



Automated Work Zone Speed Enforcement (AWZSE)

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Why AWZSE?

PENNSYLVANIA WORK ZONE CRASH STATISTICS 2012-2018

Work Zone Crashes



2% annual
increase since
2012
2018 - 1804

Speeding Concerns



39% of all work
zones crashes
involve speeding
2018 - 47%

Fatal Work Zone Crashes



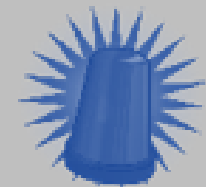
Remained
stagnant since
2012
2018 - 23

Work Zone Crash Location



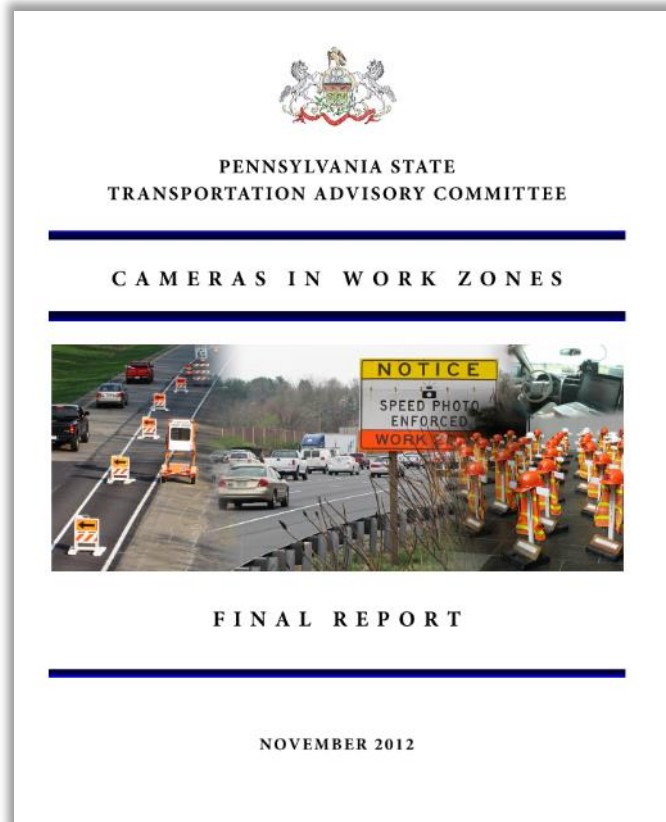
57% occur within
the activity area

Law Enforcement in Work Zones



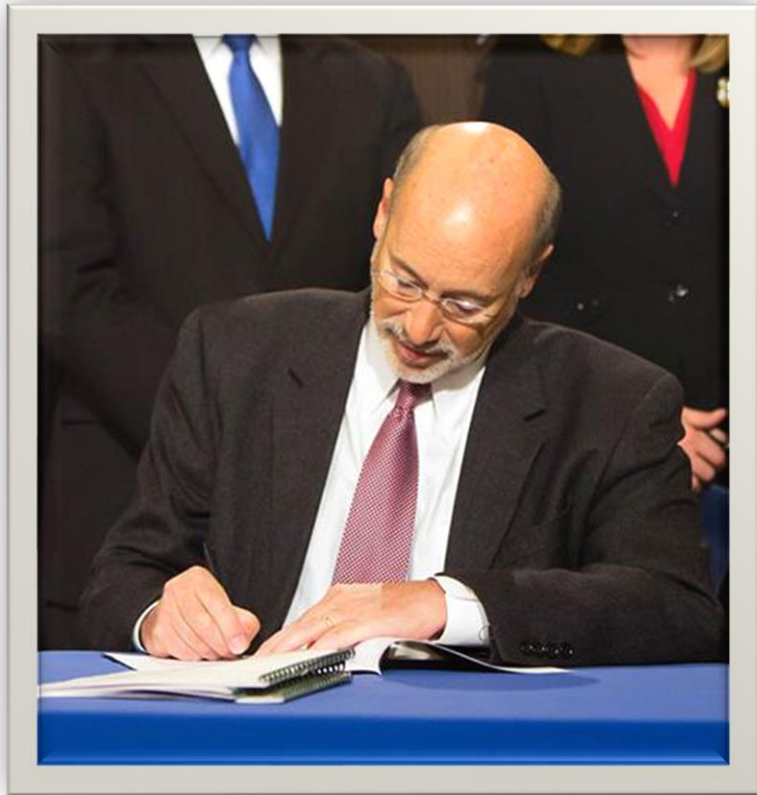
82% of crashes occur
when NOT present

History



- **November 2012 – TAC Report**
- **June 2015 – First Bill Introduced (SB 840)**
- **October 2018 – Act 86 Authorizes Five-Year Pilot Program**

