

Office of the Auditor General

Performance Audit Report

Law Enforcement Information Network

Michigan Department of State Police and
Department of Technology, Management, and Budget

April 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



OAG

Office of the Auditor General

Report Summary

Performance Audit

Law Enforcement Information Network

Michigan Department of State Police and Department of Technology, Management, and Budget

Report Number:
551-0597-15

Released:
April 2016

The Michigan Department of State Police (MSP), in conjunction with the Department of Technology, Management, and Budget (DTMB), maintains and manages the Law Enforcement Information Network (LEIN). LEIN was implemented in 1967 as a Statewide resource for local law enforcement and criminal justice agencies needing access to accurate and timely criminal justice information. LEIN contains information regarding arrest warrants, missing persons, and stolen vehicles.

Audit Objective			Conclusion
Objective #1: To assess the effectiveness of MSP and DTMB's security and access controls over LEIN.			Moderately effective
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
MSP should implement more complete controls over LEIN to help prevent inappropriate access and ensure data confidentiality. Some necessary authentication controls were not implemented, and some database administrators should have their access removed (<u>Finding #1</u>).		X	Agrees
MSP should continue to work with non-criminal justice agencies to determine if LEIN is the best resource to provide access to criminal justice records. While authorized, these agencies may have been granted access to criminal justice records they did not need (<u>Finding #2</u>).		X	Agrees

Audit Objective			Conclusion
Objective #2: To assess MSP and DTMB's controls to ensure the accuracy and completeness of data entered into LEIN.			Moderately effective
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
MSP should improve its monitoring of records entered by local law enforcement and criminal justice agencies into LEIN to identify potentially inaccurate warrant and missing person information. For 88,412 (17%) of 507,771 warrants, LEIN contained a potentially inaccurate height of 4 feet and weight of 50 pounds (<u>Finding #3</u>).		X	Agrees

Audit Objective			Conclusion
Objective #3: To assess the sufficiency of MSP's audits and reviews of LEIN data.			Sufficient with exceptions
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
MSP needs to improve its training and instruction for local law enforcement and criminal justice agencies on completing the monthly validation of LEIN records. Local law enforcement and criminal justice agencies did not always follow MSP guidance to ensure that LEIN records are valid, accurate, and complete (<u>Finding #4</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

Office of the Auditor General
201 N. Washington Square, Sixth Floor
Lansing, Michigan 48913

Doug A. Ringler, CPA, CIA
Auditor General

Laura J. Hirst, CPA
Deputy Auditor General



OAG

Office of the Auditor General

201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • www.audgen.michigan.gov

Doug A. Ringler, CPA, CIA
Auditor General

April 29, 2016

Colonel Kriste Kibbey Etue, Director
Michigan Department of State Police
7150 Harris Drive
Lansing, Michigan
and
Mr. David B. Behen
Director, Department of Technology, Management, and Budget
Chief Information Officer, State of Michigan
Lewis Cass Building
Lansing, Michigan

Dear Colonel Etue and Mr. Behen:

I am pleased to provide this performance audit report on the Law Enforcement Information Network, Michigan Department of State Police (MSP) and Department of Technology, Management, and Budget.

We organize our findings and observations by audit objective. MSP 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,

Doug Ringler
Auditor General

TABLE OF CONTENTS

LAW ENFORCEMENT INFORMATION NETWORK

	<u>Page</u>
Report Summary	1
Report Letter	3
Audit Objectives, Conclusions, Findings, and Observations	
Security and Access Controls	8
Findings:	
1. LEIN access controls could be improved.	9
2. MSP should evaluate the need for some LEIN access.	10
Accuracy and Completeness of Data	11
Findings:	
3. Improved monitoring of records entered by local law enforcement and criminal justice agencies into LEIN is needed.	12
Sufficiency of Audits and Reviews	14
Findings:	
4. Additional training and instruction needed to ensure the validity, accuracy, and completeness of LEIN records.	15
System Description	16
Audit Scope, Methodology, and Other Information	17
Glossary of Abbreviations and Terms	20

AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

SECURITY AND ACCESS CONTROLS

BACKGROUND

The Law Enforcement Information Network (LEIN) security* and access controls* limit and detect inappropriate access, which is important to ensure the availability, confidentiality, and integrity of data. LEIN security and access controls also impact other trusted network systems.

