

Automated Traffic Enforcement

How Does It Work?

Each year in San Francisco more than 1,000 people are injured or killed in collisions caused by red light violators. In an effort to reduce the number of crashes, injuries and deaths due to red light violations, the City has installed an automated traffic enforcement system at intersections with a high number of crashes caused by red light violators.

Equipment and Photographs

The automated traffic enforcement system is equipped with a computer, high-speed industrial 35 mm camera, high-speed flash, and sensors embedded in the roadway. The Camera Unit, comprised of the computer, camera, and flash, is housed in a locked, tamper-resistant and bullet-resistant cabinet. The cabinet is mounted on a pole located near one corner of the monitored intersection. At many intersections, an auxiliary flash is mounted on a separate pole. The sensors are embedded in the roadway just before the crosswalk or limit line, where vehicles must stop for a red light signal. Two sensors are placed in succession in each monitored lane to detect moving vehicles.

The computer in each Camera Unit controls the camera and flash. The computer is programmed to monitor vehicles crossing over the sensors, determine the approximate speed of vehicles as they cross over the sensors, and record the change of the signal from green to yellow to red. Each computer is programmed so that the camera is powered and activated to take the first photograph of the violation only after the signal turns red. **The camera can only take the first photograph of the violation when the signal is red. The camera is incapable of taking the first photograph when the signal is yellow or green.** When the computer detects the signal has been red for 0.3 seconds or longer and a vehicle passes over the sensors at a speed of 15 miles per hour or greater, the computer will activate the camera to take two photographs of the vehicle. The first photograph is taken when the vehicle is at the limit line: after it crosses both sensors and before it enters the intersection. The second photograph is taken as the vehicle proceeds through the intersection. Violation data from the computer in each Camera Unit is imprinted on the photographs as they are taken.

Equipment Maintenance

Trained technicians maintain and service each Camera Unit on a weekly basis. At the time of their on-site inspections, the technicians document their service and maintenance inspections by filling out a form entitled "Field Technician Service and Inspection Log." Each log includes the date, time, location of the Camera Unit, whether the Camera Unit was operating properly, a description of any malfunction,

and any work performed to fix the malfunction. Each log is signed and dated by the technician performing the inspection. When a technician determines that a system has malfunctioned, the photographs taken during the period the Camera Unit was malfunctioning are destroyed. No 'tickets' (Notices to Appear) are issued based on these photographs. Each Camera Unit has a separate log for each day that the Camera Unit is inspected.

Violation Processing

Trained technicians view the two photographs to ensure that the photographs and violation data show that the vehicle entered the intersection after the signal turned red. By viewing both photographs, the technicians can identify and reject photographs of vehicles that came to a rapid stop as they were crossing the sensors and did not go through the intersection. The process of viewing and verifying the photographs is repeated twice by separate technicians who work independently of each other.

Next, an authorized individual uses the license plate of the vehicle to obtain the name, address, driver's license number, and identifying information of the registered owner of the vehicle from the California Department of Motor Vehicles. A Notice to Appear is prepared and addressed to the registered owner.

The Notice to Appear and all the relevant documentation are presented to a San Francisco Police Officer for review. If the Officer determines that there is reasonable cause to believe that a violation occurred, then the Officer signs and issues the Notice to Appear. The signed Notice to Appear is mailed to the registered owner along with four images of the violation (the two photographs of the violation, and close-up images of the license plate and driver of the vehicle produced by zooming in and cropping the second violation photograph). If the registered owner responds to the Court to identify another driver of the vehicle at the time of the violation, the Notice to Appear may be issued to the driver.

For More Information

For questions about a Notice to appear you received, please contact the Superior Court of California, County of San Francisco at 553-9400.

For technical questions about the automated enforcement system, please contact the Department of Parking and Traffic at 701-4500 or livable.streets@sfgov.org.