



BRIAN S. BOCHNER
INTERNATIONAL PRESIDENT OF ITE

Automated Enforcement Reduces Crashes

Advancing technology has brought a world of wonders to all of us in the past few decades. We enjoy many new conveniences and capabilities from advances in electronics and intelligence/knowledge. In the transportation world we have computer-controlled traffic management systems aided by all the information and intelligence derived from intelligent transportation systems...and it is only just beginning.

THE NEED

In an era of increasing concern about public safety, security and scarce resources, there is pressure to devote as much of the law enforcement agencies' time as possible to pursuing reductions of serious crimes. At the same time, traffic safety remains a concern for most of us since annual average crashes total over 8 million, with about 42,000 fatalities and some 3.4 million persons injured in crashes.

Safety depends primarily on driver compliance with traffic laws, especially speed and assignment of right-of-way at intersections. Crash severity and injuries increase with speed. Injury crashes occur 50 percent more frequently at intersections than anywhere else. Speeding and running red signals contribute to our most severe crashes.

APPLICATIONS

New technology, scarce resources and increased concern for traffic safety have combined to yield a technology which can help in all three areas. That technology is automated enforcement. It has been used for enforcement of laws against:

- speeding;
- running red signal indications;
- entering railroad crossings when gates are down;
- failing to pay tolls; and
- high-occupancy vehicle lane violations.

Automated enforcement uses equipment that detects violations and records a photographic image of the rear of the violating vehicle, focusing on the license plate, and, usually, records another image of the driver. The license number is traced to the vehicle owner. In most cases, a citation is issued if the photo of the driver matches that of the owner's driver's license. In some locales, driver verification by photo matching is not required.

It is reported that automated enforcement is used in over 75 countries throughout the world. However, it has been slow to catch on in the United States so far.

IS AUTOMATED ENFORCEMENT EFFECTIVE?

Results show that automated enforcement has been very effective at reducing both violations and crashes. The feature and side-

bars on automated enforcement in this month's *ITE Journal* show some of the results of this new technology. As you will read in this issue, it appears there have been reductions of 5 percent to 60 percent in speeding violations, reductions of 40 percent to 90 percent in red signal and railroad crossing violations and reductions of 15 percent to 90 percent in crashes. Violators are cited nearly 100 percent of the time—far more than even human enforcement can achieve over extended periods of time. Documented conviction rates have ranged between 75 percent and 90 percent of total citations (excluding those ignored). This gives drivers a bigger incentive to comply with regulations; they know they will be cited for violations. Based on this information, it is clear that automated enforcement can be very effective.

WHY IS IT NOT USED MORE?

Automated enforcement needs state enabling legislation in most states, and that has not been pushed very hard in many states, although several states do have it. The most popular reason is violation of privacy. However, legal experts say that automated enforcement does not violate legal rights to privacy. More likely, the opposition is uncomfortable with the high rate of violations cited. However, despite the perception by some of loss of privacy, one survey showed 60 percent to 80 percent of drivers approve of automated enforcement.

After equipment installation, automated enforcement is less expensive per citation than human enforcement. It also relieves enforcement officers to pursue more serious or threatening crimes. But, automated enforcement is not more prevalent because:

- state enabling legislation is needed;
- complaints about loss of privacy have been expressed;
- the equipment has a significant initial cost; and
- many disagree whether citation of vehicle owners is appropriate in all cases.

WHERE DO YOU STAND ON AUTOMATED ENFORCEMENT?

In this day of rapidly advancing technology and concerns about traffic safety, automated enforcement is an obvious candidate for addition to our profession's toolbox of safety improvements. I encourage you to read about it in this issue and then form your position on automated enforcement. Please also let us know about experiences you know of regarding use of automated enforcement or questions being raised about it. ■