

Pennsylvania's Automated Work Zone Speed Enforcement (AWZSE) Program

2021 Annual Report

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GLOSSARY

AWZSE – Automated Work Zone Speed Enforcement
PennDOT – Pennsylvania Department of Transportation
PSP – Pennsylvania State Police
PTC – Pennsylvania Turnpike Commission

INTRODUCTION

Act 86 (2018) authorized the development of the Automated Speed Enforcement in Active Work Zones program, commonly referred to as Automated Work Zone Speed Enforcement, or AWZSE. This program is a joint safety program supported by the Pennsylvania Department of Transportation, the Pennsylvania Turnpike Commission, and the Pennsylvania State Police. Act 86 (2018) requires the following report of the program to the Senate and House Transportation Committee Chairs by no later than April 1 annually. This report provides a summary of the status of the program.

The statewide AWZSE program began live enforcement activities on March 9, 2020. Live enforcement activities were placed on hold March 16, 2020 due to the COVID-19 pandemic halting all construction activities statewide. Enforcement resumed at limited critical and emergency projects on April 20, 2020 and has been in continuous operation since then.

ACT 86 (2018) MANDATED REPORTING

Act 86 (2018) requires this Annual Report contain specific information regarding the program during the previous calendar year. This section contains that information for calendar year 2020.

Work Zone Crash Information

In 2019, there were 1,754 total crashes in work zones on all Pennsylvania roadways. On PennDOT and Commission roadways, 44.6 percent of the crashes contained fatalities or injuries. There were 1,074 injured persons resulting from work zone crashes and 16 persons fatally injured, with none of the fatalities being workers within the work zone.

Crash data from 2020 is not available as of this report but will be analyzed when officially released by the Department. Preliminary crash data appears to show that work zone crashes have been reduced by a greater percentage than traffic volume was reduced on Commonwealth highways due to the COVID-19 pandemic. Any crashes in a work zone with the AWZSE unit present have not been caused by the presence of the enforcement unit.

Speed Data

Speed data presented in this report represents data collected since the program began full enforcement on March 9, 2020. A full discussion on speed data is presented in the Speed Data section of this report. Highlights of the speed data include:

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- Due to the COVID-19 pandemic impacting traffic volumes in March, April, and May of 2020, there was a significant increase in the percentage of traffic traveling over the posted work zone speed limit as well as an increase in the percentage of traffic excessively speeding (exceeding the speed limit by 11 mph or more).
- There was a 16.6% reduction in the percentage of vehicles traveling over the posted work zone speed limit from June to November, as travel volumes normalized. Over this same time frame, there was a 43.6% reduction in the percentage of vehicles excessively speeding.



Number of Violations

In 2020, the program issued 219,231 violations. Of the issued notices, 11.62% were repeat violators, incurring fines for 2nd and subsequent violations of the statute.

Program Fines

In 2020, the Transportation Agencies collected \$1,700,640.00 in fine remittance. The program has a payment rate of approximately 70%. Table 1 summarizes the number of payments and amounts received by each agency each month in 2020.

	PennDOT		PTC		Total	
	Number	Amount	Number	Amount	Number	Amount
March	0	\$ -	0	\$ -	0	\$ -
April	48	\$ 3,825.00	8	\$ 675.00	56	\$ 4,500.00
May	333	\$ 28,715.00	23	\$ 1,840.00	356	\$ 30,555.00
June	473	\$ 43,445.00	69	\$ 6,525.00	542	\$ 49,970.00
July	1,395	\$ 138,125.00	290	\$ 27,175.00	1,685	\$ 165,300.00
August	1,398	\$ 99,977.00	553	\$ 51,755.00	1,951	\$ 151,732.00
September	1,401	\$ 138,745.00	1,341	\$ 127,777.05	2,742	\$ 266,522.05
October	1,898	\$ 187,580.00	2,646	\$ 261,865.00	4,544	\$ 449,445.00
November	1,613	\$ 160,183.00	2,166	\$ 217,675.95	3,779	\$ 377,858.95
December	922	\$ 92,152.00	1,131	\$ 112,605.00	2,053	\$ 204,757.00
Total	9,481	\$ 892,747.00	8,227	\$ 807,893.00	17,708	\$ 1,700,640.00

Table 1 – Fine Remittance by Agency by Month, 2020

Program Contracts

For calendar year 2020, the amounts paid for contracts related to the program are as follows:

- Program Administrator – \$1,503,763.76

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- System Administrator – \$1,471,024.42
- TOTAL – \$2,974,788.18

Additionally, PSP costs incurred by the program total \$460k for calendar year 2020, bringing total expenditures for the program to \$3.4 Million for calendar year 2020. Comparing the program expenditures against the fine remittance received by the program, the Transportation Agencies operated the program at more than a \$1.7 Million deficit for calendar year 2020. Table 2 summarizes program fine remittance and expenditures for the overall program for 2020.

