### Welcome



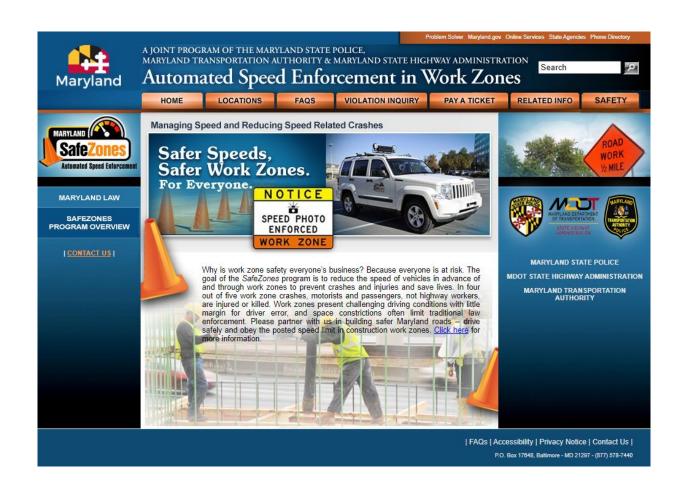


# MD SafeZones Automated Speed Enforcement

Work Zone Safety Peer Exchange March 8, 2023

### **Outline**

- Introduction
- Background
- Automated Enforcement
- Current Operations
- Office Processing
- Reporting
- Media Coverage
- What is Coming Next



### Introduction

#### **Program Goals**

- Change driver behavior using an integrated 3-E approach
- Promote awareness of speed-related safety issues
- Enhance worker and motorist safety by the reduction of or normalization of speed in work zones

#### **Program Partners**

- State Highway Administration (SHA)
- Maryland Transportation Authority (MDTA)
- Maryland Transportation Authority Police
- Maryland State Police











officers' ability to perform traditional traffic stops in work zones. The Maryland SafeZones program places automated speed enforcement technology in construction work zones to encourage drivers to travel at safer speeds. The overriding goal of the SafeZones program is to change driver behavior in work zones making these areas safer for workers.

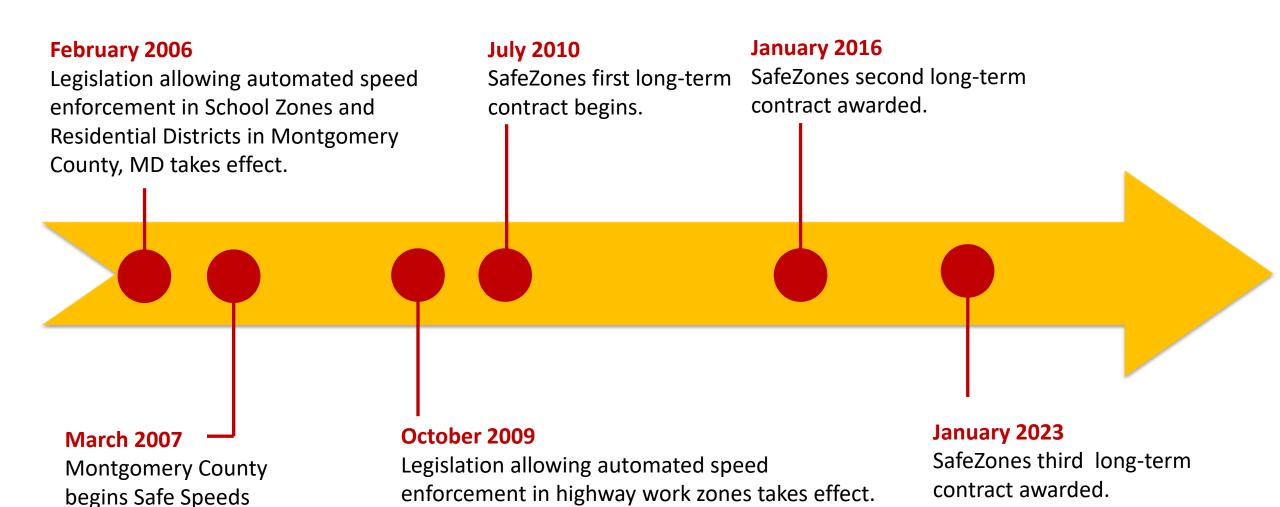
#### SafeZones basics:

