Division of Capital Asset Management and Maintenance
For the period January 1, 2019 through December 31, 2020
February 23, 2022

Ms. Carol Gladstone, Commissioner
Division of Capital Asset Management and Maintenance
1 Ashburton Place, 15th Floor
Boston, MA 02108

Dear Ms. Gladstone:

I am pleased to provide this performance audit of the Division of Capital Asset Management and Maintenance. This report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, January 1, 2019 through December 31, 2020. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to the Division of Capital Asset Management and Maintenance for the cooperation and assistance provided to my staff during the audit.

Sincerely,

Suzanne M. Bump
Auditor of the Commonwealth
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<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>B2GNow</td>
<td>Business to Government Now</td>
</tr>
<tr>
<td>CM</td>
<td>construction manager</td>
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<td>CMAR</td>
<td>construction manager at risk</td>
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<tr>
<td>CO</td>
<td>compliance officer</td>
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<tr>
<td>COVID-19</td>
<td>2019 coronavirus</td>
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<tr>
<td>CTR</td>
<td>Office of the Comptroller of the Commonwealth</td>
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<td>DCAMM</td>
<td>Division of Capital Asset Management and Maintenance</td>
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<tr>
<td>DSB</td>
<td>designer selection board</td>
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<tr>
<td>EOAF</td>
<td>Executive Office for Administration and Finance</td>
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<td>EOTSS</td>
<td>Executive Office of Technology Services and Security</td>
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<tr>
<td>ICP</td>
<td>internal control plan</td>
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<tr>
<td>LCPTTracker</td>
<td>Labor Compliance Program Tracker</td>
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<tr>
<td>MMARS</td>
<td>Massachusetts Management Accounting and Reporting System</td>
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<td>OLSOP</td>
<td>Office of Leasing and State Office Planning</td>
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EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Division of Capital Asset Management and Maintenance (DCAMM) for the period January 1, 2019 through December 31, 2020. The purpose of our audit was to determine the following:

- Did DCAMM have internal tracking, oversight, and enforcement procedures to ensure that contractors complied with the workforce participation goals established by Section 44A(1)(G) of Chapter 149 of the General Laws?
- Did DCAMM monitor quarterly contractor notifications regarding minority and woman workforce participation goals as required by the general conditions of the Commonwealth’s standard construction contract, which DCAMM uses for most construction projects?
- Did DCAMM ensure that contractors were certified before awarding contracts in accordance with Sections 4.03 and 4.04 of Title 810 of the Code of Massachusetts Regulations?
- Did DCAMM update its internal control plan (ICP) to address the 2019 coronavirus (COVID-19) pandemic as required by the Office of the Comptroller of the Commonwealth’s (CTR’s) guide “COVID-19 Pandemic Response Internal Controls Guidance”?
- Did DCAMM ensure that its employees received annual cybersecurity awareness training as required by the Executive Office of Technology Services and Security’s Information Security Risk Management Standard IS.010?

Below is a summary of our findings and recommendations, with links to each page listed.

<table>
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<td>DCAMM did not have adequate processes in place to help ensure that its contractors met its workforce participation goals for women and minorities.</td>
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<table>
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<tr>
<td>DCAMM should develop policies and procedures to effectively monitor the extent to which each contractor achieves workforce participation goals for women and minorities. These policies and procedures should establish the conditions under which DCAMM will use enforcement provisions against contractors that do not meet their workforce participation goals.</td>
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<tr>
<th>Finding 2</th>
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<tr>
<td>DCAMM did not ensure that contractors completed projected staffing tables each quarter that identified female and minority workers.</td>
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<th>Recommendation</th>
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<tr>
<td>DCAMM should develop policies and procedures, including a monitoring component, to ensure that all contractors work toward meeting its workforce participation goals for female and minority workers every quarter.</td>
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</table>

1. Workforce participation goals are the percentages of work hours for each construction contract that must be worked by minorities and women.
Executive Summary

<table>
<thead>
<tr>
<th>Finding 3</th>
<th>Page 17</th>
<th>DCAMM did not maintain adequate documentation to support all the information in its annual reports to the state Legislature.</th>
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<tr>
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<td>DCAMM should develop policies and procedures that require its staff to perform and retain regular reconciliations of its certified payroll data to ensure completeness and accuracy.</td>
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<td>Recommendation</td>
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<td>DCAMM should establish policies and procedures, including a monitoring component, for updating its ICP when significant changes occur.</td>
</tr>
<tr>
<td>Finding 5</td>
<td>Page 20</td>
<td>DCAMM did not retain employees’ cybersecurity awareness training certificates.</td>
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</table>
| Recommendations | Page 21 | 1. DCAMM should keep cybersecurity awareness training certificates in employee personnel files.  
2. DCAMM should develop a formal process to ensure that cybersecurity awareness training certificates are collected and retained in all personnel files. |

Post-Audit Action

During our audit, DCAMM updated its ICP, an agency-wide document that summarizes risks and controls for all of its business operations, to include recommendations from CTR’s “COVID-19 Pandemic Response Internal Controls Guidance” (see Finding 4). This updated ICP included telework, return-to-office plans, and a risk assessment of the impact of COVID-19 on department operations.

DCAMM’s management indicated that, as a result of the problems identified in Finding 5, the agency implemented a process to ensure that cybersecurity awareness training certificates would be collected and retained in employees’ files.
OVERVIEW OF AUDITED ENTITY

The Division of Capital Asset Management and Maintenance (DCAMM) is the state agency responsible for major public construction and real estate for the Commonwealth. DCAMM was established by Chapter 579 of the Acts of 1980 as a division within the Executive Office for Administration and Finance (EOAF) to create a professional building design and construction agency and an independent board within EOAF, the Designer Selection Board, to select design consultants. DCAMM’s main office is on the 15th floor of 1 Ashburton Place in Boston.