Income	Expenses			NET
Fine Remittance	PSP Costs	Program Administrator	System Administrator	
\$1,700,640.00	\$463,572.88	\$1,503,763.76	\$1,471,024.42	(- \$1,737,721.06)

Table 2 – Fine Remittance and Expenditure, Overall Program, 2020

The contract expenditures were in addition to the initial program costs borne by the Department and the Commission in 2019. Prior to October 16, 2019, the effective date of the Interagency Agreement, all costs for the program were divided evenly between the Department and the Commission. After the Interagency Agreement effective date, costs during program development were divided evenly between the Department and Commission. Currently, the program costs are divided proportionately depending on how each agency operates their own portion of the program.

Number of hours provided by Pennsylvania State Police for increased work zone presence

Since the program did not generate excess revenue, additional PSP hours for work zone presence were not provided during calendar year 2020.

Use of remaining funds under Section 3369 (h) 3. iv.

Since the program did not generate excess revenue, no remaining funds were available to be used during calendar year 2020.



PROGRAM GOALS

The passage of Act 86 (2018) recognized that Pennsylvania's highway work zones continue to provide safety hazards for Pennsylvania workers and traveling public. The AWZSE program is geared towards improving safety in our highway work zones statewide. Specific program goals include:

- Reduce speeds in work zones
- Promote work zone safety
- Improve driver behavior
- Save worker and traveler lives

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- Complement existing speed enforcement by the Pennsylvania State Police

PROGRAM STATUS

The program entered live enforcement on March 9, 2020. Live enforcement activities were placed on hold March 16, 2020 due to the COVID-19 pandemic halting all construction activities statewide. Enforcement resumed at limited critical and emergency projects on April 20, 2020 and has been in continuous operation since then. Some highlights of live enforcement from 2020 include:

- Over 2,000 deployments were completed in support of both construction and maintenance activities.
- Nearly 220,000 notices of violation have been issued to registered owners.
- A decrease in the number of vehicles speeding or excessively speeding in work zones.

Field Deployment Approach

Since the start of live enforcement in March 2020, the approach to field deployments includes:

- The program has 17 enforcement units available statewide. Generally, ten units are available for permissible PennDOT roadways and seven are available for Commission roadways.
- Units are available for two shifts daily, a daylight and an overnight shift.
- Program supports both construction and maintenance activities.
- Program supports both long-term and short-term work zones.



AGENCY ROLES AND RESPONSIBILITIES

As noted above, the AWZSE program is a joint program between the PennDOT, the Pennsylvania Turnpike Commission, and Pennsylvania State Police. These agencies have jointly developed a program specific Interagency Agreement. The roles and responsibilities of each agency are generally as follows:

PennDOT

- Scheduling and monitoring of units on PennDOT roadways
- Development, implementation, and operation of Financial Processes
- Promulgation of temporary regulations
- Development of standards for Department operations
- Procurement and provision of informal hearing officers

Pennsylvania Turnpike Commission

- Scheduling and monitoring of units on Commission roadways
- Implementation and operation of auditing processes

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- Vendor contract compliance
- Development of standards for Commission operations

Pennsylvania State Police

- Violation review and affirmation
- Field speed and quality control checks

Additionally, there are two contracted entities for the program, a Program Administrator and System Administrator. The Program Administrator assists the agencies with program development and execution. The System Administrator is responsible the technical aspects of the program. Specific responsibilities of each contracted entity are as follows:



Program Administrator – This work being performed through a professional services agreement between PennDOT and an engineering firm. The Program Administrator team has performed numerous support services, some of which include:

- Program development
- Project selection and scheduling
- Field and back office quality assurance and quality control
- Operational compliance and process updates
- Program outreach
- Performance monitoring and reporting
- Additional support as necessary

System Administrator – This is a vendor providing a turnkey solution. Redflex Traffic Solutions, Inc. was selected in a competitive process. The System Administrator responsibilities include:

- Field unit deployment
- Violation review and mailing
- Fine collection and backend disbursement
- Customer service and record keeping
- Supporting informal hearings

PUBLIC OUTREACH

Public outreach is a key element of the program – as it is the cornerstone of the education component of the program principles. Outreach goals have included:

- Overall program awareness
- Program goals
- Enforcement location and approach,
- Consequences of violating this law.

Program Website

A dedicated program website has been developed and is hosted by PennDOT at workzonecameras.penndot.gov. This website includes program information, locations where AWZSE deployments are active or completed, Frequently Asked Questions (FAQ) about the program, and a contact form for program questions or concerns. Additionally, a resource account has been developed for the program to ensure that all questions, concerns, or complaints about the program are addressed within a timely manner.



Media Relations

Throughout the lifespan of the program, media requests have been consistently fielded by the Department and the Commission.

Information Sessions with Other States

The success experienced by the Pennsylvania program has spurred interest in other states and shows that Pennsylvania's program is a model that other states are attempting to emulate. The Transportation Agencies and the Program Administrator have presented to numerous other states about Pennsylvania's program and provide information on how the program was developed from initial concept through to operation.

2020 AWZSE PROGRAM ACHIEVEMENTS

During calendar year 2020, the focus was on beginning live enforcement. Key tasks completed during 2020 are noted below. The emphasis on project screening, scheduling, and quality control throughout all program activities led to overall program successes in 2020.

