U.S. Department of Transportation
Federal Motor Carrier Safety Administration

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The Commercial Vehicle Information Systems and Networks Program, 2015

INTRODUCTION

The Federal Motor Carrier Safety Administration (FMCSA) was created as an operating administration within the U.S. Department of Transportation (USDOT) by the Motor Carrier Safety Improvement Act of 1999. The primary mission of FMCSA is to reduce crashes, injuries, and fatalities involving large trucks and buses.

The Commercial Vehicle Information Systems and Networks (CVISN) program supports that safety mission by providing grant funds to States for:

- Improving safety and productivity of motor carriers, commercial motor vehicles (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 CVISN

CVISN consists of both Core and Expanded functionality. Core CVISN 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 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 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 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 IRP Clearinghouse to share information across jurisdictions and automate funds settlement between jurisdictions.
— Participating in IFTA Clearinghouse to share information across jurisdictions and automate funds settlement between jurisdictions.

3. Electronic Screening (e-Screening)

Designed to target enforcement resources on high-risk 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 CVISN

Once a State is certified as having deployed all of the Core CVISN functionality, it is deemed to be Core-compliant and must maintain these capabilities. Once Core-Compliant, a State may use its Federal CVISN Deployment Grant funding to deploy Expanded CVISN functionality. The Expanded portion of the CVISN 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 CVISN, but rather are able to choose the capabilities that they wish to deploy. This "cafeteria approach" allows States to customize their Expanded CVISN programs and focus their technology resources on the projects that are most important to them.

While States can deploy a variety of capabilities as part of their Expanded CVISN 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 CVISN program. These capabilities were segmented into four Expanded CVISN 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 CVISN capabilities. Table 1 provides a brief description of these capabilities.

CVISN FUNDING

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 CVISN Grant Program. The ITD Grant Program, which includes a number of modified policies and procedures, will replace the existing CVISN Grant Program on October 1, 2016.

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) 2015, the USDOT was authorized to provide up to $2.5 million to each State for the deployment of Core CVISN capabilities. The USDOT is also authorized to provide States up to $1 million in Federal deployment grants each FY to support deployment of Expanded CVISN functionality. States that have become Core-compliant and have received less than $2.5 million in Federal Core deployment funds are eligible to use the remainder of their Core deployment funds to deploy Expanded CVISN functionality.

Core CVISN Funding

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

- Have an FMCSA-approved CVISN Program Plan and Top-Level Design (PP/TLD).
- Certify that its CVISN deployment activities are consistent with the architectures and standards of the National Intelligent Transportation Systems and CVISN, and agree to execute interoperability tests developed by FMCSA.
- Ensure that funding does not exceed the $2.5 million statutory financial cap on Federal CVISN Core deployment grant funds.
- Agree to promote interoperability and efficiency to the extent practicable.[1]

[1] SAFETEA-LU, Section 4126(e)(2)(B)

Table 1. High-priority Expanded CVISN capabilities.

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 CVISN 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.
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).

Expanded CVISN Funding

Under Expanded CVISN, each State is eligible to receive up to $1 million annually in Expanded CVISN funds. To fulfill the requirement of an approved Expanded CVISN Program Plan and Top-Level Design for approval by FMCSA, the document must include:

- Background information concerning a State's CVISN program.
- State's CVISN program goals and objectives.
- State's CVISN accomplishments to date.
- Date on which the State was certified as Core - compliant.
- State's business case for Expanded CVISN services.
- Description of the State's Expanded CVISN 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.

Table 2 summarizes the number and amount of CVISN grants awarded by FMCSA during FYs 2006–15.

Table 2. Total value and number of Federal CVISN deployment grants awarded by FMCSA, 2006–15.

Year	Number of 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

CALENDAR YEAR 2015 CVISN PROGRAM ACTIVITIES

During calendar year 2015, major activities occurred in the following areas:

- States continued their deployment of CVISN functionality.
- FMCSA conducted the 2015 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 2014 CVISN grant funding.
- FMCSA conducted the CVISN Deployment Workshop in May 2015.
- FMCSA developed a Core Compliance Monitoring Program.

Deployment of CVISN Functionality

West Virginia and Georgia achieved Core CVISN certification in July and September 2015, respectively. With these two States reaching this milestone, 35 States have now completed their deployments of Core CVISN functionality and have entered the Expanded portion of the CVISN program (as illustrated in Figure 1).

All States and the District of Columbia have deployed at least one element of Core CVISN functionality and many States are close to achieving Core CVISN compliance. Table 3 summarizes the number of States that have deployed each Core CVISN element. As indicated in the table, 42 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 program undertook projects to either upgrade their CVISN systems (CVIEW, IFTA/IRP electronic credentialing), deploy and/or enhance online OS/OW permit systems, or extend e-screening implementations to other sites within their State.

