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Revision 1

# Delaware ITD-PRISM Program & Project Information



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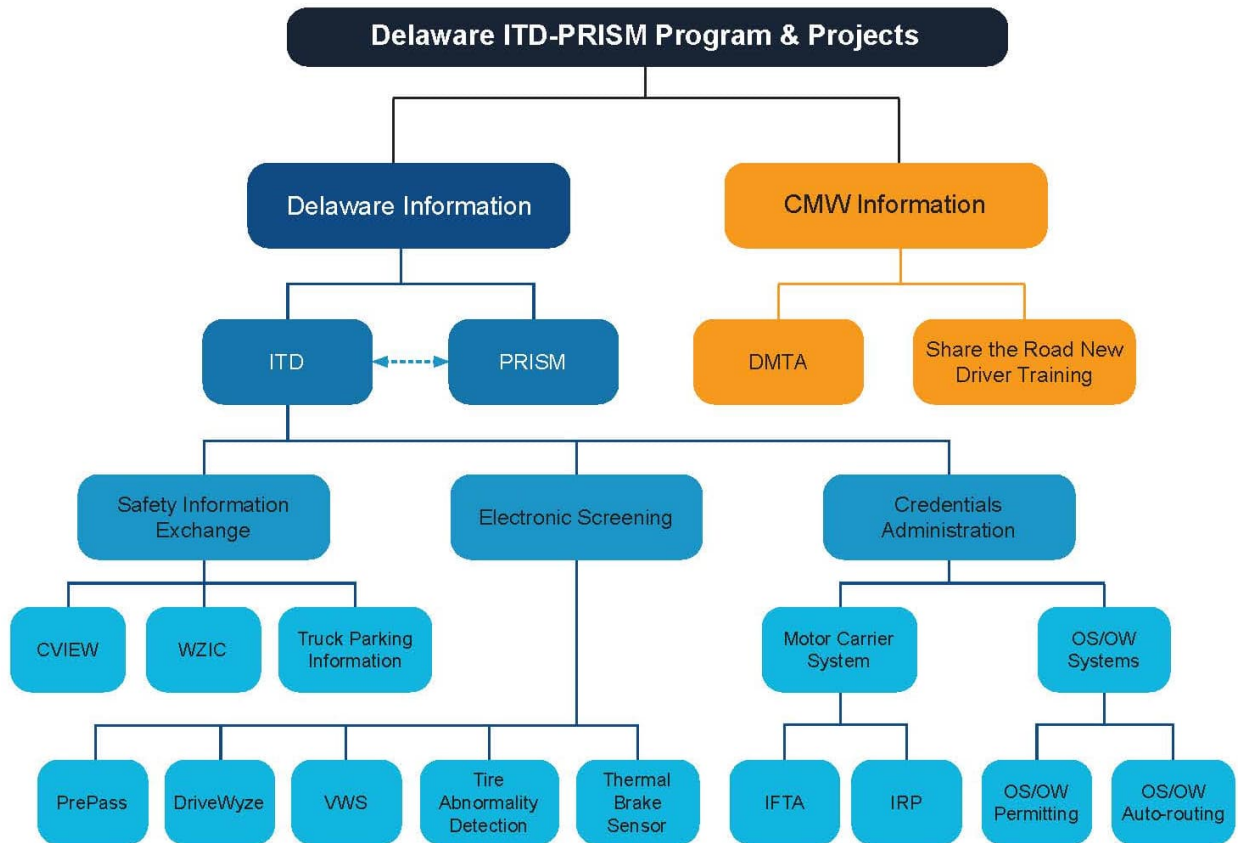
## Acronyms

CLF	common look and feel
CMV	commercial motor vehicle
CVIEW	Commercial Vehicle Information Exchange Window
CVISN	Commercial Vehicle Information Systems and Networks
DeIDOT	Delaware Department of Transportation
DMS	dynamic message sign
DMTA	Delaware Motor Transport Association
DMV	Department of Motor Vehicles
DSP	Delaware State Police
FMCSA	Federal Motor Carrier Safety Administration
IFTA	International Fuel Tax Agreement
IRP	International Registration Plan
ITD	Innovative Technology Deployment
ITS	Intelligent Transportation Systems
OS/OW	oversize/overweight
PP/TLD	Program Plan and Top-Level Design
PRISM	Performance Registration and Information Systems
SAFER	Safety and Fitness Electronic Records
VTTI	Virginia Tech Transportation Institute
VWS	virtual weigh stations
WIM	weigh-in-motion
WZIC	Work Zone and Incident Communication

# 1. Introduction

This document provides information about the state of Delaware’s Innovative Technology Deployment (ITD) Program and Performance Registration and Information Systems (PRISM) Program. Through ITD and PRISM, the Federal Motor Carrier Safety Administration (FMCSA) provides federal funding for states to deploy a variety of projects that support interstate and intrastate commercial motor vehicle (CMV) operations (Figure 1). ITD provides funding for CMV credentials administration; electronic screening of CMVs for size, weight, safety, and credential information; and the real-time exchange of vehicle and driver safety information to support safety inspections and enforcement of CMV regulations. PRISM provides states with a mechanism to identify and immobilize motor carriers with serious safety deficiencies and hold them accountable through registration and law enforcement sanctions. Delaware’s ITD and PRISM programs are fully compliant with Title VI of the Civil Rights Act of 1964. Follow this link for more information: <https://deldot.gov/Business/titleVI/index.shtml>

**Figure 1. Delaware ITD & PRISM Program and Projects Organization**



## 2. Delaware ITD Program Information

In 2006, Delaware became a part of the Commercial Vehicle Information Systems and Networks (CVISN) Program, a comprehensive, multi-agency program to improve CMV safety and operations by:

- **Replacing antiquated systems** and processes for credentialing commercial vehicles with systems that are more efficient, accurate, and user-friendly.
- **Developing new systems** to exchange safety and credentialing information with other agencies and jurisdictions throughout the country to get unsafe carriers off the road.
- **Deploying the latest technology** to electronically screen commercial vehicles for size, weight, and safety violations, allowing enforcement officers to focus their limited resources on high-risk carriers.

