

Office of the Auditor General  
Performance Audit Report

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**Selected Activities Within the Bureau of  
Construction Codes**

Department of Licensing and Regulatory Affairs

October 2021

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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*

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# OAG

Office of the Auditor General

## Report Summary

*Performance Audit*  
*Selected Activities Within the Bureau of*  
*Construction Codes (BCC)*  
*Department of Licensing and Regulatory*  
*Affairs (LARA)*

**Report Number:**  
**641-0240-20**

**Released:**  
**October 2021**

BCC's mission is to ensure Michigan's built environment and the systems within are sound, safe, and sanitary; building users' health, safety, and welfare are protected; and, through a coordinated program of code compliance, investigation, and training, consistent application of standards exists. BCC expended \$17.8 million for fiscal year 2019, and as of April 9, 2021, it had 111 employees.

Audit Objective			Conclusion
Objective 1: To assess the sufficiency of BCC's efforts to conduct inspections.			Sufficient, with exceptions
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
As of May 31, 2020, 73% of elevating devices were 26 days to over 5 years overdue for routine inspections, and 55% of elevating devices with violations were 94 days to nearly 2 years overdue for follow-up inspections ( <a href="#">Finding 1</a> ).	X		Agrees
As of May 11, 2020, 13% of boilers were 1 day to over 19 years overdue for routine inspections, and 96% of boilers with violations were 1 day to over 7 years overdue for follow-up inspections ( <a href="#">Finding 2</a> ).	X		Agrees
Fiscal year 2019 carnival-amusement and ski regulatory costs exceeded revenues by \$312,517 (82%) and \$367,490 (96%), respectively ( <a href="#">Finding 3</a> ).		X	Agrees
Regarding access and security controls, we identified issues related to assigning, disabling, and removing user access and oversight of vendor-hosted system controls. Seven former State employees had access to the systems BCC uses to document data related to licenses, permits, devices, complaints, and inspections (Accela and Jurisdiction Online [JOL]) for 115 to 941 days after they terminated State employment ( <a href="#">Finding 4</a> ).		X	Agrees
Codes and standards adopted in the <i>Michigan Administrative Code</i> for BCC-regulated activities lagged behind national standards by 3 to 16 years ( <a href="#">Finding 5</a> ).		X	Agrees

<b>Observations Related to This Audit Objective (Continued)</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
Carnival-amusement ride inspection and permit requirements may not align with the ride operating season, increasing the risk of injury, death, and/or the State's financial liability ( <u>Observation 1</u> ).			Not applicable for observations.

<b>Audit Objective</b>			<b>Conclusion</b>
Objective 2: To assess the sufficiency of BCC's efforts to resolve complaints in a timely manner.			Not sufficient
<b>Findings Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
94% of the complaint investigations we reviewed were not completed within 30 days ( <u>Finding 6</u> ).	X		Agrees

<b>Audit Objective</b>			<b>Conclusion</b>
Objective 3: To assess the sufficiency of BCC's efforts to process permit applications.			Sufficient
<b>Findings Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
None reported.			Not applicable.

<b>Audit Objective</b>			<b>Conclusion</b>
Objective 4: To assess LARA's compliance with statutory reporting requirements.			Complied, with exceptions
<b>Findings Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
Required annual reports were not supported, did not include all required elements, and were not submitted timely ( <u>Finding 7</u> ).		X	Agrees

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# OAG

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**Doug A. Ringler, CPA, CIA**  
Auditor General

October 27, 2021

Ms. Orlene Hawks, Director  
Department of Licensing and Regulatory Affairs  
Ottawa Building  
Lansing, Michigan  
and  
Ms. Shanna Draheim, Vice Chair  
Construction Code Commission  
East Lansing, Michigan  
and  
Mr. Timothy Meyer, Chair  
Ski Area Safety Board  
South Branch Township, Michigan  
and  
Mr. James Cowhy, Chair  
Residential Builders' and Maintenance and Alteration Contractors' Board  
Manchester, Michigan

Dear Ms. Hawks, Ms. Draheim, Mr. Meyer, and Mr. Cowhy:

This is our performance audit report on Selected Activities Within the Bureau of Construction Codes, Department of Licensing and Regulatory Affairs.

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 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,

A handwritten signature in black ink that reads "Doug Ringler". The signature is written in a cursive, flowing style.

Doug Ringler  
Auditor General



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# AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

# INSPECTIONS

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## BACKGROUND

The Bureau of Construction Code's (BCC's) responsibilities include conducting:

- Initial inspections upon completion of permitted new construction, installations, and alterations within its enforcement jurisdiction (see Exhibits 1A through 1D) under the:
  - Skilled Trades Regulation Act\*, Public Act 407 of 2016 - Establishes regulations for building officials and inspectors; electricians; mechanical contractors; plumbers; and boiler\* inspectors, contractors, and engineers.
  - Stille-Derossett-Hale Single State Construction Code Act\*, Public Act 230 of 1972 - Establishes standards and approval processes for devices, materials, and techniques used in the construction of buildings and premanufactured units.
  - Construction of School Buildings Act, Public Act 306 of 1937 - Regulates the construction, reconstruction, and remodeling of certain public or private school buildings or additions to those buildings.
  - Elevator Safety Board Act, Public Act 227 of 1967 - Establishes regulations for elevating devices\* and elevator journeymen who install, alter, maintain, repair, inspect, or test elevating devices.
  - Carnival-Amusement Safety Act of 1966, Public Act 225 of 1966 - Provides for regulation of carnival and amusement rides.
  - Ski Area Safety Act of 1962, Public Act 199 of 1962 - Provides for regulation of ski areas and ski lifts\*.
  - The Mobile Home Commission Act, Public Act 96 of 1987 - Establishes regulations for the construction, operation, and management of mobile home parks and dealers.
- Routine compliance inspections of boilers, elevating devices, carnival-amusement rides\*, ski lifts, and mobile home parks.

\* See glossary at end of report for definition.

BCC conducts inspections in accordance with the following national codes and/or standards, as adopted in the *Michigan Administrative Code*\*:

- International Building Code\* for buildings.
- National Electrical Code\* for electrical constructs.
- American Society of Mechanical Engineers\* codes for elevating devices and boilers.
- International Code Council's\* codes for mechanical equipment and plumbing.
- American National Standards Institute\* standards for ski lifts.

As of April 2, 2020, BCC employed 67 inspectors.

**AUDIT OBJECTIVE**

To assess the sufficiency of BCC's efforts to conduct inspections.

**CONCLUSION**

Sufficient, with exceptions.

**FACTORS  
IMPACTING  
CONCLUSION**

- BCC ensured the 7 inspectors we reviewed met required licensing and/or experience qualifications.
- BCC collected required fees for the 40 boiler inspections we reviewed.
- BCC conducted 98.7% of the routine inspections for the 39 ski lifts we reviewed.
- BCC completed annual inspections of 94.7% of all licensed mobile home parks within the preceding 12 months as of June 15, 2020.
- Overall, revenues generated from BCC's regulated activities exceeded its related salary and travel expenditures.
- Material conditions\* related to untimely elevating device and boiler inspections (Findings 1 and 2).
- Reportable conditions\* related to the need for changes to carnival-amusement ride and ski lift regulatory fees and supervision, improvements over database\* access\* and security\* controls, and updates to the *Michigan Administrative Code* to better align with national codes and standards (Findings 3, 4, and 5).

\* See glossary at end of report for definition.

## FINDING 1

### Improvements needed to elevating device inspection processes.

72.5% of elevating devices were 26 to 2,140 days overdue for routine inspection.

BCC needs to improve its processes to ensure it completes elevating device inspections in a timely manner to help protect the public from device malfunction or failure.

*Michigan Administrative Code R 408.7010* prohibits a new, altered, or relocated elevating device from being placed into service until it has been inspected. Also, *Michigan Administrative Code R 408.7011* requires passenger and freight elevators, escalators, inclined lifts, belt manlifts, and special elevating devices be inspected annually and that dumbwaiters, one-person elevators, wheelchair-elevating devices in buildings other than private residences, and sidewalk elevators be inspected biennially.

We reviewed inspection data for 40 devices that required 74 routine inspections from October 1, 2018 through May 31, 2020, including 11 devices that required 16 follow-up inspections. We also reviewed BCC's permit and inspection data for 3,407 elevating devices requiring an initial inspection during the same time period. BCC:

- a. Had not conducted 58 (78.4%) of the 74 routine inspections required for the 40 devices we tested. Also, we determined that, as of May 31, 2020, 29 (72.5%) of the 40 devices had an outstanding, overdue inspection as follows:

Time Overdue	Number (Percentage) of Devices With Overdue Inspections by Inspection Requirement			
	Annual		Biennial	
26 to 45 days	2	( 5.0%)	0	-
46 to 90 days	1	( 2.5%)	0	-
91 to 180 days	1	( 2.5%)	0	-
181 to 364 days	6	(15.0%)	0	-
1 year to less than 3 years	14	(35.0%)	1	(2.5%)
3 years to less than 5 years	3	( 7.5%)	0	-
5 years or more	1	( 2.5%)	0	-
Total	<u>28</u>	(70.0%)	<u>1</u>	(2.5%)

- b. Had not established a benchmark or monitoring process to ensure follow-up of identified violations in a timely manner. BCC categorized violations into three groups:
  - Low - Superficial issues, such as faulty light bulbs or loose handrails.
  - Medium - Maintenance issues, including overdue internal quality control checks and inoperable emergency phones.
  - High - Serious safety related issues, potentially resulting in the device being sealed out of service.

Our review of the 16 required follow-up inspections noted BCC:

54.5% of elevating devices requiring follow-up inspections were 94 to 713 days overdue for inspection.

- (1) Took an average of 121 days to complete 10 (62.5%) follow-up inspections, including 1 violation classified as high and 9 violations classified as medium.
- (2) Had not completed the remaining 6 (37.5%) follow-up inspections which were outstanding from 94 to 713 days as of May 31, 2020. All 6 (54.5%) devices contained violations classified as medium, including violations such as "cables need repair"; "bent car door restrictor shall be repaired or replaced"; and "overdue for 1 year fire test."

