

**INSURANCE INSTITUTE
FOR HIGHWAY SAFETY**

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Received

Albemarle County Board of Supervisors
401 McIntire Road
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Charlottesville, VA 22902

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County of Albemarle
Board of Supervisor's Office

Dear Supervisors:

In a recent letter to the Albemarle County Board of Supervisors, John W. Whitehead, President of The Rutherford Institute, claims that the county's new red light camera program will degrade safety. However, contrary to the claims made in the Rutherford Institute's letter, rigorous scientific research consistently shows that red light cameras reduce traffic violations and crashes, especially serious crashes that result in injury and death. Rather than relying on peer-reviewed research, Mr. Whitehead throws in a hodgepodge of studies or reports, making no distinction between those that were carefully done and others that used questionable methods. We would like to set the record straight.

Cameras reduce red light violations

Red light cameras are effective in modifying driver behavior. Violation rates in Oxnard, California, and Fairfax, Virginia, decreased about 40 percent during the first year of camera enforcement (Retting et al., 1999a, 1999b). Increases in driver compliance with signals were not limited to camera-equipped sites but spilled over to intersections without cameras.

Mr. Whitehead states that "national guidelines have actually lowered the recommended yellow light duration..., apparently in an effort to spawn the implementation of red light cameras across the nation." This statement is incorrect. The current guidelines for yellow timing published by the Institute of Transportation Engineers (ITE, 1985) have been in place since 1985.

Mr. Whitehead further claims that longer yellow intervals can solve the problem of red light running. Adequate timing is important and can reduce signal violations. Research conducted by this Institute and others showed that increasing yellow timing to values associated with the ITE guidelines (ITE, 1985) can significantly decrease the frequency of red light violations (Bonneson and Zimmerman, 2004; Retting and Greene, 1997; Van Der Horst, 1988). But longer yellow timing alone does not eliminate the benefits of red light cameras. A study conducted in Philadelphia evaluated the incremental effects on red light running of first lengthening yellow signals and then introducing red light camera enforcement. Extending yellow lights reduced violations by 36 percent, and camera enforcement reduced the remaining violations by 96 percent beyond the levels that had been achieved by the longer yellow intervals (Retting et al., 2008).

Cameras reduce intersection crashes

In asserting that crashes increase with red light camera enforcement, Mr. Whitehead relies on flawed research. This Institute conducted a careful review of two of the studies cited by Mr. Whitehead to buttress his claim (Burkey and Obeng, 2004; Garber et al., 2007); the review indicates that the researchers failed to incorporate appropriate comparison sites (Kyrychenko and Retting, 2004; Persaud et al., 2008). The result is that the expected number of crashes at intersections where cameras were installed could not be properly estimated, so the effects of the enforcement on crashes could not be determined.

In carefully controlled before-and-after studies, red light cameras have reduced violations 40 to 50 percent and injury crashes 25 to 30 percent. Institute research found significant citywide crash reductions following the introduction of cameras in Oxnard, California (Retting and Kyrychenko, 2002). Injury crashes at intersections with traffic signals were reduced 29 percent. Front-into-side collisions — the crash type most closely associated with red light running — were reduced 32 percent, and front-into-side crashes involving injuries were reduced 68 percent. Crashes declined throughout Oxnard, even though cameras were installed at only 11 of the city's 125 intersections with traffic signals. A subsequent review of international red light camera studies concluded that cameras lower red light violations 40-50 percent and reduce injury crashes 25-30 percent (Retting et al., 2003).

Some studies have reported that, even as red light cameras reduce front-into-side collisions and overall injury crashes, they can increase rear-end crashes in the initial period following camera installation. A 2005 study sponsored by the Federal Highway Administration evaluated red light camera programs in 7 communities, finding a 25 percent reduction in right-angle crashes while rear-end collisions increased 15 percent (Federal Highway Administration, 2005). But because the types of crashes that are prevented by red light cameras tend to be more severe and more costly than the additional rear-end crashes that can occur, the study estimated a positive societal benefit of more than \$18.5 million in the 7 communities.

