Mayor and Town Council,

The red-light cameras are being deployed in spite of the mountain of evidence showing that they have little to do with safety and everything to do with generating revenue.

Given that, it is important that the citizens of Chapel Hill have clear and accurate information about the usage, maintenance and ethical operation of this system.

Further, because the council has ceded a governmental responsibility to a profit-making concern, first and foremost among the responsibilities of the council is to insure the ethical and legal operation of this program.

The company should be held to the highest ethical standards since they will operate as judge, jury and executioner. And, of course, since they will be operating these cameras without direct governmental oversight, which is required in many jurisdictions to at least carry on the pretense of due process, it is your charge to safeguard the rights of our citizens.

The questions I’m submitting cover everything from the ethical operation of the red-light camera system to its technical operation.

I’m not quite sure anyone currently knows the answers, but if the answers are already out there and published, I haven’t been able to find them.

Finally, considering that an informed public is the bedrock of democracy, I would hope that the council directs ACS and the relevant town departments to publish the specific, detailed and verifiable answers to the following questions on the website.

**Ethical Operation of Red-light Camera Program**

_The company operating this system has an inherent conflict, how do you maximize profit without sacrificing the pretense of due process?_

_The following are questions that might clarify the ethical boundaries the company is expected to live within._

**Quid Pro Quo**

**Revolving Door Policy**

_Are there any restrictions on ACS hiring town employees or elected officials associated with the decision to deploy these cameras?_
Will ACS refrain from hiring employees or elected officials associated with the decision to deploy these cameras?

If it is possible to work for ACS after being involved in either of these capacities, is there a minimum time period involved or can they stop working for Chapel Hill one day and work for ACS the next?

Will the council establish some minimum guidelines to avoid the appearance of impropriety in terms of the ‘revolving door’?

Is there an expectation that any of the researchers associated with Institute for Transportation Research and Education (ITRE) will follow any guidelines set forth by the council or will researchers specifying the location and justification for additional cameras be able to get recompense from ACS, an ACS subsidiary or affiliated company after making such determinations?

**Indirect or Direct Monetary or Material Payments**

Will ACS report and place on the website a record of any and all monetary (or material) contributions, direct or indirect made to the ITRE, its researchers and students prior to the and after the deployment decision (i.e. including ongoing and future reportage)?

Will ACS report and place on the website a record of, if any, monetary contributions made directly or indirectly to any public officials or employees of Chapel Hill?

For instance, this would include paying for traffic engineer’s attendance at conferences, meetings, etc. This would also include any sponsored meetings at any other venue. In addition, contributions made to elected officials campaigns, donations made to groups associated with these officials, grants given to city sponsored organizations that lobbied for these cameras or grants given (or being anticipated to be given) to IRTE or its related personnel, to name a few examples.

Does ACS pay, directly or indirectly, any town employee for work done directly or indirectly involving this program or any other program associated with ACS?

Will ACS be providing any facilities or vehicles for the town employees can review these citations? Will ACS be providing any other services for these employees?
Will ACS provide this information as it pertains to any previous private or public employment of such an affected employee, for instance, Kumar Neppalli, whom it appears worked with ACS, for the city of Fayetteville, prior to working in Chapel Hill (http://heraldsun.com/orange/10-383561.html)?

Will ACS document the costs associated with the safelight website? Is the websites cost considered a donation to the town? What, if any, influence did this ‘in kind’ payment have on the awarding of the contract to ACS?

**Additional Monetary Considerations**

Are there any monetary quotas dictated by the contract that might influence either party to, one, act in an unethical fashion or, two, cause an excessive number of cameras to be deployed?

**Hearing Officers**

Considering that there’s a potential for the monetary motive to perturb the just and regular exercise of the appeals process vis-à-vis the hearing officer, what special, if any, safeguards are in place to monitor their performance?

What, if any, influence does ACS have in the selection and retention of hearing officers? If an officer dismisses ‘too many’ citations, will they be penalized?

As asked below, but asked again here for emphasis, can the number of appeals favorably granted be published as per the hearing officer?

Are there any procedures in place for a hearing officer to report any negligence or malfeasance, if any should ever occur, in the operation of the system? What protections, if any, would be offered in such cases?

