

MARYLAND SAFEZONES

Work Zone Automated Speed Enforcement

Penn State Traffic Engineering and Safety Conference
December 5, 2018



AUTOMATED SPEED ENFORCEMENT (ASE)

- MD / PA Comparison
- Maryland's ASE Program History
- Program Results
- Challenges



MARYLAND VS PENNSYLVANIA

- Comparing the Automated Speed Enforcement laws.



§21-810 VS. § 75-3369

PROGRAM PARTNERS



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 speeds in work zones



MARYLAND SafeZones
Automated Speed Enforcement

Safer Speeds, Safer Work Zones

Space restrictions often limit law enforcement 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, drivers and their passengers.

SafeZones basics:

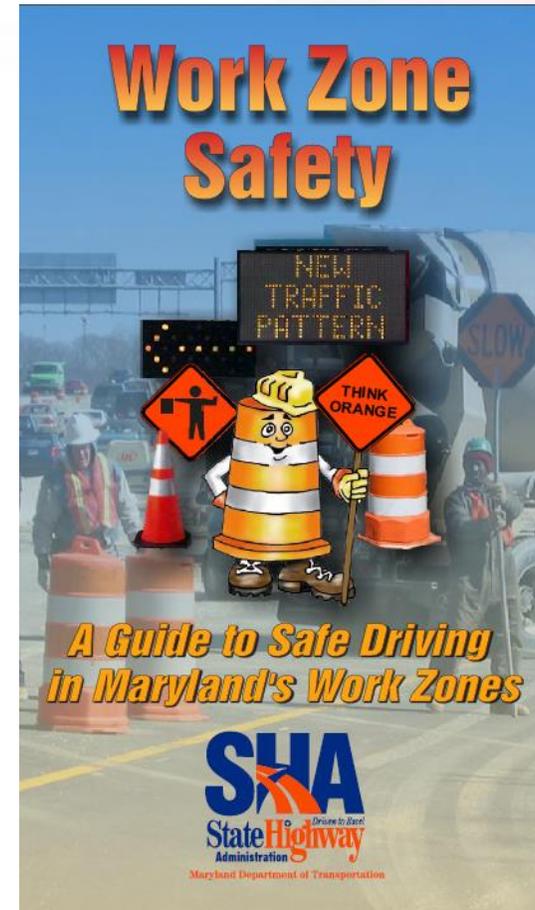
- The law authorizing automated speed enforcement in work zones became effective October 1, 2009.
- SafeZones mobile enforcement vehicles can be used in work zones on expressways and controlled access highways with a 45 mph or greater speed limit.
- Larger signs will be posted to give drivers adequate 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 prior to deployment.
- 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.

NOTICE
SPEED PHOTO ENFORCED
WORK ZONE

For more information:
SafeZones Customer Service 1-877-578-7440
www.safezones.maryland.gov

MDOT SHA'S WORK ZONE SAFETY PROGRAM

- Good work zone design
- Train **ALL** workers in safety
- New product testing
- Motorist information thru media/ITS
- Work zone inspections
- Promote safety and mobility
- *Enforcement*

