# Office of the Auditor General Performance Audit Report

## Selected Stewardship Activities for Michigan's Historical Artifacts and Archival Records

Michigan History Center Department of Natural Resources

November 2022

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.

The auditor general may make investigations pertinent to the conduct of audits.

Article IV, Section 53 of the Michigan Constitution



## **Report Summary**

Performance Audit
Selected Stewardship Activities for
Michigan's Historical Artifacts and
Archival Records
Michigan History Center (MHC)
Department of Natural Resources (DNR)

**Report Number: 751-2600-21** 

Released: November 2022

MHC is responsible for the stewardship of the State's museum and archival collections. It operates the Michigan History Museum System, including 13 museums and historic sites, and the Archives of Michigan. MHC is charged with ensuring the preservation of nearly 103,000 artifacts illustrating the history of the State and its people and over 120 million archival records of Michigan government, other institutions, and individuals. Over the past several years MHC's appropriations totaled approximately \$7.0 million annually, and it had 37 full-time employees as of September 2022.

Audit Objective		Conclusion			
Objective: To assess the effectiveness of selected MHC activities to provide stewardship for Michigan's historical artifacts and archival records.				Moderately effective	
Findings Related to This Audit Objective	Material Condition	Reportab Conditio		Agency Preliminary Response	
Over 60% of selected devices used to monitor temperature and relative humidity did not capture and/or retain all daily readings during the audit period (Finding 1).		X		Agrees	
MHC was unable to provide documentation evidencing museum artifact inventories for its 2 Lansing facilities that house approximately 90% of the State's historical artifacts and informed us it did not perform artifact inventory activities during the 33-month audit period for 3 of the 7 museums and historic sites located outside of Lansing that house the remaining 10% of MHC's historical artifacts (Finding 2).		X		Agrees	
MHC estimates 40% of its 7,900 archival record collections are not yet fully described, necessitating continued development and full implementation of an archival record processing plan ( <u>Finding 3</u> ).		X		Agrees	

Findings Related to This Audit Objective (Continued)	Material Condition	Reportable Condition	Agency Preliminary Response
MHC did not obtain required disclosure forms of personal collecting interests from over 20% of museum employees and commission members and did not require disclosure forms from any of its archival records staff (Finding 4).		X	Agrees
Approximately 30% of all users of MHC's collection management system had access that did not align with their job responsibilities, including the ability to delete artifact and archival records ( <u>Finding 5</u> ).		X	Agrees

### **Obtain Audit Reports**

Online: <u>audgen.michigan.gov</u> Phone: (517) 334-8050 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



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

November 10, 2022

Mr. Daniel Eichinger, Director Department of Natural Resources Constitution Hall Lansing, Michigan

Dear Mr. Eichinger:

This is our performance audit report on Selected Stewardship Activities for Michigan's Historical Artifacts and Archival Records, Michigan History Center, Department of Natural Resources.

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 to submit it to the State Budget Office upon completion of an audit. Within 30 days of receipt, the Office of Internal Audit Services, State Budget Office, 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**

# SELECTED STEWARDSHIP ACTIVITIES FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS

	<u>Page</u>
Report Summary	1
Report Letter	3
Audit Objectives, Conclusions, Findings, and Observations	
Selected Activities to Provide Stewardship for Michigan's Historical Artifacts and Archival Records	8
Findings:	
<ol> <li>Improvement needed to help ensure temperature and relative humidity fluctuations are addressed and minimized in storage environments.</li> </ol>	11
<ol><li>Strengthened policies needed to help ensure regular inventories of historical artifact collections.</li></ol>	14
<ol> <li>Continued development and full implementation of an archival record processing plan needed.</li> </ol>	16
4. Strengthened disclosure of interest policies and procedures needed.	18
5. Improved Argus access and security controls needed.	20
Supplemental Information	
Exhibit 1 - Map of Michigan History Center Sites	22
Exhibit 2 - Photographs of the Michigan History Museum in Lansing	23
Exhibit 3 - Photographs of the Archives of Michigan in Lansing	25
Exhibit 4 - Photographs of Michigan History Center Museums and Historic Sites	26
Agency Description	28
Audit Scope, Methodology, and Other Information	29
Glossary of Abbreviations and Terms	34

# AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

## SELECTED ACTIVITIES TO PROVIDE STEWARDSHIP FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS

#### **BACKGROUND**

The Michigan History Center (MHC), Department of Natural Resources (DNR), historically operated under Public Act 271 of 1913 and was formally created by Public Act 470 of 2016. MHC is responsible for collecting, providing stewardship for, and interpreting artifacts\* and archival records\* that document and illustrate the history of Michigan and its people. MHC holds artifact and archival record collections in public trust for the people of Michigan and manages its collections in accordance with established guidelines for professional ethics. MHC makes these materials available to the public in a manner consistent with their preservation for future generations through operation of the:

Michigan History Museum System, including its flagship museum located within the Michigan Library and Historical Center in Lansing and 12 other museums and historic sites located across the State (see Exhibits 1, 2, and 4). MHC is responsible for nearly 103,000 artifacts illustrating the history, culture, and people of Michigan. See related discussion in the audit scope section.