- The law authorizing automated speed enforcement in work zones became effective
- SafeZones mobile enforcement vehicles can be used in work zones on expressways and controlled access highways with a 45 mph
- · Larger signs will be posted to give drivers adequate advance notice of work zones with automated speed enforcement.
- SafeZones mobile enforcement vehicles will rotate among eligible work zones throughout the State. The equipment will be
- tested for proper function at each work zone According to a recent Insurance Institute
- of Highway Safety study, on Montgomery County roads with automated speed enforcement and warning signs, there was a 70 percent reduction in drivers traveling more than 10 mph over the speed limit.

SafeZones Customer Service 1-877-578-7440 www.safezones.maryland.gov

# Background

program.



Maryland begins SafeZones Pilot Program.

### **Automated Enforcement**

### Other types of automated enforcements

- Red lights
- Insurance
- Cellphone
- Seatbelt

#### **Distracted driving**



Photo from Baltimore Sun

#### **Red light running**



**Photo from Howard County** 

### Background

#### **Pilot Program**

- Oct. 1, 2009 to June 30, 2010
- Issued warnings until November 15, 2009
- Two (2) mobile enforcement vehicles
- Radar-based technology
  - Integrated LIDAR in 1st vehicle in April 2010, 2nd vehicle in June 2010
- Five(5) work zones nearly 55,000 citations and warnings issued

#### **Long-term Program**

- Seven (7) enforcement vehicles
- LIDAR-based enforcement technology
- Ten (10) deployments per vehicle per week
- Double shifts
  - Daytime AM (6 AM to 3 PM)
  - Nighttime PM (7 PM to 4 AM)
- Deploy on any day of the week, even if workers are not present
- Rotate vehicles based on work zone activity
- 3500 deployments (28,000 hrs) per year



#### **Project Selection**

- Expressways/controlled access highway, min. posted speed 45 mph
- Worker exposure/motorist hazards
- Lane shifts, lane width reduction, lane splits, closed shoulders, shortened acceleration/deceleration lanes, rough pavement, etc.

#### **Project Coordination**

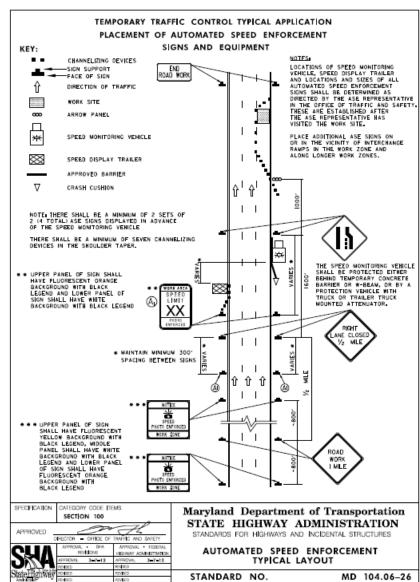
- Design Engineer: Signing, vehicle location and protection, contract pay items
- Construction Contractor: Phase changes, construction activities, vehicle location
- ASE Contractor: Deployment schedules, customer service, back-office work, courts

- Location: Expressways & Controlled Access Highways
- Settings:
  - Two sets of signs, each set comprised of two signs (minimum requirement by law)
  - Speed Display Trailer
- Speed threshold: 12 mph over posted
- Operator present: Yes, continuously manned









#### **System Operations**

- Annual Equipment Calibration
- Daily System Self Test and Logs
- Operator Training
- Sworn Police Officer Verification/Image Review





#### **Penalties**

Element	Rule
Warning Period	21 days for each new site
First	\$40
Second	\$40
Third +	\$40
Points?	No, Civil Penalty



#### CITATION

#### WORK ZONE SPEED MONITORING SYSTEM TRANSPORTATION ARTICLE §21-810

Mail Date: 11/01/09

John Q. Citizen 1234 Main Street Baltimore, MD 21227

Please take notice that the vehicle described and pictured herein was detected and recorded by a work zone speed monitoring system exceeding the posted speed limit by at least 12 mph in violation of Title 21, Subtitle 8 of the Transportation Article. The pictured vehicle was traveling at the speed listed below at the place, date, and time specified. Therefore, under Maryland State Law TA 21-810, as the registered owner(s) or lessee (six months or more) you are liable for the violation. Unless you elect to go to court, a civil penalty in the amount of \$40.00 must be paid by the date due shown on this notice.

