

National Commercial Driver's License Program Assessment

Final Report

Submitted to:

Federal Motor Carrier Safety Administration

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Disclaimer

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1.0 Introduction

The University of Cincinnati, in association with eScience & Technology Solutions, Inc. (eSTS), the North Dakota State University (NDSU) Upper Great Plains Transportation Institute (UGPTI) and the University of California, Los Angeles (UCLA) is pleased to submit this final National CDL Program Assessment report completed under the Commercial Driver's License (CDL) Program FY 2020 Commercial Driver's License Program Implementation (CDLPI) Grant. The goal of the project was to identify opportunities to strengthen the National CDL Program and help the ability of State Driver Licensing Agencies (SDLAs) to maintain compliance with Federal Motor Carrier Safety Regulations (FMCSRs) 49 CFR 383 and 384.

1.1 Research Performance Objectives

The Research Team addressed the following six performance objectives in completing the project:

- **Performance Objective #1:** Through a comprehensive environmental scan, identify all CDL program support resources currently available to states from national associations, third parties, universities, and national and state government agencies. The performance metric will be the completion of a reference document that catalogues all resources available, making them accessible through a single point of reference.
- **Performance Objective #2A:** Through a survey of state level CDL stakeholder groups including SDLAs, judiciaries, and law enforcement, identify which resources are most accessed and identified by end-users as meeting their needs. A key component of the stakeholder survey will be to collect data on stakeholder knowledge of available resources. The performance metric will be the completion of analyses of:
 - Information sources are mostly used by state government agencies.
 - Stakeholder prioritization of information sources that best meet end-user needs.
 - Stakeholder awareness of available resources both within and outside of their specific domain of expertise.
 - Stakeholder understanding of how to properly utilize available resources.
- **Performance Objective #2B:** As part of the survey of state level CDL stakeholder groups, identify challenges and issues stakeholders face with CDL program implementation, management, and maintaining compliance with FMCSRs. The performance metric will be the completion of analyses that:
 - Cross-reference challenges and issues faced by stakeholders to identify commonalities between states.
 - Prioritize those challenges and issues identified as most significant by states.

- **Performance Objective#2C:** As part of the survey, identify specific needs that stakeholders determine are not yet being met. The performance metric will be a cross-referencing of stakeholder identified needs with existing resources available to states to:
 - Assess if the identified need can be met through an existing resource that the stakeholder may not be aware of; or
 - Determine if, in fact, the identified need represents a gap in available resources.

- **Performance Objective #2D:** As part of the survey, collect data that can be used to assess end-user satisfaction with how technical support and information are currently provided. The performance metric will be a quantitative assessment of end-user satisfaction and stakeholder input on process improvements that will enhance access to and use of technical support and information.

- **Performance Objective #3:** Working with stakeholder groups, develop a comprehensive suite of program enhancements that can be used to address the stakeholder issues identified during previous research. The performance metrics will include:
 - The development of program enhancements for each identified issue that incorporates stakeholder inputs.
 - The prioritization of program enhancements by cross-referencing each proposed enhancement with the number of states that identified the issue as significant. The intent will be to prioritize program enhancements that will provide maximum benefit across multiple states and state government agencies.

- **Performance Objective #4:** Working with stakeholder groups, conduct a pilot test of a subset of program enhancements designed to address stakeholder-identified challenges and issues. The performance metrics for this will be:
 - A quantitative assessment of the effectiveness of the selected program enhancements in addressing challenges and issues. The test plans developed for the pilot testing of program enhancements will include the identification of performance metrics and data sources that can be used to conduct a quantitative assessment of effectiveness.
 - A qualitative assessment of stakeholder satisfaction with the program enhancements included in the pilot test.

- **Performance Objective #5:** Present the results obtained in meeting Performance Objectives 3 and 4 to stakeholder groups through presentations at national association meetings, Webinars, and other stakeholder engagement activities to obtain stakeholder feedback. The performance metric will be the documentation of stakeholder feedback and comments and the revision of recommended program enhancements to reflect stakeholder inputs.

- **Performance Objective #6:** Develop a comprehensive final project report. The performance metrics for this will include:
 - A final compilation of recommended process improvements identifies the stakeholder group(s) best positioned to implement them. National associations such as AAMVA, the National Center for State Courts (NCSC), or CVSA.
 - A complete listing of all resources available to states for enhancing CDL program performance. This will include information on points of contact for each resource as available.
 - Stakeholder acceptance of the final report as an indicator of stakeholder willingness to take ownership of process improvements.

1.2 Traffic Citation Lifecycle

The Research Team notes that the National CDL Program includes multiple stakeholders at the Federal and state levels of government. The Research Team further notes that while each stakeholder has distinct responsibilities within the National CDL Program, there are significant stakeholder interdependencies. To this end, the Research Team determined that assessing the CDL traffic citation lifecycle would be the most effective means of identifying stakeholder interdependencies. Subsequently, this would allow the assessment of how the challenges and issues faced by each stakeholder impact on the lifecycle.

The CDL Traffic Citation Lifecycle is shown in Figure 1 below. The figure shows how any challenge or issue encountered in any phase of the lifecycle can adversely impact the final disposition of a CDL citation.

