



# Annual Report

## Worksite Speed Control Pilot Program

November 2024

Prepared for:

**Interim Study Committee on Roads and Transportation**

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## Glossary

- WSCS – Worksite Speed Control System
- INDOT – Indiana Department of Transportation
- ISP – Indiana State Police
- HEA – House Enrolled Act
- OALP – Office of Administrative Law Proceedings
- BMV – Bureau of Motor Vehicles



# INTRODUCTION

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The Worksite Speed Control Program uses mobile enforcement units to monitor vehicle speeds through active worksites across the state. Using speed detection and image capture equipment, the mobile enforcement units will capture images of vehicles exceeding the posted worksite speed limit by 11 MPH or more. Once the captured event is processed through the multi-step review process and the registered owner information is returned from BMV, a notice of violation will be prepared and mailed to the registered owner.

The pilot program will begin with a pre-enforcement period, during which drivers will receive courtesy notices but will not be fined. After the pre-enforcement period is over, the first violation will result in a zero-fine warning, the second in a \$75 civil penalty, and every violation thereafter a penalty of \$150. In accordance with the statute, collected penalties will go into Indiana's General Fund.

The Indiana General Assembly enacted House Enrolled Act (HEA) 1015 on July 1, 2023, to amend Title 8 of the Indiana Code concerning transportation. Amendments included the addition of Chapter 32. IC 8-23-32 authorized the Indiana Department of Transportation (INDOT) to establish the Worksite Speed Control System (WSCS) pilot program. IC 8-23-32 requires the following report of the program to be provided to the Interim Study Committee on Roads and Transportation established by IC 2-5-1.3-4 no later than November 1 annually. Each annual report will follow the INDOT fiscal year of July 1 to June 30 of the following year. Therefore, this initial report covers July 1, 2023, to June 30, 2024.

As of June 30, 2024, the statewide WSCS program had not begun enforcement activities.

## CHAPTER 32 MANDATED REPORTING

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IC 8-23-32 mandates the annual report include worksite crash information, speed data, number of violations, and program fines issued by the WSCS program. Since the program had not begun enforcement activities, no program data is available for reporting. The following sections describe which data will be included on annual reports after the WSCS program gets underway.

### Worksite Crash Information

This section will include data related to worksite crashes where the WSCS was operated. Specific data will include:

- Total number of crashes.
- Percentage of crashes that resulted in injury or fatality.
- Number of people injured because of a worksite crash.
- Number of people fatally injured because of a worksite crash.
- Number of construction workers injured or fatally injured because of a worksite crash.

## Speed Data

This section will include data related to the speed of motor vehicles traveling through a worksite where the WSCS was operated. Specific data will include:

- Average speed differentials.
- Average speed of vehicles through worksites, compared to the posted speed limit.
- A comparison of the percentage of vehicles excessively speeding prior to WSCS operation and during WSCS operation.

## Number of Violations

This section will include data related to the number of violations issued in a worksite where the WSCS was operated. Specific data will include:

- Number of potential violations captured throughout the entire fiscal year.
- Percentage of violations committed by repeat offenders.

## Program Fines

This section will include data related to the number and dollar amount of penalties imposed for violations occurring in a worksite where the WSCS was operated during the fiscal year.

# PROGRAM GOALS

The goal of the WSCS program is to improve safety throughout Indiana worksites while maintaining program accuracy and efficiency. Specific objectives include:

- Reducing the number of crashes in worksites.
- Reducing the severity of crashes in worksites.
- Reducing speeds in worksites.
- Maintaining a high level of operational efficiency and accuracy.
- Maintaining a high collection rate of assessed penalties and an efficient appeals process.
- Maintaining a high level of customer service.

# PROGRAM STATUS

As of June 30, 2024, the WSCS program had not entered live enforcement, but several actions were started or completed to progress the program. These include:

- Passage of HEA 1015, establishing IC 8-23-32 – Enacted July 1, 2023.
- Development of interagency agreements between INDOT, the Indiana Bureau of Motor Vehicles (BMV), Indiana State Police (ISP), and the Office of Administrative Law Proceedings (OALP) – Started May 17, 2024.
- Publishing of WSCS rules (105 IAC 18) – Completed May 29, 2024.