With the passage of the Fixing America's Surface Transportation Act in 2015, CVISN was renamed the ITD Program.

The original Delaware CVISN (now ITD) Program Plan and Top-Level Design (PP/TLD) represented the state's commitment to implement all core CVISN capabilities through a program of projects that leveraged and enhanced existing systems and capabilities. Delaware's CVISN/ITD implementation program conformed to core CVISN requirements as defined by the FMCSA. Delaware's implementation of its core CVISN Program was guided by the national Intelligent Transportation Systems Architecture, ensuring that state deployments conform to the national program's core principles and open design standards.

By electronically linking government agencies and motor carriers, ITD is:

- **Improving Safety.** More accurate and timely safety information improves the effectiveness of federal and state safety programs, including the ability of safety enforcement personnel to focus their limited resources on high-risk commercial vehicle operators.
- **Streamlining Credentialing and Regulatory Systems and Procedures.** More efficient and responsive administrative processes, including online processing, reduce the time and cost involved in the credentialing process.
- **Increasing the Productivity of the Trucking and Bus Industries.** More-efficient movement for safe and legal motor carriers is facilitated by putting up-to-date and accurate safety and credentials data into the hands of enforcement personnel; time and cost savings associated with electronic credentialing systems also provide productivity gains for motor carriers and enforcement officers.

Delaware has deployed all core CVISN capabilities and has received core CVISN Compliance Certification from FMCSA on September 16, 2014. These capabilities are summarized as follows:

- **Safety Information Exchange.** Delaware has deployed Aspen inspection software on commercial vehicle enforcement officers' laptops and at all major inspection facilities. Delaware also has deployed a Commercial Vehicle Information Exchange Window (CVIEW) System that provides commercial vehicle safety information sharing by providing cross-references among federal and state systems such as the International Registration Plan (IRP), International Fuel Tax Agreement (IFTA), and Oversize/Overweight (OS/OW) Hauling Permit System. CVIEW also is connected to several FMCSA systems such as Query Central, PRISM, Licensing and Insurance System, Motor Carrier Management Information System, Query Central, Commercial Driver's License Information System to provide Delaware Law Enforcement personnel up-to-date safety, inspection, and credential information.
- **Credentials Administration.** Delaware participates in the IRP and the IFTA. Delaware enables electronic credentialing through the state's IRP and IFTA systems (integrated and collectively referred to as the Delaware Motor Carrier E-Credentialing System), and the state exceeds the requirement that at least 10% of transactions are filed electronically.
- **Electronic Screening.** Delaware has deployed the PrePass e-screening system and a weigh-in-motion (WIM) system at the U.S. Highway 301 weigh station that allows compliant commercial vehicles to bypass the weigh station. Communication with the vehicle driver is accomplished via transponder and dynamic message signs (DMSs).

On June 28, 2016, the state of Delaware received approval of the Delaware Expanded ITD Program Plan and Top-Level Design, which allows the state to pursue Expanded ITD grant funding for projects included in the approved plan. The latest plan update was approved on March 26, 2019. Delaware's Expanded ITD goals and objectives align with FMCSA's Expanded ITD Program areas and are summarized as follows:

- **Expanded Electronic Credentialing.** The projects in this area are Delaware's OS/OW Hauling Permit System's software upgrade and common look and feel (CLF) enhancement project and the OS/OW automatic routing system project.
- **Smart Roadside Electronic Screening.** The projects in this area are (1) deployment of virtual weigh stations (VWSs) at strategic locations throughout the state, (2) the automated brake sensor thermal inspection system, and (3) the tire abnormality detection system.
- **Enhanced Safety Information Sharing.** The projects in this area are the Work Zone and Incident Communication (WZIC) System research project, which identified alternative approaches to communicate Delaware-specific work zone and incident information to commercial vehicle drivers and vehicles via in-cab devices, and the Truck Parking Information System project, which provides information to motor carriers regarding the availability of truck parking as they travel through the state.
- **Driver Information Sharing.** Currently, there are no planned projects in this Expanded ITD Program area. Delaware may add projects in this area to the ITD PP/TLD in the future.

Follow the links (<https://deldot.gov/Programs/ITD-PRISM/>) for more detailed information regarding Delaware's ITD Program and the projects listed here.

## 2.1 Credentials Administration

Credentials Administration entails using website or computer-to-computer exchange for motor carrier companies to apply for, review, and pay registration fees and returns on fuel taxes with state agencies, and for states to participate in the IRP (<https://www.irponline.org/>) and IFTA (<https://www.iftach.org/>) clearinghouses. Core ITD requirements are summarized as follows:

- Automated electronic processing via Web-based or computer-to-computer solutions from carrier to state (processing includes carrier application, state application processing, credential issuance, and tax filing) of at least IRP and IFTA credentials, ready to extend to other credentials (intrastate, titling, OS/OW, carrier registration, hazardous materials). Note: Processing does not necessarily include e-payment.
- Updated Safety and Fitness Electronic Records (SAFER) with interstate credential information as actions are taken.
- Connection to IRP and IFTA clearinghouses.
- At least 10% of the transaction volume handled electronically.
- Ready to bring on more carriers as carriers sign up.
- Ready to extend to branch offices where applicable.