DCAMM is administered by a commissioner, who is appointed by the Secretary of EOAF with written approval from the Governor. The commissioner appoints deputy commissioners, associate deputy commissioners, and legal counsel as appropriate to manage and oversee DCAMM’s operations. Descriptions of DCAMM’s operational components appear in the Appendix to this report. DCAMM received state appropriations of $19,118,113 and $22,603,445, respectively, for fiscal years 2019 and 2020. As of December 31, 2020, DCAMM had 424 employees.

DCAMM manages more than two billion dollars annually in state-funded construction projects and manages more than 550 active leases, consisting of more than five million square feet of office space that house state agencies. DCAMM is also responsible for assisting, and consulting with, state agencies on constructing and maintaining state facilities. During our audit period, DCAMM administered 172 projects with an estimated cost obligation of $2,483,527,292, ranging in value from $112,952 to $375,500,000. Of the total cost obligation, $20,699,558 (0.8%) was awarded to 58 minority-owned businesses and $55,381,535 (2.2%) was awarded to 58 woman-owned businesses. For the 172 projects, there were 185 contracts (127 construction contracts and 58 design contracts), consisting of 931 prime contractors and subcontractors with a total of 6,535 employees, of whom 5,961 (91.2%) were employed in construction and 574 (8.8%) in design. For the 127 construction contracts, contractors hired 5,961 individuals, of whom 191 (3.2%) were women and 1,199 (20.1%) were minorities. Payroll for the 5,961 employees associated

2. An active project can consist of one or more contracts, which can employ one or more contractors.
3. Items such as land acquisitions, equipment, furnishings, and occupant relocation costs were included in the total cost obligation data provided by DCAMM.
4. There were 63 total projects, of which 53 were awarded to businesses that were both woman- and minority-owned businesses; 5 were awarded to woman-owned businesses; and 5 were awarded to minority-owned businesses.
5. A prime contractor is a business engaged in construction that can bid directly to a state agency that awards the contract and can manage all the subcontractors on a project.
with these 127 contracts totaled $90,246,668, of which female and minority workers accounted for $1,867,350 (2.1%) and $12,939,264 (14.3%), respectively.

**Construction Project Management**

Public construction projects typically involve three stages: study, planning and design, and construction. The primary method DCAMM uses to manage its construction projects is design-bid-build. In this method, a contract is awarded to design the project and then bids are solicited from contractors to perform the construction phase of the project based on the design specifications.

The second method DCAMM uses is construction manager at risk (CMAR). Chapter 149A of the Massachusetts General Laws enables DCAMM to use the CMAR method on projects with an estimated cost of at least $5 million. The CMAR method outsources various administrative and managerial responsibilities, as well as risk, from the state agency to a private construction manager (CM) firm. Before construction, the CM firm acts as project manager, providing its expertise and consulting services to DCAMM or the state agency that awards the contract (the awarding authority) and the design team. The goal of this arrangement is to ensure accuracy and practicality in the design documents and to mitigate the risk of unforeseen issues and events that could result in costly change orders.⁶ Later in the process, the CM firm acts as general contractor and is responsible for constructing the project according to the awarding authority’s specifications within a certain dollar amount, referred to as the guaranteed maximum price.

**Certification Process / Project Evaluation**

DCAMM is responsible for certifying companies in the designated categories of work⁷ for prime contractors and sub-bidders⁸ to bid on construction projects for state agencies. Contractors need to file or renew their certifications annually by submitting an online application in the Business to Government Now (B2GNow) contractor management system and uploading evidence that they meet all the requirements or conditions⁹ for the certification that are listed on DCAMM’s website. To obtain DCAMM

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6. Change orders are changes to the scope of work of the original contract that require approval from the awarding authority.
7. The categories of work for which DCAMM certifies contractors include items such as painting, plumbing, roofing, and waterproofing.
8. A sub-bidder is a subcontractor that submits a bid.
9. According to Section 4.04 of Title 810 of the Code of Massachusetts Regulations, DCAMM does not issue a certification to a contractor if the contractor does not meet the requirements, which include a minimum evaluation score of 80 out of 100, all licenses required by law for the category of work, experienced personnel, and a completed application.
certification, contractors must receive three scores of 80 or higher on their project evaluations. Evaluations are completed at the end of each project; if general contractors do not submit evaluation forms to DCAMM, DCAMM requests the forms. If a contractor scores less than 80 on three evaluations in five years, DCAMM does not recertify that contractor. Evaluations for all public and private projects must be signed by an official from the awarding authority.

There are three phases for the certification process: preliminary tasks, audits, and approval and review. During the preliminary (intake) process, the intake coordinator reviews the certification type, application type, company name, application fee payment, and certification status; whether the company has been in business for at least a year; and whether the company has submitted its financial statement / statement of gross revenue to ensure that the application has enough information for DCAMM to complete the certification process. The intake coordinator finishes and signs off on the application and then forwards it to a compliance officer (CO) for a complete review of the documents received. The CO ensures that all required documentation has been received; reviews it in B2GNow to ensure that the information is complete and consistent for the application; approves the application; and forwards it to a manager for final review, approval, and certification.

**B2GNow**

B2GNow is a software system that tracks contractors’ certifications and compliance with diversity requirements. DCAMM uses it to monitor the certification process and track certified contractors, as well as to document, review, and approve certifications in the three phases of the certification process. Contractors and subcontractors can use B2GNow to view their contracts, submit applications for certification with supporting documentation (financial statements, evaluation forms, and licenses), send certification change requests to DCAMM, and view their certifications.