PAYMENT OF THE PENALTY AMOUNT FOR THE VIOLATION IS AN ADMISSION OF LIABILITY; HOWEVER, IT WILL NOT RESULT IN POINTS ON YOUR DRIVING RECORD AND CANNOT BE USED TO INCREASE YOUR INSURANCE RATES.

WARNING: FAILURE TO PAY THE PENALTY SHOWN OR TO CONTEST LIABILITY AS DESCRIBED IN THE NEXT PARAGRAPH IS AN ADMISSION OF LIABILITY AND MAY RESULT IN THE REFUSAL OR SUSPENSION OF THE MOTOR VEHICLE REGISTRATION.

If you wish to contest this citation, your request for a court date must be received at least five days prior to the payment due date shown below. If you appear in court, the maximum amount you can be charged is a \$40.00 fine and court costs. Instructions for payment and contesting the citation are on the reverse of this notice. Recorded images are evidence of a violation of the Maryland Law prohibiting exceeding the maximum posted speed limit.

Citation Number: GB123456789 Vehicle Tag: MD 180M797 Violation Time: 13:54:59 Violation Date: 10/01/09 Vehicle Speed: 63 Posted Speed: 50 Due Date: Mail Date + 30 Amount Due: \$40 Location: Test Location

I am a police officer employed by the Maryland State Police and certify that the work zone speed monitoring system was operated in compliance with the requirements of Subsection B of TA 21-810. Based on inspection of the recorded images shown on this citation, the motor vehicle was operated in violation of Title 21, Subtitle 8 of the Transportation Article. Sworn to or affirmed by:

You can view full color images and pay online at: http://safezones.maryland.gov Citation Number: GB123456789 Pin Number: xxxxxxxx

Send Check or Money Order Payable to: STATE OF MARYLAND Post Office Box 10427 Rockville, Maryland 20849

NAME & ADDRESS OF REGISTERED OWNER:

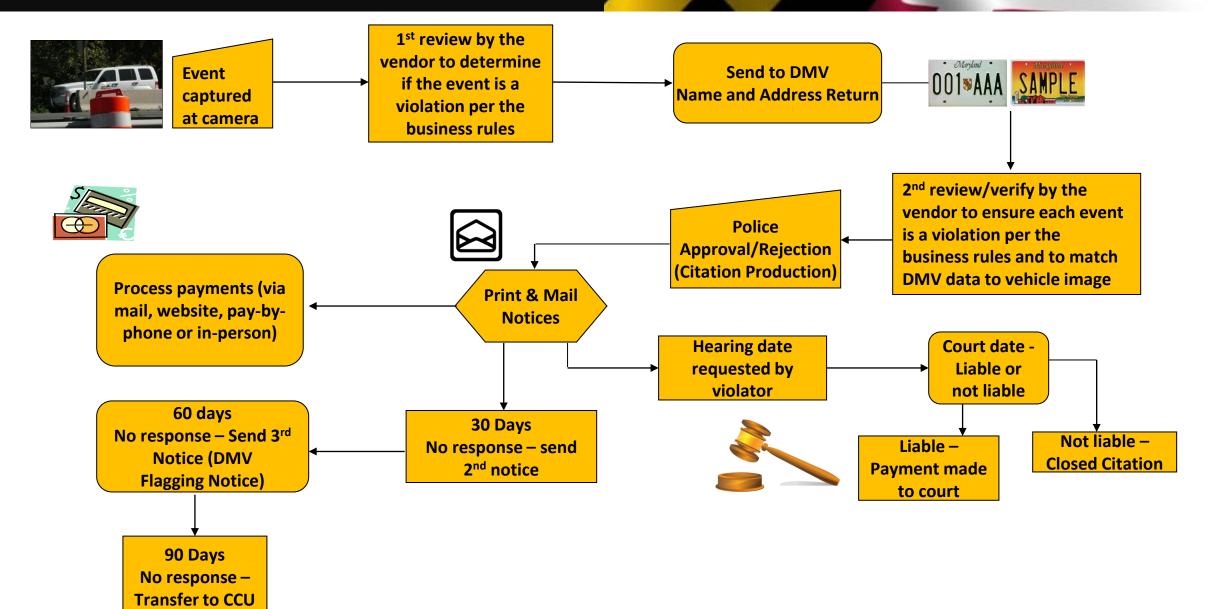
J.Q. Citizen 1234 Main Street Baltimore, MD 21227