- c. Did not document the date of the contractor's request for an initial inspection and, therefore, could not ensure it conducted such inspections for up to 3,407 issued permits in a timely manner.

BCC's ability to conduct timely elevating device inspections may have been limited because of vacancies in approximately 40% of its 27 to 29 elevator inspector positions throughout the audit period. However, we also noted inconsistent managerial oversight of inspector activity, the absence of on-going bureauwide training, a decentralized scheduling system, and a lack of standardized inspection forms which may have contributed to the inefficiencies identified above.

We consider this finding to be a material condition based on the significance of the exception rates identified for routine and follow-up inspections not conducted, the inability to measure timeliness of initial inspection, BCC's lack of a benchmark to ensure timely follow-up inspections, and the potential safety risk to the public.

## RECOMMENDATION

We recommend that BCC improve the efficiency\* of its elevating device inspections.

## AGENCY PRELIMINARY RESPONSE

The Department of Licensing and Regulatory Affairs (LARA) provided us with the following response:

*Agrees.*

*BCC acknowledges the need for continuous improvement to the efficiency of its elevating device inspections.*

*As mentioned in this and previous audit reports, a historical challenge since the early 2000s for BCC remains the recruitment of qualified elevator inspectors to maintain a full inspection staff compared to the volume of elevators in Michigan. To this end,*

\* See glossary at end of report for definition.

*LARA has organized an internal departmental partnership across State government to discuss recruitment strategies to the skilled trades industry, with one focus on recruitment specifically to State of Michigan employment. Recruiting qualified elevator inspectors, along with other trades professionals, is a problem across state government and not unique to LARA. The partnership is looking at opportunities to address this issue, including but not limited to continuing to work with the Michigan Civil Service Commission (MCSC) and the Office of State Employer on improved classification requirements and rates of pay to ensure competitiveness in the job market.*

*Recognizing this material finding is a systemic, historical problem, BCC is working to address broader improvement opportunities by implementing the following:*

- Requiring weekly reports be shared with the BCC Director for monitoring purposes. The BCC Director will ensure the identified improvement tasks are effective for positive impact.*
- Assessing workload improvement strategies such as adjusting assignments and/or jurisdictions and requiring continuous quality improvement training for all staff.*
- Including objectives specifically tied to audit findings and corrective action plans to all BCC management and staff performance evaluations.*
- Scheduling bureauwide training for all inspectors on a regular basis, at least annually.*
- Analyzing inspection trends and discussing best practices with leadership across LARA.*

*BCC is also taking active measures on the following:*

- Analyzing the 40 elevating devices the OAG identified as not having inspections or as having overdue inspections to ensure inspections are conducted and inspection invoices are paid, prioritizing the inspections dependent upon the risk level of the elevating device.*
- Implementing a weekly report monitored by BCC management identifying high risk elevating devices to ensure timely follow-up inspections are scheduled and documented in Accela.*
- Implementing a monthly report monitored by BCC management identifying medium and low risk elevating devices to ensure timely follow-up inspections are scheduled and documented in Accela.*

- *Establishing realistic timeframes with building owners and/or contractors to resolve violations needed for follow-up inspections. Establishing these timeframes will allow BCC to identify appropriate benchmarks for completing follow-up inspections.*
- *Analyzing timeframes involved for resolving violations. Analysis will take six months to identify benchmarks for follow-up inspections. BCC management will monitor follow-up inspection timeframes through weekly/monthly reporting and documentation in Accela when developing benchmarks.*
- *Updating and implementing policy and procedures to document and track inspection requests in Accela.*
- *Conducting training for all inspection staff regarding documentation expectations in Accela, including capturing when inspections are requested and scheduled ensuring BCC is conducting inspections within identified benchmarks. BCC management will be monitoring inspector documentation monthly.*

*BCC has recently implemented a policy requiring code supervisors meet with inspectors in the field on a quarterly basis to observe and provide feedback on field inspections and operations, allowing one-on-one oversight and improvement opportunities for inspectors.*

*BCC continues to communicate job postings on the MCSC Web site, social media, mass email notifications to licensees and stakeholders, including information in the BCC newsletter, and promoting information to board/commission members. BCC also continues to work with departmental staff for additional opportunities to share job postings.*

## FINDING 2

### Improvements needed to boiler inspection processes.

BCC needs to improve its processes to ensure it completes boiler inspections in a timely manner to help protect users from device malfunction or failure.

*Michigan Administrative Code R 408.4049* requires each boiler proposed to be used to be thoroughly inspected as to its construction, installation, and condition. Also, Sections 339.5917, 339.5919, and 339.5943 of the *Michigan Compiled Laws* require BCC to conduct annual inspections of power boilers, miniature boilers, and process boilers; biennial inspections of steam boilers; and triennial inspections of hot water boilers and antique steam boilers. In addition, BCC boiler inspectors establish and document a due date for required follow-up inspections generally within 30 days from the date the inspector identified the violation.

As of May 11, 2020, BCC's database, Jurisdiction Online\* (JOL), identified 68,444 registered boilers. Our analysis noted BCC:

12.7% of boilers were 1 to 6,994 days overdue for routine inspection.

- a. Had not conducted 7,860 (12.7%) of the 61,900 required routine inspections as follows:

Time Overdue	Number (Percentage) of Overdue Routine Inspections by Boiler Usage Type	
	Hot Water	Steam, Power, and Other
Less than 1 year	4,215 ( 7.7%)	1,175 (16.8%)
1 year to less than 3 years	1,572 ( 2.9%)	354 ( 5.1%)
3 years to less than 5 years	200 ( 0.4%)	85 ( 1.2%)
5 years to less than 7 years	125 ( 0.2%)	49 ( 0.7%)
7 years or less than 10 years	16 ( 0.0%)	34 ( 0.5%)
10 years or more	2 ( 0.0%)	33 ( 0.5%)
Total overdue inspections	<u>6,130</u> (11.2%)	<u>1,730</u> (24.7%)
Total required routine inspections	54,906 (88.7%)	6,994 (11.3%)

96.1% of boilers requiring follow-up inspections were 1 to 2,562 days overdue for inspection.

- b. Had not conducted 2,217 (96.1%) of the 2,308 required follow-up inspections as follows:

Time Overdue	Number (Percentage) of Overdue Follow-Up Inspections by Boiler Usage Type	
	Hot Water	Steam, Power, and Other
Less than 1 year	1,026 (49.6%)	117 (48.5%)
1 year to less than 3 years	780 (37.7%)	86 (35.7%)
3 years to less than 5 years	144 ( 7.0%)	17 ( 7.1%)
5 years to less than 7 years	34 ( 1.6%)	12 ( 5.0%)
7 years or more	1 ( 0.0%)	0 ( 0.0%)
Total overdue inspections	<u>1,985</u> (96.0%)	<u>232</u> (96.3%)
Total required routine inspections	2,067 (89.6%)	241 ( 10.4%)

\* See glossary at end of report for definition.

- c. Did not document the date of the contractor's request for an initial inspection and, therefore, could not ensure it conducted such inspections for up to 5,395 permits issued from October 1, 2018 through May 31, 2020 in a timely manner.

BCC's ability to conduct timely boiler inspections may have been limited because it consistently had vacancies in 2 (13.3%) of its 15 boiler inspector positions throughout the audit period. However, we also noted inconsistent managerial oversight of inspector activity and a decentralized scheduling process may have contributed to the inefficiencies identified above.

We consider this finding to be a material condition based on the significance of the exception rates identified for routine and follow-up inspections not completed, the inability to measure timeliness of initial inspection, and the potential safety risk to users.

## RECOMMENDATION

We recommend that BCC improve the efficiency of its boiler inspections.

## AGENCY PRELIMINARY RESPONSE

LARA provided us with the following response:

*Agrees.*

*BCC acknowledges the need for continuous improvement to the efficiency of its boiler inspections.*

*As mentioned in this and previous audit reports, a historical challenge since the early 2000s for BCC remains the recruitment of qualified boiler inspectors to maintain a full inspection staff compared to the volume of boilers in Michigan. To this end, LARA has organized an internal departmental partnership across State government to discuss recruitment strategies to the skilled trades industry, with one focus on recruitment specifically to State of Michigan employment. Recruiting qualified boiler inspectors, along with other trades professionals, is a problem across State government and not unique to LARA. The partnership is looking at opportunities to address this issue, including but not limited to continuing to work with MCSC and the Office of State Employer on improved classification requirements and rates of pay to ensure competitiveness in the job market.*

*Recognizing this material finding is a systemic, historical problem, BCC is working to address broader improvement opportunities by implementing the following:*

- *Requiring weekly reports be shared with the BCC Director for monitoring purposes. The BCC Director will ensure the identified improvement tasks are effective for positive impact.*

- *Assessing workload improvement strategies such as adjusting assignments and/or jurisdictions and requiring continuous quality improvement training for all staff.*
- *Including objectives specifically tied to audit findings and corrective action plans to all BCC management and staff performance evaluations.*
- *Scheduling bureauwide training for all inspectors on a regular basis, no less than annually.*
- *Analyzing inspection trends and discussing best practices with leadership across LARA.*

*BCC is taking active measures on the following:*

- *Analyzing the 7,860 boilers the OAG identified as not having routine inspections. Boilers that have not had an inspection in seven or more years will be prioritized before addressing the remaining boilers overdue for inspection.*
- *Analyzing the 2,217 boilers the OAG identified as needing follow-up inspections. Boilers that have not had a follow-up inspection in five or more years will be prioritized before addressing the remaining boilers overdue for a follow-up inspection.*
- *Implementing a weekly report monitored by BCC management identifying active versus inactive boilers to ensure timely routine inspections and follow-up inspections are scheduled and documented in Accela and/or JOL.*
- *Establishing realistic benchmarks with contractors to resolve violations needed for follow-up inspections. Benchmarks will be documented in Accela and/or JOL. BCC management will monitor follow-up inspections through weekly/monthly reports.*
- *Updating and implementing bureauwide policy and procedures to document and track inspection requests in Accela and JOL.*
- *Conducting training for all inspection staff regarding documentation expectations in Accela and JOL, including capturing when inspections are requested and scheduled ensuring BCC is conducting inspections timely. BCC management will be regularly monitoring inspector documentation.*