**Construction Workforce Participation**

According to state guidelines, each construction contract should include workforce participation goals: 15.3% of the hours of construction work performed should be done by minority workers and 6.9% by female workers. According to Section 44A(1)(G) of Chapter 149 of the General Laws, enforcement procedures need to be in place to ensure compliance with workforce participation goals. Currently, DCAMM requires contractors to submit weekly workforce reports that include the number of hours worked in each trade by each employee who identifies as a woman, minority, and/or non-minority.
Contractors send this information electronically to DCAMM through the Labor Compliance Program Tracker (LCPTracker), a Web-based labor and certified payroll system. In this system, contractors manage employees’ profile information and submit certified payroll reports to DCAMM at the end of each week. Contractors electronically sign each payroll report to indicate that the payroll has been certified. DCAMM includes the certified construction hours in its annual report.

**LCPTTracker**

LCPTTracker, which is linked to B2GNow, is an electronic certified payroll reporting software program for contractors to use to submit payroll information weekly to DCAMM for approval. DCAMM automatically accepts the certified payroll in the system. With this software, DCAMM can ensure that workforce participation goals are successfully met by tracking the genders and ethnicities of contractors employed, their backgrounds, their skill levels, and the prevailing wage. DCAMM uses the data in LCPTTracker to generate the “Supplier Diversity—Affirmative Marketing Program for Design & Construction” section of its annual report.

**Office of the Comptroller of the Commonwealth’s Pandemic Response Guidance**

On September 30, 2020, the Office of the Comptroller of the Commonwealth provided guidance in response to the 2019 coronavirus (COVID-19) pandemic for state agencies. The guidelines help state agencies that are experiencing significant changes identify their goals, objectives, and risks associated with COVID-19. Objectives can include telework; return-to-office plans; a risk assessment of the impact of COVID-19 on department operations; changes to the business process; safety protocols for employees and visitors; and tracking of COVID-19-related awards and expenditures, which are tracked separately from other federal, state, and local expenditures.

**Cybersecurity Awareness Training**

The Executive Office of Technology Services and Security (EOTSS) has established policies and procedures that apply to all Commonwealth agencies. Information Security Risk Management Standard IS.010 requires that all Commonwealth personnel be trained annually for cybersecurity awareness. Section 6.2 of the document states,
The objective of the Commonwealth information security training is to educate users on their responsibility to help protect the confidentiality, availability and integrity of the Commonwealth’s information assets.

To ensure that employees are clear on their responsibilities, all employees in state executive agencies with access to a Commonwealth-provided email address are required to complete an cybersecurity awareness course every year. EOTSS notifies employees when the required training is available, and they must complete it within 45 days after receiving the email. All new hires must complete an initial security awareness training course within 30 days after their orientation; this can be in addition to other agency-specific or role-based training. The training, provided by cybersecurity experts at the company KnowBe4, includes a short video, interactive segments, and a few knowledge-check questions per topic. After completing the training, employees receive a certificate proving they passed the course. EOTSS, the state Human Resources Division, and training administrators can review who has completed the training.
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Division of Capital Asset Management and Maintenance (DCAMM) for the period January 1, 2019 through December 31, 2020.

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.

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>1. Does DCAMM have internal tracking, oversight, and enforcement procedures to ensure compliance with the provisions of workforce participation goals under Section 44A(1)(G) of Chapter 149 of the General Laws?</td>
<td>No; see Findings 1 and 3</td>
</tr>
<tr>
<td>2. Does DCAMM monitor quarterly contractor notifications regarding minorities’ and women’s workforce participation goals as required by the general conditions of the Commonwealth’s standard construction contract?</td>
<td>No; see Finding 2</td>
</tr>
<tr>
<td>3. Does DCAMM ensure that contractors are certified before awarding contracts, in accordance with Sections 4.03 and 4.04 of Title 810 of the Code of Massachusetts Regulations?</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Did DCAMM update its internal control plan (ICP) to address the 2019 coronavirus (COVID-19) pandemic, as required by the Office of the Comptroller of the Commonwealth’s (CTR’s) guidance?</td>
<td>No; see Finding 4</td>
</tr>
<tr>
<td>5. Do DCAMM employees receive cybersecurity awareness training in accordance with the Executive Office of Technology Services and Security’s Information Security Risk Standard IS.010?</td>
<td>No; see Finding 5</td>
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To accomplish our objectives, we gained an understanding of DCAMM’s internal control environment related to the objectives by reviewing applicable agency policies and procedures, as well as conducting
interviews with DCAMM management. We evaluated the operating effectiveness of internal controls related to the certification and certified payroll processes.

To obtain sufficient, appropriate audit evidence to address our audit objectives, we conducted further audit testing as follows.

We examined workforce data for the 127 construction contracts and 58 design contracts for which DCAMM accepted certified payroll data during the audit period to determine whether contracts met the workforce participation goals for women and minorities.

- Using Microsoft Excel, we filtered the certified payroll data by work type (construction and design) and gender (women) to identify the total hours women worked on each contract during our audit period. We then compared the number of hours worked by women to the women’s workforce participation goal of 6.9%. We calculated the total number of contracts that met the women’s workforce participation goal and the number of contracts that did not. We analyzed the data by contract size, based on the number of employees and total hours worked on the contract, to determine the correlation between the number of employees and the number of contracts that met the goals for women’s workforce participation. We calculated the total number of female employees of each ethnicity on all contracts. Finally, we compared the sum of gross pay for all female employees to the total gross pay for all contracts during our audit period.