In November 2018, MHC was awarded reaccreditation for a five-year period from the American Alliance of Museums, which recognizes MHC's commitment to, and demonstration of, professional standards for education, public service, and collections care.

Archives of Michigan, housing over 120 million State
and local government records and private papers with
documents dating back to 1792, as well as 10 million
photographs and 500,000 maps, films, and audio tapes.
MHC makes its archival record collections available to
the public online and in person in its public reading room
located within the Michigan Library and Historical Center
in Lansing (see Exhibits 1 and 3).

MHC is also responsible for the oversight of approximately 150,000 square feet of storage and exhibit space in four Lansing area facilities housing nearly 90% of MHC's museum artifact collections and all archival record collections. In collaboration with the Department of Technology, Management, and Budget's (DTMB's) State Facilities Administration, MHC utilizes heating, ventilation, and air-conditioning (HVAC) systems in its Lansing storage environments\* to maintain temperature and relative humidity within MHC-established acceptable ranges, called set points, to help prevent mold growth, splitting and warping of materials, and/or material brittleness. In addition, MHC has numerous compact devices, called data logger devices, installed at selected points

<sup>\*</sup> See glossary at end of report for definition.

throughout its Lansing facilities to capture daily temperature and relative humidity readings.

MHC utilizes Argus\* as its collections management system to record and track artifacts and archival records in its possession. Professional standards and MHC policy provide staff with guidance to catalog\* artifacts and process\* archival records. Staff enter descriptive information in Argus for each object, such as physical description (dimensions, color, shape, etc.), donor/source, provenance, history, access restrictions, and current location in MHC's facilities.

#### **AUDIT OBJECTIVE**

To assess the effectiveness\* of selected MHC activities to provide stewardship for Michigan's historical artifacts and archival records.

#### CONCLUSION

Moderately effective.

# FACTORS IMPACTING CONCLUSION

- Our on-site observations of MHC's storage environment conditions for four Lansing facilities and four selected museums and historic sites located outside of Lansing noted no visible or obvious concerns, such as standing water, water or fire damage, mold, or pests.
- MHC physically located all of the artifacts and archival record collections in its storage environments we selected from Argus for observation.
- MHC, in collaboration with DTMB, was installing and/or upgrading HVAC systems in two of its Lansing artifact and archival record storage facilities to allow for improved control of temperature and relative humidity levels, as of our May 2022 on-site observations.
- MHC utilized compact data logger devices in all of its Lansing artifact and archival record storage environments, and all selected data logger devices were in place and functional as of our May 2022 on-site observations.
- In November 2018, MHC was awarded reaccreditation for a five-year period from the American Alliance of Museums.
- Five reportable conditions\* related to needed improvements in:
  - Monitoring of temperature and relative humidity in MHC's artifact and archival record storage environments (Finding 1).

<sup>\*</sup> See glossary at end of report for definition.

- Performance of regular inventories of historical artifact collections (Finding 2).
- Continued development and full implementation of an archival record processing plan (Finding 3).
- Disclosure of interest policies and procedures (Finding 4).
- Access\* and security\* controls over Argus (Finding 5).

<sup>\*</sup> See glossary at end of report for definition.

#### **FINDING 1**

Improvement needed to help ensure fluctuations in temperature and relative humidity are addressed and minimized in MHC's artifact and archival record storage environments.

MHC should improve its environmental monitoring program to help ensure large fluctuations in temperature and relative humidity are addressed and minimized in artifact and archival record storage environments. Incorrect temperature and relative humidity levels are among the most critical of storage environment concerns that could contribute to collection damage and/or deterioration and threaten the long-term preservation of Michigan's historical artifact and archival record collections.

Professional guidance indicates the goal of an environmental monitoring program is to avoid large fluctuations in temperature and relative humidity over a short period of time. Also, creating a quality storage environment must take into account the needs of the objects, the building's mechanical systems, available resources, and priorities.