Figure 1. National map of CVISN functionality deployment in FY 2015.

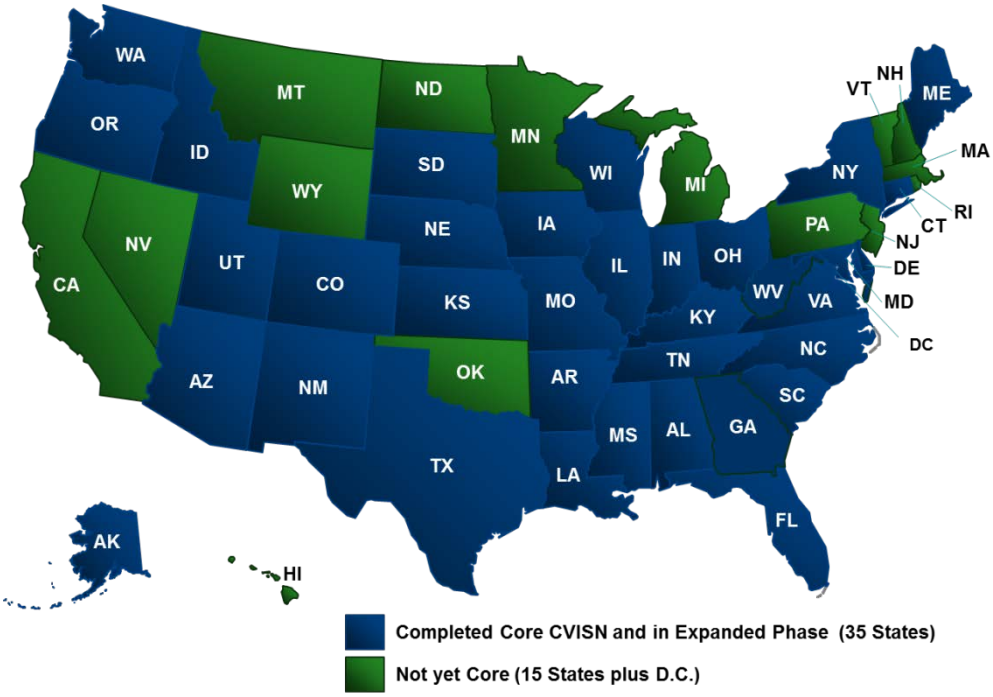


Table 3. Number of States deploying Core CVISN elements, December 31, 2015.

Core CVISN Element	Number of States That Have Deployed Functionality (a)	Total Number of Applicable States (b)	Percent of Applicable States with Functionality Deployed (a/b)
Safety Information Exchange			
– 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)	41	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%

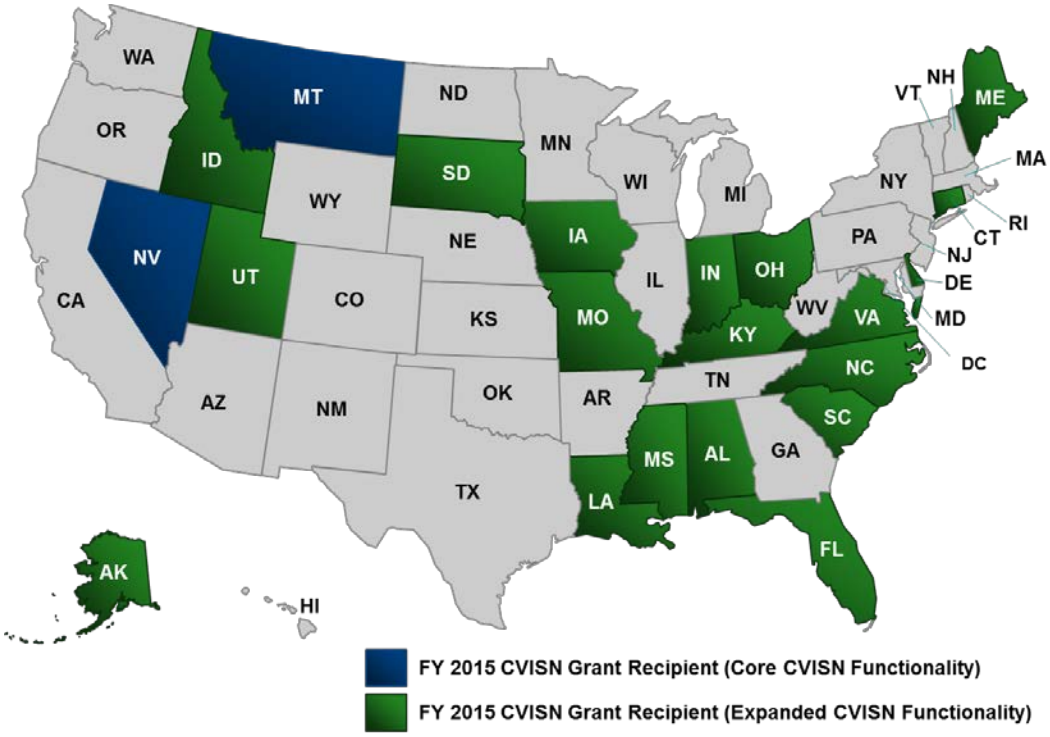
Note: *States include the District of Columbia.*
**Alaska and Hawaii are exempt from participating in the Credentials Administration (IRP and IFTA).*