Figure 1. CDL Traffic Citation Lifecycle



2.0 Summary of Research Activities

2.1 Objective 1: Environmental Scan

The Research Team initiated project activities by conducting virtual meetings with the American Association of Motor Vehicle Administrators (AAMVA), the National Center for State Courts (NCSC), the National Judicial College (NJC), the National District Attorney's Association (NDAA), the Commercial Vehicle Safety Alliance (CVSA), and the Governor's Highway Safety Association (GHSA). The format for each meeting was a presentation on the goals and objectives of the project followed by discussions on each organization's role in the National CDL Program. As part of the discussion, the Research Team identified resources made available to stakeholders (research, training, outreach, technical assistance) and points of contact at the state level for follow-on discussions.

A master Resource Guide was developed cataloguing all resources provided by each organization. As part of this, the Research Team reviewed each resource to understand what information was being provided and gain an in-depth understanding of available resources.

The Research Team also conducted interviews and/or discussions with member/representative stakeholders from each organization, as listed below by stakeholder and state. These interviews were to identify program challenges and understand stakeholder needs and requirements.

- SDLAs: Texas, Colorado, Minnesota, New Hampshire, West Virginia, South Carolina, and North Carolina
- Highway Safety Office (HSO): New York
- Traffic Safety Resource Prosecutors (TSRPs): Alabama, Vermont, Illinois, Indiana, Kentucky, Nevada, Tennessee, and Montana
- Judicial Outreach Liaisons (JOLs): Maine, New Hampshire
- Commercial Motor Vehicle (CMV) Enforcement Commanders: Indiana, Texas, and Missouri

Through the interviews and literature review, the Research Team identified several challenges that impact a state's compliance with 49 CFR Parts 383 and 384. The Research Team compiled all challenges and submitted these to the stakeholders for their review. As part of this process, the Research Team requested that stakeholders indicate which challenges were the most problematic for their community. Challenges and stakeholder prioritization are shown in Table 1.

Research Topics were developed by the Research Team using the results of the preceding analyses. The identified challenges and concerns were used to develop a problem statement designed to provide the context for and understanding of the specific issues that will be investigated in support of each research topic. The Research Team notes that the primary focus of any research undertaken will be to identify opportunities to enhance compliance with 49 CFR Parts 383 and 384.

The Resource Guide has been developed as a comprehensive cataloging of the resources identified by the Research Team during the Environmental Scan. Resources were identified by

stakeholders during interviews and through follow-on research conducted by the Team. The Guide is organized as follows:

- Resources are grouped by the organization responsible for developing and maintaining each resource.
- Each resource is identified by the document or website name and is linked to a keyword that identifies the topic addressed or covered by the resource.
- A brief description of resource content.
- Finally, a website address for each resource is included.

The Research Team further developed a database cross-referencing each identified resource with the requirements of 49 CFR 383 and 384.

Finally, the Research Team determined that developing a website to host the Resource Guide would provide all stakeholders with real-time access. The website is updated monthly to repair any broken links, remove obsolete links, and add new resources as they become available.

Table 1. Stakeholder Challenges

Challenge	Stakeholder					
	SDLAs	CVSA	NDAAs	NJC	NCSC	GHSA
Third Party Testing	✓					
SDLA awareness and Use of AAMVA reports	✓					
Inaccurate and/or incomplete CDL Citations		✓	✓	✓	✓	
Lack of Stakeholder Awareness and Use of Available Resources		✓	✓	✓	✓	
Lack of available ELDT Resources	✓					
Need for improved State-level CDL Program coordination	✓	✓	✓	✓	✓	✓
Lack of TSRP and JOL focus on CDL issues			✓			✓
Lack of Judicial Access to CDLIS (and other sources) driver records		✓			✓	
Need for roadside access to one driver/one record		✓				
Need for mandatory CDL check on citations		✓			✓	
Need for data on Judiciary Training saturation rate and participation trends				✓		
Need for data on Judiciary Training – Participant Satisfaction				✓		

Gap Analysis was conducted by matching available resources to each section of 49 CFR Parts 383 and 384 to ensure resources were available as a reference for each section and to identify gaps in resource availability. Only two potential gaps that impact the ability of SDLAs to comply with the requirements of 49 CFR Parts 383 and 384 were identified.

The first potential gap involves the new Entry Level Driver Training program as required by 49 CFR Part 380. The Research Team did not identify any resource supporting the implementation of the program, which by regulation was implemented February 7, 2022. During Environmental Scan interviews, stakeholders noted that guidance for many questions related to implementation is incomplete.

The second potential gap involves the issuance of traffic citations to CDL holders in compliance with 49 CFR Part 392. The Research Team notes that law enforcement receives initial academy and follow-up refresher training in support of traffic safety enforcement. However, during interviews with CVSA and CVSA members, inaccurate completion of citations was cited as an on-going problem. Specifically, citations issued did not complete the necessary fields indicating whether the citation was being issued to a CDL holder. A second concern identified was that enforcement personnel do not have a complete understanding of 49 CFR Part 392 and that as a result, citations issued to CDL holders at times cite an incorrect reference that does not link to the appropriate AAMVA Code Dictionary (ACD).