PAYMENT OPTIONS - SEE REVERSE Maryland SafeZones: Safer Speeds. Safer Work Zones.

A Public Safety Program of the State of Maryland

Citation Num	ber: GB123456789
Date Due	Fine Amount Due
12/1/09	\$40

## Office Processing



# Office Processing

### **Violation Processing**

Element	Rule
Citation Format	Uniform; prescribed by District Court
Mailing In-State	Max.14 days after violation
Mailing Out-of-State	Max. 30 days after violation
Payment of fine	Within 90 days of mailing date
Collections	After 90 Days, must use state collection agency

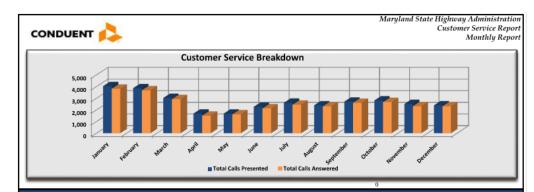
### Office Processing

#### **Customer Service**

- Customer Service Center (Back-Office Support)
  - Resolve citation issues and answer questions
- Walk-in Payment Centers
- Website and IVR
  - View citations
  - Credit Card Payments
  - Program Information
- Lock-box
- Escalation procedures to raise issues to MDOT SHA

### Reporting

- Vendor Monthly Reports
  - Violations (Events)
  - Citations/Warnings
  - Traffic Volumes and Speeds
  - Reject Reasons
  - Multiple Offender Stats
  - Customer Service Stats
  - Financial Summaries
  - Court Stats
- Ad-Hoc Reports through Vendor's System