AUDIT OBJECTIVE

To assess the effectiveness* of the Michigan Department of State Police (MSP) and the Department of Technology, Management, and Budget's (DTMB's) security and access controls over LEIN.

CONCLUSION

Moderately effective.

FACTORS IMPACTING CONCLUSION

- Establishment and implementation of several security configurations and access controls in accordance with DTMB policy.
- Reportable conditions* related to implementing more complete access controls over LEIN (Finding #1) and evaluating the need for some LEIN access (Finding #2).

* See glossary at end of report for definition.

FINDING #1

LEIN access controls could be improved.

MSP should implement more complete controls over LEIN to help prevent inappropriate access and ensure data confidentiality.

DTMB Technical Standard 1335.00.03 requires that authentication controls such as unique user names, complex passwords, failed log-in attempts, and time-out rules need to be implemented to ensure the confidentiality of LEIN data. The standard also requires access to be managed, controlled, and periodically reviewed to ensure that user access is based on the principle of least privilege*.

MSP did not:

- a. Implement complete authentication controls to prevent unauthorized access to data derived from LEIN.

Because of the confidential nature of these settings, we summarized the results for presentation in this finding and provided the detailed results to MSP management.

- b. Disable system administrators who no longer require access.

We noted that 9 (36%) of the 25 system administrator accounts that had the ability to change security settings did not require this level of access. Subsequent to our review, MSP informed us that it disabled the accounts.

RECOMMENDATION

We recommend that MSP implement more complete controls over LEIN to help prevent inappropriate access and ensure data confidentiality.

AGENCY PRELIMINARY RESPONSE

MSP provided us with the following response:

MSP agrees with the recommendation.

- a. *MSP will implement additional system controls to ensure data confidentiality.*
- b. *MSP has disabled system administrator accounts which no longer require access. In addition, MSP has implemented an annual review process of system administrator accounts.*

* See glossary at end of report for definition.

FINDING #2

MSP should evaluate the need for some LEIN access.

MSP should continue to work with non-criminal justice agencies to determine if LEIN is the best resource to provide access to criminal justice records.

DTMB Technical Standard 1335.00.03 states that the system owner must employ the principle of least privilege.

LEIN has 41 user groups ranging from private schools to federal law enforcement agencies. Certain groups, such as the Michigan Department of Health and Human Services (MDHHS) and the Michigan Lottery, are authorized to access LEIN to conduct background checks. While authorized, these agencies may have been granted access to criminal justice records they did not need. MDHHS also had access to other LEIN data, such as missing person records, personal protection warrants, material witness records, and unidentified person records. MSP maintains other information systems, such as the Internet Criminal History Access Tool (ICHAT), that restrict groups to only the necessary records.

MSP informed us that it removed the Michigan Lottery's access on October 22, 2015.

RECOMMENDATION

We recommend that MSP continue to work with non-criminal justice agencies to assess the nature of criminal justice records needed and determine if LEIN is the most appropriate resource to provide that information.

AGENCY PRELIMINARY RESPONSE

MSP provided us with the following response:

MSP agrees with the recommendation. MSP has removed access to one agency and will continue to work with other agencies to determine if LEIN is the appropriate resource to provide information.

ACCURACY AND COMPLETENESS OF DATA

BACKGROUND

MSP, local law enforcement agencies, and criminal justice agencies input data into LEIN to bring together all of the State's warrant and missing person files into one central repository. Each entity* is responsible for ensuring the accuracy and completeness of the data that it inputs into LEIN.