Table 2. Proposed Research Topics

Topic	Description
Assess Effectiveness of Training with enhancing compliance with 49 CFR 383 and 384	NDAA, NJC, CVSA, and NCSC have developed training to enhance understanding of the requirements of 49 CFR 383 and 384 when adjudicating CDL citations. To date, notwithstanding the excellent quality of the available training, limited research has been conducted on the effectiveness of training in changing attitudes and achieving enhanced compliance. Research is needed to determine the overall effectiveness of the training with an emphasis on identifying the barriers, if any, to changing attitudes and enhancing compliance.
	During background interviews with CMV-certified law enforcement personnel, the respondents cited continuing challenges with citation forms not capturing all CDL related information. The challenge this creates is that the Judiciary and SDLAs may not be receiving the information needed to properly adjudicate a citation and assign sanctions on convictions in compliance with the requirements of 49 CFR 383 and 384.
	During background interviews, law enforcement interviewees stated that while citations forms (electronic and hardcopy) have fields related to verifying that the license held is a CDL and whether the vehicle is a CMV, completing these fields is not mandatory and citations may be incorrect. If the Judiciary upholds the citation without these fields being completed, SDLAs may not be able to apply the appropriate sanctions in compliance with 49 CFR 383 and 384. Additionally, LE expressed concerns that the language utilized to identify a CDL holder on a complaint is worded different on similar forms in the same jurisdiction creating confusion.
	At present, law enforcement personnel conducting roadside enforcement actions involving CDL eligibility and status must access multiple data sources including CDLIS, NLETS, state systems, and Query Central. During background interviews conducted by the Research Team, law enforcement interviewees indicated that enforcement personnel working at roadside may not have the time or connectivity to access each separate database to verify CDL eligibility and status. An additional concern identified was that not all enforcement personnel have access to these systems.
	AAMVA has 25 reports available that can be used by SDLAs to support CDL program activities. During interviews with SDLAs conducted as part of background research, several interviewees indicated they were not familiar with all the reports available from AAMVA and as a result much available information is not being utilized.

Topic	Description
	Several jurisdictions currently have existing statutory authority to utilize third parties to provide CDL training and testing to help meet the increased demand and need for these services. The requirements for authorizing and oversight of third-party trainers and skill examiners are included in 49 CFR 383.75 (requirements for third party testing) and 49 CFR 384.228 (training and records checks) and 384.229 (skill test examiner auditing and monitoring). Identifying and investigating test fraud remains an on-going challenge for jurisdictions.
	During interviews with stakeholder groups, the Research Team determined that many stakeholders were not aware of resources and training available to all state-level stakeholder groups. The objective of this research component will be to determine stakeholder awareness of the multiple resources available and how these resources can be used to support compliance with 49 CFR 383 and 384.
	Jurisdictions frequently establish inter-agency working groups to address highway safety issues. For example, many jurisdictions utilize Traffic Records Coordinating Committees and Traffic Safety Commissions to identify traffic safety concerns. Background interviews conducted in support of the project indicated that while many jurisdictions are actively involved in inter-agency working groups, CMV and CDL enforcement is often not a priority. The objective of this component of the research will be to determine if stakeholders believe there would be value in either establishing new working groups or adding to the responsibilities of existing working groups to include CMV and CDL enforcement thereby improving compliance with 49 CFR 383 and 384.
	TSRPs and JOLs' ability to become involved in all aspects of CDL safety and enforcement are limited by the requirements associated with their funding. For example, TSRPs and JOLs may be required to focus on an issue of concern such as impaired driver detection and enforcement. During background interviews, TSRPs and JOLs frequently noted that they were not familiar with the requirements of 49 CFR Parts 383, 384 and 392 and were not involved with CDL enforcement. The objective of this research will be to determine if stakeholders see value in expanding the role of TSRPs and JOLs to include outreach and education related to CDL enforcement.
	While jurisdictions do appoint CDL Coordinators, there is a significant variation in the program areas that a CDL Coordinator may be responsible for. The result is that while CDL Coordinators represent their jurisdiction at CDL Coordinator meetings and forums, they may not be involved with all aspects of their home jurisdiction's CDL program. During the background research conducted supporting the project, the Research Team did not identify any guidance on the roles and responsibilities of a CDL Coordinator in representing their jurisdiction.

2.2 Objective 2: Stakeholder Survey

Surveys were developed for State Driver License Agencies (SDLAs), Law Enforcement, Traffic Safety Resource Prosecutors (TSRPs), and the Judiciary. The survey questions were predicated on the results of Performance Objective #1 which identified CDL program support resources currently available to states from national associations, third parties (universities), and national and state government agencies. The surveys were pilot tested with Stakeholder representatives to ensure that they were practical and applicable and feedback from the testing Stakeholders was incorporated into the final surveys. Surveys were designed to address the requirements of Objectives #2A through #2D.

Once completed, the surveys were distributed nationwide to the SDLAs, TSRPs, State and Local Law Enforcement agencies, and judicial organizations. Additionally, surveys were distributed to many of the non-governmental organizations that support the SDLAs, TSRPs, State and Local Law Enforcement agencies, and Judiciaries such as AAMVA, NDAA, NJC, CVSA, and others. The surveys were conducted over a 90-day period using the SurveyMonkey® application which also collected and initially organized the data for review by the research team. Unfortunately, the team received no responses from any members of the judiciary, despite direct contact with the NJC, National Center for State Courts (NCSC), and National Association for Court Management (NACM). Consequently, the team was unable to form an opinion about the use by, or usefulness to, the courts of the available resources.

Table 3. Summary of Jurisdiction Responses by AAMVA Region

AAMVA Regions	Jurisdictions Responding	SDLA	Law Enforcement	TSRP
I	7	3	5	3
II	12	2	9	4
III	9	4	8	4
IV	8	3	6	2
Total	36	12	28	13

Having gathered the data, the research team reviewed and studied the results and provided narratives explaining the findings based on the metrics provided in Performance Objective #2. The Research Team notes that for this research, CDL encompasses Commercial License Permits (CLP) and violations committed in a CMV by a person who is not a CDL holder.