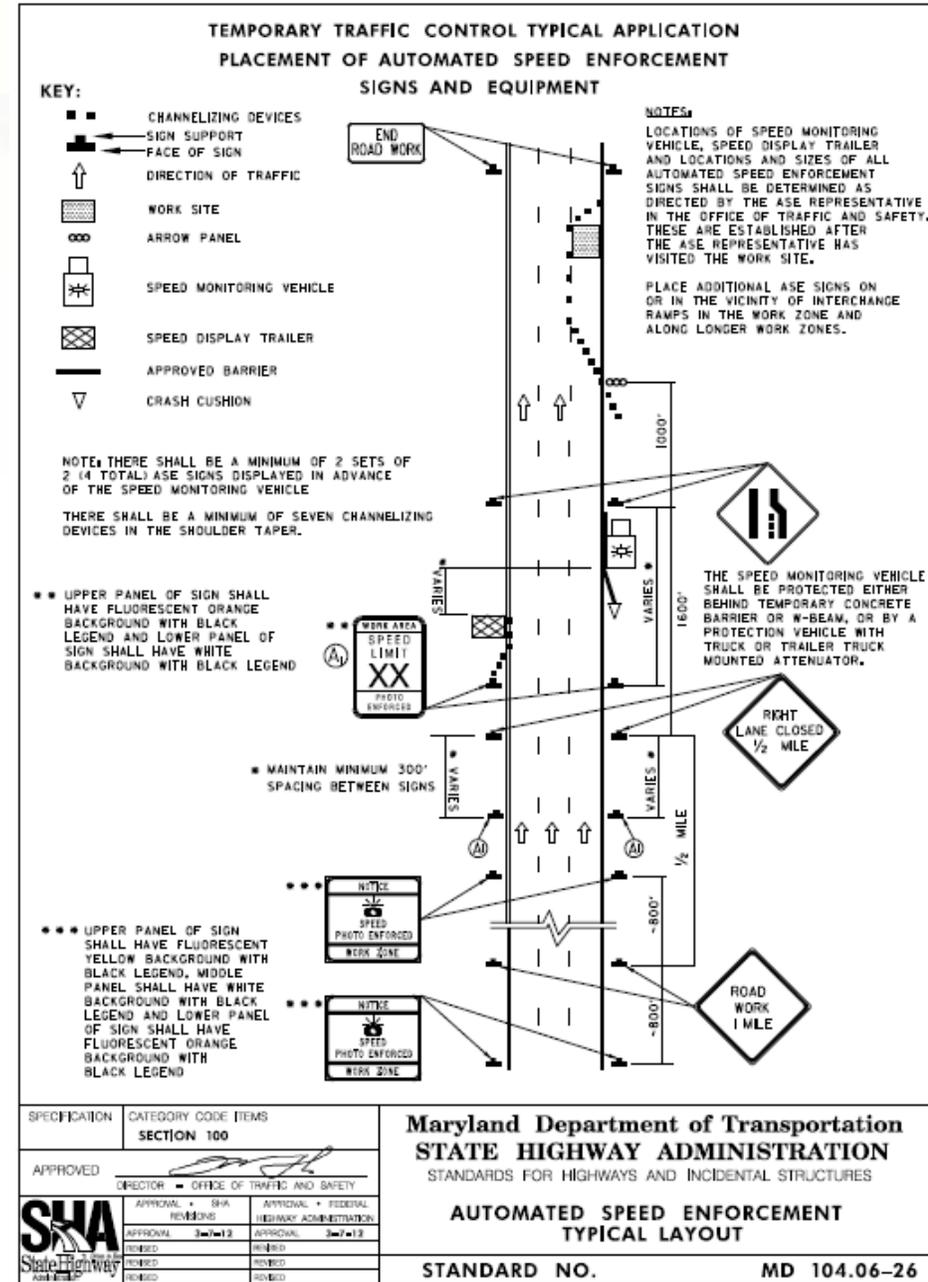


BASICS

Rule	Maryland	Pennsylvania
Location	Expressways & Controlled Access Highways	Federal aid highways under PennDOT or PTC jurisdiction
Speed Limit	45 mph and greater	None required by SB172
Speed Threshold	12 mph over posted	11 mph over posted
Operator Present	Yes, continuously manned	No
Workers Present	No	Yes
Responsible Party	Registered Vehicle Owner	Registered Vehicle Owner

ADVANCE WARNING SIGNS

- Two sets of signs, each set comprised of two signs (minimum requirement)
- Speed Display Trailer
- PA: Show when ASE is Active



SYSTEM OPERATIONS

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



PENALTIES

Rule	Maryland	Pennsylvania
Warning Period	21 days for each new site	First Violation
First	\$40	Warning
Second	\$40	\$75
Third +	\$40	\$150
Points?	No, Civil Penalty	No, Civil Penalty

VIOLATION PROCESSING

Rule	Maryland	Pennsylvania
Citation Format	Uniform; prescribed by District Court	Select content prescribed, but no requirement for uniform citations
Mailing In-State	Max. 14 days after violation	Within 30 days after discovery of identity of registered owner; max. 90 days after violation
Mailing Out-of-State	Max. 30 days after violation	Within 90 days of mailing date
Payment of fine	Within 90 days of mailing date	Within 90 days of mailing date
Collections	After 90 Days, must use state collection agency	After 90 days

ADJUDICATION & DEFENSES

Rule	Maryland	Pennsylvania
Request Hearing/ Court	Prior to due date on 1 st notice	Within 30 days of mailing date
Initial Hearing	No	Yes – by PennDOT or PTC designated Hearing Officer
Court Adjudication	Yes, by District Court	Yes, if hearing officer's disposition is appealed, goes to magisterial district judge
Transfer of Liability (Not the Driver)	Yes	No

TIMELINE

February 2006

Legislation allowing automated speed enforcement in School Zones and Residential Districts in Montgomery County, MD takes effect.

