

Office of the Auditor General
Performance Audit Report

Commercial Vehicle Enforcement Division
Michigan Department of State Police

September 2016

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

Article IV, Section 53 of the Michigan Constitution



*Performance Audit
Commercial Vehicle Enforcement Division
(CVED)
Michigan Department of State Police*

Report Number:
551-0144-15

Released:
September 2016

CVED's mission is to provide the highest quality commercial vehicle enforcement and public safety services throughout Michigan. CVED's enforcement operations include monitoring commercial motor vehicles (CMVs); conducting federal compliance reviews, school bus inspections, safety audits of new motor carriers, and CMV safety alliance training; and responding to CMV complaints. CVED expended \$22.8 million in fiscal year 2015. As of May 25, 2016, CVED had 186 employees.

Audit Objective			Conclusion
Objective #1: To assess CVED's efforts to maximize the effectiveness of its enforcement operations.			Effective
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
CVED did not have a documented strategy that identified potential impacts of proposed staffing levels and/or enhanced resources (<u>Finding #1</u>).		X	Agrees

Audit Objective			Conclusion
Objective #2: To assess the effectiveness of CVED's school bus inspection program.			Effective
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
CVED should continue to improve its school bus repair certification process (<u>Finding #2</u>).		X	Agrees

A copy of the full report can be
obtained by calling 517.334.8050
or by visiting our Web site at:
www.audgen.michigan.gov

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Auditor General

September 8, 2016

Colonel Kriste Kibbey Etue, Director
Michigan Department of State Police
7150 Harris Drive
Dimondale, Michigan

Dear Colonel Etue:

I am pleased to provide this performance audit report on the Commercial Vehicle Enforcement Division, Michigan Department of State Police.

We organize our findings and observations by audit objective. Your agency provided preliminary responses to the recommendations at the end of our fieldwork. The *Michigan Compiled Laws* and administrative procedures require an audited agency to develop a plan to comply with the recommendations and submit it within 60 days of the date above to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

A handwritten signature in dark ink that reads "Doug Ringler". The signature is written in a cursive, slightly slanted style.

Doug Ringler
Auditor General

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AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

ENFORCEMENT OPERATIONS

BACKGROUND

The Commercial Vehicle Enforcement Division (CVED), Michigan Department of State Police (MSP), is responsible for enforcing the:

- Michigan Vehicle Code (Sections 257.1 - 257.923 of the *Michigan Compiled Laws*).
- Federal Motor Carrier Safety Regulations as adopted under the Motor Carrier Safety Act of 1963 (Sections 480.11 - 480.25 of the *Michigan Compiled Laws*).
- Pupil Transportation Act (Sections 257.1801 - 257.1877 of the *Michigan Compiled Laws*).
- Other laws that pertain to motor carriers that transport commodities by truck and trailer.

CVED's enforcement operations include:

- Monitoring commercial motor vehicles* (CMVs) for traffic, moving, and drug and alcohol violations; compliance with licensure, hours of service, seat belt, and equipment maintenance requirements; and compliance with size, weight, and hauling hazardous materials requirements. Monitoring activities are conducted throughout Michigan and at Michigan's international borders.
- Conducting federal compliance reviews* of motor carrier records.
- Conducting school bus inspections.
- Conducting safety audits* of new motor carriers.
- Conducting CMV safety alliance training for CVED, local, and county law enforcement officers.
- Responding to complaints regarding CMVs.

CVED had 186 employees, including 106 motor carrier officers, as of May 25, 2016.

AUDIT OBJECTIVE

To assess CVED's efforts to maximize the effectiveness* of its enforcement operations.

* See glossary at end of report for definition.

CONCLUSION

Effective.

**FACTORS
IMPACTING
CONCLUSION**

- CVED developed its strategic plan and annual district enforcement plans to address its goals* and operational needs.
- CVED district staff utilized various enforcement information, including enforcement activity statistics (Exhibit #1), crash costs, traffic volumes, accident rates, staffing levels, the number of registered motor carriers, and weigh-in-motion* (WIM) and wireless weigh-in-motion* (WWIM) data, for planning enforcement operations.
- CVED conducted annual inspections to monitor and evaluate the district offices' performance of enforcement operations.
- CVED appropriately scheduled and accurately completed the CMV compliance reviews tested.
- CVED received a CMV Fatality Rate Award certificate from the Federal Motor Carrier Safety Administration (FMCSA) in September 2015 in recognition of the lowest commercial vehicle fatality rate for calendar years 2011, 2012, and 2013.
- Reportable condition* related to the need to identify potential impacts of proposed staffing levels and/or enhanced resources.

