In the wake of the passage of the state law pertaining to so-called "red light traffic cameras," [*See* Acts 2008, Public Chapter 962, effective July 1, 2008, codified at Tenn. Code Ann. § 55-8-198 (Supp. 2009)], numerous local governments have passed ordinances enacting regulatory schemes regarding use of this modern police tool. Previously in this newsletter I explored some possible challenges to red light camera ordinances. This is the second part in a series of articles that briefly explores some other possible challenges, and an appropriate municipal response based on cited case law.

E. Expert Testimony Issue

1. Defendants may assert that before any photographs or video evidence from a camera system may be introduced into evidence, it is first necessary for the City to lay a foundation for introduction of this "scientific or technical" evidence by use of an "expert" witness to explain how the "system" works, and "how / when / if" the cameras have been "calibrated / re-calibrated" or "certified / re-certified." Defendants are likely to argue by way of analogy that because the Tennessee Supreme Court has held that evidence concerning the horizontal gaze nystagmus (HGN) field sobriety test requires use of expert testimony,[1] then it is necessary for any photographic or video evidence derived from cameras to also be introduced only through use of expert testimony.

2. The argument by analogy will likely rely heavily on State v. Murphy, 953 S.W.2d 200; 1997 Tenn. LEXIS 530 (Tenn. 1997). In that case, the Tennessee Supreme Court determined that the HGN field sobriety test was a "scientific" test, and to be admissible at trial, such evidence must be offered through an expert witness and meet the requirements of Rule 702 and 703 of the Tennessee Rules of Evidence. In so holding, the Murphy court determined that in Tennessee, "evidence constitutes 'scientific, technical, or other specialized knowledge' if it

[1] *See* State v. Murphy, 953 S.W.2d 200; 1997 Tenn. LEXIS 530 (Tenn. 1997).

concerns a matter that 'the average juror would not know, as a matter of course.'" (*citing* State v. Bolin, 922 S.W.2d 870, 874 (Tenn. 1996)). But the determination that the HGN field sobriety test used in DUI and public intoxication criminal cases requires the use of expert testimony in no way stands for the corollary that photographs taken by surveillance cameras cannot be introduced by a muncipality without use of an expert witness as to how the cameras operate. The cameras produce photographs and videos, nothing more, and the cameras themselves operate on the same principles as cameras and video recorders that are used every day and relied upon by "the average juror" to accurately depict people, objects or scenes. The images so taken speak for themselves, and in the case of the red light cameras, record for later viewing the violation as it occurs in real time. These images are not something that an average juror would not know, understand, or rely upon as "a matter of course." To rule otherwise would mean that every crime scene photograph or video, every bank or convenience store robbery surveillance video, every narcotics transaction caught on tape, every car accident picture or "day in the life" video of any injured plaintiff, would require the use of an expert witness about how a camera or video recorder "works." To carry Defendant's argument to its' logical conclusion, would also require every *audio* tape recording to be introduced through expert testimony about how such a machine or electronic device operates.

3. Such an argument by analogy using court precedent regarding the HGN test is directly contradicted by Tennessee case law that is more directly on point. In State v. Williams, 913 S.W.2d 462 (Tenn. 1996), the Tennessee Supreme Court held that photographs taken from a videotape from a surveillance camera depicting an armed robbery as it occurred at a convenience store, which were introduced and authenticated through a *non-expert* witness (the store clerk who simply activated the automatic in-store videotape surveillance camera) constitutes recorded real evidence, were properly authenticated by the store clerk testifying that the photographs accurately depicted the scene inside the store at the time of the robbery, even though he could not identify the perpetrator in the photographs, nor at a pre-trial lineup, nor at trial, and were properly admitted as evidence against defendant. (*See also* United States v. Rembert, 863 F.2d

1023; 1988 U.S. App. LEXIS 17509 (D.C. Circuit 1988) (photographs of defendant / suspect in robbery case made from bank ATM video camera may be introduced through non-expert testimony by one who has no personal knowledge of events depicted)); *accord* United States v. Fadayini, 28 F.3d 1236; 1994 U.S. App. LEXIS 17293 (D.C. Circuit 1994); *and see* United States v. Harris, 55 M.J.433; 2001 CAAF LEXIS 1166 (Ct. App. Armed Forces 2001) (photos may be admitted and reliability of camera system need not be shown by expert witness, and reliability may be established without evidence regarding technical mechanics of operation of camera, and even though current computer technology makes alteration of a photograph a possibility any time digital photos are used, the mere claim that such photos may be altered should not bar their admission); United States v. Hobbs, 403 F.2d 977, 978 (6th Cir. 1968) (photographs are well-accepted evidence and expert testimony on the photographic process is unnecessary).