Legislative Highlights



- **PennDOT (Federal-Aid) and PTC Highways**
- **11 MPH over Posted Speed Limit Threshold**
- **Civil Penalties – Fine-Carrying and Appealed Violations Reviewed by PSP**
- **Tiered Penalty Structure**
- **Defined Contest and Appeals Processes**

Public Perception

Arguments Against ASE

- **Revenue Generating Program**
- **Speed Limits Artificially Reduced**
- **Insufficient Warning**
- **Speed Measuring Devices Inaccurate**
- **ASE Vendors Operate With Little Oversight**
- **Violators Have No Opportunity To Appeal**
- **Violation Of Privacy: “Big Brother”**

PA's Program

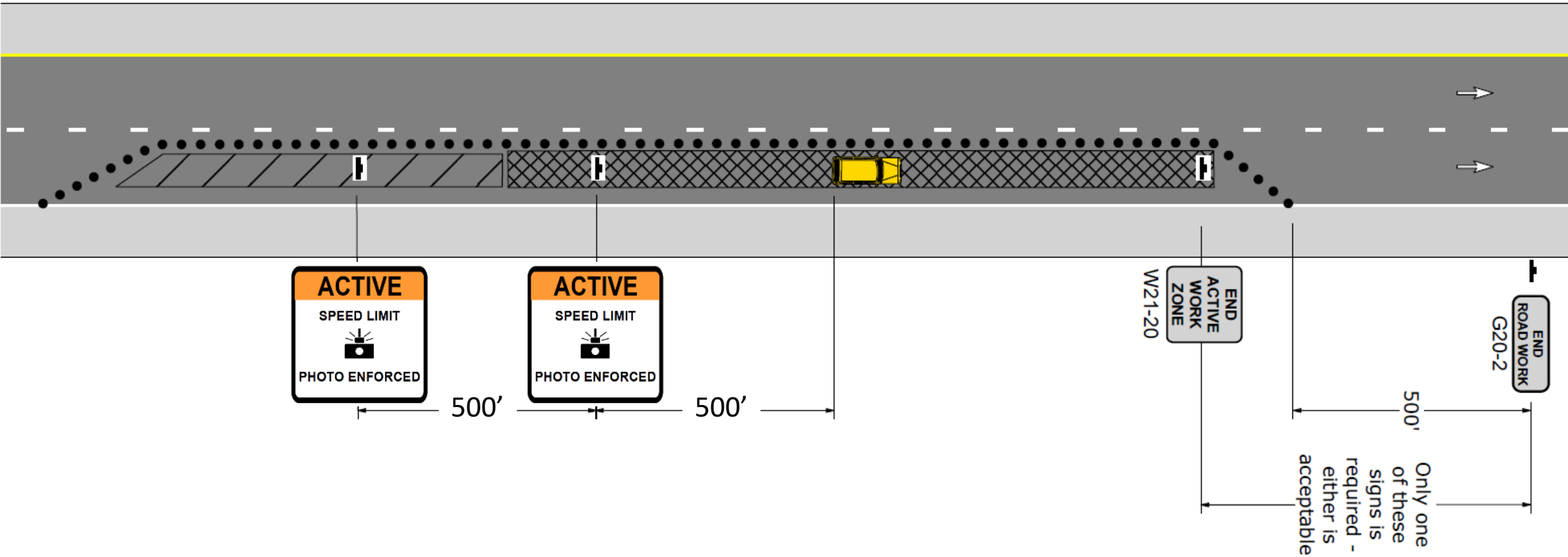
- **System Administrator Paid Flat Fee Per Deployment**
- **Statewide Work Zone Speed Limit Policy**
- **Two Advance Warning Signs and Locations Posted On Website**
- **Daily Equipment Testing/Annual Calibration**
- **PennDOT/PTC Oversee Program, PSP Reviews Fine Carrying Violations**
- **Two-step Appeal Process (Informal Hearing And Magisterial)**
- **Image Destruction Requirements**

Program Goals

- **Reduce Speeds in Work Zones**
- **Improve Driver Behavior**
- **Save Worker and Traveler Lives**
- **Complement Existing Enforcement by PA State Police**
- **Promote Work Zone Safety**



AWZSE Deployment Location



General Information

17 Units per Day

- **10 for PennDOT**
- **7 for Turnpike**

8-Hour Deployment Shift

Up to Two Shifts Daily

- **Day Shift**
- **Night Shift**

Weekday and Weekend Work Zones

Workers MUST be Present

Two Advance Warning Signs

Notice at Location and on Website

Speed Limit Signs Appropriately Placed

End Road Work/Work Zone Signs

Agency Roles and Responsibilities



- ✓ Scheduling and Monitoring (State Highways)
- ✓ Fiscal Processes and Auditing
- ✓ Regulations and Standards Development
- ✓ Hearing Officers