As the LEIN administrator, MSP establishes system controls to prevent the input of inappropriate data, such as duplicate records. In addition, MSP analyzes the data through audits to identify potential input errors.

AUDIT OBJECTIVE

To assess MSP and DTMB's controls to ensure the accuracy and completeness of data entered into LEIN.

CONCLUSION

Moderately effective.

FACTORS IMPACTING CONCLUSION

- Establishment and implementation of some controls to ensure accuracy and completeness of data.
- Reportable condition related to improved monitoring of records entered into LEIN (Finding #3).

* See glossary at end of report for definition.

FINDING #3

Improved monitoring of records entered by local law enforcement and criminal justice agencies into LEIN is needed.

MSP should improve its monitoring of records entered by local law enforcement and criminal justice agencies into LEIN to identify potentially inaccurate warrant and missing person information. Accurate data is essential for identifying missing persons, apprehending the proper individuals, and ensuring the safety of local law enforcement, court personnel, and the general public. Although MSP is responsible for LEIN's overall operation, local law enforcement and criminal justice agencies that enter information into LEIN are responsible for its accuracy.

MSP policy requires that all available personal information related to an individual be accurately entered into LEIN, including race, hair color, eye color, height, weight, date of birth, driver's license number, and social security number. Agencies can obtain this information from Secretary of State inquiries, LEIN criminal history inquiries, or agency records.

Specifically:

- a. We reviewed 2,765 missing person records entered into LEIN after October 1, 2012 and outstanding as of October 5, 2015 to assess data accuracy. For 66 (2.4%) of the 2,765 missing person records, LEIN contained a height of 4 feet, a weight of 50 pounds, and an age ranging from 0 to 77. Although it is feasible for some individuals within this age range to be 4 feet tall and weigh 50 pounds, 51 (77%) of the 66 missing persons were older than 15 years old. In addition, the eye color and hair color were unknown for 59 (89%) of the 66 individuals.

We determined that 96% of these missing person files with potentially inaccurate information originated at one local law enforcement agency.

- b. We reviewed 507,771 warrants entered into LEIN after October 1, 2012 and outstanding as of September 8, 2015 to identify potentially inaccurate data. We noted:

(1) Potentially inaccurate height and weight data.

For 88,412 (17%) of the 507,771 warrants, LEIN records contained a height of 4 feet and a weight of 50 pounds.

MSP informed us that criminal justice agencies may input a height of 4 feet and a weight of 50 pounds if an individual's height or weight is unknown. MSP informed us that this height and weight combination represents unknown because of the unlikeliness of an individual with these characteristics. However, federal requirements state that an indicator of unknown can be input for height and weight. LEIN functionality does not currently include the ability to indicate unknown; a

value must be entered in order for the record to be accepted into the national database.

We selected 10 warrants and confirmed on the Secretary of State's database that 9 (90%) of the 10 individuals were not 4 feet tall or 50 pounds. One of the 10 was not included in the database. We determined that 89% of these warrants originated at one court and 11% originated at another court. In the most recent audit of these courts (2012 and 2013) by MSP, they were given an unsatisfactory review, instructed to correct all inaccuracies identified, and required to submit a corrective action plan to MSP. MSP had not yet completed a subsequent audit of these courts' records.

- (2) Social security numbers associated with more than one name.

We identified 629 social security numbers associated with between 2 and 9 different names.

- (3) Inaccurate birthdates.

We identified 76 warrants for individuals 3 years of age or less.

- (4) Gender other than male, female, or unknown for 15 warrants.

Federal requirements state that gender must be indicated as either male, female, or unknown.

Although the number of exceptions noted in parts (2) through (4) were not significant, without an edit or monitoring to detect the error, additional exceptions could occur.

RECOMMENDATION

We recommend that MSP improve its monitoring of records entered by local law enforcement and criminal justice agencies into LEIN to identify potentially inaccurate warrant and missing person information.

