	CALL DELAY	15 SEC.	EXISTING
6	6' x 15'	2	5' BEYOND	03	4	NEW	CALL DELAY	15 SEC.	EXISTING
7	6' x 60'	1	5' BEYOND	03	5	EXISTING	———	——— SEC.	EXISTING
8	6' x 60'	1	5' BEYOND	03	6	NEW	CALL DELAY	15 SEC.	EXISTING
9	6' x 60'	1	5' BEYOND	01	7	EXISTING	———	——— SEC.	EXISTING
10	6' x 60'	1	5' BEYOND	05	8	EXISTING	———	——— SEC.	EXISTING
11	6' x 25'	2-4-2	5' BEYOND	01	10	NEW/DIGITAL	QUADRUPOLE	——— SEC.	NEW
12	6' x 25'	2	30'	01	10	NEW/DIGITAL	———	——— SEC.	NEW
13	6' x 25'	2	65'	01	10	NEW/DIGITAL	———	——— SEC.	NEW
14	6' x 25'	2-4-2	5' BEYOND	03	11	NEW/DIGITAL	QUADRUPOLE	——— SEC.	NEW
15	6' x 25'	2	30'	03	11	NEW/DIGITAL	———	——— SEC.	NEW
16	6' x 25'	2	65'	03	11	NEW/DIGITAL	———	——— SEC.	NEW

NORTH CAROLINA PROFESSIONAL SEAL 14616 ENGINEER T.A. PEOPLES

T.A. Peoples 5-31-91

SIGNAL FACE I.D.

11,22
44

7

5,6

3

4
33

1,2
333

SIGNAL UPGRADE

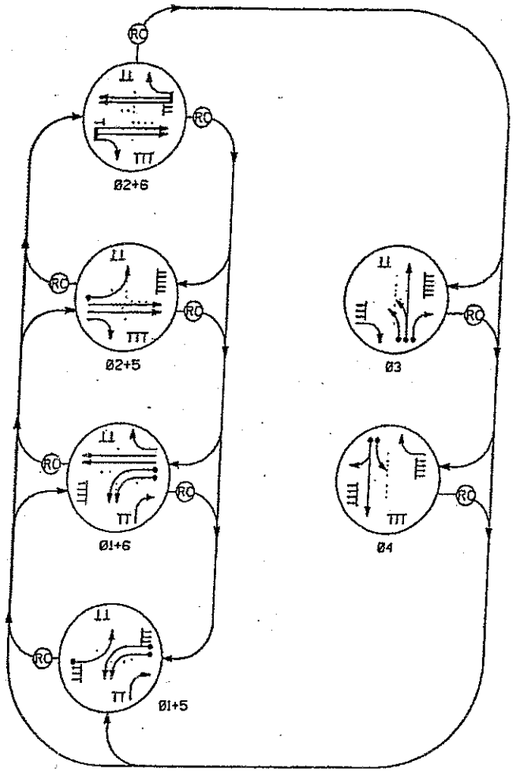
CORR. FILE NO. 05-90-71

SR 1497 (WESTERN BOULEVARD EXT.)
AND
CONVENTION DRIVE - PRINCIPAL LANE

DIV. 05 WAKE COUNTY CARY

SCALE	1"=50'	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	05-20-91		
DWG. BY	TGP	DIVISION OF HIGHWAYS	
DESIGN BY	TGP	TRAFFIC ENGINEERING BRANCH	CADD ID.
APPROVED			S/S INV. NO. 05-0873

PHASING DIAGRAM



6Ø
FULLY ACTUATED
(ISOLATED)

COLOR SEQUENCE CHART

SIGNAL FACE	Ø2+6	Ø3	Ø4	Ø1+5	Ø1+6	Ø2+5	FLASH	SIGNAL FACE
	R/W: CLEAR Ø3 Ø4 Ø1+5 Ø1+6 Ø2+5	R/W: CLEAR Ø2+6 Ø4 Ø1+5 Ø1+6 Ø2+5	R/W: CLEAR Ø2+6 Ø1+5 Ø1+6 Ø2+5	R/W: CLEAR Ø2+6 Ø1+6 Ø2+5	R/W: CLR Ø2+6 Ø1+5 Ø2+5	R/W: CLR Ø2+6 Ø1+5 Ø1+6		
	1 2 1 2 1 2 1 2 1 2	1 2 1 2 1 2 1 2 1 2	1 2 1 2 1 2 1 2	1 2 1 2 1 2	1 2 1 2 1 2	1 2 1 2 1 2		
11	G Y R Y R Y R G G Y R	R — — — — — — — — — R	R — — — — — — — R	R — — — — — — R	R G G G Y R Y R	R — — — — — — R	R Y	11
22	G Y R Y R Y R Y R G G	R — — — — — — — — — R	R — — — — — — — R	R — — — — — — R	R G G G Y R Y R	R — — — — — — R	R Y	22
3	R — — — — — — — — — R	← R ← R ← R ← R ← R	R — — — — — — — R	R — — — — — — R	R — — — — — — R	R — — — — — — R	R R	3
33	R — — — — — — — — — R	G Y R Y R Y R Y R Y R	R — — — — — — — R	R — — — — — — R	R — — — — — — R	R — — — — — — R	R R	33
333	R — — — — — — — — — R	G Y R Y R Y R Y R R R	R — — — — — — — R	R — — — — — — R	R — — — — — — R	R — — — — — — R	R R	333
4	R — — — — — — — — — R	R — — — — — — — — — R	G Y R Y R Y R Y R R	R — — — — — — R	R — — — — — — R	R — — — — — — R	R R	4
44	R — — — — — — — — — R	R — — — — — — — — — R	G Y R Y R Y R Y R R	R — — — — — — R	R — — — — — — R	R — — — — — — R	R R	44
5 , 6	← — — — — — — — — — ←	← — — — — — — — — — ←	← — — — — — — — — ←	← ← ← ← ← ← ←	← ← ← ← ← ← ←	← ← ← ← ← ← ←	← ←	5 , 6 *
7	R — — — — — — — — — R	R — — — — — — — — — R	R — — — — — — — — R	R ← ← ← ← ← ← R	R ← ← ← ← ← ← R	R — — — — — — R	R R	7 *
1	G Y R Y R Y R Y R R R	R — — — — — — — — — R	R — — — — — — — — R	R — — — — — — R	R G G G Y R Y R	R R — — — — — R	R Y	1
2	G Y R Y R Y R Y R G G	R — — — — — — — — — R	R — — — — — — — — R	R — — — — — — R	R — — — — — — R	R G G G Y R Y R	R Y	2

* REFER TO NOTE 3

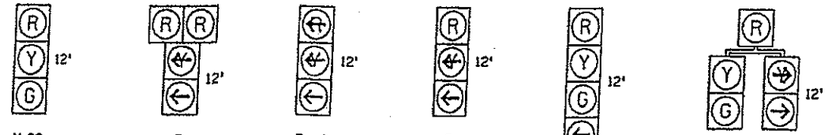
TIMING CHART

PHASE	02	06	03	04	05	01
MINIMUM GREEN	10 SEC.	10 SEC.	7 SEC.	7 SEC.	7 SEC.	7 SEC.
PASSAGE/GAP	3 SEC.	3 SEC.	1 SEC.	1 SEC.	1 SEC.	1 SEC.
YELLOW CLEARANCE	4.0 SEC.	4.0 SEC.	5.0 SEC.	4.5 SEC.	4.0 SEC.	4.5 SEC.
RED CLEARANCE	1.7 SEC.	1.3 SEC.	1.6 SEC.	1.6 SEC.	1.7 SEC.	1.6 SEC.
MAX. 1	40 SEC.	40 SEC.	30 SEC.	20 SEC.	20 SEC.	20 SEC.
MAX. 2	——— SEC.	——— SEC.	——— SEC.	——— SEC.	——— SEC.	——— SEC.
RECALL POSITION	MIN. RECALL	MIN. RECALL	NONE	NONE	NONE	NONE
VEHICLE CALL MEMORY	LOCK	LOCK	NONLOCK	NONLOCK	NONLOCK	NONLOCK

NORTH CAROLINA PROFESSIONAL SEAL 17 16 ENGINEER T. G. PEOPLES

T.G. Peoples 5-31-91

SIGNAL FACE I.D.



SIGNAL UPGRADE

CORR. FILE NO. 05-90-71

SR 1497 (WESTERN BOULEVARD EXT.)
AND
CONVENTION DRIVE - PRINCIPAL LANE

DIV. 05 | WAKE COUNTY | CARY

SCALE	N/A
DATE	05-20-91
DWG. BY	TGP
DESIGN BY	TGP
APPROVED	CGK

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

CADD file: sig\sheets\05873
S/O NO. 05-0873

EXHIBIT
tabbies
6

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
10-CVS-019930

BRIAN CECCARELLI, TIMOTHY CASPERSON, PAUL D. METTERS and LORI MILLETTE,

Plaintiff,

v.

TOWN OF CARY,

Defendant.

DEFENDANT'S RESPONSES TO PLAINTIFFS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS

Defendant Town of Cary ("the Town") hereby responds to Plaintiffs' First Request for Production of Documents as follows:

****NOTE: Throughout this document, the "Automated Traffic Control photographic systems" will be referred to as the "SafeLight program."**

REQUEST FOR PRODUCTION OF DOCUMENTS

1. Any documents reviewed, adopted, or created by you that relate to the decision to install the Automated Traffic Control photographic systems, including any pertinent contracts with regard to the Automated Traffic Control photographic systems.

RESPONSE: See attached Exhibit A (contracts between the Town and Redflex); Exhibit B (encroachment contracts between the NC Department of Transportation and Redflex); Exhibit C (North Carolina Department of Transportation guidelines for interfacing red light traffic control photo system with traffic signal control equipment); Exhibit D (red light camera studies and information from Redflex) – Note: Exhibit D contains all studies in Town files, including those reviewed after implementation of the SafeLight program; and Exhibit E (notes, training materials, emails and other correspondence, and other documentation in Town files related to the SafeLight program). Also see http://www.townofcary.org/Departments/Parks_Recreation_Cultural_Resources

/Citizen Advisory Committees/Athletic Committee/Minutes.htm for minutes of Town Council meetings.

2. Any documents that describe the methodology you used in implementing the Automated Traffic Control photographic systems, including, but not limited to: overall plan, selection of locations, calibration, installation, monitoring effectiveness and safety.