The pre-enforcement period began August 14, 2024. During this period, motorists exceeding the posted speed limit by the statutory threshold of 11 mph or more will receive a courtesy notice notifying them that they were identified as violating IC 8-23-32, as well as educational information about the WSCS program. The program team has used the pre-enforcement period to ensure the WSCS program is operating as expected and to

make any adjustments necessary to ensure proper operation. When the pre-enforcement period ends, actual enforcement will commence, and violation notices will be issued and count toward the tiered offense logic outlined in IC 8-23-32-18. The first violation will result in a zero-fine warning, the second in a \$75 civil penalty, and every violation thereafter a penalty of \$150.

## Field Deployment Approach

The field deployment approach involves:

### Pre-Enforcement Deployment Period

- Began August 14, 2024.
- Enforcement began with one unit on I-70 in Hancock County and expanded to two units within that same worksite, one in each direction, within one week.
  - Additional projects for potential enforcement are currently under evaluation and coordination.
- Deployments are restricted to daytime operation.
- Operations being tested during this period include:
  - Back-office processing and reporting.
  - Violation review and issuance.
  - Violation printing and mailing.

### Live Enforcement Deployment Period

- Live enforcement will begin when the program team is comfortable with issuing live WSCS penalties.
- Four units will be available at the start of live enforcement.
- Units will be available for two shifts daily, a daytime and an overnight shift.
- The program will support both long-term and short-term worksites.

# PROGRAM ROLES AND RESPONSIBILITIES

The roles and responsibilities of each organization involved in the WSCS program are as follows:

## **Indiana Department of Transportation (INDOT)**

- Rulemaking development.
- Development of interagency agreement(s).
- Development and advertisement of the request for proposals (RFP).
- Selection of preferred vendor.
- Scheduling and monitoring of units.
- Tracking of program budget.



INDOT is the primary stakeholder of the WSCS program, responsible for planning, implementing, auditing, and financing the program, as well as ensuring adherence to IC 8-23-32. Specific INDOT duties include:

- Funding the WSCS program.
- Procurement and management of Program Administrator and System Administrator.
- Identification of worksites that will host WSCS units.
- Scheduling of WSCS units and subsequent coordination with System Administrator at regular intervals.
- INDOT WSCS program personnel recruitment and hiring.
  - One WSCS Program Director whose duties include:
    - Oversight of the planning and execution of the program.
    - Coordination with INDOT staff, both internal and external to the WSCS program, the Program Administrator, and the System Administrator.
  - One WSCS Field Supervisor whose duties include:
    - Oversight of all INDOT Regional Operators and program field operations.
    - Ensuring that all field activity follows program policies and procedures.
    - May be involved in back-office violation review depending upon program needs and violation volume.
  - Five WSCS Regional Operators whose duties include:
    - Coordination with System Administrator to verify all requirements for enforcement are satisfied.
    - Operating the vendor-provided enforcement units during startup and shut-down processes.
    - Performing site visits to verify accuracy of results from the System Administrator.
    - Performs back-office violation review to ensure each event meets established requirements for violation issuance.
- Development and tracking of critical path method schedule.
- Transfer of collected program fines to the Indiana General Fund.
- Fulfillment of Freedom of Information Act (FOIA) requests.

INDOT procured a Program Administrator to assist with the development and administration of the program. Rummel, Klepper and Kahl, LLP (RK&K), with support from HNTB, was selected by INDOT as the WSCS Program Administrator in July 2023. Thus far, the Program Administrator team has provided support to INDOT with the following tasks:

- Vendor procurement
  - Development of vendor RFP.
  - Vendor demonstration coordination and logistics.
  - Technical expertise on vendor proposals.
- Document and standards development
  - Signing layouts.
  - Concept of operations.
  - Process flowcharts.



