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Automated Enforcement of Red-Light Running and Speeding Laws in Minnesota: Bridging Technology and Public Policy

“Efforts to bridge the promise of automated enforcement technologies with the challenge of public policy are not easy, but they are worth the effort. The gains for the many will be great, but the costs to the few will be worth it.”

— John S. Adams

Study Background

This project examines how Minnesota can reduce deaths and injuries on its roadways—along with the significant financial cost of traffic crashes—using automated enforcement. Additionally, it looks at the challenges of implementing automated enforcement for speeding and red-light running and how to overcome them.

The Problem

Traffic crashes are a serious public health issue: more than 820 people are killed and 50,000 are injured on U.S. roadways each week. The estimated economic cost of these crashes is \$230 billion each year. Red-light running and speeding are two major causes of traffic crashes in the United States.

The Automated Enforcement Solution

Automated enforcement helps reduce dangerous driver behaviors such as speeding and red-light running:

- *Red-light camera systems* automatically issue a citation to drivers who run red lights, and are the most common type of automated enforcement.
- *Automated speed enforcement* systems such as photo radar issue speeding citations to drivers based on license-plate imaging. This technology is used in more than 40 countries and 10 U.S. states.

Research has shown automated enforcement can significantly improve highway safety when implemented correctly. Use of these technologies, however, must be sanctioned with enabling laws passed by state legislatures.



A red-light camera system in Burnsville, Minnesota

The Minnesota Experience

Minnesota's only experience with automated enforcement was short-lived. In 2005, the Minneapolis Police Department launched its Photo-Cop program for automated red-light enforcement to reduce crashes at intersections with the highest crash rates. The program was authorized with a city ordinance.

The Photo-Cop program was declared invalid in September 2006 because it was in conflict with state law and because it placed a presumption of guilt on the vehicle owner. This lower court decision was later upheld by the Minnesota Supreme Court. During this time, there were several unsuccessful attempts to pass enabling legislation at the state level.

Ongoing Debate

Even in states with enabling laws, automated enforcement remains a contentious issue. The challenges of automated enforcement include:

- **False Accusations.** Vehicle owners can be improperly cited when they allow other drivers to use their vehicles.
- **Safety vs. Revenue.** Opponents argue the real motivation behind automated enforcement is increased revenue, not safety—even though revenue is often directed back to law enforcement.
- **Privacy.** Automated enforcement cameras are triggered only when a violation occurs and are not used for surveillance, but critics argue the cameras intrude on privacy. The courts have not upheld this argument.
- **Procedural Issues.** Though opponents say violators are entitled to immediate notification when a violation occurs, laws dictate citations can be issued any time within the statute of limitations.
- **Technology Reliability.** Some claim automated enforcement technologies make mistakes; however, decades of use have shown them to be reliable.
- **Public Attitudes.** Support of automated enforcement depends largely on public attitudes toward traffic safety. For example, a 1998 study found 71 percent of the general public favored the use of automated devices for speed enforcement.

Looking Forward

Because of the effectiveness of automated enforcement, the trend toward greater use will likely continue. Twenty-five states currently have laws enabling automated enforcement, and most courts affirm the constitutionality of these laws.

Minnesota has not yet implemented automated enforcement—doing so would require 10 steps:

1. Establish partnerships among the legislature, law enforcement, the judiciary, the media, state and local transportation agencies, and local jurisdictions.
2. Pass state enabling legislation and adopt appropriate local ordinances.
3. Establish a statewide public education program supporting automated enforcement.
4. Select the appropriate automated enforcement technology.

5. Involve the judiciary in automated enforcement planning efforts.
6. Clarify privacy issues.
7. Establish reasonable lag times between time of the infraction and receipt of the citation.
8. Design an appropriate revenue collection, allocation, and use system.
9. Work with traffic engineers to ensure automated enforcement is compatible with locations where it will be used.
10. Ensure the selection of locations for automated enforcement is based on quality traffic data.

About the Research

This report was authored by John S. Adams, professor emeritus in the Department of Geography and co-director of the University Metropolitan Consortium, and Barbara VanDrasek, a geography research associate. The research was sponsored by the University Metropolitan Consortium (www.umn.edu) and published by CTS. The final report—*Automated Enforcement of Red-Light Running & Speeding Laws in Minnesota: Bridging Technology and Public Policy*—is available for download at www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=1832.