

Work Zone Safety Photo Radar Speed Enforcement

Priscilla Tobias
Illinois Dept of Transportation
State Safety Engineer



Illinois Department
of Transportation



Work Zone Fatalities

2001

36 Fatalities

1 worker

15 rear-end

2002

31 Fatalities

1 worker

4 ped.'s

2003

42 Fatalities

5 workers

13 rear-end

2004

38 Fatalities

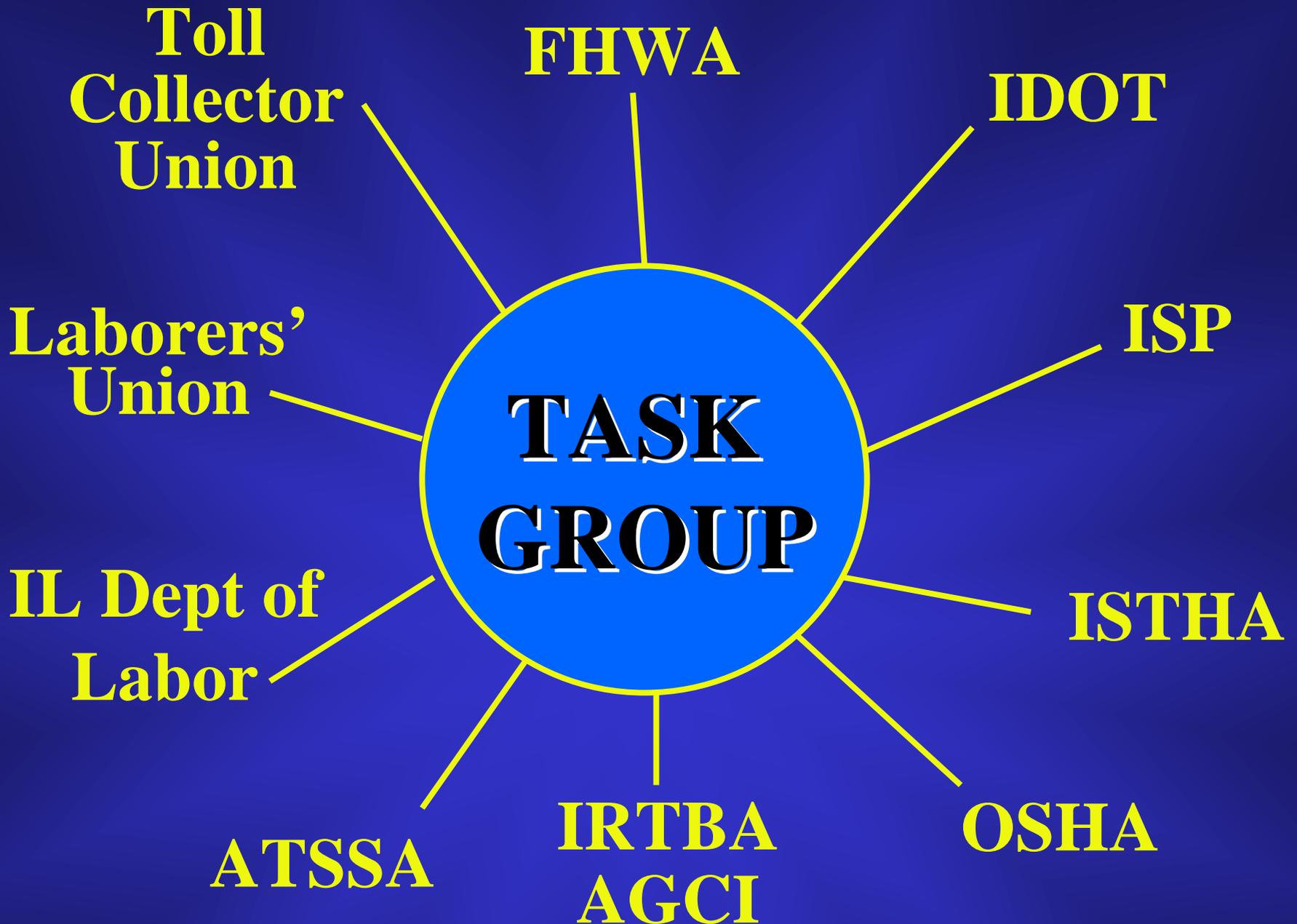
2 workers

5 ped.'s

2005

25 Fatalities

1 worker



Recent Legislation

- **WZ Fines**
- **Photo Enforcement**

Work Zone Fines

- **\$375**
- **\$1000**
 - **90 day suspension**
- **Mandatory Court Appearance**