Participants indicated high satisfaction with the training, resources, and technical assistance they had availed themselves of. Routinely, response rates exceeded 80%. However, the respondents indicated a general lack of familiarity with resources available from groups outside of their normal realm of contact. For example, SDLAs were familiar with the resources available from AAMVA, but much less familiar with the resources available from CVSA or NJC. Likewise, Law Enforcement was familiar with the resources available from CVSA but much less familiar with the resources that AAMVA and NDAA could provide. Prosecutors were familiar with NDAA and much less so with AAMVA and CVSA. Each group was “stove-piped” to the groups they were familiar with and were not using the training, resources, and technical assistance available from other groups, even though all jurisdictions belong to AAMVA and CVSA, and the

NJC is open to everyone. The reviewers believe that increased involvement in interagency organizations focused on traffic safety and especially CDL/CMV safety would broaden stakeholder's awareness of other resources available to them. Also, AAMVA, CVSA, etc. may want to consider expanding their efforts to reach beyond their focus areas.

In general, there is concern within SDLAs that insufficient resources have been dedicated to implementing technology needed to meet changing requirements in CDL/CMV testing and enforcement. Reviewers found a disappointing use of CDL PI grants to meet these and other needs, suggesting states may be unaware of the availability of these funds to help resolve outstanding findings and improve compliance.

The absence of state elected officials on interagency highway safety groups makes it more difficult to have necessary statutory changes enacted, because the elected officials responsible for enacting necessary legislation are unfamiliar with the federal requirements as well as any underlying problems that might benefit from amended legislation.

Most prosecutors stated that their states did not allow CDL/CMV cases to be mediated or reduced in severity. However, a troubling number stated that they were uncertain if these practices were or were not occurring in their state. This suggests that their knowledge of federal requirements and their state's court procedures is not as thorough as would be desirable. Furthermore, it also suggests that state courts may not be aware of federal requirements.

Because the time limits for entering and transmitting convictions is short, the fact that prosecutors were unfamiliar with CDLIS is of some concern. Although the courts are primarily responsible for transmitting convictions, prosecutors can exert some influence on the courts to ensure that deadlines are met.

2.3 Objective 3: Development of Recommended Program Enhancements

Based on the research conducted in the first two project objectives in support of the proposed research topics, the Research Team identified 12 recommended program enhancements. These in turn were presented to stakeholders for comment and review. Virtual reviews were conducted with AAMVA, CVSA, NCSC, NDAA and the NJC. In addition, following a presentation on the research findings at the National CDL Coordinators Conference, a participant poll was conducted to obtain additional stakeholder guidance and comments.

As part of the review process, stakeholders were asked to prioritize the recommended program enhancements. Overall, the recommended program enhancements received support across all stakeholders. The Research Team notes that there were some variances amongst stakeholders; for example, the NCSC and NJC indicated strong support for the use of differentiated case management (DCM) for adjudicating CDL citations while CDL Coordinator Conference participants did not identify DCM as a key priority. Other recommended program enhancements, for example, CDL-specific training for Clerks of the Court, received strong support from all stakeholders.

The Research Team, in analyzing the prioritization results, determined that consolidating the recommended program enhancements into three tiers was the most effective means of presenting the findings. The use of a three-tiered ranking system enabled the Research Team to integrate

recommended enhancements that received support from all stakeholder groups with those enhancements that represent a priority for a particular stakeholder organization. The results of the tiered ranking are presented in Table 4 below.

The recommended program enhancements are ranked as Tier 1: High Priority; Tier 2: Medium Priority; and Tier 3: Low Priority. These designations indicate the synthesis of recommendations with the highest overall stakeholder support and those that represent the highest priority for individual stakeholder organizations. The Research Team has cross-referenced each recommended program enhancement with the corresponding section(s) of 49 CFR 383 and 384 to indicate the potential for enhanced state compliance if an enhancement is implemented.

Table 4. Stakeholder Prioritization of Recommended Program Enhancements

Tier One: High Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements
Model Reference for Identifying CDL Violations	49 CFR 383.51
Mandatory CDL check on eCitation forms	49 CFR 383.51
Roadside Access to One Driver – One Record Data	49 CFR 384.220, 221, 222, 224, 225
CDL Specific Training for Clerks of Court	49 CFR 384.226, 384.209
CDL Stakeholder Participation in Traffic Safety Committees and Traffic Records Coordinating Committees	49 CFR 384
Differentiated Case Management: CDL Docket	49 CFR 383.226
Tier Two: Medium Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements
Model CDL Coordinator Position Description	49 CFR 384 Subparts C and D
Model Third Party Testing Agreement	49 CFR 383.75, 49 CFR 384.230
Judicial Survey	49 CFR 383.51, 49 CFR 384.226
Tier Three: Low Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements
Stakeholder Outreach on Available Resources	49 CFR 383.51, 49 CFR 384.226
Model State CDL Advisory Committee	49 CFR 384 Subparts C and D
SDLA Use of CDLIS Reports	49 CFR 384

The results of the stakeholder review and prioritization process were also used to identify three pilot projects. In identifying and selecting the pilot projects, the Research Team relied on the following general criteria:

- Are stakeholder staff and technical resources available to support a pilot project?
- Will the pilot project duplicate an existing stakeholder initiative?
- Is the pilot project within the purview of a supporting stakeholder group to implement?
- Will the project directly enhance SDLA compliance with 49 CFR 383 and 384?
- Will the pilot project involve stakeholders other than SDLAs to demonstrate the interconnectedness of the CDL program?