* See glossary at end of report for definition.

FINDING #1

CVED needs to identify potential impacts of proposed staffing levels and/or enhanced resources.

CVED did not have a documented strategy that identified potential impacts of proposed staffing levels and/or enhanced resources.

CVED is responsible for the numerous enforcement activities applicable to the Michigan Vehicle Code, the Motor Carrier Safety Act, the Pupil Transportation Act, and other laws that pertain to motor carriers that transport commodities by truck and trailer.

Our review noted that CVED:

- Reported that it inspected 51,943, 49,108, and 50,464 CMVs for fiscal years 2013, 2014, and 2015, respectively (Exhibit #1). These inspections represented 98.0%, 92.7%, and 88.5% of the safety inspections required by MSP's appropriations acts for these fiscal years.
- Staffed the six weigh stations reviewed for 27.5% of all shifts in June 2014 and March 2015. CVED could not provide us with an analysis to support the effectiveness of this level of staffing.
- Conducted 100% of the 17,213, 16,984, and 15,987 annual school bus inspections for the 2013, 2014, and 2015 inspection cycles, respectively; however, CVED conducted only 29.7% to 40.3% of the required repair certifications* for those inspection cycles.

CVED maintained that it was unable to meet its safety inspection goals because of insufficient staffing levels.

Formally documenting the optimal enforcement level, which considers both staffing needs and tactics, would help to provide assurances regarding the completeness and accuracy of this information. Such analyses may also identify information or statistics that could be useful to executive management and legislative policymakers in policy and/or funding decisions.

RECOMMENDATION

We recommend that CVED identify and document potential impacts of proposed staffing levels and/or enhanced resources.

AGENCY PRELIMINARY RESPONSE

MSP provided us with the following response:

CVED agrees with the recommendation. CVED will participate in a resource allocation model study to identify optimal staffing levels to accomplish CVED's mission.

* See glossary at end of report for definition.

SCHOOL BUS INSPECTION PROGRAM

BACKGROUND

Section 257.1839 of the *Michigan Compiled Laws* requires that any public or private entity that owns or uses a school bus for pupil transportation (hereafter referred to as school bus owner*) identify themselves, and all buses that they intend to use for pupil transportation, to CVED and that CVED inspect each school bus annually and as it determines necessary where school bus defects are identified. School bus owners are not allowed to operate school buses that have not been inspected by CVED.

Based on the inspection, a sticker will be affixed to the front windshield of the bus as follows:

- Green (Passed) - Satisfactory condition upon annual inspection or CVED's repair certification.
- Yellow (Operable) - Unsatisfactory condition but safe for operation if defect repaired within 60 days.
- Red (Rejected) - Unsafe for further operation. The school bus owner must repair the defect and have the repair successfully certified before the bus can be used for pupil transportation.
- Blue - Defect identified during annual inspection has been repaired as certified by the school bus owner.

CVED conducted 17,213, 16,984, and 15,987 annual inspections for the 2013, 2014, and 2015 inspection cycles, respectively. CVED rejected 1,634 (9.5%), 1,739 (10.2%), and 1,525 (9.5%) school buses as a result of these inspections (Exhibit #2).

AUDIT OBJECTIVE

To assess the effectiveness of CVED's school bus inspection program.

CONCLUSION

Effective.

FACTORS IMPACTING CONCLUSION

- CVED implemented an electronic school bus inspection application with the 2015 inspection cycle that allows CVED to electronically record inspection results and monitor the status of repair certification for identified defects.
- CVED earned the Good Government Symbol of Leadership recognition in February 2015 for implementing its electronic school bus inspection application.

* See glossary at end of report for definition.

- CVED's vehicle safety inspectors conducted 100% of the annual school bus inspections and certified 776, 847, and 696 repairs during the 2013, 2014, and 2015 inspection cycles, respectively.
- Reportable condition related to CVED's school bus repair certification process.

FINDING #2

Improvement needed to the school bus repair certification process.

CVED should continue to improve its school bus repair certification process.