- Communications
  - Program branding.
  - Website development.
  - Press release development support.
- Auditing
- Internal Dashboard Development



After the WSCS program goes live, the Program Administrator will have additional duties including:

- Performance monitoring and reporting
- Additional support as necessary

INDOT has also procured a System Administrator to assist in the execution of technical elements of the program. Conduent, Inc. was selected by INDOT to provide a turnkey solution as the WSCS System Administrator in February 2024.

In May 2024, the Curbside Management and Public Safety businesses of Conduent Inc. were acquired by Modaxo Inc., a global collective of technology organizations. Modaxo, through its sub-brand Elovate, is responsible for:

- Field Services
  - Deployment of “Active” signing when enforcement begins.
  - Removal of “Active” signing when enforcement ends.
  - Deployment of WSCS units.
  - Confirmation of worker presence throughout the enforcement period.
  - Procurement of storage facilities for WSCS units.
- Back-office Processes
  - Initial violation review.
  - Registered owner lookup.
  - Payment processing.
  - Customer service.
- Development of training guides.
- Training of INDOT personnel and Modaxo personnel.
- Obtaining annual calibration certification for all WSCS units.

**Indiana State Police (ISP)**

- Support in the development, implementation, and operation of the WSCS program.

**Office of Administrative Law Proceedings (OALP)**

- Participate in the appeal process of WSCS violations.

# FY 2024 WSCS PROGRAM ACHIEVEMENTS

While no enforcement activities occurred in FY 2024, INDOT has been focused on developing a single comprehensive statewide program that accomplishes the goals outlined in Program Goals and abides by the requirements of IC 8-23-32. Key tasks completed during FY 2024 are detailed below.

## System Administrator Procurement

- An RFP was released by INDOT on November 17, 2023.
- Field demonstrations for selected respondents occurred in January 2024.
- Interviews with selected respondents occurred after each field demonstration.
- Notification of the selected vendor occurred on February 26, 2024.
- INDOT provided the vendor with Notice to Proceed (NTP) on May 16, 2024.

## System Administrator Achievements

- Procured and outfitted four primary enforcement vehicles and one backup enforcement vehicle.
- Procured WSCS signage.
- Began updating the violation database software to include the WSCS program.
- Developed user training guides.
- Began hiring enforcement operators and back-office violation reviewers.
- Developed Deployment Log template.
- Developed deployment checklist.
- Coordinated violation printing and mailing process.
- Began developing the payment portal to receive program fines.
- Began development of call center set-up and representative training.

## Process Development and Implementation

Business rules are being developed in a joint effort by INDOT, the Program Administrator, and System Administrator to promote consistent execution of the program. Program requirements, operational procedures, and expectations are included within the program business rules. Processes described in the business rules include:

- Project/Deployment Scheduling
  - Business rules ensure weekly schedules, daily schedules, and deployment cancellations are clearly communicated between INDOT and the System Administrator.
- Signage Validation Process
  - Business rules ensure the setup of WSCS signage is consistent across deployments and satisfies IC 8-23-32-11.
- WSCS System Setup/Configuration
- Deployment Checklist
  - Business rules ensure the WSCS unit operator confirms that each deployment location and setup passes a checklist prior to enforcement.



- Deployment Log
  - Business rules ensure a Deployment Log will be generated for all deployments per IC 8-23-32-14.
- Lockbox Operating Procedures
- Customer Service Operating Procedures

Field operational processes have been established for the program, including:

- Standards development.
- Enforcement unit outfitting, testing, certification, and delivery.
- System Administrator and INDOT operator training.
- Signage procurement.

Operational processes have been established for the program, including:

- Violation capture.
- Violation verification.
- Payment acceptance.
- Appeal processing.

Financial processes involving WSCS penalty collection will be established and tested during the pre-enforcement period.

### **Program Readiness**

Prior to beginning enforcement, several additional program elements are to be completed. These elements include:

- Field Operations
  - Enforcement unit storage procurement.
- Violation Review
  - Finalization of business rules.
  - Customization of violation system.
  - Development of violation notices.