Using these criteria, the Research Team identified the following three pilot projects:

- Working with a state(s) and AAMVA, develop a model CDL Coordinator position description.
- Working with a state(s) and AAMVA, develop a model Third Party Testing Agreement.
- Working with a state(s) and CVSA, develop and evaluate the effectiveness of a model reference for use by enforcement personnel at roadside for identifying CDL violations.

2.4 Objective 4: Conduct Enhancements Pilot Test

As noted in the Objective 3: Recommended Program Enhancements Pilot Project, the Research Team identified three pilot projects. The results are presented below.

#1: Identifying Commercial Driver License (CDL) Violations Model Reference

During the research conducted through Objective 1: Environmental Scan and Objective 2: Stakeholder Surveys, law enforcement personnel identified the accurate completion of CDL citations as an on-going issue. The challenge for law enforcement is that frequently officers do not have the necessary in-depth understanding of the FMCSRs, specifically 49 CFR 383 and 384, and do not properly identify a CDL holder by needed class of license and whether they are operating in commerce. This inability to properly identify drivers and/or CMVs results in the inaccurate issuance of traffic citations.

The Research Team identified two states, Indiana, and Colorado, which have developed “cheat sheets” on how to:

- Indiana: properly identify a CDL and the correct CDL violation, and
- Colorado: flow chart to determine if a vehicle operator should have a CDL and a cross-reference of Colorado statutory citations and FMCSRs.

Both states indicated in interviews that the cheat sheets were developed to help officers understand how to:

- Determine if a driver holds a CDL and check CDL status,
- Determine if a driver requires a CDL to operate the vehicle being driven,
- Identify a CDL violation, and
- Cross-reference state statutes with FMCSRs.

The states noted that while these reference documents have been distributed, to date the states have not formally tracked if these references are being used and if their use correlates to more accurate citations that in turn enhance state compliance with 49 CFR 383 and 384.

The Research Team noted during stakeholder interviews and the stakeholder survey that law enforcement expressed interest in having access to a reference document that provided guidance to help remediate the challenges currently happening at roadside would be beneficial. The Research Team further noted that the “cheat” sheets individually did not address all the roadside challenges and would best be consolidated into a single reference document (initially conceived as a quick reference “dash” card) supported by a more detailed reference guide. The decision to

move forward with developing and testing this reference as a pilot project was supported by stakeholders and in turn selected as a pilot project.

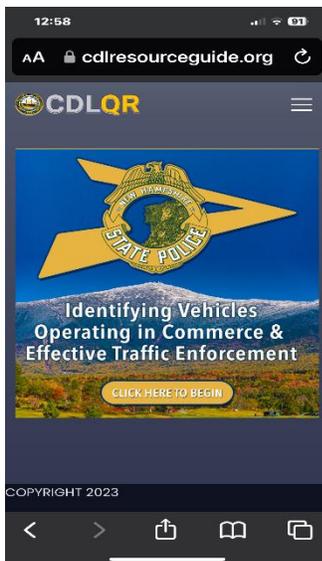
Violations Model Reference

Law enforcement stakeholders have expressed interest during interviews with team members in building on the Indiana and Colorado reference documents to develop a comprehensive reference that addresses the commercial citation lifecycle, including:

- How to identify a commercial vehicle
- How to determine if the vehicle operator needs a CDL
- How to determine if a vehicle is being operated commercially
- How to check CDL status
- How to identify a CDL violation
 - Appropriate state statutory reference
 - Appropriate cross-reference to FMCSRs

The States of New Hampshire and Vermont agreed to participate in the pilot project. During conversations with the two states, the concept of developing the reference document as an application that could be downloaded to cell phones or in-car computers was discussed and decided upon as the course of action. In addition, a dash card was developed modeling the information provided for use in areas where no Wi-Fi or cell coverage was available.

Figure 2. NH CDLQR Home Page



The application (CDLQR) is designed as a decision tree. Once the trooper accesses the CDLQR, a series of screens are accessible that contain questions designed to help a trooper determine if a vehicle is a commercial vehicle, if the vehicle is operating commercially, the vehicle class, and CDL requirements including any required endorsements. As the trooper completes each set of questions, they can continue to the next set of screens based on the answers provided. The CDLQR also contains a contact form for the trooper to complete that includes the name and contact information for the trooper and recipient and the recipient's CDL license number and issuing state. The trooper can then electronically send the contact form to an NAS-certified trooper for use in any follow-up enforcement action.

Overall, the participating troopers and their supervisors overwhelmingly endorsed the continued use of the CDLQR. As noted previously, the use of the CDLQR contributed to an 8% increase in the number of citations issued. Of the 92 citations issued to passenger vehicles, 9 were issued under 49 CFR 383.51, potentially disqualifying offenses. For hazmat carriers, 9 of the 16 citations issued were under 49 CFR 383.51 and for all other CMV, 68 of 321 citations issued were under 49 CFR 383.51. Of the 429 citations issued during the test period, 86 (20%) were under 49 CFR 383.51. Table 5 shows the test hypotheses and the corresponding evaluation

results. The Research Team determined that the first test hypotheses proved true based on the available data.

The Research Team further determined that the second and third test hypotheses were proven true. As noted, the use of the CDLQR led to an 8% increase in citations issued during the test period. Participants and supervisors overwhelmingly expressed a high level of satisfaction with the CDLQR.