- Over 2,000 deployments shifts were successfully completed in 2020. A deployment shift is a maximum eight-hour enforcement period by an enforcement unit.

Refined Project Screening Processes

- Experience was gained over time with what activities were most conducive to AWZSE deployments, resulting in better project screening to dismiss projects not suitable for deployments.
- With program development and implementation, scheduling projects for the 2020 construction season was more reactive than proactive. Heading into the 2021 construction season, all parties are more proactive with project identification and screening.

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Refined Project Scheduling Processes

- Established regular lines of communication with projects to ensure timely updates on working days and working hours.
- Adjusted the scheduled eight-hour shift for maintenance deployments to start enforcement when the work zone pattern has been completely set and work beginning rather than start the enforcement shift with the worker shift before the work zone is set.
- Converted from a fully manual scheduling system with multiple spreadsheets to an easy-to-use database with a singular set of data to streamline schedule development and data recording.

Quality Control

- Program Administrator performs both field quality control and backoffice quality control reviews.
- Field quality control reviews include:
 - Confirming that both advance warning signs are present and conspicuous.
 - Confirming that the notice is located on the vehicle.
 - Confirming that the end road work sign is present and conspicuous.
 - Confirming that speed limit signs are present and conspicuous.
 - Confirming that the enforcement unit is placed appropriately in relation to the work activity.
- Backoffice quality control reviews include:
 - Random sampling of deployment records to ensure that completed deployments meet statutory requirements.
 - Random sampling of rejected events to confirm appropriate reject categorization.
 - Random sampling of prepared notices of violation to confirm accurate details.
- PSP performs field quality control checks which include:
 - Confirmation that speed detection equipment has current certification.
 - Enforcement signing is set up according to the legislation.
 - PSP performed quality control at 71 unique enforcement setups in 2020 and found no improper setups per the statute.



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Data Tracking and Reporting

- The Program Administrator maintains a record of deployments scheduled, completed, or canceled.
- The Program Administrator receives data and statistics for each completed deployment from the System Administrator.
- The program is in the early stages of automated data tracking, including automatic transfer of enforcement data to the same database used for scheduling purposes.
- Select data for each enforcement location will eventually be included on the project map available on the program website.



Program Coordination, Awareness, and Training

- Program Coordination has continued throughout 2020 with multiple program stakeholders.
- To increase exposure of the program to PennDOT personnel across the state, PennDOT Central Office staff and members from the Program Administrator team traveled to every PennDOT District throughout the state for day-long information sessions for construction, maintenance, and design personnel. Most of these sessions were completed in-person prior to the start of the COVID-19 pandemic; Sessions that were not able to be completed in-person were held virtually.
- Similar information sessions were held virtually for Turnpike staff statewide.
- The Transportation Agencies held multiple work zone training sessions for System Administrator personnel to better prepare them for what to expect in work zones.

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DEPLOYMENT INFORMATION

Full enforcement began on March 9, 2020. Due to the COVID-19 pandemic, all construction activity was halted, and deployments were paused starting March 16, 2020. Enforcement resumed at critical and emergency projects on April 20, 2020.

Due to the COVID pandemic, the System Administrator had difficulties in successfully recruiting and retaining operator staff. This resulted in a slower than anticipated ramp-up of enforcement availability.



One of the program goals is to improve driver behavior in Pennsylvania work zones. To achieve this goal, program deployment locations and frequency must strike a balance between statewide coverage and focusing deployments at work zones where speeding has been identified as a major issue. With that in mind, AWZSE deployments were completed in 10 of 11 PennDOT Engineering Districts and to Turnpike roadways across the state. Over 2,000 individual deployments were completed in 2020. Feedback from field and project staff that have interfaced with the program has been overwhelmingly positive, with anecdotal statements that they observe motorist behavior changing when the enforcement units are present. Table 3 and Figure 1 provide more information about deployments completed in 2020.

	PTC	PennDOT	Combined
March	8	14	22
April	20	20	40
May	44	53	97
June	79	108	187
July	97	161	257
August	143	218	361
September	156	267	423
October	138	239	377
November	71	167	238
December	31	51	82
Total	787	1298	2085