July 2010

SafeZones first long-term contract begins.

January 2016

SafeZones second long-term contract awarded.

March 2007

Montgomery County begins Safe Speeds program.

October 2009

Legislation allowing automated speed enforcement in highway work zones takes effect. Maryland begins SafeZones Pilot Program.

PILOT PROGRAM

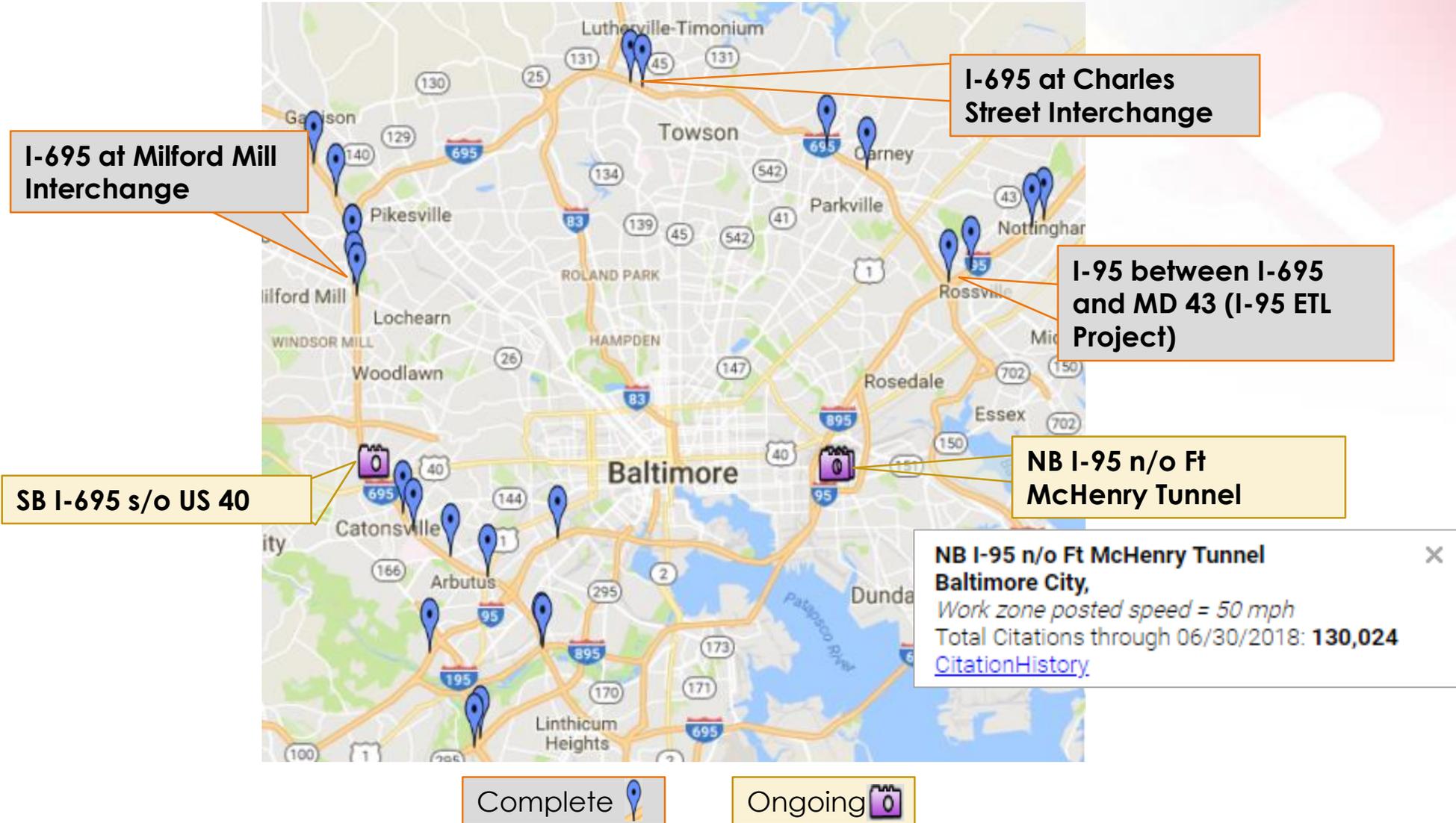
- Oct. 5, 2009 to June 30, 2010
- Issued warnings until November 15, 2009
- Two (2) mobile enforcement vehicles
- Radar-based technology
 - Integrated LIDAR in 1st vehicle in April 2010, 2nd vehicle in June 2010
- Five (5) work zones – nearly 55,000 citations and warnings issued