Table 5. Test Hypotheses and Evaluation Results

Test Hypotheses	Performance Metrics	Data	Results
The use of the reference document and the web app will improve the proper identification of CDL operators and CMVs while operating in commerce.	<p>Increased number of CDL citations issued.</p> <p>Improved accuracy of CDL citations issued (correctly identified CDL operator or CMV).</p> <p>Eligible traffic violations identified on roadside inspections resulting in citations.</p>	<p>The number of traffic citations applicable to 383.51 issued by each participating law enforcement officer.</p> <p>Number of citations returned by Clerk of Court for correction.</p>	<p>Passenger vehicles – 9 citations issued under 383.51(b)</p> <p>Hazmat vehicles – 1 citation issued under 383.51(a), 5 citations issued under 383.51(b)</p> <p>All CMV – 3 citations issued under 383.51(a), 65 citations issued under 383.51(b)</p>
The use of the reference document and the web app will improve the proper identification of CDL-related violations for those operators who currently hold a valid CDL license.	<p>Increased number of CDL-applicable traffic violations identified.</p> <p>Improved accuracy of CDL violations identified.</p>	<p>Number of CDL violations identified by participating law enforcement officers.</p> <p>Number of CDL violations requiring correction prior to submittal to SafetyNet.</p>	As noted, troopers using the CDLQR issued 321 citations for traffic violations. Before using the CDLQR, these troopers were not involved in commercial motor vehicle roadside enforcement.
Law enforcement personnel will find the web app useful when engaged in roadside operations.	Qualitative assessment of law enforcement personnel views on benefits of the web app.	Workshop and focus groups with participating law enforcement officers.	88% of respondents found the CDLQR extremely or very useful.

An additional indication of end-user satisfaction is that both New Hampshire and Vermont are interested in expanding the use of the CDLQR for all enforcement personnel, the judiciary, DMVs, and prosecutors. As part of the proposed expansion of the use of a CDLQR application for multiple agencies, the states want to map state codes and FMCSRs to AAMVA ACD codes

and to felony cases involving CDL holders. New Hampshire is planning to train all troopers to become NAS Level III certified.

Following the CVSA presentation, the Research Team was approached by half a dozen states who expressed interest in developing a CDLQR app for their states (Missouri, New Jersey, Nebraska, Texas, Kansas, and Montana).

#2: Model Third Party Testing Agreement

As of February 7, 2022, SDLAs must implement the requirements of 49 CFR 383.71 (b) and 49 CFR 383.71(b) and (f)(9), (Entry Level Driver Training Program).

The requirements of the program require that SDLAs enter into agreements with third party testers who will conduct testing on behalf of the SDLAs. The Research Team did a preliminary review of agreements identified through an on-line search and determined that developing a model agreement incorporating all statutory requirements and best practices would provide SDLAs with a reference to how to best structure these agreements in compliance with Federal Motor Carrier Safety Regulations would be of benefit to stakeholders.

This will not be to determine state compliance but to understand how states structure these agreements. The Research Team recognizes that states will have unique requirements and language included in these agreements, and our focus will be on identifying the sections and language used to comply with FMCSRs.

The Research Team reviewed existing state third party agreements and mapped these to the appropriate FMCSRs. We then developed a draft model testing agreement that incorporated the best practices identified and mapped to all FMCSR requirements. The agreement was then distributed to all state SDLAs and AAMVA for review. All comments received were then addressed and the model agreement revised accordingly.

The final model third party testing agreement is posted on the CDL resource guide website (www.cdlresourceguide.org) at this link: <https://cdlresourceguide.org/3rd.pdf>

#3: Model CDL Coordinator Position Description

The Research Team used the same approach for developing the model position description as was used to develop the model testing agreement. We reviewed existing state position descriptions and then developed a comprehensive list of all duties and responsibilities for the model position description. We then developed a draft description that captured all identified duties and best practices from state position descriptions. The draft description was then distributed to all state SDLAs and AAMVA for review. On receipt of comments, the comments were addressed, and the model position description was revised accordingly.

The final model position description is posted on the CDL resource guide website at this link: <https://cdlresourceguide.org/model.pdf>

2.5 Objective 5: Present Pilot Test Results

Sergeant Seth Turner of the New Hampshire State Police demonstrated the CDLQR to CVSA on September 26, 2023, and to NDAA, NCSC, NJC and FMCSA on November 3. As noted, end-users are very satisfied with the CDLQR and New Hampshire and Vermont are interested in expanding the use of the CDLQR for law enforcement on a state-wide basis and developing a similar application for prosecutors and the Judiciary. In addition, seven states have expressed interest in developing a CDLQR application specific to their states.

The Model CDL Position Description and the Model Third Party Testing Agreement were distributed to stakeholders for initial review in December 2023. The documents were revised to incorporate stakeholder feedback. The Research Team then distributed the documents to stakeholders for a second and final review. The final documents were posted on the CDL Resource Guide Website: <https://www.cdlresourceguide.org/>

The Research Team distributed a draft of the final recommended program enhancements to stakeholders for review on January 29. The recommended program enhancements were then revised based on the review. The final recommended program enhancements are shown in Table 6 below. As can be seen, three of the recommended program enhancements were addressed through the current project and two others are being addressed through other CDLPI grants.

2.6 Objective 6: Final Project Report

The performance metrics for the National CDL Program Assessment final project report were achieved as follows:

- The final compilation of recommended program enhancements identifying the stakeholder group(s) that would be the primary beneficiaries of these enhancements was completed through Objective 5.
- The CDL Resource Guide website (<https://www.cdlresourceguide.org/>) developed through Objective 1 was updated in December 2023. As part of the update, the Research Team generated a message to all registered stakeholders advising that the webpage was updated.
- A draft of the final project report was provided to stakeholders for comment and review. The report was revised to address all comments.