### 2.1.1 Motor Carrier System

#### 2.1.1.1 International Fuel Tax Agreement Electronic Tax Filing and Credentialing System

##### 2.1.1.1.1 Summary

The IFTA is a fuel tax collection agreement among the states of the United States and provinces of Canada. The agreement simplifies the reporting of fuel taxes by interstate motor carriers. Through the agreement, motor carriers can apply for credentials that allow them to travel in all IFTA jurisdictions. These credentials are issued by the jurisdiction in which the motor carrier is based.

The IFTA Electronic Tax Filing and Credentialing Implementation Project streamlines this process. The upgrade allows the Department of Motor Vehicles (DMV) to issue credentials and collect payments and taxes online. The system also shares data with the IRP credentialing system through the new motor carrier e-credentialing system. Motor carriers use a single login for the self-registration system to access and update their IFTA and IRP information. This includes updating credentials, decal orders, quarterly tax returns, and payments.

#### 2.1.1.1.2 Benefits

- **Benefits to the State.** Increased efficiency of processes and state resources, reduced administrative costs, and improved regulatory compliance
- **Benefits to the Motor Carrier Community.** Motor carriers get time and labor savings provided by electronic credentialing, electronic quarterly tax filing, and electronic payment processing.

### 2.1.1.2 International Registration Plan System

#### 2.1.1.2.1 Summary

The IRP is a registration agreement among the states of the United States and provinces of Canada for registration fees paid by commercial motor carriers operating throughout the jurisdictions. The plan allows registered carriers to pay fees based on each vehicle's total distance operated in each jurisdiction. Under the plan, each fleet vehicle registers one license plate and one cab card.

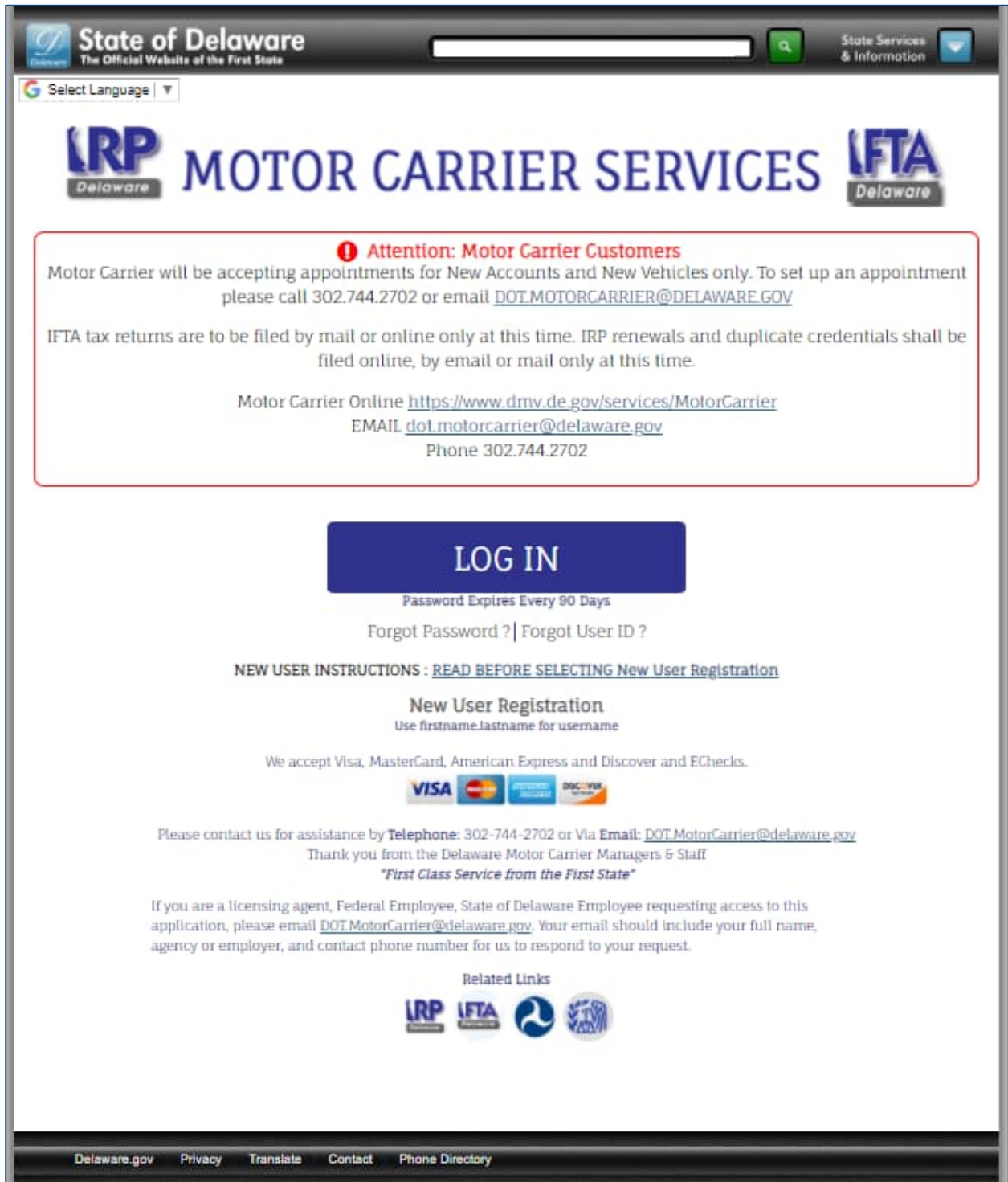
Using the IRP system, the Delaware DMV can process commercial vehicle registrations and payments electronically for IRP-registered commercial vehicles. This includes processing of new, renewal, and supplemental applications for credentials, as well as payment options. The IRP system also interfaces with Delaware's CVIEW system to provide data exchange capabilities for data validation and updates.