*BCC has recently implemented a policy requiring code supervisors meet with inspectors in the field on a quarterly basis to observe and provide feedback on field inspections and operations, allowing one-on-one oversight and improvement opportunities for inspectors.*

*BCC continues to communicate job postings on the MCSC Web site, social media, mass email notifications to licensees and stakeholders, including information in the BCC newsletter, and promoting information to board/commission members. BCC also continues to work with departmental staff for additional opportunities to share job postings.*

### FINDING 3

**Changes needed to  
carnival-amusement  
and ski regulatory fees  
and supervision.**

LARA should continue to pursue a legislative change to update the carnival-amusement ride and ski lift inspection and permit fees to ensure the restricted revenues earned are sufficient to cover the related costs. Also, BCC should fill the supervisor vacancy for carnival-amusement and ski regulatory activities to help ensure the safety of carnival-amusement ride and ski lift users. LARA supplemented 81.8% and 96.1% of the carnival-amusement and ski regulatory activities' fiscal year 2019 costs, respectively, with State General Fund/general purpose (GF/gp) revenues and/or other restricted funding sources, totaling \$680,000.

Sections 408.658 and 408.326 of the *Michigan Compiled Laws* infer that fees charged for issuing permits and conducting inspections should reflect actual costs of those activities. Also, Sections 408.659 and 408.337 of the *Michigan Compiled Laws* require BCC to employ a supervisor qualified in engineering and training to oversee and provide the carnival-amusement ride and ski lift inspectors with specialized knowledge.

For fiscal year 2019, our allocation of BCC's costs, based on the percentage of carnival-amusement and ski inspectors in relation to all BCC inspectors, indicated the cost to regulate the carnival-amusement and ski activities exceeded the related revenues as follows:

	<u>Carnival- Amusement</u>	<u>Ski</u>
Revenues	\$ 69,710	\$ 14,737
Less: Allocated costs	<u>382,227</u>	<u>382,227</u>
Allocated deficit	<u>\$ (312,517)</u>	<u>\$ (367,490)</u>
Percentage of allocated costs covered by GF/gp and/or other restricted revenues	(81.8%)	(96.1%)

The above deficits do not include the cost to employ a supervisor over carnival-amusement and ski activities, which we estimated at approximately \$131,000 per year.

The carnival-amusement and ski revenues were based on fee schedules established in 1982 and 1964, respectively (see Exhibit 2). Also, BCC indicated that previous attempts to pursue a fee increase were unsuccessful and the supervisor position has been vacant since 2016, primarily because of compensation limitations and insufficient activity income.

### RECOMMENDATIONS

We recommend that LARA continue to pursue legislative changes to update carnival-amusement and ski regulatory activity fees.

We also recommend that LARA fill its supervisor vacancy for carnival-amusement and ski activities.

**AGENCY  
PRELIMINARY  
RESPONSE**

LARA provided us with the following response:

*Agrees.*

*BCC acknowledges the need to pursue legislative improvements to update carnival-amusement and ski regulatory activity fees; and fill the supervisor vacancy for carnival-amusement and ski activities.*

*BCC will continue to work with the Executive Office of the Governor, legislative partners, and stakeholders to pursue legislative improvements to establish a fee structure that sustains the program areas while supporting the health, safety and welfare of Michigan residents enjoying and working in the carnival-amusement and ski industries. BCC appreciates the additional funding in Public Act 87 of 2021, which will assist in addressing some of these ongoing issues.*

*The supervisor position for carnival-amusement and ski programs has been previously posted on two occasions; unfortunately, no qualified applicants accepted the position at that time.*

*The supervisor position was again posted in September 2021, and BCC is in the process of hiring a qualified candidate.*

## FINDING 4

### Improvements needed over access and security controls.

LARA should improve access and security controls over Accela\* and JOL. Malicious destruction or inadvertent loss of data would negatively impact BCC's ability to process licenses, permits, and complaints and conduct inspections in a timely manner.

State of Michigan Technical Standards 1340.00.020.01 and 1340.00.020.03 require user access to be formally approved, based on the principle of least privilege\* and removed within 48 hours of an employee departure. The Standards also require BCC to maintain documentation to support the initial request for access for each user and the removal of access when no longer required. In addition, the State of Michigan Financial Management Guide (FMG) (Part VII, Chapter 1, Section 1000) requires oversight of a third party service organization's (TPSO's) internal control system when those services have a material effect on the department's operations and reporting. The FMG indicates oversight includes gaining an understanding of the TPSO's controls, obtaining assurance the controls are functioning as intended, and evaluating the effectiveness\* of the controls on an ongoing basis.

BCC uses Accela to document data related to licenses, permits, devices, complaints, and inspections. Also, BCC and inspectors hired by insurance providers use JOL to document boiler devices and inspection data. Both Accela and JOL are TPSO-hosted systems. Accela had 122 active, BCC-related, user accounts as of May 7, 2020 and JOL had 155 active user accounts as of July 28, 2020. Our review of LARA's oversight of access and security controls over Accela and JOL disclosed LARA had not:

- a. Maintained user access approval documentation for 12 (92.3%) of the 13 Accela user accounts, or the 16 JOL user accounts, we reviewed.
- b. Granted access based on the principle of least privilege. We noted 1 (7.7%) of the 13 Accela user accounts and 2 (12.5%) of the 16 JOL user accounts we reviewed had access that was not required for their job responsibilities, including supervisory or administrative abilities even though the user did not have supervisory, managerial, or administrative responsibilities.
- c. Disabled or removed user access of 7 former State employees. Specifically:
  - (1) As of May 7, 2020, 5 former BCC employees still had the ability to add or edit building, electrical, mechanical, or elevating device inspection data in Accela, ranging from 115 days to 357 days after they terminated State employment. Although none of these users had logged into Accela after their departure date through our October 9, 2020 review

\* See glossary at end of report for definition.

date, the risk of unauthorized access remains until the user accounts are inactivated. On February 10, 2021, BCC informed us it deactivated these user accounts; however, it could not provide us with documentation to support the deactivation date.

(2) As of July 28, 2020, 2 former BCC employees still had administrative access to JOL, ranging from 743 days to 941 days after they terminated State employment. BCC could not determine whether these users had accessed JOL after their departure. On September 14, 2020, BCC informed us that it deactivated these user accounts; however, it could not provide us with documentation to support the deactivation date.

- d. Reviewed the System and Organization Controls\* (SOC) reports for Accela and JOL. SOC reports are internal control reports of a TPSO that provide valuable information to enable users to assess and address the risks associated with an outsourced service including system security, availability, processing integrity, confidentiality, and privacy.

BCC indicated it did not have formal processes to monitor system controls.

## RECOMMENDATION

We recommend that LARA enhance access and security controls over Accela and JOL.

## AGENCY PRELIMINARY RESPONSE

LARA provided us with the following response:

*Agrees.*

*BCC agrees it needs to enhance access and security controls over Accela and JOL and is taking active measures to improve in this area:*

- a. *Documentation of user access approval was not tracked previously. BCC now provides user access approval documentation to the BCC Human Resources (HR) liaison.*
- b. *BCC did not previously have access availability per position or job responsibility but is now working with IT and Department of Technology, Management, and Budget to standardize access by staff role. This is currently in the testing phase and will be implemented upon testing completion. BCC and IT are working to finalize and implement a timeline.*

\* See glossary at end of report for definition.

- c. *Documentation of deactivation is not available for past actions involving the seven former State employees identified by the OAG, but screenshots showing that deactivation occurred are available. Documentation of deactivation will be provided to the BCC HR liaison going forward.*
- d. *An Accela SOC II report review was conducted on May 17, 2021, for the timeframe of January 1, 2020 - August 31, 2020. It was determined the control monitoring needs for Accela were sufficient for system security, availability, processing integrity, confidentiality, and privacy.*

*BCC has developed a bureauwide policy and procedure to monitor system access controls, including:*

- *Deactivation of user accounts upon departure.*
- *Requesting access for new staff.*
- *Disabling user accounts when an employee changes positions or leaves BCC.*
- *Identifying security breaches and responding accordingly.*

*As part of the updated policy and procedure, BCC management will work with the BCC HR liaison and IT team to ensure documentation of user access is captured upon hiring, retiring, or transitioning employees.*

*BCC IT will perform an internal audit twice per year of all user access within the bureau to ensure the new measures put in place are accurately capturing any necessary changes in a timely manner.*

*Additionally, LARA is evaluating technology options for automatically disabling accounts to major systems across the department when an employee departs their current position and no longer should have access.*

## FINDING 5

### Updates needed to the Michigan Administrative Code.

BCC did not update the *Michigan Administrative Code* rules related to its regulated activities to support its mission\* to ensure the health, safety, and welfare of users.

Sections 125.1504(5), 408.656, and 408.326 of the *Michigan Compiled Laws* require LARA to update the *Michigan Administrative Code* rules every 3 years for building, electrical, mechanical, and plumbing codes to coincide with the national code change cycle and to promulgate codes and rules for carnival-amusement rides and ski lifts based on generally accepted engineering standards, formulas, and practices. Also, as the *Michigan Compiled Laws* do not specify a timeliness requirement for updating boiler or elevating device codes, we used 3 years as a performance benchmark.