**General**

Will ACS publish statistics that clarify how many citations are dismissed for ‘exceptional’ reasons? Assuming that town vehicles and vehicles of any ‘special category’ might not be excepted, this question might be moot.

**Non-public Communications**

Can ACS be directed to publish any communications with employees of Chapel Hill or with elected officials that directly bear upon the decision to
use these cameras? Could all relevant communications be published to assure the public that all relevant facets of the system are being discussed in an open manner?

What communications, if any, has the company’s lobbyists had with employees or elected officials bearing on the current use of and the continued use of the cameras?

What discussions, if any, has the company or its lobbyist had with employees or officials in terms of defending the usage of these cameras?

Has the company provided speaking points or strategy overviews in defeating any public concerns in deploying the cameras? If so, can these speaking points and suggested PR strategies be published on the website?

What plans, if any, have been discussed with employees or officials, in extending the use of other surveillance technologies offered by ACS? Can these plans, if any, be published on the website?

Retention of Contract

Are their specific performance criteria that ACS has to meet specified in the contract? Are these performance goals tied to the revenue these cameras generate for ACS and the town?

If case of negligence in the operation of the system, will the contract be invalidated? Is there specific numbers of errors that ACS can commit before the contract is invalidated?

For instance, in Los Angeles, the county had to reimburse $500,000 in citations because of an error ACS committed [http://abclocal.go.com/kabc/news/051603_nw_red_light_camera.html], would that be considered enough of a problem to invalidate the contract?

If ACS, or any other vendor operating the system, is deemed to have violated the law or any other ethical standards in the management of this business or any other of its businesses, either here or nationally, will that invalidate the contract (a morals clause, so to speak)?

What legal actions, if any, are currently being taken against ACS as far as these cameras being deployed nationally and within our state? If there are any, could the appropriate information be posted on the web site along with any links to relevant court and settlement documents?

Provisions for Whistle Blowers
What procedures are in place at ACS to handle internal issues with the performance of the system? Is there a policy protecting internal employees if they should ever need to report on negligence in the maintenance or operation of the system? Do these same protections apply if the system is operated in an illegal fashion?

What provisions are being made for employees of Chapel Hill to report potential malfeasance or negligence, if there should ever be any, in the operation of this system? Will reporting these type issues be encouraged above the normal requirements, considering that the town has ceded a policing function to a private company, or will the basic standards apply?

Cost

Where is the detailed breakout of the citizenry's cost in implementing this system? Could this information be published on the website?

Until the town ‘breaks even’, what are the ongoing costs, both direct and indirect being incurred? Can a quarterly break down of these costs be published on the web site?

Under what conditions will the anticipated cost, for Chapel Hill, increase or decrease?

Where is the budgetary line item in the cities budget for these expenses and for managing potential financial liabilities?

If the system is independently audited, who will bear the cost of the audit? How often will this cost be incurred?

Potential Civic Financial Liabilities

What if the town has to refund citations? Will ACS indemnify our community from such costs? Considering the volume of citations ACS plans to issue, what insurance has the town taken out (so to speak), to protect the citizenry from having to cough up a large settlement?

For instance, like $500,000 in the Los Angeles case cited above or the numerous others detailed previously by those standing against this deployment.

Is Chapel Hill prepared to deal with a large class action suit, such as the one presently being pursued in California? Will Chapel Hill have sufficient resources (insurance, etc.) to deal with such a large action (as might be expected if a large number of students, for instance, are cited and decide to act as a class)? Is Chapel Hill immune from such actions considering that it is well publicized that such actions are being pursued, both at the municipal and state levels, elsewhere?
What if someone sues the town after a rear-end accident considering it was probable that the increase in this type of accident is foreseeable? Especially considering today’s litigious society, what protection does the town have from lawsuits that claim that increases in rear-end accidents was a foreseeable outcome of the deployment of these cameras or from those that feel that the system ‘failed’ to protect them adequately?

What if someone sues Chapel Hill because the high intensity flash from the camera causes an accident, especially considering it’s a known consequence of using these cameras?