- Using Microsoft Excel, we filtered the certified payroll data by work type and ethnicity (African American, Asian, Hispanic, or other) to identify the total hours worked by minorities. We then compared the total number of hours worked by minorities to the total number of hours worked on each contract during our audit period. We compared the percentage of hours worked by minorities to the minority workforce participation goal of 15.3%. We compared the sum of gross pay for all minority employees, grouped by ethnicity, to the total gross pay for all contracts during our audit period. We calculated the total number of contracts that met the minorities’ workforce participation goal and the number of contracts that did not. We analyzed the data by contract size, based on the number of employees and total hours worked on the contract, to determine the correlation between the number of employees and the number of contracts that met the goals for minority workforce participation. Finally, we calculated the total number of employees by each ethnicity on all contracts.

During our audit period, construction contracts per quarter ranged from 50 to 69, with an average of 60. Design contracts per quarter ranged from 23 to 43 contracts, with an average of 33. We identified the contracts that did not meet the workforce participation goals each quarter to identify the contracts for which DCAMM had not requested quarterly projected staffing tables as required by the general conditions of the Commonwealth’s standard construction contract.

- Using Microsoft Excel, we filtered the certified payroll data by gender, work type, quarter, and year. We compared all the contracts’ work hours to the percentage of women’s work hours for
each quarter of the audit period, showing a complete summary of the data. We determined the number of contracts and the percentage of contracts that met the women’s workforce participation goal in every quarter.

- Using Microsoft Excel, we filtered the certified payroll data by ethnicity, work type, quarter, and year. We compared all the contracts’ work hours to the percentage of minority work hours for each quarter of the audit period, showing a complete summary of the data. We determined the number of contracts and the percentage of contracts that met the minority workforce participation goal in every quarter.

Based on a high level of risk, we selected a random, statistical sample with a 90% confidence level, 5% tolerable rate, and 0% expected error rate. Our sample consisted of 47 contractors out of a total population of 1,389 contractors that applied for certification from DCAMM during our audit period. To determine whether contractors met the certification requirements before they were awarded contracts, we performed the following tests.

- We inspected copies of the applications and certifications to ensure that contractors had certification in the requested categories of work.
- We inspected copies of the contractors’ evaluations to ensure that no contractor had received three failing scores (under 80 points) during the previous five years.
- We inspected copies of the contractors’ licenses for categories of work where licenses were required.
- We examined the contractors’ financial records to ensure that they satisfied the requirement of financial responsibility.
- We examined copies of the project bonding letters\(^\text{10}\) and verified that each surety was licensed by the state Division of Insurance and was on the current list of approved sureties from the United States Department of the Treasury.
- We inspected contractors’ resumes to ensure that they had experience in performing construction projects.
- We examined certificates of good standing issued by the Commonwealth and inspected applications to ensure that contractors had not broken the certification requirements (e.g., had no lawsuits, revoked licenses, or Occupational Safety and Health Administration sanctions) in the past five years.

We asked the DCAMM deputy commissioner of finance to evaluate the ICPs for 2019 and 2020 to determine whether they had been updated during the audit period with COVID-19 guidance as required.

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10. A bonding letter is an approval by a surety that the contractor can work on a project up to a specific amount of money. A surety is an insurance company that takes on a contractor’s financial responsibility up to a specific amount of money.
by CTR’s *Internal Control Guide* because COVID-19 caused a significant change to the work environment. We examined a copy of the ICP that was updated in 2020 to determine whether it contained the components required by CTR’s “COVID-19 Pandemic Response Internal Controls Guidance.”

We asked management for certificates of completion of cybersecurity awareness training from our audit period. However, DCAMM management told us that the copies for 2019 were not maintained in the employees’ personnel files and DCAMM no longer had access to them because it had switched to another vendor.

For calendar year 2020, we selected a nonstatistical, judgmental sample of 40 employees out of the total population of 424 employees who had Commonwealth-provided email (85 of whom also had access to the Massachusetts Management Accounting and Reporting System, or MMARS). Of the 40 employees we selected, 9 also had accounts payable and procurement administrator\(^{11}\) roles in MMARS. We inspected cybersecurity awareness training certificates from 2020 to ensure that training had been completed.

When nonstatistical sampling methods were used, we could not project the results of our testing to the population.

**Data Reliability Assessment**

**Labor Compliance Program Tracker**

DCAMM uses the Labor Compliance Program Tracker (LCPTracker) for contractors to record certified payroll. We tested selected information system controls (access controls, security management, configuration management, contingency planning, and segregation of duties) to determine the reliability of the data in LCPTracker. In addition, for the list of weekly certified payroll data, we performed a data integrity test to verify that all data were within our audit period.

To assess the reliability of weekly LCPTracker certified payroll data, we checked for duplicates, electronically analyzed the data for errors and anomalies, and reconciled the data to DCAMM’s fiscal year 2020 annual report section on reported hours by gender and ethnicity. We discussed the results of our verification with DCAMM’s management team to gain an additional understanding of contractors’ eligibility for DCAMM certification.

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11. An employee with an accounts payable role prepares payments for an agency. An employee with a procurement administrator role makes purchases for an agency.
We concluded that the data might be understated and some contractors’ certified payrolls might not have been submitted (see Finding 3). Despite these issues, we determined that the weekly certified payroll data were sufficiently reliable for our purposes.