BCC conducts inspections in accordance with the national codes and/or standards as adopted in the *Michigan Administrative Code*. National codes and standards are generally updated every 3 years as a result of new products, materials, and technology in an effort to improve safety. However, as of September 25, 2020, we noted BCC-related *Michigan Administrative Code* rules lagged behind the respective national standards by 3 to 16 years as follows:

Regulated Activity	Michigan Administrative Code Last Update	National Codes or Standards	
		Version Adopted	Version Available
Building	2017	2015	2018
Electrical	2019	2017	2020
Mechanical	2016	2015	2018
Plumbing	2016	2015	2018
Carnival-Amusement	2007	2004	2020 <sup>2</sup>
Ski	2018	2012	2017
Elevator	2014	2007 - 2012 <sup>1</sup>	2019
Boiler	2013	2010	2019

<sup>1</sup> Multiple versions cited in the Michigan Elevator Rules depending on the subject matter.

<sup>2</sup> National standards for carnival-amusement rides are updated weekly.

BCC indicated the delays were because of staffing limitations and updating the *Michigan Administrative Code* rules is a time-consuming process involving input from stakeholders, including the respective board members, code experts, and lobbyists.

## RECOMMENDATION

We recommend that BCC update the *Michigan Administrative Code* rules relating to its regulated activities and keep them updated in a timely manner.

\* See glossary at end of report for definition.

**AGENCY  
PRELIMINARY  
RESPONSE**

LARA provided us with the following response:

*Agrees.*

*BCC acknowledges the need to update the Michigan Administrative Code rules relating to its regulated activities and keep them updated in a timely manner.*

*BCC has established timelines and deadlines to monitor progress for each phase of the rulemaking process as outlined in the Administrative Procedures Act of 1969 (Public Act 306 of 1969).*

*In 2017, BCC went through a Lean Process Improvement (LPI) assessment to improve its internal processes for updating the Michigan Administrative Code rules, identifying opportunities for stakeholder, licensee and public input earlier in the process rather than only during the public hearing. BCC now conducts public advisory meetings prior to public hearings to allow additional public input on code updates. BCC is scheduled for another LPI in late 2021/early 2022 to continue to improve processes related to rules.*

*At present, whenever a code is opened through the rule promulgation process, BCC relies heavily on its section chiefs to review and draft updates for the applicable code. This is a time-consuming process and pulls the section chiefs away from other management activities that are needed by the teams, licensees and customers BCC serves. Due to this, BCC typically only has two codes open at one time. To change this process, BCC is exploring the opportunity to hire two rules analysts who would be responsible for most of the review and drafting of codes, working closely with the section chiefs. The rules analysts would have the responsibility of timely updates of each respective code through the open and transparent rule promulgation process, and meeting the internal timelines and deadlines established by BCC.*

*The following Michigan Administrative Code rules have been updated or are in process:*

- The Ski Area Safety General Rules adopted the 2017 national standards, effective December 11, 2020. These are currently up to date with the most recent standard.*
- The 2018 Michigan Plumbing Code became effective on September 15, 2021.*
- The 2018 Michigan Building Code and Michigan Mechanical Codes are in the final stages of the rule promulgation process.*

*While Sections 408.656 and 408.326 of the Michigan Compiled Laws require LARA to promulgate codes and rules for carnival-amusement rides and ski lifts based on generally accepted engineering standards, formulas, and practices, it does not specify a timeliness requirement; however LARA does recognize*

*the importance of working through the rule promulgation process with stakeholders, licensees, and the public to ensure the most recent standards are adopted in all Michigan Administrative Code rules in a timely manner.*

## OBSERVATION 1

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### Carnival-amusement ride legislation and regulations could be clarified/revised.

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Michigan legislation and regulations governing carnival-amusement rides could be clarified and/or revised to better align the inspecting and permitting activities with the ride operating season to help reduce the risk of injury, death, and/or the State's financial liability.

Michigan's carnival-amusement ride legislation and regulations:

- Restrict the operation of a ride without a permit issued by LARA (Section 408.660 of the *Michigan Compiled Laws*).
- Require a ride to be inspected at least once every year while in operation, unless authorized on a temporary operating permit (Section 408.660 of the *Michigan Compiled Laws*).
- Allow a ride that was deemed compliant based on its last inspection to continue to operate through its next inspection (*Michigan Administrative Code R 408.873*).

Our review of 32 carnival-amusement rides, each of which required one inspection from October 1, 2018 through February 28, 2020, noted:

- a. BCC issued the annual permit for 7 rides based on an inspection completed during the previous operating season, ranging from 227 to 417 days prior to the permit date.
- b. BCC performed the 2019 inspection for 12 rides 63 days to 182 days after receiving the applications for an annual permit. The time lag from permit request to inspection resulted in the operation of some or all of these rides for an undetermined number of days during the 2019 operating season, based on BCC's inspection of the ride conducted during the 2018 operating season.

Because the legislation requires a ride to be inspected once every year, a ride could technically operate for more than 700 days between inspections, such as from January of year 1 through December of year 2. It seems more reasonable that an operating permit for a carnival-amusement ride would be based on an inspection conducted at the beginning of each operating season or at least every 365 days. This would ensure the inspection considered the wear and tear on the ride during the previous operating season(s) and/or the exposure to Michigan's weather conditions during the nonoperating season(s).

## COMPLAINT RESOLUTION TIMELINESS

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### BACKGROUND

BCC receives and investigates complaints filed in accordance with the following:

- Stille-Derossett-Hale Single State Construction Code Act (Public Act 230 of 1972)
- Skilled Trades Regulation Act (Public Act 407 of 2016)
- Occupational Code (Public Act 299 of 1980)
- The Mobile Home Commission Act (Public Act 96 of 1987)
- Elevator Licensing (Public Act 333 of 1976)
- Utilization of Public Facilities by Physically Limited (Public Act 1 of 1966)
- Elevator Safety Board Act (Public Act 227 of 1967)
- Carnival-Amusement Safety Act of 1966 (Public Act 225 of 1966)
- Ski Area Safety Act of 1962 (Public Act 199 of 1962)

### AUDIT OBJECTIVE

To assess the sufficiency of BCC's efforts to resolve complaints in a timely manner.

### CONCLUSION

Not sufficient.

### FACTORS IMPACTING CONCLUSION

- Material condition related to the timeliness of the complaint investigation process (Finding 6).
- BCC ensured complete migration of complaint data from the License 2000 System\* (L2K) to Accela on August 24, 2019.

\* See glossary at end of report for definition.

## FINDING 6

### Timeliness of complaint investigation process needs improvement.

93.9% of complaint investigations not completed timely.

BCC needs to implement controls over its complaint investigation process to efficiently identify and complete investigations regarding incidents that could potentially result in financial and/or physical harm to a consumer. Examples include work performed without a permit or by someone who is not properly licensed or other contractor negligence, fraud, or deceit.

Section 339.5507(1) of the *Michigan Compiled Laws* requires BCC report on the results of the complaint investigation to the director within 30 days or obtain an extension from the director. Also, Section 339.5503 of the *Michigan Compiled Laws* requires BCC provide written acknowledgment to the complainant within 15 days of receiving a complaint. In addition, because no legislative or departmental requirement exists for responding to complaints related to BCC's other activities (not subject to the Skilled Trades Regulation Act), we utilized the same 30-day and 15-day requirements as benchmarks to measure BCC's performance.

Our review of 33 of the 2,073 complaints open at any time from October 1, 2018 through June 15, 2020 noted BCC:

- a. Had not completed 31 (93.9%) of the complaint investigations within 30 days, as of June 15, 2020, as follows:

Age of Complaint	Number (Percentage) of Complaints	
	Closed	Open
31 days to 60 days	2 ( 6.1%)	0
61 days to 90 days	1 ( 3.0%)	1 ( 3.0%)
91 days to 180 days	5 (15.2%)	7 (21.2%)
181 days to 365 days	2 ( 6.1%)	4 (12.1%)
366 days to 730 days	0	8 (24.2%)
731 days to 1,095 days	0	1 ( 3.0%)
Total complaints older than 30 days we reviewed	10 (30.3%)	21 (63.6%)

BCC had not requested approval to extend the time in which to report the results of the above investigations.

- b. Had not reported any of the complaint investigation results to the LARA director or his/her designee.

- c. Had not provided written acknowledgment to the complainants for 9 (29.0%) of the 31 complaints received after October 1, 2018, within 15 days. BCC sent the 9 acknowledgments from 1 day to 75 days late as follows:

Days Overdue	Number (Percentage) of Late Acknowledgments	
1 day to 15 days	2	( 6.5%)
16 days to 30 days	5	(16.1%)
31 days to 45 days	0	
46 days to 60 days	1	( 3.2%)
61 days to 75 days	1	( 3.2%)
 Total complaints with late acknowledgments	<u>9</u>	(29.0%)

BCC indicated the 30-day requirement is not sufficient to complete the investigations because it can take that long to obtain a response from the licensee. BCC also indicated although Accela was designed to send a notification acknowledging a complaint upon receipt, BCC did not have a control to ensure that complaints were entered into Accela in a timely manner and the acknowledgment letters were sent. We verified BCC had not entered 4 complaints into Accela within 15 days of receipt.

We consider this finding to be a material condition based on the significance of the exception rate identified for the timeliness of BCC's complaint investigations and the potential financial and/or physical harm to consumers.

## RECOMMENDATION

We recommend that BCC improve the timeliness of its complaint investigation process.