## **DEPLOYMENT APPROACH AND IMPLEMENTATION**

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Once the WSCS program enters live enforcement, there will be four units available for deployment statewide. Each unit will be deployed in an active worksite for up to eight hours of enforcement in one shift.

### **Statutory Requirements**

During the development and implementation of the WSCS program, INDOT ensured all statutory requirements described in IC 8-23-32 were being met. These include:

- Warning Signs – IC 8-23-32-11 requires two warning signs indicating that worksite speed limits are monitored by a WSCS are placed ahead of the worksite where active enforcement is occurring. Development of the advance warning signs along with sign placement standards were finalized in March 2024. Each WSCS deployment will have at least two advance warning signs prior to entering the worksite besides a third advance warning sign stationed prior to the enforcement unit. The responsibility of procurement of each sign depends on the anticipated length of construction.

- Long-Term Worksite: When deploying at a long-term worksite, the construction contractor is responsible for providing two 108-inch-by-84-inch panel notice signs and at least one 48-inch-by-60-inch sheet metal notice sign prior to entering the worksite. The System Administrator is responsible for providing one 48-inch-by-48-inch roll-up active warning sign upstream of the enforcement unit. The roll-up active warning sign will only be in place during an active enforcement period. The roll-up active warning sign will be installed at the beginning of deployment and removed at the end of deployment.
- Short-Term Worksite: When deploying at a short-term worksite, the System Administrator is responsible for providing at least two 48-inch-by-60-inch roll-up notice signs in advance of the worksite and one 48-inch-by-48-inch roll-up active warning sign upstream of the enforcement unit. The roll-up active warning sign will only be in place during an active enforcement period. The roll-up active warning sign will be installed at the beginning of deployment and removed at the end of deployment.
- Active Worksite – IC 8-23-32-11 requires that the worksite must be active with workers present for enforcement to occur. Controls have been implemented to document worker presence throughout each deployment shift. The System Administrator is responsible for documenting worker presence through the full enforcement period. INDOT Regional Operators are responsible for verifying worker presence when accepting or rejecting the proper completion of the Deployment Log. The initial violation review process cannot begin until an INDOT Regional Operator has confirmed workers were present at the time of enforcement.
- Deployment Log – IC 8-23-32-14 requires the completion of a daily log by a WSCS operator; this is achieved through the use of a Deployment Log for each enforcement setup. To account for the requirements set forth by IC 8-23-32-13, INDOT has hired Regional Operators specifically to carry out the duties required by the statute. The Deployment Log contains information such as the location of the worksite, the date and time of enforcement, the location of workers within the worksite, and confirmation that the unit passed the self-test.

## **Project Selection**

Project selection will be coordinated by INDOT. Depending on availability, projects selected for WSCS will be spread throughout the state to the extent possible. This ensures no single part of the state is receiving a higher share of deployments. It also is meant to provide other worksites with a “halo effect” from these deployments that may improve speed limit compliance in worksites throughout the state.

## **Violation Verification**

A dependable and accurate operation of the WSCS program is crucial to ensuring the program is effective at achieving program goals. This is achieved by the following steps:

### Speed Camera Equipment

- Annual Unit Calibration – Each enforcement unit is tested annually by a third-party certified testing laboratory.

- Unit Daily Self-Test – Each enforcement unit undergoes a self-test at the start and end of each enforcement period. Both self-tests must be completed by an INDOT Regional Operator. The speed camera system is manufactured to prevent the beginning of enforcement until the self-test is passed. If the self-test at the end of the deployment fails, all violation images collected during that enforcement are null and void. Confirmation of these daily tests are provided within the Deployment Log kept by the System Administrator.