In collaboration with DTMB's State Facilities Administration, MHC utilizes HVAC systems in its Lansing storage environments spanning approximately 150,000 square feet to maintain temperature and relative humidity within MHC-established acceptable ranges, called set points. In addition, MHC has installed numerous compact devices, called data logger devices, at selected points throughout its Lansing facilities to capture temperature and relative humidity readings once every 30 minutes (48 readings captured per day). The data logger devices display current conditions on the device face and through a smartphone application when within Bluetooth\* range. The data logger devices can also sound an audible alarm when readings go outside of temperature and/or relative humidity set points and provide MHC with the capability to generate data reports for ongoing monitoring of readings over time.

We noted MHC could improve its environmental monitoring program by:

Assessing, in collaboration with DTMB, its HVAC systems'
capacity to maintain steady temperature and relative
humidity settings in its artifact and archival record storage
environments and, if the systems are found to be deficient
in some manner, developing a plan to best ensure
preservation of its historical artifacts and archival records
given available resources.

Our interviews with MHC management noted 3 of MHC's 4 Lansing buildings did not have fully operational HVAC systems as of May 2022. Two of the buildings were having new HVAC systems installed at the time of our observations and MHC stated 1 small warehouse storage building had heating control only.

<sup>\*</sup> See glossary at end of report for definition.

 Evaluating its implementation of data logger devices for monitoring temperature and relative humidity in its artifact and archival record storage environments. Specifically, we noted MHC should evaluate:

> The sufficiency of the number of devices deployed in its storage environments.

MHC had 73 total devices placed throughout storage environments in Lansing; however, we calculated MHC may require approximately 15 to 40 more devices based on its buildings' square footage and suggested installation information from the device manufacturer. MHC will likely need to consider other factors, such as airflow and storage area configuration, for determining the number of devices needed for a particular storage environment.

 The controls it has in place to help ensure devices are consistently functioning and/or retaining temperature and relative humidity readings.

Our review of 20 selected devices noted 13 (65%) did not capture and/or retain all daily temperature and relative humidity readings during the audit period, with typical lost readings averaging 69 consecutive days for 11 of the devices and 2 devices with lost readings for over a one-year period. MHC stated 5 of the devices failed because of device malfunctions or technical issues and most of the other devices' data was lost because staff had limited access to buildings during the COVID-19 pandemic.

- Its procedures for routine monitoring of device readings to identify and address fluctuations outside of MHC-established set points, including identification of which fluctuations require action and the steps necessary to address those fluctuations. We noted MHC's routine monitoring was informal and relied heavily on the physical presence of its staff to identify and address fluctuations in temperature and relative humidity. However, our observations noted MHC staff had a limited physical presence in some of their storage environments.
- Its procedures for long-term monitoring of device readings to provide a picture of temperature and relative humidity changes over time and an understanding of the timing and duration of fluctuations. We noted MHC did not monitor its museum artifact device readings over time. In addition, MHC asserted it reviewed readings for

MHC may require approximately 15 to 40 more data logger devices in its artifact and archival record storage environments. archival record data logger devices monthly; however, it did not document the reviews, any concerns raised, or corrective actions taken, if applicable.

Our review of historical device readings showed instances existed in which temperature and relative humidity conditions were outside of MHCestablished set points in its artifact and archival record storage environments. Consistent monitoring of device readings over time would allow MHC to better recognize patterns, trends, and locations that may require corrective action and help establish institutional priorities, such as the need for HVAC system modifications. In addition, long-term monitoring of device readings, coupled with an assessment of HVAC systems' capacity (see first bullet), may help identify whether a need exists for MHC to adjust temperature and relative humidity set points for its storage environments.

MHC informed us the HVAC work which took place during the audit period focused on macro-level concerns at its artifact and archival record storage facilities. Also, MHC indicated staffing levels, informal processes, and other collection preservation priorities resulted in less attention being given to HVAC monitoring.

#### RECOMMENDATION

We recommend that MHC improve its environmental monitoring program to help ensure large fluctuations in temperature and relative humidity are addressed and minimized in artifact and archival record storage environments.

AGENCY PRELIMINARY RESPONSE DNR provided us with the following response:

DNR agrees and will comply with the recommendation that MHC assess, evaluate, improve and document its environmental monitoring program to help ensure large fluctuations in temperature and relative humidity are addressed and minimized in artifact and archival record storage environments.

#### **FINDING 2**

Strengthened policies needed to help ensure regular inventories of historical artifact collections.

MHC policies do not include guidance as to the type, frequency, timing, depth, required documentation, or steps necessary to resolve discrepancies noted during an artifact inventory.