Through the IRP System Replacement Project, Delaware introduced the motor carrier e-credentialing system. The system integrates IFTA and IRP functionality using a single login. The system became operational in 2014 and can be found here: <https://dmv.de.gov/services/MotorCarrier/index.shtml>

#### 2.1.1.2.2 Benefits

- **Benefits to the State.** The system reduces extra work by replacing legacy solutions such as spreadsheets that were used in the previous mainframe-based system.
- **Benefits to the Motor Carrier Community.** Quick credential turnaround times and staggered registrations provide significant time savings to motor carriers.

Figure 2. Screenshot of Motor Carrier Services Login Screen





## 2.1.2 Oversize/Overweight Credentialing Systems

### 2.1.2.1 Oversize/Overweight Hauling Permit System Software Upgrade and Common Look and Feel Enhancements

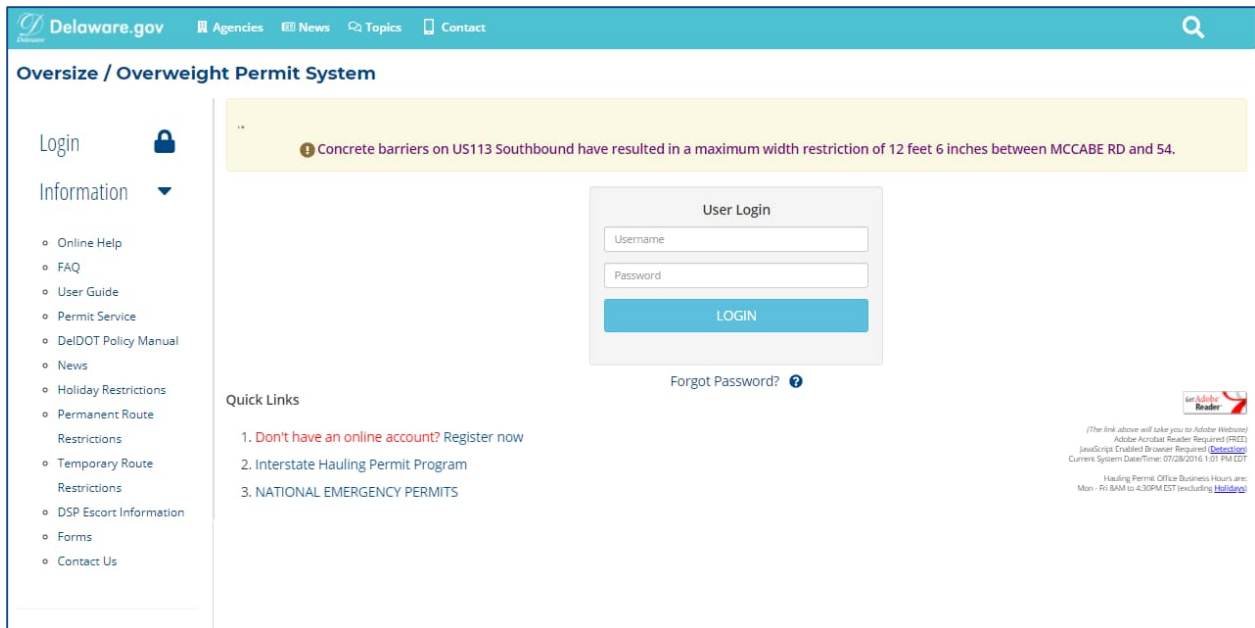
#### 2.1.2.1.1 Summary

The OS/OW Hauling Permit System software upgrade and common look and feel enhancements project updates the system to be more accessible and secure. The system software was upgraded to a new version of JAVA and Delaware’s information technology CLF standard. The CLF standard improves the user experience and enables access to the system through different platforms such as tablets and smartphones (refer to Figure 3). Along with accessibility, the upgraded system provides enhanced security against cyberthreats.

#### 2.1.2.1.2 Benefits

- **Benefits to the State.**
  - The software upgrade provides a more stable, secure, and resilient system that addresses cybersecurity risks.
  - Customer service is improved by making the system accessible on multiple devices.
- **Benefits to the Motor Carrier Industry.**
  - Motor carriers using the upgraded OS/OW Hauling Permit System will find it more accessible and easier to navigate with the CLF enhancements.
  - The upgrades improve ease of access to the system by allowing motor carriers to launch the software on various platforms such as tablets and smartphones.