RESPONSE: The Town did not develop the methodology or the red light traffic camera plans used in the SafeLight program. Further, the Town did not install the SafeLight program components nor does the Town "calibrate" or maintain the same. The SafeLight program was designed by, installed by and is operated and maintained by Redflex. The SafeLight program is controlled at each intersection by a cabinet (box with electrical wiring and program data) and set of plans for the red light camera, which are separate from the traffic signal plans at the intersection. Redflex, pursuant to its contract with the Town, is responsible for maintaining same. The State of North Carolina owns the traffic signals at all fifteen (15) intersections in the Town where the SafeLight program is utilized and the NC Department of Transportation is responsible for approving all traffic signal plans at these intersections. The Town did select the locations for the SafeLight program. See attached Exhibit F (data related to violations and incidents at various intersections in the Town); and Exhibit G (Kimley-Horn study of SafeLight program in the Town of Cary).

The intersections in the Town where the SafeLight program is utilized are as follows: (1) Cary Town Boulevard and Convention Drive, EB; (2) Kildaire Farm Road and High Meadow Drive, SB; (3) High House Road and Prestonwood Drive, WB; (4) NW Maynard Road and Chapel Hill Road, NB; (5) Maynard Road and

Walnut Street, SB; (6) Tryon Road and Crescent Green, EB; (7) Tryon Road and Regency Parkway, WB; (8) Walnut Street and Dillard Drive, NB; (9) Maynard Road and Kildaire Farm Road, WB and SB; (10) Cary Parkway and Kildaire Farm Road, WB and NB; (11) Cary Parkway and High House Road; (12) Harrison Avenue and Maynard Road, SB; (13) Harrison Avenue and Weston Parkway, SB; (14) Walnut Street and Meeting Street, WB; (15) Cary Parkway and High Meadow Drive, WB.

3. For each of the Automated Traffic Control photographic systems, please provide any documents that reference the calculations used to calibrate the yellow light change interval at each location.

RESPONSE: Objection. This Request calls for information that is not within the possession of the Town. Subject to this explanation, the Town responds as follows:

There are seventeen (17) SafeLight cameras in the Town of Cary located at fifteen (15) traffic light intersections. The State of North Carolina owns the traffic lights at these particular intersections and the NC Department of Transportation is responsible for approving any traffic signal plans. The traffic signal plans .specify the length of yellow light intervals. The Town has no authority to implement or change a traffic signal plan at an intersection controlled by the NC Department of Transportation without the NC Department of Transportation's approval of sealed engineering plans regarding same. The NC Department of Transportation determines "clearance time calculations" for red and yellow lights at these fifteen (15) intersections and the Town has no authority to change these calculations without the approval of the NC Department of Transportation. See attached Exhibit

H (traffic signal plans for the 15 red light camera intersections and clearance time calculations for those plans approved by - though not designed by - the NC Department of Transportation).

The Town's public works department provides quarterly maintenance on traffic signals, unless there is a specific problem or incident (i.e. lightning strikes and cabinet or signal equipment malfunctions) or there is a change to the plan for a particular signal (i.e. the recently implemented "preemption" program designed for quicker response time for emergency vehicles). See attached Exhibit I (maintenance reports and work orders in Town files related to the traffic signals at the fifteen (15) intersections with SafeLight cameras).

The SafeLight program was designed by, installed by and is operated and maintained by Redflex. The SafeLight program is controlled at each intersection by a cabinet (box with electrical wiring and program data) and set of plans for the red light camera, which are separate from the traffic signal plans at the intersection. The Town does not maintain this documentation.

4. For each of the Automated Traffic Control photographic systems, please provide a month by month record of the calibration of the yellow light change interval at each location.
RESPONSE: Objection. This Request calls for information that is not within the possession of the Town. Subject to this explanation, see response to Request No. 3 and attached Exhibit I.

5. For each of the Automated Traffic Control photographic systems, please provide a month by month record of your monitoring procedures of the yellow light change interval at each location.

RESPONSE: See response to Request No. 3. Also see attached Exhibit I.

6. For each of the Automated Traffic Control photographic systems, please provide a month by month record of the citations issued at each location.

RESPONSE: See attached Exhibit J (record of citations issued in SafeLight program).

7. For each of the Automated Traffic Control photographic systems, please provide the names and addresses of the individuals who have received citations organized by intersection.

RESPONSE: Objection. This Request calls for information that is not within the Town's possession.

8. For each of the Automated Traffic Control photographic systems, please provide a month by month record of the revenue you earned at each location.

RESPONSE: Objection. This Request is confusing, in that The Town does not understand the meaning of the phrase "revenue you earned" as used. Subject thereto, the Town responds that it does not make a profit from the SafeLight program and retains only that money which is needed for administrative costs related to the SafeLight program. The remainder of any money received by the Town from Redflex pursuant to the SafeLight program is given to the Wake County Public School System. Also see attached Exhibit K (documents in Town files containing financial information related to the SafeLight program).

9. Any traffic studies, safety studies or other feasibility studies including *pro formas* regarding each of the Automated Traffic Control photographic systems.

RESPONSE: See attached Exhibits D and G.

10. Any documents that analyze or evaluate citations for safety or effectiveness of the Automated Traffic Control photographic systems.

RESPONSE: Objection. This Request is confusing in that The Town does not understand the meaning of the phrase "analyze or evaluate citations for safety or effectiveness" as used. Subject to this explanation, see attached Exhibit G.

11. Any accident reports or complaints regarding safety that you received related to the Automated Traffic Control photographic systems.

RESPONSE: Objection. The Town maintains that the SafeLight program is safe. Further, this Request is confusing and calls for a legal conclusion in that it asks for "accident reports . . . regarding safety . . . related to the Automated Traffic Control photographic systems." Subject to this explanation, see attached Exhibit E.

12. Any North Carolina Department of Transportation manuals, documents, procedures, or guidelines that were relied upon, followed, or referenced by you in the operation of the Automated Traffic Control photographic systems.

RESPONSE: Objection. The Town does not operate the red light cameras. Subject to this explanation, see response to Request Nos. 2 and 3. Also see attached Exhibit C.

13. Any documentation of the procedure you followed to ensure compliance with the North Carolina Department of Transportation requirements with regard to the Automated Traffic Control photographic systems.

RESPONSE: See response to Request Nos. 2, 3 and 12.

14. Any documents related to the decision, date of change, and/or implementation of the increased speed limit on Cary Town Boulevard from 35 miles per hour to 45 miles per hour at the intersection of Cary Town Boulevard and Convention Drive.

RESPONSE: See attached Exhibit L (traffic schedule for Cary Town Boulevard and Convention Drive).

15. Any documents that reference the date and decision to change the yellow light calibration of the Automated Traffic Control photographic system at the intersection of Cary Town Boulevard and Convention Drive.

RESPONSE: See Response to Request Nos. 2 and 3. Also see attached Exhibits H and M (preemption documents).

16. Any documents that reference assumed speed of vehicles turning left with regard to the yellow light calibration of the Automated Traffic Control photographic system, particularly with regard to the following three (3) intersections:

(1) Cary Parkway and left on Kildaire Farm Road

(2) Kildaire Farm Road and left on Cary Parkway

(3) Walnut Street and left on Meeting Street

RESPONSE: See response to Request Nos. 2 and 3. Also see attached Exhibit H.

17. Any documents that indicate your Automated Traffic Control photographic system was not in compliance with the North Carolina Department of Transportation guidelines.

RESPONSE: The Town is not aware of any such documents. Also see response to Request Nos. 2, 3 and 12 and Exhibits B and C.

18. Any documents that indicate any of your Automated Traffic Control photographic systems were not safe.

RESPONSE: Objection. The Town maintains that the SafeLight program is safe. Subject to this explanation, see attached Exhibit E.

19. Any substantive documents on which you will rely upon at trial to prove the safety of the Automated Traffic Control photographic system.

RESPONSE: The Town has not yet determined which documents it will rely upon at the trial of this matter. Subject to this explanation, see attached Exhibits D and G.

This the 4th day of April, 2011.

MARTINEAU KING, PLLC
PO Box 31188
Charlotte NC 28231
Tel: 704 247 8520

By: _____
Elizabeth A. Martineau
NC Bar No. 23694
Email: emartineau@martineauking.com
Hope Fisher Connie
NC Bar No. 27616
Email: hconnie@martineauking.com
Attorneys for Defendant

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served upon all counsel of Record by depositing a copy hereof, postage prepaid, in the United States Mail, and/or by electronic mail, addressed to the attorney for each said party as follows:

Mr. William Peaslee
102 Commonwealth Court
Cary, NC 27511
Attorney for Plaintiffs.

Mr. Paul Stam
Ms. Caroline Nickel
Stam & Danchi, PLLC
PO Box 1600
Apex, NC 27502
Attorneys for Plaintiffs.

This 4 day of April, 2011.

Elizabeth A. Martineau
Hope Fisher Connie

From: David Spencer
To: Laura Cove
Subject: Fw: Information Regarding Plans of Record: 05-0873
Date: 11/30/2009 04:04 PM

Verification of the yellow time on the 1991 plan was for 35 mph. If it were done for 45 mph it would be 4.3 sec rounded up to 4.5 sec.

David H. Spencer, PE
Traffic Engineer
Engineering Department
Traffic and Transportation Group
Town of Cary
P.O. Box 8005
Cary, NC 27512-8005
(919) 462-3833
david.spencer@townofcary.org
----- Forwarded by David Spencer/Cary on 11/30/2009 04:02 PM -----

"Murr, Buddy" <gmurr@ncdot.gov>

11/30/2009 02:35 PM

To "David.Spencer@townofcary.org" <David.Spencer@townofcary.org>
cc
Subject RE: Information Regarding Plans of Record: 05-0873

David,
The clearance calculation sheets dated on May 20, 1991 showed 35 mph for phases 2 & 6; 20 mph for phases 1 & 5; and 25 mph for phases 3 & 4. All grades were shown as 0%.

Using the ITE formula yielded yellows of 3.6 seconds on phases 2 & 6. These times were rounded up to 4.0. Our general practice at that time was to not show any yellows less than 4.0 seconds. In addition, the ITE formula used 1 sec of Perception/Reaction time and a deceleration rate of 10 ft/sec/sec. The new formula calls for 1.5 sec of Perception/Reaction and a decel rate of 11.2 ft/sec/sec.

Does this info help?
Buddy

G. G. Murr, Jr., PE
NCDOT - State Signals Engineer

Direct: 919-661-5953
Main: 919-773-2800
Fax: 919-771-2745
www.ncdot.org/doh/preconstruct/traffic/ITSS

From: David.Spencer@townofcary.org [mailto:David.Spencer@townofcary.org]
Sent: Monday, November 30, 2009 2:08 PM
To: Murr, Buddy
Subject: RE: Information Regarding Plans of Record: 05-0873

Just another random thought I had. I'm assuming that since the signal plan showed 35 mph then the clearance time was calculated using 35 mph. However, I know sometimes that what is shown may not be what was used to do a calculation. Do you have the means to verify that if a clearance time was calculated in 1991 using a 0% grade and a 35 mph design speed that the resulting yellow time would be 4.0 seconds?