MHC needs to strengthen its policies to help ensure regular inventories of historical artifact collections are performed and consistently documented. Doing so would increase MHC's assurance the State's historical artifact collections are appropriately accounted for and safeguarded from risk of loss, theft, and/or damage, thereby ensuring preservation of its collections for future generations.

MHC is responsible for the care, safety, and preservation of approximately 103,000 historical artifacts primarily located in its two Lansing-area locations, while others are located in museums and historic sites across the State. These historical artifacts document and illustrate the history, culture, and people of Michigan, and many are irreplaceable because of the unique stories associated with the objects.

The American Alliance of Museums publication titled *Museum Registration Methods* states artifact collections must be inventoried regularly, citing regular inventories help:

- Provide accountability, control, and access to a collection.
- Locate misplaced objects.
- Detect hidden pests and unnoticed deterioration of objects.
- Identify problems with storage materials and facilities.
- Discourage insider theft.

MHC's policies indicated MHC Collections Unit staff were responsible for the creation and maintenance of artifact inventory records and files; however, the policies did not include direction or guidance as to the type, frequency, timing, depth, required documentation, or steps necessary to resolve discrepancies noted during an artifact inventory. To help determine the impact of MHC's vague policy and guidance on artifact inventory activities, we interviewed MHC staff, made inquiries related to MHC's inventory activities at its 2 Lansing facilities and 7 other locations, and performed limited inventory procedures. We noted:

MHC staff asserted they performed inventory activities for approximately 9,000 artifacts located in its Lansing facilities during the 33-month audit period; however, MHC was unable to provide documentation evidencing the performance of these inventories for its Lansing facilities, which house approximately 90% of the State's historical artifacts.

MHC indicated an updated "location date" field in Argus provides evidence staff completed an inventory for these artifacts. However, our review showed it was undeterminable whether the updated Argus field

information was the result of inventory activities or other museum activities for these artifacts.

- MHC did not perform artifact inventory activities for 3 (43%) of the 7 museums and historic sites located outside of Lansing during the 33-month audit period which house the remaining 10% of MHC's historical artifacts.
   For the 4 locations where some inventory activities were performed, MHC provided us with various and inconsistent documentation to support those activities.
- 10% of approximately 300 selected historical artifacts were found in a location other than the location documented in Argus or the selected object lacked sufficient labeling to allow us to carry out our procedures.

MHC stated it lacked sufficient financial and staffing resources to prioritize improving inventory policies over other critical museum collections functions, including improving collections storage conditions, cataloging collections, and supporting exhibits.

#### RECOMMENDATION

We recommend that MHC strengthen its policies to help ensure regular inventories of historical artifact collections are performed and consistently documented.

AGENCY PRELIMINARY RESPONSE

DNR provided us with the following response:

DNR agrees that MHC needs to strengthen and implement its policies concerning regular inventories of historical artifact collections, including establishing consistent methods of documenting the sub-sets of artifacts inventoried, resolution of discrepancies, and resulting updating of the Argus records. It also needs to establish and implement a multi-year rotating schedule to ensure regular sampling or full inventories of all sites and storage sub-areas over time.

DNR notes that at current staffing levels, a full rotation will probably cover eight to ten years.

#### FINDING 3

Continued development and full implementation of an archival record processing plan are needed. MHC needs to continue to develop and fully implement an archival record processing plan. Doing so will help improve MHC's ability to fulfill its commitment to preserve and share Michigan's archival records for the long term and meet its mandate to provide stewardship for and public access to archival materials documenting and illustrating the history of Michigan and its people.

Professional standards explain archival record processing is designed to prepare record collections for research use, with a focus on arrangement and descriptive activities, as well as packaging, labeling, and basic preservation measures. Professional literature also indicates each archival record collection does not have to be processed to the same level; instead, processing judgments should be made based on the research, legal, and intrinsic value of a collection or series; the physical condition of the materials; available resources; and other factors. Consequently, it is important for MHC to have a well-developed plan in place which reflects relevant judgments for consistent archival record collection processing, facilitates public access, and helps ensure the long-term preservation of Michigan's historical archival records.

MHC estimates 40% of its archival record collections are not yet fully described.

MHC estimates 40% of the total 7,900 archival record collections in its possession are not yet fully described. MHC recognized a completed and implemented plan will help MHC document how it identifies archival records in need of additional processing; reestablish processing priorities; and provide uniform guidance to staff regarding the level of arrangement and description needed based on the size, type, and condition of the records.

MHC asserted that in January 2022, it began to develop a formal archival record processing plan. MHC also stated the longevity of a small staff has meant distinct processing methodologies and priorities were established in the past through individual work plans and assignments. However, succession planning, the shift in technology to include online catalog records, and changing retention schedules and transfer processes for State and local governments necessitate a revised and documented approach.