Section 257.1839 of the *Michigan Compiled Laws* (Public Act 187 of 1990) allows CVED to delegate its inspection responsibilities to publicly employed inspectors; however, *Michigan Administrative Code R 257.955*, promulgated in 1982, indicates that repair certifications shall be conducted by a State Police official.

Our review of CVED's school bus inspection process noted:

- a. Our analysis of the inspection results of 100 of the 1,525 school buses that were rejected based on their 2015 inspections and their inspection results for 2013 and 2014 noted that 7 school buses were rejected in all 3 annual inspections and that 18 school buses were rejected in 2 of the 3 annual inspections. For these 25 school buses, the school bus owner certified that the defects had been repaired for 13 (86.7%), 15 (78.9%), and 12 (57.1%) of the required repair certifications for the 2013, 2014, and 2015 inspection cycles, respectively.
- b. CVED reported that it allowed the school bus owners to certify that the defects had been repaired for 59.7%, 67.9%, and 70.3% of all rejected (red sticker) and operable (yellow sticker) school buses in the 2013, 2014, and 2015 inspection cycles, respectively. CVED reported that it certified the remaining repairs.
- c. CVED did not have an effective process to determine whether defect patterns existed for buses that have been identified with significant defects. Such information may assist in justifying CVED's decision to allow school bus owners to certify that defects have been repaired.

CVED indicated that it allowed self-certification of repairs because:

- CVED interprets that the statute allows school bus owners to certify that repairs were made.
- CVED did not have sufficient vehicle safety inspector staffing levels to certify all repairs.
- CVED vehicle safety inspectors may not have been available to certify the repairs prior to the buses being needed for pupil transportation.
- CVED's use of an antiquated documentation system prior to the 2015 inspection cycle was cumbersome and time consuming.

We believe that the opportunity exists for CVED to place more stringent practices on school bus owner repair certifications, such as limiting the percentage of buses within a district that can be

self-certified, limiting the number of rejected inspections a school bus owner can have and still self-certify, assessing an owner's overall safety history, or other options. Applying a risk-based approach would help improve the repair certification process.

RECOMMENDATION

We recommend that CVED continue to improve its school bus repair certification process.

**AGENCY
PRELIMINARY
RESPONSE**

MSP provided us with the following response:

CVED agrees with the recommendation. CVED implemented an electronic inspection application in 2015 that allowed the division to focus more resources on the repair certification process. CVED will formalize its risk-based repair certification process in a written policy.

SUPPLEMENTAL INFORMATION

UNAUDITED
Exhibit #1

COMMERCIAL VEHICLE ENFORCEMENT DIVISION

Michigan Department of State Police

Enforcement Activity Profile Fiscal Years 2013 Through 2015

	2013	2014	2015
<u>Enforcement Activity Summary</u>			
Vehicle inspections	51,943	49,108	50,464
Compliance reviews	53	167	233
Safety audits	1,175	963	791
Vehicles stopped (inspections, reviews, and traffic offenses)	79,447	78,802	75,991
Vehicles weighed*	2,581,217	1,861,599	2,809,427
<u>Citation Summary</u>			
Overweight citations	5,716	5,037	5,438
Size citations	2,347	1,853	1,827
Traffic citations - Speeding	5,583	5,534	4,921
Other traffic citations (improper lane change, reckless driving, etc.)	1,314	1,178	1,053
Driver impairment	65	39	31
Registration	3,308	3,195	3,200
Seat belts	3,544	3,067	3,143
Driver license	1,281	1,237	1,225
Parking	601	583	474
Driver qualification violations	4,058	3,604	3,212
Equipment	3,874	3,772	3,510
Logbook	2,833	2,719	2,060
Hazardous materials	235	162	141
Other	9,110	9,228	8,224
Total citations	43,869	41,208	38,459
<u>Arrest Summary</u>			
Felony violations	77	70	142
Misdemeanor violations	290	281	348
Fugitives arrested	549	563	580
Total arrests	916	914	1,070
<u>Crash Summary</u>			
CMV crashes	4,192	5,241	5,057
Persons killed in CMV related crashes	87	117	88
Persons injured in CMV related crashes	1,694	1,823	1,627

* Includes portable, platform, and WIM scales.

Source: The Office of the Auditor General prepared this exhibit from data obtained from the FMCSA Web site.