**Figure 3. Screenshot of Oversize/Overweight Hauling Permit System Login Page**



Source: The Delaware OS/OW Permit system can be found here: <https://deldot.gov/osow/application/>

## 2.1.2.2 Oversize/Overweight Automatic Routing System

### 2.1.2.2.1 Summary

The OS/OW Automatic Routing System generates routes for commercial vehicles along permitted routes. Motor carriers can enter start and end locations into the OS/OW Automatic Routing System to generate a route that ensures the safety of the traveling public and the integrity of public streets, bridges, and infrastructure statewide. Data input by the Delaware Department of Transportation (DelDOT) personnel and commercial vehicle operations personnel is used to evaluate the routing options.

### 2.1.2.2.2 Benefits

- **Benefits to the State.**
  - Automated validation and processing of permitted routes will reduce processing time and potential for human error when determining routes based on vehicle size and weight.
  - Keeping OS/OW vehicles on permitted routes reduces impacts on roadways and prevents overheight vehicle strikes on overpasses and roadway structures.
- **Benefits to the Motor Carrier Community.** Automated validation and processing of permitted routes will provide accurate and timely directions for motor carriers, reducing administrative costs and wait times, while promoting safer operations.
- **Benefits to the Public.** Automatic routing reduces OS/OW vehicle impacts on roadways and structures, resulting in long-term infrastructure maintenance cost savings.

## 2.2 Electronic Screening

Electronic screening entails deploying technology to identify and electronically screen commercial vehicles at mainline speeds. Core electronic screening requirements are summarized as follows:

- **Use of motor carrier/vehicle snapshots** to support screening decisions
- **Implementation of one fixed** or mobile inspection site, at a minimum
- **Ready to replicate** at other sites

Delaware's current and planned electronic screening systems are summarized here and detailed in the following pages:

- **Subscriber-based transponder** and onboard wireless mobile data device e-screening systems
- **Virtual weigh stations**
- **Automated brake sensor** thermal inspection system
- **Tire abnormality detection** system

### 2.2.1 E-Screening Systems

#### 2.2.1.1 Summary

The Delaware Electronic Screening Deployment Project uses technology to screen commercial vehicles in motion. Motor carriers can enroll in the program if the carrier and vehicle meet safety and credentialing requirements. When enrolled, commercial vehicles can use the e-screening sites to bypass fixed weigh stations. The site prescreens registered vehicles for compliance with size and weight regulations and tells drivers to bypass or continue to the weigh station. A transponder and DMSs or in-cab devices communicate information to the driver. An overheight detector and the WIM assess if the vehicle meets size and weight requirements.

### 2.2.1.1.1 Help Inc.'s PrePass

A transponder-based electronic screening system called PrePass is deployed at one site in Delaware:

- **Middletown** U.S. Highway 301 northbound

### 2.2.1.1.2 DriveWyze

A geo-fence/mobile device system based electronic system called DriveWyze is used at seven sites in Delaware:

- **Delaware Toll Plaza** Interstate 95 northbound
- **Delaware Turnpike** Inspection Point 295/Interstate 95 southbound
- **Limestone Inspection** State Route 7 northbound
- **Limestone Inspection** State Route 7 southbound
- **Middletown** U.S. Highway 301 northbound
- **Newport Gap Pike** Inspection U.S. Highway 41 southbound
- **Terminal Avenue** Inspection Point Terminal Avenue

The DriveWyze system also provides advance notification of low overpasses and high rollover areas at 15 sites for system subscribers.

### 2.2.1.2 Benefits

- **Benefits to the State.**
  - Allowing motor carriers to bypass a weigh station or inspection facility reduces the number of commercial vehicles entering the facility, allowing the Delaware State Police (DSP) and weigh masters to focus their size, weight, and safety inspections on possible violators.
  - Providing advance notification of low overpasses and high rollover areas will reduce the number of bridge strikes and rollovers, improving safety and reducing maintenance costs.
- **Benefits to the Motor Carrier Community.**
  - Compliant motor carriers save time and fuel by bypassing the weigh station or inspection facility.
  - Enhances safety by reducing incidents and accidents associated with low overpasses and high rollover areas.

## 2.2.2 Virtual Weigh Station Deployment

### 2.2.2.1 Summary

VWS technology is deployed along diversion routes that trucks use to avoid tolls or weigh stations. VWSs allow the state to implement cost-effective truck route monitoring with targeted enforcement. The sites typically include WIM technology; overheight detection; cameras to capture images of the vehicle, license plate, and U.S. Department of Transportation number; and wireless communication devices. The sites send the collected data to officers located in fixed weigh stations or patrol vehicles who can intercept violators based on screening of vehicle size, weight, credentials, and safety information. A VWS site can be developed for a fraction of the cost of a fixed facility, providing greater coverage and flexibility for enforcement officers. The wider enforcement coverage promotes better compliance with size, weight, credential, and safety regulations.

- **Deployed Sites:**
  - U.S. Highway 13 northbound approaching weigh station (refer to Figure 4)
  - State Route 1 northbound approaching Exit 119
  - Warwick Road eastbound

- U.S. Highway 301 northbound at the Maryland-Delaware state line
- A portable VWS trailer that can be deployed throughout the state of Delaware

▪ **Planned Sites:**

- U.S. Highway 113 southbound, Georgetown
- Additional locations to be determined

### 2.2.2.2 Benefits

▪ **Benefits to the State.**

- Monitor commercial traffic in areas where fixed, staffed sites are not practical or are not warranted.
- Allow the DSP to target enforcement activities at times and in areas where violations are more likely to occur.
- Expand DSP enforcement over a broader area.
- Provide cost-effective monitoring of routes typically used to bypass fixed weigh stations.
- Serve as an additional deterrent to violation of size and weight regulations.