David H. Spencer, PE
Traffic Engineer
Engineering Department
Traffic and Transportation Group
Town of Cary
P.O. Box 8005
Cary, NC 27512-8005
(919) 462-3833
david.spencer@townofcary.org

"Murr, Buddy"
<gmurr@ncdot.gov>

11/30/2009 09:24 AM

To "David.Spencer@townofcary.org" <David.Spencer@townofcary.org>
cc "Mckay, Andrew F" <amckay@ncdot.gov>, "Ziemba, Robert J" <rziemba@ncdot.gov>, "Maduabuchukwu, Boniface A" <bmadu@ncdot.gov>
Subject RE: Information Regarding Plans of Record: 05-0873

David,
Good talking with you this morning. Per our conversation, you may go ahead and make changes to the exisiting yellow and red timings based on the new 11/04/09 EVP plan. Please verify the times are transferred to the new controller when you complete implementation of the new plans.

Thanks for letting us know about this.

Have a good day,
Buddy

G. G. Murr, Jr., PE
NCDOT - State Signals Engineer
Direct: 919-661-5953
Main: 919-773-2800
Fax: 919-771-2745
www.ncdot.org/doh/preconstruct/traffic/ITSS

From: David.Spencer@townofcary.org [mailto:David.Spencer@townofcary.org]
Sent: Monday, November 30, 2009 8:51 AM
To: Murr, Buddy
Subject: Re: Information Regarding Plans of Record

Thanks for that info Buddy. The person that is contacting us is Brian Ceccarelli. It's obvious he's been looking in the Manual so they may be involved together. What the problem is now, that I've found through some digging, is that the signal plan done in 1991 used the wrong speed limit so the yellow time is incorrect. The signal plan used a speed limit of 35 mph on Cary Towne Blvd when the speed limit was 45 mph at that time (and still is). I have the ordinances from TEAAS that shows the speed limit was set at 45 mph in 1984. We based our yellow times for the red light camera on this info but since it wasn't done correctly to begin with, it leaves us in a bind. We plan on implementing the EVP plans at this intersection very soon but we may change the clearance times in the interim since this seems to be a safety issue. If you have any history on this intersection, let me know when you call. Thanks!

David H. Spencer, PE
Traffic Engineer
Engineering Department
Traffic and Transportation Group
Town of Cary
P.O. Box 8005
Cary, NC 27512-8005
(919) 462-3833
david.spencer@townofcary.org

"Murr, Buddy" <gmurr@ncdot.gov>

11/25/2009 04:06 PM

To "David.Spencer@townofcary.org" <David.Spencer@townofcary.org>

cc

Subject Information Regarding Plans of Record

David,
I got your voicemail. Plan of Record updates are submitted to us via our Division offices. If a municipal jurisdiction is maintaining and operating their own signals/signal system, they should send a POR marked up plan to the responsible Division and they, in turn, will submit the plans to us for updating.

Depending on what work is to be done to an intersection, please understand that certain situations require different treatments and a POR may not be the approved method. A POR update is basically an as-built plan of the intersection. In many cases, the construction of the signal may vary slightly from the approved plan that was sent out. I'm attaching TEPPL T-67 which gives examples of what constitutes a plan change versus what could qualify as a POR update (which may be done after-the-fact).

In the case of the intersection you mentioned in your voicemail, those changes would require an updated plan in lieu of a POR update. Now that Rob has given you an updated plan for your EVP installation, that will become the new POR after construction is complete. If your EVP system is still several months out, you may want to consider an interim plan change.

I'll be in at 6:30 am on Monday, but will be out from 7:30 to 10:00 or so for a Dr. appt. I'll call you when I get back in.

Happy Thanksgiving,
Buddy

P.S. The party in question wouldn't have the last name of Keith, by chance? Mr. Keith had questions about how we time our clearance and he requested a copy of our Design Manual. He didn't discuss specifics with me. I did relay the link to the online version of our Manual to him.

G. G. Murr, Jr., PE
NCDOT - State Signals Engineer
Direct: 919-661-5953
Main: 919-773-2800
Fax: 919-771-2745
www.ncdot.org/doh/preconstruct/traffic/ITSS

From: David Spencer
To: Brad Hudson
Cc: chris.davis@townofcary.org; barry.nickalson; david.wulff@townofcary.org; pat.bazemore@townofcary.org; Tim Bailey; Laura Cove
Subject: Re: Fw: Illegal Red Camera Light in Cary. Legal Quandry. Please help!
Date: 12/01/2009 10:38 AM
Attachments: Ceccarelli.pdf

I found session law 2004-141 which reference 160A-300.2 and states that the yellow times only have to match the signal plan, not the NCDOT calculations. We do operate and maintain the signals in Town for NCDOT but the signals are still owned by NCDOT and it is their responsibility to maintain up-to-date records on their signals. Our staff in Public Works does Performance Maintenance on the signals so they should be checking the signal plans to make sure they are correct, but it appears this one wasn't checked closely enough. I believe all of this is moot since our law states we only have to abide by the timings on signal plans and we did that. The timings may be wrong but our responsibility should be to follow what was sealed by an engineer on the plans.

We plan on responding to the guy and simply providing our Law (2004-141) and letting him decide how he wants to handle it from there.

Thanks for working with us on this.

David H. Spencer, PE
Traffic Engineer
Engineering Department
Traffic and Transportation Group
Town of Cary
P.O. Box 8005
Cary, NC 27512-8005
(919) 462-3833
david.spencer@townofcary.org
▼ Brad Hudson <safelight.cary@gmail.com>

Brad Hudson
<safelight.cary@gmail.com>

12/01/2009 09:58 AM

To David.Spencer@townofcary.org
cc chris.davis@townofcary.org, "barry.nickalson" <Barry.Nickalson@townofcary.org>, david.wulff@townofcary.org, pat.bazemore@townofcary.org, tim.bailey@townofcary.org
Subject Re: Fw: Illegal Red Camera Light in Cary. Legal Quandry. Please help!

David,

Thanks for getting back to me so quickly this morning. I have pulled up Mr. Ceccerallí's citation (attached). In short, he was traveling 50 mph in a 45 mph

Wesley Vo/Cary

01/02/2009 02:40 PM

To Laura Cove/Cary@Cary

cc April Raphiou/Cary@Cary, Ben Shivar/Cary@Cary, Brad Hudson/Cary@Cary, "Bryan Hayes" <Bryan.Hayes@townofcary.org>, "David Spencer" <David.Spencer@townofcary.org>, Joe Moore/Cary@Cary, Pat Bazemore/Cary@Cary, SUSAN MORAN/Cary@Cary, Tim Bailey/Cary@Cary, "Tom Reilly" <Tom.Reilly@townofcary.org>

Subject Re: Red Light Camera story in N&O

Good afternoon April,
I confirmed the yellow clearance times for all red light locations in Cary. Field data do match the sealed plan of records. These plans were designed by private engineering firms and approved by North Carolina Department of Transportation. Using NCDOT current standard, I recalculated the intersection at Kildaire Farm Road and SW Maynard Road on December 17, 2008. My calculations are similar to the sealed plan of record date June 7, 2006. Attached are the clearance times for all the red light approaches. FYI, we use NCDOT current standard of calculation for all new and upgrade traffic signals.

		Field Controller			
			Clearances		Sealed Traffic Signal Plan
Inv. No	Red Light Intersections	Phase	Yelow	Red	Date
128	Maynard Road and Walnut Street (SB)	4	5.1	2.0	23-Mar-04
213	Maynard Road and Kildaire Farm Road (WB)	4	3.8	2.5	7-Jun-06
213	Maynard Road and Kildaire Farm Road (WB Lf)	7	3.0	3.3	7-Jun-06
213	Kildaire Farm Road and Maynard Road (SB)	2	3.7	2.8	7-Jun-06
260	Kildaire Farm Road and High Meadow Drive (SB)	6	4.5	1.6	1-Aug-01
267	Cary Parkway and Kildaire Farm Road (WB)	4	4.7	1.5	6-Mar-03
267	Cary Parkway and Kildaire Farm Road (WB Lf)	7	4.0	2.5	6-Mar-03
267	Kildaire Farm Road and Cary Parkway (NB)	2	4.7	3.0	6-Mar-03
267	Kildaire Farm Road and Cary Parkway (NB Lf)	5	4.0	3.0	6-Mar-03
873	Cary Town Blvd and Convention Drive (EB)	2	4.0	1.7	31-May-91
1094	Tryon Road and Regency Parkway (WB)	6	4.7	1.3	9-May-05
1328	NW Maynard Road and Chapel Hill Road (NB)	2	4.7	2.0	9-May-03
1339	Harrison Avenue and Maynard Road (SB)	6	4.2	2.0	9-May-06
1460	Harrison Avenue and Weston Parkway (SB)	6	4.5	1.3	9-May-06
1497	Cary Parkway and High Medow Dr (WB)	6	4.5	1.9	9-May-05
1558	Walnut Street and Meeting Street (SB)	2	4.5	2.2	20-Jul-07
1558	Walnut Street and Meeting Street (SB Lf)	5	3.2	3.3	20-Jul-07
1692	Cary Parkway and High House Road (NB)	8	4.3	2.1	5-Nov-06
1732	Walnut Street and Dillard Drive (NB)	6	4.4	2.2	20-Jul-07
1741	High House Road and Prestonwood Drive (WB)	6	5.0	1.5	5-Oct-06
2016	Tryon Road and Crescent Green Way (EB)	2	4.7	3.0	1-Jan-02

Wesley Vo, PE
Traffic Systems Supervisor
Town of Cary
318 North Academy Street
919-460-3148 tel
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wesley.vo@townofcary.org
▼ Laura Cove/Cary

Laura Cove/Cary

12/31/2008 08:31 AM

To April Raphiou/Cary@Cary

cc Ben Shivar/Cary@Cary, Brad Hudson/Cary@Cary, Joe Moore/Cary@Cary, SUSAN MORAN/Cary@Cary, Pat Bazemore/Cary@Cary, Tim Bailey/Cary@Cary, "Wesley Vo" <Wesley.Vo@townofcary.org>, "David Spencer" <David.Spencer@townofcary.org>, "Tom Reilly"

Tim Bailey/Cary

07/23/2007 09:51 AM

To Pat Bazemore/Cary@Cary
cc
Subject Re: Fw: Public Records Request

I don't think we have this data. For the most part I don't think you do either. This is a public records request, we don't have to create new data. here is what I sent him.

Mr. Baker:

Here is a table of the signal timing showing intersection clearance time. To the best of my knowledge this is the only public record that the Engineering Department has from your requested list. The clearance time is part of the signal design which is calculated by the professional engineer that seals the plans and do not change randomly.