COMMERCIAL VEHICLE ENFORCEMENT DIVISION
Michigan Department of State Police

Annual School Bus Inspection Results
For Inspection Cycles 2013 Through 2015



Source: The Office of the Auditor General prepared this exhibit from data obtained from MSP.

COMMERCIAL VEHICLE ENFORCEMENT DIVISION
Michigan Department of State Police

Expenditures by Enforcement Activity
Fiscal Years 2013 Through 2015

Enforcement Activity	Fiscal Year		
	2013	2014	2015
Motor carrier enforcement	\$ 11,524,265	\$ 11,834,093	\$ 12,583,687
Safety inspections	5,806,986	5,812,918	5,978,985
School bus inspections	1,213,656	1,849,020	1,348,828
Special transportation enforcement team operations	1,864,461	2,099,856	1,849,029
Other safety projects	1,636,785	1,125,594	934,495
Motor carrier recruit school			55,848
Total CVED expenditures	<u>\$ 22,046,154</u>	<u>\$ 22,721,481</u>	<u>\$ 22,750,872</u>

Source: The Office of the Auditor General prepared this exhibit based on information obtained from the Michigan Administrative Information Network (MAIN).

AGENCY DESCRIPTION

CVED's mission* is to provide the highest quality commercial vehicle enforcement and public safety services throughout Michigan. CVED's goals are to provide Statewide policing to enhance public safety, including the safety of pupil transportation; invest in employees by providing the highest quality training and technology; and enhance customer service by building on MSP's foundation as a service organization.

During fiscal year 2015, CVED expended \$22.8 million: \$5.7 million (25.1%) from federal funds, \$15.6 million (68.7%) from State restricted funds, \$1.3 million (5.9%) from locals, and \$55,800 (.2%) from the State's General Fund to perform enforcement operations for CMV enforcement, safety inspections, school bus inspections, special enforcement team operations, safety projects, and motor carrier officer recruiting (Exhibit #3).

CVED had 186 employees, including 106 motor carrier officers, as of May 25, 2016.

* See glossary at end of report for definition.

AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

AUDIT SCOPE

To examine the operations, processes, and records of CVED. We conducted this performance audit* in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The responsibility to collect motor carrier fees was transferred to CVED through Executive Order No. 2015-10, effective May 17, 2015. Because this occurred during our fieldwork, we did not include it within the scope of our audit.

PERIOD

Our audit procedures, which included a preliminary survey, audit fieldwork, report preparation, analysis of agency responses, and quality assurance, generally covered the period October 1, 2012 through September 30, 2015.

METHODOLOGY

We conducted a preliminary survey to gain an understanding of CVED's operations and activities to establish our audit objectives, scope, and methodology. During our preliminary survey, we:

- Interviewed CVED management and staff to obtain an understanding of CVED's various enforcement operations.
- Reviewed CVED's mission, goals, and strategic plans and the districts' enforcement plans.
- Reviewed applicable State laws and MSP and CVED policy directives.
- Reviewed CVED's federal grant awards and financial and performance reports.
- Analyzed CVED and district office staffing, responsibilities, officer qualifications, and the officer performance appraisal process.
- Reviewed CVED's monitoring of local units' commercial vehicle safety alliance inspector qualifications.
- Researched other states' school bus inspection requirements.

* See glossary at end of report for definition.

OBJECTIVE #1

To assess CVED's efforts to maximize the effectiveness of its enforcement operations.

To accomplish this objective, we:

- Reviewed CVED's documentation to support its reported accomplishments in relation to its strategic plan.
- Reviewed CVED's evaluations of district offices' enforcement operations.
- Reviewed CVED's analysis of its expected staffing levels and resource needs.
- Reviewed CVED's utilization of WIM and WWIM data to plan weigh station and bypass route staffing.
- Analyzed staffing and WIM data for six judgmentally selected weigh stations during two judgmentally selected months. The weigh stations were selected based on their proximity to a WIM scale. The months were selected to provide seasonal coverage throughout the audit period. Therefore, we could not project the results to the overall population.
- Conducted site visits and interviewed officers at three judgmentally selected district offices. The district offices were selected based on their geographical location, the presence of a weigh station, their staffing levels, and their CMV traffic volumes. Therefore, we could not project the results to the overall population.
- Randomly selected and tested 25 of the 169 motor carriers with accidents or multiple alerts, as noted on the FMCSA dashboard, to determine if CVED scheduled a compliance review. We randomly selected our sample to eliminate bias and enable us to project the results to the entire population.
- Judgmentally selected and tested 25 of the 446 federal compliance reviews for completeness and accuracy.