Table 3 – Deployments by Agency by Month, 2020

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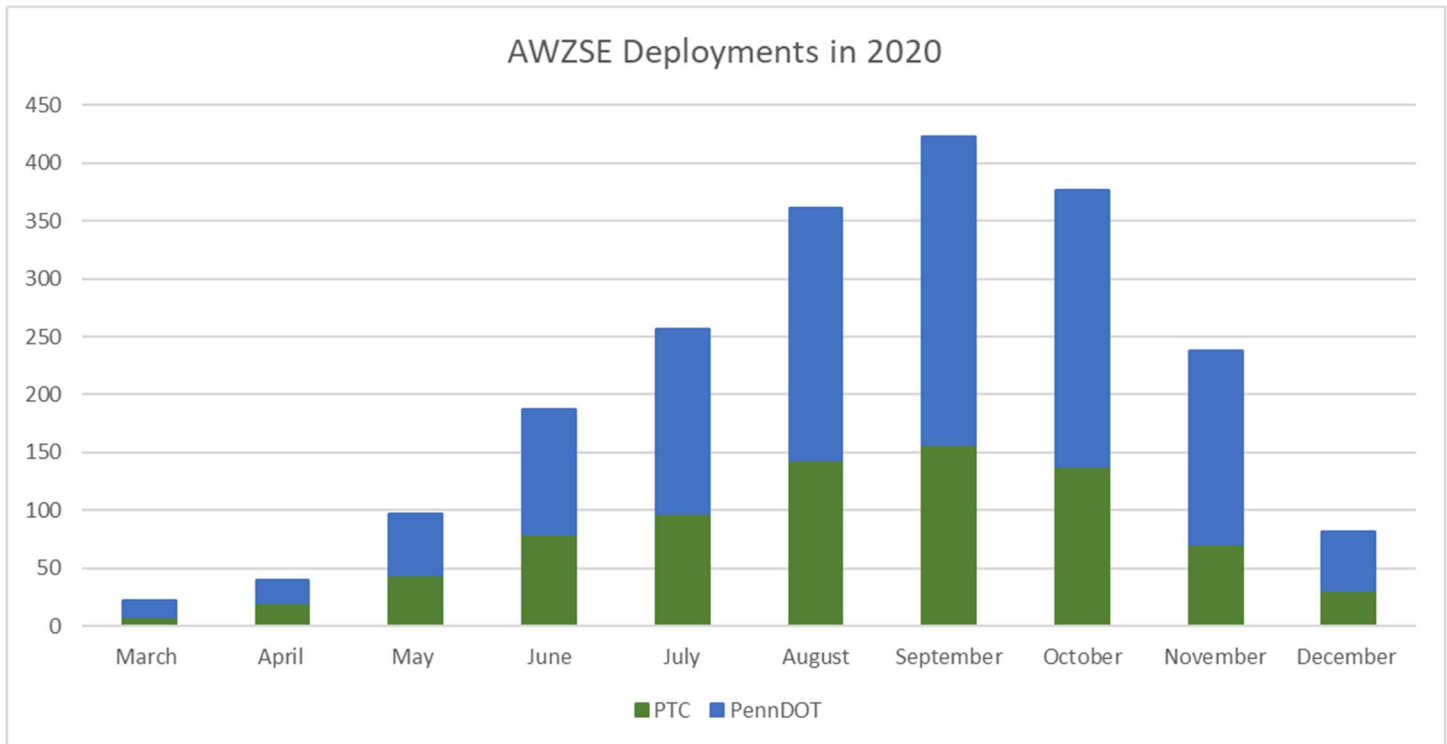


Figure 1 – Deployments by Agency by Month, 2020

The program supported both construction and maintenance activities across the state on both agencies' roadways. Deployments occurred during daylight and overnight operations both on weekdays and weekends.

Enforcements in support of maintenance activities tended to have shorter enforcement durations than enforcements supporting construction projects. This is due to the short-term nature of the work zones established for maintenance activities. Enforcements in support of Turnpike maintenance activities rarely exceeded four hours in duration, whereas enforcements supporting construction projects were generally longer than six hours, with many fulfilling the eight-hour enforcement shift window.

VIOLATION DATA

From the beginning of full enforcement on March 9, 2020 through the end of the year, the program issued 219,231 violations. This represents a 79.5% issuance rate from 275,725 captured events. When an event is captured, a verification and review process occurs to ensure that the event captured can progress forward through the issuance process. During this multi-step process, events may be rejected for a variety of reasons, but will fall into two main categories: Controllable Rejects and Uncontrollable Rejects.

Controllable Rejects are issues that are within the System Administrator's control that prevent the captured event from being issuable. Uncontrollable rejects are issues with a captured event outside

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of the System Administrator's control that prevent it from being issuable. Some examples of each type of reject category are:

- Controllable Rejects
 - Image Clarity – Plate is illegible and cannot be read
 - Image Framing – Cameras are not aligned properly to capture plate images
- Uncontrollable Rejects
 - Canadian/Diplomat/Foreign Plate
 - No DMV Hit – After three attempts, no registered owner information is available for violation issuance.
 - No Plate – Vehicle is fully in view, but no plate is visible in any of the collected images.
 - Obstruction – Obstruction of license plate to prohibit plate read (trailer hitch, bike rack, etc.)

The program team is continually reviewing processes to improve the issuance rate. Actions that have been taken to improve the issuance rate include:

- Reviewing and refining deployment locations to make sure as many obstructions resulting from the roadway or work zone configuration are avoided.
- System Administrator is working to establish direct connections with neighboring state DMVs to minimize the number of Out-of-State No DMV hits, reducing the reliance on third party vehicle record lookup services currently resulting in increased "No DMV Hit" rejections.

Additionally, the System Administrator contract includes liquidated damages designed to limit the allowable percentage of controllable rejects. For all violations processed in 2020, the System Administrator has met the contract goals for controllable reject percentage.

Table 4 provides a summary of violations captured by the program in 2020. Additional information can be found in Appendix A.