**Business to Government Now**

DCAMM uses Business to Government Now (B2GNow) to manage certifications for the 18 categories of work. We inspected the System and Organization Control report performed by IS Partners LLC that covered the period February 1, 2020 through January 31, 2021. It described testing of the information system general controls and explained that they had been tested without exceptions. In addition, we tested certain general information technology controls (security management, access control, configuration management, segregation of duties, and contingency planning) for the period January 1, 2019 through December 31, 2020. We analyzed the spreadsheets by testing for hidden data, columns, worksheets, and duplicates. We ensured the completeness and accuracy of the data from B2GNow by judgmentally selecting 40 contractors from the contractor list and verifying that the certifications for which they had applied were the certifications granted.

**List of Employees**

We used a Microsoft Excel spreadsheet of employees, provided by DCAMM, to identify the number of contractor employees during our audit period. We compared the employee list to a list of Commonwealth Information Warehouse\(^\text{12}\) accounts payable data and inspected the two lists for discrepancies. We analyzed the spreadsheets by testing for hidden data, columns, worksheets, and duplicates. We judgmentally selected a sample of 20 employees from the Commonwealth Information Warehouse list and traced it to the list of employees provided by DCAMM to verify the employees’ existence.

Based on the results of our data reliability assessments, we determined that the information obtained for our audit period was sufficiently reliable for the purpose of our audit objectives.

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12. According to the website of the Executive Office for Administration and Finance, the Commonwealth’s Information Warehouse is an “integrated repository” of “financial, budgetary, human resource, payroll, and time reporting information.”
Detailed Audit Findings with Auditee’s Response

1. The Division of Capital Asset Management and Maintenance did not have adequate processes in place to help ensure that its contractors met its workforce participation goals for women and minorities.

The Division of Capital Asset Management and Maintenance (DCAMM) did not have adequate processes to effectively monitor the extent to which each contractor achieved workforce participation goals for women and minorities in order to establish measures to enforce compliance with these goals. During the audit period, 120 (95%) of the 127 construction contracts did not meet the women’s workforce participation goal: that 6.9% of the hours of construction worked should be done by women. Seventy-eight (61%) of the 127 construction contracts did not have any hours worked by women. In addition, 81 (64%) of the 127 contracts did not meet the minority workforce participation goal: that 15.3% of the hours of construction worked should be done by minorities. Thirty-six (28%) of the 127 contracts did not have any hours worked by minorities.

As a result, DCAMM did not have adequate enforcement provisions in place to help ensure that its contractors met the diversity requirements regarding workforce participation for women and minorities.

Authoritative Guidance

Section 44A(1)(G) of Chapter 149 of the Massachusetts General Laws states,

Every contract by a state agency or state assisted contract for design, construction, reconstruction, installation, demolition, maintenance or repair shall set forth the participation goals of minority and women workers to be employed on each such contract and the processes and procedures to ensure compliance with those workforce participation goals, including reporting and enforcement provisions.

The Executive Office for Administration and Finance has issued an administrative bulletin, “Equal Opportunity and Non-discrimination on State and State-Assisted Construction Contracts,” effective March 18, 2009. Section III of an attachment to the bulletin states, “The participation goals . . . shall be 15.3% for minorities and 6.9% for women.”

Although the contracts included reporting and workforce participation goals, DCAMM did not fully use enforcement provisions.
Reasons for Noncompliance

DCAMM had not established policies and procedures to effectively monitor the extent to which each contractor achieved the workforce participation goals for women and minorities in order to establish measures to enforce compliance with these goals.

Recommendation

DCAMM should develop policies and procedures to effectively monitor the extent to which each contractor achieves workforce participation goals for women and minorities. These policies and procedures should establish the conditions under which DCAMM will use enforcement provisions against contractors that do not meet their workforce participation goals.

Auditee’s Response

DCAMM’s Affirmative Marketing Program is both a focus and source of pride for our agency. Through our Affirmative Marketing Program; DCAMM expands opportunities for minority, women and veteran-owned businesses, helps minorities and women realize successful careers in the construction industry, and helps to create a pipeline of skilled workers for a diverse workforce.

Monitoring of workforce participation goals has historically taken place via a comprehensive tailored approach which involves the DCAMM Compliance Officer at every stage, from contract inception to close-out. The Compliance Officer meets regularly and conducts site visits with the project managers, resident engineers, primes and contractors. The Compliance Officer reviews submissions, daily reports, meeting minutes and other communications. The comprehensive tailored approach allows the Compliance Officer to best review the project process, understand the (often evolving) timing of various categories of work and, because each project is unique, to best tailor actions to achieve and increase both minority and women business and workforce participation.

DCAMM is implementing the recommendation of the [Office of the State Auditor] by supplementing its comprehensive tailored approach with a structure for additional supervisor review and automatic implementation of its contract option to require quarterly projected workforce tables. The internal compliance officer procedures will be updated to require a workforce report on all active contracts to be run and provided to the Deputy Director of Access and Opportunity at least quarterly. The Deputy Director will meet with the Compliance Officer and identify all underperforming contracts, and promptly provide notification of such underperformance to both the Director of Access and Opportunity and the applicable Prime Contractor. A meeting will be scheduled and conducted by the Deputy Director and the Compliance Officer with the Prime Contractor and relevant Subcontractors in attendance, at which time an action plan will be created. If, after review of the circumstances and information provided, DCAMM staff believes that quarterly projections may assist in the increase in workforce participation, DCAMM may require the submission of quarterly projections as part of the action plan. If a subcontractor continues to be underperforming in the following quarter, quarterly projections will be required in all instances.
DCAMM will be communicating the foregoing procedure update to all members of the compliance team.