## AGENCY PRELIMINARY RESPONSE

LARA provided us with the following response:

*Agrees.*

*BCC acknowledges the need to improve the timeliness of its complaint investigation process.*

*The OAG review included complaints related to work performed without a permit and work performed by someone without a license, which do not fall solely under the jurisdiction of BCC. These complaints should be filed with the local enforcing agency and/or local prosecuting attorneys.*

*BCC is revising existing bureauwide policies and procedures to align complaint processes with statutory authority. These changes implement documentation of extension requests for investigations beyond the 30-day statutory completion requirement, written acknowledgements within 15 days of receipt,*

*eliminate unnecessary mailings, responses, and delays, and focus solely on complaint allegations.*

*Additionally, BCC is updating bureau policy and procedure regarding complaints that are transferred to the Attorney General's Office and complaints that are processed through the judicial system. These complaints will be closed upon completion of the investigation and transferred to the appropriate channel.*

*BCC acknowledges the need to pursue legislative improvements to update statute, specifically Section 339.5507(1) of the Michigan Compiled Laws, to afford BCC a more realistic and thorough timeframe for completing investigation complaints.*

*BCC worked with IT to update Accela to autogenerate complaint receipt acknowledgement emails to complainants when an email address is provided. Additional enhancements continue to be explored that will improve the customer experience when submitting complaints.*

*BCC has recently updated its processes for complaints received in the mail or that do not include an email address. These complaints are logged into Accela which generates an acknowledgment letter that is then mailed to the complainant's address.*

*BCC is implementing weekly reports, monitored by BCC management and shared with the BCC Director, on complaint investigation results and timeliness of resolution and on extension requests. Extension approvals will be documented in Accela. BCC is also assessing workload improvement strategies such as adjusting assignments and requiring continuous quality improvement training for all staff.*

## PERMIT PROCESSING

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### BACKGROUND

BCC receives permit applications and corresponding fees from contractors or owners/operators relating to:

- New construction, or certain alterations, of buildings and structures.
- Installation, alteration, or repair of boilers and its piping.
- Installation or alteration of:
  - Electrical wiring.
  - Elevating devices.
  - Carnival-amusement rides.
  - Ski lifts.
- Initiation of:
  - Mechanical work.
  - Plumbing work.

BCC reviews permit applications and plan documents and can approve, request additional information, or deny a permit application.

### AUDIT OBJECTIVE

To assess the sufficiency of BCC's efforts to process permit applications.

### CONCLUSION

Sufficient.

### FACTORS IMPACTING CONCLUSION

- BCC timely processed all 40 elevating device and 94.9% of the 39 boiler permit applications we reviewed and collected the applicable fees prior to issuing the permits.
- BCC ensured receipt and completion of all required permit documentation, permit payments, and initial inspections for the 3 ski lifts we reviewed.
- BCC ensured all applicable building, electrical, mechanical, and plumbing permits existed before issuing 96.0% of the 25 building certificates of use and occupancy we reviewed.

## **COMPLIANCE WITH STATUTORY REPORTING REQUIREMENTS**

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### **BACKGROUND**

LARA is required by Sections 408.815(5), 339.5217, and 339.212 of the *Michigan Compiled Laws* and appropriations acts to annually report on its regulated activities including:

- Revenues and expenditures by regulated activity.
- Statistics for licensing and permit application approvals, denials, and processing timeliness; examinations administered; complaints received; investigations opened and closed; enforcement actions; and administrative hearings for each regulated activity.
- Description of BCC's complaint resolution process.

### **AUDIT OBJECTIVE**

To assess LARA's compliance with statutory reporting requirements.

### **CONCLUSION**

Complied, with exceptions.

### **FACTORS IMPACTING CONCLUSION**

- Reportable condition related to improving the completeness, accuracy, and timeliness of the required annual reports (Finding 7).

## FINDING 7

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### **Statutory reporting needs improvement.**

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LARA should improve its statutory reporting of BCC-regulated activities. LARA and BCC management, and the Legislature, did not have complete, accurate, and timely information to enable them to effectively oversee the strategic direction of BCC's operations.

LARA's appropriations acts for fiscal years 2019 and 2020 (Section 226 of Public Act 207 of 2018 and Sections 226 and 514 of Public Act 60 of 2019) and various sections of the *Michigan Compiled Laws* require LARA to submit annual reports summarizing information related to its regulated activities. Also, Section 18.1285 of the *Michigan Compiled Laws* requires LARA to maintain records necessary for proper recording of its activities.

Our review of the annual reports for activities regulated by BCC during fiscal years 2018 and 2019 noted LARA did not:

- a. Maintain documentation to support the accuracy of the data reported. Our efforts to replicate the figures using BCC's data identified numerous, significant differences from the published reports that BCC could not explain. For example, LARA reported BCC:
  - (1) Received 47 complaints during fiscal year 2018; however, our replication identified 1,502 complaints.
  - (2) Received a total of 129 license applications for boiler installers, repairers, special inspectors, and operators during fiscal year 2019; however, our replication identified differences, by type of boiler license, ranging from 5.9% to 200.0%.
  - (3) Issued a total of 10,233 initial and renewal licenses to plumbers during fiscal year 2019; however, our replication identified differences, by type of plumbing license, ranging from 1.4% to 62.6%.
- b. Include all required reporting elements. Specifically, LARA did not report the:
  - (1) Expenditures, number of applications approved, and number of enforcement actions by regulated activity.
  - (2) Number of complaints received by type of complaint.
  - (3) Average amount of time to close complaint investigations.

- c. Submit the annual report required by the appropriations acts by March 1st of each year, specifically:
- (1) LARA submitted the report covering fiscal year 2019 activities on September 15, 2020, 6.5 months after the deadline.
  - (2) LARA submitted the report covering fiscal year 2018 activities on May 10, 2019, approximately 2.5 months after the deadline.

LARA did not have policies and procedures and had not assigned responsibility for preparing, compiling, and reviewing the accuracy of the statutorily required reports.

## **RECOMMENDATION**

We recommend that LARA improve its statutory reporting for all BCC-regulated activities.

## **AGENCY PRELIMINARY RESPONSE**

LARA provided us with the following response:

*Agrees.*

*BCC acknowledges the need to improve its statutory reporting for all BCC-regulated activities and has taken action to ensure data is accurate and deadlines are met.*

*BCC updated bureau policies and procedures regarding the compilation and preparation of statutorily required and boilerplate reports, creating internal timeframes for each step including:*

- *Gathering and verifying budget information.*
- *Compiling necessary data with the help of IT and/or the Department of Technology, Management, and Budget.*
- *Reviewing/revising each report for accuracy prior to submission.*

*All these steps have deadlines established in advance of the report submission deadlines. These changes will ensure they are submitted on time.*

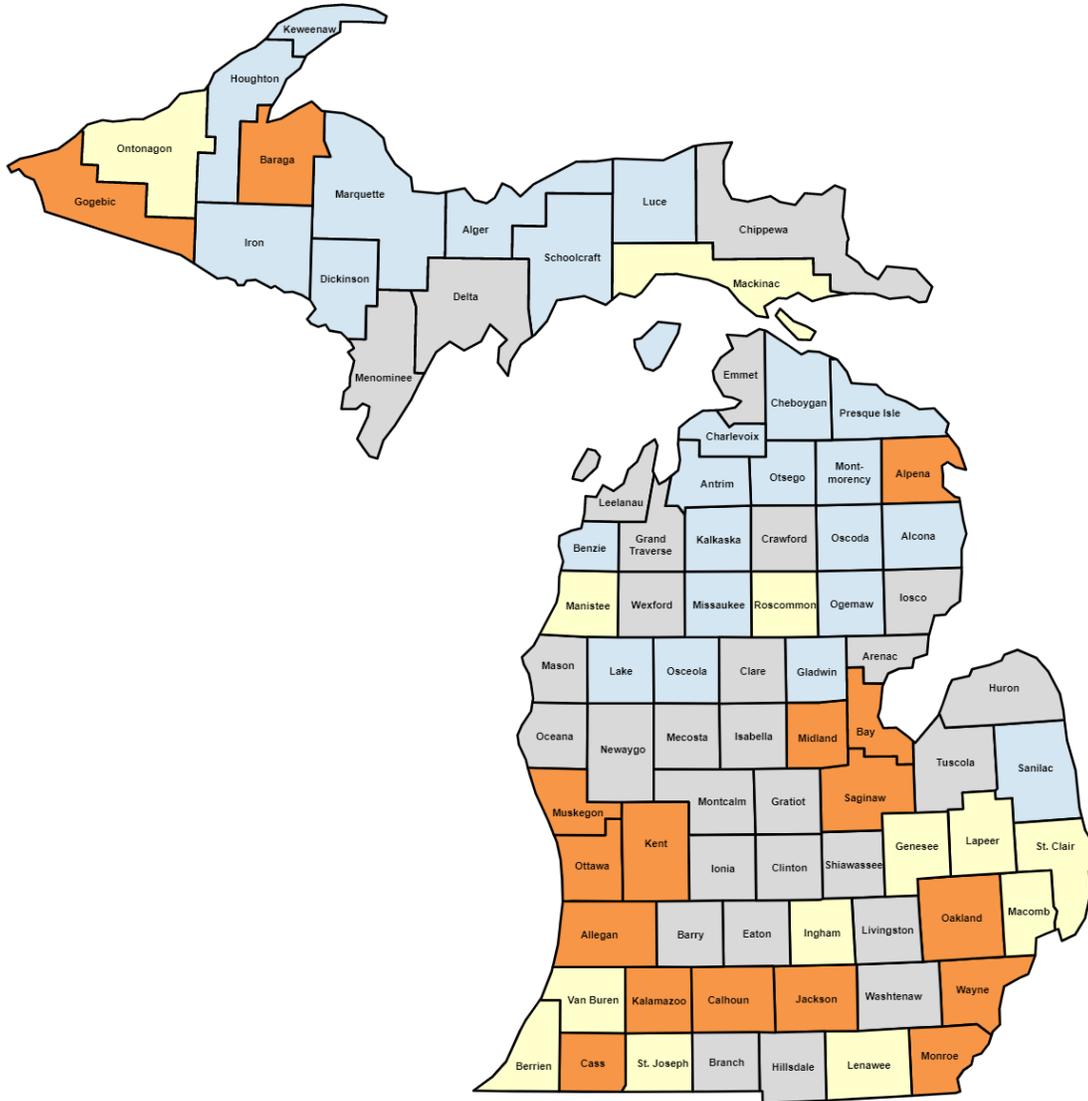
*The bureau policy will be reviewed and updated annually to capture any new or changed reporting requirements.*