4. Photographs and videos are commonly used as proof in Tennessee courts, without the introduction of expert testimony regarding the way a camera or video recorder system operates.[2] The only evidentiary requirements for admissibility of photographs and videotapes are: (1) the photograph or video must satisfy the so-called "best evidence" or "original writing" rule pursuant to Rule 1002 of the Tennessee Rules of Evidence; (2) it must be established that the photograph or video is "relevant" under Rule 401 of the Tennessee Rules of Evidence; (3) if objection is made or issue raised, there must be a determination by the trial court that the photograph or video, though relevant, should not be excluded pursuant to Rule 403 of the Tennessee Rules of Evidence; and (4) the photograph or video must be properly authenticated under Rule 901 of the Tennessee Rules of Evidence.[3]

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[2] *See* Neil Cohen, Sarah Shepherd, and Donald Paine, Tennessee Law of Evidence, 5th ed. (2005 & Supp. 2008), § 4.01[18] and [19] and cases cited therein [hereafter, Tenn. L. Evid., 5th ed.]

[3] Id.

5. With regard to the first requirement, Rule 1002, Tennessee Rules of Evidence, pertains to the "Requirement of [an] Original," and provides in pertinent part that "[t]o prove the content of a … photograph, the original … photograph is required, except as otherwise provided in these rules or by Act of Congress or the Tennessee Legislature." [This is the so-called 'best evidence" or "original writing" rule.] Under the definitions section of the original writing rule, "photographs" are defined as including "still photographs, … video tapes, and motion pictures." (Rule 1001(2), Tenn. R. Evid.) According to the definitions, "an 'original' of a photograph includes the negative or *any print*." (Rule 1001(3), Tenn. R. Evid. [emphasis added]). Therefore, pursuant to the Rule, the usual version of a photo – a print from a negative, or its' modern equivalent, a "digital" photograph or computer screenshot of same – is defined as an original, and therefore satisfies the "best evidence" or "original writing" rule and thus meets the first requirement for introduction of a photograph or video.

6. The second requirement for introduction of a photograph or video is that the photograph or video is "relevant" to a fact at issue under Rules 401 and 402 of the Tennessee Rules of Evidence. Rule 402 provides that relevant evidence is admissible and evidence which is not relevant is not admissible. Rule 401 defines "relevant evidence" and provides as follows: "'Relevant evidence' means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Obviously, a photograph or series of photographs and / or a video showing a specific vehicle with a specific license plate depicted running through a red light would be evidence having a tendency to make the existence of a fact that is of consequence to a determination of the action – here the fact that is of consequence to a determination of the action is whether a specifically registered vehicle ran through a red light – more probable than without the photographs or video. In other words, as the Advisory Commission Comment to rule 401 notes, "[t]he theoretical test for admissibility is a lenient one" and "[t]o be relevant, evidence must tend to prove a material issue." Evidence consisting of photographs or a video depicting a

specific vehicle with specific license plate running a red light would "tend to prove" the material issue of whether a specific vehicle with a specific license plate did in fact run a red light in violation of a city ordinance.[4]

7. With regard to the third requirement, even if a photograph is deemed relevant under Rules 401 and 402, it may still be excluded under Rule 403 of the Tennessee Rules of Evidence, which provides that "[a]lthough relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by consideration of undue delay, waste of time, or needless presentation of cumulative evidence." (Rule 403, Tenn. R. Evid.) This requirement does not appear to be a major hurdle in dealing with photographs or video from a red light surveillance camera system.

8. The fourth requirement pertains to "authentication" of a photograph or video under Rule 901(a) of the Tennessee Rules of Evidence. A photograph or video can be authenticated by proof that it depicts what it is claimed to depict, and is admissible "when shown to be a reasonably accurate representation of the place or thing in question."[5] Of course, a person who took the photo or recorded the video may authenticate the photo or video by testifying that the photo or video is one the witness took or recorded at or about a certain time and date, and that same is an accurate depiction of the object, matter, or scene photographed or recorded. However, it is well settled law that it is not necessary that the witness through whom a photo or video is offered into evidence also be the one who actually took the photograph or recorded the video. Any person, whether or not they took the photo or recorded the video, who is familiar with the place, scene or item in question that was photographed or recorded, can authenticate the