In addition, we note that DCAMM is leveraging its eBuilder project management system to provide the Access and Opportunity unit with yet another tool and resource for oversight and involvement in projects. Finally, DCAMM has updated its Contractor Evaluation Form, which now explicitly includes the consideration "Did the Contractor meet applicable workforce goals, benchmarks or other requirements?"

**Auditor’s Reply**

Based on its response, DCAMM is taking measures to address our concerns on this matter.

2. **DCAMM did not ensure that contractors completed projected staffing tables each quarter that identified female and minority workers.**

DCAMM did not ensure that contractors completed projected staffing tables each quarter that identified female and minority workers. Staffing tables are meant to provide DCAMM with an update on each contractor working toward achieving workforce participation goals for women and minorities. As a result of this issue, DCAMM did not identify contractors that did not comply with the workforce participation goals for women and minorities and needed to submit these staffing tables. In our analysis, we determined that, during our audit period, an average of 56 of the 60 contracts per quarter did not meet the women’s workforce participation goal of 6.9% and an average of 40 of the 60 contracts per quarter did not meet the minority workforce participation goal of 15.3%.

Without receiving and reviewing the quarterly projected staffing tables, DCAMM cannot determine what specific actions contractors are taking toward meeting their workforce participation goals for women and minorities and therefore cannot evaluate whether any enforcement provisions are warranted.

Below is a chart detailing the number of contracts for each quarter during our audit period and the number that met workforce participation goals for women and minorities.
### Female and Minority Workforce Participation Goal Results by Calendar Year and Quarter

<table>
<thead>
<tr>
<th>Calendar Year and Quarter (Q)</th>
<th>Number of Contracts</th>
<th>Contracts That Met the Workforce Participation Goal (Women)</th>
<th>Contracts That Did Not Meet the Workforce Participation Goal (Women)</th>
<th>Contracts That Met the Workforce Participation Goal (Minorities)</th>
<th>Contracts That Did Not Meet the Workforce Participation Goal (Minorities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Q1</td>
<td>58</td>
<td>3</td>
<td>55</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>2019 Q2</td>
<td>62</td>
<td>3</td>
<td>59</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>2019 Q3</td>
<td>61</td>
<td>4</td>
<td>57</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>2019 Q4</td>
<td>69</td>
<td>4</td>
<td>65</td>
<td>26</td>
<td>43</td>
</tr>
<tr>
<td>2020 Q1</td>
<td>59</td>
<td>6</td>
<td>53</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td>2020 Q2</td>
<td>59</td>
<td>1</td>
<td>58</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>2020 Q3</td>
<td>58</td>
<td>3</td>
<td>55</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>2020 Q4</td>
<td>50</td>
<td>5</td>
<td>45</td>
<td>14</td>
<td>36</td>
</tr>
</tbody>
</table>

### Authoritative Guidance

Section 44(G) of Chapter 149 of the General Laws states,

*Every contract by a state agency or state assisted contract for design, construction, reconstruction, installation, demolition, maintenance or repair shall set forth the participation goals of minority and women workers to be employed on each such contract and the processes and procedures to ensure compliance with those workforce participation goals, including reporting and enforcement provisions.*

Section 3(B) of Appendix A of the general conditions of the Commonwealth’s standard construction contract states,

*The Contractor shall prepare projected staffing tables on a quarterly basis. These shall be broken down into projections, by week, of workers required in each trade.*

Although DCAMM did include the staffing tables as a reporting provision of the contracts, it did not ensure that contractors submitted them.

### Reasons for Noncompliance

DCAMM did not have any policies and procedures or a monitoring component to ensure that contractors completed projected staffing tables quarterly to update its tracking of the contractors’ steps toward achieving its workforce participation goals for female and minority workers.
**Recommendation**

DCAMM should develop policies and procedures, including a monitoring component, to ensure that all contractors work toward meeting its workforce participation goals for female and minority workers every quarter.

**Auditee’s Response**

As described in the Auditee Response to Finding No. 1 above, DCAMM is implementing the recommendation of the [Office of the State Auditor] by supplementing the existing procedures of its compliance unit to include additional supervisor review on a quarterly basis and automatic implementation of its contract option to require quarterly projected workforce tables.

**Auditor’s Reply**

Based on its response, DCAMM is taking measures to address our concerns on this matter.

3. **DCAMM did not maintain adequate documentation to support all the information in its annual reports to the state Legislature.**

DCAMM did not maintain adequate documentation to support the information in its annual reports to the state Legislature for fiscal years 2019 and 2020. These reports include a section about DCAMM contractors’ compliance with the agency’s workforce participation goals for women and minorities.

As a result, the annual report was inaccurate. We performed a reconciliation of all the certified payroll data for fiscal year 2020. DCAMM’s annual report shows a total of 660,790 hours worked for that period, whereas our testing showed a total of 581,897, reflecting an overstatement of 78,893 hours by DCAMM for its construction and design contracts.

**Authoritative Guidance**

In its *Internal Control Guide*, issued in September 2007 and updated in June 2015, the Office of the Comptroller of the Commonwealth (CTR) stresses the importance of internal controls and the need for documentation.

The “Documentation” section of the 2007 *Internal Control Guide* states,

*Documentation involves preserving evidence to substantiate a decision, event, transaction, or system. All documentation should be complete, accurate, and recorded timely.*
Section 12.01 of the 2015 *Internal Control Guide* states,

> Managers and other staff in key roles should document internal control, all transactions, and other significant events in a manner that allows the documentation to be readily available for examination.

Section A01-02 of the *Massachusetts Statewide Records Retention Schedule* states,

**Annual and Summary Reports records. . . .**

Documents the production of annual reports or other summary reports of agency business. Includes background support materials, statistical and other interim reports, unpublished reports, final products, and related correspondence.