Inv. No	Red Light Intersections	Field Controller			Traffic Signal Plan
		Phase	Clearances		
			Yelow	Red	Date
128	Maynard Road and Walnut Street (SB)	4	5.1	2.0	23-Mar-04
213	Maynard Road and Kildaire Farm Road (WB)	4	4.0	2.0	10-Apr-01
213	Maynard Road and Kildaire Farm Road (WB Lt)	7	4.0	3.0	10-Apr-01
213	Kildaire Farm Road and Maynard Road (SB)	2	4.0	2.0	10-Apr-01
260	Kildaire Farm Road and High Meadow Drive (SB)	6	4.5	1.6	1-Aug-01
267	Cary Parkway and Kildaire Farm Road (WB)	4	4.7	1.5	6-Mar-03
267	Cary Parkway and Kildaire Farm Road (WB Lt)	7	4.0	2.0	6-Mar-03
267	Kildaire Farm Road and Cary Parkway (NB)	2	4.7	2.0	6-Mar-03
267	Kildaire Farm Road and Cary Parkway (NB Lt)	5	4.0	2.0	6-Mar-03
873	Cary Town Blvd and Convention Drive (EB)	2	4.0	1.7	31-May-91
1094	Tryon Road and Regency Parkway (WB)	6	4.7	1.3	9-May-05
1145	Ten-Ten Road and Kildaire Farm Road (EB)	8	4.5	1.6	15-Jun-05
1328	NW Maynard Road and Chapel Hill Road (NB)	2	4.7	2.0	9-May-03
1339	Harrison Avenue and Maynard Road (SB)	6	5.0	2.0	4-Nov-04
1460	Harrison Avenue and Weston Parkway (SB)	6	4.5	1.5	17-Nov-99
1558	Walnut Street and Meeting Street (SB Lt)	5	4.0	4.0	1-Jun-04
1692	Cary Parkway and High House Road (NB)	8	4.7	2.0	11-Apr-94
1732	Walnut Street and Dillard Drive (NB)	6	4.7	2.0	2-Feb-00
1741	High House Road and Prestonwood Drive (WB)	6	4.5	2.0	24-Feb-99
2016	Tryon Road and Crescent Green Way (EB)	2	4.7	3.0	1-Jan-02

Tim Bailey, P.E.
Director of Engineering
Town of Cary
E-mail: tim.bailey@townofcary.org
▼ Pat Bazemore/Cary

Pat Bazemore/Cary

07/23/2007 08:35 AM

To Tim Bailey/Cary@Cary
cc
Subject Fw: Public Records Request

Tim,

Will you please let me know if you agree with Chris and Brad's assessment that most of this information should come from Engineering? We will do whatever we need to respond to the public information request. Please let me know how you would like to proceed. Thanks

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003449

Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date	Close Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Veh Cost	Mat Cost	Cont Cost	Total Cost
229731	2/13/06	2/13/06	PM - Traffic Signal - A Type (3m)	5.00	0.00	5.00	$126.60	$4.78	$35.63	$0.00	$167.00

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3 month)

Comments

completed all items on PM worksheet - intersection operating properly upon departure

WO#	Req Date	Close Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Veh Cost	Mat Cost	Cont Cost	Total Cost
250668	6/6/06	6/6/06	Traffic Signal Inspect	2.00	0.00	2.00	$45.37	$0.00	$14.25	$0.00	$59.62

Problem

MIST not communicating with cabinet

Comments

modem and controller operating properly - notified TR - he said problem must be with master - intersection operating properly upon departure

WO#	Req Date	Close Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Veh Cost	Mat Cost	Cont Cost	Total Cost
270993	9/27/06	9/27/06	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$160.57	$6.78	$42.75	$0.00	$210.09

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3 month)

Comments

completed all items on pm worksheet.

WO#	Req Date	Close Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Veh Cost	Mat Cost	Cont Cost	Total Cost
287524	12/21/06	12/21/06	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$160.57	$4.78	$42.75	$0.00	$208.09

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3 month)

Comments

completed all items on PM worksheet

** lab is calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003450

Cary Towne Blv - Convention Dr (05-0873)

292117	1/9/07	1/10/07	Traffic Signal Repair	0.00	6.00	6.00	$247.72	$0.00	$42.75	$0.00	$290.47

Problem

not cycling

Comments

found signal hanging up in 1 and 5 - signal would not cycle even with calls on it - put 2 and 6 in max recall - put 1, 3, 4, 5, in min recall and changed min time from 5 to 10 sec - intersection operating properly

292122	1/15/07	1/15/07	Traffic Signal Replace Equipment	48.00	0.00	48.00	$1,399.55	$18,821.75	$278.40	$0.00	$20,499.70

Problem

in flash

Comments

backboard on cab had burnt - replaced TS1 cab with TS2 - intersection operating properly

292804	1/24/07	1/24/07	Traffic Signal Repair	0.00	2.00	2.00	$69.11	$0.00	$14.25	$0.00	$83.36

Problem

change chip sets for opac upgrade

Comments

reset baude rate to 19.2

292806	1/25/07	1/25/07	Traffic Signal Repair	0.00	2.00	2.00	$69.11	$0.00	$14.25	$0.00	$83.36

Problem

do opac upgrade so talks to MIST at baude rate of 19.2

Comments

* *labor c calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003451

Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Equip Cost	Cont Cost	Total Cost
301542	2/25/07	2/25/07	Traffic Signal Repair	0.00	4.50	4.50	$214.92	$0.00	$21.38	$0.00	$236.30

Problem

power failure confirmed by pwr company

Comments

reported signal out due to blown trasnformer on Farmgate Rd - power restored - intersection working upon departure

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Equip Cost	Cont Cost	Total Cost
315262	4/4/07	4/4/07	Traffic Signal Repair	0.00	2.00	2.00	$72.95	$0.00	$14.25	$0.00	$87.20

Problem

lost comm

Comments

cycle pwr - working properly upon departure

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Equip Cost	Cont Cost	Total Cost
328161	6/8/07	6/8/07	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$154.01	$9.28	$42.75	$0.00	$206.04

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3 month)

Comments

completed PM sheet PE MTR # ZZZ FR2612 S9

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Equip Cost	Cont Cost	Total Cost
339124	7/3/07	7/3/07	Traffic Signal Repair	2.00	0.00	2.00	$55.54	$0.00	$14.25	$0.00	$69.79

Problem

check det for motorcycles per CPD

Comments

made sensitivity changes as needed - intersection operating properly upon departure

* *labo* *is calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003452

Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date	Comp Date	Type	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Eqp Cost	Other Cost	Total Cost
342375	8/22/07	8/22/07	Traffic Signal Repair	0.00	2.00	2.00	$85.85	$0.00	$14.25	$0.00	$100.10

Problem

no comm

Comments

responded to programmed flash reported by MIST - singal in operation - cycled pwr and problem reset - no comm - unplugged opac from modem - comm restored - operating properly upon departure

WO#	Req Date	Comp Date	Type	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Eqp Cost	Other Cost	Total Cost
359498	10/21/07	10/21/07	Traffic Signal Repair	0.00	12.00	12.00	$458.22	$0.00	$122.20	$0.00	$580.42

Problem

power failure confirmed by Progress Energy

Comments

signal out - called pwr company - they responded and found bad transformer - installed gen to pwr signal - pwr compnay came back and fixed problem - removed gen - operating properly upon departure

WO#	Req Date	Comp Date	Type	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Eqp Cost	Other Cost	Total Cost
369533	11/28/07	11/28/07	Traffic Signal Inspect	2.00	0.00	2.00	$53.47	$0.00	$24.25	$0.00	$77.72

Problem

not cycling properly?

Comments

singal reported short cycling - all signal and eqp operating as programmed - running coord pattern 15

WO#	Req Date	Comp Date	Type	Reg Hrs	OT Hrs	Total Hrs	Labor Cost	Mat Cost	Eqp Cost	Other Cost	Total Cost
372820	12/3/07	12/3/07	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$161.66	$4.78	$72.75	$0.00	$239.19

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

* *labor : calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Der 003453

Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Mat Cost	Equip Cost	Total Cost
378909	1/25/08	1/25/08	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$161.66	$9.78	$72.75	$0.00	$244.19

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Mat Cost	Equip Cost	Total Cost
384542	3/18/08	3/18/08	Concrete Repair Maintenance	30.50	0.00	30.50	$787.37	$126.84	$368.63	$0.00	$1,282.84

Problem

supply concrete for school flasher install project

Comments

installed concrete foundations for school flashers

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Mat Cost	Equip Cost	Total Cost
391849	4/18/08	4/18/08	Traffic Signal Repair	0.00	4.00	4.00	$161.66	$195.18	$52.00	$0.00	$408.84

Problem

green out

Comments

changed 2 green LEDs - operating properly upon departure

WO#	Req Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Mat Cost	Equip Cost	Total Cost
390491	4/21/08	4/21/08	PM - Traffic Signal - A Type (3m)	3.00	0.00	3.00	$80.83	$9.78	$39.00	$0.00	$129.61

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

** labc is calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003454

Cary Towne Blv - Convention Dr (05-0873)

392467	4/24/08	4/24/08	Traffic Signal Repair		8.00	0.00	8.00	$215.54	$390.36	$104.00	$0.00	$709.90

Problem

change bad LEDs

Comments

changed 4 green ball LEDs

409786	6/23/08	6/23/08	Traffic Signal Repair		3.00	0.00	3.00	$86.91	$0.00	$26.00	$0.00	$112.91

Problem

not cycling

Comments

controller locked up on arrival - powered down controller for a few minuites and powered back up - controller started cycling - operating properly on departure

427770	8/1/08	8/1/08	PM - Traffic Signal - A Type (3m)		4.00	0.00	4.00	$107.77	$9.78	$52.00	$0.00	$169.55

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

430584	9/17/08	9/17/08	Traffic Signal Inspect		0.00	5.00	5.00	$191.84	$0.00	$65.00	$0.00	$256.84

Problem

Reported intersection not cycling properly

Comments

Upon arrival we checked all detection and controller equipment. We also rode all approaches No trouble was found. Observed operation of intersection. Intersection operating properly upon departure.

** labor c calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003455

Cary Towne Blv - Convention Dr (05-0873)

PM Intersection - Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date / Complete	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Equip Cost	Cont Cost	Total Cost
441472	10/27/08 10/27/08	PM - Traffic Signal - A Type (3m)	6.00	0.00	6.00	$161.66	$9.78	$78.00	$0.00	$249.44

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

Signal Heads - Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date / Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Equip Cost	Cont Cost	Total Cost
466246	3/28/09 3/28/09	Traffic Signal Repair	0.00	6.00	6.00	$230.20	$500.00	$78.00	$0.00	$808.20

Problem

Reported green LED out at intersection.