What liability does the town incur when the number of citations decrease (as it appears they historically do)? As happened in Charlotte [http://www.charlotte.com/mld/charlotte/news/columnists/dr_traffic/6269978.htm], the system became less profitable within a couple years, will that same decrease in revenue cause a financial problem for Chapel Hill?

**Technical Issues Associated with the System’s Proper Functioning and Evaluation**

**Monitoring Effectiveness**

**Efficacy**

What specific criteria is the Chapel Hill transportation department using to assess the success or failure of the red-light camera deployment? What criteria are being used to evaluate the system as a whole? Will metrics be accumulated and posted in a public forum, say the web site, so that the public can review the progress the program is making in its stated goals?

How many failures before the system, as a whole, is considered a failure?

In the criteria for success or failure, is one of the parameters the revenue generated by the camera or is the evaluation done without considering the financial aspect?

**Apples to Apples Comparison of Safety**

*In reviewing the data collection methodology used to justify these cameras, it isn’t obvious why certain intersections were selected.*

Could the specific criteria in selecting these intersections, including the historical accident rates and types, be published?

Could the statistical methodology used to determine these sites also be published? Also, could the some additional analysis be provided to explain why some intersections that seemingly are equivalent were treated differently? In this analysis, how was an ‘apple-to-apple’ comparison performed?
In order to determine the deployment strategy, and to eliminate the profit motive as a compelling factor, this information is required. For instance, one of the complaints against the Charlotte system was that the top 23 intersections for red-light running crashes were not selected or the extremely poor coverage in Los Angeles with only 4 of the 40 top dangerous intersections selected [http://cbs2.com/specialassign/local_story_055160148.html]. How is one to determine whether the same faulty analysis wasn’t applied in Chapel Hill?

Could ITRE publish the relevant NHSTA, NC-DOT or other standards they have and will use in the evaluation of both the systems performance and the selection of additional sites?

**Monitoring New Categories of Accidents**

What additional information, if any, will be gathered to determine if a new class of accidents are occurring at the intersections covered by the cameras? For instance, will additional data be collected on accidents caused by rear ending or caused by the intense flash of the camera?

How will the baseline for accident studies be calculated?

**Calibration of Red-light Cameras and Associated Signals**

*These questions cover areas that should generally eliminate any suspicions that various intersection parameters have been modified in such a way as to increase the revenue stream and decrease safety.*

Can the detailed maintenance logs for each of the cameras be published on the website? Such logs would detail when each camera received maintenance, whether the maintenance was expected or extraordinary (i.e. fixing a mechanical/electrical/software problem), who did the maintenance, etc.

Can the detailed settings of each camera and associated signal light be published? For instance, at Airport Rd. and Estes, what are the red, yellow and green light timings? What is the historical record of modifications for these timings? What justification was used in modifying these timings? Finally, where are the parameters for the settings coming from? Is it ITRE or NC-DOT or NHSTA or some homegrown variant?

As far as the cameras, what are the various parameters they operate on (delay, etc.)?
Can the relevant dimensions of the intersections be published?

Again, at Airport Rd. and Estes (an intersection I drive through at least 8 times daily), it appears that the paint crew modified the stopping line and other markers in the intersection. Why, specifically, was this modified?

Can the relevant work history of the maintenance personnel be published? Will the public be able to determine the work and training history of those people so important to the proper operation of this private ‘policing’ function?

**Validation of the Software Running the Camera System**

Has the software been independently verified to follow the customary standards for high-risk software? If so, what organizations have validated the software?

Is the software that operates this system, both in the camera and the office, available for public review?

What procedures, if any, have been installed to prevent tampering with the software? What ‘in-house’ auditing procedures are in-place to guarantee that the software hasn’t been tampered with?

What steps has Chapel Hill taken to make sure that the software is validated against the normal standards for such high-risk usage?

Considering that this software is directly responsible for the issuance of citations, that there is no real due process and no real governmental oversight, what steps is Chapel Hill taking to verify the software running the system is bug free? What auditing, if any, will Chapel Hill independently perform to verify the proper installation of the operating software? What checks are in place to verify that the software deployed in the processing center and the camera is the properly ‘validated’ and that the software meets the highest level of standards expected for an autonomous policing agent?