- **A01-02(a): Annual reports**
  - Permanent
- **A01-02(b): Substantive support documentation for annual reports**
  - Retain 3 years.
- **A01-02(c): All other reports, published or unpublished, and substantive support materials**
  - Retain until administrative use ceases. Permission from [the state Records Conservation Board] not required for destruction.

**Reasons for Noncompliance**

DCAMM lacked policies and procedures that required its staff to perform and retain regular reconciliations of its certified payroll data to ensure that it had the most complete and accurate data for its annual report.

**Recommendation**

DCAMM should develop policies and procedures that require its staff to perform and retain regular reconciliations of its certified payroll data to ensure completeness and accuracy.

**Auditee’s Response**

Certified payroll data for the Affirmative Marketing Program Annual Report was based upon a workforce report run on December 7, 2020 ("December 2020 Workforce Report"). The total hours reported in the December 2020 Workforce Report were 660,790 and were correct as of that date. Certified payroll data may be added and amended by the contractor after a report date. Subsequent reports will reflect such additions and amendments. DCAMM provided an updated workforce report to the [Office of the State Auditor] on April 28, 2021 (Doc. No. 84) which reflected 581,897 hours, but that report contained errors due to incorrect parameters. Therefore, DCAMM provided a
corrected workforce report run on June 14, 2021 (“June 2021 Workforce Report”) (Doc. No. 100) and backup data (Doc. Nos. 103–106). A “walk-through” of the report and data was conducted with [Office of the State Auditor] staff on June 17, 2021. The total hours reported in the June 2021 Workforce Report, which include all additions and amendments through that date, were 693,338. Subsequent analysis by DCAMM using a special report requested from [the Labor Compliance Program Tracker, or LCPT] for this purpose in September of 2021 verified that 28,582 additional hours for [fiscal year] 2020 payrolls were submitted after December 7, 2020, the date the original December 2020 Workforce Report was run. After adjusting for the subsequent additions and amendments; there was a statistically small (1%) difference in expected values between the December 2020 and the September 2021 special report from [LCPT] which have been difficult to account for. We are continuing to work with [LCPT’s] technical team to address data anomalies going forward.

DCAMM has implemented the recommendation of the [Office of the State Auditor] by creating a detailed guide for quality assurance and generating and archiving backup reports for the [Affirmative Marketing Program] Annual Report. The guide will be provided to all DCAMM staff who participate in the generation of the [Affirmative Marketing Program] Annual Report, and will be regularly reviewed and updated.

**Auditor’s Reply**

Based on its response, DCAMM is taking measures to address our concerns on this matter.

**4. DCAMM’s internal control plan was not updated with a 2019 coronavirus pandemic component.**

DCAMM’s internal control plan (ICP) was not updated with a 2019 coronavirus (COVID-19) pandemic component as required by CTR’s “COVID-19 Pandemic Response Internal Controls Guidance,” issued September 30, 2020.

The absence of an up-to-date, comprehensive ICP may hinder DCAMM’s ability to achieve its mission and objectives effectively and efficiently.

**Authoritative Guidance**

CTR’s “COVID-19 Pandemic Response Internal Controls Guidance,” dated September 30, 2020, states,

> Department internal control plans must be based on risk assessments and updated annually, or when significant changes occur. Because the COVID-19 Pandemic has affected all departments, the Comptroller, in consultation with the State Auditor’s Office, is providing two options for updating internal controls.

1. **If the impact to your department is such that it can be reflected in your Internal Control Plan (ICP), then update the ICP as you would for any other mid-year changes.**
2. Departments experiencing a significant impact, and requiring the accumulation of substantial documentation (e.g., changes to business processes, requirements of federal and state specific laws or guidance, new funds or new programs), can draft a separate COVID-19 Pandemic Response Plan Appendix to the ICP as an organized set (hard or soft copies) of emails, documents, risk assessments, policies and procedures.

Reasons for Noncompliance

DCAMM did not have policies and procedures in place, including a monitoring component, to ensure that its ICP is updated when significant changes occur.

Recommendation

DCAMM should establish policies and procedures, including a monitoring component, for updating its ICP when significant changes occur.

Auditee’s Response

After notification by, and in consultation with, the [Office of the State Auditor]; DCAMM updated its Internal Control Plan in March, 2021 to reflect CTR’s “COVID-19 Pandemic Response Internal Controls Guidance,” issued September 30, 2020. Prior to the March, 2021 update, the DCAMM Internal Control Plan had previously been updated in June of 2020.

DCAMM is implementing the recommendation of the [Office of the State Auditor] by creating a policy and procedure for updates in response to significant unforeseen changes (such as the coronavirus pandemic), in addition to periodic reviews and updates. The procedure will be led by the DCAMM Deputy Commissioner of Finance, supported by the DCAMM Chief Financial Officer. The Deputy Commissioner and Chief Financial Officer shall each collect guidance, notifications, comments or any other change in conditions/situation which either mandate or may justify an immediate update to the Internal Control Plan. In such event, the Deputy Commissioner and Chief Financial Officer shall immediately confer and prepare a recommended update for submission to the DCAMM Commissioner.

The foregoing policy and procedure will be incorporated into the DCAMM Internal Control Plan.

Auditor’s Reply

Based on its response, DCAMM is taking measures to address our concerns on this matter.

5. DCAMM did not retain employees’ cybersecurity awareness training certificates.

During the audit period, there were 424 active DCAMM employees with Commonwealth-provided email addresses. There were no cybersecurity awareness training certificates in any employee’s personnel file.
to show that the employee had completed either initial or annual training for 2019. For calendar year 2020, from the sample of 40 employees tested, 1 employee’s personnel file lacked a security awareness training certificate to show that the employee had completed annual training.