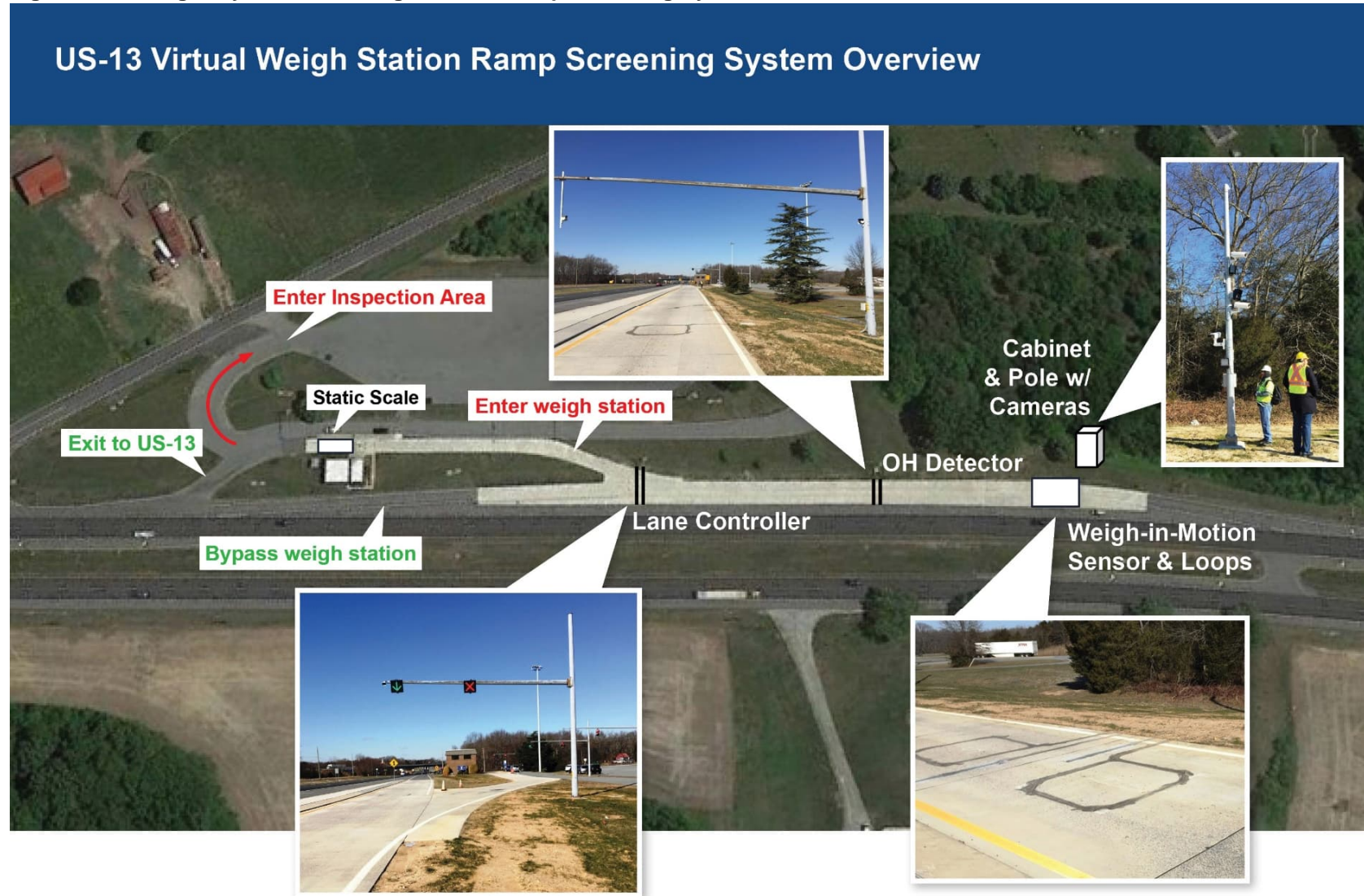
▪ **Benefits to the Motor Carrier Industry.**

- Compliant carriers can bypass screening facilities and roadside enforcement, saving time and fuel.
- Compliant carriers are less likely to be screened than carriers with poor safety records.

▪ **Benefits to the Public.**

- Expanded enforcement gets unsafe trucks off the road, improving safety for the traveling public.
- Reducing the number of random screenings improves the efficiency of goods moving through the state of Delaware.

Figure 4. U.S. Highway 13 Virtual Weigh Station Ramp Screening System Overview



## 2.2.3 Automated Brake Sensor Thermal Inspection System

### 2.2.3.1 Summary

An automated brake sensor thermal inspection system automatically screens CMVs for unsafe equipment without human intervention. The system captures thermal images of each wheel set for every axle as the vehicle is passing through the system. The system scans the images and flags vehicles that have potentially faulty equipment based on the heat signatures of the thermal images. This information then is sent to officials at the scale house, who can direct vehicles into the inspection area for further inspection. The state of Delaware has installed a thermal inspection system on the approach ramp to the U.S. Highway 301 weigh station.