Comments

Upon arrival we replaced green LED on phase 2. Also found that detector 5 was holding permanent call. We replaced detector for det.5 and 6. Intersection and all equipment operating properly upon departure.

Controller - Pedestrian - Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date / Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Equip Cost	Cont Cost	Total Cost
505751	8/4/09 8/4/09	Traffic Signal Repair	2.00	0.00	2.00	$54.61	$0.00	$26.00	$0.00	$80.61

Problem

Reported no comm. thru MIST.

Comments

Checked comm. Controller had comm. OPAC disconnected - causing failure.

Cassette Module - Cary Towne Blv - Convention Dr (05-0873)

WO#	Req Date / Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	NS Cost	Equip Cost	Cont Cost	Total Cost
506277	8/14/09 8/14/09	Traffic Signal Repair	0.00	4.00	4.00	$153.47	$0.00	$52.00	$0.00	$205.47

Problem

Reported OPAC wasn't operating at intersection

Comments

Upon arrival we started troubleshooting OPAC. We reset OPAC board and observed. OPAC board appeared to start operating properly. Observed operation of intersection. Intersection operating properly upon departure.

** labo[illegible] is calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Def 003456

Cary Towne Blv - Convention Dr (05-0873)

532377	1/2/10	1/2/10	**Traffic Signal Repair**	0.00	12.00	12.00	$484.97	$0.00	$156.00	$0.00	$640.97

Problem

Not cycling properly

Comments

Phase 3 loops holding call and max out on the side street. We checked out the cuts in the road. They all checked out good. We then pulled all the lids on the yard box's and checked the joints. They were all dry and had good connections. Next we checked the pole at the c-box and all of the joints at the pole looked good. We looked at the top of the pole and noticed limbs off of a pine tree beside the pole broke and the limbs fell onto the pole which resulted in breaking the weatherhead. We trimmed the limbs away from the pole and then found that the loop wires were damaged. The coating on the wires were skinned which we had to fix. After fixing the wires we went back to the cabinet and reset the detector. The phase 3 loops were then found to be working. The intersection was working upon our departure.

554192	12/28/09	12/28/09	**PM - Traffic Signal - A Type (3m)**	3.00	0.00	3.00	$80.83	$9.78	$39.00	$0.00	$129.61

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

532691	1/4/10	1/4/10	**Traffic Signal Repair**	2.00	0.00	2.00	$53.89	$7.30	$26.00	$0.00	$87.19

Problem

Broken weather head

Comments

Replaced a weather head that had broke from a tree limb falling on.

542150	1/29/10	1/29/10	**Traffic Signal Inspect**	4.00	0.00	4.00	$109.23	$0.00	$52.00	$0.00	$161.23

Problem

Reported loops not working properly.

Comments

Checked all loops, lead-ins and controller set ups. Everything working properly.

* *labor c calculated at actual hourly rate plus 40% for benefits*

PWUT Work Order Cost Report - 7/1/2005 thru 12/31/2010

Report Date: 4/1/2011 8:04:17AM

Der 003457

Cary Towne Blv - Convention Dr (05-0873)

WO#	Beg Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	PS Cost	Equip Cost	Cont Cost	Total Cost
540554	2/1/10	2/1/10	Traffic Signal Repair	0.00	4.00	4.00	$153.47	$205.00	$52.00	$0.00	$410.47

Problem

Reported that intersection wasn't cycling.

Comments

Upon arrival we found that phase 4 had permanet call on it and was maxing out on phase 4. We had to replace phase 4 detector and detector started operating properly.
Observed operation of intersection. Intersection operating properly upon departure.

WO#	Beg Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	PS Cost	Equip Cost	Cont Cost	Total Cost
544369	2/1/10	2/1/10	Traffic Signal Repair	0.00	4.00	4.00	$153.47	$205.00	$52.00	$0.00	$410.47

Problem

Reported that intersection wasn't cycling.

Comments

Upon arrival we found that phase 4 had perm. call on it and was maxing out on phase 4. We had to replace phase 4 detector and detector started operating properly.
Observed operation of intersection. Intersection operating properly upon departure.

WO#	Beg Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	PS Cost	Equip Cost	Cont Cost	Total Cost
555549	2/16/10	2/16/10	PM - Traffic Signal - A Type (3m)	2.00	0.00	2.00	$59.70	$9.78	$52.00	$0.00	$121.47

Problem

PM Intersection - Cary Towne Blv - Convention Dr (05-0873) - PM - Traffic Signal - A Type (3m)

Comments

completed all items on PM worksheet

WO#	Beg Date	Comp Date	Task	Reg Hrs	OT Hrs	Total Hrs	Labor Cost*	PS Cost	Equip Cost	Cont Cost	Total Cost
546709	3/15/10	3/15/10	Traffic Signal Replace Equipment	22.00	0.00	22.00	$581.74	$1,778.50	$286.00	$0.00	$2,646.24

Problem

Reported to intersectionto run preemption wire for project.

Comments

We ran preemp wire and hung new sign. Also ran lead-in for new loops that will be added. Changed detector rack to match new print and changed timing data per print.
Observed operation of intersection. Will report back around Thursday to connect preemption. Intersection operating properly upon departure.

** lab[illegible]t is calculated at actual hourly rate plus 40% for benefits*

EXHIBIT 7

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
10-CVS-019930

BRIAN CECCARELL
individually and as class representatives,

Plaintiffs,

v.

TOWN OF CARY

Defendant.

DEFENDANT'S RESPOSNES TO PLAINTIFFS' FIRST SET OF INTERROGATORIES AND THIRD REQUEST FOR PRODUCTION OF DOCUMENTS

NOW COMES Defendant, TOWN OF CARY, pursuant to Rules 26, 33, and 34 of the North Carolina Rules of Civil Procedure and responds as follows:

INTERROGATORIES

1. For each of the Automated Traffic Control photographic systems, please provide an account of dated traffic signal plans of record, beginning at the installation of the red light camera to present.

   a. Cary Town Blvd & Convention Drive (EB)

   RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

b. Kildaire Farm Road & High Meadow Drive (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

c. High House Road & Prestonwood Parkway (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

d. NW Maynard Road & Chapel Hill Road (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

e. Maynard Road & Walnut Street (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the

yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

f. Tryon Road & Crescent Green Way (EB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

g. Tryon Road & Regency Parkway (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

h. Walnut Street & Dillard Drive (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally,

the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

i. Maynard Road & Kildaire Farm Road (WB; WB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

j. Kildaire Farm Road & Maynard Road (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

k. Cary Parkway & Kildaire Farm Road (WB; WB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

l. Kildaire Farm Road & Cary Parkway (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

m. Cary Parkway & High House Road (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

n. Harrison Avenue & Maynard Road (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

o. Harrison Avenue & Weston Parkway (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

p. Walnut Street & Meeting Street (SB; SB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

q. Cary Parkway & High Meadow (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

2. For each of the Automated Traffic Control photographic systems, please provide a dated record of the yellow change intervals according to the signal plan of record, beginning at the installation of the red light camera to present and noting the any increases or decreases in timing of the yellow light.

   a. Cary Town Blvd & Convention Drive (EB)

   RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

   b. Kildaire Farm Road & High Meadow Drive (SB)

   RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

   c. High House Road & Prestonwood Parkway (WB)

   RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

d. NW Maynard Road & Chapel Hill Road (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

e. Maynard Road & Walnut Street (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

f. Tryon Road & Crescent Green Way (EB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

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RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

h. Walnut Street & Dillard Drive (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

i. Maynard Road & Kildaire Farm Road (WB; WB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

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RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

k. Cary Parkway & Kildaire Farm Road (WB; WB left turn)

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l. Kildaire Farm Road & Cary Parkway (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

m. Cary Parkway & High House Road (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the

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n. Harrison Avenue & Maynard Road (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

o. Harrison Avenue & Weston Parkway (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

p. Walnut Street & Meeting Street (SB; SB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally,

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q. Cary Parkway & High Meadow (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record for this intersection. Upon information and belief, NCDOT would have these records as it is their intersection and they are in control of the NCDOT approved signal plan of record.

3. For each of the Automated Traffic Control photographic systems, please provide an explanation as why the yellow light duration was changed according to the signal plan of record, beginning at the installation of the red light camera to present.

a. Cary Town Blvd & Convention Drive (EB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request. Finally, please see deposition testimony of David Spencer at page 20, lines 22-25; page 21, line 5.

b. Kildaire Farm Road & High Meadow Drive (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no

allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

c. High House Road & Prestonwood Parkway (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

d. NW Maynard Road & Chapel Hill Road (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

e. Maynard Road & Walnut Street (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no

allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

f. Tryon Road & Crescent Green Way (EB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

g. Tryon Road & Regency Parkway (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

h. Walnut Street & Dillard Drive (NB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT

signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

i. Maynard Road & Kildaire Farm Road (WB; WB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

j. Kildaire Farm Road & Maynard Road (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

k. Cary Parkway & Kildaire Farm Road (WB; WB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

l. Kildaire Farm Road & Cary Parkway (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

m. Cary Parkway & High House Road (NB; NB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

n. Harrison Avenue & Maynard Road (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

o. Harrison Avenue & Weston Parkway (SB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the

yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

p. Walnut Street & Meeting Street (SB; SB left turn)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

q. Cary Parkway & High Meadow (WB)

RESPONSE: Objection. This interrogatory seeks information that is irrelevant to this action because NCDOT has control over and determines the yellow times for this State owned intersection and because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Additionally, the Town of Cary does not keep a log of the changes made to the NCDOT signal plan of record and does not know the reasons the NCDOT may have changed the yellow times for this intersection. Upon information and belief, NCDOT may have information responsive to this request.

REQUEST FOR PRODUCTION OF DOCUMENTS

You are hereby requested to produce:

1. For each of the Automated Traffic Control photographic systems, please provide all Traffic Signal Plans of Record referenced in the above interrogatories.

RESPONSE: Objection. Upon information and belief, NCDOT would be the State agency that should have information that is responsive to this request. The Town of Cary does have copies of the most current signal plan of record for each State owned intersection within the Town limits, and the Town has already produced copies of those documents. The Town may have copies of outdated signal plans in its records, but it is not able to determine if those outdated signal plans in its files are true and accurate copies of the official NCDOT past signal plans of records for the requested intersections. Additionally, the Town of Cary objects to this document request because it is over-burdensome and irrelevant because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Finally, please see documents previously produced by the Town of Cary.

2. For each of the Automated Traffic Control photographic systems, please provide all Traffic Signal Plans of Record beginning at the installation of the red light camera to present, specifically those that reflect a revision to the yellow change interval.