CVISN Grant Funding

In FY 2015, FMCSA distributed a total of $12,373,948 in Federal CVISN deployment funding to 21 States. Of the 21 States, Montana and Nevada received a total of $671,646 in Federal CVISN funding to support deployment of Core CVISN functionality, while the remaining 19 States received a total of $11,702,303 in Federal CVISN funding to support the deployment of Expanded CVISN functionality.

Appendix A provides the breakdown of funding and funded CVISN projects/activities. Figure 2 illustrates the States that received Federal CVISN funding in FY 2015.

Figure 2. States receiving Federal CVISN funding in FY 2015.



For more information about the CVISN grant program, please visit:

http://www.fmcsa.dot.gov/commercial-vehicle-information-systems-and-networks-cvisn

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APPENDIX A: SUMMARY OF STATE CVISN 2015 GRANT RECIPIENTS AND FUNDED ACTIVITIES

State	Core Compliant	FY 2015 Core Grant	FY 2015 Expanded Grant	Funded Projects/Activities
Alabama	Yes	$0	$997,500	• Install and deploy virtual weigh station, integrated screening data, and real-time OS/OW. • Enhance the work zone notification system.
Alaska	Yes	$0	$94,822	• Replace transponders that are no longer functioning with new transponders. • North American Preclearance and Safety System (NORPASS) annual membership. • Routine maintenance of mission critical software for OS/OW automated permit system.
Connecticut	Yes	$0	$1,000,000	• New Connecticut CVIEW development, maintenance and hosting costs. • Obtain help desk personnel contractor until automated help desk transition is complete. • Obtain a software integration specialist contractor. • Acquire a modernized e-screening system. • Annual maintenance costs for new IFTA system. • CVISN-specific travel expenses, including air travel, car rental, and hotel accommodations.
Delaware	Yes	$0	$604,500	• Program management support for 3 years that includes the development of an expanded CVISN PP/TLD. • Three years of ongoing operations and maintenance support for IRP system. • Three years of ongoing operations and maintenance support for IFTA system. • Three years of ongoing operations and maintenance support for CVIEW system.
Florida	Yes	$0	$475,375	• Hire a vendor to complete the geographic information system (GIS) routing and data cleansing for the permit application system. • CVISN program management technical and administrative oversight and travel costs. • Operations and maintenance costs for GIS routing and data, weigh-in-motion (WIM) sites and virtual weigh-in-motion (VWIM) sites.
Idaho	Yes	$0	$1,000,000	• Port-of-entry (POE) roadside operations computer (ROC) installation and maintenance to include equipment to support WIM and automated vehicle identification (AVI).
Indiana	Yes	$0	$185,000	• IRP, IFTA and PrePass membership dues and fees for 3 years.
Iowa	Yes	$0	$54,770	• PrePass annual membership. • Travel for three participants for CVISN Workshop 2016. • Contractual cost of enhancements for IFTA/IRP/CVIEW and Iowa automated OS/OW