	Potential Violations	Controllable Rejects	Uncontrollable Rejects	Other Rejects	In Process	Issued
March	6,181	153	1,181	1	0	4,846
April	12,692	173	2,514	0	0	10,005
May	25,917	448	4,135	0	0	21,334
June	26,941	753	4,289	0	0	21,899
July	25,806	553	3,520	0	0	21,733
August	55,133	2,203	8,823	6	0	44,101
September	51,703	2,713	9,195	7	0	39,788
October	39,344	2,606	7,162	0	0	29,576
November	16,592	398	2,421	1	0	13,772
December	15,416	532	2,701	5	1	12,177
Total	275,725	10,532	45,941	20	1	219,231

Table 4 – Overall Program Violation Summary by Month, 2020

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Table 5 provides a breakdown of how many of each tier of violations were issued by the program in 2020.

	First Violation (\$0)	Second Violation (\$75)	Third/Subsequent Violation (\$150)	Issued	Total Repeat Rate
PennDOT	104,300	10,400	4,400	119,100	11.8%
PTC	87,300	8,800	4,000	100,100	11.0%
Total	191,600	19,200	8,400	219,200	11.6%

Table 5 – Issued Notice Distribution by Agency, 2020

Violations captured from March 9, 2020 through the end of the year resulted in a repeat rate of 11.62%, meaning those violations were fine-carrying 2nd or subsequent violations. The remainder of the violations issued in 2020, or 88.38%, were zero-fine first violation warnings.

Through the end of 2020, the program had an approximately 70% payment rate. The only statutory recourse against non-paying violators is to send those

violations to a collections agency. Violations can be transferred to collections once all reminder notices have been sent and no payment has been received after 120 days, which at the end of 2020 was approximately 11%. Coordination is ongoing with Transportation Agency collections agencies to start the collections process for eligible violations in early 2021.

Currently, unpaid E-ZPass violations must be paid prior to renewing vehicle registration, which ensures a high payment rate for the Turnpike's tolling system. The AWZSE program does not have this same sort of recourse, and collections remain the only recourse.



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A breakdown of the payment status of all violations is shown in Figure 2. The “other” category includes violations that were currently in process at the end of 2020.