What procedures has Chapel Hill instituted to verify that the software deployed in the system is the validated software? Considering that a maintenance upgrade of the software in the camera or elsewhere could cause a variance in its operation, what steps are being taken to ‘re-validate’ the software?
Will any bugs or improper operation of the software, either in the processing office or the camera be tracked? In terms of legal discovery, shouldn’t this information be published on the web site?

What network access, if any, does the camera software utilize? If it does access a network, what precautions have been taken to protect the data flowing across the network? What checks is Chapel Hill prepared to perform to validate the security of these networks? What checks is Chapel Hill prepared to perform to validate that the data on the network cannot be tampered with, altered or created?

What network access, if any, does the processing center utilize? Is this network open to the Internet? What procedures are in place to prevent the tampering, alteration and destruction of data over the network or on the processing machines themselves? What audit policies will Chapel Hill perform to verify ACS compliance with expected security practices?

Validating the Cameras

What procedures, if any, are in place to independently verify and validate the correct functioning of the electrical, mechanical and software components of the deployed cameras?

What independent auditor will perform these tasks?

If the system is audited, will the auditors report be made available to the public via the web site? Will the report contain a record of deficiencies, if any, in the system?

How often will the correct functioning of the cameras be checked?

How often will the software in the cameras be independently checked to verify that it is of the proper, ‘validated’ version?

What penalties does ACS incur if a camera has not been properly calibrated? If a particular camera either repeatedly falls out of proper calibration, for whatever reason, do the penalties increase?

Are the cameras being deployed in Chapel Hill recycled from other jurisdictions (like Charlotte, where ACS lost its contract to operate) or are the brand new? If they’re recycled, will the previous maintenance logs be available for inspection by the public?

Publishing Data Relevant for an Informed Public

Number of Citations and Relevant Additional Information
Given that ACS should be collecting the following data, will ACS publish the following type of statistics on their website in a timely manner (say weekly)?

1. Number of cars recorded by the cameras, broken down by location and by hour.
2. Number of citations issued, again, broken down by location and by hour. It would be great if they published a break down of citations by the amount of seconds the person violated the signal light.
3. A breakdown of the residual cars not cited, broken down by reason.
4. It would be nice if violations were correlated with known public events, say football games, first day of college, vacation breaks, holidays, etc.
5. A break down of violators based on geographic distribution, to whit, in-town (Chapel Hill), Carrboro residents, Durham residents, in-state but out-of-town and out-of-state (say, the parents of our out-of-state students). If possible, it would be interesting to see if the number of students hit with this fine could be determined.
6. A break down showing recidivist.
7. A break down of those, if there are any, excepted for special reasons (emergency vehicles, city vehicles, city buses, etc.).
8. A reporting of monies collected by week, month and year. These monies further broken down into those collected on out-of-state, in-state, etc. (as above).
9. Number of first level appeals and how many were successful.
10. Number of second level appeals and how many were successful.

**Number of Crashes**

Considering that a number of red-light citations are issued to inebriated drivers, how did ACS break out the number of red-light camera citations expected to be issued to this especially dangerous driving subclass?

For instance, ACS has recently published statistics trumpeting the success of the system in Charlotte in reducing the number of red-light intersection accidents. I haven’t been able to find a detailed analysis of this information that breaks out additional contributing factors in this decline, specifically, tougher driving and drinking enforcement or the improvement in Charlotte’s roads or the increased traffic sluggishness at specified intersections that mitigate such collisions. Will ACS be expected to give these type of data break outs so the citizenry can properly evaluate the efficacy of the system?

Prior to the deployment of the system, was any analysis made to determine the number of citations that would be issued to incautious drivers versus dangerous drivers (drunk for instance)? This analysis is crucial, because if
the analysis showed that 80% of the accidents were caused by dangerous drivers, one could only conclude that only our honorable police officers would provide a real defense, as taking a picture of a drunk driver doesn’t forestall their dangerous activity.

Fair and Balanced Website

How can information that contradicts the inaccurate information on the website be added (in the interest of a fair and balanced representation of the red-light camera issue)? I'm assuming, that since this website is associated with our government, this is an acceptable request. So, what is the mechanism for adding these links?