### 2.2.3.2 Benefits

- **Benefits to the State.**
  - DSP commercial vehicle enforcement personnel will be able to focus brake inspections on trucks that are flagged for potential brake failures, improving the efficiency of the inspection process.
  - The system improves enforcement activities without the need for additional inspection officials.
- **Benefits to the Motor Carrier Industry.**
  - Compared to manual inspections that can take up to 45 minutes to complete, the automated system takes only seconds to screen a moving truck and trailer.
  - Unsafe trucks are removed from the highway without impacting responsible motor carriers. Even trucks that are properly maintained can have faulty systems. The system can identify these faults so that proper maintenance can be performed to improve vehicle safety and prevent an accident.

## 2.2.4 Tire Abnormality Detection System

### 2.2.4.1 Summary

A tire abnormality detection system electronically screens tires of commercial vehicles to identify underinflated, missing, mismatched, and flat tires at ramp-to-highway speeds. Anomalous or flat tires decrease a driver's directional control, increasing the risk of an accident. Tire issues also reduce the useful life of the tire and impact fuel economy. In the case of missing or mismatched tires (old and new in dual set), the vehicle loading can become imbalanced, also increasing the risk of an accident. Tire and brake failures are the number one equipment failures involved in commercial vehicle crashes across the nation. This innovative system can screen commercial vehicles for anomalous tires to prevent crashes before they occur. The state of Delaware has one system installed on U.S. Highway 301 northbound approaching the weigh station in Middletown, with future locations to be determined.

### 2.2.4.2 Benefits

- **Benefits to the State.**
  - The system gives the state the ability to screen commercial vehicles for underinflated or missing tires.
  - Commercial motor vehicles with safety hazards will be put out of service and reduce accidents.
- **Benefits to the Motor Carrier Community.** Removing commercial vehicles with unsafe tires will protect the commercial motor vehicle driver from accidents that can occur from underinflated or missing tires.
- **Benefits to the Public.** Reducing the number of commercial vehicles with underinflated tires should prevent these commercial vehicles from getting into collisions with the driving public.

## 2.3 Safety Information Exchange

Safety Information Exchange entails electronically collecting and exchanging safety performance and credentials information within each state and among states, federal agencies, and motor carriers. Core Safety Information Exchange requirements are summarized as follows:

- **Inspection reporting** using Aspen (or equivalent) by all certified inspectors. Aspen data are sent to the SAFER system directly or indirectly.
- **Connection to the SAFER system** to provide exchange of interstate carrier and vehicle data snapshots among states.
- **Implementation of a CVIEW system**, or CVIEW equivalent, for exchange of intrastate and interstate data within the state, and connection to SAFER for exchange of interstate data through snapshots.

The following link provides an overview of the variety of information systems that support FMCSA operations: <https://www.fmcsa.dot.gov/mission/information-systems/information-systems>. The following sections provide additional details.

### 2.3.1 Commercial Vehicle Information Exchange Window System

#### 2.3.1.1 Summary

CVIEW facilitates data exchange with internal and external applications, including federal and state systems. CVIEW provides streamlined access to information from the following commercial vehicle systems:

- IRP
- SAFER
- PRISM
- Unified Carrier Registration
- OS/OW Hauling Permit System
- Query Central
- IFTA

CVIEW exchanges motor carrier and vehicle information updates with SAFER, the PRISM database and with Delaware's IRP and IFTA systems. The CVIEW system is accessible to DMV personnel and to the DSP for roadside inspections and enforcement.

#### 2.3.1.2 Benefits

- **Benefits to the State.**
  - Focuses enforcement resources on high-risk carriers.
  - Confirms improved regulatory compliance.
  - Offers information sharing within the state and with other jurisdictions.
  - Improves the quality of data.
  - Fulfills data exchange requirements/supports registration requirements of PRISM.
- **Benefits to the Motor Carrier Industry.**
  - Improves the quality of data, for example, accuracy, timeliness, security.
  - Levels the playing field.
  - Offers faster inspections, resulting in time savings.

## 2.3.2 Work Zone and Incident Communication System for Commercial Vehicles

### 2.3.2.1 Summary

The WZIC system will enhance DeIDOT's ability to communicate advanced notice about work zone and incident locations to commercial vehicle drivers. The communication may include closures, adverse roadway conditions, safety alerts, and security concerns. These notifications will be provided to drivers in-cab in a safe and nonintrusive manner. The notifications will be sent with sufficient advanced notice to enable rerouting around the incident or slowing down to a safe speed approaching the area of concern.

Following a research study that evaluated alternative approaches for the WZIC, DeIDOT has decided to pilot a private sector solution offered by e-screening system partner DriveWyze. DriveWyze has teamed with INRIX to enable alerts based on real-time road conditions. The system works as follows:

- **INRIX provides real-time traffic data** for DriveWyze Safety Alerts on the prescribed corridors included in the project (Interstate 95, Interstate 295, U.S. Highway 301, and segments of State Route 1, U.S. Highway 13, and U.S. Highway 113).
- **INRIX provides DriveWyze with alerts for sudden slowdowns** and congestion queues based on established thresholds.
- **DriveWyze conveys the safety alerts** to all CMVs that opt in for the safety message alerts. These alerts will appear on the drivers' in-cab devices as they approach the slowdown, allowing the driver to proactively slow down the vehicle in a safe manner.
- **DeIDOT can monitor the safety alert system** at any time using the CMV Traffic Dashboard provided by DriveWyze. This will allow DeIDOT ITD team members to access performance data and to filter data by a variety of factors, such as most-active corridors, alerts by hour of day, incident durations, and others, with the ability to drill down to specific incident information.

