Overview
Red Light Running Camera Enforcement in Rhode Island

New England ITE Meeting

December 5, 2011

Robert Rocchio, P.E.
Managing Engineer,
RIDOT-Traffic Design
Initiated by City of Providence in 2003.

District Court cautioned that a State Statute was needed.

Providence Congressional delegation introduced the “Rhode Island Automated Traffic Violation Monitoring System (ATVMS) Act of 2005”
Background (Cont’d)

- Support by Highway and Safety Officials, Municipalities, and Insurance Institute (IIHS).
  - Safety Benefits ... Number and severity of crashes reduced
  - Revenue Source

- Received Opposition from ACLU & NMA
  - Ability to challenge ticket harder
  - Privacy concerns
  - Potential for abuse by inducing violations
  - Could discourage engineering solutions
Rhode Island General Laws Section 31-41.2-1 et seq.

Broad policy

“utilize the best available technology for the monitoring and prosecution of civil traffic violations, including automated traffic violation detection systems.” R.I. Gen. Laws § 31-41.2-2.

Limited authorization

- red light running enforcement cameras only
- sunset provision effective July 19, 2008 (subsequently repealed)
ATVMS LAW – Highlights (cont’d)

• Requires approval from DOT Director prior to installation.

• Requires DOT Director to promulgate rules and regulations.

• Prohibits compensation to vendors based upon the revenue generated by such systems.
Further requirements:
- Photo enforcement signs
- Annual reports
- Citations to be issued within 14 days

Nature of violations: Civil, not criminal

Privacy Protections
- Photographs are not “public records” and must eventually be destroyed
ATVMS – Goals of Program

- Increase Safety
- Revenue Generation Not a Concern
- Maintain Public Support
Questions to be answered:

- Single/multiple vendors selected/pre-qualified by DOT through RFP Process?
- Would Towns choose own vendors?
- Who would pick locations?
- Who would administer the program?
- Who pays to install and maintain Systems?
- Etc.
Approval Process

• **Vendor**
  • Technical specs submitted by city/town.
  • No specific technology criteria.
  • Once approved then placed on pre-approved list.

• **Intersection**
  • Engineering study report required.
  • Intersections Selected by City or Town.
  • Permit also Required at State Owned intersections.
  • Review of Annual reports (violations, crashes, etc.)
ATVMS Minimum Requirements:

- Recorded image of vehicle and rear plate prior to entering intersection.
- Recorded image of vehicle and rear plate in intersection during a red indication.
- Time, date, location, and duration of red at time of entry.
- Min. delay or "grace" time of .2 seconds.
- Yellow interval verification.
1. Intersection meets traffic signal warrant criteria.
2. Yellow times in conformance with ITE Handbook.
3. Yellow times adjusted for 85th percentile.
4. All red intervals set to a minimum of 1 second.
5. Signal faces un-obstructed and sight distance o.k.
6. Signal face horizontal & vertical locations meet MUTCD.
7. Signing visible and legible.
8. Signal timing optimized to current traffic conditions.
9. If actuated, all detectors working properly.
Status

- 2 Approved Systems
- Operational in 1 City (Providence)
- 15 Intersections
- 25 Cameras
Providence ATVMS Program

• 25 Camera Approaches
• 7 Operational in 2006
• All operational by April 2007
Results

- # of Violations
- # of Crashes
- Economic Benefit
Providence ATVMS Program Results
Providence ATVMS Program Results

Total Violations - 2007 thru 2010

# of Violations

YEAR
2007
2008
2009
2010

Total Violations Graph
Providence ATVMS Program Results

Total Crashes - 2007 thru 2010

Total Violations - 2007 thru 2010
Providence ATVMS Intersection Results

Crashes by Intersection Approach - 2007 thru 2010

- Angell St @ Gano St Westbound
- Steeple St @ Canal St Westbound
- Waterman St @ Gano St Eastbound
- Oakland St @ Chalkstone Ave Southbound
- Oakland St @ Chalkstone Ave Northbound
- Oakland St @ Chalkstone Ave Westbound
- Broad St @ Baker St Northbound
- Broad St @ Baker St Southbound
Providence ATVMS Intersection Results

Crashes by Intersection Approach - 2007 thru 2010

- Service Rd 7 @ Atwells Ave Southbound
- Service Rd 8 @ Atwells Ave Northbound
- Service Rd 7 @ Broadway Southbound
- Service Rd 8 @ Broadway Northbound
- Eaton St @ Husley St Eastbound
- Easton St @ Husley St Westbound
- Admiral St @ River St Eastbound
- Admiral St @ River St Westbound
Providence ATVMS Intersection Results

Crashes by Intersection Approach - 2007 thru 2010

- Smith St @ River St Eastbound
- Smith St @ River St Westbound
- Eddy St @ Thurberson Ave Northbound
- Eddy St @ Thurberson Ave Southbound
- Valley St @ River St Northbound
- Valley St @ River St Southbound
- Pocasset St @ Webster St Southbound
- Pocasset St @ Webster St Eastbound
- Pocasset St @ Webster St Westbound
Next Step:

- RIDOT administered statewide program
  - Providence program successful and effective.
  - FHWA and IIHS release reports showing similar results nationally.
  - Smaller communities have requested state assistance.
  - Delaware DOT statewide program to be used as model.
  - **Enabling legislation to be submitted in 2012 session.**
References: