





The Innovative Technology Deployment (ITD)/ Commercial Vehicle Information Systems and Networks (CVISN) Program, 2016 Annual Report

On December 4, 2015, the Fixing America's Surface Transportation Act, 2015 (FAST Act) (Pub. L. 114-94) established the Innovative Technology Deployment (ITD) Grant Program, replacing the long-standing Commercial Vehicle Information Systems and Networks (CVISN) Deployment Grant Program, effective October 1, 2016. This change included the consolidation of 7 agency grants into 4, and placing the ITD Grant Program under the Motor Carrier Safety Assistance Program (MCSAP) High Priority (HP) program which reduced the burden on States that apply for multiple grants annually. The change also allowed for at least an 85/15 Federal funding to State match split from the previous 50/50 requirement. Lastly, the FAST Act removed the annual caps for funding requests, as well as other statutory program requirements, allowing the FMCSA the flexibility to make necessary program changes through policy.

This report details CVISN funding activities for fiscal year (FY) 2016 and ITD/CVISN program activities for calendar year 2016. The terms "ITD" and "CVISN" are used interchangeably throughout this report.

BACKGROUND

Established as a separate operating administration within the U.S. Department of Transportation (USDOT) on January 1, 2000, pursuant to the Motor Carrier Safety Improvement Act of 1999, the primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries, and fatalities involving large trucks and buses.

The ITD program is a key component of FMCSA's drive to improve commercial motor vehicle (CMV) safety. The ITD program supports this safety mission by providing grant funds to States for:

- Improving safety and productivity of motor carriers, CMVs, and their drivers.
- Improving efficiency and effectiveness of CMV safety programs through targeted enforcement.
- Improving CMV data sharing among States and between States and FMCSA.
- Reducing Federal, State, and industry regulatory and administrative costs.

CORE ITD

ITD consists of Core and Expanded functionality. Core ITD capabilities exist in three program areas:

1. Safety Information Exchange

Designed to ensure the safety of motor carriers and CMVs through improved data collection and enhanced data sharing (e.g., inspection reports, credentials status) across Agency and jurisdictional boundaries. Specific Safety Information Exchange items include:

- Using the Aspen (or equivalent) automated inspection software at all major inspection sites.
- Connecting to the national Safety and Fitness Electronic Records (SAFER) system to provide exchange of interstate carrier and vehicle safety data among States.

— Implementing a State-specific Commercial Vehicle Information Exchange Window (CVIEW) system or equivalent to exchange credential and safety data with the national SAFER system, which then makes the data available to other jurisdictions.

2. Electronic Credentials Administration

Designed to automate the application, processing, and issuance of motor carrier operating credentials and permits to improve the efficiency of both motor carriers and State credentialing agencies. Specific Electronic Credentials Administration items for States include:

- Automating the processing of International Registration Plan (IRP) and International Fuel Tax Agreement (IFTA) credentials and conducting at least 10 percent of transaction volume electronically.
- Participating in the IRP Clearinghouse to share information across jurisdictions and automate funds settlement between jurisdictions.
- Participating in the IFTA Clearinghouse to share information across jurisdictions and automate funds settlement between jurisdictions.

3. Electronic Screening (e-Screening)

Designed to target enforcement resources on highrisk and non-compliant motor carriers and CMVs by verifying safety and credentials information and CMV weight while the CMV is in motion. Vehicles known to be non-compliant or carriers with histories of poor safety performance are targeted for inspection, while vehicles with the necessary motor carrier operating credentials and a history of good safety performance are allowed to bypass an inspection facility. Specific e-screening items include:

— Implementing e-screening at a minimum of one fixed or mobile inspection site and being ready to replicate this functionality at other sites.

EXPANDED ITD

Once a State is certified as having deployed all the Core ITD functionality, it is deemed to be Corecompliant and must maintain these capabilities. Once Core-Compliant, a State may use its Federal ITD Deployment Grant funding to deploy Expanded ITD functionality. The Expanded portion of the ITD program is designed to be more flexible than the Core component of the program.

States are not required to deploy a set of fixed capabilities or to enable certain technologies as part of Expanded ITD, but rather are able to choose the capabilities they wish to deploy. This "cafeteria approach" allows States to customize their ITD programs and focus their technology resources on the projects most important to them.

While States can deploy a variety of capabilities as part of their Expanded ITD programs, FMCSA supports a specific set of key capabilities. FMCSA, in conjunction with public and private stakeholders, initially identified 40 capabilities that could be integrated into the ITD program. These capabilities were segmented into four Expanded ITD program areas:

- 1. Driver Information Sharing.
- 2. Enhanced Safety Information Sharing.
- 3. Smart Roadside.
- 4. Expanded Electronic Credentialing.

Based on input from industry and State agencies, FMCSA further developed and defined a list of high-priority Expanded ITD capabilities. Table 1 provides a brief description of these capabilities.

ITD/CVISN FUNDING

Prior to the FAST Act, the CVISN program was reauthorized by the Moving Ahead for Progress in the 21st Century Act, enacted in 2012. In fiscal year (FY) 2016, the USDOT was authorized to provide up to \$25 million across all States for the deployment of Core and Expanded ITD functionality.

Core Funding

To be eligible for Core ITD deployment funds, States must meet the following requirements:

- Have an FMCSA-approved ITD Program Plan and Top-Level Design (PP/TLD).
- Certify that its ITD deployment activities are consistent with the architectures and standards of the National Intelligent Transportation Systems and commercial vehicle information systems and networks, and agree to execute interoperability tests developed by FMCSA.

• Agree to promote interoperability and efficiency to the extent practicable.⁽¹⁾

A previous requirement for Core CVISN funding eligibility (prior to implementation of the changes mandated by the FAST Act) was that States must ensure that funding does not exceed the \$2.5 million statutory financial cap on Federal CVISN Core deployment grant funds. The FAST Act removed this financial cap, and allowed States that had not used all of their \$2.5 Million for Core deployment the ability to do so in the FY 2016 grant year. The remaining caps were removed effective October 1, 2017.

Expanded Funding

Once Core certified, States were eligible to apply for up to \$1 Million Expanded ITD funding. In FY 2017, previous annual caps of \$1 million were removed to promote an innovative technology approach to enhance a State's CVISN program. States are required to have an FMCSA-approved Expanded ITD PP/TLD before applying for related projects that must include:

- Background information concerning a State's ITD program.
- State's ITD program goals and objectives.
- State's ITD accomplishments to date.
- Date on which the State was certified as Core compliant.
- State's business case for Expanded ITD services.
- Description of the State's Expanded ITD project(s), including costs, management approach, deployment schedule, and conformance with appropriate architecture(s).
- Funding plan, including plan to secure necessary matching funds.
- Review of outstanding issues.

Program Area	Capability	Description
Driver Information Sharing	Driver Snapshots	• Use and maintain driver snapshots in all processes that require information about drivers (e.g., enforcement, credentialing, hiring, inspection).
Driver Information Sharing	Access to Driver Data	• Improve enforcement personnel and carriers' access to driver information to target driver safety risks.
Enhanced Safety Information Sharing	Safety Data Quality	 Establish data quality measures (timeliness, accuracy, and integrity), especially for those data elements used in making safety decisions. Regularly check data used in ITD processes for quality; purge stale data; and correct errors.
Enhanced Safety Information Sharing	Carrier Access to Safety Data	 Improve carriers' ability to review safety-related data (carrier, vehicle, driver, cargo, crash, citation, inspection) collected by a State or Federal agency in a timely manner. Consider proactively delivering safety data to the carrier.
Smart Roadside	Roadside Access to Data	 Provide integrated and improved access for roadside personnel to data stored in infrastructure systems (e.g., SAFER, Motor Carrier Management Information System [MCMIS], Commercial Driver's License [CDL] data systems).
Smart Roadside	Virtual Weigh Stations	• Expand the use and capabilities of virtual/remote enforcement sites to increase the effectiveness of enforcement.

Table 1. High-priority Expanded ITD capabilities.

¹ SAFETEA-LU, Section 4126(e)(2)(B)

Program Area	Capability	Description
Expanded e-Credentialing	Access to Credentials Data	• Enhance interfaces and systems for information sharing to provide improved access to more current and accurate credentials information for authorized stakeholders.
Expanded e-Credentialing	Better e-Credentialing	 Reduce complexity and redundancy for users by offering access to multiple credentials from a single source. Expand the types of credentials that are available electronically (e.g., add oversize/overweight [OS/OW] and hazardous materials permitting).

Table 2. Total value and number of FederalCVISN deployment grants awarded byFMCSA, 2006–16.

Year	Grants	Total Amount
2006	30	\$14,512,884
2007	26	\$22,442,372
2008	23	\$18,192,327
2009	18	\$19,925,000
2010	4	\$4,761,848
2011	20	\$17,010,364
2012	22	\$15,609,917
2013	20	\$15,785,861
2014	23	\$14,906,179
2015	21	\$12,373,949
2016	27	\$16,834,069

CALENDAR YEAR 2016 CVISN/ITD PROGRAM ACTIVITIES

During calendar year 2016, major activities occurred in the following areas:

- States continued their deployment of CVISN/ITD functionality.
- FMCSA conducted the 2016 CVISN Notice of Funding Availability (NOFA) webinar outlining national priorities and grants management information.
- FMCSA hosted monthly program manager teleconference calls with State and industry partners.
- FMCSA awarded FY 2016 CVISN grant funding.
- FMCSA conducted the CVISN Deployment Workshop in May 2016.
- FMCSA conducted Core Compliance Reviews in seven States in FY16 (Arizona, Connecticut, Indiana, Louisiana, North Carolina, New

Mexico, and Utah). Five reviews were conducted remotely via webinar (Arizona, Indiana, Louisiana, North Carolina, and Utah), with two States (Connecticut and New Mexico) having onsite reviews.

Highlights

<u>Electronic Screening</u>- Beginning in FY16, the FMCSA provided roadside enforcement personnel the ability to differentiate those inspections conducted as a result of an E-Screening decision. When comparing these particular inspections with the most recent data available for all inspections (FY15), we determined the vehicle out-of-service (OOS) rate (26.79%), driver OOS rate (5.66%), and the violation rate (59.44%) exceeded the vehicle (20.31%) and driver (4.88%) OOS rates for all inspections in FY15

<u>Grant Closeouts</u>- In FY 16, the Program Office and the Grants Management Office made a concerted effort to close out aged CVISN grants. That effort resulted in 24 grants being closed out by our State partners.

Deployment of CVISN Functionality

California, Massachusetts, Montana and New Jersey achieved Core CVISN certification in calendar year (CY) 2016. By the end of CY 2016, 39 States had completed their deployments of Core CVISN/ITD functionality and had entered the Expanded portion of the program (as illustrated in Figure 1).

All States and the District of Columbia have deployed at least one element of Core functionality and many States are close to achieving Core compliance. Table 3 summarizes the number of States that have deployed each Core element. As indicated in the table, 40 States have implemented a CVIEW and enabled interstate sharing of credential data. Forty-one States have implemented electronic credentialing for both IFTA and IRP. One State has implemented electronic credentialing for IRP, but not IFTA.

All jurisdictions have deployed the Aspen inspection software, or an equivalent, and the vast majority (47 out of 49) are currently participating in both the IRP and IFTA clearinghouses. Alaska and Hawaii are exempted from participating in IRP and IFTA; therefore, only 49 jurisdictions are required to deploy IRP- and IFTA-related functionality. Forty-seven States have some form of e-screening implementation.

Several States in the Expanded phase of their CVISN/ITD program undertook projects to either upgrade their systems (CVIEW, IFTA/IRP electronic credentialing), deploy and/or enhance online OS/OW permit systems, or extend escreening implementations to other sites within their State.

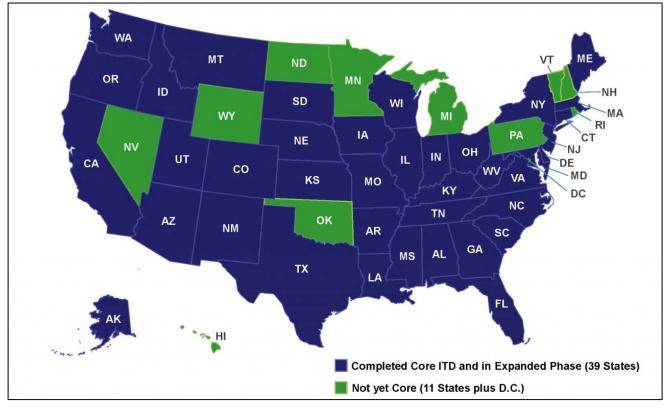


Figure 1. National map of CVISN functionality deployment in FY 2016.

Table 3. Number of States deploying Core CVISN/ITD elements, December 31, 2016.

Core CVISN Element Safety Information Exchange	Number of States That Have Deployed Functionality (a)	Total Number of Applicable States (b)	Percent of Applicable States with Functionality Deployed (a/b)
– Aspen or equivalent	51	51	100%
- CVIEW or equivalent	42	51	82%

Credentials Administration*			
- Automated processing of International Registration Plan (IRP)	42	49	86%
 Automated processing of International Fuel Tax Agreement (IFTA) (includes tax filing) 	44	49	84%
– Data exchange with IRP Clearinghouse	48	49	98%
- Data exchange with IFTA Clearinghouse	47	49	96%
Electronic Screening (e-Screening)			
- Deployment of e-screening at one site (minimum)	47	51	92%

Note: States include the District of Columbia.

*Alaska and Hawaii are exempt from participating in the Credentials Administration (IRP and IFTA). *The District of Columbia is exempt from IFTA.

CVISN Grant Funding

In FY 2016, FMCSA distributed a total of \$16,834,069 in Federal CVISN deployment funding to 27 States. Of the 27 States, PA and WY received a total of \$104,039 in Federal CVISN funding to support deployment of Core CVISN functionality, while the remaining 25 States received a total of \$16,730,030 in Federal CVISN funding to support the deployment of Expanded CVISN functionality.

Appendix A provides the breakdown of FY 2016 funding and funded CVISN projects/activities. Figure 2 illustrates the States that received Federal CVISN funding in FY 2016.

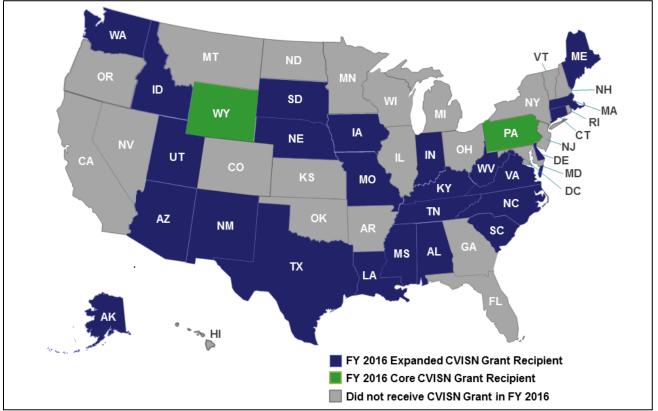


Figure 2. States receiving Federal CVISN funding in FY 2016.

For more information about the ITD Grant Program, please visit: https://www.fmcsa.dot.gov/information-systems/itd/innovative-technology-deployment-itd

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APPENDIX A: SUMMARY OF STATE CVISN 2016 GRANT RECIPIENTS AND FUNDED ACTIVITIES

State	Core Compliant	FY 2016 Core Grant	FY 2016 Expanded Grant	Funded Projects/Activities
Alabama	Yes	\$0	\$1,000,000	 Modernization of CVIEW Electronic Screening Deployment Enhanced Systems Integration Training System Upgrade Workzone Notification and Analytics
Alaska	Yes	\$0	\$510,097	 CVIEW Maintenance and Administration CVISN Training & Seminars Statewide Oversize & Overweight Permits (SWOOP) Core & Expanded CVISN Maintenance
Arizona	Yes	\$0	\$581,472	 Implement Work Zone Notification System Truck Screening and Permitting Improvements at the Nogales International Port of Entry
Connecticut	Yes	\$0	\$1,000,000	 IFTA Modernization Maintenance, Support & Hosting IRP Simplification/ Enhancements OS/OW Hosting Subscription Motor Carrier Portal Development Integration Consultant (Contractor) CTCVIEW Maintenance, Support & Hosting NORPASS Dues Travel for CVISN Support Staff Staff Expenses Supporting E-Screening
Delaware	Yes	\$0	\$503,815	 IRP, IFTA, and HELP Inc. Annual Membership Dues IRP, IFTA, and OS/OW Permitting System Server Hosting OS/OW Automatic Routing System Operations and Maintenance (O&M) OS/OW Permitting System Software Upgrade and Common Look & Feel (CLF) Enhancement
Idaho	Yes	\$0	\$1,000,000	POE Roadside Operation Computer (ROC) Install & Maintenance
Indiana	Yes	\$0	\$1,000,000	 Electronic Screening – I-94 One-Stop-Shop (OSS) and IRP Augmentation
Iowa	Yes	\$0	\$495,450	 PrePass, IFTA, IRP Membership Dues IFTA/IRP/CVIEW System O&M 360 SmartView Licensing Fee CVISN Workshop Travel

		FY 2016	FY 2016	
	Core	Core	Expanded	
State	Compliant	Grant	Grant	Funded Projects/Activities
	-			
Kentucky	Yes	\$0	\$1,000,000	 Enhancements for Motor Carrier Portal (MCP) Applications KY IFTA Processing Consortium (IPC)/Explore Enhancements International Registration Plan (IRP) Enhancement Modules Kentucky Automated Truck Screening (KATS) Installation Hosting and Maintenance for Kentucky's CVIEW Administrative and Technical Support for Kentucky's CVISN Program CVISN-Related Training Data Quality Initiative
				 International Registration Plan and International Fuel Tax Agreement Membership Fees E-Screening Membership Fees
Louisiana	Yes	\$0	\$225,000	 OS/OW Permitting Project Deployment – Development Spiral 6: Interface with State Systems OS/OW Permitting Project Operations & Maintenance – Software Upgrade CVIEW Operations & Maintenance
Maine	Yes	\$0	\$1,000,000	 Maintenance for E-Screening System(s) in Maine Maintenance for E-Credentialing (IFTA, IRP) and Safety Applications (CVIEW) Automated Integrated Routing for OS/OW Application
Massachusetts	Yes	\$0	454,713	 CVO in MassCVO Web Portal CVISN Program Administration, Consultant Support & System Architect Consultant Support MassIRP Program Support and Maintenance MassCVIEW Operations, Maintenance, and Upgrades CVISN Workshop Participation
Mississippi	Yes	\$0	\$450,000	Expanded CVISN Safety Information ExchangeSmart Roadside Maintenance
Missouri	Yes	\$0	\$494,124	 Membership Fees and Dues Coordinate Oversight of Enforcement Screening Sites Attendance at CVISN Workshop System Maintenance and License Fees Integration of Oversize Permit System
Nebraska	Yes	\$0	\$190,800	 Fund CVISN-related membership and fees for HELP Inc. PrePass Fund CVISN-related IRP membership and Clearinghouse dues Fund CVISN-related IFTA membership and Clearinghouse dues

		FY 2016	FY 2016	
	Core	Core	Expanded	
State	Compliant	Grant	Grant	Funded Projects/Activities
New Mexico	Yes	\$0	\$817,114	 New Mexico SRIS CVISN Core Compliance O&M Purchase and Installation of SRIS at the Hobbs Port of Entry Purchase and Installation of SRIS at the Texico Port of
				 Entry Purchase and Installation of SRIS Integrated Lane Control System at the Anthony Port of Entry Purchase and Installation of SRIS Integrated Lane Control System at the Lordsburg Port of Entry Out of State travel—CVISN Conferences Administrative Personnel Costs
North Carolina	Yes	\$0	\$765,500	 Upgrade Existing Weigh Station (WS) Facility (I-26 Henderson WS) Upgrade Existing Weigh Station Facility (I-40 Asheville Weigh Station Eastbound Side) Attend CVISN/IT Workshops CVISN Program Support - ITRE
Pennsylvania	No	\$50,000	\$0	 Develop Core CVISN Program Plan and Top-Level Design
South Carolina	Yes	\$0	\$55,110	CVISN O&M Support
South Dakota	Yes	\$0	\$1,000,000	 CVISN Program Management CVISN Core O&M CVISN Memberships & Fees US14/US83 Weigh/Inspection Station
Tennessee	Yes	\$0	\$1,000,000	 Program Management CVIEW Maintenance PrePass Membership Fees Fixed & Virtual Inspection Site Maintenance
Texas	Yes	\$0	\$521,750	 Commercial Vehicle Enforcement (CVE) Facility Advanced Technology Screening (FATS) Pilot Core Maintenance and Augmentation
Utah	Yes	\$0	\$777,091	 Utah E-Screening Sites & Systems Motor Carrier Systems Utah CVISN Systems Maintenance PrePass Fees Utah CVISN Program Support
Virginia	Yes	\$0	\$522,285	WIM Replacement and WIM Maintenance FeesCVISN Fees and Dues
Washington	Yes	\$0	\$374,709	WIM SLC Replacement
West Virginia	Yes	\$0	\$991,000	 CVISN Program Management – Training and Workshop Attendance Electronic Credentialing for IRP and IFTA Maintenance of Efforts for CVIEW Enhancement of Fixed Screening Site Electronic Credentialing for Interstate Registration and Other Credentials Ensure Data Quality

State	Core Compliant	FY 2016 Core Grant	FY 2016 Expanded Grant	Funded Projects/Activities
Wyoming	No	\$54,039	\$0	CVISN Workshop
				• HELP, Inc. Dues
				ITERIS Maintenance Fees
				 Updated Project Plan/Top Level Design
Total FY 2016 Funds Awarded				\$16,834,069