**Dependent on signs,
not workers present**

Appropriate Signing



Photo Enforcement

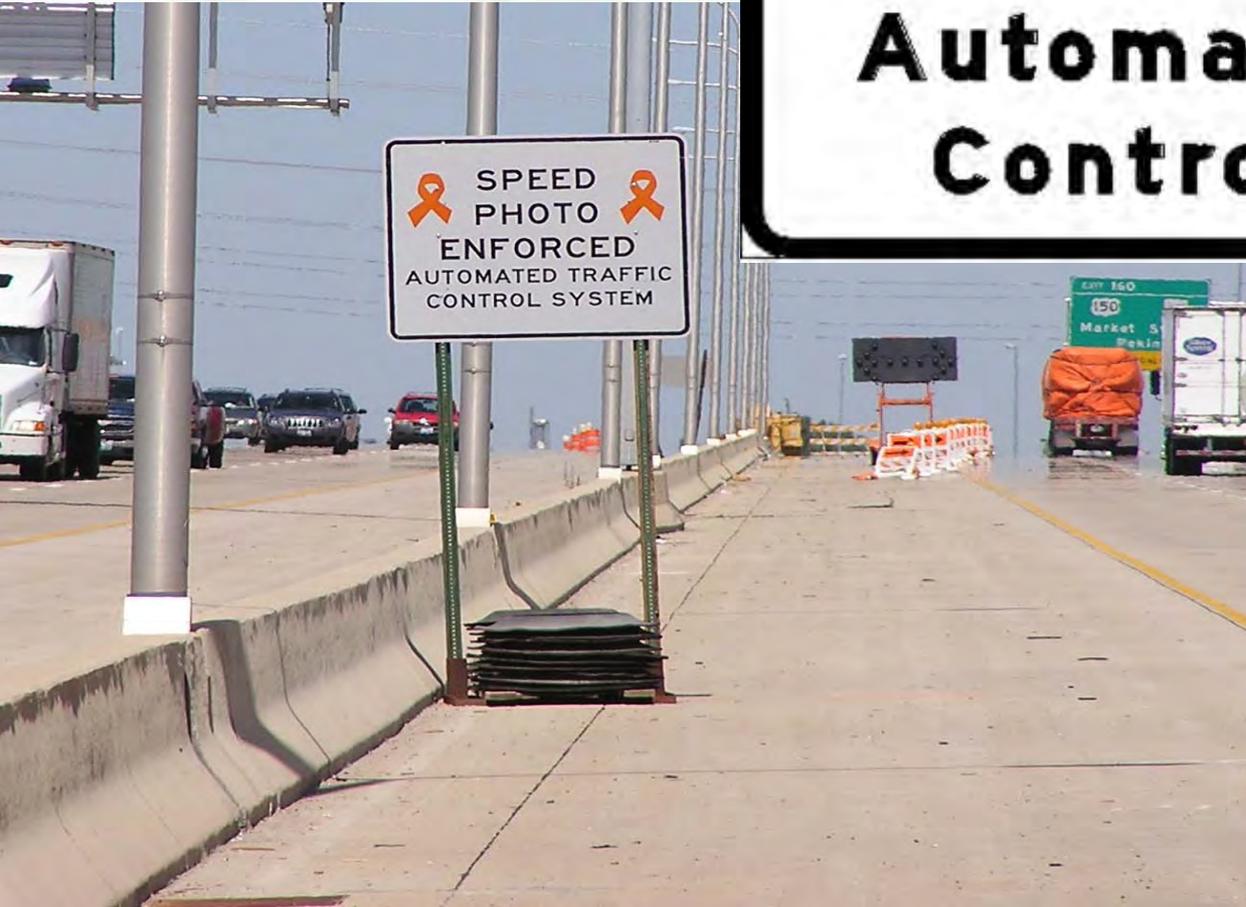


Photo Enforcement

- **Work Zone Fines Apply**
- **Workers Present**
- **No Restriction on Time of Day**
- **WZ Must be Signed**



**SPEED
PHOTO
ENFORCED
Automated Traffic
Control System**



 **SPEED
PHOTO** 
ENFORCED
Automated Traffic
Control System



Photo Enforcement

- **Picture of Driver & License Plate**
- **Time, Date, & Location**
- **Violation Tied to Driver**

Photo Enforcement

- **Sent Certified Mail in
6 Business Days**
- **Trooper NOT Required**
- **Public Awareness Campaign**

Photo Enforcement Vehicle



ILLINOIS
STATE
POLICE



990 7845

STAY ALIVE
DRIVE 45

CHEVROLET

EXPRESS

Down the Road Radar

YOUR SPEED



Enforcement Radar

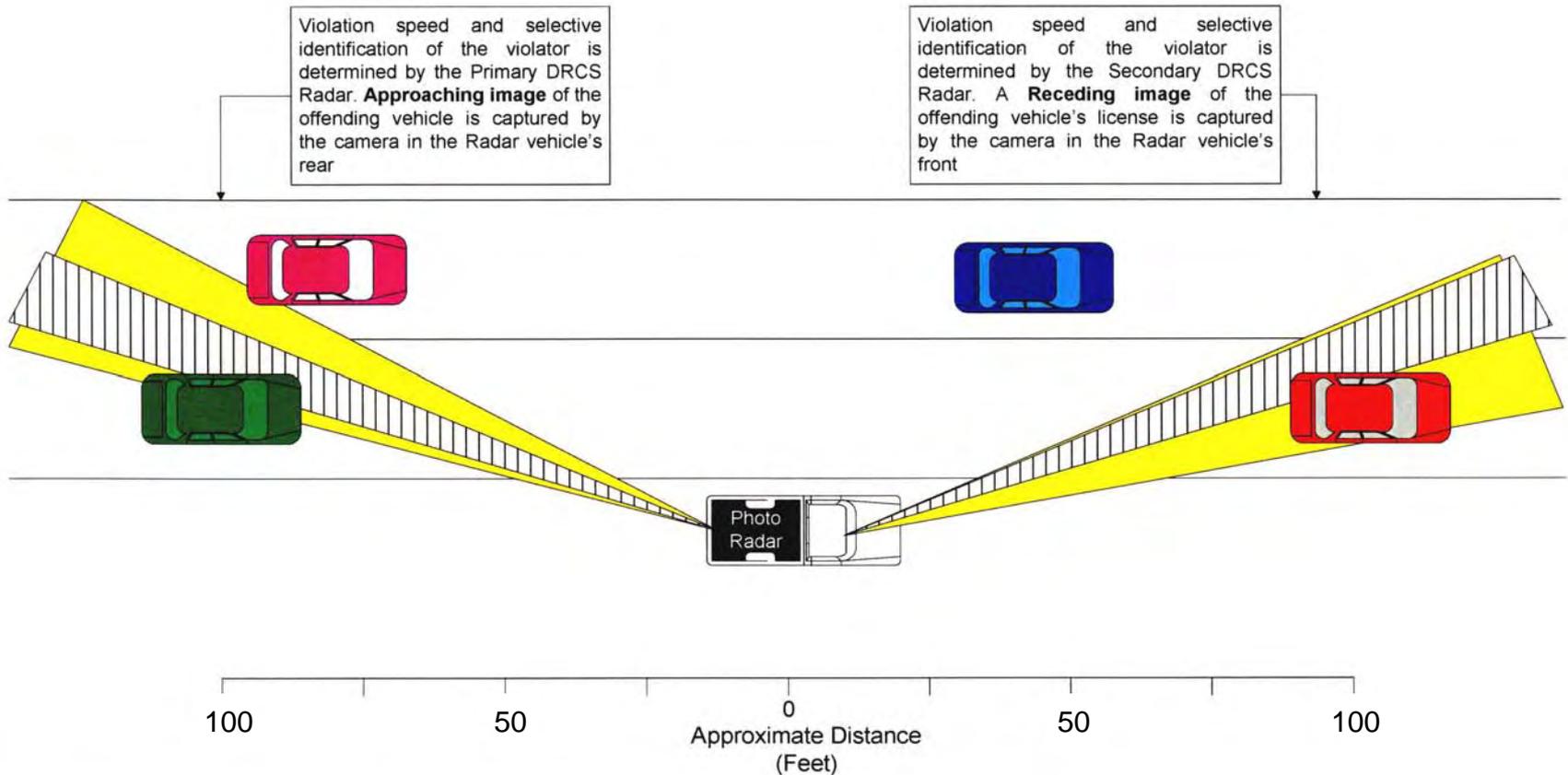


Antenna



The antenna is located in a box on the back door. It is encased to protect it from corroding. It emits a frequency that reflects back to determine the speed of a vehicle.

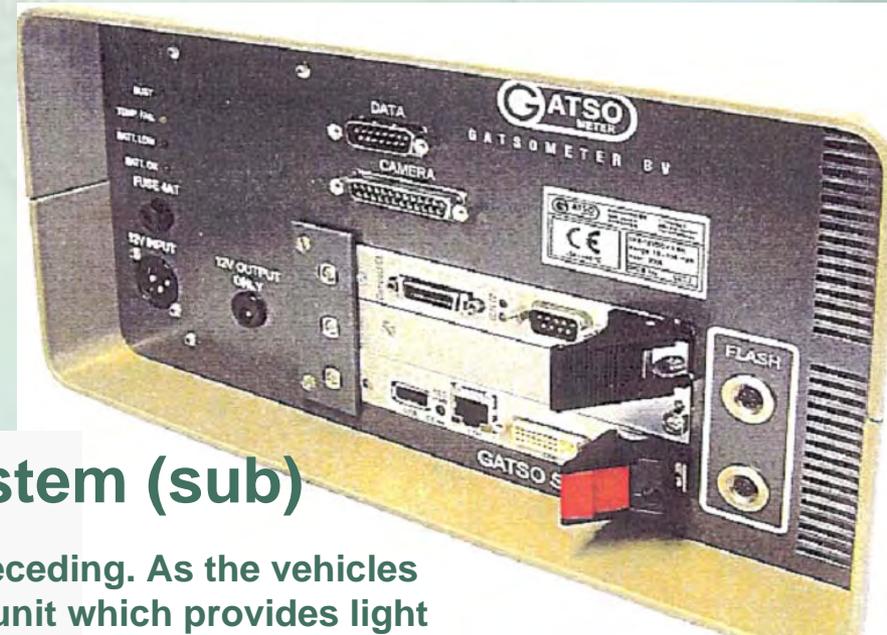
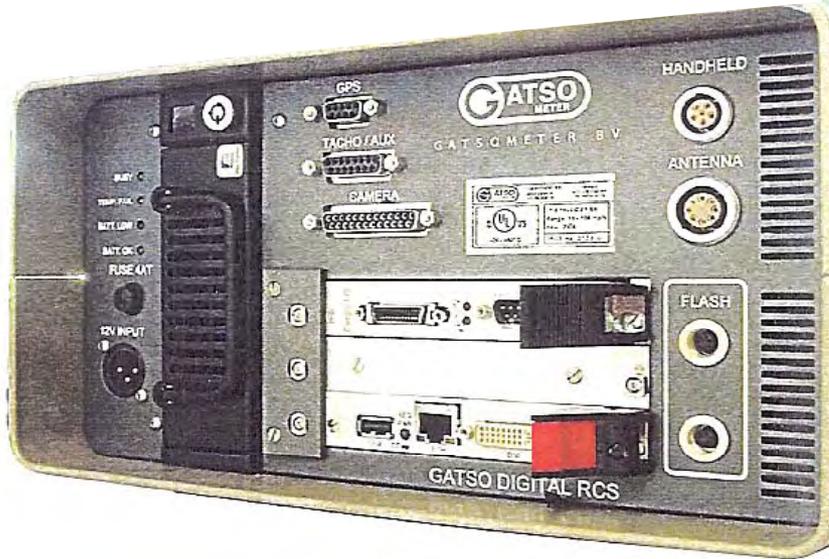
Photo Radar Workzone Unit with Dual Camera DRCS System



During operation the van is parked parallel to the lanes of travel and can operate effectively either inside or outside of Jersey barrier.

The Components

DRCS - Digital Radar Camera System (main)



DRCS - Digital Radar Camera System (sub)

The sub DRCS processes the photos taken of vehicles receding. As the vehicles drive away from the vehicle, a signal is sent to the flash unit which provides light for the rear license plates on a car. The signal is then written to the hard drive located on the main DRCS.

Handheld Control Unit (HCU)



The Handheld Control Unit (HCU) is used to program the system. Upon powering the system, this HCU is set up to perform a series of self-tests to ensure all systems are functional and communicating with each other.

An internal tuning fork is incorporated for the most accurate testing available. Prior to a deployment, the trooper reviews a checklist to test the continued accuracy and functionality of the equipment.

This checklist is another step utilized to provide a stronger evidence package.

Cameras



The primary camera which is located at the rear of the vehicle captures drivers who are exceeding the threshold that the user programs into the system via the handheld unit.

The front camera captures the rear license plate as the motorist drives away.



Paging Unit

This device promptly alerts all work zone employees that a vehicle is approaching them at an excessive speed.

This speed is programmed into the system at the beginning of the deployment.

20 pagers per vehicle will be provided to help prevent work zone fatalities.



Deployment Station

Flash Units



The rear of the vehicle contains (2) 140 watt bulbs. This is utilized to provide light to identify the driver as well as light up the environment.

The receding light (not shown) provides much less light-enough to provide brilliance to identify the license plate.



Citation



ILLINOIS STATE POLICE
Sangamon County



Notice of Infraction

Mail Date: 06/10/05

REGISTERED OWNER INFORMATION

S013883011

Diane Vander Kooy
500 Iles Park Place Suite 100
Springfield, IL 627032982

Your vehicle was photographed violating Section 11-605.1 of the Illinois Vehicle Code on the date and time listed below. Under Illinois State law, the vehicle operator is liable for the violation recorded using an automated traffic enforcement system. The penalties for and consequences of a traffic violation recorded by an automated traffic control system are the same as for any similar violations of the Illinois Vehicle Code. The basis for the citation is the photographic images recorded by the automated traffic control system.

On the back of this notice you will find detailed information and instructions regarding payment and ticket adjudication.

VIOLATION INFORMATION

Ticket Number: S013883011
Issue Date: 12/14/04
Issue Time: 10:30 AM
Violation Code: T119
Description: Speed Photo Radar
Location: Test Location
Vehicle Tag: IL 0173
Vehicle Make: 4DR
Vehicle Speed: 63mph
Posted Speed: 35mph
First available court date: January 20, 2005

Your answer to this notice of infraction must be received by the payment due date listed below.

Failure to pay the fine or otherwise answer in the manner and time required is an admission of liability. This will result in additional penalties and the loss of your right to a hearing. In addition, your home state may place a hold on the renewal of your vehicle registration.



Detach and return this portion with your payment in the envelope provided, or you may pay your ticket through the Internet at <http://www.isp.state.il.us>

Ticket Number: S013883011 **Vehicle Tag:** IL 0173 **Mail Date:** 06/10/05

Payment Due Date: 07/10/05
Initial Fine Amount Due: \$375.00

You can view full color version of the image below at
<http://www.public.cite-web.com>

Citation Number: 01388301 Pin Number: 273857565

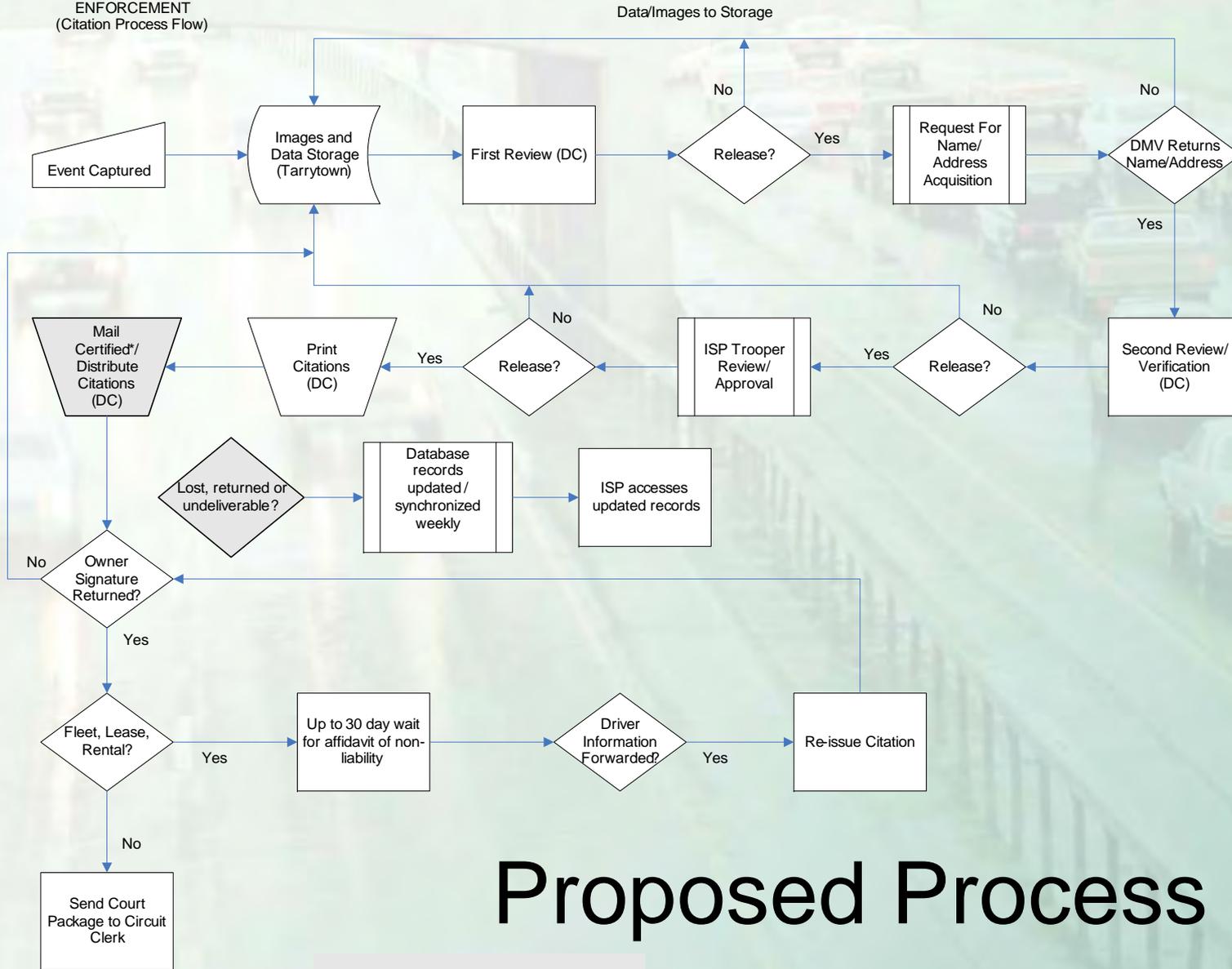
Amount Paid: \$

55004N2000250001112340000000R00000001507500015000

Citation



ILLINOIS WORK ZONE PHOTO
ENFORCEMENT
(Citation Process Flow)

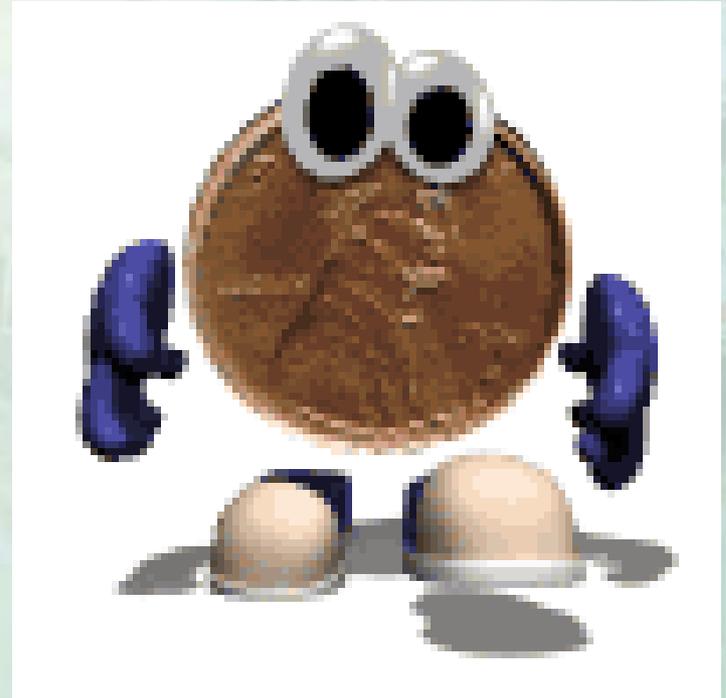


Proposed Process Flow

Mail Certified / Return Receipt Requested
(Owner only can sign for Delivery)

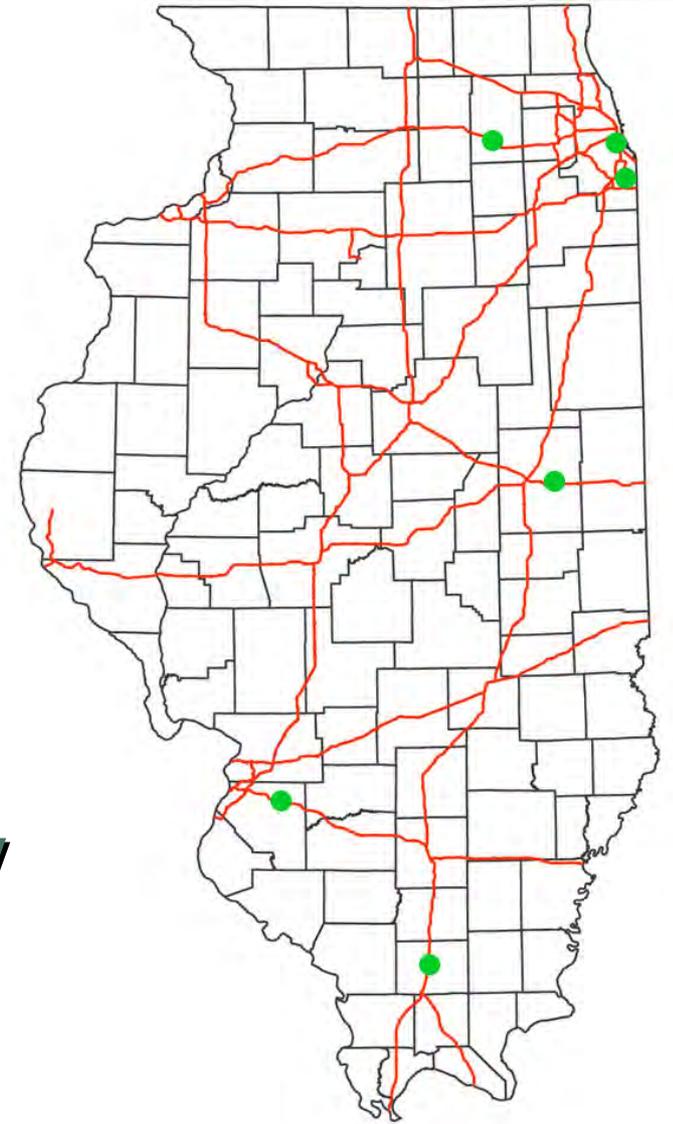
Cost for Service

- \$2,950/ month/van
 - Vans
 - Equipment
 - Maintenance Service
 - Upgrades
 - Training
- \$15/ticket issued
 - Processing violation
 - Certified Mailing
 - Court Packets



Locations

- **Dan Ryan**
- **Kingery**
- **Tollway**
- **I-64 St. Clair County**
- **I-74 Champaign County**
- **I-57 Williamson County**



Hurdles

- **State Level Program/102 County System**
- **Out of State Drivers**
- **Moving Violation vs Administrative**
- **Must Appear in Court**
- **Educating the Court**
- **Inexperienced Vendor**

Innovative Enforcement Techniques

Trooper in a Truck



QUESTIONS ???