AGENCY PRELIMINARY RESPONSE

MSP provided us with the following response:

MSP agrees with the recommendation. MSP has identified and will implement system edits to detect data exceptions. Once implemented, MSP will provide training on the system changes.

SUFFICIENCY OF AUDITS AND REVIEWS

BACKGROUND

MSP ensures the accuracy and completeness of LEIN data through completion of monthly validations and triennial audits.

All local law enforcement and criminal justice agencies that entered information into LEIN in a given month are subject to monthly validations. During the monthly validation, each entity should review records entered for validity, accuracy, and completeness. MSP indicated that there are approximately 700 to 1,000 agencies that could validate records each month.

MSP is required by the Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) security policy to triennially audit all agencies with direct access to LEIN. There were 1,361 direct access agencies subject to audit as of July 8, 2015. Agencies are separated into four regions, with one auditor in each region. Each auditor typically completes 300 to 400 audits each audit cycle. Each audit takes between 6 and 8 hours to complete.

AUDIT OBJECTIVE

To assess the sufficiency of MSP's audits and reviews of LEIN data.

CONCLUSION

Sufficient with exceptions.

FACTORS IMPACTING CONCLUSION

- Establishment and implementation of a triennial audit and monthly validation process to ensure the accuracy, completeness, and security of LEIN data.
- Reportable condition related to additional training and instruction for local law enforcement and criminal justice agencies on completing the monthly validations (Finding #4).

FINDING #4

Additional training and instruction needed to ensure validity, accuracy, and completeness of LEIN records.

MSP needs to improve its training and instruction for local law enforcement and criminal justice agencies on completing the monthly validation of LEIN records to help ensure the validity, accuracy, and completeness of LEIN records input by the agencies.

The *Michigan Administrative Code* states that each entity shall validate LEIN records as required by Michigan and FBI CJIS policy.

The FBI's National Crime Information Center (NCIC) provides MSP with a monthly master file of Michigan's criminal justice records to validate for completeness, accuracy, and active status. MSP provides these records to the originating entity, which must review and validate the records.

MSP provided guidance and training to the local law enforcement and criminal justice agencies on how to complete the validation process, including maintaining formal validation procedures, reviewing the records for accuracy, and maintaining validation reports for the current and previous year. We contacted 31 agencies to review their validation process and noted:

- a. Nine (29%) agencies did not review records according to instructions before validating them in LEIN.
- b. Six (19%) agencies did not maintain formal validation procedures.
- c. Eight (26%) agencies did not maintain validation reports for at least the current and previous year as required by MSP's retention policy.

RECOMMENDATION

We recommend that MSP improve its training and instruction for local law enforcement and criminal justice agencies on completing the monthly validation of LEIN records.

AGENCY PRELIMINARY RESPONSE

MSP provided us with the following response:

MSP agrees with the recommendation. MSP will update the monthly validation training instructions. In addition, MSP will develop a sample validation procedure for local law enforcement and criminal justice agencies.

SYSTEM DESCRIPTION

MSP, in conjunction with DTMB, maintains and manages LEIN. LEIN was implemented in 1967 as a Statewide resource for local law enforcement and criminal justice agencies needing access to accurate and timely criminal justice information. LEIN contains information regarding:

- Arrest warrants.
- Missing persons.
- Unidentified persons.
- Stolen vehicles.

Access to LEIN is restricted to local law enforcement and criminal justice agencies or those agencies statutorily granted authorization. Agencies granted access include, but are not limited to, sheriff departments, Friend of the Court offices, probate courts, juvenile courts, the Department of Corrections, probation and parole offices, county prosecuting attorneys, and local and contractual prosecutors.

The goal* of LEIN is to assist the local law enforcement and criminal justice agencies in the performance of their duties by providing and maintaining a computerized filing system of accurate and timely criminal justice information.