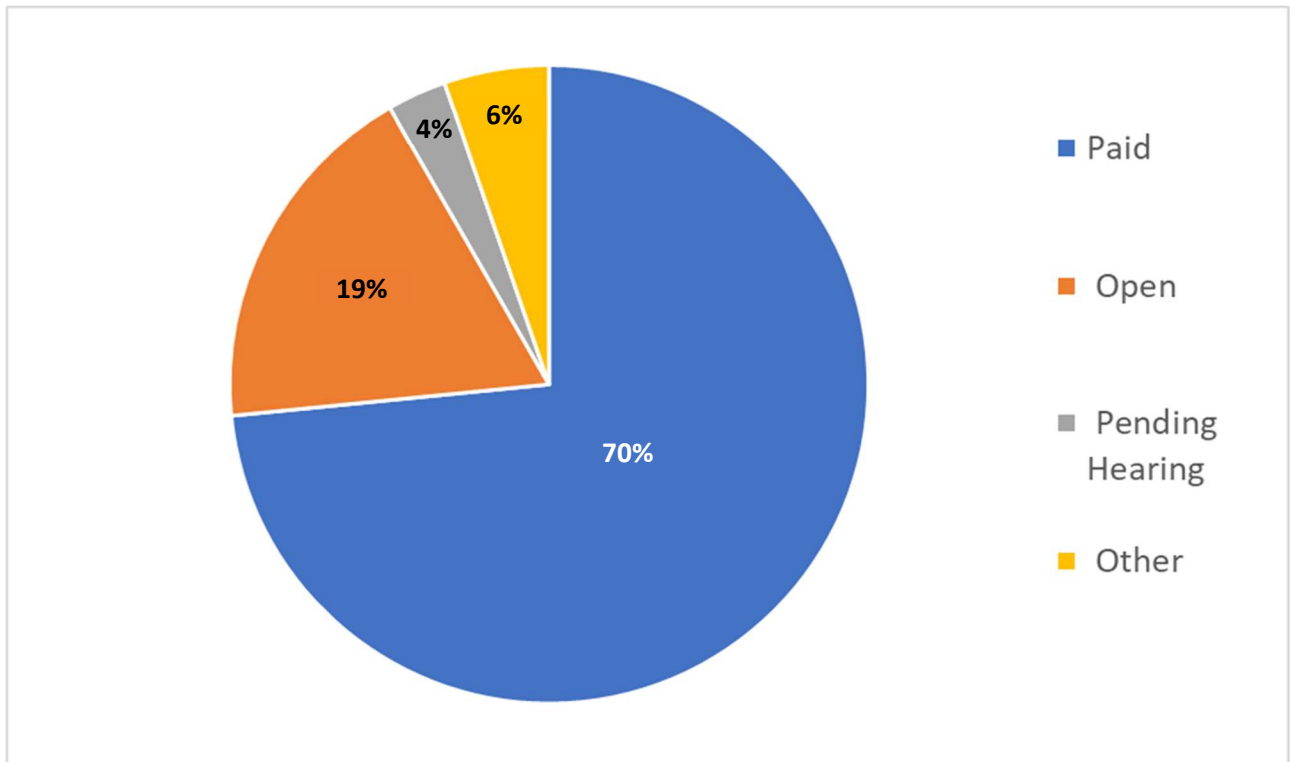


Figure 2 – Breakdown of Payment Status, End of 2020

78% of events captured in 2020 were of vehicles registered in Pennsylvania or states adjacent to Pennsylvania (i.e. Maryland, Ohio, New York, New Jersey, etc.). An additional 12% were other out-of-state registrations, and the final 10% were foreign plates or unidentified plate origin which are unable to be issued. For vehicles captured that are registered in or adjacent to Pennsylvania, this indicates the motorists whose behavior is most important to change through this program. Additionally, this data indicates which states are most important to have direct lookup agreements. The breakdown of captured vehicle registrations is shown in Figure 3.

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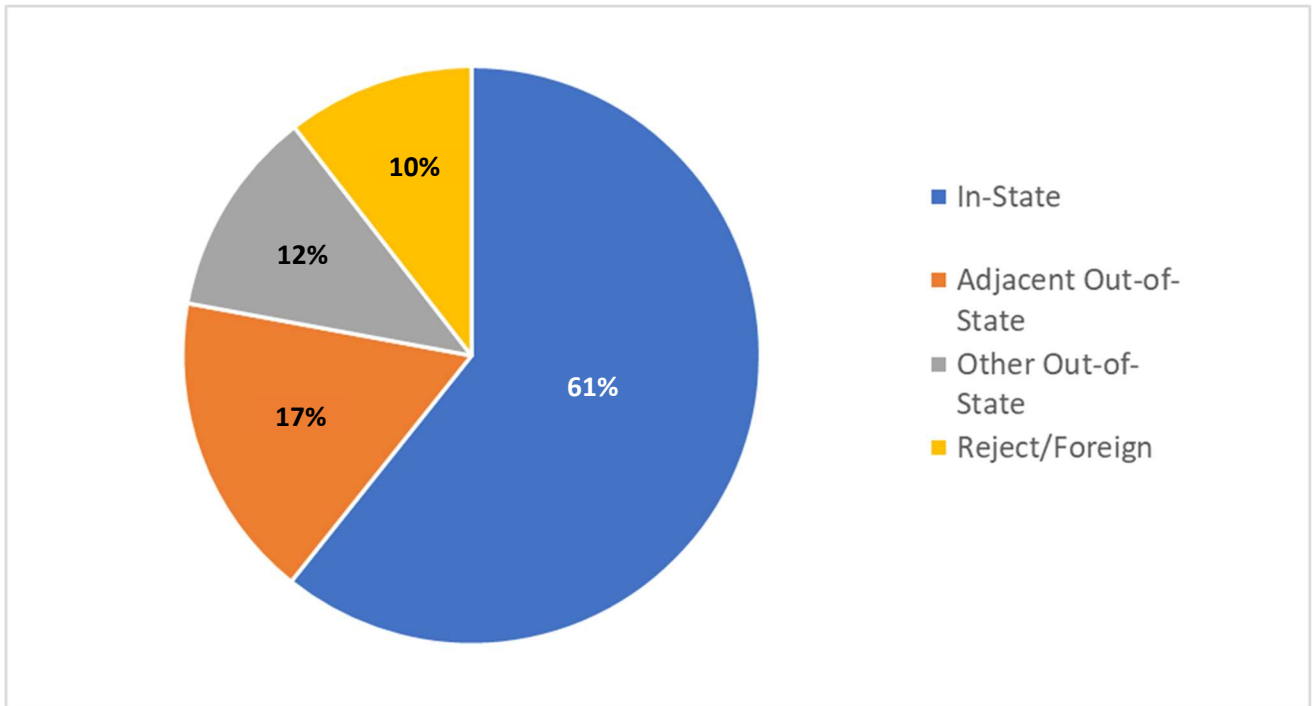


Figure 3 – Breakdown of Vehicle Registrations for Events Captured, 2020

SPEED DATA

Two primary metrics are used to measure the performance of the AWZSE program's impacts: Percent over the Speed Limit and Percent Excessively Speeding. Percent over the Speed Limit measures the percentage of detected vehicles exceeding the posted work zone speed limit by any amount. Percent Excessively Speeding measures the percentage of detected vehicles going 11 mph or more over the posted work zone speed limit. These metrics are tracked for each deployment completed, which allows for program staff to monitor speeding trends across all projects. This leads to identification of work zones with consistent speeding issues that may benefit from increased enforcement to better manage speeds through those work zones.



Table 6, Table 7, and Figure 4 provides a summary of speed data captured in 2020.