RESPONSE: Objection. Upon information and belief, NCDOT would be the State agency that should have information that is responsive to this request. The Town of Cary does have copies of the most current signal plan of record for each State owned intersection within the Town limits, and the Town has already produced copies of those documents. The Town may have copies of outdated signal plans in its records, but it is not able to determine if those outdated signal plans in its files are true and accurate copies of the official NCDOT past signal plans of records for the requested intersections. Additionally, the Town of Cary objects to this document request because it is over-burdensome and irrelevant because there is no allegation against the Town of Cary that the yellow times at this intersection were not in accordance with the yellow times listed on the NCDOT signal plan of record in effect at the time of Plaintiff's civil violation. Finally, please see documents previously produced by the Town of Cary.

3. For each of the Automated Traffic Control photographic systems, please provide the full names and addresses of the individuals who have received a Notice of Violation of Cary Town Code 34-303 from Safelight Cary, Town of Cary, NC, such names being organized by intersection and date.

RESPONSE: Objection. The Town of Cary objects to this interrogatory because it seeks information that is not relevant to this lawsuit. Judge Fox has already dismissed from this action those Plaintiffs who had not appealed their civil violation. Additionally, the Town has already provided to you copies of civil violations for those individuals who appealed their violation. The copies provided show the name, date, address, and intersection in question.

4. For each of the Automated Traffic Control photographic systems, please provide a month by month record of all Notices of Violation of Cary Town Code 34-303 issued by Safelight Cary, Town of Cary, NC, such notices being organized by intersection.

RESPONSE: Objection. The Town of Cary objects to this interrogatory because it seeks information that is not relevant to this lawsuit. Judge Fox has already dismissed from this action those Plaintiffs who had not appealed their civil violation. Additionally, the Town has already provided to you copies of civil violations for those individuals who appealed their violation. The copies provided show the name, date, address, and intersection in question.

5. For each of the Automated Traffic Control photographic systems, please provide a record of all receipts of payment from those issued a Notice of Violation of Cary Town Code 34-303 from Safelight Cary, Town of Cary, NC, such receipts being organized by intersection.

RESPONSE: Objection. The Town of Cary objects to this interrogatory because it seeks information that is not relevant to this lawsuit. Judge Fox has already dismissed from this action those Plaintiffs who had not appealed their civil violation. Additionally, the Town has already provided to you copies of civil violations for those individuals who appealed their violation. The copies provided show the name, date, address, and intersection in question. Finally, Cary does not maintain a record of receipts of payment from individuals issued such notices.

This the ___ day of September, 2011

MARTINEAU KING PLLC

Elizabeth A. Martineau
Attorney for Defendant
P.O. Box 31188
Charlotte NC 28231
Tel: 704-247-8520
emartineau@martineauking.com

CERTIFICATE OF SERVICE

The undersigned certifies that she served a copy of the above document by fax to each of the listed attorneys below. An additional copy was served by first class mail, postage prepaid to the addresses listed below.

William W. Peaslee
102 Commonwealth Court
Cary, NC 27511
FAX: 919.481.2919

Paul Stam
Caroline Nickel
Stam & Danchi, PLLC
PO Box 1600
Apex, NC 27502
FAX: 919.387.7329

This the 27 day of September, 2011

Tonya Deisn
Paralegal

EXHIBIT tabbies 8

STATE OF NORTH CAROLINA **COUNTY OF WAKE** **BRIAN CECCARELLI and LORI MILLETTE,** **individually and as class representatives,** **Plaintiffs,** **v.** **TOWN OF CARY,** **Defendant.**	**IN THE GENERAL COURT OF JUSTICE** **SUPERIOR COURT DIVISION** **10-CVS-019930** **DEFENDANT'S RESPONSE TO FIRST REQUEST FOR ADMISSIONS**

Now comes the Defendant, Town of Cary, and hereby responds within the time allowed to Plaintiff's first request for admissions as follows.

1. The attached copy, labeled Exhibit A, of the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 3/19/2010, introduced as Plaintiffs' Deposition Exhibit A during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

   RESPONSE: The Defendant admits that Exhibit A is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit A is a genuine copy of the NCDOT Traffic Signal Plan of record kept and maintained by NCDOT for SR 1397 and Convention Drive dated 3/19/2010.

2. The attached copy, labeled Exhibit B, of the NCDOT Traffic Signal Plan for SR 1300 and High Meadow Drive dated 3/30/2010, introduced as Plaintiffs' Deposition Exhibit B during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

   RESPONSE: The Defendant admits that Exhibit B is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit B is a genuine copy of the NCDOT Traffic Signal Plan of record kept and maintained by NCDOT for SR 1300 and High Meadow Drive dated 3/30/2010.

3. The attached copy, labeled Exhibit C, of the NCDOT Traffic Signal Plan for SR 1615 and Prestonwood Parkway & Legault Drive dated 10/5/2006, introduced as Plaintiffs'

Deposition Exhibit C during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit C is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit C is a genuine copy of the NCDOT Traffic Signal Plan of record kept and maintained by NCDOT for SR 1615 and Prestonwood Parkway and Legault Drive dated 10/5/2006.

4. The attached copy, labeled Exhibit D, of the NCDOT Traffic Signal Plan for NC 54/SR 3073 and NC 54/SR 3081 prepared in the Office of Kimley-Horn and Associates, Inc. with revisions dated 5/9/2003, introduced as Plaintiffs' Deposition Exhibit D during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit D is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit D is a genuine copy of the NCDOT Traffic Signal Plan of record kept and maintained by NCDOT for NC 54/SR 3073 and NC 54/SR 3081 prepared in the Office of Kimley-Horn and Associates, Inc. with revisions dated 5/9/2003.

5. The attached copy, labeled Exhibit E, of the NCDOT Traffic Signal Plan for SR 1415 and SR 1313 dated 3/23/04, introduced as Plaintiffs' Deposition Exhibit E during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit E is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit E is a genuine copy of the NCDOT Traffic Signal Plan for SR 1415 and SR 1313 dated 3/23/2004.

6. The attached copy, labeled Exhibit F, of the NCDOT Traffic Signal Plan for SR 1009 and Crescent Green dated 10/5/2006, introduced as Plaintiffs' Deposition Exhibit F during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit F is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit F is a genuine copy of the NCDOT Traffic Signal Plan for SR 1009 and Crescent Gree dated 10/5/2006.

7. The attached copy, labeled Exhibit G, of the NCDOT Traffic Signal Plan for SR 1009 and Regency Parkway dated 9/17/2009, introduced as Plaintiffs' Deposition Exhibit G during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit G is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit G is a genuine copy of the NCDOT Traffic Signal Plan for SR 1009 and Regency Parkway dated 9/17/2009.

8. The attached copy, labeled Exhibit H, of the NCDOT Traffic Signal Plan for SR 1313 and Dillard Drive dated 7/20/2007, introduced as Plaintiffs' Deposition Exhibit H during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit H is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit H is a genuine copy of the NCDOT Traffic Signal Plan for SR 1313 and Dillard Drive dated 7/20/2007.

9. The attached copy, labeled Exhibits I and J, of the NCDOT Traffic Signal Plan for SR 1415 and SR 1300 dated 6/7/2006, introduced as Plaintiffs' Deposition Exhibits I and J during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., are genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibits I and J are business records kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibits I and J are genuine copies of the NCDOT Traffic Signal Plan for SR 1415 and SR 1300 dated 6/7/2006.

10. The attached copy, labeled Exhibits K and L, of the NCDOT Traffic Signal Plan for SR 1300 and SR 3977 dated 4/28/2009, introduced as Plaintiffs' Deposition Exhibits K and L during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., are genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibits K and L are business records kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibits K and L are genuine copies of the NCDOT Traffic Signal Plan for SR 1300 and SR 3977 dated 4/28/2009.

11. The attached copy, labeled Exhibit M, of the NCDOT Traffic Signal Plan for SR 1615 and SR 3977 dated 10/5/2006, introduced as Plaintiffs' Deposition Exhibit M during

Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit M is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit M is a genuine copy of the NCDOT Traffic Signal Plan for SR 1615 and SR 3977 dated 10/5/2006.

12. The attached copy, labeled Exhibit N, of the NCDOT Traffic Signal Plan for SR 1652 and NC 54 dated 9/5/2006, introduced as Plaintiffs' Deposition Exhibit N during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit N is a business record kept the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit N is a genuine copy of the NCDOT Traffic Signal Plan for SR 1652 and NC 54 dated 9/5/2006.

13. The attached copy, labeled Exhibit O, of the NCDOT Traffic Signal Plan for SR 1652 and SR 3005 dated 1/29/2009, introduced as Plaintiffs' Deposition Exhibit O during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit O is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit O is a genuine copy of the NCDOT Traffic Signal Plan for SR 1652 and SR 3005 dated 1/29/2009.

14. The attached copy, labeled Exhibit P, of the NCDOT Traffic Signal Plan for SR 1313 and Meeting Street dated 10/26/2009, introduced as Plaintiffs' Deposition Exhibit P during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit P is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit P is a genuine copy of the NCDOT Traffic Signal Plan for SR 1313 and Meeting Street dated 10/26/2009.

15. The attached copy, labeled Exhibit Q, of the NCDOT Traffic Signal Plan for SR 3977 and High Meadow Drive dated 5/9/2005, introduced as Plaintiffs' Deposition Exhibit Q

during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit Q is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit Q is a genuine copy of the NCDOT Traffic Signal Plan for SR 3977 and High Meadow Drive dated 5/9/2005.

16. The attached copy, labeled Exhibit 14, of the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 5-20-91, introduced as Plaintiffs' Deposition Exhibit Number 14 during Plaintiffs' Deposition of Tim Bailey, P.E., is genuine and may be admitted into evidence without further authentication or proof.

RESPONSE: The Defendant admits that Exhibit 14 is a business record kept by the Town of Cary. However, Defendant cannot admit or deny as to whether Exhibit 14 is a genuine copy of the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 5/20/1991.

17. According to the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 5-20-91, introduced as Plaintiffs' Deposition Exhibit Number 14 during Plaintiffs' Deposition of Tim Bailey, P.E., the speed limit when traveling eastbound on SR 1497 and at the intersection with Convention Drive was 35 mph.

RESPONSE: It is admitted that the NCDOT signal plan of record dated 5/20/91 indicates that the speed limit in this direction is 35 mph.

18. According to the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 5-20-91, introduced as Plaintiffs' Deposition Exhibit Number 14 during Plaintiffs' Deposition of Tim Bailey, P.E., the duration of the yellow light clearance time when traveling eastbound on Cary Towne Blvd and at the intersection with Convention Drive (Phase 2) was 4.0 seconds.