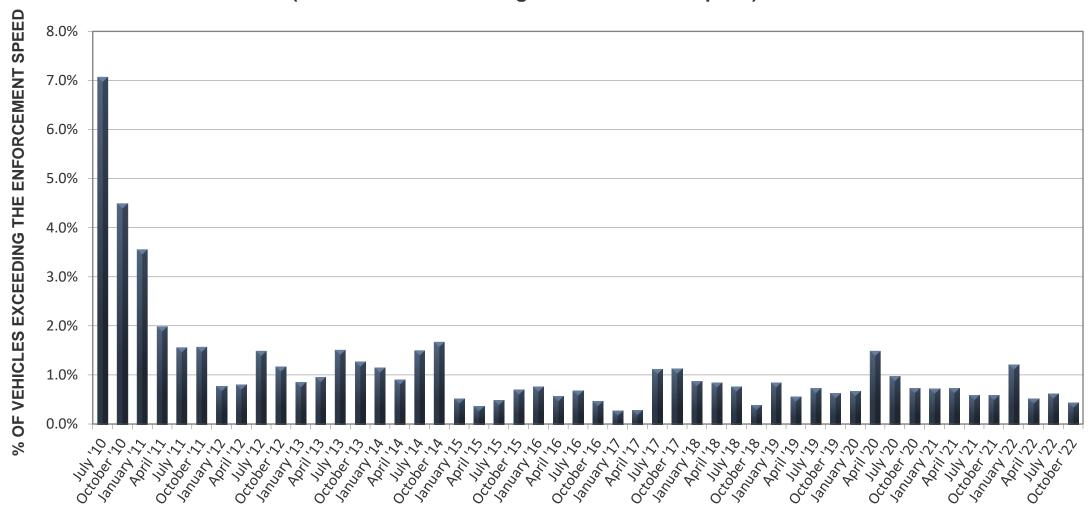


During the month of:	Total Calls Presented	Total Calls Answered	Average Wait Time	Total Spanish Calls	Total Spanish Answered	Spanish Wait Time
January 2020	4,030	3,805	0:00:48	259	240	0:00:50
February 2020	3,858	3,672	0:00:53	186	164	0:00:53
March 2020	3,019	2,917	0:00:45	204	187	0:00:49
April 2020	1,682	1,502	0:00:38	149	127	0:00:37
May 2020	1,677	1,612	0:00:38	152	133	0:00:56
June 2020	2,263	2,124	0:01:09	256	229	0:01:16
July 2020	2,608	2,441	0:01:12	174	146	0:01:19
August 2020	2,383	2,300	0:00:37	183	166	0:00:38
September 2020	2,702	2,598	0:00:46	231	217	0:01:11
October 2020	2,804	2,667	0:00:53	186	146	0:01:02
November 2020	2,501	2,311	0:01:51	132	105	0:04:11
December 2020	2,386	2,304	0:00:41	146	136	0:01:36
77-1-134	21.012		0.00.51			

During the month of:	Number Contested	Liable	Not Guilty	FTA	Paid prior to Court	% Upheld	% Upheld by Judge
January 2020	34	10	0	13	11	100.00%	100.00%
February 2020	44	14	3	15	12	93.18%	93.18%
March 2020	16	3	2	7	4	87.75%	87.75%
April 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
May 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
June 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
July 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
August 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
September 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
October 2020	50	11	0	21	18	100.00%	100.00%
November 2020	20	4	0	5	11	100.00%	100.00%
December 2020-Courts Closed due to Covid-19	0	0	0	0	0	0.00%	0.00%
otal Year	164	42	5	61	56	95.23%	95.23%

### Results

### Decrease in Violation Percentage (% of vehicles exceeding the enforcement speed)



### Media Coverage

- Mostly fair for the SafeZones Program
- Local Jurisdiction ASE program headlines:
  - ➤ County Voids Hundreds Of Speed Camera Citations
  - > Baltimore needs a speed camera do-over
  - ➤ Charles sheriff's office suspends use of speed cameras over sign placement issue
  - ➤ Drivers' videos show Morningside speed-camera problems
  - ➤ Conflicting Reports On Status Of City Speed Cameras



### What is Coming Next?

#### Short-term Projects

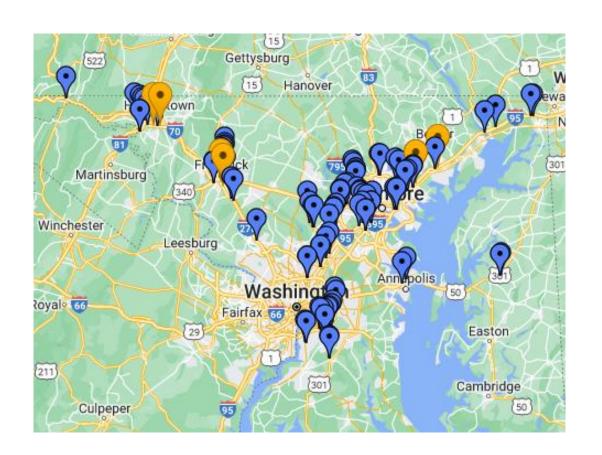
 Workers on 3R projects are more exposed to traffic (by cones and drums vs. concrete barrier for long-term projects)

#### Short-term Projects – Concerns

- Protection of ASE vehicles and operations
- Mobile operation

### Project Expansion

 Continue evaluating program for eligibility and expansion



### **End Notes**

#### SafeZones – Automated Speed Enforcement

- Positive change in driver behavior Reduction in percentage of drivers exceeding the enforcement threshold
- Increased driver awareness in work zones Potential reduction in distracted driving errors
- CAVs in workzone?
- ASE with other work zone safety technologies
  - WZ intrusion alarm
  - Proactive protection system



Old Logo



### Thank You!

Questions?
Sung Yoon Park
spark@mdot.maryland.gov

Thank You!