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	PTC	PennDOT	Combined
March	26.85%	42.12%	35.07%
April	33.65%	59.24%	46.45%
May	34.55%	37.12%	35.90%
June	25.96%	22.25%	23.58%
July	31.80%	15.37%	21.86%
August	34.69%	14.79%	22.34%
September	32.80%	17.61%	23.16%
October	33.74%	16.00%	22.39%
November	29.36%	15.48%	19.67%
December	39.12%	28.79%	33.14%
Average	32.25%	26.88%	28.36%

Table 6 – Percent over the Speed Limit, by Month, 2020

	PTC	PennDOT	Combined
March	2.29%	7.03%	4.84%
April	3.38%	16.27%	9.82%
May	4.78%	8.97%	6.90%
June	3.26%	4.52%	3.92%
July	4.73%	3.10%	3.72%
August	6.24%	2.59%	3.97%
September	4.85%	2.66%	3.46%
October	4.71%	2.06%	3.01%
November	3.09%	1.82%	2.21%
December	4.89%	5.81%	5.52%
Average	4.22%	5.48%	4.74%

Table 7 – Percent Excessively Speeding, by Month, 2020

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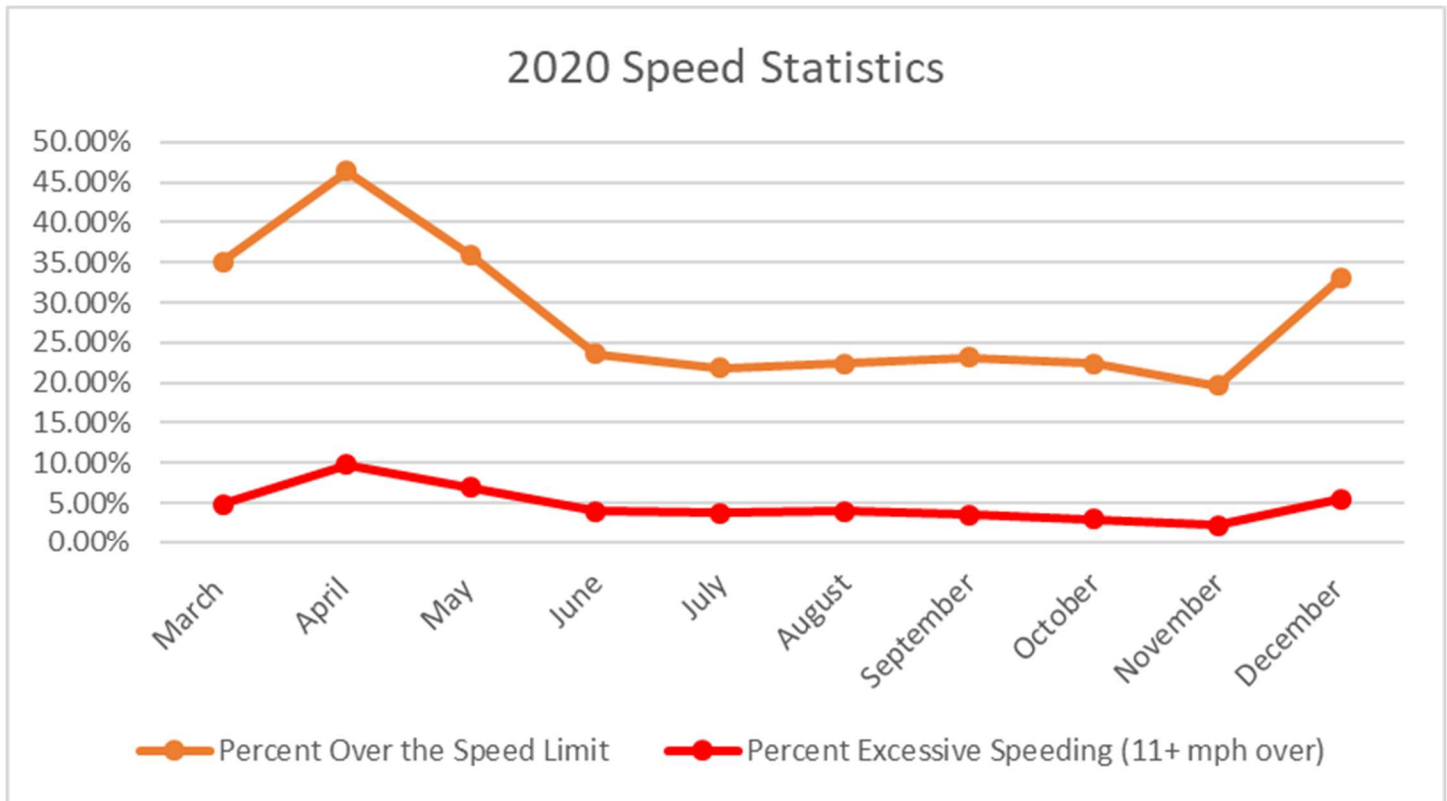


Figure 4 – Percent over Speed Limit and Percent Excessively Speeding, by Month, 2020

Since the construction restart in May, overall speeding and excessive speeding has reduced substantially through AWZSE enforced work zones through November, as the traditional construction season wrapped up in 2020. The increases in both metrics in April and early May are attributed to lower traffic volumes resulting from COVID-19 pandemic stay-at-home orders that were active in those months. The increases in both metrics in December are attributed to the types of projects that were available for enforcement, specifically, long-term projects that are protected by barrier where speeds have been generally higher.