#### RECOMMENDATION

We recommend that MHC continue to develop and fully implement an archival record processing plan.

AGENCY PRELIMINARY RESPONSE DNR provided us with the following response:

DNR agrees that MHC needs to complete and implement its archival records processing plan to document archival records in need of further processing and to provide criteria for determining the appropriate levels of processing and for setting processing priorities. Accordingly, MHC will complete and fully implement the plan as recommended.

MHC has already created a draft processing plan that features prioritized agencies and the creation of an appraisal scorecard. MHC is also investigating software that will more easily integrate the creation of digital catalogue records and finding aids into workflows for future collections.

#### **FINDING 4**

Strengthened disclosure of interest policies and procedures needed.

MHC needs to strengthen its disclosure of interest policies and procedures. Doing so would enhance MHC's ability to identify and address potential conflicts of interest for all applicable individuals, thereby helping it to better safeguard artifact and archival record collections and interests related to items offered for donation.

State law requires MHC to collect and provide stewardship for artifacts and archival records that document and illustrate the history of this State and its people.

#### MHC museum policy requires:

- Staff, senior management, and Michigan Historical Commission members to complete and submit an annual personal collecting interest disclosure form for MHC management approval signature.
- Individuals who have disclosed personal collecting interests to not be involved in any artifact acquisition transactions in which a conflict of interest may exist.

#### We noted:

 Although MHC required annual disclosure forms from museum employees and commission members, it did not require archival records staff to provide personal collecting interest disclosure forms.

MHC informed us it did not require its archival records staff to disclose personal collecting interests because they were primarily working with State and local government records, and it believed personal collecting interest disclosure was a practice particular to the museum artifacts profession. However, MHC's archival records include numerous collections that could be of interest to personal collectors, such as maps, photographs, diaries, and handwritten letters from private individuals and organizations. In addition, disclosures of interest are common and required for State of Michigan employees.

Michigan Civil Service Commission Rule 2-8 requires State employees to annually disclose all personal interest in any business or entity with which the employee has direct contact while performing official duties and MHC to take appropriate actions to eliminate the conflict of interest. The Rule allows MHC to establish more stringent ethical standards, define specific conflicts of interest, and establish procedures, forms, and times for disclosure.

 MHC did not always ensure required MHC museum staff, senior management, and commissioners annually disclosed personal collecting interests and did not approve all completed disclosure forms. We reviewed the annual disclosure forms for calendar years 2019, 2020, and 2021, as applicable, from individuals involved in museum artifact transactions. We noted:

- (1) MHC did not obtain 8 (23%) of the 35 required disclosure forms from applicable individuals for calendar years 2019 and 2020 or any forms from the 17 (100%) applicable individuals for calendar year 2021.
- (2) MHC management did not appropriately approve 13 (48%) of the 27 completed 2019 and 2020 disclosure forms.

MHC informed us there were a variety of reasons for the missing disclosure forms from 2019 to 2021, including an oversight, not requiring new staff to complete the form, not collecting all forms during the COVID-19 pandemic, and not requesting completed forms from remote workers when museum artifact acquisition was suspended to avoid in-person contact.

#### **RECOMMENDATION**

We recommend that MHC strengthen its disclosure of interest policies and procedures.

AGENCY PRELIMINARY RESPONSE

DNR provided us with the following response:

DNR agrees that MHC needs to strengthen its disclosure of collecting-interests controls. It is now requiring annual submission and review of collecting/conflict-of-interest disclosure forms by all staff and Michigan Historical Commission members. It will require new staff and commissioners to submit the forms upon hire or appointment.

#### FINDING 5

Argus access and security controls need improvement.

MHC needs to strengthen its access and security controls over Argus. Doing so would increase MHC's assurance only appropriate individuals can access and/or edit Argus data and help ensure the integrity\* and availability\* of the data.

State of Michigan Administrative Guide to State Government and State of Michigan (SOM) technical standards outline the access and security controls required for the State's IT systems.

As of June 28, 2021, Argus had 26 active MHC users. Our review of selected access and security controls over Argus disclosed:

a. MHC did not always ensure Argus access was based on the principle of least privilege\*. We noted 8 (31%) of MHC's 26 Argus users had access not aligning with their job descriptions, including the ability to delete artifact or archival records.

SOM Technical Standard 1340.00.020.01 indicates agencies should grant authorized access to users only as necessary to accomplish assigned tasks in accordance with roles and responsibilities of job functions.