LONG TERM PROGRAM

- Seven (7) enforcement vehicles
- LIDAR-based enforcement technology
- Five (5) 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

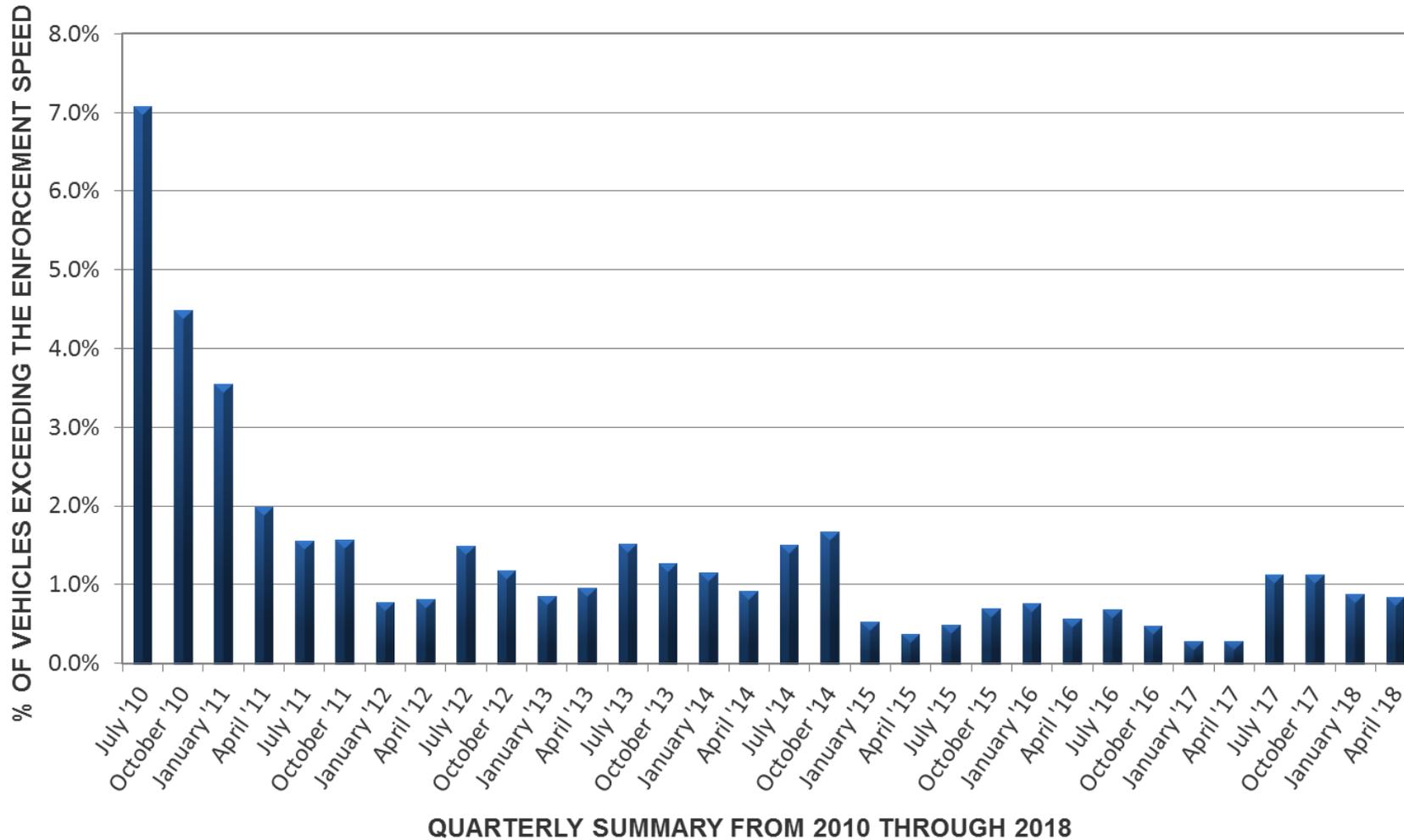


ASE LOCATIONS MAP



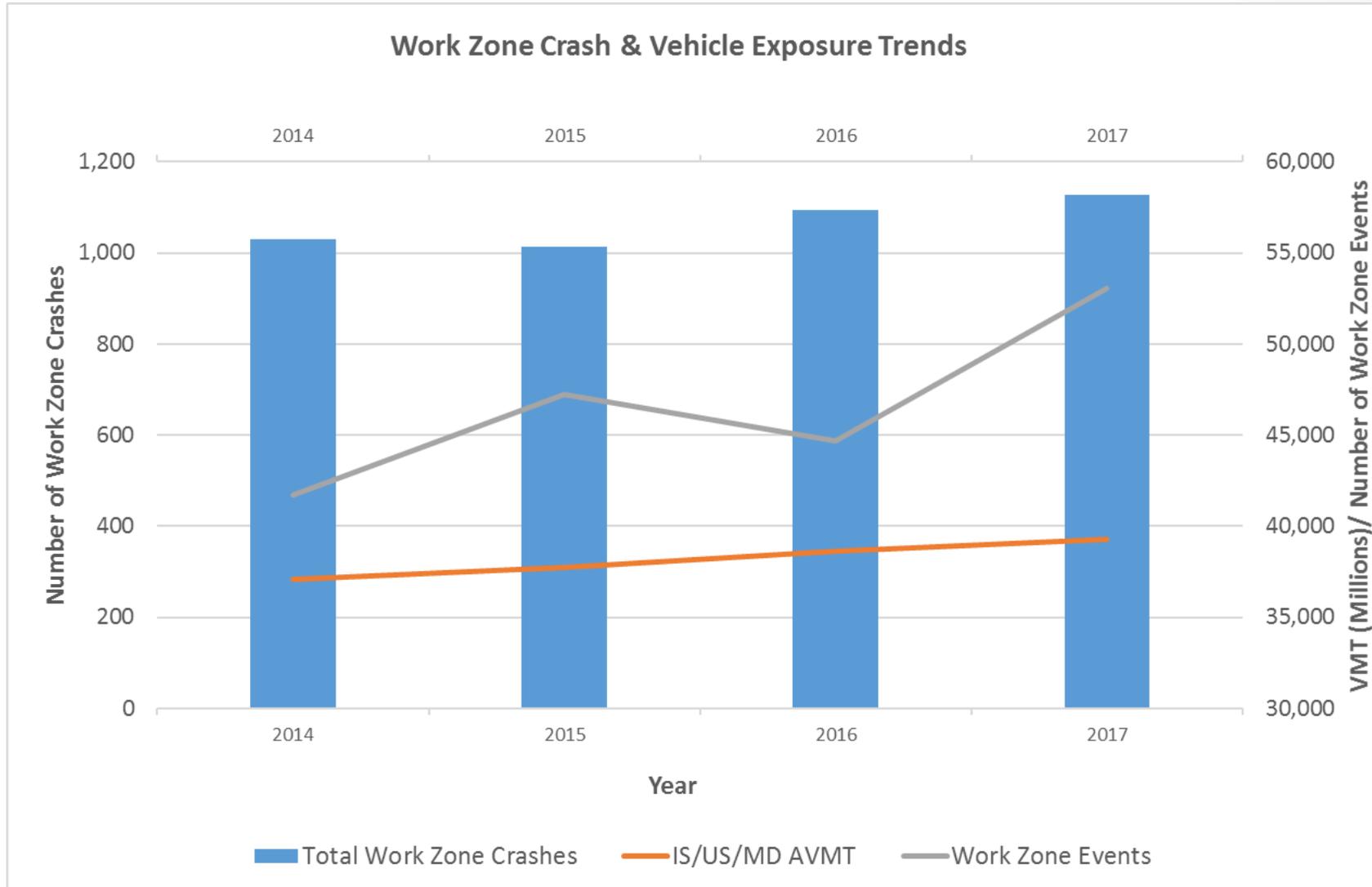
RESULTS (JULY 1, 2010 TO JUNE 30, 2018)