In general, speeds have been higher in long-term barrier protected work zones than in short-term unprotected work zones. As the enforcement units have been deployed to the long-term barrier protected work zones, a reduction in speeds has been seen in these work zones. There have been more crashes in these barrier-protected long-term work zones when workers are not present and automated enforcement is not occurring. This shows that the enforcement units are not only increasing safety for the workers active in the zone, but also for the motorists traveling through these work zones.

INFORMAL HEARINGS

Through the end of 2020, the program received approximately 1,500 informal hearing requests from registered owners contesting liability, constituting approximately 7% of all violations issued.

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PennDOT filled two full time AWZSE hearing officer positions to preside over the informal hearings, which began in March 2021.

At the current time, all hearings are being conducted virtually in accordance with the applicable COVID mitigation orders and guidance on the Microsoft Teams platform. In-person hearings will resume consistent with applicable guidelines.

Numerous hearing requests have been made where the registered owner attempts to void the violation based on a technicality, rather than questioning the accuracy of the violation or the applicability of the location of the work zone deployment. For hearings held to date, these hearings have generally resulted in the registered owner being found liable. “Not liable” findings have typically been associated with one of the three defenses in §3369(g) – a stolen vehicle reported to a police department, evidence that the registered owner was not the owner at the time of the offense, or an error in the speed timing device accuracy. At the time of this report, there have been zero “not liable” findings attributed to the last defense.

Another request that has been fielded in relation to hearing requests is the desire to transfer liability to the individual driving the car at the time of the violation, with both the registered owner and the driver willing to submit the request in writing. Per the legislation, the registered owner is the responsible party and liability cannot be transferred.



NEXT STEPS

The program will continue operation into 2021.

- Continued project screening, deployment scheduling, and data tracking.
- Further development of the program database for enhanced scheduling, tracking, and reporting.
- Historic deployment data will be available on the website by location. This will include the number of violations captured at that location, potentially with other stats. This capability is still in development.

LEGISLATIVE REVIEW

The AWZSE team continually evaluates all aspects of the program to improve program operations and effectiveness. In 2020, there appear to have been several trends that may require additional legislative action. These include:

- Section 3369.i.4 – Payment of Fine – A potential change to this section would allow for vehicle registration renewal to be withheld until unpaid fines are collected. This would be similar to EZPass non-payment suspension under Act 165 of 2016.

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- Section 3369.b.2 – Signing – Requesting ability to remove indication of active / inactive work zone from signing. This may allow for additional signing as needed.
- Section 3369.c.1 – Owner Liability – Requesting ability to transfer liability from registered owner to driver of vehicle if both parties agree in writing. Currently, liability cannot be transferred.
- Section 3369.e.1 and e.2 – Penalty – Consideration for potential alternatives in fine structure could include:
 - Financial penalty on first offense
 - Speed-based penalties (i.e. 21 mph over the posted work zone speed limit would be a higher penalty than 11 mph over the posted work zone speed limit)
- Section 3369.j – Contest – Requesting ability to hold hearings fully virtual or as a document review once pandemic restrictions are lifted.

CONCLUSIONS

In 2020, the AWZSE program was successfully established, exceeding the timeframe required in Act 86 of 2018 by several months. Despite the challenges associated with the COVID-19 pandemic, in 2020, the program took several steps to meet its overall program goals:

- Reduce speeds in work zones – Generally speaking, work zones speeds have trended downward throughout AWZSE enforced work zones, once AWZSE was consistently used as a tool to reduce speeds, from June - November. **Figure 4** above illustrates this decrease, with a 16.6% reduction in the percentage of vehicles traveling over the posted work zone speed limit and a 43.6% reduction in the percentage of vehicles excessively speeding.
- Promote work zone safety – Throughout 2020, the Transportation Agencies (PennDOT and the Turnpike Commission) have promoted the use of AWZSE as a tool to enhance work zone safety and have incorporated this messaging into their overall work zone safety messaging programs. Several press articles and efforts have highlighted the effectiveness of the program and have focused on the safety benefits of the program.
- Improve driver behavior – There is evidence that overall work zone speeds have declined in projects that have had long-term deployments, such as I-78 in Berks County or I-476 in Montgomery County. There has been a reduction in average speeds of 5-8 MPH in these work zones, regardless if the AWZSE units have been deployed or not.
- Save worker and traveler lives – Overall work zone crashes in Pennsylvania work zones were down approximately 30-35% (note that final crash statistics are not available).
- Complement existing speed enforcement by the Pennsylvania State Police – PSP remains a committed program partner and serves a vital role in the program. PSP has continued providing conventional speed enforcement in Pennsylvania Work Zones, and the combination of both types of enforcement appears to be complimenting each other and yielding benefits in our work zones.

The AWZSE program is focused on continuing to meet these program goals and is taking steps in 2021 to better meet the program goals and further make Commonwealth work zones safer. All three agencies are committed to increasing the use of this tool in 2021, building upon the program successes in 2020

AUTOMATED WORK ZONE SPEED ENFORCEMENT

and as activity emerges from the COVID-19 pandemic. Applying the lessons learned from 2020 will be critical to achieving the desired safety improvements and continues to be an emphasis point for all involved in the AWZSE program.