MHC assumed the responsibility of administering access to Argus in January 2020; however, as of June 1, 2021, MHC had not performed a review of all MHC users' roles for alignment with job functions (see part c.).

b. MHC did not identify and monitor deleted Argus records.

Administrative Guide to State Government policy 1340.00 indicates security controls must be implemented to protect information from unauthorized destruction and to ensure integrity and availability of information.

We identified 4 security roles within Argus with the ability to delete records and 12 (46%) users were assigned these security roles; however, MHC did not have a mechanism to identify whether and/or when these users may have deleted records in Argus.

MHC informed us it did not have the module for tracking deleted records installed in its version of Argus.

c. MHC did not review user access semiannually for privileged accounts or annually for all other accounts.

SOM Technical Standard 1340.00.020.01 requires a semiannual certification of privileged accounts and an annual certification of all other accounts to verify accesses are still appropriate. We reviewed Argus user role information and considered all administrator roles and/or

<sup>\*</sup> See glossary at end of report for definition.

roles with the ability to delete records to be privileged accounts. As of June 28, 2021, 12 (46%) of MHC's 26 active Argus users had roles we considered privileged accounts.

MHC informed us it was not aware of the semiannual and annual certification requirements for its Argus users.

#### RECOMMENDATION

We recommend that MHC strengthen its access and security controls over Argus.

#### AGENCY PRELIMINARY RESPONSE

DNR provided us with the following response:

DNR agrees that MHC needs to strengthen its security controls over Argus. MHC has already resolved the issue of access to Argus. Access to delete records is now held only by the Museum Registrar, the State Archivist and the Archivist who is the Michigan History Center administrator of the Argus system. MHC has also established a formal protocol for granting access to users.

The Argus audit history feature generates a history of record changes when adding, modifying, or deleting records through data entry, import, batch update, or the Application Programming Interface. It could triple the size of the database. MHC will evaluate that option, including its cost implications, and alternative options for monitoring deletion of records.

MHC has contacted the DNR, Privacy and Information Security Officer, about SOM Technical Standard 1340.00.020.01. An Access Control Policy for the Department is being developed that will create a process for application access, account management and audit oversight. MHC will follow that policy once it is established.

UNAUDITED Exhibit 1

## SELECTED STEWARDSHIP ACTIVITIES FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS

Michigan History Center
Department of Natural Resources

#### Map of Michigan History Center Sites



★ Michigan History Museum and Archives of Michigan ● MHC Museums and Historic Sites

To view the interactive map, use this link: <a href="mailto:audgen.michigan.gov/751-2600-21-map/">audgen.michigan.gov/751-2600-21-map/</a>

Source: The OAG created this map using address information from MHC's Web site.

# SELECTED STEWARDSHIP ACTIVITIES FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS Michigan History Center Department of Natural Resources

Photographs of the Michigan History Museum in Lansing















This exhibit continued on next page.















Source: Photographs were provided by MHC.

# SELECTED STEWARDSHIP ACTIVITIES FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS Michigan History Center Department of Natural Resources

#### Photographs of the Archives of Michigan in Lansing













Source: Photographs were provided by MHC.

## SELECTED STEWARDSHIP ACTIVITIES FOR MICHIGAN'S HISTORICAL ARTIFACTS AND ARCHIVAL RECORDS

Michigan History Center Department of Natural Resources

Photographs of Michigan History Center Museums and Historic Sites



Cambridge Junction Historic State Park in Brooklyn.



Father Marquette National Memorial in St. Ignace\*.



Fayette Historic Townsite in Garden.



Fort Wilkins and Copper Harbor Lighthouses in Copper Harbor.



Great Lakes Maritime Heritage Center in Alpena\*.



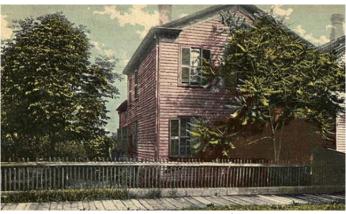
Hartwick Pines Logging Museum in Grayling.

This exhibit continued on next page.

#### UNAUDITED Exhibit 4 (Continued)



Higgins Lake Nursery and Civilian Conservation Corps Museum in Roscommon.



Julia and Ulysses S. Grant Home in Detroit\*.



Mann House in Concord.



Michigan Iron Industry Museum in Negaunee.



Sanilac Petroglyphs in Cass City\*.



Tawas Point Lighthouse in East Tawas\*.

\* This MHC museum and/or historic site was excluded from our audit procedures and conclusions. See the audit scope section for more details.

Source: Photographs were provided by MHC.