OBJECTIVE #2

To assess the effectiveness of CVED's school bus inspection program.

To accomplish this objective, we:

- Analyzed school bus inspection statistics for CVED's 2015 inspection cycle.
- Judgmentally selected and tested 100 of the 1,525 school buses that CVED rejected during the 2015 inspection cycle and compared the inspection results with the school buses' inspection results for 2013 and

2014. The school buses were selected based on their geographic location throughout the State and the size of the owner's school bus fleet. Therefore, we could not project the results to the overall population.

CONCLUSIONS

We base our conclusions on our audit efforts and the resulting material conditions* and reportable conditions.

When selecting activities or programs for audit, we direct our efforts based on risk and opportunities to improve State government operations. Consequently, we prepare our performance audit reports on an exception basis.

AGENCY RESPONSES

Our audit report contains 2 findings and 2 corresponding recommendations. MSP's preliminary response indicates that CVED agrees with both recommendations.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion at the end of our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require an audited agency to develop a plan to comply with the recommendations and submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

* See glossary at end of report for definition.

PRIOR AUDIT FOLLOW-UP

Following is the status of the reported findings from our January 2008 performance audit of Commercial Vehicle Enforcement, Michigan Department of State Police (551-0144-06):

Prior Audit Finding Number	Topic Area	Current Status	Current Finding Number
1a	Enforcement Activity Outcomes - Performance indicators not developed.	No longer applicable.	
1b	Enforcement Activity Outcomes - Performance standards not established.	No longer applicable.	
1c	Enforcement Activity Outcomes - Weight enforcement efforts not evaluated.	No longer applicable.	
2	Weight Enforcement Scales - Functionality not maintained.	Complied	Not applicable
3a	Overweight CMV Citation* Analysis - Sufficient citation data not obtained.	Not in scope of this audit.	
3b	Overweight CMV Citation Analysis - Fine data not analyzed.	Not in scope of this audit.	

SUPPLEMENTAL INFORMATION

Our audit report includes supplemental information that relates to our audit objectives (Exhibits #1 through #3). Our audit was not directed toward expressing an opinion on this information.

* See glossary at end of report for definition.

GLOSSARY OF ABBREVIATIONS AND TERMS

citation	A ticket issued to an offender charging a violation of a State statute or local ordinance.
commercial motor vehicle (CMV)	A motor vehicle used for commercial transportation of goods or passengers.
compliance review	An on-site examination of a motor carrier's operations for compliance with FMCSA regulations.
CVED	Commercial Vehicle Enforcement Division.
effectiveness	Success in achieving mission and goals.
FMCSA	Federal Motor Carrier Safety Administration.
goal	An intended outcome of a program or an entity to accomplish its mission.
material condition	A matter that, in the auditor's judgment, is more severe than a reportable condition and could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the judgment of an interested person concerning the effectiveness and efficiency of the program.
mission	The main purpose of a program or an entity or the reason that the program or the entity was established.
MSP	Michigan Department of State Police.
performance audit	An audit that provides findings or conclusions based on an evaluation of sufficient, appropriate evidence against criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

repair certification	A certification that specific defects identified during initial inspection have been repaired.
reportable condition	A matter that, in the auditor's judgment, is less severe than a material condition and falls within any of the following categories: an opportunity for improvement within the context of the audit objectives; a deficiency in internal control that is significant within the context of the audit objectives; all instances of fraud; illegal acts unless they are inconsequential within the context of the audit objectives; significant violations of provisions of contracts or grant agreements; and significant abuse that has occurred or is likely to have occurred.
safety audit	An examination of a motor carrier's operations to provide educational and technical assistance on safety and operational requirements.
school bus owner	Any public or private entity that owns or uses a school bus for pupil transportation.
weigh-in-motion (WIM)	Scales designed to capture and record axle weights and gross vehicle weights as vehicles drive over a measurement site at a reduced or normal traffic speed.
wireless weigh-in-motion (WWIM)	Scales that allow wireless transmission of WIM data from the traffic monitoring site to a mobile patrol unit utilizing a laptop computer and an in-car receiver.