[4] *See also* Tenn. L. Evid., 5th ed., § 4.01[18][c] (trial judge has broad discretion in determining whether a particular photograph is sufficiently accurate to be admitted into evidence; in Tennessee photos are liberally admitted, even when the subject matter is in some way different than at the time in question)

[5] *See* Hughes v. State, 126 Tenn. 40, 68-69; 148 S.W. 543, 550 (1912); *see also* Tenn. L. Evid., 5th ed., § 4.01[18][e] and [19].

photograph or video by testifying as to their familiarity with same and that the photograph or video is a true and accurate depiction of the location, scene, or item at issue.[6] Thus, any City police officer who has viewed and is familiar with the particular intersection involved, and with the photographs and / or video at issue, may testify that the photos and/ or video are a true and accurate depiction of the intersection scene, and then the photographs and / video may be introduced through said witness. Moreover, magnifications or enlargements of photographs are admissible if helpful to the trier of fact and not unduly prejudicial.[7]

9. Defendants may also make the same argument by analogy by using the example of speed radars. In response, municipalities may make their own argument by analogy for the introduction of evidence based on a new technology involving computers, specifically, "caller-ID." Although I have not found any Tennessee case on point, the Kansas Supreme Court has passed on this issue in a persuasive opinion in State v. Schuette, 273 Kan. 593; 44 P.3d 459; 2002 LEXIS 130 (2002). In Schuette, the defendant was convicted of making threats and telephone harassment. The defendant made two threatening phone calls to the victim, who had caller ID service. After the threatening phone calls were made, the victim called the law. Law enforcement arrived and the victim showed the law officer his caller ID, which showed that one call came from the defendant by name and number, and the second call displayed the same number of the previous call which showed defendant's name, but no name registered on the display for the second call. A phonebook check confirmed the number that was displayed on the caller ID device for both calls was listed in the name of defendant. This evidence concerning what the caller ID device displayed was introduced through the testimony of the victim, and confirmed and corroborated by the testimony of the law officer, along with the victim's girlfriend who also observed the display from the caller ID. The defendant objected at trial to

[6] Tenn. L. Evid., 5th ed., § 4.01[18][e] and [19].

[7] *See e.g.* State v. Irick, 762 S.W.2d 121, 127 (Tenn. 1988); *see also* Tenn. L. Evid., 5th ed., § 4.01[18][e].

introduction of this testimony about what the caller ID device showed and raised the issue on appeal. As grounds for his appeal, defendant asserted *inter alia* that the trial court erred in admitting the caller ID evidence because (a) there was not sufficient foundation laid to admit the evidence, and (b) the caller ID evidence was inadmissible hearsay. With regard to his first argument, the defendant proposed that the proper foundation testimony must establish (1) the scientific or technical principles employed by the caller ID unit, (2) the device was working properly and reliably on the date in question, and (3) the operator of the caller ID unit was sufficiently qualified to use the device (citing to State v. Lowry, 163 Kan. 622; 185 P.2d 147 (1947); State v. Estill, 13 Kan. App. 2d 111; 764 P.2d 455 (1988), *rev. denied* 244 Kan. 739 (1989); and State v. Primm, 4 Kan. App. 2d 314; 606 P.2d 112 (1980)). In dismantling the defendant's arguments, in Schuette the Kansas Supreme Court stated:

> *Prim* and *Lowry* are factually distinguishable. In *Prim*, the Kansas Court of Appeals considered whether read outs from police radar units were admissible, and the analysis was *clearly limited to cases pertaining to radar*. [emphasis added] [citation omitted] In *Lowry*, this court considered and rejected the admissibility of lie detector tests. [citation omitted] Both situations differ from our facts.
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> In *Estill*, the Court of Appeals considered the admissibility of a computer-generated "phone trap" record. The court explained that a phone trap is where "a telephone company computer traces all calls made to [the requesting customer's] number and records and stores the numbers of the phones from which the calls originated." [citation omitted] A Southwestern Bell employee testified the records were kept in the ordinary course of business. He could not testify, on cross-examination, as to the internal operations of the computer. After citing decisions from several jurisdictions pertaining to the admissibility of similar electronic devices, the court concluded:
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> > We are of the opinion the trial court properly admitted the evidence as a business record. The question of reliability goes to the weight of the evidence and not to its admissibility. [citation omitted]
>
> …
>
> The *Estill* court analyzed the opinions in *People v. Holowko* [citation omitted] and *State v. Armstead* [citation omitted], which both agreed that computer-generated data (data which is reflective of the internal operations of a computer system), as opposed to computer-stored data (data which is placed into a computer by an out-of-court declarant), should be treated as nonhearsay:

> The evidence is generated instantaneously as the telephone call is placed, without the assistance, observations, or reports from or by a human declarant. The printouts of such data are merely the tangible result of the computer's internal operations …. [ellipsis in original]
>
> The court in ***Armstead*** noted the underlying rationale of the hearsay rule is that out-of-court statements are made without an oath and their truth cannot be tested by cross-examination. 'With a machine, however, there is no possibility of a conscious misrepresentation, and the possibility of inaccurate or misleading data only materializes if the machine is not functioning properly.'
>
> Since the computer was programmed to record its activities when it made the telephone connections, the printout simply represents a self-generated record of its operations, much like a seismograph can produce a record of geophysical occurrences, a flight recorder can produce a record of physical conditions onboard an aircraft, and an electron microscope can produce a micrograph, which is a photograph of things too small to be viewed by the human eye. [*citing* Estill, 432 So.2d at 840]

…

The logic of … ***Estill*** is sound. The foundation requirement of reliability is satisfied through witness testimony that the caller ID device is or has in the past been operating properly.

…

[Defendant's] arguments that the users of the caller ID unit were not trained experts in its operation, as well as his contention that the underlying scientific principles must be introduced before admission of the evidence, are disingenuous. We take judicial notice that the operation of caller ID units does not require any advanced training; the record additionally reflects that by merely pressing arrow buttons, the user could review prior calls that were made. This fact is "so generally known or of such common notoriety within the territorial jurisdiction of the court that [it] cannot reasonably be the subject of dispute." [citation omitted]

[Defendant's] claim that the ***Frye*** test must be applied, or some other scientific proof, in order to introduce caller ID evidence is rejected based on ***Estill*** ….

[In addition, Defendant's] argument that caller ID evidence constitutes inadmissible hearsay appears to run contrary to every jurisdiction that has broached this matter. Each court has held that caller ID displays are merely computer generated read outs and not hearsay statements of persons or electronically regenerated hearsay statements. [citations omitted]

[Defendant's] citation to ***Estill*** is not persuasive. The court's holding did not "necessarily recognize" that phone trap records must come in through the business records exception; rather, the court merely affirmed the trial court's admission of the evidence through that

> exception. The court never specifically found whether phone trap records constituted hearsay. The caller ID display is not the output of statements from an out-of-court declarant but merely the result of the device's operations, which is not hearsay.

Schuette, at 461-64.

10. The use by a city of the photographs and video produced by the computer generated system should not require expert testimony about how the system operates, or about the "internal operations of the computer," because the photos and video are "generated instantaneously" as the offending vehicle runs the red-light, "without assistance, observations or reports from or by a human declarant" and the products or "data" of the system (the photographs and video) are "merely the tangible result of the computer's internal operations," and simply represent "a self-generated record of its operations." The only foundation requirement regarding reliability should be satisfied through testimony of a *non-expert* witness that the camera system is or has been in the past operating properly, which may be testified to by any police officer with minimal training that the "machine" is certified and has been regularly tested and found to be in good operating condition. There should be no requirement that an officer be a "trained expert" in the operations of the system, nor that testimony be elicited regarding the "underlying scientific principles" of the machine before admission of the photos and video.

11. Further, the photos and video are not hearsay under Rules 801 of the Tennessee Rules of Evidence, because the photos and video are not "statements" as that term is defined under Rule 801(a), and because these "products" or "data" are made by a computer "machine" and not by a "declarant" as that term is defined under Rule 801(b). In the alternative, should the Court find the photos and / or video to be "hearsay" within the meaning of Rule 801, the photos and / or video would still be admissible under the following exceptions to the hearsay rule set out in Rule 803: Rule 803 (1.2) (Admission by Party-Opponent (if the photos and / or video is a "statement" of defendant)); Rule 803 (6) (Records of Regularly Conducted Activity (if the photos and/ or video is a "statement" of the camera company or of the city / police department));

or Rule 803 (8) (Public Records and Reports (if the photos and / or video is a “statement” of the city / police department)). Further, the photos and / or video would be admissible as hearsay exceptions under Rule 804 (b) (3) (Statement Against Interest (if the photos and / or video is a “statement” of the defendant)).