#### **AGENCY DESCRIPTION**

The origin of MHC goes back more than 100 years to the first efforts to organize and sustain a historical society, with name and organizational changes over time. In 2009, MHC was transferred to DNR when Executive Order No. 2009-36 abolished the former Department of History, Arts, and Libraries.

MHC is responsible for collecting, providing stewardship for, and interpreting artifacts and archival records which document and illustrate the history of Michigan and its people. MHC makes these materials available to the public in a manner consistent with their preservation for future generations through operation of the Michigan History Museum System and the Archives of Michigan.

Over the past several years MHC's appropriations totaled approximately \$7.0 million annually, and it had 37 full-time employees as of September 2022.

### AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

#### **AUDIT SCOPE**

To examine the records and processes related to selected MHC activities to provide stewardship for Michigan's historical artifacts and archival records. 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 objective and corresponding audit procedures were directed toward concluding on selected MHC activities to provide stewardship for historical artifacts and archival records. We determined the 5 MHC museums and historic sites listed below housed fewer than 10 combined MHC historical artifacts and were excluded from our audit procedures and conclusions:

- Father Marquette National Memorial, St. Ignace
- Great Lakes Maritime Heritage Center, Alpena
- Julia and Ulysses S. Grant Home, Detroit
- Sanilac Petroglyphs, Cass City
- Tawas Point Lighthouse, East Tawas

As part of the audit, we considered the five components of internal control (control environment, risk assessment, control activities, information and communication, and monitoring activities) relative to the audit objectives and determined all components were significant.

#### **PERIOD**

Our audit procedures, which included a preliminary survey, audit fieldwork, report preparation, analysis of agency responses, and quality assurance, generally covered October 1, 2018 through June 30, 2021; however, we performed additional on-site observations of MHC's Lansing facilities and operations in May 2022.

#### **METHODOLOGY**

We conducted a preliminary survey to gain an understanding of MHC's processes and activities related to stewardship of Michigan's historical artifacts and archival records and to establish our audit objective, scope, and methodology.

<sup>\*</sup> See glossary at end of report for definition.

During our preliminary survey, we:

- Reviewed applicable laws, policies, procedures, guidelines, and other relevant information pertaining to MHC operations.
- Interviewed MHC management and staff to obtain an understanding of MHC's responsibilities, operations, and activities related to its stewardship of Michigan's historical artifacts and archival records.
- Reviewed professional literature and guidance to identify best practices related to museum artifact and archival record stewardship.
- Reviewed MHC's 2018 reaccreditation report from the American Alliance of Museums.
- Performed site visits and conducted preliminary testing at MHC's Lansing facilities.
- Performed a limited review of MHC's documentation of its museum artifact inventory activities.
- Confirmed MHC had not deaccessioned\* any artifacts during the audit period.

#### **OBJECTIVE**

To assess the effectiveness of selected MHC activities to provide stewardship for Michigan's historical artifacts and archival records.

To accomplish this objective, we:

- Performed on-site visits at MHC's Lansing artifact and archival record facilities in September and October 2021 and May 2022 and 4 judgmentally selected MHC museums and historic sites located outside of Lansing in September and October 2021, including Cambridge Junction Historic State Park, Fayette Historic Townsite, Hartwick Pines Logging Museum, and Mann House. We:
  - Observed MHC's storage environment conditions for obviously visible concerns, such as standing water, water or fire damage, mold, or pests.
  - Randomly selected 175 artifacts from the population of approximately 99,000 recorded in Argus as of June 18, 2021 and performed limited inventory procedures, which included verifying selected artifacts could be physically located in MHC's artifact storage environments, were

<sup>\*</sup> See glossary at end of report for definition.

tagged and/or labeled with a unique identification number, and were located in the same physical location (on an exhibit shelf or case, storage shelf, etc.) documented in Argus.

- Randomly and judgmentally selected 59 archival record collections from the population of approximately 7,600 recorded in Argus as of June 14, 2021 to verify the collections could be physically located in MHC's Lansing archival record storage environments.
- Evaluated the completeness of Argus by tracing artifacts and archival record collections selected from MHC storage environments to Argus records using the unique identification number affixed to the object for:
  - 130 artifacts judgmentally selected from exhibits, display cases, and storage areas.
  - 40 archival record collections judgmentally selected from storage shelves and drawers.
- Reviewed MHC's environmental monitoring program related to storage environment temperature and relative humidity. Specifically, we:
  - Randomly and judgmentally selected 37 data logger devices from the population of 73 installed in MHC's Lansing artifact and archival record storage environments during the audit period and physically observed the selected data logger devices during our May 2022 on-site visits to verify the device was in place and functioning.
  - Evaluated the sufficiency of the number of data logger devices in place during the audit period in MHC's Lansing facilities based on building square footage and the device manufacturer suggested installation information.
  - o Randomly and judgmentally selected 20 data logger devices from the population of 73 installed in MHC's Lansing artifact and archival record storage environments and obtained available historical temperature and relative humidity reading data to determine whether the selected devices were consistently functioning and capturing temperature and relative humidity readings across the entire audit period.