State	Core Compliant	FY 2015 Core Grant	FY 2015 Expanded Grant	Funded Projects/Activities
				permit system. These include a database upgrade, incorporating e-pay into online system, IFTA/IRP system changes, and adding new logic to the OS/OW permit system.
Kentucky	Yes	$0	$1,000,000	• Motor carrier portal enhancements. Analyze proposed modules of the motor carrier portal, develop the modules, and test and benchmark modules as development is completed • IRP System Rewrite – Phase 3. Provide enhanced online capabilities in the motor carrier portal. • Implementation of thermal imaging cameras for e-screening. • Maintenance, hosting, and support for Kentucky's CVIEW. • Provide administrative and technical support for Kentucky's CVISN program. • Annual training on CVISN-related technologies and systems. • Improve data quality of Safety Information Exchange. • Provide enforcement officers with new laptops and weigh station computers. • Maintain IRP and IFTA membership. • E-screening membership fees and participation on the Help, Inc. Board of Directors.
Louisiana	Yes	$0	$162,500	• Replace the online portal of the information management system, data management/storage, and communications capabilities.
Maine	Yes	$0	$864,000	• Automate credential cross-checking prior to issuing OS/OW permits. • Integrate screening software results with the OS/OW data in CVIEW. • Automate integrated routing for OS/OW application. • Provide support and maintenance of e-screening system at the Kittery weigh station. • Provide support and maintenance of the CVISN system.
Mississippi	Yes	$0	$1,000,000	• Enhance the permitting system capabilities for enforcement personnel, officers, and users. • Ensure adequate operation and maintenance funding of operations to enable use of the Smart Roadside systems.
Missouri	Yes	$0	$864,605	• Upgrade/replace the OS/OW permit system to include point-and-click route selection. • Modify intrastate vehicle registration/credentialing process to change business rules related to household goods carriers. • Membership dues and fees for IRP, IFTA, and Help, Inc. • Coordinate oversight of enforcement screening sites,

State	Core Compliant	FY 2015 Core Grant	FY 2015 Expanded Grant	Funded Projects/Activities
				including personal services, fringes, and related travel expenses (e.g., meals, hotel stays, etc.). • Attendance at CVISN Workshop. • Warranty of electronics at virtual weight station. Technology and equipment covered under the warranty consists of a license plate reader (LPR), USDOT number reader, image capture system, e-screening system, and WIM.
Montana	No	$355,281	$0	• Automated electronic processing via Web-based or computer-to-computer solutions from carrier to State of IFTA, IRP, and OS/OW information. • Update SAFER with credential information for interstate operators as actions are taken. • Connect to IRP and IFTA clearinghouses. • At least 10 percent of the transaction volume handled electronically, ready to bring on more carriers as carriers sign up, and ready to extend to branch offices where applicable. • Indirect costs.
Nevada	No	$316,365	$0	• Update Core CVISN Program Plan. • Implement CVIEW and SAFER connectivity and reporting. • Automate IRP and IFTA credentialing and reporting. • Attendance of CVISN workshops and training for three staff members.
North Carolina	Yes	$0	$474,000	• Upgrade existing weigh station facility, (I-26 Hendersonville) with WIM, LPR, and variable message board. • Upgrade existing weigh station facility, (I-40/85 north and southbound lanes) with infrared brake monitoring system. • Provide funding for stakeholder travel to CVISN-related workshops and conferences. • CVISN program support with the engagement and participation of the North Carolina State University Institute for Transportation, Research and Education (ITRE).
Ohio	Yes	$0	$27,500	• Upload payment data to SAFER so that industry and enforcement officials are able to determine whether a motor carrier has properly paid its fees for Unified Carrier Registration (UCR). • Timely upload of IFTA/IRP data to SAFER. • PrePass membership.
South Carolina	Yes	$0	$49,860	• CVISN operations and maintenance support.
South Dakota	Yes	$0	$999,982	• CVISN program administration. • Maintain information systems directly supporting South Dakota's CVISN Program, including IRP/IFTA, CVIEW CV automated permitting system and electronic screening systems at four ports of entry.

State	Core Compliant	FY 2015 Core Grant	FY 2015 Expanded Grant	Funded Projects/Activities
				• Participate in national programs and clearinghouses directly supporting the CVISN Program, including IRP, IFTA, and NORPASS. • Enhance South Dakota's automated permitting system (SDAPS) to provide Web-based user interface, update the highway network used to route OS/OW vehicles, and enable use of mobile devices for permit applications. • Deploy e-screening on eastbound US14 and 83 approaching the Blunt Weigh Station in central South Dakota.
Utah	Yes	$0	$847,888	• Enhancements, connectivity, and support of equipment needed for LPR/optical character recognition [OCR]-based e-screening and inspections from the mobile and fixed weigh stations. • Programming and ongoing maintenance / development of the Motor Carrier Online System (MCOLS). • LPR/OCR warranty and maintenance fees in support of equipment and software upkeep for the mainline e-clearance and ramp e-screening. • CVIEW programming updates/modernization and staffing to support efforts to bring the CVIEW into compliance with changes to the data structures imposed by the Department of Motor Vehicles and Utah Highway Patrol. • Fourth-year support for auto-routing, and maintenance and staffing to support the necessary enhancement due to auto-routing functions. • PrePass fees and personnel to manage PrePass.
Virginia	Yes	$0	$1,000,000	• Enhance and replace Motor Carrier Credentialing System (webCAT). • WIM replacement and maintenance fees. • CVISN fees for CVIEW maintenance; IRP, IFTA and PrePass membership; and Xerox maintenance fees.
				Total FY 2015 Funds Awarded $12,373,948