### 2.3.2.2 Benefits

- **Benefits to the State.** The WZIC system enhances DeIDOT's ability to communicate to CMV drivers regarding work zones, traffic queues, accidents, and other incidents.
- **Benefits to the Public.** By providing advanced warning, the WZIC system will reduce the risk of truck accidents in work zones and incident queues, benefitting the motor carrier community and the public alike.
- **Benefits to the Motor Carrier Industry.** Providing nonintrusive, advanced warnings to commercial vehicle drivers approaching work zones and traffic incident areas allows the drivers to make informed decisions, which improves safety for workers in the work zone and the commercial vehicle drivers.

## 2.3.3 Truck Parking Information System

### 2.3.3.1 Summary

The Truck Parking Information System pilot project was developed to evaluate alternative technologies to gather and distribute truck parking information and to deploy an operational system at the Smyrna Rest Area. The system uses cameras to monitor the availability of truck parking with information about space availability for truck drivers using the DeIDOT web page and DeIDOT application. The state also is considering the deployment of DMSs at strategic locations on State Route 1 and U.S. Highway 13 providing the current number of available truck parking spaces. With better truck parking information, commercial vehicle drivers can plan their rest stops along their routes, in accordance with federal requirements.



### 2.3.3.2 Benefits

- **Benefits to the State.** Communication between DelDOT and motor carriers will allow the state to maximize the use of existing truck parking.
- **Benefits to the Motor Carrier Industry.** The system improves safety for motor carriers by making it easier for drivers to plan their route and comply with electronic log device requirements and associated rest requirements.
- **Benefits to the Public.** By providing truck parking information, the system reduces the incidences of driver fatigue because drivers can more effectively plan parking along their routes and rest properly, in accordance with federal requirements.

### 3. Delaware PRISM Program Information

PRISM allows the state of Delaware to improve CMV safety by using targeted enforcement. The program improves accountability for high-risk carriers by targeting them for increased inspections. The program provides Delaware with a mechanism to identify and immobilize carriers with serious safety deficiencies. The carriers are held accountable through registration and law enforcement sanctions. PRISM requirements are integrated with IRP and CVIEW systems, providing frequent updates of safety data in PRISM. The level of PRISM deployment is based on the activities and technologies a state has implemented. Delaware is one of 32 states across the nation that has reached the Enhanced highest level of PRISM deployment, and one of three states that uses real-time PRISM web service in the CMV registration process. Delaware is currently pursuing Expanded PRISM, which will apply primary PRISM requirements to motor carriers operating interstate that have gross vehicle weights between 10,001 and 26,000 pounds (current PRISM requirements only apply to gross vehicle weights greater than 26,000 pounds).

#### 3.1 Benefits

- **Benefits to the State.**
  - Provides nightly updates of carrier safety information to DSP for enforcement activities.
  - Improves safety of commercial motor vehicles operating in the state of Delaware.
- **Benefits to Motor Carrier Community.** Targeted enforcement means compliant carriers are less likely to be screened than high-risk carriers.

The threat of sanctions pressures carriers with identified safety deficiencies to improve safety and reduces the risk of the carrier's involvement in an accident.

## 4. Share the Road New Driver Training Program

Nearly 50% of driver's education programs in the United States do not cover how to safely share the road

with trucks or other large vehicles. This program consists of two components: a brief in-class presentation and a hands-on commercial motor vehicle demonstration. A member of the Virginia Tech Transportation Institute (VTTI) research team with a commercial driver's license will give the presentation (Figure 5) immediately before the truck demonstration to provide students with information to help them understand why they need to safely share the road with heavy trucks. During the hands-on truck demonstration, students will sit in the cab of the heavy truck to see the blind spots for themselves. In addition, light vehicles will be strategically placed around a heavy vehicle to show students proper following, leading, and passing positions (Figure 6).

**Figure 5. Classroom Presentation**



The in-class presentation covers sobering facts about crashes involving heavy trucks, provides information about heavy vehicle characteristics, and introduces the five key sharing-the-road tips. The sobering facts will be used to inform students why it is so important to share the road with heavy trucks. The heavy truck characteristics will be used to help students understand how heavy trucks operate (for example, longer stopping distances, and so on). Finally, the research team will introduce the five key sharing-the-road tips that the students will learn about during the hands-on truck demonstration and will discuss why they are important.

The VTTI truck demonstration will cover key sharing-the-road tips with driver education students using hands-on experiences in and around a heavy truck. Students will be taken through four stations where they will be able to sit in the truck, walk around the truck, and see the blind spots for themselves. It should be noted that researchers will try to discuss each key sharing-the-road tip at more than one station so that the points are reinforced. Supplemental videos are also provided at station four. The stations included: Inside of the truck cab, rear no-zone, driver's side no-zone, and passenger's side no-zone.

**Figure 6. Truck Demonstration**



## 5. Delaware Motor Transport Association

### 5.1 Summary

The Delaware Motor Transport Association (DMTA) is the State Trucking Association for Delaware. It serves as the voice of Delaware's trucking industry before the legislature, regulatory agencies, the public, and the news media.

Founded by state trucking industry leaders in 1939, DMTA provides its members with current information about industry matters. The association allows members to speak with a united voice on matters affecting highway transportation. In addition, it encourages and supports safety on the highways and works to foster a positive attitude on the part of the public toward the trucking industry.

DMTA meetings provide members with pertinent updates to the regulatory and operating environment in Delaware and nationwide. DMTA is an important industry stakeholder member of the Delaware ITD Program Team. Use the following link for more information about DMTA: <https://delawaretrucking.org/>