Not all studies have reported increases in rear-end crashes. In 2005 the Cochrane Collaboration, an international nonprofit organization that conducts systematic reviews of the scientific literature on public health issues, reviewed 10 controlled before-and-after studies of red light camera effectiveness in Australia, Singapore, and the United States (Aeron-Thomas and Hess, 2005). These studies showed a 16 percent reduction in all types of injury crashes and a 24 percent reduction in right-angle crashes. The review did not find a statistically significant change in rear-end crashes (Aeron-Thomas and Hess, 2005). It is important to note that increases in rear-enders also occur when traffic lights are installed.

An initial increase associated with photo enforcement would not be surprising because it means that drivers who would have violated the light before are now stopping, preventing much more severe side-impact crashes.

Despite Mr. Whitehead's claims to the contrary, legal challenges to red light camera programs consistently have been denied by the courts. Mr. Whitehead raises "big brother" concerns and portrays violators as victims. But the real victims are the innocent people who are injured or die in crashes caused by red light runners, and cameras can prevent many of these crashes. On a national basis in 2008, drivers who ran red lights were responsible for an estimated 137,000 injuries and 762 deaths. Nearly three-quarters of the deaths were people other than the red light running drivers. Camera enforcement is not a panacea, but it is a proven way to reduce traffic violations and prevent crashes, especially serious crashes that result in injury and death. We applaud the Board for taking this step to protect the public.