For instance, links to NHSTA studies showing the fallacious reasoning underlying the deployment of red-light cameras or the Australian studies showing a 70% increase in rear-ending? What about adding a comparison/contrast link highlighting the report commissioned by San Diego that repudiates the California auditor’s report (currently posted on the site) or the later auditor’s reports that re-evaluate this earlier report’s conclusions in a somewhat less jubilant fashion?

What review, if any, is being done by Chapel Hill to verify the accuracy of the information presented on the web site?

Privacy Concerns

Most of these questions cover the privacy issues surrounding a for-profit entity managing personal information. In pursuit of their stated business goal, ACS will be handling the sensitive information of possibly hundreds of thousands of citizens. As evidenced elsewhere, this information is a very salable commodity and has to be protected lest it fall into the wrong hands. Imagine this system creating thousands of identity thefts and that should put these questions in perspective.

“Chinese Wall”

Is ACS prohibited from sharing citation or other data with other entities, specifically, ACS affiliated companies, ACS divisions or other 3rd parties? What procedures has Chapel Hill instituted to verify compliance with the any guidelines prohibiting such sharing?

If ACS should ever violate the “Chinese wall”, what are the repercussions? Will Chapel Hill publish the violation? Will this terminate the contract? Are there any financial penalties built into the contract or mandated by law for such a violation? If so, under what conditions are these consequences invoked?
Specifically, under what guidelines, statutes, regulations, etc. will ACS be required to share data with state and federal entities?

**Web Site Privacy Policy**

Why does the web site lack a privacy policy, in contravention of established governmental procedure?

What is the privacy policy as it pertains to communications with the safelight web site? How long are these communications retained? Are the communications, their content and, especially, their return email addresses, distributed to any third parties?

**Data Retention**

How soon, after the determination that a violation has not occurred, will the relevant records be permanently destroyed? What care is taken to destroy backups of this data? What procedures are in place to permanently wipe this data off any storage media?

Are all potential violations, and their associated data, stored at the local processing office? If not, under what conditions is it stored remotely? What procedures are in place to permanently excise the remotely stored data?

For violations that are settled (not appealed), how long is the data retained?

For violations that are appealed, how long is the data retained?

What procedures does Chapel Hill have to audit ACS compliance with data retention guidelines? How often will these audits be performed? Will non-compliance be reported in a public place, like the web site?

**Data Sanctity – Chain of Evidence**

Given that the current process is a subversion of the generally accepted due process requirements most citizens are familiar with, it is extremely important that the rules of evidence used by ACS is above reproach.

I imagine that in most cases, ACS will be assumed to have followed the rules of evidence and have properly maintained the chain of evidence. Still, to retain the public's confidence in the overall fairness of the system, it's of the greatest importance that a proper oversight is performed.

What process, if any, is in place to insure public oversight of the “chain of evidence”? Will an audit trail be available to review every step the data generated by the camera went through before it became a violation? What
records are associated with the violation? Will Chapel Hill audit these records to verify that the proper process was followed in generating a violation? How often will ACS be audited to verify their compliance with the established “rules of evidence”? Will non-compliance be published on the web site?

What access, if any, will someone that appeals a violation have to review the electronic “chain of evidence”? What legal redress will they have to challenge the veracity of the data and to verify that the proper “rules of evidence” were applied? Will Chapel Hill be ‘spot checking’ violations, especially ones under appeal, to verify that the proper procedures were followed? Will this evaluation include checks, if an appellant should ask, of the data captured to make sure no alteration was performed?

If tampering is alleged, what process is in place to forensically determine that data hasn’t been altered? Is Chapel Hill prepared to bear the cost of hiring such an expert or does the town already have access to such an expert?

**Security**

Generally, what procedures has Chapel Hill asked ACS to follow to insure the highest levels of security of the data it will be processing? Will Chapel Hill be auditing ACS for compliance to these procedures? How often will these audits be performed? Will the audits findings be published on the web site?

Are there procedures in place to prevent the unauthorized access to DMV records by ACS or its personnel? Does Chapel Hill have an auditing process to verify that ACS is following the established, if any, safeguards?