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



QUARTERLY SUMMARY FROM 2010 THROUGH 2018

RESULTS – WORK ZONE CRASHES



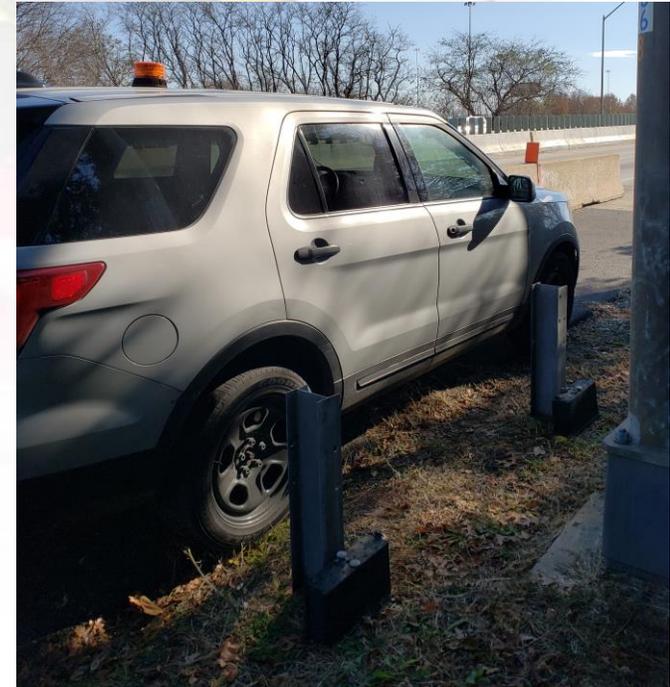
- Statewide – trending up, but why?

2014 to 2017

Work Zone Crashes	+ 9.6%
IS/US/MD AVMT	+ 6.2%
Work Zone Events	+ 27.1%

ASE PROGRAM CHALLENGES

- Customer inquiries
 - Emails, phone calls, FOIA requests, reporter requests, etc.
- Customer curiosity
 - “Friendly” drive-bys or stop-bys
- Operations coordination
 - Scheduling deployments, changing on-the-fly, weather, etc.
- Vendor
 - Not familiar with construction projects and work zone setups
- DOT and Police Staff Resources



EXPECT THE UNEXPECTED

- Contractor
 - Removes all ASE Signage
 - Moves or removes Speed Display Trailer
 - Changes construction phases without notice
 - Removes concrete barrier protecting ASE vehicle
 - Removes vendor port-a-pot
 - Delays in fabricating and installing signs
- Vendor
 - Data loss after deployment (lost thumb drive)
 - Operator getting speeding ticket on way to/from site
 - Operator being approached by citizens while deploying
 - Operator not showing up on time
- ???

CONTACT US...

SafeZones Website: www.safezones.maryland.gov

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The screenshot shows the homepage of the Maryland SafeZones website. At the top, it identifies the program as a joint effort between the Maryland State Police, Maryland Transportation Authority, and Maryland State Highway Administration. The main heading is "Automated Speed Enforcement in Work Zones". A navigation menu includes links for Home, Locations, FAQs, Violation Inquiry, Pay a Ticket, Related Info, and Safety. The central content area features a banner with the text "Safer Speeds, Safer Work Zones. For Everyone." and a "NOTICE SPEED PHOTO ENFORCED WORK ZONE" sign. Below the banner is a paragraph explaining the program's goal to reduce speed-related crashes and injuries. The right sidebar contains logos for the Maryland State Police, MDOT, and Maryland Transportation Authority. The footer includes links for FAQs, Accessibility, Privacy Notice, and Contact Us, along with the physical address: P.O. Box 17048, Baltimore - MD 21287 - (877) 578-7440.