- ✓ Scheduling and Monitoring (Commission Highways)
- ✓ Auditing and System Admin
- ✓ Contract Compliance
- ✓ Standards Development



- ✓ Violation Review and Affirmation
- ✓ Field Speed and Quality Control Testing

Contracted Services



PROGRAM ADMINISTRATOR

- ✓ **Project Selection/Scheduling**
- ✓ **Field & Back Office QA/QC**
- ✓ **Operational Compliance and Process Updates**
- ✓ **Program Outreach**
- ✓ **Performance Monitoring and Reporting**
- ✓ **Technical /Admin Support**

SYSTEM ADMINISTRATOR

- ✓ **Field Unit Deployment**
- ✓ **Violation Review, Collection, Mailing and Disbursement**
- ✓ **Customer Service & Record Keeping**
- ✓ **Informal Hearing Support**
- ✓ **Annual Certifications**

Penalty Structure

Element	Rule
First Violation	No Monetary Fine
Second Violation	\$75 fine
Third+ Violation	\$150 Fine
Late Fees	Up to \$75 if not paid within 90 days of mailing
Contest	Must be filed within 30 days of Mailing
Violation Type	Civil – no points, no merit rating change

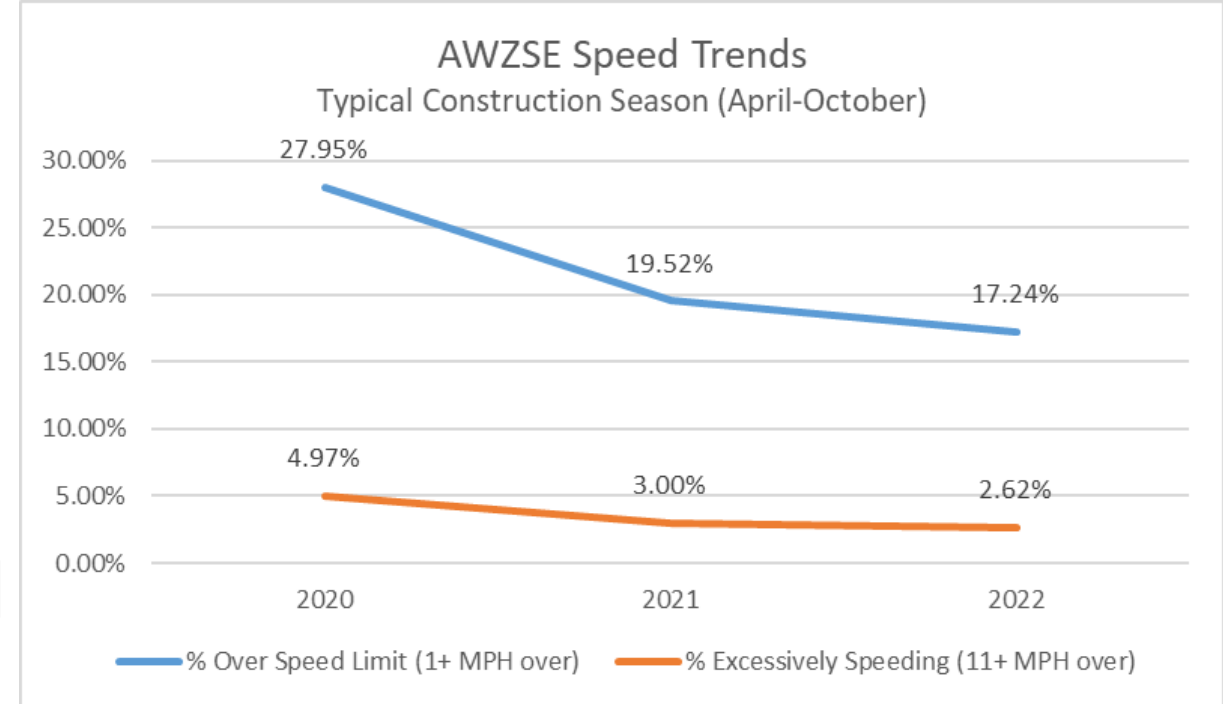
Deployments and Violations

- **8,800+ Deployments**
- **1,000,000+ Violations**
- **16.1% Repeat Rate**

	DEPLOYMENTS	FIRST VIOLATIONS (\$0)	SECOND VIOLATIONS (\$75)	THIRD/SUBSEQUENT VIOLATIONS (\$150)	TOTAL VIOLATIONS ISSUED	REPEAT RATE
2020 TOTAL	2,084	191,595	19,226	8,409	219,230	12.61%
2021 TOTAL	3,302	359,697	45,967	19,119	424,783	15.32%
2022 TOTAL	3,482	362,195	57,114	25,458	444,767	18.57%
PROGRAM TOTAL	8,868	913,487	122,307	52,986	1,088,780	16.10%