Insufficient cybersecurity awareness training may lead to user error and compromise the integrity and security of protected information in LCPTTracker and Business to Government Now.

**Authoritative Guidance**

Section 6.2 of the Executive Office of Technology Services and Security’s Information Security Risk Management Standard IS.010, effective October 15, 2018, requires the following:

6.2.3 **New Hire Security Awareness Training:** All new personnel must complete an Initial Security Awareness Training course.

6.2.4 **Annual Security Awareness Training:** All personnel will be required to complete Annual Security Awareness Training.

Section 6 of Executive Order 504, which was effective January 1, 2009 through October 25, 2019, states,

All agency heads, managers, supervisors, and employees (including contract employees) shall attend mandatory information security training within one year of the effective date of this Order. For future employees, such training shall be part of the standardized orientation provided at the time they commence work. Such training shall include, without limitation, guidance to employees regarding how to identify, maintain and safeguard records and data that contain personal information.

**Reasons for Noncompliance**

DCAMM did not have a formal process in place to ensure that cybersecurity awareness training certificates were collected and retained in each employee’s personnel file.

**Recommendations**

1. DCAMM should keep cybersecurity awareness training certificates in employee personnel files.

2. DCAMM should develop a formal process to ensure that cybersecurity awareness training certificates are collected and retained in all personnel files.

**Auditee’s Response**

DCAMM has implemented both of the recommendations of the [Office of the State Auditor]. Since the Audit Period, DCAMM has created a dedicated role of Director of Training and Operations within the DCAMM Human Resources Department. The Director of Training and Operations is responsible,
and has created a system, for collection and retention of cybersecurity awareness training certificates in each employee’s personnel file. The Director of Training and Operations also coordinates with [the Executive Office of Technology Services and Security] regarding upcoming trainings, sends agency communications and reminders, monitors training deadlines and completions, reports non-compliance if/when necessary.

**Auditor’s Reply**

Based on its response, DCAMM is taking measures to address our concerns on this matter.
APPENDIX

Division of Capital Asset Management and Maintenance Operational Components

Office of Finance and Administration

The operations and fiscal activities of the Division of Capital Asset Management and Maintenance (DCAMM) are managed by an internal Office of Finance and Administration, which oversees spending on all projects DCAMM manages as well as daily operational expenses, capital spending plans, human resources, access and opportunities to bid on projects, contractor compliance with diversity requirements, contractor certification, and construction and architecture contracts for publicly funded projects.

Office of the General Counsel

All DCAMM legal services related to constructing public buildings and real estate are provided by its Office of the General Counsel. The general counsel at DCAMM plays a critical role in real estate transactions, state facility construction, environmental issues, legislative analysis, and litigation. DCAMM’s Certification Unit, which is supported by the Office of the General Counsel, is responsible for contractor certification, emergency waiver requests (with respect to rush jobs, sole source selection, or other procurement issues that arise from special circumstances), and the maintenance of decertified contractor lists and comprehensive contractor certification files. The chief legal counsel is appointed by DCAMM’s commissioner to head the office and oversee its functions.

Office of Leasing and State Office Planning

The Office of Leasing and State Office Planning (OLSOP) is responsible for the Commonwealth’s leasing activity, manages office buildings, and provides planning and reconfiguration assistance to state agencies to meet changing office needs. On behalf of state agencies, DCAMM leases more than seven million square feet of space from private and public landlords. The Office of Real Estate Management is a department within OLSOP that acquires and sells real property for the Commonwealth as well as providing assistance with licensing, land use, and legal matters to entities that wish to use land owned by the state.
**Designer Selection Board**

The Designer Selection Board (DSB) is an independent segment of the Executive Office for Administration and Finance (EOAF) that selects designers for public construction projects throughout Massachusetts. DSB was established autonomously to avoid the appearance of undue influence or bias by DCAMM staff members in the selection of design firms, although DCAMM does provide input as an interested party. DSB has 11 members, 8 of whom are selected by the Governor. Three of these are registered architects; 3 are registered engineers; and 2 are representatives of the public who are not architects, designers, engineers, or construction contractors. Three more members are appointed by the Boston Society of Architects, the Massachusetts Society of Professional Engineers, and the Massachusetts chapter of the Associated General Contractors of America Inc. (one member is appointed by each group). DCAMM personnel do not have any voting or other official capacity with DSB. EOAF procures an executive director, staff, and office space for DSB.

**The Office of Planning and the Office of Design and Construction**

The Office of Planning and the Office of Design and Construction are responsible for every phase of state building project management, including project initiation and development, planning and design, and construction. The offices oversee the work of architectural and engineering firms directly involved in public building projects as well as the general contractors and subcontractors that perform the construction work. In the early stages of a project, the offices provide programming services that include defining the scope of the project, identifying issues and technical requirements, establishing a framework for more detailed design decisions, and determining project feasibility (based on several factors, such as budget, environmental impact, and scheduling). When a building project is initiated, the offices manage design and construction services, such as studies for preventive maintenance, development of design and construction documents, and contractor oversight.

The offices procure goods and services and provide the oversight needed to complete high-quality and cost-efficient construction, renovation, and maintenance of public facilities. The offices use several different project delivery methods for different types of projects, because projects differ in everything from the method of procuring subcontractors to project scheduling. The different project delivery methods can also be used to alter the final pricing and compensation schedule for construction projects, shifting the risk of cost overruns between the project owner and the contractor.