3.0 Recommendations

This section of the final project report presents the Research Teams findings and recommendations. In developing these, the Research Team updated the status of the Objective 3 Recommended Program Enhancements shown in Table 6 below to identify the status of recommended program enhancements. The recommendations developed for stakeholder consideration are directed specifically to the recommended enhancements not yet addressed.

In assessing the status update and developing recommendations, the Research Team identified the stakeholders we believe are most directly impacted by each proposed enhancement. The intent is not to direct a particular organization to implement the recommended enhancement but more to note which stakeholder we believe would be the primary beneficiary of each recommended enhancement. The Research Team further classified stakeholders by our assessment of primary or secondary beneficiaries.

3.1 Recommendation #1: Differentiated Case Management: CDL Docket

The Research Team notes enhancing compliance with the requirements of 49 CFR 384.226 remains a national problem. Reasons for this include:

- Notwithstanding the excellent training available to assist with compliance with 49 CFR Parts 383 and 384, the Research Team notes that achieving a desirable training saturation rate with judges, magistrates and others who hear CDL cases remains a challenge.
- States are experiencing significant turnover in the judiciary as judges retire and new judges are appointed to the bench.
- The same challenges facing the judiciary also impact prosecutors and court personnel.

The Research Team noted that in the Objective 3: Recommended Program Enhancement report that the use of CDL-specific dockets heard by court personnel, judges, and prosecutors with expertise in 49 CFR 383 and 384 is limited. Subsequently, we learned that the State of Connecticut has successfully implemented a CDL-specific docket. The result has been a significant improvement in compliance with 49 CFR 384.226.

The Research Team believes the National CDL Program will benefit significantly by having other states test a CDL-specific docket. To this end, we encourage one or more states to consider adopting a CDL-specific docket. Further, we recommend that the implementation of a CDL-docket include a detailed assessment of the implementation process and benefits obtained. The results of the assessment would constitute a best practices guideline available to other states to use as a roadmap.

3.2 Recommendation #2: Enhancing Roadside Safety Enforcement

In assessing the National CDL Program, the Research Team determined that the compliance issues SDLAs and jurisdiction face frequently begin at roadside which is the starting point of the CDL citation lifecycle shown in Figure 1. Based on research conducted, the Research Team found that key to improving data quality, timeliness, and accuracy starts at roadside. If a mistake is made in issuing a citation, the mistake frequently carries through the entire CDL citation lifecycle. An additional challenge noted during the research is that law enforcement personnel

may engage in inadvertent masking at roadside if a charge is reduced on a citation or no citation is issued.

The primary cause for roadside enforcement challenges stems from the fact that law enforcement frequently lacks the necessary in-depth understanding of the Federal Motor Carrier Safety Regulations (FMCSRs), specifically 49 CFR 383 and 384, and do not properly identify a CDL or cite the correct violation. This is particularly true for non-NASI certified officers, although the Research Team did discover that NASI certified officers at times may make the same mistakes.

The Research Team recommends the following for CDL stakeholder consideration to help address the challenges identified above:

Promoting Development of a CDLQR App for Other States

During the Objective 1 Environmental Scan, The Research Team identified two states, Indiana, and Colorado, which have developed “cheat sheets” on how to:

- Indiana: properly identify a CDL and the correct CDL violation, and
- Colorado: flow chart to determine if a vehicle operator should have a CDL and a cross-reference of Colorado statutory citations and Federal Motor Carrier Safety Regulations.

Both states indicated in interviews that the cheat sheets were developed to help officers understand how to:

- Determine if a driver holds a CDL and check CDL status,
- Determine if a driver requires a CDL to operate the vehicle being driven,
- Identify a CDL violation, and
- Cross-reference state statutes with FMCSRs.

The “cheat sheets” being used by Indiana and Colorado served as the inspiration for the New Hampshire-Vermont pilot test of a CDL-app (CDLQR) for use law enforcement use at roadside.

An additional challenge involves the use of eCitation forms which many states are now using. The eCitation applications which do contain the necessary fields to identify if a driver receiving a citation has the proper endorsement, possesses the proper class of license, and/or is operating a CMV do not have hard stops to ensure these fields are reviewed prior to completion and submittal of the eCitation thereby increasing the likelihood that the citations are completed in full compliance with the requirements of 49 CFR 383 and 384.

Objective 2: Stakeholder Survey Report found that that many enforcement personnel do not understand how to complete these fields and do not properly identify the driver as a CDL-holder.

As noted, the CDLQR is designed as a decision tree to help roadside personnel determine if a vehicle is operating commercially, the class of vehicle, placarding requirements, and CDL Licensing requirements including required endorsements. The key feature of the CDLQR is mapping the New Hampshire and Vermont state codes with corresponding Federal regulations; particularly 49 CFR 383.51. If a driver is being charged with a 49 CFR 383.51 driving offense, the CDLQR clearly indicates to the officer that the charge may not be reduced or changed in any

way. This feature is designed to specifically make roadside personnel aware of and enhance compliance with 48 CFR 384.226.

During demonstrations provided to CVSA, NDAA, NCSC, NJC, and FMCSA, several states expressed interest in exploring the development of a CDLQR app. NDAA has also extended an invitation to the Research Team to demonstrate the CDLQR in St. Paul Minnesota at the 2024 Commercial Driver's License Violations Conference: Enforcement, Prosecution, & Reporting training program. Vermont and New Hampshire have both expressed interest in developing a similar app for prosecutors and the state judiciaries. Their respective DMVs have also expressed interest in expanding the app to map ACD codes with the state regulations and Federal regulations.

