



RESEARCH PROJECT CAPSULE [10-3SS]

May 2011

TECHNOLOGY TRANSFER PROGRAM

Automatic Enforcement and Highway Safety

JUST THE FACTS:

Start Date:

June 6, 2011

Duration:

24 months

End Date:

May 31, 2013

Funding:

State

Principal Investigators:

Susan B. Herbel, Ph.D.

Cambridge Systematics, Principal

202-494-5539

Administrative Contact:

Mark Morvant, P.E.

Associate Director, Research

225-767-9124

Technical Contact:

Chester Wilmot, Ph.D.

Professor

Louisiana State University

225-578-4697

Louisiana Transportation

Research Center

4101 Gourrier Ave

Baton Rouge, LA 70808

Sponsored jointly by the Louisiana

Department of Transportation and

Development and Louisiana State

University

POINTS OF INTEREST:

Problem Addressed / Objective of
Research / Methodology Used
Implementation Potential

PROBLEM

Louisiana has mounted a strong and successful campaign to drive down fatalities and serious injuries on the state's roadways. The effort is led by the Louisiana Department of Transportation and Development (LADOTD), Louisiana Highway Safety Commission, and Louisiana State Police and includes a broad range of partners and stakeholders. The effort is coordinated by the Strategic Highway Safety Plan (SHSP) and is branded by the Destination Zero Deaths logo.

Louisiana ranks third in the nation for pedestrian fatalities per 100,000 populations, and of the 912 total traffic fatalities in Louisiana in 2008, 84 percent occurred on state and local roads. One possible strategy for improving safety within the constraints of limited manpower is automated enforcement. Properly deployed, automated enforcement can modify dangerous driver behavior while allowing scarce law enforcement resources to be used elsewhere. LTRC and LADOTD are interested in developing policies and procedures that promote safety but, at the same time, conform to the public's expectations regarding appropriate enforcement policies and procedures in their communities.

Louisiana has already applied automated cameras to address red light running violations in various communities in the state. In some cases, their installation has resulted in negative public opinion, which, in the long run, could produce city ordinances and/or statewide legislation contesting their use. For example, the American Civil Liberties Union (ACLU) of Louisiana issued a press release in 2006 criticizing the red light camera program in Jefferson Parish.

The research to be conducted in this study is aimed at developing a set of protocols, policies, and strategies that address public concerns while still exploiting the benefits of automated red light camera enforcement.

OBJECTIVE

The objectives of this research are to:

1. Identify aspects of the automatic detection of red light running that the public finds offensive or problematical, and quantify the level of opposition on each aspect.
2. Identify aspects of the automatic detection of red light running the public supports, and quantify the level of support on each aspect.
3. Quantify the safety impact of automatic enforcement versus traditional enforcement in countering red light running.
4. Develop alternative policies and strategies aimed at addressing public concerns of automatic enforcement of red light running.
5. Conduct an economic evaluation of implementing automatic enforcement applying the alternative policies and strategies versus applying traditional enforcement.
6. Develop recommended practices.
7. Document results and recommendations.

METHODOLOGY

The research will be completed by conducting the following sequential set of tasks:

1. Identify the state-of-the-art automated enforcement by conducting a comprehensive literature review and collecting data on application of automated enforcement in Louisiana, including information on public opinion, equipment, costs, and safety statistics from before and after installation of equipment.
2. Use information from the first step to develop survey instruments to measure support and opposition to red light camera enforcement. The survey will be aimed primarily at the public but will also include stakeholders such as city officials, law enforcement, local engineers, and others.
3. Develop alternative policies and strategies that address the problems and positive aspects of current practices. The policies and strategies will be aimed at promoting safety while addressing the concerns of the public.
4. Evaluate alternative policies and strategies. The evaluation will include both qualitative and quantitative aspects of the policies and strategies and will include the "do nothing" alternative. Costs will be estimated from local sources as well as from studies in other states.
5. Develop recommended procedures. Recommended practice will be compiled in a manual with detailed instructions for developing, implementing, and evaluating an effective red light camera automated enforcement program. The manual will contain checklists, templates, outreach programs, guidance on site selection and operation, equipment specifications, and enforcement procedures.

IMPLEMENTATION POTENTIAL

The research team will develop a detailed marketing and communications plan as part of the instructions in the manual to facilitate application of the recommended policies and strategies emerging from this study. The marketing and communications plan will identify a target audience, establish an overall objective, and outline the strategies and tactics required to market the automated enforcement in Louisiana. Specifically, the implementation and marketing plan will include the following elements:

- Introduction
- Objective
- Target audiences (i.e., city officials, community administrators, metropolitan and regional planning organizations, city and county engineers and transportation planner, law enforcement, etc.)
- Communication strategies (i.e., memo from the office of the mayor or city manager, brochures, tip cards, newsletter articles, PowerPoint presentations with speaker notes, and web notices with links)
- Communication tactics (i.e., press releases, media events, web site postings, e-mail blasts, newsletters, webinars and conference presentations, conference distribution, etc.)
- Detailed development and distribution schedule
- Resource requirements
- Budget estimates