### Violation Review

- Deployment Log Review – Once a deployment has been completed and uploaded to the back-office database, an INDOT Regional Operator must review and either affirm or reject the log. If the Regional Operator affirms the log was completed satisfactorily per IC 8-23-32-14, the violations from the deployment will enter initial review. If the Regional Operator rejects the log due to an unsatisfactory condition, then the deployment is null and void and the captured events from that deployment will be discarded.
- Initial Review and Processing – The System Administrator manually reviews each violation recorded and uploaded to the back-office database. This initial review confirms that all documentation is in order, including records of the start and end self-tests; ensures that the image quality is high enough to issue a Notice of Violation; and initiates the BMV lookup process to identify the registered owner of the vehicle.
- Double-Blind Review and Processing – The System Administrator performs a second manual review of each violation recorded, referred to as the “Double-Blind” Review. The System Administrator personnel assigned to this task always differs from the personnel performing the initial review.
- Final Review and Processing - The System Administrator confirms the registered owner information returned from the BMV lookup matches with the vehicle captured in the images, i.e. a registered owner lookup tied to a blue sedan matches a blue sedan in the images. Another check of the documentation and Notice of Violation is prepared at this point.
- INDOT Regional Operator Verification - All notices and violations are reviewed and affirmed by INDOT Regional Operators prior to being mailed. INDOT Regional Operators will provide an additional review to confirm the plate shown in the violation images match the plate key-in for the BMV lookup.

If any of these steps is found to have failed during the violation review process, the violation will no longer be valid.

## **PERFORMANCE MONITORING AND REPORTING**

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The Program Administrator will monitor program performance and report on the associated statistics.

## Performance Monitoring

The Program Administrator is to confirm that units are operating as scheduled or if a deployment cannot occur as scheduled. Additionally, the Program Administrator is to perform field quality control to ensure deployments are operating as required by IC 8-23-32.

## Reporting

The following statistics will be evaluated by the Program Administrator during the life of the program:

### Violations

- Total violations captured.
- Total notices of violation issued.
- Uncontrollable/controllable rejects.
- Number of repeat offenders.
- Amount of fines imposed and collected.

### Speeds

- Average speeds
  - Prior to enforcement.
  - During enforcement.
  - After enforcement.
- Average speed of violators.
- Percentage of traffic exceeding the speed threshold (11 mph over posted speed limit).



# PUBLIC OUTREACH

INDOT intends to use the following outreach techniques to educate the public on the WSCS program:

## Program Launch

- Ongoing communication about the program will be shared with legislators and local officials.
- Press releases were prepared prior to the start of the Pre-Enforcement Period. Similar press releases will be prepared when the program transitions to live enforcement.
- Targeted media briefings will continue to be held for future deployments.
- A public-facing informational website has been developed.

## Field Testing

- A legislative briefing regarding field testing was held with policymakers.
- A press release was provided to media.
- An explanatory video will be created to post on INDOT channels.
- Update of public-facing informational website.

## Go Live

- A press release regarding “go live” was provided to the media for the pre-enforcement period and will be provided again before active enforcement.
- Continued push of an explanatory video posted on INDOT channels.
- Update of public-facing informational website.
- Creation of location-specific communications for each worksite.

## Program Website

A public-facing informational website has been developed and is hosted by the Program Administrator at [SafeZonesIN.com](https://www.SafeZonesIN.com). Information on the website includes the following:

- An overview of the program, including how and why the program was created and what residents can expect.
- Infographics of speed data trends to be added at a future date.
- References to similar programs within the United States.
- Frequently Asked Questions (FAQ).

## Media Relations

The WSCS program intends to be part of National Work Zone Awareness Week (NWZAW) in 2025 as the program shares a similar goal – encouraging motorists to use caution and practice safe driving through worksites.

# PRE-ENFORCEMENT DEPLOYMENT

The WSCS program did not deploy any units during fiscal year 2024, however pre-enforcement deployments of the WSCS unit began August 14, 2024, and will continue until all processes are confirmed as functional. During the pre-enforcement period, the units will be mostly deployed to long-term worksites during daylight hours.

During the pre-enforcement period, additional tasks will be completed to ensure the program is functional to minimize risks during “go live.” Additional tasks to be worked through include:

- Refinement and finalization of business rules.
- Completion of training for all worksite operators employed by INDOT or the System Administrator.