* See glossary at end of report for definition.

AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

AUDIT SCOPE

To examine the information processing and other records of LEIN. 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.

Our audit of LEIN did not include a review of the operating system* that supports LEIN and the database that stores criminal justice information.

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 October 31, 2015.

METHODOLOGY

We conducted a preliminary survey of LEIN to formulate a basis for defining our audit objectives and scope. During our preliminary survey, we:

- Conducted interviews to obtain an understanding of MSP's and DMTB's operations, activities, and internal control* related to LEIN.
- Reviewed applicable sections of MSP, DTMB, and FBI CJIS policies and procedures.
- Analyzed available LEIN data and statistics.

OBJECTIVE #1

To assess the effectiveness of MSP and DTMB's security and access controls over LEIN.

To accomplish this objective, we:

- Interviewed MSP and DTMB management to obtain an understanding of security and access controls.
- Tested the configuration* of the LEIN and the Michigan Criminal Justice Information Network applications against DTMB policies and federal requirements.

* See glossary at end of report for definition.

- Tested the appropriateness of user access to the LEIN application and database.
- Reviewed contracts for LEIN and related systems.

OBJECTIVE #2

To assess MSP and DTMB's controls to ensure the accuracy and completeness of data entered into LEIN.

To accomplish this objective, we:

- Reviewed warrant files entered into LEIN during our audit period and outstanding as of September 8, 2015 for inaccuracies.
- Reviewed missing person files entered into LEIN during our audit period and outstanding as of October 5, 2015 for inaccuracies.
- Tested data input into LEIN by courts for completeness.

OBJECTIVE #3

To assess the sufficiency of MSP's audits and reviews of LEIN data.

To accomplish this objective, we:

- Interviewed MSP staff about the process for completing monthly validations and triennial audits.
- Interviewed a selection of local law enforcement and criminal justice agencies with LEIN access to understand how the entities perform monthly validations.

CONCLUSIONS

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

When selecting activities and 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 4 findings and 4 corresponding recommendations. MSP's preliminary response indicates that it agrees with all of the recommendations.

The agency preliminary response that follows each recommendation in our report was taken from MSP's written comments and oral discussion at the end of our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and

* See glossary at end of report for definition.

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.

GLOSSARY OF ABBREVIATIONS AND TERMS

access controls	Controls that protect data from unauthorized modification, loss, or disclosure by restricting access and detecting inappropriate access attempts.
CJIS	Criminal Justice Information Services.
configuration	The way a system is set up. Configuration can refer to either hardware or software or the combination of both.
DTMB	Department of Technology, Management, and Budget.
effectiveness	Success in achieving mission and goals.
entity	A criminal justice agency, court or other governmental agency, or a subunit thereof, that engages in the administration of criminal justice pursuant to a statute or executive order and that allocates a substantial part of its annual budget for the administration of criminal justice.
FBI	Federal Bureau of Investigation.
goal	An intended outcome of a program or an entity to accomplish its mission.
internal control	The organization, policies, and procedures adopted by management and other personnel to provide reasonable assurance that operations, including the use of resources, are effective and efficient; financial reporting and other reports for internal and external use are reliable; and laws and regulations are followed. Internal control also includes the safeguarding of assets against unauthorized acquisition, use, or disposition.
LEIN	Law Enforcement Information Network.
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.

MDHHS	Michigan Department of Health and Human Services.
MSP	Michigan Department of State Police.
operating system	The essential program in a computer that manages all the other programs and maintains disk files, runs applications, and handles devices such as the mouse and printer.
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.
principle of least privilege	The practice of limiting access to the minimal level that will allow normal functioning. Applied to employees, the principle of least privilege translates to giving people the lowest level of user access rights that they can have and still do their jobs. The principle is also applied to things other than people, including programs and processes.
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.
security	Safeguarding an entity's data from unauthorized access or modification to ensure its availability, confidentiality, and integrity.