RESPONSE: It is admitted that Plaintiff's Exhibit No. 14 to Time Bailey's deposition indicates the following yellow times:

TIMING CHART

PHASE	Ø2	Ø6	Ø3	Ø4	Ø5	Ø1
MINIMUM GREEN	10 SEC.	10 SEC.	7 SEC.	7 SEC.	7 SEC.	7 SEC.
PASSAGE/GAP	3 SEC.	3 SEC.	1 SEC.	1 SEC.	1 SEC.	1 SEC.
YELLOW CLEARANCE	4.0 SEC.	4.0 SEC.	5.0 SEC.	4.5 SEC.	4.0 SEC.	4.5 SEC.
RED CLEARANCE	1.7 SEC.	1.3 SEC.	1.6 SEC.	1.6 SEC.	1.7 SEC.	1.6 SEC.
MAX. 1	40 SEC.	40 SEC.	30 SEC.	20 SEC.	20 SEC.	20 SEC.
MAX. 2	——— SEC.	——— SEC.	——— SEC.	——— SEC.	——— SEC.	——— SEC.
RECALL POSITION	MIN. RECALL	MIN. RECALL	NONE	NONE	NONE	NONE
VEHICLE CALL MEMORY	LOCK	LOCK	NONLOCK	NONLOCK	NONLOCK	NONLOCK

19. The NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 5-20-91, introduced as Plaintiffs' Deposition Exhibit Number 14 during Plaintiffs' Deposition of Tim Bailey, P.E., depicts the intersection now referred to as the intersection of Cary Towne Blvd and Convention Drive.

RESPONSE: Admitted.

20. According to the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 3/19/2010, introduced as Plaintiffs' Deposition Exhibit A during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., the speed limit when traveling eastbound on SR 1497 and at the intersection with Convention Drive was 45 mph.

RESPONSE: While it is difficult to determine which way the north arrow is pointing on Plaintiff's Exhibit A introduced in the deposition of David Spencer (see transcript of D Spencer), it is admitted that the NCDOT signal plan dated 3/19/2010 indicates that the speed limit on SR 1497 (Cary Town Blvd) approaching the intersection is 45 mph.

21. According to the NCDOT Traffic Signal Plan for SR 1497 and Convention Drive dated 3/19/2010, introduced as Plaintiffs' Deposition Exhibit A during Plaintiffs' Deposition of David Howard Spencer, Jr., P.E., the duration of the yellow light change interval when traveling eastbound on Cary Towne Blvd and at the intersection with Convention Drive (Feature 2) was 4.5 seconds.

RESPONSE: It is admitted that Exhibit A to David Spencer's deposition indicates the following yellow times as indicated in the chart below:

TIMING CHART
2070N CONTROLLER

FEATURE	PHASE					
	01	02	03	04	05	06
MINIMUM GREEN *	7 SEC.	10 SEC.	7 SEC.	7 SEC.	7 SEC.	10 SEC.
PASSAGE/GAP *	1.0 SEC.	3.0 SEC.	1.0 SEC.	1.0 SEC.	1.0 SEC.	4.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.5 SEC.	3.3 SEC.	3.1 SEC.	3.0 SEC.	4.5 SEC.
RED CLEARANCE	2.9 SEC.	1.3 SEC.	3.0 SEC.	2.9 SEC.	2.8 SEC.	1.0 SEC.
MAX. 1 *	20 SEC.	40 SEC.	30 SEC.	30 SEC.	30 SEC.	40 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL
VEHICLE CALL MEMORY	NONLOCK	LOCK	NONLOCK	NONLOCK	NONLOCK	LOCK
WALK *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
FLASHING DON'T WALK	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.

22. The speed limit eastbound on SR 1497 crossing its intersection with Convention Drive was 45 mph from 2004 to present.

RESPONSE: Denied.

23. The speed limit westbound on SR 1415 (SE Maynard Road) crossing its intersection with SR 1300 (Kildaire Farm Road) was 35 mph from 2004 to present.

RESPONSE: The Town of Cary does not have enough information to admit or deny this request because many factors go into determining what the legal speed limit is on State owned roads or intersections within the limits of the municipality.

24. The speed limit westbound on SR 3977 (Cary Parkway) crossing its intersection with SR 1300 (Kildaire Farm Road) was 45 mph from 2004 to present.

RESPONSE: It is admitted, upon information and belief, that as of January 31, 2011 the posted speed limit at this intersection is 45 mph. The Defendant is not able to admit or deny what the legal speed limit was on the road in question prior to that time.

25. The speed limit northbound on SR 1300 (Kildaire Farm Road) crossing its intersection with SR 3977 (Cary Parkway) was 45 mph from 2004 to present.

RESPONSE: It is admitted, upon information and belief, that as of January 31, 2011 the posted speed limit at this intersection is 45 mph. The Defendant is not able to admit or deny what the legal speed limit was on the road in question prior to that time.

26. The speed limit northbound on SR 3977 (Cary Parkway) crossing its intersection with SR 1615 (High House Road) was 45 mph from 2004 to present.

RESPONSE: The Town of Cary does not have enough information to admit or deny this request because many factors go into determining what the legal speed limit is on State owned roads or intersections within the limits of the municipality.

27. The speed limit southbound on SR 1313 (Walnut Street) crossing its intersection with Meeting Street was 45 mph from 2004 to present.

RESPONSE: It is admitted, upon information and belief, that as of January 31, 2011 the posted speed limit at this intersection is 45 mph. The Defendant is not able to admit or deny what the legal speed limit was on the road in question prior to that time.

28. The left turn yellow light arrow duration when traveling westbound on SR 1415 (SE Maynard Road) crossing its intersection with SR 1300 (Kildaire Farm Road) is determined using the assumption that vehicles turning left will be traveling 20 to 30 mph.

RESPONSE: Because the Town of Cary did not design the yellow times for the signal plan in question, the Town is not able to admit or deny what assumptions the engineer of record used in determining the duration of the yellow times at the intersection in question.

29. The left turn yellow light arrow duration when traveling westbound on SR 3977 (Cary Parkway) crossing its intersection with SR 1300 (Kildaire Farm Road) is determined using the assumption that vehicles turning left will be traveling 20 to 30 mph.

RESPONSE: Because the Town of Cary did not design the yellow times for the signal plan in question, the Town is not able to admit or deny what assumptions the engineer of record used in determining the duration of the yellow times at the intersection in question.

30. The left turn yellow light arrow duration when traveling northbound on SR 1300 (Kildaire Farm Road) crossing its intersection with SR 3977 (Cary Parkway) is determined using the assumption that vehicles turning left will be traveling 20 to 30 mph.

RESPONSE: Because the Town of Cary did not design the yellow times for the signal plan in question, the Town is not able to admit or deny what assumptions the engineer of record used in determining the duration of the yellow times at the intersection in question.

31. The left turn yellow light arrow duration when traveling northbound on SR 3977 (Cary Parkway) crossing its intersection with SR 1615 (High House Road) is determined using the assumption that vehicles turning left will be traveling 20 to 30 mph.

RESPONSE: Because the Town of Cary did not design the yellow times for the signal plan in question, the Town is not able to admit or deny what assumptions the engineer of record used in determining the duration of the yellow times at the intersection in question.

32. The left turn yellow light arrow duration when traveling southbound on SR 1313 (Walnut Street) crossing its intersection with Meeting Street is determined using the assumption that vehicles turning left will be traveling 20 to 30 mph.

RESPONSE: Because the Town of Cary did not design the yellow times for the signal plan in question, the Town is not able to admit or deny what assumptions the engineer of record used in determining the duration of the yellow times at the intersection in question.

33. The attached copy, labeled Exhibit 11, of the Notice of Violation from Safelight Cary, Town of Cary, NC, identified as Plaintiffs' Deposition Exhibit Number 11 during Plaintiffs' Deposition of Christopher Davis, is an accurate representation in form of all notices issued for violation of Cary Town Code 34-303.

RESPONSE: Denied.

34. Page 4, Number 1, Section B.1. of the Notice of Violation from Safelight Cary, Town of Cary, NC, identified as Plaintiffs' Deposition Exhibit Number 11 introduced during Plaintiffs' Deposition of Christopher Davis, states the following: "Your responsibility can only be transferred if the driver you identified accepts the responsibility."

RESPONSE: It is admitted that attached to Defendant's responses is Plaintiff's Deposition Exhibit Number 11 and that the contents speak for itself.

35. On the Town of Cary website, identified as Plaintiffs' Deposition Exhibit Number 12 during Plaintiffs' Deposition of Christopher Davis, specifically http://www.townofcary.org/Departments/Police_Department/Red_Light_Signal_Cameras/Appeals_Process.htm (copy attached for your convenience), states the following: "If the person you nominated as the driver doesn't pay the fine, you will still be held accountable."

RESPONSE: It is admitted that attached to Defendant's responses is Plaintiff's Deposition Exhibit Number 12 and that the contents speak for itself.

36. The Town of Cary website, on the page identified as http://www.townofcary.org/Departments/Police_Department/Red_Light_Signal_Cameras/FAQ.htm (copy attached for your convenience), states the following: "State law says the vehicle's registered owner is responsible. If you have the name and address of the person who ran the red light, however, you may nominate that person as the driver. Follow the instructions on the back of your citation. You are responsible for the citation if the person nominated as the driver does not pay it."

RESPONSE: It is admitted that attached to Defendant's responses is a copy of the page listed in this request for admission printed on September 27, 2011, and that the contents of this page speak for itself.

This the 27th day of September, 2011.

MARTINEAU KING PLLC

Elizabeth A. Martineau
Attorney for Defendants
P.O. Box 31188
Charlotte, NC 28231
Tel: 704-247-8520
Fax: 704-247-8582

CERTIFICATE OF SERVICE

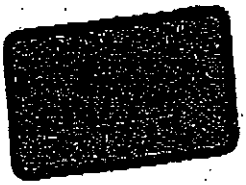
The undersigned hereby certifies that a copy of the foregoing document was served on the all parties in this action by fax to the numbers below and by depositing a copy of the same in the United States Mail, first-class postage prepaid, and addressed as follows:

William W. Peaslee
102 Commonwealth Court
Cary, NC 27511
FAX: 919.481.2919

Paul Stam
Caroline Nickel
Stam & Danchi, PLLC
PO Box 1600
Apex, NC 27502
FAX: 919.387.7329

This the 27th day of September, 2011

Tonya Deisn
Paralegal



SAFELIGHT CARY
TOWN OF CARY, NC
NOTICE OF VIOLATION

NOTICE NUMBER: CA10105002

Unfortunately, and as you can see from the photos to the right, the vehicle registered in your name and described below appears to have run a red light. Such action violates Cary Town Code 34-303.