# SUPPLEMENTAL INFORMATION

UNAUDITED  
Exhibit 1A

## SELECTED ACTIVITIES WITHIN THE BUREAU OF CONSTRUCTION CODES Department of Licensing and Regulatory Affairs

### Building Code Enforcement Jurisdiction Map As of March 10, 2021



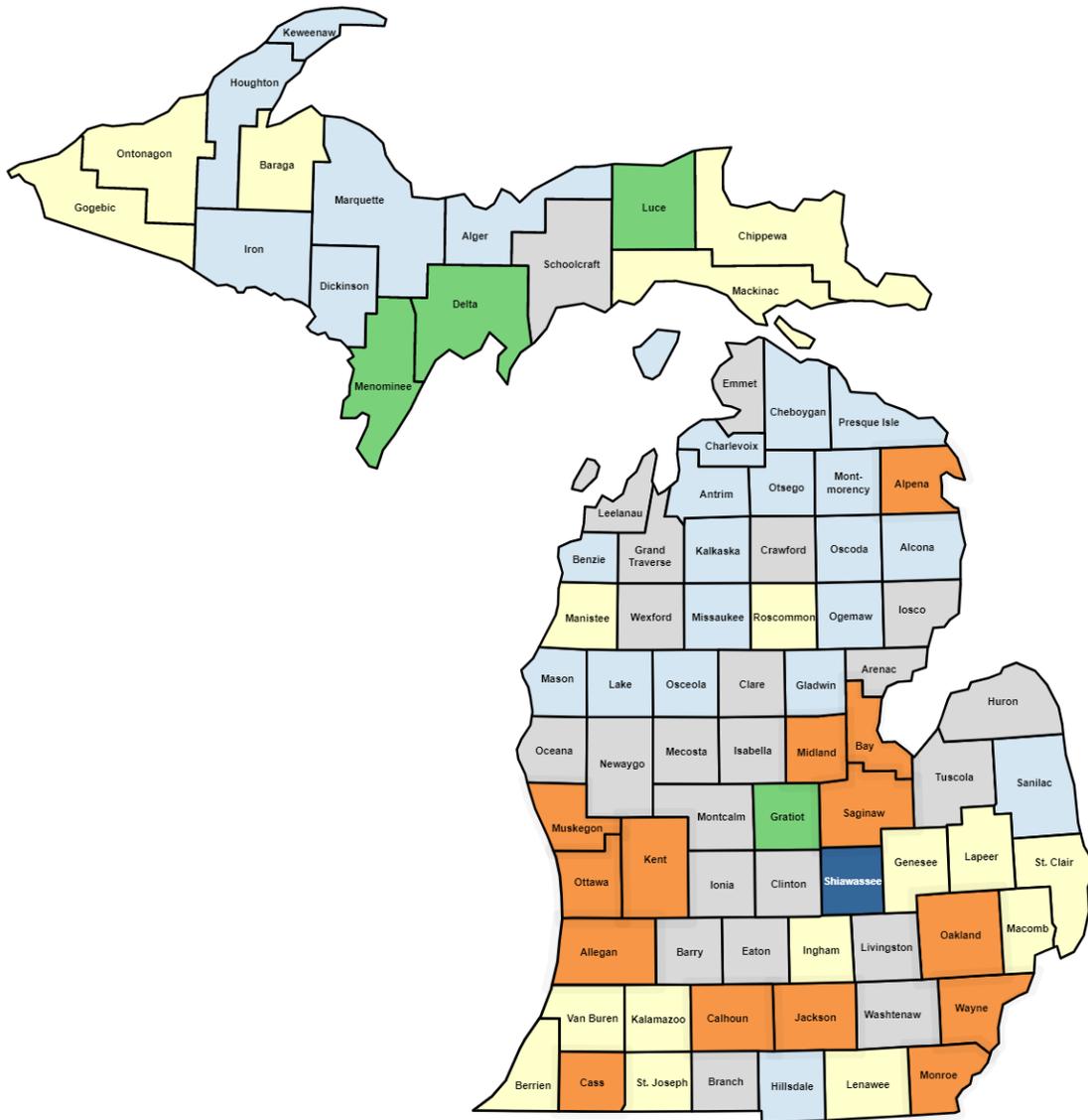
- BCC has full jurisdiction.
- County has full jurisdiction.
- Local municipalities have jurisdiction.
- Jurisdiction is split between BCC and local municipalities.
- Jurisdiction is split between County and local municipalities.

To view the interactive map: <https://audgen.michigan.gov/641-0240-20-map-1A/>

Source: The OAG prepared this exhibit using the BCC Statewide Jurisdiction list published on BCC's Web site.

SELECTED ACTIVITIES WITHIN THE BUREAU OF CONSTRUCTION CODES  
Department of Licensing and Regulatory Affairs

Electrical Code Enforcement Jurisdiction Map  
As of March 10, 2021



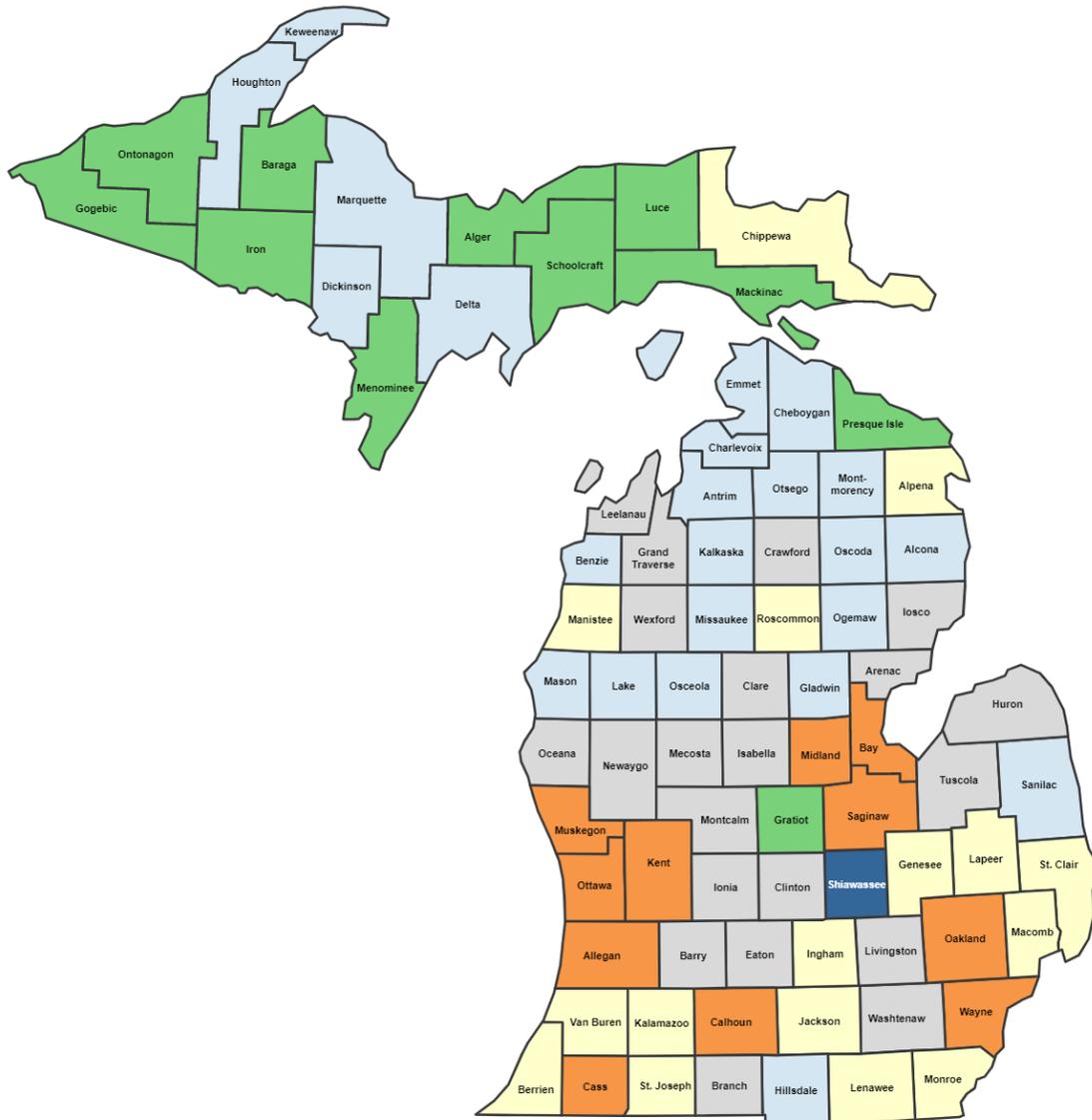
- BCC has full jurisdiction.
- County has full jurisdiction.
- Local municipalities have jurisdiction.
- Jurisdiction is split between BCC and local municipalities.
- Jurisdiction is split between County and local municipalities.
- Jurisdiction is split among BCC, County, and local municipalities.

To view the interactive map: <https://audgen.michigan.gov/641-0240-20-map-1B/>

Source: The OAG prepared this exhibit using the BCC Statewide Jurisdiction list published on BCC's Web site.