The Research Team recommends that states explore developing a similar app available for all state CDL stakeholders. Based on the Vermont and New Hampshire pilot test, we believe that providing real-time access to a CDLQR-type app covering all aspects of CDLs (Commercial Driver's License) will be of significant benefit for enhancing the state's compliance with 49 CFR 383 and 384.

Mandatory eCitation CDL Check

Law enforcement personnel noted that while many eCitation programs include fields for commercial motor vehicles, roadside personnel often do not complete these. A number of law enforcement personnel interviewed during the research indicated that having a mandatory CDL check on eCitation so that citations would not be submitted until an officer has checked to see if the driver is a CDL holder. eCitation applications have the functionality to require that CDL status be checked (is the driver a CDL holder, if so, CDL record check, etc.) before the citation is submitted but this capability. Often it is an optional feature and may not be used.

The Research Team recommends that one or more states implement the use of a mandatory CDL check on eCitation forms and evaluate their effectiveness. The results could then be made available to other states as a best practice guideline. The Research Team believes that this will decrease instances where CDL holders are not receiving citations when warranted.

3.3 Recommendation #3: Model State CDL Working Group

During the Objective 1: Environmental Scan and the Objective 2: Stakeholder Survey tasks, stakeholders overwhelmingly stated the need for CDL program stakeholders be included as members of state-wide transportation safety groups such as Traffic Safety Committees (TSC) and Traffic Records Coordinating Committees (TRCC).

The Research Team reached out to the Governor's Highway Safety Association during the Objective 1: Environmental Scan to discuss the National CDL Program Assessment. A challenge identified during these discussions is that TSCs and TRCCs are funded through the National Highway Traffic Safety Administration (NHTSA), and are tasked with all aspects of highway safety, including occupant protection, impaired driving, speed enforcement, pedestrian and bicycle safety, and crash data collection. While the agencies housing CDL programs are typically members of TSCs and TRCCs, the CDL program is a subset of their broader agency responsibilities and the overall highway safety program.

An interesting alternative to expanding TSCs and TRCCs has been adopted by the State of Kentucky. Kentucky, in 2020, established an Advisory Committee to create a forum connecting all traffic safety partners involved with the CDL program. The Kentucky CDL Advisory Committee was created as a forum to connect all CDL program stakeholders, traffic safety partners from every part of the process, from CDL licensing to roadside enforcement and adjudication. The CDL Advisory Committee also includes representatives from the motor carrier industry. The CDL Advisory Committee meets quarterly to discuss contemporary issues in CDL-related traffic safety, challenges, successes, and ways to create safer roadways for the traveling public and CDL drivers¹.

The Research Team recommends that other states consider establishing a CDL Advisory Committee with the same or similar charge as that established for the Kentucky CDL Advisory Committee.

¹ Adapted from an excellent article on the Kentucky CDL Advisory Committee published by the National District Attorney's Association: <https://ndaa.org/wp-content/uploads/BTL-Vol-29-No9-Sept-2021-KY-CDL-Advisory-Comm-Outreach-Project.pdf>

Table 6. Status of Recommended Program Enhancements

Tier One: High Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements	Status	Stakeholder Impacts
Model Reference for Identifying CDL Violations	49 CFR 383.51	Addressed through the development of the CDLQR application	The primary beneficiary will be law enforcement. If the CDLQR app is expanded, additional beneficiaries will be prosecutors, the Judiciary and SDLAs
Mandatory CDL check on eCitation forms	49 CFR 383.51	Not yet addressed	The primary beneficiary will be law enforcement. Additional beneficiaries will be prosecutors, the Judiciary and SDLAs through improved accuracy of citations
Roadside Access to One Driver – One Record Data	49 CFR 384.220, 221, 222, 224, 225	Not yet addressed	The primary beneficiary will be law enforcement
CDL Specific Training for Clerks of Court	49 CFR 384.226, 384.209	Being developed under a separate CDLPI grant to the University of Cincinnati	Primary beneficiaries will be the Judiciary and SDLAs
CDL Stakeholder Participation in Traffic Safety Committees and Traffic Records Coordinating Committees	49 CFR 384	Not yet addressed	All CDL stakeholders will benefit
Differentiated Case Management: CDL Docket	49 CFR 383.226	Not yet addressed	Primary beneficiaries will be prosecutors, the Judiciary and SDLAs through enhanced compliance with 49 CFR 383 and 384 with emphasis on 49 CFR 384.226 Prohibition on Masking

Tier Two: Medium Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements	Status	Stakeholder Impacts
Model CDL Coordinator Position Description	49 CFR 384 Subparts C and D	Model Position Description is posted on the website	Primary beneficiary will be SDLAs
Model Third Party Testing Agreement	49 CFR 383.75, 49 CFR 384.230	Model Third Party Testing Agreement is posted on the website	Primary beneficiary will be SDLAs
Judicial Survey	49 CFR 383.51, 49 CFR 384.226	Not yet addressed	Primary beneficiary will be the Judiciary in particular judicial educators
Tier Three: Low Priority - Recommended Program Enhancements	49 CFR 383 and 384: Expected SDLA Compliance Enhancements	Status	Stakeholder Impacts
Stakeholder Outreach on Available Resources	49 CFR 383.51, 49 CFR 384.226	Not yet addressed	All stakeholders
Model State CDL Advisory Committee	49 CFR 384 Subparts C and D	Not yet addressed	All stakeholders
SDLA Use of CDLIS Reports	49 CFR 384	AAMVA received a CDLPI grant to undertake this research	Primary beneficiary will be SDLAs