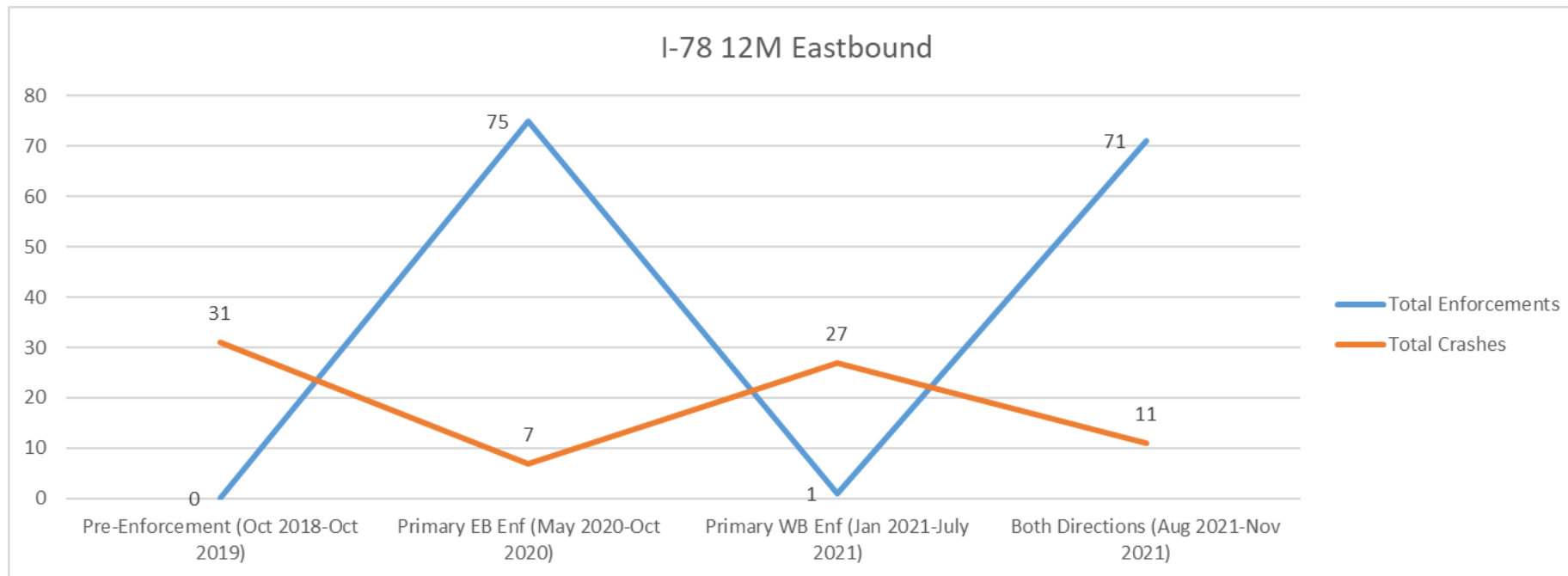
Speed Reduction

- **Percent over the speed limit**
- **Percent excessively speeding (11+ MPH over speed limit)**
- **Speeds higher in barrier-protected work zones vs unprotected**
 - **% of traffic over speed limit and % excessively speeding is twice as high in barrier work zones**
 - **75% of deployments are channelized work zones**



Reduced Crashes

- **Based on study of long-term barrier-protected work zones**
- **Increased enforcements resulted in fewer crashes**



US-1 Work Zone

- **RC1 was 45mph. RC2 was 55mph.**
- **RC2 incorrectly identified as 45mph for enforcement.**
- **All fines and warnings rescinded.**



Looking to the Future

PROPOSED

- **Elimination of the sunset date**
- **Removal of “not active” requirement**
- **Withholding registration renewals for non-payment**
- **Allowance of enforcement in inactive work zones**

Looking to the Future

PROPOSED

- **Financial penalty on first violation**
- **Improved advance signing**
- **Virtual informal hearings**
- **Transfer of responsibility for leased vehicles**

PROGRAM RESOURCES

Program Website

<https://workzonecameras.penndot.gov/>

Legislative Annual Reports

<https://workzonecameras.penndot.gov/about/>

Purdue University Study

<https://www.mdpi.com/1424-8220/22/8/2885/htm>





Thank You

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GHSA 2023 Annual Meeting