**SELECTED ACTIVITIES WITHIN THE BUREAU OF CONSTRUCTION CODES**  
Department of Licensing and Regulatory Affairs

**Mechanical Code Enforcement Jurisdiction Map**  
**As of March 10, 2021**



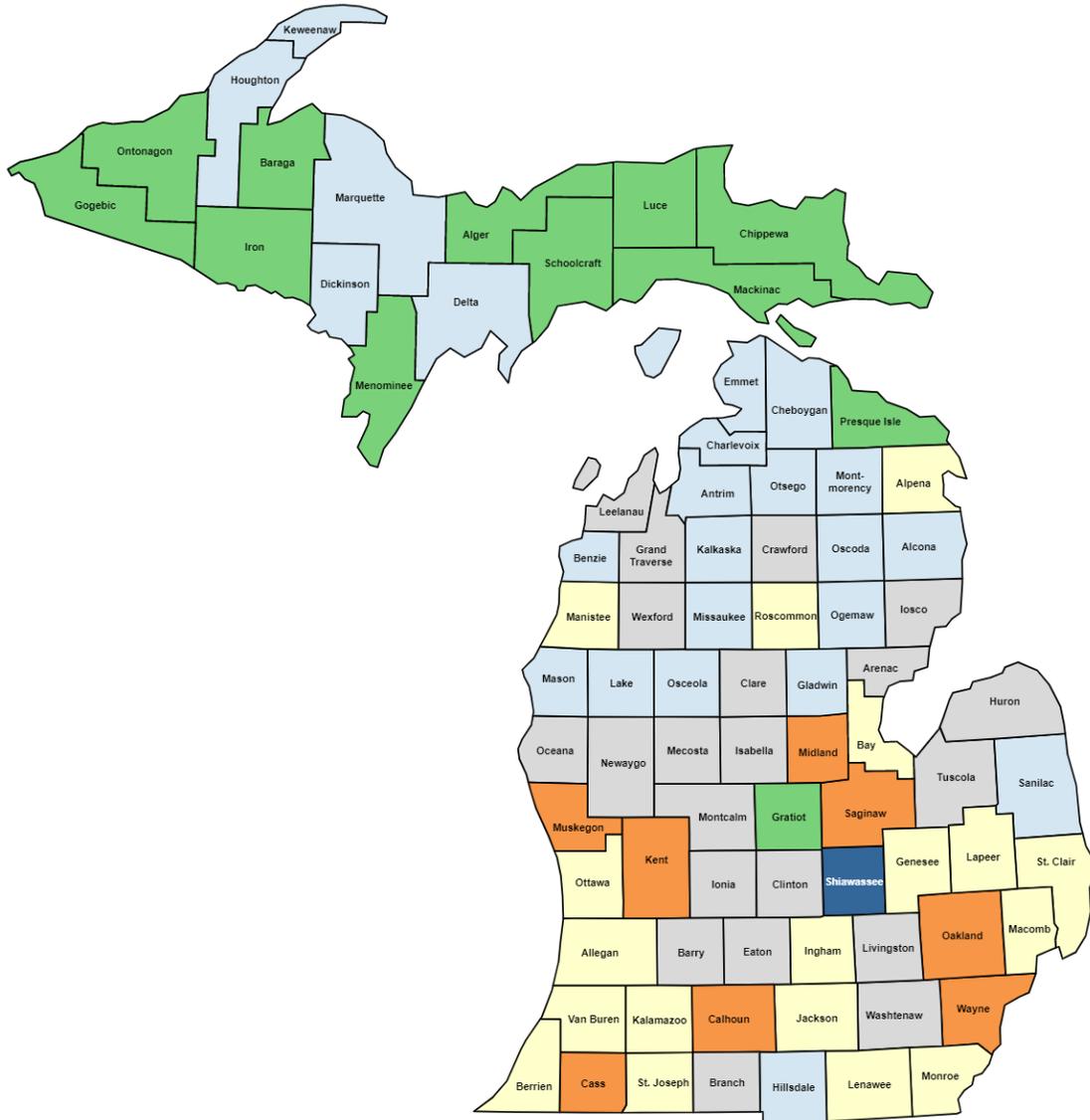
- BCC has full jurisdiction.
- County has full jurisdiction.
- Local municipalities have jurisdiction.
- Jurisdiction is split between BCC and local municipalities.
- Jurisdiction is split between County and local municipalities.
- Jurisdiction is split among BCC, County, and local municipalities.

To view the interactive map: <https://audgen.michigan.gov/641-0240-20-map-1C/>

Source: The OAG prepared this exhibit using the BCC Statewide Jurisdiction list published on BCC's Web site.

SELECTED ACTIVITIES WITHIN THE BUREAU OF CONSTRUCTION CODES  
Department of Licensing and Regulatory Affairs

Plumbing Code Enforcement Jurisdiction Map  
As of March 10, 2021



- BCC has full jurisdiction.
- County has full jurisdiction.
- Local municipalities have jurisdiction.
- Jurisdiction is split between BCC and local municipalities.
- Jurisdiction is split between County and local municipalities.
- Jurisdiction is split among BCC, County, and local municipalities.

To view the interactive map: <https://audgen.michigan.gov/641-0240-20-map-1D/>

Source: The OAG prepared this exhibit using the BCC Statewide Jurisdiction list published on BCC's Web site.

**SELECTED ACTIVITIES WITHIN THE BUREAU OF CONSTRUCTION CODES**  
Department of Licensing and Regulatory Affairs

Schedule of Carnival-Amusement and Ski Permit and Inspection Fees  
As of August 24, 2021

**Carnival-Amusement Annual Permit Fees<sup>1</sup>**

Standard Fee	\$10
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**Carnival-Amusement Inspection Fees<sup>1</sup>**

Annual Inspections:

Kiddie rides	\$ 40 per device
Fixed coaster	\$ 90 per device
Aerial lifts	\$115 per device
Miscellaneous rides	\$ 50 per device

Reinspection:

Kiddie rides	\$20 per device
Fixed coaster	\$75 per device
Aerial lifts	\$75 per device
Miscellaneous rides	\$20 per device

**Ski Annual Permit Fees<sup>2</sup>**

Standard Minimum Fee	\$25
OR (if the combination of the costs below are greater than \$25)	
Rope Tow	\$ 2 per device
T bar, J bar, or platter pull	\$ 5 per device
Chair Lift or Skimobile	\$15 per device
Aerial Tramway	\$30 per device

**Ski Inspection Fees<sup>2</sup>**

Rope Tow	\$ 8 per device
T bar, J bar, or platter pull	\$ 20 per device
Chair Lift or Skimobile	\$ 60 per device
Aerial Tramway	\$120 per device

<sup>1</sup>The fee amounts were last amended by Public Act 35 of 1982, effective March 12, 1982.

<sup>2</sup>The fee amounts were established by Public Act 199 of 1962, effective August 28, 1964.

Source: The OAG prepared this exhibit based on Sections 408.336 and 408.658 of the *Michigan Compiled Laws*.

## AGENCY DESCRIPTION

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BCC's mission is to ensure Michigan's built environment\* and the systems within are sound, safe, and sanitary; building users' health, safety, and welfare are protected; and, through a coordinated program of code compliance, investigation, and training, a consistent application of standards exists.

BCC consists of the following 8 divisions and 1 office:

- Building and Permits Division
- Electrical Division
- Mechanical Division
- Plumbing Division
- Elevator, Ski, Carnival-Amusement and Information Technology Division
- Boiler Division
- Licensing and Compliance Division
- Administrative Services Division
- Office of Land Survey and Remonumentation

Building, electrical, mechanical, and plumbing code enforcement jurisdiction varies across the State based on the governmental subdivision's ability and preference to administer and enforce the legislative criteria for each regulated activity (see Exhibits 1A through 1D). All boilers and elevating devices in the State, except those located within the City of Detroit, fall under BCC's permitting and inspection jurisdiction. In addition, Section 339.5925 of the *Michigan Compiled Laws* allows inspectors hired by insurance providers to conduct routine inspections of boilers on behalf of BCC. BCC has jurisdiction over all carnival-amusement rides and ski lifts.

BCC expended \$17.8 million for fiscal year 2019, and as of April 9, 2021, it had 111 employees.

\* See glossary at end of report for definition.

## AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

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### AUDIT SCOPE

To examine the documentation and processes of selected activities of BCC. 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our scope did not include regulatory activities outside of BCC's code enforcement jurisdiction (see Exhibits 1A through 1D). Also, we did not include BCC's Office of Land Survey and Remonumentation in the scope of this audit because we separately audited it and released our performance audit report in March 2020 (641-0991-19).

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 May 31, 2020.

### METHODOLOGY

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

- Interviewed BCC management and staff to gain an understanding of their organizational structure, responsibilities, and procedures.
- Examined applicable State laws, *Michigan Administrative Code* rules, published BCC annual reports, and BCC processes.
- Analyzed BCC revenue and expenditure data for fiscal years 2019 and 2020.
- Reviewed two daily BCC fee revenue reconciliations completed by BCC and LARA finance.

\* See glossary at end of report for definition.

- Obtained an understanding of how BCC uses Accela and JOL.
- Reviewed permit and inspection records of the skilled trades (building, electrical, mechanical, and plumbing), elevating devices, carnival-amusement rides, ski lifts, and mobile home parks to verify our understanding of BCC's processes and analyze BCC's timeliness.
- Obtained an understanding of BCC management oversight of inspector activity, including review of travel logs and inspection scheduling.
- Analyzed Skilled Trades Regulation Act license applications submitted to BCC from January 1, 2019 through June 15, 2020 and reviewed a limited sample of licenses issued to determine if the applicants paid the proper fees and completed the required examination.

## OBJECTIVE 1

To assess the sufficiency of BCC's efforts to conduct inspections.

To accomplish this objective, we:

- Compared permit and inspection fee revenues with the associated expenditures for all BCC-regulated activities for fiscal years 2018 and 2019 to assess whether the fees covered the actual cost of those activities.
- Compared national code versions for activities regulated by BCC with those adopted in the *Michigan Administrative Code* as of fiscal year 2020.
- Reviewed inspection documentation of 40 of 49,142 elevating devices (relating to 82,295 elevating device permit applications present in Accela as of June 15, 2020) to determine the timeliness of the inspections.
- Reviewed initial inspection documentation for 40 of 3,640 elevating device permit applications and 39 of 5,698 boiler permit applications received by BCC from October 1, 2018 through May 31, 2020 to determine the timeliness of the initial inspections.
- Reviewed inspection documentation of 40 of the 68,444 boilers maintained in JOL as of May 11, 2020 to assess the accuracy and reliability of JOL data and determine if inspection fees were paid.
- Analyzed inspection data for the 61,900 boilers that had routine inspections due and the 2,308 boilers that had violation follow-up inspections due as of May 11, 2020 to identify overdue inspections.