Are there procedures in place to prevent an employee of ACS from downloading DMV records or other related, personal, data onto removable storage devices or over the network? Does Chapel Hill have a procedure in place to audit ACS as far as this type security?

What procedures are in place to prevent a town employee from improperly accessing these records?

**Inaccurate Data**

What procedures are in place to correct inaccurate data? If the inaccurate data causes an improper citation to be issued, what is the process for correcting the records? If the inaccurate data results in a notification to a credit bureau, what procedure does ACS have in place to rectify the credit report?
Improper Usage of Equipment

What rules are in place to prevent the retargeting of these cameras for more invasive surveillance reasons? How will Chapel Hill verify that the cameras are being used for their intended reason?

General Questions

Why is Chapel Hill deploying a comparable number of cameras to Raleigh? Considering that Raleigh had documented many more red-light violations and accidents and, obviously, is somewhat larger than Chapel Hill, how is the number of cameras justified?

As brought out in last year’s debate over the deployment of these cameras, it was suggested by the vendor that it would require about 10 cameras to make the system financially worthwhile. Is this why there are 10 cameras proposed for Chapel Hill? Where are the crash and other statistics justifying a similar number of cameras as Raleigh?

Can the contract between the town and ACS be published on the website for all the citizenry to review? I’m sure that the citizens of Chapel Hill can read it and evaluate for themselves whether this was a good deal or not.

Will there the council consider a moratorium on the deployment of privately monitored ‘law enforcement’ technology, such as speeding cameras, crosswalk cameras, ‘beggar’ monitoring or any other type scheme?

If the council will not issue a blanket prohibition on such devices and services, what method will they use to advertise their interest in such deployment? If a company, say ACS, approaches the town trying to sell such services, when will the citizenry be advised? Will defects, if there are any, in the administration of the red-light camera system invalidate ACS from further contracts for any other service with the town?

The web site http://safelight.townofchapelhill.org/safelight/dev/how.htm says that town employees will be reviewing the citations before their issuance. This doesn’t square with the information presented in the public hearings of last year. If this is an accurate, who, specifically, will be reviewing the tickets? What, if any, relationship do they have with ACS? Will ACS be paying these town employees to review the citations? If so, how much (i.e. is there a performance criteria associated with the process)?

Has any consideration been made to the impact this will have on the student population and the relationship between the town and the university? My speculation has always been that the students will be ticketed disproportionately, so, are any procedures in place to monitor the impact of the citations on the students? Has anyone determined if the 30-day limit for appeals is problematic for students that have vehicles registered in their hometown addresses? Is the
town prepared to deal with those students, possibly a majority of students receiving citations, that get the citation to late to appeal because of the citation first goes to their home address?

Has any consideration been made to determine the impact these cameras will have on downtown? As someone that works downtown, it appears that these cameras will drive more people away from downtown, especially when hundreds of citations are given out for what might seem to many a non-violation (paused in intersection, etc.).

**Conclusion**

To sum up, briefly, Chapel Hill has ceded one of its governmental powers, the enforcement of the law, to a private for-profit company.

As citizens, we have generally only awarded such powers to groups whose behavior could be reviewed and modified by our elected officials. Our police department and its fine officers have earned the trust of Chapel Hill’s citizens by performing their duties to a high ethical and honorable degree and by following the specific procedures laid down by the law.

And, when some of these officers have gone astray, the public could be satisfied that the appropriate actions were taken to fix the problems. Why? The actions of the police department in enforcing its own code of standards was open and transparent, there was no hiding from public scrutiny. Of course, if the specified procedures and actions weren’t followed, the public could always challenge the improper actions in an open forum.

It should be the expectation of every citizen that this company perform its duties with the high ethical standards we expect of our government and with the same transparency that is required by our government.

Of course, a company seeking to maximize its profits probably won’t want to act in a transparent fashion. You could expect that phrases like ‘trade secrets’, ‘proprietary interest’, ‘on going patent applications’ being used to hide from public scrutiny. Hopefully, this won’t be the case with ACS.

Finally, and most importantly, it is the expectation of the citizenry that the council is not delinquent in its duty to protect the public interest and scrutinize, on our behalf, the operations of ACS.

Thank you,

Will Raymond
Resident, Chapel Hill