- o Randomly and judgmentally selected 13 data logger devices from the population of 73 installed in MHC's Lansing artifact and archival record storage environments during the audit period and reviewed randomly and judgmentally selected historical temperature and relative humidity reading data for the selected data logger devices to determine whether conditions in MHC's storage environments, over time, were outside of MHC-established set points.
- Interviewed MHC management to obtain an understanding of MHC's practices for routine monitoring of data logger device readings to identify and address fluctuations outside of MHC-established set points and long-term monitoring of data logger device readings over time.
- Interviewed MHC management and reviewed MHC procedures to obtain an understanding of MHC practices for performance of regular inventories of historical artifact collections. We also made inquiries and requested all available evidence of MHC's performance of regular inventories of historical artifacts during the audit period at the Michigan History Museum located in Lansing and at 7 of MHC's museums and historic sites located across the State.
- Requested personal collecting interest disclosure forms for all MHC museum staff, MHC management, and Michigan Historical Commission members, including 17 individuals for fiscal year 2019, 18 individuals for fiscal year 2020, and 17 individuals for fiscal year 2021 to determine whether the forms were completed annually and had an MHC approval signature as required by MHC policy.
- Reviewed all 26 Argus users with active access as of June 28, 2021 to verify access was appropriate for the users' job responsibilities. We also interviewed MHC management to determine whether MHC periodically reviewed Argus user accounts for appropriateness.

Our random samples were selected to eliminate bias and enable us to project the results to the respective populations. We selected other samples judgmentally to ensure representativeness or based on risk and could not project those results to the respective populations.

#### CONCLUSIONS

We base our conclusions on our audit efforts and any resulting material conditions\* or 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 5 findings and 5 corresponding recommendations. DNR's preliminary response indicates that it agrees with all of the recommendations.

The agency preliminary response following each recommendation in our report was taken from the agency's written comments and oral discussion at the end of our 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 to submit it to the State Budget Office upon completion of an audit. Within 30 days of receipt, the Office of Internal Audit Services, State Budget Office, 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.

## SUPPLEMENTAL INFORMATION

Our audit report includes supplemental information presented as Exhibits 1 through 4. Our audit was not directed toward expressing a conclusion on this information.

<sup>\*</sup> See glossary at end of report for definition.

### **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.

archival record The non-current records of an organization or institution that are

preserved for the future.

Argus MHC's collection management system.

artifact An object showing human workmanship. In a museum collection,

the items are legally owned by the museum and philosophically

held in trust for the public.

availability Timely and reliable access to data and information systems.

Bluetooth Short-range wireless technology used to exchange data between

fixed and mobile devices over short distances. MHC's data logger devices utilize Bluetooth technology and can send temperature and relative humidity information to MHC staff smartphones that

are within 100 feet of the data logger device.

catalog To document detailed information about an artifact based on

research and information provided by the donor as well as an

image (digital or photographic) of the artifact.

**deaccession**To remove a record or artifact from MHC's collections that, upon

examination, is deemed inappropriate for further retention.

**DNR** Department of Natural Resources.

**DTMB** Department of Technology, Management, and Budget.

effectiveness Success in achieving mission and goals.

**HVAC** heating, ventilation, and air-conditioning.

integrity Accuracy, completeness, and timeliness of data in an information

system.

IT

information technology.

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. Our assessment of materiality is in relation to the respective audit objective.

MHC

Michigan History Center.

performance audit

An audit providing 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 they can have and still do their jobs. The principle is also applied to things other than people, including programs and processes.

process

To arrange and describe archival records in a manner that makes them accessible to researchers.

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: a deficiency in internal control; noncompliance with provisions of laws, regulations, contracts, or grant agreements; opportunities to improve programs and operations; or fraud.

security

Safeguarding an entity's data from unauthorized access or modification to ensure its availability, confidentiality, and integrity.

SOM

State of Michigan.

storage environment

The enclosed space around an object, including both exhibit space and storage space.



## Report Fraud/Waste/Abuse

Online: audgen.michigan.gov/report-fraud

Hotline: (517) 334-8070