DATE OF VIOLATION	TIME OF VIOLATION
07-Feb-2010	10:25 AM

REGISTERED OWNER OR LESSEE
RODNEY LEWIS SHEFFIELD

ADDRESS
1804 OPEN FIELD DR

CITY	STATE	ZIP CODE
GARNER	NC	27529

LIC. NO.	STATE	VEH. YEAR
WYP1882	NC	2004

VEH. MAKE	BODY STYLE
PONTIAC	4 door Automobile

PLEASE NOTE THAT RECORDED IMAGES DO CONSTITUTE EVIDENCE OF A VIOLATION OF CARY TOWN CODE 34-303 (FAILURE TO STOP AT A RED LIGHT).

LOCATION OF VIOLATION
High Meadow Dr and Cary Parkway WB

THIS VIOLATION WAS NOT COMMITTED IN MY PRESENCE. BASED UPON MY REVIEW AND INSPECTION OF THE RECORDED IMAGES, I STATE THAT A VIOLATION OF CARY TOWN CODE 34-303 DID OCCUR. I DECLARE, UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, THAT THE FOREGOING IS TRUE AND CORRECT.

08-Feb-2010		[illegible]
DATE ISSUED	SIGNATURE	CARY PD OFFICER'S STYL

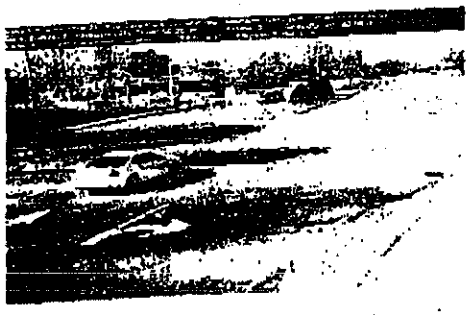
Please respond to this notice in one of the following ways:

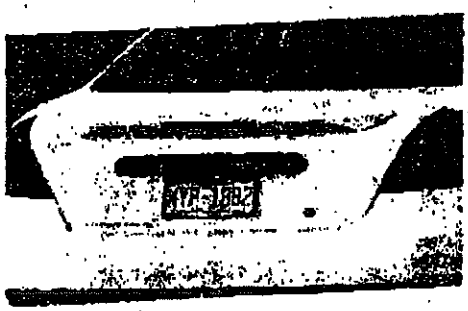
1. Submit the civil payment for the civil penalty (See payment Option A page 2)
2. Provide information as to the driver of the vehicle. (See Affidavit coupon on Option B page 2)
3. Request a hearing to review the notice (See page 4)

You must respond no later than [illegible] to avoid an additional penalty of $50.00 and civil action against you.

For questions regarding payment, contact the customer service call center toll free at 1-877-847-2338 between 7:00am and 5:00pm (MST).

Para preguntas con respecto al pago, contacte el pago del centro de la llamada del servicio de cliente libertad en 1-877-847-2338 entre 7:00am y 5:00pm (MST).





To view the video of this violation, visit www.photonotice.com (City Code CNC)

TOWN OF CARY **INSTRUCTION PAGE** RED MEANS STOP

1. **Reason You Received This Notice:**

A vehicle registered in your name was photographed failing to stop for an official red traffic control signal, or the registered owner of the vehicle depicted on this citation has submitted an Affidavit naming you as the driver of the vehicle at the time of the offense. This is a violation of the Cary Town Code 34-303.

2. **You Must Select One of the Following Options. Complete the coupon on the Options Page for the option you select and return the coupon in the enclosed envelope. Make sure the mailing address on the reverse side of the coupon appears in the window of the enclosed envelope.**

A. **Payment Methods.** As the registered owner of the vehicle described in this Notice, we have no choice but to hold you responsible for paying this fine by [illegible], any profits from which go to our public school system. No points will be assessed to your driving record, and no record of this violation will be sent to your insurance company or the Division of Motor Vehicles. Of course, if you were not the driver at the time of the offense, you may choose to complete the affidavit on Option B of the mail-in coupon on page 2 of this Notice and indicate who was driving.

1. Please do not send cash.
2. Make Check or Money Order payable to 'Safelight Cary'
3. Payments by Personal Check, Money Order or Visa/MasterCard are accepted. Please mail in the enclosed envelope along with the payment coupon found on Option A of page 2.
4. A $25.00 administrative fee will be assessed for rejected or declined payments.
5. Credit Card payments can also be made online at. https://www.photonotice.com (Enter city code : CNC)

B. **Identify another Driver.** If is sufficient evidence of a violation of Cary Town Code 34-303, that the person registered as the owner of the vehicle was operating at the time of the violation. However, liability of the owner may be removed if the Affidavit of Non-Responsibility (Option B of the mail-in coupon on page 2) is completed and returned in the enclosed envelope by [illegible]

1. Your responsibility can only be transferred if the driver you identified accepts the responsibility.
2. This notice may be withdrawn before or after the penalty is paid.
3. No points will be assessed to your driving record and no record of this offense will be sent to your insurance company or to the Division of Motor Vehicles.

3. **Your Right to View Video**

- The violation has been captured on video and is available to be viewed on the internet at: www.photonotice.com (Enter City Code CNC) The video is available for 60 days from date of violation
- You may also view the video (BY APPOINTMENT ONLY) by calling the Safelight-Cary Customer Service Office at 919.388.9129 to schedule a viewing. The Office Hours are: Monday, Wednesday and Friday 10:00 AM to 2:00 PM, Tuesday and Thursday 1:00 PM to 5:00 PM

4. **Right to a Hearing.** You have the right to a hearing.

- If you choose to have the matter reviewed by the Town's Hearing Board, **YOU MUST SUBMIT A $50.00 BOND PAYMENT** prior to scheduling a hearing.
- To schedule a hearing you must contact **THE SAFELIGHT CARY PHOTO VIEWING OFFICE AT 919-388-9129.** At that time, the Photo Viewing Representative will schedule a date and time for you to appear.
- Hearings are held at 318 North Academy Street Bldg B Cary, NC 27512 **BY APPOINTMENT ONLY.**
- **IF YOU FAIL TO PAY YOUR FINE OR SUBMIT THE BOND PAYMENT BY [illegible] YOU WILL FORFEIT YOUR RIGHT TO A HEARING.**

TOWN of CARY

Appeals Process

How to Appeal a Citation

Anyone who believes they have received a citation in error has the right to appeal. An appeals panel meets monthly to review objections to citations or penalties. Appointments are required.
Read common objections to citations and the Town's answer.

Requesting a hearing

You must notify the Town of your decision to appeal by the due date written on the citation in order to receive a hearing. Failure to do so will result in the automatic dismissal of your appeal, and you will be responsible for all fines and late fees.

A request to appeal can be made by contacting the SafeLight Cary office at . A message may be left 24 hours a day, seven days a week, and a representative from the office will contact you.

To speak with a SafeLight Cary representative directly, call the office during these operating hours:

- Monday, Wednesday, Friday - 10 a.m. to 2 p.m.
- Tuesday, Thursday - 1-5 p.m.

The office is closed on weekends and Town holidays.

Before the hearing

- Citations must be paid before a hearing can be scheduled. The $50 fee will act as a bond and will be returned if the appeals panel finds that you were not responsible.
- You may view video of the red light violation by appointment at the SafeLight Cary office, 315 N. Academy St. You do not have to pay the ticket or file an appeal before watching the video, but appointments should be set well in advance of the due date on your citation.
- If you are contesting the citation because another person was driving your vehicle at the time of the violation, you must fill out the form on the back of the citation with the driver's name and address by the due date. Please note, however, that State law says the owner of the vehicle is responsible for the violation. If the person you nominated as the driver doesn't pay the fine, you will still be held accountable.

More on Appeals

Members of the appeals panel may review images of the violation before the hearing. This includes the three digital photos you received with your citation and a 12-second video.

Each Red Light Camera box contains three separate cameras that take three different photos. One camera takes a photo of the vehicle at the stop line. A second camera takes a photo of the vehicle in the intersection during a red light. A third camera provides a close up of the vehicle's license plate. The electronic flash produces clear photos in all weather conditions.

For more information about citations and appealing a violation, call the SafeLight Cary customer service office at .

TOWN of CARY

FAQ

What is my responsibility when approaching a red light?

When approaching a red light, the law requires you to come to a complete stop behind the first white line. The vehicle must remain stopped until the light turns green. If you are turning right where right turns on red are not prohibited, you still must come to a complete stop behind the first white line. You may then turn right if you are able to do so safely.

Why did the Town of Cary decide to use red light cameras?

The goal of the program is to encourage voluntary compliance with traffic signal laws through around-the-clock enforcement of red lights at locations. Studies show voluntary compliance reduce deaths, serious injuries and property damage from auto crashes. Several cities with red light cameras have crash reductions as high as 30 percent.

Which intersections were selected?

See the intersections chosen for red light cameras.

Why were they selected?

Each intersection had at least five collisions over two years in which someone ran red light. The cameras are focused on the direction those red light runners were traveling. To maximize the number of intersections with cameras, the Town chose to monitor a single approach at each intersection.

What effect does a red light camera citation have on my driving record and insurance?

Citations for "camera enforced" red light violations are civil penalties, similar to a parking ticket. No record of the violation goes to your insurance company or the N.C. Division of Motor Vehicles.

I received a citation and several pictures, but I understand that there is also video. How can I see it?

You are entitled to see several seconds of digital video related to each violation. To see the video, call the customer service agent for an appointment at (919) 388-9129. Or you may view online at www.photonotice.com.

After seeing the pictures and video, I still want to contest my citation. How do I?

First, you must pay the citation on time. This serves as your bond and will be refunded if you are found not responsible for the violation. If your citation is not paid on time, you will have waived your right to an appeal. After paying on time, contact the customer service agent at (919) 388-9129 to schedule a hearing.

I received a citation. It is my car, but I was not driving. Am I still responsible?

State law says the vehicle's registered owner is responsible. If you have the name and address of the person who ran the red light, however, you may nominate that person as the driver. Follow the instructions on the back of your citation. You are responsible for the citation if the person nominated as the driver does not pay it.

Why does my citation come from Arizona and my payment go to a bank in Ohio?

The Town hired RTS (Redflex Traffic Systems) to install and maintain the cameras. Violation images are transmitted by DSL or similar technology to Scottsdale, Ariz. where RTS formats them and identifies the registered owner. Violations are sent over the Internet to the Cary Police Department, which employs a project manager to authorize or reject each violation. Authorized images are sent to RTS, which mails the notices. Skyy Bank of Ohio collects payments for the Town of Cary and RTS.

What happens to the money collected from fines and late fees?

Redflex Traffic Systems is paid to install and operate the system through fines and late fees. The Town retains a portion of proceeds to cover administrative costs. The remainder goes to the Wake County Public School System. A more detailed explanation is in the Town's contract with RTS. You can arrange to see the contract by calling the Town Clerk's office at (919) 460-4941.