# SPEED DATA

The overall goal of this program is to promote worksite safety by encouraging drivers to comply with worksite speed limits. As the program enters pre-enforcement and continues into live enforcement, speed data will be collected and analyzed as measures of effectiveness. The two main categories of speed data to be analyzed are:

- Average speed
- Excessive speed

## **Average Speed**

The data gathered from WSCS enforcement will not be used in the analysis of average speed. Instead, INDOT will leverage its existing partnership with Purdue University to gather data and use it to look at changes in average speed through worksites over time. The data will be analyzed in a manner that compares average speeds upstream of the enforcement unit and average speeds at the location of the enforcement unit. The data also will be analyzed to compare the average speed through a worksite prior to the presence of an enforcement unit, during the enforcement period, and after the enforcement period.

## **Excessive Speed**

Excessive speeding is defined as vehicles that are traveling at least 11 mph over the posted speed limit. The data gathered from WSCS enforcement will be used in the analysis of excessive speed. The data will be provided as a percentage of the total speed readings taken by the enforcement unit.

# **NEXT STEPS**

INDOT will continue to implement the program while sharing information with ISP regarding the WSCS pilot program. Since the close of fiscal year 2024, the WSCS program has begun pre-enforcement with two units operating. A full end-to-end test will be completed once all field, operational, and financial processes are implemented. The end-to-end test will follow a violation through the entire cycle of the program to confirm all processes are operational and functioning as expected. After the successful completion of the end-to-end test, the program will enter live enforcement with all four primary units operational. INDOT will continue to educate the public on the WSCS program and will provide a press release before the start of live enforcement. The public facing informational website went live July 24, 2024, and will be updated as the program enters live enforcement. INDOT will continue to identify worksites that are suitable for WSCS operation. As additional worksites are identified and begin enforcement, the public-facing informational website will be updated with location-specific information.



# SUMMARY OF INITIAL RESULTS

Pre-enforcement began on Wednesday, August 14, 2024 in the I-70 Mount Comfort to SR 9 worksite in Hancock County. The following observations were made in the worksite during the pre-enforcement period:

- Average speeds decreased by up to 4 mph when WSCS warning signs were present.
- Average speeds decreased by up to 6 mph when WSCS warning signs and enforcement were present.

## Ongoing Speed Reduction

Enforceable events, defined as vehicles traveling 11 MPH or over the posted speed limit, are an indirect measure of the effectiveness of the program. As shown in the table below, enforceable events reduced substantially with the start of the pre-enforcement period. The effectiveness of the enforcement varied as the location of the enforcement vehicle within the worksite was adjusted over time.

		Reduction in Enforceable Events (Speeds 11mph or more over the posted speed limit) <sup>1</sup>	
Start Date	End Date	EB	WB
9/16/24	9/22/24	82%	71%
9/23/24	9/29/24	82%	71%
9/30/24	10/6/24	82%	81%
10/7/24	10/13/24	71%	90%
10/14/24	10/20/24	50%	57%
10/21/24	10/23/24	50%	64%
10/24/24	10/28/24	50%	95%
<b>Average</b>		<b>70%</b>	<b>76%</b>

## Back-Office Processes

17,908 enforceable events have been collected to date (as of October 29, 2024) and 8,435 courtesy notices have been mailed to motorists. 46% of enforceable events have been rejected due to limitations related to commercial vehicles, vehicle registration identification, obstructed license plates and rental/leased vehicles. 7% of enforceable events are in processing.

Start Date	End Date	Enforceable Events	Rejected Events	Events In Process	Courtesy Notices Mailed <sup>2</sup>
8/1/2024	8/31/2024	4627	2593	7	2027
9/1/2024	9/30/2024	7779	3646	0	4133
10/1/2024	10/29/2024	5502	2047	1180	2275
<b>Totals</b>		<b>17908</b>	<b>8286 (46%)</b>	<b>1187 (7%)</b>	<b>8435 (47%)</b>

<sup>1</sup> Reduction in enforceable events as compared to events occurring in the pre-enforcement period.

<sup>2</sup> No penalties are issued during the pre-enforcement period.