- Reviewed inspection documentation for 32 of the 1,465 carnival-amusement rides and 39 of the 304 ski lifts active at some time from October 1, 2018 through May 31, 2020.
- Analyzed annual inspection data of 1,050 mobile home parks, licensed as of June 15, 2020, to identify overdue inspections.
- Reviewed 18 inspection reports, completed by 9 of BCC's 67 inspectors from October 1, 2018 through May 31, 2020, to verify mileage reporting and management oversight. We judgmentally selected our sample based on inspecting divisions to ensure coverage of each division. Therefore, we could not project the results to the overall population.
- Reviewed the appropriateness of user access for 18 Accela user accounts and 16 JOL user accounts.
- Reviewed the Accela and JOL SOC reports and inquired as to whether LARA or BCC reviewed them.
- Reviewed licensing and employment documentation for 7 of BCC's 67 inspectors employed as of April 2, 2020 to determine compliance with qualifications established in the *Michigan Compiled Laws*. We judgmentally selected our sample to ensure it included an inspector from each of BCC's divisions. Therefore, we could not project the results to the overall population.

Unless otherwise indicated, our samples were randomly selected to eliminate bias and enable us to project the results to the respective populations.

## **OBJECTIVE 2**

To assess the sufficiency of BCC's efforts to resolve complaints in a timely manner.

To accomplish this objective, we:

- Reviewed documentation related to 33 of the 2,073 complaints open at any time from October 1, 2018 through June 15, 2020. We randomly selected our sample to eliminate bias and enable us to project the result to the full population. Our review was designed to verify:
  - The accuracy of the recorded receipt date and reported status within Accela.
  - The timeliness of BCC's acknowledgment to the complainant and of the complaint investigation.
  - Whether the results were reported to LARA's and/or BCC's director.

- Reviewed BCC's process for migrating complaint data from L2K to Accela to ensure completeness.

### **OBJECTIVE 3**

To assess the sufficiency of BCC's efforts to process permit applications.

To accomplish this objective, we reviewed:

- 40 of 3,640 elevating device permit applications and 39 of 5,698 boiler permit applications BCC received from October 1, 2018 through May 31, 2020 to determine whether BCC collected all applicable fees and issued permits in a timely manner.
- Documentation for 3 of 12 ski lifts that began operating during Michigan's 2019 and 2020 ski seasons to determine if the owner/operator requested a permit and whether BCC obtained all required documentation and collected all applicable fees. We randomly and judgmentally selected our sample to ensure coverage of both seasons and various ski lift owners/operators and, therefore, could not project the results to the overall population.
- 25 of the 478 building certificates of use and occupancy issued by BCC from October 1, 2018 through May 31, 2020 to determine if the required permits were processed by BCC prior to issuance of the certificates.

Unless otherwise indicated, our samples were randomly selected to eliminate bias and enable us to project the results to the respective populations.

### **OBJECTIVE 4**

To assess LARA's compliance with statutory reporting requirements.

To accomplish this objective, for the fiscal year 2018 and 2019 reporting requirements, we:

- Compared information presented in the annual reports with statutory reporting requirements for completeness.
- Analyzed source data for selected information included in the annual reports to verify accuracy.
- Reviewed the reports' submission dates.

### **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 7 findings and 8 corresponding recommendations. LARA'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 1A, 1B, 1C, 1D, and 2. Our audit was not directed toward expressing a conclusion on this information.

## GLOSSARY OF ABBREVIATIONS AND TERMS

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Accela	The vendor-hosted system BCC uses for licensing, permitting, complaints, inspections, and plan reviews.
access controls	Controls that protect data from unauthorized modification, loss, or disclosure by restricting access and detecting inappropriate access attempts.
American National Standards Institute	A private, nonprofit organization that administers and coordinates the United States voluntary standards and conformity assessment system. The Institute works in close collaboration with stakeholders from industry and government to identify and develop standards- and conformance-based solutions to national and global priorities.
American Society of Mechanical Engineers (ASME)	A nonprofit, professional organization that enables collaboration, knowledge sharing, and skill development across all engineering disciplines, while promoting the vital role of the engineer in society. ASME codes and standards, publications, conferences, continuing education, and professional development programs provide a foundation for advancing technical knowledge and a safer world.
BCC	Bureau of Construction Codes.
boiler	A closed vessel in which water is heated, steam is generated, or steam is superheated or a combination of those actions occurs, under pressure or vacuum by the application of heat from combustible fuels, electricity, or nuclear energy. Boiler does not include facilities of an integral part of a continuous processing unit but does include a fired unit for heating or vaporizing liquids other than water if the unit is separate from a processing system and is complete within itself.
built environment	The man-made surroundings that support human activity.
carnival-amusement ride	A device that carries or conveys passengers along, around, or over a fixed or restricted route or course for the purpose of giving its passengers amusement, pleasure, thrills, or excitement. A carnival or amusement ride does not include a hobby locomotive operating on narrow gauge tracks less than 24 inches and powered by steam, electricity, gas, or other fuel, whether or not it is operated on the owner's property.
database	A collection of information organized so it can be easily accessed, managed, and updated.

effectiveness	Success in achieving mission and goals.
efficiency	Achieving the most outputs and the most outcomes practical with the minimum amount of resources.
elevating device	The machinery, construction, apparatus, and equipment of an incline lift, escalator, moving walk, or device serving two or more landings used in raising and lowering a car, cage, or platform which is guided. The term includes a passenger elevator, freight elevator, gravity elevator, workmen's elevator, dumbwaiter, manlift, or other lifting or lowering apparatus that is guided.
FMG	State of Michigan Financial Management Guide.
GF/gp	General Fund/general purpose.
International Building Code	A model code providing minimum requirements to safeguard the public health, safety, and general welfare of the occupants of new and existing buildings and structures.
International Code Council	The leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, training, and certification. The International Code Council's codes, standards, and solutions are used to ensure safe, affordable, and sustainable communities and buildings worldwide.
Jurisdiction Online (JOL)	Vendor-hosted, Internet-based software application available to insurance companies and jurisdictional authorities involved with boiler inspection and certification.
LARA	Department of Licensing and Regulatory Affairs.
License 2000 System (L2K)	The system historically used to manage State of Michigan licenses.
LPI	Lean Process Improvement.
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.

MCSC	Michigan Civil Service Commission
<i>Michigan Administrative Code</i>	A compilation of all adopted rules and regulations in effect in the State of Michigan. Each rule has been assigned a rule number, which appears at the beginning of each rule in the text of the <i>Michigan Administrative Code</i> .
mission	The main purpose of a program or an entity or the reason the program or the entity was established.
National Electrical Code	A model code for the installation of electrical components and systems. Its purpose is to safeguard persons and property from hazards arising from the use of electricity.
observation	A commentary highlighting certain details or events that may be of interest to users of the report. An observation may not include the attributes (condition, effect, criteria, cause, and recommendation) presented in an audit finding.
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 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: 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.
ski lift	A device for transporting persons uphill on skis, or in cars on tracks, or suspended in the air by the use of cables, chains, belts,

or ropes, and usually supported by trestles or towers with 1 or more spans. Ski lift includes a rope tow.

Skilled Trades Regulation Act

An act to revise, consolidate, and classify the laws of Michigan regarding the regulation of certain occupations in the skilled trades and to regulate persons and activities relative to those occupations; to create a board for each of those occupations; to establish the powers and duties of certain state and local governmental officers and entities, including the boards created under this Act; to provide for the promulgation of rules; to provide for fees; to provide for penalties and civil fines; and to repeal acts and parts of acts.

Stille-Derossett-Hale Single State Construction Code Act

An act to create a construction code commission and prescribe its functions; to authorize the director to promulgate rules with recommendations from each affected board relating to the construction, alteration, demolition, occupancy, and use of buildings and structures; to prescribe energy conservation standards for the construction of certain buildings; to provide for Statewide approval of premanufactured units; to provide for the testing of new devices, materials, and techniques for the construction of buildings and structures; to define the classes of buildings and structures affected by the act; to provide for administration and enforcement of the act; to create a State construction code fund; to prohibit certain conduct; to establish penalties, remedies, and sanctions for violations of the act; to repeal acts and parts of acts; and to provide an appropriation.

System and Organization Controls (SOC) report

Designed to help organizations that provide services to user entities build trust and confidence in their delivery processes and controls through a report by an independent certified public accountant (CPA). Each type of SOC report is designed to meet specific user needs:

- SOC 1 (Report on Controls at a Service Organization Relevant to User Entities' Internal Control Over Financial Reporting) - Intended for user entities and the CPAs auditing their financial statements in evaluating the effect of the service organization's controls on the user entities' financial statements.
- SOC 2 (Report on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy) - Intended for a broad range of users that need information and assurance about a service organization's controls relevant to any combination of the five predefined control principles.

There are two types of SOC 1 and SOC 2 reports:

- Type 1 - Reports on the fairness of management's description of a service organization's system and the suitability of the design of the controls to achieve

the related control objectives included in the description, as of a specified date.

- Type 2 - Includes the information in a type 1 report and also addresses the operating effectiveness of the controls to achieve the related control objectives included in the description, throughout a specified period.
- SOC 3 (Trust Services Report for a Service Organization) - Intended for those needing assurance about a service organization's controls that affect the security, availability, or processing integrity of the systems a service organization employs to process user entities' information, or the confidentiality or privacy of information, but do not have the need for or the knowledge necessary to make effective use of a SOC 2 report.
- SOC for Cybersecurity. Intended to communicate relevant information about the effectiveness of an organization's cybersecurity risk management programs.

TPSO

third party service organization.









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