Sincerely,

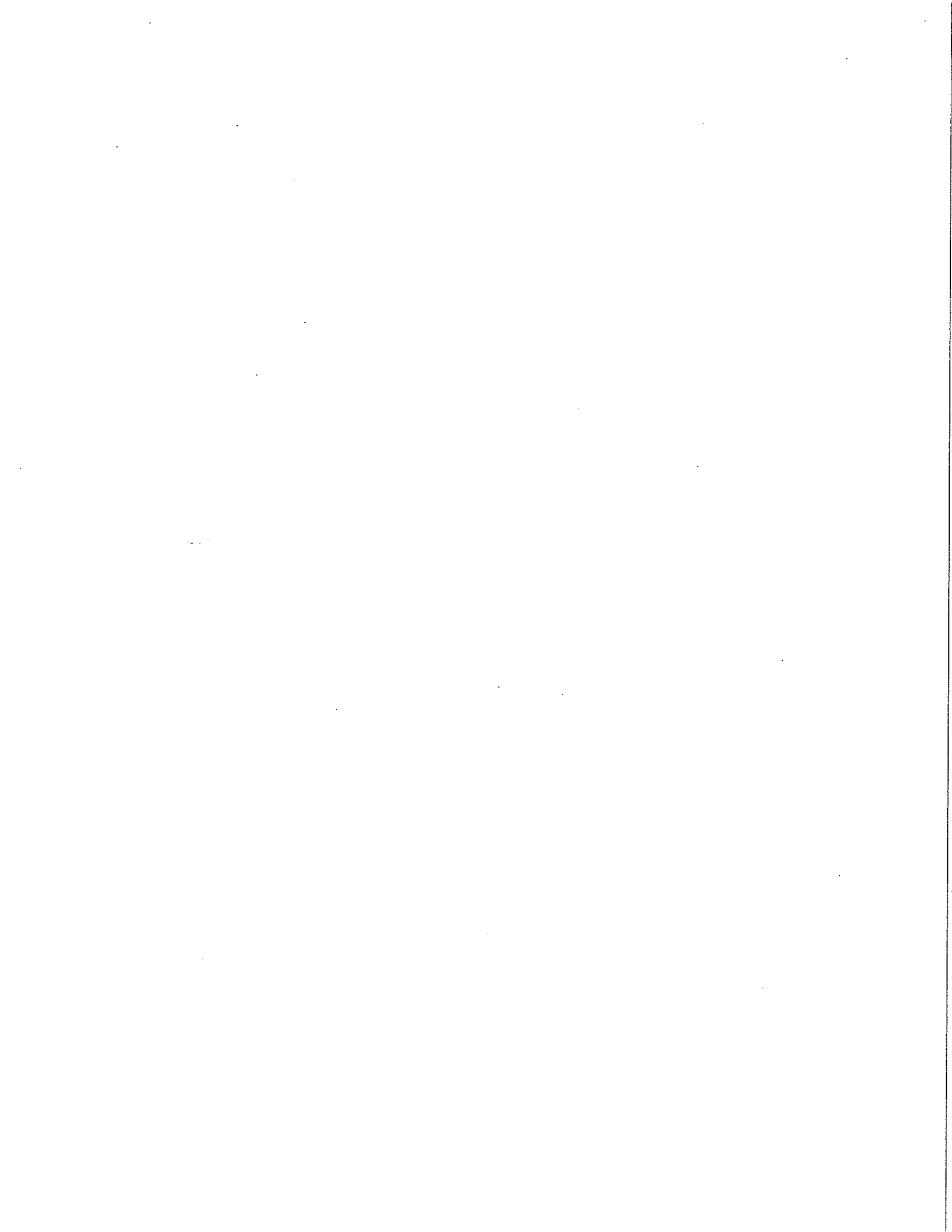


Joseph Nolan
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Enclosure

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Charlottesville, Virginia

December 3, 2010

County's red-light cameras dangerous, illegal, Rutherford says

By Brandon Shulleeta

The Rutherford Institute is contending that Albemarle County's new red-light cameras create new traffic dangers and that the county's contract with the system provider is illegal.

County officials maintain that no state law has been violated and the cameras were installed to reduce the likelihood of severe traffic accidents.

John W. Whitehead, president of Rutherford, a civil liberties organization, said evidence overwhelmingly indicates that the camera systems are "revenue-raising devices" and might actually result in more unsafe conditions at intersections.

The Albemarle-based nonprofit, which sent a six-page letter to the Albemarle Board of Supervisors on Friday, is calling for a halt to the camera program. In the letter, Whitehead cites studies that indicate red light cameras have created an increase in rear-end collisions at some intersections, from drivers who brake suddenly, to avoid citations.

Albemarle Supervisor Kenneth C. Boyd said the letter is "kind of a dragging up of old data," noting supervisors had been presented with reports that showed some localities have seen an increase in rear-end collisions but a reduction of more severe crashes, including high-speed T-bone accidents.

"Rather than trading one type of crash for another as red light cameras do," the county should increase the duration of yellow lights, the institute contends, citing national studies that show crashes drastically declined in some intersections after the duration of yellow lights were adjusted.

The Board of Supervisors voted last year to have the cameras installed at the intersection of U.S. 29 and Rio Road.

Vehicles that enter the intersection a half second after the light turns red trigger the automatic cameras. The vehicle is photographed three times — once to show the light was red, once to show the vehicle's license plate and a third time to show the vehicle in the intersection while the light was red. In addition, a 12-second video is produced, which can be viewed online by the alleged offender.

Violators are mailed notice of a \$50 civil fine, which can be appealed.

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The cameras went live Nov. 12, and for the first 30 days, the county is issuing only warnings. After that, Albemarle plans to begin issuing the \$50 fines, which cannot be increased under state law and do not appear on offenders' driving records.

The county has a three-year contract with Redflex Traffic Systems. The county can be released from the contract if state or federal laws are changed to prohibit or "substantially change" the operation of light enforcement systems, or if a court declares the evidence obtained from the technology inadmissible, according to the contract.

If the county abandoned the system within three years, it would be responsible for paying Redflex for certain non-recoverable expenses, according to the contract, which does not specify how much money the county would have to pay.

Redflex receives the first \$10,000 collected from revenue each month, and the county receives money generated from the fees in excess of \$10,000. The county would not owe Redflex money if less than \$10,000 is collected.

Whitehead argues that the agreement violates a state statute that states: "No locality shall enter into an agreement for compensation based on the number of violations or monetary penalties imposed."

Whitehead's letter states that it appears both Albemarle and the vendor have a "financial incentive to see that as many violations as possible occur."

Boyd responded that supervisors considered the camera lights a safety measure, not a means to generate revenue. "We felt that the best thing that could happen to us was for this company to lose money and for us to ... take the lights out, because that would mean that the situation is corrected," Boyd said.

Annie Kim, the county's senior assistant attorney, said the county's contract with RedFlex "fully complies with state code."

"We use the same payment arrangement used by Newport News and other Virginia localities in their contracts with RedFlex," Kim wrote in an e-mail. "The county's goal has been, and remains, the reduction of accidents and dangerous driving at this intersection — not maximizing the number of citations. We've taken many steps to make sure that the police officers who review each and every potential PhotoSafe violation exercise the same objective and professional judgment they exercise when they're conducting traffic enforcement out in the field. If they don't find a clear violation, no summons will be issued."